

# Trendlines

Perspectives on Utah's Economy

Summer 2013

## UTAH'S ECONOMY: Industry Outlook & Job Update



THE NEW  
**jobs.utah.gov**  
You Spoke, We Listened

Waging a Living:  
**WHAT DO UTAH'S  
OCCUPATIONS PAY?**

NEW occupational  
employment  
and wage data

**A COMPARISON**  
OF PUBLIC AND  
PRIVATE SECTOR  
WAGES

The debate over falling  
labor force participation





## Putting an End to Intergenerational Poverty in Utah

*Jon Pierpont, Executive Director,  
Department of Workforce Services*

**D**EAR READERS:

In response to a report on intergenerational poverty that the Department of Workforce Services provided last year, the 2013 session of the Utah Legislature created the Intergenerational Welfare Reform Commission and the Intergenerational Poverty Advisory Committee. I serve as the chair of the commission and Bishop H. David Burton chairs the Advisory Committee. Among many findings, last year's report showed:

- The more impoverished a person is during childhood, the more likely that person is to receive public assistance (PA) as an adult.
- One in every 20 intergenerational teen girls (ages 13 to 17) was pregnant during 2012, expecting the "fourth generation" of PA recipients.
- One third of intergenerational adults have less than a high school diploma or GED completion. Most of the remaining population have no postsecondary education

Together, Bishop Burton and I as well as our respective teams are working

on a policy agenda that addresses these trends in a meaningful way with the goal of ending the cycle of poverty. Some of the initial ideas to help us reach our goal include fostering collaboration across state agencies and community partners in sharing and analyzing data and information regarding intergenerational poverty in the state; examining and analyzing the shared data; and identifying and developing effective and efficient plans, programs and recommendations to help at-risk children in the state escape the cycle of poverty and welfare dependency.

I am confident that we can set forth an agenda to increase awareness and promote meaningful public policy that addresses — and ends — intergenerational poverty in Utah.

SINCERELY,



To learn more, visit  
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or  
[jobs.utah.gov/wi/pubs/Poverty\\_Report\\_web.pdf](http://jobs.utah.gov/wi/pubs/Poverty_Report_web.pdf)

## Trendlines

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## Industry Outlook and Occupational Update



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# Federal Sequestration & Utah's Economy

**A**s we begin the beginning of federal government sequestration, many economic pundits believe the economy will slow over the spring and summer months, affecting state economies as well. There will probably be some setback to Utah's growth momentum as we move toward the fall months, but economic recovery will still remain intact. The summer months should be just a pause in the pace of Utah economic recovery. The sequestration this year, combined with the end of the payroll tax holiday as well as tax revenue increases and spending cuts included in the fiscal cliff and debt limit deals, will shave around 1.5 percentage points off potential U.S. GDP growth. This slowing will trickle down to Utah.

Utah's employment growth rebound from the recession has been much better than most states, as employment gains have flirted with 4.0

percent growth through the first three months of 2013. But the Bureau of Labor Statistics' Utah employment estimate showed growth on an annual basis slipping from that 4.0-percent range in March to 3.5 percent in April. There will probably be more slippage as the summer months progress, but we do not expect to see annual employment growth fall below 3.0 percent in Utah.

Those who opine on the national economy feel this sequestration and fiscal restraint will ease by this year's fourth quarter and that a strong housing market rebound will help lead GDP growth to a higher level in 2014. Though in Utah we expect the growth rate to weaken with some fluctuation as we move through the remainder of this year, for calendar year 2013 growth should be around 3.4 percent, largely matching 2012's growth rate of 3.3 percent. A better year is expected for 2014 with employment growth forecast around 3.8 percent. 

Growth in 2013 should largely match  
2012's growth rate of 3.3 percent.



## THE DEBATE OVER FALLING

# LABOR FORCE

## PARTICIPATION

A national loss of 3 million workers—is it the aging baby boomers or are job seekers abandoning their search?

The percentage of the working age population (16 and older) that is either working or looking for work (the labor force participation rate) has fallen sharply during the recent recession, both here in Utah and in the United States. Past recessions have had rising unemployment and corresponding job losses, but none have been accompanied by the amount of labor force participation decline like this recession. Is the drop in participation a problem for the economy going forward?

Questions about why participation dropped and whether it is a permanent (structural) or temporary (cyclical) decline is under debate throughout the nation. A structural problem is not as worrisome as a cyclical one, and professional journals and the blogosphere are alive with discussion.

Interest in the topic comes from a national loss of 3 million workers. Some argue that the loss is natural — that it is nothing more than the aging of the baby boomer generation. The timing of the recession was such that it occurred right when this structural decline would have developed anyway.

The counter-argument is that if this is not the driving factor, then declining participation is largely made up of frustrated job seekers



abandoning their search. If that is the case, then the implications are twofold: the labor market may be weaker than the published unemployment rate suggests, and if unemployed workers are giving up on finding a job, they could drift so far from the labor force that they are unlikely to return, even when hiring improves. This counter-argument predicts a more negative impact on the future state of the economy than the former, as retirements are usually planned for.

The decline at the national level is probably a combination of both causes. The national participation rate has been inching downward

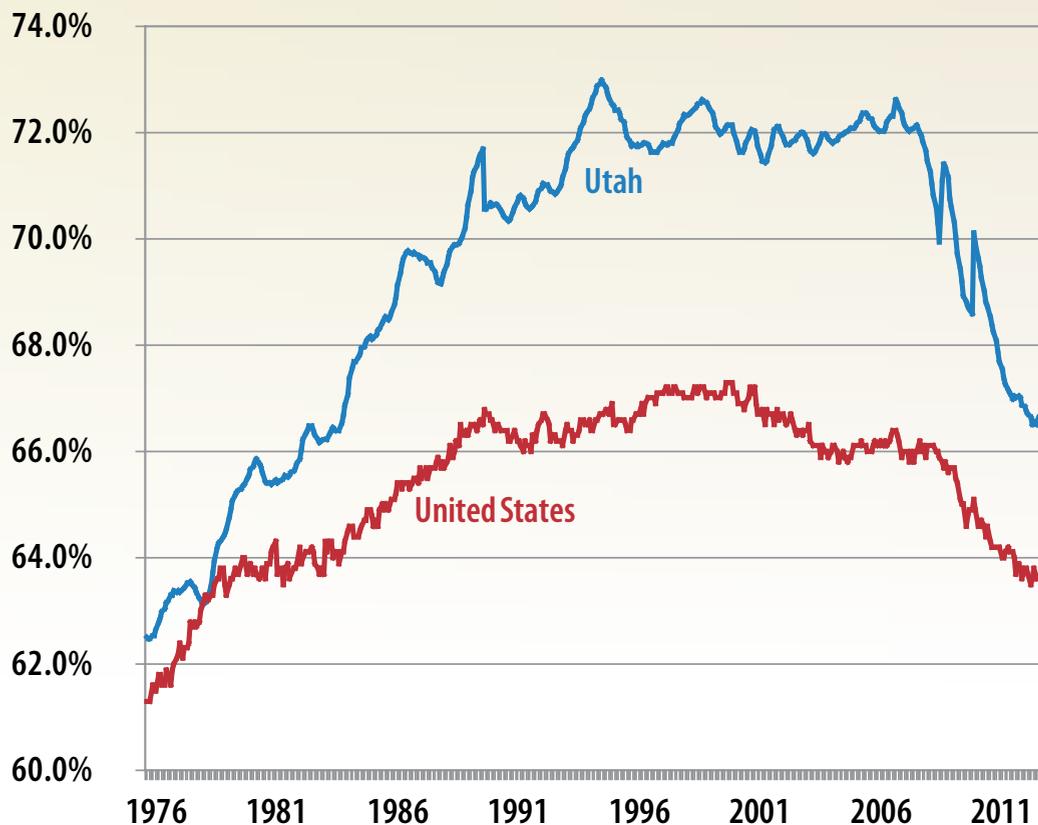
since the late 1990s, suggesting something structural. While the recession accelerated that pace, the national decline still appears more structural than cyclical.

