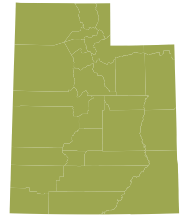




Occupational Employment by Ethnicity and Gender



BY JOHN KRANTZ, RESEARCH ECONOMIST

The U.S. Census Bureau produces a special data set referred to as the Equal Employment Opportunity (EEO) Tabulation. It is designed to measure the effects of and compliance with EEO laws. The data set serves as the primary benchmark for comparing the race, ethnicity, and gender composition of an organization's internal workforce to the analogous external labor market within a specific geography and occupation. It is produced under the sponsorship of four federal agencies: the Equal Employment Opportunity Commission (EEOC), the Department of Justice (DOJ), the Office of Federal Contract Compliance Programs (OFCCP), and the Office of Personnel Management (OPM). The current results are derived from the American Community Survey (ACS) data and are based on data collected over a five year period from 2006 to 2010.

Utah's EEO data revealed that the distributions of Hispanic workers and women workers across occupations were quite different from the statewide average. This should not necessarily be interpreted as presence of widespread discriminatory hiring practices in Utah. When the aforementioned federal agencies investigate violations

of anti-discrimination laws, they compare the race, ethnicity and gender composition for an individual firm against the composition of the external workforce. The EEO data describe the external workforce and characterize the "normal" distributions of race, ethnicity and sex across occupations for the state. Why were the percentages of Hispanics and women across occupations different from the state averages? While employment discrimination may have played a role, educational attainment and personal career preferences were undoubtedly major influences.

Distribution of Occupational Employment

The EEO data set divides occupational employment into 14 major groups. Figure 1 shows how the total employment in the State of Utah is distributed across these 14 occupational groups. This distribution will be referred to as the statewide average. In addition to characterizing the distribution of employment across occupations, Figure 1 serves as a reference point for Figure 3 and Figure 5.

At 17 percent of total employment, administrative support workers made

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up the largest share of Utah workers. This includes secretaries, administrative assistants, bank tellers, receptionists, postal workers and bookkeepers, to name just a few. Management, business and financial workers accounted for the second largest share with 12.4 percent of Utah’s total employment, while services workers (except protective), which includes health aides, food preparation workers, accommodations workers and first-line supervisors of these workers, were third with 12.2 percent.

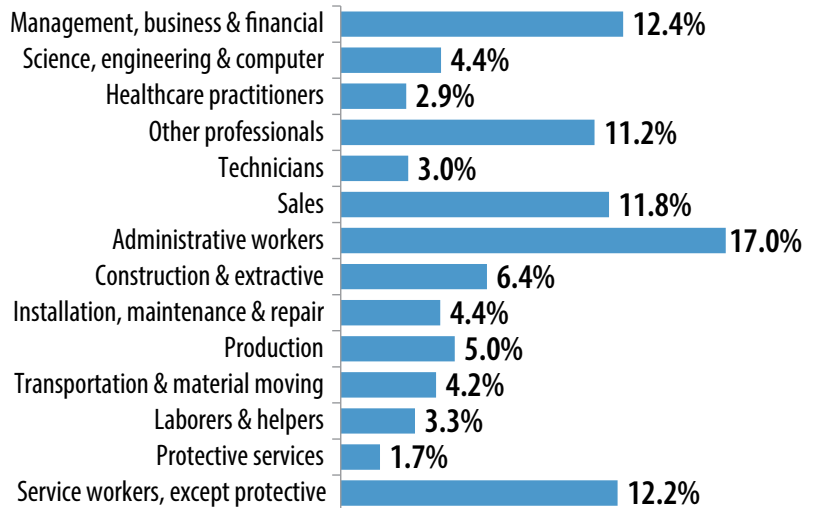
The smallest percentage of total employment was found in protective services (1.7 percent), an occupational group that includes police, firefighters, and correctional officers. Healthcare practitioner professionals constituted the second smallest group at 2.9 percent and technicians (primarily medical and science) were third with 3.0 percent.

