

### THE CONNECT REGION The work that provided the basis for this publication was supported by funding under an award with the U.S. Department of Housing and Urban Development **IREDELL** (HUD). The substance and findings of the work are dedicated to the public. ROWAN LINCOLN CABARRUS **CLEVELAND STANLY GASTON MECKLENBURG** NORTH CAROLINA UNION **YORK ANSON** SOUTH CAROLINA UNION **CHESTER LANCASTER**



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www.ConnectOurFuture.org



Prepared by: Wallace, Roberts & Todd, 2015

# WHAT'S INSIDE

A regional framework and tools to help realize the region's priorities

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Cover Image: RealityCheck 2050 - CONNECT Our Future

# From the Editor

#### THE CONNECT CONSORTIUM

he CONNECT Our Future Regional Growth Framework represents a landmark achievement for our region - the culmination of a process in which communities, businesses, educators, nonprofits and individuals from across our 14-county region have worked together to identify solutions to our region's challenges, that will help us to build a stronger economy, create vibrant communities, conserve our resources, improve quality of life, and control the cost of government.

This Regional Growth Framework emerged from an extensive collaborative outreach and engagement of over 8,400 residents and extensive work with local governments elected leaders and staff, other organizations and businesses throughout the region over the last 3 years. This is not our Framework, it is theirs—it is the region's residents who created this Framework for growth. As one of our mayors from a very small town said, "We had a voice, and we were heard, and I don't believe I've ever seen a process be so intentional about not just hearing but using what was said."

We've seen first-hand how deeply our residents, businesses, and policy leaders care about the future of the CONNECT region. Through their contributions and sharing of ideas, we now have a regional growth concept and a set of tools to help us to grow our communities and the region without losing what we value and love about this area. This is what we are calling a Regional Growth Framework.

The realization of the Regional Growth Framework will mean an even better future for our region than what we have previously planned for. We can expect more vibrant downtowns, more active farmland, new walkable activity centers, greater housing choices, better connected transit service and roads and multiple ways our residents can travel throughout the region for work or play. This approach to intentional growth and change reduces the cost of providing services by making efficient use of existing infrastructure like roads, public water and sewer services, and our existing public buildings and services. This approach also makes us more truly livable and resilient, while enhancing our global economic competitiveness both now and in the future.

On the CONNECT Our Future website you will find a series of toolkits that provide an opportunity for communities within the CONNECT region to review and choose those tools and approaches that best fit their local community needs, and to move forward on the priorities that are most important to them. You'll also find how you can "jump start" your community in moving toward the Regional Growth Framework, should you choose to do so. You can find tools that will enable you to do everything from finding funding for energy efficient housing, to improving access to health care for your community, to redeveloping your old shopping center.

And the great thing is, we already have examples of communities that are finding ways to do these things. CONNECT's toolkits highlight the great work being done in our region and elsewhere, and provide ways to build on that work.

We sincerely thank the 95 members, both public and private sector, of the CONNECT Consortium for their tireless dedication and the many valuable insights they shared throughout this process. We also want to thank the hundreds of people who volunteered for work groups, who participated in focus groups, small groups, review panels, and who came out to night meetings to talk about what is important for this region's future.

We hope you enjoy learning about the CONNECT vision, ideas for the future and how you can make it your own. We are confident that you will find the Regional Growth Framework and the website inspiring, useful, and empowering for your community. And we hope you will use it to get where you want to go-this report isn't thick enough to sit on a shelf, for a reason!

Our staff stands ready to assist communities throughout the region in any way, as voluntary implementation begins. Let us know if you have questions, comments or concerns. Let us know what's working for you and what isn't. Tell us about your successes, and lessons you learn, so that other communities can learn from your stories. CONNECT Our Future isn't over...it's just beginning, and now comes the excitement of making our shared vision a shared reality.

#### What's Online? ConnectOurFuture.org

Check out the Preferred Regional Growth Concept to see how the region's priorities can be realized.

Discover the many tools available to further our region's priorities! Here are just a few:

- Active Living integrates physical activity into everyday routes, e.g., walking to the store and biking to work
- → Water Conservation Education teaches residents how to reduce water consumption and impact on water supplies
- Farm to School connects schools and local farms with the goal of serving healthy meals, educating students, and improving nutrition



MICHAEL JOHNSON, CHAIR Centralina Council of Governments (CCOG) Statesville Mayor Pro Tem



DR. J. EDWARD LEE, CHAIR Catawba Regional Council of Governments (CRCOG) Mayor, City of York



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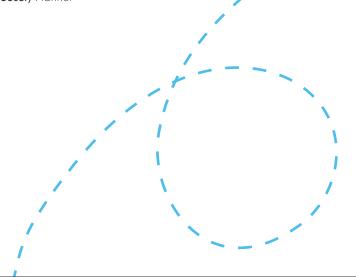
See page 83 for list of organizations represented in CONNECT

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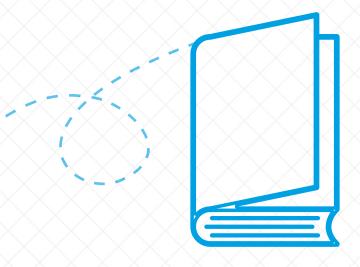
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# A USER'S GUIDE

### TO CONNECT OUR FUTURE



The CONNECT Our Future process was driven by over 8,400 residents and numerous stakeholders (public and private), public officials, and policy makers from the 14-county Greater Charlotte Region. All of your participation and hard work has led us to this point. Now, moving forward, we must work together to ensure that our region continues on this path to implement the Regional Growth Framework and help our communities grow jobs and the economy, improve quality of life, and control the cost of government!

This magazine is a *framework and a living document* that can and should be actively used. We hope you will put the ideas and tools within this document, and others found on the website at www.ConnectOurFuture.org to good use in your community to help our region grow and make our shared vision a reality!

#### IN THIS ISSUE

Growth is coming to our region in the next 35 years and will transform our region in profound ways. We take a look at how the CONNECT region can forge a new path moving forward in **Spotlight**, **Looking Ahead for a Better Future.** (page 8)

Faces of CONNECT, featured throughout the magazine, shines a spotlight on you—the people who made this process possible and will help to ensure the success of the CONNECT region in the future! These features highlight the unique voices and stories from community members throughout the region.

What are the key facts you need to know about this initiative? **The CONNECT Essentials** (page 11) answers

this question and many more. Learn about our core values, who participated, how the framework was developed, and what our future looks like. Make sure to check out the **Regional Preferred Growth Concept** (page 20) to see how our region can provide the quality of life, transportation choices, jobs closer to home, and housing choices residents want, while matching our growing population.

Next, **The Features** (page 25) section provides an in-depth examination of our region's 10 priorities that were developed through an iterative process with input and feedback from the residents and stakeholders (private and public) who participated in the 3-year CONNECT Our Future process. We know supporting our communities,

maximizing return on public investment, supporting local farms, improving access to parks and open space, increasing transportation choices, growing jobs closer to home, improving water quality, improving air quality, increasing housing choices, and reducing commuting costs were voted top priorities for future growth. Now, see why they are priorities, how we can move these priorities forward, together, and see where some of the tools related to each priority have been successful in "Ideas from around here."

Our region's vision and priorities are meaningless without tools to help us put them into action. We have developed over 80 tools that will be resources to communities throughout the region to help realize our shared vision and

priorities. **Featured Tools** (page 67) showcases five of these tools—Farm to Table, the Local Return on Investment Calculator, Transit Readiness Assessment, Preserving and Building Parks, and Land Use Modeling. All of the tools are available online at www.ConnectOurFuture.org.

Finally, we close this issue with a look at where we go from here. **The Future of CONNECT** (page 79) discusses what's next for CONNECT and how the Centralina and Catawba Regional Councils of Government are organizing to help the region's communities press forward.

# Spotlight LOOKING AHEAD FOR A **BETTER FUTURE**

There is no question that the residents of the CONNECT region love our beautiful natural surroundings, the quality of life in our cities, towns and rural areas, our robust economy, and our responsive local governments and institutions. Through the CONNECT Our Future process, we've heard from thousands of residents, business owners, and community leaders describing the qualities they love about our region-the very qualities that have primed our region for growth.

With population expected to double in the next three decades by 2050, it is now time to consider what this 14-county, bi-state region might look like in the year 2050. Our many natural, cultural, and social assets, and quality of life will attract almost two million additional residents by then, nearly doubling our current population. The new residents will need opportunities for decent housing, jobs, education, health care and other services that our region strives to provide today. But the development resulting from this tremendous population increase could consume thousands of acres of existing farmland and open space and require hundreds of miles of new roads, schools, parks and other public facilities which could cost hundreds of millions in tax dollars. Growth could also come in ways that revitalize our downtowns, encourage more job growth closer to home, preserve open space and natural areas, and open up even more farmland, and improve our air quality.

Ready or not, growth is coming to our region. It is inevitable, and for better or worse the next 35 years will change us in profound ways. What is NOT inevitable are the consequences of this growth-we get to choose. We have to be intentional about how we manage this growth so it can help maintain our communities' character and enhance and preserve it for future generations.

Will we have clean air, and enough water? Will we have mobility/travel choices that reduce the time and expense of commuting? Will we have an array of quality housing choices at all price points that reflect our changing demographics? Will enough good jobs be available so that all of our residents have an opportunity to prosper, without having to commute long distances for a good job? Will we retain and enhance the unique character and quality of life of our cities, towns and rural areas? Do we grow by choice, or by chance?

The answers to these questions, and to the question of what our region will become by 2050, depends entirely on which path to the future we choose. It starts NOW.



One path, that of "business as usual," is likely to give us more of what we have been getting: diminishing open space and farmland as we continue to spread out, ever increasing traffic congestion and air pollution, stress on finite water resources, escalating costs of public facilities and services, and a growing segment of our population living in poverty, under-educated, under-employed and in less than optimal health. If we keep doing what we've been doing, surely we will keep getting what we've been getting. The consequence could be a region in 2050 that we would scarcely recognize or wish to continue to live in. The choice is ours in choosing the character of communities we want to live in and raise our family.

CONNECT OUR FUTURE IS THE OTHER PATH, THE ONE THROUGH WHICH WE, TOGETHER AND AS INDIVIDUAL COMMUNITIES, CAN GROW IN A PURPOSEFUL WAY, MAKING OUR REGION BETTER AS WE GET BIGGER. FOLLOWING THIS PATH WILL ALLOW US TO:

- » Create development patterns that strengthen our communities, preserving and enhancing their character, whether they are urban, small town, or rural:
- » Reduce the need for car trips and new road infrastructure, lessen traffic congestion, and offer greater mobility choices;
- » Conserve our land and water resources, farmland, and the scenic beauty of the region;



- » Collaborate in economic development, propelling our region forward to compete on the national and global stage of technology and innovation, and creating more jobs closer to home, so that our youth don't have to go elsewhere; and
- » Anticipate and plan the capital needs of our communities to control the cost of government with greater efficiency and wise investments.

Best of all, CONNECT Our Future is the path that residents of this region have created through hundreds of community engagement events, through small group discussions, and through on-line surveys—CONNECT Our Future is the way that those thousands of folks have helped craft through their input. What's exciting is that it yields exactly the kinds of results that residents throughout the region have said they hoped for.

We all know the challenges we face today: the loss of jobs in many of our communities, the need to commute increasingly longer distances for well-paying jobs (leading to more traffic congestion), loss of vitality in our downtowns, mismatches between the housing people need and what's available, vanishing farmland and natural areas, and disparities in health access and job access. CONNECT Our Future offers a framework for our region's communities to meet these challenges, both together and individually. CONNECT Our Future offers a framework for growing by choice, not by chance –an opportunity to grow for better, not for worse.

#### A WAY FORWARD, WORKING TOGETHER

The CONNECT Our Future path is fourfold:

- To engage, enable and equip local governments, our towns, cities and counties, to grow and develop at the local level by applying those tools and best practices which best reflect local circumstances and best lead to achieving local priorities;
- To provide a regional perspective on local decisions, assisting local governments in considering how local decisions impact our neighbors and our entire region, and with data and other information that will assist them with assessing the longterm impacts, financial and other, of development choices;
- To recognize and act on the fact that the CONNECT Our
  Future region is greater than the sum of its individual parts,
  engaging local governments and institutions to address
  issues which transcend jurisdictional boundaries,
  our economy, our air, water and land resources, and the
  functionality of our regional transportation and infrastructure systems; and
- To continue to follow the path of community engagement and inclusion, so that CONNECT Our Future always reflects community character and values and never falls into a "one size fits all" mentality.

"Our future is really bright—a lot of companies will come here because of our location, and we'll have more jobs."

-Aadithya Nair, Ardrey Kell High School Charlotte, NC





"We can all say that we were a part of this, that my voice was there. And it's important to have a voice!"

-Darbah Skaf, Executive Director, Statesville Housing Authority Statesville, NC

# Faces of CONNECT

Shining a spotlight on the unique voices and stories of the region. Members of the community share what CONNECT means to them.



This project connected two states with diverse backgrounds in planning for the future of the Carolinas. It allowed us to think regionally on the issues we are facing and how we could lay the foundation for improving and sustaining our economy, natural resources, and new developments in the area. Overall this project enabled everyone to cooperate together to find solutions and resources to make our region and our communities viable for the future.

> -Penelope G. Karagounis, Planning Director, Lancaster County, SC

# The **CONNECT**Essentials

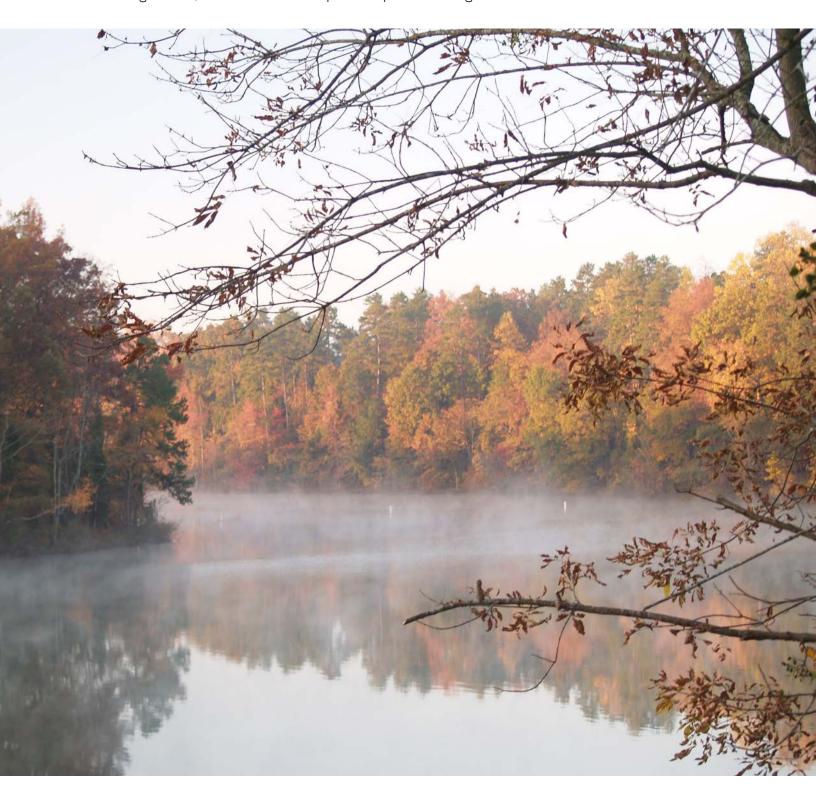
While a main goal of the CONNECT Our Future effort is to create a framework for guiding and investing in the region's growth, CONNECT is not as much an end product as it is an ongoing process. A process in which residents, cities, counties, businesses, educators, non-profits, and other organizations work cooperatively over time, laying the foundation upon which together we will grow jobs and the economy, improve quality of life and control the cost of government in our region's communities. Following are some key facts you need to know about this initiative.



# About **CONNECT**

The CONNECT Our Future Regional Growth Framework was developed through broad and robust community engagement. It was built on what our local communities within the 14 counties of North and South Carolina identified as existing conditions, aspirations for the future, and strategies to promote growth and prosperity across the region. The process was supported by a \$4.9 million HUD Sustainable Communities grant and \$3 million in local in-kind public and private matching resources.

Bottom Right: young residents of the CONNECT our Future region learn about gardening and planting at the Old Town Market in Rock Hill, SC.



or the past three years, the
CONNECT Our Future regional
planning effort has provided
a ground-breaking opportunity for the residents and
governments of our 14-county,
two-state region to create a vision for future
growth at the local and regional levels.
Moving forward, CONNECT Our Future
Regional Growth Framework will provide us
guidance, help us prepare to meet the challenges that our communities share, and plan
for the future growth of our region.

The CONNECT Our Future process builds on the CONNECT Regional Vision completed in 2008, centered on six core values that were adopted by local governments representing more than 70% of the population within the region. The CONNECT process engaged thousands of individuals and hundreds of public, private, and nonprofit organizations across the 14-county region, to talk about what those values mean to them and to their communities, as the region grows. What become the important priorities? What become the ways that people want to live, work, and get around? What and where can they find in terms of employment? CONNECT Our Future used that public input and very robust analytical tools to develop a regional growth framework based on publicly-identified priorities and publicly-identified choices for where and how to grow.

A regional growth framework is simply a depiction of what our region might look like in the future if we grow in ways that align with the priorities and development choices identified by the public, and used available tools, strategies, and best practices to guide housing, jobs, and transportation system growth. It is a combination of a regional vision (page 22) and tools/strategies that will help us realize that vision in the future. What is the benefit of having a regional growth framework? For one thing, many communities in the region face similar challenges, such as unemployment, housing needs, and a desire to attract and retain young people. The CONNECT framework allows us to more easily strategize for these common challenges. A regional growth framework will help communities decide how to best utilize limited resources (e.g., infrastructure and systems) to serve growth that is anticipated over the next 40 years. The CONNECT process offers an ongoing way to discuss how we want to address multi-billion dollar infrastructure investments and encourage existing and new business investment in our region. Working together will help us strengthen our economy, boost jobs, improve our quality of life, and control the cost of government.

#### Our Core Values!

CONNECT Our Future is guided by the following core values. These values were generated by extensive community input and adopted by the majority of jurisdictions within the 14-county region.

- A Strong, Diverse Economy that supports a wide variety of businesses and enterprises
- Sustainable, Well-Managed Growth that maintains quality of life, protects open space and environmental quality, retains the natural character of the region, and maximizes the efficiency of infrastructure investments
- A Safe and Healthy Environment with good air and water quality
- Increased Collaboration Among Jurisdictions on issues that transcend boundaries, including growth management, transportation, and environmental concerns, in a manner that recognizes both regional and local needs
- Enhanced Social Equity through community leadership and cooperative volunteerism
- High Quality Educational Opportunities that are available to all residents



#### **CONNECT ESSENTIALS**



Above, Merchants and farmers sell local products to residents at the Old Town Market in Rock Hill, SC.

"Rome wasn't built in a day." People often use this adage to remind someone of the time needed to create something great. And it's true: it takes time—years, in most cases—along with a great deal of patience and resolve, to achieve anything that is worthwhile.

So, how did CONNECT get started? How long did it take to get to this point? Although the 3-year process itself began in 2012, the regional growth initiative really goes back much longer than that. Regional discussions originated in the late 1990s, as concerns grew about the impacts on our communities and resources of rapid but imbalanced and unplanned growth. These discussions set in motion the Sustainable Environment for Quality of Life (SEQL) Project. Between 2003 and 2006, the SEQL Project brought together elected and appointed officials

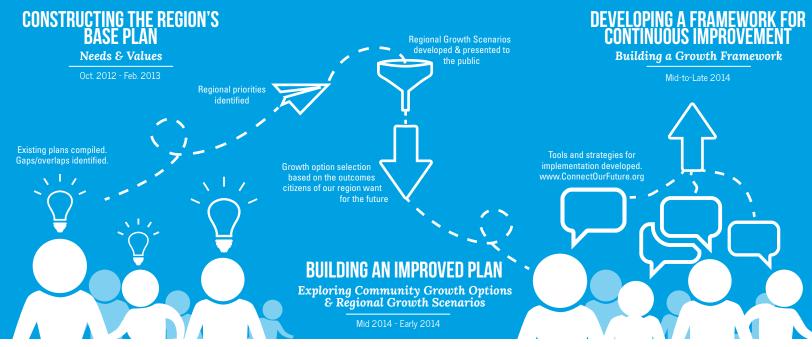
from more than 80 jurisdictions in North and South Carolina to identify and undertake 800 cumulative actions to protect and enhance natural resources.

