Spreading Economic Opportunity Across North Carolina

A North Carolina Chamber Foundation Study

North Carolina Chamber Foundation

North Carolina is a dynamic state with more than ten million people living in our 100 counties. Home to gleaming skyscrapers, charming main streets and fertile farms, the Old North State is growing. By 2030 the population is expected to grow to 12 million, making North Carolina the seventh most populous state in the nation. This growth is bringing new jobs and new economic opportunities. North Carolina is viewed as a competitive leader, both regionally and nationally, and a top destination state for businesses in the global economy.

Despite this growth, evolving national and global trends are creating challenges for North Carolina. By 2030, almost one out of every five Americans will be 65 years or older, placing additional burdens on entitlement programs and increasing health care costs in North Carolina.

The workplace is being transformed by automation, globalization and robotics. Some jobs are quickly disappearing while new jobs, not imagined a decade ago, are emerging. Employer needs are changing and across the country there is a mismatch between worker abilities and required skills. The migration from farms and small towns to denser urban areas has only continued to accelerate.

For these and many more reasons, economic opportunity is not evenly distributed statewide. Many communities are prospering while others struggle. It is simple to think of this as an urban-rural divide. North Carolina, the United States and most developed countries in the world have been urbanizing for many decades. According to the United States Department of Agriculture, about 46 million of America’s estimated 320 million people live in nonmetropolitan (nonmetro) counties. As a whole, those areas lost population between July 2013 and 2014, continuing a four-year trend.

But metro growth has also been very uneven. Over the past 20 years, the decline of jobs in manufacturing, consolidation of the finance and insurance sectors, the emergence of the energy, technology and professional services sectors, and health and education jobs has produced uneven levels of economic growth even among North Carolina's metropolitan areas. Unlike many states, North Carolina's nonurban communities are not as sparse or distant from micro or metropolitan areas resulting in an interdependence between all places.

In December of 2014, the North Carolina Chamber Foundation created ***North Carolina Vision 2030 – A Plan for Accelerating Job Growth and Securing North Carolina's Future***, a forward-thinking, initiative-driven plan that provides focused economic development strategies to create good jobs for North Carolinians. Developed with the involvement of top North Carolina business leaders, local chambers of commerce and key stakeholders, it is built on the premise that in order to be a winner in the global jobs war, North Carolina must strive for excellence in four key areas:

- Education and Talent Supply
- Competitive Business Climate
- Entrepreneurship and Innovation
- Infrastructure and Growth Leadership

> The number of people living in nonmetropolitan (nonmetro) counties stood at 46.2 million in 2014, representing nearly 15 percent of U.S. residents spread across 72 percent of the nation's land area. Nonmetro areas lost population between July 2013 and 2014, continuing a four-year trend. While hundreds of individual nonmetro counties have lost population over the years, this is the first recorded period of overall population decline.
>
> The recent economic recession, increased global competition, and technological changes led to widespread job losses in rural manufacturing and have contributed to the nonmetro population decline since 2010. Also, suburban expansion and migration to scenic retirement/recreation destinations have weakened since 2010.
>
> USDA, John Cromartie
> June 2015

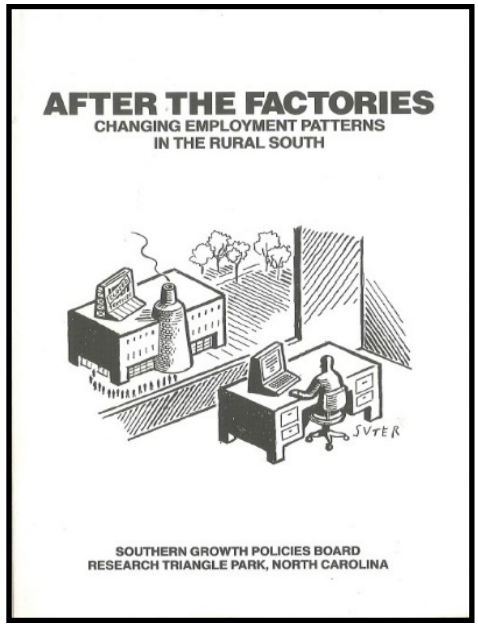
North Carolina Vision 2030 is taking root and North Carolina is better positioned to compete for new jobs than it was just a couple of years ago. But over the past year our business leaders have also recognized that focusing on state level results is not sufficient. A state as large and diverse as ours cannot be satisfied with a few places producing great economic results while many others stagnate or decline. We need our state's economic engine to be firing on all cylinders in order to successfully compete for talent, investment and jobs, but we must take aggressive actions to extend more economic opportunity to more places. The time to act is now.

Action will not be easy. If new efforts hurt some places to help others, the zero sum gain for our state is neither an efficient use of resources nor likely to be effective. We believe that working together we can increase the economic competitiveness of communities all across the state. We also believe that rather than creating competition among our communities we must embrace and enable collaboration as the foundation for North

Carolina's cities, counties and regions to compete against those in other states and countries.

What Does the Research Say?

Effectively spreading opportunity across the state begins with understanding the drivers and challenges of rural or less-urban economic competitiveness. This is not a new challenge; it is one that has been studied for decades.



In 1988, the North Carolina-based, Southern Growth Policies Board, produced a report called ***After the Factories, Changing Employment Patterns in the Rural South***. The report concluded that we were beginning to notice "an alarming decline in the nonmetropolitan South."

