

local insights

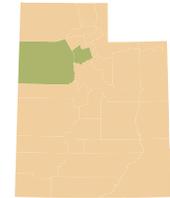


An economic and labor market analysis of the Wasatch Front South Area

vol. 3 issue 1 • jobs.utah.gov



Economic Diversity in Wasatch Front South



BY JIM ROBSON, ECONOMIST

Balanced and diversified economies are more likely to perform better over time because the economic eggs are not in just a few baskets. In other words, a region with a more diverse industrial economy is not as vulnerable to employment fluctuations. Economies naturally take advantage of the endowment of local resources, which may cause an area to specialize in some economic activities and become

less diversified. This article examines the extent to which the Wasatch Front South (WFS) Economic Service Area (Salt Lake and Tooele Counties) is diversified and specialized with regard to employment among industries.

One approach used to measure the relative industrial diversification or conversely, specialization is to compare its industrial structure to that of the United States. The assumption is that

in this issue:

Economic Diversity in Wasatch Front South..... 1

Using the Hachman Index to explore the regional distribution of employment by industry.

Current State of the Economy in Wasatch Front South 3

Economic indicators show us what to expect in the coming months.

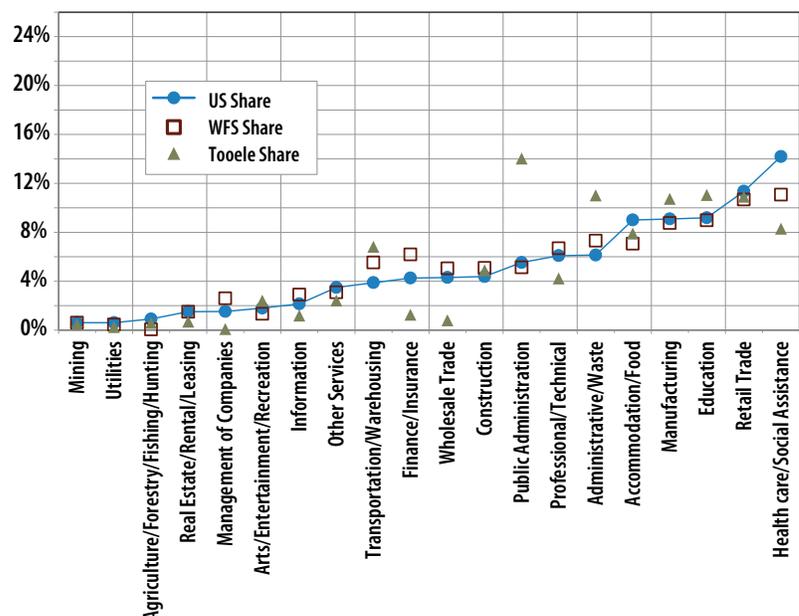
Wasatch Front South County-to-County Migration..... 6

Economic and social patterns between counties.

The Influence of Industrial Diversity 8

How industrial diversity can impact the economy.

Figure 1: 2012 Percent Share of Total Jobs by Industry



the nation's industrial employment structure is diverse. By dividing up total employment among 20 major industrial sectors, a comparison of the percent shares of employment can be made for each industry to the corresponding breakout for the nation as a whole. This comparison between WFS and the U.S. is illustrated in Figures 1 and 2. The data are sorted from the U.S. industry with the lowest percentage share to the highest percentage share of total employment.

Two WFS industries - mining and real estate/rental/leasing have essentially the same percentage of employment as the U.S., 10 industries have lower employment shares and eight industries have a higher percentage of employment. Of particular note is that healthcare/social assistance employment in WFS at 11.1 percent with the largest share of total jobs, but is 3.1 percentage points lower than the national share, 14.2 percent.

In the fourth column of Figure 2 the Location Quotient (LQ) is listed. The LQ for an industry within a region is the ratio of the percent share of employment in the region divided by the percent share of that same industry for the U.S. The largest location quotient in WFS is 1.45 for finance and insurance, or 6.19 percent for WFS divided by 4.26 percent in the U.S. The smallest LQ is agriculture/forestry/fishing/hunting at 0.05 (0.05 percent divided by 0.91 percent).

When the industry LQ is close to one it signifies employment in that industry is basically the same share or percentage nationally. In WFS, mining and real estate/rental/leasing each have a LQ almost equal to one. When the LQ is greater than 1.2 it indicates a degree of specialization or greater presence of that industry than found nationally. A LQ less than 0.8 suggests that an industry is underrepresented compared to a national standard.