SEQL led to an enriched awareness of the deep connections that also exist between the economies, housing and transportation networks across the fourteen counties that form the CONNECT region. Working from this improved understanding, in 2005 elected officials initiated the shared CONNECT Regional Vision-the first step in developing a plan for future growth. Despite the recession that hit in 2008, the region continued to grow, and CONNECT relationships and discussions about how to move forward as a region continued. Now, there was even stronger emphasis on the need to create jobs and

aligned workforce training so that people in every county had job opportunities closer to home.

In 2010, HUD announced their Sustainable Communities Initiatives (SCI) programs, and CONNECT's leaders recognized that these funds could provide the boost to complete the regional vision, help each community determine their priorities, and develop tools that would lead to implementation of the vision. They formed a broad-based Consortium of public, private, and non-profit organizations, and worked for two years to develop a successful grant application that, in 2011, resulted in the \$4.9 million grant, matched by \$3 million in local support. The grant award celebration in November 2011, attended by over 100 people, was just the beginning of the exciting next phase of CONNECT Our Future.

#### THE CONNECT OUR FUTURE PROCESS



**CONNECT Our Future estab**lished a process that confirmed the original core values, but in even greater depth and with broader public input, and then used that input to identify 10 key priorities for growth. Residents from throughout the region also provided their input on how they wanted to grow, through RealityCheck 2050, and through 57 Community Growth Workshops. These workshops, open houses, focus groups, special non-English and youth oriented sessions, on-line media, and outreach to thousands of people across the region led to over 6,400 voices shaping the Regional Growth Concept as one way to realize those regional priorities through how we grow. Concurrently, work groups were developing cutting-edge tools and studies specific to economic development, energy, air quality, public health, food systems, and housing. Together with the Regional Growth Concept, the technical studies and the tools that have emerged from them form the

Regional Growth Framework—an IMPLEMENTABLE way forward that honors the priorities and needs identified by thousands of the region's residents.

CONNECT Our Future is the work of many individuals and many groups working together over a long time, and continues the region's focus on growth that delivers the desired results,

a safe and healthy environment, a strong and diverse economy, high quality education opportunities, enhanced social equity, and increased collaboration among jurisdictions. CONNECT's tools support every community focusing on what is most important to them, while providing a regional context and framework for addressing those issues that, to be successfully resolved,

must be addressed on a regional or multi-jurisdictional basis. The work isn't done yet, in fact, the real work in acting upon this regional vision is just beginning. It is now up to all of us to help make the vision captured in the Regional Growth Framework a reality.

Below, Iredell County CONNECT Youth Event - October 9, 2013.



# Who Participated?





Above & Left, Groups participate in CONNECT's RealityCheck 2050.

#### Quick Facts

- 80+ Public Engagement Opportunities
- 400+ Regional Leaders
- 60 Local Governments & Government Agencies
- 29 Non-Profits & Community Foundations
- 12 Private Sector For-Profit Businesses
- 7 Educational Institutions
- 4 State Government Agencies from North & South Carolina
- 8,400 individuals participated!

CONNECT Our Future offered over 330 opportunities and multiple means for the public to engage in the CONNECT process, ranging from open houses, workshops and small group activities, to online questionnaires, business and youth-oriented outreach activities, and crowdsourcing events.

Participants in the CONNECT Our Future process included over 400 regional leaders, 60 local governments or local government agencies, 29 non-profits and community foundations, 12 private-sector for-profit businesses, 7 educational institutions, and 4 state government agencies from North and South Carolina.

In total, CONNECT gathered over 8,400 inputs from residents, many of them representing larger groups and organizations across the region, to help shape and inform the development of the Regional Crowth Framework. Each outreach phase strived to reach a broad participant base representing the demographics of the region.

# The Consortium

The CONNECT Consortium-a broad-based group of 95 governments, businesses, non-profits, educational institutions and organizations-is the body that provided oversight and guidance for the CONNECT Our Future Regional Growth Framework. The Consortium's role was to integrate the content produced by different work groups to create the Framework. This content includes both the Regional Preferred Growth Scenario and a variety of supporting studies, findings and recommendations in the areas of economic development, housing, energy, food access, public health, and other topics. The Centralina Council of Governments (CCOG), which was the grant recipient on behalf of the Consortium, and the Catawba Regional Council of Governments (CRCOG) coordinated, facilitated and staffed the process. A listing of all Consortium member organizations and jurisdictions can be found on our website www.ConnectOurFuture.org.

THE CONNECT CONSORTIUM IS MADE UP OF TWO "FORUMS":

THE PROGRAM FORUM: This forum includes senior staff, department heads, content experts, and other Consortium representatives who reviewed and provided feedback on draft components of the Framework, identified potential policy questions, resolved content or technical conflicts to the extent possible, and ensured that Framework elements worked in sync. The Program Forum made recommendations to the Policy Forum.

THE POLICY FORUM: This forum engaged elected officials, private and non-profit sector CEOs and/or Board members, whose role was to examine policy implications and messaging issues, identify needed policy or regulatory changes, provide feedback to the Program Forum, and resolve policy-related conflicts. The Policy Forum was the body that endorsed all final work of CONNECT Our Future, including the Regional Growth Framework, following extensive public engagement.







# Where we're working

The CONNECT region is expansive, covering 7,100 square miles and 1.127 million parcels of real estate, two states, and fourteen counties (see map above). It includes 120 local communities and countless smaller entities such as fire districts, school districts, soil and water conservation districts, transportation service districts, etc. Cities and towns in the region range from large metropolitan centers to rural crossroads. Environmental features, such as water basins, prime agriculture soils, and air quality, bind the region together and blur city, town, county, and state boundaries.

Together, the CONNECT region represents a land area larger than the State of Connecticut and a population greater than fifteen U.S. states (US Census Bureau, 2010). U.S. Census data indicates that the CONNECT region was the fastest growing metropolitan region over one million in the United States between 2000 and 2010, and projections indicate the population could nearly double in four decades (2050).

#### The region's strengths

- Growing population, the region is expected to add over 1.8 million people in by 2050
- Diversifying population
- Better overall health outcomes when compared to North and South Carolina
- Continued economic growth
- Higher median income compared to other parts of North and South Carolina
- Wealth of natural resources, including parks and open spaces



#### **OUR REGION'S 10 PRIORITIES**

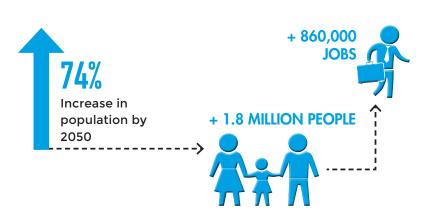
- » Support Our Communities
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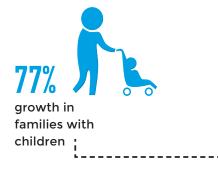
# Fast Facts about the CONNECT Region

One of the work products of the CONNECT process was a "Regional Scan," a fact-based document that describes current conditions in the CONNECT region. The Regional Scan provides a general overview of key trends and indicators that influence growth and development while acknowledging the desire of towns, cities, and counties to retain their unique character within the planning area. Here are some key facts from the Regional Scan about the CONNECT region today. To review the full document, go to: www.ConnectOurFuture.org.

#### **OUR REGION IS GROWING FAST.**

The CONNECT region grew in population every decade over the last 100 years. The pace of growth jumped dramatically in the 1990s, at rates which were double or triple that of the U.S. as a whole, particularly during the housing boom between 2000 and 2008. In fact, the CONNECT region was the fastest-growing in the country during that time. Individually, half of the counties within the region experienced rapid growth during the tenyear period while others experienced moderate growth. Only two counties, both in South Carolina experienced a population decrease during the ten-year period.







#### **OUR REGION IS FAMILY FRIENDLY.**

The CONNECT region as a whole had a larger share of families with young children compared to the U.S. national average, and family households continued to grow rapidly in the region between 2000 and 2010 (over 77%). Population growth for children 0 to 19 years old increased in seven of the fourteen counties between 2000 and 2010. However, five counties in the region did experience some decline in their child population during the same ten-year time period.



#### **OUR REGION IS GROWING OLDER.**

While children and residents between 25 and 44 years old represent a large share of the region's population, the largest increase for any age group over the past decade occurred among those 60 years and older. All fourteen counties in the region experienced growth in retirees and near-retirees, ranging from 8% in Union County, South Carolina to 67% in Lancaster County, South Carolina.

## OUR REGION IS GROWING MORE CULTURALLY AND ETHNICALLY DIVERSE.

The CONNECT region continued to become more diverse between 2000 and 2010. All races reported by the U.S. Census Bureau—White, African-American, Hispanic, Asian, American Indian, and Other Races—experienced significant growth in the ten-year period. Hispanic populations greatly outpaced the growth of all others by a large amount.



Right, Many textile mills like the Loray Mill (pictured) were closed following the decline of manufacturing throughout the CONNECT region. Many of these buildings are now being repurposed as new rental apartments, condos, and office buildings. (see 'Support Our Communities,' page 28, for more information)

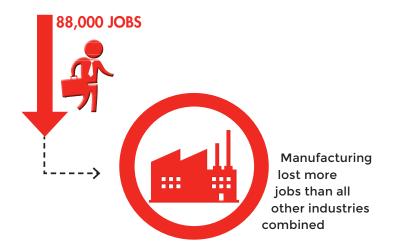


## OUR REGION WAS ONE OF THE HARDEST HIT DURING THE RECENT RECESSION.

Between 2008 and 2010, the CONNECT region lost nearly 88,000 jobs. Job creation returned in 2011 with 24,000 jobs added to the local economy. More jobs were lost in manufacturing (a past staple in the economy) during the previous five years than all other industries combined. Cities and towns heavily invested in manufacturing are now reinventing themselves for new industry growth. Today, the region's three largest industries include trade, transportation and utilities (230,000 jobs), professional and business services (170,000 jobs) and government (165,000 jobs).

### MORE PEOPLE IN OUR REGION ARE EXPERIENCING POVERTY.

Prior to the recession, a smaller share of residents in the CONNECT region lived in poverty (12%) compared to the U.S. national average (13%). However, poverty grew by 35% between 2007 and 2010, reaching a total of 411,000 residents. This raised the region's poverty level slightly higher than the U.S. national average, 16% locally compared to 15% nationally. An increase in persons living below the poverty line signals potential new demands for social programs administered by federal, state and local government agencies or nonprofit groups. Child poverty rates in the CONNECT region also went up between 2007 and 2010, rising from 16% to 22%.



HIGHER RATES OF POVERTY OUTSIDE OF MECKLENBURG COUNTY

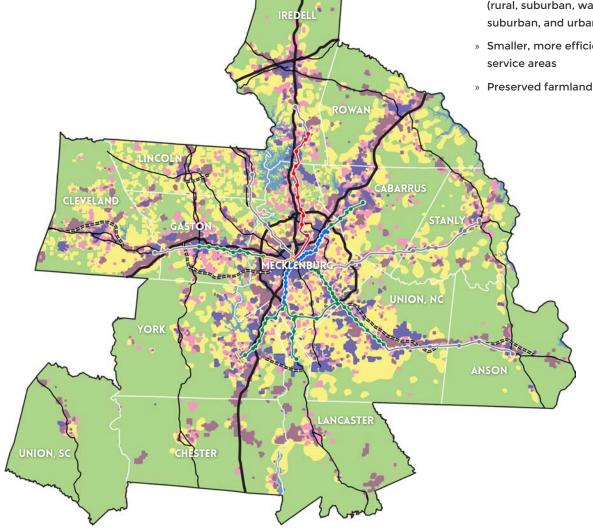
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Chester, Anson, and Union (SC) Counties have the largest percentage of people living below the poverty line

# What does our **Future** look like?

#### FINAL PREFERRED GROWTH CONCEPT

- » Major reinvestment in downtowns
- » Emphasis on mixed-use, walkable neighborhoods
- » Connected transit corridors utilizing streetcar, light rail, commuter rail, Bus Rapid Transit (BRT), buses, and highways
- » More housing choices (rural, suburban, walkable suburban, and urban living)
- » Smaller, more efficient







All evidence developed during the CONNECT process points to the same conclusion: our region's population will continue to growand we must provide the skills, jobs, businesses, infrastructure and services to match.

While all counties within the region have not experienced growth in equal measures, overall growth in the CONNECT region is expected to accelerate through 2050 because of the region's affordable housing, low cost-of-living, temperate weather and emerging business growth sectors. Forecasters anticipate 4.24 million people will call the CONNECT region home by 2050-an increase of 74% from 2010.

Without planning, rapid growth could mean fiscally unsustainable development. Nearly doubling population in the region between 2000 and 2050 could significantly increase the consumption

of farmland and open space, spread out our population and the area where services and infrastructure must be provided, producing an array of undesired consequences: expensive utility expansion, increased traffic congestion with longer commutes to work, overcrowded schools, loss of working farms and degradation of environmental resources. In addition, while employment is expected to increase to 2.18 million in 2050 (66% more than in 2010), our ability to grow businesses that support high quality jobs, and provide the skilled labor to fill those jobs, will be critical to maintaining the economic health and vitality of the region. How can communities in the region determine where, when and how to grow in order to achieve the sustainable future embodied in the CONNECT Vision?

This is where the CONNECT Our Future Preferred Regional Growth Concept for 2050 comes into play. A "preferred growth concept" is essentially a future-growth scenario that represents a land use and transportation pattern a community or a region seeks to achieve over the long term, because it addresses the region's priorities in a way that successfully produces the trade-offs needed to grow, improve quality of life, and control costs.

The Preferred Growth Concept map is one of three building blocks in the **CONNECT Regional Growth** Framework (the other two being the region's 10 Growth Priorities and a Toolkit of Best Practices available to local governments, in full, at www.ConnectOurFuture. org). The Preferred Growth Concept is essentially a quilt of local-level preferred growth maps from each of the 14 counties in the CONNECT region. The county-level maps were created from existing community plans, on-going discussions with local leaders, stakeholders and staff,

and extensive public input received through CONNECT Our Future outreach activities between 2012 and 2014.

While the Preferred Growth Concept is based on detailed technical analyses, it is intended to be applied flexibly to accommodate change over time as communities in the region make their own local decisions for future growth. While local governments are encouraged to consider the Preferred Growth Concept in making land use and transportation plans, they should do so in accordance with local policies, available tools and residents' expressed values and aspirations. The Preferred Regional Growth Concept offers local communities the opportunity to grow by choice-not by chance-while helping the region achieve the common goals of the CONNECT Vision.

"We have many different races, religions, and cultures here, and we need to be sure that we make Charlotte attractive to all of them! And get more youth involved in planning."

-Rickey Burch, Butler High School, Matthews, NC





"The challenges faced throughout our region do not recognize the various group boundaries in which we generally function therefore must be met in a more unified manner."

> -Doug Echols, Mayor, City of Rock Hill, SC

# Faces of CONNECT

Shining a spotlight on the unique voices and stories of the region. Members of the community share what CONNECT means to them.

"CONNECT Our Future has given us two things we've really needed, whether we're from Albemarle or Rock Hill—the data and the tools we need to grow stronger communities, and a framework to discuss regional growth policy issues with our state and federal officials."

> -Martha Sue Hall, Immediate Past Chair Centralina Executive Board









Scan the QR code or go to http://tinyurl.com/Support Communities to see tools and resources related to this priority.

#### WHY IS THIS A PRIORITY?

The CONNECT region grew tremendously over the last decade, influenced by strong job growth, vast amounts of developable land, and the influx of new residents from outside the region. Total population increased by 26% between 2000 and 2010, adding over 500,000 new residents to our region.

Growth is expected to accelerate through 2050 because of the region's affordable housing, low cost-of-living, temperate weather, and emerging business growth sectors. In fact, the CONNECT region is one of the fastest-growing large metropolitan areas in the country. As a result, our region is now experiencing the results of the fast-paced growth that has taken a decentralized, spreadout pattern over the last several

decades: accelerated land consumption, lost working farms, expensive utility expansion, loss of environmental resources, and longer commutes and traffic congestion.

Through the CONNECT process, residents have said that our cities and towns are important to quality of life, health, and the local economy. People identified their town centers or "main streets" as treasured places where community-building happens, where people can gather for work, shopping, entertainment, and food, and where they believe their community's character is most strongly expressed. We can support our existing communities, curb the cost of development, and maximize the return on public investments by



population growth in Cabarrus County by 2050.



population and employment is expected to double between 2000 and 2050.

encouraging and promoting growth (including redevelopment and infill), inside existing communities instead of on the fringe to ensure that vibrant downtowns and town centers will continue to thrive in the CONNECT region.

these features that again emerged from public input, we can not only support growth and reinvestment in our communities, but also preserve land outside of designated growth areas as rural or working farmland

"We should invest in existing growth centers rather than new growth centers."

-CONNECT Participant

MAKING IT HAPPEN

Through the CONNECT process, we now have a **Regional Preferred Growth** Concept based on public input developed in collaboration with the counties and municipalities of the region. The growth concept demonstrates that major reinvestment in walkable downtowns, mixed-use activity centers, walkable neighborhoods, and transit corridors region-wide supports our communities more strongly than past development trends, and provides other benefits. By encouraging

and preserve the community character that matters so much to every community in our region.

Since most land use, zoning, and transportation decisions are local, local municipalities play a major role in implementing the "Support Our Communities" priority. But "Support Our Communities" also holds true for rural communities, whether incorporated or not, so counties play a role also in realizing this priority. The land use modeling software, CommunityViz®, can be

used to track development patterns and regional and local progress toward this priority over a period of several years. Locally, communities can use CommunityViz® and the Return on Investment tool to compare

land use decisions that support development within existing communities and provide long-term positive investment for the local government.

As a region, we already monitor population and economic trends to inform decision making. We can also monitor our progress in supporting this priority through indicators and annual reporting. We can better integrate community health and wellness into decision making by including local and regional health experts in the planning process and using tools like Health

Impact Analysis to better understand potential impacts on the community's health.

Other tools include the use of GIS for provision of community services, a transit readiness assessment, and a step by step guide to infill development, brownfields and greyfields redevelopment and mixed-use zoning and guidelines.

# Why is this important?

Supporting our communities means creating new town centers and ensuring the success of existing downtowns.



- Use locally-owned businesses and services, including businesses located in the town center. If you are considering starting a business, consider the downtown of your community as a potential location.
- Consider housing options closer to the town center —housing downtown or near a town center helps draw new businesses and revitalize existing ones, and can include options ranging from great homes on treelined streets with sidewalks to modern condos with no yard work!
- Support events, activities, and festivals in your city or town; your local arts council or Chamber of Commerce will maintain a list.
- Check out the Buy Local Campaigns, Main Street Programs, and Educating Officials about Housing Diversity toolkits for more information.





# Ideas from around here

"Building and depending on our existing and enhanced infrastructure in employment and activity centers is the smartest growth option."





Above, The Loray Mill Lofts, an adaptive reuse project in Gastonia, NC, includes 190 loft rental apartments and 100,000 square feet of retail space.

### Adaptive Reuse at the Loray Mill (NC)

The Loray Mill, a 600,000 square foot 110 year old building, was once home to the Firestone Textile and Fibers and over 3,500 employees until 1993. Preservation North Carolina acquired the building in 1998 and began looking for a developer. After years of looking for developer partners, the Loray Mill

Redevelopment organization began the \$39 million renovation. The first phase was opened in 2014 and includes 190 loft apartments, a pool, health club, and restaurant amenities. The second phase, located in the 150,000 square foot wing of the mill will consist of an historic gallery, additional retail spaces, and public amenities.

