



NC TOMORROW
Building Communities for Tomorrow's Jobs

North Carolina Regional and
Statewide Strategies for
Comprehensive Community and
Economic Development



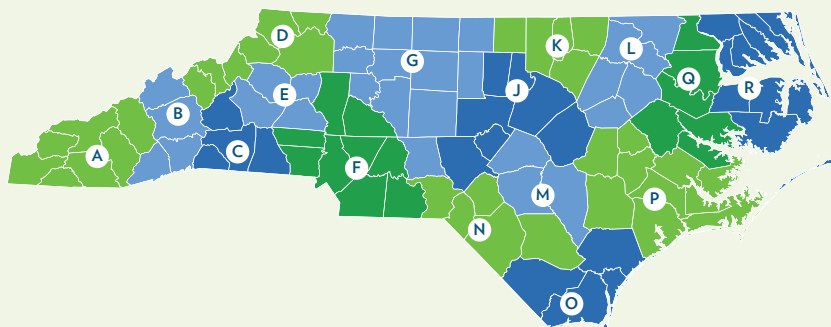


The North Carolina Association of Regional Councils
in partnership with
The U.S. Economic Development Administration
The U.S. Department of Housing and Urban Development
presents



NC TOMORROW

Building Communities for Tomorrow's Jobs



- A Southwestern Commission
- B Land of Sky Regional Council
- C Isothermal Planning & Development Commission
- D High Country Council of Governments
- E Western Piedmont Council of Governments
- F Centralina Council of Governments
- G Piedmont Triad Regional Council
- J Triangle J Council of Governments
- K Kerr-Tar Regional Council of Governments
- L Upper Coastal Plain Council of Governments
- M Mid-Carolina Council of Governments
- N Lumber River Council of Governments
- O Cape Fear Council of Governments
- P Eastern Carolina Council
- Q Mid-East Commission
- R Albemarle Commission

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by Ridgetop Associates and the Center for Regional Economic Competitiveness.

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INTRODUCTION

NC Tomorrow is an initiative of the North Carolina Association of Regional Councils in partnership with numerous organizations across North Carolina. This update was developed with input from several new partners: The NC Rural Center, the NC Metro Mayors Coalition, the NC League of Municipalities, the NC Association of County Commissioners and the Economic Development Partnership of North Carolina. In addition, a new statewide survey of community leaders and elected officials was conducted in December of 2016 to gauge the progress as well as the ongoing challenges of the community and economic well-being of North Carolina.

This revised plan is designed for the stakeholders in North Carolina's economic and community development agencies as a set of goals, strategies, tactics and metrics to reach the higher-arching goal of making North Carolina a better place to live, work and play. The original plan, developed in 2012 and published in 2014, incorporated 16 regional plans with uniform Regional Comprehensive Economic Development Strategies (CEDS) designed to identify regional priorities for resilient economic and community development. The regional plans served as the foundation for a statewide **Strategy for Comprehensive Economic Development** intended to function as a suggested blueprint for statewide efforts to "Build Communities for Tomorrow's Jobs."

A number of state rankings rate North Carolina favorably as a place for doing business. For example, the state ranks very highly in the popular state rankings produced by *Site Selection* magazine (#1)¹, *Forbes'* Best States for Business (#2)², *CEO* magazine (#3)³, and *Area Development* magazine (#9)⁴. These general business climate rankings take into account a broad range of factors, and as a result tend to reflect a state's various strengths and weaknesses. Several common themes emerge from these rankings. For instance, North Carolina tends to score well when it comes to several tax-related issues, ranking (#1) in lowest state and local business tax burden in the U.S. according to Ernst Young, and (#4) in the lowest tax rate for corporate income⁵ by the Tax Foundation. At the same time, it scores relatively well in terms of available industrial sites, labor climate, transportation infrastructure, and general business friendly climate.

It is important to note that these kinds of rankings depend on what the researcher prioritizes, what data they use, and how they construct their analysis. The reports cited above, which score North Carolina favorably, emphasize the general business climate; but those rankings that place greater emphasis on state capacity for science, technology and innovation, rank North Carolina much lower. For instance, the Milken Institute's 2016 State Technology and Science Index ranks North Carolina 12th⁶ in the nation and the Information Technology and Innovation Foundation's 2014 State New Economy Index ranks North Carolina 23rd.⁷

¹ <http://siteselection.com/issues/2015/may/top-competitive-states.cfm>

² <http://www.forbes.com/places/nc/>

³ <http://chiefexecutive.net/2016-best-and-worst-states-for-business-full-list/>

⁴ <http://www.areadevelopment.com/Top-States-for-Doing-Business/>

⁵ <https://taxfoundation.org/publications/state-business-tax-climate-index/>



Another strong point of North Carolina's economy is its exceptional colleges and universities. In 2014, North Carolina's higher education institutions conferred more than 108,800 associate, bachelor, masters, and doctoral degrees, and confer over 20,500 science, technology, engineering, and math (STEM) degrees and certificates annually. To this end, North Carolina has developed a highly-skilled workforce, hosting over 460,000 manufacturing employees, the largest manufacturing workforce in the Southeastern U.S.⁸

Clearly, North Carolina still has significant work to do in order to compete effectively in today's global marketplace. At the most basic level, unemployment throughout the state remains a substantial problem as of January 2016. North Carolina had the country's 11th-highest unemployment rate at 5.1 percent.⁹ Moreover, per capita income also remains relatively low, as the state ranks 39th nationwide.¹⁰ North Carolina has numerous strengths, but in order to maintain and build on those strengths it must address many challenges.



This document lays out challenges that North Carolina needs to overcome to realize its goal of a more robust economy and recommends strategies for addressing these challenges. This document synthesizes the challenges and strategies identified in the State's 16 Regional Councils' CEDS documents, combined with input from partner organizations, local and state elected officials, the business community and community leaders from the private sector. This resulting statewide Strategy for Comprehensive Community and Economic Development does not include every regional CEDS strategy, but rather highlights the *common challenges and strategies* that could make a discernible difference on the state's overall economic prosperity. In addition, this document offers some recommended Statewide Policies for North Carolina that emerged as the work was being accomplished to develop the Statewide Strategy.

⁶ <http://statetechandscience.org/statetech.taf?page=state-ranking>

⁷ <https://itif.org/publications/2014/06/11/2014-state-new-economy-index>

⁸ <https://edpnc.com/wp-content/uploads/2016/08/NC-Overview-2016.pdf>

⁹ U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics

¹⁰ U.S. Census Bureau, American Community Survey



EXECUTIVE SUMMARY

In order to facilitate the development of a Statewide Strategy for Comprehensive Community and Economic Development, the Association developed strategies around four broad goals:

I. Build on the Region's Competitive Advantages and Leverage the Marketplace

II. Establish and Maintain a Robust Regional Infrastructure

III. Create Revitalized, Healthy, Secure and Resilient Communities

IV. Develop Talented and Innovative People

The NC Tomorrow initiative identified the challenges that must be overcome to achieve these goals, as well as the strategies identified by the various stakeholders including planning and economic development professionals, non-profits, local elected officials and the private sector community throughout the state's regions. This created a bottom-up as well as a top-down process in developing the plan.



I. Build on the Region's Competitive Advantages and Leverage the Marketplace

Several areas of the state are globally recognized for their business and industry clusters (e.g., Charlotte's Finance cluster and the Research Triangle's Information Technology cluster). Furthermore, different partners have focused on different clusters based on their own strategic priorities and capacity. However, the benefits emerging from these clusters are not felt equally across the state, as many regions do not have adequate assets to build these clusters or they do not have the capacity to maximize the potential of their economic development assets.

Recommended Statewide Policy

To achieve true prosperity, North Carolina will successfully coordinate efforts to build, grow and maintain robust, competitive areas of proficiency and innovation throughout the state.

This strategy supports the continued evolution of existing clusters within the state as employers. It is also aimed at supporting disruptive technologies and business models that could help North Carolina firms leapfrog their global competitors.

Targeting the State's Growth Clusters

Industry clusters that have traditionally been the focus for growth and development include:

- A. Defense and homeland security/
aerospace manufacturing,
- B. Tourism (e.g., art, entertainment, outdoor recreation and related industries),
- C. Transportation equipment, industrial machinery, and machining,
- D. Electronics and instruments manufacturing,
- E. Financial and information services,
- F. Energy,
- G. Life sciences (including pharmaceutical manufacturing) and related health informatics,
- H. Food processing and value-added agribusiness.

In addition to these targeted growth industries, North Carolina also is a national leader in furniture, textile, and plastics—industries that have struggled but are on the rebound.

