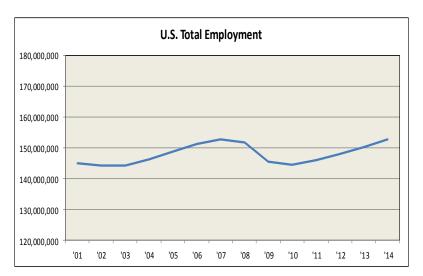
United States Skilled Worker Shortage By Ed Andrews



The recession of 2008 had a significant negative impact on U.S. employment. While there has been steady job growth since 2010, employment did not recover to the 2007 level of 152.7 million jobs until 2014.

Despite the fact that total employment is nearly the same as it was seven years ago, there have been several reports and surveys that have shown that there is a shortage of skilled workers in the U.S., which is often referred to as the Skills Gap. This leads to key questions:

- 1. How fast is employment projected to grow?
- 2. How large will the skill worker shortage be in the future?



Employment growth over the next 10 years

2014 Employment

2024 Projected Employment

Growth 2014 - 2024

152.7 million

169.7 million

17.0 million

Source: Economic Modeling Specialists Int'l (EMSI)

Besides needing workers to fill the 17 million new jobs that will be created, the U.S. will need workers to replace the workers that leave their jobs due to promotion, relocation, retirement, and other factors. The Bureau of Labor Statistics conducts surveys to determine the number of replacement workers that will be needed and the following shows the total number of new jobs and replacements, which is referred to as "Openings", that EMSI projects are needed over the next 10 years.



New Jobs



Replacements 39.4 Million



With 56.4 million new workers needed over the next ten years, are there likely to be significant skilled worker shortages? If so, what can be done to mitigate these shortages?



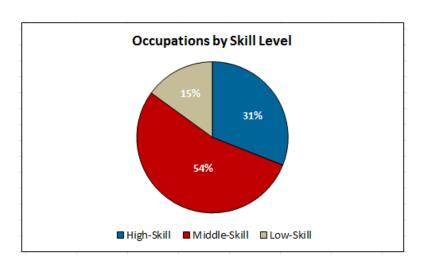
United States Projected Skilled Worker Shortage

Primary Sources of Potential Workers

- **Unemployed workers** There are currently 9.4 million workers that are classified by the Bureau of Labor Statistics (BLS) as unemployed.
- People not currently employed According to the October 2014 jobs report by the BLS, there are more than 92 million Americans (37% of the civilian population 16 years old and over) that are not in the U.S. labor force. The BLS' October Current Population Survey reported that 93.3% of all adults not in the labor force, which is 85.9 million adults, don't want a job now. Based on the distribution of this group by age and the reasons for not currently participating in the labor force, Smart Solutions Group estimates that 34.4 million people in this group will enter/reenter the labor force over the next ten years.
- **Net increase in the working age population** EMSI projects the working age population in the U.S. will grow by 1.1 million from 2014 to 2024. Smart Solutions Group estimates that 70% of this increase in working age population will enter the workforce during the next ten years.
- **Immigrants** Because of potential actions on immigration by the federal government, it is difficult to estimate the number of immigrants that will enter the labor force over the next ten years. For purpose of this discussion, assume that 5.0 million immigrants will be added to the labor force as a result of President Obama's executive order on immigration.

Based on these estimates, **49.6** million workers would be added to labor force over the next 10 years. However, there is a projected need for 56.4 million workers over this time period, which would result in a **Gap of 6.8** million workers. While these estimates and projections are based on the total labor force, the primary interest of economic developers is on the workers needed for the middle-skill and high-skill occupations.

High-skill occupations require at least a four -year college degree, while middle—skill occupations require education beyond high school but not a four-year college degree. The National Skills Coalition indicates that 31% if the occupations in the U.S. require a high level of skill and 54% require a median level of skill. Workers in high-skill occupations are 25% of the U.S. workforce and workers in middle-skill occupations are 42% of the workforce.



Occupations	Openings 2014 - 2024	% of Total
High-Skill	13.5 million	24%
Middle-Skill	21.5 million	38%
Low-Skill	21.4 million	38%
Total	56.4 million	100%

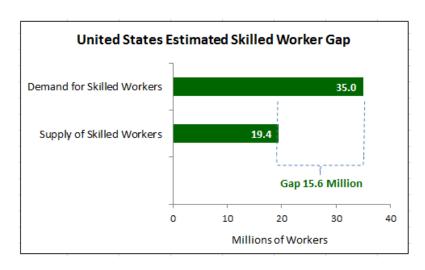
Over the next 10 years, 35 million new workers will be needed to fill openings for high-skill and middleskill jobs.

Will there be the workers needed for the skilled jobs? If not, how large will the gap be between the demand and supply of skilled workers?



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The demand for middle-skill and high-skill jobs (Openings) is projected to be 35.0 million jobs, which is 62% of the total Openings. By estimating the percentage of workers in each of the four primary sources of potential workers, it is forecasted that there is a supply of 19.4 million potential skilled workers for the middle-skill and high-skill jobs. Therefore, there is a gap of 15.6 million workers needed to be able to meet the projected demand for middle-skill and high-skill jobs.



Strategies to Mitigate Skill Gaps

To close the skill gaps that exist in the U.S., actions are needed to be taken at the federal, state, and local levels. At the federal level new policies and programs can be developed that specifically target occupations that are projected to have major shortages, such as:

- New job training and apprenticeship programs
- Increase in the number of H1-B visas Student grant and loan programs for students
- Student grant and loan programs

States can also develop new job training and apprenticeship programs. Student loan forgiveness programs could be developed for graduates that remain in the state and have started their careers in key target occupations.

Communities, metropolitan areas, and regions need to develop programs that specifically address skilled worker shortages in their area because the federal and state programs may not meet the specific needs of the local area. There are three general strategies for mitigating workforce shortages at the local or regional area:

- 1. Increase the skills of the workers and students in the labor market
- 2. Reduce the out-migration of skilled workers
- 3. Increase the in-migration of skilled workers

Within each of these three strategies there are several tactics which can be implemented.

Smart Solutions Group can assist economic development organizations in identifying skill gaps and developing Strategic Roadmaps for Workforce Development that focus on the workforce needs of the area's target industries. Ed Andrews is a Partner with Smart Solutions Group. Ed has an extensive background in business, economic development and ACT Work Keys. For addition information on the ways Smart Solutions Group can assist your area in developing a skill workforce, contact:

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