The Loray Mill developers successfully leveraged historic preservation tax credits to complete a mixed use development reusing a building key to the area's history. The project is being funded mostly by a private grant given to Preservation North Carolina. However, without additional financial incentives in the form of tax credits for historic preservation, the mill project would not have been successful. The project has transformed a structure many described as blighted, to a development that may become a catalyst for neighborhood transformation in years to come.



Davidson, NC made a number of investments to support active and healthy lifestyles including new bike and walking trails, a farmer's market, and events to promote active living.

# Davidson Design for Life (NC)

The mission of the Davidson Design for Life (DD4L) program is to create a community that is healthy today and even healthier in the future while serving as a model for other small towns by implementing healthy design. Davidson uses the Health Im-

pact Assessment (HIA) process to evaluate and inform decisions and investments in the town, as well as at the regional and statewide level before a plan, project, or policy is implemented. Through the program, Davidson is able to collaborate with health experts in the planning process and more fully engage residents in discussion about healthier lifestyle options.

Here's why it works!

design standards, walking and biking trails, and health programs were created based on the results of the town's HIA.

The program start-up was funded by a CDC grant to conduct HIAs and provide community training to others municipalities.

Since initiating the program, Davidson has completed several HIAs and has started to revise the town's Street Design Standards to improve air quality, promote more walking and biking, and reduce the number of

people injured in car accidents. The HIA process was also part of the town's new Pedestrian and Active Transportation Plan, which included a committee on aging to understand what type of transportation options are needed to allow older adults to remain independent and in their own homes. Since 2011, the program has engaged residents throughout the small town through focus groups, town newsletter surveys, and everyday conversations. One key

element of the program is the collaboration that occurs between the planning department and DD4L. By physically sharing an office, staff is able to use resources more efficiently, broaden involvement in the public process, and crosspollinate ideas between groups that had not previously been at the same table.

(see index on page 82 for full list of resources)





Scan the QR code or go to http://tinyurl.com/Maximize Public to see tools and resources related to this priority.

#### WHY IS THIS A PRIORITY?

While the population and economic growth occurring in our region offers many benefits when well-managed, we must ensure that development does not result in expensive, unnecessary utility expansions and duplicative services. Based on observed budget shortfalls today, if our region continues to grow in a low-density, decentralized pattern, (which dramatically increases costs to build infrastructure and provide services such as police and fire) we will not be able to sustain the cost of infrastructure without burdening taxpayers. National studies such as the Brookings Institute's "Investing in a Better Future: A Review of the Fiscal and Competitive Advantages of Smarter Growth Development Patterns" have shown that revenues generated by this

inefficient pattern of development are often insufficient to cover the costs incurred. Resulting budget shortfalls will lead to continued stress and deficits similar to those already experienced in some parts of the CONNECT region. Leaders across the region agree that we need to pursue growth patterns that facilitate use of existing infrastructure, stimulate job growth and business access in every county in the region, greater fiscal responsibility for providing the public facilities and services, and higher quality of life.

Throughout this process, residents have said that controlling government spending, including the cost of providing public services, is important to improving efficiency and increasing public trust. Ensuring



highest priority identified by residents was infrastructure to support growth.



greater return on investment for denser development (Downtown Shelby, NC vs. newer Cleveland Mall).



Aging infrastructure is a major concern for transportation officials in the region, and maintenance needs for roads and bridges will stress already scarce transportation resources for new construction.

that revenue generated from new development, is sufficient to cover costs to expand facilities and services should be the approach to addressing this priority. Utilizing data to make educated decisions about public investment will ensure that communities in the CONNECT region continue to be able to provide needed services.

We now have a preferred regional growth concept for 2050 that if conceptually realized, will manage the cost of providing government facilities and services by encouraging development, and redevelopment, and infill where infrastructure and services already exist. The growth concept reduces the cost of providing services by generating more tax value per acre and maintaining smaller populated areas where service is required, thus reducing government costs.

#### **MAKING IT HAPPEN**

There are many different ways in which the local communities within the CONNECT region can maximize return on the public's investment—including staging and timing costly infrastructure expansions to mesh appropriately with development, operating more efficiently, sharing resources, and maintaining partnerships between organizations and at a regional level. Tools available online offer ways to operate public buildings more efficiently and at a lower cost, to adap-

between government and community neighborhood organizations is another avenue to pursue.

Finally, the CONNECT our Future planning process resulted in a huge inventory of parcel-based land use data for the region that is available and can be utilized by our communities in local comprehensive

# "Infrastructure is my top priority. We need to control costs of government."

-CONNECT Participant

tively reuse older and potentially historic community buildings, and to develop techniques for managing stormwater and water resources to reduce costs.

Many of our communities are already sharing resources and are seeking ways to expand shared use agreements to reduce capital and operating costs. The success of public private partnerships and strengthening relationships

and strategic planning, to make better land use and zoning decisions, and to prioritize capital improvements. One feature of that data is the identification of undeveloped or underdeveloped land in areas where municipal infrastructure is already present. Tools included in the Regional Growth Framework, such as those that address infill and redevelop-

ment can help to increase

# Why is this important?

Maximizing return on public investment can help reduce the burden placed on taxpayers and enhance the quality of life for residents.

the value of those properties, creating value where no or low additional infrastructure costs are incurred. In addition, our regional growth concept includes county and municipal data applicable to use in land use modeling for scenario planning, growth management, and planning for transportation and utilities. One of the lasting impacts of CONNECT will be the continued coordination between local municipalities and across county and state lines, as well the sharing of GIS data, best practices, and ideas from across the region.

### WHAT CAN YOU DO?

- Hold local officials accountable for spending decisions, and carefully consider and participate in public input opportunities regarding infill and redevelopment proposals in or near your area. Your input can help keep life and growth in your community in a way that meets existing residents' needs.
- Share information with community leaders about areas in your neighborhood that need improvement (e.g., sidewalk gaps or repairs, deteriorated schools, parks and housing) so that existing neighborhoods hold value and remain viable.





# Ideas from around here

"Communities need to focus more on the total cost of growth to the whole community as opposed to just the revenues generate from growth. Taxes shouldn't be raised to compensate for bad growth decisions."

#### -CONNECT Participant

# Rowan-Salisbury School District Energy Reduction (NC)

Following a series of budgetary cuts and recognizing the need for generating energy and cost savings, the Rowan-Salisbury School District hired an Energy Manager to monitor energy

consumption and develop strategies to reduce energy use and costs. As the school district's Energy Manager, Mike Austin, began implementing small changes including replacing bulbs with compact fluorescent bulbs, automatic light timers and sensors,

programming thermostats, and replacing old equipment with energy efficient versions. In addition to physical changes, he has also instituted an education campaign to raise awareness among staff and students about energy consumption.

These small improvements have made a big impact on the physical environment around and within the schools in the Rowan-Salisbury School District. In the last ten years since hiring an Energy Manager, 33 of the district's 39 buildings have been Energy Star certified, meaning that these buildings perform better than 75% of similar buildings in the country. In addition to the environmental and air quality benefits, these small changes yielded \$237,000 in savings in 2010 alone.



Above, Salisbury High School (Salisbury, NC) instituted a number of energy saving methods.

#### RiverWalk (SC)

RiverWalk is a \$600 million multi-use development along the Catawba River in Rock Hill, South Carolina. The development was planned and completed through a Public-Private Partnership between the City of Rock Hill and Assured Group. RiverWalk, located on a 1000-acre brownfield, consists of a variety of housing (over 3,000 residential units), a business district, manufacturing, sports facilities, open spaces, and miles of biking trails.

The new development provides a multitude of publicly assessable amenities to Rock Hill residents. The Rock Hill **Outdoor Center** (RHOC) adds more than 250 acres of new public recreation space to the city's existing park system, including a new YMCA, athletic

fields, trails and new streets, miles of river frontage, canoe/kayak launch areas, and the Giordana Velodrome (a world-class Olympic and professional cycling training center). The City of Rock Hill provided funding for initial public improvements including the Riverwalk Trail and the RHOC and provided creative financing tools for Assured Group. The Assured Group provided

guarantees of payment using the land as collateral and provided construction services.

A Tax Increment Financing (TIF) district which provided \$10 million in city-backed bonds and up to \$5 million in developer-backed bonds and a Municipal Improvement District (MID) were created. The MID creates a district that allows the city to collect additional tax assessments to fund bonds.

The RiverWalk development is an example of a Public-Private Partnership between the city and a developer that provides benefits to residents of Rock Hill, a consistent revenue stream for the city through tax assessments, and provides the developer with a return on investment. The RHOC, new residential homes and apartments, and Business Park, will create 4,000 potential jobs, provide the city with \$375,000 per year in hospitality tax revenues, draw new investment, and provide \$20 million per year in property taxes and

utility revenues. The 2.5 mile Riverwalk Trail, part of the Carolina Thread Trail System, receives 9,000 visitors per month, which is expected to increase as more residential units and apartment buildings are constructed. In addition, the state-of-the-art Giordana Velodrome is expected to have an economic impact of \$9.2 million in the Rock Hill area and earned Rock Hill an award for "showcase city" by the National League of Cities in 2011.

(see index on page 82 for full list of resources)







Scan the QR code or go to http://tinyurl.com/Support Farms to see tools and resources related to this priority.

#### WHY IS THIS A PRIORITY?

Most food in the US is produced hundreds, and sometimes thousands of miles from where it is consumed, which requires significant energy and cost for handling and transportation, increases food spoilage and waste during the journey, and undermines local markets that often grow or produce similar products. The strength of the agricultural commodities present in the CONNECT region shows great opportunity for a more sustainable, local-first food system.

The preservation of farmland and local farms is essential to protecting the beauty of the region and sustaining local jobs, and emerged through public input as a priority for the region. Better connecting farmers and consumers will strengthen the agricultural economy in rural areas and improve access to healthy food for disadvantaged communities. To be successful as a region, we must safeguard the long-term economic stability and viability of local farms.

#### MAKING IT HAPPEN

There are many tools that communities can put in place to support local and regional food systems. Farmland Protection Plans, Voluntary Agricultural Districts, and preferential local purchasing policies are all ways that we can support local food producers. However, food production is only one important piece of a very large, complex system. This system includes a long chain of activities,



of the region is farmland used for crops or livestock.





of farms in the region grow fresh fruits and vegetables.

workers, processes, and economic sectors that are each affected by multiple layers of policies and regulations. It is important that communities and planners consistently work to create and re-evaluate policies and regulations that work to support healthy community food systems.

the overall environment."

While agriculture is a regional strength and part of our local heritage, not everyone has access to fresh foods. We can foster demand for locally grown foods by improving the region's distribution network. Currently, there is a \$560 million gap between the amount resi-

"Locally grown food is not only good for farmers, but for the local economy, residents' healthy eating options, and

-CONNECT Participant

Our region can work together to bring local food issues to the forefront of local governments. We can support farmers and local food production by strengthening the business of farming, increasing access to foods by expanding farmers' markets and direct farm-to-consumer sales, and eliminating barriers between farmers and business outlets.

dents in the region spend on fresh fruits and vegetables and the amount of fresh fruits and vegetables produced by the region's farms. Our communities can ensure that residents are able to choose from a range of quality agricultural products by educating residents and farmers about the local food economy and creating more opportunities for training and direct farm to consumer

sales. We can improve collaboration between the many different businesses and individuals involved in distribution to improve efficiency and access. The development of food councils is one tool that is recommended as a way

to improve access and distribution.
Food councils bring together various segments of the community that play a role in the food system (e.g., agriculture, economic development, tourism, emergency food access, education, conserva-

tion, public health, etc.) and create a way to share information and resources across groups that do not typically communicate. County and regional food councils can then act together across the region to improve efficiencies in the distribution network and strengthen the agricultural economy.

# Why is this important?

Supporting local farms ensures the agricultural way of life in the region is maintained and protected for future generations.



- Shop at stores that carry locally-sourced foods.
- Encourage your grocer and restaurants to source local foods.
- Visit local farmers' or fresh food markets.
- Participate in local farm tours offered in your area.
- Sign up for a Community Supported Agriculture (CSA) to receive fresh food direct from local farmers each month.
- Work with your child's school to develop a farm to school program.
- See the Buy Local Campaign, Farm to Table, and Farm to School toolkits for additional information on these types of actions.





# Ideas from around here

"Without air, water, nor food we will not survive. We need to create balance for healthy growth because at the end of the day, you can't eat cement."

#### -CONNECT Participant

### Catawba Lands Conservancy (NC)

The Catawba Lands Conservancy (CLC), one of 24 non-profit land trusts in North Carolina, protects a community-based organization, CLC works with land owners, volunteers, local governments and land conservation advocates to pursue protection and secure

of land in the greater Charlotte region. The properties preserved by the CLC in 2013 include areas that protect biodiversity, restore riparian buffers within key watersheds, and provide land for future trails within the Carolina Thread Trail system. **CLC finances conservation** through local, state, and federal funding sources as well as private donations from individuals and corporations. Grants from the Conservation Trust of North Carolina's Farmland Forever Fund (FFF) pay for miscellaneous costs, including legal and acquisition fees. The Fork Farm and Stables (the Fork) in Norwood, North Carolina was one of the largest areas conserved by CLC in 2013 at 1,353 acres. The Fork includes land devoted to wildlife and productive farming practices where farmers grow hay, alfalfa, orchard grass, corn, sunflowers, and much more on 100 acres of agriculture plots outside of the horse

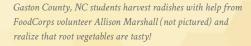
stables and lodging areas.



Above, The Fork Farm and Stables in Norwood, NC contains more than 100 acres of productive agriculture plots, horse stables, and lodging. 176 properties covering
14,783 acres of vital land
from development. The
conservation lands include
farmland, open spaces,
wildlife habitats, and land
near key water sources. As

financing for conservation of land vital to the natural environment.

CLC set a record in 2013 by securing the permanent conservation of 1,972 acres





CLC was also able to secure
Clean Water Management
Trust Fund grants by working
with the Centralina Council of
Governments and
three counties to
purchase major
portions of the
land adjacent to
Mountain Island

Lake, Mecklenburg County's

major drinking water source.

Here's why it works!

Students try new truits and vegetables, gain a greater awareness of where their food comes from, and build healthy habits to last a lifetime!

Gaston
County Harvesting
Healthy Youth (NC)

Under the Gaston County
Cooperative Extension,
schools are participating
in farm to table programs
that connect students to
local agriculture. Harvesting Healthy Youth is
a 15-week school gardening and nutrition program
offered to 3rd grade classrooms under the direction
of FoodCorps volunteers. In
2013, the program reached
950 3rd grade students at

twelve elementary schools in the county. As part of the FoodCorps volunteer efforts, Gaston County schools have also started the Harvest of the Month program where local produce is featured in school lunches every month.

The program successfully incorporates local produce into schools and helps students create positive experiences with fresh food in an effort to encourage healthy eating habits and reduce rates of childhood obesity. Harvesting Healthy Youth incorporates hands-on gardening and nutrition education where students not only learn about how food is produced, but also use the experience to meet learning objectives in other subjects. The program is funded by FoodCorps, a national program designed to address childhood obesity, which places young, motivated leaders in low-resource communities where they receive stipends in exchange

dit: NC FoodCorps

for teaching students about gardening and healthy eating habits and work to establish Farm to School programs. Now students at Gaston County schools are equipped with the knowledge of where their food comes from, how to grow and care for a garden, and what foods are healthy, while local farmers now have an opportunity to sell fresh food directly to the county schools. Find out more at www.ConnectOurFuture.org.

(see index on page 82 for full list of resources)





Scan the QR code or go to http://tinyurl.com/ ImproveParks to see tools and resources related to this priority.

### WHY IS THIS A PRIORITY?

Parks and recreation facilities in the CONNECT region contribute significantly to residents' healthy lifestyle and improve quality of life. Centers for Disease Control (CDC) research shows that parks and trails can promote physical activity and improve overall community health and social engagement, while providing environmental and mental health benefits. Welldesigned and safe, parks have also been shown to reduce stress and foster community interaction. Multiple studies have found that parks and open space strengthen the local economy and tax base by increasing property values and creating opportunities for tourism, as well as offering environmental benefits ranging from protection of natural

habitats, to improvement of water quality, and stormwater management. Furthermore, the region's residents value the beauty of nature and access to nature-parks and open space is one of the region's top priorities. As communities become denser to support transit, providing parks and "parklets" in urbanizing areas will be increasingly important as a way of preserving that value and providing recreation and "green breathing space" for children.

Despite the importance placed on parks and recreation, only about 7% of land in the region is protected as permanent open space, with only 1% of total land maintained by local governments for active or passive recreation activities. Even where parks exist,



of land in the CONNECT region is protected as permanent open space.

## <2 acres

of parkland per 1,000 residents Chester and Union Counties (SC) and Iredell, Lincoln, and Cleveland (NC).



local governments maintain parks or recreation programs for youth and adults. they are not always easy to access by walking, biking, or transit and may not be well distributed throughout a community. While residents of Mecklenburg County have a relatively high number of park acres per capita, nearly all of the surrounding counties have fewer than 10 acres per 1,000

to improve access to parks and improve their functionality and use. Most parks and recreation departments are now looking to year-round, multi-purpose fields or facilities to keep up with demand. They are also working with area schools to share the use of their athletic facilities and

parks. In addition, active living campaigns, educational materials, and Health Impact Assessments (HIAs) are included to improve understanding and of the potential health benefits and recreational opportunities provided by existing parks.

Improving access to parks & open space promotes active lifestyles, increases property values, and benefits overall community health.

Why is

this important?

"I like the growth in parks and open spaces...with a growing family of young children, this is very important to me."

-CONNECT Participant

residents. This falls well below typical standards for park acreage in a community.

#### **MAKING IT HAPPEN**

Officials in the region report that the public demand for parks and recreation out-paces available budgets resources, and that shrinking budgets hindering their ability to build new park and recreation facilities. However, there are tools that communities within the CONNECT region can use

school grounds. Under these types of partnerships, parks and recreation departments improve facilities on school property in exchange for joint use of the site.

Other tools provided on the CONNECT website are designed to help communities plan for greenways, trails, and rails to trails, to partner with land trusts to increase open space conservation, to promote existing parks, and to improve physical access to Communities can require or create incentives for the dedication of land for parks or recreation activities in new development projects to significantly lower tal costs for building new ities in the future. The

capital costs for building new facilities in the future. The inclusion of such parks and open space in new development has been shown to raise the value of property. To improve region-wide access, our communities also need to plan for equitable distribution of parks in long-range planning so that parks are located near residences, schools, shopping and other amenities.

## WHAT CAN YOU DO?

- Find out if your community has a "Friends of the Parks" or another parks volunteer program, and join.
- To preserve and improve your parks, become involved in long-range community planning, zoning and development decisions.
- Support funding for existing and new parks.
- Urge your local government to provide safe, comfortable environments for walking and biking to local parks.
- Support the sharing of facilities between the school district and the community for recreational purposes.
- Check out the Active Living, Park and Greenway Access, Parks Promotion Campaigns, Regional Cooperation, Preserving and Building Parks, and Complete Streets toolkits for more information.





"I would love to see more utilization of our abandoned rail trails, as well as more parks & recreational options in York. I've never felt more childlike and excited about the city I live in since I've discovered these trails. It is a wonderful thing that I'd love to share with more of our community."

## -CONNECT Participant

### GO! Chapel Hill (NC)

One of 25 community partnerships under the Robert Wood Johnson Foundation's Active and more environmentally friendly lifestyle. Active Living by Design places emphasis on influencing individual behavior that raise public awareness and bring the community together to get fit including free bike inspections, bike-in movie nights, and CycleFests.