Promoting Disruptive Advantages to Create Growth Opportunities “Beyond Clusters”

While the cluster targets provide a strong foundation on which to continue building the existing economy, North Carolina leaders recognize that many noteworthy growth opportunities will rely on emerging technologies or transformational business models rather than just continuing to build its existing industry clusters. Companies in almost any industry may gain a competitive advantage by developing new products or market niches in a wide variety of areas. For instance, state leaders have identified tremendous growth potential for companies capable of leveraging new technologies in emerging areas including:

- Video modeling and gaming,
- Nanomaterials,
- Pervasive computing,
- Digital design,
- Advanced materials and
- Rapid prototyping.

These technological shifts have the potential to create new business models for almost every industry, from construction and manufacturing to product distribution to business services and health care to a variety of other supporting services. Because the impacts of these disruptive technologies are not restricted to companies in any specific industry or cluster, it is vital that North Carolina (and its companies) gain a competitive edge in the commercial application of these technologies and the business model shifts they imply.



II. Establish and Maintain a Robust Regional Infrastructure:

North Carolina has many infrastructure assets on which to build, including several major airports, six interstate highways, and extensive broadband penetration. For these and other infrastructure assets to contribute to the state's overall economic competitiveness, strategic investments must be made to ensure that these assets are maintained and expanded.

Recommended Statewide Policy

To remain competitive in a growing global economy, North Carolina should make the revitalization and improvement of state and local infrastructure a priority for policy change and funding.

While North Carolina has many infrastructure assets, the full capacity of its infrastructure has not been fully realized. North Carolina will become more competitive when businesses, entrepreneurs and residents are able to make use of well-coordinated and robust regional transportation, water/sewer/gas, broadband, housing, energy and natural environment infrastructures such as national parks and forests.

North Carolina must focus on making strategically important investments in its infrastructure to ensure that it is best able to leverage its physical and talent assets. Providing productive workplaces—with state-of-the-art broadband, the most energy-efficient buildings, and high quality amenities—will ensure that North Carolina's people are the most dynamic in the world. Moving goods and information efficiently are vital to accessing markets, moving workers, and maintaining cost-competitive production of products or services.



III. Create Revitalized, Healthy, Secure and Resilient Communities:

Although North Carolina has many thriving cities and towns, there remain places throughout the state that are experiencing declining downtowns and outmigration of people.

Recommended Statewide Policy

To meet the needs of employers and residents alike, North Carolina strives to increase the number of resilient communities.

To thrive and prosper, both urban and rural communities must actively build on unique advantages to revitalize and/or maintain their city and town centers. The state has some key challenges in ensuring that every citizen has an opportunity to access affordable and safe housing, alternative transportation options to get to work, and health care to meet the needs of area workers. This will require not only creating environments where businesses want to locate, but also as places where people of all ages want to spend time personally and professionally.

North Carolina will need to identify main streets that offer potential as community centers, job centers, and residential centers. Targeting resources to these places is a smart investment. It builds on an existing infrastructure that is often underutilized. It recognizes the productivity improvements that can be achieved by encouraging companies to work near one another—through the opportunities for greater collaboration, through the amenity assets that can help workers be more prolific, as well as the shared learning that happens from close community ties. Finally, it recognizes changing consumer preferences as more workers and families continue to try to satisfy their preference for either urban amenities or small-town living.



IV. Develop Talented and Innovative People:

Despite historically high unemployment rates, many employers across the state have experienced difficulty in finding, recruiting, and hiring the kinds of skilled workers the companies need to be competitive. For some employers, the challenge is finding individuals with basic work readiness skills. For others, the challenge is finding individuals with applied technical skills to maintain a competitive edge. For others still, the challenge is finding workers with the ability to understand the company and its mission, adapt to a changing workplace, and anticipate customer demands even before the customer realizes they have a need. Companies increasingly turn to the higher education system to meet this workforce need, but not always successfully. Therefore, companies also search for the types of workers they need in a national and even global marketplace.

Recommended Statewide Policy

The key competitive asset for businesses in the 21st century, North Carolina strives to prepare the flexible, entrepreneurial, globally oriented, and skilled workers with cross-cutting competencies sought by employers.

North Carolina has an incredible asset base on which to build a globally competitive talent pipeline. The state has a tremendous university system, a nationally recognized community college system, and an improving public secondary school system. These systems are becoming more “demand-driven” (meaning that the educational systems are recognizing that they are preparing the future generation of North Carolina workers, so they should become more focused on the needs of the state’s employers), but these institutions have far to go. The community colleges are probably furthest along in their efforts to be more industry-focused in their curriculum, but they have many

public financial incentives to focus a large portion of their mission on articulating general college education and fewer incentives to provide the kinds of career and technical education companies increasingly demand. The state’s universities are also beginning to respond, but they have significant internal barriers to change that slow progress.

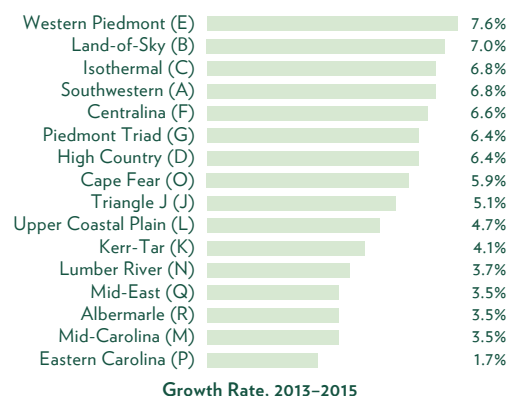
At the same time, North Carolina’s public workforce development and training system could lead the way since the focus is on helping jobseekers find employment. Like many other states, too many jobseekers lack the essential soft skills that employers require, and the training needed to ensure that everyone seeking work is employable. The workforce system has limited resources that are spread way too thinly across many different organizations. The federally legislated and state-designated Workforce Development Boards (WDBs) provide an opportunity for private sector leaders to help identify regional labor needs, guide workforce and education investments, and develop targeted training programs. The WDBs have a designated role as a funding pipeline, but limited resources and capacity means they are not always able to fulfill their role as a “go-to” regional workforce planning entity.

The Association also recommends the investment of financial resources into research and analytical tools that will enable all units of government to measure the effectiveness of their work in community and economic development. Tools that provide a “dashboard” for measuring quality of life and prosperity through performance analytics is critical for precious resource management from the local, regional and state levels. Otherwise, North Carolina could once again invest in “great ideas” that might not produce the necessary changes at the community level across the state.

GOAL 1: BUILD ON EACH REGION'S COMPETITIVE ADVANTAGES AND LEVERAGE THE MARKETPLACE.

To achieve true prosperity, North Carolina will successfully coordinate efforts to build, grow and maintain robust, competitive areas of proficiency and innovation across the state.

Figure 1: Per Capita Income (2013–2015)



Challenge 1: Many regions have struggled economically and not been able to attract investment as effectively as the state's more prosperous areas. For smaller rural locations, lower incomes, poor job growth, and few clear competitive advantages mean they must better connect to the state's high-growth areas.

According to the Rural Assistance Center, rural communities throughout the USA are more likely to depend on a single employment sector than urban areas, which often translates to lower wages and more seasonal work. Lower Per Capita Income (PCI) limits tax revenue, resulting in fewer resources for social services and less money being put back into the community.¹¹

North Carolina's PCI is more than \$3,000 less than the U.S. average,¹² but there are PCI disparities throughout the state. In fact, only 10 counties in North Carolina—Carteret, Chatham, Dare, Durham, Mecklenburg, Moore, New Hanover, Orange, Union, and Wake—have PCI levels above the U.S. average, and only 22 counties statewide have PCIs above the North Carolina average. As shown in Figure 1, regional PCIs west of Interstate 77 have grown faster than those to the east.

The regional disparities are also reflected in employment growth. Figure 2 shows that over two-thirds of North Carolina's net job growth since 2013 is shared

between the state's largest urban centers—Centralina and Triangle regions. In contrast, significant job losses occurred in many rural regions and especially those in the Piedmont and along coastal Carolina.

This unevenness creates many different and sometimes conflicting visions for the state's economic future. This can lead to challenges for organizing and delivering economic development services throughout the state. For instance, the state's diverse regional economies can be a challenge for presenting a common North Carolina state image or brand. It can also pose challenges for delivering necessary economic development services to regions that have many needs and limited capacity and resources.

Motivation for a new strategic direction:

North Carolina is widely known as a rapid-growth state driven by its globally recognized financial services and high-technology activities. However, this image does not fully align with the realities of many areas of the state. Past efforts to market One North Carolina have largely been internally focused and have had limited success in attracting attention and investment to areas outside Charlotte and the Research Triangle. A more successful regional branding effort would offer clearer messages about the state's diverse assets and would include more impactful execution of a statewide branding and marketing initiative designed to increase in the number of companies expanding into or re-locating to all parts of North Carolina.

