# THE NEW TALENT LANDSCAPE 

## RECRUITING DIFFICULTY AND SKILLS SHORTAGES



# THE NEW TALENT LANDSCAPE Recruiting Difficulty and Skills Shortages 

Media Contact
Kate Kennedy Phone: + 1.703.535.6260
The Society for Human Resource Management (SHRM) is the world's largest HR professional society, representing 285,000 members in more than 165 countries. For nearly seven decades, the Society has been the leading provider of resources serving the needs of HR professionals and advancing the practice of human resource management. SHRM has more than 575 affiliated chapters within the United States and subsidiary offices in China, India and United Arab Emirates. Visit us at shrm.org.

E-mail: kate.kennedy@shrm.org
Vanessa Hill
Phone: +1.703.535.6072 E-mail: vanessa.hill@shrm.org

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SOCIETY FOR HUMAN
RESOURCE MANAGEMENT

## USA

SHRM Headquarters
Alexandria, VA 22314
Phone +1.800.283.7476
E-mail SHRM@shrm.org
China
Gateway Plaza
Chaoyang District
Beijing, 100027
Phone +86.10.59231033
E-mail SHRMChina@shrm.org
INDIA
Gurgaon, Sector 26
Haryana 122002
Phone +91.12.44200243
E-mail SHRMIndia@shrm.org
United Arab Emirates
Dubai Knowledge Village
Dubai, UAE
Phone +971.050.104.6330
E-mail SHRM.MEA@shrm.org

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## ABOUT THIS RESEARCH REPORT

## Because of their central role in carrying out workforce planning, job analysis and skills audits and in managing the overall recruiting process, no one is better positioned to understand where skills shortages are occurring than the professionals working in human resource and staffing management.

HR and other business leaders have for some time expressed concern that it is growing more difficult to locate job applicants who possess the needed skills, experience, educational qualifications and credentials to be successful. Because a high-quality workforce is the most important determinant of business success, these challenges have a direct influence on organizations' competitiveness both today and in the future.
Although HR professionals are aware of the need for a skilled workforce, the problem of developing a strong talent pipeline is not one that HR professionals can solve on their own. It involves a complex mix of factors, including economic and social conditions as well as government policy. Included in this mix are the efforts that organizations make to invest in their workforce through training and development. Beyond these investments, it is imperative that business leaders, especially HR leaders, are actively involved in efforts to improve the workforce readiness of their local talent pools as well as the talent pools in their specific industry. HR professionals possess valuable insights into talent issues and skills shortages due to their role in staffing.

With this in mind, the Society for Human Resource Management (SHRM) conducted a survey of HR professionals across industries and in organizations of different sizes to learn more about recruiting difficulty, skills shortages and the recruiting and training tactics organizations are using in response to these challenges. This research report comprises overall results as well as more in-depth analysis based on organization staff size and industries. The following industries were included in the analysis: accommodation, food services and retail/wholesale trade; construction, mining, gas and oil; education; finance, insurance and real estate; government; health and social assistance; high-tech; manufacturing; and professional, scientific and technical services.
SHRM has conducted similar surveys in previous years, most recently in 2013, as part of its economic conditions series of surveys, so, when possible, comparisons with previous years' findings are shown. The survey included questions on the topics listed below.

## RECRUTING DIFFICULTY

- How challenging is the current recruiting environment?
- What factors are causing recruiting difficulty?
- What types of vacant positions are the most difficult to fill?


## SKILLS SHORTAGES

- What basic skills do HR professionals see as most lacking in today's job applicants?
- What applied skills do HR professionals believe are most lacking among candidates?
- What roles do the changing nature of work and the need for new skills play in creating current skills shortages?


## RECRUITING STRATEGIES

- What are the most common strategies organizations are using to deal with recruiting challenges?
- Which of these tactics do they consider most effective?
- Do these approaches vary by industry or organization staff size?


## TRAINING STRATEGIES

- Are training budgets and strategies changing to meet the challenges of recruiting difficulty and skills shortages?
- How aware are HR professionals of government and other training resources that may help them meet these challenges?
 OF HR PROFESSIONALS ARE EXPERIENCING DIFFICULTY RECRUITING CANDIDATES FOR FULL-TIME POSITIONS IN THEIR ORGANIZATIONS.

SHRM surveyed HR professionals on a range of recruiting and skills issues to get a better understanding of what the current talent market looked like across a range of industries. The findings reveal that many HR professionals are experiencing a more challenging recruiting environment compared with previous years.

HR professionals also say there are skills shortages among the job applicants applying for open positions: More than half of HR professionals reported some level of basic skills/knowledge deficits among job applicants, and $84 \%$ reported applied skills shortages in job applicants in the last year. But although the most common strategy HR professionals report their organizations are taking to recruit for fulltime regular positions is to leverage social media, the approach they consider most effective is to train existing employees to take on hard-to-fill roles. This emphasizes the need to address skills shortages in the talent market as well as the importance of addressing skills gaps within the existing workforce.

DESPITE HIGH LEVELS OF RECRUITING DIFFICULTY AND MANY AREAS OF SKILLS SHORTAGES, NEARLY ONETHIRD OF HR PROFESSIONALS REPORT THAT THEY ARE WORKING WITHOUT A TRAINING BUDGET.

## Other findings included:

- The top basic skills shortages identified are writing in English, basic computer skills, spoken English language, reading comprehension and mathematics.
- The most commonly reported applied skills shortages are critical thinking/problem-solving, professionalism/ work ethic, leadership, written communications and teamwork/collaboration.
- It is not uncommon for HR professionals to work without a training budget. Whereas $69 \%$ of HR professionals surveyed said their organization had a training budget over the last 12 months, almost one-third (31\%) reported that their organization did not.
- One-half of HR professionals reported that over the past 12 months their training budgets had remained the same. Meanwhile, $39 \%$ said training budgets had increased and $11 \%$ said they had decreased.
- Employees receive their training most often through conferences, seminars, workshops and professional organizations; via on-the-job training; or through webinars or other online training applications.
- Organizations reported varying levels of use of the public workforce system (the network of federal, state and local programs, sometimes referred to as American Job Centers or One-Stop Centers, that function to support economic expansion and develop the talent of the U.S. workforce). Use of the public workforce system appeared to be associated with organization staff size, with HR professionals at the smallest organizations least likely to say that they had used the public workforce system.
- Whereas few organizations reported that they provide registered apprenticeship programs in their organizations, larger organizations (those with 2,500 or more employees) were more likely to have them compared with smaller organizations.


## FIGURE 1

## MORE HR PROFESSIONALS REPORT DIFFICULTY RECRUITING FOR FULL-TIME REGULAR POSITIONS IN THE LAST 12 MONTHS

2013



YES


NO

Note: $\mathrm{n}=2,988$ (2013); $\mathrm{n}=3,160$ (2016). Respondents who answered "don't know" or "not applicable, have not hired any full-time regular positions" were excluded from this analysis.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

## Implications for HR Professionals

- Hiring managers and organizational leaders may not be as aware as HR professionals are of the current levels of difficulty in filling open job vacancies. HR professionals will therefore need to gather as much information and data as they can to build a solid business case for greater investments in securing talent-either through increased staffing resources or, in some cases, higher compensation budgets.
- Building the business case for investing in talent should be a natural outcome of the overall workforce planning process, which, in turn, must be continuous and longterm in scope to be successful.
- HR professionals must understand the unique skills requirements of their industry to develop more effective strategies for bridging skills shortages and gaps. This may entail having in-depth knowledge of many jobs' technical specifications.
- Replacing retiring Baby Boomers will continue to be a key staffing challenge in the years ahead. Organizations that can continue to engage their mature workforce and even retain them beyond retirement age will have an advantage. The U.S. Bureau of Labor Statistics (BLS) forecasts a decreasing overall labor force where replacement needs will exceed new job growth vacancies in four out of five occupations. ${ }^{1}$
- Although HR professionals must continue to take a leading role in driving increases in productivity, they are also charged with managing their organizational culture and improving employee job satisfaction and engagement. Making sure employees are not at risk of burnout will be critical, especially where technological changes or the inability to fill some positions may leave many employees doing more with less.
- HR professionals will need to work with their organizational leaders and relevant education and training bodies to invest in education and training as a way to meet skills shortfalls. Smaller organizations with lower training budgets in particular may benefit from leveraging government and industry resources. Therefore, HR professionals in these organizations must stay informed of what resources and potential collaborations may be on offer.
- HR professionals have a unique and important insight into the labor market and what skills, education and credentials employers need the most today and in the future. As a result, they are a vital part of regional and industry efforts to build the talent pipeline. To truly lead, HR professionals must become involved in workforce readiness efforts that extend beyond the boundaries of their organizations and become leaders on this issue within the communities where they do business.



## KEY FINDINGS

- In 2016, across industries HR professionals report a more challenging market for talent with increased recruiting difficulty compared with previous years.
- HR professionals in the manufacturing and health and social assistance industries report the highest levels of recruiting difficulty.
- A low number of applicants, candidates without the needed work experience, competition from other employers, candidates' lack of technical skills and the local market not producing enough qualified candidates are the top reasons for recruiting difficulty, according to HR professionals.

> Because of their central role in the recruiting process, HR professionals have a unique insight into changing labor market conditions. Overall, they report a more challenging talent market in which finding the right person for the job is growing increasingly tough.

Data from the U.S. Bureau of Labor Statistics (BLS) over the past 12 months have shown the U.S. economy trending toward low levels of unemployment while job openings are increasing. ${ }^{2}$ These improved conditions are encouraging many individuals to seek out new job opportunities, but they are also making it more difficult for organizations to fill their open positions.

## Levels of Difficulty in Recruiting

When comparing the difficulty HR professionals in 2016 said they had experienced in recruiting for full-time regular positions over the last 12 months with the responses from 2013, it is clear that conditions have changed. Whereas in 2013 50\% of HR professionals found it difficult to fill their open full-time regular positions, as shown in Figure 1, in 2016 that percentage had grown to 68\%. These findings echo similar findings from the SHRM Leading Indicators of National Employment ${ }^{\circledR}$ (LINE ${ }^{\oplus}$ ) recruiting difficulty index, which shows a rise in the difficulty HR professionals report in finding candidates for jobs of most strategic importance (see box on page 10).

Industries that reported the highest levels of recruiting difficulty were health and social assistance and manufacturing, with $81 \%$ and $75 \%$ of HR professionals in these respective industries reporting difficulty filling their full-time regular positions (see Table 16 in the Appendix).

## Reasons for Difficulty in Recruiting

When asked what factors were behind increased recruiting difficulty, HR professionals listed the low number of applicants (51\%), lack of necessary work experience among applicants (50\%), competition from other employers (49\%), lack of technical skills among applicants (38\%) and the local market not producing enough qualified candidates ( $38 \%$ ). Thirty-four percent said that their organization did not offer salaries competitive with the going market rate (see Figure 2 and Table 1).

## SHRM Leading Indicators of National Employment (LINE) Recruiting Difficulty Index

The SHRM LINE Report examines four key areas: employers' hiring expectations, new-hire compensation, recruiting difficulty and job vacancies. It is based on a monthly survey of private-sector human resource professionals at more than 500 manufacturing and 500 service-sector companies. Together, these two sectors employ more than $90 \%$ of the nation's private-sector workers.

LINE's recruiting difficulty index measures how difficult it is for firms to recruit candidates to fill the positions of greatest strategic importance to their companies. The recruiting difficulty index shows that in both manufacturing and services, HR professionals are experiencing difficulty finding applicants for these jobs at levels not seen since before the Great Recession of 2007-2009.

Source: SHRM Leading Indicators of National Employment (LINE) historical data

Note: $\mathrm{n}=2,114$. Respondents who answered "don't know" were excluded from this analysis. Percentages do not equal 100\% due to multiple response options. Only respondents whose organizations were having difficulty hiring for full-time positions were asked this question
Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

There were statistically significant differences between industries. For example, HR professionals in construction, mining, gas and oil; finance, insurance and real estate; health and social assistance; high-tech; and manufacturing were more likely to report that their local labor market was not producing enough work-ready/qualified job candidates compared with respondents from other industries. HR professionals in accommodation, food services and retail/ wholesale trade were more likely than those in other industries to say that candidates did not have the right workplace soft skills such as problem-solving, interpersonal skills, communication, teamwork and leadership. HR professionals in the education, government, and health and social assistance industries were more likely than those in other industries to say that the job candidates they were seeing did not have the needed credentials or certifications for the roles they were applying for. Those in the education industry were also more likely than HR professionals in other industries to report that applicants did
(continued on page 12)

## TABLE 1

## reasons organizations have difflculty Hirng for FULL-TIME REGULAR POSITIONS

| - Low number of applicants | 51\% |
| :---: | :---: |
| - Candidates do not have the needed work experience | 50\% |
| - Competition from other employers | 49\% |
| - Candidates do not have the right technical skills | 38\% |
| - The local market is not producing enough work-ready/qualified job candidates | 38\% |
| - Salaries are not competitive for the market | 34\% |
| Candidates do not have the right workplace (soft) skills (problem-solving, interpersonal skills, communication, teamwork, leadership, etc.) | 30\% |
| - Qualified candidates are not interested in moving to our local area | 26\% |
| - Candidates do not have the needed credentials/certifications | 24\% |
| - Candidates reject compensation package | 23\% |
| - Lack of interest in type of job among job seekers | 17\% |
| - Candidates do not have the needed training | 16\% |
| - Candidates do not have high enough levels of education | 11\% |
| - Candidates do not have the right basic skills (reading, writing, math, basic computer skills, etc.) | 11\% |
| - Candidates are overqualified | 10\% |
| Qualified candidates are not able to move to our local area (due to mortgage or other issues) | 9\% |
| - Relocation package is not competitive or not provided | 8\% |
| - Candidates reject benefits package | 6\% |
| - Supply/demand - Qualifications/skillsCompensation/ <br> required for the job benefits | graphy |

## INDUSTRY SPOTLIGHT

## Manufacturing

Manufacturing as an industry has been in decline since the 1970s. But although the BLS projects manufacturing employment to continue to decline at a $0.7 \%$ annual rate between 2014 and 2024, this is a more moderate decline than the $1.6 \%$ rate experienced in the previous decade. According to the BLS, a few manufacturing industriescement and concrete product manufacturing, and veneer, plywood and engineered wood product manufacturingare expected to experience occupational growth rates higher than average for all workers. This growth appears to be closely related to construction demand as the fastestgrowing manufacturing industry occupational growth rates are directly related to that industry. Most manufacturing jobs are in production occupations, thus replacement needs will often be concentrated in these types of jobs. However, the BLS predicts that as manufacturing innovation continues, science and engineering jobs will be added, and these may be among the most difficult vacancies to fill due to the need for high levels of education and credentials. ${ }^{3}$

As shown in the industry tables featured in the Appendix of this research report, HR professionals in the manufacturing industry are reporting some of the highest levels of recruiting difficulty, second only to those in the health care and social assistance industry. They are more likely than HR professionals in most other industries to say that they require new engineering and technical skills in their job applicants and to work with a recruitment agency to fill their open positions. Manufacturing is also one of the industries showing the highest percentages of hiring veterans. Compared with most other industries, HR professionals in manufacturing were also more likely to report using the public workforce system and providing customized apprenticeship programs when not utilizing registered apprenticeship programs.

HR PROFESSIONALS IN THE HIGH-TECH INDUSTRY WERE MORE LIKELY THAN THOSE IN ANY OTHER INDUSTRY TO INDICATE THAT GLOBAL COMPETITION WAS A FACTOR IN THEIR INCREASING DIFFICULTY FINDING QUALIFIED TALENT.

FIGURE 2
TOP REASONS ORGANIZATIONS EXPERIENCED HIRING DIFFICULTY FOR FULL-TIME REGULAR POSITIONS


Note: $\mathrm{n}=2,114$. Respondents who answered
"don't know" were excluded from this analysis. Respondents could select multiple response options. Only respondents whose organizations were having difficulty hiring for full-time positions were asked this question
Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

## FIGURE 3

ORGANIZATIONS CITING UNCOMPETITIVE SALARIES as a reason For recruiting difficulity, by ORGANIZATION STAFF SIZE


Note: Statistically significant differences were found between the following organization staff sizes: 2,500 or more employees >1 to 499 employees.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

FIGURE 4
COMPETITION FROM ORGANIZATIONS IN OTHER COUNTRIES FOR QUALLFIED TALENT IN THE LAST 12 MONTHS


Yes


No

Note: $\mathrm{n}=2,805$. Respondents who answered "don't know" were excluded from this analysis.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)
not possess high enough educational qualifications. HR professionals in the high-tech industry were more likely than those in any other industry to indicate that global competition was a factor in their increasing difficulty finding qualified talent (see Tables 17 and 19 in the Appendix for more detail).

Statistically significant differences based on organization staff size were also found. As shown in Figure 3, HR professionals at organizations with 2,500 or more employees were more likely than those at organizations with 1 to 499 employees to report difficulty recruiting for full-time regular positions in the last 12 months because the salaries they were offering were not competitive for the market.

Figure 4 shows that most organizations ( $85 \%$ ) did not report competition for talent from other countries as a factor in recruiting difficulty. However, further analysis showed that organizations with 10,000 or more employees were more likely than organizations with 1 to 2,499 employees to indicate that their organizations had been facing competition from companies in other countries for qualified talent (see Table 7 in the Appendix).

## The Hardest Jobs to Fill

Vacancies for jobs requiring high and in-demand skills are among the most difficult to fill. According to the HR professionals surveyed, the most difficult-to-recruit-for job categories were high-skilled medical (with 46\% of HR professionals saying they were very difficult to fill), scientists and mathematicians (33\%), skilled trades (33\%), engineering and architecture (31\%), IT/computer specialists (27\%), executives (24\%) and high-skilled technicians (24\%), as illustrated in Figure 5 and in more detail in Table 2.

Organizations with 1 to 99 employees were more likely than organizations with 500 or more employees to say it was very difficult to fill full-time regular manager positions in the last 12 months. And organizations with 1 to 99 employees were more likely than organizations with 100 to 9,999 employees to say it was very difficult to fill full-time regular skilled trade positions in the last 12 months (see Table 6 in the Appendix).