Educational Attainment by Occupation

In addition to showing the distribution of employment by occupational group, the EEO data set provides the distribution of educational attainment across these groups, which is represented in Figure 2. It should be noted that the educational attainment data include all individuals 16 and older. This is not the best way to represent educational attainment because younger individuals have not yet had the opportunity to finish higher levels of education, but this approach was necessary for comparability of the data.

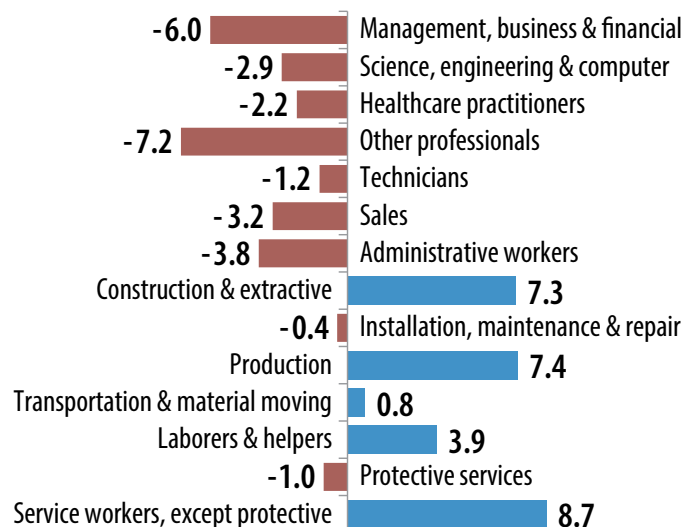
The three occupational groups with the highest levels of educational attainment

Figure 1: Distribution of Total Employment by Occupational Groups



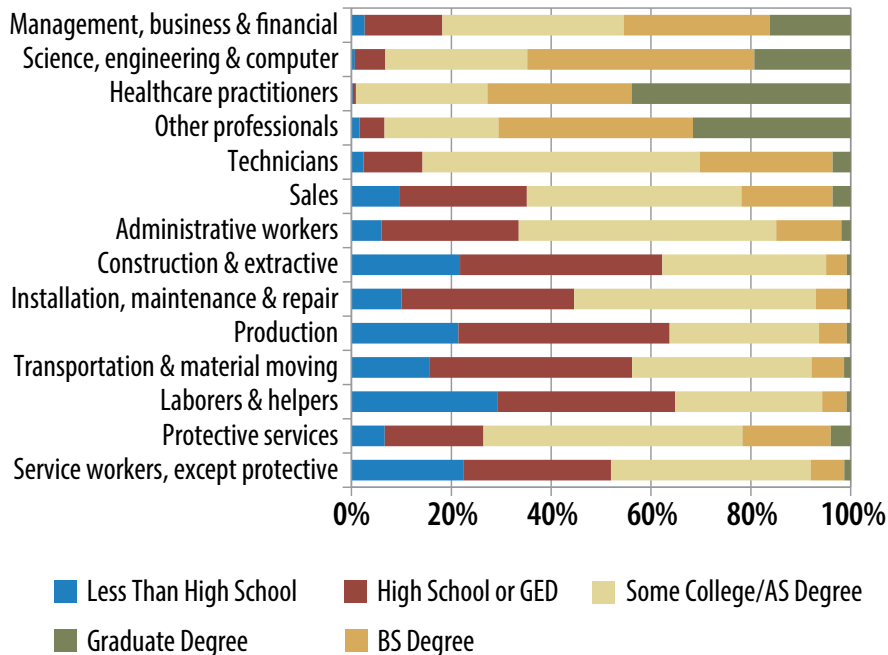
Source: U.S. Census Bureau; American Community Survey EEO Tabulation.