Data verified that nonmetro counties "have a different industry mix than metro counties, with a greater concentration of manufacturing-especially in nondurable goods." Since then, the manufacturing job losses, especially in nondurable goods have been severe. Agricultural efficiencies have continued with fewer workers producing more and foreign production permeating more markets.

North Carolina issued a major policy publication in 2000, the ***Rural Prosperity Task Force Report.*** Dozens of actions were recommended and many were initiated.

The task force and report had five guiding principles that still ring true in 2016.

1) **Rural North Carolina is facing significant–and irreversible–long-term challenges**. The impacts of globalization on textiles, apparel and agriculture, weakened the economic fabric of many rural communities.

2) **One size doesn't–and shouldn't fit all.** Rural communities have different strengths and weaknesses and indeed different economies. Support needs to be nuanced and custom tailored to each community.

3) **Education–at every stage of life–is the key to success of rural North Carolina.** The skills needed to remain competitive are rapidly changing and all of our institutions need to be committed to helping our citizens prepare.

4) **Taking a regional approach to economic development is hard. And it works**. Regional efforts that allow communities to collaborate on projects that are in everybody's self-interest can be very effective.

5) **Rural North Carolina matters–to our entire state.** Ben Franklin's quote, "We must hang together, or assuredly we shall hang separately" is often used to emphasize the point.

In 2003, the National Governors Association's (NGA) Center for Best Practices issued a paper on ***Innovative State Policy Options to Promote Rural Economic Development.*** The NGA cited three promising strategies.

- Reinvigorating agriculture through diversification and value-added products. This strategy included financial, technical and infrastructure support.
- Promoting rural entrepreneurship – with access to seed capital, access to online resources, and local networks to train and support entrepreneurs.
- Adapting cluster-based principles to rural economies. These principles include innovation, cooperation and networking. Community colleges would be a key resource for worker training, and industry clusters would be supported with access to capital and technical assistance.

In 2004***, Competitiveness in Rural U.S. Regions*** by Michael Porter (Harvard Business School) provided an excellent summary of current knowledge about rural areas and their economic competitiveness. Porter found that policies to improve rural economic performance were "by and large, not working," and that the gap between urban and rural areas seemed to be widening. Porter's conclusions demonstrated the extreme differences in the economic drivers of rural counties and made specific recommendations.

- The need for a shared, regional economic vision and agenda
- Leadership from both the public and private sector
- Fact-based strategic analysis
- Collaboration among institutions and constituencies
- Building on the region's own strengths, not copying from other regions or focusing on generic weaknesses
- A cluster-based approach to industry support

A 2012 United States Department of Agriculture (USDA) report called ***Rural Wealth Creation: Concepts, Strategies, and Measures*** summarized current thinking about inventorying and building upon rural community assets – physical, financial, human, intellectual, natural, social, political and cultural.

The USDA report differentiated between "Traditional" and "Non-Traditional" rural economic development strategies. Traditional strategies include industrial recruitment; becoming a regional center for retail and services; becoming a bedroom community by providing quality schools and other amenities and becoming an amenity-based community with tourism, recreation, and retirement opportunities. Non-Traditional strategies listed in this report align with other new policy thinking: small business entrepreneurship; innovation and knowledge-based; cluster-based and attracting the creative class.

No silver bullet emerged from the research. In reviewing popular and generally accepted rural economic development policies in North Carolina, the South and the United States over the past 25 years, the actions that appear to improve competitiveness can be said to fall into two categories: more traditional or "Established" policies, and a set of less traditional or "Emerging" policies that may play a greater role in shaping rural strategies in coming years. Both established and emerging actions are important for the nonurban parts of North Carolina in the coming years.

The Established Policies include:

- Improving education and workforce training
- Enhancing infrastructure, including telecommunications
- Targeted business recruitment and retention
- Value-added agriculture and increased agriculture exports
- Supporting industry clusters
- Promoting regional thinking and planning
- Social supports, such as health care, child care and housing

The Emerging Policies include:

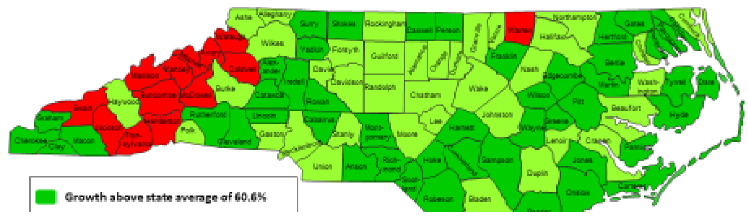
- Promoting innovation, technology and clusters of knowledge
- Support for small business entrepreneurship and self-employment (including access to capital)
- Better linkages with urban centers and the global economy
- Focus on quality of life and "placemaking" – providing amenities and an attractive community (includes downtown revitalization and adaptive reuse of existing buildings)
- Recruiting people – the creative class, immigrants and retirees
- Locally-developed strategies based on the specific assets of each community or region
- Development of new leadership and rural community capacity to act

What Does the Current Data Show?