## FIGURE 5

DIFFICULTY FILLING FULL-TIME REGULAR POSITIONS IN THE LAST 12 MONTHS, BY JOB CATEGORY


Note: $\mathrm{n}=240-1,591$. Respondents who answered "don't know" or "not applicable, did not hire this position" were excluded from this analysis.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

## TABLE 2

DIFFICULTY FILLING FULL-TIME REGULAR POSITIONS IN THE LAST 12 MONTHS, BY JOB CATEGORY

|  | Very Difficult | Somewhat Difficult | Somewhat Easy | Very Easy |
| :---: | :---: | :---: | :---: | :---: |
| High-skilled medical, such as nurses, doctors, specialists | 46\% | 35\% | 17\% | 3\% |
| Scientists and mathematicians | 33\% | 37\% | 24\% | 6\% |
| Skilled trades, such as electricians, carpenters, machinists, mechanics, welders, plumbers | 33\% | 35\% | 26\% | 7\% |
| Engineering and architecture | 31\% | 41\% | 24\% | 4\% |
| IT/computer specialists, such as IT analysts, software developers and programmers, database administrators | 27\% | 38\% | 27\% | 7\% |
| Executives | 24\% | 42\% | 28\% | 5\% |
| High-skilled technicians, such as health, telecommunications and environmental technicians | 24\% | 44\% | 27\% | 5\% |
| Transportation, such as drivers | 20\% | 32\% | 33\% | 15\% |
| Construction and extraction, such as mining | 20\% | 38\% | 31\% | 10\% |
| Community and social service workers, such as counselors, therapists, social workers | 19\% | 41\% | 32\% | 9\% |
| Sales | 17\% | 43\% | 32\% | 8\% |
| Managers | 15\% | 46\% | 33\% | 6\% |
| Production operators | 14\% | 32\% | 41\% | 12\% |
| Protective service workers, such as firefighters, law enforcement, security guards | 13\% | 34\% | 42\% | 12\% |
| Education, training and librrary, such as teachers, professors | 13\% | 36\% | 38\% | 13\% |
| Hourly service workers, such as cashiers, retail sales, food service workers | 13\% | 26\% | 41\% | 20\% |
| Farming, fishing and forestry | 12\% | 33\% | 43\% | 12\% |
| Legal occupations, such as lawyers, judges and legal support workers | 11\% | 34\% | 45\% | 10\% |
| Accounting and finance professionals | 11\% | 36\% | 44\% | 9\% |
| Hourly laborers | 11\% | 26\% | 40\% | 23\% |
| Military occupations | 9\% | 26\% | 47\% | 17\% |
| Art and design | 9\% | 34\% | 48\% | 10\% |
| Advertising | 9\% | 31\% | 49\% | 11\% |
| Human resources | 8\% | 34\% | 46\% | 12\% |
| Marketing | 7\% | 34\% | 49\% | 11\% |
| Customer service representatives | 6\% | 26\% | 50\% | 18\% |
| Communications, media and public relations | 6\% | 29\% | 53\% | 13\% |
| Business | 6\% | 35\% | 50\% | 9\% |
| Entertainment and sports | 5\% | 28\% | 51\% | 16\% |
| Administrative support staff | 3\% | 20\% | 50\% | 27\% |

Note: $\mathrm{n}=60-2,194$. Respondents who answered "don't know" or "not applicable, did not hire this position" were excluded from this analysis.
Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

## CASE STUDY

## Collaborative Solutions to Workforce Readiness and Skills Shortages in Greenville County, SC

One of the ways that HR professionals are responding to the challenges they face in a more competitive market for talent-where the need for a workforce with constantly updated knowledge and skills has become the norm-is to work more closely with local government and educational bodies on collaborative solutions. This approach has proven successful in Greenville, a fast-growing city in the upstate region of South Carolina. Its location between Atlanta, Ga., and Charlotte, NC, along with favorable wages and tax benefits, has positioned it as an attractive location for many large companies.

According to Jay Blankenship, regional workforce advisor for Greenville, "The economic environment in Greenville allows for various levels of strategic collaboration to be built that are reflective of the labor market needs of the local area, the region and the state. These collaborations allow for a system to be developed that emphasizes ways to address the talent pipeline needs of our workforce."

HR professionals are an important stakeholder in this strategic collaborative approach and work closely with local business and government leaders to develop programs that enhance the skills base for the region.

According to Robyn Knox, SHRM-SCP, SPHR, vice president of human resources at the Southern Weaving Company and 2016 Greenville SHRM (GSHRM) chapter president, "As HR professionals, we have realized that we must take an active role in attracting future talent at a much younger age. This requires a partnership between education and industry, with HR often being the
voice representing industry. For example, it is no longer acceptable to only attend career fairs and similar events for high school juniors and seniors. With the support of organizations like SC Works Greenville and the SC Department of Commerce's Regional Education Center Advisory Board for Greenville, these types of events are being held for 7th and 8th graders in an attempt to introduce them to high-demand careers before they must choose a high school course of study. As you can imagine, we as HR professionals are having to adjust our approach to recruiting to appeal to this younger generation. For example, we no longer talk about jobs; we talk about career ladders-where do they start, where can they go, and how quickly can they get there!"

Examples of local collaborations include the High School Equivalency (HSE) Apprenticeship Program, which originated in Greenville County as a public-private partnership between HTI, SC Commerce, SC Works and Anderson School District Five Adult Education. Starting as a pilot program, it now provides a dropout recovery strategy for individuals seeking employment through HTI Employment Solutions. Through the HSE program, applicants who do not possess a secondary school diploma are offered a contingent employment assignment through HTI in conjunction with participating in HSE classes. Upon completion of the HSE program, participants are offered direct hire employment. With an estimated 147,000 residents who do not hold a high school diploma or equivalency in the upstate of South Carolina, the program is expected to have a meaningful impact on the employment prospects of the area's newest entrants to the labor force.

## CASE STUDY

Another collaborative initiative was developed by Regional Education Center Advisory Board member Michael Parris, director of the Enoree Career and Technology Center, and Brooks Smith, executive director of career and technology education for Greenville County Schools. This initiative is centered on the development of a logistics and material handling program at the career center by working with Grove Medical, Inc., a logistics and distribution company that distributes medical supplies, equipment and services to the alternate site market. Here also HR leadership played a key role in developing the initiative. GSHRM member Andrea Jannack, director of human resources, worked with Michael Laico, vice president of operations at Grove Medical, to collaborate with the school district to build logistics, transportation and distribution sites at three of the four career centers in the school district.

HR professionals in Greenville also work through their local SHRM chapter to get more involved in collaborative efforts to improve the workforce readiness and skills of their regional labor force. According to Knox, "because members of our chapter represent various types of industries and organizations, much of our talent development focus has been on soft skills. Representatives from Greenville SHRM often serve as presenters or panel members at various conferences being held throughout the county."

As in many chapters, GSHRM's workforce readiness council takes a lead role in expanding the talent pool. Last year, the council hosted a panel discussion that covered
statistics and benefits of employing entry-level workers, ex-offenders, individuals with disabilities, seasoned/mature workers and the long-term unemployed. It also hosted a session focused on hiring veterans.

Blankenship's advice to HR professionals who would like to strengthen the collaborative efforts to build their community's talent pipeline is to start by identifying the key stakeholders in their local area that work to find solutions to skills shortages and seek out regional partners from there. Often there are industry, workforce and educational projects, initiatives, activities and events that already exist that can be greatly strengthened by HR involvement.

Knox agrees that HR professionals must take a lead role in their communities to build their local talent pipeline. "Human resource professionals are in the unique position to understand the needs of the business and the needs of employees. In fact, they spend most of their time balancing the two. They are involved at every stage of the career cycle. They understand what attracts candidates for employment and what skills are required for success. HR professionals learned years ago how important it was to have a seat at the table within the business environment. It is equally as important to have a seat at the table with workforce development organizations, educational institutions and community organizations that provide services to job seekers."

SKILLS SHORTAGES

## KEY FINDINGS

- HR professionals report that applied skills are more likely to be lacking among job applicants than basic skills.
- 59\% of HR professionals report some level of basic skills/knowledge deficits among job applicants over the previous 12 months.
- The top basic skills shortages identified are writing in English, basic computer skills, spoken English language, reading comprehension and mathematics.
- All industries report the same top two basic skills/knowledge shortages: writing in English and basic computer skills.
- $84 \%$ of HR professionals report finding applied skills shortages in job applicants over the last 12 months.
- The most commonly reported applied skills shortages are in critical thinking/ problem-solving, professionalism/work ethic, leadership, written communications and teamwork/collaboration.

The survey asked HR professionals about both basic and applied skills deficits among current job applicants to determine to what extent skills shortages are occurring within the labor market.

Skills shortages occur when the labor market does not produce enough qualified candidates to fill the needed number of positions within a particular occupation. This can be due either to a lack of required skills, work experience, or educational qualifications or credentials. Labor market experts also sometimes reference skills gaps. This phrase is often used to describe a situation where, for a variety of reasons, existing employees within an organization do not have the needed skills to perform new or additional tasks within their current or future job roles.

A common refrain among U.S. business leaders is that their companies face a growing challenge of finding and retaining workers with the skills that are needed to perform their roles effectively. SHRM research highlighted in the Business and Human Capital Challenges Today and in the Future (2015) report showed that non-HR C-suite executives believed that retaining their highest-performing employees was their top critical human capital challenge in the current business environment. The report also found that HR professionals and non-HR C-suite executives agreed that the top future human capital challenge was developing the next generation of organizational leaders. ${ }^{4}$ These findings suggest that both skills shortages and skills gaps are likely to be issues of concern for HR and other organizational leaders for the foreseeable future.

There are, no doubt, a number of reasons why both HR and other business leaders appear to be increasingly focused on finding and retaining high-skilled employees as well as making sure the next generation has the skills they need to become effective leaders. On the demand side, the reduction of staff and automation of jobs that occurred over the course of the recession amplified the drive for productivity from those remaining in jobs; rising productivity is associated with the use of and need for higher skills. Similarly, the overall development of technology and increased specialization within highly technical fields have also made skill requirements more exacting. Therefore, job candidates with precisely the right mix of skills and experience may be becoming more elusive.

The supply side of the equation may also be changing. In the United States, many individuals holding the highest levels of education and skills are in the 40-plus age demographic. SHRM research has found that as the workforce ages and highly experienced and skilled workers retire, many organizations are not prepared for their loss (for more on these findings see "Research Spotlight: Preparing for an Aging Workforce" on page 20).

RESEARCH SPOTLIGHT

## Preparing for an Aging Workforce

As part of the SHRM and the SHRM Foundation three-year initiative supported by a grant from the Alfred P. Sloan Foundation, SHRM Research conducted a survey of HR professionals to learn more about how organizations are preparing for an aging workforce, including the current demographics of organizations and the respondents' views on how the demographic breakdown of their workforce is likely to change in the future in both their organizations and industries. When comparing the recommendations in the SHRM Foundation's Effective Practice Guidelines (EPG) report titled The Aging Workforce: A Guide to Leveraging the Talents of Mature Employees with the findings from the SHRM Preparing for an Aging Workforce Survey, key gaps between recommended effective practices and the current state of practice were identified. In particular, the comparisons revealed:

A short-term mindset: Whereas The Aging Workforce EPG report advised taking a long-term view of demographic changes and the impact of an aging workforce, most organizations surveyed by SHRM said they were primarily focused on assessing the impact of the aging workforce and the impact of retirements within a relatively short period of time (one to five years, as shown in Figure 6).

## A lack of urgency in preparing for impending

demographic shifts: The EPG outlined a strong case for preparing for a major shift in workforce demographics in the years ahead, but most organizations in the SHRM survey did not appear to share the same level of urgency. Most organizations reported that they were either at the early stage of examining the issue or believed that no changes were necessary. Thirteen percent were not even aware of this potential change to the demographics of the workforce.


#### Abstract

A lack of formal long-term forecasting, planning and assessment related to changing workforce demographics and an aging workforce: Though the EPG recommended


 a number of steps in preparing for an aging workforce, including short- and long-term demographic forecasting and assessment as well as current and future skills audits, most organizations did not report having a process for assessing the impact of demographic changes in their workforce beyond the next one to two years.Older workers are not included in diversity planning related to recruiting: Whereas the EPG recommended building efforts to attract and retain older workers into diversity and affirmative action recruiting plans, many organizations reported that they did not actively recruit older workers at all.

For more information about the SHRM/SHRM Foundation Aging Workforce Initiative, visit shrm.org/agingworkforce

## FIGURE 6

ORGANIZATONS THAT HAVE CONDUCTED A STRATEGIC WORKFORCE PLANNING*ASSESSMENT TO ...


[^0]Another factor that could be driving a perception that skills shortages are a growing problem may be that recruiting behaviors are changing. Although the use of recruiting software and social media may make finding potential job candidates with very specific and hard-to-find skills more efficient, these technologies may encourage a greater focus on recruiting an increasingly small and specialized talent pool rather than investing in the development and skills of job candidates who, if given the chance, a bit of time and the right training and education, could perform well in job roles that are difficult to fill.

## Basic Skills

Basic skills are critical not only in and of themselves but also because they act as the foundation upon which more high-level skills are built. Therefore, concerns with the levels of basic skills in the workforce point to fundamental and farreaching problems with the workforce readiness of the labor pool.

When asked about the basic skills/knowledge shortages that they had encountered among job applicants over the previous 12 months, fewer than half (41\%) of the HR professionals said that they had not encountered such shortages. Among the top deficits that were identified were writing in English (30\%), basic computer skills (30\%), spoken English language (18\%), reading comprehension (17\%) and mathematics (14\%), as shown in Figure 7. There was little to no change in these findings compared with 2013. The percentage of HR professionals reporting writing in English as a skill deficit among job seekers rose from $26 \%$ to $30 \%$, but other factors held steady.

FIGURE 7
BASIC SKLLLSSKNOWLEDGE SHORTAGES AMONG JOB APPLICANTS IN THE LAST 12 MONTHS


[^1]
## INDUSTRY SPOTLIGHT

> THE HEALTH CARE AND SOCIAL ASSISTANCE INDUSTRY REPORTED THE HIGHEST PERCENTAGES OF RECRUITING DIFFICULTY, REFLECTING THE RAPID PACE OF GROWTH IN INDUSTRY ocCuPations.

## Health Care and Social Assistance

The BLS projects that the service-providing sectors will account for $94.6 \%$ of all the jobs added between 2014 and 2024, and of these 9.3 million new service-sector jobs, 3.8 million will be added to the health care and social assistance major sector. Factors such as the aging population are creating a strong demand for health care services and social assistance programs. As a result, the health care and social assistance sector is expected to become the largest employing sector during the 20142024 BLS projections decade, overtaking state and local government and the professional and business services. It is forecast to increase its employment share from 12.0\% in 2014 to $13.6 \%$ in 2024. Occupational forecasts from the BLS predict that health care support occupations and health care practitioners and technical occupations will be the two fastest growing occupational groups between 2014 and 2024, contributing the most new jobs. The combined increase of 2.3 million jobs will represent about one out of four new jobs. ${ }^{5}$

As shown in the industry tables in the Appendix, the health care and social assistance industry reported the highest percentages for recruiting difficulty, reflecting the rapid pace of growth in industry occupations. HR professionals from this industry were also the most likely to report difficulties in finding job applicants with teamwork/collaborating skills. Because of both technical and safety requirements of many jobs in this industry, it is not surprising that HR professionals in the health care and social assistance industry were more likely than HR professionals in other fields to report requiring new credentials/certifications and new skills for their open jobs because of legal or regulatory requirements.

Although all industries reported the same top two basic skills/knowledge shortages-writing in English and basic computer skills-a few industries were more likely to report shortages for certain skills/knowledge. For example, HR professionals in accommodation, food services and retail/wholesale trade; construction, mining, gas and oil; and manufacturing were more likely than those in other industries to report shortages in spoken English language as well as reading comprehension skills among job applicants. Professional, scientific and technical services HR professionals were more likely to report that they had not encountered any basic skills shortages among jobs applicants ( $52 \%$ ), compared with respondents from other industries. Manufacturing HR professionals were more likely to report shortages in mathematics/basic computational skills, whereas those in high-tech were more likely to have encountered shortages in the science skills of job applicants compared with respondents from other industries (see Table 20 in the Appendix).

## Applied Skills

Whereas basic skills act as a foundation for further learning, applied skills can be thought of as those that enable individuals to use their knowledge to perform in the workplace. The ability to use these skills on the job makes them absolutely critical.

Although a little over $40 \%$ of HR professionals reported that they had not encountered basic skills shortages among the job applicants they had seen over the last 12 months, the picture was different when they considered applied skills. As shown in Figure 8, only 16\% of HR professionals reported that they had not seen any applied skills deficits in job applicants over the last 12 months, indicating that when it comes to applied skills, HR professionals are seeing more shortages. The most commonly reported missing applied skills were critical thinking/problem-solving (45\%), professionalism/work ethic (43\%), leadership (35\%), written communications ( $29 \%$ ) and teamwork/collaboration (28\%).

## FIGURE 8

applied SkILLS ShORTAGES AMONG JOB APPLICANTS IN THE LAST 12 MONTHS


# ONLY 16\% OF HR PROFESSIONALS REPORTED THAT THEY HAD NOT SEEN ANY APPLIED SKILLS SHORTAGES IN JOB APPLICANTS OVER THE LAST 12 MONTHS. 

Overall there was agreement among industries about the top applied skills shortages, but a few applied skills deficits were greater for certain industries. These included a higher percentage of HR professionals in the accommodation, food services and retail/wholesale trade; finance, insurance and real estate; and health and social assistance industries that had encountered applicants that fell short in their professionalism/work ethic when compared with other industries (see Table 21 in the Appendix).

## The Need for New Skills

One factor that may make it more difficult for job seekers to obtain and maintain the needed skills for open positions is that new types of skills are frequently required for a growing number of jobs. Meanwhile, the time it takes for the labor market to respond to these new skills requirements may lag. Obtaining new skills and any accompanying credentials can be costly and timeconsuming for job seekers. There is also the additional problem that many job seekers lack solid and accurate information about the types of skills that either currently are or eventually will be in demand. Could the constant need for new skills be a reason for today's skills shortages?

While the need for new skills is clearly a factor behind many areas of reported skills shortages, based on the responses of HR professionals in this survey, this issue may not be as great of a factor in 2016 as it was in the years immediately following the recession. As shown in Figure 9, in 2013 just under half ( $48 \%$ ) of HR professionals reported that the full-time regular positions that they hired for in the last year required skills that were new and different from previous positions. In 2016 this percentage dropped to $38 \%$.

In the more immediate aftermath of a recession, organizations are likely to be going through more changes than in less volatile times, and these changes can include a number of factors, such as shifts in technology, market growth or disruptions, and changing client and customer
expectations, that all could influence the types of skills needed by an organization. Therefore, one theory to explain this decline could be that although many jobs were permanently eliminated during the recession through either automation or outsourcing, those that remained suddenly required new and different skills. For example, a manufacturing plant may have automated its assembly line during the recession, eliminating many low- to middle-skilled jobs in the process. It would then require skilled technicians to manage the machinery or technology that had displaced the workers whose jobs had been automated. These new roles would require different and potentially more technical skills compared with those needed to manage line workers. According to this theory, this type of disruption would likely have been a greater factor in the years immediately after the recession but could be less of a factor today because those new positions were eventually filled and are now established.

Although there may be some truth to this theory, the types of new skills that HR professionals actually say are required for their full-time regular positions hired in the last 12 months are, in fact, a mix of technical and applied skills; the top category HR respondents indicated was needed was workplace/soft skills such as communication, teamwork or problem-solving (45\%). This was followed by computer/web/IT skills (39\%), management/project management/training skills (39\%), technical skills (37\%) and business/HR/leadership skills (32\%), as illustrated in Figure 10.

