

With a rich history of manufacturing and agriculture, and a land base that provides an abundance of natural resources, North Carolina's rural communities play a vital role to the economy of the state. Although recent years have proven difficult for the industries of rural North Carolina, investing in its development and maintenance will yield benefits throughout the state by contributing to a diverse and healthy state economy.

Global economic trends and the multiple recessions in the decade from 2000-2010 led to high unemployment and little economic growth in rural North Carolina. As traditional industries have left North Carolina and technological advances have allowed remaining manufacturers to employ fewer workers, all of the state's United States Department of Agriculture (USDA) designated persistent poverty counties (where more than 20% of the population has lived in poverty for the last 30 years) remain rural. The Task Force recognized that fostering sustainable economic development through investments in infrastructure, regional industry, and workforce development is crucial to improving health for rural North Carolina.

Over the past several years, an uptick in growth and employment has shown promise and progress for rural areas: since 2010, jobs have been added in rural areas of North Carolina. The rural unemployment rate, while still high at 11.0% in 2012, is declining, down from 11.5% in 2011.¹ In contrast, however, the statewide unemployment rate was 9.5% in 2012, and the urban unemployment rate was 9.1%.¹ Job growth in service industries and health care, along with growth of farms and small businesses, drove much of the improvement in rural areas. Increases in rural population and high school graduation rates continue to contribute to a potential comeback.

However, many challenges remain in rural North Carolina. Many areas struggle with a high proportion of residents living in poverty, with income much lower than the state average as well as lower levels of education. In rural counties, 20.8% of residents lived at or below the Federal Poverty Guideline in 2012 compared to 16.8% of urban residents. The median per capita income in rural counties was \$31,948, compared with the state average of \$37,910.¹ During the period of 2008-2012, 20.5% of rural residents did not complete high school, compared with only 14.5% of urban residents. In addition, only 17% of rural residents received a college degree, compared to 29.9% of urban residents.¹

Economic Measures and Health

Economic factors are closely related to health status and outcomes. People who are unemployed or who have lower incomes fare worse on most health indicators as compared to people with jobs or with higher incomes. Lower incomes are also associated with other risk factors for poor health, including

I always knew I wanted to be a family physician. Serving in my rural hometown of Taylorsville was the goal I set when I first walked through the doors of the medical school at East Carolina. Looking back, my whole medical journey has been a dream come true!

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poor health behaviors, poor housing quality, lack of health insurance coverage, food insecurity, and lower educational attainment.²

In North Carolina, 34.8% of those with annual incomes below \$25,000 reported their health as fair or poor, while only 10.2% of those with incomes above \$25,000 reported fair or poor health status.³ Lower income also affects access to care across North Carolina: nearly one-third of North Carolinians with incomes below \$25,000 reported cost as a factor in not being able to see a doctor, with only 10.5% of those with higher incomes reporting the same.³

Among adults in the United States, 25.2% of those out of work for more than one year reported their health as fair or poor, compared to 16.6% of those unemployed for less than one year and 8.2% of currently employed respondents.⁴ People who are employed are more likely to report that they had no unhealthy days in the last 30 days compared to those who were unemployed for more than one year (70.3% vs. 55.9% respectively). This difference is also true of mental health, with 67.3% of employed respondents vs. 50.6% of those unemployed for more than one year reporting zero mentally unhealthy days in the past 30 days.⁴

Strategies to Improve Rural Infrastructure and Promote Economic Development

Acknowledging the correlation between economic factors and health outcomes, the Task Force on Rural Health developed the following strategies to address economic development and security in rural areas of North Carolina:

- Invest in infrastructure
- Develop regional industries and local resources
- Recruit and retain industry
- Create workforce development programs to support the local economy

Invest in Infrastructure

The Task Force identified several current initiatives in place to address infrastructure needs of rural North Carolina and the potential ways that addressing these needs can contribute to improved health outcomes for residents of these areas. Some of these initiatives are statewide and support local infrastructure (such as water, sewer, broadband access, and neighborhood stabilization) focused in low to moderate income communities. Others are focused more specifically in rural communities, emphasizing building restoration and expansion of broadband networks.

