

# Research Report

Report Number 699, March 2011

## MAKING SENSE OF UTAH'S TAX And fee burdens

#### **HIGHLIGHTS**

- Fiscal Year 2008 data from the U.S. Census Bureau show Utah's tax burden ranks 16th highest in the nation and fourth among western states. However, it is important to not only consider how the burden compares to other states, but how it compares to the need for government services within the state.
- Estimating Utah's demand for the state's sixlargest government-funded services shows Utah's demand for elementary, secondary, and higher education services is well above the national average. The state's demand for public welfare services and hospitals and healthrelated services is below the national average. The demand for highway-related services and police protection/corrections is slightly below or roughly equal to the national average.
- The fact that the largest portion of Utah's state and local direct government expenditures is for education-related services—services Utah has the highest demand for in the country due to the high birth rate and young population—makes Utah's comparatively high tax burden seem reasonable.
- Utah's burden for taxes and mandatory fees is 1.7% higher than the national average, while the state's demand for education services is 20% higher than the national average.

The mission of Utah Foundation is to promote a thriving economy, a well-prepared workforce, and a high quality of life for Utahns by performing thorough, well-supported research that helps policymakers, business and community leaders, and citizens better understand complex issues and providing practical, well-reasoned recommendations for policy change.

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Utah's tax burden is fairly high when compared to other states. The Fiscal Year 2008 data show Utah's tax burden ranks 16th highest in the country and fourth highest among western states. For a more complete understanding of Utah's tax burden, however, it is important to also compare it to the need that exists in Utah for government services paid for through taxes and fees. Estimating Utah's demand for the state's six-largest government-funded services shows Utah's demand for elementary, secondary, and higher education services is well above the national average. The state's demand for public welfare services and hospitals and health-related services is below the national average. The demand for highway-related services and police protection/corrections is slightly below or roughly equal to the national average.

The fact that the largest portion of Utah's state and local direct government expenditures is for education-related services—services Utah has the highest demand for in the country—places Utah's comparatively high tax burden in perspective. Utah's burden for taxes and mandatory fees is 1.7% higher than the national average, while the state's demand for education services is 20% higher than the national average.

This report examines Utah's tax burden using the U.S. Census Bureau's latest comprehensive figures on state and local government finances. Utah's tax burden remained fairly stable between 1993 and 2008, although the burden per \$1,000 of personal income fell by about six dollars from 2007 to 2008. Utah's mandatory fee burden increased over this period; rising from \$10.30 in 1993 to \$17.54 in 2007.

#### UTAH FOUNDATION'S METHODOLOGY

Every couple of years, Utah Foundation publishes a research report showing Utah's updated tax burden trend. This is done using a methodology Utah Foundation developed in 2006. While government fees are an important and growing component of state and local tax

burdens, some fees are not mandatory impositions on taxpayers and should not be included in the overall tax burden. Therefore, non-mandatory government fees are excluded from the calculation.

Utah Foundation defines a non-mandatory government fee as a fee for services that taxpayers can choose to purchase from the private sector, from government, or which they can choose not to purchase at all. The primary example of such a fee is college tuition, but other examples include school lunches, parking in public garages, parks, recreation programs, golfing, rent in public housing, sales of agricultural products, and medical services at public hospitals.

Only the fees for services in which government holds a virtual monopoly are included in the calculation of the tax burden. These include fees for airport services, sewers, solid waste disposal, courts, police, libraries, recording fees, and exactions on property owners for things such as road improvements.

When measuring Utah's tax burden, Utah Foundation calculates a ratio of government revenue per \$1,000 of personal income. This method, which is similar to expressing government revenue as a percent of personal income, provides perspective on the proportion of Utahns' earnings that are dedicated to funding state and local government. Small changes in government revenue are also more easily discernible using dollars per thousand than percents.<sup>1</sup>

#### UTAH'S TAX AND FEE BURDEN TRENDS

This report uses the most current data from the U.S. Census Bureau to calculate Utah's Fiscal Year 2008 state and local tax burden. Figure 1 shows Utah's 2008 tax and fee burden per \$1,000 of personal income compared to the national average. How Utah's burden ranks against other states and the District of Columbia is also shown. Utah's tax burden, all fees excluded, is slightly above the

