

Roadmap to Career

Exit
Job



Thru-Ramp
Work-based
Learning



Thru-Ramp
Apprenticeships



Exit
Job



Exit
Job



Entrance
Re-training



Post-
Secondary

K-12

Pre-K

Research and Analysis conducted by
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Executive Summary

Securing and retaining qualified talent is one of the top challenges facing North Carolina employers. Businesses have job openings but are struggling to find people with the right skills to fill them, and the concern only grows as baby-boomer retirements draw near amid declining participation rates and rising skill requirements. As the top consumer of talent, the business community cannot wait for the education and workforce systems to solve these problems on their own. Employers cannot accept the status quo of inadequate educational and training outcomes. To ensure productive and profitable career opportunities for North Carolinians, all stakeholders must acknowledge that this is an urgent problem and commit to working together to find a solution that aligns business and education at all levels. Nothing less than a commitment to establishing North Carolina as the No. 1 state for workforce readiness is acceptable.

Exit
Job



This Roadmap to Career report was developed to frame an issue of vital, bottom-line importance to North Carolina's business.

The education and workforce systems are not properly aligned and the results are that North Carolina employers cannot find qualified talent and available jobs. This report is a call to action for all stakeholders along the workforce continuum, providing a baseline against which to measure improvements and progress within the education and workforce systems that must occur at the speed of business.

Talent Supply Chain Management Approach

Securing the right talent is the top competitive priority for businesses, and it is often the difference between success and failure. Talent Supply Chain Management is a proactive approach to securing and optimizing talent supply through all possible suppliers to meet the workforce needs of companies, allowing them to produce and deliver their goods and services. This report examines the talent supply chain in North Carolina from the employer perspective, encompassing all parts of the education and skill training systems that prepare an individual for a career. The Roadmap to Career for every North Carolinian begins at a young age and extends through adulthood. It allows an individual to make stops at jobs and to retrain for new jobs that lead to a fulfilling career. This report raises current challenges and makes recommendations for stakeholders in the entire talent supply chain to ensure greater success for businesses and North Carolinians.

A recent survey of North Carolina employers, focus groups with business leaders and economic development professionals, and interviews with program providers conducted for this report reveal that our current talent supply chain has many challenges, but also opportunities for positive change.

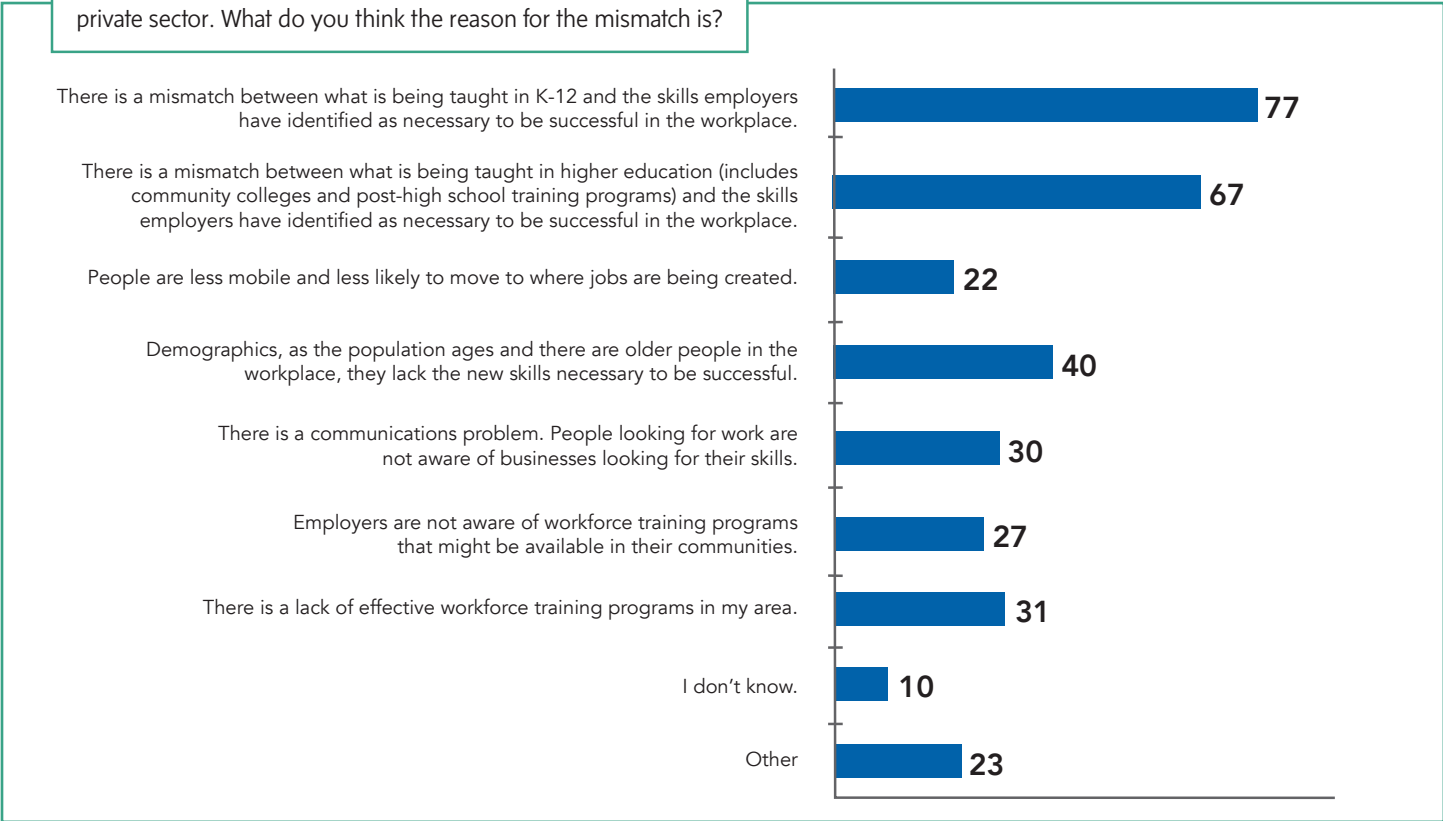
Challenges and Opportunities

CHALLENGE: Employers believe there is a mismatch between what is being taught in the talent supply chain and the skills necessary to be successful in the workplace. Employers report that many graduates from North Carolina’s educational institutions and training programs do not have the skills to be successful in today’s workplace.

Opportunities

- 1) The NC Department of Public Instruction (DPI) should ensure all ninth graders develop an academic plan that aligns with the vision for their future by providing students and families with the tools and knowledge necessary to make informed decisions.
- 2) School systems and the business community must prioritize and increase work-based learning options, such as apprenticeships, internships and externships, within the K-12 and postsecondary systems.
- 3) Continue to ensure proper implementation of the North Carolina Digital Learning Plan, designed to support innovation, and provide resources to let educators and students benefit from digital-age teaching and learning. This should include appropriate professional development for educators and ongoing involvement by multiple stakeholders.

