

**2018**

**EMPLOYER  
NEEDS  
SURVEY**



LABOR & ECONOMIC  
ANALYSIS DIVISION

*NCWorks*  
COMMISSION

## LETTER FROM THE CHAIR

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As the board that oversees North Carolina's workforce development system, the NCWorks Commission relies on data to inform strategies that enable the state's workforce and businesses to compete in the global economy. Our mission is to ensure North Carolina has a world-class workforce development system that is adaptable, integrated, relevant, efficient, and effective.

To develop the very best information to support our mission, we commissioned the Labor and Economic Analysis Division (LEAD) in the NC Department of Commerce to conduct the 2018 Employer Needs Survey. This survey is an update to the reports produced by LEAD in 2014 and 2016. The commission is committed to tracking the needs of employers over time to ensure that our workforce development system is meeting not only their needs, but is becoming a strategic asset for them.

This year's survey provides vital data about the extent to which North Carolina businesses are experiencing hiring difficulties and identifies the top reasons, recognizing that different challenges exist for different industry segments, different business sizes and different regions. There was some good news in the report: hiring remains strong in North Carolina with 43.3% of employers expecting hiring to increase in the future.

However, half of all companies surveyed reported difficulty in hiring new staff, a substantial increase over previous years. In key growth industries like Manufacturing and Science, Technology, Engineering, and Mathematics (STEM) industries, the number approaches two-thirds. Among the reasons employers encountered difficulties, two-thirds cited inadequate employability skills and half also reported that candidates had inadequate experience or technical skills – or that there simply weren't enough candidates in the applicant pool to fill their roles.

The conclusions drawn from the report will assist the workforce development ecosystem to develop or move to scale data-informed policies and programs that equip job seekers with the skills and experience required by businesses. For example, the evidence suggests younger workers would benefit greatly from earlier work experiences – such as apprenticeships, internships, and other work-based learning programs – that will help them develop the kinds of employability skills they need for the good jobs that are too often difficult to fill in our state. Opportunities also exist for the workforce system to more fully engage with employers to help meet their needs and prepare job seekers for current and future jobs. The commission will continue its efforts to identify and address mis-alignments that exist between labor supply and demand.

The findings in the report support the key elements of Governor Roy Cooper's NC Job Ready Initiative and his priorities for workforce development, to which we are fully committed. NC Job Ready has three core principles: skills and education attainment, employer leadership, and local innovation. Our continued, collaborative progress on NCWorks Certified Career Pathways, business engagement strategies, and NCWorks Career Centers will support NC Job Ready by preparing North Carolinians for the jobs of today and tomorrow.

I want to thank Governor Cooper for placing his confidence in the commission, and LEAD for this impactful report that will ensure our workforce system is responsive to the fast-changing needs of employers.

Kevin Trapani, Chair  
NCWorks Commission

# ACKNOWLEDGMENTS

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# EXECUTIVE SUMMARY

The 2018 Employer Needs Survey, carried out by the Labor and Economic Analysis Division (LEAD) of the North Carolina Department of Commerce on behalf of the NCWorks Commission, asked over 2,000 business establishments about their hiring practices, with emphasis on hiring difficulties and workforce needs. In addition to an Overall sample of all industries, we surveyed Manufacturers and a set of Science, Technology, Engineering, and Mathematics-related industries (STEM). The survey also looked at several labor markets of differing sizes, recognizing that employers may have distinct needs depending on the size of the available labor force. The survey also examined difficulties hiring workers for positions requiring different levels of experience: entry-level (less than 1 year of experience), mid-level (2-4 years) and senior-level (5 years or greater).

When compared to the results of our 2016 survey, we found an increased level of hiring difficulties, with half of hiring employers experiencing difficulty filling at least one position within the previous 12 months. Manufacturing and STEM employers reported higher levels of difficulty, with nearly 6 in 10 employers reporting difficulty hiring.

While hiring difficulties are often held up as evidence of a “skills gap,” our survey asked employers about a range of possible explanations for difficulties. Employers were able to choose two new responses this year, based on feedback from previous surveys—lack of employability issues such as work ethic, professionalism, reliability, and motivation—as well as a low number of applicants. These new options were the top reasons given by employers in 2018 for hiring difficulties.

As in 2016 and 2014, a lack of relevant work experience, technical as well as soft skills, and education were all frequently mentioned by employers as reasons for hiring difficulties. Other reasons, such as a criminal record, low pay, and drug screening issues, were less frequently chosen by employers.

## KEY FINDINGS



**5 out of 10** employers who tried to hire in the past year had **difficulty filling at least one position**, up from 4 of 10 in 2016



**Charlotte** and the **Triangle** had **less difficulty**, **Medium-sized metros** had **more difficulty**



**Manufacturing** and **STEM** had **more difficulty** filling positions



A lack of **employability** (such as lack of work ethic) and **low numbers of applicants** were the top reasons given by employers with hiring difficulties



A lack of **work experience**, **technical skills**, **soft skills**, and **education** were also frequently reported, as in 2016 and 2014 surveys

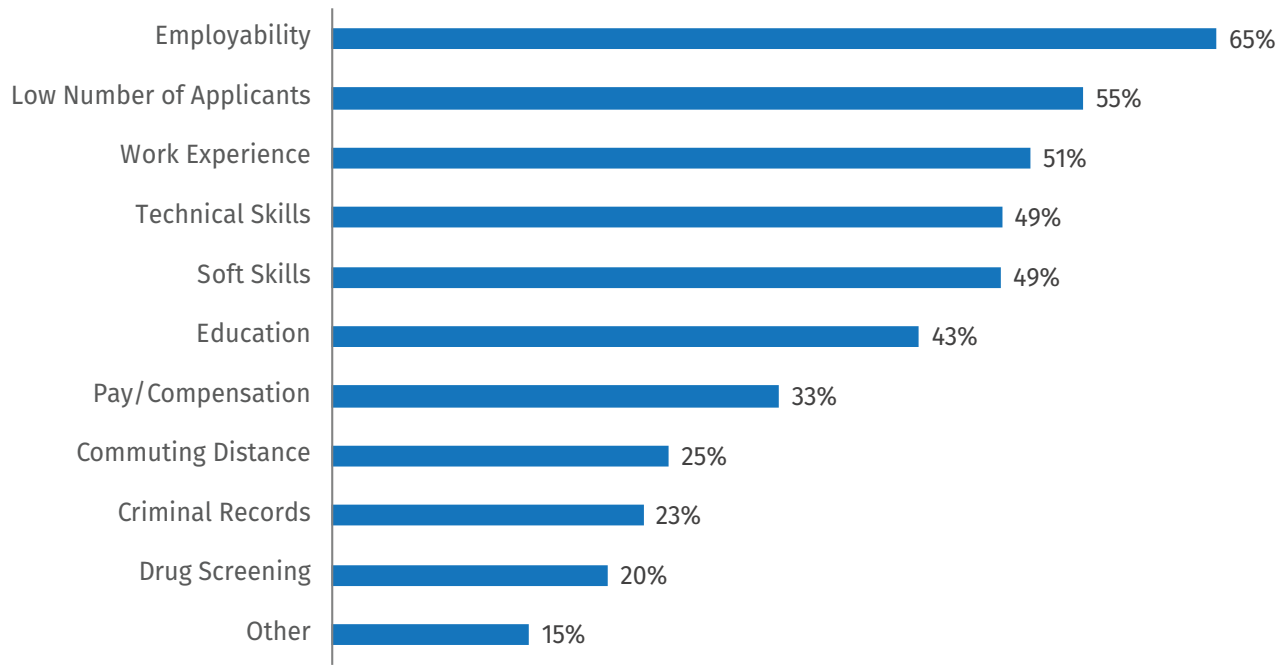


Employers reported higher rates of **internet postings** to recruit candidates than in 2016



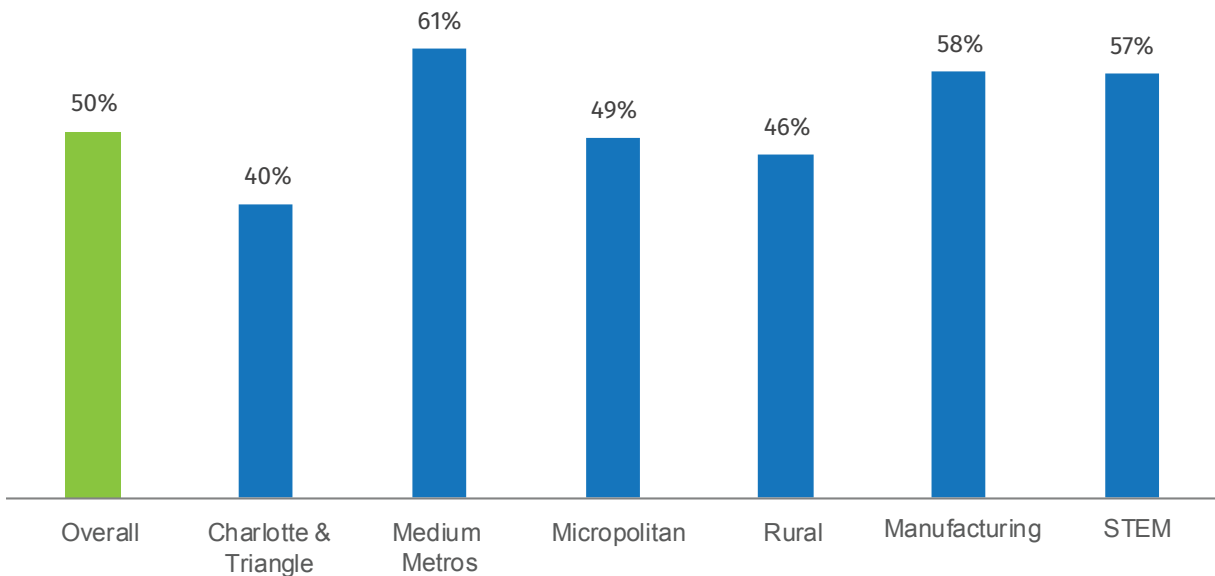
Opportunities exist to **increase awareness** of workforce development resources, especially in **Rural** areas and among **Manufacturers** and **STEM** industries

### Reasons For Difficulty (Overall Sample, All Positions)



Looking across the state, employers in the two largest metropolitan areas (Charlotte and the Triangle) had less difficulty hiring (40%) than the state as a whole (50%), while employers in the state’s other metro areas had more difficulty (61%). Micropolitan (49%) and Rural (46%) area employers had a similar level of difficulty to the state as a whole.

### Percent of Hiring Establishments with Difficulty by Region and Industry



A key takeaway from the survey is that while the degree of hiring difficulty has increased since 2016, half of hiring employers are not having any difficulties. Hiring in a tight labor market may bring different challenges than those experienced during a downturn, as shown by the greater difficulty in filling entry-level positions. Issues of employability and low number of applicants can be addressed both by workforce development and education partners in preparing jobseekers as well as by employers in evaluating the competitiveness of wages, benefits, and working conditions in a tight labor market. Addressing the increased level of difficulty in North Carolina's medium-sized metros may be another target for the workforce development system. Finally, the survey points to opportunities to increase awareness of the workforce resources available to employers across the state.



# INTRODUCTION

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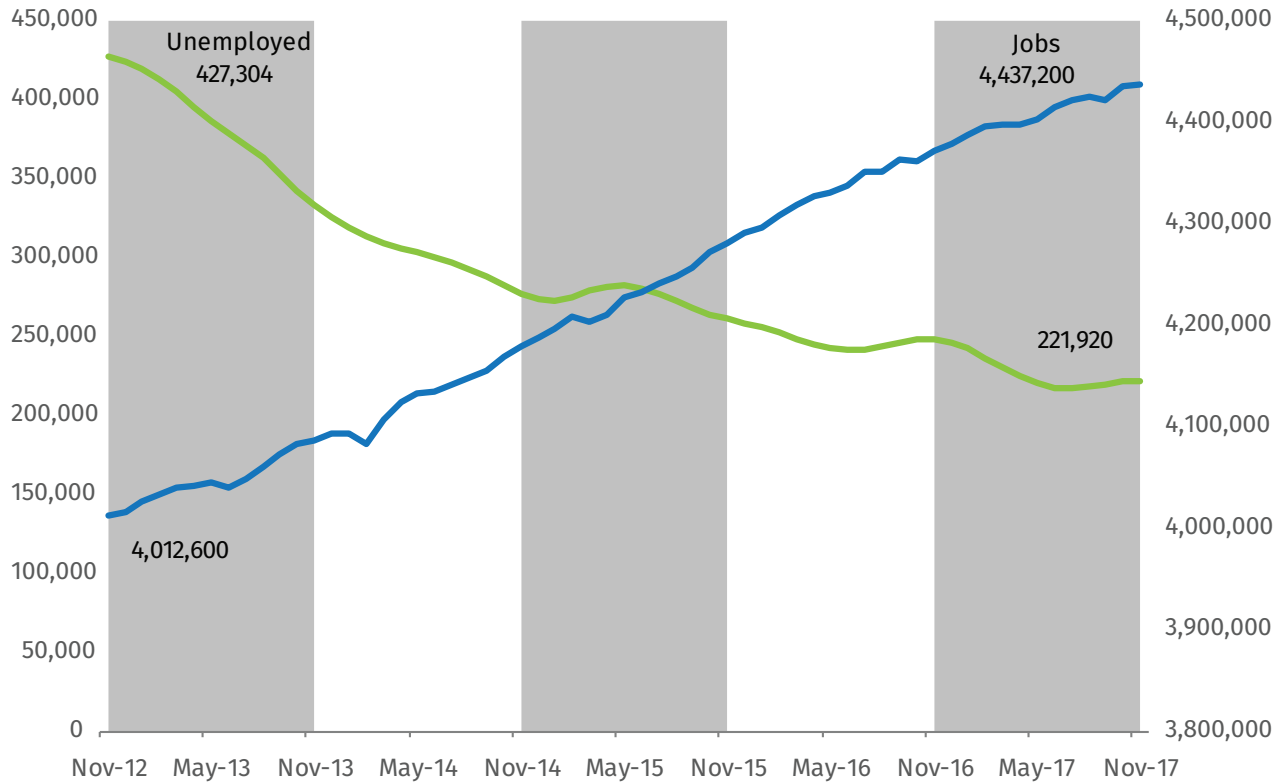
Nationally and within North Carolina, we frequently hear about the difficulties some employers have finding qualified workers.<sup>i</sup> Nine years after the recovery from the Great Recession began (June 2009), national and state labor markets have tightened as a result of slow but steady job growth and stabilizing labor force participation rates. While some employers struggled with the paradox of being unable to find qualified workers during the Great Recession<sup>ii</sup>, the situation today is quite different.<sup>iii</sup> With unemployment at low levels (at or near “full employment”), employers have more competition to attract a smaller pool of unemployed workers, and must also work harder to retain current workers who have more opportunities to switch jobs.

Previous research has explored the question of whether there is a mismatch between the jobs available and the skills and interests of the labor force. Employers have reported that the North Carolina labor pool does not match growing demand for jobs that require strong skills (both technical skills and soft skills), proper training and certification, sufficient levels of education, and previous work experience.<sup>iv</sup>

The phrase “skills gap” has been used to describe this seemingly persistent phenomenon at both the national and state level, in which the skills (or other characteristics such as educational attainment) of applicants simply do not match the needs of employers.<sup>v</sup> Other explanations are that wages have not grown enough in some occupations to attract qualified applicants or that negative industry perceptions contribute to a lack of applicants (an “interest gap”).<sup>vi</sup> While there is no consensus on exactly what is contributing to mismatches, they may be an obstacle to business growth and competitiveness. Various remedies to the problem have been proposed, including proposals on both the demand and supply side of the matching equation.<sup>vii</sup> However, examples of mismatches are often based on anecdotal accounts and non-scientific surveys rather than on careful empirical studies. To fully understand this question, a detailed survey of both labor demand (employers) and supply (labor force) would be required. Due to the challenges inherent in surveying the labor force (including both employed workers and unemployed jobseekers), this report only examines one side of the mismatch—employer demand for qualified workers.

