



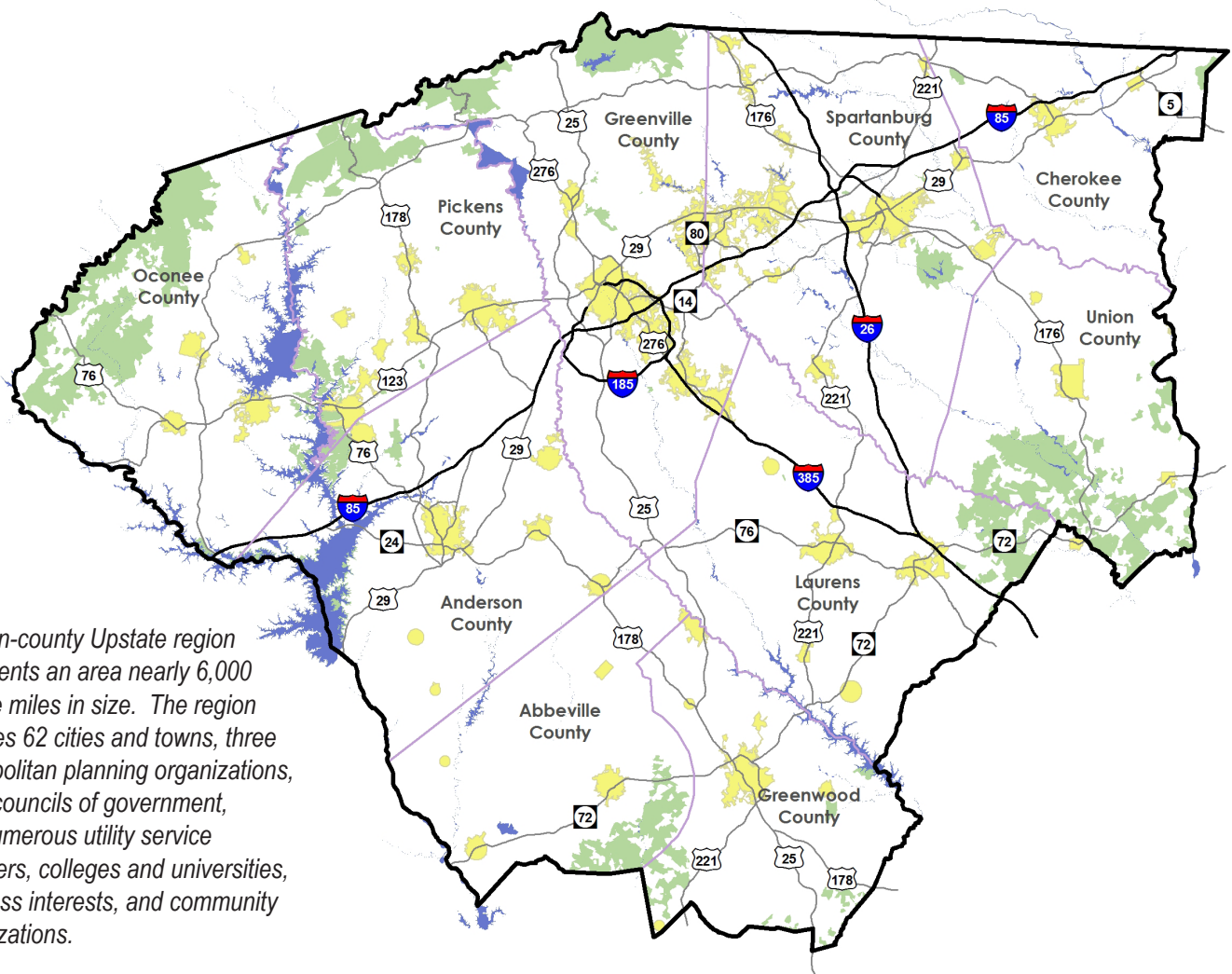
Shaping Our Future

Upstate South Carolina



The Shaping Our Future initiative assumes...

- ✓ Population in the Upstate will continue to grow.
- ✓ Doing nothing to prepare for future growth does not mean that the Upstate will stay the same.
- ✓ Decisions made today will have an impact on the Upstate long into future.
- ✓ Understanding, exploring, and measuring the trade-offs of different growth options will help our residents and leaders make informed decisions about the future.



The ten-county Upstate region represents an area nearly 6,000 square miles in size. The region includes 62 cities and towns, three metropolitan planning organizations, three councils of government, and numerous utility service providers, colleges and universities, business interests, and community organizations.



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This report was completed in June 2017.

About

The ten-county Upstate Region is growing, and is projected to welcome more than 300,000 new residents by 2040 to reach a total population of nearly 1,750,000 — an increase of 64% since 1990. How and where the region grows will have real impacts on residents' quality-of-life — affecting commute times and transportation choices, economic development opportunities, environmental sustainability, home choices, government finances, and family pocketbooks. The Shaping Our Future initiative is an opportunity to explore and debate alternative patterns for growth in the Upstate keeping in mind their associated trade-offs. Scenario planning — and specifically CommunityViz software — was used to evaluate the impacts of competing growth alternatives to inform future decision-making in the region, especially in regards to land use.

The initiative is being advanced by the Shaping Our Future Consortium — a partnership between Upstate Forever, Ten at the Top and the Riley Institute at Furman University — and relies on guidance from a broad spectrum of partners, including: elected officials, the business sector, local governments and utilities, community organizations, schools and universities, and environmental groups. The study's findings and recommendations can serve as a valuable resource for demonstrating the impacts and trade-offs for alternative ways communities might grow in the future, and provide initial guidance for some of the most pressing growth-related issues facing communities in the region. The growth discussion framework — data, tools, findings and next steps — should spur continued collaboration in the ten-county region, and highlight important findings and recommendations for preparing future community plans, policies and studies.

The study builds on previous work completed by Consortium members and others including the Upstate Growth Study, Upstate Reality Check, Upstate Shared Growth Vision, and lessons learned from the Shaping Our Future Speaker Series.

The Shaping Our Future Growth Alternatives Analysis was made possible by the generous contributions of Hollingsworth Funds, the Greater Greenville Association of Realtors, Ten at the Top, the Riley Institute at Furman University, New Belgium Brewing Company, and Upstate Forever. Additional resources created during the Shaping Our Future initiative can be found on the project's website (www.ShapingOurFutureUpstateSC.org).

The Trend Trajectory

Growth and development in the Upstate Region have historically followed a low-density, single-use pattern moving away from existing city centers — commonly referred to as suburban sprawl — which requires outward expansion of roads, water and sewer lines, schools, parks, fire and police protection, etc. to serve the newly developed areas. This pattern of development consumes a tremendous amount of land — especially rural, farm and forested areas — to accommodate new growth and increases the distance and time spent commuting between home, work and shopping destinations. The blueprint for the region's 'trend development growth scenario' is contained in the plans, programs and ordinances of government, local market demands, available investment capital, and developer interests.

Looking toward 2040, the Upstate is on pace to change significantly if it continues following trend development patterns and intensities throughout the ten-county

region. The amount of land consumed to accommodate new growth and development (the “development footprint”) could more than double. Government’s cost to serve the newly developed areas with water, sewer, roads and police and fire protection would increase dramatically over time, and the revenues expected from low-density, single-use development patterns miles away from existing service areas would likely not cover half of the projected costs. Equally important, the amount (and especially the rate) of change for some areas of the Upstate might threaten current residents’ high quality-of-life, as well as the competitive advantage this region has for attracting continued growth and investment long into the future.

A Call to Action

Addressing issues associated with rapid population growth while increasing economic prosperity and protecting quality of life is an issue that the Upstate – like many regions – has been grappling with for decades. Achieving a balance between private property rights and proactive growth management through planning and policy-making is an ongoing and difficult challenge facing local governments.

Whether through federal or state-mandated land use and transportation planning efforts, or those which have been privately led, the Upstate has been in a local and regional planning dialogue for generations, with each successive study or plan confirming a similar message: encourage future growth and development for continued economic prosperity, ensure infrastructure is in place to manage it, and proactively manage that growth to safeguard the region’s high quality-of-life. More directly, do not sacrifice a long-term vision and financial, environmental or social goals for potential short-term gains that may lead to unintended consequences when compounded over time. Unfortunately, the symptoms of decline in a region oftentimes go unnoticed until it is too late – or at least until a point at which it is very expensive to reduce or reverse the negative trends.

The regional dialogue about growth and development in the Upstate has generally concluded with a statement like:

We do not want to see our region become Greater Charlotte or Greater Atlanta in the future because these places suffer from the ills of rapid, low-density and decentralized growth patterns: rapid loss of rural and agricultural lands, legendary traffic congestion issues, skyrocketing housing costs, schools operating over their intended capacity, poor air quality, and expensive infrastructure projects deemed necessary to reactively manage compounded growth problems.

Participants in the Shaping Our Future initiative made similar statements about avoiding the problems experienced in the Greater Charlotte and Greater Atlanta regions. Unfortunately, actions speak louder than words, and in part due to the challenges outlined above, much of the Upstate is on the same path in 2017 as these two regions were just decades ago. This trajectory will likely not change unless major changes are made to the ‘trend development scenario ways’ that result in low-density and decentralized growth patterns over much of the ten-county region.

For the Upstate to buck the trend and grow in a manner that accommodates future growth while protecting the character of the region and current residents’ quality of life will require increased understanding of the trade-offs of varying growth choices. Recognizing that most residents and local government leaders want similar outcomes, future discussions on how to grow must find a way to effectively balance proactive planning and policy decisions to achieve desired community outcomes with preferences regarding limited government and individual property rights.

The findings from the Shaping Our Future Analysis provide a tool for citizens and community leaders to engage in a more informed discussion about growth choices. The results help clarify the connections between local land use decisions and regional impacts. Ultimately, the findings and recommendations in this study are designed to empower local Upstate leaders and decision-makers to engage community members in growth management discussions so that they can successfully enact community-based visions for the future.

An approach to thoughtful growth should generally focus on building relationships, increasing knowledge



and capacity, and coordinating regional high-priority infrastructure. Initial ideas and concepts for implementing these three initiatives include:

Building Relationships

- Facilitate dialogue about future growth and identify opportunities to coordinate on solutions that address shared concerns in the region using groups regularly convened by Ten at the Top such as the Upstate Professional Planners Group as well as more targeted opportunities to inform and educate stakeholders.
- Build even stronger relationships in the region between private, government and non-profit interests for advancing local and regional priorities and growth strategies.
- Build public trust by sharing the results of the Shaping Our Future initiative with community members and decision-makers and continue efforts to achieve the vision stated in the Upstate Shared Growth Vision document.

Increase Knowledge & Capacity

- Provide data and tools from Shaping Our Future to cities, towns, districts, counties and regional-focused planning organizations to better plan and achieve their goals.
- Start an initiative to capture ‘best practices’ from around the region and share them with other communities in an annual case study document series.
- Help local governments and regional service providers (i.e., transportation, water, sewer, etc.) better align their plans and policies influencing growth and development patterns.
- Build awareness of the regional impacts of local land use decisions on water quality, local food and agricultural opportunities, economic competitiveness, etc.