The case in Utah may be different, though, as participation decline appears to be more cyclical. Utah's labor force is much younger than that of the nation, so it does not experience the same proportional influence by the baby boom retirement phenomenon. Utah's participation rate had not fallen at all prior to this recession, but only declined when the recession hit and did so at a higher rate than the nation (72 percent to

66 percent for Utah compared to 66 percent to 63 percent for the nation). Also, recessionary layoffs tend to hit young workers more heavily than older workers. Utah's participation rate, unlike the nation's, has bottomed out and is rebounding, pointing more to a cyclical recession issue than a baby boom issue.

In Utah, lower participation could be economically problematic in the future, but the rate seems to be on the rebound. Nationally, however, the declining rate has more to do with an aging labor force settling into retirement, and it not cause for great alarm. ●

## DECLINING LABOR FORCE PARTICIPATION RATES UNITED STATES & UTAH



Source: U.S. Bureau of Labor Statistics

# NEW Occupational Employment and Wage Data

Every year the U.S. Bureau of Labor Statistics releases wage and employment estimates for over 800 detailed occupations.

Occupational wage estimates are some of the most widely used labor market statistics. In particular, average wage data enable businesses to compare the wage rates they pay by occupation with national and regional averages. Wage rates inform business decisions with regard to workforce retention and recruitment. Workers

and job seekers use these same averages to gauge their own financial expectations surrounding current or desired future employment.

These estimates are available for the nation as a whole, for individual states and for metropolitan and non-metropolitan areas. For example, there are five metro areas and four non-metropolitan areas in Utah. Each of Utah's 29 counties fall within one of these nine regions.

Figure 1: Employment and Median Hourly Wages Estimated for Selected New Occupations May 2012



2010 SOC Code	Occupational Title	United States		Utah	
		Employment Estimate	Median Hourly Wage	Employment Estimate	Median Hourly Wage
	<b>Total – All Occupations</b>	<b>130,287,700</b>	<b>\$16.71</b>	<b>1,200,850</b>	<b>\$15.75</b>
13-1131	Fundraisers	48,530	\$24.37	280	\$20.77
15-1122	Information security analysts	72,670	\$41.43	700	\$37.06
15-1134	Web developers	102,940	\$30.05	1,700	\$25.45
15-1143	Computer network architects	137,890	\$43.75	550	\$39.79
15-1152	Computer network support specialists	167,980	\$28.41	1,500	\$27.72
21-1094	Community health workers	38,020	\$16.64	480	\$20.18
29-1151	Nurse anesthetists	34,180	\$71.23	160	\$75.80
29-1171	Nurse practitioners	105,780	\$43.25	1,670	\$39.69
29-2035	Magnetic resonance imaging technologists	29,560	\$31.42	140	\$27.63
29-2092	Hearing aid specialists	4,980	\$19.92	50	\$13.21
31-1015	Orderlies	53,920	\$11.53	450	\$10.28
31-9097	Phlebotomists	100,380	\$14.29	930	\$12.58
33-9093	Transportation security screeners	47,200	\$17.71	520	\$16.89
39-4031	Morticians, undertakers, and funeral directors	23,070	\$22.52	130	\$22.26

Source: U.S. Bureau of Labor Statistics

## Classification Revisions

Periodically, the classification system (Standard Occupation Classification or SOC) is revised to better reflect changes in structure and the emergence of new occupations. The SOC system was re-evaluated and updated in 2010, with the first release under the revised system containing May 2012 estimates.

The May 2012 job counts and wage estimates include information for 24 newly defined or substantially revised detailed occupations. Figure 1 lists 14 of the new occupations with publishable Utah employment counts and median hourly wages as well as national data for comparison.

Of these 14 “new” occupations, four are related to information technology and seven to health care. Information technology and health care are among the fastest growing and most dynamic areas of the economy. Adjustments to their occupational mix and definitions are necessary to reflect the changing structure

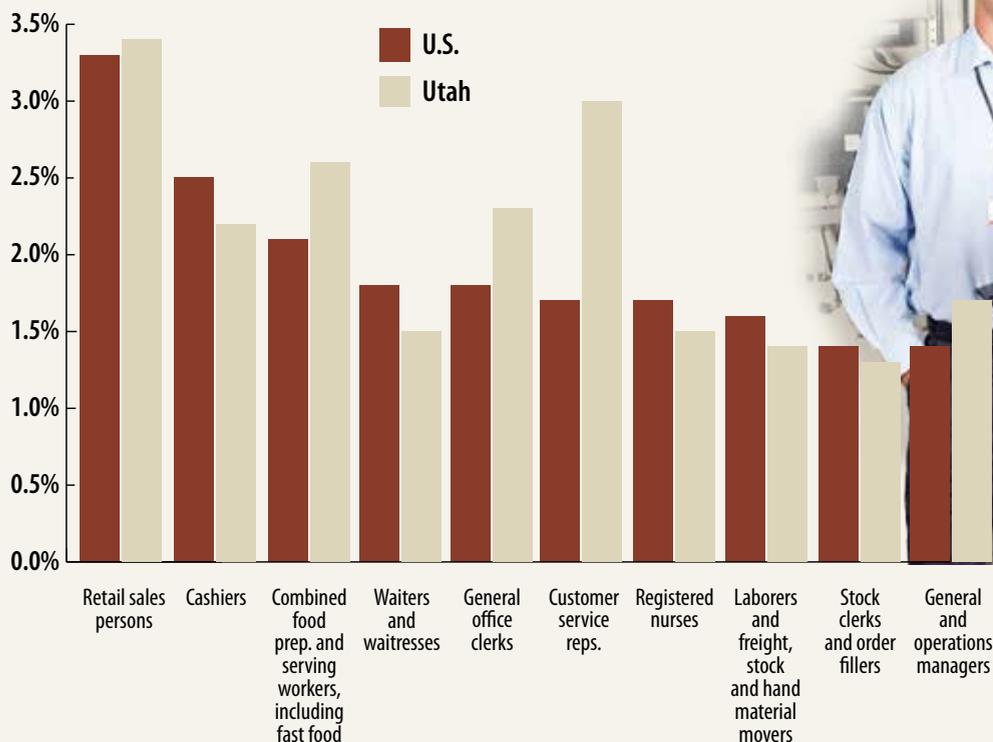
of the economy. Nationally, the 14 occupations in Figure 1 comprise 0.7 percent of the 130 million total estimated jobs and 0.8 percent of Utah’s estimated 1.2 million jobs.

## Largest Occupations

Among the 800 occupations defined, just 10 account for about one in five workers in the U.S. and in Utah (Figure 2). The top four occupations are predominately found in retail trade and food services. The fifth and sixth most common occupations, general office clerks and customer service representatives, are found in offices throughout all industry sectors. The seventh occupation in the top ten is the most common health care occupation: registered nurse.

Wage and employment counts by occupation can be examined in many ways, and the information is available online to assist anyone in their particular labor market needs. Visit [bls.gov/oes/home.htm](http://bls.gov/oes/home.htm) for Bureau of Labor Statistics occupational employment statistics and [jobs.utah.gov](http://jobs.utah.gov) for Utah labor market information. ●

Figure 2: Ten Largest U.S. Occupations as a Percent of Total Employment with a Utah Comparison  
May 2012



Sum of ten largest U.S. occupations is 19.2 percent and for Utah 21.0 percent. Source: U.S. Bureau of Labor Statistics

# What Do Job Orders Say?

## White Collar Job Orders

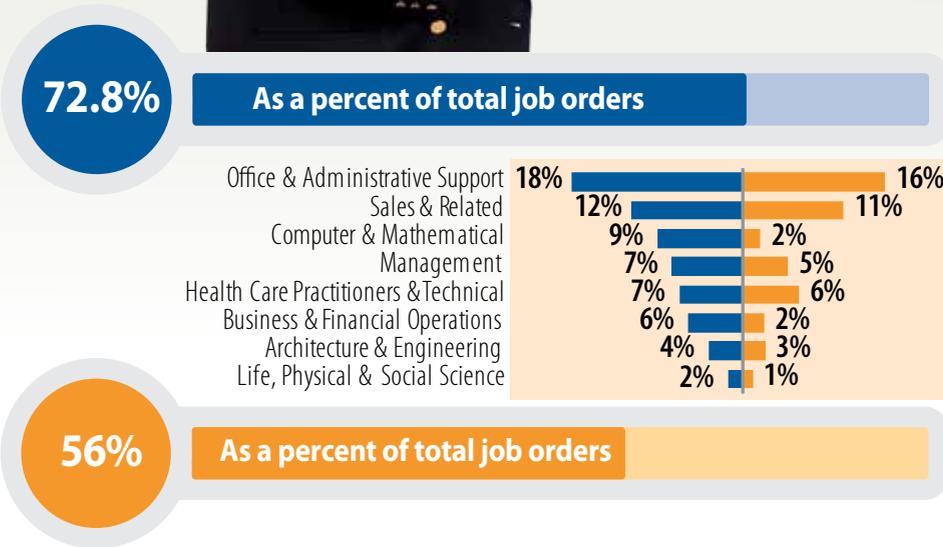


Utah employers who are looking to hire additional staff often turn to the jobs board on the Department of Workforce Services (DWS) website. When a firm places a job order, they are asked to provide specific information about the positions they hope to fill, such as the location of the worksite, the occupational title of the open position and the number of positions available. For analysts, the DWS employment database provides an abundance of labor market data that can be used to examine the local economy and highlight differences in rural and urban employment.