The North Carolina Department of Commerce (DOC) currently supports several initiatives designed to support rural communities. These are part of the Rural Development Division at DOC, and include the Community Development Block Grant (CDBG) program, Appalachian Regional Commission (ARC), NC Broadband, and other programs. Administered by the Office of Community

Investment and the Commerce Finance Center, the CDBG program focuses on local governments and fund economic development projects.^a The aim of the CDBG program is to expand economic opportunity for low- and moderate-income residents. The state requires that at least 70% of this grant funding goes to benefit this population.

The Department of Commerce also administers the Building Reuse program. This program aims to create new, full-time jobs in Tier 1 or Tier 2 communities. This program provides grants and loans of up to \$500,000 (or half of project cost) to restore buildings and properties that have been vacant for more than three months and/or build, expand, or restore rural health care facilities. The program gives priority to projects that will create jobs with higher salaries and benefits and also requires participating communities to match grant funding with local resources, with local governments required to provide at least 5% of the cash match.⁵ In addition, the Department of Commerce, through the Rural Grants/Programs section, funds the Economic Infrastructure Program. This program aims to create new, full-time jobs in rural areas through investments in infrastructure projects such as repairs or upgrades to drinking and waste water or sewer lines, extensions of publicly owned gas lines, and transportation projects such as road and rail upgrades.⁶

Access to high-speed internet is increasingly required both for recruiting industry and to support individuals' employment (i.e. finding/applying to jobs, communicating with colleagues, or telecommuting). Enhancing the broadband infrastructure is crucial for rural North Carolinians. Many North Carolina broadband projects target the "middle mile," the portion of the telecommunications network that connects the network operator's core to the local network plant, generally located with the local telecommunications provider. Other projects target the "last mile," the portion of the telecommunications network that reaches individual consumers. Because it is often not cost-effective for telecommunications companies to install appropriate technologies in areas that serve few consumers, rural areas are often underserved by these technologies, particularly for the "last mile." However, an investment in broadband technology yields significant economic returns; the US Bureau of Economic Analysis estimates that for each dollar invested in broadband, \$3 is returned to the local economy.⁷ In addition, it is estimated that increasing broadband access in North Carolina could add between 9,100 and 12,700 jobs to the state economy with a 1-3% increase in broadband penetration, respectively.^{8,9}

A combination of federal and state grants, private loans, and private grants help fund additional broadband projects, targeting homes as well as community

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^a In the past, CDBG funds were used to support housing development and physical infrastructure (including water and sewer). The investments in the physical infrastructure were moved to the Department of Environment and Natural Resources (DENR). DOC still has a number of housing projects on the ground, but it will not be awarding any new funding to support additional housing efforts.

Golden LEAF works with 69 rural counties to provide high-speed broadband and has helped build 1,300 miles of “middle-mile” broadband fiber throughout the state.

organizations such as schools, libraries, and local businesses. The Golden LEAF Rural Broadband Initiative provides matching funds to the federal Broadband Technology Opportunities Program (BTOP #2), as part of the American Recovery and Reinvestment Act Broadband Recovery Funds. Through this initiative, Golden LEAF works with 69 rural counties to provide high-speed broadband and has helped build 1,300 miles of “middle-mile” broadband fiber throughout the state. It also builds broadband capacity for public schools, libraries, community colleges, and other community organizations. As private sector partners can lease broadband fiber through this program, it will also allow a greater number of “last mile” service providers to increase broadband service options for businesses, community organizations, and individual consumers in this area. Not only does this provide key infrastructure to many remote rural areas, it also encourages competition which will improve the price structure for those in rural areas, while creating an additional tax base that can be used to support other local government services.