Meanwhile, 30\% reported that their full-time regular positions for which employees were hired in the last 12 months required new credentials or certifications. Larger organizations appeared to have a greater need for job applicants possessing credentials or certifications. For example, $41 \%$ of HR professionals at organizations with 10,000 or more employees reported the need for applicants with specific credentials/certifications compared with $22 \%$ of HR professionals working

FIGURE 9
ORGANIZATIONS REQUIRING NEW SKILLS FOR FULL-TIME regular positions hried in the last 12 MONTHS



Note: $\mathrm{n}=2,641$ (2013); $\mathrm{n}=2,734$ (2016). Respondents who answered "don't know" were excluded from this analysis. Only respondents whose organizations were hiring full-time staff were asked this question.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

> MORE HR PROFESSIONALS ARE REPORTING EITHER SOMEWHAT OR VERY DIFFICULT CONDITIONS FOR FINDING OUALIFIED INDIVIDUALS FOR FULL-TIME REGULAR POSITIONS THAT REOUIRE NEW SKILLS IN 2016 COMPARED WITH ANY OTHER YEAR STUDIED SINCE 2010.
at organizations with 1 to 99 employees and $25 \%$ at organizations with 100 to 499 employees (see Table 8 in the Appendix). As shown in Table 3, the most common credentials/certifications required were trade (38\%), management/project management/training (34\%), business/ HR/leadership (33\%), computer/web/IT (32\%) and workplace (soft) skills (32\%).

HR professionals in the high-tech industry were significantly more likely than those in other industries (except for health care and professional services) to report that their open positions required new skills (see Table 22 in the Appendix).

HR professionals in the high-tech, manufacturing, and professional, scientific and technical services were more likely than those in other industries to say that they needed applicants specifically with new technical skills, such as data analytics, programming or quality control.

Health care and social assistance HR professionals were more likely than those in other industries to report that they were looking for job applicants with new types of credentials/certifications (see Table 23 in the Appendix).

The types of workers that were most likely to require certifications/credentials were community and social service workers, such as counselors, therapists and social workers; construction and extraction workers, such as miners; high-skilled medical workers, such as nurses, doctors and specialists; and workers in the farming, fishing and forestry fields (see Table 9 in the Appendix).

When asked what factors were the main reasons behind the need for new skills, more than half of HR professionals cited changing technology (54\%) as a driver, followed by growth of the organization (52\%), changing customer/client expectations (39\%), developing or offering new products/

## FIGURE 10

## TYPES OF NEW SKILLS REQUIRED FOR FULL-TIME REGULAR POSITIONS HIRED IN THE LAST 12 MONTHS


services (35\%) and expanding the business into new markets (26\%), as shown in Figure 11.

HR professionals in high-tech, manufacturing, and professional, scientific and technical services were more likely than those in other industries to report that the need for new skills was being driven by developing or offering new products/services (see Table 24 in the Appendix).

Differences were also seen based on organization staff size. HR professionals at organizations with 500 or more employees were more likely than organizations with 1 to 99 employees to say that positions required new skills because of changing technology, whereas those at organizations with 2,500 or more employees were more likely than those at organizations with 1 to 99 employees to say that positions required new skills because of a reorganization. Organizations with 500 or more employees
were more likely than organizations with 1 to 99 employees and organizations with 10,000 or more employees were more likely than organizations with 1 to 499 employees to say that positions required new skills because of a merger or acquisition (see Table 10 in the Appendix).

As shown in Figure 12, when comparing the findings over time, more HR professionals were reporting either somewhat or very difficult conditions for finding qualified individuals for full-time regular positions that required new skills in 2016 compared with any other year studied since 2010. So although there may be a lower percentage reporting that their open positions require new skills compared with 2013, these types of jobs are still getting harder to fill.

## FIGURE 11

reasons that positions reourre new skllls


Note: $\mathrm{n}=999$. Respondents who answered "don't know" were excluded from this analysis. Percentages do not equal 100\% due to multiple response options. Only respondents whose organizations were hiring full-time positions that required new skills were asked this question.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

of HR professionals who are hiring for jobs requiring new skills say changing technology is a driver

TABLE 3
MOST COMMONLY CITED TYPES OF NEW SKILLS NEEDED FOR ORganIZATIONS THAT REQUIRE NEW CREDENTIALS/CERTIFICATIONS

| Trade ( $\mathrm{n}=78$ ) | $38 \%$ |
| :--- | :--- |
| Management/project management/training ( $\mathrm{n}=389$ ) | $34 \%$ |
| Business/HR/leadership ( $\mathrm{n}=323$ ) | $33 \%$ |
| Computer/web/IT ( $\mathrm{n}=394$ ) | $32 \%$ |
| Workplace (soft) skills (e.g., problem-solving, interpersonal skills, <br> communication, teamwork, leadership) (n=445) | $32 \%$ |
| Basic skills (e.g., reading, writing, math, basic computer skills) (n=113) | $31 \%$ |
| Technical (n=369) | $31 \%$ |
| Engineering ( $\mathrm{n}=125$ ) | $30 \%$ |
| Research and development ( $\mathrm{n}=114$ ) | $28 \%$ |
| Marketing/communications ( $\mathrm{n}=120$ ) | $28 \%$ |
| Science/math ( $\mathrm{n}=88$ ) | $27 \%$ |
| Other ( $\mathrm{n}=94$ ) | $19 \%$ |

Note: Table uses row percentages. For example, of organizations that said they required new trade skills, $38 \%$ required new credentials/certifications.
Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

FIGURE 12
LEVEL OF DIFFICULTY IN FINDING QUALLIFIED INDIVIDUALS FOR FULL-TIME REGULAR POSITIONS THAT REQUIRE NEW SKILLS IN THE LAST 12 MONTHS


Note: $\mathrm{n}=528-1,199$. Respondents who answered "don't know" were excluded from this analysis. Only respondents whose organizations were hiring full-time positions that required new skills were asked this question.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

# Mary Clagett, Director of National Workforce Policy, Jobs for the Future 


#### Abstract

Mary Gardner Clagett is director of national workforce policy at Jobs for the Future (JFF), where she works with workforce leaders and practitioners from around the country to shape effective policy recommendations to meet the skills needs of America's workers and the U.S. economy. She and the team at JFF work to identify best and promising practices, particularly for meeting the education, training and employment needs of underprepared students, job seekers and workers-translating practice into policy.


## Sector Strategies and Career Pathways Offer Promise for Closing the Skills Gap

The number of U.S. jobs that will require some form of postsecondary education or training is expected to reach a new high of $65 \%$ by 2020, according to Georgetown University's Center on Education and the Workforce. However, the Center also projects that by 2020 the U.S. will face shortages of 3 million workers with associate's degrees or higher, and 5 million workers with technical certificates and credentials (Carnevale, Smith \& Strohl, 2013).

This is a critical concern for employers that, in survey after survey, cite the skills gap as a serious threat to their competitiveness. Although there are no quick fixes for addressing this skilled worker shortage, there are significant actions underway in the nation's education and workforce development systems to respond to increasing employer demand for academic, employability and technical skills in their current and future workers.

Sector strategies and career pathways initiatives are two approaches that are showing considerable promise for ensuring the relevance of education and training programs and for helping a broad range of individuals attain industryrecognized postsecondary credentials. Sector strategies bring together regional partnerships of employers and education, workforce, and economic development organizations to establish education and training programs that meet the skill needs of their industries. Career pathways systems formally align the education, workforce and supportive services needed to successfully guide a wide range of individuals, including those who are underprepared, through the continuum of education and training necessary for credentials that can lead to family-sustaining careers.

Although an increasing number of state and local workforce development and community college systems have worked to build and expand these system redesign efforts in recent years, few places have taken these strategies to scale. The Obama Administration has encouraged these systems change approaches through guidance, technical assistance, and competitive grants to workforce and community college partnerships, and Congress has encouraged them through enactment of the new Workforce Innovation and Opportunity Act (WIOA)-the federal law that authorizes the nation's publicly funded workforce development system.

WIOA requires that all state and local workforce development systems work with employers in high-demand industry sectors and with education, economic development and other partners to develop and implement regional sector strategies and career pathways initiatives across the country. This requirement is game-changing in that it sets the expectation that sector-focused and career pathway approaches will become a new way of doing business in the nation's workforce development system. But system leaders and practitioners who design and operate these programs cannot be successful without engaging employers as full partners. A pipeline of work-ready employees will only become a reality if employers understand how to effectively use publicly funded education and training resources to their advantage.
Employers can become involved in the development of innovative approaches by working with their regional workforce development boards and community college systems in the following ways:

- Encourage the development of these systems change initiatives and help identify the skills needed for highdemand jobs.
- Provide input on program design and curriculum.
- Provide feedback on credentials that have value to employers for making employment and promotion decisions, particularly as traditional credentials are being reconsidered in view of industry-recognized micro and alternative certifications and badges that focus on the attainment of competencies.
- Provide internships and other work-based learning opportunities for students.
- Offer onsite training or release time for employees.
- Participate in the delivery of training or provide teachers for the delivery of contextual learning.

Taking advantage of these opportunities to provide input in the design and delivery of education and training is of particular value to small and mid-sized businesses that can join with other employers in an industry sector, creating economies of scale to design specialized training programs, influence change and ensure system relevance.

[^2]RECRUITING STRATEGIES


## KEY FINDINGS

- Although the most common strategy organizations are taking to deal with recruiting challenges for full-time regular positions is to leverage social media to find candidates, the approach HR professionals consider most effective is to train existing employees to take on hard-to-fill roles.
- The largest organizations are the most likely to use training of existing employees to take on hard-to-fill positions as a way to deal with recruiting difficulty.
- HR professionals at smaller organizations are more likely than their counterparts at larger organizations to say that they are improving their benefits packages as a recruiting strategy.
- Two-thirds of HR professionals (67\%) say they had hired veterans for open positions in the last 12 months.

With HR professionals reporting high levels of recruiting difficulty as well as skills shortages, it stands to reason that many may be reconsidering their recruiting strategies in order to remain or become more competitive in the talent marketplace.

Some of the most common approaches HR professionals reported their organizations were taking to recruit for full-time regular positions were to leverage social media (such as by finding passive job seekers and other candidates, building employer brand and advertising open positions) ( $70 \%$ ), collaborate with educational institutions (58\%), expand their advertising efforts (49\%) and use a recruitment agency (44\%). Some indicated that they were dealing with the more difficult recruiting environment by stepping up their efforts to retain existing staff (43\%) and train existing employees to take on hard-to-fill roles (42\%), as shown in Figure 13.

Further analysis found that as organizations get larger, they were more likely to seek talent from nontraditional sources such as veterans and retirees as a recruiting strategy for full-time regular positions (see Figure 14). Organizations with 10,000 or more employees were also significantly more likely than those at organizations with 2,499 or fewer employees to say they were training existing employees to take on hard-to-fill positions as a way to deal with recruiting difficulty. However, HR professionals at smaller organizations (those with 1-99 and 100-499 employees) were significantly more likely than their counterparts at larger organizations to say that they were improving their benefits packages as a recruiting strategy (see Table 11 in the Appendix).

HR professionals in the education and health and social assistance industries were more likely than those in other industries to indicate that they were expanding advertising efforts in order to improve their recruiting success, whereas those in the manufacturing industry were significantly more likely than HR professionals in other industries to indicate that they were working with a recruitment agency. Meanwhile, HR professionals in the hightech industry were more likely to say they were seeking out passive job seekers and expanding their geographic search region (see Table 26 in the Appendix).

FIGURE 13
reccruiting strategles organizations use for full-TIME regular positions


As shown in Table 4, when looking at what recruiting strategies were actually considered the most effective (as opposed to most commonly used) ways to deal with recruiting challenges, the image changed slightly. Almost half ( $48 \%$ ) of HR professionals said that training existing employees to take on hard-to-fill positions was an effective recruiting strategy. This was followed by using social media and recruitment agencies (both 47\%), expanding advertising efforts ( $44 \%$ ) and improving the compensation packages being offered to job candidates (42\%).

Veterans can be a good source of talent because many of the skills from their military roles can transfer directly to hard-to-fill civilian jobs. As in 2013, more than one-half of HR professionals ( $67 \%$ ) said they had hired veterans for open positions over the last 12 months (as shown in Figure 15). Whereas smaller organizations were less likely to have hired veterans, most HR professionals at organizations with 500 or more employees said they had hired veterans in the last 12 months (see Table 12 in the Appendix). When looking at different industries, there was variation in the most effective strategies identified, perhaps due to the unique needs of each industry. HR professionals in the education field were more likely than those in other industries to say that collaborating with educational institutions and expanding their geographic search region had been effective strategies for managing recruiting difficulties, as shown in Table 27 in the Appendix.

FIGURE 14
ORGANIZATIONS SEEKING TALENT FROM NONTPADITIONAL sOURCES (E.G. VETERANS, RETREES), BY ORGANIZATION STAFF SIZE


Note: Statistically significant differences were found between the following organization staff sizes: 10,000 or more employees > 1 to 9,999 employees; 500 to 9,999 employees > 1 to 499 employees; 100 to 499 employees > 1 to 99 employees.
Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

## TABLE 4

## most EFFECTIVE RECRUITINg STRategles FOR ORganizations

| Training existing employees to take on hard-to-fill positions ( $n=1,229$ ) | 48\% |
| :---: | :---: |
| Using social media ( $\mathrm{n}=2,066$ ) | 47\% |
| Using a recruitment agency ( $\mathrm{n}=1,300$ ) | 47\% |
| Expanding advertising efforts ( $\mathrm{n}=1,446$ ) | 44\% |
| Improving compensation ( $\mathrm{n}=1,052$ ) | 42\% |
| Targeting passive job seekers ( $\mathrm{n}=1,207$ ) | 40\% |
| Offering more flexible work arrangements ( $\mathrm{n}=846$ ) | 39\% |
| Using/enhancing employee referral program ( $\mathrm{n}=1,028$ ) | 37\% |
| Increasing retention efforts ( $\mathrm{n}=1,274$ ) | 34\% |
| Collaborating with educational institutions ( $n=1,720$ ) | 34\% |
| Expanding training programs to help improve skills of new hires ( $\mathrm{n}=1,190$ ) | 32\% |
| Expanding geographic search region ( $\mathrm{n}=1,011$ ) | 29\% |
| Improving benefits package ( $\mathrm{n}=651$ ) | 29\% |
| Providing monetary incentives to candidates (e.g., signing bonus) ( $\mathrm{n}=778$ ) | 27\% |
| Seeking talent from nontraditional sources (e.g., veterans, retirees) ( $n=1,039$ ) | 23\% |
| Offering new job perks ( $\mathrm{n}=320$ ) | 12\% |
| Other ( $\mathrm{n}=92$ ) | 26\% |

Note: Respondents who answered "don't know" were excluded from this analysis. Respondents were only asked about those recruiting strategies that their organizations were using.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

## Employing Veterans

SHRM works collaboratively with other organizations to support employment of veterans through programs such as the Department of Defense's Employer Support for the Guard and Reserve (ESGR). SHRM and ESGR collaborate by raising awareness about the talents the military population brings to the civilian workplace. ESGR has a strong volunteer structure nationwide, making ESGR a resource that SHRM members can turn to when seeking to hire veterans, guard and reservists. SHRM is also working with the Easter Seals Dixon Center to link SHRM chapters with job-seeking veterans and community-based veteran organizations. SHRM and the Dixon Center currently have a focus in California.

SHRM members are also very involved in veterans' issues within their communities and chapters. For example, four of the 12 SHRM Pinnacle Awardsawards given for outstanding efforts in achievements in chapter/ state council development and contributions to the advancement of effective human resource management-have been given to programs focusing on veterans' issues. Visit shrm.org for more information on how the HR community is getting involved in veterans' issues.

## FIGURE 15

## ORganZations that have hred u.S. veterans for full-TIME

 regular positions in the last 12 MONTHS

Note: $n=2,561$ (2013); $n=2,562$ (2016). Respondents who answered "don't know" were excluded from this analysis.
Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

## INDUSTRY SPOTLIGHT

## High-Tech

Jobs in the high-tech industry often require high levels of skill and education, often within the much in-demand science, technology, engineering and math (STEM) fields. These types of jobs are expected to continue to be in demand over the coming decade. The BLS forecasts that employment of computer and information technology occupations will grow $12 \%$ from 2014 to 2024, faster than the average for all occupations. According to BLS economists, the "greater emphasis on cloud computing, the collection and storage of big data, more everyday items becoming connected to the Internet in what is commonly referred to as the 'Internet of things,' and the continued demand for mobile computing" will drive up demand within these occupations. These highwage, high-tech computer and information occupations are expected to grow by about 488,500 new jobs, from approximately 3.9 million jobs to about 4.4 million jobs from 2014 to $2024 .{ }^{6}$

As shown in the industry tables in the Appendix, HR professionals in the high-tech industry were the most likely to cite global competition for talent as a reason for their increased recruiting difficulty. They were also more likely than their counterparts in other industries to indicate that their open positions required new skills, specifically new engineering and technical skills. In addition, they were more likely to say that developing/offering new products/services was a driver of the need for new skills. Compared with HR professionals in most other industries, they were more likely to report targeting passive job seekers and expanding their geographic search region as effective recruiting tactics. Interestingly, high-tech was one of the industries with the highest percentage of HR professionals reporting that they hired veterans, demonstrating that the technical skills many veterans develop in their military service have valuable applications in the civilian world and, perhaps, the high-tech field in particular.

of large organizations (10,000+ employees) are training existing employees to take on hard-to-fill positions as a recruiting strategy

# Shayne Spaulding, Senior Research Associate, Income and Benefits Policy Center, Urban Institute 

Shayne Spaulding is a senior research associate in the Income and Benefits Policy Center at the Urban Institute, where her work focuses on the evaluation of workforce development, postsecondary education programs and the design of programs that are responsive to employer needs. She has spent nearly 20 years in the workforce development field as an evaluator, technical assistance provider and program manager. Before joining Urban, she served as the university director of workforce development for the City University of New York (CUNY), overseeing continuing education and workforce programs for the university's 24 colleges. She holds a Master of Arts degree in public policy from Johns Hopkins University.

## Connecting with the Public Workforce System

The public workforce system is an underutilized resource for employers. Research shows that only about half of employers are even aware of their key local public workforce system partners (GAO, 2005). According to one study, only about 5\% of employers recruiting less-skilled workers use a public agency for hiring (Acs and Loprest, 2008).

There are many reasons for employers to tap into the public system. Employers that engage with the public system do so to find qualified applicants for open positions, to reduce the cost of hiring or training, or to address particular training or service needs that cannot be addressed internally. For example, employers that have put in place new credentialing requirements may want to seek out external training providers to help incumbent staff earn necessary credentials or upgrade their skills. The public system may also be helpful for achieving diversity goals or assisting employers in meeting social responsibility objectives (Spaulding and Martin-Caughey, 2015).