The comparison of employment shares and the computation of the LQ for a regional economy gives insight into how similar the industrial structure of an area is to the nation. The LQ applies a specific industry and does not give an overall summary measure for how

Figure 2: 2012 Industry Employment Shares, Location Quotients and Derivation of Hachman Index

Industry	A	B	C	D	E
	WFS Employment Share	US Employment Share	Difference in Job Share A-B	WFS Location Quotient A/B	Weight Times LQ D*A
Mining	0.60%	0.61%	-0.01%	0.99	0.0059
Utilities	0.44%	0.61%	-0.17%	0.73	0.0032
Agriculture/ Forestry Fishing/ Hunting	0.05%	0.91%	-0.86%	0.05	0.0000
Real Estate/ Rental/Leasing	1.50%	1.51%	-0.02%	0.99	0.0148
Management of Companies	2.60%	1.52%	1.08%	1.71	0.0443
Arts/ Entertainment/ Recreation	1.33%	1.80%	-0.47%	0.74	0.0098
Information	2.90%	2.14%	0.75%	1.35	0.0392
Other Services	3.08%	3.49%	-0.40%	0.88	0.0273
Transportation/ Warehousing	5.53%	3.88%	1.64%	1.42	0.0787
Finance/Insurance	6.19%	4.26%	1.93%	1.45	0.0899
Wholesale Trade	5.05%	4.30%	0.74%	1.17	0.0592
Construction	5.08%	4.38%	0.70%	1.16	0.0589
Public Administration	5.12%	5.53%	-0.40%	0.93	0.0475
Professional/ Technical	6.69%	6.09%	0.60%	1.10	0.0735
Administrative/ Waste	7.31%	6.14%	1.18%	1.19	0.0871
Accommodation/ Food	7.06%	9.01%	-1.95%	0.78	0.0553
Manufacturing	8.75%	9.09%	-0.34%	0.96	0.0843
Education	8.98%	9.19%	-0.21%	0.98	0.0877
Retail Trade	10.67%	11.35%	-0.68%	0.94	0.1003
Health Care/Social Assistance	11.08%	14.20%	-3.12%	0.78	0.0864
	100.00%	100.00%			
Weighted Average of LQs = 1.0535					
(1 / W. Avg of LQ's) Hachman Index = 0.9492					

closely the regional economy compares to the national economy. A comprehensive measure is provided by the Hachman Index which is calculated by dividing one by the weighted average of the industry employment LQ. Each industry's LQ is weighted by the regions share of employment in a given industry.

The weighted average of the WFS LQ equals 1.05, its reciprocal (1 divided by 1.0535) equals 0.95, the Hachman Index score. The closer its value is to one, the more similar the region's industrial composition (as measured by industry job shares) is to that of the nation. The Hachman index would equal one if the region's industries percentage employment shares were exactly the same as the national industry distribution.

In 2012, the WFS area had 604,119 jobs and a 0.95 Hachman Index. Tooele County with 15,906 jobs has an industry employment structure quite different than that of the U.S. as illustrated in Figure 1. For example, public administration is 14.0 percent of total jobs in Tooele County which includes a significant number of federal government jobs, while the national share of public administration is 5.5 percent. Wholesale trade nationally is 4.3 percent, but just 0.8 percent in Tooele County. The Hachman Index for Tooele County is 0.76, not nearly as close to one as was the 0.95 score for WFS. The state Hachman Index in 2012 was 0.97 somewhat higher or more diverse than Wasatch Front South.



Current State of the Economy in Wasatch Front South

BY JIM ROBSON, ECONOMIST

The Wasatch Front South Economic Service Area labor market ended 2013 with a strong performance, with year-over employment growth of 3.2 percent. The region's unemployment rate was a healthy 4.0 percent in the fourth quarter of 2013. Average employment growth in 2013 was a robust 3.1 percent above the level for 2012. There was job growth across all major industrial groups with three exceptions, mining, federal government and utilities employment. 2013 was the third complete year of economic expansion and labor market improvement since the end of the great recession.

Salt Lake County

Year-over job increases continued across 15 of 19 industrial sectors with overall nonfarm payroll employment increasing by 3.3 percent from December 2012 to December 2013. The net new jobs from the past year add to the three-plus years of recovery since the employment trough

of the recent recession in Salt Lake County. Average employment in 2012 was 603,924 and 623,940 in 2013, an increase of 20,016 jobs or 3.3 percent. There were 641,085 nonfarm payroll jobs reported by employers in December 2013, which includes the temporary employment surge of the holiday season.