The number of job orders posted tells a valuable story about economic growth and

Figure 1: **Distribution of Utah Job Orders by SOC Major Groups\***

The Wasatch Front\*\* vs. All Other Areas  
First Quarter 2013



\*SOC Major Groups represent the 23 Standard Occupational Classification Groups that describe the job title and function for a given occupation

\*\*Wasatch Front is represented by Weber, Davis, Salt Lake and Utah Counties as well as Brigham City

# What is the story of economic growth and employer demand for labor along the Wasatch Front vs. other areas of Utah?

employer demand for labor. In 2009, at the bottom of the recession, there were an average of approximately 1,400 job orders posted on the DWS job board each month. In the four years after 2009, job orders increased by over 10 percent per year to nearly 2,000 orders per month in 2012. Job posting momentum continued in the first three months of this year: from the first quarter of 2012 to the first quarter of 2013 job orders grew 15.8 percent. Although the demand for labor has increased statewide, growth has been uneven from county to county.

The types of jobs in demand differ greatly depending on the dynamics of the local economy. Urbanization contributes highly to the types of occupations employers are seeking. The Wasatch Front is the most heavily populated area in the state, and a much larger

proportion of employers across this urbanized region are looking for employees in “white-collar” occupations, like computers and mathematics or business and financial operations. Conversely, the counties and cities not located in the Wasatch Front have a larger proportion of job orders in service and “blue-collar” occupations, like food preparation and serving or production (Figure 1).

Job order data reveal valuable insights about the economy. Job order postings on the DWS website have seen positive improvements since 2009 and the variety of job orders from the Wasatch Front highlights the differences between urban and rural staffing patterns. 

Wasatch Front

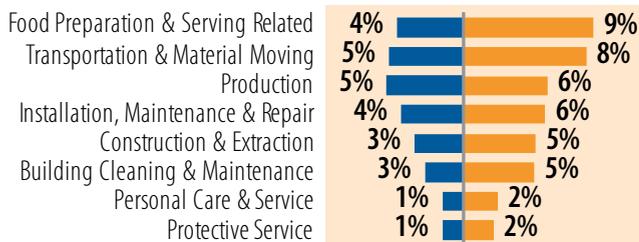
All Other Areas



## Other Job Orders

27.2%

As a percent of total job orders



44%

As a percent of total job orders

Source: Department of Workforce Services

# Wasatch Front Metropolitan Industry Projections



*Ten-year employment  
projections up to the  
year 2020.*

This past spring, the Department of Workforce Services (DWS) produced 10-year projections of industry employment up to year 2020 for eight separate regions encompassing all 29 counties within the state. Local economic structure, conditions and industry trends were used in conjunction with statewide and national trends to produce a long-term outlook for expected regional job growth by industry. These 2020 job counts are by-in-large compatible with a previously produced statewide analysis.

## **Wasatch Front Metros**

This article presents the projection results for the three metropolitan areas that comprise the Wasatch Front. A federally defined metropolitan statistical area (MSA) is an aggregation of counties around core metropolitan cities. The Wasatch Front has three MSAs: the Ogden-Clearfield MSA made up of Davis, Morgan and Weber counties; the Provo-Orem MSA made up of Utah and Juab counties; and the Salt Lake City MSA made up of

Salt Lake, Summit and Tooele counties. Businesses within these three contiguous metro areas have 82.9 percent of all nonfarm payroll jobs and pay out 85.9 percent of total wages in the state. In addition, 79.7 percent of Utahns reside in these three metro areas.

## **Ogden-Clearfield MSA**

Figure 1 displays the top five major industry groups that are expected to add the most jobs by 2020 in the Ogden-Clearfield area. Health care and social services, both public and private, will provide the most new jobs. Health care will not only lead in job growth across Utah's metropolitan areas, but is generally the leader in all regions across the state.

Construction, second on the list, is increasing from the depressed levels caused by the recent recession. Construction will grow at a relatively rapid annual rate of 3.5 percent and add 4,740 jobs from 2010 to 2020, yet will still be below the construction peak employment level achieved in 2007.

The Ogden-Clearfield area is projected to add 42,570 jobs by 2020, an annual average growth of 2.0 percent

per year from the 2010 base payroll employment of 191,090.

### Provo-Orem MSA

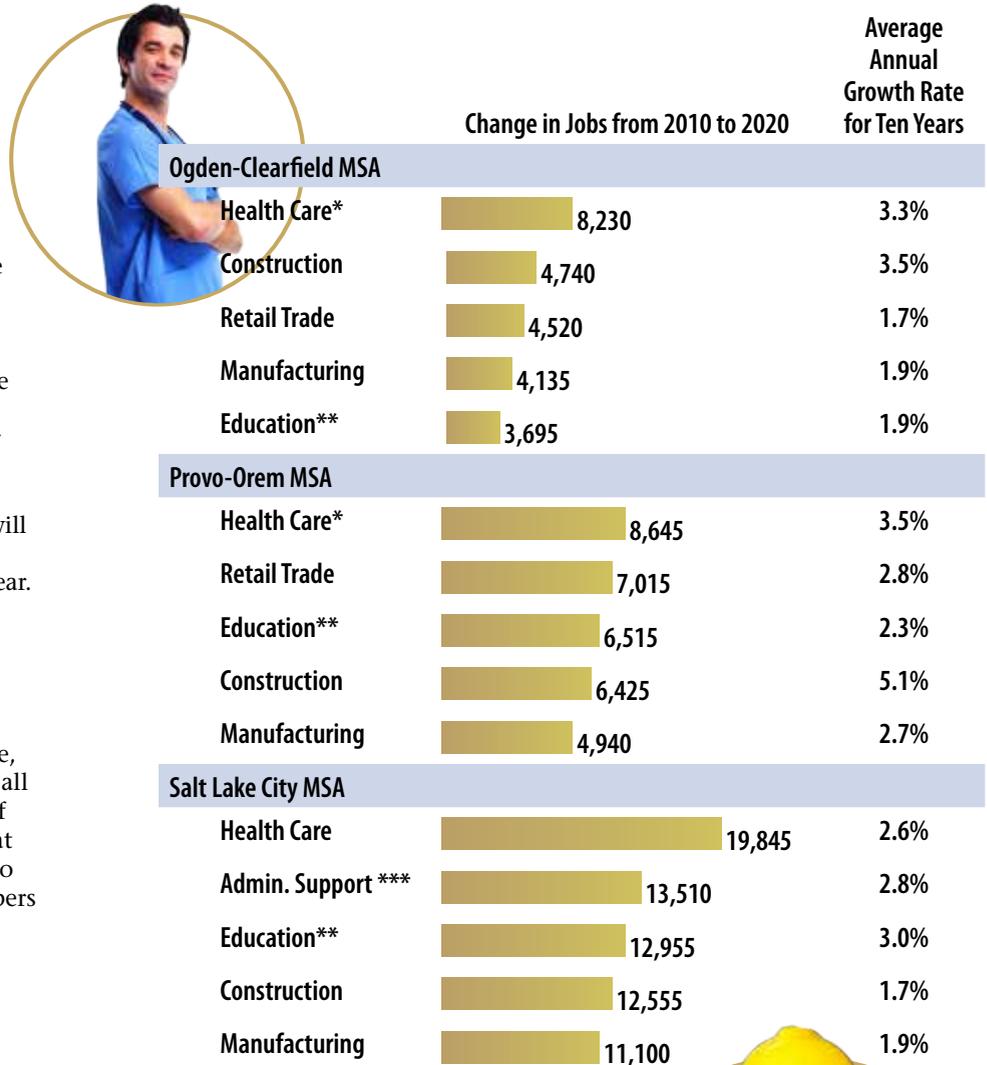
After health care, the Provo-Orem metropolitan area will see the most new jobs in retail trade, education, construction and manufacturing. Just as in the Ogden-Clearfield area, construction will grow significantly, making up for recessionary job losses and keeping up with expected significant population growth. Education continues to be a force for job growth with three main facets — public K-12 education, Utah Valley University and Brigham Young University. These major education players in Utah County follow population, labor force and business growth and provide vitality. Overall, the Provo-Orem employment base will increase by 55,600 jobs by 2020, growing about 2.9 percent per year.