Job growth has been uneven. Over the past few years North Carolina, statewide, has recovered from the job losses of the Great Recession with 2.8 percent more jobs in the third quarter of 2015 than we had in 2008. But a county analysis shows that from 2008 through the third quarter of 2015 (the most recent data available) only 21 of the state's

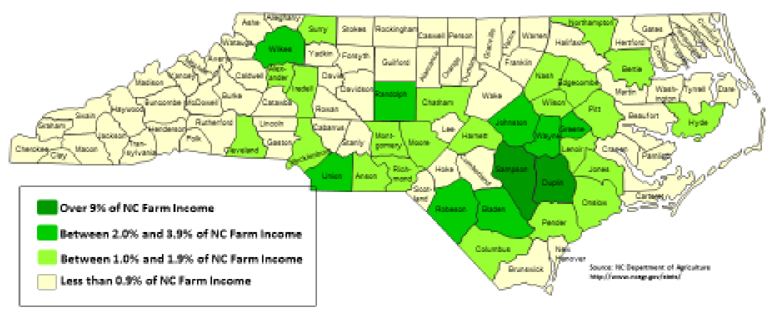
100 counties grew faster (a higher percentage job growth) than the state average. Those 21 counties include Wake, Mecklenburg, Durham, New Hanover and Buncombe; but they also include small nonurban counties like Currituck, Swain, Hyde and Pender; and midsized counties such as Iredell, Moore and Onslow.

Percentage Change in Farm Income 2004 - 2014
Cash Receipts & Government Payments
North Carolina state average 60.6%



At the other extreme, more than 20 counties have at least 10 percent fewer jobs than they had in 2008. During the most recent twelve month period, September 2014-September 2015, more than 20 counties continued to lose jobs. Most of these counties are less urbanized.

County Percentage of North Carolina Farm Income 2014
Cash Receipts & Government Payments



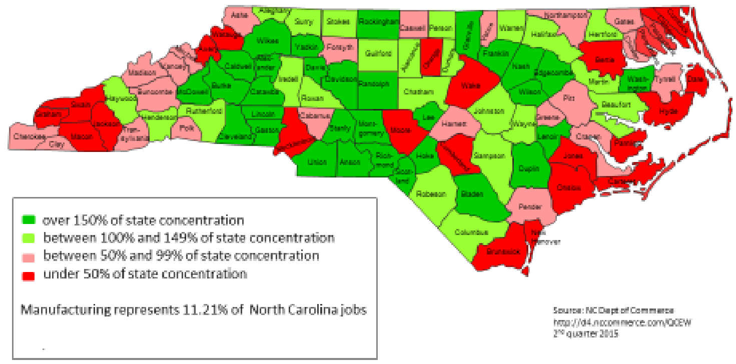
Economic drivers in rural counties vary greatly.
The industry most associated with "rural" is agriculture. In our state, agriculture remains a very important part of the economy. Of all the acreage in the state, 27 percent is devoted to farmland, down from 29 percent in 2002.

The percentage of farm income from 2004-2014 from cash receipts and government payments rose by more than 60 percent and increased in the vast majority of counties.

Farm revenue is important to many counties, but for about 30 counties where most of the revenue is generated, farming is crucial to the local economy. Many of those counties are located in southeastern and south central North Carolina.

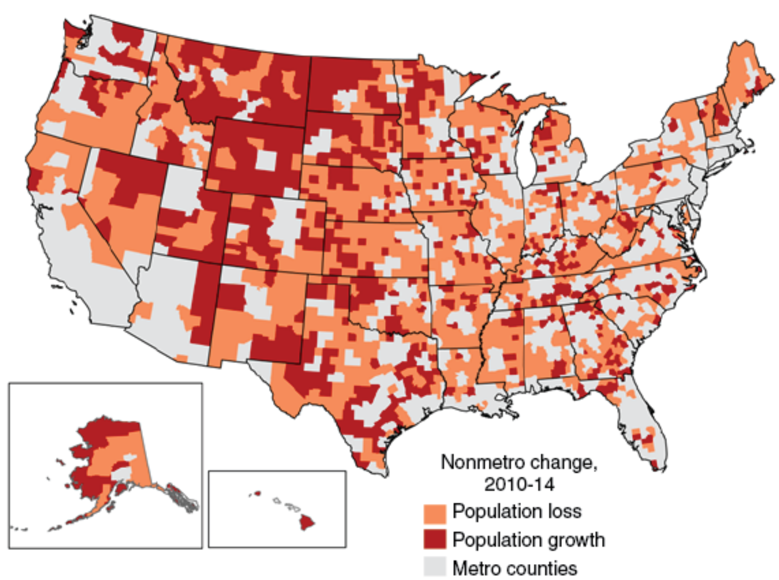
Other less urban counties have economies with concentrations of jobs in manufacturing, tourism, or logistics. The diversity of less urban economies establishes a need to have multiple strategies and to establish a clear understanding of each community's local assets prior to jumping to a solution.

Concentration of County Jobs in Manufacturing



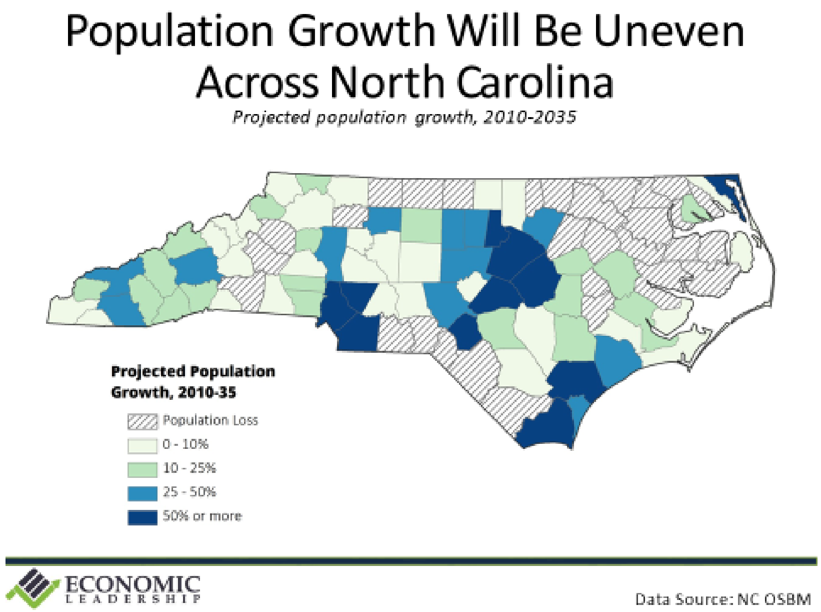
Disparity in population growth could exacerbate unevenness. Across the country populations continue to migrate. North Carolina and the South have been beneficiaries of a move from the Northeast and Midwest to the South and West. But these trends have been far from uniform in the South, especially in nonmetro counties where recent data shows many areas losing population.