Coordinate Regional High-Priority Infrastructure

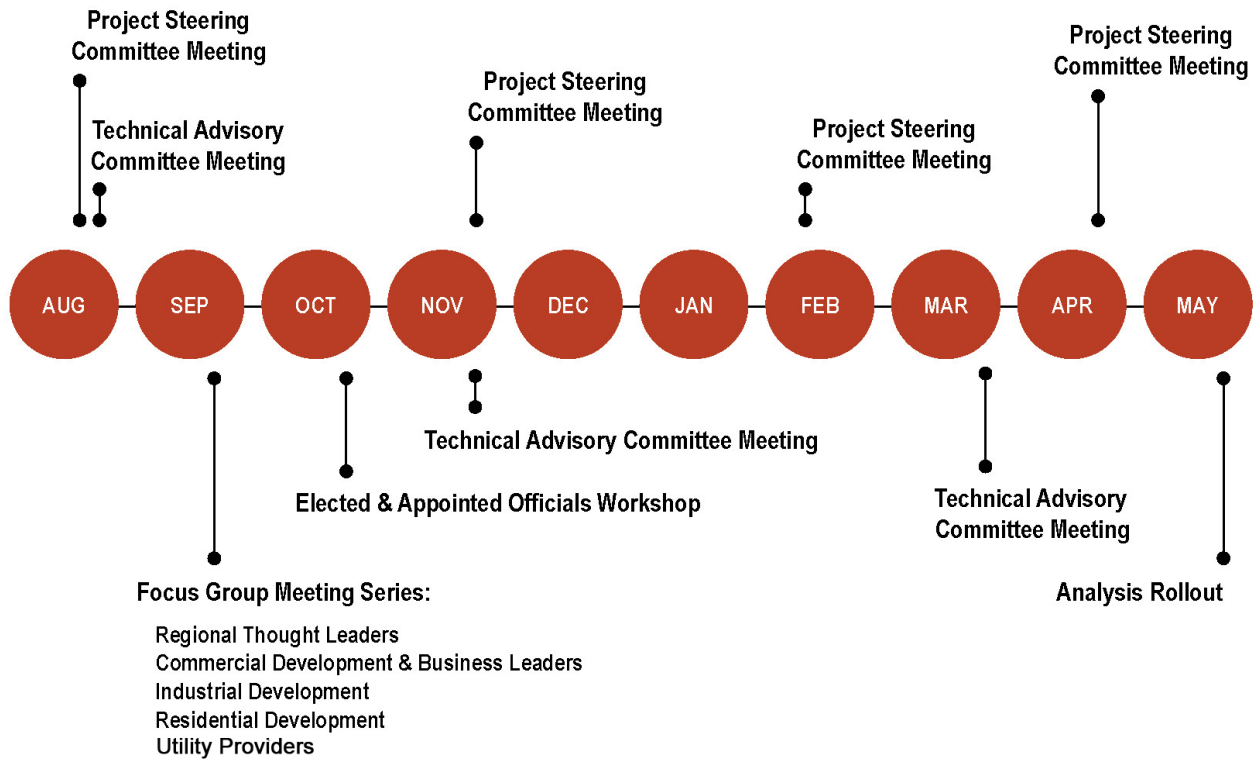
- Encourage more collaboration between SCDOT, the three Upstate MPOs, and local land use planners regarding freight movement, road network planning and street design, and transit readiness.
- Stress the importance of water resource planning, including water quality and quantity, in the context of a rapidly-growing region and the notion that water resource issues regularly transcend political or service provider boundaries.
- Build awareness of the economic benefits of “green infrastructure” and encourage communities to identify lands within their jurisdictions that naturally provide otherwise costly services (i.e. stormwater management and infiltration, prime soil conservation, etc.)
- Support regional needs to improve economic development infrastructure in the Upstate as a means to compete globally for continued business investment.

These approaches are suggested because local and regional planning and coordination is a multi-generational investment that needs time to take hold. One size does not fit all for communities looking to implement findings and ideas from Shaping Our Future, and the notion of ‘community-based regionalism’ means stronger communities will result in a more vibrant region.

The Shaping Our Future Consortium stands ready to assist communities throughout the region in any way, as voluntary implementation begins.

To access background information, technical reports, and other data and information created through the Shaping our Future Growth Alternatives Analysis effort, or to secure technical assistance and guidance advancing recommendations from this report, visit www.ShapingOurFutureUpstateSC.org or contact Upstate Forever at (864) 250-0500 or info@upstateforever.org.

Our Process



It was important for Shaping Our Future that the alternative growth scenarios prepared for study considered the region's outstanding quality-of-life, key development markets, environmental assets, and varied preferences about growth and growth choices. The project team worked with several stakeholder groups to understand the challenges and opportunities facing the region and create viable alternative growth scenarios. Key partners involved in the study process included:



Shaping Our Future Consortium

The Shaping Our Future Consortium — representing Upstate Forever, Ten at the Top and Furman’s Riley Institute — was responsible for facilitating the overall planning process, ensuring information generated for the project was impactful, and establishing a long-term framework so that the project would live on in the Upstate (focused especially on continued collaboration in the region and implementation of key findings and recommendations from this project in other plans, policies and studies). Members of the Consortium interacted regularly during the planning process using email, bi-weekly conference calls, and project milestone meetings. Their time and effort were instrumental for hosting a successful series of partner and focus group meetings, and for preparing all of the data, tools and documents created to support the Growth Alternatives Analysis.

Project Steering Committee

The project steering committee for Shaping Our Future was used to validate the scenario planning process, verify data, identify key planning themes and case study locations, and review draft deliverables. Those on the committee represented a broad base of interests, viewpoints and concerns for the Upstate Region, including economic development, education, transportation, housing, utility service, environmental stewardship, and private developers. Four meetings were held with the committee at key milestones in the study process.

Technical Advisory Committee

The technical advisory committee for Shaping Our Future was used to validate the scenario planning process, verify and secure data, and review draft findings and recommendations. Those on the committee represented a broad base of interests, viewpoints and concerns for the Upstate Region, including land use, transportation, farmland protection, education, environmental stewardship, and several professional development service providers (i.e., engineers, planners, landscape architects, etc.). Many participants on the committee are also members of the Ten at the Top Upstate Professional Planners Group. Three meetings were held with the committee at key milestones in the study process.

Members of the Steering Committee for the Shaping Our Future Growth Alternatives Analysis:

Michael Allen – McMillan Pazdan Smith Architects
Harriett Belue – Spartanburg County Farm Bureau
Chip Bentley – Appalachian Council of Governments
Richard Blackwell – Oconee Economic Alliance
Matt Carter – C. Dan Joyner Commercial Realtors/
Greenville Transit Authority Board
Andrea Cooper – Upstate Forever
Michael Cunningham – AnMed Health
Brett Dalton – Clemson University
Michael Dey – Greenville Home Builders Association
Mark Farris – Greenville Area Development Corporation
Michael Forman – Anderson County Planning/Upstate
Professional Planners Group Co-Chair
Linda Hannon – Duke Energy
Laura Henthorn – Mark III Properties
Mitch Kennedy – City of Spartanburg
Butch Kirven – GPATS Policy Committee/Greenville
County Council
Phil Lindler – Greenwood City & County Planning/
Upstate Professional Planners Group Co-Chair
Rob Rain – Johnson Development Associates, Inc.
Graham Rich – Renewable Water Resources (ReWa)
Terence Roberts – ANATS Policy Committee/Mayor, City
of Anderson
Sue Schneider – Spartanburg Water
Stephen Steese – City of Easley
Walter Torres – Printing Solutions

Focus Group Meetings

Focus group meetings were used in the Shaping Our Future Growth Alternatives Analysis to summarize and evaluate market forces, development policies, available infrastructure and political viewpoints in the Upstate Region. Thoughts and ideas from the meetings influenced different development types, locations, patterns and intensities in the four growth scenarios, and helped identify important issues for selecting the project's case study topics. All events were held in the City of Greer on September 19 – 21, 2017. A summary of the events and information collected from the focus groups can be found at www.ShapingOurFutureUpstateSC.org. A brief description of each focus group meeting follows:

Regional Thought Leaders

The project team for Shaping Our Future met with Regional Thought Leaders identified as community leaders in the Upstate. The goals of the meeting were to introduce these leaders to the project, discuss broad growth challenges facing the region, and identify key quality of life aspects the region must strive to maintain as it grows. Twenty-one people attended the event representing a broad range of interests in the region: local farms, elected officials, business and economic development, local government, historic resources, education, transportation and mobility, rural and urban issues, recreation, community foundations, and open space preservation. A presentation by the project team was followed by a discussion on topics related to quality of life. Attendees brainstormed a list of quality of life factors that should be protected as the region grows. Those factors were in turn considered when selecting topics for the project's case studies.

Commercial Development & Business Leaders

The project team for Shaping Our Future met with commercial developers and business leaders to gather information regarding site selection criteria that makes one area — or one type and style of commercial or office development — more attractive to grow and develop compared to others in the Upstate Region. Eight people attended the event representing the viewpoints of business, economic development, engineering

and chambers of commerce in the region. Attendees brainstormed a list of important 'growth drivers' and 'hot spots' for future commercial and office development, which were considered when developing key themes for each of the four growth scenarios. The group also discussed industries the Upstate is currently targeting and those they hope to attract in the future.

Industrial Development

The project team for Shaping Our Future met with industrial developers and economic development leaders to gather information regarding site selection criteria that makes one area — or one type and style of industrial development — more attractive to grow and develop compared to others in the Upstate Region. Four people attended the event representing the viewpoints of business and economic development in the region. Attendees brainstormed a list of important 'growth drivers' and 'hot spots' for future industrial development, which were considered when developing key themes for each of the four growth scenarios. The group also discussed industries the Upstate is currently targeting and those they hope to attract in the future.

Residential Development

The project team for Shaping Our Future met with residential developers and real estate experts to gather information regarding site selection criteria that makes one area — or one type and style of residential neighborhood — more attractive to grow and develop compared to others in the Upstate Region. Fifteen people attended the event representing the viewpoints of developers, home builders, real estate experts, elected officials and engineers in the region. Attendees brainstormed a list of important 'growth drivers' and 'hot spots' for future residential development, which were considered when developing key themes for each of the four growth scenarios.

Utility Service Providers

The project team for Shaping Our Future met with utility service providers to gather feedback on the influence and impact of available infrastructure for making one area — or one type and style of development — more attractive compared to others in the Upstate Region. Ten people attended the event representing the viewpoints of water, sewer, electric and natural gas

providers in the region. The group was asked to identify general service areas in the region and challenges associated with serving specific new development types, locations, patterns or intensities in the future.

Elected Officials Workshop

On October 27, 2016, the project team for Shaping Our Future met with nearly 60 elected and appointed officials to collect their opinions on a variety of growth-related topics — ranging from current growth trends to the effectiveness of existing land development controls to opportunities and threats of future development



over the next 25 years. Comments from the meeting were captured in a written survey and push-button voting exercise (both completed during the event). It was truly an interactive experience, and the ‘instant results’ provided in the push-button polling exercise framed much of the participants’ discussion, and quickly measured consensus for several key topics from viewpoints across the region.

A summary of the event and information collected from the push-button voting exercise can be found at www.ShapingOurFutureUpstateSC.org.

Growth Alternatives Analysis Forum

On May 25, 2017, the Shaping Our Future Consortium hosted a region-wide Growth Alternatives Analysis Forum, which was used to share findings and recommendations from the project and explore the resources, processes, partners and next steps necessary to continue promoting the principles of community-based regionalism. Presentations by project team members highlighted the trade-offs of competing growth scenarios, and the opportunities or threats each scenario might bring to the ten-county region. A panel discussion by local representatives started identifying opportunities to continue collaboration in the region and implement some of the key findings and recommendations from this project in other plans, policies and studies.