The public workforce system is interested in engaging employers. Recent changes in federal policies put an even stronger emphasis on engaging employers. The Workforce Innovation and Opportunity Act (WIOA) emphasizes the development of programs that are responsive to employer needs and designed in partnership with employers. Other federal and philanthropic initiatives have also placed a premium on the engagement of employers (Barnow and Spaulding, 2015).

Why don't employers engage with the public system more often? Despite the many reasons employers and workforce programs should rely on each other, their collaborations encounter persistent challenges. Employers often perceive the costs of participation in workforce programs as outweighing the benefits. They may also have a general wariness of working with the government or nonprofits, which may be driven by differences in organizational cultures or by concerns about the target populations served by some workforce programs. Firms may also be wary of working with competing firms in efforts that involve multiple employers (Barnow and Spaulding, 2015; Laufer Green Isaac, 2004).

Evidence is emerging for solutions that may address these challenges. Some promising or proven approaches for engaging employers in the public workforce system include the following:

- Sector-based initiatives where groups of employers work together with the workforce system or workforce programs to address human resource issues. Strong examples have emerged in health care, manufacturing, technology and other industries. The passage of WIOA may further the development of these sector- or industry-based approaches. (To learn more about sector-based initiatives, see the Aspen Institute's Workforce Strategies Initiative, which includes numerous reports on these initiatives: http:// www.aspenwsi.org/research-resources/sector-approach/)
- Efforts led by intermediaries who serve as bridges between training programs and employers, helping to translate employer needs, inform the development of training, and coordinate resources and services across multiple partners.
- Registered apprenticeships where employers play a lead role in designing training and where trainees receive a combination of classroom training with paid, on-the-job training to ensure they have the skills employers need.
- Customized training or on-the-job training using WIOA funding, where employers contribute only half (and sometimes less than half) of the cost of training (can be financial or in kind).

These are just a few of the potential ways employers can partner with the workforce system. Other ways of engaging with the system include contributing to workforce development program oversight via organizational boards, informing the design of training programs, playing a role in program delivery (for example, by participating in mock interviews or offering internship opportunities) and communicating with the workforce system or particular programs regarding recruitment activities and hiring needs (Spaulding and Martin-Caughey, 2015).

How can employers connect with the system? Part of the reason the public workforce system may be underutilized is its complexity. As Eyster and colleagues (2016) note in their primer on the workforce system, each local system looks different and involves different actors. Employers looking to connect with the workforce system for hiring or training needs can seek out their local Workforce Development Board, an oversight body for Workforce Innovation and Opportunity Act services that is required to have a majority employer membership. These boards oversee American Job Centers, which provide job-brokering services for local employers. Local community and technical colleges, along with community-based organizations, can play an important role by providing basic or technical skills training. In many cases, local philanthropic partners are contributing resources and driving change. By working with these local workforce system partners, employers have the potential to address their human resource needs, reduce hiring and training costs, and contribute to their local communities.

[^3]TRAINING STRATEGIES

## KEY FINDINGS

- Whereas $69 \%$ of HR professionals surveyed say their organization has had a training budget over the last 12 months, almost onethird (31\%) reported that their organization has not.
- One-half of HR professionals report that over the past 12 months their training budgets have remained the same. Meanwhile, $39 \%$ say their budgets have increased and $11 \%$ say their budgets have decreased.
- Employees receive their training most often through conferences, seminars, workshops, professional organizations, on-the-job training or through webinars or other online training applications.
- Organizations report varying levels of use of the public workforce system, the federally funded network of services available at the state and local levels. Use of the public workforce system appears to be associated with organization staff size, with HR professionals at the smallest organizations least likely to say that they use the public workforce system.
- Although few HR professionals indicate that they provide registered apprenticeship programs in their organizations, those that do are more likely to work for organizations with 2,500 employees or more.

Because of HR's central role in the workforce planning process, HR professionals are also at the heart of the development of their organizations' training strategies.

The development of these strategies is a natural outflow of workforce planning and, in fact, one of its main steps. While workforce planning begins with the analysis of supply and demand and the identification of any gaps between the two, one of its final stages is a solution analysis that outlines a plan to address gaps in both current and future skills and staffing needs. Although the plan may involve retention and recruiting tactics, it invariably also focuses on training and development.

Just as workforce planning must be an ongoing activity to truly be effective, the process of employee training and development planning must also continuously take into account any changes in the internal and external environment that may affect job performance and bring about the need for learning and training interventions. However, in practice, investments in training and development can often be put on hold or even eliminated altogether, especially during times of downsizing and cost-cutting. In this kind of belt-tightening environment, skills gaps can often creep up unexpectedly. Without a budget to invest in training, the processes of job analysis-the systematic study of jobs to determine which activities and responsibilities they include and the skills needed to do them well-and skills audits may be less likely to occur. Yet, it is precisely during such times that HR professionals-and their businesses-benefit most from performing such assessments because they need solid data to make their best case for investments in employee training and development.

## Training Budgets

Unfortunately, despite the strong evidence that skills shortages are a growing problem, many HR professionals are still working without a training budget. Although $69 \%$ of HR professionals surveyed said their organization had a training budget over the last 12 months, almost one-third (31\%) reported that their organization did not, as shown in Figure 16. Previous research SHRM conducted in 2012 found that $57 \%$ of HR professionals reported that they had a training budget during the previous year, indicating that more organizations are setting aside funds for training and development as the labor market grows tighter. ${ }^{7}$

## FIGURE 16



Note: $\mathrm{n}=2,863$. Respondents who answered "don't' know" were excluded from this analysis.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

Unsurprisingly, the larger the organization the more likely it was to have a training budget. Whereas nearly $90 \%$ of HR professionals working at organizations with 2,500 or more employees said they had a training budget, the number dropped to below $50 \%$ at organizations with 99 or fewer employees (see Table 13 in the Appendix). Meanwhile, HR professionals in government were significantly more likely to say they had a training budget to work with compared with their counterparts in other industries (see Table 29 in the Appendix).

When asked if there had been any changes in their training budgets over the previous 12 months, half of HR professionals reported that their budgets had remained the same, $39 \%$ said they had increased and $11 \%$ said they had decreased. Given the dual challenges of recruiting difficulty and skills shortages that many HR professionals reported, the nearly $40 \%$ who said their employee training investments were increasing may represent one important way many organizations are responding (see Figure 17).

## Where and How Employees Receive Training

According to HR professionals, three modes of employee training predominate: 1) conferences, seminars, workshops and professional organizations, 2) on-the-job training, and 3) webinars or other online training (all 84\%). Meanwhile, $79 \%$ reported offering onsite training, 46\% utilized offsite employer-provided training, 29\% reported offering training through a college or university, and $23 \%$ provided training through a technical or community college (see Figure 18).

## FIGURE 17

CHANGE IN TRAINING BUDGET IN THE LAST 12 MONTHS


Note: $\mathrm{n}=1,702$. Respondents who answered "don't' know" were excluded from this analysis. Only respondents who had a training budget in the last 12 months were asked this question.
Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

The public workforce system is a network of federal, state and local programs (sometimes referred to as American Job Centers or One-Stop Centers) that function to support economic expansion and develop the talent of the U.S. workforce. The public workforce system works in partnership with employers, educators and community leaders to foster economic development and high-growth opportunities in regional economies. This system exists to help businesses find qualified workers to meet their present and future workforce needs.

The HR professionals surveyed showed varying levels of awareness and use of the public workforce system. As shown in Figure 19, 43\% of HR professionals reported that their organization had not made use of the public workforce system in any way. Thirty-five percent had used it to post job openings and $24 \%$ had participated in local job fairs. Only a small percentage (5\%) had participated in workforce investment boards (WIBs), and even fewer (3\%) had used the system to meet training and education needs of their workforce. At the same time, $16 \%$ responded "do not know," suggesting there may be a lack of awareness of these types of resources among some in the profession.

Use of the public workforce system appeared to be associated with organization staff size. Seventytwo percent of HR professionals at the smallest organizations (1-99 employees) said that they had not used the public workforce system, compared with $36 \%$ of HR professionals at the largest organizations (10,000 or more employees) (see Table 14 in the Appendix).
Most organizations also did not use either registered or customized apprenticeship programs. Forty-four percent said they did not use either type of the apprenticeship program, whereas $29 \%$ said these programs were not applicable to their workforce because no positions were eligible for apprenticeship. Twelve percent said they did not know. This left 15\% of respondents who said that they used either a registered or a customized apprenticeship program as a training option in their organizations, as shown in Figure 20.
About one out of $10(11 \%)$ of HR professionals said their organization worked in conjunction with registered apprenticeship programs. Of those that did not use a registered apprenticeship program, 10\% reported that they used a customized apprenticeship program instead.

## FIGURE 18

Where employees recelve trannng


Note: $\mathrm{n}=1,971$. Respondents who answered "don't know" were excluded from this analysis. Only respondents who had a training budget in the last 12 months were asked this question. Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

> USE OF THE PUBLIC WORKFORCE SYSTEM APPEARED TO BE ASSOCIATED WITH ORGANIZATION STAFF SIZE: SMALL ORGANIZATIONS WERE MORE LIKELY than large organizations to report THAT THEY HAD NOT USED THE PUBLIC workforce system.

## Apprenticeships

An apprenticeship is defined as a workforce development strategy that trains individuals in a specific occupation using a combination of on-the-job training and related instruction. The occupations with the largest number of apprentices tend to be in skilled trades and construction. Registered apprenticeships are programs that have met national standards for registration with the U.S. Department of Labor (or an approved State Apprenticeship Agency). Businesses that register have access to a nationwide network of expertise, tax credits and opportunities for funding.

Organizations are using apprenticeship programs to address the shortages of qualified candidates in certain industries, such as construction, utilities and retail trade. Apprenticeship programs are "earn and learn" training models that provide a combination of structured learning with on-the-job training. SHRM's public policy guide (shrm.org/advocacy) contains further information relevant to HR professionals about recent congressional efforts focusing on the need for a skilled workforce.

## FIGURE 19

HOW ORGANIZATIONS USE THE PUBLIC WORKFORCE SYSTEM


Note: $\mathrm{n}=3,090$. Percentages do not equal $100 \%$ due to multiple response options.
Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

Although few organizations reported that they provided registered apprenticeship programs in their organizations, those that did were more likely to be organizations with 2,500 employees or more (see Table 15 in the Appendix). HR professionals in construction, mining, gas and oil were significantly more likely (34\%) than HR professionals in other industries to report having a registered apprenticeship program (see Table 33 in the Appendix). This suggests that there may be a potential opportunity for HR professionals in other industries to learn more about the use of apprenticeships in their organizations.

FIGURE 20
ORGANIZATIONS THAT PROVIDE OR WORK IN CONJUNCTION WITH REGISTERED OR CUSTOMIZED APPRENTICESHIP PROGRAMS


## EXPERT VIEW

## Dorothy Martin, Workforce Development Consultant

Dorothy Martin's background and experience has focused primarily on designing and implementing learning and development programs within the telecommunications industry and establishing educational partnerships with public and private institutions of higher education. For more than 30 years Dorothy was involved in workforce training and development, and during this time she successfully managed several corporate tuition assistance programs that directly benefited over 200,000 employees. To meet key business strategies at Verizon Wireless, Dorothy established customized onsite and online certificate and college degree programs funded through the company's tuition assistance program. She continues to provide business consulting regarding the design, implementation and effective use of tuition assistance programs in the corporate and higher education sectors.

## Tuition Assistance Programs as a Strategic Investment: the Importance of Measurement

One of the most important ways that HR professionals demonstrate their own leadership within their organizations is by developing other leaders. In today's world this preparation has to involve knowledge and skills development through education. However, many organizations hesitate to invest in tuition assistance programs because of fears that the costs are overwhelming and that the employees who benefit from such programs will not stay with the organization long enough for the company to enjoy a full return on investment.

This is why measurement is so important. Not only are the benefits of education substantial, but when seen as an investment the returns can also be considerable. My experience helping organizations develop and measure the return on investment of their tuition assistance programs over the past 10 years has convinced me that especially when looking at the impact of tuition assistance in reducing turnover, companies can cover the majority of the costs of their tuition assistance program.

The best way to invest in your business is to invest in your employees by providing excellent training programs and opportunities for higher education. A generous tuition assistance program will assist you in becoming an employer
of choice for recruiting purposes, as well as help you reduce turnover, increase job productivity and improve career mobility for employees who take advantage of the program. Tuition assistance programs can also be tied to other corporate business objectives, such as developing specific skill sets, creating talent management strategies and managing leadership development programs.

But to take full advantage of your investment in tuition assistance, it is necessary to examine the business impact in a systematic way. The four key areas you will need to focus on are:

1. Recruitment.
2. Retention.
3. Career mobility.
4. Job performance.

For example, collecting data on the impact of tuition assistance programs on position acceptance rates can show to what extent such programs act as a recruiting tool. As the Millennial generation (born 1981-1996) and even Centennials/Gen Z (born from 1997 to the early 2000s) begin to enter the workforce in greater numbers, these

OF ORGANIZATIONS OFFER UNDERGRADUATE EDUCATION ASSISTANCE


OFFER GRADUATE EDUCATION ASSISTANCE


OFFER EDUCATION SCHOLARSHIPS FOR EMPLOYEE FAMILY MEMBERS


OFFER COMPANYPROVIDED STUDENT LOAN REPAYMENT
types of programs are likely to become an even stronger element of your employer brand.

Likewise, poor retention rates are an expensive problem for many employers. Survey data examining the impact of the LearningLINK tuition assistance program at Verizon, for example, showed that the general workforce was more than twice as likely to leave the company as those participating in the tuition assistance program, even after degree or program completion.

Collecting data on career mobility can also show a measurable impact on the bottom line through increased rates of promotional and lateral moves that benefit both the employee and the organization. And participation in tuition assistance programs has also been shown to have a positive effect on factors such as employee job satisfaction, decision-making abilities, leadership and management skills, productivity and technical skills. Managers and supervisors also report improvements in employee behaviors such as an increased interest in personal career development, interest in seeking out and accepting leadership roles, greater interest in internal training opportunities and in additional work assignments, and increased adaptability to change.

To maximize these benefits, it is important to leave nothing to chance and to approach tuition assistance in a strategic way. Specific steps to do this include:

- Setting up a monthly/quarterly measurement model to help assess the business impact of the program (this requires dedicated resources).
- Promoting the tuition assistance program to employees (imbed continuous learning into the corporate philosophy).
- Making the program easy for employees to access and use (allow online application processing, no service commitments on the front or back end of participation, prepaid tuition as opposed to reimbursement, a meaningful cap rather than a token amount of coverage, local support personnel to encourage and assist employee participation).
- Developing a consistent communication link to the participants (monthly newsletters, annual college fairs held on site at the business, internal website, frequent internal PR promotions).
- Establishing a graduation recognition program (notes of congratulations from senior leaders, a small gift, monetary compensation or stock options, team luncheons, website photos, testimonials).
- Providing career opportunities upon degree or program completion (make graduation data available to internal departments and talent management teams, establish mentorship programs).
- Partnering with a college or university to develop specific programs of study tied to your business objectives.
- Seeking educational institutions that are willing to be flexible and offer reduced tuition and costs for participants in your program.

To create a measurement model, you must have the following data available:

- The cost of turnover in your business (costs of advertising, recruiting, background checks, hiring, training, ramp-up time to full productivity, etc.).
- Comparative data from your internal HR database (employee numbers and profile data, turnover stats, job performance ratings, job transfer data, etc.).
- Utilization metrics of your tuition assistance program (participant numbers, tuition costs, administrative costs, course and degree stats, graduation and program completion records, etc.).
- Survey data from your tuition assistance participants and the supervisors/managers of those participants (program satisfaction ratings, on-the-job behavioral influences, job performance observations, etc.).

By taking these steps, HR leaders can push tuition assistance programs far beyond being simply another employee benefit. Instead, these programs can become an integral part of an organization's human capital and leadership development strategy-one that continues to pay dividends years into the future.


## HR professionals from all industries are reporting a highly competitive market for talent, with recruiting difficulty reaching levels not seen in years.

The survey findings discussed in this report reveal that HR professionals from all industries are experiencing a highly competitive market for talent, with recruiting difficulty reaching levels not seen in years. A low number of applicants, candidates without the needed work experience, competition from other employers, candidates' lack of technical skills and the inability of local markets to build the needed talent pipeline are among the many reasons that HR professionals report challenges finding the candidates they need.

HR professionals are also reporting skills shortages, with $59 \%$ indicating some level of basic skills/knowledge shortages and 84\% reporting applied skills deficits among job applicants over the past 12 months.

Despite these skills shortages as well as skills gaps within their own workforce, it was not uncommon for HR professionals to report that they were operating without many resources for employee training and development. Almost one-third indicated that their organization did not have a training budget. This finding is even more noteworthy when considering that the approach HR professionals considered to be most effective in combating recruiting difficulty, according to this research, was to train existing employees to take on hard-to-fill roles.

One reason for this gap could be that organizational leaders are less aware of the level of recruiting difficulty in the current talent market. This puts the responsibility on HR professionals to make a strong business case for greater investments in addressing both recruiting challenges and skills shortages.

Because talent shortages appear to be an issue across industries and in organizations of all sizes, the problem spans well beyond individual organizations. This is why many HR professionals are also looking beyond their organizations for solutions and are getting more involved in community efforts to build their local and industry talent pipelines. These approaches can differ depending on industry factors as well as the regional talent market. For some HR professionals, such as those profiled in the Greenville case study, this can even mean starting their efforts to build their local talent pipeline as early as middle school. For other HR professionals, the focus may be more on working with universities at the graduate level.

Whatever approach makes the most sense for their industry, the common factor these HR professionals share is their deep and practical insight into the labor market, making them ideal partners for educational bodies, government and business leaders who are looking for innovative, effective and long-lasting solutions to workforce readiness challenges.

METHODOLOGY

## Survey Methodology

A sample of HR professionals from the following nine different industries was randomly selected from SHRM's membership database, which included approximately 275,000 individual members at the time the survey was conducted:

- Accommodation and food services, retail/wholesale trade.
- Construction, mining, quarrying, and oil and gas extraction.
- Educational services.
- Finance, insurance, real estate and rental and leasing.
- Government agencies.
- Health care and social assistance.
- High-tech.
- Manufacturing.
- Professional, scientific and technical services.

Only members who had not participated in a SHRM survey or poll in the last six months were included in the sampling frame. Members who were students, located internationally or had no e-mail address on file were excluded from the sampling frame. In February 2016, an e-mail that included a hyperlink to the Recruiting and Skills Survey was sent to 27,000 randomly selected SHRM members. Of those, 3,314 responses were received, yielding a response rate of $12 \%$ and a margin of error of $+/-2 \%$. The survey was accessible until late February 2016. Multiple reminders were sent to nonrespondents in an effort to increase response rates.

## Notations

Differences: Conventional statistical methods were used to determine if observed differences were statistically significant (i.e., there is a small likelihood that the differences occurred by chance). Therefore, in most cases, only results that were statistically significant are discussed, unless otherwise noted. In some cases, data may be discussed in the text of this report but not presented in an accompanying figure or table.