From December 2012 to December 2013, the most new jobs were created in professional/scientific/technical services, administrative support services, and state government (which includes higher education). The new jobs in these high-growth areas are spread broadly within these industries; however there are a few notable sub-industries worth mentioning. Within professional/scientific/technical services a substantial number of the job opportunities are in architectural, engineering, computer systems design, management/technical consulting and business headquarters services. Within

Year-over job increases continued across 15 of 19 industrial sectors with overall nonfarm payroll employment increasing by 3.3 percent from December 2012 to December 2013.

the administrative support services, most of the new jobs created were in business support services. State higher education employment accounted for 70 percent of the job growth in state government.

Of 19 major industrial groups listed in Figure 3, four shed jobs from December 2012 to December 2013. Mining employment was down by about 680 jobs, with much of the decline related to the major landslide in April 2013 at the Bingham Canyon Kennecott Copper Mine and a reduced need for construction-related

mining activities. Manufacturing had reductions of around 1,350 in computer and electronic product manufacturing. On the manufacturing plus side, there were more than 855 new jobs added to medical equipment and supply firms. Construction employment was reduced by 435 jobs. While residential construction activities added employment, commercial construction, highway, street and other heavy construction reduced employment enough to account for the overall net loss in construction jobs. Utilities shed 82 jobs.

Unemployment

The seasonally adjusted unemployment rate in Salt Lake County has lessened from where it began the year at about 5.0 percent to a low 3.9 in the fourth quarter of 2013. Since January 2013, the number of unemployed Salt Lake County residents declined from about 26,400 to 22,900. Initial claims for unemployment benefits are at their lowest level in four years, although they took a temporary uptick because of the partial shutdown of the federal government in the fourth quarter of 2013.

Figure 3: Payroll Job Change by Industry from December 2012 to December 2013

Industry	Salt Lake County		Tooele County	
	Count	Percent	Count	Percent
Prof/Sci/Tech/HQ*	4,432	7.6%	61	9.6%
Admin Support/Waste**	3,702	8.2%	-185	-11.5%
State Government	3,573	8.9%	0	0.0%
Healthcare/Social Services	1,873	3.2%	-34	-2.7%
Accommodation and Food	1,820	4.1%	113	9.8%
Finance and Insurance	1,716	4.4%	-3	-1.6%
Transportation/Warehousing	1,639	5.8%	41	4.2%
Private Education	1,014	9.0%	16	12.6%
Trade	743	0.7%	5	0.3%
Arts/Entertainment/Recreation	367	5.1%	17	8.0%
Other Private Services	335	1.8%	-5	-1.4%
Real Estate/Rental/Leasing	329	3.5%	7	6.7%
Federal Government	165	1.6%	-239	-15.3%
Information	108	0.6%	-26	-16.0%
Local Government	104	0.2%	-86	-3.5%
Utilities	-82	-5.4%	-5	-19.2%
Construction	-435	-1.4%	106	13.9%
Manufacturing	-466	-0.9%	-27	-1.6%
Mining	-680	-18.3%	9	12.3%
Total	20,294	3.3%	-237	-1.5%

*Prof/Sci/Tech/HQ—Professional/Scientific/Technical Services and Management of Companies (Headquarters)

**Admin Support/Waste—Administration and Support/Waste/Remediation Services

d=Not shown to avoid disclosure of individual firm data

The stabilization, improvement and expansion in the Salt Lake County labor market since mid-year 2010 have been reflected in the gross taxable sales figures. For 15 consecutive quarters, starting in the second quarter of 2010 and going through the fourth quarter of 2013, Salt Lake County year-over change in sales tax collections have been positive. The fourth quarter 2013 year-over taxable sales were up 1.7 percent, down from the 3.1 percent growth rate of third quarter 2013.

Tooele County

Tooele County's own job recession continued through the end of 2013, with year-over net job losses of 237 across all industries for the 12 months ending in December 2013. Payroll employment in the county peaked in mid-2011 and has been down on a year-over basis since then.

The three largest job reductions occurred in the federal government shedding 239 jobs, local government (including decreases in public education) declining by 86, administrative support/waste management services decreasing by 185 jobs. Many of these losses stem from the direct and indirect effects of the Deseret Chemical Depot closure which will be completed by the summer of 2014.

The employment declines listed above are significant, but 9 of 19 industries in Figure 3 did have year-over employment increases in December 2013. The negative job loss effects of the current Tooele County recession peaked in July 2013 with year-over job losses of 4.2 percent. During 2014, the overall job picture will change as employment growth should resume by mid-summer in the County.