Figure 2: Net Employment Growth (2013–2015)

Employment: Job Gains, Talent in 5 Urban Areas			
Region	2016	'13-'16	Pct.
Centralina (F)	1,126,034	99,801	9.7%
Triangle J (J)	1,013,435	82,334	8.8%
Land-of-Sky (B)	198,820	12,135	6.5%
Cape Fear (O)	185,178	10,761	6.2%
Southwestern (A)	72,895	3,090	4.4%
Piedmont Triad (G)	778,074	27,181	3.6%
High Country (D)	81,761	2,547	3.2%
Isothermal (C)	83,207	2,531	3.1%
Albermarle (R)	68,088	1,802	2.7%
Kerr-Tar (K)	68,799	1,786	2.7%
Western Piedmont (E)	160,079	3,733	2.4%
Mid-East (Q)	126,121	2,169	1.7%
Eastern Carolina (P)	296,473	3,882	1.3%
Mid-Carolina (M)	230,823	2,996	1.3%
Upper Coastal Plain (L)	127,107	1,435	1.1%
Lumber River (N)	96,942	221	0.2%

Source: EMSI, 2016.4. Includes self-employment

United States 5.6%
North Carolina 6.1%

¹¹ "Economic Development." <http://www.raconline.org/topics/economic-development/>

¹² U.S. Census Bureau, U.S. Chamber of Commerce. <https://factfinder.census.gov>

STRATEGIES AND TACTICS:

1. Develop a statewide brand and integrated vision of how to best leverage assets for economic development.

- 1.1. Take an active leadership role in managing a statewide branding and visioning process.
- 1.2. Analyze existing regional identities and brands, and their contributions toward a statewide economic development brand.
- 1.3. Launch an expanded statewide brand recognition campaign (that acknowledges the state's unique regional characteristics) to support targeted recruitment of companies, entrepreneurs, and talent.

2. Encourage collaboration in marketing regional economic and community development assets.

- 2.1. Foster regional branding, product development, and product marketing initiatives that engage networks of small businesses in industries that need to collaborate to build scale (e.g., agricultural products and local foods, viticulture, recreation and tourism, etc.).
- 2.2. Facilitate regional collaboration of travel and tourism marketing to better utilize funding and increase impact.

3. Improve industry access to direct assistance to existing businesses in becoming more globally competitive.

- 3.1. Coordinate business services across multiple programs to help North Carolina small businesses to become more innovative and proficient in competing for global business.
- 3.2. Integrate and actively market business assistance program services from a variety of organizations (including financing, exporting, management planning, site selection, workforce development, and other services) as an integrated and seamless network that helps companies access any type of assistance through "no wrong door."

PERFORMANCE MEASURES:

Milestones:

- Completed regional brand analysis
- Established statewide brand campaign
- Ongoing collaborative marketing campaigns for key industries willing to work together (e.g., agricultural and local foods, viticulture, recreation and tourism, etc.)

Metrics:

- Proportion of business executives in targeted industries that recognize revitalized NC brand
- Revenue growth for key industries
- Number of collaborations within key industries
- Number of existing firms receiving business services

GOAL 1:

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- 1.1. Defense and homeland security/aerospace
- 1.2. Tourism (e.g., art, entertainment, outdoor recreation and related industries)
- 1.3. Transportation equipment, industrial machinery, machining
- 1.4. Electronics and instruments
- 1.5. Financial and information services
- 1.6. Energy
- 1.7. Life sciences (including pharmaceutical manufacturing) and related health informatics
- 1.8. Food processing and value-added agribusiness

Challenge 2: North Carolina's regions require more information about their unique areas of proficiencies and innovation and how best to exploit their competitive advantages. Support for these unique areas of proficiencies and innovation often occurs in an ad hoc manner.

More and more, policy makers are embracing data-driven regional economic analysis approaches as the foundation for strategic planning process because this approach provides fact-based information about a region's unique competitive advantages. As indicated in the 2011 State of North Carolina Workforce Report,¹⁵ North Carolina's regions vary greatly in their economic drivers and workforce characteristics. For instance, the census employment data used in this report showed the recent job growth in the Research Triangle primarily came from the expansion of medical device and electronic equipment manufacturing in the region. Fort Bragg, on the other hand, was a winner in the BRAC process and benefited due to historical growth in defense spending and activities that were relocated to the state from other parts of the country. Meanwhile, the greater Hickory area has undergone a major transformation in its traditional industries. The remaining furniture and textile manufacturers are no longer engaged in labor-intensive manufacturing, but are now more driven by innovating high-quality, customized products. Furthermore, health care has become an important source of high-quality jobs in communities large and small. However, this is not an economic development focus because, except in a few notable cases, health care employment growth results from changing demographics and related health patterns rather than policy efforts designed to improve economic conditions. It is critical for policy makers to

understand the breadth of geographic disparities in North Carolina's economic structure and workforce as they result in completely different strategies from place to place.

Motivation for a new strategic direction:

With limited resources available for economic development investment, North Carolina must focus its attention on helping industries grow faster than they might otherwise. This means understanding in a systematic and continuous way which ones are most likely to prosper given current development trajectories and to assess what those industries may require to ensure they grow as rapidly as possible. Furthermore, this emphasis on identifying targeted growth clusters cannot ignore the opportunities to leapfrog development by embracing new technologies that could result in new products, services, or even business models that would provide North Carolina firms with a competitive advantage. North Carolina must develop regionally significant initiatives for each of its eight targeted industry clusters, while also identifying investment plans to help those industries take full advantage of key technology opportunities (such as video modeling and gaming, nanomaterials, pervasive computing, digital design, advanced materials and rapid prototyping) that could potentially transform those industries. These industries are suffering because too many jobseekers lack the essential skills that employers require and the training provided does not always prepare workers with the required technical skills. Like industry clusters that interact across multiple communities and regions, efforts to recruit, prepare, and retain a world-class workforce require a statewide vision implemented through regional cooperation.

¹⁵ <http://www.nccommerce.com/workforce/about-us/plans-policies-reports-initiatives/reports/2011-state-of-the-workforce-report>

STRATEGIES AND TACTICS:

1. Invest in ongoing development of selected clusters or unique technologies.

- 1.1. Design and deploy an information system through the regional data centers to provide insights for leaders and stakeholders about key industry shifts, emerging economic trends, or potential project opportunities related to clusters of statewide significance.
- 1.2. Devise regional plans to help companies understand and adapt to the most important disruptive technologies through innovation and improved proficiencies.

2. Establish a more evidence-based process for making investments in economic and community development.

- 2.1. Provide cutting-edge analytical tools to the state's local and regional leaders (including economic developers, decision makers, elected officials, etc.).
- 2.2. Identify supply chain networks related to key industry clusters and determine key network gaps that should receive targeted attention and investments.

PERFORMANCE MEASURES:

Milestones:

- Development of a research agenda to support economic development planning and implementation
- Creation of a sustainable business model to provide planners and economic developers with access to ongoing analysis of state economic development data and analysis
- Completed plans for promoting the use of advanced and innovative technologies

Metrics:

- Job creation in targeted clusters
- Private and public sector investment in support of disruptive technologies
- Number of organizations using available data and research tools



GOAL 1:

Challenge 3: Most areas of the State lack an effective “entrepreneurial ecosystem” to encourage the development of new start-ups and other entrepreneurial initiatives. In some cases, that deficiency results from entrepreneurial programs that are not well coordinated and poorly marketed.

North Carolina has seen the creation of more than 1,800 high-growth firms during the past two decades, creating more than 40,000 jobs and attracting nearly \$8 billion in private capital during the past 15 years.¹⁴ The state has been particularly successful in attracting investment from large technology and life science companies during that period. While the state built its future on entrepreneurial success, North Carolina also endured some of the most significant losses of companies as a result of the recession. The state lost a net 6,755 firms, according to the U.S. Census’s Longitudinal Business Database, an 11 percent decrease since 2009. This decline ranked North Carolina as 43rd lowest in net new entrepreneurial activity among the 50 states.¹⁵

Of all jobs in the state in 2015, 20 percent represented sole proprietorships, a figure that has increased roughly 15 percent in 2001.¹⁶ Many of these entrepreneurs lack the network, resources, and personal relationships that are generally necessary for turning their fledgling enterprises into successful new businesses. Although there exist many private organizations and government resources intended to assist small dynamic businesses, many entrepreneurs find it difficult to connect to the organization best suited to meet their needs because they (1)

don’t typically look externally for help in any proactive way or (2) are bewildered by the number and are confused by the variety of organizations that offer assistance. Entrepreneurs looking to connect to seasoned mentors may find that mentor networks are not present in their community, especially if they operate in an underserved community.¹⁷

Motivation for a new strategic direction:

New business formation lies at the heart of a dynamic economy. Consequently, fostering greater entrepreneurial behavior is imperative to sowing the seeds for future growth. North Carolina will need to create new businesses and support small existing businesses looking to expand. Over the next five years, North Carolina must seek to create hundreds of “very high-growth” companies (i.e., companies that double from their current size in terms of employment or sales). Doing so will require increasing opportunities for entrepreneurs to overcome impediments such as limited capital, lack of management expertise, an inadequately trained workforce, and an underutilized entrepreneurial and business support service network. For example, the Manufacturing Solutions Center in Conover and Opportunity Threads in Morganton have combined to help to rejuvenate the western Piedmont textile industry. The North Carolina Rural Economic Development Center has helped to leverage private equity capital to support small businesses in communities large and small across the state. Universities across the state are taking on the challenge of developing entrepreneurial skills in their graduates through programs like Artrepreneurs at UNC-Greensboro and the NC State University Entrepreneurship Initiative.