Since the first Employer Needs Survey was conducted in 2014, labor market conditions in North Carolina have changed considerably, as the numbers of unemployed have decreased and jobs have increased:

## 400,000 more Jobs, 200,000 fewer Unemployed Nov 2012 - Nov 2017

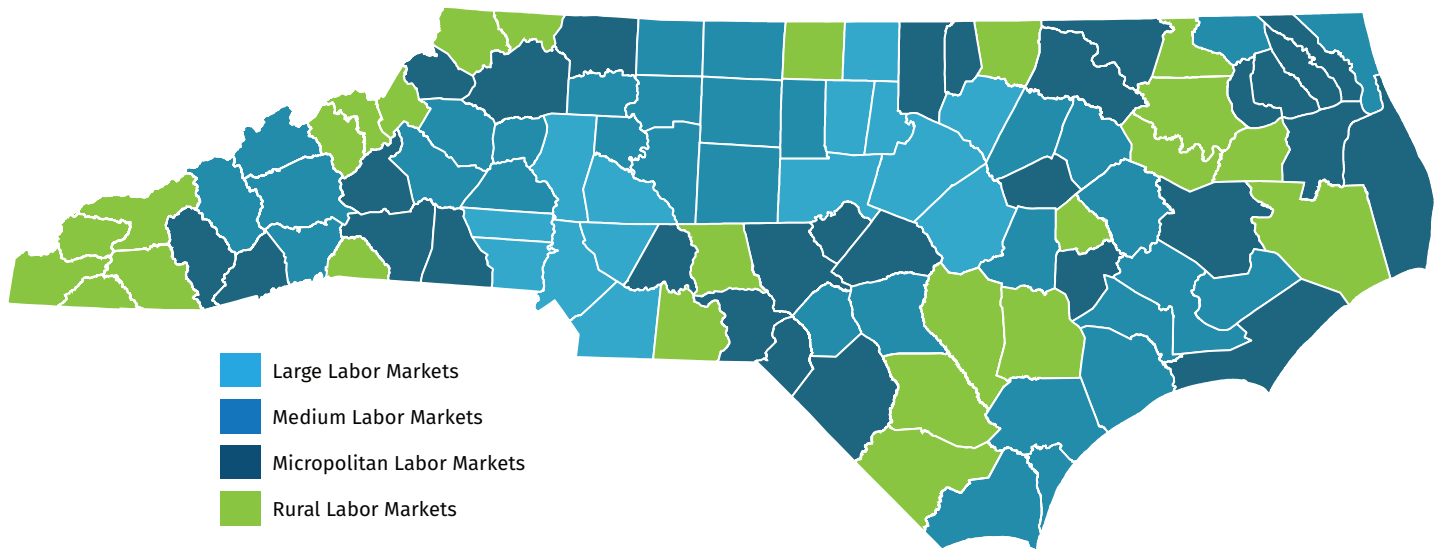


Sources: NC Commerce, LEAD, LAUS (unemployed) and CES (jobs).  
 Note: Gray bars indicate reference periods for the 2014, 2016, and 2018 Employer Needs Surveys.

In light of these changing conditions, the NCWorks Commission is once again examining the needs of employers in the state, with a particular emphasis on hiring difficulties in this tightened labor market. The 2018 Employer Needs Survey is an update to and enhancement of a survey completed by the Labor and Economic Analysis Division (LEAD) of the North Carolina Department of Commerce in 2016 and 2014 on behalf of the NCWorks Commission.<sup>viii</sup> The 2018 survey replicates much of the 2016 version, but with a few key differences. The current survey focuses exclusively on businesses with 10 or more employees and includes a sample representative of all North Carolina industries, including public and private employers (referred to as the Overall sample), as well as separate samples of manufacturing companies (referred to as the Manufacturing sample) and Science, Technology, Engineering, and Mathematics-related (STEM) industries (referred to as the STEM sample).<sup>ix</sup> One new feature in this survey was a focus on labor markets of differing sizes, recognizing that employers may have distinct needs depending on the size of the available labor force. Four size-classes of labor markets were defined: 1) large labor markets comprised of the two largest Metropolitan Statistical Areas<sup>x</sup> (Charlotte and the Triangle); 2) medium-sized labor markets comprised of the state's other Metropolitan Statistical Areas (MSAs); 3) small labor markets made up of Micropolitan Statistical Areas, and 4) Rural labor markets made up of counties not located within a Micropolitan or Metropolitan Statistical Area, as illustrated in the map on page 7:



## North Carolina's Labor Markets by Size



Additionally, the survey asked employers about positions they had tried to fill, grouped by the years of experience required: entry-level positions requiring one year of experience or less, mid-level positions requiring two to four years, and more senior positions requiring five or more years. This distinction grew out of the results of the 2016 survey, in which employers reported different levels of difficulty in filling positions requiring different levels of experience. Finally, the current survey added additional questions on use of the workforce development system as well as more details on training and benefits.

Taken in conjunction with the results of the previous surveys, the current findings provide answers to the following questions:

1. What is the current and recent state of hiring by employers in the state?
2. Are employers having difficulties hiring, and if so, which employers and to what extent?
3. What reasons do employers give for hiring difficulties?
4. What are employers' current strategies for recruiting and retaining workers?
5. How do employers respond to workforce challenges? Do they use the resources available to them through the state's workforce development system?

## METHODOLOGY

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The 2018 Employer Needs Survey collected information using the same survey instrument for several distinct samples based on geography and industry. This year, the sample included establishments with 10 or more employees. The samples were drawn from the 2017 Quarter 1 Quarterly Census of Employment and Wages (QCEW), an administrative source containing public and private establishments in North Carolina covered under the Unemployment Insurance System. The Overall sample is a stratified sample drawn based on county and its geographic and official designation of Metropolitan and Micropolitan status by the United States Federal Office of Management and Budget. The four different sized labor markets in North Carolina that comprise the Overall sample are:

- Large Labor Markets- Comprised of counties in the three largest Metropolitan Statistical Areas: Charlotte, and the Triangle region (Raleigh and Durham-Chapel Hill).
- Medium Labor Markets- Comprised of other Metropolitan Statistical Areas across North Carolina including Asheville, Burlington, Fayetteville, Greensboro-High Point, Hickory-Lenoir-Morganton, Jacksonville, New Bern, Rocky Mount, Wilmington, and Winston-Salem.
- Micropolitan Labor Markets- Comprised of Micropolitan Statistical Areas which are not part of a larger Metropolitan Statistical Area
- Rural Labor Markets- Comprised of counties not located within Metropolitan or Micropolitan Statistical Areas

The survey also includes a separate sample of Manufacturing firms across the state, as well as a STEM sample across the state from each of the following groups (with their associated NAICS Codes):

- Manufacturing (310000-339999)
- STEM (Software Publishers (5112), Wired Telecommunications Carriers (5171), Wireless Telecommunications Carriers (5172), Satellite Telecommunications (5174), Other Telecommunications (5179), Data Processing and Related Services (5182), Other Information Services (5191), Architectural and Engineering Services (5413), Computer Systems Design and Related Services (5415), Management & Technical Consulting Services (5416), Scientific Research & Development Services (5417), Other Professional & Technical Services (5419))

The Center for Urban Affairs and Community Services (CUACS) at NC State University conducted telephone interviews for the Overall and Manufacturing samples between September and November 2017. In total, the interviewers collected 1,956 survey responses from all 100 counties. The achieved sample for the Overall and Manufacturing samples generally reflect the industrial mix across the state. Data from the STEM sample was collected by CUACS between March and April 2018, and included 405 survey responses.

In order to have an overall representative sample across the state, sampling weights were applied based on the likelihood of being chosen for the sample within each strata, as well as likelihood of being chosen as a particular establishment within a multi-establishment firm and strata. The STEM sample had an achieved sample whose weighted cases did not closely reflect the expected industrial mix, and further weighting for non-response was applied to these cases to more closely reflect the industrial mix within STEM. Results from this report will be based on percentages calculated using weighted data.

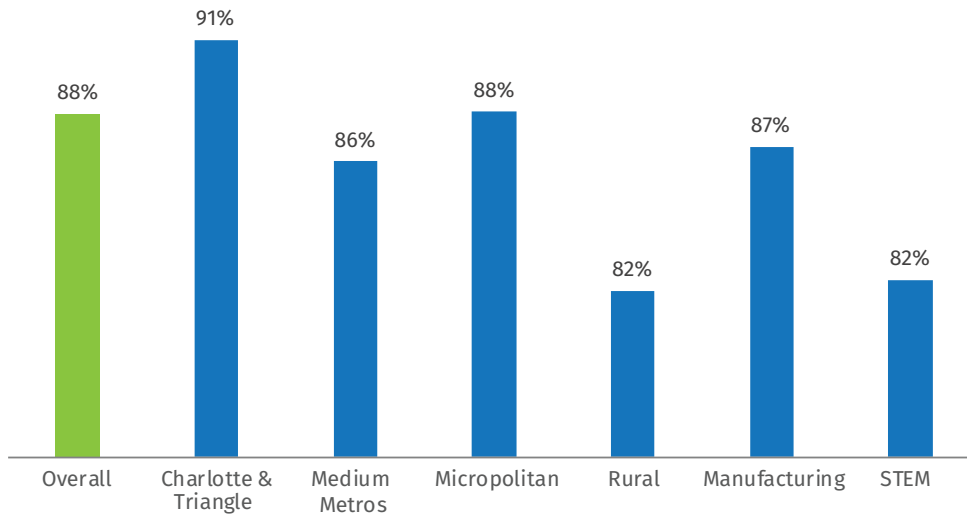
## FINDINGS

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### What percentage of employers are hiring?

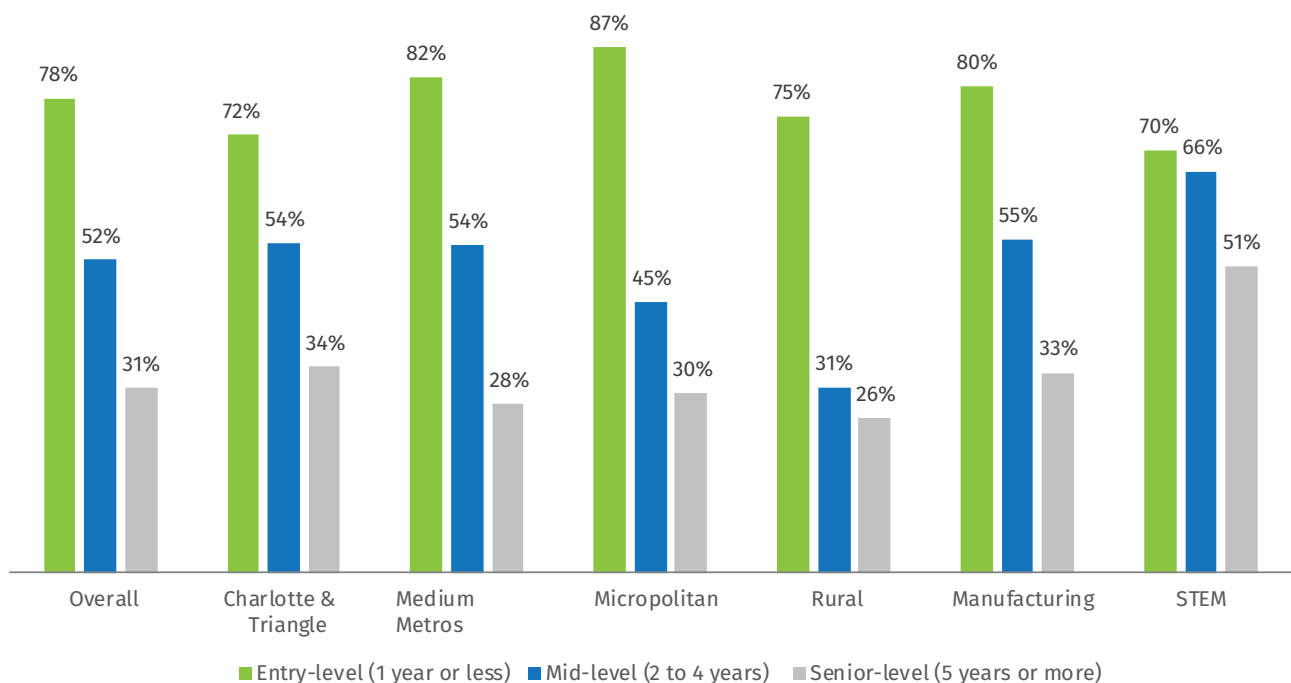
In order to understand the hiring needs of employers, it is important to establish how many employers have attempted to hire, recognizing that some employers may not try to grow in a given year. In the Overall sample, 88.0 percent of respondents attempted to hire at least one position in the previous 12 months—a finding that was very similar to the previous two surveys (89.0% in 2016 and 88.5% in 2014). Among the regions, the **Large** labor markets (Charlotte and the Triangle) attempted to hire a bit more (90.6%) while the **Medium metros** (86.3%) and the **Rural** areas (81.8%) attempted a bit less. Manufacturers attempted to hire at the same rate, while **STEM** employers reported attempting to hire at lower percentages (82.2%).

## Percent of Employers Attempting to Hire in Previous 12 Months



The 2018 survey asked about the level of work experience required for the positions employers were trying to fill: **entry-level** positions requiring one year of experience or less; **mid-level** positions requiring two to four years; and **senior-level** positions requiring five years or more. Among employers that attempted to hire, 78.2 percent of the employers needed positions requiring **entry-level** experience, 51.6 percent of employers required positions with **mid-level** experience, and 30.5 percent of employers were looking to fill positions with **senior-level** experience. **Manufacturers** reported similar rates, while **STEM** employers reported lower rates for **entry-level** (69.7%) workers and higher rates for **mid-level** (66.1%) and **senior-level** (50.5%) workers.

## Percent of Employers Attempting to Hire by Experience Level of Position



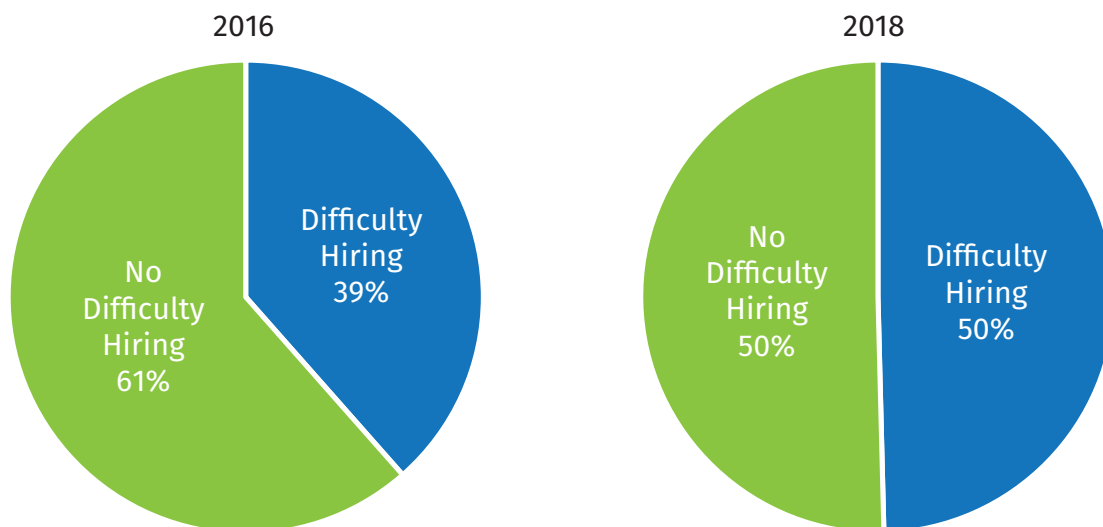
## What percentage of employers are having difficulties hiring?

Employers who reported attempting to hire were asked if they had difficulty filling any of their positions in the past 12 months. This means that even if an employer had difficulty with filling just one out of many vacancies, that employer would be counted as experiencing hiring difficulties. By setting such a low threshold for difficulty, the survey aimed to capture any level of hiring problems experienced by an employer. In addition, because “difficulty” was not explicitly defined, employers in different industries could define the term for themselves. As a result, this approach should be thought of as capturing the maximum level of hiring difficulties as defined by employers themselves. In the current survey, 49.6 percent of employers in the Overall sample who tried to hire reported difficulty.