NC Broadband, also a division of the Department of Commerce, seeks to build broadband capacity and examine the impact of broadband expansion, particularly in rural areas. Through an 18-month pilot project called NC LITE-UP (Linking Internet to Economically Underprivileged People), NC Broadband partners with broadband providers and county offices within the North Carolina Department of Social Services to research barriers to wider broadband adoption in underserved areas of the state. Through NC LITE-UP, NC Broadband hopes to inform and contribute to a national roll-out of increased internet access by the Federal Communications Commission. NC Broadband also provides technical assistance and support to communities wishing to expand their broadband networks, particularly to the “last mile.”

As health care providers also increase their utilization of internet technology in their practices, an enhanced broadband infrastructure can improve access to and coordination of care, increase access to personal medical information through online patient portals, and will be instrumental in helping practices reach “meaningful use” standards for health information technology. The North Carolina Telehealth Network (NCTN), run by the Cabarrus Health Alliance and subsidized by the Federal Communications Commission’s Rural Health Care Pilot Project, provides a telecommunications network through the North Carolina Research and Education Network (NCREN) infrastructure and the North Carolina Office of Information Technology Services (ITS) infrastructure. The North Carolina Telehealth Network provides this network for health institutions throughout the state and supports telehealth needs, exchange of health information, and disaster monitoring and response support.¹⁰ In 2012, Vidant Medical Center in Greenville, North Carolina, was the first not-for-profit hospital to be connected to NCTN. It was estimated that the hospital saves \$44,000 annually and received a large increase in internet bandwidth capacity.¹⁰

A stronger broadband infrastructure can also increase access to health services in underserved areas. In 2013, a three-year, \$1.6 million grant from The Duke Endowment, managed by the Albemarle Hospital Foundation in partnership with Vidant Health and the Brody School of Medicine at East Carolina University, founded the North Carolina Telepsychiatry Network. This program provides 10 hospitals in the Vidant Health system with funding to enhance telehealth capacity in order to provide psychological evaluation of emergency department patients when a mental health provider is not available on site. The program reduces mental health care costs for hospitals, increases patient satisfaction, and also allows health care facilities to provide prioritized care for patients most in need.¹¹

Significant federal dollars are available to support infrastructure improvements in rural communities through USDA-Rural Development, which administers more than 40 programs designed to invest loans and grants to support water, sewer, housing, business, telecommunications, community facilities, electricity, and economic development.¹² Non-federal match dollars required for the grants can be provided by local and state agencies and private (for-profit, nonprofit, and philanthropic) partners.

Develop Regional Industries and Local Resources

Strong regional industry and investment in local resources is critically important for economic strength and development in rural North Carolina. The Task Force examined a number of industries that are showing promise in strengthening rural economies, including agriculture and sustainable energy.

Local efforts to enhance the agriculture sector can help revitalize North Carolina's rural economy. In the 2012 Census of Agriculture, North Carolina ranked eighth in the country for total value of agricultural products sold, with a value of approximately \$12.5 billion (this figure includes total crops, livestock, and poultry). In total, North Carolina had more than 50,000 farms employing nearly 650,000 people.¹³ North Carolinians spend approximately \$35 billion on food annually. Thus, encouraging consumers to purchase more locally grown foods can greatly enhance local economies. A study of Iowa farms showed that if consumers purchased 25% of fruits and vegetables directly from Iowa farmers, it would create more than 2,000 jobs and generate \$139.9 million annually.¹⁴ Similarly, if residents of North Carolina spent 10% of their food dollars on local food, it would mean \$4.1 billion available in the local economy each year.^b

As of 2010, North Carolina had an estimated 200 farmers' markets and 100 community-supported agriculture programs. Through these efforts, there were more than 3,700 farms selling directly to consumers for a total sales value of more than \$29 million.¹⁴ Some farmers encounter challenges when selling directly to consumers. Food-safety requirements such as the Good Agricultural Practices

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^b Nancy Creamer, PhD, Professor and Director, Center for Environmental Farming Systems, North Carolina State University. Email communication. April 10, 2014.