Figure 1: Utah's Tax and Fee Burdens, FY 2008

	Revenues Per \$1,000 Personal Income		
	U.S. FY 2008	Utah FY 2008	National Rank
Taxes & Fees	\$139.64	\$149.70	11
Taxes & Mandatory Fees	120.87	122.87	16
All Taxes	109.02	106.95	22
Individual Income Tax	24.96	29.59	15
General Sales Tax	24.95	29.82	13
Property Tax	33.57	25.31	38
Corporate Income Tax	4.74	4.50	19
Motor Fuel Tax	3.11	4.31	12
All Fees	30.62	42.75	5
Mandatory Fees	11.85	15.92	7
Tuition & College Fees	7.76	13.29	7
Other Optional Fees	11.01	13.54	16

Sources: U.S. Census Bureau, Bureau of Economic Analysis (BEA). Calculations by Utah Foundation

Figure 2: Utah's Tax and Mandatory Fee Burdens Compared to Western States, FY 2008

Western States	All Taxes	Mandatory Fees	Individual Income Tax	Corporate Income Tax	General Sales Tax	Property Tax	Motor Fuel Tax
Arizona	\$103.22	\$10.62	\$15.30	\$3.52	\$40.89	\$30.10	\$3.28
California	116.46	16.71	34.90	7.42	25.73	33.03	2.14
Colorado	92.82	12.92	23.96	2.40	24.86	28.98	3.01
Idaho	98.60	12.98	28.71	3.80	26.90	23.56	4.79
Montana	103.00	12.52	25.99	4.83	0.00	35.10	6.15
Nevada	100.34	16.77	0.00	0.00	31.97	30.48	3.76
New Mexico	118.61	8.33	18.58	5.43	42.35	17.21	3.83
Oregon	91.35	14.61	36.27	3.96	0.00	31.04	3.11
Utah	106.95	15.92	29.59	4.50	29.82	25.31	4.31
Washington	101.45	14.81	0.00	0.00	48.73	27.71	4.15
Wyoming	144.25	9.67	0.00	0.00	47.50	49.20	2.93

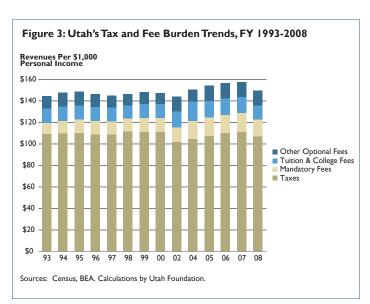
national average, ranking 22nd highest in the nation. When using the Utah Foundation measure, which only includes mandatory fees, Utah's tax and fee burden ranks 16th highest in the nation.

Figure 1 also shows that, compared to other states, Utah has a very high ranking for all government fees, particularly mandatory fees and tuition and college fees. The fact that Utah's tuition and college fees rank so high is not surprising, given the state's young population. Having a young population means a larger percent of the state's population is enrolled in college, which increases the amount of tuition and college fees collected by the state. Most of Utah's students also attend public colleges, rather than private schools, which inflates the amount of government fees collected in Utah compared to other states. Utah's tuition and college fees per \$1,000 of personal income remained fairly stable between 1993 and 2008, consistently ranking as one of the top four highest ratios in the nation (except for in 2008 when the rank fell to seventh highest, Figure 3).

Utah's mandatory fee burden, however, has significantly grown since 1993, increasing from \$10.30 per \$1,000 of personal income in 1993 to \$17.54 in 2007 (Figure 3). Even with the burden falling in 2008 to \$15.92 per \$1,000 of personal income, this equates to an average growth rate of almost 3% per year. Conversely, the average annual growth rate in Utah's tax burden is fairly stable, falling slightly by 0.2% per year.

Utah's mandatory fee burden is the third highest in the West (Figure 2). Since the tax revolts of the 1970s, many state and local governments have increasingly relied on fees, rather than general taxes, to support new or expanded services. This trend is clearly seen in Figure 3. The recent rise of the Tea Party movement may lead to similar policy actions as the 1970s, and it will be interesting to see how the party's inception will affect these numbers in years to come.

Examining the major taxes which make up Utah's tax burden shows Utah has fairly high motor fuel, general sales, and individual income tax burdens, ranking 12th, 13th, and 15th highest in the nation respectively (Figure 1). Utah's corporate income tax burden is slightly higher than average, ranking 19th. The state's property tax burden is one of the lowest in the nation.