### Salt Lake City MSA

The Salt Lake metropolitan area displays much of the same description in its top five job-producing industries. Health care, education and construction are all important as major producers of new job opportunities. Note that manufacturing in all three metro areas will have significant numbers of new jobs. Manufacturing employment is generally better than average quality with higher than average wages. Manufacturing activities often bring wealth to an area as much of its products are exported out of the region. The Salt Lake area is expected to increase each year on average from 2010 by 2.1 percent. This should provide an additional 138,720 jobs to the 2010 base employment of 607,495 jobs.

The look forward into regional industry job growth along the Wasatch Front gives context to the likely long-term economic and labor market environment faced by businesses and workers. ①

Figure 1:  
Top Five Industries for Projected Job Growth  
by Metropolitan Area along the Wasatch Front: 2010 to 2020



\*The health care industry includes social services and both private and government providers.

\*\*Education includes public and private institutions and businesses.

\*\*\*Administrative support and waste management industry.

Source: Utah Department of Workforce Services

# Apples & Oranges

## A Comparison of Public and Private Sector Occupational Employment and Wages

In today's media, it is not uncommon to hear assertions about government employment in the United States. The truth is, however, public sector employment is perhaps best evaluated in a greater economic context (i.e., with reference to the private sector) and those comparisons can be difficult to make. Despite such difficulty, data made available by the U.S. Bureau of Labor Statistics Occupational Employment Statistics (OES) program assists the comparison of occupational wages and employment between the public and private sectors. The OES randomly samples employers in both public and private sectors and asks them for information about their workforce job assignments and wages. Employers' reported job titles are then coded into the Standard Occupational Classification (SOC) structure to aggregate common job duties and standardize response data. This information yields annual estimates of employment and wages for over 800 occupations nationally.

The Comparison of OES public and private sector employment by major occupational group reveals some immediate differences in the general occupational make-up of the two areas of economic ownership. The three largest occupational groups by employment in the public sector are education, training and library occupations; office and administrative support occupations; and protective service occupations, with employment shares of 29.9 percent, 15.3 percent and 9.4 percent, respectively. The large portion of employment in office and administrative support occupations actually exists in the private sector as well, but that is the extent of the similarities between the two groups. In the private sector, jobs in education and protective services sum to an employment share of only 2.9 percent. In terms of average wages, education occupations in the private and public sector seem to fare about the same, at \$23.41 an hour as compared to \$25.00 an hour, respectively. In protective services, workers earn an average of \$24.92 an hour, while private sector protective services workers average only \$13.56 an hour.

Despite core contrasts between private sector and government employment, the occupational mix at the detailed level heavily influence wage and employment estimates. For instance, public sector protective service occupations are primarily represented by police officers, whereas private sector protective service occupations generally consist of security guards. And since police officers earn more on average than security guards in both the public and private sectors, it is a natural consequence that the average wages of protective service workers are higher in the public sector.

Examining public and private sector occupational data at a detailed level can provide more granular insight into potential wage and employment disparities. In reviewing select detailed occupations that are well represented in both the public and private labor markets, it becomes apparent that in some cases the public sector average wage exceeds the private sector, in some cases the opposite is true and in other cases the average wages are nearly identical. Unfortunately, even at this most detailed definition, many factors that significantly contribute to public and private occupational compensation differences are unaccounted for in OES. Wage determinants, such as level of work performed, educational attainment and tenure in a position, are not explicitly captured by the OES program and can complicate comparisons of OES data by sector. Nevertheless, OES data conclusively illustrate the dissimilarity between public and private sector occupational employment compositions. Wage differences are also substantiated by OES, but all of the potential causes are not controlled. 



## Private and Public Sector Employment and Wages by Major Occupational Group, National

Occupational Group	Private			Public			Public as a Percent of Private	
	Employment	Emp. Share	Avg. Wage	Employment	Emp. Share	Avg. Wage	Employment	Avg. Wage
Management Occupations	5,380,790	4.9%	\$53.66	1,009,630	4.7%	\$44.42	18.8%	82.8%
Business & Financial Operations Occupations	5,259,450	4.8%	\$33.74	1,159,920	5.4%	\$32.06	22.1%	95.0%
Computer & Mathematical Occupations	3,171,230	2.9%	\$39.23	406,990	1.9%	\$33.23	12.8%	84.7%
Architecture & Engineering Occupations	2,045,490	1.9%	\$38.02	311,040	1.5%	\$37.72	15.2%	99.2%
Life, Physical & Social Science Occupations	657,980	0.6%	\$34.30	446,120	2.1%	\$30.76	67.8%	89.7%
Community & Social Service Occupations	1,160,590	1.1%	\$19.03	721,480	3.4%	\$24.87	62.2%	130.7%
Legal Occupations	762,340	0.7%	\$49.59	260,680	1.2%	\$40.96	34.2%	82.6%
Education, Training & Library Occupations	1,983,340	1.8%	\$23.41	6,391,570	29.9%	\$25.00	322.3%	106.8%
Arts, Design, Entertainment, Sports & Media Occupations	1,556,700	1.4%	\$26.59	193,430	0.9%	\$23.03	12.4%	86.6%
Health Care Practitioners & Technical Occupations	6,482,800	6.0%	\$35.88	1,167,140	5.5%	\$32.43	18.0%	90.4%
Health Care Support Occupations	3,616,680	3.3%	\$13.26	298,790	1.4%	\$14.55	8.3%	109.7%
Protective Service Occupations	1,192,780	1.1%	\$13.56	2,015,010	9.4%	\$24.92	168.9%	183.8%
Food Preparation & Serving Related Occupations	11,006,660	10.1%	\$10.21	540,220	2.5%	\$11.77	4.9%	115.3%
Building/Grounds Cleaning & Maintenance Occupations	3,523,810	3.2%	\$11.88	722,450	3.4%	\$14.59	20.5%	122.8%
Personal Care & Service Occupations	3,328,940	3.1%	\$11.66	481,810	2.3%	\$12.75	14.5%	109.3%
Sales & Related Occupations	13,748,510	12.6%	\$18.28	86,580	0.4%	\$16.17	0.6%	88.5%
Office & Administrative Support Occupations	18,079,150	16.6%	\$16.13	3,276,200	15.3%	\$18.82	18.1%	116.7%
Farming, Fishing & Forestry Occupations	401,020	0.4%	\$11.22	26,650	0.1%	\$18.11	6.6%	161.4%
Construction & Extraction Occupations	4,499,670	4.1%	\$21.64	478,620	2.2%	\$21.37	10.6%	98.8%
Installation, Maintenance & Repair Occupations	4,534,860	4.2%	\$20.90	534,730	2.5%	\$22.73	11.8%	108.8%
Production Occupations	8,412,810	7.7%	\$16.43	181,360	0.8%	\$23.69	2.2%	144.2%
Transportation & Material Moving Occupations	8,118,650	7.5%	\$15.91	653,040	3.1%	\$19.12	8.0%	120.2%