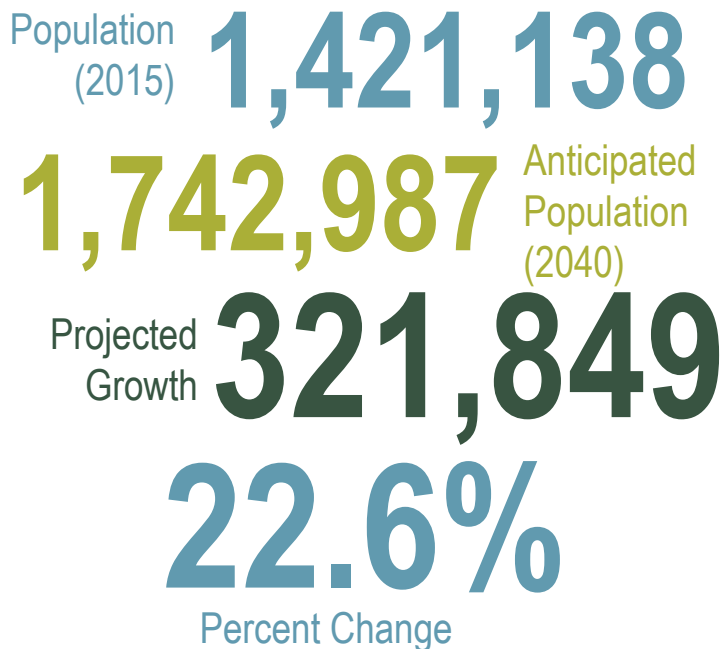


Upstate at a Glance

CURRENT CONDITIONS & EMERGING TRENDS

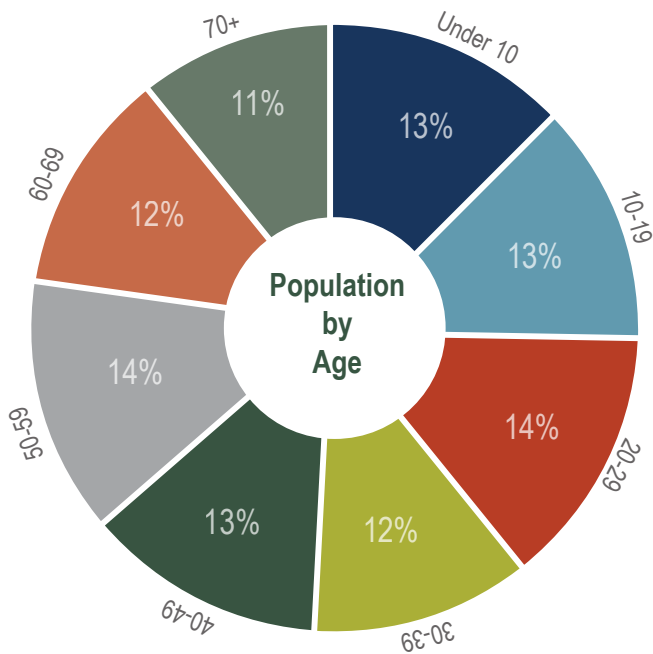
Demographic, employment, and commuting data for the Upstate were collected to establish a baseline of information for contemplating alternative futures in each of the four growth scenarios. The data summarized in this section provides the 'pulse of the region' in 2015-16. Some of the indicators (i.e., existing home choices, transportation, travel time to work, etc.) could be used in the future to track progress implementing key themes from one or more of the alternative growth scenarios.

Population & Demographics



Population in the Upstate will continue to increase from 2015 to 2040 at a rate of 23%. The US Census Bureau has found that the population growth rate in the region will exceed the nation as a whole. Within South Carolina, population growth in the region will exceed the rates of growth forecast for both the Charleston and Columbia Areas.

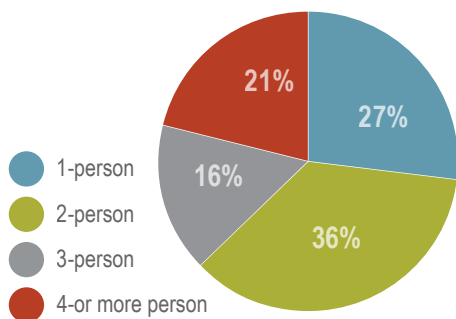
SOURCE 2015: WOODS & POOLE ECONOMICS, INC. (DATA DOWNLOADED OCTOBER 7, 2016)



The age distribution of Upstate residents in 2015 is illustrated in the chart above. It is important to note that by 2040, according to the US Census, there will be 75,000 more young people under the age of 19, and 25% of all residents in the region will be over the age of 65 (a doubling in senior population from approximately 214,000 in 2015 to 437,000 in 2040). These two groups require specific services that must be taken into account as the region grows.

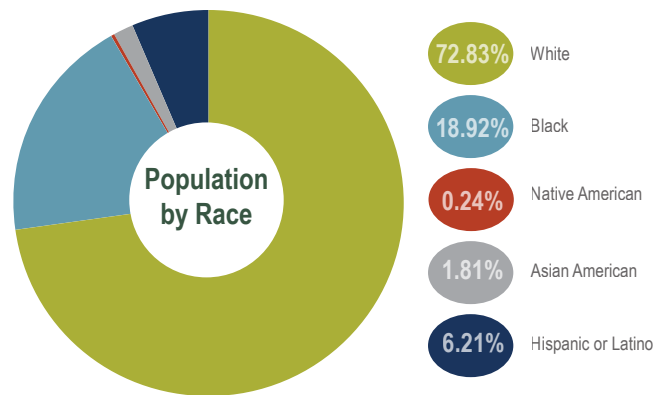
SOURCE 2015: WOODS & POOLE ECONOMICS, INC. (DATA DOWN-LOADED OCTOBER 7, 2016)

Household Size



Household sizes in the region are consistent with patterns seen in the rest of the US. Since 1970, household sizes have tended to become much smaller, with the number of two person households – roughly one third of total households – increasing the most.

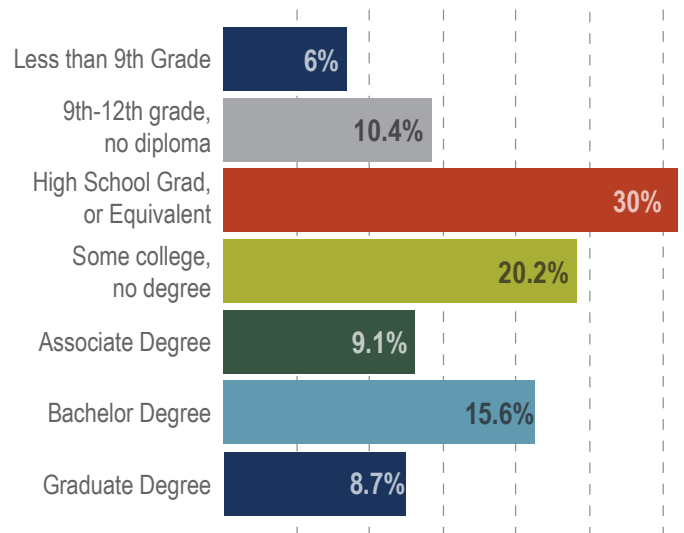
SOURCE: US CENSUS BUREAU, AMERICAN COMMUNITY SURVEY, FIVE YEAR ESTIMATES, 2011-2015, TABLE S2501



The graph above depicts racial and ethnic percentages of residents in the Upstate in 2015. The percentage of population that is White, Non-Hispanic is typical of the nation as a whole. While the percentage of Hispanic or Latino is lower than the national rate, the percentage of Black, Non-Hispanic is higher.

SOURCE 2015: WOODS & POOLE ECONOMICS, INC. (DATA DOWN-LOADED OCTOBER 7, 2016)

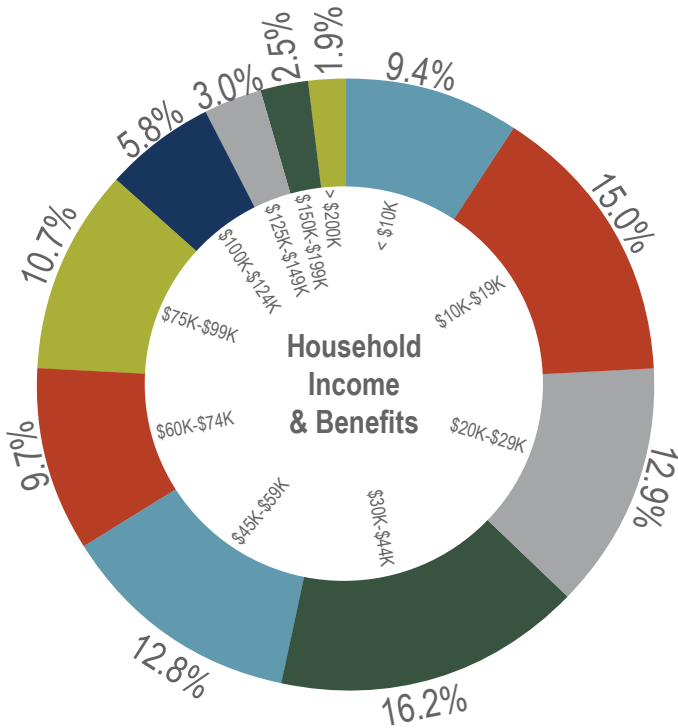
Educational Attainment (Population 25 Years or Older)



Roughly 84% of Upstate residents 25 years and older have at least a high school education or equivalent. 29% of those individuals have achieved an Associate Degree or attended some college, while 16% have a Bachelor Degree and 9% have an advanced degree.

SOURCE: US CENSUS BUREAU, AMERICAN COMMUNITY SURVEY, FIVE YEAR ESTIMATES, 2011-2015, TABLE S1501, COMPILED BY INFOMENTUM - A DECISION SUPPORT SYSTEM FOR UPSTATE SOUTH CAROLINA

Upstate at a Glance



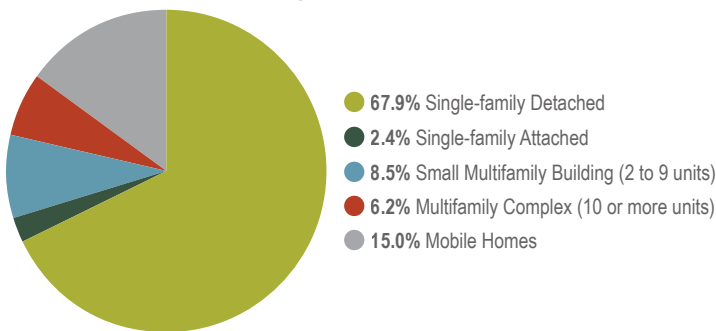
\$33,736 Per Capita Income

Household income and benefits in the Upstate vary greatly, ranging from 9% of households earning less than \$10,000 annually to roughly 13% of households earning \$100,000 and above. The average per capita income for the region is lower than both the State of South Carolina (\$35,100) and the United States (\$43,700).