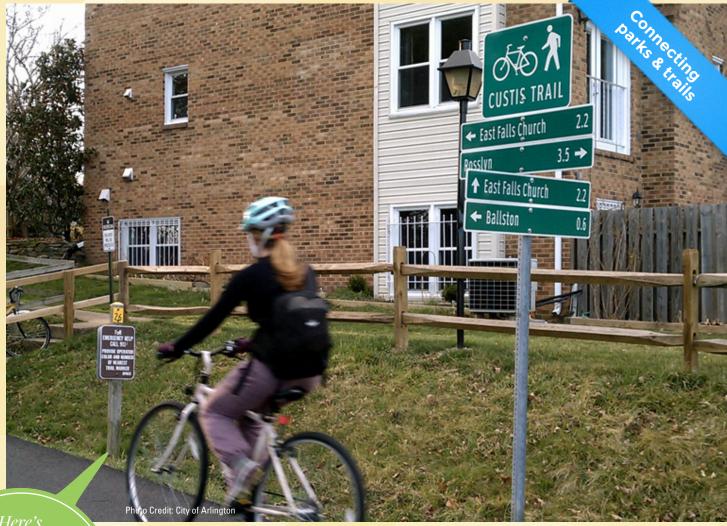
The program has been successful in building capacity and capitalizing on strengths within the community by forging partnerships with local businesses and engaged residents through the Chapel Hill Partnership Advisory Committee. One such partnership initiated by a local parent concerned about the lack of active physical activity among school children, led to six schools in Chapel Hill adopting "Active Routes to School" strategies. These strategies include improved sidewalks, painted crosswalks, and removal of visual barriers along routed to schools. In addition to physical improvements, parents organized "Walking Wednesdays" to promote walking to school. Students



Above, GO! Chapel Hill celebrates Bike Month with Switching Gears Bike Night. A night with family-friendly activities like slow ride races, bike jeopardy, children's bike decorating tent, and bike contests.

Living by Design program, GO! Chapel Hill encourages leaving your car at home and using public transportation, bicycling, and walking as ways to achieve a healthier through larger, communitywide strategies to create an environment that promotes physical activity and health. GO! organizes events with partners in the community





Here's why it works!

Signs throughout the city inform bikers and pedestrians about nearby trail and park connections

who participate by walking to school on that day receive a prize or a sticker. This effort has not only led to an increase in the number of students who walk to school, but also the number of parents who walk with their children, expanding the social and physical benefits of the campaign.

## Arlington Wayfinding and Associated Programs (VA)

To meet several community goals, including the promotion of walking, biking and mass transit use, the City of Alexandria adopted a Wayfinding Design Guidelines Manual in 2010. This manual includes guidelines detailing how the signs will look and how they'll be maintained, as well as coordinating elements such as lighting and planting. Signage is being phased in throughout the city through Arlington's CIP program and includes

pedestrian, trail, and transit markers. In addition, there are several websites (e.g., Bike Arlington) geared toward helping residents find existing transit locations, trail, and bicycle resources (including maps of multiuse trails, tips for those new to biking, and links to the Capital Bikeshare program).

Encouraging active transportation through a multipronged approach using design, wayfinding, educational, and marketing resources in Arlington is proving successful. The

city and county have been long-time proponents of safe, complete streets and innovative transportation planning. Between 2000 and 2011, the percentage of commuters driving alone decreased and the percentage of those commuting by bike or transit increased in the Arlington region. In addition, the city is part of the Capital Bikeshare program, which has seen ridership increase each year since its inception in 2011.

(see index on page 82 for full list of resources)





Scan the QR code or go http://tinyurl.com/Increase TransportationChoices to see tools and resources related to this priority.

### WHY IS THIS A PRIORITY?

Our region's current public transit includes light rail (the Blue Line) in Charlotte, as well as bus service in Charlotte, Gastonia. Concord, Kannapolis and Salisbury. In other areas, limited on-demand transit service is available to the elderly and others lacking access to a private automobile, such as York County (SC) Access. Likewise, while many communities in the **CONNECT** region have undertaken efforts such as complete streets and trails. to increase opportunities for pedestrian and bicycle mobility, other areas lack such facilities as sidewalks and bicycle paths. As a consequence of limited mobility options, the automobile remains the dominant

mode of travel throughout the CONNECT region. The impacts of this necessary reliance on automobile includes degraded air quality, high costs associated with the expense of auto ownership, serious and growing issues with traffic congestion and long commutes (see Reduce Commuting Costs, page 62).

This limited availability of transit is in part due to the fact that much of the CONNECT region is developed at low densities that do not permit efficient transit service. However, the prospect of doubling the region's population, plus demographic shifts and changing housing preferences in favor of higher density housing in activity centers near jobs, creates



highest mentioned "community or regional challenge" identified by residents.

Transit in the region includes the Blue Line in Charlotte (light rail) as well as regional bus service.



Funding and maintenance of aging infrastructure is a major concern for transportation officials in the region.

the potential for greater transit use (and walking and biking for transportation) in the future if we plan for it now. Another major contributing reason for the limited availability of transit is its high initial cost and the limited availability of funding for new starts. This can be addressed, at least in part, when development

#### MAKING IT HAPPEN

Many communities in the **CONNECT** region already have policies in place and have taken steps to influence development patterns in ways that reduce dependency on vehicles for all transportation needs, and increase access to transit, bike and pedestrian pathways. These measures

future transportation corridors and centers that could accommodate transit service by allowing for or encouraging higher density housing, and mixed use development. In addition, urban communities that currently have transit (light rail and bus) could iden-

> tify additional redevelopment opportunities for transit-oriented development (TOD).

> Encouraging alternative development patterns (e.g., TOD), building and retrofitting com-

plete streets, and developing biking and walking trails are just a few ways to ensure that residents of the CONNECT region have the option to choose a variety of transportation modes.

"...allowing for different transportation provides me with options to choose to live where I want to so I can still have access to rural living if I so choose."

-CONNECT Participant

patterns support higher likely transit ridership (making us more competitive for grants), and also by considering other modes of transit in addition to light rail. But we've heard from residents across the region that more transportation choices are important to their quality of life, wallets and health.

include adopting development guidelines and incentives to promote compact walkable development patterns, and complete streets designs that facilitate transit, bicycle and pedestrian as well as vehicular mobility. Communities in the CONNECT region could seek to identify potential



Why is

this important?

Increasing transportation

choices to include walking,

biking, and transit options

can improve access

and quality of life

for residents.

## **WHAT CAN YOU DO?**

- Whenever possible choose to bike, walk, or take transit to work, instead of driving your car.
- Urge your elected officials to support safe, comfortable environments for walking and biking.
- Participate in community-wide planning for bike, transit and pedestrian improvements.
- Talk to your employer about supporting alternative transportation incentive programs and offering bicycle storage
- Check out the Complete Streets, and Greenways and Trails Planning, and Transit **Readiness Assessment and Primer toolkits** for more information.





"I would like to see a continued integration of transportation and land use. More greenways, sidewalks, bikeways, transit and mixed use developments"

## -CONNECT Participant

## Spartanburg Safe Routes to School (SC)

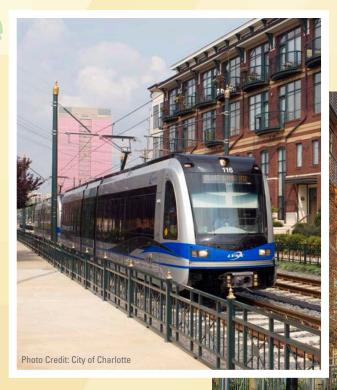
Spartanburg County's Safe Routes to School (SRTS) has its foundation in teaching safety, improving the condition of administered through the South Carolina Department of Transportation (SCDOT) to begin the program. The grant funds were focused on education and outreach, as well as infrastructure

health and physical education classes. Events such as Park and Walks (where families drive to a centralized parking lot and walk to school) and walking school buses were designed to implement these habits through participation. The program also paid for infrastructure improvements to physically improve safety conditions, such as connectivity improvements, signage and crosswalk markings at the schools. Community support has grown and is still growing as organizations and community members are beginning to understand the importance of alternative transportation to and from schools. The program encouraged regular walking and bicycling to school, making it so safe, conve<mark>nient, and</mark> cool that it becomes a realistic choice for transportation. The program has been an overwhelming success. In 2008, Spartanburg hosted the most successful Walk to School event in South Carolina, with more than 44 schools across the county participating, and rates of walking and bicycling has increased every year.



Above, students from Spartanburg County's West View Elementary participate in their annual Walk To School Day October, 2013. the physical environment, and using outreach to increase the number of families capable of walking to school. In 2007 and 2008, three schools received a total of \$400,000 in Federal Safe Routes to School funding

improvements and increased staffing and safety monitoring.
The program began with piloting safety curriculum to increase students' understanding of safe pedestrian and bicyclist habits, which was incorporated into



## Charlotte Blue Line Transit Oriented Development (NC)

Charlotte's LYNX Blue Line, a 9.6 mile light rail line, opened in 2007 along one of the city's identified growth corridors that stretches south from the convention center in Charlotte. A total of 15 stations were constructed along the line in communi-

ties ranging in density from well-populated, walkable city centers to more auto-oriented strip retail centers. Private development and investment has been more successful in the areas closest to Charlotte, while stations located further south have a stronger park and ride ridership. A number of new large-scale TOD developments have been planned and constructed including the Ashton and the Circle (a LEED

Certified project). In addition to large apartment buildings, many smaller plots of land have been redeveloped into townhouses or apartments through infill. By 2013, developers completed construction of 1,887 new residential dwelling units and 182,768 square feet of new commercial and office space. The Blue Line has also exceeded ridership estimates since opening and is expected to bring over \$1.8 billion in new tax revenue for the city and

county. Plans for each of the 15 stations were completed, taking into account the unique aspects of each community. The planning and design team understood that each community required a tailored development approach since there is no set formula or one-size-fits-all approach to creating a TOD. As a result, the City complimented the construction of the new light rail line (construction cost of \$465 million) with a \$50 million investment in community connectivity enhancements including new street connections, street and intersection

enhancements, 9 miles of pedestrian and bicycle access routes, and 16 miles of new sidewalks. The City also worked closely with community members through development response sessions and workshops to ensure that residents understood what new TOD investments would mean for their community. As a result, they implemented a number of new policies to protect existing neighborhoods from potential development pressure and density and scale issues.

(see index on page 82 for full list of resources)



The new light rail line was complimented by \$50 million in enhancements to pedestrian and street connectivity Development ed





Scan the QR code or go to http://tinyurl.com/ ImproveWaterQ to see tools and resources related to this priority.

### WHY IS THIS A PRIORITY?

Water is essential to all aspects of life, and is used in our communities for drinking, meal preparation, hygiene, irrigation, recreation, energy production and wildlife habitat. While water quality is regulated by both state and federal agencies, many lakes, streams and other water resources in the CONNECT region are impaired and in poor health. While water is a renewable resource, it can be depleted quickly because of contamination, watershed modification, over-withdrawal or wasteful stormwater management. Efforts to balance water supply and demand in the region are greatly affected by population density and distribution, seasonal and environmental variability, water pollution, and water use patterns.

One of the top threats to our water resources and quality of the region's water is the presence of E. coli, from human or animal waste. As the population grows, the likelihood of sewer treatment and sewer contamination in all three of the region's watersheds grows as well. The widespread use of septic tanks, mostly in rural areas, and the potential failure of septic system could result in discharge of untreated waste into the rivers, streams and lakes. Larger developments outside of municipal water service areas use package treatment plant technology that do not have stringent pollutant removal requirements and tend to inevitably fail if not properly maintained. Another important factor contributing to im-



of water use from the Catawba River basin is used by power plants.



most endangered river in the U.S. is the Catawba River (American Rivers, 2013).



Water consumption is anticipated to rise dramatically as population in the CONNECT region nearly doubles by 2050.

paired water quality in lakes and streams is the runoff of pesticides, fertilizers and other stormwater contaminants, such as oil or gasoline and household chemicals. An effective measure that local governments can take is to require riparian buffers to intercept pollutants, such as was done by York County, SC to protect the water quality of Lake Wylie.

Through the CONNECT process, people said that the environment, specifically clean water, is important to ensure the health of residents, the environment, and the economy. We can take steps to improve the region's water quality by reducing impervious surfaces to replenish groundwater and aquifers, managing stormwater runoff, and limiting pollutants.

### **MAKING IT HAPPEN**

There are many tools local communities can use to protect and improve water quality. The effective management of stormwater (the rainwater that runs off streets and other surfaces) is vital for minimizing flooding, stream bank erosion, habitat destruction and pollutants entering streams. Traditionally, the management of stormwater has focused on collecting runoff through a network of sewers and pipes to be discharged directly into streams, rivers and lakes, or to be treated at a large management facility. Green infrastructure solutions such as forested buffers, unpaved bioswales, green roofs, and rain gardens help manage and reduce the amount of stormwater runoff that reaches the treatment plant.

As a region, we can focus efforts on reducing consumption and more efficiently using water in energy production, by improving energy efficiency and moving to greater use of renewable energy. The preservation of environmentally sensitive land in key watersheds and expansion of stream corridors and buffers

are also key to improving and maintaining the region's water resources.

Green infrastructure, tree canopy preservation, water resource protection, and water capacity planning are just a few tools available online to assist communities in more efficiently managing water and improving water quality and resources.

## Why is this important?

Improving water quality ensures the longevity of our region's key watersheds and maintains the scenic nature of our rivers and lakes.

"I rank environmental health highly because for my generation there is a big concern that our future will be plagued by poor health and drastic climate change."

-CONNECT Participant

## **WHAT CAN YOU DO?**

- Conserve water at home and at work. There are many simple steps you can take, such as shorter showers; fixing drips and leaks immediately; installing water saving devices such as low-flow toilets, shower heads and faucet aerators; turning off the water after you wet your toothbrush; and using your dishwasher and clothes washer for only full loads.
- Participate in your municipality's recycling and hazardous waste collection programs, if available.
   If not, encourage your local government to provide these options.
- Monitor storm drains and gutters near your home or business, and keep them free of leaves and debris to prevent water from ponding and flooding.
- Install rain barrels and rain gardens at home, work or school to collect and reuse stormwater.
- Participate in or organize community clean-up initiatives to remove litter and debris, or start an "adopt a river" or "adopt a watershed" program.
- Review the Tree Canopy Preservation, Stormwater Management Best Practices, Water Conservation Education, and Water Resource Protection tools for additional information.





"I am looking out for the future of my grandkids, Lancaster needs to put money into joining the septic and water systems to Indian Land so that businesses can be built and jobs can come closer to Lancaster."

-CONNECT Participant

## Drovers Road Preserve (NC)

Located in rural Buncombe
County, North Carolina near
Asheville, Drovers Road Preserve is a large-lot residential conservation development situated on a 186-acre mountainside site. The developers made a commitment to protect the site's

natural heritage, resources, and scenic views. The site is designed in a way that maximizes the developer's return on investment while preserving the natural environment, and is focused on preserving the quality of the existing land and protecting the site's water resources. Instead of installing tradi-

tional grey infrastructure, the development uses roadside swales, bioretention areas, forested riparian buffers, a stormwater wetland, and an infiltration meadow to manage stormwater on-site. In addition to these green measures, known in the industry as Best Management Practices (BMPs), Drovers Road Preserve's site planners furthered conservation goals by planning new roads and infrastructure to reduce stream crossings, impervious surfaces, and forest clearing and set aside land for permanent conservation in a conservation easement program.

At the time of planning and construction, Buncombe County had no post-construction stormwater requirements or other stormwater or conservation zoning. However, the developers and their planning team, recognizing the



Above, a rain garden harnesses and filters stormwater in Drovers Road Preserve.

site's unique natural character, made a commitment to conservation throughout the site. With help from the planning team and North Carolina Extension, the development team sized a number of BMPs, including swales, wetlands, and bioretention areas, to capture the first 1.25 inches of stormwater. Post-construction, the developers transferred long-term maintenance of open spaces including the stormwater BMPs to the homeowners' association while the land in the conservation easement is maintained by the Southern Appalachian Highlands Conservancy. This case illustrates a comprehensive approach to conservation development by successfully limit-

Catawba-Wateree Water Management Group (NC & SC)

ing site disturbance, preserv-

ing 59% of the site for open

space and conservation, uti-

lizing conservation easement

tax credits, reducing impervi-

ous surfaces, and using BMPs

to treat stormwater on-site.

The Catawba-Wateree
Water Management Group
(CWWMG) was founded in
2007 following an extensive
stakeholder process associated with the relicensing of
the Catawba-Wateree Hydro

Project by Duke Energy. The communities within the Catawba-Wateree River watershed, encompassing 4,750 square miles, are located within one of the fastest growing regions in the country. These communities came to the conclusion that if they continued to consume water in the same way, they would be unable to meet future demand. As a result, the CWWMG works to identify, fund, and manage projects to increase the capacity of the Catawba-Wateree River to meet needs of residents (e.g., power production, industry, agriculture, and commerce) without impacting the ecological health of the watershed.

Members include 18 public water utilities from communities including Belmont, Charlotte, and Gastonia, NC and Rock Hill and Camden, SC. The group meets regularly and prepares five-year strategic plans to address water demand and ecological challenges.

The CWWMG has successfully worked with stakeholders to complete a number
of projects to improve the
health and efficiency of the
Catawba-Wateree River
watershed. These projects include the Water Use
Efficiency Plan, the Public
Information on Wise Water
Use Campaign, the USGS
Groundwater Well Project,

and many more. Their most recent project, the Catawba-Wateree River Basin Water Supply Master Plan, was developed following more than four years of stakeholder input in an effort to ensure that the growing needs of the region (e.g., supporting new jobs, producing energy, and maintaining quality of life) will be met in a sustainable manner over the next 50 years. The master plan focuses on improving the watershed's ability to address drought conditions and developing long-range strategies that will extend the watershed's ability to address future water and energy production needs while ensuring environmental protection.

(see index on page 82 for full list of resources)



The CWWMG brought together a broad group of stakeholders to create a 50 year Master Plan to ensure the longterm viability & health of the watershed





Scan the QR code or go to http://tinyurl.com/
ImproveAir to see tools and resources related to this priority.

#### WHY IS THIS A PRIORITY?

Addressing air quality to improve public health and our environment is one of the core values of CONNECT. Throughout the CONNECT process, people said that improving air quality, by reducing pollutants is important to our health and economy. One of our youthful participants in CONNECT Our Future's public engagement puts it succinctly: "I don't want to see a black sky filled with smog." Parts of our region have struggled with air quality issues in the past, and some counties are just now coming into compliance with 2008 federal air quality requlations for ozone. We need to take care that the projected population growth and the construction that is expected to accompany the region's growth, including new roads,

bridges, and housing, do not result in negative impacts on air quality. Unless we work collaboratively across the region as we continue to grow, air pollution from NOx, fine particulate matter and black carbon emissions will remain an issue that is associated with serious health consequences including cancer and respiratory disease.

From a public health standpoint, residents with asthma, older adults, young children, and people working or exercising outside are at particular risk on poor air quality days. While topography and weather patterns play a major role, there are a number of steps that our communities, residents, and businesses can take to improve air quality in the region.

## 3-year

ozone readings were above EPA standards in 2012.



Congestion, construction activity, and energy generation plants contribute to poor air quality days in the region, particularly during hot summers.



Black carbon (the main component of soot) is recognized as a potent climate warmer, and it also has a direct impact on human health, including respiratory and cardiovascular effects. Black carbon is relatively cheap and easy to limit, and its control can have an immediate climate benefit.

#### MAKING IT HAPPEN

Our region is already taking progressive steps to improve air quality. In 2014, the City of Charlotte dropped off the annual list of the American Lung Association's ranking of the 25th "smoggiest cities" for ozone. Overall ozone levels have dropped by 25% since 2000 despite continued population growth. We can continue to make progress and reduce harmful emissions by providing more choices in how and where

and where
we live, get
around, and
develop in our
communities.
By continuing
to improve air
quality, our
region will take
an important
step in reducing premature
deaths, asthma-related
emergency visits, and lost
school days and work days.