(GAPs) certification and audit procedures can be prohibitively expensive or otherwise difficult for small farms. With this in mind, representatives from North Carolina State University, North Carolina Agricultural and Technical State University, the North Carolina Department of Agriculture and Consumer Services, the U.S. Food and Drug Administration, the North Carolina Farm Bureau, and several other stakeholders, have created the North Carolina Fresh Produce Safety Task Force. This Task Force developed a tiered system of food-safety certification, sponsors additional training programs, and implemented a GAPs certification assistance program to assist farmers with paying for government audits.¹⁵

The Farm to Fork initiative, launched in 2008 by the Center for Environmental Farming Systems, seeks to promote policy changes around local food economies; promote collaboration between local and regional food and farming organizations; and identify best practices that will enhance the local food economy. The Farm to Fork initiative recommends support for small local farmers to meet additional challenges presented by a larger food market infrastructure, including state-based support for locally produced food for state institutions (including schools, prisons, state-run health providers, and government agencies); business planning and marketing support; and local food job training opportunities. Farm to Fork also encourages local and community initiatives such as dedicating vacant land for farmers' markets or community gardens, revising land use ordinances to encourage small-scale food production in residential areas, and procuring more local food for institutional use.

At the community level, there are many examples of locally-driven efforts that are increasing access to healthy food while creating and sustaining jobs and small businesses. In rural communities, food hubs and aggregation organizations such as Feast Down East, Eastern Carolina Organics, and TRACTOR are being used to pool and distribute the harvests of multiple farms. Shared-use commercial kitchens are providing opportunities for value-added food processing and catering enterprises to grow their businesses without having to invest in major equipment or facility costs. Cooperative grocery stores are being established in food deserts that are unlikely to be served by major grocery store chains, and are providing new markets for local farmers. Additionally, there are Catch groups in coastal counties (NC Catch, Brunswick Catch, Carteret Catch, Ocracoke Fresh, and Outer Banks Catch) that are working to educate the public about the health benefits of local seafood and increase access to new and established markets, in order to sustain and strengthen our commercial fishing industry.

In addition to contributing to the state and local economies, such programs aimed at increasing the use of local food can also contribute to the reduction in health and food access disparities across rural North Carolina. As an additional resource, policy makers can also refer to the American Planning Association's *Policy Guide on Community and Regional Food Planning* to engage in community planning that improves access to and cost of local food, thus

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stimulating the rural economy and improving residents' health.¹⁶ There are additional opportunities to increase the purchasing volume of fresh vegetables, fruits, meats, and cheeses from locally sourced growers to nearby metro areas by addressing some additional barriers in systems and facilities for efficient processing, distribution, and marketing of the products.

In March of 2013, USDA Secretary Vilsack announced that North Carolina had been added to the "StrikeForce" initiative, designed to increase partnerships with rural communities and leverage community resources in targeted, persistent poverty counties.¹⁷ Programs providing financial support and technical assistance through the Farm Service Agency, Rural Development, and Natural Resources Conservation Service are available to help local and state governments and community organizations implement projects that promote economic development and job creation. There are 43 North Carolina counties that have been identified as priorities: Anson, Beaufort, Bertie, Bladen, Camden, Caswell, Cherokee, Chowan, Cleveland, Columbus, Currituck, Duplin, Edgecombe, Gates, Graham, Granville, Greene, Halifax, Hertford, Hoke, Hyde, Jackson, Jones, Lenoir, Martin, Montgomery, Nash, Northampton, Pasquotank, Perquimans, Person, Pitt, Richmond, Robeson, Rowan, Rutherford, Sampson, Scotland, Tyrrell, Vance, Washington, Wayne, and Wilson counties.