SOURCE: WOODS & POOLE ECONOMICS, INC. (DATA DOWNLOADED OCTOBER 7, 2016)

Home Characteristics

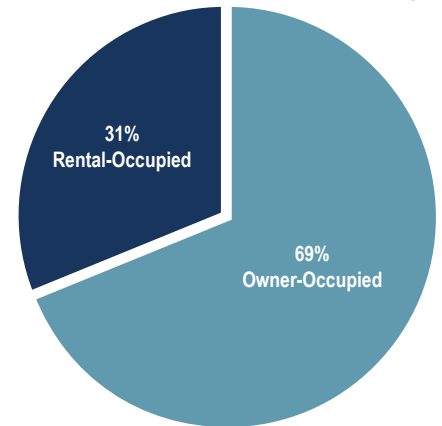
Existing Home Choices



More than two-thirds of homes in the Upstate are classified by the US Census Bureau as single-family detached, meaning one home on one lot sharing no walls with another home. The second largest categories in the region are mobile (manufactured) homes (15%) and small and large multifamily homes combined – such as condominiums and apartments of varying densities (15%). Single-family attached homes, typically sharing one or two walls with another home (townhomes) are the least represented in the region.

SOURCE: US CENSUS BUREAU, AMERICAN COMMUNITY SURVEY, FIVE YEAR ESTIMATES, 2011-2015, TABLE S2504

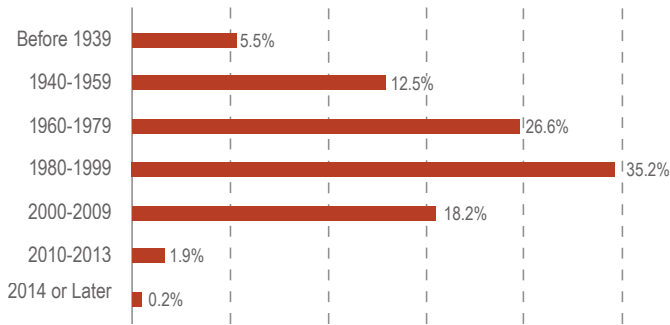
Owner-Occupied vs. Rental Housing Units



Just under 70% of homes in the Upstate are owner-occupied, meaning the individual or family living there is paying a mortgage to someday own the home. Comparatively, the national percentage of owner-occupied housing is slightly higher than 65%, suggesting that home ownership may be more attainable in the region than in other parts of the country.

SOURCE: US CENSUS BUREAU, AMERICAN COMMUNITY SURVEY, FIVE YEAR ESTIMATES, 2011-2015, TABLE S2504

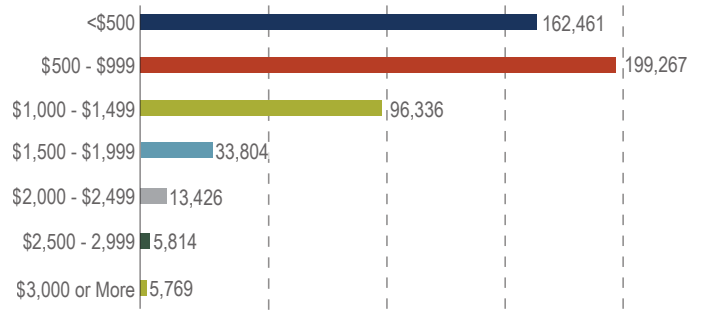
Tenure By Year Housing Built



Over half of the region's housing stock was built after 1980, with a substantial proportion being built in the 1960s and 1970s. Nearly 80% of people in the Upstate are living in a home built before 2000 (either owner- or renter-occupied).

SOURCE: US CENSUS BUREAU, AMERICAN COMMUNITY SURVEY, FIVE YEAR ESTIMATES, 2011-2015, TABLE S2504

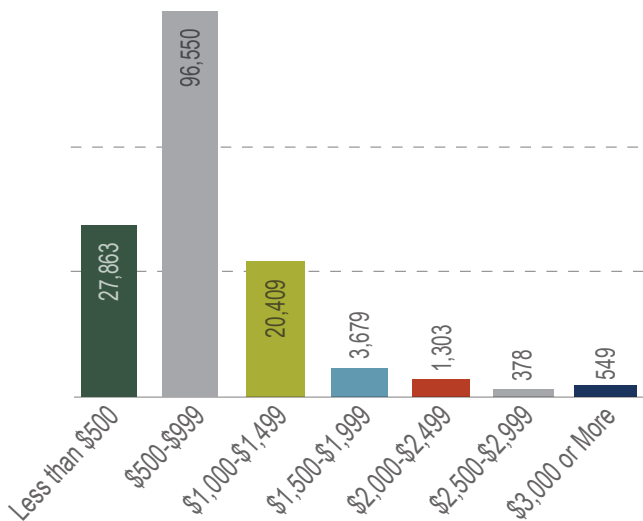
Typical Monthly Home Ownership Costs



Typical home ownership costs — mortgage, taxes, utilities and insurance — are slightly lower in the Upstate than the nation as a whole with most households paying less than \$1,500 per month. However, some areas of the region report monthly home ownership costs much higher than this figure.

SOURCE: US CENSUS BUREAU, AMERICAN COMMUNITY SURVEY, FIVE YEAR ESTIMATES, 2011-2015, TABLE B25104

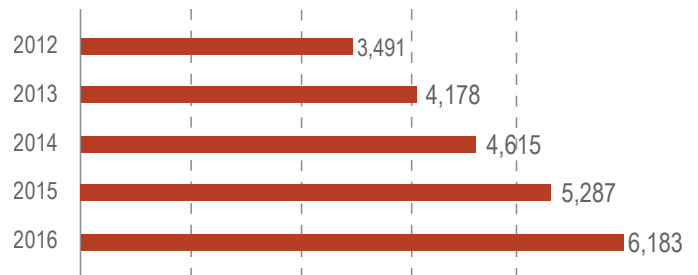
Typical Monthly Home Rental Costs



About 82% of the region's population who rent their housing spend less than \$1,000 in gross rent. This is substantially lower than the nation as a whole where only 56% spends less than \$1,000. However, some areas of the region report monthly rental costs much higher than this figure.

SOURCE: US CENSUS BUREAU, AMERICAN COMMUNITY SURVEY, FIVE YEAR ESTIMATES, 2011-2015, TABLE DP04

Residential Building Permits

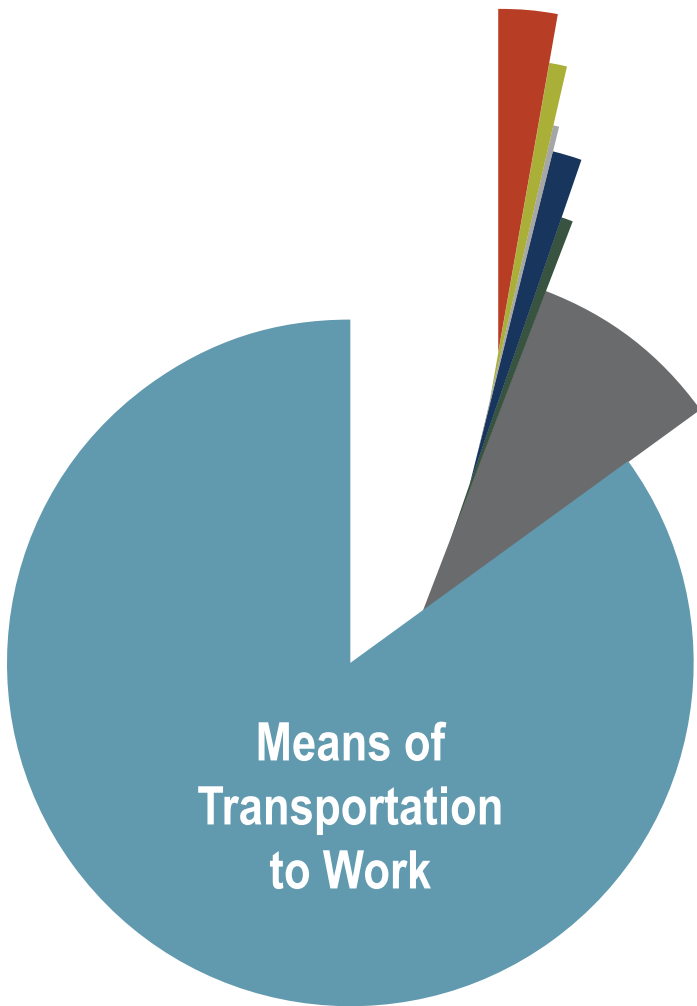


NOTE: STATISTICS REPORTED FOR THE TEN-COUNTY REGION MINUS UNION AND CHEROKEE COUNTIES

Data maintained by the Upstate SC Alliance indicates building permit activity has been on the rise every year since 2012. This is consistent with patterns in much of the nation where building permits have increased since the recession of 2008-09.

SOURCE: UPSTATE SC ALLIANCE, DATA & RESOURCES WEBSITE (DATA DOWNLOADED APRIL 3, 2017)

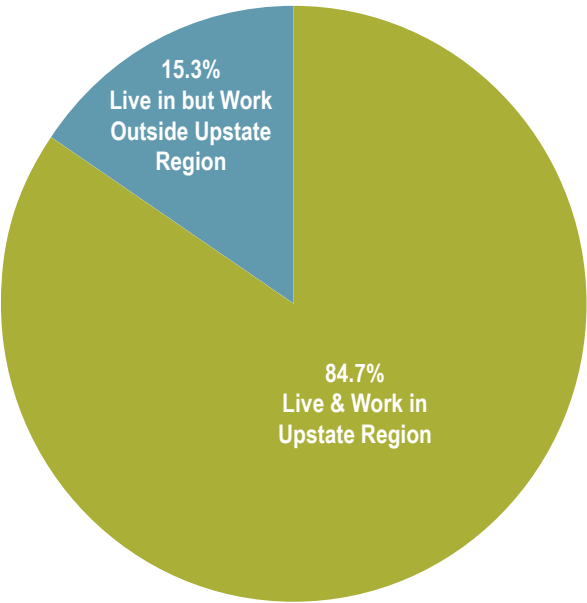
Transportation



- Work at home 3.0%
- Taxi, Motorcycle, Other 0.8%
- Bicycle 0.1%
- Walked 1.6%
- Public Transportation 0.4%
- Automobile (Carpool) 9.1%
- Automobile (Single-occupancy) 84.9%

The majority of workers in the Upstate report traveling by standalone (single-occupant) automobile, meaning they travel between work and home alone in their car. Approximately 9% of workers carpool with someone else to their job on a daily basis. Very few people in the region walk, use a bicycle, or take transit for their work trip.