There are many ways in which the communities of the CONNECT region can get involved. Perhaps the

first step is to increase collaboration among local academic, business, and government entities to jointly address our region's air quality challenges. On a community scale, we can push to create new bicycle and pedestrian infrastructure that reduces overall dependence on motor vehicle trips. We can also monitor the economics of renewable energy resources, create incentives to

The removal and mitigation of black carbon emissions from diesel construction equipment is a major opportunity for the region that will have an immediate impact on air quality. Unlike many other pollutants, black carbon is relatively easy to see, smell, and touch. The removal of black carbon from construction equipment offers relatively quick, inexpensive, effective,

## Why is this important?

Improving air quality has a beneficial effect on health for residents and theregion's environment.

"Public transportation is vital for cleaner air, freer movement of people, makes transportation available to those who cannot afford a car. More people are able to work."

## -CONNECT Participant

increase the use of renewable energy and energy efficiency in buildings and vehicles, and encourage new innovative private-public partnerships with a focus on improving community health by reducing emissions.

and localized air quality (and climate change) benefits. To assist communities in the mitigation of black carbon emissions, the CONNECT website includes a tool to assess and reduce Diesel Construction Equipment Emissions.



## WHAT CAN YOU DO?

- To help reduce emissions, consider walking or biking instead of driving for short trips.
- To absorb and filter air pollutants and help to cool the air, plant trees at home or organize tree-planting initiatives at school or work.
- Support funding for parks to help reduce the urban heat island effect, which contributes to ozone formation.
- For more information, see the Tree Canopy Preservation, Parks Promotion Campaigns, Walking and Bicycle Audits and Planning, Preserving and Building Parks. and Clean Construction Assessment toolkits for more information.



"Protecting our natural assets of forestlands, open fields, lakes and streams is very important to the quality of life in our region. Preserving natural areas helps with air and water quality."

-CONNECT Participant



Above, The York County, SC Natural Gas Compressed Natural Gas (CNG) Station.

## City of Rock Hill Clean Fleet Operations (SC)

In the late 1990s, the City of Rock Hill transitioned their fleet to bio-diesel fuels.
Then in 2005, with assistance from an EPA grant and a partnership with York Technical College, the City was able to expand the program to retrofit existing vehicle equipment to further reduce emissions. Since then, Rock Hill has continued to expand its alterna-

tive energy fleet to over 1,200 pieces of equipment including approximately 265 vehicles operating on bio-diesel (B-20), a blend of biodiesel and diesel, or compressed natural gas (CNG) and six electric cars. As a result, the City won the Palmetto State's Greenest Fleet Award in 2010.

In addition to switching to a clean air fleet, the City has implemented a number

of energy efficient and cost saving measures in an effort to set a positive example for the community and increase environmental awareness. These measures include 16 electric car charging stations for public use, a no-idle policy, public fuel stations carrying B-20 and CNG tanks, LED stoplights, and a comprehensive recycling program. In testing a number of alternatives to fossil fuels, the City found that B-20 fuel represents significant environmental savings by reducing a vehicle's black cloud by 90%, but tends to be more expensive than traditional fuel. However, CNG fueled vehicles represent significant cost savings at only \$1.36 per gallon of fuel. Since making alternative fuels readily available to the public at the York County Natural Gas CNG Station, Burns Automotive, a local car dealership in Rock Hill has started selling and servicing CNG vehicles.





**Concord No Idling Policy** (NC)

Photo Credit: Concord Downtown

The City of Concord has a no-idling policy that applies to the city's fleet of over 1.000 vehicles and equipment. In addition, Concord is working toward fleet diversification by replacing older vehicles with more fuelefficient and cleaner operating vehicles and equipment to reduce fuel usage and improve air quality.

Recognized in 2011 as the 48th best public sector fleet operation in North America, the

city's no-idling policy is one of many efforts it has taken to improve the environment and reduce emissions-leading to reduced costs and earning Concord the national recognition. In addition, the policy saves the city money every year. In a 2010 survey of 17 participating municipalities, Concord had the lowest costs per vehicle.

(see index on page 82 for full list of

# **Your Engine**



## **Kids Breathe Here**

N.C. Division of Air Quality www.ncair.org

Anti-idling signs and other measures work to improve air quality by reducing fuel usage and emissions from vehicles in Concord, NC.





Scan the QR code or go to http://tinyurl.com/Grow JobsHome to see tools and resources related to this priority.

## WHY IS THIS A PRIORITY?

The economy, jobs, underemployment, and poverty were viewed by participants in the CONNECT process as the top challenges facing the region. Concerns include loss of jobs and business closings, resulting unemployment and a rise in poverty, and challenges in recruiting new businesses. This perception reflects recent employment trends - in 2007 job growth sharply declined as a result of the national recession. The region experienced a net loss of jobs from 2008-2010, with financial, construction, and manufacturing jobs taking hard hits. Emerging industries that have rebounded include health care, government, hospitality, professional service, logistics, tourism, research, and IT. To retain and attract a skilled workforce,

the region has to address not only economic development practices, but also workforce training, quality of life, housing availability, transportation, and amenities; all of which influence the region's competitiveness in economic development. Many young people entering the workforce in growing fields like technology and health care are searching for a greater work-life balance that can be supported by working closer to home, and many communities are struggling to grow jobs that will enable young people to stay local, and older workers to have short commutes.

Through the CONNECT process, residents of all ages and backgrounds said that the ability to work closer to home



of the metro area's households spend more than 45% of their household income on housing and transportation costs.



created in the region from 2011 to 2013.



of the region's workforce lives in one county and works in another. is important, and more likely to occur when a diverse mix of jobs are located near a diverse mix of jobs are located near a diverse mix of housing options. By supporting continued local business growth and workforce training, and finding opportunities to locate housing in mixed-use and employment areas, communities throughout the CONNECT region can foster job growth located within a convenient distance of housing.

### MAKING IT HAPPEN

One of the main recommendations coming out of the CONNECT process is to expand education and training for jobs in the region's target economic sectors. Coupled with this recommendation was a desire for stronger alignment between the workforce we have and have capacity to train, and our region's job opportunities and those we seek to attract. Career Headlight is an online

CONNECT's tools include one that helps leaders and others understand and use this robust data in their economic development efforts. As former Mooresville Mayor and CEDC Chairman Bill Thunberg said, "This changes business recruitment and development from an elephant hunt into a much more strategic process."

To increase the number of local job opportunities in our communities, the CONNECT toolkit includes guidance on how we can redevelop,

adaptively reuse and revitalize existing town centers, corridors, outdated malls, and underutilized sites. By encouraging development of flexible, modern office and commercial space where existing utilities are present, our towns and cities will create opportunities for local business and job growth near where people live. Communities can also update zoning ordinances

and codes to

resolve any

ing options that meet diverse needs, such as allowing mixed use and higher residential densities near employment areas.

Why is

this important?

Growing jobs closer to

home reduces commuting

costs and time and sup-

ports existing communi-

ties in the region.

barriers to constructing hous-

The online toolkit offers specific ways in which our communities can redevelop underutilized brownfield and greyfield sites, support local businesses through "buy local" campaigns, adaptively reuse or redevelop existing sites, grow jobs with heritage tourism, and support local agriculture through farm to consumer development practices.

## "Job growth should be our #1 priority."

-CONNECT Participant

There are a number of potential benefits in supporting job growth close to home. Benefits include shorter commute times to work, which help reduce the cost burden on households; reduced congestion on highways, fewer emissions from vehicles, and the quality of life benefits that come with working closer to home (e.g., more time spent with family and in leisure).

tool specifically designed for the region that allows job seekers to explore the region's economic opportunities and match their skills, education and interests with potential career paths and employment.

Other key tools are the region's Comprehensive Economic Development Strategies, which include in-depth data about growing industry sectors in each county, and project job opportunities for the next five years.

## **WHAT CAN YOU DO?**

- Use local businesses and services Shop Local!
- Use Career Headlight and other local job resources to find career-related educational opportunities and positions in your area.
- When making housing decisions, consider commute time and its trade-offs in decision-making.





"Our smaller communities need to remain strong and we need transportation options to connect with the larger metropolitan areas."

## -CONNECT Participant

## Tryon Main Street Program (NC)

Tryon, North Carolina is located in Polk County in the Blue Ridge Mountains. The town is situated

Carolina Department of Commerce. As part of the designation the Town of Tryon receives technical services from the Small Town Main Street (STMS) has received two Awards of Merit from the NC Commerce's Small Town Main Street Award—in 2014 for Promotion and 2013 for Economic Restructuring.



Above, Tryon, NC Main Street.

approximately 40 miles south of Asheville, NC and 25 miles north of Spartanburg, SC. Tryon became a designated a North Carolina Small Town Main Street community in 2007 by the North staff. The program follows the guidelines set by the National Main Street Center which was founded by the National Trust for Historic Preservation. Since its establishment the Town of Tryon

Tryon's success has been a combination of firm local commitment and the right financial tools. Twenty years ago, the Tryon Downtown Development Association (TDDA) was established to address downtown concerns and fill empty retail spaces. TDDA created a strong relationship with the Town of Tryon to seek investors to commit to restoring Tryon to its rightful place as a wonderful destination. Even prior to becoming an official Small Town Main Street, TDDA began employing the approach of the National Main Street Center-promotion, design, economic restructuring, and organization-and raised funds to develop a master plan for its downtown, including redevelopment of the historic train depot and infrastructure improvements.

Below, the North Mecklenburg County Industrial Park, located in the town of Huntersville, is part of an interlocal agreement made by the communities of Huntersville, Davidson, and Cornelius, NC.



## Here's why it works!

Through an innovative interlocal agreement, the LNREDC diversified the tax base of three communities and attracted 1,711 new jobs to the grea

Firstly, Tryon won an NCDOT grant to bury overhead lines, install new street lights and begin sidewalk improvements. Secondly, a public-private partnership was formed that included private investments to build a new construction dentist office on Depot Plaza, renovate the historic Depot, and convert a former gas station across the street into a retail space on St. Luke's Plaza. Tryon was able to leverage 15% of project funding through the Main Street Solutions Fund Grant, with 1.5% public financing and nearly 84% of private investment. In 2009, North Carolina established the Main Street Solutions Fund to provide economic development planning assistance and grant support to small businesses. The Solutions Fund has provided grants to 16 communities and leveraged an impressive amount of additional public and private dollars. Tryon has taken advantage of this funding to reinvigorate its one-sided Main Street commercial district. Tryon's economic and investment climate has been transformed as a direct consequence of the Main Street Solutions Funds, local funding sources, and the long-standing support of local advocates.

## Lake Norman Regional Economic Development Corporation (NC)

In the early 2000s, the North Mecklenburg region (Davidson, Huntersville, and Cornelius, NC) had become a bedroom community for Charlotte. All three communities were heavily reliant on residential taxes and the demand for housing in the North Mecklenburg County was expected to triple over the following 30 years. However,

residential development was not paying for itself with an average cost to provide \$1.15 in services for every \$1 collected in taxes. In 2002, the Lake Norman Chamber of Commerce commissioned an **Economic Development Strategy** report for North Mecklenburg County. The study focused on three major needs in the area. These included expanding job opportunities, upgrading local jobs to expand beyond service and retail jobs, and diversifying and expanding the tax bases of the three communities. As a result, the Lake Norman Regional Economic Development Corporation (LNREDC) was founded to improve the community, work on site development, enhance internal communications and industry relations, and engage in external marketing. The three communities signed an interlocal agreement for economic development support, funded on a per capita basis, and cost-sharing associated with job development in the region. The LNREDC planned a new industrial park utilizing a

126-acre site in Huntersville that would have likely become the site of over 1000 new homes. In 2005, the industrial park, now 330 acres of land, attracted Prairie Packaging as the first tenant.

The joint industrial park and interlocal agreement has allowed the three communities to share the risks and rewards and gives smaller communities the chance to compete against larger municipalities. Under this agreement, the three communities shared the land and construction costs and the resultant tax revenues. The agreement was unique as it marked the first time three municipalities in North Carolina entered into a cost and revenue sharing agreement centered on an industrial park and job growth. Since attracting the first tenant in 2005, LNREDC has brought over \$218.3 million in new capital investment, over 30 new companies, and more than 1,711 new jobs to the region.

(see index on page 82 for full list of resources)





Scan the QR code or go to http://tinyurl.com/Increase Housing to see tools and resources related to this priority.

#### WHY IS THIS A PRIORITY?

Housing choice means providing a range of quality housing for households of all types, sizes, and income levels. The cost and location of housing also influence many of the region's priorities-including transportation choice, commuting costs, and jobs closer to home. Through the **CONNECT** process, residents said that housing choices are important to them-including the ability to choose from a variety of different types, sizes, and price points for singlefamily, townhomes, condos, apartments, and senior living units. "Home" matters greatly in the CONNECT region!

Currently, about 72% of all housing units in the region are single-family homes (an increase from 70% in 2000). The CONNECT Housing Work Group found that there is expected to be significant increase in demand for future market-rate housing, both owner- and renter-occupied. In addition, there will continue to be a demand for independent senior housing, energy-efficient housing, and housing appropriate for a range of family/household types and sizes. Nationally, we can expect some significant shifts in demographics and housing demand compared with the last several decades. The percentage of the population that is 65 or older, retired and looking to downsize from the single family homes will increase. In addition to empty nest baby boomers living longer, many in the Millennial generation are postponing marriage and



of all housing units in the region are single-family homes.

665,000

new households added to the region by 2050.



increase in renters by 2050.

having children, or planning to have fewer children. These younger people tend to want housing that is different from what they grew up in. Given these trends, demand for multifamily and attached homes, as well as small-lot homes, is expected to continue to

accommodate new housing include removal of vacant dwellings, rehabilitation of existing structures, and renovation of existing vacant buildings and underutilized housing, along with construction of new housing as infill or new development.

of the different types

palities to increase housing choices. These tool help to make housing people, regardless of physi-

housing gaps, to improve energy efficiency in housing (reducing energy bills) and to improve accessibility to and from neighborhoods to other location.

of housing available in a community, as well as neighborhood characteristics such as schools and parks and other community resources. There are also several tools to equip munici-

> accessible to all cal ability or

age, to meet our workforce

"I have a large family. Each has different needs and incomes that impact their housing. If one location has a variety of housing, my whole family could live in one place."

-CONNECT Participant

increase according to research by the Brookings Institution and Arthur Nelson at the University of Utah.

## **MAKING IT HAPPEN**

Communities within the CONNECT region can increase local housing choice, remain economically competitive, and provide a high quality of life by creating opportunities for a range of new housing types in targeted areas. Strategies to

programs and resources to increase housing rehab and redevelopment activities, as well as incorporate more contemporary housing and neighborhood design features through a combination of rehab and new construction. Other tools to increase housing choices include developing community resource guides so that new residents and employers become aware

We can develop local



Why is

this important?

Increasing housing choices

allows residents to choose

from a variety of types, siz-

es, and price points for all

ages and families.

- Participate in community processes that consider local regulatory changes to expand the array of housing types that may be developed at appropriate locations in your community, such as accessory dwellings, townhomes, or work-live units.
- If you are a residential developer, consider the feasibility of including additional housing types in your next project. And make sure to incorporate modern amenities and accessibility features in all your projects!
- Check out the Educating Officials about Housing Diversity, Energy Efficient Residential Practices and Funding, Housing Accessibility, Workforce Housing Incentives and toolkits for more information.





"More senior growth is anticipated in our region which means more senior-friendly housing, but integrated communities are a better option for seniors than segregated scenarios in most instances."

## -CONNECT Participant

#### **Builders of Hope (NC)**

Since 2006, Builders of Hope has worked to create and rebuild affordable, workforce neighborhoods by reusing existing housing inventory in the communities of Charlotte, Durham, and Raleigh, North Carolina. The organization rescues homes that would otherwise be demolished and recycles the materials for new residential construction. The rebuilt housing is designed to be healthy and energy efficient, and is located in areas with access to jobs, services, and transportation. The organization offers both for sale and rental housing, and is a proponent of mixed-use neighborhoods.

The Builders of Hope model is successful in its mission to affect multiple outcomes: providing safe and healthy affordable housing options; reusing existing materials and infrastructure; helping to revitalize neighborhoods by reducing vacancies; and providing job training in green construction and building practices. As of 2012, the organization had redeveloped 300 for sale and rental homes, while diverting over 11 million pounds of construction debris from landfills.



Above, State Street Village (Raleigh, NC) a 25-home model green community fills a long neglected role in providing workforce housing close to the city center. Each home was donated and moved from their original location, to their new, permanent site.

## Salisbury Community Development Corporation (NC)

The Salisbury Community **Development Corporation** (SCDC) is a non-profit organization which partners with the City of Salisbury and Rowan County to increase affordable housing opportunities and promote neighborhood revitalization. The city receives funding from Community Development Block Grants (CDBG) and HOME **Investment Partnership** through HUD. SCDC aids in homeownership counseling, foreclosure prevention, home rehabilitation, and reverse mortgages. Funding is used to increase the supply of affordable housing avail-

gages. Funding is used to increase the supply of affordable housing available to citizens of Salisbury and to help eliminate blight. The beneficiaries are low-moderate income families. Most activities are focused in specific revital-

ization areas where at least 51% or more of the population earns less than the threshold income and where substandard and deteriorated structures have been persistent problems.

SCDC was borne out of the efforts of residents determined to revitalize their neighborhood and provides a crucial nexus between city and county funding sources, and the boots-on-

the-ground able to work directly with the community. SCDC has the funding to actively help contribute to incremental neighborhood revitalization and contribute to the availability of quality, affordable housing in the Salisbury and Rowan communities. SCDC has several programs that focus primarily on housing rehabilitation. The organization is able to channel CDBG funding to provide repairs to help

low-income residents. The **HOME** program helps create suitable living environments for homeowners living in unincorporated areas of Rowan County. It provides a substantial amount of home repair assistance to those who qualify and whose household income falls between 31% and 51% AMI. The Urgent Repair Program uses funding from the N.C. Housing Finance Agency to provide emergency home repairs to elderly and disabled homeowners and homeowners with special needs. The Salisbury Housing Authority

was the recipient of a 2012 **HUD Choice Neighborhood** Grant, which focused on the transformation of the West End neighborhood, a dilapidated public housing site. The SCDC was an active community partner in the development of the plan, engaging with residents. The neighborhood is now poised for the development of new housing to replace Civic Park, and lead to further revitalization of the community.

(see index on page 82 for full list of resources)







Scan the QR code or go to http://tinyurl.com/Reduce Commuting to see tools and resources related to this priority.

#### WHY IS THIS A PRIORITY?

When determining where to live, many people think about the cost of housing as the determining factor, rather than the cost of transportation. However, for the typical household, transportation costs are the second greatest expense (after housing) and vary greatly based on how far you commute to work and other daily activities. A more complete model of affordability combines housing and transportation costs into one figure. When transportation costs are factored in with housing, the region looks much less affordable, with nearly two-thirds of the CONNECT region's households spending more than 45% of their annual income on housing and transportation according to the Housing and Transportation (H+T®) Affordability Index.

The question becomes, if the region is generally considered affordable compared to other metro areas, why do transportation costs have such a great impact? Reliance on automobiles for regular trips and traveling long distances between work, home, school, and shopping have a number negative consequences on our communities and our lives. These include rapidly increasing vehicle miles traveled and associated gas and maintenance costs, as well as insurance costs, and in many cases parking expenses, for vehicles. Less obvious costs that impact families' quality of life and pocketbooks include longer travel times, increased air pollution, and heightened infrastructure and public service costs.

By improving our development patterns, transportation network and infrastructure, we can help reduce a



people working in Mecklenburg County live outside of the county.





of the region's workforce lives in one county and works in another. household's transportation costs, free up disposable income for other uses, and help reduce traffic congestion overall.

## **MAKING IT HAPPEN**

While it may seem like transportation is a fixed cost, there are a variety of ways a household can reduce the cost of their commute. They range from personal decisions (e.g., how many vehicles do tation, as well as aligning land use and economic development initiatives, fostering job growth closer to home. We can work together to encourage policies that support options for transit and complete streets – those that accommodate bike and pedestrians, as well as cars. On an individual basis, we can support the use of fuel efficient vehicles that utilize alternative sources of energy (e.g., electric, CNG) and reduce transporta-

award winners in 2012, and Charlotte and Davidson were designated as national walk-friendly communities in 2012.