The three industries showing the largest December 2013 year-over employment increases include accommodation/food services, construction, and professional/scientific/technical services. Overall, nonfarm payroll employment totaled 15,226 in December 2013, with 237 fewer jobs than in December 2012, a reduction of 1.5 percent.

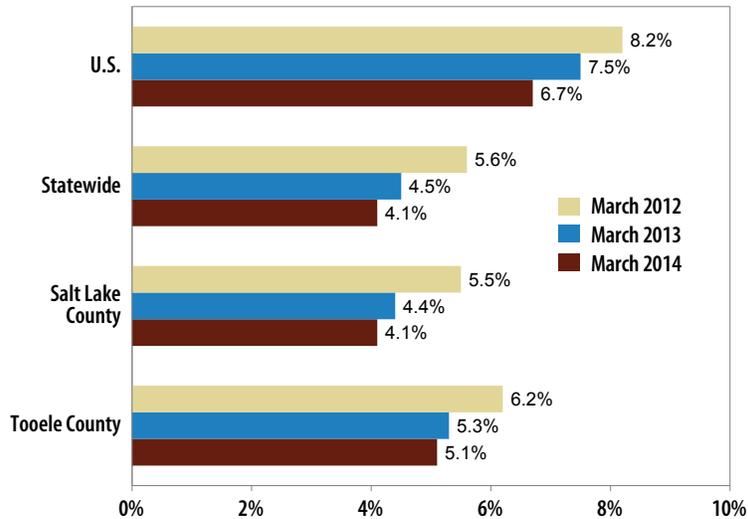
As part of the greater Salt Lake City Metropolitan Area, Tooele County

residents have access to the Salt Lake County job market. Salt Lake's current relative strength provides support to Tooele County residents. Still, the unemployment rate may increase a little in the coming months. In the summer of 2012, the unemployment rate was around 6.3 percent, improving throughout 2013 to record a rate of 5.0 percent in December 2013. There are about 1,500 or so unemployed Tooele County Residents looking for work in the spring of 2014.

Since May of 2013, initial unemployment insurance claims have trended above the levels observed during the summer and fall of 2012 and 2011. The government shutdown sent initial unemployment claims to an abnormally high level last October. They have since subsided to the same level of claims normally seen during the spring in recent years.

Gross taxable sales declined by 3.2 percent in the fourth quarter 2013 compared to fourth quarter 2012. This was the fifth consecutive quarter with year-over reductions for gross taxable sales in Tooele County.

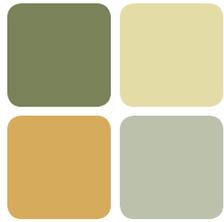
Figure 4: Annual Unemployment Rate Comparisons



Outlook

Overall, continued strong job growth and improving labor market characterized economic conditions during 2013, with job growth averaging about 3.3 percent for the year in WFS. Total 2013 payroll employment averaged about 638,450 jobs in this service area. The improving labor market brought down the unemployment rate in 2013. Due to some slack created in the labor market during the recession and subsequent slow recovery, the unemployment rate will likely continue to range between 3.5 and 4.3 percent through the first half of 2014.

The 2014 job outlook in the Wasatch Front South area is expected to show overall employment growth of around 3 percent, adding an additional 19,000 to 21,000 jobs. Substantial job increases should come from administrative support, professional/scientific/technical services, education, and financial activities.



Wasatch Front South County-to-County Migration

BY JIM ROBSON, ECONOMIST

Each year, the U.S. Census Bureau produces a set of statistics from the American Community Survey (ACS) showing the estimated annual in- and out-migration for every county in the U.S. The most recent measures of county-to-county migration flows are estimated from survey responses collected over the five year period from 2007 to 2011.

The ACS is continuously collected each month across the country. The responses are combined into consecutive yearly datasets to increase the sample size in order to provide reasonably reliable estimates for smaller areas. For example, some counties such as Salt Lake are large metropolitan areas of a million people, while relatively smaller counties like Tooele have about 60,000 residents and the smallest counties within Utah only have one or two thousand inhabitants. Only the combined 5-year datasets provide a large enough sample size to make estimates for all counties in the U.S. irrespective of size.

Salt Lake County Migration Flows

For Salt Lake County 57,826 people or 5.8 percent of the population moved into Salt Lake County from other Utah counties, from other counties around the United States or from abroad. In addition, 11.7 percent of the population when asked where they lived a year-ago had moved within Salt Lake County to a new address. Together, in-migrants from outside and movers within the county totaled 174,922 or 17.5 percent of the population.