SOURCE: US CENSUS BUREAU, AMERICAN COMMUNITY SURVEY, FIVE YEAR ESTIMATES, 2011-2015, TABLE S0801

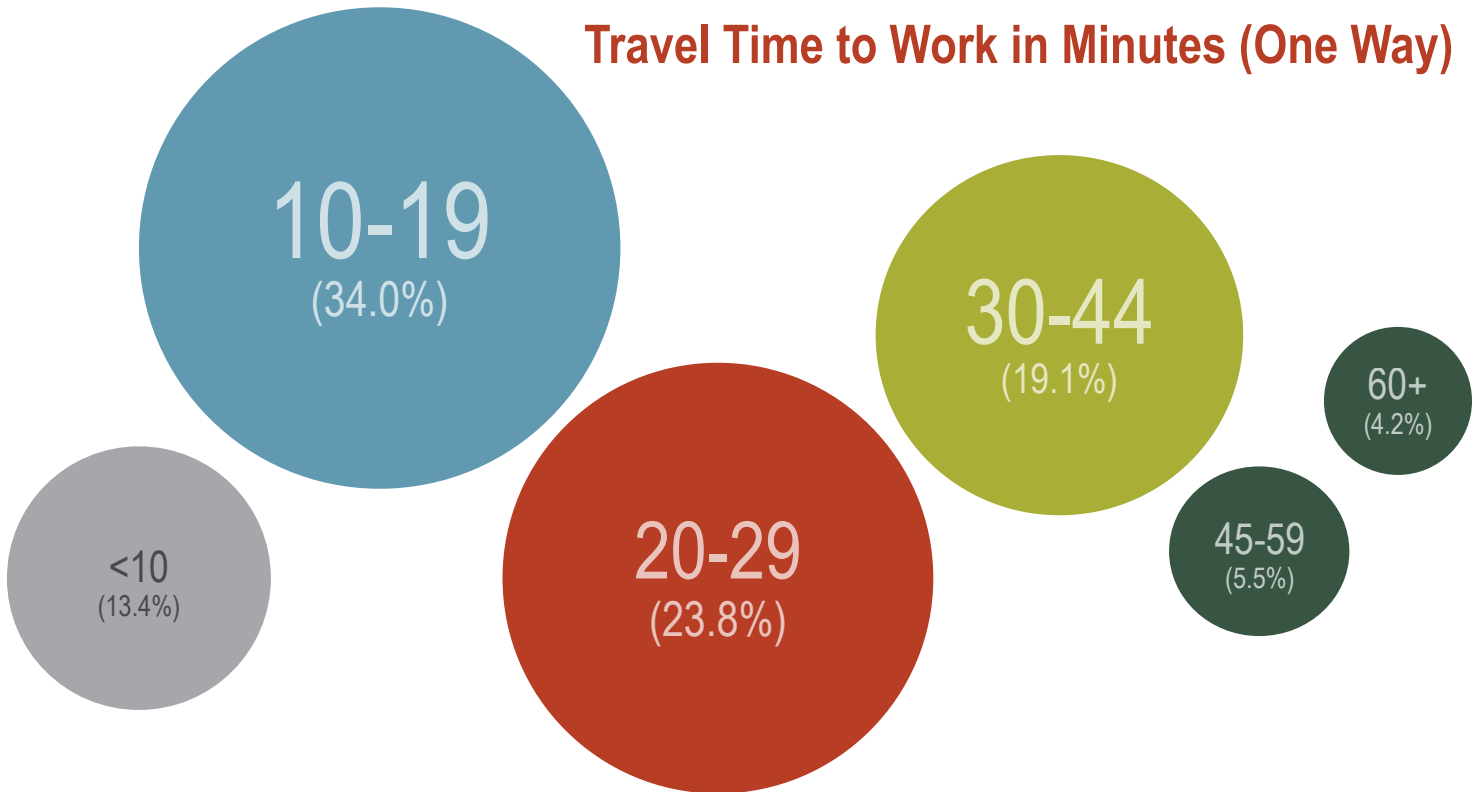


Living in Place of Work

People living in the Upstate generally work in the ten-county region too. However, more than 15% of people do leave the region every day to work in places like Charlotte, Rock Hill and Columbia.

SOURCE: US CENSUS BUREAU, ONTHEMAP APPLICATION AND LEHD ORIGIN-DESTINATION EMPLOYMENT STATISTICS (BEGINNING OF QUARTER EMPLOYMENT, 2ND QUARTER OF 2002-2014)

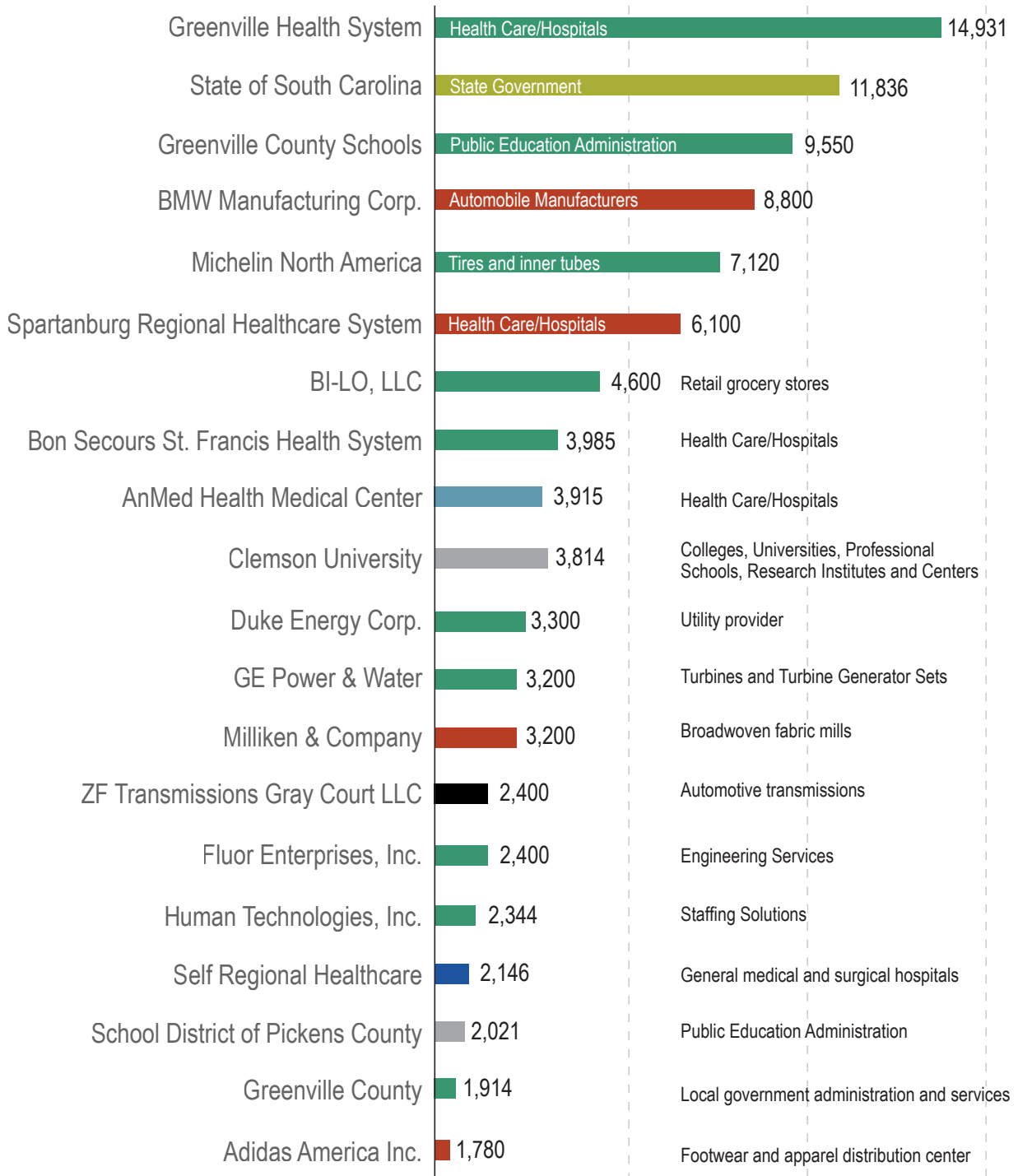
Travel Time to Work in Minutes (One Way)



Most Upstate workers travel less than 30 minutes each way, although longer commutes of up to 45 minutes each way are not uncommon. Just over 13% of workers commute less than 10 minutes one way.

SOURCE: US CENSUS BUREAU, AMERICAN COMMUNITY SURVEY, FIVE YEAR ESTIMATES, 2011-2015, TABLE S0801

Largest Employers in the Upstate



SOURCE: DATA MAINTAINED BY THE UPSTATE SC ALLIANCE FOR 2016 INDICATES HEALTH CARE, STATE GOVERNMENT, SCHOOL DISTRICTS AND MANUFACTURING AS MAJOR EMPLOYERS IN THE TEN-COUNTY REGION.

Private Capital Investments in the Upstate

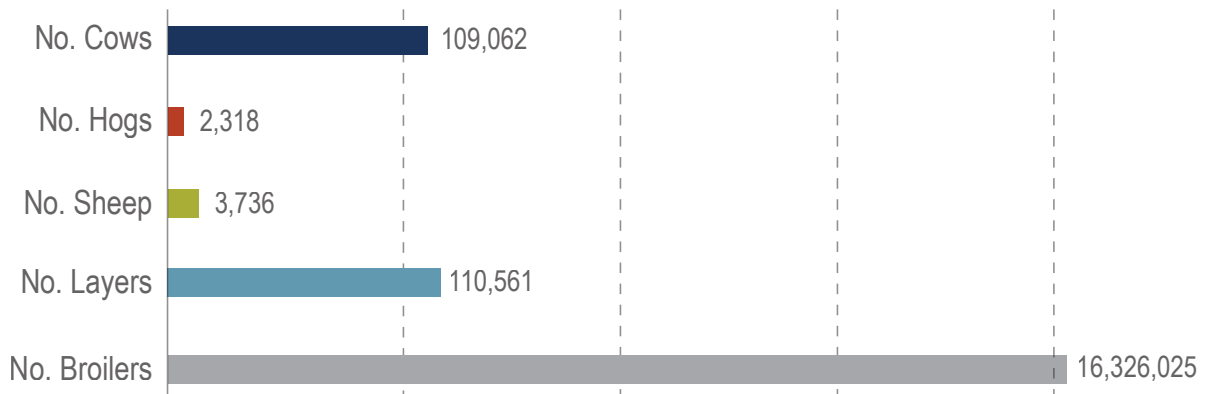
Year Reported	New Jobs	Annual Capital Investment (Dollars)
2012	4,117	\$2,306,960,000
2013	4,966	\$1,101,450,500
2014	4,932	\$4,055,062,200
2015	6,374	\$1,311,224,726
2016	5,396	\$1,894,763,206

Between 2012 and 2016, private capital investment by new and existing businesses in the Upstate region exceeded \$10.6 billion while adding more than 25,000 new jobs. While capital investment fluctuates annually, the number of new jobs in the region has remained relatively steady.

SOURCE: UPSTATE SC ALLIANCE, DATA & RESOURCES WEBSITES
(DATA DOWNLOAD APRIL 3, 2017)

Upstate Region Agriculture Statistics

Number of Farms **8,178** Land Area in Farms (Acres) **858,714**
 Average Farm Size (Acres) **119** Total Cropland (Acres) **230,240**
 Market Value of Agriculture Products Sold **\$340,355,000**



Roughly 40% of food produced in the US is wasted throughout the entire food system – starting at the farm and ending with what is thrown away by the consumer. The average fruit or vegetable in the US travels 1,500 miles from where it is grown to reach a consumer’s dinner table.

There are more farms and farming activities in the Upstate than people initially think, which contributed more than \$340 million to the region’s economy in 2012 (the last year of the USDA Census of Agriculture). Livestock – especially chickens (layers and broilers) – dominate the region’s agriculture economy.

SOURCE: USDA CENSUS OF AGRICULTURE, 2012 CENSUS, VOLUME 1, CHAPTER 2, COUNTY LEVEL DATA



Thinking as a Region

WORKING TOGETHER FOR GENERATIONS

Working across jurisdictional boundaries to address major issues or opportunities is something the Upstate Region has been doing in some manner for generations. The development of GSP International Airport, location of BMW's North American Manufacturing Facility and creation of regional organizations to support economic development and environmental sustainability are just a few examples of how leaders from across the Upstate have come together to address issues that impact the region.

When it comes to looking at future population and the various impacts it will have on our region – fiscal, quality-of-life, and environmental – leaders from across the Upstate have been convening for the last decade to discuss and identify opportunities to address major growth issues. The Shaping Our Future Growth Alternatives Analysis builds upon those previous efforts, introducing new data and tools that cities, counties and towns can use to help shape growth in their own communities.

A summary of major milestones around regional-thinking for land use and population growth in the Upstate Region follows.