## Have hiring difficulties increased compared to previous surveys?

The percentage of employers reporting hiring difficulties in 2018 was significantly higher than the difficulty reported in 2016 (38.5%) and 2014 (44.6%) when comparing employers of the same size class.<sup>xi</sup>

### Percent of Hiring Establishments with Difficulty, Overall Sample\*

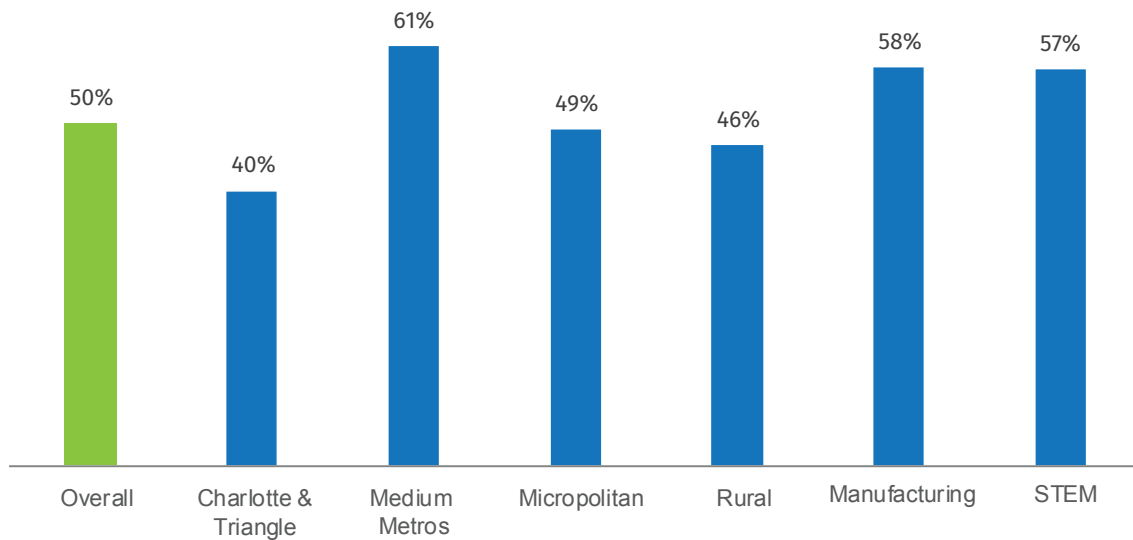


*\*Among establishments of 10 or more employees in the Overall samples*

## Regional and Industry differences in 2018

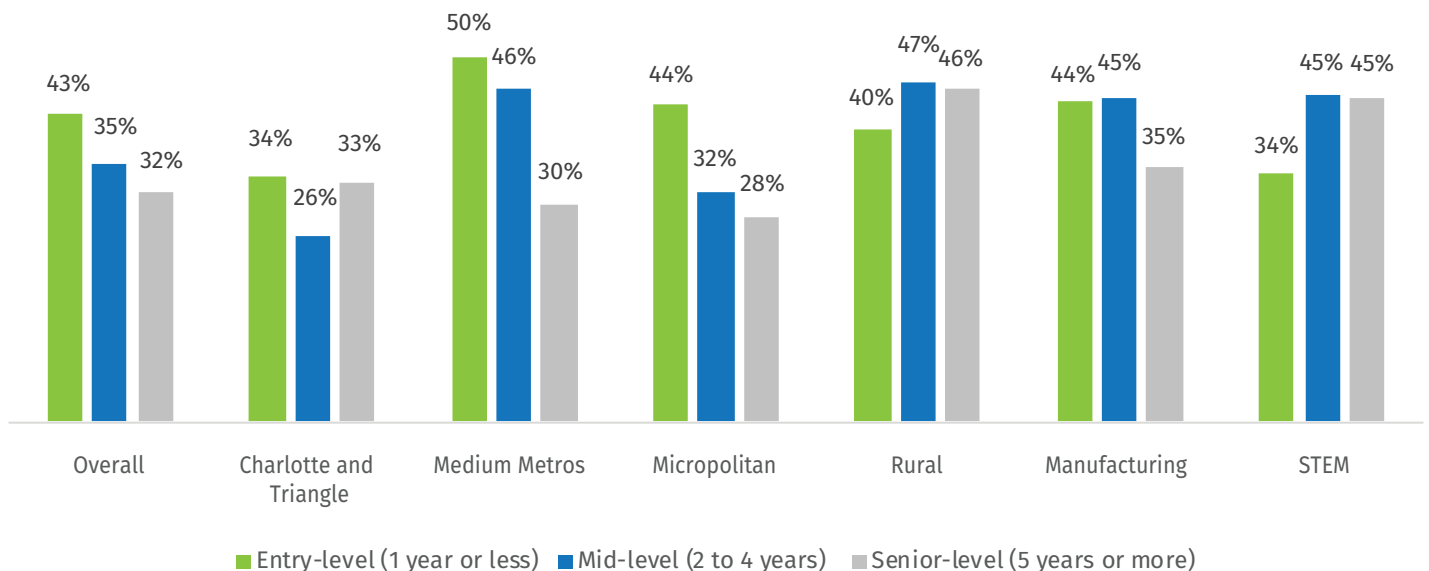
When looking across regions, **Large metros** experienced significantly less difficulty (39.8%) while the **Medium metros** experienced significantly more difficulty (60.7%) than the Overall sample at 49.6 percent. The **Micropolitan** (48.7%) and **Rural** (46.4%) labor markets experienced about the same level of difficulty as the Overall sample. 57.6 percent of **Manufacturers** attempting to hire reported difficulty, and 57.3 percent of **STEM** employers reported difficulty, a significant increase from their 2016 rates of 46.5 percent and 31.7 percent, respectively.

## Percent of Hiring Establishments with Difficulty by Region and Industry



Employers were also asked about the difficulty in filling positions by level of experience. Employers reported greater difficulty in filling **entry-level** positions—42.6 percent among the Overall sample of hiring employers—compared to filling **mid-level** (35.5%) and **senior-level** (31.8%) positions. Looking across the regions, two areas stand out: employers in the **Medium metros** had more difficulty hiring **entry-level** (50.4%) and **mid-level** positions (45.7%), and employers in **Rural** areas had more difficulty with **mid-level** (46.8%) and **senior-level** (45.7%) positions. **Manufacturers** had more difficulty with **mid-level** (44.6%) positions and **STEM** employers had less difficulty with **entry-level** (34.0%) positions but more difficulty with **mid-level** (44.8%) and **senior-level** (44.7%) positions as compared to the Overall sample.

## Percent of Hiring Establishments with Hiring Difficulty by Level of Experience

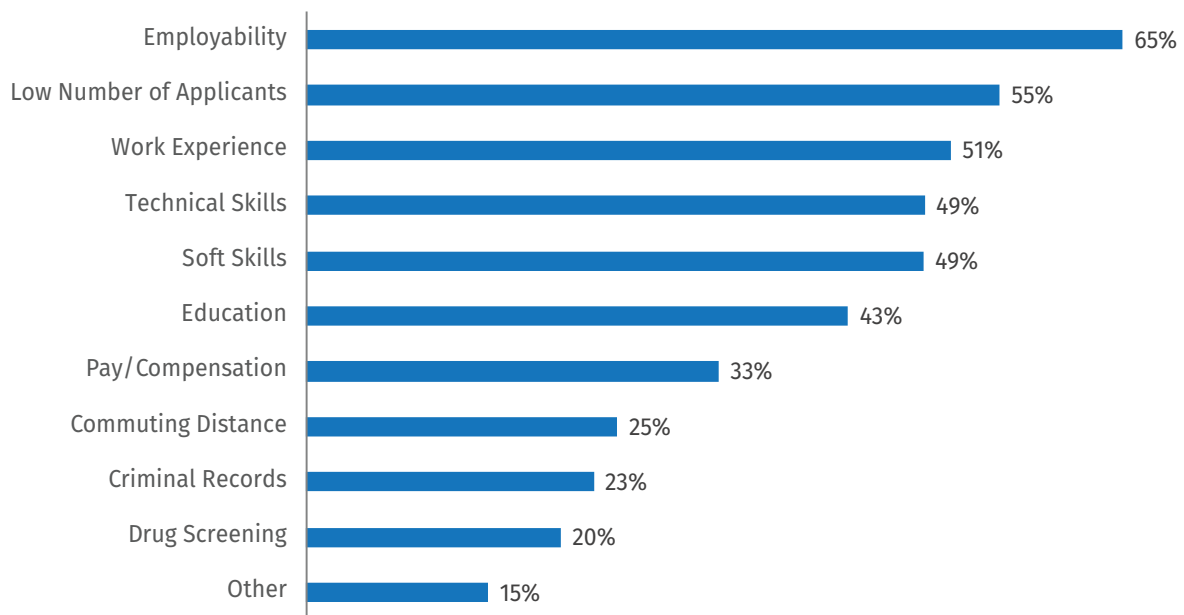


## What reasons do employers give for hiring difficulties?

Employers who had reported difficulties filling positions were asked about the reasons why and were able to select multiple responses from a range of possible explanations.<sup>xii</sup> It is important to note that there is potential overlap among these reasons, and it is possible for the same employer to have different reasons for multiple positions.

Among employers experiencing hiring difficulties in the Overall sample in 2018, the top reasons were applicants' lack of employability (including work ethic, professionalism, reliability, motivation) (65.1%), a low number of applicants (55.3%), and applicants' lack of relevant work experience (51.4%). A perceived lack of technical or occupation-related skills (49.3%) and soft skills (such as communication, teamwork, critical thinking, creativity) (49.2%) were close behind, with nearly half of employers with hiring difficulties choosing these reasons. Applicants' lack of the necessary education level, certification, or training (43.2%) was chosen by a substantial number of employers, followed by smaller percentages selecting applicants' unwillingness to accept the offered pay or compensation (32.9%), commuting distance or other geographic issues (24.8%), applicants' criminal records (22.9%), failure to pass drug screening (20.3%), or other reasons (14.5%).

### Reasons For Difficulty (Overall Sample, All Positions)

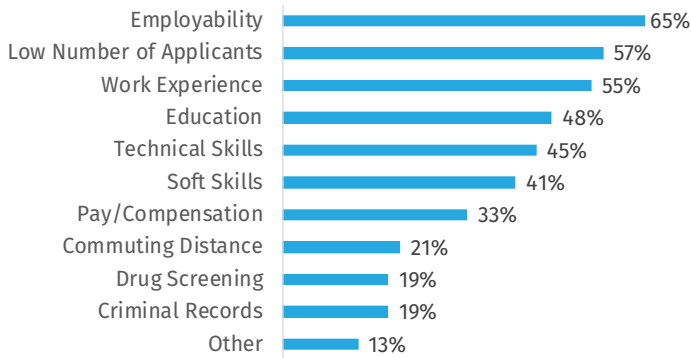


### Top Reasons for Difficulties by Region

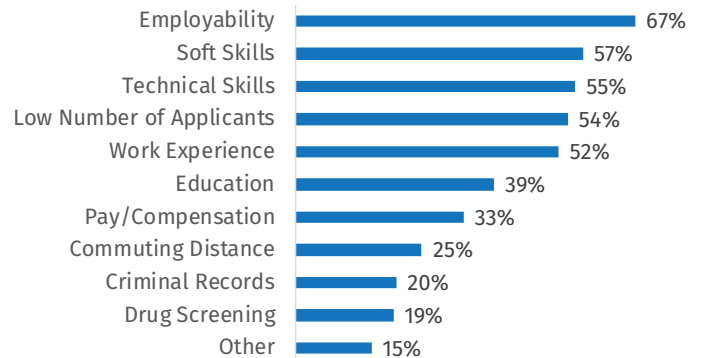
Employers in the **Large metros** (Charlotte and the Triangle) chose the same top three reasons as the Overall sample, followed by education (47.8%) and technical skills (45.2%). Work experience (54.8%) and education (47.8%) were more frequently selected in this region, and soft skills were less frequently chosen (41.4%).

Employers in the **Medium metros** chose employability (67.3%), soft skills (57.1%), and technical skills as the top three reasons for difficulty, which were all significantly higher than the Overall sample. A low number of applicants (54.1%) and work experience (52.1%) were also frequently chosen by regional employers.

### Large Metros



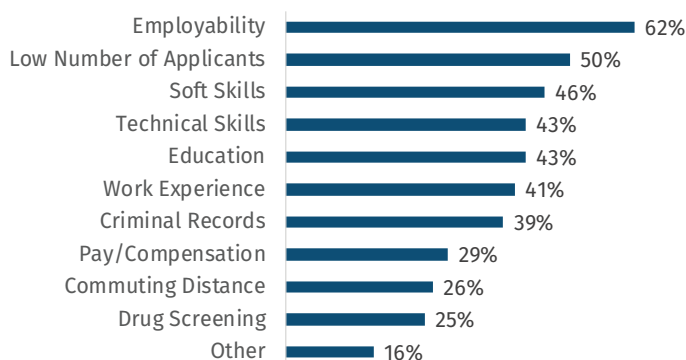
### Medium Metros



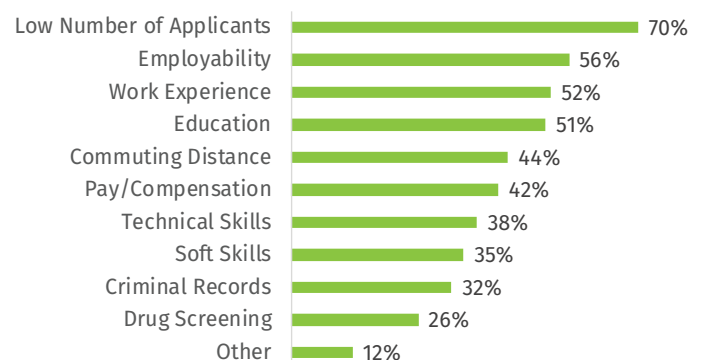
Employers in the **Micropolitan** labor markets chose employability (61.9%), a low number of applicants (50.4%), and soft skills (45.9%) as the top three reasons for difficulty, followed by education (42.6%) and technical skills (42.6%). Although not top reasons, having a criminal record (38.5%) and failing a drug test (24.6%) were significantly higher than the Overall sample.

Employers in the **Rural** labor markets cited a low number of applicants (70.0%) as the top reason for difficulty, a significantly higher percentage than the Overall sample. Employability (56.2%), a lack of work experience (52.4%), and education (51.4%) were also top reasons for difficulty. Commuting distance (43.8%) was significantly higher than the Overall sample, as were pay/compensation (41.9%), criminal records (32.4%), and drug screening (25.7%).

### Micropolitan



### Rural



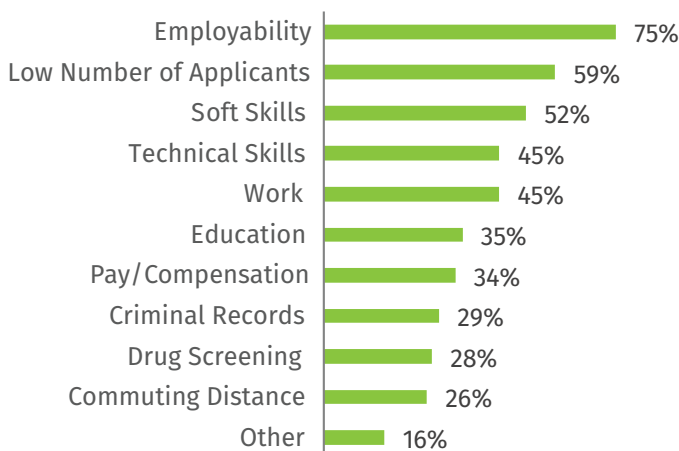


## Top Reasons for Hiring Difficulties by Level of Work Experience

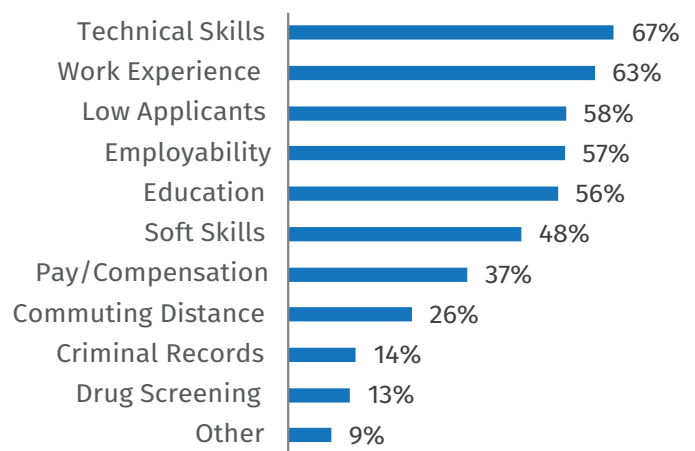
Employers in the Overall sample were asked about reasons for difficulty for positions by level of work experience, which differed in a few ways. Employers seeking to fill **entry-level** positions (requiring one year of experience or less) chose employability (74.6%) and a low number of applicants (59.1%) as the top reasons for hiring difficulties, followed by soft skills (51.7%). Having a criminal record (29.5%) and failing to pass a drug test (27.7%) were not top reasons but were mentioned about twice as frequently for entry-level positions than for mid- and senior-level positions.