Nonmetro population loss widespread in all eastern States



Source: USDA, Economic Research Service using data from U.S. Census Bureau.

Future population projections paint a chilling picture for many North Carolina counties. Recently released projections by the North Carolina Office of State Budget and Management forecast upcoming population losses in about a third of counties with more than half losing working-age population between 2010 and 2035.



Rapid technological changes could further reduce the competitiveness of many places.

At their recent Future of Work conference, the Institute for Emerging Issues released a new study that looked at the impacts of technological advancements on places in North Carolina. They found that many of our less urban areas are especially vulnerable. They also found:

- Lower-wage jobs are particularly at risk, but automation is threatening many job categories. More than one million North Carolinians are currently employed in these most vulnerable roles. The five most vulnerable roles: food prep and servers (including fast food), retail salespersons, cashiers, waiters and general office clerks.
- On average, North Carolina counties face the potential loss of more than 25 percent of their current jobs and nearly 20 percent of current wages as a result of automation and related technologies.

Listening to North Carolinians

After examining the research, The North Carolina Chamber Foundation began to talk to business and community leaders across the state. Public listening sessions were held in six areas across the state with community and business leaders, and legislators. Citizens expressed concerns, aspirations and concrete recommendations. There were many commonalities.

Education and Talent Supply

Attracting, training and retaining workforce was a top concern. Businesses expressed their frustration with having good jobs available but being unable to match employee skills with their needs. Both specific skill shortages and soft skill barriers were part of every discussion.

The Department of Commerce's Labor and Economic Analysis Division recently released its ***2016 Employer Needs Survey***. After collecting 1,900 surveys, more than a third of businesses surveyed expressed difficulty in filling positions. Finding candidates with the right work experience, education, and technical skills were the top reasons cited. Businesses in construction and manufacturing expressed the most difficulty. The survey also found that these difficulties were true in both urban and rural parts of the state.

At our forums attendees suggested many ways to address this issue:

- Curricula more tailored to industry needs
- Expose students to career opportunities earlier
- Better information for students, parents, career counselors and teachers about business needs and expectations
- Increased work experience for young people including apprenticeships
- Examine labor laws that are creating barriers to youth work experience
- Improve ways to quantify credentials and measure skills
- Public information campaign extoling the value of all training, not just four-year colleges
- More life skills/soft skills in curriculum
- Efforts to retain more exiting military
- State help to attract and retain Science Technology Engineering and Math teachers to rural systems
- More emphasis on place-making in smaller cities to attract and retain millennials
- Expanded early college programs
- Continue to improve the accessibility and value of NCWorks
- Scale successful programs where possible

Competitive Business Climate

Many attendees were positive about recent improvements in the business climate.

- Set-aside or targeted incentives for areas with greater needs
- State assistance with the development of quality buildings and sites
- More targeted recruitment in industries where less urban communities are competitive
- Permitting streamlining and certainty

- Place-making support to improve small communities

One area of concern was the current tier system for incentives. Although many opinions were expressed, it was clear that the current system created frustration and concern.

Entrepreneurship and Innovation
Optimism was expressed by attendees about the opportunities to attract and grow entrepreneurs in their communities. Statewide resources like the Community College Small Business Centers and the Small Business Technology Development Center were cited as resources.

- Small business incubators for small communities
- Increased rural capital
- Research and innovation in agriculture and food manufacturing

Infrastructure and Growth Leadership

Having a good workforce and appropriate infrastructure was described by many attendees as must haves or antes to even begin to compete for new jobs and investments. There was recognition that less dense places had many hurdles to scale.

- Broadband availability and affordability
- Broader availability of natural gas
- Improved port facilities
- Water and sewer assistance for rural systems that are aging and often failing
- Four-lane highway access across the state

In addition to the common comments presented above, four additional themes emerged.

The codependency of urban and less urban areas. As was borne out in the research, attendees discussed how urban and less urban economies depended on each other. Whether through metro area air service, rural food production, regional labor sheds, logistics networks or leisure opportunities there was a clear understanding that North Carolinians were economically interdependent. Enabling, embracing and funding collaboration was seen as a current barrier.

Geographically specific opportunities. While many of the same issues emerged across the state, each place also had concerns that reflected their own economies. Military, agriculture, port capacity and tourism, each had their champions. Micropolitan communities (regions anchored by cities with under 50,000 population) were singled out as places facing extreme competitive issues.

Healthcare was discussed as both a necessary infrastructure for competitiveness and a source of extreme angst. With the national policy debate showing no signs of subsiding, communities are feeling the impacts. Rural hospitals are facing hard choices in order to survive and in many cases the community's chances of future prosperity are intertwined with the outcome. It is hard and getting harder to recruit doctors to nonurban communities.