In addition to agriculture, investments in alternative and sustainable energy sources show promise for rural North Carolina. Between 2007 and 2013, North Carolina spent nearly \$2.7 billion in renewable energy investments, with a resulting contribution to gross state product of \$2.97 billion and 21,163 job-years by 2012.^{15,c} Much of this investment occurred in rural areas of North Carolina, with Duplin and Robeson counties investing over \$100 million each between 2007 and 2013. Beaufort and Cleveland counties each invested between \$50 and \$100 million between 2007 and 2013. State incentives for renewable energy investment, including the renewable energy investment tax credit and the Utility Savings Initiative, contributed to the ability of these communities and industries to invest in these areas.¹⁸

Since 2007, over \$1.65 billion has been invested in the solar industry, contributing to job growth and the improvement of the energy infrastructure.¹⁹ In 2013, North Carolina was sixth in the nation in the number of installed megawatts of solar energy and had more than 500 organizations working in the sector, employing over 2,000 workers.¹⁸ In particular, due to transferable skills, many of these jobs were created in rural areas that had been adversely affected by job loss in the construction industry. Wind power is also a renewable energy option that is available in many communities across the state.²⁰

It is also important for rural communities to invest in regional industries that take advantage of their unique resources and heritage. One example of a new

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c A job year is one full-time equivalent job per year.

An additional 0.72 workers are employed for every one worker employed in health care and an additional \$0.55 in wages is earned in a community for every one dollar paid to health care workers.

company seeking to utilize local resources and build on historical infrastructure is Opportunity Threads, a Burke County textile company. Founded in 2009, Opportunity Threads is worker-owned and committed to reclaiming the area's textile heritage and providing economic opportunities for local residents. Opportunity Threads has collaborated with the Manufacturing Solutions Center and Burke Development, Inc., to create the Carolina Textile District, which provides manufacturing and development resources to local designers and entrepreneurs throughout western North Carolina. This collaboration seeks to provide employment, build wealth for local workers, revitalize the textile industry, and sustain local heritage, particularly for young residents of rural western North Carolina.²¹

Recruit and Retain Industry

In addition to investing in existing regional industries, North Carolina must also invest in recruiting additional industry to rural areas as a strategy for economic development. Renewed focus on strengthening the health care industry and identifying opportunities in high value added manufacturing are key economic drivers.

As discussed more fully in Chapter 8, many areas of rural North Carolina suffer from a shortage of health care providers. This shortage leads to direct adverse effects on the health of these areas' residents, and can have negative economic consequences for the region.

North Carolina has recently seen the financial downturn of many rural hospitals. Due in part to the fact that local hospitals are in the top three employers in many counties, the impact of these downturns can be economically devastating, with research estimating long-term decreases of 1.5% in per capita income with a hospital closure.²² There is also a multiplier effect to health care jobs and wages, with an additional 0.72 workers employed for every one worker employed in health care and an additional \$0.55 in wages in a community for every one dollar paid to health care workers.²³ Estimates show that for every 10 critical access hospital (CAH) employees in rural communities, an additional 7.6 jobs indirectly depend on the CAH's economic activity.²⁴ In addition, the National Center for Rural Health Works at Oklahoma State University estimates that the closing of one CAH would result in the loss of 141 jobs and have an income impact of \$6.8 million to a community. For these and other reasons, it is therefore critical to commit resources and effort to keeping health care providers and hospitals in rural communities.

In many cases, rural hospitals suffer financially because patients are disproportionately poor and/or uninsured. According to the North Carolina Hospital Association, rural hospitals have an average 75.4% of patients on Medicaid, Medicare, or without insurance, compared to 68.2% in urban hospitals.²² While the payer mix may change due to increased insurance coverage through the Affordable Care Act, new models of care may be necessary for rural health care providers to remain in their communities. In Anson County, for

example, the traditional 125-bed hospital, built in the 1950s, was too large and costly for the small community. The Carolinas HealthCare System, which operated the Anson County hospital, closed the hospital and built a new facility focused on outpatient care, with a free-standing emergency department, outpatient clinics, and an on-site nursing home facility.²⁵ By replacing struggling hospitals with more cost-effective and accessible facilities, rural areas can keep jobs in the community and remain financially viable.