Employers seeking **mid-level** positions (requiring two to four years) chose a lack of technical skills (67.5%), work experience (63.5%) and a low number of applicants (57.5%) most frequently, followed closely by employability (57.3%) and education (55.9%). Employers seeking more **senior-level** positions (requiring five years or more) chose work experience (61.2%), low number of applicants (58.9%), and education (56.1%) most frequently, followed by employability (48.5%) and technical skills (45.0%).

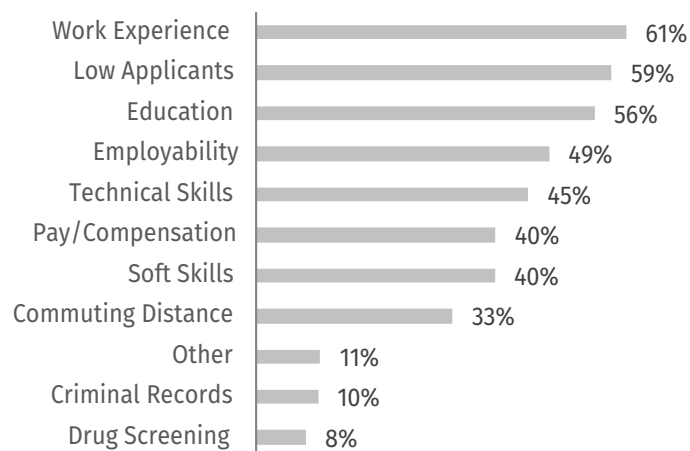
### Entry-Level Positions



### Mid-Level Positions



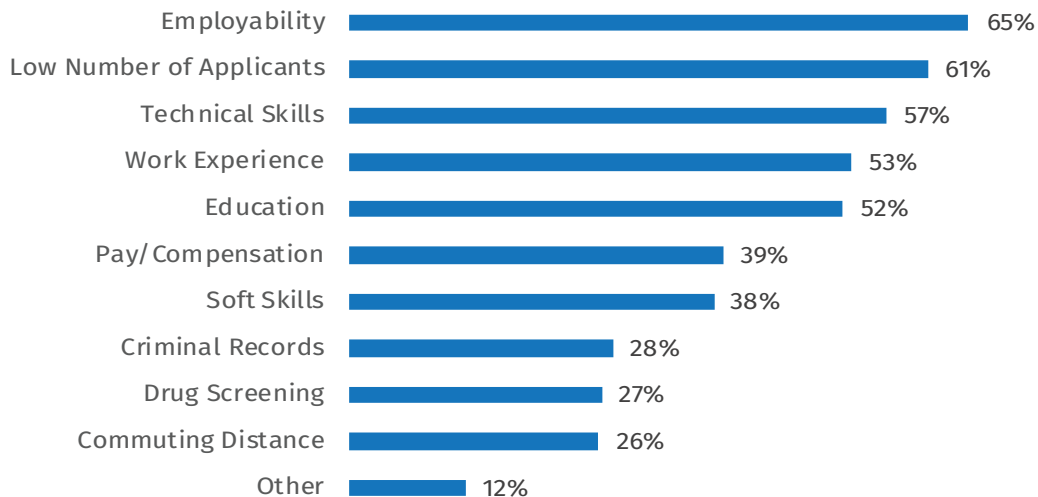
### Senior-Level Positions



## Top Reasons for Difficulty among Manufacturers and STEM employers

For all positions among **Manufacturers**, the top reasons for difficulty were similar to the Overall sample: employability (65.2%), a low number of applicants (60.9%), technical skills (56.6%), work experience (52.9%), and education or credentials (52.0%)—but technical skills and a lack of education or credentials were significantly higher than for the Overall employers.

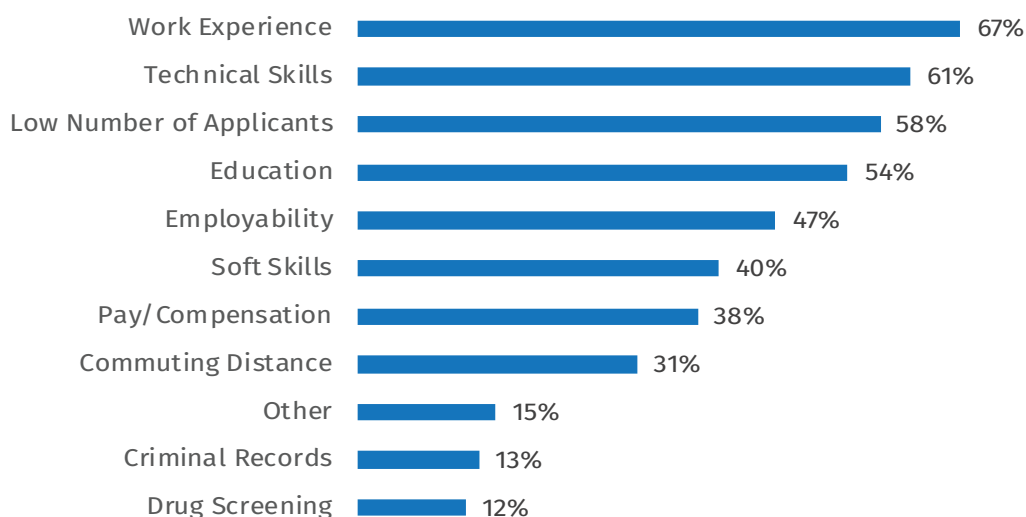
### Manufacturing (all positions)



For **entry-level** manufacturing positions, the top reasons were employability (78.3%), low number of applicants (51.4%), technical skills (46.7%), and work experience (44.6%). These reasons were similar to the Overall sample, although soft skills (42.8%) were less frequently chosen and drug screening (35.5%) was more frequently chosen. For **mid-level** positions, Manufacturers chose low number of applicants (66.0%), technical skills (63.9%), education (62.0%), work experience (60.7%), and employability (58.4%) as the top reasons for difficulties. Compared to the Overall sample, a low number of applicants (66.0%), criminal records (26.3%) and drug screening (23.9%) were significantly higher. For **senior-level** positions, Manufacturers chose education (73.5%), technical skills (68.1%), low number of applicants (68.1%), and work experience (57.4%) as the top reasons for difficulty. Compared to the Overall sample, education and technical skills were chosen at significantly higher percentages.

When looking at all **STEM** positions, employers chose work experience (67.0%), technical skills (61.4%), a low number of applicants (58.1%), education (54.5%), and employability (46.5%) as the top reasons for difficulty. Work experience, technical skills, and education were all significantly higher than the Overall sample, reflecting the more technical needs of these industries as well as STEM's larger hiring demand for mid- and senior-level positions relative to Manufacturing or the Overall samples.

## STEM (all positions)

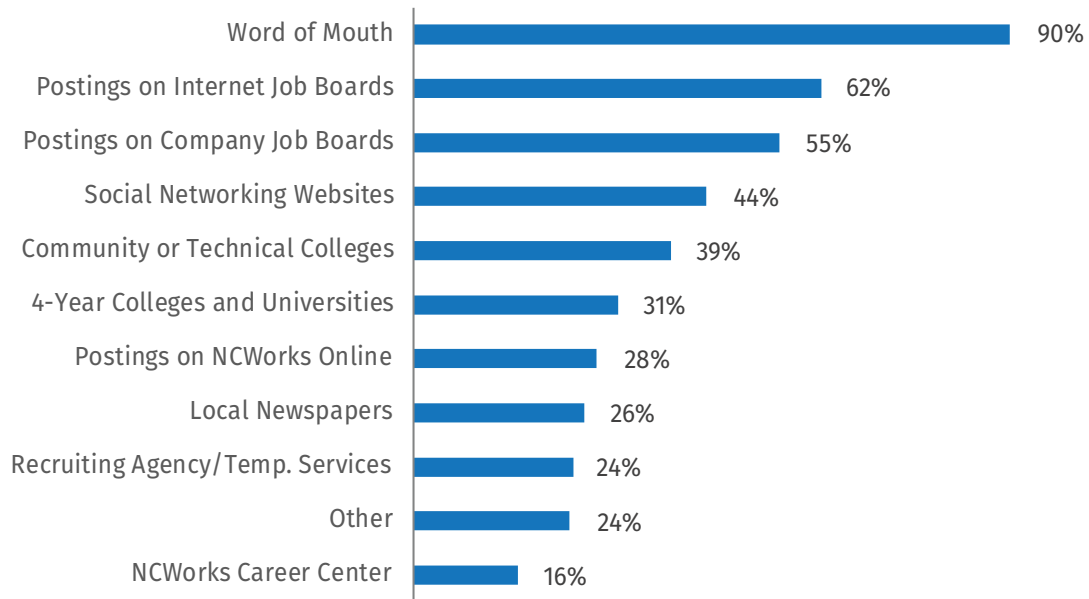


Employability was still the most frequent issue for STEM **entry-level** positions, but at a significantly lower rate (58.3%) than the Overall sample. A lack of work experience (48.6%), technical skills (48.0%), and a low number of applicants (46.8%) were other top reasons for difficulty hiring entry-level STEM positions. For **mid-level** positions, technical skills (75.1%), a lack of work experience (74.3%), education (65.6%), and a low number of applicants (59.8%) were the top reasons given for difficulty. For **senior-level** positions, a low number of applicants (63.9%), a lack of work experience (62.6%), and technical skills (54.6%) were the top three most frequently mentioned reasons for difficulty. Education (44.3%), employability (27.8%), and soft skills (22.6%) were significantly lower for these senior-level STEM positions than for the Overall sample.

## Resources for Recruiting

In order to better understand hiring practices, all employers (not just those that had attempted to hire in the past 12 months) were asked to identify any of the resources they use when recruiting. As in previous surveys, “word of mouth” was used by nearly all hiring employers (90.0%), followed by online postings on job boards (61.7%), company websites (55.3%), and social networking sites (44.2%), and community colleges (38.9%). Employers reported use of online postings and social networking websites at significantly higher rates than in 2016, perhaps reflecting tighter labor market conditions or simply greater adoption of this technology over time. In general, those with difficulty hiring were more likely to utilize each type of resource for recruiting than those without difficulty.

## Resources Used for Recruitment, Overall Sample



Compared to the Overall sample, employers in Charlotte and the Triangle were slightly less likely to use “word of mouth,” while employers in the other regions were more likely to use it. The use of NCWorks Online was higher in Rural areas (38.3%), Micropolitan areas (30.0%), and Medium labor markets (32.8%), but lower in Charlotte and the Triangle (19.7%). Employers in Medium labor markets (30.0%), Micropolitan areas (35.8%), and Rural areas (41.9%) were more likely to use local newspapers, while employers in Charlotte and the Triangle (15.4%) were less likely to use them. Recruiting agency/temporary employment services were used more frequently in Charlotte and the Triangle (27.4%) and less so in Micropolitan (17.9%) and Rural (12.0%) areas. A lower percentage of employers in Charlotte and the Triangle (10.2%) reported using NCWorks Career Centers, while employers reported higher percentages in Medium metros (17.0%), Micropolitan (23.9%) and Rural (23.3%) regions.

**Manufacturers** were much more likely to use recruiting agencies/temporary employment services (52.6%), community colleges (46.7%), NCWorks Online (42.6%), and NC Works Career Centers (24.6%) but less likely to use company job boards (41.5%), general internet job boards (56.5%), and social networking websites (37.2%). **STEM** employers were more likely to post on online job boards (77.5%) and their own company job boards (62.6%) as well as social networking websites (52.8%). They were also more likely to use 4-year colleges (46.1%) and community colleges (46.0%) as well as recruiting agencies or temporary employment services (31.2%).

## Workforce Challenges and Responses

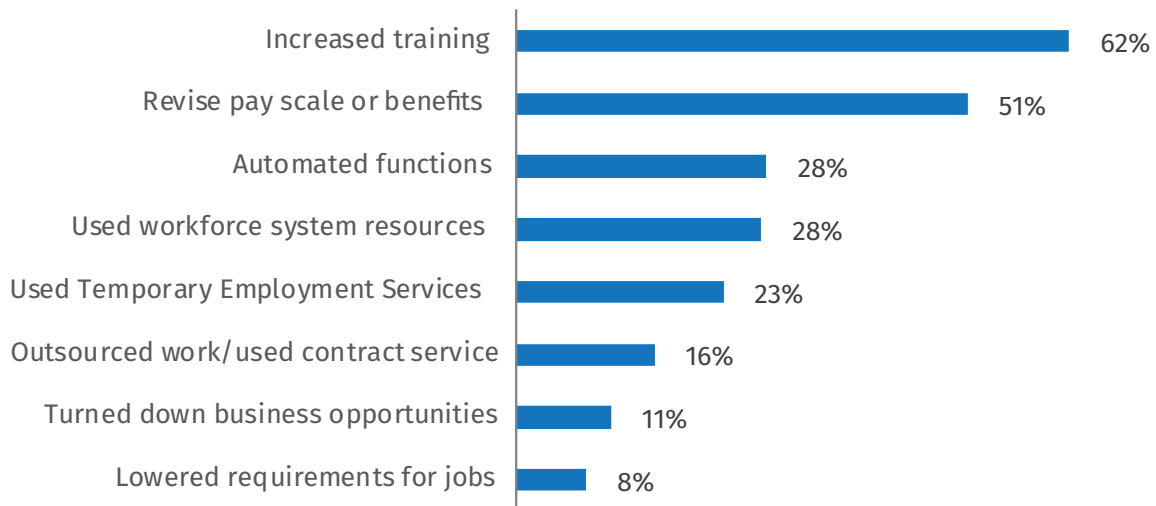
All employers were asked to choose their single biggest workforce challenge. Among the Overall employers, finding job candidates and dealing with turnover were each chosen by more than a third of respondents, a pattern that held across all regions. Among Manufacturers and STEM employers, finding job candidates was much more important, with turnover a distant second.

## Single Biggest Workforce Challenge

	Overall	Manufacturing	STEM
Finding job candidates	36%	55%	56%
Turnover	36%	20%	17%
Staff Development (Training Workers)	10%	9%	10%
Other	9%	9%	6%
Hiring	6%	6%	7%
Promotion/Advancement	3%	2%	4%

All employers were then asked about how they had responded to workforce challenges. Increased training and revising pay and benefits were the most common, with over half saying they had done so. Automation and using resources from the workforce system (such as NCWorks Career Centers or community colleges) were next at over a quarter of employers, followed by the use of temporary employment services. Employers reporting difficulty hiring were more likely to report using the workforce system (36.3%) versus those without difficulty (21.2%). **Manufacturers** were more likely to revise pay or benefits (60.3%), to use temporary services (51.0%) or outsource work (32.4%) as well as to automate functions (38.5%). They were also more likely to use workforce system resources (41.1%). **STEM** employers were similar to the Overall sample, although they were less likely to increase training (54.5%) and more likely to outsource work or use contractors (36.2%).

### Responding to Workforce Challenges, Overall Sample



### Using Workforce Development System Resources

Those employers who reported using workforce system resources were asked a follow-up question about which specific resources they had used. Manufacturers were significantly more likely to use NCWorks Online (69.5%) than employers in the Overall sample. STEM employers were less likely to use community colleges (67.3%) and NCWorks Career Centers (38.2%) but more likely to use NCWorks Online (63.6%).