Leadership and local capacity needs were discussed at each session. Community leaders expressed the need to work together, share best practices, to get help and to try to better understand the challenges that they would be facing in the coming years. Lack of actionable economic development intelligence emerged as an impediment to progress.

***North Carolina Vision 2030* is a plan to accelerate job growth and secure our state's future. We are convinced that if we complete the agenda laid out in the plan, our North Carolina will prosper. However, based on what we currently know, what our business leaders are telling us and the trends that most expect to shape our future, we will accomplish our overall goals while leaving large portions of our state behind. That is not acceptable and we are proposing a set of additional actions that will seed the spread of prosperity to more of our communities.**

Private-Public Strategic Action Priorities to Spread Economic Opportunity Across the State

The North Carolina Opportunity Package

There are many programs that are already in place and working in North Carolina. The Rural Grants programs, Industrial Development Fund and NCWorks are examples of programs that are already contributing to the economic opportunity for many North Carolinians. But more needs to be done.

To increase opportunities across our state, we recommend the following set of public and private priorities which recognize the importance of local leadership and regionalism, scales proven best practices and helps communities help themselves to build a more competitive economic product. Helping places become more competitive is not just addressing one issue, it is about improving workforce readiness, infrastructure and the business climate. We recommend that a

nc> North Carolina Chamber Foundation

pathway for communities be established where achieving initial success, for example achieving Certified Work Ready Community status, creates eligibility for additional programs.

Education and Talent Supply

1. Expand NCWorks Certified Work Ready Communities program to certify 30 additional nonurban communities by 2021.

2. Create a competitive grant fund to develop or expand five new Swiss/German-style apprenticeship partnerships in multiple nonurban communities by 2019. Encourage public and private support for additional efforts to raise the number of high-quality apprenticeships and support close coordination between high schools, community colleges and businesses.

3. Prepare more nonurban students for emerging Science Technology Engineering and Math (STEM) jobs by improving mathematics skills across the state. The North Carolina Chamber Foundation will work with North Carolina New Schools/Breakthrough Learning to deploy lessons from its STEM Accelerator into four regional county groupings by 2021. Encourage public and private support for additional STEM efforts in communities across the state.

4. 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 nonurban counties by December 2017.

Competitive Business Climate

5. Create a Rural Opportunity Grant Fund available only to nonurban counties to incent new investment and jobs.

6. Build on the agriculture, food processing and food manufacturing value added chain within the state borders to stimulate job opportunity and private investment.

7. Create a multi-year Targeted Marketing Fund for the North Carolina Partnership for Economic Development to identify and attract nonurban manufacturing clusters.

8. Strengthen manufacturing competitiveness in the state by repealing the Mill Machinery and Equipment Tax.

9. Study options to reduce permitting delays in order to increase certainty, improve time delays and reduce investment costs.

Infrastructure and Growth Leadership

10. Complete the Atlantic Coast Pipeline to extend natural gas service to unserved areas of the state.

11. Continue to make strategic transportation investments and funding reforms to further economic opportunity and connectivity in nonurban North Carolina.

12. The North Carolina Chamber Federation will establish a public-private partnership to explore public, private and philanthropic options to increase the deployment of high-speed broadband and make recommendations to the General Assembly for the 2017 legislative session. (A group of initial ideas is provided in Appendix 1)

13. Create a competitive, matching Nonurban Product Development Fund to help communities create "Certified Sites" or spec buildings, complete building renovations or demolitions, and make strategic infrastructure improvements. The fund would require a match based on need.

14. Create a competitive Nonurban Tourism Development or Entrepreneurial Ecosystem Development Fund to help nonurban communities attract more tourism spending or support entrepreneurial growth. The fund would require a match based on need.

15. Create a public-private study effort to identify options to attract and keep healthcare professionals in the nonurban parts of the state and explore public-private partnerships and possible incentives to address the changing health care financial model, with recommendations to be made for the 2017 legislative session.

Entrepreneurship and Innovation

16. The North Carolina Chamber Foundation and the Chamber Federation will work with the Small Business and Technology Development Centers, Industry Expansion Solutions, Cooperative Extension and the Community College Small Business Centers, to develop a program to proactively identify and assist 50 high-impact businesses each year in nonurban counties beginning in 2017.

17. The North Carolina Chamber Foundation will work with the North Carolina Commerce Rural Division to develop a public-private funded partnership to assist nonurban counties to assess their economic competitiveness and develop strategic action agendas to increase their prosperity. The effort will target 10 new communities each year and prioritize regional efforts.

18. 100 Ideas to Extend Prosperity – The North Carolina Chamber Foundation will work with the North Carolina Economic Developers Association, the North Carolina Association of Workforce Boards and others to develop a "Best Practices Guide" of programs that can be replicated and scaled.

19. The North Carolina Chamber Foundation will work with the Chamber Federation to create a new public-private partnership to develop and deliver a local leadership education program to align economic competitiveness goals.

20. Prioritize efforts that are public-private, that are multijurisdictional (regional), that are comprehensive, that build on prior efforts, that are based on proven models and that yield quantifiable results.