Figure 3: Percentage-Point Differences in Hispanic Employment Compared to Statewide



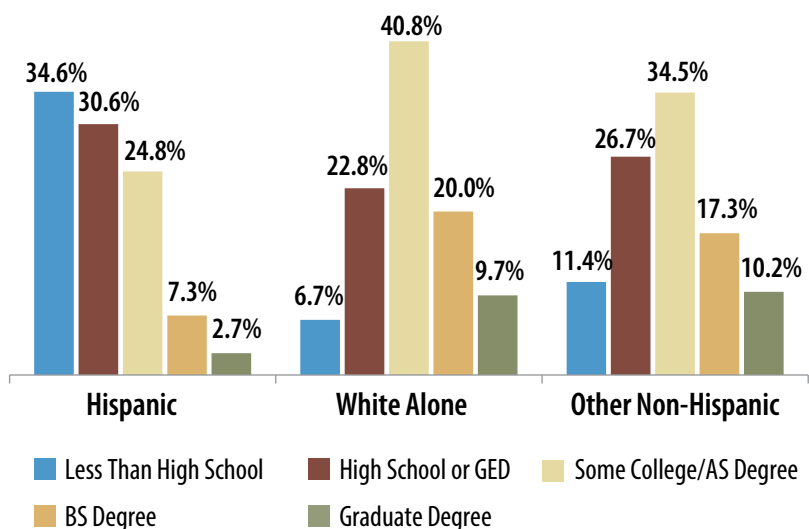
Source: U.S. Census Bureau; American Community Survey EEO Tabulation.

Figure 2: Educational Attainment by Occupational Groups



Source: U.S. Census Bureau; American Community Survey EEO Tabulation.

Figure 4: Distributions of Educational Attainment by Ethnicity



Source: U.S. Census Bureau; American Community Survey EEO Tabulation.

were healthcare practitioners, other professional workers and science, engineering and computer professionals. Individuals with a bachelor’s degree or higher made up 73, 71 and 65 percent of these occupational groups, respectively.

The lowest levels of educational attainment were found among the laborers and helpers, production workers and construction and extractive craft workers occupations. Workers with a high school diploma or less accounted for 65, 64 and 62 percent of these groups, respectively.

Occupational Employment of Hispanics

The distribution of Hispanic workers across occupational groups was quite different from the distribution of all workers statewide. Figure 3 shows the percentage-point differences in Hispanic employment across occupational groups as compared to the statewide distribution. These differences were calculated by finding the percentage of all Hispanic workers in each occupational group and subtracting the percentages found in Figure 1 from the Hispanic worker percentages. For example, referring to Figures 1 and 3, only 6.4 percent of all Hispanic workers are in the management, business and financial workers group because Hispanic employment is 6.0 percentage points lower (Figure 3) than the statewide total percentage of 12.4 (Figure 1).

Hispanic workers were much more concentrated within four occupational groups: construction and extractive craft workers, production operative workers, laborers and helpers and service workers (except protective). For the rest of the occupational groups, Hispanic workers were less concentrated or showed very little difference as compared to the statewide average.

Education and Hispanic Ethnicity

Examining educational attainment for Hispanics and non-Hispanics can go a long way toward explaining the differences in the distributions by ethnicity across the various occupational groups. Figure 4 compares the



Occupational Employment by Ethnicity and Gender Continued

distributions of educational attainment for Hispanics, non-Hispanic whites, and all other non-Hispanics. It was striking that 65.2 percent of the Hispanic workforce had a high school diploma or less as compared to only 29.5 percent of non-Hispanic whites. At the high end of the educational attainment spectrum, only 10.0 percent of the Hispanic workforce held a bachelor's degree or higher as compared to 29.7 percent for non-Hispanic whites.

Referring back to Figure 2, the four occupational groups that had the highest concentrations of Hispanic workers (Figure 3) were exactly the

same ones with the highest percentages of individuals with a high school diploma or less. Furthermore, the occupational groups where Hispanics were underrepresented were also the occupations with much higher levels of educational attainment.

Many occupations have licensing requirements that carry with them educational requirements, while other occupations require high levels of technical skills that can only be acquired through higher education. Given the educational requirements of particular occupations and the distribution of educational attainment among Hispanics, the pattern of occupational employment for Hispanics is largely explained by education.