Other initiatives in the region - such as the Carolina Thread Trail - will link local greenways into a 'superhighway' for bicycling and walking in the region.

While only about 2% of the region's population commutes to work via

public transportation currently, the long-term picture of the region depicted in the Regional Growth Concept envisions an expanded transit network with increased frequency and improved conve-

nience of service. This effort calls for a regional transit plan in coordination with the

Charlotte
Area Transit
System (CATS)
to expand
big-picture,
long-range
transit planning outside
of Mecklen-

burg County in

## Why is this important?

Reducing commuting costs benefits residents throughout the region by reducing the amount of income spent on transportation costs.

an effort to identify corridors, funding options for right-of-way preservation, supportive land uses, and legislative and policy barriers. For areas on existing transit lines, coordination with CATS is probable to improve the ease of transit use and encourage employers to develop incentives to encourage public transit use and reduce overall costs.

## "I think the concept of having transportation options between towns is great...remember a lot of people commute across the region and not into Charlotte."

## -CONNECT Participant

we need, or can we switch to a more fuel efficient car?), to employer-based incentive programs, to the overall walkability and proximity of activities (including jobs) in a community.

As a region, we can reduce the financial and time burden of commuting by limiting barriers to constructing new housing near jobs and public transpor-

tion costs, and encourage municipalities to provide fueling or recharging stations for cheaper-fueled, cleaner-fueled vehicles.

Several cities and towns in the region are leading the way for more bicycle- and pedestrian-friendly communities. Charlotte, Davidson and Rock Hill were designated as national bicycle-friendly community

## WHAT CAN YOU DO?

- Use fuel efficiency as a key factor in your next car purchase.
- If you have an option that enables you to do so, walk, bike, or ride transit to your regular destinations such as work, the store, or a shopping center. You can save significant money on gas and maintenance by leaving your car at home.
- Carpooling is good for the environment, and it also reduces your gas and maintenance expenses and enables you to use carpooling lanes, which can save you community time.
- Use your commute home for reasonable errands along your route -that way, you won't need to waste fuel to drive out again once you're home.
- If your employer offers flexible hours or a telecommuting option, change your work schedule to avoid peak traffic or work from home one or two days a week.





"Public transportation is vital for cleaner air, freer movement of people, and makes transportation available to those who cannot afford a car... more people are able to work."

-CONNECT Participant

## CK Rider - Concord Kannapolis Area Transit System (NC)

CK Rider began providing local, ADA-accessible fixed-route transit service to Concord and Kannapolis residents in 2004. These two communities, home to a biotechnology research campus of the University of North Carolina-Charlotte and several major employers, are expected to experience an increase in population over the next two decades. The system currently operates 10 hybrid buses along 7 fixed routes connected by a centralized transit center near a major interstate interchange. These routes operate 7 days a week and provide access to major employment

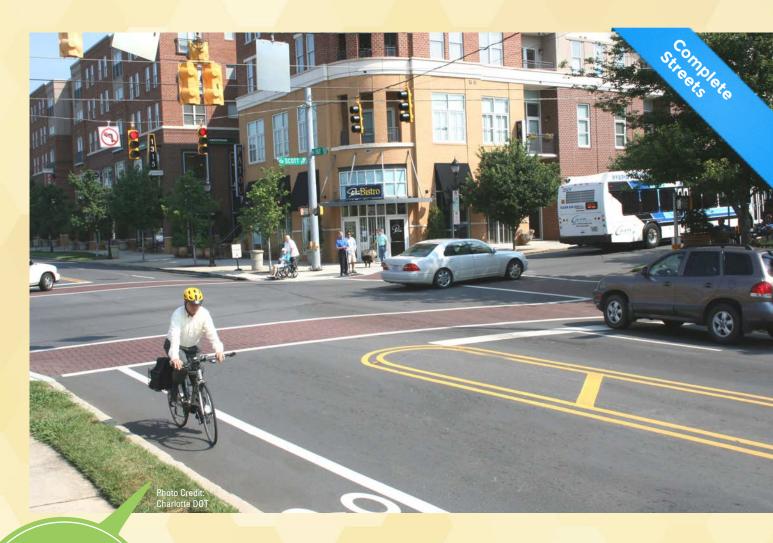
centers and destinations
throughout the area. A recent
survey conducted as part of
the CK Rider's 2015-2019 Transit
Development Plan (TDP) found
that 57% of transit riders utilize
the CK Rider system to travel to
and from work for five or more
trips per week. The system connects riders to local destinations
and to CATS (Charlotte Area
Transit System) and provides
riders with access to real-time
GPS tracking using "trak it."

By connecting to major local and regional employers, the system gives employees the flexibility to choose public transportation over driving. Some major employers in the area, including Catawba College's Center for the Environment encourage the use of public transportation as an alternative to commuting via car. Local demand for alternative transportation options, supported by increased ridership and the results of public outreach conducted during the



Above, a CK Rider bus driver explains how the system's 7 fixed routes connect.





## Here's why it works!

Charlotte's USDG have turned areas of the city into great urban places with sidewalk improvements and bus and bike lanes.

development of the TDP, have resulted in short-term and long-range implementation measures for CK Rider. Some of these measures in the draft plan include providing more frequent service to Charlotte, improving bus shelters and amenities, and providing faster and more reliable service.

## Charlotte Urban Street Design Guidelines (NC)

Adopted in 2007, Charlotte's Urban Street Design Guidelines (USDG) focus on providing the best achievable street design to accommodate growth, create transportation choices, and maintain livability. The guidelines have won several awards, including the EPA's National Award for Smart Growth Achievement in Policies and Regulations, and have been featured as a Best Practice by the American Planning Association. To implement the city's goals, the guidelines include a street classification system that is

context-based, considering different types of land uses, traffic speeds and congestion levels, and evaluates features that influence the safety and comfort of pedestrians and bicyclists (e.g., crossing distance, crosswalks, bike lanes, traffic-signal timing).

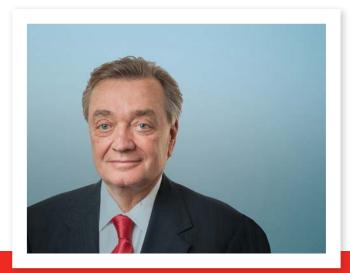
In practice, the implementation of the guidelines for redesigning streets includes a careful analysis of congestion over several hours, rather than only at peak travel times. Data on crashes, speeds, and volumes at peak periods are collected before and after improvements are made to en-

sure that the guidelines result in positive impacts. Charlotte revised its Subdivision and Zoning Ordinance in 2010 to incorporate the guidelines to direct how private development will impact street design through more compact, mixed-use development. In addition, the implementation of the new standards has been incremental in its approach, and as a result has gained support from developers and the community.

(see index on page 82 for full list of resources)

# Faces of CONNECT

Shining a spotlight on the unique voices and stories of the region. Members of the community share what CONNECT means to them.



"Across 14 counties and two states, through thousands upon thousands of interviews, meetings and collaborative efforts both public and private, CONNECT has diligently searched the heart of our region for the truth of where we are and the home we wish for our children. Here's the most important thing...we found our Regional Voice. The best is yet to come."

-Michael Johnson,

Chair, Centralina Council of Governments (CCOG)

"Our region has grown, continues to grow, and is now so interconnected that we no longer have the luxury of being only concerned with our own sphere of influence. CONNECT, through our Councils of Government, has established the planning framework that will serve our local jurisdictions and the entire bi-state region far into the future."

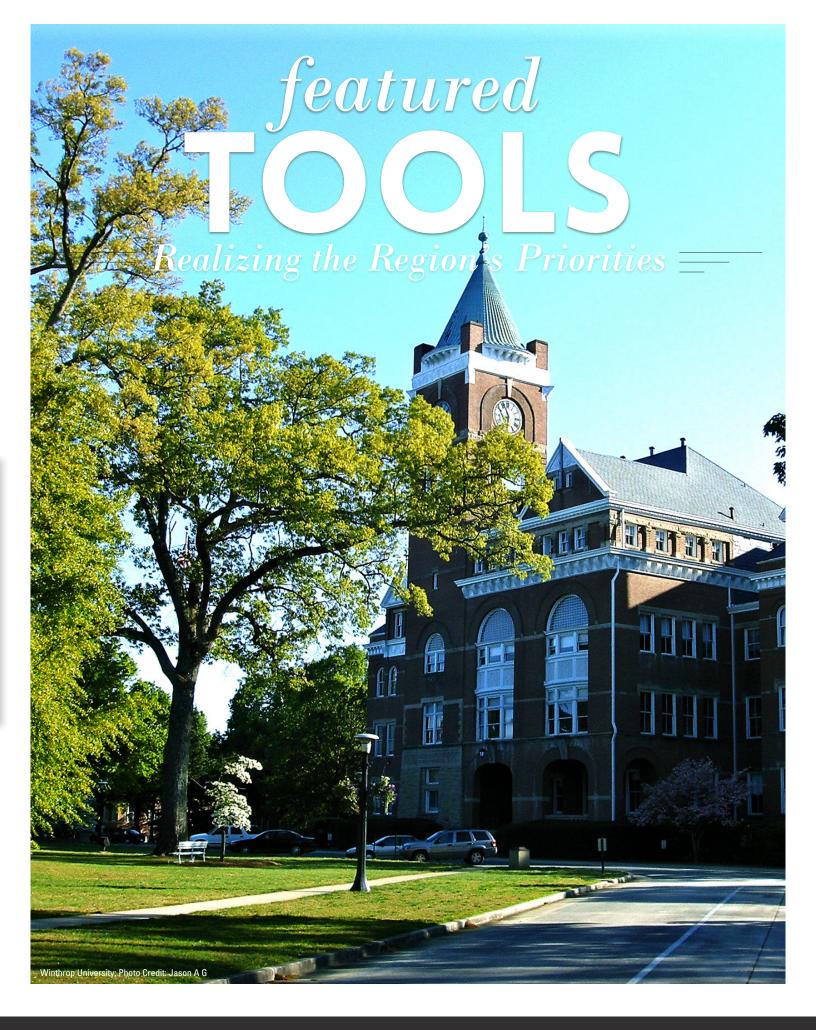
> -Steve Willis, County Administrator, Lancaster County, SC

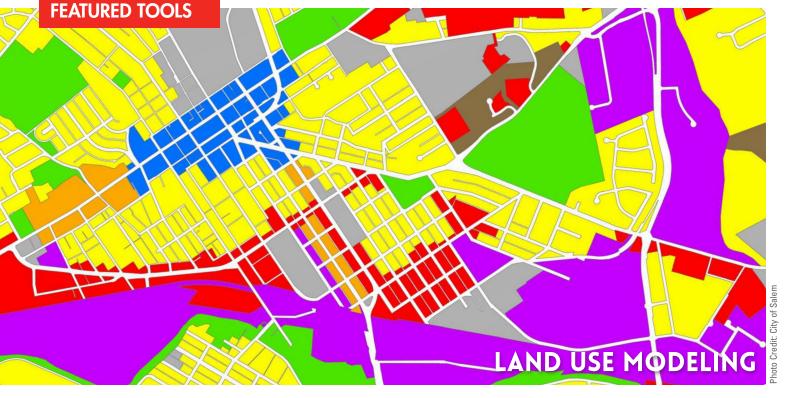




"I was quite a skeptic coming into this long-term planning process. Then I saw the extent of the public input, especially the interest and contribution of thousands in hands-on, map-driven, in-person, full-on participation. The process became the midwife to the birth of a preferred community Vision, then helped craft the tools for us to make the Vision a reality if we have the leadership to do it. I became a believer."

-Lisa Lee Morgan, President & CEO, Calor Energy





**Support Our Communities** 

Land use modeling is a quantitative method that uses existing and projected data combined with economic and social behavior theories to predict future changes in the types and longer term impacts of land uses. Computer modeling of alternative land use and transportation situations (scenarios) can contribute to a more measurable, and therefore more objective, planning process. Modeling can also add value to the planning process by providing opportunities to visualize complex systems and outcomes.

## WHY DO IT?

Modeling land uses allows decision-makers and residents to visualize and compare the potential impacts of land use change at a neighborhood, community, and regional-level.

By 2050, the CONNECT region is projected to add about 665.000 households, with a total population of 4,241,000 and 863,260 new jobs. The research through CONNECT Our Future planning process shows that he region is experiencing accelerated land consumption, a loss of working farms, demand for expensive utility expansion, impacts to environmental resources, and longer commutes and increased traffic congestion as a result of the current growth trends. The impacts of this growth will vary across each community and among their respective residents and businesses. Equipping decision makers and the public with the ability to measure. visualize, and compare these impacts can lead to a more balanced and functional set of future land use plans that

are consistent with a regional vision, and also perform well at the local level.

A variety of models have been developed and are available to local governments and land planning authorities, primarily based on geographic information systems (GIS) data and software. Building a consistent baseline with the same set of assumptions as part of a regional land use framework will allow all aspects of land use planning to be easily compared across multiple municipalities. The greatest benefit scenario planning offers is more informed decision making. however, communities in the region have already benefitted from the tools and data developed as part of the scenario planning initiative, by using the new data in their land use and transportation planning efforts.

This type of scenario planning helps communities prepare for the future by analyzing various future growth alternatives and considering how different growth patterns impact local priorities. Overall, scenario planning helps local decision-makers and the public understand local and regional impacts of different choices, providing an opportunity for regional dialogue on issues of mutual interest, to better coordinate local planning decisions. Scenario planning has been used in other communities and regions across the country and is considered a best practice for integrating transportation and land use decisions.

## **HOW DOES IT WORK?**

The process of "modeling" involves developing an abstract representation of a system to analyze its performance and identify opportunities for improvement. In community planning, modeling can be used to study a variety of elements and their potential impacts on populations, including economic development, the natural environment, transportation, and land use.

As regions and local municipalities make decisions about their future, models can serve as an important tool that provide comparable indicators and foster the understanding of potential impacts. Although the process of modeling is complex and requires robust and current data from a variety of sources to maintain accuracy, the goal is to provide a focused, understandable, and actionable set of results. Land use modeling, in particular, has been used effectively to simulate proposed changes, analyze the impact of change across a range of indicators, and even produce visualizations of what that change will look like. By utilizing land use modeling, planners are able to more accurately assess the performance of a given community's current land use configuration, and more effectively communicate what the potential impact of future variations will be to decisionmakers and the public.

#### RESOURCES

US Environmental Protection Agency: http://www.epa.gov/reva/ docs/ProjectingLandUseChange.pdf

Consortium for Atlantic Regional Assessment: http://www.cara.psu.edu/land/lu-primer/luprimer09.asp

Imagine Austin: http://austintexas. gov/department/communityparticipation

EPA Projecting Land Use Change: http://www.epa.gov/reva/docs/ ProjectingLandUseChange.pdf

Connections 2040: http://www.connections2040.com/cms/images/stories/Future\_Scenarios\_Summary.pdf

Transportation/Land Use Modeling, "The Geography of Transport Systems": http://people. hofstra.edu/geotrans/eng/methods/ ch6m1en.html

## Where has it worked? —

#### Integrated Regional Land Use Planning: CommunityViz®

El Paso, Teller, and Pueblo Counties, CO



he Pikes Peak Area Council of Governments (PPACG) in southern Colorado is a regional planning agency with a territory that is projected to grow from 700,000 to 1 million over a thirty year planning period. The Council started a regional planning process in 2007 with the goal of integrating land use and environmental conservation principles with transportation planning. The planning team identified a specific scenario-planning tool for three elements, to develop scenarios that could be combined into a final single preferred future for the region:

- 1. Land Use Model: CommunityViz® for land use planning and overall scenario development.
- 2. Environmental Conservation Model: NatureServe Vista, with sensitive species data from the Colorado Natural Heritage Program (CNHP) for conservation planning.
- **3. Transportation Model:** PPACG (as the designated Metropolitan Planning Organization) used its' existing transportation model.

The process began by developing a Current Trend plan that showed how growth would likely occur by the year 2035. Two alternative scenarios were developed using CommunityViz®. One scenario focused growth on infill clusters, while the other prioritized the protection of environmentally sensitive areas. To remain consistent with the transportation model, each scenario used traffic analysis zone polygons as the primary level of detail. In the Infill/Cluster scenario, the planning team identified opportunities to increase development

intensity in areas adjacent to transit. For the Conservation scenario, the team used data from CNHP and NatureServe Vista to select land areas that were particularly sensitive. The associated parcels were designated as unbuildable to show an extreme conservation strategy.

ConnectOurFuture.org

For each scenario, jobs and housing units were allocated across the area by overlaying the conditions of the scenario against the likely desirability for development. According to the lead consultant for the scenario development, an interesting outcome of the extreme

Check out **Using the Tool** @ tinyurl.com/
LandUseModeling

conservation scenario was that growth "leap frogged" over a large, environmentally sensitive tract close to downtown and spread into more remote rural areas, producing unwanted side-effects (e.g., long commutes and dispersed growth). In response, a modified conservation scenario allowed some dense, highly clustered development in one of the less sensitive areas of the affected tract.

PPACG then used CommunityViz® to calculate a wide variety of performance measures and indicators to compare the scenarios. In addition to standard indicators such as vehicle miles traveled and land use mixes, many indicators measured potential adverse impacts to sensitive places and populations.

To develop a preferred scenario as the basis of the Regional Transportation Plan, PPACG hosted a stake-holder workshop with its Technical Advisory Committee. Working with live CommunityViz® analysis in small groups, participants moved residential and jobs density around on the map to improve the original scenarios. After each small group came up with a proposal, CommunityViz® was used to merge their maps into a single combined proposal which was fine-tuned by the entire group.



**Support Local Farms** 

Farm to Table refers to a method of harvesting and distribution that focuses on delivering fresh, seasonal, food to local businesses including restaurants and markets.

#### WHY DO IT?

While the average metropolitan area in America only grows or raises less than 2% of the food it consumes, the demand for locally sourced produce in restaurants, at markets, and in households across the country has steadily increased in the last decade. A 2012 survey of South Carolina consumers conducted by researchers Willis, Carpio, and Young found that households are willing to pay almost 12% more for locally grown produce. Another survey, conducted with North Carolina food businesses, found that a majority of surveyed managers prefer to purchase locally-sourced, in-season food products. The Farm to Table movement seeks to create connections between local farms and food businesses (restaurants, markets, etc.). These connections provide an additional source of income for local farmers, provide businesses and consumers with fresh, locally sourced foods, and represent a potentially lucrative economic development strategy

for the region. Supporting Farm to Table connections throughout the CONNECT region can ensure that local farms have a sustainable source of income and continue to contribute to the region.

#### **HOW DOES IT WORK?**

There are several ways to employ Farm to Table methods at local and regional level. Farms can participate in organized farmer's markets that attract buyers and chefs from local food establishments and restaurants. Many times, these markets provide an opportunity for local farmers to establish a steady, mutually-beneficial supply relationship with a business. Some restaurateurs even go so far as to establish their own farm off-site to exclusively supply their restaurant. Some companies and business agreements have emerged solely to fill in the gaps between farmers and consumers. Neighborhood Community Supported Agriculture (CSAs) organi-

zations allow residents to purchase a 'share' of crops from a local farmer. The farmer then distributes produce from throughout the region to convenient drop-off locations to serve retail and business customers. Regardless of which Farm to Table method is utilized, this movement can have a significant impact on the economy throughout the CONNECT region, including the stabilization of local farms and an increase in tax revenue and jobs.

#### **RESOURCES**

CONNECT Our Future Food System Working Group, Action Plan for Food Systems Improvement: www. ConnectOurFuture.org/wp-content/ uploads/2015/01/CONNECT-FS-Action-Plan-for-Food-Systems-Improvement.