¹⁴ “Starting Something: The State of the Entrepreneurial Economy of North Carolina, 1992-2011”, CED <http://www.cednc.org/?page=Resources>

¹⁵ Source: “State of Small Business and Entrepreneurship 2012”, Small Business and Technology Development Center <http://www.sbtcd.org/pdf/ssb.pdf>

¹⁶ U.S. Bureau of Economic Analysis Regional Economic Information System

¹⁷ “Startup America: Reducing Barriers: Recommendations from High-Growth Entrepreneurs on Smarter Regulations, Process Simplification, and Bold New Ideas for Lean Government”, Small Business Administration <http://www.sba.gov/sites/default/files/Startup%20America%20Reducing%20Barriers%20Report.pdf>

STRATEGIES AND TACTICS:

1. Increase entrepreneurial activity through more dynamic networks across the state.

- 1.1. Expand access to equity and risk capital through micro-lending, crowd funding and angel investment activity.
- 1.2. Expand the network of business accelerators, incubators, pop-up-shops or other shared services/space as part of broader downtown revitalization, redevelopment, and Main Street improvement efforts.
- 1.3. Support and expand entrepreneurial education and training programs in high schools and at local community colleges.
- 1.4. Coordinate the activities of entrepreneurial service providers (e.g., small business centers, small business technology development centers, incubators, economic development, financial assets, and other business support organizations).
- 1.5. Aggressively market entrepreneurial support services to area companies and individuals.
- 1.6. Organize networking events for entrepreneurs and their support intermediaries.

PERFORMANCE MEASURES:

Milestones:

- Increased inventory of available equity and risk capital (including angel as well as venture capital)
- Completed marketing plan for promoting entrepreneurial service providers
- Organized routine regional entrepreneurial networking sessions

Metrics:

- Volume of equity/risk capital available and invested
- Amount of incubator space available and occupied
- Number of new entrepreneurs (businesses)
- Number of very high-growth firms (doubling employment or sales during the past five years)



GOAL 2: ESTABLISH AND MAINTAIN A ROBUST REGIONAL INFRASTRUCTURE

To remain competitive in a growing global economy, North Carolina should make the revitalization and improvement of state and local infrastructure a priority for funding.

Challenge 1: Water and sewer systems are poorly integrated and coordinated. Better targeted investment in more cooperative and resilient systems would reduce costs and increase efficiencies in the state's water and sewer systems.

Water and sewer systems represent one of the most significant local government fiscal requirements and the investment in these systems is inadequate. According to the ASCE infrastructure report card, North Carolina has an estimated \$830 million in annual water and wastewater investment requirement over the next 20 years.¹⁸ Morikawa et. al. identified 11 industries throughout the country that are extremely reliant on water resources or susceptible to water risk. These 11 industries are especially prominent in North Carolina and include apparel, automotive, beverage, biotech/ pharmaceutical, chemical, forest products, high tech/ electronics, metal/mining, refining, and utilities.¹⁹ If upgrades are not made to the water system, this could ultimately result in impediments to growth (or even potential job losses) in these 11 industries before spreading to other industries.²⁰

Motivation for a new strategic direction:

To date, water and sewer system development has been implemented on an ad hoc, local basis. This means that every city and town has fended for itself to access the water and sewer resources required. This competition for very limited resources has resulted in a misalignment of investment with state or regional economic development needs. Furthermore, this parochial approach to decision-making provides few, if any, incentives to leverage existing underutilized systems for economic growth. The reality is that the state needs to provide a mechanism for prioritizing water and sewer system needs based on their likely broader economic impact—despite any individual community's ability to pay. This approach focuses on fostering collaboration among municipalities and ensuring data are available to help better frame water/ sewer investment choices in much the same way that regional transportation needs are assessed to determine major regional infrastructure priorities.

¹⁸ American Society of Civil Engineers, 2013 Report Card for America's Infrastructure, http://www.infrastructurereportcard.org/north_carolina/north-carolina-overview/

¹⁹ Morikawa, Mari, Jason Morrison, and Peter Gleick. 2007. Corporate reporting on water: A review of eleven global industries. Oakland: Pacific Institute

²⁰ American Society of Civil Engineers. Failure to Act: The Economic Impact of Current Investment Trends in Water and Wastewater Treatment Infrastructure. http://www.asce.org/uploadedFiles/Infrastructure/Failure_to_Act/ASCE%20WATER%20REPORT%20FINAL.pdf



STRATEGIES AND TACTICS:

1. Establish water resources management, planning and coordination to plan for drought and flood response and to ensure a long-term water supply across the state.

- 1.1. Coordinate planning to encourage strategic, regionally important water and sewer infrastructure investments.
- 1.2. Incentivize planning and implementation of strategic regional asset management in anticipation of future droughts.

2. Build technical capacity within local water and sewer utility providers.

- 2.1. Provide technical assistance to water and sewer utility systems to help address substantial fiscal and operational challenges.
- 2.2. Ensure digital access to up-to-date service availability maps, diagrams and capacity attributes to improve water and sewer planning activities statewide.

PERFORMANCE MEASURES:

Milestones:

- Completed inventory of water/sewer capacity
- Completed asset management plans that influence state, regional, and local water/sewer infrastructure investments

Metrics:

- Number of linked water and sewer systems
- Volume of water and sewer capacity that is integrated through linked water and sewer systems
- Reduction in the number of systems with Special Order of Consent being issued

GOAL 2:

Challenge 2: Many areas of North Carolina still lack adequate broadband access. High-speed broadband is now a necessity for the development of resilient and successful communities. The approaching switch to digital textbooks in public schools in 2017 makes this challenge critical to our rural areas. Improved broadband is the minimal baseline for existing businesses to thrive and ultra-high-speed broadband is absolutely critical to become globally competitive in research and innovation.

The Public Policy Institute of California demonstrated that the overall relationship between broadband expansion and employment growth is positive. The study found that, all else being equal, companies moving from regions with no broadband providers to places with between one and three broadband providers grew 6.4 percent faster than other firms between 1999 and 2006.²¹

Broadband access and affordability are vital for all places, but it is especially important in rural areas. Rural communities in particular rely on sole proprietors and entrepreneurs more so than more densely populated places, and broadband represents a basic utility for these very small companies that help them become more competitive.²² For instance, high-speed broadband can help companies manage more efficiently, implement business-to-business economic transactions cheaply, compete in a cost-effective and more productive way for customers with services that once were only available through face-to-face interaction, widely expand opportunities for direct sales and provide customer support in a more interactive way. For individuals, this connectivity is also vital because it makes teleworking a viable option for knowledge-intensive occupations that once could only be implemented at a traditional worksite. Affordability is an important consideration as rural costs can be particularly high, given that infrastructure costs must be recouped from a low density of users.

The Federal Communications Commission (FCC) defines “access” to broadband by the service area of present telecommunications companies and not by physical connections.²³ The Broadband Statistics Report finds that broadband Internet is not available to almost 296,000 rural North Carolinians.²⁴ Using this FCC definition, that grossly underestimates the number of people without broadband access because it assumes that an entire county has access if one major broadband connection exists somewhere in the state. Under this definition, many small companies and residents are located in counties with a connection, but the connection is not located anywhere near them so to gain access would require costly infrastructure that neither they nor a service provider can afford.

Even those with affordable access to broadband may be ill-equipped to compete. Many more North Carolinians have access to broadband but it is not the latest broadband technologies that provide very high-speed access. Imagine having Internet access but requiring minutes to download a video and encountering buffering issues every time someone streams a video. To address this issue, policy leaders must modify an outdated definition of “access to broadband” in North Carolina to accurately capture the coverage rate of broadband up to the task of serving increasingly sophisticated customer markets. Moreover, the cost-effectiveness of providing broadband access to “the last mile” in North Carolina as well as its affordability to customers remain unresolved. Businesses increasingly require higher service bandwidths capable of allowing companies to deploy products or services that deliver potentially disruptive technologies. For too many communities, the most commonly used broadband are cable and DSL; however, they are in need of newer technologies utilizing “very-high-bit-rate” digital services that are necessary for day-to-day business. These ultra-high-speed access rates allow consumers to access technologies such as high-definition television or Voice over Internet Protocol (VOIP) telephone services. For rural areas, Wi-Fi networks that utilize 4G technology standards can provide access to important business services such as mobile web, VOIP, high-definition videoconference, and cloud computing that are only possible through ultra-high-speed broadband.