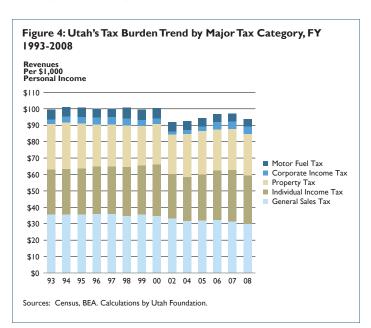


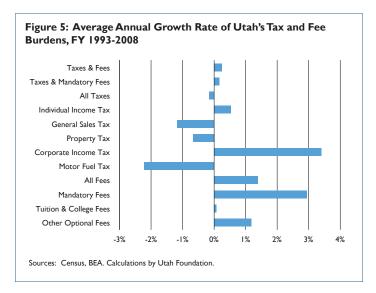
According to the 2008 Census data, the general sales tax is Utah's heaviest tax burden at \$29.82 per \$1,000 of personal income. However, this is closely followed by the individual income tax at \$29.59 (Figure 4). The gap between the general sales tax burden and the individual income tax burden has closed since 1993 when the general sales tax burden was about eight dollars more than the individual income tax burden. This gap has closed because the general sales tax burden has fallen since 1997. Between 1993 and 2008, Utah's individual income tax burden consistently ranked between 14th and 17th highest in the nation. In the 1990s, Utah's general sales tax burden ranked as one of the top ten highest in the country, but since 2004 it has ranked 13th.

Utah's corporate income tax burden grew at an average rate of 3.4% per year—increases which are largely due to periods of economic growth in the mid 1990s and mid-to-late 2000s (Figure 4). Even though tax increases were not adopted during these periods, the revenue from those taxes grew in response to rapid economic growth. This revenue growth was faster than the growth in the economy, which results in an increasing tax burden. 5 Utah's corporate income tax burden ranked 38th highest in 1993. In 2008, it ranked 19th.

Utah's property tax burden and motor fuel tax burden decreased between 1993 and 2008. Utah's last gas tax increase occurred in 1997, just before the reconstruction of I-15 in Salt Lake County, meaning the gas tax remained flat while gas prices were rising between 2002 and 2008. The fact that the economy was growing much faster than the revenue being collected from the motor fuel tax during this period explains why the motor fuel tax burden fell. After the 1997 gas tax increase, Utah's motor fuel tax burden ranked as one of the top ten highest in the country. In 2008, it ranked 12th.

Figure 5 shows the average annual growth rates of Utah's tax and fee burdens between 1993 and 2008. Regardless of which methodology is used to measure the burden (taxes only, taxes and all government fees, or taxes and mandatory government fees), Utah's total tax and fee burden remained relatively stable during this time period. The corporate income tax burden, the motor fuel tax burden, and the mandatory fee burden are the three burdens that experienced the most significant changes over these 15 years.

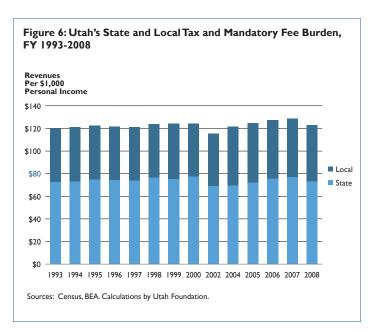


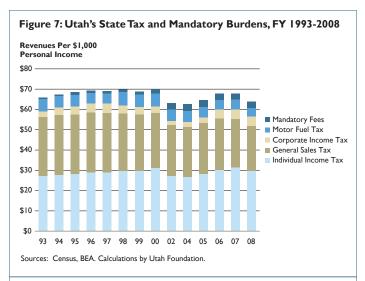


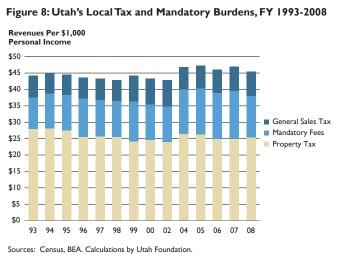
#### Utah's State and Local Tax and Fee Burdens

Figure 6 shows that while the state tax burden (including mandatory fees) remained relatively stable between 1993 and 2008, the local tax burden slightly increased. As mentioned above, much of this increase is due to an increase in mandatory fees, which are primarily collected at the local level. For example, Utah's mandatory fee burden in 2008 is \$15.92 per \$1,000 of personal income. Of this amount, \$12.74 is collected at the local level and \$3.18 is collected at the state level.