Not surprisingly, the large counties to the north and south, Davis and Utah,

provided the most in-migrants, with 4,031 and 6,430 respectively (Figure 6). Weber, Tooele, Washington, and Cache were also among the top ten sources of new residents to Salt Lake County. While counties within the State were the source of 19,616 in-migrants, 30,279 came from the other states and D.C. Three states contributed 12,407 or 41 percent of the 30,279, California, Arizona, and Idaho. The largest out-of-state county sources for new arrivals were Maricopa County, AZ, Los Angeles County, CA, Clark County, NV, and Orange County, CA. Finally there were an estimated 7,931 people who moved from abroad into Salt

Lake, accounting for 13.7 percent of new residents and 0.8 percent of the 999,829 total population 1 year of age and over.

There were 49,482 who left Salt Lake County, 24,016 settling in other counties within Utah and 25,466 moving to other states. We don't know how many former residents moved abroad because they are out of the scope of the U.S. survey. When we subtract in-migrants from abroad from total in-migrants and compare move-ins (49,895) to move-out (49,482) from other counties around Utah and the other states in the U.S., they are essentially in balance.

Figure 5: Annualized County-to-County Migration Flow from 2007 to 2011

		Salt Lake County		Tooele County	
Resident Population 1 Year and Over		999,829	100.0%	56,024	100.0%
Nonmovers		824,907	82.5%	47,844	85.4%
Moved from Residence One Year Ago		174,922	17.5%	8,180	14.6%
Moved Within the Same County		117,096	11.7%	3,182	5.7%
Moved Into the County		57,826	5.8%	4,998	8.9%
In	From Different County - Same State	19,616	2.0%	3,190	5.7%
In	From Different State	30,279	3.0%	1,594	2.8%
In	From Abroad	7,931	0.8%	214	0.4%
Moved Out of the County		49,482	4.9%	3,534	6.3%
Out	To Different County - Same State	24,016	2.4%	2,140	3.8%
Out	To Different State	25,466	2.5%	1,394	2.5%
Ratio of In-migrants to out-migrants*		1.01		1.35	

*This ratio excludes in-migrants from abroad in order to have a comparable measure of county-to-county flow within the United States

Source: U.S. Census Bureau, American Community Survey, 5-year estimates 2007 to 2011

Figure 6: Ten Largest County-to-County Flows for Wasatch Front South Counties

To Salt Lake County from:			From Salt Lake County to:			To Tooele County from:			From Tooele County to:		
County	State	Count	County	State	Count	County	State	Count	County	State	Count
Utah	UT	6,430	Utah	UT	6,753	Salt Lake	UT	2,185	Salt Lake	UT	1,406
Davis	UT	4,031	Davis	UT	6,263	Davis	UT	341	Utah	UT	197
Maricopa	AZ	2,240	Tooele	UT	2,185	Maricopa	AZ	228	Davis	UT	161
Los Angeles	CA	2,227	Weber	UT	2,068	Utah	UT	146	Montgomery	TX	123
Weber	UT	1,674	Cache	UT	1,904	Summit	UT	110	Fairfax	VA	93
Tooele	UT	1,406	Maricopa	AZ	1,367	Lincoln	WY	108	Benton	AR	88
Clark	NV	1,298	Clark	NV	1,080	Clark	NV	100	Kenai Peninsula	AK	87
Washington	UT	1,128	Washington	UT	1,055	Cache	UT	95	Delta	CO	76
Cache	UT	916	Sanpete	UT	742	Blaine	ID	90	Sanpete	UT	75
Orange	CA	899	Los Angeles	CA	722	Fremont	WY	88	Washington	UT	71

Source: U.S. Census Bureau, American Community Survey, 5-year estimates 2007 to 2011

The 24,016 who departed Salt Lake for other counties within Utah usually settled into the surrounding counties along the Wasatch front. Utah, Davis, Tooele and Weber counties were the destination for 17, 269. For the 25,466 who left Salt Lake for other states, the largest recipients were Maricopa County, AZ, Clark County, NV and Los Angeles County, CA.

Tooele County Migration Flows

Movers into Tooele County totaled 4,998 or 8.9 percent of the 56, 024 resident population 1 year and over. Another 5.7 percent of the population moved to a new address on average each year. Together, in-migrants from outside and movers within the county totaled 8,180 or 14.6 percent of the population.