²¹ Kolko, Jed. Does Broadband Boost Local Economic Development? http://www.ppic.org/content/pubs/report/r_110jkr.PDF

²² Rural Broadband at a Glance, 2013 Edition. U.S. Department of Agriculture, Economic Research Service. https://www.ers.usda.gov/webdocs/publications/eb23/37973_eb-23.pdf

²³ 2016 Broadband Progress Report. Federal Communications Commission. https://apps.fcc.gov/edocs_public/attachmatch/FCC-16-6A1.pdf

²⁴ <https://www.broadbandmap.gov/download/Broadband%20Availability%20in%20Rural%20vs%20Urban%20Areas.pdf>

Motivation for a new strategic direction:

To compete in the 21st century economy, a key foundation will be the ability for companies to move vast quantities of information at the speed of light. Many emerging products or services rely on the ability to (1) access the mobile Internet at high-speeds, (2) stream ever-growing quantities of content, to share data across the machines that make products, (3) manage production, or monitor customer requirements, or (4) maintain uninterrupted real-time access to the universe of cloud-based data storage. To be successful in this environment, companies must rely on reliable, ultra-high-speed broadband. Areas that have this infrastructure in place will have a tremendous economic advantage. North Carolina must develop an intentional strategy to ensure the entire state has the opportunity to seize this advantage.



STRATEGIES AND TACTICS:

1. Improve adequate and affordable broadband access to unserved and underserved areas.

- 1.1. Convene a telecommunications summit of key private and public state leaders (e.g., key legislators, local elected officials, etc.) to develop possible approaches to implementing adequate and affordable broadband and expanding access to ultra-high-speed broadband at an affordable cost to consumers.
- 1.2. Monitor and report on progress in improving broadband access and addressing gaps.
- 1.3. Identify incentives (e.g., grants, loans, tax programs) to encourage greater private investment by the telecoms in the broadband infrastructure.
- 1.4. Identify barriers, such as limitations on public delivery of broadband services, that prevent innovative programs designed to leverage public and private investment that would improve broadband services across North Carolina.

PERFORMANCE MEASURES:

Milestones:

- Organization of governor-sponsored state summit to increase broadband deployment throughout the state
- Identification of best practices for delivering broadband to rural areas

Metrics:

- Extent of ultra-high-speed broadband coverage throughout the state
- Increased Wi-Fi Internet connection accessibility in public places

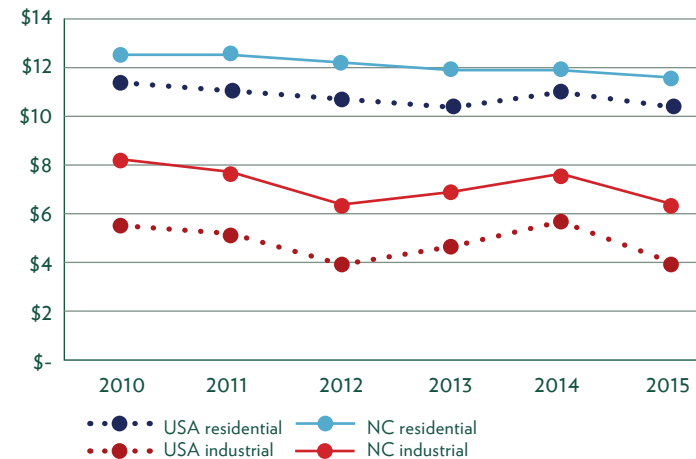
GOAL 2:

Challenge 3: There is insufficient availability and/or access to natural gas, especially in rural areas, therefore creating an unnecessary barrier to recruitment efforts across the state.

Natural gas is the second largest source of fuel in the USA.²⁵ It is also viewed as the cleanest, most cost-effective source of fossil fuel and is often available from local sources. The U.S. Energy Information Administration-Annual Energy Outlook 2017 forecasts that reliance on natural gas is projected to increase over the next 23 years in all sectors except residential. The prices of both natural gas and oil depend on a variety of supply and demand factors, as well as the stability of the region from where the resource comes.

Therefore, the price of natural gas depends on the stability of North America, while the price of oil relies heavily on the stability of the rest of the world.²⁶ This makes natural gas a relatively attractive energy source. As domestic drilling has increased, the price of natural gas has declined, making it a more attractive energy source to consumers. Much of this drilling activity has taken advantage of the natural gas reserves found in the Bakken Shale region in North Dakota, and the Marcellus Shale reserves in large parts of Appalachia. Although the drilling activity is largely taking place elsewhere, the natural gas boom has the potential to benefit North Carolina companies, utilizing this lower-cost fuel option. Declining natural gas prices have created a competitive advantage for large natural gas users in industries such as steel, foundries, and chemical production. Lower utility costs can also lower the overall cost of living for a location, and make a more attractive destination for new residents. Figure 3 shows industrial and residential natural gas prices for the U.S. and North Carolina. In both cases, natural gas prices are higher in North Carolina than the U.S. overall. As a result, making natural gas more accessible can be important to both industrial and residential development.²⁷

Figure 3: Commercial and Industrial Natural Gas Prices



Motivation for a new strategic direction:

North Carolina has not been actively involved in promoting natural gas as an alternative energy source. However, as natural gas prices have declined, companies are increasingly seeking access to this low-cost energy source as a way to remain competitive. In North Carolina, the availability of information about where exactly accessible natural gas pipelines are located has been limited. Furthermore, most gas distributors restrict the public release of information about their existing pipelines (or their plans for growth), citing proprietary interests or security concerns. Without information about major natural gas infrastructure investments, however, economic development leaders have found it difficult to proactively market these assets or focus land use planning or infrastructure investment resources to areas that could benefit most. North Carolina must become better informed about this critical infrastructure and leverage it to promote economic growth.

²⁵ U.S. Primary Energy Consumption by Sources and Sector. <http://www.eia.gov/energyexplained/>

²⁶ Market Trends- Natural Gas. http://www.eia.gov/forecasts/aeo/MT_naturalgas.cfm

²⁷ Natural Gas Prices 2010-2015. U.S. Energy Information Administration. https://www.eia.gov/dnav/ng/ng_pri_sum_dcu_SNC_a.htm

STRATEGIES AND TACTICS:

1. Make low-cost, clean-burning natural gas accessible to communities throughout the state.

- 1.1. Facilitate collaboration between private natural gas providers and local and regional planners and economic developers.
- 1.2. Incentivize investment in the development of appropriate natural gas infrastructure and related facilities.

PERFORMANCE MEASURES:

Milestones:

- The development of an inventory of major natural gas pipelines and planned future pipeline corridors
- Developed incentives to increase use and access to natural gas

Metrics:

- Percentage of residences and industries with access to natural gas options
- Percentage of firms using alternative fuel sources including natural gas



GOAL 2:

Challenge 4: The state's transportation system has an inadequate maintenance funding allocation as well as a number of unfinished or inadequate infrastructure investments in strategic transportation corridors. Moreover, North Carolina has only limited multimodal transportation options particularly in rural areas.

It has been long known that key infrastructure investments can be critical in creating economic benefits for the economy. According to a 2012 study by the U.S. Department of the Treasury, infrastructure investments can have both long-term economic benefits and short-term job creation benefits that exceed the investments made.²⁸ Furthermore, the study indicates a strong demand from the public and businesses for additional transportation capacity. However, the American Society of Civil Engineers' Report Card for America's Infrastructure reports that approximately 49 percent of North Carolina's roads are in poor or mediocre condition, costing motorists approximately \$2.3 billion dollars per year in vehicle repairs.²⁹ Approximately 12 percent of the bridges in North Carolina are considered structurally deficient and 18 percent of the bridges are functionally obsolete.³⁰ The Treasury Department study also suggests that traditional infrastructure funding techniques cannot meet the need, nor do these approaches leverage nontraditional resources (such as private sector investment in highway and transit systems).

Motivation for a new strategic direction:

North Carolina's transportation investment decisions are currently made using a prioritization process (P 4.0) that does not always adequately fund regional transportation needs. Proposals to restructure the mobility planning process could help overcome this limitation. Yet, we must also recognize the unique needs of certain regions of the state that may have larger statewide consequences, including balancing the needs for development in rural communities with efforts to alleviate congestion in urban areas. In addition, better coordination to align various regional community assistance programs would provide significant resources in a targeted way in some communities to create a tipping point of positive investment that could lead to the revitalization of those areas.

Furthermore, most proposals focus primarily on moving the largest number of people—a critically important goal for the state's transportation system. However, from an economic and community development standpoint, North Carolina must also develop a comprehensive approach to moving goods that complements any people mobility strategy—recognizing the importance of rail and water as complements to the state's roadway network.