Strom Thurmond Institute Growth Study

The Strom Thurmond Institute at Clemson University completed a study in 2008 entitled 'Modeling Growth and Predicting Future Developed Land in the Upstate of South Carolina'. A geographic system-based model was developed by the researchers, combining statistical methods with expert information collected from around the region, to forecast what the region might look like in 2030 assuming current development

trends and principles remain in place. The results of the modeling effort indicated that – conservatively speaking – land was being developed at a rate five times faster than the rate of population growth from 1990 to 2000.

The model architecture and variables used in the Institute's 2008 model were evaluated for the Shaping Our Future Growth Alternatives Analysis, and incorporated into CommunityViz, where appropriate, to take advantage of prior research and development.

Upstate Reality Check Event

On April 8, 2009, over 400 people from across the region participated in the Upstate Reality Check, a hands-on, interactive exercise hosted by Ten at the Top and the Urban Land Institute to contemplate growth and how to accommodate it. LEGO blocks were used to represent forecasted population and employment growth through 2030, and a work map and colored yarn let participants distribute growth and new infrastructure among 62 communities in the ten-county region. Table top exercises were completed during the event, and the data compiled to identify common values, common themes, and the general impacts and trade-offs associated with different development concepts available for accommodating future growth. Results from the exercise were shared with participants using a large-group meeting presentation.

One theme welcomed during the event was "we really do agree, more than we disagree". This consensus was to become the foundation from which participants might go forth and be effective together.

Four general growth concepts were identified after reviewing the table work at the event: dispersed, corridor, compact and rural village development. These are the four starting concepts that were used to develop the growth scenarios contemplated for the Shaping Our Future Growth Alternatives Analysis.

More information on the Upstate Reality Check event can be found at www.southcarolina.uli.org/upstate-reality-check.

Upstate Shared Growth Vision

Building on the work of the Upstate Reality Check, in 2010 Ten at the Top used community surveys, community forums and workshops, and presentations to ask more than 10,000 Upstate residents to share “what matters most as we look towards the future and future growth in the Upstate?” The result was the Upstate Shared Growth Vision, which calls for the Upstate in 2030 to be “universally recognized as a leading place in the United States to live, learn, do business and raise a family.”

The regional vision focuses around five driver areas for implementation: Human Potential, Community Vibrancy, Economic & Entrepreneurial Vitality, Sustainable Growth and Natural Beauty & Resources. Each element includes strategies and action items for guiding voluntary implementation across the Upstate. Ten at the Top created task forces around each driver area and has spent the last six years working with organizations from across the region to identify and implement collaborative opportunities to enhance capacity and grow connectivity across the Upstate around elements of the vision and driver areas.

A copy of the Upstate Shared Growth Vision document is available from the Ten at the Top website (www.ourupstatesc.org/our-upstate-vision-collateral.php).



Shaping Our Future Speaker Series

The Shaping Our Future Consortium formed in 2015. One of its first actions was to organize a speaker series that focused on threats, opportunities, and trends important to safeguarding the future of the Upstate, which helped inform the scenario planning and growth alternatives analysis for Shaping Our Future. National experts and regional leaders shared their experiences and best practices on a variety of topics important to the Upstate Region: infrastructure, government financing, home buying preferences, place-making, and open space preservation.

Videos and meeting summaries for each presentation can be found at www.ShapingOurFutureUpstateSC.org.



Looking Ahead

HOW MIGHT THE REGION GROW IN THE FUTURE?

Introduction

Scenario planning provides a forum, process, set of tools and measurable outcomes for regions of all sizes to contemplate future possibilities. The process generally relies on empirical data, quantitative analysis, qualitative assessment and community engagement to visualize important choices ahead, and their impacts and trade-offs for meeting stated community goals and values. No two scenario planning initiatives are ever the same, and all require some level of innovation or flexibility to properly align the right processes and tools for decision-making with preferences, norms or protocols specific to the region.

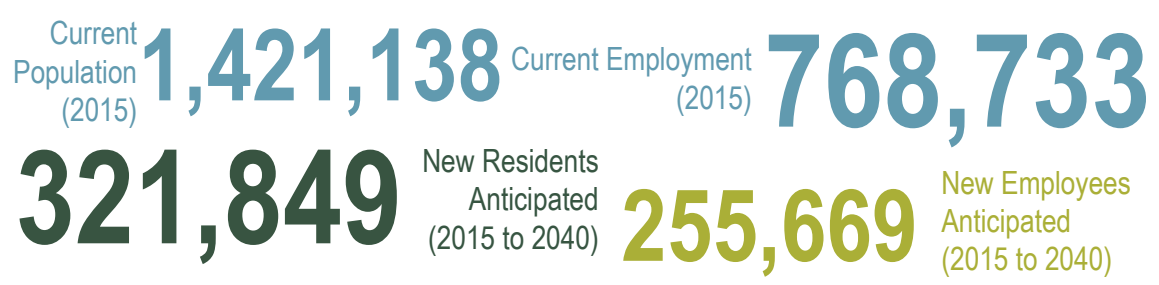
Visualization of the interaction between land use, infrastructure, economic, environmental and government finance decisions, as well as the causal factors that

explain the push-pull relationships between them, provides community leaders with the information needed to evaluate the consequences of potential actions. Thinking of the region as a whole, and as a series of interacting systems, also eliminates some of the traditional silo thinking prevalent in parts of the Upstate Region (whether isolated by system category, service area or municipal limits).

Ultimately, the scenarios themselves are fictitious stories about the future. They are not forecasts or predictions, but possible futures that may come to pass based on what already exists, emerging trends, or the region's desires to change course for the future. The essential requirement of any growth scenario is that it be plausible, within the realm of what exists or what could be.

Well-developed growth scenarios encourage critical thinking about issues or events that might significantly impact a region's economy, built environment, natural environment or quality-of-life (either now or in the future).

Comparing alternative growth scenarios for the region strengthens the visioning process, and provides information (in the form of performance measures) to prioritize outcomes, set targets and monitor implementation. Data, documents and tools generated in the scenario planning process help local governments, service providers and advocacy groups in future projects, local planning efforts and studies.



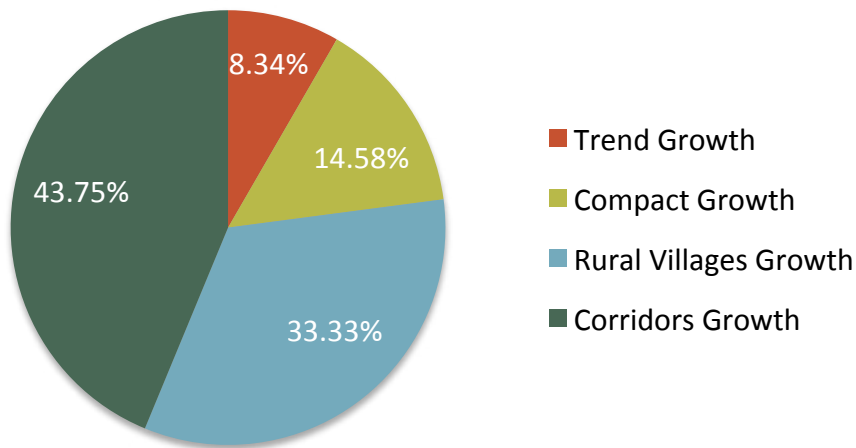
(Projected new residents and projected new employees remain constant across scenarios)

Trend Development Scenario

The project team prepared a trend development scenario for the Upstate Region using local comprehensive plans and information volunteered by the partner groups. Population and employment projections for the ten-county region between 2015 and 2040 relied on data published by Woods and Poole Economics, Inc. Protected open space in the region was assumed to remain at current levels for measuring and evaluating conditions in 2040. The road network assumed for the region matched what is used for the South Carolina Department of Transportation Statewide Travel Demand Model.

More information about the trend development scenario is provided on pages 22 and 23.

What is our best path forward for meeting future demands and protecting quality of life?



During an Upstate Elected Officials Workshop held in October 2016, attendees were asked to share which growth scenario “is our best path forward for meeting future demands and protecting quality-of-life”. Approximately 90% in attendance selected a scenario other than the Trend.

Alternative Growth Scenarios

The project team prepared three alternative growth scenarios for the Upstate Region using information volunteered by the partner groups. Each scenario was different enough to pose real choices for how communities within the region might develop using variations on several growth-related variables: housing mix, public facilities and services, viable travel options, environmental stewardship, jobs-housing proximity, farmland preservation and development footprint.

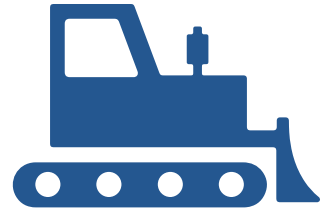
The three alternative growth scenarios include:

- Compact Centers
- Major Corridors
- Rural Villages

Each growth scenario used projections for population and employment between 2015 and 2040 identical to the trend development scenario. Assumptions for protected open space and the starting transportation network for each alternative growth scenario were also identical to the trend development scenario. The number and mix of dwelling units, key growth centers, utility service areas, road improvements, and transit systems in each scenario were different to account for competing development patterns and intensities represented in the scenarios.

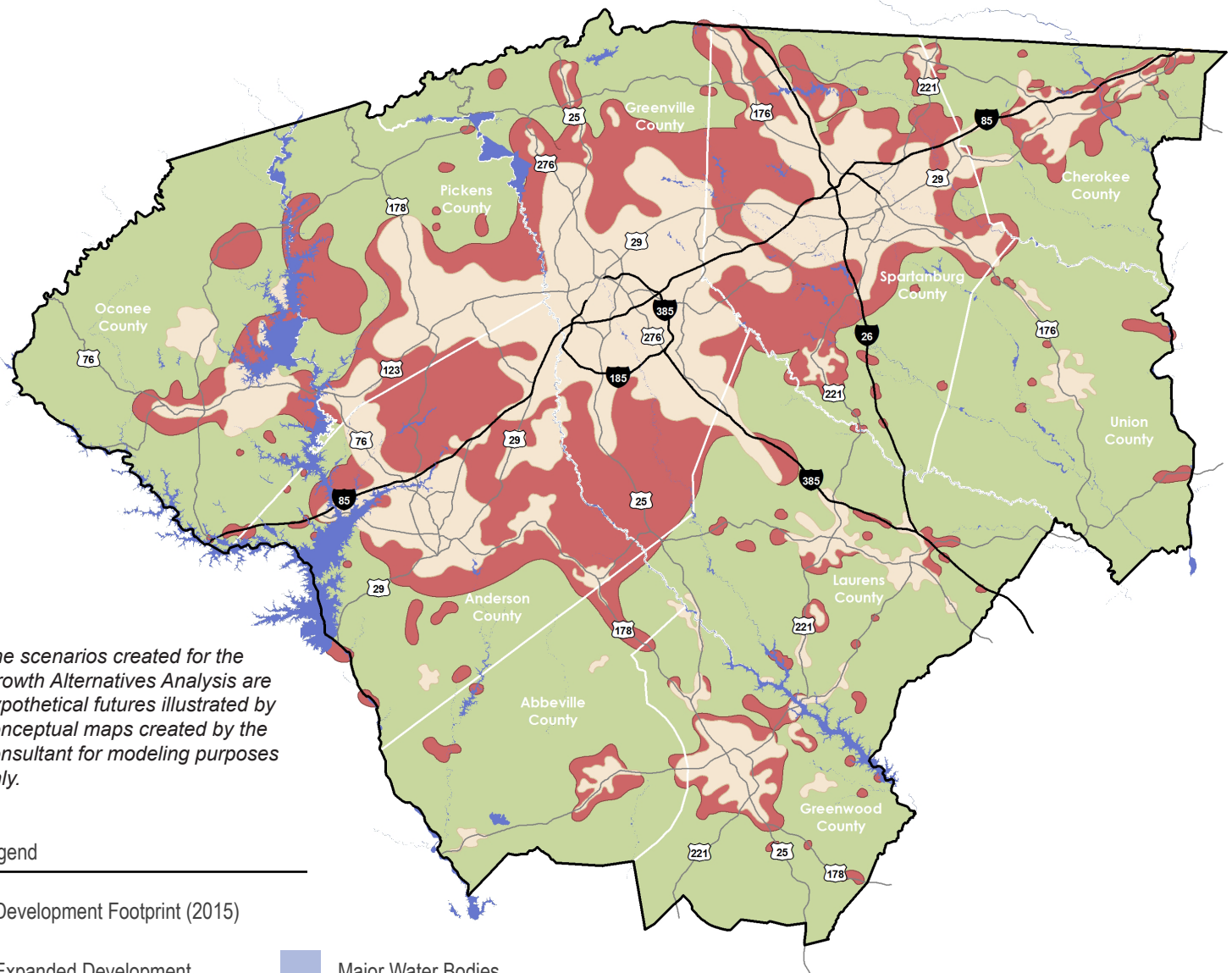
More information about each alternative growth scenario is provided on pages 24 through 29.