Separating out state and local taxes shows how changes in specific tax and fee burdens have influenced these growth rates (Figures 7 and 8). Of all the taxes and fees collected at the state level in 2008, the individual income tax creates the heaviest tax burden. This is a change from the mid 1990s, when the general sales tax was the heaviest tax burden. Interestingly, the state's general sales tax burden has fallen since 1996, while the local general sales tax burden has increased (Figure 8). Even though it only accounts for a small proportion of the overall tax burden, one can see in Figure 7 the considerable amount by which the state-level mandatory fee burden has increased since 1993.







Because not many taxes are collected at the local level, it is not surprising that the property tax creates the heaviest local tax burden. However, as mentioned above, the property tax burden has declined over time. In 1993, the property tax burden was \$28 per \$1,000 of personal income. In 2008, the burden is \$25.31.

It is important to recognize that the changes made to Utah's tax system in 2007 are only reflected in the latest tax burden numbers for 2008. During the 2007 legislative session, the Legislature passed the largest tax cut in the history of Utah. The tax cuts included a \$110 million reduction to the personal and corporate income taxes, a \$40.8 million reduction to the state general sales tax, and a \$40.4 million reduction to state sales tax on groceries.

Major changes were also made to Utah's individual income tax structure during the 2006 and 2007 General Sessions. In 2006, the Legislature enacted the initial version of the single-rate income tax system, which was later established in 2007 as the single-rate one track system. The single-rate one track system applies a 5% rate to federal adjusted gross income (AGI). It also replaces the deduction-based system with a credit-based tax system. The decreases in the tax burden seen in 2008 are most likely the result of these tax cuts, rather than the effect of the recession which didn't fully hit Utah until 2009.

### UTAH'S TAX BURDEN COMPARED TO ITS DEMAND FOR SERVICES

Examining how Utah's tax burden compares to the national average and to other states gives a sense as to whether Utah's tax burden is low or high. However, to truly understand why Utah's burden is high, one must also examine the need that exists in Utah for government services paid for through taxes and fees. For instance, Utah's tax and mandatory fee burden ranks 16th highest in the country (Figure 1), which indicates a fairly high tax burden. If the need for government services is higher in Utah than in other states, then a higher tax burden may be appropriate to serve those needs. In order to better understand Utah's tax burden, this section examines how Utah's general need for services compares to the national average.

The majority of Utah's state and local government expenditures are directed toward six service categories: elementary and secondary education, higher education, public welfare, hospitals and health, highways, and police protection/corrections. The remaining spending consists of other service categories such as interest on general debt, parks and recreation, etc. Since the size of these other categories is small relative to overall spending, this report focuses solely on the six largest expenditure categories. In order to estimate Utah's need for these six services, measures of demand are used for each of the categories. It is important to note that some of these measures do represent the actual demand for government services (i.e., education enrollment numbers), but others are close proxies that indicate a potentially higher or lower demand for services compared to other states.<sup>6</sup> The following section provides details on the measures which are used to estimate demand for the six service categories being evaluated in this report.

#### Measures of Public Service Demands

#### Elementary and Secondary Education

Elementary and secondary education is Utah's largest state and local government expense. The measure used to estimate Utah's demand for Elementary and Secondary Education is the number of students enrolled in public elementary and secondary schools per state population. The data were tabulated by the U.S. Census Bureau, which collected the enrollment data from the National Center for Education Statistics. A three-year average rate is calculated to reduce the variability of year-to-year estimates. Utah's rate of elementary and secondary enrollment for 2006-2008 is 19.5%, which is the highest rate in the country and a direct result of Utah's large family sizes and high birth rate. The national average is 16.1%.

#### Higher Education

The measure used to estimate Utah's demand for Higher Education is the number of students enrolled in public post-secondary institutions per state population. This includes students enrolled in both undergraduate programs and graduate or professional schools. The data come from the U.S. Census Bureau's American Community Survey. Again, a three-year average enrollment rate is used in the analysis. Utah's rate of higher-education enrollment for 2006-2008 is 6.3%, which is the third highest rate in the country. Again, this is the result of Utah's high birth rate, resulting in a very large proportion of young adults in the population. The national average rate of higher-education enrollment is 5.1%.