Occupational Employment of Women

Similar to the Hispanic workforce, the female workforce exhibited an occupational employment distribution that differed from the statewide average. Figure 5 shows the percentage-point differences for women across occupational groups as compared to the statewide

percentages and was interpreted in the same manner as Figure 3.

The highest concentrations of women occurred within the administrative support workers, service workers (except protective) and other professional workers groups. The other professional workers occupational group includes all teachers from pre-kindergarten through post-secondary and female workers typically dominate employment in the education field. The occupational groups with the lowest concentrations of female workers were construction/extractive craft workers, installation/maintenance/repair craft workers, management/business/financial workers and science/engineering/computer professionals.

Education and Gender

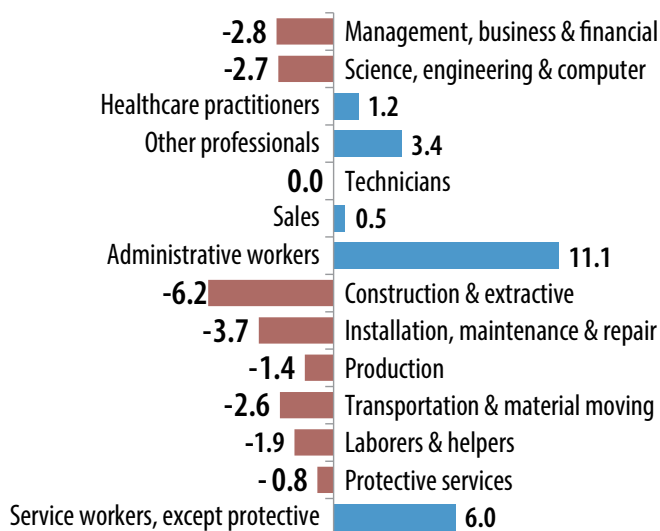
While differences in educational attainment were quite noticeable between Hispanics and non-Hispanic whites, educational differences were not dramatic between men and women. The differences were largest for the categories some college/AS degree and graduate degree. Women were roughly 3.5 percentage points above the average for some college/AS degrees and about 2 percentage points lower for graduate degrees.

If educational attainment does not explain differences in occupational employment by gender in Utah, what does? Strictly speaking, the answer to this question is beyond the scope of the EEO data. Yet, while again acknowledging that discrimination may play a role, the strongest explanation is that occupational preference differs by gender.

Concluding Points

Were the patterns of occupational employment by ethnicity and gender found in the EEO data set unique to Utah? Comparing Utah to the nation reveals that the patterns were remarkably similar. While the percentages differed slightly, Hispanics were overrepresented and underrepresented in exactly the same occupational groups at the national level as they were in Utah. The same held true for the distributions of women across occupations.

Figure 5: Percentage-Point Differences in Female Employment Compared to Statewide

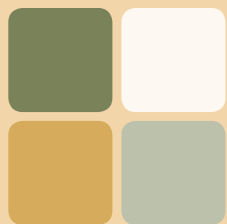


Source: U.S. Census Bureau; American Community Survey EEO Tabulation.

Employment discrimination based on race, ethnicity, gender, religion, origin, age and disability is an ongoing concern across the nation and the effort to ensure equal employment opportunities to everyone continues. However, demonstrating that discrimination has occurred requires a very careful analysis of a broad set of facts. If, for example, no one within a particular racial group had a level of educational attainment higher than a high school diploma, this

group would appear as considerably underrepresented within the healthcare occupations. Yet, in this case, the reason for this discrepancy would not be, per se, employment discrimination, but rather the occupational licensing requirements for healthcare professionals that typically call for high levels of educational attainment. Gender and cultural background may also play a role in influencing the occupations individuals chose to enter. Consequently, differences

in the distributions of employment across occupations by ethnicity, race, or gender may be in large part due to differences in educational attainment and/or personal career preferences.



Utah Economic Conversation

MARK KNOLD, SUPERVISING ECONOMIST

Utah's Third Quarter Employment Growth Outperforms Preliminary Estimates

Utah's third quarter employment data reveals that the Utah economy is performing right around its historical average of 3.1 percent growth per year—higher than most other states' averages.