Trend Development Growth Scenario



The Trend Development Scenario shows how the region might develop if adopted community plans were followed for the next 25 years. Future growth would continue to favor low-density, single-use development patterns and intensities moving away from existing city centers, which requires outward expansion of roads, water and sewer lines, fire and police protection, etc., to serve the newly developed areas. This pattern of development consumes a tremendous amount of land — especially rural, farm and forested areas — to accommodate new growth and increases the distance and time spent commuting between home, work and shopping destinations primarily by automobile.

If the Upstate continues following the land use and transportation plans and policies it has for the last 25 years, what will it likely look like by 2040?



The scenarios created for the Growth Alternatives Analysis are hypothetical futures illustrated by conceptual maps created by the consultant for modeling purposes only.

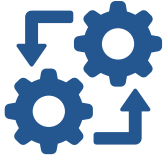
Map Legend

- Development Footprint (2015)
- Expanded Development Footprint (2040)
- Undeveloped Areas (2040)
- Major Water Bodies
- County Boundaries
- Interstates
- Major Roads



Housing Mix

The region would build primarily large-lot, single-family detached homes to meet future demand. New housing supply would be approximately 90% single family and 10% multifamily. New residential neighborhoods would average fewer than three homes per acre.



Public Facilities & Services

Local governments would continue to expand their water, sewer and transportation systems to keep up with expanding suburban growth. Growth would not be constrained by existing service, and infrastructure investments would focus on new or expanding service areas throughout the region.



Viable Travel Options

Cars would be the primary mode of transportation for residents in the region. Investments in interstates and highways would try to keep up with growth. Only the most urban areas of the region would have transit service, which would primarily operate as a closed system of local bus routes not connected to other cities and towns.



Environmental Stewardship

The amount of new land held as protected open space (parks, greenways, natural areas, etc.) would follow past trends in the region — approximately 62.5 square miles have been protected by local and regional land trusts over the last twenty years — and we would assume a similar rate for land conservation would continue in the future.



Jobs-Housing Proximity

Most employees would still drive long distances for work, especially to destinations in Greenville or along the I-85/I-385 corridors. Only a few communities in the region would have jobs and housing located close enough together to realize expected benefits (e.g., shorter commute distance or lower commute times).



Farmland Preservation

Farmland preservation would not be a priority in the region. Working farms would become new residential neighborhoods, commercial shopping centers, and office complexes.



Development Footprint

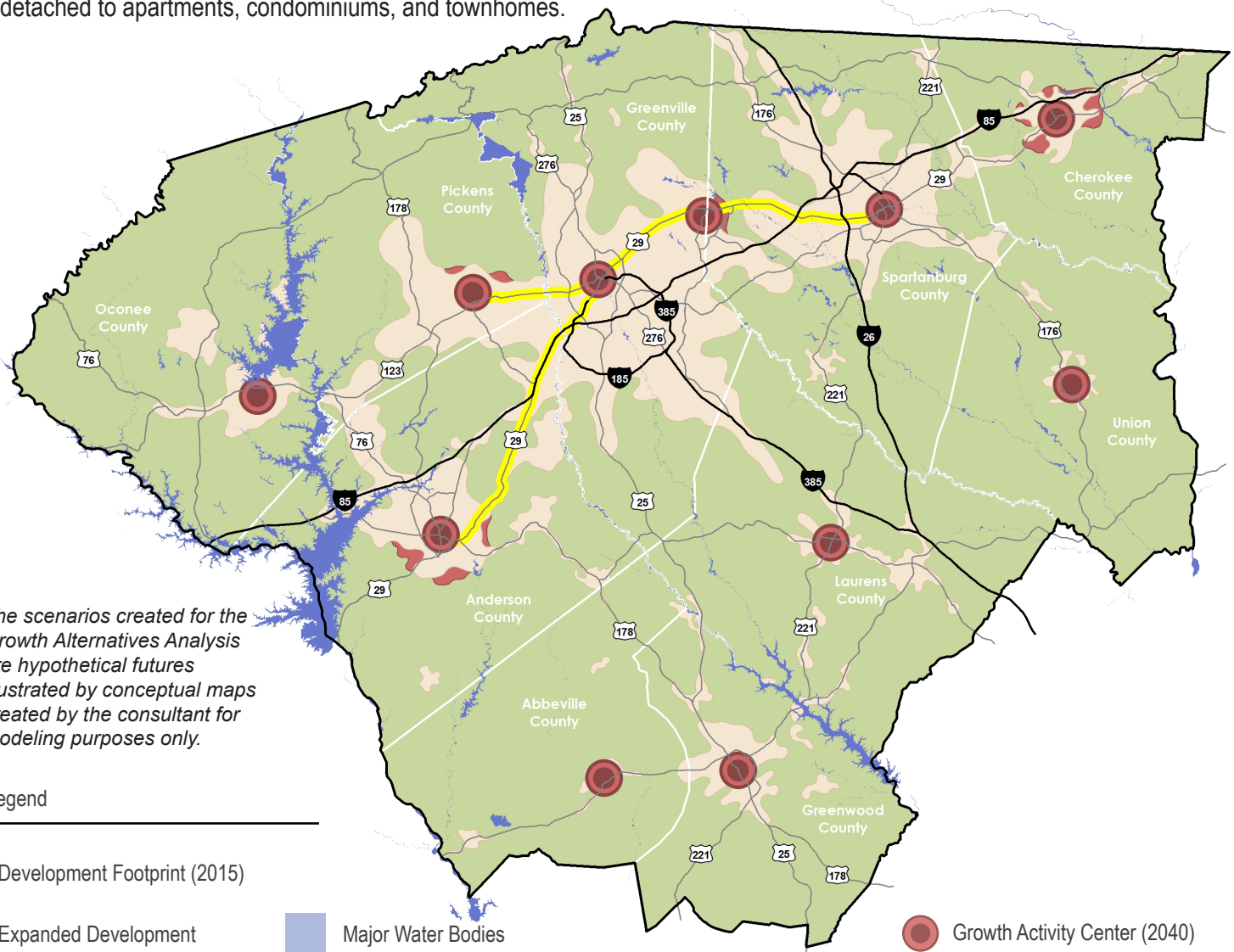
Single-use, low-density development patterns would be spread throughout the region; exemplified by suburban neighborhoods, highway strip-commercial, and standalone office or industrial development. Mixed-use, walkable development patterns (residential, retail, and office combined) would be focused in only a few urbanizing communities (e.g., Downtown Greenville).

Compact Centers Growth Scenario



The Compact Centers Growth Scenario considers how the region might develop if growth were concentrated in regional growth centers identified on the scenario map. The design, scale and intensity of the centers would create unique places in the region, and encourage active living with opportunities to live, work, shop and play in the same community. Land surrounding future development would remain open space, farmland, forested areas or rural living areas. This is an extreme scenario for the Upstate, but provides a dramatic illustration of the merits of extremely compact growth. This scenario would focus all new development for the region in an area roughly the size of the City of Greenville – less than 30 square miles. It would rely heavily on infill development, repurposed buildings, and redevelopment of underutilized parcels. Also, it would require a major shift in neighborhood design and home choices from primarily single family detached to apartments, condominiums, and townhomes.

What does the region look like if we focus nearly all growth into dense, mixed-use & urban activity centers?



The scenarios created for the Growth Alternatives Analysis are hypothetical futures illustrated by conceptual maps created by the consultant for modeling purposes only.

Map Legend

- Development Footprint (2015)
- Expanded Development Footprint (2040)
- Undeveloped Areas (2040)
- Major Water Bodies
- County Boundaries
- Interstates
- Major Roads
- Growth Activity Center (2040)
- Major Transit Corridors (2040)



Housing Mix

A major shift in neighborhood design and housing choices would favor multifamily housing to meet future demand (62% multifamily vs. 38% single-family). Average residential densities would range from six units/acre for single-family detached homes, to 20 units/acre for townhomes, to 50 units/acre for condominium and apartment homes per acre.



Public Facilities & Services

Infrastructure investments (water, sewer, roads, etc.) would be lower (but not eliminated) by concentrating new growth and development in existing service areas.



Viable Travel Options

The emphasis would be switched from car to transit for trips within the urban centers. Local bus service would connect riders with premium regional transit corridors (bus rapid transit). Widespread use of mixed-use, walkable development principles in the growth centers would help shorten trip length and increase the number of viable travel mode options. Daily travel needs would be served by walking, biking, or transit within, and between, nearby growth centers.



Environmental Stewardship

An abundance of open space, farmland, forested areas and rural living surrounding the identified centers would offset higher densities and less private open space in the urban environments. Low impact development principles would also contribute to a greener landscape in more rural areas.



Jobs-Housing Proximity

Mixed-use, walkable growth centers would significantly increase opportunities to link jobs and housing in close proximity.



Farmland Preservation

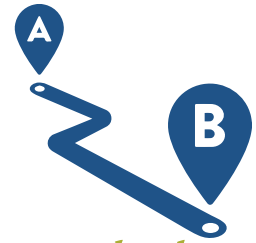
Farmland preservation would be a high priority. Working farms would be protected using policies, rules or incentives that promote farming as critical for future economic development. Nearly all farmland identified in the region would be maintained under this scenario.



Development Footprint

Future growth would be focused in compact, walkable centers. Nearby opportunities to live, work, shop and play would draw people to urban or urbanizing areas. Land outside identified growth centers would be protected for open space, farmland, forested areas and rural living.