#### Public Welfare

Utah's need for Public Welfare is estimated by using the U.S. Census Bureau's three-year average poverty rate. The data come from the Census Bureau's Current Population Survey, which uses income thresholds set by the Federal Government—which vary by family size and composition—to determine who is in poverty. If a family's total income is less than the family's threshold, then every individual in that family is considered in poverty. 8 While many government aid programs use different poverty measures or multiples of this poverty measure to determine specific program eligibility, this general poverty rate provides a good indication of the percent of a state's population that may need public welfare services. Utah's three-year average poverty rate for 2006-2008 is 8.8%, which is significantly lower than the national poverty rate of 12.7%. Utah's rate of 8.8% is the fifth lowest poverty rate in the country.

#### Hospitals and Health

The measure used to estimate Utah's demand for Hospitals and Health related services is the state's premature death rate or the number of years of productive life lost due to death before the age 75 per state population. This measure is an indication of the number of useful years of life that are not available to a population due to early death. The data come from the Center for Disease Control and Prevention. The rate is age-adjusted, meaning that it controls for the effects of differences in population age distribution. Utah's three-year average premature death rate for 2005-2007 is 6.2% compared to the national average of 7.4%.

Utah is a healthy state and therefore ranks well compared to other states on most health indicators. Utah's 2005-2007 premature death rate is the ninth lowest rate in the country. This statistic is somewhat determined by how well Utah ranks on other health measures. For example, Utah ranks among the top ten states with a low prevalence of smoking, a low prevalence of binge drinking, a low rate of preventable hospitalizations, a low infant mortality rate, and a low rate of cancer deaths.9

#### Highways

The measure used to estimate demand for Utah's highway services (a definition which includes the maintenance, operation, repair, and construction of highways, streets, roads, alleys, bridges, tunnels, etc.) is Vehicle Miles Traveled (VMT) per state population. VMT is a pervasive measure used in transportation studies, which literally measures the total travel on roadways. Federal and state governments produce VMT statistics by measuring how many total vehicles drive specific stretches of roadway. They do this by installing traffic counters, electronic devices that can determine how many vehicles pass a specific point. The data are multiplied by the distance measured to determine exactly how many miles each vehicle traveled. 10 Utah's 2006-2008 three-year average of VMT is 9,877 per person. This is just slightly below the national average of 9,969 per person. Utah's VMT per state population is 35th highest in the country.

#### Police Protection and Corrections

Utah's need for Police Protection and Corrections is estimated by using a three-year average crime rate. This rate includes both violent crimes, such as murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault, and property crimes, such as burglary, larceny-theft, and motor vehicle theft. Data come from the Federal Bureau of Investigation's annual Crime in the United States reports.

Figure 9: Percent Difference Between Utah's Demand for Public Services and the National Average, Three-Year Average Estimates (2006-2008)30% -10% -20% -30% -40% Public Welfare Elementary Higher Hospitals Police Highway: & Secondary & Health Protection & Education Sources: Census, Centers for Disease Control and Prevention, U.S. Department of Transportation, Federal Bureau of Investigation. Calculations by Utah Foundation.

Utah's three-year average crime rate for 2006-2008 is 3.68%, which roughly equals the national average of 3.73%. Utah's crime rate is 25th highest in the country.

Figure 9 shows the percent difference between Utah's demand for each of the state's largest service categories and the national average. Utah's demand, or need, for educational services (both elementary and secondary and higher education) is well above the national average, while its demand for public welfare services and hospitals and healthrelated services is significantly below the national average. Utah's demand for highway-related services and police protection/corrections is slightly below or roughly equal to the national average.

The fact that most of Utah's state and local direct government expenditures are for education-related services, a service area that Utah has the highest demand for in the country, places Utah's comparatively high tax burden in perspective. In fact, the tax and mandatory fee burden in Utah is only 1.7% higher than the national average, while Utah's education needs are in excess of 20% higher than average.

Interestingly, even though Utah's estimated need for educational services is so high, the amount of direct general expenditures spent on elementary and secondary education services per \$1,000 of personal income only ranks 38th highest in the country. Figure 10 shows how

Figure 10: Utah State and Local Government Direct Expenditures Compared to Estimated Need, FY 2008

	Expenditures Per \$1,000 Personal Income	National Rank of Expenditures Per \$1,000 Personal Income	National Rank of Estimated Need
Elementary & Secondary Education	\$37.73	38	1
Higher Education	12.05	18	3
Public Welfare	25.88	47	47
Hospitals & Health	15.78	25	43*
Highways	6.26	23	35
Police Protection	12.94	16	25

Note: All data in this table come from the Census Bureau's latest statistics on state and local government finances, except for the higher education number which comes from the National Center for Higher Education Management Systems. The Census Bureau miscounts Utah's higher education expenditures; therefore a more reliable source is used.