Utah's job growth continues to be even higher than preliminary estimates suggested. Job growth for July through September 2013 averaged 3.2 percent, whereas previous estimates made during that period forecasted growth at only 2.6 percent. The difference between the estimate and actual employment amounted to an additional 6,300 jobs. Total growth between third quarter 2013 and third quarter 2012 was 40,800 jobs.

Preliminary employment estimates are built upon the foundation of an employer survey. Actual employment counts

come months later when employers report to the state's unemployment insurance program. This reporting is so comprehensive it is classified as a census. Its drawback is a lack of timeliness and therefore a survey is undertaken to present a current employment profile.

Current estimates are produced each month by the U.S. Bureau of Labor Statistics. The objective is to solicit employer feedback related to employment and then expand it out to represent the entire face of Utah employment activity. Analyst judgment is involved in expanding the survey answers, and therein lies the crucial step which determines whether a survey gives an accurate portrayal of the yet-to-come employment counts.

Throughout most of 2013, the employer survey estimations came in lower than the actual census counts of Utah

employment (Figure 6). While the differences were small at the beginning of the year, the divergence deepened as the year progressed. The second quarter 2013 employment estimate was 2.8 percent. The actual rate came in at 3.2 percent. The third quarter estimate was 2.6 percent; the actual came in at 3.2 percent. Fourth quarter census employment won't be available until April, but seeing the even weaker employment estimates made for the fourth quarter (2.1 percent), it is not a stretch to believe the disparity between the fourth quarter estimate and fourth quarter actual will be the greatest of the year.

Fortunately this disparity will be repaired with the introduction of January data. Every year at the beginning of the year, the survey estimation is backfilled with actual census employment, and then the survey output is corrected. Yet the survey output for 2012 was corrected

Utah Economic Conversation Continued

at the beginning of 2013, and then throughout 2013 the survey estimates trended downward. Readjusting the survey to start 2014 does not mean the survey couldn't get off track again as the year progresses, particularly since there has been a bias toward moving the estimates downward. Oftentimes a pattern develops where Utah job growth is strong in relation to the rest of the nation and the survey has trouble keeping up with Utah's employment growth. We are expecting 2014 to be another year where Utah employment growth will noticeably outperform the national outcome. The 2014 survey employment estimates will again undershoot likely Utah employment performance as the year progresses.

The real strength of Utah's employment growth is its diversity. It is spread across nearly all major industry groups. The small mining sector is the only industry

group with fewer jobs than a year ago. Professional and business services lead the way with 6.1 percent growth and 10,300 jobs. This is followed by 7,000 jobs in the health care and private education sector, and another 4,200 in construction, among others.

100,000 Jobs in 1,000 Days

During the throes of the Great Recession, Governor Herbert challenged the Utah business community to create 100,000 jobs in Utah in 1,000 days. Is the economy on track to achieve the 100,000 jobs by the thousand-day mark in September 2014? As we look at the current character of Utah's economy and its trend, we expect this target to be achieved as early as June.

We do not expect the employment estimates for early summer to show that the 100,000-jobs target has been achieved. However, when the actual employment counts for early summer do become available, we should then see that the 100,000-jobs target was achieved in June or July. The leading employment snapshot throughout the summer will

be the Bureau of Labor Statistics' Utah preliminary employment forecast from its ongoing employer survey. As previously explained, this survey has a recent tendency toward understating Utah's employment gains (Figure 6) and we believe this bias will continue in 2014.

Going Forward

As the next two years progress, we are optimistic about the Utah employment picture. The Utah employment growth rate forecast is for employment growth of 3.3 percent in 2014. That fair estimate will be a solid additional step in Utah's movement out of the Great Recession's shadow. Yet Utah's growth rate could be even higher; upwards of 3.6 percent since 2014 is expected to be a better year economically than 2013. 2015 could be even better if the momentum keeps up.