Employers report that there is a gap between the skills of North Carolina’s workers and the jobs that are available from the private sector. What do you think the reason for the mismatch is?



CHALLENGE: The lack of systemic employer engagement throughout the talent supply chain contributes to the skills mismatch. Providers can improve work skills results by listening and working with employers leading to continuous improvement.

Opportunities

- 4) Engage multiple state agencies (Department of Public Instruction, Department of Commerce, Department of Labor, Economic Development Partnership of NC, etc.) to collaborate with the business community to conduct an annual review of the state's anticipated workforce needs and the number of postsecondary credentials that are being issued, identifying workforce needs that are not being met by education and training programs.
- 5) The NC Chamber Foundation will manage an internal Apprenticeship Council to establish a leading business voice for apprenticeships in the state. The Council will create a five-year plan to make North Carolina the No. 1 state for apprenticeships and will be focused on reducing regulations that are hindering successful programs, improving regionalization, expanding sector involvement and removing barriers for the growth of apprenticeships in the state.

CHALLENGE: The current talent supply chain is complex, confusing and crowded. The education and workforce system is extremely complex and confusing, creating barriers between providers and employers.

Opportunities

- 6) Establish regional workforce development resources. There should be one Department of Commerce contact in each region. This person will act as a business concierge, with the sole purpose of understanding business needs and connecting employers to the correct agency for their specific workforce challenges and requirements.
- 7) Remove and/or streamline any existing, restrictive borders within which community colleges, workforce development boards and others can serve employers. The state must take a regional approach to preparing its workforce as it no longer serves the needs of businesses, and ultimately North Carolinians looking for a job and/or career, to continue operating within arbitrary and outdated service areas.

CHALLENGE: There are no accountability measures for the talent supply chain as a "system." No actual system exists among the various education and skill training programs and providers, resulting in a lack of clear responsibility and authority. Employers have not been holding the talent supply chain accountable, and programmatic data is scarce, which has led to a disconnect regarding what skills are needed in the workforce and which programs are efficiently and effectively addressing those needs.


Opportunities

- 8) Break down or bridge the silos among workforce partners. Each county/region should develop a team of representatives from all workforce agencies to develop a strategic plan to meet regional employer needs, incorporating local employers throughout the talent pipeline.
- 9) Establish employer-based performance measures in addition to tracking the broad measures of entered employment rate, retention rate and average wages, and engage employers on a regular basis with customer satisfaction surveys and focus groups to ensure continuous improvement. This opportunity was also raised in the North Carolina Workforce System Review and Options for Reform, commissioned by the North Carolina Chamber Foundation and conducted by UWC in 2014.

CHALLENGE: The lack of clear communication about education or workforce in North Carolina reduces the ability to scale successful programs. There are many successful programs in North Carolina, but the lack of clear communication and promotion makes them unfamiliar and inaccessible for much of the business community.


Opportunities

- 10) Develop regional partnerships of NCWorks Certified Work Ready communities. Grow the number of certified communities to 50 by 2020 and achieve all 100 counties certified by 2030. The NC Chamber Foundation should continue supporting certified counties to maintain their certification while assisting non-participating counties to join the initiative.
- 11) State workforce leaders and business leaders should jointly develop and implement an outreach campaign with the NC Chamber Foundation that includes local chambers of commerce, economic developers and workforce boards to raise awareness of workforce programs.
- 12) Increase the number of and accessibility to career pathways across the state, giving priority to pathways that lead to industry-recognized credentials.



CHALLENGE: The lack of committed, aligned leaders has stifled North Carolina's ability to address workforce issues. There is a lack of leaders statewide, regionally and locally who are engaged to address the skills mismatch challenge and who are setting an example for others.

Opportunities

- 13) Business organizations and chambers of commerce should develop working groups of employers and "tribal leaders" to identify, by sector, credentials that best reflect the skills needed for successful performance in the workplace.
 - 14) The North Carolina Chamber Foundation, through the Chamber Federation (an aligned group of members made up of local chambers of commerce and other economic development groups), will identify and coordinate 200 business mentors for high school and middle school guidance counselors in targeted North Carolina non-urban counties by December 2017.
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Preface

North Carolina employers continue to face challenges finding the right talent. There are different perspectives on what is contributing to the problem and how to solve it, but two complicating factors arose during the research for this report: (1) a lack of consistent data; different sources (e.g. NC Department of Commerce, Georgetown University) categorize and label the skills needs and the gap differently; and (2) the individual elements of the talent supply chain (K-12, Community College, University, Certificate, Workforce Development programs) are out of alignment with the needs of the business community and with each other. These two factors help to explain the ongoing confusion about the skills gap data and the lack of a common understanding and language between job creators and the talent supply chain stakeholders. They must be addressed if the individual components of the talent supply chain are to successfully deliver the talent needed for the workforce of today and the future.

The Roadmap to Career includes on ramps and off ramps for different stops along the talent supply chain that an individual needs to connect to the right job throughout a working life.

The Wheel to Success (page 9) represents the vehicle that will allow individuals to travel successfully along the road to a career. The spokes on the wheel reflect what stakeholders must achieve to ensure that the skills being taught match the skills employers need. Stakeholder collaboration to achieve this goal must include: (1) partnering with employers and providers; (2) transforming education and workforce delivery; (3) promoting transparency and accountability; (4) improving communications; and (5) leading by example.

For this report, a recent survey of North Carolina employers, focus groups with business leaders and economic development professionals on existing programs, and interviews with employers and program providers revealed some of the current workforce challenges as well as opportunities for positive change. This report serves as a high-level overview of the challenges and makes recommendations for improvement.

Introduction

In his book, *The Coming Jobs War*, Gallup Chairman Jim Clifton writes that after six years of research and collecting data with Gallup on what the whole world wants, the “most searing, world-altering fact” is that the whole world wants a good job. North Carolina cannot be successful if it does not prepare its workforce for today’s jobs and the good jobs that will be available in the future. All stakeholders, including elected officials, business leaders, workforce system leaders, education leaders and every citizen, must be committed to making North Carolina a top state in which to live and do business, as well as providing our citizens the opportunity to obtain the skills they need to secure and retain a good job.

In a rapidly changing world, our economic future is not secured.

- What if the education system does not innovate at the speed of business and there are not enough workers prepared for the careers of the future? This challenge is already beginning to materialize in a big way for some industries.
- What if there is mass unemployment due to technology without an innovative and nimble worker retraining system?

Employers are the No. 1 consumer of our state’s talent. Job creators consistently report that the talent supply chain is not producing enough people with the skills needed to be successful in the jobs available. This must change now if North Carolina is to stay competitive in a global economy. North Carolina must create an aligned education and workforce development system that evolves at the rate of technological transformation and keeps pace with the needs of modern business. To that end, North Carolina needs, as Clifton describes in *The Coming Jobs War*, “tribal leaders” to take a larger responsibility in creating and embracing change in our education and workforce system. Clifton defines these leaders as “a self-organized group of talented people influencing and guiding,” with the overall goal of making their local and state communities more successful (Clifton 2011:68).