The ranking of need for hospitals and health may not be as accurate as for the other spending areas because some spending on healthcare is necessary even with a healthy population. For example, the need for routine medical care, childbirths, and end-of-life care would not be reduced by Utah's status as a very healthy state. For this reason, compare the need to the expenditure rank with caution.

Sources: Census, National Center for Higher Education Management Systems. Calculations by Utah Foundation.

Utah's state and local direct expenditures per \$1,000 of personal income compare against other states and Utah's estimated need for government services.

#### **CONCLUSION**

While Utah is often cited as having a high tax burden compared to other states, the burden seems reasonable when compared to Utah's estimated need for government-funded services, especially education-related services. Utah's burden for taxes and mandatory fees ranks 16th highest in the nation, but the burden is only 1.7% higher than the national average. Comparing that to the need for public and higher education shows such a tax burden is not excessive for this state. As Utah's population continues to grow, so will its need for these services—and providing adequate funding for the services may result in an increase in Utah's tax burden. Therefore it is important to take into consideration both angles when evaluating Utah's tax burden: how the burden compares to other states and how the burden compares to the need for government services within the state.

This research report was written by Utah Foundation Research Director Laura Summers. Ms. Summers or Foundation President Stephen Kroes may be reached for comment at (801) 355-1400 or by email at: laura@utahfoundation.org or steve@utahfoundation.org.

#### **ENDNOTES**

- 1 "Spending Your Tax Dollars: Two Decades of Utah Tax and Spending Trends," Utah Foundation, Report 687 (2008).
- 2 "All fees" is equal to mandatory fees plus tuition and college fees plus other optional fees.
- 3 In some states, especially in the East, a high proportion of students attend private colleges and their tuition dollars are not counted as part of government fees, further inflating Utah's fee burden ranking compared to other states. "Utah's Tax Burden: Excluding Non-Compulsory Fees Provides a More Accurate Ranking."
- 4 "Tax revolts" is often used to refer to a series of anti-tax state initiative campaigns. "Utah's Tax Burden: Excluding Non-Compulsory Fees Provides a More Accurate Ranking," Utah Foundation, Report 676 (2006).
- 5 "Spending Your Tax Dollars: Two Decades of Utah Tax and Spending Trends."
- 6 Measuring the actual demand for the services provided by Utah's state and local governments would require collecting data across multiple programs, sources, and categories—data which may or may not be compatible with other states. The variables used in this study provide a measure of demand that is comparable to other states.
- 7 The U.S. Census Bureau recommends using three-year averages when comparing the relative ranking of states.
- 8 U.S. Census Bureau, "How the Census Bureau Measures Poverty," 26 January 2011, <a href="http://www.census.gov/hhes/www/poverty/methods/measure.html">http://www.census.gov/hhes/www/poverty/methods/measure.html</a> (accessed 3 February 2011).
- 9 "America's Health Rankings—2010 Edition," United Health Foundation (2010).

10 Robert Puentes and Adie Tomer, "The Road...Less Traveled: An Analysis of Vehicle Miles Traveled Trends in the U.S.," Brookings, Metropolitan Infrastructure Initiative Series (December 2008).

PLATINUM Questar Gas Rio Tinto	GOLD Energy Solutions Intermountain Power Agency	SILVER American Express Intermountain Healthcare	Parsons Brinkerhoff Union Pacific
Rocky Mountain Power	Utah Transit Authority	Merit Medical Systems	University of Utah Health Care
		MountainStar Healthcare Regence BlueCross BlueShield	Wells Fargo Wheeler Machinery
		Parsons Parsons	Workers Compensation Fund
Bronze			
Brigham Young University	Garbett Homes	Key Bank	US Bank
Central Utah Clinic	Granite Construction	Parsons Behle & Latimer	University of Utah
Deloitte	HDR Engineering	Ray Quinney & Nebeker	Utah System of Higher Education
Deseret Management Corp.	Holme Roberts & Owen	Sandy City	Utah Valley University
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