Looking across regions, the Large metros were less likely to use NCWorks Career Centers (33.7%), NCWorks Online (41.1%), and workforce development boards (21.7%) and more likely to use community colleges (85.9%). The Medium metros were more likely to use NCWorks Career Centers (57.5%), NCWorks Online (62.7%), and workforce development boards (34.4%). The Micropolitan areas had no significant differences. The Rural employers were more likely to use NCWorks Career Centers (61.7%) and NCWorks Online (75.8%).

### Workforce System Resources Used

	Overall	Manufacturing	STEM
Community/Technical Colleges	82%	80%	67%
NCWorks Online	55%	70%	64%
NCWorks Career Centers	48%	51%	38%
Workforce Development Boards	29%	33%	26%
Other	4%	2%	5%

Employers who **did not** use workforce system resources were asked about why they didn't use them. A lack of awareness of existing resources was the most common answer, with about 45 percent of employers choosing this reason. Others felt the services did not fit the needs of their business or industry (41.0%) or that the job candidates available through these resources were not the right fit for their business (23.5%). There were significantly more employers citing a lack of awareness in Rural areas (60.1%), but also far fewer employers who felt the services did not fit the needs of their business (25.8%). Micropolitan employers cited job candidates were not a fit (30.4%) and that it was not worth the time or effort (27.7%) at higher rates. **Manufacturers** were more likely to choose a lack of awareness (52.7%) and were twice as likely to say it was not worth the time or effort (19.9%) than the Overall sample (10.0%)—however, it must be remembered that Manufacturers (41.1%) were significantly more likely to say they use workforce system resources than Overall employers (27.7%). **STEM** employers were more likely to say they were not aware of these resources (63.4%).

### Reasons for Not Using Workforce System Resources

	Overall	Manufacturing	STEM
Not aware of these resources	45%	53%	63%
Services do not fit the needs of my business or industry	41%	35%	23%
Job candidates available are not the right fit for my business	24%	27%	23%
Other	16%	14%	13%
Not worth the time or effort	10%	20%	12%
The quality of services isn't sufficient	8%	11%	11%

### Training and Benefits

All employers were asked about the resources they used to meet the skill needs of their workforce. Nearly all employers use informal on-the-job training, and large numbers use formal customized training at the workplace. Over half use self-study or online training, and nearly half use seminars

or conferences. **Manufacturers** were similar to the Overall employers, although less likely to use formal customized training, seminars or conferences, and self-study or online training. **STEM** employers were less likely to use informal training and more likely to use formal training, seminars, self-study, and apprenticeship programs.

### Resources to Meet Skill Needs

	Overall	Manufacturing	STEM
Informal training on the job	93%	94%	90%
Formal training customized by work	71%	65%	78%
Self-study or online training	57%	42%	70%
Seminars or conferences	46%	41%	69%
Formal training open to everyone	33%	32%	39%
Apprenticeship programs	23%	24%	29%
Other	7%	5%	10%
None	1%	1%	0%

Employers were asked to estimate the number of hours of professional development or training the average employee receives per year and the median was 20 hours for the Overall and **Manufacturing** samples and 25 hours for the **STEM** sample. Almost all employers used in-house or corporate staff to conduct professional development and training (95.5%), with smaller numbers using private vendors (38.4%) and community colleges (19.0%). **Manufacturers** were more likely to use community colleges (25.3%), while **STEM** employers were more likely to use private vendors (59.8%), apprenticeships (21.6%), and 4-year universities (17.7%).

Employers were also asked about whether they offered benefits to their employees. The Overall and **Manufacturing** responses were fairly similar, with **STEM** employers much more likely to offer health insurance, paid leave, and contribution to a pension/retirement plan. One interesting finding is that employers that offered benefits reported less difficulty hiring than those who didn't offer benefits. Forty-eight percent of employers that offered any type of benefit had difficulty hiring versus 63 percent of those that offered none. This was true for each benefit, including health insurance (47% vs. 59%), paid leave (46% vs. 64%), and contribution to pensions or retirement savings plans (45% vs. 59%).

### Benefits Offered by Employers

	Overall	Manufacturing	STEM
Any Benefit	87%	92%	98%
Paid Leave	79%	83%	94%
Health Insurance	76%	78%	87%
Contribution to Pension/Retirement	66%	67%	75%
No Benefits	13%	8%	1%
Other	11%	7%	9%



## General Assessment and Expectations of Future Hiring

All employers were asked to compare their experience filling positions to the previous year—61.5 percent said it was about the same level of difficulty as in the previous year, 24.1 percent said it was more difficult than the previous year, and 14.3 percent it was easier.

Looking forward, employers were asked about their expectations about employment levels. 54.4 percent expected employment levels to remain about the same, 44.3 percent expected employment to increase, and only 2.3 percent expected to decrease. There was little geographic difference with the exception of **Rural** employers, where 74.3 percent of employers expected to stay the same size, and only 23.9 percent expected to grow. **Manufacturers** were very similar in their outlook to the Overall sample, but 53.6 percent of **STEM** employers expected to increase and 4.7 percent expected to decrease.

## CONCLUSION

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The results of the 2018 survey are largely consistent with the findings of the 2016 and 2014 surveys and occur in the context of a tighter labor market in which employers are experiencing more difficulty than in past years—roughly half of those who try to hire encounter difficulty in filling at least one position. However, this means that the other half of employers who tried to hire had no difficulty—a reassuring statistic in an economy nearing or at full employment. As in previous years, nearly nine out of ten employers attempted to hire last year, another encouraging sign that almost all businesses in the state are seeking to grow. In assessing their difficulty levels, three-quarters of employers said it was about the same level or easier than the previous year, suggesting that conditions had not rapidly become more difficult. Just under half of employers expect to grow in the coming year, again suggesting that hiring difficulties were not a roadblock to growth for all companies (although rural employers were not as optimistic about growth).

However, in consideration of those companies which did experience difficulty, it is worth exploring the perceptions around job candidates' general employability, particularly for entry-level positions, which seems to be a common area of concern. Most employers (78.2%) were seeking entry-level positions and they reported more difficulty filling these positions, suggesting a potential area to target for workforce development efforts. For workforce development and education partners, this presents an opportunity to focus on jobseekers' work ethic, motivation, punctuality, and other characteristics that are important to employers in hiring and retention decisions. While some of these characteristics can be taught and emphasized through formal education, many of these skills are acquired through early work experience. One potential area for future research may be generational differences between employers and jobseekers around expectations for workers and the workplace. The declining prevalence of youth employment may also contribute to a lack of exposure to work environments, and programs which teach on-the-job learning such as apprenticeships may be a tool to address these needs.<sup>xiii</sup>

For employers dealing with the two top issues of employability and a low number of applicants, it is worth reevaluating the offered wages, which may need to be raised in a competitive labor market to attract sufficient numbers of qualified workers. Because wages have not risen substantially over the past decade, and because employers could rely on a large labor pool during

the Recession, some regions and industries may need to reassess if the offered wages are truly competitive. Fortunately, half of employers say they have revised their pay scale or benefits to respond to workforce challenges, which may lead to more attractive conditions for jobseekers. As the survey discovered, employers who offered any benefits to their workers reported less hiring difficulty than those that did not offer any. One potentially positive finding was that employers reported increased use of online postings as a recruitment tool, potentially broadening the pool of applicants they can attract. Competition for mid- and senior-level positions, which require more work experience, technical skills, and education and credentials is another area in which employers may have to be creative in recruitment and retention of workers.

Looking across the state, most labor markets were close to the average for hiring difficulty, with the exception of the Medium metropolitan areas, which reported higher levels of difficulty. From previous research, we know that many of the medium-sized metros have struggled with job growth following the Recession.<sup>xiv</sup> The two largest metros, with strong job growth and lower percentages of hiring difficulty, may attract workers from other regions of the state. Manufacturing and STEM industries also reported higher than average difficulty, although their reasons for difficulty and the types of positions they are seeking are different. These are potential areas to explore for research and workforce development interventions.

One finding of interest to workforce development partners is that while some employers are using the workforce development system, there are more that are not using it and are unaware of the existing resources available to them, particularly in rural areas and among Manufacturing and STEM employers. Another area of potential concern is the degree to which automation and the use of temporary or contract labor may replace and transform the traditional uses of labor. Finally, with the potential for another recession somewhere on the horizon after a long but slow recovery, it is worth looking ahead to the future needs of employers and jobseekers if economic conditions rapidly deteriorate.

# ENDNOTES

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<sup>i</sup>See “Hiring Difficulties across Industries and Location” by Mels de Zeeuw from the Federal Reserve Bank of Atlanta for results from the national 2017 Small Business Credit Survey, available at <https://www.frbatlanta.org/cweo/publications/workforce-currents/2018/04-hiring-difficulties-across-industries-and-location-2018-04-24>

<sup>ii</sup>See “Where Are the Workers?": Assessing Labor Market Mismatch Using the Beveridge Curve” by Andrew Berger-Gross, Labor and Economic Analysis Division, North Carolina Department of Commerce at <http://www.nccommerce.com/lead/research-publications/the-lead-feed/artmid/11056/articleid/29/%E2%80%9Cwhere-are-the-workers%E2%80%9D-assessing-labor-market-mismatch-using-the-beveridge-curve>

<sup>iii</sup>For a recent look at statewide conditions, see “The Data Roller Coaster: A Revised Take On North Carolina’s Labor Force Trends” by Andrew Berger-Gross, Labor and Economic Analysis Division, North Carolina Department of Commerce at <http://www.nccommerce.com/lead/research-publications/the-lead-feed/artmid/11056/articleid/354/the-data-roller-coaster-a-revised-take-on-north-carolina%E2%80%99s-labor-force-trends>

<sup>iv</sup>Previous employer surveys in North Carolina included a 2012 survey by the North Carolina Association of Workforce Development Boards called “Closing the Gap: 2012 Skills Survey of North Carolina Employers” as well as the Greensboro Chamber of Commerce, Greensboro/High Point/Guilford County Workforce Development Board and Human Resource Management Association of Greensboro’s “2012 Greater Greensboro Workforce Development Survey” as well as LEAD’s 2014 and 2016 Employer Needs Survey. RTI International recently carried out a study in the Triangle titled “Triangle Talent: Understanding the Skills Gap,” available at <https://www.rti.org/announcements/rti-international-presents-new-study-industry-talent-and-skills-needs-rtp>

<sup>v</sup>Peter H. Cappelli. 2015. “Skill Gaps, Skill Shortages, and Skill Mismatches: Evidence and Arguments for the United States.” ILR Review 68(2): 251-290.) Both Cappelli and Paul Krugman ([http://www.nytimes.com/2014/03/31/opinion/krugman-jobs-and-skills-and-zombies.html?\\_r=2](http://www.nytimes.com/2014/03/31/opinion/krugman-jobs-and-skills-and-zombies.html?_r=2)) offer critical takes on the “skills gap” as commonly seen in popular media; for contrary perspectives, see James Bessen’s “Employers Aren’t Just Whining – the “Skills Gap” Is Real” (Harvard Business Review, 2014) <https://hbr.org/2014/08/employers-arent-just-whining-the-skills-gap-is-real/> and Jonathan Rothwell’s piece “Understanding Hiring Difficulty: It’s Not that Complicated” (Brookings, 2014) <http://www.brookings.edu/blogs/the-avenue/posts/2014/07/11-hiring-difficulty-rothwell> Barbara Kaviat’s “The Big Jobs Myth: American Workers Aren’t Ready for American Jobs,” (The Atlantic, 2012) provides a history of the “skills gap” debate and its ability to mean many things to many different audiences <https://www.theatlantic.com/business/archive/2012/07/the-big-jobs-myth-american-workers-arent-ready-for-american-jobs/260169/>

<sup>vi</sup>See for example, <http://www.infor.com/content/brochures/skillgaps-in-manufacturing.pdf/>

<sup>vii</sup>See for example, <https://www.pwc.com/gx/en/hr-management-services/publications/assets/linkedin.pdf>

<sup>viii</sup>Available at <https://www.nccommerce.com/Portals/47/Publications/Industry%20Reports/2016-Employer-Needs-Survey.pdf> and <https://www.nccommerce.com/Portals/11/Documents/Commission/2014%20Employer%20Needs%20Survey.pdf>

<sup>ix</sup>The three surveys included establishments of different sizes: 10-499 for 2014, all sizes for 2016, and 10 and above for 2018.

<sup>x</sup>Metropolitan Statistical Areas, as defined by the U.S. Office of Management and Budget, have an urban area of at least 50,000 and related counties with a total population of at least 100,000; Micropolitan Statistical Areas have an urban cluster of at least 10,000 but less than 50,000. A map of the current Metropolitan and Micropolitan Counties is available at <http://www.nccommerce.com/Portals/47/MapData/Metro-Micro-2013.pdf>

<sup>xi</sup> Comparison among establishments of 10 or more employees.

<sup>xiii</sup>See “The Decline in Summer Youth Employment” by Devon Holmes, Labor and Economic Analysis Division, North Carolina Department of Commerce, for a discussion of declining youth labor force participation in the state, available at <https://www.nccommerce.com/lead/research-publications/the-lead-feed/artmid/11056/articleid/309/the-decline-in-summer-youth-employment>

<sup>xiv</sup>See “The Geography of Job Growth in North Carolina” by Lindsay Johnston, Labor and Economic Analysis Division, North Carolina Department of Commerce, for an overview of how different metropolitan regions in North Carolina have fared since the Great Recession, available at <http://www.nccommerce.com/lead/research-publications/the-lead-feed/artmid/11056/articleid/334/the-geography-of-job-growth-in-north-carolina>

# APPENDIX

## Industry of Overall Sample (All Cases: Unweighted)

NAICS Sector	Industry	# of Establishments	% of Respondents
11	Agriculture, Forestry, Fishing & Hunting	29	1.9%
21	Mining	2	0.1%
22	Utilities	5	0.3%
23	Construction	144	9.3%
31	Manufacturing	128	8.3%
42	Wholesale Trade	88	5.7%
44	Retail Trade	223	14.4%
48	Transportation & Warehousing	33	2.1%
51	Information	14	0.9%
52	Finance & Insurance	24	1.6%
53	Real Estate, Rental & Leasing	22	1.4%
54	Professional & Technical Services	53	3.4%
55	Management of Companies & Enterprises	11	0.7%
56	Administrative & Waste Services	81	5.2%
61	Educational Services	42	2.7%
62	Health Care & Social Assistance	223	14.4%
71	Arts, Entertainment & Recreation	35	2.3%
72	Accommodation & Food Services	278	18.0%
81	Other Services (Except Public Admin.)	71	4.6%
92	Public Administration	43	2.8%
<b>Total</b>		<b>1,549</b>	<b>100%</b>

## Industry of Overall Sample (All Cases: Weighted)

NAICS Sector	Industry	# of Establishments	% of Respondents
11	Agriculture, Forestry, Fishing & Hunting	94.7	1.0%
21	Mining	2.0	0.0%
22	Utilities	19.8	0.2%
23	Construction	608.3	6.3%
31	Manufacturing	630.9	6.5%
42	Wholesale Trade	550.8	5.7%
44	Retail Trade	2112.2	21.7%
48	Transportation & Warehousing	246.8	2.5%
51	Information	80.7	0.8%
52	Finance & Insurance	160.8	1.7%
53	Real Estate, Rental & Leasing	226.2	2.3%
54	Professional & Technical Services	305.5	3.1%
55	Management of Companies & Enterprises	88.5	0.9%
56	Administrative & Waste Services	440.2	4.5%
61	Educational Services	655.9	6.7%
62	Health Care & Social Assistance	1197.1	12.3%
71	Arts, Entertainment & Recreation	181.0	1.9%
72	Accommodation & Food Services	1626.7	16.7%
81	Other Services (Except Public Admin.)	383.6	3.9%
92	Public Administration	120.7	1.2%
<b>Total</b>		<b>9732.2</b>	<b>100%</b>