²⁸ U.S. Department Of The Treasury with The Council Of Economic Advisers, "A New Economic Analysis Of Infrastructure Investment," March 23, 2012

²⁹ American Society of Civil Engineers, 2013 Report Card for America's Infrastructure, <http://www.infrastructurereportcard.org/north-carolina/north-carolina-overview/>; TRIP, North Carolina Transportation Numbers: Meeting the State's Need for Safe and Efficient Mobility, March 2014, http://www.tripnet.org/docs/NC_Transportation_by_the_Numbers_TRIP_Report_March_2014.pdf

³⁰ U.S. Department of Transportation Federal Highway Administration, "Deficient Bridges by Highway System 2013," December 31, 2013, <https://www.fhwa.dot.gov/bridge/nbi/no10/defbr13.cfm>



STRATEGIES AND TACTICS:

1. Implement a mobility plan designed to reinforce the importance of moving goods and people.

- 1.1. Improve freight access options to and from key port facilities.
- 1.2. Establish regional multi modal distribution/transportation hub facilities.
- 1.3. Plan for multimodal transportation options that ensure choice for workers seeking alternatives to private vehicles to get to and from their jobs.

2. Increase collaboration in state and regional transportation planning to ensure that critical statewide transportation corridors are completed.

- 2.1. Align transportation funding geographies with planning regions.

PERFORMANCE MEASURES:

Milestones:

- Identified priorities in a statewide mobility plan

Metrics:

- Volume of freight movement in state
- Cost of freight movement in state
- Miles of roads in adequate condition
- Number of bridges in adequate condition
- Miles of non-freight rail
- Number of transit services for workers
- Number of miles of bike and pedestrian transportation options
- Funding for transit planning priorities

GOAL 2:

Challenge 5: Many areas of the state have an inadequate supply of workforce housing in proximity to their employment centers.

Housing costs have risen faster than wages, creating an increasing strain on the availability of affordable housing options for working families and young workers.³¹ This challenge has been highlighted by a number of groups, including the Brookings Institution, the North Carolina Realtors Association, the North Carolina Housing Coalition, and the National Housing Conference. Brookings maintains that fewer middle-income families exist, creating pressures for housing providers to tip either toward higher or lower income households.³² More than one million households in North Carolina cannot afford a safe, stable home that costs less than 30 percent of their income. More than 600,000 live in a home they cannot afford, and more than 300,000 households pay more than half their income for housing.

To afford to own a home requires the average family must earn at least \$60,000 per year.³³ Therefore, the North Carolina Housing Coalition maintains that the single most important challenge facing North Carolina is helping more households access affordable rental housing.³⁴ The problem is particularly acute for households earning less than \$25,000 per year. In fact, nearly 43 percent of renters earn less than the average hourly wage (\$15.32) required to rent a two-bedroom apartment.³⁵

According to the National Housing Conference, “working households” are those that work at least 20 hours per week but earn no more than 120 percent of the median income. Of these working households, about 19 percent—or about 279,000 households—are “severely housing cost burdened”—meaning those families spend at least 50% of their income on housing. The challenge is greatest outside of the Charlotte and Raleigh metro areas, where some 176,000 households (or 20 percent of the total) are severely housing cost burdened.

Motivation for a new strategic direction:

The heavy financial burden that housing costs bring upon so many of North Carolina’s working families can translate into lower productivity—as workers spend an inordinate amount of time seeking out appropriate housing or commuting to far-flung job locations. For many, the issue is the limited choice for young adults who cannot afford new market-rate housing located near their work, and instead choose between older, deteriorating housing that does not meet the basic requirements of a family, or far-flung housing that requires long commutes. North Carolina has ceased all public funding for housing programs. To address this challenge, North Carolina must proactively re-engage and focus housing programs on meeting the needs of those who work hard to manage their family responsibilities and pay taxes, but otherwise cannot find adequate, affordable housing near where they work and wish to live.

³¹ Diane Greene Workforce Housing in North Carolina Backgrounder, Homes4NC, North Carolina Association of REALTORS Housing Opportunity Foundation, <https://www.slideshare.net/NHCandCenter/diane-greene-north-carolina-association-of-realtors>

³² Jason C. Booza, Jackie Cutsinger, and George Galster, “Where Did They Go? The Decline of Middle-Income Neighborhoods in Metropolitan America,” Brookings Institution, June 2006

³³ North Carolina Housing Coalition, http://nlihc.org/sites/default/files/oor/files/reports/state/OOR_2016_NC.pdf

³⁴ The U.S. Department of Housing and Urban Development defines an affordable home as one that requires families to spend no more than 30 percent of household annual income on housing. Families who pay more than 30 percent of their income for housing are considered cost burdened and may have difficulty affording necessities such as food, clothing, transportation and medical care.

³⁵ North Carolina Housing Coalition, Housing Facts and Statistics in NC, <http://nchousing.org/county-fact-sheets/>, downloaded February 20, 2017

STRATEGIES AND TACTICS:

1. Expand and diversify the affordable housing stock in areas near employment centers and existing infrastructure.

- 1.1. Define and identify the rural and urban areas of deficiency within the existing affordable housing stock.
- 1.2. Coordinate existing housing programs and financial incentives to incorporate best practices in affordable housing investments.
- 1.3. Develop and finance a statewide housing strategy aimed at improving availability of affordable renter and owner-occupied housing stock for workers and families living in rural and downtown settings.

PERFORMANCE MEASURES:

Milestones:

- Completed survey of quality housing stock affordable to workers making 120% or less of the average wage
- Assessed the affordability gap in North Carolina metros

Metrics:

- Number of net new quality housing units made available to workers earning less than 120% of the average wage



GOAL 3: CREATE REVITALIZED, HEALTHY AND RESILIENT COMMUNITIES

To meet the needs of employers and residents alike, North Carolina strives to increase the number of healthy and dynamic communities.

Challenge 1: Development patterns should facilitate healthy and safe outdoor activities. Many of the state's downtowns and urban areas offer few choices for individuals seeking to engage in natural exercise, contributing to unhealthy lifestyles, increased healthcare costs, and degraded quality of life.

North Carolinians, moving from an agricultural tradition to suburban development have little opportunity for natural exercise, creating significant health consequences. First, the state's urbanized areas are consuming land at a faster rate than denser development would require, leading North Carolinians to drive more and resulting in ever-poorer air quality.³⁷ Commuting to work is primarily through single-occupancy automobiles, and commute rates for public transit and walking/biking are among the nation's lowest. About 2 percent of North Carolina commuters either bike or walk to work, compared with a 3.5 percent rate nationally.³⁸ Furthermore, inadequate infrastructure for walking and biking has become an important safety issue for pedestrians and bicyclists.

Moreover, at the heart of this issue are suburban development patterns that provide few sidewalks, limited common space for outdoor exercise, and limited choices for individuals seeking to bike, run, or even walk. These development patterns have dominated the North Carolina landscape, but they discourage healthy living because they do not allow for natural exercise that occurs from doing daily activities. As a recent Brookings Institution report contends, "The willingness to walk isn't just about the distance. Certainly no one is inspired to stroll from one end of a super-regional mall parking lot to the other. People will walk 1,500 feet or more only if they have an interesting and safe streetscape and people to watch along the way—a mix of sights and sounds

that can make a pedestrian forget that he is unintentionally getting enjoyable exercise."³⁹ As lifestyles become more fast-paced, ready-made foods using preservatives or flavored with preservatives become a greater part of the diet. Poor diets combined with lack of exercise have led to major health issues in the state.⁴⁰ Heart disease and stroke are among the leading causes of death. Almost one in three North Carolina adults report high blood pressure and nearly two-thirds of adults have a body mass index that indicates that they are either overweight or obese. Furthermore, these health issues are affecting North Carolina children who have poor diet and exercise regimens. These habits contribute to increased health care costs for workers and their families, adding to the rationale for the ever-rising health insurance premiums paid by businesses and workers alike.

Motivation for a new strategic direction:

Recent research suggests that citizens are demanding new lifestyle choices and there is a tremendous public interest in providing options that offer a healthier lifestyle. As North Carolina continues its transformation to a service-based economy, the "natural opportunities" for exercise that many agricultural and manufacturing jobs once provided are available to fewer and fewer workers in the state. At the same time, young educated adults—the types of talent that North Carolina can and must attract/retain—are increasingly interested in lifestyles that offer opportunities for exercise that is integrated into their daily lives—through their commutes or readily available recreational activities. North Carolina's leaders must take a more intentional approach to providing these healthy lifestyle options as a way to attract the best and brightest while also helping to minimize the costs of health insurance and medical care for North Carolina companies and citizens.