In a survey of North Carolina employers, 77 percent of employers stated that there is a mismatch between what is being taught in K-12 schools and the skills employers have identified as essential to be successful in the workplace.

But responsibility for training the state’s workforce does not solely fall to the K-12 system. All stakeholders share the responsibility. This study is a call to action for all stakeholders to understand the urgency of this issue and move beyond bemoaning the “skills gap” to develop real solutions to better prepare the workforce for the careers that are available. This must start happening today for our state’s citizens and businesses to continue to be successful.

As stated in the NC Chamber Foundation’s *North Carolina Vision 2030*, to have a more economically competitive workforce we must:

- Emphasize a demand-driven approach to workforce development
- Maintain high academic standards and quality credentials
- Align the workforce and education systems

North Carolina is home to a variety of talented leaders who can work together to make our state the leading place to do business and pursue a high quality of life in the 21st century economy, but these leaders must accept the responsibility to address the challenge of workforce readiness. To ensure the future needs of the employers are met, private sector leaders must play a greater and more meaningful role.



Defining the Skills Gap

The mismatch between the state's available workforce and the skills needed for available jobs is increasingly discussed but rarely addressed with action. North Carolinians can move through the talent supply chain without making the connections between the skills they are learning and the skills they will need to be successful at work.

The following tiered breakdown of skills, created by Economic Leadership, a North Carolina economic strategy firm, helps develop a common language to discuss the "skills gap." Each tier builds upon the previous set of skills to prepare an individual for work and a successful career.

Basic Knowledge is the set of core competencies being taught by elementary, middle and high schools in North Carolina. The curriculum details expected learning in English, mathematics, science, social studies and other areas of focus.

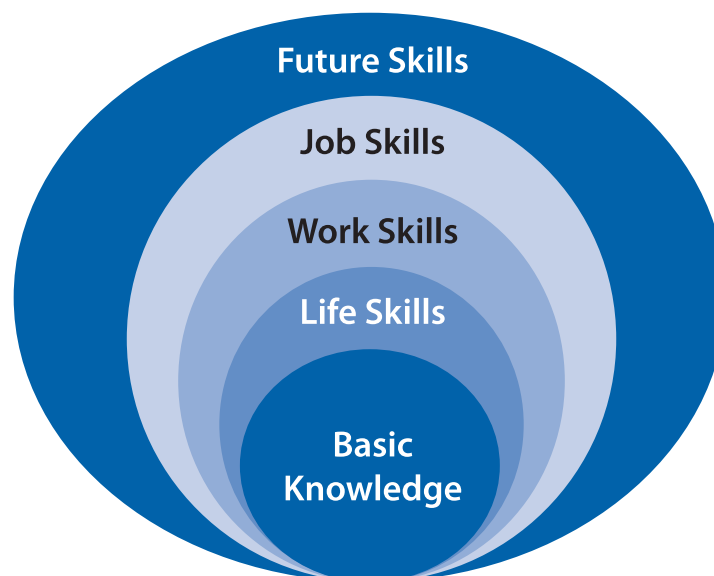
From the employers' perspective, this course of study would result in proficiency in reading comprehension, writing and, increasingly important, applied math. The needed basic knowledge skills should be gained during school years and then augmented and reinforced throughout a person's work life by ongoing education and practice. All jobs today, and in the future, will require these skills.

Life Skills are made up of those personal attributes that are sometimes described as "soft skills." They include motivation (initiative), responsibility, honesty, punctuality, personal accountability, flexibility/adaptability and conflict resolution. Where and how these skills are best acquired is a topic of debate. Commonly this starts in the family and community and is often reinforced through educational curriculum throughout a young life.

Work Skills are sometimes considered "soft skills" since many are viewed as personal traits, but it is useful to separate them. These skills are extremely important to employers, and they are also generally transferable between jobs. Today, most jobs demand that a good employee have teamwork, problem solving, flexibility, perseverance and communication skills. More often innovation, creativity, leadership, selling and negotiation abilities are valued. These skills can be taught or modeled through families and education, but work experience is also valuable.

Job Skills are specific to an individual job. A welder, radiology technician or pastry chef must receive specific training for the task. Community and technical colleges can often provide this training. Apprenticeships have been a job skills pathway for centuries. These are also the skills that employers say they can teach if a candidate has good basic knowledge and life skills. Whether it is a degree or certificate, many employers are demanding more skills than the basic knowledge conferred by a high school diploma. Additional training can take many forms and will continue to evolve in the next decade. Nevertheless, instilling in everyone the understanding that they will be required to continuously train and retrain throughout their work life is important.

Finally, **Future Skills** are emerging as abilities that can add worth to the employee, especially in these rapidly changing economic times. Once, being able to use a computer was new. Today, the ability to use and interface with technology, manage multiple simultaneous priorities, comfortably absorb and apply data, and successfully interact with colleagues and customers who are different are highly valued. The Institute for the Future has listed



© Economic Leadership

Social Intelligence (the ability to connect with others), computational thinking (the ability to absorb and rapidly process data), new media literacy, virtual collaboration and adaptive thinking as the types of skills that will be needed soon. In addition, math is becoming increasingly important. These skills should be gained during school years and augmented by ongoing education and practice.

A talent supply chain that is forward-focused and continues to innovate at the speed of business is critically important in preparing our citizens for the jobs of the future. Continuous evaluation by education and training stakeholders of the specific skills in demand by employers, will improve our citizens' chances of economic success.

The talent supply chain should focus on the specific jobs that will be needed in targeted industries such as computer science and technology sectors, health care, financial services and consumer-related industries. According to Dr. Michael Walden, William Neal Reynolds Distinguished Professor and Extension Economist at North Carolina State University, the continuum also needs to prepare for North Carolina's aging population – not only for re-training those older workers, but training in the jobs needed to take care of the elderly.

In the latest data available, 59 percent of North Carolina's adults over the age of 25 have some education beyond a high school degree.