## Industry of Overall Sample (Large Labor Market: Unweighted)

NAICS Sector	Industry	# of Establishments	% of Respondents
11	Agriculture, Forestry, Fishing & Hunting	5	1.3%
21	Mining	0	0.0%
22	Utilities	1	0.3%
23	Construction	32	8.2%
31	Manufacturing	29	7.4%
42	Wholesale Trade	29	7.4%
44	Retail Trade	54	13.8%
48	Transportation & Warehousing	9	2.3%
51	Information	6	1.5%
52	Finance & Insurance	13	3.3%
53	Real Estate, Rental & Leasing	9	2.3%
54	Professional & Technical Services	24	6.1%
55	Management of Companies & Enterprises	2	0.5%
56	Administrative & Waste Services	19	4.9%
61	Educational Services	9	2.3%
62	Health Care & Social Assistance	44	11.3%
71	Arts, Entertainment & Recreation	10	2.6%
72	Accommodation & Food Services	77	19.7%
81	Other Services (Except Public Admin.)	16	4.1%
92	Public Administration	3	0.8%
<b>Total</b>		<b>391</b>	<b>100%</b>

## Industry of Overall Sample (Large Labor Market: Weighted)

NAICS Sector	Industry	# of Establishments	% of Respondents
11	Agriculture, Forestry, Fishing & Hunting	44.3	1.2%
21	Mining	0.0	0.0%
22	Utilities	7.4	0.2%
23	Construction	236.1	6.1%
31	Manufacturing	236.1	6.1%
42	Wholesale Trade	324.6	8.4%
44	Retail Trade	723.0	18.7%
48	Transportation & Warehousing	81.1	2.1%
51	Information	44.3	1.2%
52	Finance & Insurance	103.3	2.7%
53	Real Estate, Rental & Leasing	66.4	1.7%
54	Professional & Technical Services	191.8	5.0%
55	Management of Companies & Enterprises	22.1	0.6%
56	Administrative & Waste Services	140.2	3.6%
61	Educational Services	250.8	6.5%
62	Health Care & Social Assistance	413.1	10.7%
71	Arts, Entertainment & Recreation	81.1	2.1%
72	Accommodation & Food Services	737.7	19.1%
81	Other Services (Except Public Admin.)	140.2	3.6%
92	Public Administration	22.1	0.6%
<b>Total</b>		<b>3865.6</b>	<b>100%</b>



## Industry of Overall Sample (Medium Labor Market: Unweighted)

NAICS Sector	Industry	# of Establishments	% of Respondents
11	Agriculture, Forestry, Fishing & Hunting	4	1.0%
21	Mining	0	0.0%
22	Utilities	1	0.2%
23	Construction	34	8.2%
31	Manufacturing	34	8.2%
42	Wholesale Trade	26	6.2%
44	Retail Trade	61	14.6%
48	Transportation & Warehousing	9	2.2%
51	Information	3	0.7%
52	Finance & Insurance	5	1.2%
53	Real Estate, Rental & Leasing	8	1.9%
54	Professional & Technical Services	12	2.9%
55	Management of Companies & Enterprises	6	1.4%
56	Administrative & Waste Services	27	6.5%
61	Educational Services	13	3.1%
62	Health Care & Social Assistance	62	14.9%
71	Arts, Entertainment & Recreation	10	2.4%
72	Accommodation & Food Services	71	17.0%
81	Other Services (Except Public Admin.)	24	5.8%
92	Public Administration	7	1.7%
<b>Total</b>		<b>417</b>	<b>100%</b>

## Industry of Overall Sample (Medium Labor Market: Weighted)

NAICS Sector	Industry	# of Establishments	% of Respondents
11	Agriculture, Forestry, Fishing & Hunting	26.2	0.7%
21	Mining	0.0	0.0%
22	Utilities	6.5	0.2%
23	Construction	235.6	6.0%
31	Manufacturing	261.8	6.7%
42	Wholesale Trade	170.1	4.3%
44	Retail Trade	831.1	21.2%
48	Transportation & Warehousing	144.0	3.7%
51	Information	26.2	0.7%
52	Finance & Insurance	45.8	1.2%
53	Real Estate, Rental & Leasing	150.5	3.8%
54	Professional & Technical Services	78.5	2.0%
55	Management of Companies & Enterprises	52.4	1.3%
56	Administrative & Waste Services	216.0	5.5%
61	Educational Services	248.7	6.3%
62	Health Care & Social Assistance	510.4	13.0%
71	Arts, Entertainment & Recreation	72.0	1.8%
72	Accommodation & Food Services	621.7	15.8%
81	Other Services (Except Public Admin.)	183.2	4.7%
92	Public Administration	45.8	1.2%
<b>Total</b>		<b>3926.4</b>	<b>100%</b>

## Industry of Overall Sample (Micropolitan Labor Market: Unweighted)

NAICS Sector	Industry	# of Establishments	% of Respondents
11	Agriculture, Forestry, Fishing & Hunting	3	0.8%
21	Mining	0	0.0%
22	Utilities	2	0.5%
23	Construction	41	10.7%
31	Manufacturing	36	9.4%
42	Wholesale Trade	14	3.7%
44	Retail Trade	61	15.9%
48	Transportation & Warehousing	4	1.0%
51	Information	3	0.8%
52	Finance & Insurance	4	1.0%
53	Real Estate, Rental & Leasing	3	0.8%
54	Professional & Technical Services	11	2.9%
55	Management of Companies & Enterprises	0	0.0%
56	Administrative & Waste Services	22	5.7%
61	Educational Services	9	2.4%
62	Health Care & Social Assistance	67	17.5%
71	Arts, Entertainment & Recreation	9	2.4%
72	Accommodation & Food Services	67	17.5%
81	Other Services (Except Public Admin.)	17	4.4%
92	Public Administration	10	2.6%
<b>Total</b>		<b>383</b>	<b>100%</b>

## Industry of Overall Sample (Micropolitan Labor Market: Weighted)

NAICS Sector	Industry	# of Establishments	% of Respondents
11	Agriculture, Forestry, Fishing & Hunting	7.3	0.5%
21	Mining	0.0	0.0%
22	Utilities	4.9	0.4%
23	Construction	99.6	7.2%
31	Manufacturing	102.1	7.4%
42	Wholesale Trade	34.0	2.5%
44	Retail Trade	413.1	29.8%
48	Transportation & Warehousing	9.7	0.7%
51	Information	7.3	0.5%
52	Finance & Insurance	9.7	0.7%
53	Real Estate, Rental & Leasing	7.3	0.5%
54	Professional & Technical Services	29.2	2.1%
55	Management of Companies & Enterprises	0.0	0.0%
56	Administrative & Waste Services	68.0	4.9%
61	Educational Services	109.4	7.9%
62	Health Care & Social Assistance	206.6	14.9%
71	Arts, Entertainment & Recreation	21.9	1.6%
72	Accommodation & Food Services	182.3	13.2%
81	Other Services (Except Public Admin.)	46.2	3.3%
92	Public Administration	26.7	1.9%
<b>Total</b>		<b>1385.2</b>	<b>100%</b>

## Industry of Overall Sample (Rural Labor Market: Unweighted)

NAICS Sector	Industry	# of Establishments	% of Respondents
11	Agriculture, Forestry, Fishing & Hunting	17	4.8%
21	Mining	2	0.6%
22	Utilities	1	0.3%
23	Construction	37	10.3%
31	Manufacturing	29	8.1%
42	Wholesale Trade	19	5.3%
44	Retail Trade	47	13.1%
48	Transportation & Warehousing	11	3.1%
51	Information	2	0.6%
52	Finance & Insurance	2	0.6%
53	Real Estate, Rental & Leasing	2	0.6%
54	Professional & Technical Services	6	1.7%
55	Management of Companies & Enterprises	3	0.8%
56	Administrative & Waste Services	13	3.6%
61	Educational Services	11	3.1%
62	Health Care & Social Assistance	50	14.0%
71	Arts, Entertainment & Recreation	6	1.7%
72	Accommodation & Food Services	63	17.6%
81	Other Services (Except Public Admin.)	14	3.9%
92	Public Administration	23	6.4%
<b>Total</b>		<b>358</b>	<b>100%</b>

## Industry of Overall Sample (Rural Labor Market: Weighted)

NAICS Sector	Industry	# of Establishments	% of Respondents
11	Agriculture, Forestry, Fishing & Hunting	17.0	3.1%
21	Mining	2.0	0.4%
22	Utilities	1.0	0.2%
23	Construction	37.0	6.7%
31	Manufacturing	31.0	5.6%
42	Wholesale Trade	22.0	4.0%
44	Retail Trade	145.0	26.1%
48	Transportation & Warehousing	12.0	2.2%
51	Information	3.0	0.5%
52	Finance & Insurance	2.0	0.4%
53	Real Estate, Rental & Leasing	2.0	0.4%
54	Professional & Technical Services	6.0	1.1%
55	Management of Companies & Enterprises	14.0	2.5%
56	Administrative & Waste Services	16.0	2.9%
61	Educational Services	47.0	8.5%
62	Health Care & Social Assistance	67.0	12.1%
71	Arts, Entertainment & Recreation	6.0	1.1%
72	Accommodation & Food Services	85.0	15.3%
81	Other Services (Except Public Admin.)	14.0	2.5%
92	Public Administration	26.0	4.7%
<b>Total</b>		<b>555.0</b>	<b>100%</b>

## Detailed Industry of Manufacturing Sample (unweighted)

NAICS Sector	Industry	# of Establishments	% of Respondents
311	Food Manufacturing	36	7.1%
312	Beverage and Tobacco Product Manufacturing	19	3.8%
313	Textile Mills	24	4.8%
314	Textile Product Mills	9	1.8%
315	Apparel Manufacturing	21	4.2%
316	Leather and Allied Product Manufacturing	3	0.6%
321	Wood Product Manufacturing	48	9.5%
322	Paper Manufacturing	14	2.8%
323	Printing and Related Support Activities	31	6.1%
324	Petroleum and Coal Products Manufacturing	1	0.2%
325	Chemical Manufacturing	27	5.3%
326	Plastics and Rubber Products Manufacturing	27	5.3%
327	Nonmetallic Mineral Product Manufacturing	21	4.2%
331	Primary Metal Manufacturing	3	0.6%
332	Fabricated Metal Product Manufacturing	76	15.0%
333	Machinery Manufacturing	42	8.3%
334	Computer and Electronic Product Manufacturing	13	2.6%
335	Electrical Equipment, Appliance, and Component Manufacturing	13	2.6%
336	Transportation Equipment Manufacturing	18	3.6%
337	Furniture and Related Product Manufacturing	32	6.3%
339	Miscellaneous Manufacturing	27	5.3%
<b>Total</b>		<b>505</b>	<b>100%</b>

Missing cases: 2



## Detailed Industry of Manufacturing Sample (weighted)

NAICS Sector	Industry	# of Establishments	% of Respondents
311	Food Manufacturing	40.0	7.1%
312	Beverage and Tobacco Product Manufacturing	19.0	3.4%
313	Textile Mills	33.0	5.9%
314	Textile Product Mills	9.5	1.7%
315	Apparel Manufacturing	23.5	4.2%
316	Leather and Allied Product Manufacturing	3.0	0.5%
321	Wood Product Manufacturing	49.0	8.7%
322	Paper Manufacturing	21.0	3.7%
323	Printing and Related Support Activities	31.0	5.5%
324	Petroleum and Coal Products Manufacturing	1.0	0.2%
325	Chemical Manufacturing	28.0	5.0%
326	Plastics and Rubber Products Manufacturing	31.0	5.5%
327	Nonmetallic Mineral Product Manufacturing	30.5	5.4%
331	Primary Metal Manufacturing	3.0	0.5%
332	Fabricated Metal Product Manufacturing	78.0	13.9%
333	Machinery Manufacturing	43.5	7.7%
334	Computer and Electronic Product Manufacturing	13.0	2.3%
335	Electrical Equipment, Appliance, and Component Manufacturing	16.5	2.9%
336	Transportation Equipment Manufacturing	18.5	3.3%
337	Furniture and Related Product Manufacturing	35.5	6.3%
339	Miscellaneous Manufacturing	34.0	6.1%
<b>Total</b>		<b>561.5</b>	<b>100%</b>

## Detailed Industry of STEM Sample (unweighted)

NAICS Sector	Industry	# of Establishments	% of Respondents
5112	Software Publishers	8	2.0%
5173	Wired and Wireless Telecommunications Carriers	10	2.5%
5174	Satellite Telecommunications	1	0.2%
5179	Other Telecommunications	1	0.2%
5182	Data Processing, Hosting, and Related Services	5	1.2%
5191	Other Information Services	9	2.2%
5413	Architectural, Engineering, and Related Services	106	26.2%
5415	Computer Systems Design and Related Services	64	15.8%
5416	Management, Scientific, and Technical Consulting Services	75	18.5%
5417	Scientific Research and Development Services	17	4.2%
5419	Other Professional, Scientific, and Technical Services	109	26.9%
<b>Total</b>		<b>405</b>	<b>100%</b>

## Detailed Industry of STEM Sample (weighted)

NAICS Sector	Industry	# of Establishments	% of Respondents
5112	Software Publishers	14.4	3.4%
5173	Wired and Wireless Telecommunications Carriers	38.0	9.1%
5174	Satellite Telecommunications	0.3	0.1%
5179	Other Telecommunications	4.3	1.0%
5182	Data Processing, Hosting, and Related Services	14.5	3.5%
5191	Other Information Services	7.8	1.9%
5413	Architectural, Engineering, and Related Services	79.3	18.9%
5415	Computer Systems Design and Related Services	87.8	20.9%
5416	Management, Scientific, and Technical Consulting Services	75.4	18.0%
5417	Scientific Research and Development Services	26.4	6.3%
5419	Other Professional, Scientific, and Technical Services	71.3	17.0%
<b>Total</b>		<b>419.5</b>	<b>100%</b>

## How many employees (full-time & part-time) are at this location?

### Overall: All

Employees	Frequency	Percent
under 20	3462.5	36.0%
20-49	3351.3	34.9%
50-99	1654.4	17.2%
100-249	787.2	8.2%
250-499	228.3	2.4%
500+	125.0	1.3%
<b>Sum</b>	<b>9608.8</b>	<b>100%</b>

(weighted cases missing: 123.4)

### Overall: Large Labor Market

Employees	Frequency	Percent
under 20	1335.3	35.1%
20-49	1468.0	38.6%
50-99	634.4	16.7%
100-249	287.7	7.6%
250-499	44.3	1.2%
500+	29.5	0.8%
<b>Sum</b>	<b>3799.2</b>	<b>100%</b>

(weighted cases missing: 66.4)

### Overall: Medium Labor Market

Employees	Frequency	Percent
under 20	1348.1	34.7%
20-49	1321.9	34.0%
50-99	693.7	17.8%
100-249	366.5	9.4%
250-499	130.9	3.4%
500+	26.2	0.7%
<b>Sum</b>	<b>3887.1</b>	<b>100%</b>

(weighted cases missing: 39.3)

### Overall: Micropolitan Labor Market

Employees	Frequency	Percent
under 20	549.2	39.9%
20-49	403.4	29.3%
50-99	233.3	17.0%
100-249	102.1	7.4%
250-499	29.2	2.1%
500+	58.3	4.2%
<b>Sum</b>	<b>1375.5</b>	<b>100%</b>

(weighted cases missing: 9.7)

### Overall: Rural Labor Market

Employees	Frequency	Percent
under 20	230.0	42.0%
20-49	158.0	28.9%
50-99	93.0	17.0%
100-249	31.0	5.7%
250-499	24.0	4.4%
500+	11.0	2.0%
<b>Sum</b>	<b>547.0</b>	<b>100%</b>

(weighted cases missing: 8)

### Manufacturing

Employees	Frequency	Percent
under 20	167.0	30.2%
20-49	167.0	30.2%
50-99	110.5	20.0%
100-249	68.5	12.4%
250-499	28.5	5.1%
500+	12.0	2.2%
<b>Sum</b>	<b>553.5</b>	<b>100%</b>

(weighted cases missing: 8)

### STEM

Employees	Frequency	Percent
under 20	209.0	51.3%
20-49	119.5	29.3%
50-99	46.5	11.4%
100-249	22.7	5.6%
250-499	8.0	2.0%
500+	1.4	0.3%
<b>Sum</b>	<b>407.0</b>	<b>100%</b>

(weighted cases missing: 12.5)