## Private and Public Sector Employment and Wages by Selected Detailed Occupations, National

Detailed Occupation	Private		Public		Public as a Percent of Private
	Employment	Avg. Wage	Employment	Avg. Wage	Avg. Wage
General & Operations Managers	1,762,660	\$55.74	136,800	\$48.52	87.0%
Accountants & Auditors	997,990	\$34.59	131,350	\$30.83	89.1%
Civil Engineers	182,630	\$41.13	75,480	\$38.83	94.4%
Lawyers	457,340	\$66.80	124,580	\$48.69	72.9%
Registered Nurses	2,168,910	\$32.72	465,070	\$32.35	98.9%
Janitors & Cleaners, Except Maids & Housekeeping Cleaners	1,594,690	\$11.29	502,690	\$14.03	124.3%
Cashiers	3,267,150	\$9.74	46,860	\$13.39	137.5%
Office Clerks, General	2,286,250	\$13.92	521,850	\$14.76	106.0%
First-Line Supervisors of Mechanics, Installers, & Repairers	359,340	\$30.03	62,310	\$30.28	100.8%
Water/Wastewater Treatment Plant & System Operators	21,590	\$21.20	86,840	\$21.52	101.5%

# Waging a Living: What do Utah's Occupations Pay?

Figure 1: Median Hourly Wage for All Occupations

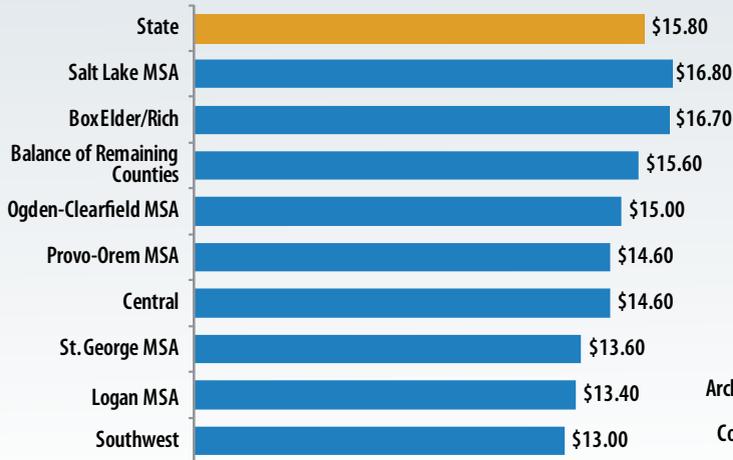
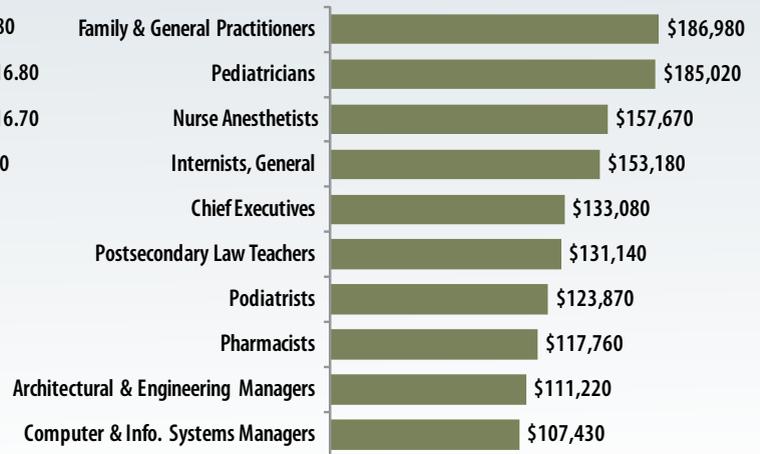


Figure 2: 2012 Annual Median Wage of Highest Paid Utah Occupations



An employer asks, "What wages should I pay to attract and keep high quality workers?" A job seeker inquires, "What wage should I request in my upcoming job negotiation?" A student wonders, "If I choose a certain career, how much can I expect to earn?"

The Utah Department of Workforce Services can help answer all these questions with our recently released occupational wage data.

This wage data is collected via the Occupational Employment Statistics program, a nationwide employer survey conducted by individual states under the auspices of the U.S. Bureau of Labor Statistics. You won't find a larger or more complete wage survey anywhere. And, all this lovely information is available for Utah and eight substate areas at the click of a mouse ([jobs.utah.gov/jsp/almiswage/wage-home](http://jobs.utah.gov/jsp/almiswage/wage-home)). Compiled median, average and inexperienced (average of the bottom third) wages aid workers, employers and career seekers in making market-driven wage decisions.

Statewide, wages are published for more than 660 occupations. Keep in mind, the Department of Workforce Services does not publish wages for occupations where confidentiality would be compromised or where survey sample size or response does not provide statistically viable data.

Figure 3: Hourly Median Wage of Lowest Paid Utah Occupations

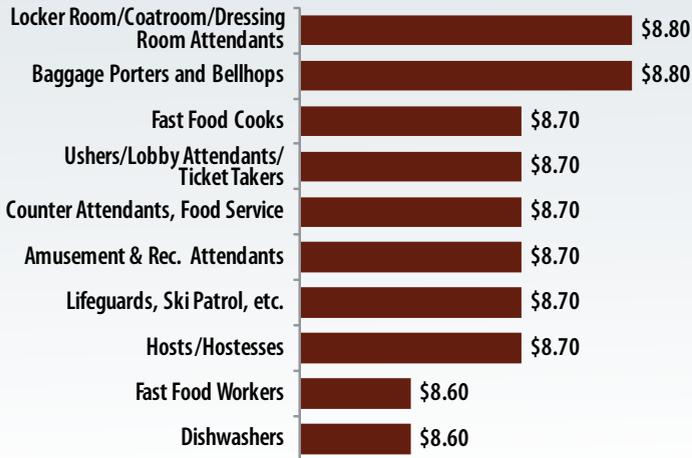
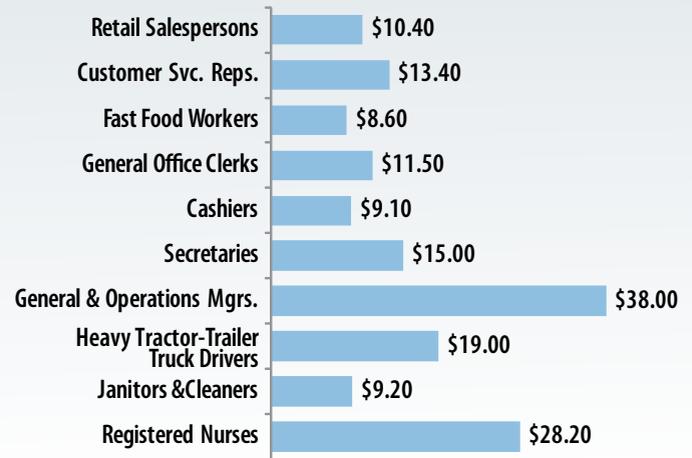


Figure 4: Utah Hourly Median Wage of the Most Common Occupations



Source: Utah Department of Workforce Services

Smaller substate areas generate a smaller number of publishable wages.

## Location

Not all of Utah's substate areas pay equal wages. Differences in occupational mix, labor market supply and demand, and the relative state of an area's economy all affect wages. Typically, the median wage provides a better measure of central tendency than does the average. Although the Salt Lake City Metropolitan Statistical Area shows the highest median wage, two noticeably less-urban substate areas rank number two (Box Elder and Rich) and number three (balance of counties) for median hourly wages. Box Elder, with its high percentage of higher-than-average paying manufacturing positions, and the Uintah Basin, with booming oil and gas wages, precipitated high rankings for these two areas. On the other end of the scale, the Logan MSA and southwest counties showed the lowest median wages.

## Wages

Not surprisingly, the highest-paid occupations in Utah generally fall into two categories: high-skilled medical jobs and high-skilled managerial positions. Remember that some highly paid occupations failed to make the list because their wages did not meet publication or confidentiality standards (such as surgeons). Service occupations requiring few skills dominate the list of Utah occupations with the lowest median wages.

In Utah, occupations that encompass the largest number of workers supply vastly different wages. For example, fast food workers receive one of the lowest median wages of all occupations (\$8.60 per hour). On the other hand, another large occupation, general and operations managers, pays almost five times as much as a fast food worker. In these employment-heavy groups, registered nurses and heavy tractor-trailer truck drivers also receive higher than average wages.

More than 660 occupations reside in our database in addition to those mentioned here. Now that your appetite for wage data has been whetted, aren't you just dying to know the market wage for your occupation or your employees' occupations? Visit our website ([jobs.utah.gov/jsp/almisswage/wage-home](http://jobs.utah.gov/jsp/almisswage/wage-home)) for the latest answers to your wage questions. 