Percentage of Adults Over Age 25 by Educational Attainment 2015

State	No high school credential	High school but no post-sec education	Some post-sec, but no credential	Total: less than a post-sec credential	Post-sec credential
ALABAMA	16	31	22	69	31
ARKANSAS	15	35	23	73	27
DELAWARE	12	31	20	63	37
FLORIDA	13	30	21	64	36
GEORGIA	14	28	21	63	37
KENTUCKY	16	34	21	71	29
LOUISIANA	17	34	21	72	28
MARYLAND	11	26	20	57	43
MISSISSIPPI	18	30	23	71	29
NORTH CAROLINA	14	27	22	63	37
OKLAHOMA	13	32	24	69	31
SOUTH CAROLINA	14	30	21	65	35
TENNESSEE	14	33	21	68	32
TEXAS	18	25	23	66	34
VIRGINIA	12	25	20	57	43
WEST VIRGINIA	15	41	19	75	25

Source: US Census

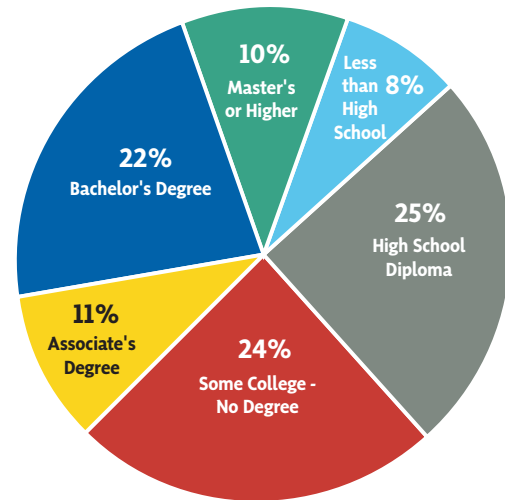
2020 Total Jobs in North Carolina by Occupation and Education Level

The Georgetown Public Policy Institute's report *Recovery: Job Growth and Education Requirement Through 2020* (see chart on page 8) reveals the projection of total jobs in North Carolina, by occupation type and education level by 2020. Approximately 67 percent of the more than five million jobs listed in the chart require more than a high school diploma. Those jobs will require a certificate, some college or a degree. A broader public awareness of the educational requirements of future jobs will help parents, students and all citizens evaluate how best to align their skills and invest their time and resources.

The North Carolina Department of Commerce, Labor and Economic Analysis division website provides information on the required education for the expected job openings over ten years due to expansion and turnover. Slightly more than 1.6 million openings are projected from 2014 to 2024.

The ongoing challenge with projections is that they can be confusing and even contradictory. They also deal with the short term, which the talent supply chain has less ability to address. The business community understands that the education and workforce system will need to evolve at the speed of business. As historian Yuval Noah Harari noted in a 2017 address: "Since we do not know how the job market would look in 2030 or 2040...most of what they currently learn in school will probably be irrelevant by the time they are 40."

Education Level Required for NC Jobs in 2020



Source: Georgetown Public Policy Institute

"By 2050, **21%** of our state's residents will be **65+**. They'll want to live long, fruitful lives in their own homes - not institutional settings. Healthcare, nutrition, recreation and education that caters to a growing elderly population will be big."

- Michael Walden
William Neal Reynolds Distinguished Professor and
Extension Economist at NC State University

North Carolina 2014-2024 Occupational Employment Projections (6-Digit Level) Top Ten Occupational Categories by Highest Openings

Occupation Title	Total Openings 2014-2024	Educational Requirements
Combined Food Prep & Serving	74,504	No Formal Educational Credential
Retail Salespersons	69,600	No Formal Educational Credential
Cashiers	55,056	No Formal Educational Credential
Waiters and Waitresses	47,237	No Formal Educational Credential
Registered Nurses	42,696	Bachelor's Degree
Customer Service Reps	38,069	High School Diploma or Equivalent
Home Health Aides	32,599	No Formal Educational Credential
Laborers, Freight, Stock, & Movers	31,408	No Formal Educational Credential
Nursing Assistants	26,350	Post-Secondary No Degree Award
Office Clerks, General	23,952	High School Diploma or Equivalent

Source: North Carolina Dept. of Commerce Labor and Economic Analysis Division

2020 Total Jobs in North Carolina by Occupation and Education Level

Occupation	Less than High School	High School Diploma	Some College/ No Degree	Associate's Degree	Bachelor's Degree	Master's Degree or Better
Management	8,180	55,790	69,330	37,050	139,930	58,860
Business operations	2,520	12,690	30,080	7,730	50,300	18,230
Financial services	-	5,300	12,910	15,550	67,690	32,780
Legal	-	1,180	4,120	2,930	6,620	15,100
Computer & mathematical sciences	400	4,960	24,450	11,990	53,460	18,180
Architecture	240	2,600	1,840	2,210	3,270	630
Engineering	100	2,640	5,880	6,210	23,900	8,530
Life & physical sciences	570	1,350	3,720	2,470	9,310	13,680
Social sciences	-	-	410	500	9,600	12,910
Community & social services	310	2,960	12,190	5,840	34,390	25,620
Arts, design, entertainment, sports & media	880	12,180	28,450	15,820	57,890	13,680
Education, training & library	550	12,500	40,540	23,120	123,820	103,480
Healthcare professional & technical	2,070	15,160	39,580	67,910	59,130	71,370
Healthcare support	11,370	41,440	82,880	27,760	12,820	3,180
Food preparation & serving related	77,180	119,620	91,070	22,040	43,560	6,480
Building and grounds cleaning & maintenance	50,630	90,060	46,870	13,480	14,320	940
Personal care & services	9,180	53,830	57,710	26,640	23,140	3,860
Protective services	1,300	21,980	34,460	12,930	23,940	3,360
Sales & related	23,180	164,590	174,680	61,470	193,550	29,220
Office & administrative support	20,650	183,760	215,260	92,870	108,530	20,800
Farming, fishing & forestry	9,810	6,900	3,160	810	1,050	-
Construction & extraction	62,580	97,370	40,980	13,590	8,850	2,320
Installation, maintenance & repair	21,800	72,150	58,240	27,420	8,960	1,700
Production	56,850	152,490	77,770	14,990	18,420	3,080
Transportation & material moving	50,460	141,040	63,760	15,140	22,480	3,900
Totals:	410,810	1,274,540	1,220,340	528,470	1,119,930	471,890

Source: Georgetown Public Policy Institute "Recovery: Job Growth and Education Requirement Through 2020. (p:77)

Transforming the Roadmap to Career

North Carolina employers are the No. 1 consumers of North Carolina’s talent. Unfortunately, businesses currently have limited ability to control the quality of the workforce being produced. As a result, while business cannot find the right people for available jobs, unemployed North Carolinians do not have the skills needed to secure available jobs. The state needs a coordinated, comprehensive approach to talent development that emphasizes value with accountability for results.

The talent supply chain, shown below, demonstrates many of the options for an individual who is on the road to a career, beginning at home, continuing in Pre-K and persisting through lifelong retraining. Many stakeholders contribute to a successful talent supply chain. A demand-driven system for education and workforce, one that incorporates the needs of employers, will be critical to our state’s future competitiveness.

The first step is to achieve consensus on the goal for the talent supply chain: **To prepare every individual traveling along the road to a career for the right job at the right time.** This will take an alignment of objectives, goals and communication that is currently lacking.