³⁷ "The Impacts of Growth and Sprawl in North Carolina", University of North Carolina at Chapel Hill Center for Urban and Regional Studies, <http://curs.unc.edu/files/2013/05/updatemay2003.pdf>

³⁸ WalkBike NC Plan: North Carolina Statewide Pedestrian and Bicycle Plan", NC Department of Transportation <https://www.ncdot.gov/bikeped/walkbikenc/pictures/ProjectSummary.pdf>

³⁹ Christopher B. Leinberger, "Turning Around Downtown: Twelve Steps to Revitalization," The Brookings Institution Research Brief, March 2005

⁴⁰ Source: "From Farm to Fork: A Guide to Building North Carolina's Sustainable Local Food Economy", The Center for Environmental Farming Systems <https://cefs.ncsu.edu/wp-content/uploads/stateactionguide2010.pdf?x47549>

STRATEGIES AND TACTICS:

1. Raise awareness about the importance of government planning in ensuring that residents have transportation, housing, and job center choices that could contribute to healthier, safer communities.

- 1.1. Gather best practice examples of how local development plans can provide more opportunities for “natural exercise” (e.g., walking, biking, etc.) to improve community safety and health.
- 1.2. Increase access to more outdoor public space, develop pedestrian and bikeway plans, and promote senior-friendly community initiatives designed to create a greater sense of community.

2. Create new “impactful” recreational options that serve broader regional needs

- 2.1. Encourage continued state funding for the water and land resource investments in partnership with local governments.

PERFORMANCE MEASURES:

Milestones:

- Completed best practices report on community walkability practices

Metrics:

- Miles of bike paths and sidewalks established
- Number of people walking and biking to work
- More options, trail systems and funding towards Parks and Recreation Trust Fund (PARTF)



GOAL 3:

Challenge 2: A disconnect exists in many communities between local farmers and consumers for fresh, healthy, and affordable food. The state's food production and distribution networks are not coordinated or expansive enough to adequately and affordably provide local food options to many of the state's residents.

North Carolina remains one of the nation's most important agricultural states, ranking eighth in 2015.⁴¹ Farm income exceeds \$8.6 billion, with more than \$3 billion associated with exports. North Carolinians spend approximately \$35 billion on food annually, representing a tremendous market potential for the state's farms and food producers. Where row crops (including tobacco) once dominated the state's farming, today broilers, hogs, and greenhouse/nursery products now outrank tobacco in terms of income.⁴² With development pressures on much of the state's prime farmland combined with an aging farm workforce, prime farmland is being lost.⁴³ However, as demand for local and organic foods continues to increase, North Carolina's rural tradition may be tied directly to its growing population base.

According to the Centers for Disease Control and Prevention, 69.9 percent of census tracts in North Carolina have a healthy food retailer within a half mile of its boundaries. That was greater than the national rate of 69.5 percent.⁴⁴ Although health food options are at least proximate, many North Carolinians eat fewer fruits and vegetables than the nation

overall. 40.8 percent of North Carolina's adults consume fruits less than once a day and 21.9 percent consume less than one vegetable a day, as compared to 37.7 percent and 22.6 percent, respectively, nationally. Similar patterns exist among adolescents, where 44.5 percent of North Carolina's adolescents consume less than one serving of fruit and 39.6 percent consume less than one serving of vegetables daily (as opposed to 36 percent and 37.7 percent nationally).⁴⁵

Motivation for a new strategic direction:

North Carolina's citizens could be much healthier with better access to the very assets that are widely available in the state—a large agricultural base where fruits and vegetables could become an integral part of citizens' diets. As state residents continue to prosper, the demand for more nutritional foods will continue to increase—providing a wonderful opportunity for the state's agricultural sector. However, the state must demonstrate leadership in making early connections between market demand and market opportunities to seed the growth of the local foods movement.

⁴¹ U.S. Department of Agriculture Economic Research Service, 2015, "Farm Income and Wealth Statistics" <https://data.ers.usda.gov/reports.aspx?ID=53580>

⁴² North Carolina Cooperative Extension, 2013, "Eating Local Foods in North Carolina," <https://wake.ces.ncsu.edu/wp-content/uploads/2013/08/SuccessFamily-Summer13.pdf?fwd=no>

⁴³ The Impacts of Growth and Sprawl in North Carolina, Center for Urban and Regional Studies Update, UNC Chapel Hill, Volume VIII, Number 1, May 2003

⁴⁴ "State Indicator Report on Fruits and Vegetables, 2013" Centers for Disease Control and Prevention. <https://www.cdc.gov/nutrition/downloads/state-indicator-report-fruits-vegetables-2013.pdf>

⁴⁵ "State Indicator Report on Fruits and Vegetables, 2013" Centers for Disease Control and Prevention. <https://www.cdc.gov/nutrition/downloads/state-indicator-report-fruits-vegetables-2013.pdf>

STRATEGIES AND TACTICS:

1. Develop local food networks throughout the state.

- 1.1. Invest in model programs that encourage local growers and where possible appropriately link them to local market opportunities (e.g., farmers markets, “farm to fork”, etc.).
- 1.2. Coordinate local food networks to encourage small farmers to aggregate existing and new local networks and coordinate distribution with potential markets.
- 1.3. Support pilot programs that provide processing capacity for those food and meat producers that are too small to serve commodity markets effectively, but too large to sell directly to consumers at a scale large enough to compete.
- 1.4. Connect local growers and food producers to the state’s network of agricultural research stations.

PERFORMANCE MEASURES:

Milestones:

- Established regional programs linking local food producers to markets

Metrics:

- Volume of local foods produced and sold to regional markets
- Obesity rates
- Consumption rates of locally grown fruits and vegetables
- Jobs created in defined local food networks
- Amount of farmland in service and amount lost over time



GOAL 3:

Challenge 3: Many cities and towns are experiencing deteriorating core business districts. A large number of the state's downtowns and other urban centers are challenged in attracting new businesses, residents and/or visitors from other areas.

As once prosperous industries in North Carolina undergo significant transformations, many are shifting their regional production to lower-cost places, leaving many smaller communities in distress.⁴⁶ At the same time, development in more prosperous communities continues to consume lower-cost green-field developments, reinforcing the disinvestment already underway in many small towns and urban areas. These factors are magnifying the distress affecting so many communities. Many residents of these communities are leaving to find jobs elsewhere. Those residents left behind tend to occupy lower-income households or operate more marginal businesses that cannot afford to move. The result is that these communities are often the state's areas with highest unemployment, lowest per capita income, greatest need for public assistance, largest share of non-English speaking households, and lowest home ownership rates. These characteristics, in turn, may lead to a vicious cycle of further disinvestment in the very urban areas where significant and valuable public infrastructure investment is already in place.⁴⁷

Motivation for a new strategic direction:

Many of North Carolina's smaller communities are struggling to find their way as their economic rationale has changed in a fast-changing economy. Public investments need to break the vicious cycle, but they rarely do when they are so modest and are spread ad hoc across a large number of locations with little strategic intent. Past proposals to align various regional community assistance programs would provide significant resources in a targeted way in a few communities to create a tipping point of positive investment that could lead to the revitalization of those areas. This regional approach is on target as long as the program's intent is reinforced with the scale of resources truly required to leverage the needed private investment that will turn around the recipient communities, the effort is sustained over a long enough period to attract private investment, and the communities participating are selected to receive this type of intensive in a strategic, competitive, and transparent way that is designed to engage local public and private leadership.

⁴⁶ Stacey Sutton, "Urban Revitalization in the United States: Policies and Practices," Columbia University, prepared for Seoul National University, June 2008

⁴⁷ "The State of North Carolina Urban Distressed Communities", University of North Carolina at Chapel Hill Center for Urban and Regional Studies <https://curs.unc.edu/files/2005/02/urbandistressedcities.pdf>



STRATEGIES AND TACTICS:

1. Revitalize downtowns throughout North Carolina.

- 1.1. Expand existing and successful state-sponsored programs such as the Main Street Program or the Small Town Economic Prosperity Program.
- 1.2. Create incentives funding resources for local communities to add regionally important amenities (e.g. targeted sidewalks, bike lanes) to revitalize neighborhoods and downtowns.

2. Invest in repurposing commercial and residential buildings for emerging economic activities.

- 2.1. Inventory and evaluate vacant buildings that could be used by entrepreneurs or growth industries.
- 2.2. Develop model regional approaches to leverage reinvestment by commercial property owners, especially absentee landlords, and private investment.

PERFORMANCE MEASURES:

Milestones:

- Inventory of vacant buildings for reuse in downtown areas
- Total public sector invested in revitalizing downtown areas

Metrics:

- Vacancy rates of office/residential/retail space in downtown areas
- Total private sector investment leveraged as a result of public and private sector engagement in urban revitalization



GOAL 4: DEVELOP TALENTED AND INNOVATIVE PEOPLE

The key competitive asset for businesses in the 21st century, North Carolina strives to prepare the flexible, entrepreneurial, globally-oriented, and skilled workers with cross-cutting competencies sought by employers.