## Has your establishment tried to fill any positions in the past 12 months?

Overall		
Yes	8538.4	88.0%
No	1164.3	12.0%
Don't Know	29.5	

Large Labor Market		
Yes	3474.6	90.6%
No	361.5	9.4%
Don't Know	29.5	

Medium Labor Market		
Yes	3389.8	86.3%
No	536.6	13.7%
Don't Know	0.0	

Micropolitan Labor Market		
Yes	1219.9	88.1%
No	165.2	11.9%
Don't Know	0.0	

Rural Labor Market		
Yes	454	81.8%
No	101	18.2%
Don't Know	0.0	

Manufacturing		
Yes	486	86.9%
No	73.5	13.1%
Don't Know	2.0	

STEM		
Yes	343.8	82.2%
No	74.4	17.8%
Don't Know	1.4	

## Of the positions you tried to fill, how many required Entry-Level (1 year or less) Working Experience?

Overall		
0	1453.1	17.0%
1 or more	6675.4	78.2%
Don't Know	409.8	4.8%

Large Labor Market		
0	826.2	23.8%
1 or more	2508.2	72.2%
Don't Know	140.2	4.0%

Medium Labor Market		
0	464.6	13.7%
1 or more	2768.1	81.7%
Don't Know	157.1	4.6%

Micropolitan Labor Market		
0	114.2	9.4%
1 or more	1057.1	86.7%
Don't Know	48.6	4.0%

Rural Labor Market		
0	48.0	10.6%
1 or more	342.0	75.3%
Don't Know	64.0	14.1%

Manufacturing		
0	72.0	14.8%
1 or more	390.0	80.2%
Don't Know	24.0	4.9%

STEM		
0	97.1	28.2%
1 or more	239.5	69.7%
Don't Know	7.2	2.1%

## Of the positions you tried to fill, how many required Mid-Level (2-4 years) Working Experience?

Overall		
0	3562.8	41.7%
1 or more	4404.2	51.6%
Don't Know	571.3	6.7%

Large Labor Market		
0	1232.0	35.5%
1 or more	1888.5	54.4%
Don't Know	354.1	10.2%

Medium Labor Market		
0	1439.7	42.5%
1 or more	1832.3	54.1%
Don't Know	117.8	3.5%

Micropolitan Labor Market		
0	639.1	52.4%
1 or more	544.4	44.6%
Don't Know	36.5	3.0%

Rural Labor Market		
0	252.0	55.5%
1 or more	139.0	30.6%
Don't Know	63.0	13.9%

Manufacturing		
0	194.5	40.0%
1 or more	267.0	54.9%
Don't Know	24.5	5.0%

STEM		
0	107.2	31.2%
1 or more	227.4	66.1%
Don't Know	9.2	2.7%

## Of the positions you tried to fill, how many required Senior-Level (5+ years) Working Experience?

Overall		
0	5253.3	61.5%
1 or more	2600.8	30.5%
Don't Know	684.3	8.0%

Large Labor Market		
0	1954.9	56.3%
1 or more	1180.3	34.0%
Don't Know	339.3	9.8%

Medium Labor Market		
0	2185.7	64.5%
1 or more	942.3	27.8%
Don't Know	261.8	7.7%

Micropolitan Labor Market		
0	811.7	66.5%
1 or more	362.1	29.7%
Don't Know	46.2	3.8%

Rural Labor Market		
0	301.0	66.3%
1 or more	116.0	25.6%
Don't Know	37.0	8.1%

Manufacturing		
0	311.0	64.0%
1 or more	160.5	33.0%
Don't Know	14.5	3.0%

STEM		
0	162.3	47.2%
1 or more	173.6	50.5%
Don't Know	7.9	2.3%

## Of the positions you tried to fill, about how many required..\*

Entry-Level (1 year or less) Working Experience

Sample	Mean Value
Overall	17.7
Large Labor Market	15.8
Medium Labor Market	19.5
Micropolitan Labor Market	18.8
Rural Labor Market	13.9
Manufacturing	17.4
STEM	4.9

Mid-Level (2-4 years) Working Experience

Sample	Mean Value
Overall	7.1
Large Labor Market	6.4
Medium Labor Market	8.0
Micropolitan Labor Market	7.3
Rural Labor Market	4.7
Manufacturing	6.2
STEM	4.7

Senior-Level (5+ years) Working Experience

Sample	Mean Value
Overall	5.0
Large Labor Market	3.6
Medium Labor Market	7.4
Micropolitan Labor Market	4.2
Rural Labor Market	3.1
Manufacturing	4.4
STEM	3.9

\*Statistics of establishments that had at least one position at level they tried to fill.

## Over the past 12 months, has your establishment had difficulty filling any positions?\*

Sample	No	Yes	% Yes	Don't Know
Overall	4223.1	4157.9	49.6%	157.3
Large Labor Market	2073.0	1372.2	39.8%	29.5
Medium Labor Market	1282.6	1982.8	60.7%	124.3
Micropolitan Labor Market	624.5	593.0	48.7%	2.4
Rural Labor Market	243.0	210.0	46.4%	1.0
Manufacturing	206.0	280.0	57.6%	0.0
STEM	145.8	195.9	57.3%	2.1

\*Denominators can differ from question to question based on skip patterns and non-response to each question. Some respondents replied 'Don't Know' to number hired by level of seniority, but responded to difficulty hiring for level of seniority.

## Did your establishment have difficulty filling entry-level positions? (Y/N)

	Overall	Large Labor Market	Medium	Micropolitan Labor Market	Rural Labor Market	Manufacturing	STEM
Had Difficulty	2841.0	848.4	1393.9	461.7	137.0	172.5	80.9
Total Organizations hiring entry-level positions	6675.4	2508.2	2768.1	1057.1	342.0	390.0	237.7
% with Difficulty	42.6%	33.8%	50.4%	43.7%	40.1%	44.2%	34.0%

## Did your establishment have difficulty filling mid-level positions? (Y/N)

	Overall	Large Labor Market	Medium	Micropolitan Labor Market	Rural Labor Market	Manufacturing	STEM
Had Difficulty	1562.1	486.9	837.6	172.5	65.0	119.0	102.0
Total Organizations hiring entry-level positionsmid	4404.2	1888.5	1832.3	544.4	139.0	267.0	227.4
% with Difficulty	35.5%	25.8%	45.7%	31.7%	46.8%	44.6%	44.8%

## Did your establishment have difficulty filling senior-level positions? (Y/N)

	Overall	Large Labor Market	Medium	Micropolitan Labor Market	Rural Labor Market	Manufacturing	STEM
Had Difficulty	827.4	391.0	281.4	102.1	53.0	56.5	77.5
Total Organizations hiring senior-level positions	2600.8	1180.3	942.3	362.1	116.0	160.5	173.6
% with Difficulty	31.8%	33.1%	29.9%	28.2%	45.7%	35.2%	44.7%

## Which of the following were reasons that these positions were difficult to fill?\*

	Overall	%	Large Labor Market	%	Medium Labor Market	%	Microropolitan Labor Market	%	Rural Labor Market	%	Manufacturing	%	STEM	%
Applicants lacked necessary EDUCATION level, certification, or training	1796.0	43.2%	656.6	47.8%	778.7	39.3%	252.7	42.6%	108.0	51.4%	145.5	52.0%	113.0	54.5%
Applicants lacked technical or occupation-based SKILLS	2050.8	49.3%	619.7	45.2%	1099.4	55.4%	252.7	42.6%	79.0	37.6%	158.5	56.6%	127.5	61.4%
Applicants lacked EMPLOYABILITY (work ethic, professionalism, reliability, motivation)	2705.2	65.1%	885.3	64.5%	1335.0	67.3%	367.0	61.9%	118.0	56.2%	182.5	65.2%	96.5	46.5%
Applicants lacked SOFT SKILLS (communication, teamwork, critical thinking, creativity)	2045.3	49.2%	568.0	41.4%	1132.1	57.1%	272.2	45.9%	73.0	34.8%	107.5	38.4%	83.5	40.2%
Applicants lacked relevant WORK EXPERIENCE	2137.0	51.4%	752.5	54.8%	1034.0	52.1%	240.6	40.6%	110.0	52.4%	148.0	52.9%	139.0	67.0%
Applicants unwilling to accept offered PAY/COMPENSATION	1369.1	32.9%	450.0	32.8%	660.9	33.3%	170.1	28.7%	88.0	41.9%	110.0	39.3%	78.5	37.8%
LOW NUMBER of applicants	2301.1	55.3%	782.0	57.0%	1073.2	54.1%	298.9	50.4%	147.0	70.0%	170.5	60.9%	120.5	58.1%
COMMUTING DISTANCE or other geographic issues	1032.6	24.8%	287.7	21.0%	497.3	25.1%	155.5	26.2%	92.0	43.8%	73.5	26.3%	64.5	31.1%
Applicants had CRIMINAL RECORDS	953.8	22.9%	258.2	18.8%	399.2	20.1%	228.4	38.5%	68.0	32.4%	78.0	27.9%	28.0	13.5%
Applicants failed DRUG SCREENING	844.1	20.3%	258.2	18.8%	386.1	19.5%	145.8	24.6%	54.0	25.7%	74.5	26.6%	25.0	12.0%
OTHER	603.8	14.5%	184.4	13.4%	301.0	15.2%	92.3	15.6%	26.0	12.4%	34.5	12.3%	32.0	15.4%

\*This analysis is to compare to 2016 - which did not differentiate between any level of position. If an establishment cited any of these for any of the levels of position (Entry-, Mid-, Senior-) in 2018, it is listed above.  
 Denominators can differ from question to question based on skip patterns and non-response to each question. Some respondents replied 'Don't Know' to number hired by level of seniority, but responded to difficulty hiring for level of seniority.  
 Highlighted percentages indicate a statistically significant difference from the Overall sample.



## Which of the following were reasons that these entry-level positions were difficult to fill?\*

	Overall	%	Large Labor Market	%	Medium Labor Market	%	Microropolitan Labor Market	%	Rural Labor Market	%	Manufacturing	%	STEM	%
Applicants lacked necessary EDUCATION level, certification, or training	1022.3	35.4%	317.2	36.4%	477.7	33.6%	160.4	36.5%	67.0	43.2%	70.0	39.1%	32.6	39.9%
Applicants lacked technical or occupation-based SKILLS	1280.1	44.8%	332.0	39.5%	752.6	52.8%	155.5	35.4%	40.0	27.0%	84.0	46.7%	37.4	48.0%
Applicants lacked EMPLOYABILITY (work ethic, professionalism, reliability, motivation)	2151.1	74.6%	663.9	76.9%	1073.2	75.2%	315.9	72.2%	98.0	62.4%	142.5	78.3%	44.4	58.3%
Applicants lacked SOFT SKILLS (communication, teamwork, critical thinking, creativity)	1385.3	51.7%	376.2	45.1%	726.4	57.2%	218.7	51.4%	64.0	41.8%	77.5	42.8%	27.6	36.3%
Applicants lacked relevant WORK EXPERIENCE	1196.5	44.7%	435.3	52.2%	536.6	42.9%	150.7	34.6%	74.0	47.1%	78.5	44.6%	39.3	48.6%
Applicants unwilling to accept offered PAY/COMPENSATION	895.0	33.6%	287.7	34.8%	339.2	27.0%	136.1	32.0%	72.0	46.8%	74.5	41.2%	25.9	33.3%
LOW NUMBER of applicants	1596.5	59.1%	472.1	56.1%	804.9	63.4%	211.4	48.6%	108.0	68.8%	92.5	51.4%	36.4	46.8%
COMMUTING DISTANCE or other geographic issues	710.9	26.4%	199.2	23.9%	346.8	27.5%	106.9	24.4%	58.0	37.4%	43.5	24.3%	17.7	22.7%
Applicants had CRIMINAL RECORDS	785.6	29.5%	177.1	20.7%	333.7	27.0%	213.9	50.6%	61.0	40.4%	61.0	35.0%	17.7	22.9%
Applicants failed DRUG SCREENING	723.0	27.7%	228.7	27.4%	327.2	24.8%	119.1	38.3%	48.0	32.9%	60.5	35.5%	13.3	17.5%
OTHER	441.2	15.5%	103.3	12.2%	255.2	18.3%	60.8	13.2%	22.0	16.1%	22.0	12.8%	13.2	16.3%

\*Denominators can differ from question to question based on skip patterns and non-response to each question. Some respondents replied 'Don't Know' to number hired by level of seniority, but responded to difficulty hiring for level of seniority. Highlighted percentages indicate a statistically significant difference from the Overall sample.

## Which of the following were reasons that these mid-level positions were difficult to fill?\*

	Overall	%	Large Labor Market	%	Medium Labor Market	%	Microropolitan Labor Market	%	Rural Labor Market	%	Manufacturing	%	STEM	%
Applicants lacked necessary EDUCATION level, certification, or training	861.3	55.9%	309.8	66.7%	418.8	50.0%	99.6	58.6%	33.0	47.8%	72.5	62.0%	67.8	65.6%
Applicants lacked technical or occupation-based SKILLS	1033.9	67.5%	265.6	59.0%	621.7	73.6%	116.6	69.6%	30.0	42.9%	76.0	63.9%	77.6	75.1%
Applicants lacked EMPLOYABILITY (work ethic, professionalism, reliability, motivation)	884.9	57.3%	250.8	54.0%	530.1	63.3%	68.0	40.0%	36.0	50.7%	69.5	58.4%	43.8	43.7%
Applicants lacked SOFT SKILLS (communication, teamwork, critical thinking, creativity)	732.4	48.3%	191.8	41.3%	471.2	56.7%	53.5	34.9%	16.0	23.5%	43.0	36.4%	43.2	43.1%
Applicants lacked relevant WORK EXPERIENCE	984.0	63.5%	265.6	57.1%	595.5	70.5%	89.9	52.9%	33.0	46.5%	73.5	60.7%	76.8	74.3%
Applicants unwilling to accept offered PAY/COMPENSATION	568.0	37.1%	154.9	33.3%	327.2	38.8%	55.9	37.1%	30.0	42.9%	38.5	32.1%	37.8	37.6%
LOW NUMBER of applicants	893.8	57.5%	295.1	62.5%	431.9	51.6%	111.8	64.8%	55.0	77.5%	78.5	66.0%	60.7	59.8%
COMMUTING DISTANCE or other geographic issues	389.1	25.6%	73.8	16.4%	235.6	28.3%	60.8	36.2%	19.0	26.8%	27.5	23.5%	24.3	23.8%
Applicants had CRIMINAL RECORDS	215.7	14.1%	66.4	14.5%	104.7	12.5%	31.6	18.6%	13.0	18.8%	31.0	26.3%	7.7	7.9%
Applicants failed DRUG SCREENING	189.6	12.8%	44.3	9.8%	85.1	10.7%	41.3	25.0%	19.0	27.9%	28.0	23.9%	8.7	8.9%
OTHER	139.0	8.9%	59.0	12.1%	45.8	5.5%	29.2	16.9%	5.0	7.7%	14.0	11.8%	13.7	13.5%

\*Denominators can differ from question to question based on skip patterns and non-response to each question. Some respondents replied 'Don't Know' to number hired by level of seniority, but responded to difficulty hiring for level of seniority. Highlighted percentages indicate a statistically significant difference from the Overall sample.