“Only in our dreams are we free. The rest of the time we need wages.” –Terry Pratchett



Long-Term

# Employment Projections

for Utah's Non-Wasatch Front Regions



Every two years, economists from the Department of Workforce Services produce long-term (10-year) employment projections for different regions in Utah. 2013 marks the year when the latest long-term, substate regional projections are produced, starting from the base-year of 2010. The value in providing these employment projections is to identify which types of jobs are

most likely to be in high demand in the future. Projections give our future workforce (typically youth still preparing themselves in school) a sense of which industries are estimated to have abundant prospective employment opportunities. Projections assist employment counselors in communicating where abundant employment opportunities are expected to be. Projections can also direct the education community in shaping policies aimed at preparing the future workforce with those skills necessary and valued in order to meet the future employment demands. Ultimately, the long-term employment projections act as a forecasting measure by which individuals as well as organizations and agencies can plan ahead.

The substate regions are divided into the following eight geographical areas: Bear River, Central Utah, Eastern Utah, Ogden-Clearfield, Provo-Orem, Salt Lake City, Southwest Utah and St. George. Figure 1 illustrates which counties belong to which substate regions. What is the outlook for those substate regions outside of the Wasatch Front?

In any given region, industries that typically support the local population will tend to grow the most in

terms of absolute jobs. Usually, these are industries like education, health care, construction or trade. In addition, niche industries in a region that also employ relatively large shares of the workforce will tend to see significant numbers of new jobs projected to be added to the economy. Identifying population-supporting and niche industries in an area gives a further sense of local employment character as well as any industries that appear to be growing faster than average.

## Bear River

Industries important to Bear River, which include manufacturing, educational services, retail and health care and social assistance, are projected to continue offering the most abundant employment opportunities. Health care and social assistance is projected to net over 2,000 more jobs over the 10-year projection period. Educational services will net slightly fewer than 1,900 and manufacturing will net almost 1,000. Construction and retail, industries typically tied to supporting the population, will also net well over 1,000 jobs each.

## Central Utah

Health care and social assistance will net 775 more jobs between 2010 and 2020. In fact, social assistance is projected to grow annually at a rate of 5.7 percent. As is typically the case in rural areas, government will also continue to offer relatively more abundant employment opportunities, with a 587 net gain in jobs over the projected period. Other relatively meaningful employment opportunities in Central Utah will likely include transportation and warehousing, leisure and hospitality, and retail trade.

## Southwest

Once again, health care and social assistance is likely to net the highest job gains in the 10-year interim at just over 1,000, with social assistance growing annually by 4.5 percent. Leisure and hospitality will net slightly fewer than 1,000 more jobs. Other population-driven industries, retail trade and government, will each add

Figure 1: Sub-State Regions



Sub-State Regions	Counties Comprising the Sub-State Region
Bear River	Box Elder, Cache and Rich Counties
Central Utah	Millard, Piute, Sanpete, Sevier and Wayne Counties
Eastern Utah	Carbon, Daggett, Duchesne, Emery, Grand, San Juan, Uintah and Wasatch Counties
Ogden-Clearfield	Davis, Morgan and Weber Counties
Provo-Orem	Juab and Utah Counties
Salt Lake City	Salt Lake, Summit and Tooele Counties
Southwest	Beaver, Garfield, Iron and Kane Counties
St. George	Washington County

Figure 2: Long-Term Employment Projections for Non-Wasatch Front Regions, 2010-2020  
Actual Job Growth and Compound Annual Growth Rates

Industry	Bear River		Central Utah		Southwest		St. George		Eastern Utah	
	Actual Job Growth	Compound Annual Growth Rate	Actual Job Growth	Compound Annual Growth Rate	Actual Job Growth	Compound Annual Growth Rate	Actual Job Growth	Compound Annual Growth Rate	Actual Job Growth	Compound Annual Growth Rate
Mining	2	0.4%	178	2.3%	27	1.9%	88	5.2%	2496	3.4%
Utilities	2	0.2%	-5	-0.1%	7	0.4%	54	4.1%	15	0.2%
Construction	1461	3.6%	-23	-0.3%	255	2.4%	3157	6.8%	1383	3.3%
Manufacturing	982	0.6%	259	2.0%	346	2.0%	744	2.9%	275	2.4%
Wholesale Trade	345	2.4%	119	2.4%	92	2.4%	442	3.7%	415	2.6%
Retail Trade	1275	1.7%	488	1.6%	552	1.8%	2741	3.3%	1380	2.2%
Transportation/Warehousing	699	2.5%	506	3.4%	119	1.9%	1014	3.2%	593	2.2%
Information	201	2.5%	-20	-0.7%	-21	-0.8%	107	1.4%	14	0.2%
Finance/Insurance	207	1.4%	42	1.1%	137	1.8%	296	2.3%	139	1.5%
Real Estate/Rental/Leasing	97	1.9%	24	1.8%	71	2.8%	227	2.9%	248	2.9%
Prof./Technical Services	908	2.7%	93	2.7%	-59	-1.5%	628	3.4%	491	3.3%
Mgmt. of Companies/Enterprises	0	0.0%	53	24.0%	6	1.9%	50	8.9%	40	2.8%
Admin./Waste Services	616	2.1%	250	4.3%	190	2.2%	770	3.4%	332	2.3%
Educational Services	1884	2.2%	209	0.8%	484	1.5%	1103	2.5%	550	1.2%
Health Care/Social Assistance	2113	2.8%	775	2.9%	1016	3.4%	2943	3.3%	1224	2.3%
Arts/Ent./Recreation	203	2.5%	30	2.9%	72	1.8%	234	2.6%	110	2.0%
Accomm./Food Services	861	1.7%	414	2.1%	909	2.3%	2160	3.2%	1376	2.3%
Other Services (except gov.)	238	1.4%	83	1.6%	112	1.2%	211	1.4%	359	2.2%
Government	637	1.4%	587	2.0%	505	1.9%	727	2.3%	1210	1.8%

Source: Utah Department of Workforce Services

over 500 more jobs over the projection period. The fastest growing industry is projected to be within miscellaneous manufacturing, while furniture and related product manufacturing is projected to shed 68 jobs (22 percent annually).

### **St. George**

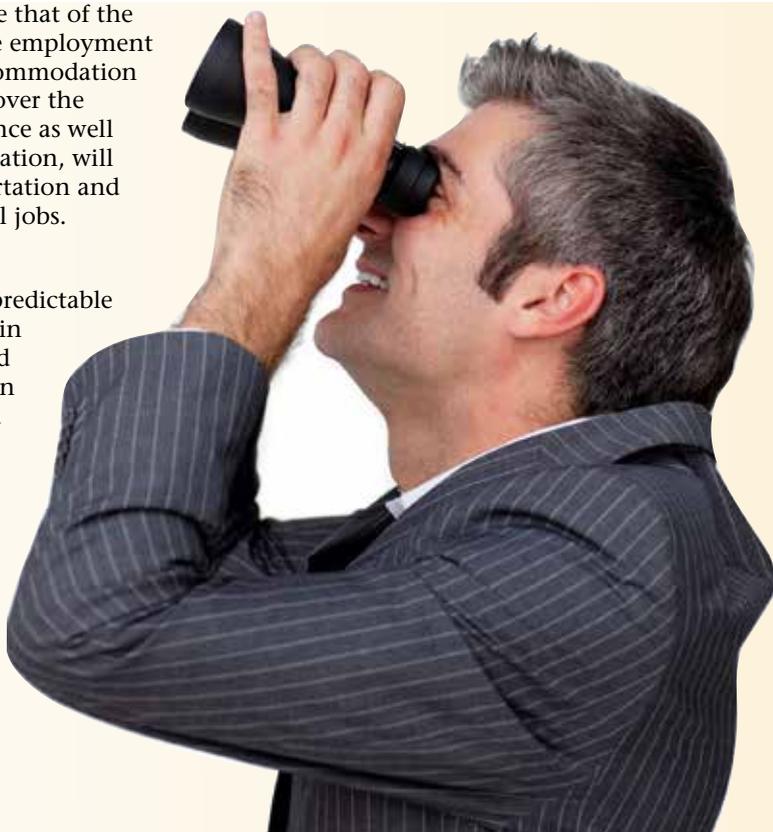
Although the construction industry has seen its employment woes since the great recession, this industry is, nevertheless, projected to provide the most abundant employment opportunities in St. George with a net of over 3,100 more jobs over the ten-year period. Construction of buildings is projected to grow at an annual rate of 10 percent, the highest rate of growth for any sub-industry in the region. Among the population-supporting industries of the region, health care and social assistance will net over 2,900 jobs by 2020, government about 730, retail trade over 2,700, accommodation and food services over 2,100 and educational services about 1,100. Transportation and warehousing, manufacturing and professional and technical services are estimated to net between 600 and 1,000 jobs each.