The retention of primary care providers also has a strong economic impact on rural communities. For each primary care physician in a rural area, there is an average of four jobs created in the physician's office: one physician, one nurse, one medical technician, and one receptionist, with a total compensation (including salary and benefits) of \$395,024.²⁶ In addition, because of the referrals to hospitals that physicians make, there is also a large downstream financial impact on a rural hospital. The revenue that primary care physicians create from inpatient and outpatient services helps create an estimated 13.5 additional jobs at the local hospital, with a total compensation of \$704,444. The increase in jobs and salaries at the physicians' offices and hospitals also has an impact on the greater local economy, with secondary impacts estimated at approximately \$1.35 million in the local economy.²⁶

In addition to the impact that increasing health sector jobs can have on local rural economies, improving the health care infrastructure of a community can also have a broader beneficial impact on recruiting industry to rural areas. Businesses report that the existence of a strong health care system is a top priority when deciding where to pursue relocation or expansion of a company. A strong health care system also helps promote a healthier workforce and helps businesses to recruit employees from other areas.²⁷ The retention of health care facilities and robust health care infrastructure also ensures that areas can attract and keep retired residents who bring economic growth to communities.

North Carolina also has significant opportunity to recruit and enhance manufacturing in order to improve the economic security of rural communities. Historically, manufacturing has been a large part of North Carolina's economy, especially in textiles, tobacco, and furniture. More recently, high tech industries including pharmaceuticals, aviation, transportation, and electronics have emerged as key parts of North Carolina's manufacturing sector, contributing to North Carolina's rank as the fourth largest manufacturing state.²⁸ Manufacturing is a large portion of the North Carolina economy, making up 84.4% of total exports and 10.9% of jobs statewide, and over 20% of jobs in some rural counties.²⁹ Like most industries, manufacturing experienced a downturn in the recessions of the early 2000s. However, in recent years it has been making a comeback in North Carolina. Some industries are shifting to local material and labor sourcing as international costs increase. Growth through 2011 and 2012 brought total manufacturing jobs to approximately 440,000 in the state.²⁹ Manufacturing jobs also tend to have higher wages, with an average salary in North Carolina of \$63,457 annually, compared to the average non-farming

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salary of \$41,520.²⁸ In addition, growth in manufacturing also can lead to economic expansion in other sectors, as area manufacturing leads to increased need for utilities, local retail, and management and employment services.³⁰ For every dollar in manufacturing output, there is an additional \$1.75 created in the local economy.²⁸

Within both the manufacturing and the agriculture sector, high value-added products also show great promise in improving North Carolina's rural economy. A manufactured good becomes a high value-added product when the manufacturer enhances its value through additional processing, packaging, or marketing in a way that allows the product to meet a different demand or fulfill a niche market. Expansion of high value-added products allows for lower costs through lower expenditures on transportation (i.e. transporting raw goods to another facility for additional processing) and other supply chain logistics. Establishing high value-added products is a way for manufacturers and farmers to increase their profitability and receive additional recognition for their business and products. Examples of high value-added products include converting soybean oil into biodiesel fuel; direct marketing of local and/or organic foods to local restaurants and businesses (while marketing as such); and running an ice cream or cheese shop as part of a dairy farm.³¹ Other high value-added industries that are growing in North Carolina include microbreweries that produce craft beers from locally-produced hops, wineries that attract visitors to their regions, and grass-fed beef, pork, and other specialty meat products.

Create Workforce Development Programs to Support the Local Economy

Developing a strong workforce is another priority for rural areas seeking to improve economic security. It is important to address workforce development in order to encourage and incentivize young people to remain in or relocate to work in these communities rather than migrate to urban centers in search of better job opportunities. This is particularly important as existing workers age out of the workforce.

In June 2012, the North Carolina Rural Economic Development Center (the Rural Center) awarded the first 25 grants of its New Generation initiative, which targets communities with grants of up to \$100,000 to develop business-driven training, job placement, and rural career path development assistance. The New Generation grants also fund projects that seek to recruit young adults to rural areas and improve technical skills. The Department of Commerce administers the Rural Community Mobilization Project which funds community organizations (including community colleges, economic development agencies, and workforce development agencies) in connecting unemployed and underemployed workers with job training and job placement services. From January 2010 to May 2011, the Mobilization Project served 1,821 people, with 936 participating in education or job-related training, 562 earning a credential, and 322 participants finding a new job.^{32,33} Several of these projects emphasize demand-driven workforce development by developing programs

supported directly by individual employers or in industries where employers have identified the greatest need for new workers.³⁴