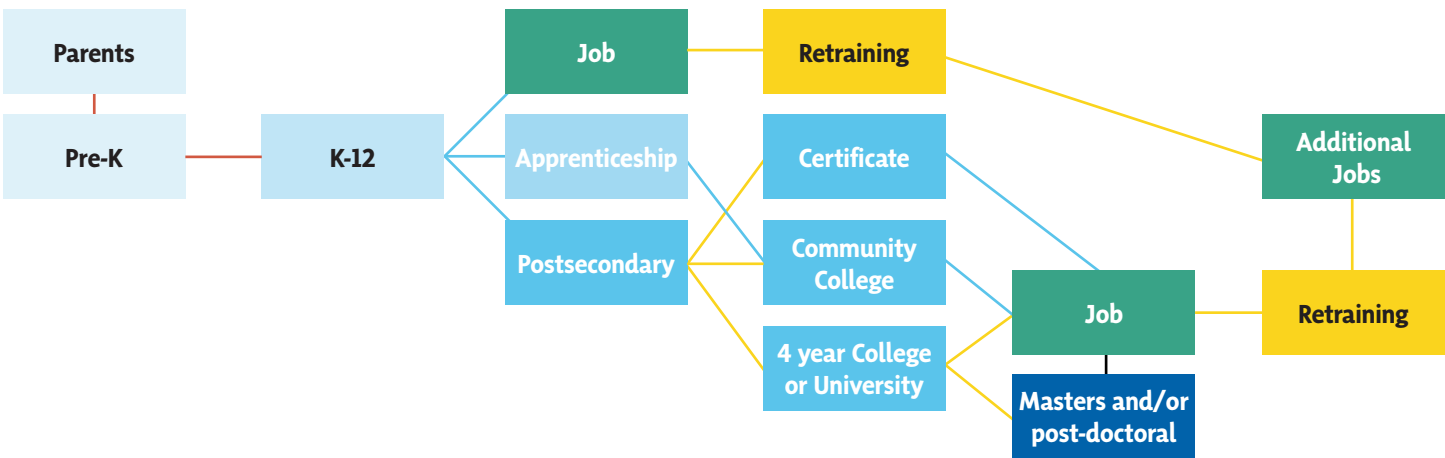
The Stakeholder Wheel to Success is a visual representation of the key components that stakeholders along the talent supply chain must collaborate on as they redefine value as the ultimate match of an individual with a career. The Stakeholder Wheel to Success requires stakeholders to be “all in” to match the skills being taught with those needed by employers by: (1) collaborating with employers; (2) transforming education and workforce delivery; (3) promoting transparency and accountability; (4) improving communications; and (5) leading by example.

Stakeholder Wheel to Success



Stakeholders across the talent supply chain working together on a multi-pronged strategy to drive value in the education and the workforce delivery system will result in more successful and highly skilled talent equipped to meet the needs of employers. Following are six areas where challenges are impeding success and recommendations for improvement.

Talent Supply Chain



Transforming Education and Workforce Delivery

Challenge: Skills being taught must match with those needed by employers.

There are many reasons to get an education, but one is fundamental: learning the skills needed to become economically self-sufficient and successful in life. Many studies have been published in the past few years examining the skills gap or the skills mismatch. One post-recession McKinsey study, **Education to Employment**, reported that less than half of employers believe new graduates are adequately prepared for work.

As noted previously, advances in technology and business practices are raising the bar for needed skills every day. To align the skills being taught, and those in demand, will require ongoing employer input and continuous calibration.

Career and academic planning must start earlier than junior year of high school. The **2016 North Carolina State Progress Report**, by the Southern Regional Education Board (SREB), analyzed middle grades career and academic planning.

SREB's 2011 Middle Grades Commission report, **A New Mission for the Middle Grades**, called for states to ensure that all students create an academic plan, as well as identify and explore potential plans. Students are always able to change their plans. Providing all students with the opportunity to identify a vision for their future lets them see a pathway for success in a career. The leaders within the talent supply chain must give individuals who are traveling on the road to their career the tools and knowledge necessary to make them successful.

Opportunities

- 1) The North Carolina Department of Public Instruction (DPI) should ensure all ninth graders develop an academic plan that aligns with the vision for their future by providing students and families with the tools and knowledge necessary to make informed decisions.
- 2) Encourage school systems and the business community to prioritize and increase work-based learning options, such as apprenticeships, internships and externships, within the K-12 and postsecondary systems.
- 3) Ensure the proper implementation of the North Carolina Digital Learning Plan, designed to support innovation and provide resources to let educators and students benefit from digital-age teaching and learning. This should include appropriate professional development for educators and ongoing involvement by multiple stakeholders.

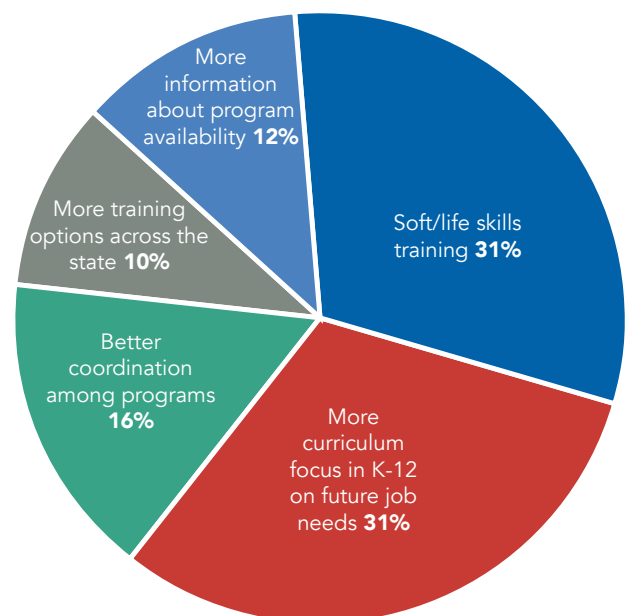
Certified Career Pathways – An Employer's Experience

One employer involved in a certified career pathway believes the approach has potential for statewide application in different employment sectors. Noting that he has lived in nine cities, he said the program has been very beneficial in bringing the interested parties together.

"There are many programs in every community, and it's hard to understand who you should partner with and how they work. This program connects everybody. ...It actually connects them with the employers in real time, in a real effort to get people moving in the right direction."

Continued state support for the effort is key, he said. "This allows employers to take some risk because there is some upfront funding available" to develop the pathway. "But you know an individual has been going through training that will help them improve."

Please define what you would need to improve your workforce.



Source: Survey of North Carolina Chamber of Commerce members, 2017

Collaborating with Employers

Challenge: Employer touch points are lacking throughout the talent supply chain.

According to employers, engaging in the talent supply chain is frequently frustrating and often becomes a barrier to engagement and results. Making it less complicated for employers to collaborate with education/workforce partners improves results for all parties.

One area that offers great potential for meaningful employer involvement and improved outcomes is work-based learning. The business community understands its own needs and the qualifications that must be met to ensure that today's students can be seamlessly connected with tomorrow's jobs. Work-based learning can enable employers to communicate that critical information to students and educators.