Appendix 1
Facilitating Broadband Deployment in NC

1. **Improved Coordination with State Agencies**
2. **Connect America Fund Phase II**
3. **North Carolina's Grant History**
4. **Legislation in Other States to Facilitate Broadband**

1. Improved Cooperation between State Agencies and Providers

Over the last 2 years the communications infrastructure providers listed below have worked with the North Carolina Department of Commerce and most recently the North Carolina Department of Information Technology to identify how providers can works with State Agencies to promote communications infrastructure deployment throughout the state of North Carolina. The providers recommend that discussions include the following agencies to promote communications infrastructure in NC.

<u>Agencies</u> - Dept of Transportation, Dept of Environment and Natural Resources, Dept of Administration, Dept of Public Safety, Information Technology, UNC System, and NC Railroad

<u>Providers</u> - AT&T, CenturyLink, NC Cable Telecommunications Association, NC Telephone Cooperative Association, and Time Warner Cable

Wireline (Because of backhaul facilities, these issues impact wireless as well.)

- **Align permitting requirements and procedures across all NCDOT Divisions** – Each Division has its own process. Uniformity across Divisions would bring predictability to the process and reduce turnaround times. Companies have found that at times the right of way is located in the outer five feet of the right of way, and sometimes it is in the outer one foot. The difference in placement seems to be dependent upon which office at NCDOT is handling the request. Whether five feet or one foot, both result in increased cost to the providers. Providers have to clear the vegetation from the area before installing equipment or in some cases the wildlife fencing is placed within the same area as the provider right of way. Also, the average cycle time for obtaining a standard NCDOT permit is 25 days.
- **Allow NCDOT permit submissions to be completely electronic** – Currently, all NCDOT permits must be submitted on paper with an original signature. By equipping all Divisions with the means to accept electronic permits and removing the requirement for an original signature, the permitting process would become more efficient for both the NCDOT and the applicants. (Note: An electronic permitting trial was briefly conducted in the Raleigh area Division. However, the permits had to be submitted in both electronic form and paper form with an original signature.)

- **Establish a compensation mechanism for infrastructure moves due to road moves or improvements** – When the NCDOT requests that a provider move facilities due to a road move or improvement, the provider is reimbursed only if the facilities are on a private right of way (except for cable companies, which are not currently compensated). If the facilities are on a NCDOT right of way, the provider is not reimbursed for the cost of moving their facilities. This is a long standing arrangement in that the providers do not pay for the use of NCDOT right of way. Each time a provider must move facilities free of charge fewer capital dollars are available for new and improved services.
- **Implement competitively-neutral reimbursement policy** – As stated above, telecommunication companies current receive reimbursement for relocations if the facilities are on private right of way, but cable companies do not. The NCDOT's reimbursement policies should be competitively neutral across technologies.
- **Reduce fees and turnaround times for railroad right of way permits** – Permitting fees for NCRR average $14,000-$17,000 per permit request, and the fees for the NCDOT Rail Division average $15,000 per permit request. The NCRR requires a professional engineering survey at an average cost of $3,800, which no other railroad operating in NC requires. Additionally, permit approval times vary widely for NCRR (up to 14 months). Approval time for the Rail Division is typically three months or less. Excessive delays in permitting create issues with service provisioning to large business customers that need the technology to move their business forward. State government taking the lead with streamlining the permitting processes and lowering fees for the railroad right of way would be a good step forward.
- **Review procedures related to infrastructure and advanced service procurement**– Providers now include public and private entities as well as taxed and non-taxed entities. A review of the state procurement procedures could highlight areas to insure fair competitive bidding among parties as well as areas for efficiencies to be gained in state purchases of communications services.
- **Develop public-private partnership opportunities for funding to provide service in the highest cost unserved areas** – Recent FCC actions have moved ubiquitous voice funding support to support for broadband services. However, this funding transition is still insufficient to support broadband deployment in all unserved, high cost areas. Businesses of sufficient size in these unserved areas will be served as it would be profitable for providers to deploy services to their area due to the volume of services the business purchases. It is the residential or small business consumer in these unserved, highest cost areas that is likely to be left with inadequate broadband service. The state could consider establishment of public-provider partnership opportunities to support broadband deployment in the unserved, high cost areas through mechanisms such as grants or tax incentives.
- **Eliminate local government barriers to broadband deployment** – In recent years, the state has moved to a statewide gross receipts tax in lieu of local franchise, privilege and similar taxes on utilities and communications service providers, a portion of the revenues collected by the state are remitted to local

government to replicate the loss of revenues from elimination of local taxes. These revenues include payments in exchange for the right to use and occupy the right of way. However, many local governments are not allocating any portion of the state gross receipts tax to right of way administration. Those local governments are assessing local right of way fees on top of the monies already received from the state for use of the right of way. Ensuring that local governments properly use statewide gross receipts tax revenues rather than effectively charging providers twice for use of the right of way should be a top priority in North Carolina. Failure to do so will discourage broadband investment and significantly increase the cost of broadband service.