CONNECT Our Future Food System Working Group, Food Assessment Report: www. ConnectOurFuture.org/wp-content/ uploads/2015/01/CONNECT-FS-Food-Systems-Assessment-Report.pdf

"How the Farm-to-Table Movement Is Helping Grow the Economy": http://www. entrepreneur.com/article/220357

Community Supported Agriculture (CSA) Resource Guide for Farmers: http://growingsmallfarms.ces.ncsu.edu/growingsmallfarms-

csaquide/

"Consumer Willingness to Pay for Locally Grown Produce Designed to Support Local Food Banks and Enhance Locally Grown Producer Markets": http://ageconsearch.umn. edu/bitstream/150288/2/Willis%20 et%20al%20AAEA%202013R.pdf

**Poplar Ridge Farm CSA:** http://www.poplarridgefarmnc.com/events/

Ohio City Farm: http://www.ohiocityfarm.com/

**Ohio City Farm:** http://sustainability.greatlakesbrewing.com/ohio-city-farm

## Where has it worked? --

#### **Poplar Ridge Farm CSA**

Union County, serving Mecklenburg County, NC

While the farm supports local farmers

markets and direct sales to restaurants,

a majority of business focuses on Com-



munity Supported Agriculture (CSA) and environmental and nutritional education. Since starting the CSA, the farm has continually expanded delivery service to now reach a large network of families and businesses throughout the Charlotte metropolitan region.

Photo Credit: UNC Charlotte Urban Institute

The farm has a long history of serving families and businesses throughout the Charlotte metropolitan region with high-quality organic produce including arugula, beets, kale, okra, squash, green beans, peppers, and much more. Members have the option to take a full-share or half-share membership for the full growing season or during summer or fall growing seasons. The farm also has produce available for retail sale at a market stand throughout the growing season. In addition to providing fresh produce to residents, Poplar Ridge offers farm tours, cooking classes, Farm to Table chef events, and guest speaker events.

### **Ohio City Farm**

Cleveland, OH

he Ohio City Farm has attracted local and national attention for its unique approach. The project has transformed nearly six acres of unused city land for urban agriculture, community development, and job training a mile from downtown Cleveland. Formed by a consortium of partners, including the Refugee Response, Ohio City Near West Development Corporation, and the Cuyahoga Metropolitan Housing Authority, the farm is providing access to healthy foods in underserved areas. Through an agreement similar to a CSA, the farm directly supplies Great Lakes Brewing Company with produce throughout the season to use in its restaurant and brewery.

ConnectOurFuture.org

Check out **Using the Tool** @ tinyurl.com/
FarmtoTableTool

The farm operates through a partnership with carefully thought out funding arrangements and provides a range of community benefits. In addition to the CSA which helps fund up front operations, the farm operates a weekly farm stand and kitchen incubator. The commercially licensed kitchen incubator provides affordable space to local food businesses and a testing ground for new restaurant and food business ideas. The incubator also provides assistance with feasibility studies and pre-development process for a kitchen assisted by outside funding. With a defined mission, the Ohio City Farm provides services well beyond the typical community farm and is able to provide direct benefits to the local economy, environment, and surrounding community.



Improve Access to Parks & Open Space

Parks are essential elements of cities and neighborhoods that are primarily places for recreation, community gathering, and natural open space. Parks can come in all shapes and sizes, from linear parks that may incorporate portions of greenways or trails, to large wooded passive parks, to urban playgrounds, to pocket parks and shaded urban squares such as dot Savannah and London. Ensuring that there are adequate park facilities to serve the population is a function of planning, zoning, and development guidelines.

#### WHY DO IT?

Over 8,000 residents who participated in the CONNECT process identified access to Parks and Open Spaces as one of the top priorities for our region. Parks and Open Spaces not only provide recreational benefits but also provide a range of valuable economic. environmental, and social benefits to the communities they serve. Numerous studies have shown that access to parks attracts residents, increases property values, enables sports and recreation tourism, and spurs investment as community members appreciate safe and easy access to natural outdoor areas to relax and enjoy the outdoors. Additionally, as many communities have turned their attention to planning for healthy communities, parks provide opportunities for active recreation, fresh and clean air, and space for trees and open space, which contributes to improved air quality and climate resilience. Finally, parks provide opportunities for community gathering and social interaction, which boost neighborhood pride and strengthen communities.

### **HOW DOES IT WORK?**

Like any type of land use, the building and preservation of parks is controlled by a city, town, or county's future land use map, zoning code and map, and development and subdivision regulations. The amount of park land and open space that is needed in a given community is typically based on population and ease of access. The location of parks is also influenced by the location of natural resources and environmentallysensitive areas such as critical watersheds. Ideally, a city will have a current park system master plan to balance the needs for and capacity of parks as the population grows: communities are often benchmarked on their "acres of parkland per capita." Such a plan takes into account existing facilities, population dynamics, natural resources protection, and public input to set a course for the park system's future. These recommendations are then incorporated into the zoning code, development and subdivision regulations, and the design review process.

Through an adequate public facilities ordinance, some communities require new development to build a certain amount of parks and open space based on the density, intensity, and character of development. If parks are dedicated for public use, they become the responsibility of a community's parks and recreation department to maintain. Alternatively, some open space resources may be kept under private ownership and then are the responsibility of property owners or homeowners' associations to maintain and furnish. The zoning code can also be used to protect desirable sites for parks and open spaces from being developed for any purpose other than parks, based on allowable use. Conversely, parks of any size may be built in most all other zoning districts. This combination of zoning code provisions enables the protection of existing parks and future planned parks from being transformed to another use, while encouraging parks in all types of new development.

Another model for providing parks, aligned with tactical, or "Do-it-Yourself (DIY)," urbanism, is the creation of temporary parks in vacant lots or open space to serve the immediate neighborhood. Programming for such parks may include space for community gardens, or the parks may be attached to businesses, as is the case for "parklets," which usually include plantings, seating areas to support local businesses, and sometimes public art, and provide additional outdoor space in constrained urban environments.

Park financing is a concern for many communities that has continued to evolve in the era of limited public funding. The most common funding mechanism is requiring future development to pay for parks through development agreements. However, this typically covers only capital costs, and once completed the parks become the responsibility of the community to maintain. Some communities rely on donors and private financing to raise money for parks in areas that are already developed, or float bonds for parks construction and improvements. This requires significant community involvement and advocacy. Some states, such as North Carolina, offer grants for the building of parks to benefit communities and conserve natural resources. Other financing strategies include tapping watershed protection or transportation sources, implementing dedicated funding sources or voluntary park taxing districts, and sponsorships.

#### **RESOURCES**

**City Parks Alliance:** http://www.cityparksalliance.org/

The Official Guide to Tactical Urbanism: http://www.citylab.com/design/2012/03/guide-tactical-urbanism/1387/

Measuring the Economic Value of a City Park System: https://www. tpl.org/measuring-economic-valuecity-park-system

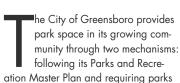
Greensboro 2017 Comprehensive Parks and Recreation Master Plan: http://www.greensboro-nc.gov/index. aspx?page=3366

# Where has it worked?

# City of Greensboro 2017 Comprehensive Parks and Recreation Master Plan and Land Development Ordinance

Greensboro, NC







in their Land Development Ordinance, or zoning. The parks planning update began in 1997, which included forecasting the City's park and recreational facilities needs for the next twenty years. The city obtained a consultant to complete the master plan, which involved evaluating the existing programs and facilities in the city and developing strategies to meet future recreation needs and population growth. Public outreach was central to preparation of the plan to ensure that future facilities met community needs. The master plan resulted in recommendations for the amount and type of park land that the city would need to acquire and build, district by district, within specified time frames and areas. In turn, the City's Land Development Ordinance requires that adequate park land be dedicated consistent with the recommended acreages.

The Comprehensive Parks and Recreation Master Plan established standards for the development of parks based on population, which was expected to increase by over 40,000 people. These 40,000 new individuals would need places to recreate and have easy access to open space as the city grew and transformed. The plan established definitions for each type of park, including Magnet Parks (+1,000 acres), Regional Parks (86-400 acres), Community Parks (15-75 acres), Neighborhood Parks (5-15 acres), Mini Parks (1-4 acres), and Greenways or Special Use Parks (no standard). The larger the park, the fewer the number of parks needed of that type, but the greater

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PreservingBuilding
Parks

amount of acreage needed overall. The unit of necessary acreage, "acres per 1,000 new people," triggers new parks to be built according to population growth thresholds. Standards were developed based on the National Recreation and Park Association (NRPA) and the North Carolina Department of Environmental Health and Natural Resources (NCDEHNR) recommendations, as well as those of similar cities. Included with the population thresholds and required acreages, the master plan also includes recommended park designs for each of the park types so that they would all achieve exemplary design and contribute to the community and environmental character of the city. The master plan also recommends upgrades to existing facilities and potential partners in implementing the plan.

In order to make the recommendations of the Comprehensive Parks and Recreation Master Plan a part of city regulation, Greensboro's Land Development Ordinance (LDO) codified the recommendations into zoning requirements. Today, any Planned Unit Development (PUD), mixed-use developments, residential subdivisions, townhouses and residential condominium developments, and multi-family residential developments must include a percentage of open space based on the density of the site, or a set amount of open space square footage per dwelling unit (i.e. 250 s.f. of open space per dwelling unit in multi-family developments of less than 3 acres). Developments within environmentally sensitive areas (critical watershed areas) must dedicate as much as 90% of the site as open space, based on the level of sensitivity. The character of the open space is determined by the design of the site and may take the form of a community park or on-site open space, such as a courtyard. The LDO similarly allows for the building of parks in all zoning categories, but limits the other uses that may be built in areas of the zoning map held for open space, thus preserving their longevity.



<u>Increase Transportation</u>
<u>Choices</u>

A transit readiness assessment and primer provides necessary steps to help communities prepare and plan for transit. Assessments may include suggested land uses, preservation of corridors, density, and typical per mile costs.

#### WHY DO IT?

According to the Locational Affordability Index developed by the U.S. Department of Housing and Urban Development (HUD), median income families in communities throughout the CONNECT region spend as much as 41% of their annual income on transportation costs. Over-reliance on automobiles for transportation has a detrimental effect not only on family budgets, but also on the environment. Increasing access to alternative forms of transportation, including transit, can reduce commuting costs for residents and improve air quality by reducing the number of vehicle miles traveled. A transit readiness assessment is an important first step that communities, regardless of size, can take to plan and prepare for transit. Transit-hopeful communities can use their comprehensive plan processes to identify, promote, and prioritize investment in transit-supportive development patterns in corridors and nodes, thereby creating transit-opportunity areas. Transit readiness assessments have the added benefit of helping communities plan for walkability and bike-ability as well, because development patterns that will support transit typically

also support these other forms of active transportation. Assessments are often completed for communities along a key regional transit corridor or in conjunction with a regional plan.

#### **HOW DOES IT WORK?**

No two communities are alike. Therefore, there is no single strategy or approach to plan for successful transit in a community. A community transit readiness assessment should analyze existing conditions (e.g., current commuting/traveling patterns, land uses, income, current and projected demographics, etc.), work with major stakeholders to develop local place-based solutions, and create individual work plans for communities. The assessment should take into account what types of development patterns best support transit and what investments could be made to prepare communities for transit. Recommendations should include what type of transit is appropriate for the location (e.g., dedicated bus lanes, BRT, commuter rail, light rail, etc.); what land uses and densities are necessary to support new transit investments, typical per mile costs for construction, and

a cost-benefit analysis with expected return on investment.

Transit systems can be broken into two categories: rail and bus.

Rail transit systems are able to attract and carry a greater number of passengers than bus transit systems, and are able to increase capacity by adding cars or increasing the frequency of service with limited additional capital investments, once the basic infrastructure is in place. There is often greater support for rail transit investments, as rail is considered a more reliable and attractive form of transportation with consistent headways (headway is a measurement of distance or time between vehicles in a transit system). Studies focusing on the impact of transit on development and land use reveal that rail transit tends to be a more successful method to catalyze development and raise property values. However, rail is typically built in medium-to-high density well-populated urban and suburban centers and initial capital costs can be quite high.

**Bus transit systems** are more flexible, allowing for routes and services to change and expand

as needed especially in dispersed or low-density communities. Capital investment is often lower as bus transit does not require special facilities and more often than not can use existing roadways, although special provision must sometimes be made for BRT to ensure that it is "rapid" transit. Additionally, bus transit improves access to job centers, medical services, and other necessary services for underserved and low-income residents that may not be served by fixed rail transit systems. However, for bus systems that use nondedicated lanes or running ways, headways are dependent on traffic and are not as reliable or consistent as rail systems.

#### RESOURCES

HUD's Location Affordability Index: http://locationaffordability.info/lai.aspx

The Growing Transit Communities Strategy: http://www.psrc.org/ assets/9539/GTCStrategy.pdf

"Measuring Urbanity One Block at a Time": http://www. reconnectingamerica.org/assets/ Uploads/content.pdf

Evaluating Public Transit Benefits and Costs – Best Practices: http://www.vtpi.org/tranben.pdf

Comparing Transit Modes: http:// www.neptis.org/publications/ appendix-detailed-estimatescosts-and-benefits/chapters/ comparing-transit-modes

Transportation for Sustainable Communities: http://www.cnu. org/sites/www.cnu.org/files/ condoncnu19finalpaper\_0.pdf

Reconnecting America – Transit Technologies Worksheet: http:// www.reconnectingamerica.org/ assets/Uploads/bestpractice175.pdf

**Rural DRT:** http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp\_rpt\_136.pdf

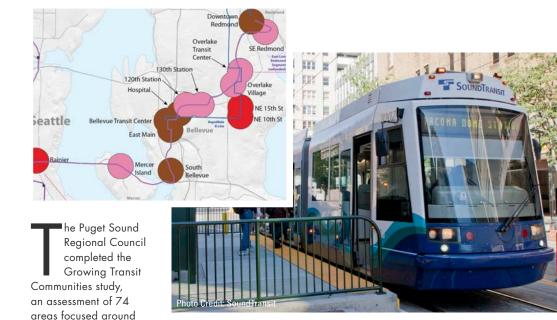
National Center on Senior Transportation: http:// seniortransportation.net/Portals/0/ Cache/Pages/Resources/ DemandAndResponse.pdf

BRT: http://www.nbrti.org/CBRT.html

VTS: http://seniortransportation.net/ Portals/0/Cache/Pages/Resources/ VolunteerTransportation.pdf

# Where has it worked? --

# The Growing Transit Communities Strategy – Puget Sound Regional Council Puget Sound Region, WA



existing and future locations of Sound Transit Link light rail stations and other key transit nodes. The study was completed utilizing regional goals set in the Vision 2040 report. Goals included attracting more residential and employment growth to high capacity transit communities, providing a diversity of affordable housing choices near transit, and increasing access to opportunity for existing and future residents of transit communities. Data from each of the 74 study areas was

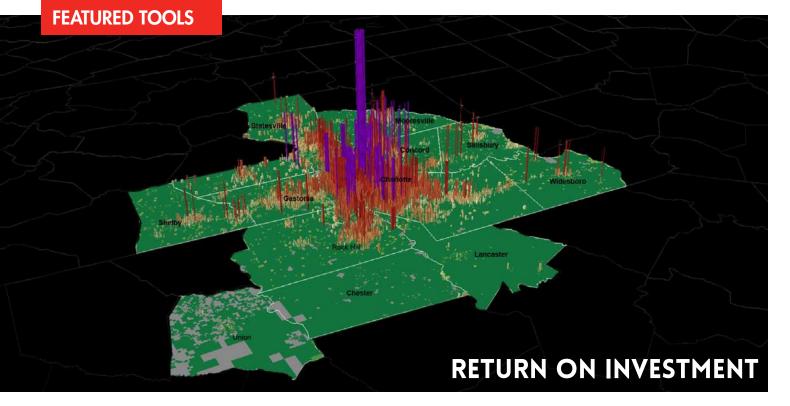
collected and analyzed to provide a number of corridor-specific implementation priorities, strategies, and next steps. The South Corridor, stretching south from downtown Seattle to downtown Tacoma (including two operating light rail lines and a number of proposed lines to be completed in the next 10 to 20 years), encompasses a number of racially and ethnically diverse communities and connects major employment centers in the region. Implementation priorities for the 24 planned and potential stations along this corridor are broken into three categories based on analysis of existing conditions: Protect and Grow, Enhance

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TransitReadiness

Community, and Stimulate Demand. Communities that fall under the Protect and Grow category are those existing transit communities with growing market potential. A key concern for these communities is preserving affordability while continuing to increase density. Enhancing Community includes communities that are low-density with an auto-oriented character, but have the potential to become denser transit and activity centers. Stimulate Demand communities have strong existing transit systems, but have low market demand. The goal for these communities is to capitalize on existing assets to expand job and housing opportunities. Recommendations include securing funding to extend light rail further down the corridor in Federal Way and Tacoma, taking short-term action to strengthen real estate markets for transit-oriented development in existing communities, ensuring continued stakeholder and community engagement throughout the process, and encouraging the development of housing for all types of families in the region.

By working within the region's existing framework, Vision 2040, the Growing Transit Communities study provides key strategies and actions individual communities and the greater region can take to realize their vision of a well-connected, healthy, and accessible region. All of the study areas along key transit corridors were analyzed for diversity of land uses, availability of housing, market potential, density, and demographics to determine what the character of potential transit would be in each area. The resultant 'typologies' (e.g., Protect and Grow, Enhance Community, and Stimulate Demand) take into account the analysis completed for each area and provide strategies to improve transit connectivity without adversely affecting existing communities.



Maximize Return on Public Investment

The Return on Investment (ROI) tool developed for the **CONNECT** region by Urban3 estimates the potential revenue generation by different development types in a particular area, or for particular parcel(s) so that jurisdictions may weigh that revenue against the costs of infrastructure and service delivery. The tool helps decision-makers best determine where to allocate resources and what types of development patterns will result in long-term "fiscal sustainability" for the community.

#### WHY DO IT?

Revenue modeling can help communities avoid land use decisions that can be costly in the long term, and make decisions that will positively contribute to the communities' fiscal health. The tool assesses the costs and benefits of downtown revitalization, compact versus suburban development, infrastructure upgrades, and community investment. This allows decision-makers access to the longer-term impacts of various development patterns on their revenue or expense streams. The report on revenue generation for the CONNECT region revealed not only differences in revenue generation across the region based on development form and cities' past investments, but also differences in the revenue production within individual communities. For example, the report found a stark difference in tax revenue per acre produced by big box sites and downtown development sites. Shelby's downtown generates almost \$400,000 in tax revenue on 25 acres compared to the

Cleveland Mall, which produces only \$164,000 on more than 40 acres. That amounts to 2.5 times the revenue per acre in downtown. Information such as this can be a major asset to decision-makers as they consider where development can and should occur. The revenue generation modeling tool produced for the CONNECT region can readily be customized to individual communities at a community, neighborhood or parcel level, so that decisionmakers can access cost-benefit analyses and return-oninvestment information for future land use decisions and capital investment projects such as infrastructure.

### **HOW DOES IT WORK?**

CONNECT's local Return on Investment tool measures the potential revenue and overall economic impact for hypothetical or proposed projects for a city, community, or region. This tool utilizes the concept of "value per acre" for different types of uses and locations to measure the tax proceeds

and determine the best value for the local government. The tool can help communities compare multiple development types at the same location by examining actual tax proceeds from similar development types in the same community or from a comparable community. This will allow a local government to weigh alternative development proposals or future development types on a given site. The tool can also compare similar development types at different locations to generate data on the best or most profitable location for future investments.

The tool estimates the potential revenue that could be generated based on the nature and location of the future development. To do this, the tool uses data collected from local municipalities for comparable situations, such as property values and taxes by land use type, to gauge the tax revenue potential of the development. Like scenario planning tools, the ROI calculator generates both numeric and visual outputs

that illustrate the benefits and potential drawbacks of development choices. Communities can utilize this tool, with help from regional agencies such as a COG, to inform capital improvement and facilities planning and long range land use planning decisions, to shape not only a community's development footprint but also its fiscal sustainability. When revenue outputs of the tool are coupled with locally generated cost to serve estimations, effective cost-benefit analysis across multiple development scenarios is possible.