We expect there could be a higher 2014 growth rate for two reasons. First, Utah achieved much of its 2013 employment growth without a large contribution from a key industry. Construction is historically a strong contributor to employment rebounds out of recessions, yet it has played only a minimal role in Utah's current rebound. Utah initially pulled out of the Great Recession while still experiencing continued construction losses. Construction finally stabilized and made employment contributions in 2013, but there is room for more. All other industries are expanding employment favorably, so it wouldn't take much more from the construction industry to help push Utah's employment growth rate higher than predicted.

The second reason is a virtual consensus among economists that the national economy will see a better 2014 than 2013, giving Utah an even larger boost. The federal sequestration austerity will not be as influential in 2014 and the economically-disruptive Congressional dialogue of 2013 is not expected to be repeated. A budget is in place for this year and next and offers stability at the national level that the business community embraces.

Figure 6: Utah Employment Growth Rate Preliminary Estimate and Actual, 2012 to 2013

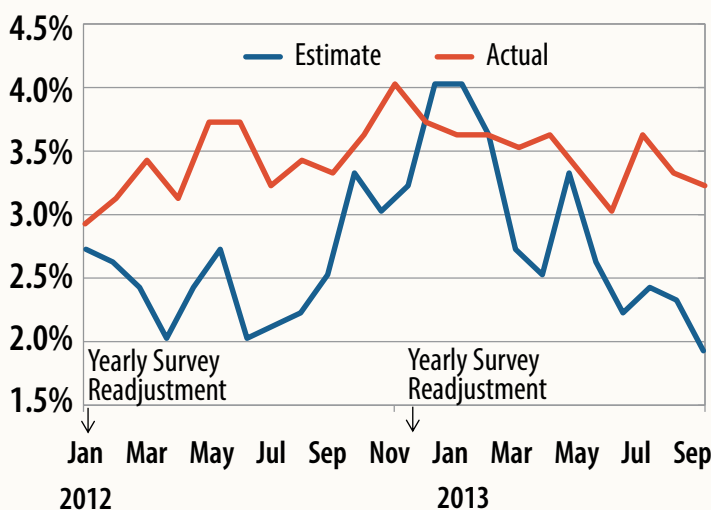
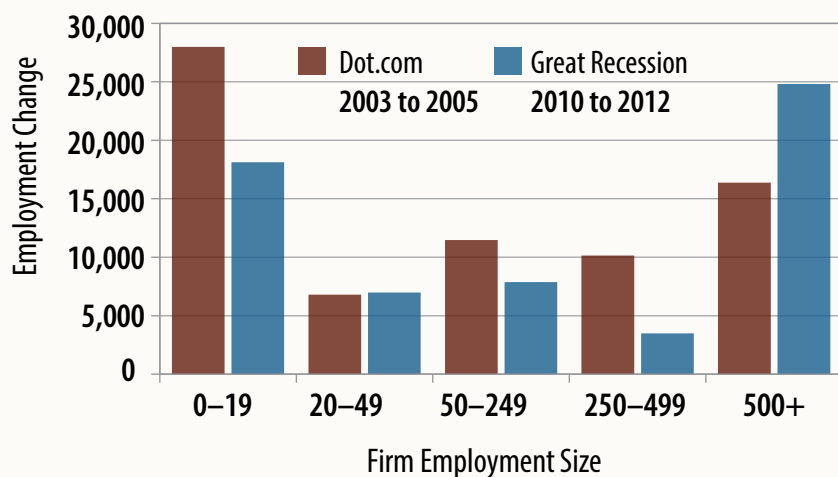
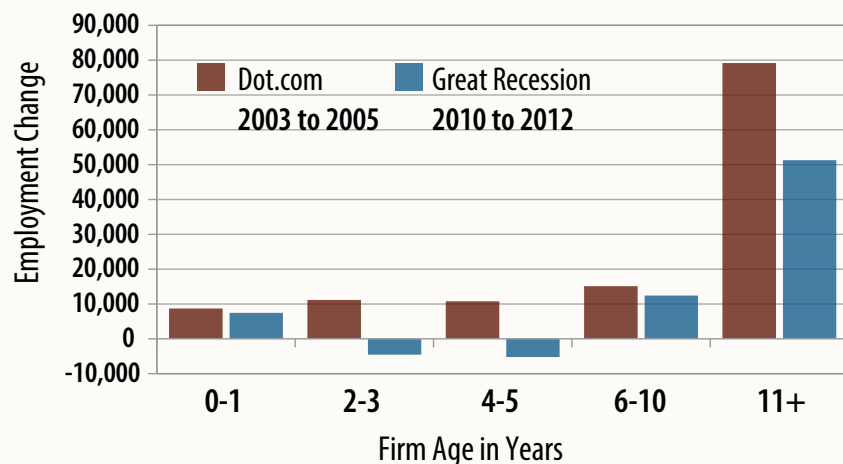