The Stanford Center for Opportunity Policy in Education states that benefits of work-based learning include: application of classroom knowledge to real-world problems, higher student completion rates, student ownership in their future and the development of critical skills. Work-based learning, including internships, mentorship and apprenticeships, prepares students for both postsecondary and career opportunities. The entire talent supply chain must be engaged to make these experiences available and valuable.

One example of the business community being engaged in training and work-based learning is through apprenticeships. The business community across North Carolina has locally been carrying the brand for apprenticeships. The North Carolina Chamber Foundation launched the Apprenticeship Advisory Council, which has taken on the responsibility of making North Carolina the gold standard, working to be the top state for apprenticeships. Moving forward, the Council will be focused on building the brand of apprenticeships, removing barriers and engaging all stakeholders to continue expanding apprenticeships across North Carolina.

"We have a mind-numbing system of complex systems with no accountability to achieve the most important thing – to give our citizens the skills to be successful in life."

- A North Carolina economic developer

North Carolina has a long history of leading in Career and Technical Education. To expand and realign these efforts, the Department of Career and Technical Education, in partnership with the NCWorks Commission, collaborated on the development of certified "gold standard" career pathways. These career pathways are regionally focused and developed with local direction and oversight. Today North Carolina has 14 certified career pathways.

Opportunities

- 4) Engage multiple state agencies (Department of Public Instruction, Department of Labor, Economic Development Partnership of NC, etc.) to collaborate with the business community to conduct an annual review of the state's anticipated workforce needs and the number of postsecondary credentials that are being issued, identifying workforce needs that may not be met by education and training programs.
- 5) The NC Chamber Foundation will manage an internal Apprenticeship Council to take the lead on being the business voice for apprenticeships in the state. The Council will create a five-year plan to become the No. 1 state for apprenticeships and will be focused on reduced regulations, improved regionalization, expanded sector involvement and removing barriers for the growth of apprenticeship in the state.

"We have seen from attending these certifications across the state that employers are beginning to weight the Career Readiness Certificate even more heavily than a high school diploma because they know immediately by seeing a Bronze, Silver, Gold or Platinum Certificate on a resume that the applicant has proven certain foundational skills needed for employment within their company."

- Lew Ebert, President & CEO, NC Chamber

Transforming the Education/Workforce Delivery System

Challenge: The education and workforce delivery "system" is complex, confusing and crowded.

North Carolina has a complex and, according to employers, convoluted workforce system. Navigating this system is not a new problem for employers. In fact, the NC Chamber Foundation commissioned UWC to conduct "The North Carolina Workforce System Review and Options for Reform" in 2014 to obtain an objective evaluation of the state's workforce system, with special emphasis on service delivery and program administration. Unfortunately, three years later, focus groups with employers revealed that there is still confusion with North Carolina's workforce programs, and they report that the skills gap continues to widen.

In every industry, employers are asking the same question: **How are we going to find, hire, train and retain the best workers?** Finding the answer is frustrating, especially for smaller or midsize companies already short on personnel, time and resources.

For employers, the challenges lie in figuring out where to go, what contacts to make, how to identify which program might be helpful and how to use it to meet

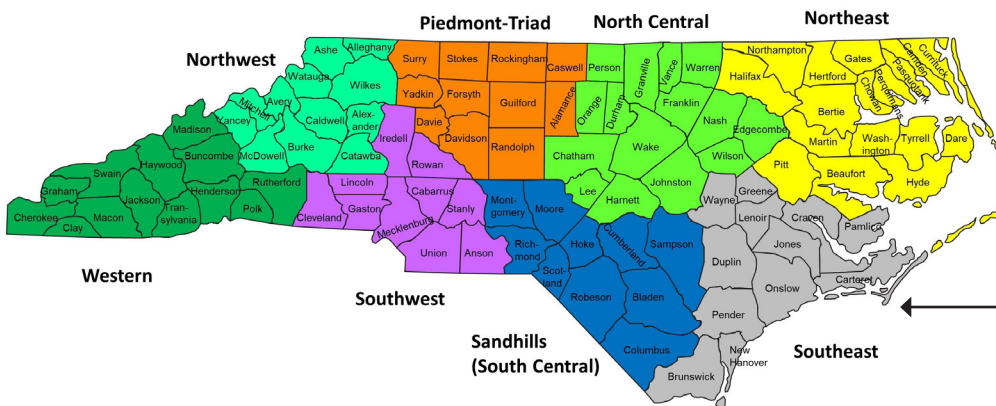
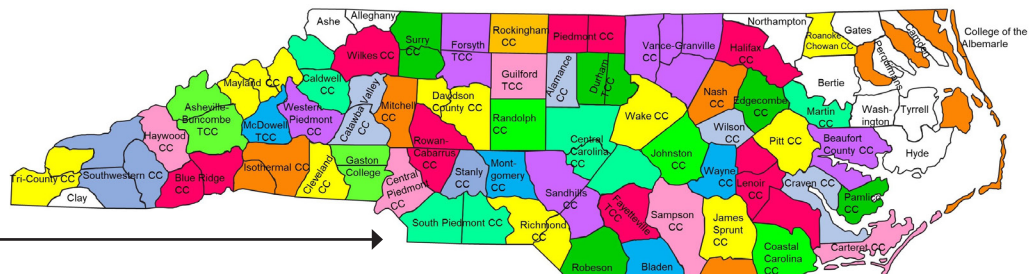
workforce needs. **The complexity of the system reduces its value. Both North Carolina citizens and businesses suffer lost opportunities.** Without a central information clearinghouse and real time evaluations of the scope, effectiveness and efficiency of the individual programs, many businesses find the system is just too time prohibitive to use.

Opportunities

- 6) Establish regional workforce development resources - one point of contact in each region, acting as business concierges, with the sole purpose of connecting businesses to the correct agency for their specific workforce challenges/needs.
- 7) Remove and/or streamline any existing, restrictive borders within which community colleges, workforce development boards and others can serve employers. The state must take a regional approach to preparing our workforce. It no longer serves the needs of businesses to continue operating within arbitrary and outdated service areas.

North Carolina Community Colleges

Source: NC Community Colleges System

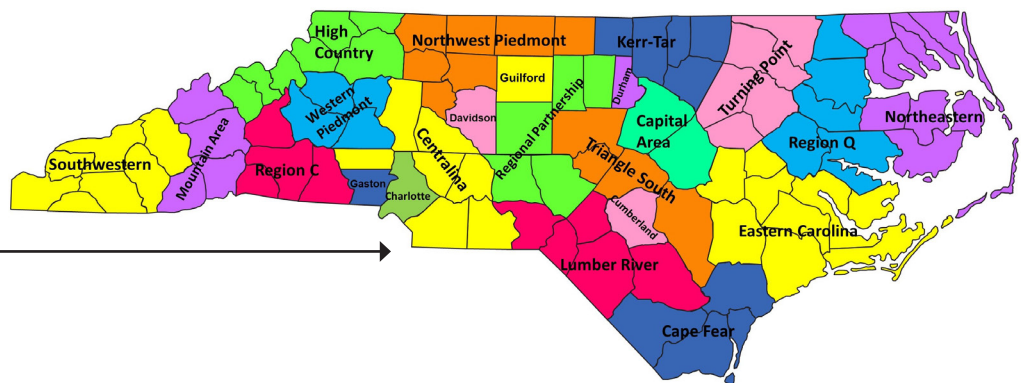


North Carolina Prosperity Zones

Source: NC Department of Commerce

North Carolina Workforce Development Boards

Source: NC Association of Workforce Development Boards



Promoting Transparency & Accountability

Challenge: Accountability is lacking for the talent supply chain as a whole.