### **Eastern Utah**

Mining, especially oil and gas extraction is the industry that seems to drive everything in Eastern Utah. At a net of 2,500 additional jobs by 2020, mining is by far the industry projected to provide the most abundant employment opportunities for the region. This projected figure is about twice that of the next highest ranking industries in terms of future employment opportunities: construction, retail trade, and accommodation and food services will net about 1,380 jobs each over the projection interim. Health care and social assistance as well as government, industries that support the population, will net just over 1,200 additional jobs each. Transportation and warehousing is slated to add about 600 additional jobs.

### **Patterns**

As would be expected, any given region will see predictable and relatively sizable employment opportunities in population-supporting industries. Health care and social assistance is a primary industry of growth in all regions because of its function of supporting a growing population over time. Furthermore, the growing number of aging baby-boomers needing health care services heightens future demand. Other population-supporting industries, like government and retail trade, will also continue to provide relatively ample employment opportunities. Finally, niche industries like manufacturing in Bear River or mining (oil and gas) in Eastern Utah will also continue to provide more abundant employment opportunities in the future. 



Aging baby-boomers are creating a future demand for health care services—hence health care will continue its growth pattern.

The New

# jobs.utah.gov

You Spoke, We Listened

**O**The jobs.utah.gov website was redesigned to provide you, our customer, with a faster and more intuitive online experience. We updated our pages with job seekers, employers and others in mind, and now we deliver only the most timely and relevant content in a fresh, clean design. We have listened to and carefully studied your needs: we minimized links and emphasized the information and services you need the most.

You'll find our new design utilizes an expanded navigation bar guiding you intuitively to many of our services organized by customer or division. Each item in the navigation bar represents a unique set of services offered by the department.

For example, the Job Seeker page, the first page listed in our navigation bar, is focused on helping our customers to find their next job. All links and services are focused on the steps to take to find, prepare for and secure a job.

When you sign in to your DWS account, you'll find the simpler and personalized information makes it easier for you to see and manage your account, especially if you receive multiple services. Employers will now find that filing reports online is much easier than before.

Experience the new design today by visiting [jobs.utah.gov](http://jobs.utah.gov) where your insight provided a more uniform look and feel across all other services. 



- Improved, easier to navigate layout
- Responsive to all screen sizes
- Interactive labor market information
- Upgraded services for employers
- As always, Utah's largest database of jobs and resources for job seekers

Your one stop shop for finding a job or posting a job!

# Operations Research Analyst



The duties of an operations research analyst encompass tasks that span all aspects of an organization, such as generating sales and revenue and working with production schedules and deadlines. These analysts are also involved in managing the supply chain, where they identify issues as they relate to production and logistics. They employ the use of sophisticated computer software, such as databases and statistical modeling packages, to solve complex problems. Opportunities to solve problems in a myriad of ways require operations research analysts to possess an element of ingenuity in how they approach their work. At the core of problem-solving, an analyst needs to consider the cost to benefit ratio while exploring alternative solutions when presenting recommendations to managers. Problem-solving skills aid analysts in examining information to determine the best way to analyze it. They employ a multidisciplinary approach in finding solutions to complex problems. This cross-platform approach allows most analysts to work on teams, thus building interpersonal skills. Upon the advice of these analysts, a manager is able to make sound decisions.

Typically, operational research analysts spend most of their work hours in the office. Sometimes they work in the field where they gather data and analyze information through direct observation. Often they work full time with some required travel. The multifaceted nature of an operational research analyst's analysis transcends the boundaries of large corporations. As such, many of these analysts are highly recruited by agencies within the federal government, such as the

Department of Defense. This job is quite intricate and demanding in nature. For that reason, most employers prefer applicants to have at least a master's degree, although a bachelor's degree is commonly accepted for entry-level positions. Quantitative analysis is the essence of this job. In order to be aptly prepared, students need extensive coursework in mathematics, specifically statistics, calculus and linear algebra. The completion of coursework in computer science is both necessary and important because analysts rely heavily on advanced statistical and database software to carry out their tasks. Some analysts who enter this profession have pursued courses outside the boundaries of mathematics with coursework in engineering, economics and political science. This background is useful as the nature of operations research is multidisciplinary.

There are about 670 analysts employed in Utah making an average hourly wage of \$30.16. Annual growth rate is projected at 2.8 percent through 2013 and 2.9 percent through 2020. Establishments in the public administration and professional, scientific and technical services industries house the bulk of operations research analyst employment in Utah.

Equipped with an ability to solve complex problems using analytical software, operations research analysts will continue to play a crucial part in the implementation of policies within a variety of organizations. As technology advances, organizations are finding it easier to get data. As such, these analysts are expected to become more visible in companies that need help turning their data into valuable information, in order for managers to make better decisions in their businesses. 

Percent total  
*Operation Research Analyst*  
Employment by Industry in Utah

Industry	Percent of Operation Research Analyst Employment in Utah
Public Administration	26.6%
Professional, Scientific and Technical Services	23.4%
Finance and Insurance	17.2%
Manufacturing	12.5%
Management	7.8%
Wholesale Trade	6.3%
Information	4.7%
Education Services	1.6%

Labor Statistics for  
*Operation Research Analysts*  
in Utah

Employment	670
Mean Hourly Wage	\$30.16
Projected Annual Growth Rate through 2013	2.8%
Projected Annual Growth Rate through 2020	2.9%
Location Quotient	1.05

Source: Utah Department of Workforce Services and Bureau of Labor Statistics (2012)

*Opportunities to solve problems*  
in a myriad of ways require operations research analysts to possess an element of ingenuity in how they approach their work.



## Utah Workers with

How do workers with disabilities fare in Utah's workforce?

# DisAbilities



The Utah workforce is comprised of diverse demographics, including individuals with disabilities. While some disabilities are acute enough to impede vocational work, others allow for participation in the workforce. The Census Bureau's American Community Survey (ACS) reports the number of Utahns (both in and out of the labor force) with disabilities, which includes those who report difficulty with hearing, vision, cognition, walking, self-care or independent living. Among the population of employed workers in the state, what is the profile of workers with disabilities?

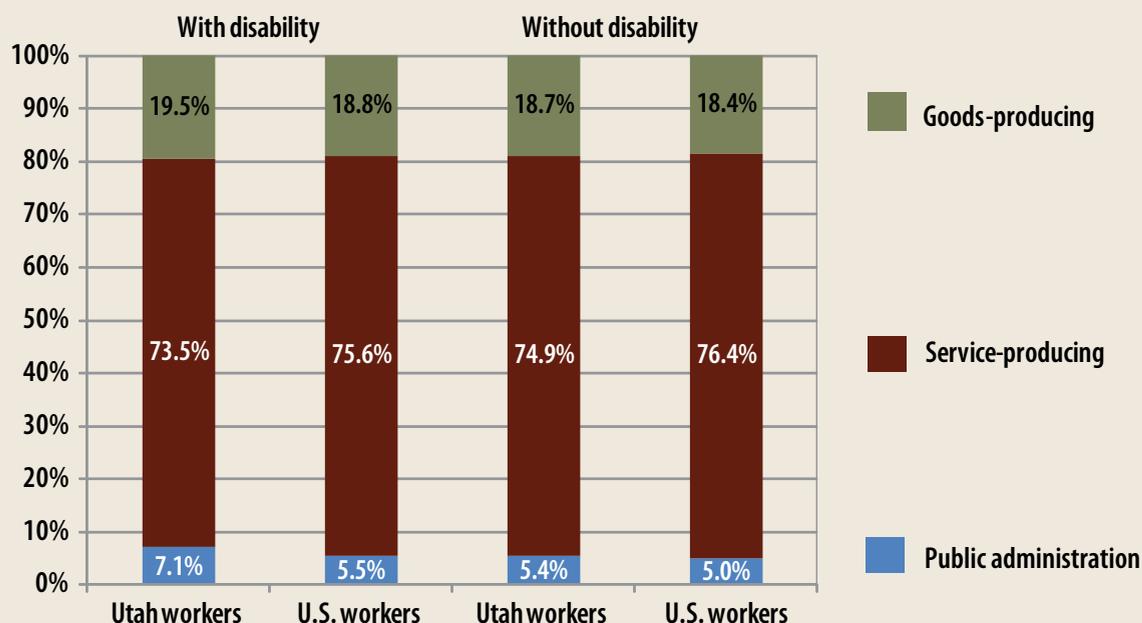
In 2011, the population of Utah who were at least 16 years old and employed included approximately 1,261,000 workers, 61,000 of whom had a disability. This means 4.8 percent of individuals employed in the workforce had a disability, while the proportion for the United States was 5.3 percent. The percent of individuals 16 and older with a disability who were employed was higher in Utah than the nation: 27 percent compared to 22 percent.