Figure 7: Recession Rebound—Utah Employment Growth by Firm Employment Size



Source: U.S. Census Bureau, Local Employment Dynamics

Figure 8: Recession Rebound—Utah Employment Growth by Firm Age



Source: U.S. Census Bureau, Local Employment Dynamics

Job Gains by Employment Size and Age

The Utah employment growth rate forecast is for employment growth of 3.3 percent in 2014. Both firm employment size and firm age can help show who created these jobs.

Figure 7 shows firm size broken into five classifications. The largest firms (500+) created the most new jobs coming out of the Great Recession. That recession was pervasive across the whole business community and stressed many firms' monetary positions and credit availability. Larger firms with deeper pockets and more abundant resources and reserves were probably better positioned to begin the rebound process than smaller firms. During the rebound from the dot.com recession, when the overall financial sector was not as stressed, the smallest firms created the most new jobs. Note: the construction industry is heavily populated with small firms and was a lead industry in pulling the economy out of the dot.com recession. As you may recall, construction was an industry not contributing to the initial rebound of the Great Recession.

As for the age of a firm, Figure 8 shows it has a deeper impact. Coming out of both recessions, the longest tenured firms were the ones to create the most new jobs in Utah. Again, resources, financial reserves, and long-term working relationships probably played a leading role in this development.

The Utah employment growth rate forecast is for employment growth of 3.3 percent in 2014.



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The Equal Employment Opportunity Data

BY MELAUNI JENSEN, LMI ANALYST

From 2010 - 2013, there was an estimated 5.0 percent population growth in Utah compared to 2.4 percent in the United States. Demographic statistics like this from the U.S. Census Bureau's American Community Survey (ACS) are important and useful for the communities of Utah. The ACS asks a variety of demographic questions including race, gender, employment, income and education, and is a valuable source of occupational information. The survey provides unbiased data that are used to create occupational profiles as complete and accurate as possible. Profiles can then be used by government, community organizations or private businesses to make informed decisions.

Regional economists at the Department of Workforce Services analyze the data in an effort to tell a story about the changing aspects of the economy. The profile for a geographic area helps to reveal trends in the workforce and the economy. For instance, research has shown that the changes in age, compared to population growth, could make an impact on the future workforce. As people live longer, more workers retire, which can reduce the growth in the future labor force. Communities will need information like this to keep up with changing dynamics.

The ACS tells stories that can help communities to plan. Businesses can use the information about education and employment to find

strategic places to develop new establishments in their industry. A business specializing in senior services might look for potential employees skilled in nursing, or a business trying to obtain funding needs to show that their diversity follows the community. In an effort to keep up with basic services, local governments can look at commuting patterns and population to make decisions about transportation, or aging statistics to find the need for hospitals and schools. Local non-profit groups benefit from seeing a profile of the area that helps with emergency planning, finding funding or developing community projects. In a world that is growing technologically, jobs are changing and educators might use the data to evaluate the need to teach new methods and skills.

The combinations are endless in both the gathering and the analysis of these statistics, but it is clear that demographics are an important tool for communities transitioning to the changing future.

Many of these analyses can be found on Utah's Labor Market and Economy blog and other publications. <http://jobs.utah.gov/wi/pubs/publicat.html> and <http://economyutah.blogspot.com>