The Conservation Fund also administers several projects aimed at developing the rural workforce. Through the Resourceful Communities initiative, the Conservation Fund uses a “triple bottom line” approach (environmental stewardship, sustainable economic development, and social justice) to address the economic needs of rural communities, and provides small grants to local grassroots organizations for job training and economic growth projects.³⁵

The North Carolina Community College System (NCCCS), a statewide network of 58 community colleges, is also heavily involved with workforce development within their respective communities, many of which are rural areas. SuccessNC is a planning initiative of NCCCS that aims to increase the percentage of students who transfer, complete credentials, or remain continuously enrolled from a six-year baseline of 45% in 2004 to 59% in 2014. SuccessNC has multiple components, including Career and College Promise, which offers dual enrollment programs for high school students wishing to earn college transfer credit and technical education certification.³⁶ NCCCS also works with the North Carolina Department of Public Instruction to administer the North Carolina High School to Community College Articulation Agreement, which provides opportunities for students to receive community college credit for proficiency in high school courses in the same subject.³⁶

NCCCS works directly with business and industry to develop career training and job readiness programs tailored specifically to the businesses’ workforce needs. Through the Customized Training Program, NCCCS focuses on job growth and productivity for local businesses. The program provides community college representatives who collaborate directly with local businesses to determine and coordinate the kinds of assistance they need. Offered services include training needs assessment, curriculum design and development, orientation development, and lab and computer training.³⁷ NCCCS also administers the Small Business Center Network, which provides resources and assistance for small business owners and employees, including business development, marketing, bookkeeping, taxes, and assistance with networking.³⁸ To this end, federal grant money has recently been allocated toward linking community colleges directly with business and industry associations and expanding on the job training through apprentice programs.³⁹ In addition to the programs focused on skill development and workforce readiness for young adults, some communities are expanding their focus to include workforce development and training programs for middle and high school students. The NCEast Alliance, a nonprofit organization dedicated to economic development for eastern North Carolina, addresses workforce development through the STEM East project. STEM East works with middle school and high school students to engage and enhance learning in science, technology, engineering, and math (STEM), preparing students for local work in these fields. STEM East also created a

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Many community- and state-level agencies and nonprofits provide services, programs, and financial assistance to support workforce training and small business development that is needed for diverse rural economies.

public/private partnership between public schools, businesses, government, community organizations, and higher education institutions to develop teacher-training programs and regional advocacy programs, as well as offer preliminary job opportunities to students and identify other specific regional workforce needs.⁴⁰ By reaching students at an earlier age, STEM East aims to develop a skilled workforce, incentivize employers to “grow their own” workforce, and encourage students to remain in their home communities.

There are many community- and state-level agencies and nonprofits that provide services, programs, and financial assistance to support workforce training and small business development that is needed for diverse rural economies; a few examples are described below. North Carolina’s Small Business and Technology Development Center (SBTDC) is the business and technology extension service of the University of North Carolina system (UNC), which is administered by North Carolina State University and operated in partnership with the US Small Business Administration. Through 10 regional service centers in 15 offices and six special programs, SBTDC provides management counseling and educational services to small and mid-sized businesses. Opportunities Industrialization Centers are located in Rocky Mount and Wilson, and provide a wide range of services and programs that address the integrated educational, economic, and social needs of workers. Community development financial institutions (including the Latino Community Credit Union, Mountain BizWorks, Natural Capital Investment Fund, NC Community Development Initiative, Self-Help Credit Union, SJF Ventures, and The Support Center) provide loans and technical assistance to entrepreneurs. Community economic development organizations (including the Land Loss Prevention Project, North Carolina Association of Community Development Corporations, North Carolina Community Development Initiative, North Carolina Indian Economic Development Initiative, North Carolina Institute of Minority Economic Development, North Carolina Rural Center, North Carolina REAL Enterprises, RAFI-USA, The Conservation Fund’s Resourceful Communities, and others) provide grants, training, technical assistance, and other support to community-driven rural community and economic development.