By far, the largest source of new residents to Tooele County came from Salt Lake County, an estimated 2,185. Other surrounding counties, Davis, Utah and Summit contributed 341, 146 and 110 new residents respectively. In total, counties within the State provided 3,190 in-migrants, with 1,594 coming from the other states and D.C. Wyoming, Arizona, California, Nevada and Texas added between 100 to 281 people to Tooele. The

largest out-of-state county sources for new arrivals were Maricopa County, AZ, Lincoln County, WY, Clark County, NV, and Blaine County, ID. Finally there were an estimated 214 people who moved from abroad into Tooele County, accounting for 4.3 percent of new residents and just 0.4 percent of the 56,024 total population 1 year of age and over.

Out-migrants from Tooele County totaled 3,534, with 2,140 settling in other counties within Utah and 1,394 moving to other states. The ratio of in-migrants to out-migrants found in Figure 6 was 1.35.

Of the 2,140 who departed Tooele County for other counties within Utah most settled into the large surrounding counties of Salt Lake, Utah, and Davis. Salt Lake County stands out with 1,406 of the out-migrants. For the 1,394 who left Tooele for other states, the largest numbers moved into Montgomery County, TX, Fairfax County, VA, and Benton County, AK. Tooele out-migrants from Utah moved to Idaho, Texas, Arkansas, Wyoming, Colorado, Virginia and Alaska.

The county-to-county migration flows provide some important insight into

economic and social ties of various counties within the State of Utah and around the United States. Within the Wasatch Front South area, the relationships between Salt Lake County and Tooele County are typical of those generally found between a large metropolitan county and a smaller, more rural adjacent county. Tooele in many ways acts as a bedroom community to Salt Lake. On the other hand, as a large metropolitan county Salt Lake has significant cross migration to other large metropolitan areas in the western states, particularly California and Arizona.

The largest source of new residents to Tooele County came from Salt Lake County— an estimated 2,185.



Workforce Services
 Workforce Research and Analysis (WRA) Division
 140 E. 300 S. • Salt Lake City, UT 84111
 Equal Opportunity Employer/Programs

Presorted Standard
 US Postage
 PAID
 SLC, UT
 Permit # 4621

localinsights

jobs.utah.gov/wi/topjobs/



Executive Director: Jon Pierpont
Director, WRA: Carrie Mayne
Supervising Economist: Mark Knold
Editor: Stacy Neal
Designer: Reason Robles
Economist: Jim Robson
 jrobson@utah.gov • (801) 526-9626
 To subscribe or request a copy, please
 call: 801-526-9785

The Influence of Industrial Diversity

BY MELAUNI JENSEN, LMI ANALYST

Labor market economists don't always agree about the most favorable structure for a thriving economy; all theories, tools and applications have their pluses and minuses. The same holds true for the discussion about industrial diversification and its influence on local economies.

A diverse economy has a broad and balanced variety of industries and doesn't rely on related businesses that provide or produce the same products or services. As we saw in the Summer 2013 issue of Local Insights, industry data provide important information about local conditions. The Quarterly Census of Employment and Wages (QCEW) derived from Utah employer's Unemployment Insurance (UI) reports provides us with this view. This comprehensive database quantifies business establishments, shows an accurate reflection of Utah employment and allows us to profile a geographic area and evaluate its diversity.

Industry diversity can lead to lower unemployment in an area. Less diverse local economies are more prone to experience higher employment instability. Diversity on the other hand, offers more options. For instance, a worker who is unemployed from one industry may find work in another industry desiring their skill set. Occupations such as accountants or sales

representatives could work in many different industries and may have an easier time finding opportunities than those who are skilled for specific industries like coal miners and skin care specialists. When one industry loses workers, the others in the area may be adding jobs. Industrial diversity can minimize this risk of unemployment and temper a downturn, or recession in the economy.

To measure industry diversity, DWS economists look to the Hachman Index. This tool was developed by Frank Hachman, an economics professor from the University of Utah. Using QCEW data and its industry classification coding system (NAICS) to identify industries, the Hachman Index compares the variety of industries in a local economy to the national variety. Economists use this formula to calculate the variable comparisons.

Utah currently ranks fourth in the nation for industrial diversity. This diversity has been a contributing factor to Utah's relatively speedy economic recovery.

Industrial diversity is one tool economists use to evaluate the underlying strength and performance of a local economy. In this issue of Local Insights, industrial diversity will be looked upon at the county level, and some revealing factors will emerge.