Generalization of results: As with any research, readers should exercise caution when generalizing results and take individual circumstances and experiences into consideration when making decisions based on these data. Although SHRM is confident in its research, it is prudent to understand that the results presented in this survey report are only truly representative of the sample of HR professionals responding to the survey.

Number of respondents: The number of respondents (indicated by " n " in figures and tables) varies from table to table and figure to figure because some respondents did not answer all of the questions. Individuals may not have responded to a question on the survey because the question or some of its parts were not applicable or because the requested data were unavailable. This also accounts for the varying number of responses within each table or figure.

Confidence level and margin of error: A confidence level and margin of error give readers some measure of how much they can rely on survey responses to represent all SHRM members. Given the level of response to the survey, SHRM Research is $95 \%$ confident that responses given by responding HR professionals can be applied to all SHRM members, in general, with a margin of error of approximately $2 \%$. For example, $68 \%$ of HR professionals reported their organizations experienced recruiting difficulty for full-time regular positions in the last 12 months. With a $2 \%$ margin of error, the reader can be $95 \%$ certain that between $66 \%$ and $70 \%$ of SHRM members would report that their organizations experienced difficulty recruiting for these positions in the last 12 months. Note that the margin of error is calculated based on the overall sample size of the survey, not for each question, as a general practice.

Notable statistically significant differences by industry were discussed in the report. For clarity purposes they are not noted in the Appendix tables.

Respondent Demographics

| Organization Industry |  |
| :--- | :---: |
| High-tech | $18 \%$ |
| Professional, scientific and technical services | $16 \%$ |
| Health and social assistance | $13 \%$ |
| Manufacturing | $12 \%$ |
| Government agency | $12 \%$ |
| Education | $12 \%$ |
| Construction, mining, gas and oil | $10 \%$ |
| Accommodation and food services and retail/ <br> wholesale trade | $10 \%$ |
| Finance, insurance and real estate | $10 \%$ |
| Other | $6 \%$ |

Note: $\mathrm{n}=3,314$. Percentages do not equal $100 \%$ due to multiple response options.

Primary Industry for Respondents in the High-Tech Industry

| Professional, scientific and technical services | $41 \%$ |
| :--- | :---: |
| Manufacturing | $21 \%$ |
| Construction, mining, gas and oil | $9 \%$ |
| Education | $7 \%$ |
| Health and social assistance | $5 \%$ |
| Government agency | $4 \%$ |
| Finance, insurance and real estate | $2 \%$ |
| Accommodation and food services and retail/ <br> wholesale trade | $1 \%$ |
| Other <br> $\mathrm{n}=607$. | $10 \%$ |

## Organization Sector

| Privately owned for-profit | $48 \%$ |
| :--- | :---: |
| Government | $19 \%$ |
| Publicly owned for-profit | $19 \%$ |
| Nonprofit/not-for-profit organization | $15 \%$ |

$n=3,314$

## Region

| South | $39 \%$ |
| :--- | :--- |
| Midwest | $25 \%$ |
| West | $20 \%$ |
| Northeast | $16 \%$ |

$n=2,984$.

## Organizational Operations

| U.S.-based operations only | $76 \%$ |
| :--- | :---: |
| Multinational operations | $24 \%$ |

$n=3,061$.

## Units Within the U.S.

| Single-unit organization | $31 \%$ |
| :--- | :---: |
| Multi-unit organization | $69 \%$ |

$n=3,085$.

## Level at Which HR Policies and Procedures Are Determined

| Multi-unit headquarters | $53 \%$ |
| :--- | :---: |
| Each work location | $3 \%$ |
| A combination of both | $44 \%$ |

Note: $\mathrm{n}=2,198$. Only respondents whose
organizations have multinational operations or a multi-unit organization in the U.S. were asked this question.

## Organization Staff Size

| 1 to 99 employees | $22 \%$ |
| :--- | :---: |
| 100 to 499 employees | $32 \%$ |
| 500 to 2,499 employees | $22 \%$ |
| 2,500 to 9,999 employees | $12 \%$ |
| 10,000 or more employees | $12 \%$ |

APPENDIX A: DIFFERENCES BY ORGANIZATION STAFF SIZE AND ADDITIONAL ANALYSIS

## TABLE 5

DIFFICULTY RECRUITING FOR FULL-TIME REGULAR POSITIONS IN THE LAST 12 MONTHS: COMPARISONS BY ORGANIZATION STAFF SIZE

| 1 to 99 <br> Employees | 100 to 499 <br> Employees | 500 to 2,499 <br> Employees | 2,500 to 9,999 <br> Employees | 10,000 or More <br> Employees |
| :---: | :---: | :---: | :---: | :---: |
| $59 \%$ | $70 \%$ | $71 \%$ | $69 \%$ | $70 \%$ |

Note: Percentages with darker shading are statistically larger than percentages with lighter shading.
Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

## TABLE 6

DIFFICULTY FILLING FULL-TIME REGULAR POSITIONS IN THE LAST 12 MONTHS, BY JOB CATEGORY: COMPARISONS BY ORGANIZATION STAFF SIZE

|  |  | 1 to 99 Employees | 100 to 499 <br> Employees | 500 to 2,499 Employees | 2,500 to 9,999 Employees | 10,000 or More Employees |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Managers | Very difficult | 24\% | 18\% | 12\% | 13\% | 13\% |
| Skilled trades, such as electricians, carpenters, machinists, mechanics, welders, plumbers | Very difficult | 49\% | 33\% | 31\% | 28\% | 35\% |

Note: Percentages with darker shading are statistically larger than percentages with lighter shading
Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

## TABLE 7

COMPETITION FROM ORGANIZATIONS IN OTHER COUNTRIES FOR QUALIFIED TALENT IN THE LAST 12 MONTHS: COMPARISONS BY ORGANIZATION STAFF SIZE

| 1 to 99 <br> Employees | 100 to 499 <br> Employees | 500 to 2,499 <br> Employees | 2,500 to 9,999 <br> Employees | 10,000 or More <br> Employees |
| :---: | :---: | :---: | :---: | :---: |
| $11 \%$ | $13 \%$ | $14 \%$ | $16 \%$ | $23 \%$ |

Note: Percentages with darker shading are statistically larger than percentages with lighter shading.
Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

## TABLE 8

TYPES OF NEW SKILLS REQUIRED FOR FULL-TIME REGULAR POSITIONS HIRED IN THE LAST 12 MONTHS: COMPARISONS BY ORGANIZATION STAFF SIZE

|  | 1 to 99 <br> Employees | 100 to 499 <br> Employees | 500 to 2,499 <br> Employees | 2,500 to 9,999 <br> Employees | 10,000 or More <br> Employees |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Credentials/ <br> certifications | $22 \%$ | $25 \%$ | $32 \%$ | $38 \%$ | $41 \%$ |
|  | $22 \%$ | $25 \%$ | $32 \%$ | $38 \%$ |  |

Note: Percentages with darker shading are statistically larger than percentages with lighter shading within the same row. Blank cells are duplicative of data in the above rows, and are intentionally left blank to highlight the statistical differences being shown within that row.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

## TABLE 9

TYPES OF JOB CATEGORIES HIRED IN ORGANIZATIONS REQUIRING NEW CREDENTIALS OR CERTIFICATIONS

| Job Category | Require New Credentials/ Certifications |
| :---: | :---: |
| Community and social service workers, such as counselors, therapists, social workers ( $n=178$ ) | 49\% |
| Construction and extraction, such as mining ( $\mathrm{n}=96$ ) | 43\% |
| High-skilled medical, such as nurses, doctors, specialists ( $\mathrm{n}=213$ ) | 42\% |
| Farming, fishing and forestry ( $\mathrm{n}=27$ ) | 41\% |
| Protective service workers, such as firefighters, law enforcement, security guards ( $\mathrm{n}=139$ ) | 38\% |
| High-skilled technicians, such as health, telecommunications and environmental technicians ( $\mathrm{n}=307$ ) | 38\% |
| Entertainment and sports ( $\mathrm{n}=38$ ) | 37\% |
| Education, training and library, such as teachers, professors ( $\mathrm{n}=165$ ) | 35\% |
| Transportation, such as drivers ( $\mathrm{n}=215$ ) | 35\% |
| Communications, media and public relations ( $\mathrm{n}=336$ ) | 34\% |
| Hourly service workers, such as cashiers, retail sales, food service workers ( $\mathrm{n}=305$ ) | 33\% |
| Skilled trades, such as electricians, carpenters, machinists, mechanics, welders, plumbers ( $n=373$ ) | 33\% |
| Executives ( $\mathrm{n}=521$ ) | 33\% |
| Advertising ( $\mathrm{n}=120$ ) | 33\% |
| Managers ( $\mathrm{n}=708$ ) | 32\% |
| Human resources ( $\mathrm{n}=587$ ) | 32\% |
| Administrative support staff ( $\mathrm{n}=784$ ) | 32\% |
| Accounting and finance professionals ( $\mathrm{n}=665$ ) | 31\% |
| Legal occupations, such as lawyers, judges and legal support workers ( $\mathrm{n}=221$ ) | 31\% |
| Hourly laborers ( $\mathrm{n}=482$ ) | 31\% |
| Customer service representatives ( $\mathrm{n}=512$ ) | 31\% |
| IT/computer specialists, such as IT analysts, software developers and programmers, database administrators ( $\mathrm{n}=611$ ) | 31\% |
| Art and design ( $\mathrm{n}=139$ ) | 30\% |
| Business ( $\mathrm{n}=439$ ) | 30\% |
| Engineering and architecture ( $\mathrm{n}=312$ ) | 30\% |
| Military occupations ( $\mathrm{n}=44$ ) | 30\% |
| Marketing ( $\mathrm{n}=415$ ) | 28\% |
| Sales ( $\mathrm{n}=402$ ) | 27\% |
| Scientists and mathematicians ( $\mathrm{n}=167$ ) | 27\% |
| Production operators ( $\mathrm{n}=202$ ) | 27\% |

Note: Table uses row percentages. For example, of organizations that said they hired community and social service workers, $49 \%$ required new credentials/certifications.
Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

## TABLE 10

reasons that positions require new skills: comparisons by organization staff size

|  |  | 100 to 499 <br> Employees | 500 to 2,499 <br> Employees | 2,500 to 9,999 <br> Employees | 10,000 or More <br> Employees |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Changing technology | $43 \%$ | $52 \%$ | $59 \%$ | $64 \%$ | $62 \%$ |
| Reorganization | $15 \%$ | $22 \%$ | $20 \%$ | $30 \%$ | $32 \%$ |
| Merger or acquisition | $2 \%$ | $6 \%$ | $10 \%$ | $13 \%$ | $19 \%$ |
| Merger or acquisition | $2 \%$ | $6 \%$ | $10 \%$ | $13 \%$ | $19 \%$ |

Note: Percentages with darker shading are statistically larger than percentages with lighter shading within the same row.
Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

## TABLE 11

recruiting strategies organizations use for full-time regular positions: Comparisons by ORGANIZATION STAFF SIZE

|  | 1 to 99 <br> Employees | 100 to 499 <br> Employees | 500 to 2,499 <br> Employees | 2,500 to 9,999 <br> Employees | 10,000 or More <br> Employees |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Training existing employees to take <br> on hard-to-fill positions | $37 \%$ | $40 \%$ | $40 \%$ | $46 \%$ |  |

Note: Percentages with darker shading are statistically larger than percentages with lighter shading within the same row.
Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

## TABLE 12

ORGANIZATIONS THAT HAVE HIRED U.S. VETERANS FOR FULL-TIME REGULAR POSITIONS IN THE LAST 12 MONTHS: COMPARISONS BY ORGANIZATION STAFF SIZE

|  | 1 to 99 <br> Employees | 100 to 499 <br> Employees | 500 to 2,499 <br> Employees | 2,500 to 9,999 <br> Employees | 10,000 or More <br> Employees |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Hired veterans for full-time regular <br> positions in the last 12 months | $32 \%$ | $62 \%$ | $85 \%$ | $89 \%$ | $91 \%$ |
|  | $32 \%$ | $62 \%$ |  |  |  |

[^4]
## TABLE 13

ORGANIZATIONS WITH A TRAINING BUDGET IN THE LAST 12 MONTHS: COMPARISONS BY ORGANIZATION STAFF SIZE

|  | 1 to 99 <br> Employees | 100 to 499 <br> Employees | 500 to 2,499 <br> Employees | 2,500 to 9,999 <br> Employees | 10,000 or More <br> Employees |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Had a training budget <br> in the last 12 months | $49 \%$ | $62 \%$ | $79 \%$ | $88 \%$ | $89 \%$ |

Note: Percentages with darker shading are statistically larger than percentages with lighter shading within the same row. Blank cells are duplicative of data in the above rows, and are intentionally left blank to highlight the statistical differences being shown within that row
Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

## TABLE 14

Organizations that have not used the public workforce system: COMParisons by organization STAFF SIZE

|  | 1 to 99 Employees | 100 to 499 Employees | 500 to 2,499 Employees | 2,500 to 9,999 Employees | 10,000 or More Employees |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Have not used the public workforce system | 72\% | 53\% | 43\% | 32\% | 36\% |
|  |  | 53\% | 43\% | 32\% | 36\% |
|  |  |  | 43\% | 32\% |  |

Note: Percentages with darker shading are statistically larger than percentages with lighter shading within the same row. Blank cells are duplicative of data in the above rows, and are intentionally left blank to highlight the statistical differences being shown within that row

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

## TABLE 15

ORgANIZATIONS THAT PROVIDE OR WORK IN CONJUNCTION WITH REGISTERED APPRENTICESHIP PROGRAMS: comparisons by organization staff size

|  | 1 to 99 <br> Employees | 100 to 499 <br> Employees | 500 to 2,499 <br> Employees | 2,500 to 9,999 <br> Employees | 10,000 or More <br> Employees |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Providing or working in <br> conjunction with registered <br> apprenticeship programs | $7 \%$ | $9 \%$ |  | $20 \%$ | $18 \%$ |
|  |  |  |  | $13 \%$ | $20 \%$ |

Note: Percentages with darker shading are statistically larger than percentages with lighter shading within the same row. Blank cells are duplicative of data in the above rows, and are intentionally left blank to highlight the statistical differences being shown within that row.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

APPENDIX B: DIFFERENCES BY INDUSTRY

TABLE 16
DIFFICULTY RECRUITING FOR FULL-TIME REGULAR POSITIONS IN THE LAST 12 MONTHS: COMPARISONS BY INDUSTRY

|  | Accommodation, Food Services and Retail/ Wholesale Trade | Construction, Mining, Gas and Oil | Education | Finance, Insurance and Real Estate | Government | Health and Social Assistance | High-Tech | Manufacturing | Professional, Scientific and Technical Services | All Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Yes | 71\% | 63\% | 58\% | 63\% | 61\% | 81\% | 69\% | 75\% | 69\% | 68\% |
| No | 29\% | 37\% | 42\% | 37\% | 39\% | 19\% | 31\% | 25\% | 31\% | 32\% |
| n | 317 | 316 | 368 | 307 | 389 | 401 | 581 | 394 | 486 | 3160 |

Note: Respondents who answered "don't know" or "not applicable, have not hired any full-time regular positions" were excluded from this analysis. Total n for "All Industries" includes those in other industries not reported in this table.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

TABLE 17
REASONS ORGANIZATIONS HAVE DIFFICULTY HIRING FOR FULL-TIME REGULAR POSITIONS: COMPARISONS BY INDUSTRY

|  | Accommodation, Food Services and Retail/ Wholesale Trade | Construction, Mining, Gas and Oil | Education | Finance, Insurance and Real Estate | Government | Health and Social Assistance | High-Tech | Manufacturing | Professional, Scientific and Technical Services | All Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low number of applicants | 55\% | 50\% | 48\% | 50\% | 48\% | 59\% | 44\% | 52\% | 47\% | 51\% |
| Candidates do not have the needed work experience | 49\% | 55\% | 37\% | 58\% | 54\% | 45\% | 43\% | 52\% | 50\% | 50\% |
| Competition from other employers | 54\% | 52\% | 46\% | 45\% | 44\% | 48\% | 55\% | 45\% | 58\% | 49\% |
| Candidates do not have the right technical skills | 28\% | 50\% | 24\% | 37\% | 33\% | 17\% | 60\% | 57\% | 51\% | 38\% |
| The local market is not producing enough work-ready/qualified job candidates | 35\% | 47\% | 26\% | 44\% | 27\% | 45\% | 39\% | 43\% | 36\% | 38\% |
| Salaries are not competitive for the market | 30\% | 17\% | 48\% | 24\% | 55\% | 38\% | 30\% | 29\% | 27\% | 34\% |
| Candidates do not have the right workplace (soft) skills (problem-solving, interpersonal skills, communication, teamwork, leadership, etc.) | 42\% | 25\% | 24\% | 35\% | 21\% | 28\% | 27\% | 30\% | 29\% | 30\% |
| Qualified candidates are not interested in moving to our local area | 18\% | 25\% | 29\% | 28\% | 22\% | 25\% | 32\% | 33\% | 25\% | 26\% |
| Candidates do not have the needed credentials/ certifications | 10\% | 20\% | 32\% | 19\% | 40\% | 33\% | 18\% | 12\% | 25\% | 24\% |
| Candidates reject compensation package | 22\% | 17\% | 30\% | 24\% | 28\% | 22\% | 22\% | 23\% | 25\% | 23\% |
| Lack of interest in type of job | 30\% | 20\% | 14\% | 15\% | 23\% | 13\% | 7\% | 17\% | 11\% | 17\% |
| Candidates do not have the needed training | 12\% | 20\% | 12\% | 16\% | 16\% | 15\% | 13\% | 18\% | 13\% | 16\% |
| Candidates do not have high enough levels of education | 6\% | 6\% | 20\% | 7\% | 16\% | 12\% | 10\% | 10\% | 10\% | 11\% |
| Candidates do not have the right basic skills (reading, writing, math, basic computer skills, etc.) | 12\% | 13\% | 8\% | 9\% | 13\% | 10\% | 4\% | 15\% | 6\% | 11\% |
| Candidates are overqualified | 14\% | 10\% | 11\% | 12\% | 10\% | 5\% | 8\% | 11\% | 13\% | 10\% |
| Qualified candidates are not able to move to our local area (due to mortgage or other issues) | 9\% | 9\% | 12\% | 8\% | 11\% | 7\% | 11\% | 5\% | 12\% | 9\% |
| Relocation package is not competitive or not provided | 9\% | 4\% | 14\% | 5\% | 12\% | 7\% | 11\% | 6\% | 9\% | 8\% |
| Candidates reject benefits package | 7\% | 7\% | 5\% | 6\% | 3\% | 7\% | 5\% | 4\% | 6\% | 6\% |
| Other | 7\% | 8\% | 9\% | 6\% | 11\% | 8\% | 9\% | 7\% | 10\% | 8\% |
| n | 218 | 197 | 210 | 190 | 236 | 321 | 396 | 293 | 330 | 2114 |

Note: Respondents who answered "don't know" were excluded from this analysis. Percentages do not equal $100 \%$ due to multiple response options. Only respondents whose organizations were having difficulty hiring for full-time positions were asked this question. Total n for "All Industries" includes those in other industries not reported in this table.