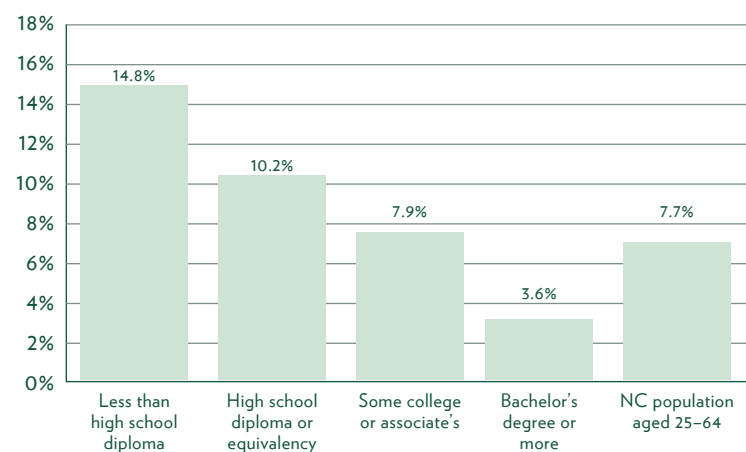
Challenge 1: Employers do not always have access to skilled workers. In many instances, workers lack the skill set and education required for today's jobs. In addition, many students and workers are unaware of available career opportunities and their requirements. They also lack information about the career pathways they could follow in order to attain their career goals.

Even in the context of some of the highest unemployment rates of the past generation, North Carolina companies consistently indicate that they cannot find the workers they require. The state consistently has higher rates of adults that have not earned their high school diploma (at nearly 15 percent) than the U.S. average of 12.6 percent. In addition, the proportion of North Carolina's adult population with at least a bachelor's degree has historically been slightly lower than the national average. This is an issue that requires sustained attention, especially since the state continues to emphasize technology-related industries as a path for creating future prosperity.⁴⁸

The challenge of finding good-paying jobs is particularly acute for workers lacking any post-secondary educational experience. As shown in Figure 4 data from the American Community Survey, almost one in seven adult workers (age 25+) without a high school degree were likely to be unemployed. This figure is almost twice the state average. Even those workers with some college or an associate's degree had an unemployment rate that was around the state average. By contrast, the unemployment rate for adult workers with at least a 4-year degree was less than half the average for the all workers aged 25-64.

The premium placed on skills has put significant pressure on workers in "middle-skill jobs." Many of those jobs were lost during the recession. When they returned, they were no longer the same, and the people who filled them were no longer qualified for the new higher skills that employers were demanding. To illustrate, production-related occupations declined due to job losses in manufacturing over the first decade of this century, but those industries are now seeing significant demand for workers, but at a much higher skill level.⁴⁹ Another example is in allied health, business and financial operations, and other industries in which technical jobs are being added at a very rapid rate, but not enough workers have the skills required to meet their needs.

Figure 4: North Carolina Unemployment by Educational Attainment (2010–2015)



Motivation for a new strategic direction:

North Carolina's leaders have recognized that the state must develop a more intentional education system—one that acknowledges the critical role that Pre-K through post-secondary (often abbreviated as P-20) academic preparation plays in preparing young people for the world of work. This issue has been highly publicized and has gained lots of attention from the state's public and post-secondary education systems. However, one area that has not received adequate attention and resources has been tied to the essential role that counselors and mentors play in helping students and jobseekers understand the possibilities of different kinds of work or to prepare appropriately for meaningful careers. North Carolina must become a national leader in informing and even mentoring its workforce to ensure that they invest more responsibly in education that matters and prepare appropriately (and efficiently) for jobs offering family-sustaining wages.

⁴⁸ University of North Carolina at Chapel Hill Center for Urban and Regional Studies <http://curs.unc.edu/about-us/background-of-curs/>

⁴⁹ "State of the North Carolina Workforce 2011-2020", The North Carolina Commission on Workforce Development

STRATEGIES AND TACTICS:

1. Prepare youth, unemployed and underemployed individuals for high-skill, in-demand jobs.

- 1.1. Increase innovative career pathway counseling and training that prepare workers for high-skill jobs.
- 1.2. Expand promotion of career and technical education opportunities in new areas such as advanced manufacturing and creative industries.
- 1.3. Provide training support for those seeking to access jobs that provide more promising career opportunities.
- 1.4. Examine barriers to licensure and reciprocity in NC.

2. Conduct a coordinated marketing campaign that identifies and promotes middle-skill career opportunities that can be promoted to middle school- and high school-aged children.

- 2.1. Increase promotion of education and training in science, technology, engineering, and math (STEM) disciplines—target students, parents, educators, and businesses.

PERFORMANCE MEASURES:

Milestones:

- Established career pathway programs throughout the state
- Launched statewide marketing campaign to promote career awareness

Metrics:

- Change in educational attainment
- Number of students in career and technical education programs that are linked to in-demand jobs
- Graduation from STEM degrees and completion of industry-demanded STEM certifications and badges
- Employment in STEM occupations of workers with degrees, certifications, or badges
- Number of military personnel that have been transitioned into the civilian workforce in NC
- Number of certificate issues for specific training programs in NC
- General education attainment of civilian workforce

GOAL 4:

Challenge 2: The state's workforce and educational systems are fragmented and lacking alignment.

Policymakers are concerned that the state's colleges and universities do not always offer programs that are directly relevant to business. This means that larger cohorts of graduates need to learn skills tied to business needs (such as management, marketing, sales, and related support activities), and/or more graduates need to learn skills more in line with the needs of businesses. These business expertise skills are relevant to every industry and represent a major area of growth for the state's universities and colleges.

Businesses are also increasingly demanding workers to have relevant skills in STEM-related programs (especially, biological and biomedical sciences, engineering, computer and information sciences, and support services).⁵⁰ Eighty (80) STEM-related occupations⁵¹ accounted for 91,000 jobs in North Carolina in 2012.⁵² Between 2012 and 2021, North Carolina's economy is projected to add another 10,000 net new jobs in these 80 occupations. Many of these jobs are relatively higher paying as well. Combined these occupations pay average wages that are almost 60 percent higher than the state. As industries encounter continuous changes in market conditions, workers with STEM skills are often able to more quickly adapt to a dynamic economic environment.

Motivation for a new strategic direction:

North Carolina has an extensive network of workforce education and training programs designed to meet many labor force skill requirements. They are frequently demand-driven and customer-focused, but they are also offered in an ad hoc manner with little emphasis on strategic economic development purposes. These programs also tend to be driven by vocational tracks rather than developing "cross-cutting" skill sets that can be applied to many advanced manufacturing processes. Past efforts to bring these systems into alignment have experienced only limited success. North Carolina must commit to developing more business-driven, strategic workforce initiatives—organized



to emphasize the needs of the state's primary economic development targets first. North Carolina must also seek to strengthen the linkage between available education and training resources in ways that meet the continuously changing needs of regionally targeted industries. This strategy must also ensure that jobseekers understand these needs and receive incentives to obtain the knowledge and skills that these industry sectors require.

⁵⁰ "State of the North Carolina Workforce 2011-2020", The North Carolina Commission on Workforce Development <https://www.nccommerce.com/Portals/11/Documents/Reports/2011%20SOTW%20Full%20Final%20Report%2052311%20909am.pdf>

⁵¹ These 80 Occupations are drawn primarily from computer and mathematical occupations, architecture and engineering occupations, and life, physical and social science occupations. There are obviously many other occupations that require or utilize STEM skills, but these occupations are the most directly STEM-related.

⁵² Covered employment data provided by Economic Modeling Specialists International (EMSI).

STRATEGIES AND TACTICS:

1. Launch statewide sector (or industry-related) workforce initiatives designed to align training and educational options to the skill demands for critical, in-demand occupations.

- 1.1. Inventory statewide and local K-12 and community college programs that serve targeted industries.
- 1.2. Design, deploy, and consolidate regional initiatives to align job skill requirements (especially in targeted industries) with education and training curriculum under the leadership of the Workforce Development Boards, key employers, and other stakeholders.
- 1.3. Engage both individuals and companies through their networks (e.g. chambers and trade groups) to identify specific workforce shortages.

2. Improve efforts to prepare workers for available jobs.

- 2.1. Promote Career Readiness Certificate (CRC) usage by employers, students, and incumbent workers.
- 2.2. Reframe our investments in social services to focus on prevention and treatment of social ills (e.g., crime and health outcomes) in order to ensure that workers with barriers are able to find employment and remain gainfully employed.

3. Address the unique challenges of adult workers seeking career transitions.

- 3.1. Help veterans and service personnel exiting the military find jobs in North Carolina, especially those with in-demand technical skills.

PERFORMANCE MEASURES:

Milestones:

- Organized employer-led workforce sector initiatives in each of the state's regions
- Coordinated initiatives in similar industry sectors across the state's regions

Metrics:

- Number of workers trained, placed, or otherwise impacted by workforce sector initiatives
- Number of employers using Career Readiness Certificates as a part of their hiring process
- Number of workers receiving Career Readiness Certificates
- Proportion of the state's workforce in middle skill jobs that have earned industry-recognized certifications
- Unemployment rate among veterans



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