#### RESOURCES

Capital for Healthy Families and Communities: Social Impact Calculator: http://www.liifund.org/calculator-tool/

**Urban3:** http://www.urban-three.com/

# CONNECT our Future – Local Solutions for a Regional Vision:

www.ConnectOurFuture.org/ wp-content/uploads/2015/01/ CONNECT-BP-Local-Solutions-for-a-Regional-Vision.pdf

The Brookings Institution Center on Urban and Metropolitan Policy: Investing in a Better Future: A Review of the Fiscal and Competitive Advantages of Smarter Growth Development Patterns: http://www.brookings.edu/research/reports/2004/03/metropolitanpolicy-muro

# Where has it worked?

# Cost of Land Use Fiscal Impact Study, Davidson, NC Davidson, NC

he town recently worked with a consultant to complete a land use fiscal impact study of the services that the town provides to the commercial and residential sectors of the community. The Cost of Land Use Fiscal Impact Analysis is the first step of a multi-phase fiscal impact analysis evaluation. It evaluates the fiscal impact of specific types of land uses or locations grouped together. Similar to the CONNECT Rol, in this analysis the characteristics of various residential (i.e., single family, multifamily), nonresidential (i.e., retail, industrial, office), and mixed use "prototypes" are defined and a "snapshot" approach is used to determine the annual costs

Coastal Traveler Blog (rdmosley,wordpress.c

and revenues from each land use prototype to the jurisdiction. In this analysis, prototype land uses are grouped together to produce fiscal results for sample areas in the Town. The factors used to define these prototypes typically include household size, market values, number of employees, and vehicle trips.

The Cost of Land Use Fiscal Impact Study seeks to answer the question, "What type of development pays for itself?" The results will assist the Town with future land use and financial planning. Land use planning can be assisted by understanding the types of land uses that are more fiscally advantageous to the Town's bottom line. While fiscal zoning is illegal, the analysis can help inform an appropriate mix of land uses, knowing that some land uses are "contributors" while others may be "recipients." Second, the analysis can assist in long-term financial planning as well as identify the need for and type of additional revenue sources.

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returnoninvestment

Davidson's Cost of Land Use Fiscal Impact Study identified eight residential and ten nonresidential land use prototypes. Six of the eight residential prototypes generate more revenues than expenditures—a net surplus. The results are due to the Town's revenue and service structure—with property tax generating the majority of revenue to the Town as well as the types of services provided by the Town. Because the Town is not responsible for expensive population-driven services such as education and human services, the revenue and service structure tends to favor residential development with a few exceptions.

For nonresidential land uses, seven of the ten prototype areas generate net surpluses. Downtown Mixed Use and the Circles @ 30 Mixed Use areas generate the largest surpluses due to property, sales, and prepared food tax revenues generated and low relative costs. Office development at a high enough property value tends to generate net surpluses. For the Downtown prototype areas, while all generate net surpluses, when office uses are included in the mix, the results are better fiscally.

# Faces of CONNECT

Shining a spotlight on the unique voices and stories of the region. Members of the community share what CONNECT means to them.

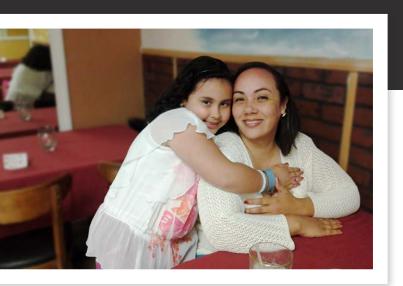


"All fourteen counties are part of the SAME region, and it is obvious that the enormous amount of data we collected during the last three years and the numerous conversations we had throughout the project will strengthen us as we prepare for OUR future."

-Dr. Edward J. Lee, Chair, Catawba Regional Council of Governments (CRCOG)

"We're part of what's going to be a mega-region, and if we want to preserve what we love about our towns, and get the best of the growth that's coming, we MUST plan together for it. Accidental growth is not an alternative that we'd want to live with, or leave our children."

-Mayor Max Hopper, Town of Earl, NC





"I felt I belonged to a community that cared about the future. It felt fantastic to see our diverse community working together for one goal."

> -Dr. Rosanna Saladin-Subero, PhD, Assistant Director for Community Partnerships and Family Engagement, Charlotte-Mecklenburg Schools



# What's next for CONNECT Our Future?

"Throughout the past three years, the CONNECT Our Future Consortium has underscored the importance of a "regional role" while CONNECT implementation occurs at both the local and regional levels. Because CONNECT Our Future includes two states that have different statutes and their Councils of Government (Centralina CCOG and Catawba Regional COG) are organized differently, CONNECT's next steps will be different in each state. Both Centralina and Catawba Regional Councils of Governments are committed to assisting each individual community access the tools and data available via the CONNECT Our Future project that are most relevant and needed by them. By strengthening our communities, we will be building a stronger region.

Centralina COG's approach will focus on three major areas as part of the organization's Strategic Plan:

#### **BUILDING RELATIONSHIPS**

- » Continuing to grow the North Carolina component of the CONNECT Consortium as a voluntary collaboration
- » Building even stronger relationships with the private and non-profit sectors, through collaboration on regional freight, communitybased housing strategies, and other projects
- » Building public trust by sharing CONNECT results, strategies and engaging the public in continuing efforts to achieve their community's vision for growth
- » Building stronger relationships with local, state and federal officials to move forward on local and regional priorities and growth strategies

# BUILDING CAPACITY AT LOCAL AND REGIONAL LEVELS

- » Providing tools through the Regional Growth Framework, including CommunityViz® and Return on Investment modeling software and datasets, that enable communities and MPOs to better plan to strategically achieve their goals. These tools will be supported by educational forums/training and technical assistance and support from CCOG staff, so that users are able to build their capacity as well
- » Capturing the increasing number of "best practices" within our region for sharing with other communities
- » Helping communities align local development plans with transportation, workforce and economic growth systems
- » Facilitating efforts to remove barriers for increased infill development as a means of preserving farmland and

open space and supporting the vitality of town centers, as well as controlling cost of government

# BUILDING OUR REGIONAL HIGH PRIORITY INFRASTRUCTURE

- » Coordinating transportation issues including freight planning and transit readiness
- » Water resource planning including water quality and quantity
- » Creating stronger economic development infrastructure through the Centralina Economic Development Strategy (CEDS) specifically Career Headlight, Advanced Industries and Housing Strategies
- » Maintaining CONNECT's regional data infrastructure to provide more support and refinement for evidence based economic and community growth strategies

Catawba Regional COG's approach will be similar to Centralina, although the emphasis for CRCOG will be on using CONNECT tools and data for the benefit of communities throughout the SC portion of the region.

# CATAWBA REGIONAL COG WILL FOCUS ON THREE AREAS RELATED TO CONNECT CORE VALUES:

- » Use CONNECT data and tools to broaden and deepen strong existing relationships with member governments and jurisdictions.
- » This supports the CONNECT Core Values of: Sustainable, Well-Managed Growth, and Increased Collaboration among Jurisdictions.

Application: Using **CONNECT Tools such as** return on investment, CommunityViz®, and parcel mapping, CRCOG will provide critical data to member local governments as requested and needed. This information will aid our jurisdictions in making the best decisions for long term, positive impact. Impact will be derived through small area plans, comprehensive plan development, land use documents, solid waste planning, and transportation planning.

- » Use CONNECT data and reports to assist in the creation of jobs and grow the economy by providing needed capital for infrastructure, equipment, and capital improvements.
- » This supports the CONNECT Core Value of: A Strong, Diverse Economy and a Safe and Healthy Environment.

Application: Using CONNECT information related to brownfield and greyfield redevelopment, CRCOG will, in partnership with SC DHEC, continue to creatively deploy \$5 million of EPA Revolving Loan Fund capital for cleanup of the region and state's brownfields. Using business financing programs and a \$6 million EDA Revolving Loan Fund, CRCOG will search for opportunities to provide needed capital for greyfield redevelopment and adaptive re-use throughout the region and state.

» Use CONNECT data and reports to target community development efforts and capital for healthy housing and improved neighborhoods. » This supports the CONNECT Core Value of: A Safe and Healthy Environment and Sustainable, Well-Managed Growth.

Application: Using CONNECT generated tools and information related to housing and energy, CRCOG will seek to deploy capital for neighborhood improvement, including elimination of slum/blight conditions, along with better infrastructure solutions for low-moderate income neighborhoods.

These two approaches make sense given the differences in state government and structure between North and South Carolina, and also emphasize what CONNECT has always championed:

that strong regions are made up of strong communities, that "one size does not fit all," and that "community-based regionalism" that reflects the underlying premise that support for strengthening each of our communities is the path toward vibrant communities in a robust region.

We look forward to working with all CONNECT partners and communities as we continue to move along that path. Let's work together to build stronger communities and a stronger region where we all—and future generations—can live, work and play.



# RESOURCE INDEX

#### **SUPPORT OUR COMMUNITIES** (page 26-29)

- Historic Tax Credits (National Parks Services): http://www.nps.gov/tps/ tax-incentives.htm
- New Markets Tax Credit Program http://www.cdfifund.gov/what\_we\_ do/programs\_id.asp?programID=5
- Loray Mills: http://www.charlotteobserver.com/2014/03/07/4749146/ gastonias-historic-loray-mills.html#.U\_ X7RfldXTo; http://digitalinnovation. unc.edu/projects/loray-mill-project
- APA, Planning for Healthy Places with Health Impact Assessments: https:// www.planning.org/nationalcenters/ health/healthimpactassess.htm.
- Centers for Disease Control and Prevention, Healthy Places: http:// www.cdc.gov/healthyplaces/hia.htm
- Davidson Design for Life (DD4L): http://www.healthimpactnc.com/; http://www.cdc.gov/healthyplaces/ stories/davidson.htm

# MAXIMIZE RETURN ON **PUBLIC INVESTMENT**

(page 30-33)

- Waste Reduction Partners: http:// wastereductionpartners.org/localgovernment
- South Carolina Energy Office http:// www.energy.sc.gov/public
- Rowan-Salisbury School District: http://www.campaignforcleanair. org/news-reader/items/energycoordinator-makes-schools-moreenergy-efficient.html
- 2013 Infrastructure Report Card: http://www.infrastructurereportcard. org/http://www.infrastructurereportcard.org/a/#p/state-facts
- The National Council for Public Private Partnerships - 7 Keys to Success: http://www.ncppp.org/ ppp-basics/7-keys
- RiverWalk, SC: http://www.carolinathreadtrail.org/wp-content/ uploads/2011/12/If-We-Build-It-Will-They-Come.pdf; http://www. riverwalkcarolinas.com

#### SUPPORT LOCAL FARMS (page 34-37)

Catawba Lands Conservancy:

- http://catawbalands.org/clcsrecord-year-for-conservation-1972-acres-protected-in-14-locations-in-2013
- The Fork Farm and Stables: http:// www.forkstables.com
- Growing Minds Farm to school: growing-minds.org
- Gaston County Schools: http:// www.gastongazette.com/lifestyles/health/program-aimedto-encourage-children-to-heathealthy-1.71239?page=1
- Growing up Green: http://www. charlottemagazine.com/Charlotte-Magazine/December-2012/Growing-Up-Green
- Gaston Healthy Harvest: http://gaston.ces.ncsu.edu/healthyharvest

# **IMPROVE ACCESS TO PARKS & OPEN SPACE**

(page 38-41)

- · Active Living by Design: http://activelivingbydesign.org
- · Let's Move!: www.letsmove.gov
- A Healthy Community = A Strong Local Economy: http://icma.org/ en/results/sustainable\_communities/news/Article/104990/A\_ Healthy\_Community\_\_A\_Strong\_Local\_Economy
- GO! Chapel Hill: http://www.rwjf. org/en/about-rwjf/newsroom/ newsroom-content/2010/02/ chapel-hill-mother-helps-createactive-routes-to-school.html
- Active Living Research: http://activelivingresearch.org
- The Signage Foundation: http:// www.thesignagefoundation.org/Portals/o/UrbanWayfindingPlanningImplementationManualWebsite.pdf
- Arlington Wayfinding: http://alexandriava.gov/Wayfinding
- Bike Arlington: http://www.bikearlinaton.com

## **INCREASE TRANSPORTATION**

CHOICES (page 42-45)

- Safe Routes to School: http://saferoutesinfo.org
- Spartanburg, SC Safe Routes to School: http://www.saferoutesinfo. org/data-central/success-stories/ spartanburg-south-carolina-countywide-effort-pays-spartanburg-sc
- Center for Transit Oriented Development: http://www.ctod.org/
- Charlotte Blue Line TOD: http://www.nga.org/files/ live/sites/NGA/files/ pdf/1012TRANSPORTZEILER.PDF

#### **IMPROVE WATER QUALITY**

(page 46-49)

- · Stormwater Management Philadelphia Water Department: http://www. phillywatersheds.org/watershed\_issues/stormwater\_management
- Drover's Road Preserve: http:// www.ces.ncsu.edu/depts/agecon/WECO/lid/documents/ NC\_LID\_Guidebook.pdf; http:// www.droversroad.com; http:// www.equinoxenvironmental.com/ our-work/drovers-road-preserveconservation-subdivision
- U.S. Army Corps of Engineers (USACE) Planning Community Toolbox: Water Supply: http://planning.usace.army. mil/toolbox/guidance.cfm?Option= BL&BL=WaterSupply&Type=None& Sort=Default
- Catawba-Wateree Water Management Group (CWWMG): http://www. catawbawatereewmq.org

# **IMPROVE AIR QUALITY**

(page 50-53)

- Alternative Fuels Data Center: http://www.afdc.energy.gov
- · US DOE Clean Cities Program: http:// www1.eere.energy.gov/cleancities
- Rock Hill, SC: http://www.heraldonline.com/2012/04/22/3913835/ rock-hill-works-hard-at-being.html; http://www.cityofrockhill.com/ Home/ShowDocument?id=2700

- IdleBox Toolkit for Idle-Reduction Projects: http://www1.eere.energy. gov/cleancities/toolbox/idlebox.html
- Concord, NC Idling: http://www. concordnc.gov/Home/Article-Type/ArticleView/ArticleID/416/ PageID/416

# **GROW JOBS CLOSER TO**

**HOME** (page 54-57)

- National Main Street Center: http:// www.preservationnation.org/ main-street/about-main-street/ the-center/
- Tryon, NC Main Street: http://downtowntryon.org/
- · LNREDC: http://lakenormanregion. com/
- LNREDC Industrial Park: http:// www.nclm.org/meetings-training/ Documents/StrengthinRegions.pdf

# **INCREASE HOUSING** CHOICES (page 58-61)

- Builders of Hope: http://www.buildersofhope.org/
- · National Community Development Association: http://www.ncdaonline.org
- Salisbury CDC: http://salisburycdc.org/

# REDUCE COMMUTING

**COSTS** (page 62-65)

- Commute Connection: http:// commuteseattle.com/wp-content/ uploads/2013/11/Employer-Toolkit-2013-for-Web.pdf
- · CK Rider: http://www.ckrider.com
- Introduction to Complete Streets: http://www.smartgrowthamerica. org/documents/cs/resources/ cs-intro.pptx
- Charlotte USDG: http://charmeck. org/city/charlotte/Transportation/ PlansProjects/Pages/Urban%20 Street%20Design%20Guidelines. aspx

# CONNECT Our Future

# ACKNOWLEDGMENTS

# CONNECT PROGRAM & POLICY FORUM AND WORK GROUPS

(Jurisdictions & organizations represented)

Anson County, NC Stallings, NC Statesville, NC Albemarle, NC Belmont, NC Troutman, NC Bessemer City, NC Cabarrus County, NC Unionville, NC Charlotte, NC Wadesboro, NC Cherryville, NC Waxhaw, NC China Grove, NC Wingate, NC Cleveland County, NC Rock Hill, SC Cramerton, NC Lancaster County, SC

Concord, NC Davidson, NC Dallas, NC East Spencer, NC

Gaston County, NC Gastonia, NC Granite Quarry, NC Iredell County, NC Harrisburg, NC

Huntersville, NC Kannapolis, NC

Kings Mountain, NC Lincoln County, NC Lincolnton, NC

Locust, NC Lowell, NC Marshville, NC Marvin, NC Matthews, NC Mecklenburg County, NC

Midland, NC Mineral Springs, NC Misenheimer, NC Monroe, NC Mooresville, NC

Morven, NC Mount Holly, NC Mount Pleasant, NC

New London, NC Norwood, NC Peachland, NC Pineville, NC Ranlo, NC Rowan County, NC Salisbury, NC

Stanly County, NC

Union County, NC

York County, SC

AARP, Charlotte Chapter The Affordable Housing Group

Allen Tate Company Anson County Extension Bank of America

Blanchard Machinery Company

**Builders of Hope** 

Cabarrus County Extension

Cabarrus County Food Policy Council

Cabarrus Health Alliance

Calor Energy Cardinal Innovations Carolinas Healthcare System Catawba Indian Nation

Catawba Regional COG (CRCOG) Catawba Regional Local Food Coalition

Caterpillar Emissions Solutions Central Piedmont Community College Centralina Clean Fuels Coalition Centralina COG (CCOG) Centralina Economic Development

Commission

Char-Meck Food Policy Council

Charlotte DOT

Charlotte Housing Authority

Charlotte-Mecklenburg Coalition for

Housing

Charlotte-Mecklenburg Food Policy Council

Charlotte-Mecklenburg Housing

Partnership Charlotte Planning

Charlotte Regional Partnership

Charlotte Regional Transportation Planning

Organization (CRTPO) Clean Air Carolina

Cleveland County Community **Development Corporation** 

Cleveland County Extension Cleveland County Farm Bureau

Community Health Partners

Crescent Resources Discovery Place **Duke Energy EcoEnvisions** 

Gaston-Cleveland-Lincoln MPO (GCLMPO)

Gaston County Farm Bureau

Greater Charlotte Apartment Association

Habitat for Humanity-Charlotte

HomeSight

Housing Authority for the City of Chester

Housing Authority of Lancaster Housing Authority of Salisbury Huntersville Bike and Greenway Commission

IDFAS Center

Iredell County Health Department

Iredell County Extension Johnson C. Smith University

**K&L** Gates

Kimley-Horn and Associates, Inc.

Lake Norman RPO

Lancaster County Economic Development Corporation

Latin American Chamber of Commerce

Laurel Street Residential Lincoln County Extension

Lincoln Economic Development Authority (LEDA)

Mecklenburg County Department of Social Services

Mecklenburg County Environmental Policy

Mecklenburg County Extension

Mecklenburg County Health Department Mecklenburg-Union MPO

Mixed-Income Housing Coalition Monroe Housing Authority

Mooresville South-Iredell EDC

National Association of Home Builders

Natural Resources Defense Council North Carolina Department of

Environmental and Natural Resources North Carolina Department of Commerce

North Carolina Finance Agency (NCHFA)

North Carolina Sustainable Energy Association (NCSEA)

Northeastern University

Pfeiffer University

Piedmont Natural Gas

Primary Care Medicine & Public Health Synergy Consulting

Prosperity Unlimited, Inc.

Public Health Synergy Real Estate and Building Industry Coalition

Rock Hill Fort Mill Area Transportation Study (RFATS)

Rocky River RPO (RRRPO) Rowan County Extension Rowan Works EDC

Salisbury Housing Authority Saussy Burbank

Socialserve com

South Carolina Department of Health and **Environmental Control** 

South Piedmont Community College (SPCC)

St. Martin's Episcopal Stanly County Extension Statesville Housing Authority

Sustain Charlotte

Synergies Professional Solutions

The Lee Institute

Urban Land Institute, Charlotte District

US Green Building Council, Charlotte

Chapter

Union County Extension

Union County Tourism Commission

University of North Carolina Charlotte (UNCC)

**UNCC Public Health** 

**UNCC School of Architecture** 

**UNCC Urban Institute** 

Upper PeeDee Farm and Food Council

York Technical College Winthrop University

CONNECT CONSORTIUM AND WORK GROUP REPRESENTATIVES AS OF JANUARY 2015.