It is ultimately the responsibility of employers, the end consumer of the talent supply chain, to hold all suppliers accountable. The business community is sending a clear message that it is not getting what it needs from the talent supply chain and is beginning to look to holding the talent supply chain accountable.

This can be seen through the business community's work with local community college systems and the K-12 system on educational goals and objectives and addressing unmet needs. However, the current system makes it challenging for employers to make their needs heard and to make substantial change on a regional level. There is also a lack of accountability between the K-12 system and postsecondary institutions.

In 2011, North Carolina reorganized the workforce delivery system through administrative restructuring that placed responsibility for the primary federally funded workforce programs within the Department of Commerce. In 2012, these programs were rebranded under NCWorks.

Workforce programs in the state stretch well beyond the N.C. Department of Commerce and the eight Prosperity Zones therein; 115 local school districts, 58 community colleges, 23 workforce development boards and countless local chambers of commerce and economic development organizations can operate as the local authority for workforce needs. This abundance and layering of local contacts and agencies may seem helpful on paper, but it leaves employers questioning who should be their main point of contact and who should be held accountable to meet their needs.

There must be a change in accountability within the talent supply chain to create value for individuals who are on the road to a career and for the businesses that will employ them.

Opportunities

- 8) Break down or bridge the silos among workforce partners. Each region should develop a team of representatives from all workforce agencies to develop a strategic plan to meet regional employer needs, incorporating local employers throughout the talent pipeline.
- 9) Establish employer-based performance measures in addition to tracking the broad measures of entered employment rate, retention rate and average wages, and engage employers on a regular basis with customer satisfaction surveys and focus groups to enable continuous improvement. This recommendation was also provided in the North Carolina Workforce System Review and Options for Reform, commissioned by the North Carolina Chamber Foundation and conducted by UWC in 2014.

Imagine an Employer's Perspective - The Complexity of North Carolina's Workforce System

A large regional employer in the Triad wants to engage the workforce system in their region to find the skilled workers they need for an expansion over the next three years but isn't sure where to start or how to engage possible partners. They want to be good corporate citizens, and they also want to attract and engage employees from across the labor shed, which they have established as a 45-minute drive-time to their facility. After some initial investigation, they learn that the 11 counties of the region's prosperity zone are served by four different workforce boards, eight community colleges, dozens of Career and Technical Education programs in the individual school systems, several good apprenticeship programs, and unique programs like TriadWorks, Triad Workforce Solutions, NCWorks, Piedmont Triad Education Consortium, Goodwill, Step Up Greensboro and many others. They might have identified who the players are, or can be, but they still aren't certain where to go to find out what program or provider would best meet their needs. They find themselves spending far more time than they intended trying to figure that out. The employer, frustrated, reaches out to a couple of the organizations, but quickly encounters barriers to working across the whole region or to maximizing the potential labor pool and finds that they actually do need to talk to many different people to find out if what they need is possible. The employer gives up and decides to hire an expensive recruitment firm that begins recruiting talent outside of their region in another state.

Improving Communications

Challenge: There is not clear communication or an overall brand for success in education or workforce in North Carolina.

Even with the long list of programs and services, both for individuals and employers, the mismatch between open positions and individuals continues to widen. The percentage of available jobs as a percentage of total jobs was 3.8 percent in the South as of March 2017. (Bureau of Labor Statistics, 2017)

Public perception has long been a hindrance to individuals exploring a less traditional path to a career. Alternatives to a four-year bachelor's degree are often viewed as being less rigorous or rewarding – a major brand challenge to overcome.

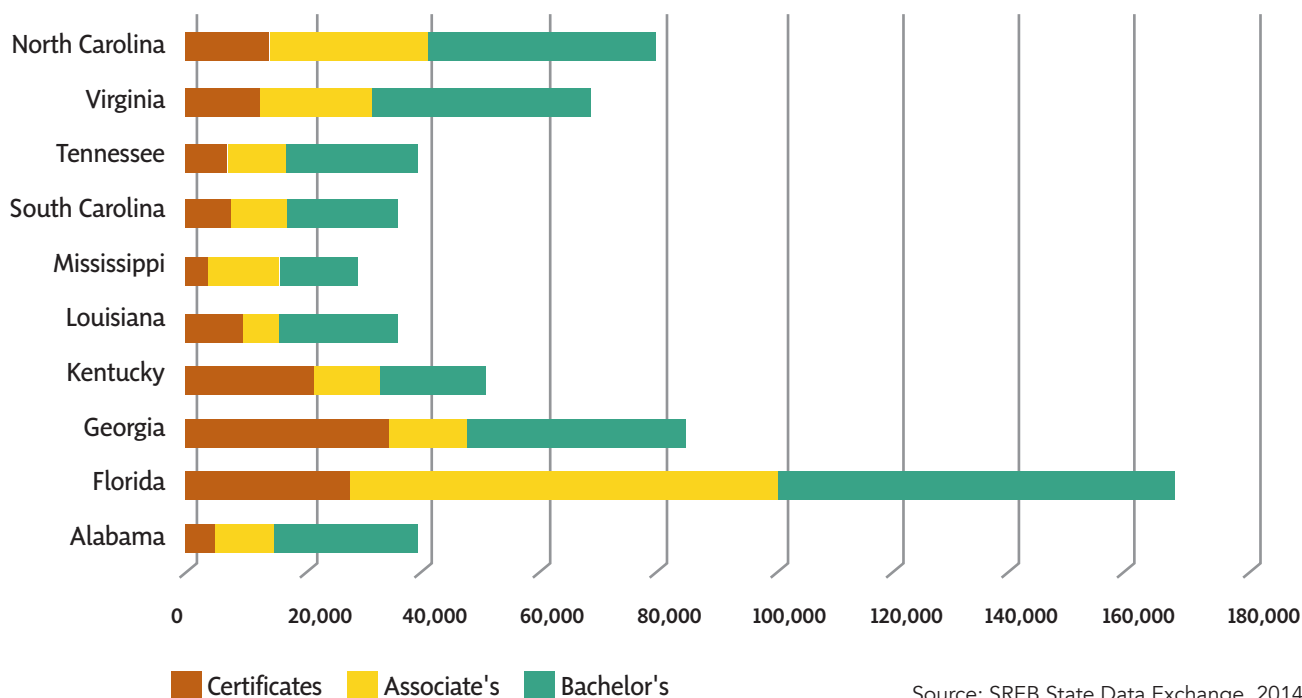
According to Georgetown University's Center on Education and Workforce report *Recovery: Job Growth and Education Requirements Through 2020* – 67 percent of jobs in North Carolina will require postsecondary education by 2020. Looking further into the job requirements of 2020, 22 percent will require a bachelor's degree, and only 10 percent will require a master's degree or better. Postsecondary can no longer be defined by an associate's and/or bachelor's degree. Increasing access to and attainment of industry-recognized credentials and alternate pathways will be crucial in preparing students for the jobs of the future.