TABLE 18
DIFFICULTY FILLING FULLLTIME REGULAR POSITIONS IN THE LAST 12 MONTHS, BY JOB CATEGORY: COMPARISONS BY INDUSTRY

|  |  | Accommodation, Food Services and Retail/ <br> Wholesale Trade | Construction, Mining, Gas and Oil | Education | Finance, Insurance and Real Estate | Government | Health and Social Assistance | High-Tech | Manufacturing | Professional, Scientific and Technical Services | All Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accounting and finance professionals | Very difficult | 12\% | 8\% | 8\% | 15\% | 8\% | 11\% | 9\% | 14\% | 13\% | 11\% |
|  | Somewhat difficult | 38\% | 31\% | 28\% | 44\% | 36\% | 39\% | 30\% | 41\% | 33\% | 36\% |
|  | Somewhat easy | 42\% | 51\% | 51\% | 34\% | 44\% | 45\% | 52\% | 39\% | 46\% | 44\% |
|  | Very easy | 8\% | 10\% | 14\% | 7\% | 11\% | 5\% | 9\% | 6\% | 8\% | 9\% |
|  | n | 153 | 170 | 211 | 204 | 248 | 204 | 359 | 201 | 300 | 1792 |
| Administrative support staff | Very difficult | 4\% | 1\% | 1\% | 4\% | 2\% | 6\% | 2\% | 3\% | 5\% | 3\% |
|  | Somewhat difficult | 28\% | 19\% | 17\% | 27\% | 13\% | 18\% | 15\% | 15\% | 24\% | 20\% |
|  | Somewhat easy | 51\% | 53\% | 49\% | 51\% | 49\% | 52\% | 52\% | 57\% | 45\% | 50\% |
|  | Very easy | 16\% | 28\% | 33\% | 18\% | 36\% | 24\% | 31\% | 25\% | 26\% | 27\% |
|  | n | 195 | 220 | 295 | 221 | 314 | 291 | 390 | 207 | 338 | 2194 |
| Advertising | Very difficult | 5\% | - | 7\% | 6\% | - | - | 8\% | - | 11\% | 9\% |
|  | Somewhat difficult | 33\% | - | 29\% | 33\% | - | - | 35\% | - | 41\% | 31\% |
|  | Somewhat easy | 55\% | - | 50\% | 39\% | - | - | 48\% | - | 37\% | 49\% |
|  | Very easy | 8\% | - | 14\% | 21\% | - | - | 10\% | - | 11\% | 11\% |
|  | n | 40 | - | 58 | 33 | - | - | 52 | - | 46 | 270 |
| Art and design | Very difficult | 15\% | - | 4\% | 14\% | 0\% | - | 13\% | 9\% | 13\% | 9\% |
|  | Somewhat difficult | 34\% | - | 31\% | 38\% | 27\% | - | 38\% | 34\% | 44\% | 34\% |
|  | Somewhat easy | 43\% | - | 50\% | 38\% | 55\% | - | 42\% | 49\% | 40\% | 48\% |
|  | Very easy | 8\% | - | 15\% | 10\% | 18\% | - | 8\% | 9\% | 3\% | 10\% |
|  | n | 53 | - | 78 | 21 | 33 | - | 72 | 35 | 63 | 320 |
| Business | Very difficult | 11\% | 5\% | 3\% | 6\% | 5\% | 5\% | 6\% | 5\% | 5\% | 6\% |
|  | Somewhat difficult | 40\% | 34\% | 27\% | 44\% | 32\% | 31\% | 30\% | 42\% | 36\% | 35\% |
|  | Somewhat easy | 40\% | 44\% | 59\% | 44\% | 50\% | 55\% | 54\% | 45\% | 53\% | 50\% |
|  | Very easy | 10\% | 16\% | 11\% | 6\% | 14\% | 9\% | 10\% | 8\% | 6\% | 9\% |
|  | n | 103 | 79 | 142 | 128 | 125 | 131 | 231 | 117 | 163 | 1048 |
| Communications, media and public relations | Very difficult | 4\% | 3\% | 5\% | 8\% | 6\% | 3\% | 6\% | 8\% | 7\% | 6\% |
|  | Somewhat difficult | 35\% | 29\% | 29\% | 35\% | 20\% | 23\% | 25\% | 25\% | 33\% | 29\% |
|  | Somewhat easy | 49\% | 45\% | 54\% | 45\% | 57\% | 58\% | 57\% | 58\% | 52\% | 53\% |
|  | Very easy | 12\% | 23\% | 12\% | 12\% | 17\% | 15\% | 12\% | 8\% | 8\% | 13\% |
|  | n | 75 | 31 | 161 | 65 | 148 | 98 | 162 | 60 | 122 | 808 |
| Community and social service workers, such as counselors, therapists, social workers | Very difficult | - | - | 15\% | - | 13\% | 24\% | 0\% | - | - | 19\% |
|  | Somewhat difficult | - | - | 28\% | - | 38\% | 49\% | 46\% | - | - | 41\% |
|  | Somewhat easy | - | - | 42\% | - | 35\% | 24\% | 46\% | - | - | 32\% |
|  | Very easy | - | - | 14\% | - | 14\% | 3\% | 7\% | - | - | 9\% |
|  | n | - | - | 130 | - | 112 | 202 | 28 | - | - | 483 |
| Construction and extraction, such as mining | Very difficult | - | 25\% | - | - | - | - | 7\% | - | - | 20\% |
|  | Somewhat difficult | - | 35\% | - | - | - | - | 27\% | - | - | 38\% |
|  | Somewhat easy | - | 26\% | - | - | - | - | 51\% | - | - | 31\% |
|  | Very easy | - | 14\% | - | - | - | - | 16\% | - | - | 10\% |
|  | n | - | 142 | - | - | - | - | 45 | - | - | 249 |
| Customer service representatives | Very difficult | 8\% | 6\% | 2\% | 11\% | 1\% | 8\% | 4\% | 8\% | 6\% | 6\% |
|  | Somewhat difficult | 34\% | 21\% | 12\% | 32\% | 19\% | 21\% | 23\% | 27\% | 28\% | 26\% |
|  | Somewhat easy | 48\% | 64\% | 57\% | 40\% | 48\% | 51\% | 51\% | 52\% | 52\% | 50\% |
|  | Very easy | 10\% | 9\% | 29\% | 16\% | 32\% | 20\% | 22\% | 14\% | 13\% | 18\% |
|  | n | 183 | 66 | 133 | 213 | 181 | 205 | 209 | 153 | 141 | 1347 |
| Education, training and library, such as teachers, professors | Very difficult | - | - | 14\% | - | 9\% | 8\% | 24\% | - | - | 13\% |
|  | Somewhat difficult | - | - | 36\% | - | 30\% | 42\% | 35\% | - | - | 36\% |
|  | Somewhat easy | - | - | 36\% | - | 49\% | 40\% | 33\% | - | - | 38\% |
|  | Very easy | - | - | 14\% | - | 13\% | 10\% | 9\% | - | - | 13\% |
|  | n | - | - | 287 | - | 70 | 48 | 55 | - | - | 478 |
| Engineering and architecture | Very difficult | - | 22\% | 29\% | - | 26\% | - | 34\% | 36\% | 38\% | 31\% |
|  | Somewhat difficult | - | 37\% | 40\% | - | 48\% | - | 37\% | 43\% | 39\% | 41\% |
|  | Somewhat easy | - | 29\% | 26\% | - | 24\% | - | 24\% | 19\% | 19\% | 24\% |
|  | Very easy | - | 12\% | 5\% | - | 1\% | - | 4\% | 2\% | 4\% | 4\% |
|  | n | - | 147 | 58 | - | 147 | - | 295 | 205 | 156 | 823 |
| Entertainment and sports | Very difficult | - | - | 0\% | - | - | - | - | - | - | 5\% |
|  | Somewhat difficult | - | - | 26\% | - | - | - | - | - | - | 28\% |
|  | Somewhat easy | - | - | 60\% | - | - | - | - | - | - | 51\% |
|  | Very easy | - | - | 13\% | - | - | - | - | - | - | 16\% |
|  | n | - | - | 53 | - | - | - | - | - | - | 103 |

continued on next page

TABLE 18
dIFFICULTY FILLING FULL-TIME REGULAR POSITIONS IN THE LAST 12 MONTHS, BY JOB CATEGORY: COMPARISONS BY INDUSTRY (continued)

|  |  | Accommodation, Food Services and Retail/ <br> Wholesale Trade | Construction, Mining, Gas and Oil | Education | Finance, Insurance and Real Estate | Government | Health and Social Assistance | High-Tech | Manufacturing | Professional, Scientific and Technical Services | All Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Executives | Very difficult | 29\% | 25\% | 17\% | 26\% | 17\% | 22\% | 25\% | 28\% | 30\% | 24\% |
|  | Somewhat difficult | 39\% | 33\% | 37\% | 47\% | 41\% | 43\% | 44\% | 45\% | 48\% | 42\% |
|  | Somewhat easy | 26\% | 36\% | 39\% | 24\% | 32\% | 31\% | 27\% | 24\% | 18\% | 28\% |
|  | Very easy | 6\% | 7\% | 7\% | 3\% | 10\% | 4\% | 4\% | 3\% | 4\% | 5\% |
|  | n | 108 | 107 | 179 | 124 | 207 | 169 | 271 | 134 | 192 | 1296 |
| Farming, fishing and forestry | Very difficult | - | - | - | - | - | - | - | - | - | 12\% |
|  | Somewhat difficult | - | - | - | - | - | - | - | - | - | 33\% |
|  | Somewhat easy | - | - | - | - | - | - | - | - | - | 43\% |
|  | Very easy | - | - | - | - | - | - | - | - | - | 12\% |
|  | n | - | - | - | - | - | - | - | - | - | 60 |
| High-skilled medical, such as nurses, doctors, specialists | Very difficult | - | - | 31\% | - | 46\% | 54\% | 35\% | - | 32\% | 46\% |
|  | Somewhat difficult | - | - | 34\% | - | 33\% | 33\% | 41\% | - | 51\% | 35\% |
|  | Somewhat easy | - | - | 30\% | - | 16\% | 11\% | 20\% | - | 15\% | 17\% |
|  | Very easy | - | - | 5\% | - | 4\% | 2\% | 4\% | - | 2\% | 3\% |
|  | n | - | - | 108 | - | 67 | 303 | 74 | - | 41 | 567 |
| High-skilled technicians, such as health, telecommunications and environmental technicians | Very difficult | - | 27\% | 16\% | - | 22\% | 25\% | 25\% | 32\% | 23\% | 24\% |
|  | Somewhat difficult | - | 31\% | 39\% | - | 48\% | 48\% | 36\% | 41\% | 41\% | 44\% |
|  | Somewhat easy | - | 31\% | 43\% | - | 25\% | 23\% | 31\% | 21\% | 29\% | 27\% |
|  | Very easy | - | 11\% | 2\% | - | 5\% | 4\% | 7\% | 5\% | 8\% | 5\% |
|  | n | - | 55 | 89 | - | 133 | 169 | 192 | 75 | 101 | 716 |
| Hourly laborers | Very difficult | 17\% | 10\% | 2\% | 11\% | 5\% | 16\% | 6\% | 15\% | 7\% | 11\% |
|  | Somewhat difficult | 35\% | 28\% | 19\% | 19\% | 20\% | 28\% | 21\% | 29\% | 22\% | 26\% |
|  | Somewhat easy | 34\% | 37\% | 50\% | 56\% | 43\% | 41\% | 44\% | 35\% | 47\% | 40\% |
|  | Very easy | 14\% | 25\% | 29\% | 14\% | 32\% | 16\% | 29\% | 21\% | 24\% | 23\% |
|  | n | 191 | 223 | 171 | 57 | 218 | 135 | 222 | 289 | 90 | 1447 |
| Hourly service workers, such as cashiers, retail sales, food service workers | Very difficult | 21\% | 10\% | 4\% | 11\% | 2\% | 16\% | 6\% | 20\% | 6\% | 13\% |
|  | Somewhat difficult | 36\% | 13\% | 19\% | 28\% | 17\% | 29\% | 15\% | 15\% | 23\% | 26\% |
|  | Somewhat easy | 28\% | 45\% | 45\% | 46\% | 53\% | 38\% | 49\% | 51\% | 49\% | 41\% |
|  | Very easy | 14\% | 32\% | 32\% | 15\% | 28\% | 17\% | 30\% | 15\% | 23\% | 20\% |
|  | n | 218 | 31 | 145 | 80 | 94 | 186 | 71 | 41 | 35 | 863 |
| Human resources | Very difficult | 8\% | 11\% | 4\% | 12\% | 11\% | 9\% | 6\% | 10\% | 6\% | 8\% |
|  | Somewhat difficult | 37\% | 27\% | 30\% | 31\% | 31\% | 35\% | 30\% | 40\% | 37\% | 34\% |
|  | Somewhat easy | 46\% | 46\% | 49\% | 44\% | 46\% | 45\% | 52\% | 42\% | 48\% | 46\% |
|  | Very easy | 9\% | 15\% | 17\% | 14\% | 13\% | 11\% | 12\% | 8\% | 10\% | 12\% |
|  | n | 157 | 140 | 189 | 124 | 219 | 213 | 312 | 179 | 223 | 1531 |
| IT/computer specialists, such as IT analysts, software developers and programmers, database administrators | Very difficult | 20\% | 8\% | 24\% | 34\% | 29\% | 25\% | 32\% | 29\% | 33\% | 27\% |
|  | Somewhat difficult | 44\% | 34\% | 35\% | 41\% | 37\% | 40\% | 37\% | 40\% | 40\% | 38\% |
|  | Somewhat easy | 29\% | 45\% | 33\% | 19\% | 28\% | 30\% | 23\% | 24\% | 20\% | 27\% |
|  | Very easy | 7\% | 13\% | 8\% | 6\% | 7\% | 5\% | 9\% | 7\% | 7\% | 7\% |
|  | n | 121 | 107 | 227 | 164 | 236 | 183 | 405 | 164 | 305 | 1591 |
| Legal occupations, such as lawyers, judges and legal support workers | Very difficult | - | - | 6\% | 17\% | 6\% | 13\% | 8\% | 2\% | 18\% | 11\% |
|  | Somewhat difficult | - | - | 24\% | 35\% | 29\% | 35\% | 32\% | 46\% | 36\% | 34\% |
|  | Somewhat easy | - | - | 59\% | 42\% | 49\% | 50\% | 48\% | 49\% | 37\% | 45\% |
|  | Very easy | - | - | 12\% | 6\% | 16\% | 2\% | 12\% | 2\% | 9\% | 10\% |
|  | n | - | - | 34 | 52 | 146 | 46 | 113 | 41 | 114 | 516 |
| Managers | Very difficult | 23\% | 19\% | 7\% | 13\% | 11\% | 15\% | 12\% | 18\% | 16\% | 15\% |
|  | Somewhat difficult | 42\% | 47\% | 36\% | 53\% | 38\% | 47\% | 49\% | 51\% | 49\% | 46\% |
|  | Somewhat easy | 30\% | 24\% | 48\% | 29\% | 42\% | 35\% | 32\% | 27\% | 32\% | 33\% |
|  | Very easy | 5\% | 10\% | 9\% | 5\% | 9\% | 3\% | 7\% | 4\% | 2\% | 6\% |
|  | n | 252 | 185 | 215 | 187 | 253 | 264 | 371 | 239 | 266 | 1968 |
| Marketing | Very difficult | 10\% | 3\% | 6\% | 6\% | 1\% | 7\% | 7\% | 13\% | 7\% | 7\% |
|  | Somewhat difficult | 35\% | 30\% | 21\% | 41\% | 28\% | 23\% | 33\% | 42\% | 39\% | 34\% |
|  | Somewhat easy | 43\% | 61\% | 60\% | 39\% | 62\% | 57\% | 48\% | 36\% | 46\% | 49\% |
|  | Very easy | 13\% | 6\% | 13\% | 14\% | 9\% | 14\% | 11\% | 8\% | 9\% | 11\% |
|  | n | 115 | 67 | 118 | 118 | 68 | 122 | 227 | 113 | 197 | 979 |
| Military occupations | Very difficult | - | - | - | - | - | - | - | - | - | 9\% |
|  | Somewhat difficult | - | - | - | - | - | - | - | - | - | 26\% |
|  | Somewhat easy | - | - | - | - | - | - | - | - | - | 47\% |
|  | Very easy | - | - | - | - | - | - | - | - | - | 17\% |
|  | n | - | - | - | - | - | - | - | - | - | 87 |