- **Eliminate sales tax on purchase of fiber optic cable.** <u>Current cable service providers pay a gross receipts tax on the purchase of fiber optic cable, even where this cable is used to support the provision of taxable service and subject to treatment as a capital asset for accounting purposes. *See* G.S. 105-164.13(5d) ("For the purposes of this subdivision, "broadcasting equipment" does not include cable.) The imposition of a sales tax on the purchase of customer-facing fiber is inappropriate as a policy matter because it represents the taxation of a business-to-business input and it effectively impedes broadband deployment by making it more expensive to deploy fiber.</u>

Wireless

- **Implement Sec. 3 of the Cell Tower Deployment Act** – Section 3 of the Cell Tower Deployment Act allows for the creation of master contracts for the purpose of leasing state-owned property for the siting of cell towers and other wireless facilities. These master contracts need to be established as soon as possible.
- **Standardization of process and contact for facility placement on UNC campuses -** Each campus in the UNC System has its own unique procedures and point of contact for placement of wireless facilities and related telecommunications infrastructure (including cable hub sites). Streamlining the process and working through a single point of contact for the whole System would facilitate deployment of wireless broadband to the UNC System students and the communities where they are located.
- **Allow wireless providers to collocate on state public safety towers** – Using existing state public safety towers to be leased by wireless providers would help accelerate the deployment of Broadband and reduce the need for construction of new towers.
- **Allow wireless towers and other facilities to be located on NCDOT property** – Opening up NCDOT property to be leased for wireless purposes would further facilitate Broadband deployment.

2. Connect America Fund Phase II

The Connect America Fund (CAF) is the result of a comprehensive reform of the FCC administered Universal Service Fund (USF). The CAF was established in order to accelerate broadband build-out to Americans who lack access to infrastructure capable of providing 10/1 Mbps fixed broadband. This reform is intended to expand the benefits of high-speed Internet to millions of consumers in every part of the country by transforming the existing USF into a new Connect America Fund focused on broadband. On December 18, 2014, the FCC released its final order setting forth the Connect America Fund Phase II (CAF II) parameters. The order required:

Build-out speed – 10 Mbps downstream / 1 Mbps upstream for Incumbent Local Exchange Carriers (ILECs) accepting the statewide right of first refusal; must also provide voice service
Build-out timeline/Support Period – 6 years (Carriers accepting the offer of CAF II model-based support may elect to receive an optional 7th year of funding.)
Build-out milestones – straight line build-out requirements with 40% of the construction to be completed by year end 2017, 60% by year end 2018, 80% by year end 2019, and 100% by year end 2020. Shortfalls in 2020 can be cured in 2021. Waiver provisions do exist in the cause of extreme circumstances, most notably adverse weather events.
Penalties – progressive penalties are incurred for substantially missing buildout milestones.

A number of North Carolina's providers committed to participate in the CAF II program as summarized below. The "Eligible Locations" represent the number of living units or small businesses to which the provider is required to deploy or maintain Internet access and voice services meeting the FCC's requirements within the FCC's identified high cost eligible census blocks. The "Support Amount" is the annual support providers will receive over a six year period to combine with their own funds to provide service. As a result, over 68,000 rural households or small businesses in North Carolina will see new or improved broadband services in the foreseeable future.

North Carolina State Summary

Carrier	Eligible Locations	Support Amount
AT&T	13,139	$3,498,885
CenturyLink	36,159	$10,008,387
Frontier Communications	11,981	$3,596,158
Windstream Communications	6,988	$1,952,081
Total	**68,267**	**$19,055,511**

North Carolina Chamber Foundation

For more information on CAF II parameters and eligible areas, please refer to the following link:
https://www.fcc.gov/reports-research/maps/connect-america-phase-ii-final-eligible-areas-map

3. North Carolina's Grant History

The State of North Carolina has a successful history of deploying broadband in the most rural areas by way of grants which were administered by the e-NC Authority from 2002 to 2009. The e-NC Authority was later absorbed by the Department of Commerce in 2011. In 2012, the North Carolina General Assembly made available $1 million to be administered by the Department of Commerce for grant purposes. CenturyLink and Time Warner Cable were the 2012 grant recipients. Prior to 2012, the grants administered by the e-NC Authority required a minimum dollar for dollar match from the grant recipient. The areas eligible for these grants were identified by the e-NC Authority beginning with counties that had the lowest levels of broadband available at the time. The Department of Commerce grants were competitive in nature and also required matching funds from the grant recipients. Under the Department of Commerce, grant recipients also had some degree of flexibility in identifying eligible rural areas. A 2009 "*e-NC Authority Report on Broadband Grants Awarded*" can be found by clicking on the following link:

http://www.ncga.state.nc.us/DocumentSites/committees/JLOCIT/Past%20Meeting%20Information/2009-2010%20Meetings/09-30-2009/e-NC%20Broadband%20Grants.pdf

Based on the previous successes of North Carolina's grant program, the state could consider appropriating additional grant funds for areas left unserved by the FCC's Connect America Fund. Through diligent planning and coordination with the state's providers the additional funds might also create a "halo effect" or an expansion of CAF II results in a very cost effective manner.

It should also be noted that in 2012, the state of North Carolina passed a law that allows counties to use unrestricted general funds for high-speed internet deployment grants in unserved areas. To date no such grants have been awarded. To view this session law refer to the following link:
http://www.ncleg.net/Sessions/2011/Bills/Senate/PDF/S572v5.pdf

4. Current Legislation in Other States to Facilitate Broadband

Three bills were introduced in Alabama this year that seek to encourage investment in broadband infrastructure by providing certain tax incentives.
SB 212, sponsored by Sen. Clay Scofield (R., District 9), seeks to promote accelerated investment in broadband infrastructure by private business by providing a 10-year property tax exemption for qualifying high-speed broadband telecommunications network facilities constructed after Jan. 1, 2016. The bill defines "broadband telecommunications network facility" as "electronics, equipment, transmission facility,

fiber optic or copper cable, and any other property used directly or indirectly to transmit broadband signals capable of speeds of at least 10 megabits per second of download speed and one megabit per second of upload speed."
http://alisondb.legislature.state.al.us/ALISON/SearchableInstruments/2016RS/PrintFiles/SB212-int.pdf