Many organizations are also providing scholarship opportunities for young rural students with the intention of providing educational opportunities and job training for those wishing to remain in their home communities. The Golden LEAF Foundation, a nonprofit dedicated to the economic development of rural areas, has awarded nearly \$30 million to more than 10,000 students since its inception. Golden LEAF’s scholarship programs provide funding for students from tobacco dependent and economically stressed counties to attend either two-year or four-year colleges. For those students attending colleges away from home, recipients must express a commitment to return or relocate to economically-distressed rural counties.⁴¹ The Golden LEAF scholarships aim to revitalize these areas and provide replacement workers for the aging workforce. In 2013, more than 200 scholarship recipients from 68 rural counties participated in internships

and other career development programs in health care, law, education, and other industries.⁴²

Based on evidence concerning the ways in which the economic strength of a community relates to health outcomes, one of the priorities of the Rural Health Action Plan is to focus more resources on rural economic development activities. This should include a focus on investments in the local infrastructure, development of local resources and regional industries, and efforts to recruit or support local health and manufacturing industries. Rural economic development activities should also include an investment in workforce development to ensure an adequate local supply of workers with the skills required for the next generation of workers.

Recommendation 1: To improve the economy of rural and economically distressed counties, the Task Force recommends:

- a) The Department of Commerce (DOC) and rural funders should:**
 - 1) Create a dedicated funding stream for rural communities to further investments in infrastructure, regional industry, manufacturing, and workforce development.**
 - 2) Work with local and regional offices of economic development to invest in economic development activities that capitalize on local strengths and resources.**
 - 3) Work with rural businesses and community organizations to enhance broadband access (particularly “last-mile” access) and infrastructure for rural communities.**
 - 4) Fund or provide support to local entrepreneurs to develop high quality jobs and businesses that build on local resources to grow regional industries.**
 - 5) Develop a system of incentives and grants to encourage high value-added manufacturing and agriculture industries including farming, fishing, and forestry and to make investments in rural areas.**
- b) To promote local agriculture and the sale of agricultural produce to local businesses, schools, and other government agencies, as well as directly to consumers:**
 - 1) The North Carolina Farm Bureau and other agricultural support organizations and agencies should provide technical assistance to small farmers to help minimize costs and support GAPs certification.**

- 2) **The North Carolina Department of Agriculture and Consumer Services, DOC, and the Division of Public Health within the North Carolina Department of Health and Human Services should review and revise, as necessary, existing regulations related to local farm rules in order to remove barriers to farm-to-table initiatives while still protecting public health.**
 - 3) **Rural funders should consider investing in projects that support local food programs, especially those that focus on marketing directly to consumers (particularly those with low-income), and improving consumer access, as these programs may be financially feasible and improve rural health outcomes.**
- c) **The North Carolina General Assembly and Department of Revenue should continue to encourage investments in renewable energy development through tax and other incentives.**
 - d) **Rural funders, the Office of Rural Health and Community Care, and the DOC should invest in rural health care, including recruitment and retention of providers to rural communities (discussed in Recommendation 6), and support for rural clinics and other rural health care institutions.**
 - e) **The North Carolina Community College System and Local Educational Agencies should continue to partner with small businesses, rural entrepreneurs, and local economic development offices to develop the rural workforce.**
 - 1) **The North Carolina Community College System should enhance programs that offer college transfer credit to high school students proficient in college subjects.**
 - 2) **Community colleges should offer career readiness certificates for job skills commensurate with the education of students in the community college and the needs of community businesses and industries. These career readiness certificates should be focused on the industries local to a community college and developed in partnership with local industries.**
 - f) **Rural funders should focus on supporting the recruitment and development of local, talented leaders. Funders should provide scholarship opportunities to talented youth leaders who agree to return, or relocate, to live and work in rural communities in exchange for scholarship funding.**

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