## TABLE 18

DIFFICULTY FILLING FULL-TIME REGULAR POSITIONS IN THE LAST 12 MONTHS, BY JOB CATEGORY: COMPARISONS BY INDUSTRY (continued)

|  |  | Accommodation, Food Services and Retail/ <br> Wholesale Trade | Construction, Mining, Gas and Oil | Education | Finance, Insurance and Real Estate | Government | Health and Social Assistance | High-Tech | Manufacturing | Professional, Scientific and Technical Services | All Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Production operators | Very difficult | 11\% | 12\% | - | - | 6\% | - | 10\% | 18\% | 16\% | 14\% |
|  | Somewhat difficult | 46\% | 28\% | - | - | 28\% | - | 24\% | 32\% | 21\% | 32\% |
|  | Somewhat easy | 35\% | 39\% | - | - | 56\% | - | 46\% | 39\% | 51\% | 41\% |
|  | Very easy | 9\% | 20\% | - | - | 9\% | - | 19\% | 11\% | 12\% | 12\% |
|  | n | 57 | 89 | - | - | 32 | - | 162 | 274 | 57 | 586 |
| Protective service workers, such as firefighters, law enforcement, security guards | Very difficult | - | - | 5\% | - | 17\% | 11\% | 3\% | - | - | 13\% |
|  | Somewhat difficult | - | - | 39\% | - | 32\% | 24\% | 22\% | - | - | 34\% |
|  | Somewhat easy | - | - | 45\% | - | 36\% | 53\% | 66\% | - | - | 42\% |
|  | Very easy | - | - | 11\% | - | 14\% | 11\% | 9\% | - | - | 12\% |
|  | n | - | - | 88 | - | 190 | 45 | 32 | - | - | 391 |
| Sales | Very difficult | 17\% | 15\% | 13\% | 19\% | - | 15\% | 15\% | 15\% | 19\% | 17\% |
|  | Somewhat difficult | 39\% | 35\% | 31\% | 52\% | - | 33\% | 43\% | 46\% | 43\% | 43\% |
|  | Somewhat easy | 36\% | 36\% | 33\% | 27\% | - | 38\% | 35\% | 34\% | 31\% | 32\% |
|  | Very easy | 9\% | 14\% | 23\% | 3\% | - | 14\% | 7\% | 6\% | 6\% | 8\% |
|  | n | 179 | 104 | 39 | 153 | - | 72 | 274 | 178 | 208 | 1029 |
| Scientists and mathematicians | Very difficult | - | - | 30\% | - | 34\% | - | 33\% | 31\% | 37\% | 33\% |
|  | Somewhat difficult | - | - | 27\% | - | 44\% | - | 36\% | 47\% | 40\% | 37\% |
|  | Somewhat easy | - | - | 36\% | - | 16\% | - | 23\% | 22\% | 15\% | 24\% |
|  | Very easy | - | - | 8\% | - | 6\% | - | 7\% | 0\% | 8\% | 6\% |
|  | n | - | - | 115 | - | 50 | - | 171 | 49 | 105 | 408 |
| Skilled trades, such as electricians, carpenters, machinists, mechanics, welders, plumbers | Very difficult | 45\% | 34\% | 19\% | 30\% | 17\% | 12\% | 28\% | 55\% | 21\% | 33\% |
|  | Somewhat difficult | 34\% | 31\% | 32\% | 39\% | 40\% | 51\% | 34\% | 28\% | 41\% | 35\% |
|  | Somewhat easy | 19\% | 23\% | 40\% | 27\% | 39\% | 30\% | 29\% | 14\% | 31\% | 26\% |
|  | Very easy | 2\% | 12\% | 10\% | 3\% | 4\% | 8\% | 8\% | 4\% | 7\% | 7\% |
|  | n | 95 | 215 | 145 | 33 | 169 | 77 | 194 | 255 | 58 | 1099 |
| Transportation, such as drivers | Very difficult | 36\% | 17\% | 15\% | - | 12\% | 17\% | 4\% | 24\% | 19\% | 20\% |
|  | Somewhat difficult | 30\% | 35\% | 31\% | - | 36\% | 28\% | 33\% | 36\% | 22\% | 32\% |
|  | Somewhat easy | 24\% | 30\% | 32\% | - | 38\% | 41\% | 43\% | 31\% | 41\% | 33\% |
|  | Very easy | 10\% | 19\% | 22\% | - | 14\% | 14\% | 19\% | 9\% | 19\% | 15\% |
|  | n | 98 | 113 | 96 | - | 126 | 81 | 67 | 70 | 32 | 652 |

Note: Respondents who answered "don't know" or "not applicable, did not hire this position" were excluded from this analysis. Percentages may not equal $100 \%$ due to rounding. A dash (-) indicates the sample size was too small to report. Total n for "All Industries" includes those in other industries not reported in this table.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

TABLE 19
COMPETITION FROM ORGANIZATIONS IN OTHER COUNTRIES FOR QUALLFIED TALENT IN THE LAST 12 MONTHS: COMPARISONS BY INDUSTRY

|  | Accommodation, Food Services and Retail/ Wholesale Trade | Construction, Mining, Gas and Oil | Education | Finance, Insurance and Real Estate | Government | Health and Social Assistance | High-Tech | Manufacturing | Professional, Scientific and Technical Services | All Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Yes | 14\% | 14\% | 16\% | 14\% | 12\% | 14\% | 26\% | 15\% | 17\% | 15\% |
| No | 86\% | 86\% | 84\% | 86\% | 88\% | 86\% | 74\% | 85\% | 83\% | 85\% |
| n | 288 | 277 | 318 | 278 | 347 | 371 | 490 | 336 | 433 | 2805 |

Note: Respondents who answered "don't know" were excluded from this analysis. Total $n$ for "All Industries" includes those in other industries not reported in this table.
Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

## tABLE 20

basic skills/knowledge shortages among job applicants in the last 12 months: COMPArisons by industry

|  | Accommodation, Food Services and Retail/ Wholesale Trade | Construction, Mining, Gas and Oil | Education | Finance, Insurance and Real Estate | Government | Health and Social Assistance | High-Tech | Manufacturing | Professional, Scientific and Technical Services | All Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| None | 33\% | 38\% | 49\% | 41\% | 39\% | 36\% | 46\% | 32\% | 52\% | 41\% |
| Writing in English (grammar, spelling, etc.) | 35\% | 28\% | 26\% | 32\% | 35\% | 33\% | 21\% | 27\% | 27\% | 30\% |
| Basic computer skills (e.g., using a mouse, typing, opening/closing/ saving files, terminology, accessing the Internet) | 37\% | 35\% | 25\% | 28\% | 26\% | 36\% | 23\% | 33\% | 21\% | 30\% |
| English language (spoken) | 30\% | 25\% | 14\% | 13\% | 12\% | 16\% | 16\% | 22\% | 15\% | 18\% |
| Reading comprehension in English | 24\% | 24\% | 12\% | 14\% | 18\% | 15\% | 12\% | 21\% | 10\% | 17\% |
| Mathematics (computation) | 13\% | 13\% | 12\% | 17\% | 16\% | 9\% | 15\% | 23\% | 10\% | 14\% |
| Spanish language | 7\% | 9\% | 11\% | 5\% | 11\% | 11\% | 5\% | 6\% | 4\% | 8\% |
| Science | 1\% | 3\% | 6\% | 1\% | 9\% | 4\% | 14\% | 9\% | 9\% | 6\% |
| Foreign languages (exceptSpanish) | 3\% | 2\% | 5\% | 3\% | 5\% | 2\% | 4\% | 3\% | 3\% | 3\% |
| Other | 4\% | 2\% | 4\% | 7\% | 3\% | 3\% | 3\% | 7\% | 4\% | 4\% |
| n | 262 | 265 | 279 | 259 | 321 | 348 | 459 | 322 | 407 | 2613 |

Note: Respondents who answered "don't know" were excluded from this analysis. Percentages do not equal 100\% due to multiple response options. Total n for "All Industries" includes those in other industries not reported in this table.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

TABLE 21
APPLIED SKILLS SHORTAGES AMONG JOB APPLICANTS IN THE LAST 12 MONTHS: COMPARISONS BY INDUSTRY

|  | Accommodation, Food Services and Retail/Wholesale Trade | Construction, Mining, Gas and Oil | Education | Finance, Insurance and Real Estate | Government | Health and Social Assistance | High-Tech | Manufacturing | Professional, Scientific and Technical Services | All Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| None | 7\% | 17\% | 17\% | 12\% | 19\% | 13\% | 19\% | 15\% | 21\% | 16\% |
| Critical thinking/ problem-solving | 49\% | 37\% | 42\% | 45\% | 45\% | 51\% | 44\% | 48\% | 41\% | 45\% |
| Professionalism/ work ethic | 57\% | 39\% | 32\% | 47\% | 35\% | 54\% | 33\% | 42\% | 38\% | 43\% |
| Leadership | 42\% | 36\% | 35\% | 32\% | 34\% | 34\% | 37\% | 36\% | 36\% | 35\% |
| Written communications | 31\% | 27\% | 26\% | 33\% | 36\% | 28\% | 23\% | 20\% | 31\% | 29\% |
| Teamwork/ collaboration | 32\% | 28\% | 22\% | 25\% | 26\% | 37\% | 26\% | 31\% | 25\% | 28\% |
| Oral communications | 33\% | 24\% | 26\% | 29\% | 27\% | 25\% | 22\% | 25\% | 25\% | 26\% |
| Application of information and communications technology (ICT) (e.g., email, Internet research, word processing, spreadsheets, programming, social media) | 19\% | 17\% | 15\% | 19\% | 19\% | 20\% | 16\% | 16\% | 19\% | 18\% |
| Lifelong learning/self direction | 22\% | 16\% | 14\% | 18\% | 15\% | 13\% | 13\% | 16\% | 16\% | 16\% |
| Diversity (i.e., the ability to work well with a diverse workforce and customer base) | 17\% | 17\% | 24\% | 11\% | 17\% | 15\% | 12\% | 13\% | 8\% | 15\% |
| Creativity/innovation | 16\% | 13\% | 14\% | 13\% | 16\% | 11\% | 16\% | 11\% | 15\% | 14\% |
| Ethics/social responsibility | 19\% | 13\% | 10\% | 11\% | 12\% | 17\% | 8\% | 9\% | 7\% | 12\% |
| Other | 3\% | 5\% | 5\% | 4\% | 2\% | 3\% | 4\% | 5\% | 4\% | 4\% |
| n | 283 | 276 | 291 | 273 | 330 | 366 | 496 | 341 | 422 | 2741 |

Note: Respondents who answered "don't know" were excluded from this analysis. Percentages do not equal 100\% due to multiple response options. Total n for "All Industries" includes those in other industries not reported in this table.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

## TABLE 22

ORGANIZATIONS REQUIRING NEW SKILLS FOR FULL-TIME REGULAR POSITIONS HIRED IN THE LAST 12 MONTHS: COMPARISONS BY INDUSTRY

|  | Accommodation, Food Services and Retail/ Wholesale Trade | Construction, Mining, Gas and Oil | Education | Finance, Insurance and Real Estate | Government | Health and Social Assistance | High-Tech | Manufacturing | Professional, Scientific and Technical Services | All Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Yes | 36\% | 33\% | 38\% | 37\% | 37\% | 40\% | 49\% | 34\% | 42\% | 38\% |
| No | 64\% | 67\% | 62\% | 63\% | 63\% | 60\% | 51\% | 66\% | 58\% | 62\% |
| n | 273 | 274 | 302 | 275 | 341 | 356 | 490 | 339 | 415 | 2734 |

[^5] those in other industries not reported in this table.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

TABLE 23
TYPES OF NeW SklLLS REQURED FOR FULLTIME REGULAR POSTIONS HRED II THE LAST 12 MONTHS: COMPARISONS BY INDUSTRY

|  | Accommodation, Food Services and Retail/ <br> Wholesale Trade | Construction, Mining, Gas and Oil | Education | Finance, Insurance and Real Estate | Government | Health and Social Assistance | High-Tech | Manufacturing | Professional, Scientific and Technical Services | All Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Workplace (soft) skills (for example, problem-solving, interpersonal skills, communication, teamwork, leadership) | 53\% | 42\% | 38\% | 50\% | 39\% | 47\% | 36\% | 40\% | 41\% | 43\% |
| Computer/web/T | 43\% | 33\% | 39\% | 44\% | 39\% | 30\% | 41\% | 31\% | 45\% | 38\% |
| Management/project management/ training | 46\% | 43\% | 38\% | 45\% | 31\% | 29\% | 40\% | 33\% | 42\% | 38\% |
| Technical | 21\% | 42\% | 35\% | 30\% | 37\% | 22\% | 54\% | 49\% | 43\% | 36\% |
| Business/HR/ leadership | 42\% | 27\% | 37\% | 28\% | 30\% | 33\% | 33\% | 25\% | 32\% | 31\% |
| Credentials/ certifications | 21\% | 28\% | 29\% | 36\% | 35\% | 48\% | 25\% | 25\% | 25\% | 30\% |
| Engineering | 2\% | 20\% | 6\% | 3\% | 10\% | 1\% | 30\% | 29\% | 21\% | 12\% |
| Marketing/ communications | 18\% | 6\% | 10\% | 19\% | 6\% | 10\% | 10\% | 7\% | 16\% | 12\% |
| Research and development | 3\% | 6\% | 19\% | 8\% | 13\% | 3\% | 22\% | 15\% | 13\% | 11\% |
| Basic skills (for example, reading, writing, math, basic computer skills) | 15\% | 11\% | 10\% | 13\% | 10\% | 11\% | 5\% | 19\% | 6\% | 11\% |
| Science/math | 2\% | 4\% | 12\% | 6\% | 12\% | 5\% | 15\% | 13\% | 10\% | 9\% |
| Trade | 7\% | 22\% | 5\% | 6\% | 7\% | 2\% | 7\% | 13\% | 3\% | 8\% |
| Other | 12\% | 12\% | 8\% | 10\% | 8\% | 11\% | 9\% | 8\% | 9\% | 9\% |
| n | 98 | 90 | 115 | 101 | 124 | 143 | 240 | 114 | 173 | 1028 |

Note: Percentages do not equal $100 \%$ due to multiple response options. Only respondents whose organizations were hiring full-time positions that required new skills were asked this question. Total n for "All Industries" includes those in other industries not reported in this table.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

TABLE 24
reasons that positions require new skllls: Comparisons by industry

|  | Accommodation, Food Services and Retail/ <br> Wholesale Trade | Construction, Mining, Gas and Oil | Education | Finance, Insurance and Real Estate | Government | Health and Social Assistance | High-Tech | Manufacturing | Professional, Scientific and Technical Services | All Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Changing technology | 54\% | 51\% | 61\% | 43\% | 54\% | 42\% | 66\% | 62\% | 60\% | 54\% |
| Growth of organization (for example, staff size, revenue, sales) | 66\% | 54\% | 40\% | 58\% | 31\% | 56\% | 55\% | 53\% | 57\% | 52\% |
| Changing customer/ client expectations | 42\% | 36\% | 37\% | 38\% | 40\% | 44\% | 41\% | 29\% | 43\% | 39\% |
| Developing or offering new products/services | 33\% | 22\% | 33\% | 42\% | 20\% | 26\% | 51\% | 47\% | 48\% | 35\% |
| Expanding business into new markets | 27\% | 24\% | 16\% | 23\% | 7\% | 26\% | 36\% | 30\% | 42\% | 26\% |
| Reorganization | 23\% | 23\% | 30\% | 19\% | 26\% | 28\% | 24\% | 13\% | 17\% | 23\% |
| Legal or regulatory requirements | 7\% | 15\% | 18\% | 35\% | 35\% | 38\% | 17\% | 14\% | 13\% | 22\% |
| Replacing temporary workers, part-time employees, contractors or freelancers with full-time positions | 16\% | 9\% | 11\% | 4\% | 8\% | 6\% | 8\% | 16\% | 6\% | 9\% |
| Merger or acquisition | 5\% | 11\% | 2\% | 13\% | 1\% | 12\% | 13\% | 9\% | 13\% | 9\% |
| Other | 3\% | 8\% | 7\% | 8\% | 16\% | 9\% | 5\% | 10\% | 8\% | 9\% |
| n | 95 | 87 | 109 | 99 | 123 | 140 | 238 | 109 | 168 | 999 |

Note: Respondents who answered "don't know" were excluded from this analysis. Percentages do not equal $100 \%$ due to multiple response options. Only respondents whose organizations were hiring full-time positions that required new skills were asked this question. Total $n$ for "All Industries" includes those in other industries not reported in this table.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

TABLE 25
LEVEL OF DIFFICULTY IN FINDING QUALIFIED INDIVIDUALS FOR FULL-TIME REGULAR POSITIONS THAT REQUIRE NEW SKILLS: COMPARISONS BY INDUSTRY

|  | Accommodation, Food Services and Retail/Wholesale Trade | Construction, Mining, Gas and Oil | Education | Finance, Insurance and Real Estate | Government | Health and Social Assistance | High-Tech | Manufacturing | Professional, Scientific and Technical Services | All Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Very difficult | 13\% | 17\% | 11\% | 17\% | 10\% | 24\% | 25\% | 29\% | 25\% | 19\% |
| Somewhat difficult | 56\% | 50\% | 53\% | 59\% | 61\% | 63\% | 56\% | 59\% | 53\% | 57\% |
| Somewhat easy | 30\% | 32\% | 34\% | 22\% | 26\% | 12\% | 18\% | 12\% | 20\% | 22\% |
| Very easy | 1\% | 1\% | 3\% | 1\% | 3\% | 0\% | 1\% | 1\% | 2\% | 1\% |
| n | 96 | 88 | 110 | 98 | 117 | 139 | 235 | 112 | 166 | 996 |

Note: Respondents who answered "don't know" were excluded from this analysis. Percentages may not equal $100 \%$ due to rounding. Only respondents whose organizations were hiring full-time positions that required new skills were asked this question. Total $n$ for "All Industries" includes those in other industries not reported in this table.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016

TABLE 26
recruiting strategles organizations use for full-time regular positions: Comparisons by industry

|  | Accommodation, Food Services and Retail/ Wholesale Trade | Construction, Mining, Gas and Oil | Education | Finance, Insurance and Real Estate | Government | Health and Social Assistance | High-Tech | Manufacturing | Professional, Scientific and Technical Services | All Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Using social media | 81\% | 70\% | 61\% | 66\% | 61\% | 74\% | 74\% | 67\% | 77\% | 70\% |
| Collaborating with educational institutions | 63\% | 59\% | 47\% | 57\% | 55\% | 67\% | 60\% | 61\% | 59\% | 58\% |
| Expanding advertising efforts | 49\% | 43\% | 62\% | 43\% | 51\% | 59\% | 41\% | 47\% | 44\% | 49\% |
| Using a recruitment agency | 37\% | 51\% | 25\% | 51\% | 20\% | 41\% | 58\% | 68\% | 55\% | 44\% |
| Increasing retention efforts | 47\% | 44\% | 34\% | 47\% | 28\% | 54\% | 45\% | 41\% | 47\% | 43\% |
| Training existing employees to take on hard-to-fill positions | 46\% | 45\% | 34\% | 42\% | 36\% | 44\% | 46\% | 51\% | 37\% | 42\% |
| Targeting passive job seekers | 46\% | 37\% | 24\% | 45\% | 24\% | 43\% | 57\% | 45\% | 56\% | 41\% |
| Expanding training programs to help improve skills of new hires | 43\% | 46\% | 31\% | 48\% | 36\% | 40\% | 41\% | 43\% | 38\% | 40\% |
| Seeking talent from nontraditional sources (e.g., veterans, retirees) | 42\% | 44\% | 30\% | 29\% | 40\% | 30\% | 40\% | 43\% | 33\% | 36\% |
| Improving compensation | 41\% | 32\% | 31\% | 39\% | 23\% | 40\% | 40\% | 35\% | 40\% | 36\% |
| Using/enhancing employee referral program | 44\% | 44\% | 10\% | 42\% | 6\% | 39\% | 48\% | 37\% | 52\% | 35\% |
| Expanding geographic search region | 24\% | 34\% | 35\% | 31\% | 34\% | 38\% | 45\% | 32\% | 40\% | 34\% |
| Offering more flexible work arrangements | 22\% | 17\% | 26\% | 35\% | 28\% | 26\% | 38\% | 20\% | 46\% | 29\% |
| Providing monetary incentives to candidates (e.g., signing bonus) | 26\% | 31\% | 11\% | 29\% | 8\% | 37\% | 39\% | 30\% | 34\% | 26\% |
| Improving benefits package | 25\% | 25\% | 18\% | 20\% | 14\% | 21\% | 26\% | 19\% | 28\% | 22\% |
| Offering new job perks | 13\% | 10\% | 5\% | 9\% | 6\% | 11\% | 15\% | 9\% | 19\% | 11\% |
| Other | 1\% | 2\% | 3\% | 2\% | 4\% | 5\% | 3\% | 3\% | 3\% | 3\% |
| None | 2\% | 2\% | 5\% | 2\% | 7\% | 3\% | 1\% | 3\% | 2\% | 3\% |
| n | 290 | 287 | 331 | 292 | 371 | 384 | 541 | 368 | 462 | 2956 |