The goal is for North Carolina to be the No. 1 state for workforce readiness. This must be the brand that all stakeholders along North Carolina's talent supply chain are engaged in promoting.

There are many examples of individual members along the talent supply chain working together to build their individual brand. This has contributed to the complexity and confusion that makes it difficult for employers to navigate the system. There must be collaboration locally and statewide to build the value and brand of North Carolina being the No. 1 state for workforce readiness.

The NCWorks Certified WorkReady Communities initiative was created to address the need for increased credentialing. Companies rely on the value of the National Career Readiness Certificate (NCRC) to better align open jobs with the foundational skills they require. Counties participate in the program by organizing a team of local workforce leaders to develop a collaborative strategic plan to solve their local workforce challenges. This includes increasing the number of National Career Readiness Certificates administered to high school students, the

Certificates, Associate's and Bachelor's Degrees Awarded



Source: SREB State Data Exchange, 2014

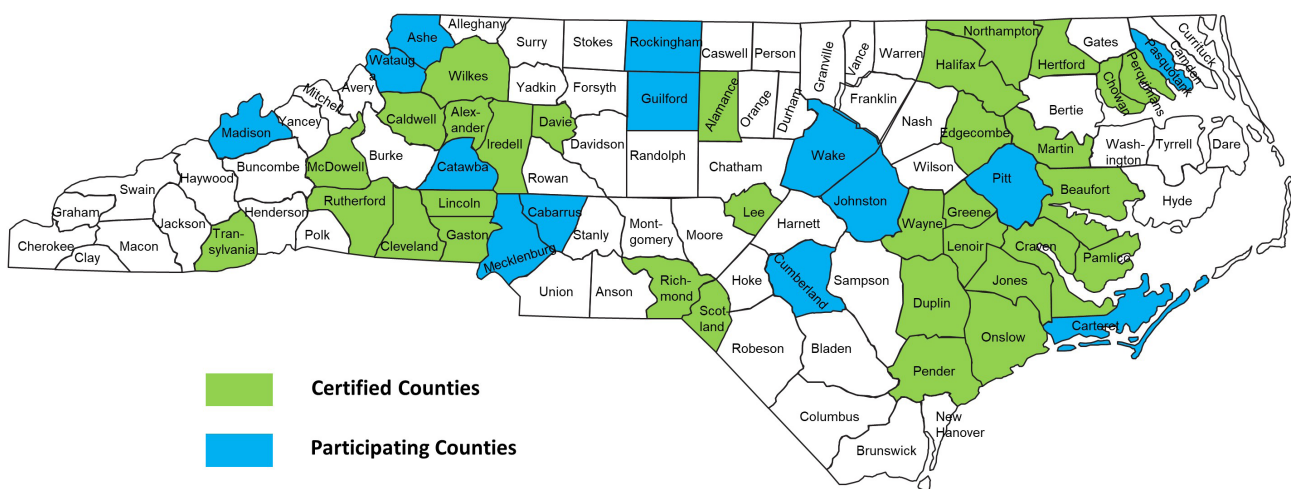
unemployed and transitioning workforce; engaging employers in recognizing and/or recommending the NCRC in their hiring; continuing to increase high school graduation rates; and, perhaps most important, making a commitment to continued collaboration among all workforce partners to utilize data and make demand-driven decisions on closing the skills gap.

To date, 28 North Carolina counties have been certified as Work Ready and approximately 15 additional counties have established local teams that are actively working toward certification goals.

Opportunities

- 10) Develop regional partnerships of NCWorks Certified WorkReady Communities. Grow the number of certified communities to 50 by 2020 and all 100 counties certified by 2030. Continue supporting certified counties to maintain their certification while assisting non-participating counties to join the initiative.
- 11) State workforce and business leaders should jointly develop and implement an outreach campaign with the NC Chamber Foundation, which includes local chambers of commerce, economic developers and workforce boards, to raise awareness of workforce programs.
- 12) Increase the number of and accessibility to career pathways across the state, giving priority to pathways that lead to industry-recognized credentials.

Certified & Participating WorkReady Communities



Source: ACT WorkReady Communities

Leading by Example

Challenge: There is a lack of “tribal leaders.”

North Carolina is uniquely positioned with an abundance of strong private and public sector leaders. Unfortunately, these leaders have not collaborated to successfully address the persistent challenges that inhibit aligning the priorities of the education and workforce systems with the needs of employers. Leaders must demand change that equips students, parents and individuals navigating the workforce system with the tools necessary to be successful. This should start in the early grades; it is often too late to wait until a student is deciding which postsecondary path to follow or when an individual is seeking a job.

North Carolina has an exceptional group of leaders who can work together to make our state the leading place to do business and pursue a high quality of life in the 21st century economy. These leaders must take on the responsibility to address the complications and opportunities that are evident in our state with the challenge of workforce readiness. To ensure the future needs of the business community are met, job creators must continue to think of themselves as key tribal leaders who will need to play an active role in the solution.

Opportunities

- 14) Business organizations and chambers of commerce should develop working groups of employers and “tribal leaders” to identify, by sector, credentials that best reflect the skills needed for successful performance in the workplace.
- 15) The North Carolina Chamber Foundation, through the Chamber Federation (an aligned group of members made up of local chambers of commerce and other economic development groups), will identify and coordinate 200 business mentors for high school and middle school guidance counselors in targeted North Carolina non-urban counties by December 2017.

Conclusion

Roadmap to Career was developed to serve as a framework to deliver a message of vital concern to North Carolina's business community, the largest consumer of talent. The education and workforce systems are not properly aligned and the results are that North Carolina employers cannot find qualified talent for available jobs. This report serves as a call to action from the North Carolina business community to all the stakeholders along the workforce continuum to make North Carolina a leader in the region and the nation in talent development and workforce readiness.

The recommendations provided in this report are intended to be provocative and provide the guardrails necessary for productive debate. The North Carolina business community is committed to a collaborative and focused discussion, which will lead to sustainable and measurable improvements along the talent development pipeline. The time is now to make a commitment to change and continuously improve at the speed of business if North Carolina is to compete in and win *The Coming Jobs War*.

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