The ratio of median earnings of workers with a disability to the

total employed population reveals lower earnings for workers with a disability. In 2011, median earnings for workers with a disability were 81 percent of the median earnings of all workers. The median earnings of the total civilian population were about \$26,000, as compared to median earnings of workers with a disability of just over \$21,000. Over 40 percent of the working age population with a disability earned less than \$15,000 in the 12 months prior to responding to the ACS. The share of workers without a disability earning the same level in 2011 was just over 33 percent. While relatively low earnings can indicate a prevalence of low-wage positions for workers with disabilities, they can also be the result of relatively higher levels of temporary or part-time positions.

During 2011, the highest percentage of employed workers with a disability were found in management, business, science and arts occupations (32 percent) and the smallest percentage in natural resources, construction and maintenance (9 percent). Figure 1 shows the share of workers, with and without a disability, employed by industry for the state and the nation. Interestingly, compared to

**Figure 1.**  
**Share of Workers by Industry of Employment, 2011**



Source: U.S. Census Bureau, American Community Survey 2011

their counterparts in the same geographic regions, workers with disabilities tend to represent a larger share of employment in goods-producing industries. The reverse is true for workers without a disability in service-producing industries. Despite this distribution by industry, employment figures by occupation show workers with disabilities favoring positions that do not require intense manual labor, as might be expected.

There are characteristic differences between the state's population of workers with disabilities and those without, warranting recognition of the group as both a distinct and integrated segment of the labor force. 

**Goods-producing sectors** include agriculture, forestry, fishing and hunting; mining, quarrying and oil and gas extraction; construction; and manufacturing.

**Service-producing sectors** include utilities; wholesale trade; retail trade; transportation and warehousing; information; finance and insurance; real estate and rental and leasing; professional, scientific and technical services; management of companies and enterprises; administrative and support and waste management and remediation services; educational services; health care and social assistance; arts, entertainment and recreation; accommodation and food services; and other services (except public administration).

# Professional, Scientific and Technical Services



**Professional and Technical Services Industry, Utah**

Year	Annual Average Employment	Number of Establishments	Annual Payroll	Average
2012	72,337	11,743	\$4,516,972,718	\$1,129,264,703
2011	68,060	11,131	\$4,192,251,406	\$1,048,083,152
2010	65,226	10,757	\$3,888,025,339	\$972,025,833
2009	65,337	10,665	\$3,863,217,241	\$965,823,813
2008	68,159	10,565	\$3,986,039,437	\$996,530,042
2007	64,872	10,133	\$3,644,849,972	\$911,231,746
2006	60,916	9,942	\$3,218,191,167	\$804,566,008
2005	55,061	9,099	\$2,790,479,359	\$697,636,381
2004	51,209	8,280	\$2,531,078,224	\$632,784,929

Source: Utah Department of Workforce Services

If there was any doubt that the professional, scientific and technical services industry has been booming in Utah, then a look at recent newspapers, magazines and Internet headlines will chase away any uncertainty. Accelerating technological change has increased the intensity of business competition and economic development, forcing continual adjustments in a changing environment. Since the summer of 2004, this industry has continued to have a pronounced impact on Utah's economic growth, adding jobs even through the Great Recession.

A wide variety of services represent professional, scientific and technical services, such as legal, accounting and bookkeeping; architectural and engineering; specialized design; computer systems design; management and technical consulting; scientific research and development; advertising; and other professional and technical services. Many occupations within these types of services typically require a high level of training or education and commonly some sort of formal certification. Jobs like computer hardware engineers, computer support specialists, mechanical and industrial engineers, paralegals and legal assistants are among the most desired in this industry. The long-term outlook for occupational projections for Utah find accountants and auditors, lawyers, management analysts and market research analysts as five-star jobs in Utah, defined as occupations with high wages and high employment opportunities.

The industry's two largest employers can be found along the Wasatch Front. Marketstar Corporation in Weber County represents management and technical consulting services, and Myriad Genetic Laboratories, Inc. in Salt Lake County represents scientific research

and development services. Both companies employ over 500 workers. The next 16 largest companies in this industry employ 250 to 500 workers and are all situated in Utah, Salt Lake, Davis or Cache counties. Thirty of the largest employers represent computer systems design and related services, emphasizing the importance of Utah's "Silicone Slopes." Utah's "Silicon Slopes" is a name that refers to Utah's thriving technology industry. The fact that thirty of the largest employers in professional, scientific and technical services are within computer systems design and related services emphasizes Utah's overall presence in a larger technology landscape such as Adobe, 3M and Novell. Although the state of Utah has smaller metro areas than other states with high technology employment, jobs in this industry have rapidly increased to bring Utah to mind in many national outlets.

Computer systems design and scientific and technical jobs have risen, and with the help of the Utah Science and Technology Research Initiative (USTAR), Utah has been important in creating and sustaining jobs. New companies are coming into the state such as SolarWinds, and startup companies are being created at Startup Weekend events.

In the end, national companies are recognizing the benefits of Utah, with its combination of well-educated and skilled workers, lower wages nationally, a relatively lower cost of living, lower taxes and a high percentage of multi-lingual speakers. All of this allows Utah's professional, scientific and technical services industry to successfully compete for employers, providing a wealth of opportunities to those seeking employment within this industry. ●

For more information on companies in Utah: [jobs.utah.gov/jsp/firmfind/welcome.do](http://jobs.utah.gov/jsp/firmfind/welcome.do)

just  
the  
facts...

### May 2013 Unemployment Rates

Utah Unemployment Rate	4.6%
U.S. Unemployment Rate	7.6%
Utah Nonfarm Jobs (thousands)	1,282.7
U.S. Nonfarm Jobs (thousands)	136,367.0

### Changes From Last Year

Down	1.2 points
Down	0.6 points
Up	2.6%
Up	1.6%
Up	1.4%
Up	1.7%

### May 2013 Consumer Price Index Rates

U.S. Consumer Price Index	232.9
U.S. Producer Price Index	197.0

Source: Utah Department of Workforce Services

### May 2013 Seasonally Adjusted Unemployment Rates

Beaver	4.6%
Box Elder	5.5 %
Cache	4.1 %
Carbon	6.4 %
Daggett	5.1 %
Davis	4.5 %
Duchesne	3.7 %
Emery	6.4 %
Garfield	9.3 %
Grand	7.6 %
Iron	6.0 %
Juab	5.5 %
Kane	5.6 %
Millard	4.2 %
Morgan	4.2 %
Piute	4.9 %
Rich	4.0 %
Salt Lake	4.4 %
San Juan	9.5 %
Sanpete	6.3 %
Sevier	5.5 %
Summit	4.1 %
Tooele	5.2 %
Uintah	3.7 %
Utah	4.6 %
Wasatch	5.3 %
Washington	5.6 %
Wayne	11.6 %
Weber	5.4 %

rate  
updates...



# NEW and improved!



- Improved, easier to navigate
- Responsive to all screen sizes
- Interactive labor market information
- Utah's largest database of jobs and resources for job seekers
- Upgraded and personalized services for employers