## Which of the following were reasons that these senior-level positions were difficult to fill?\*

	Overall	%	Large Labor Market	%	Medium Labor Market	%	Microropolitan Labor Market	%	Rural Labor Market	%	Manufacturing	%	STEM	%
Applicants lacked necessary EDUCATION level, certification, or training	441.4	56.1%	228.7	60.8%	117.8	45.0%	55.9	57.5%	39.0	75.0%	41.5	73.5%	31.5	44.3%
Applicants lacked technical or occupation-based SKILLS	361.2	45.0%	184.4	47.2%	104.7	40.0%	51.0	52.5%	24.0	46.2%	38.5	68.1%	39.5	54.6%
Applicants lacked EMPLOYABILITY (work ethic, professionalism, reliability, motivation)	386.4	48.5%	236.1	60.4%	98.2	36.6%	29.2	30.0%	23.0	57.5%	17.5	31.0%	19.9	27.8%
Applicants lacked SOFT SKILLS (communication, teamwork, critical thinking, creativity)	306.0	39.5%	169.7	44.2%	91.6	34.1%	26.7	32.4%	18.0	45.0%	16.5	29.2%	16.0	22.6%
Applicants lacked relevant WORK EXPERIENCE	499.0	61.2%	258.2	64.8%	163.6	61.0%	46.2	47.5%	31.0	60.8%	33.0	57.4%	45.4	62.6%
Applicants unwilling to accept offered PAY/COMPENSATION	312.1	39.6%	191.8	50.0%	78.5	29.3%	26.7	31.4%	15.0	29.4%	25.5	44.3%	24.5	35.4%
LOW NUMBER of applicants	470.8	58.9%	213.9	54.7%	176.7	65.9%	46.2	46.3%	34.0	82.9%	38.5	68.1%	49.2	63.9%
COMMUTING DISTANCE or other geographic issues	258.9	32.5%	95.9	25.0%	85.1	31.7%	38.9	42.1%	39.0	76.5%	18.0	31.9%	25.1	34.9%
Applicants had CRIMINAL RECORDS	80.7	10.2%	29.5	7.8%	26.2	9.8%	17.0	18.4%	8.0	15.7%	5.5	10.1%	2.7	3.8%
Applicants failed DRUG SCREENING	62.4	8.2%	7.4	2.0%	26.2	10.3%	21.9	23.7%	7.0	14.3%	3.5	6.3%	2.7	3.8%
OTHER	88.0	10.6%	44.3	11.3%	26.2	9.3%	14.6	14.3%	3.0	5.7%	5.0	8.8%	8.4	10.9%

\*Denominators can differ from question to question based on skip patterns and non-response to each question. Some respondents replied 'Don't Know' to number hired by level of seniority, but responded to difficulty hiring for level of seniority. Highlighted percentages indicate a statistically significant difference from the Overall sample.

## What resources has your establishment used in recruiting efforts?

	Overall	%	Large Labor Market		Medium Labor Market		Metropolitan Labor Market		Rural Labor Market		Manufacturing	%	STEM	%
				%		%		%		%				
Word of Mouth	8425.0	90.0%	3127.9	87.1%	3507.6	91.3%	1268.5	92.4%	521.0	94.7%	500.0	90.7%	358.6	88.8%
Internet Postings on NCWorks Online	2454.9	27.6%	678.7	19.7%	1177.9	32.8%	391.3	30.0%	207.0	38.3%	225.5	42.6%	114.8	30.4%
Internet Postings on Company Job Boards	5094.9	55.3%	1969.7	55.6%	2100.6	55.2%	743.6	55.7%	281.0	52.0%	224.5	41.5%	248.8	62.6%
Postings on Job Boards, such as CareerBuilder, Indeed, or Monster.com	5597.1	61.7%	2294.3	64.5%	2362.4	64.3%	680.4	51.6%	260.0	49.4%	304.5	56.5%	309.8	77.5%
Social Networking Websites such as Facebook, LinkedIn, or Twitter	4018.4	44.2%	1497.6	43.0%	1734.2	45.9%	551.6	41.9%	235.0	45.3%	199.5	37.2%	207.0	52.8%
Local Newspapers	2368.5	25.9%	538.5	15.4%	1132.1	30.0%	473.9	35.8%	224.0	41.9%	179.5	33.5%	68.6	17.4%
NCWorks Career Center	1373.2	15.8%	346.7	10.2%	589.0	17.0%	313.5	23.9%	124.0	23.3%	129.5	24.6%	55.7	15.0%
Community or Technical Colleges	3535.3	38.9%	1003.3	28.8%	1760.3	46.7%	568.7	43.2%	203.0	38.7%	250.5	46.7%	181.1	46.0%
4-Year Colleges and Universities	2806.9	30.9%	922.1	26.5%	1295.7	34.5%	435.0	33.1%	154.0	29.1%	156.0	29.3%	183.7	46.1%
Recruiting Agency/Temporary Employment Services	2180.9	24.3%	966.4	27.4%	916.2	25.3%	233.3	17.9%	65.0	12.0%	284.5	52.6%	122.4	31.2%
Other	2269.6	23.6%	1010.7	26.4%	850.7	21.9%	272.2	19.8%	136.0	24.7%	103.5	18.7%	93.1	22.8%

Highlighted percentages indicate a statistically significant difference from the Overall sample.

## What is your biggest workforce challenge?

	Overall	%	Large Labor Market		Medium Labor Market		Micropolitan Labor Market		Rural Labor Market		Manufacturing		STEM	
				%		%		%		%		%		%
Finding job candidates	3387.2	36.0%	1232.0	33.5%	1387.3	36.1%	558.9	41.7%	209.0	38.6%	290.5	54.7%	220.4	56.1%
Hiring	593.3	6.3%	243.4	6.6%	248.7	6.5%	63.2	4.7%	38.0	7.0%	29.5	5.6%	27.7	7.0%
Staff Development (Training Workers)	923.9	9.8%	590.2	16.0%	242.1	6.3%	82.6	6.2%	9.0	1.7%	47.0	8.8%	37.9	9.6%
Promotion/Advancement	238.1	2.5%	125.4	3.4%	52.4	1.4%	24.3	1.8%	36.0	6.6%	8.0	1.5%	15.3	3.9%
Turnover	3388.4	36.0%	1195.1	32.5%	1511.7	39.4%	483.6	36.1%	198.0	36.5%	107.5	20.2%	67.2	17.1%
Other	872.6	9.3%	295.1	8.0%	399.2	10.4%	126.4	9.4%	52.0	9.6%	49.0	9.2%	24.6	6.3%
(missing)	328.7		184.4		85.1		46.2		13.0		30.0			

Highlighted percentages indicate a statistically significant difference from the Overall sample.

## In response to workforce challenges, has your establishment done any of the following?

	Overall	%	Large Labor Market		Medium Labor Market		Micropolitan Labor Market		Rural Labor Market		Manufacturing		STEM	
				%		%		%		%		%		%
Revise pay scale or benefits	4425.3	50.9%	1814.8	54.5%	1799.6	50.2%	575.9	45.0%	235.0	47.1%	309.5	60.3%	198.7	53.7%
Increased training	5452.6	62.4%	2043.5	61.1%	2283.9	63.3%	843.3	65.6%	282.0	55.8%	303.0	58.7%	202.3	54.5%
Used Temporary Employment Services	2026.8	23.4%	826.2	24.7%	903.1	25.4%	245.4	19.3%	52.0	10.4%	264.5	51.0%	73.5	19.4%
Outsourced work or used a contracted service	1328.2	15.6%	627.1	18.8%	431.9	12.5%	199.3	15.8%	70.0	14.8%	169.0	32.4%	135.1	36.2%
Automated functions through new equipment or systems	2380.2	28.3%	922.1	28.3%	1053.6	30.7%	262.5	21.0%	142.0	29.2%	196.5	38.5%	97.3	27.3%
Lowered requirements for jobs	701.1	7.9%	228.7	6.9%	287.9	7.7%	138.5	10.7%	46.0	9.0%	70.5	13.6%	30.1	8.1%
Used workforce system resources like NCWorks Career Centers or Community Colleges	2367.7	27.7%	759.8	23.0%	1079.8	31.1%	396.1	31.0%	132.0	26.2%	212.0	41.1%	102.4	28.2%
Turned down business opportunities	889.0	10.7%	346.7	10.7%	373.0	11.0%	131.2	10.7%	38.0	8.3%	62.5	12.2%	49.4	13.8%
Other	569.6	5.9%	309.8	8.0%	202.9	5.2%	38.9	2.8%	18.0	3.2%	13.0	2.3%	23.1	5.5%

Highlighted percentages indicate a statistically significant difference from the Overall sample.

## What workforce system resources did you use?

	Overall	%	Large Labor Market	%	Medium Labor Market	%	Micropolitan Labor Market	%	Rural Labor Market	%	Manufacturing	%	STEM	%
NCWorks Career Centers	1094.5	48.4%	236.1	33.7%	602.0	57.5%	177.4	46.2%	79.0	61.7%	102.0	51.4%	37.6	38.2%
NCWorks Online	1234.3	54.9%	287.7	41.1%	647.9	62.7%	201.7	52.5%	97.0	75.8%	140.0	69.5%	62.8	63.6%
Community/Technical Colleges	1888.8	82.2%	627.1	85.9%	857.3	81.4%	313.5	81.6%	91.0	70.0%	166.5	79.9%	68.1	67.3%
Workforce Development Boards	622.7	28.6%	147.5	21.7%	346.8	34.4%	92.3	25.5%	36.0	28.3%	63.0	32.5%	24.0	25.8%
Other	86.8	3.7%	36.9	4.9%	32.7	3.0%	12.2	3.1%	5.0	3.8%	3.5	1.7%	5.0	4.8%

Highlighted percentages indicate a statistically significant difference from the Overall sample.

## Why did you not use workforce system resources?

	Overall	%	Large Labor Market	%	Medium Labor Market	%	Micropolitan Labor Market	%	Rural Labor Market	%	Manufacturing	%	STEM	%
Services do not fit the needs of my business or industry	1629.5	41.0%	612.3	36.6%	732.9	47.5%	233.3	41.6%	51.0	25.8%	65.0	35.1%	46.8	22.9%
Job candidates available are not the right fit for my business	918.5	23.5%	332.0	20.5%	366.5	23.8%	170.1	30.4%	50.0	25.3%	49.5	26.6%	46.1	22.6%
Not worth the time or effort	386.2	10.0%	103.3	6.4%	111.2	7.4%	150.7	27.7%	21.0	11.5%	36.0	19.9%	23.4	11.6%
The quality of services isn't sufficient	281.5	7.5%	81.1	5.2%	130.9	8.8%	53.5	10.0%	16.0	8.8%	20.0	11.3%	21.1	10.7%
Not aware of these resources	2154.0	44.9%	900.0	45.2%	804.9	42.7%	294.0	44.3%	155.0	60.1%	123.5	52.7%	142.7	63.4%
Other	974.8	15.7%	450.0	17.7%	307.6	12.8%	131.2	14.9%	86.0	23.2%	41.0	13.5%	34.5	13.2%

Highlighted percentages indicate a statistically significant difference from the Overall sample.

## What resources does your establishment use to meet the skill needs of your workforce?

	Overall	%	Large Labor Market	%	Medium Labor Market	%	Micropolitan Labor Market	%	Rural Labor Market	%	Manufacturing	%	STEM	%
Informal training on the job	8883.0	93.0%	3423.0	90.4%	3645.0	94.4%	1305.0	95.4%	510.0	94.4%	516.5	93.9%	368.6	89.6%
Formal training customized by work	6724.7	71.1%	2736.9	72.7%	2748.5	71.9%	877.3	65.6%	362.0	67.3%	354.0	65.0%	318.8	78.0%
Formal training open to everyone (like through a college or product vendor)	3008.9	33.0%	1276.2	34.5%	1230.3	34.2%	352.4	27.4%	150.0	28.1%	172.5	32.1%	161.2	39.3%
Seminars or conferences	4160.7	46.5%	1586.1	44.5%	1865.0	52.3%	483.6	37.4%	226.0	42.4%	219.0	40.6%	280.7	68.5%
Self-study or online training	5223.1	57.1%	1807.4	51.1%	2421.3	64.3%	714.5	54.0%	280.0	52.7%	225.5	41.5%	286.9	70.2%
Apprenticeship programs	2019.3	22.8%	752.5	21.4%	948.9	27.4%	209.0	15.8%	109.0	20.5%	128.5	23.8%	117.1	28.8%
Other	681.3	7.1%	332.0	8.8%	242.1	6.2%	80.2	5.8%	27.0	5.0%	28.5	5.2%	43.0	10.4%
None	50.9	0.5%	14.8	0.4%	32.7	0.8%	2.4	0.2%	1.0	0.2%	8.0	1.4%	1.0	0.2%

Highlighted percentages indicate a statistically significant difference from the Overall sample.

## Who do you use to conduct professional development/training?

	Overall	%	Large Labor Market	%	Medium Labor Market	%	Micropolitan Labor Market	%	Rural Labor Market	%	Manufacturing	%	STEM	%
In-house or corporate staff	8746.5	95.5%	3253.3	92.5%	3671.2	97.4%	1305.0	97.5%	517.0	96.5%	512.5	96.3%	374.8	93.9%
Private-sector vendors	3435.3	38.4%	1379.5	40.2%	1361.2	37.1%	449.6	34.0%	245.0	46.2%	207.5	39.8%	239.2	59.8%
NCWorks Career Centers	491.1	5.6%	81.1	2.4%	320.7	9.1%	41.3	3.1%	48.0	9.1%	27.5	5.3%	15.8	4.2%
Community College Programs	1685.8	19.0%	494.3	14.4%	765.6	21.0%	315.9	24.5%	110.0	21.0%	132.0	25.3%	79.9	19.9%
4-Year Universities/Colleges	976.6	10.9%	324.6	9.5%	346.8	9.5%	238.2	18.0%	67.0	12.8%	43.0	8.3%	70.9	17.7%
Apprenticeship programs	1201.3	13.6%	479.5	14.0%	484.3	13.7%	172.5	13.1%	65.0	12.4%	74.0	14.2%	87.0	21.6%
Other	1029.0	10.7%	531.2	13.9%	353.4	9.2%	121.5	8.9%	23.0	4.2%	23.0	4.2%	28.6	6.9%

Highlighted percentages indicate a statistically significant difference from the Overall sample.



## Median hours of Professional Development or training average employee receives?

Median Hours	
Overall	20.0
Large Labor Market	20.0
Medium Labor Market	21.5
Micropolitan Labor Market	20.0
Rural Labor Market	20.0
Manufacturing	20.0
STEM	25.0

## Does your establishment offer the following employer provided benefits?

	Overall	%	Large Labor Market	%	Medium Labor Market	%	Micropolitan Labor Market	%	Rural Labor Market	%	Manufacturing	%	STEM	%
Health Insurance	7347.1	76.3%	2973.0	77.5%	3003.7	77.5%	991.5	71.7%	379.0	70.2%	436.0	78.3%	360.0	87.1%
Paid Leave	7590.7	79.1%	3083.6	80.5%	3069.1	79.9%	1010.9	73.2%	427.0	79.1%	463.0	83.4%	388.2	94.0%
Contribution to Pension/Retirement	6390.4	66.2%	2633.6	68.5%	2519.4	64.9%	877.3	63.4%	360.0	66.8%	372.0	67.3%	306.6	74.9%
Other	981.4	10.7%	332.0	9.4%	405.7	10.8%	184.7	13.4%	59.0	10.9%	38.5	6.9%	37.3	9.0%
Any Benefit	8403.2	87.2%	3364.0	87.5%	3396.3	87.7%	1185.9	85.9%	457.0	84.6%	512.0	91.8%	404.0	97.8%
No Benefits	1234.6	12.8%	479.5	12.5%	477.7	12.3%	194.4	14.1%	83.0	15.4%	46.0	8.2%	5.3	1.3%

Highlighted percentages indicate a statistically significant difference from the Overall sample.



## Would you describe your experience filling positions at this location as....

	Overall %	Large Labor Market	Medium Labor Market	Micropolitan Labor Market	Rural Labor Market	Manufacturing %	STEM %							
More difficult than last year	2196.4	24.1%	663.9	18.9%	1014.3	26.7%	413.1	31.8%	105.0	21.5%	132.5	25.4%	83.5	21.5%
About the same as last year	5601.4	61.5%	2198.4	62.6%	2316.6	60.9%	731.5	56.3%	355.0	72.7%	344.0	66.0%	258.2	66.6%
Easier than last year	1303.9	14.3%	649.2	18.5%	471.2	12.4%	155.5	12.0%	28.0	5.7%	44.5	8.5%	45.7	11.8%

Highlighted percentages indicate a statistically significant difference from the Overall sample.

## For 2018, do you expect your total employment at this location to \_\_\_\_\_

	Overall %	Large Labor Market	Medium Labor Market	Micropolitan Labor Market	Rural Labor Market	Manufacturing %	STEM %							
Decrease	209.3	2.3%	81.1	2.3%	72.0	1.8%	46.2	3.4%	10.0	1.9%	19.5	3.6%	19.3	4.7%
Remain about the same	5041.2	54.4%	1800.0	51.9%	2094.1	53.6%	746.1	55.2%	401.0	74.3%	286.0	52.5%	170.4	41.7%
Increase	4014.7	43.3%	1586.1	45.7%	1740.7	44.6%	558.9	41.4%	129.0	23.9%	239.5	43.9%	219.4	53.6%

Highlighted percentages indicate a statistically significant difference from the Overall sample.

# NOTES

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