SB 213, sponsored by Sen. Scofield, seeks to provide an exemption from sales and use tax for equipment and materials incorporated into or used to operate any qualifying broadband telecommunications network facility. The bill also defines broadband facility as equipment, facility, or property used to transmit broadband capable of speeds of at least 10 megabits per second of download speed and one megabit per second of upload speed.
http://alisondb.legislature.state.al.us/ALISON/SearchableInstruments/2016RS/PrintFiles/SB213-int.pdf

SB 214, also sponsored by Sen. Scofield, seeks to encourage investment in broadband infrastructure by private businesses by providing a nonrefundable income tax credit equal to 10% of the qualified investment in new broadband telecommunications network facilities in the state.
http://alisondb.legislature.state.al.us/ALISON/SearchableInstruments/2016RS/PrintFiles/SB214-int.pdf

Virginia's Governor McAuliffe has included $5.5 million ($2.75 million each year) in his budget proposal for improving rural broadband in the Commonwealth. Of these amounts, $250,000 in each year would be provided for broadband planning efforts and $2,500,000 in each year would be provided for broadband implementation efforts.
In Colorado, Senate Bill 67 provides for a property tax exemption on investments used to provide broadband services.
http://www.leg.state.co.us/clics/clics2016a/csl.nsf/fsbillcont/379A86D07D73724487257EF20078FF8B?Open&file=067_01.pdf

In Iowa, House Bill 655 provides for a property tax exemption on investments used to provide broadband services, establishes broadband grants, and seeks to speed up the permitting process for broadband deployment.
https://www.legis.iowa.gov/legislation/BillBook?ga=86&ba=HF%20655

In Iowa, House Bill 641 provides for a property tax exemption on investments used to provide broadband services, establishes broadband grants for targeted areas, establishes a conduit program and seeks to speed up the permitting process for broadband deployment.
https://www.legis.iowa.gov/legislation/BillBook?ga=86&ba=HF%20641

In Washington, Senate Bill 5425 provides for a sales and use tax exemption for qualified broadband equipment. http://lawfilesext.leg.wa.gov/biennium/2015-16/Pdf/Bills/Senate%20Bills/5425.pdf

In West Virginia, Senate Bill 315 provides a tax credit for broadband deployment in certain high cost census blocks. http://www.legis.state.wv.us/Bill_Text_HTML/2016_SESSIONS/RS/bills/SB16%20intr.pdf

References

Aldrich, Lorna, and L. Kusmin. 1997. "Rural Economic Development: What Makes Rural Communities Grow?" USDA Agriculture Information Bulletin Number 737. Southern Growth Policies Board. 1985 "After the Factories- Changing Employment Patterns in the Rural South. Rodenfeld, Bergman & Rubin

Council of Economic Advisors. 2010. "Strengthening the Rural Economy – the Current State of Rural America." *https://www.whitehouse.gov/administration/eop/cea/factsheets-reports/strengthening-the-rural-economy/the-current-state-of-rural-america*

Haley, Michael, C. Harder and A. Lea. 2008. "Developing Strategies for Widely Shared Prosperity: A New Lens for Understanding Rural-Urban Integration." North Carolina Department of Commerce, Division of Policy, Research, and Strategic Planning.

ICMA Center for Sustainable Communities briefing paper. 2013. "Asset-Based Economic Development: Building Sustainable Small and Rural Communities." *http://icma.org/en/icma/knowledge_network/documents/kn/Document/305453/Asset Based_Economic_Development_Briefing_Papers%20%20*

ICMA Smart Growth Network. 2010. "Putting Smart Growth to Work in Rural Communities." *http://icma.org/en/icma/knowledge_network/documents/kn/Document/301483/Putting_Smart_Growth_to_Work_in_Rural_Communities*

MDC, Inc. "Building Blocks of Rural Development." MDC Discussion Paper, June 1991.

NGA Center for Best Practices. 2003. "Innovative State Policy Options to Promote Rural Economic Development." Economic & Technology Policy Studies Issue Brief.

North Carolina Rural Economic Development Center. 1999. "Choices for a New Century."

North Carolina Rural Prosperity Task Force Report. February 21, 2000.

Pender, John, A. Marre and R. Reeder. 2012. "Rural Wealth Creation: Concepts, Strategies, and Measures." USDA Economic Research Service, Economic Research Report Number 131.

Porter, Michael E., with C.H.M. Ketels, K. Miller and R.T. Bryden. 2004. "Competitiveness in Rural U.S. Regions: Learning and Research Agenda." Institute for Strategy and Competitiveness, Harvard Business School.

Scott, Leslie A. "Supporting Rural Entrepreneurship." 2012. *Economic Development Journal*, Vol. 11 Number 4: 11-25.

Seline, Richard S., E.J. Byler and S.M. Miller. Undated, circa 2007. "What is Rural America's Place in an Innovation-Based Economy? Viewing Rural Economies as Competitive Nodes of Innovation, Entrepreneurship & Economic Growth." Briefing Paper 4, New Economy Strategies, LLC.

Southern Growth Policies Board. 2005. "The New Architecture of Rural Prosperity." 2005 Report on the Future of the South.

Stauber, Karl. "Critical Capacity and Rural America in the 21st Century." April 5, 2011.

United States Department of Agriculture. 2006. "Rural Development." USDA 2007 Farm Bill Theme Papers.
http://www.usda.gov/documents/Farmbill07ruraldevelopment.pdf