Note: Respondents who answered "don't know" were excluded from this analysis. Percentages do not equal $100 \%$ due to multiple response options. Total $n$ for "All Industries" includes those in other industries not reported in this table.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)
$\overline{\text { APPENDIX }}$

TABLE 27
most effective recruiting strategies for organizations: COMParisons by industry

|  | Accommodation, Food Services and Retail/Wholesale Trade | Construction, Mining, Gas and Oil | Education | Finance, Insurance and Real Estate | Government | Health and Social Assistance | High-Tech | Manufacturing | Professional, Scientific and Technical Services | All Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Training existing employees to take on hard-to-fill positions | 44\% | 50\% | 54\% | 43\% | 60\% | 44\% | 41\% | 53\% | 38\% | 48\% |
| n | 134 | 130 | 113 | 123 | 134 | 168 | 248 | 188 | 170 | 1229 |
| Using a recruitment agency | 43\% | 49\% | 40\% | 50\% | 48\% | 32\% | 46\% | 57\% | 48\% | 47\% |
| n | 106 | 146 | 82 | 149 | 73 | 159 | 314 | 248 | 254 | 1300 |
| Using social media | 52\% | 47\% | 47\% | 52\% | 54\% | 46\% | 43\% | 41\% | 45\% | 47\% |
| n | 235 | 200 | 201 | 193 | 226 | 285 | 399 | 247 | 355 | 2066 |
| Expanding advertising efforts | 44\% | 39\% | 53\% | 37\% | 51\% | 43\% | 33\% | 45\% | 32\% | 44\% |
| n | 142 | 122 | 204 | 125 | 189 | 227 | 222 | 173 | 201 | 1446 |
| Improving compensation | 49\% | 42\% | 52\% | 42\% | 53\% | 43\% | 30\% | 37\% | 30\% | 42\% |
| n | 119 | 92 | 102 | 113 | 86 | 154 | 214 | 129 | 187 | 1052 |
| Targeting passive job seekers | 40\% | 41\% | 38\% | 41\% | 43\% | 27\% | 45\% | 37\% | 47\% | 40\% |
| n | 132 | 107 | 80 | 131 | 89 | 164 | 310 | 164 | 257 | 1207 |
| Offering more flexible work arrangements | 32\% | 26\% | 53\% | 37\% | 47\% | 38\% | 37\% | 24\% | 40\% | 39\% |
| n | 65 | 50 | 85 | 101 | 103 | 100 | 202 | 72 | 213 | 846 |
| Using/enhancing employee referral program | 39\% | 44\% | 28\% | 34\% | - | 33\% | 37\% | 37\% | 38\% | 37\% |
| n | 127 | 126 | 32 | 122 | - | 151 | 259 | 136 | 240 | 1028 |
| Increasing retention efforts | 39\% | 28\% | 38\% | 34\% | 31\% | 36\% | 36\% | 29\% | 32\% | 34\% |
| n | 137 | 127 | 112 | 138 | 103 | 209 | 245 | 151 | 218 | 1274 |
| Collaborating with educational institutions | 26\% | 41\% | 46\% | 25\% | 37\% | 38\% | 32\% | 28\% | 34\% | 34\% |
| n | 183 | 169 | 154 | 166 | 204 | 256 | 325 | 223 | 273 | 1720 |
| Expanding training programs to help improve skills of new hires | 30\% | 38\% | 31\% | 36\% | 32\% | 33\% | 27\% | 31\% | 25\% | 32\% |
| n | 124 | 133 | 102 | 139 | 133 | 155 | 220 | 159 | 175 | 1190 |
| Improving benefits package | 26\% | 31\% | 44\% | 31\% | 36\% | 21\% | 25\% | 25\% | 29\% | 29\% |
| n | 73 | 72 | 59 | 59 | 53 | 82 | 139 | 69 | 129 | 651 |
| Expanding geographic search region | 21\% | 21\% | 46\% | 20\% | 40\% | 24\% | 32\% | 26\% | 29\% | 29\% |
| n | 71 | 97 | 116 | 90 | 126 | 144 | 242 | 118 | 185 | 1011 |
| Providing monetary incentives to candidates (e.g., signing bonus) | 19\% | 21\% | 29\% | 39\% | 39\% | 37\% | 22\% | 22\% | 22\% | 27\% |
| n | 74 | 90 | 35 | 85 | 31 | 141 | 213 | 112 | 158 | 778 |
| Seeking talent from nontraditional sources (e.g., veterans, retirees) | 28\% | 21\% | 34\% | 12\% | 31\% | 14\% | 23\% | 25\% | 20\% | 23\% |

TABLE 27
MOST EFFECTIVE RECRUITING STRATEGIES FOR ORGANIZATIONS: COMPARISONS BY INDUSTRY (continued)

|  | Accommodation, Food Services and Retail/Wholesale Trade | Construction, Mining, Gas and Oil | Education | Finance, Insurance and Real Estate | Government | Health and Social Assistance | High-Tech | Manufacturing | Professional, Scientific and Technical Services | All Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n | 121 | 122 | 97 | 85 | 144 | 114 | 213 | 156 | 147 | 1039 |
| Offering new job perks | 19\% | - | - | - | - | 7\% | 13\% | 12\% | 13\% | 12\% |
| n | 37 | - | - | - | - | 42 | 80 | 33 | 86 | 320 |

Note: Respondents who answered "don't know" were excluded from this analysis. Respondents were only asked about those recruiting strategies that their organizations were using. A dash (-) indicates the sample size was too small to report. Total n for "All Industries" includes those in other industries not reported in this table.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

## TABLE 28

ORGANIZATIONS THAT HAVE HIRED U.S. VETERANS FOR FULL-TIME REGULAR POSITIONS IN THE LAST 12 MONTHS: COMPARISONS BY INDUSTRY

|  | Accommodation, Food Services and Retail/ Wholesale Trade | Construction, Mining, Gas and Oil | Education | Finance, Insurance and Real Estate | Government | Health and Social Assistance | High-Tech | Manufacturing | Professional, Scientific and Technical Services | All Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Yes | 71\% | 78\% | 64\% | 51\% | 77\% | 61\% | 75\% | 75\% | 58\% | 67\% |
| No | 16\% | 14\% | 26\% | 37\% | 18\% | 24\% | 19\% | 15\% | 31\% | 23\% |
| No, but we are considering it | 9\% | 5\% | 6\% | 8\% | 3\% | 11\% | 4\% | 8\% | 8\% | 7\% |
| No, but we have plans to do so in the next 12 months | 4\% | 3\% | 4\% | 4\% | 2\% | 4\% | 1\% | 3\% | 3\% | 3\% |
| n | 227 | 263 | 264 | 241 | 345 | 319 | 472 | 320 | 392 | 2526 |

Note: Respondents who answered "don't know" were excluded from this analysis. Percentages may not equal 100\% due to rounding. Total $n$ for "All Industries" includes those in other industries not reported in this table.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

## TABLE 29

ORGANIZATIONS WITH A TRAINING BUDGET IN THE LAST 12 MONTHS: COMPARISONS BY INDUSTRY

|  | Accommodation, <br> Food Services and Retail/ Wholesale Trade | Construction, Mining, Gas and Oil | Education | Finance, Insurance and Real Estate | Government | Health and Social Assistance | High-Tech | Manufacturing | Professional, Scientific and Technical Services | All Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Yes | 66\% | 59\% | 76\% | 73\% | 84\% | 68\% | 72\% | 62\% | 65\% | 69\% |
| No | 34\% | 41\% | 24\% | 27\% | 16\% | 32\% | 28\% | 38\% | 35\% | 31\% |
| n | 273 | 286 | 319 | 279 | 373 | 359 | 524 | 359 | 443 | 2863 |

Note: Respondents who answered "don't know" were excluded from this analysis. Total $n$ for "All Industries" includes those in other industries not reported in this table.
Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)
$\overline{\text { APPENDIX }}$

TABLE 30
CHANGE IN TRAINING BUDGETS IN THE LAST 12 MONTHS: COMPARISONS BY INDUSTRY

|  | Accommodation, Food Services and Retail/ <br> Wholesale Trade | Construction, Mining, Gas and Oil | Education | Finance, Insurance and Real Estate | Government | Health and Social Assistance | High-Tech | Manufacturing | Professional, Scientific and Technical Services | All Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Increased | 40\% | 54\% | 25\% | 52\% | 27\% | 38\% | 39\% | 35\% | 48\% | 39\% |
| Stayed the same | 50\% | 27\% | 61\% | 40\% | 62\% | 53\% | 44\% | 55\% | 41\% | 50\% |
| Decreased | 10\% | 19\% | 15\% | 8\% | 11\% | 9\% | 17\% | 11\% | 10\% | 11\% |
| n | 161 | 145 | 208 | 166 | 277 | 203 | 315 | 200 | 241 | 1702 |

Note: Respondents who answered "don't know" were excluded from this analysis. Percentages may not equal $100 \%$ due to rounding. Only respondents who had a training budget in the last 12 months were asked this question. Total n for "All Industries" includes those in other industries not reported in this table.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

## TABLE 31

WHERE EMPLOYEES RECEIVE TRAINING: COMPARISONS BY INDUSTRY

|  | Accommodation, Food Services and Retail/ Wholesale Trade | Construction, Mining, Gas and Oil | Education | Finance, Insurance and Real Estate | Government | Health and Social Assistance | High-Tech | Manufacturing | Professional, Scientific and Technical Services | All Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conferences, seminars, workshops, professional organizations, etc. | 65\% | 82\% | 89\% | 89\% | 91\% | 80\% | 85\% | 86\% | 87\% | 84\% |
| On the job | 91\% | 86\% | 76\% | 90\% | 81\% | 88\% | 80\% | 87\% | 82\% | 84\% |
| Webinars or other online training | 76\% | 75\% | 83\% | 91\% | 89\% | 82\% | 83\% | 78\% | 89\% | 84\% |
| Onsite training | 76\% | 84\% | 77\% | 82\% | 77\% | 83\% | 78\% | 82\% | 74\% | 79\% |
| Employer-provided offsite training (other than technical, community college or university) | 33\% | 55\% | 42\% | 44\% | 46\% | 46\% | 47\% | 55\% | 45\% | 46\% |
| College or university | 15\% | 28\% | 41\% | 25\% | 34\% | 25\% | 39\% | 31\% | 33\% | 29\% |
| Technical or community college | 10\% | 30\% | 12\% | 17\% | 30\% | 23\% | 26\% | 43\% | 14\% | 23\% |
| Other | 2\% | 5\% | 1\% | 2\% | 3\% | 3\% | 4\% | 3\% | 4\% | 3\% |
| n | 178 | 170 | 241 | 202 | 313 | 244 | 372 | 221 | 285 | 1971 |

Note: Respondents who answered "don't know" were excluded from this analysis. Percentages do not equal $100 \%$ due to multiple response options. Only respondents who had a training budget in the last 12 months were asked this question. Total n for "All Industries" includes those in other industries not reported in this table.

Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

TABLE 32
HOW ORGANIZATIONS USE THE PUBLIC WORKFORCE SYSTEM: COMPARISONS BY INDUSTRY

|  | Accommodation, Food Services and Retail/ <br> Wholesale Trade | Construction, Mining, Gas and Oil | Education | Finance, Insurance and Real Estate | Government | Health and Social Assistance | High-Tech | Manufacturing | Professional, Scientific and Technical Services | All Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N/A, my organization has not used the public workforce system | 42\% | 35\% | 45\% | 54\% | 40\% | 40\% | 40\% | 34\% | 54\% | 43\% |
| Posted job openings for my organization | 37\% | 44\% | 29\% | 28\% | 38\% | 36\% | 32\% | 46\% | 25\% | 35\% |
| Participated in local job fairs | 28\% | 28\% | 23\% | 19\% | 26\% | 28\% | 22\% | 31\% | 13\% | 24\% |
| Participated on a Workforce Investment Board (WIB) | 6\% | 9\% | 4\% | 4\% | 6\% | 4\% | 7\% | 10\% | 2\% | 5\% |
| To meet training and education needs of my workforce | 2\% | 2\% | 2\% | 2\% | 4\% | 4\% | 2\% | 4\% | 1\% | 3\% |
| Other "employer services" | 2\% | 3\% | 1\% | 1\% | 4\% | 3\% | 2\% | 4\% | 1\% | 2\% |
| Don't know | 14\% | 15\% | 18\% | 14\% | 17\% | 18\% | 22\% | 15\% | 19\% | 16\% |
| n | 297 | 304 | 359 | 304 | 384 | 400 | 567 | 377 | 484 | 3090 |

Note: Percentages do not equal $100 \%$ due to multiple response options. Total $n$ for "All Industries" includes those in other industries not reported in this table.
Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

TABLE 33
ORGANIZATIONS THAT PROVIDE OR WORK IN CONJUNCTION WITH REGISTERED APPRENTICESHIP PROGRAMS: COMPARISONS BY INDUSTRY

|  | Accommodation, Food Services and Retail/Wholesale Trade | Construction, Mining, Gas and Oil | Education | Finance, Insurance and Real Estate | Government | Health and Social Assistance | High-Tech | Manufacturing | Professional, Scientific and Technical Services | All Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Yes | 5\% | 34\% | 14\% | 4\% | 12\% | 8\% | 12\% | 15\% | 5\% | 12\% |
| No | 61\% | 49\% | 54\% | 58\% | 54\% | 55\% | 58\% | 63\% | 55\% | 56\% |
| N/A, my organization does not have any positions that could be eligible for a registered apprenticeship | 34\% | 17\% | 32\% | 37\% | 34\% | 37\% | 30\% | 22\% | 41\% | 32\% |
| n | 279 | 287 | 313 | 277 | 338 | 345 | 490 | 344 | 441 | 2782 |


Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

TABLE 34
ORganIZATIONS THAT PROVIDE OR WORK IN CONJUNCTION WITH CUSTOMIZED APPRENTICESHIP PROGRAMS: COMPARISONS BY INDUSTRY

|  | Accommodation, Food Services and Retail/ <br> Wholesale Trade | Construction, Mining, Gas and Oil | Education | Finance, Insurance and Real Estate | Government | Health and Social Assistance | High-Tech | Manufacturing | Professional, Scientific and Technical Services | All Industries |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Yes | 12\% | 12\% | 8\% | 4\% | 7\% | 14\% | 14\% | 15\% | 7\% | 10\% |
| No | 88\% | 88\% | 92\% | 96\% | 93\% | 86\% | 86\% | 85\% | 93\% | 90\% |
| n | 163 | 138 | 156 | 156 | 167 | 180 | 271 | 205 | 233 | 1493 |

[^6]ENDNOTES
${ }^{1}$ Lockard, C. B., \& Wolf, M. (2012, January). Occupational employment projections to 2020. Monthly Labor Review. Retrieved from http://www.bls.gov/opub/mlr/2012/01/art5full.pdf
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## ADDITIONAL SHRM RESOURCES

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The Ongoing Impact of the Recession series examines topics such as recruiting challenges and skills shortages, organizations' financial health, global competition and hiring strategies. In addition to providing overall results for U.S. organizations, results are broken out into eight industry-level reports.

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## Defining HR Success

Kari R. Strobel, James N. Kurtessis, Debra J. Cohen, and Alexander Alonso
Foreword by Henry G. Jackson
Paperback, 197 pages, 2015
ISBN: 978-1-58644-382-5
SHRMStore Item \#: 61.11504
High-quality HR practitioners have advanced skill sets in the critical competencies needed to work our most pressing talent issues of today and to deliver HR strategy to enable businesses to evolve in the future. Now HR professionals are expected to be valued team members and contribute as business partners for the growth of the organization. Defining HR Success provides an indepth review and application of the nine critical $H R$ competencies practitioners need to be successful within the field of HR and leaders of their organizations:

- HR Expertise (HR Knowledge)
- Business Acumen
- Communication
- Consultation
- Critical Evaluation
- Ethical Practice
- Global and Cultural Effectiveness
- Leadership and Navigation
- Relationship Management


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The SHRM Body of Competency and Knowledge (SHRM BoCK ${ }^{\text {M }}$ ) also draws heavily on the SHRM Competency Model. The SHRM BoCK documents the HR Behavioral Competencies and Knowledge Domains tested on the SHRM-CP and SHRM-SCP certification exams. The SHRM BoCK is also the common framework for item writers developing questions and individuals developing exam preparation materials. SHRM operates exam development and study material development as separate, independent functions, and observes a strict firewall between these activities to protect the integrity and credibility of the certification exams.

Available for download at shrm.org/certification/about/ bodyofcompetencyknowledge/pages/default.aspx

## shrm.org/research

*Fee-based services

## PROJECT TEAM

## Project leads

Jen Schramm, M.Phil., SHRM-SCP, is the manager of the Workforce Trends and Forecasting program at SHRM.

Tanya Mulvey, MAPP, is a researcher specializing in talent management and workforce skills at SHRM.

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Jay Blankenship, Regional Workforce Advisor, Greenville; Mary Clagett, deputy director of workforce policy, Workforce and Education Policy Group, Jobs for the Future; Robyn Knox, SHRM-SCP, SPHR, vice president of human resources, Southern Weaving Company, 2016 Greenville SHRM Chapter President; Dorothy Martin, workforce development consultant; Shayne Spaulding, senior research associate, Income and Benefits Policy Center, Urban Institute

## Project contributors

Alexander Alonso, Ph.D., SHRM-SCP, senior vice president, Knowledge Development, SHRM; Kathleen Coulombe, government relations advisor, Government Affairs, SHRM; Evren Esen, SHRM-SCP, director, Survey Programs, SHRM; Kelly Hastings, senior government relations advisor, Government Affairs, SHRM

## Copy editing

Katya Scanlan, copy editor

## Design

Blair Cobb, senior design specialist

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1800 Duke Street
Alexandria, VA 22314
SOCIETY FOR HUMAN
RESOURCE MANAGEMENT
USA


[^0]:    *Strategic workforce planning is a process used to ensure an organization takes into account the future loss of knowledge through employee resignations/retirements and the projected knowledge/personnel resources required to achieve the organization's goals.

    Note: $\mathrm{n}=1,529-1,691$
    Source: SHRM Survey Findings: The Aging Workforce-The State of Older Workers in U.S. Organizations (SHRM, 2015)

[^1]:    Note: $\mathrm{n}=2,613$. Respondents who answered "don't know" were excluded from this analysis. Percentages do not equal 100\% due to multiple response options.

    Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

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[^4]:    Note: Percentages with darker shading are statistically larger than percentages with lighter shading within the same row. Blank cells are duplicative of data in the above rows, and are intentionally left blank to highlight the statistical differences being shown within that row.

    Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

[^5]:    Note. Respondents who answered "don't know' wer

[^6]:    Note: Respondents who answered "don't know" were

    Source: The New Talent Landscape: Recruiting Difficulty and Skills Shortages (SHRM, 2016)