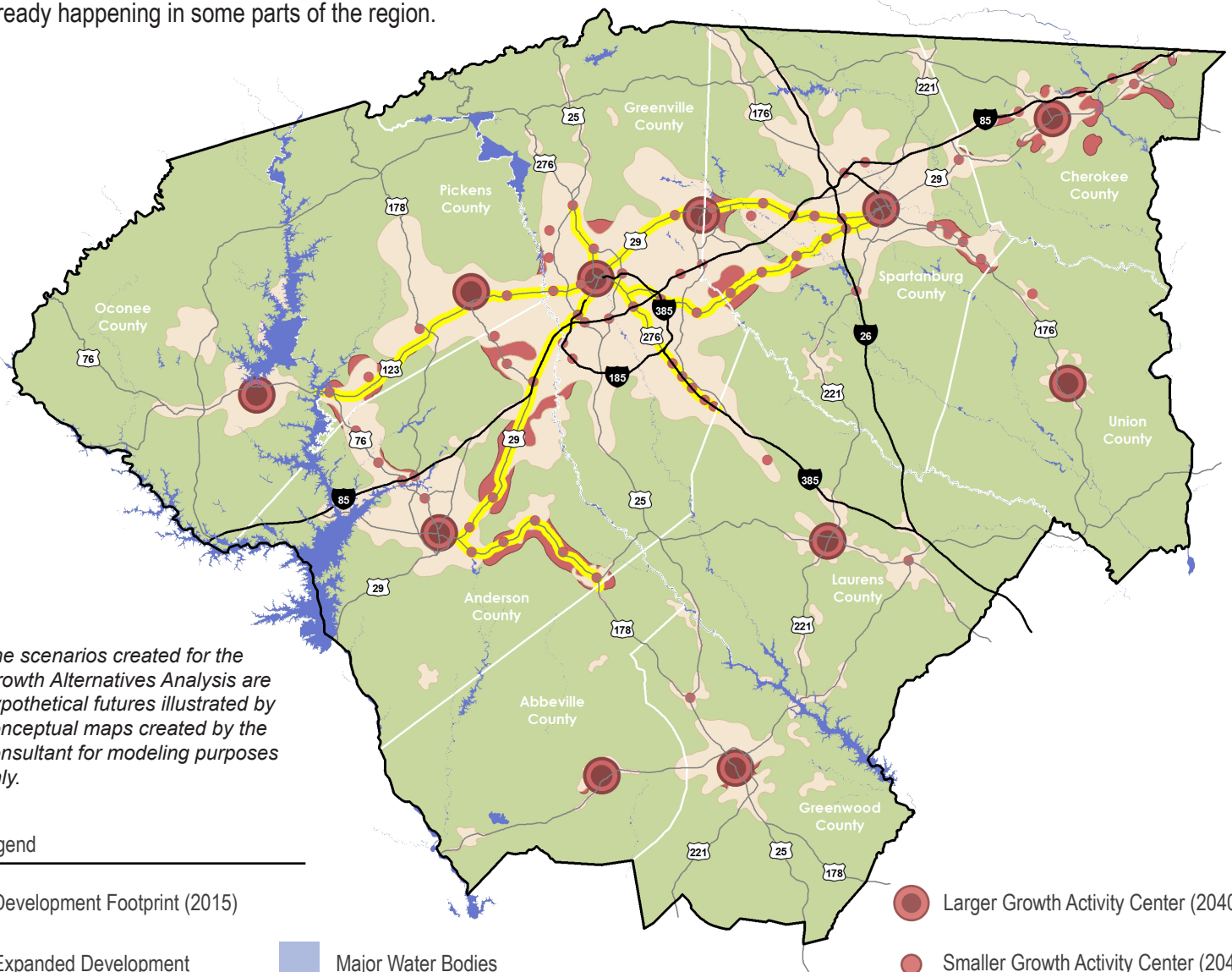
Major Corridors Growth Scenario



The Major Corridors Growth Scenario considers how the region might develop if growth is concentrated along transportation corridors. The design, scale and intensity of development in the corridors would create unique places, and encourage active living in a series of centers identified for opportunities to live, work, shop and play in the same community (or at least in close proximity between two or more nearby centers). Targeted investments in premium transit (bus rapid transit) and highway improvements (interstates or limited access highways) would move people efficiently along the corridors and between the identified centers.

What does the region look like if we focus growth into strategic transportation corridors that connect many mixed-use, walkable activity centers together?

This is a moderate scenario for the Upstate that is already happening in some parts of the region.



The scenarios created for the Growth Alternatives Analysis are hypothetical futures illustrated by conceptual maps created by the consultant for modeling purposes only.

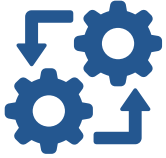
Map Legend

- Development Footprint (2015)
- Expanded Development Footprint (2040)
- Undeveloped Areas (2040)
- Major Water Bodies
- County Boundaries
- Interstates
- Major Roads
- Major Transit Corridors (2040)
- Larger Growth Activity Center (2040)
- Smaller Growth Activity Center (2040)



Housing Mix

A shift in neighborhood design and housing choices would better balance the distribution between single-family (54%) and multifamily (46%) housing compared to the Trend Development Growth Scenario. Average residential densities would range from four units/acre for single-family detached homes, to 16 units/acre for townhomes, to 30 units/acre for condominium and apartment homes.



Public Facilities & Services

Infrastructure investments (water, sewer, roads, etc.) would be managed by limiting expansion to new or emerging strategic growth corridors.



Viable Travel Options

Targeted investment in premium transit (bus rapid transit) and highways (interstates or limited access freeways) would efficiently move people between growth centers and development nodes. Local bus service would connect riders with premium regional transit corridors (bus rapid transit). Widespread use of mixed-use, walkable development principles in the growth centers and development nodes would help shorten trip lengths and increase the number of viable travel mode options. Daily travel needs would be served by walking, biking, transit and car within the corridors, centers and nodes.



Environmental Stewardship

Protecting land outside the growth centers or development nodes for open space, farmland, forested areas, or rural living would increase a green print for the region. Low impact development principles would also contribute to a greener landscape in more rural areas.



Jobs-Housing Proximity

Mixed-use, walkable growth centers or development nodes would significantly increase opportunities to link jobs and housing in close proximity along corridors.



Farmland Preservation

Farmland preservation would be a high priority. Working farms would be protected using policies, rules or incentives that promote farming as critical for future economic development, though some farms near the strategic growth corridors may be lost to new development.



Development Footprint

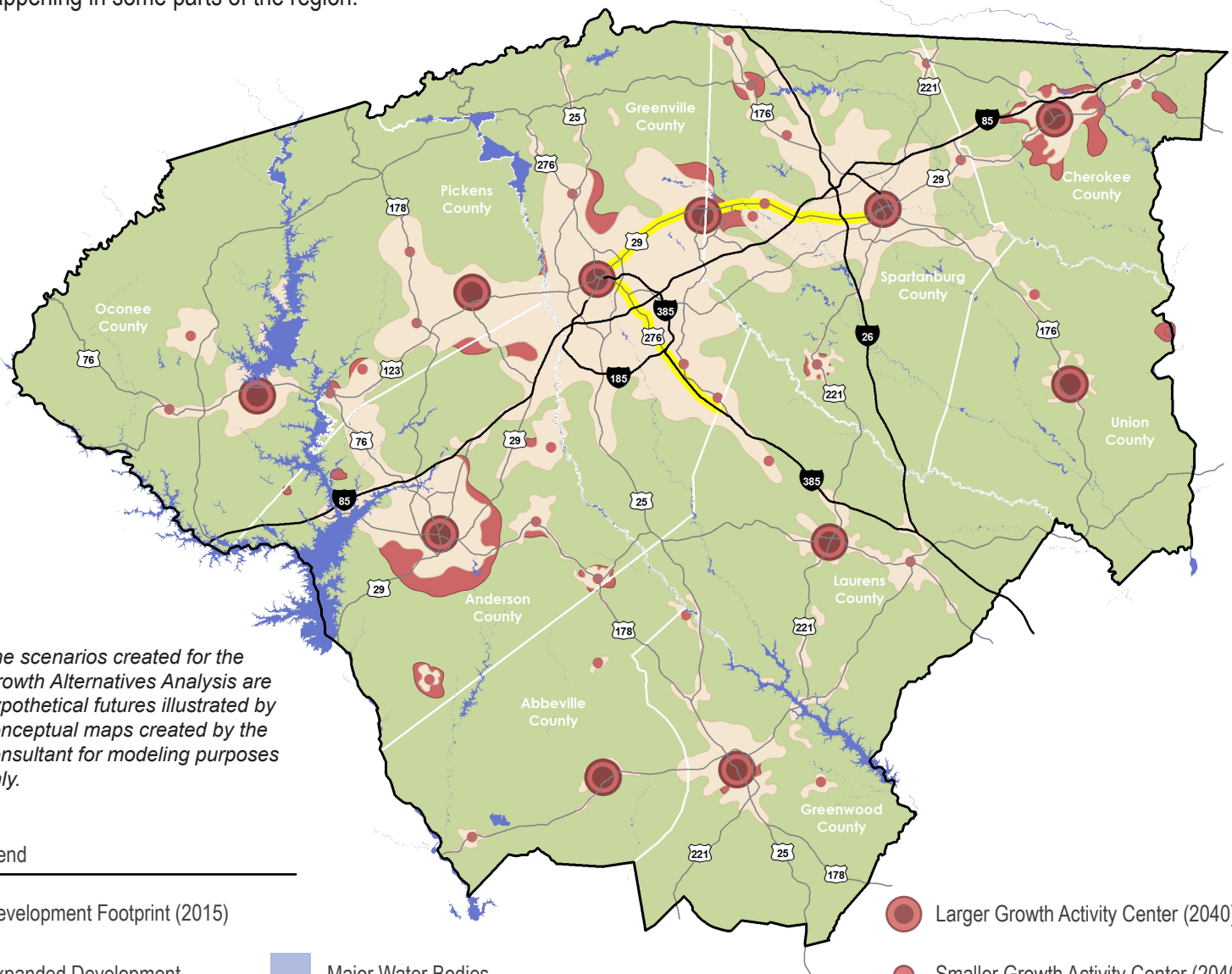
Future growth would be focused in corridors and compact, walkable centers identified along them. Nearby opportunities to live, work, shop and play would draw people to urban or urbanizing areas. Land outside identified growth centers would be protected for open space, farmland, forested areas, and rural living.

Rural Villages Growth Scenario



The Rural Villages Growth Scenario considers how the region might develop if growth were concentrated into several activity centers identified throughout the region (a more dispersed, less intense group of centers compared to the Compact Centers Growth Scenario). The design, scale and intensity of the centers would create unique places in the region, and encourage active living with opportunities to live, work, shop and play in the same community. However, residents living in some activity centers may need to visit larger activity centers in the region to meet some of their daily needs (especially employment opportunities). Land surrounding the future development footprint would remain as open space, farmland, forested areas or rural living areas. This is a moderate scenario for the Upstate that is already happening in some parts of the region.

What does the region look like if we focus growth into a hierarchy of mixed-use, walkable activity centers located throughout the region?



The scenarios created for the Growth Alternatives Analysis are hypothetical futures illustrated by conceptual maps created by the consultant for modeling purposes only.

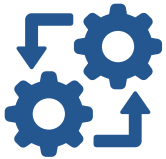
Map Legend

- Development Footprint (2015)
- Expanded Development Footprint (2040)
- Undeveloped Areas (2040)
- Major Water Bodies
- County Boundaries
- Interstates
- Major Roads
- Major Transit Corridors (2040)
- Larger Growth Activity Center (2040)
- Smaller Growth Activity Center (2040)



Housing Mix

A shift in neighborhood design and housing choices would better balance the distribution between single-family (52%) and multifamily (48%) housing compared to the Trend Development Growth Scenario. Average residential densities would range from four units/acre for single-family detached homes, to 16 units/acre for townhomes, to 30 units/acre for condominium and apartment homes.



Public Facilities & Services

Infrastructure investments (water, sewer, roads, etc.) would be limited by concentrating new growth in existing service areas. This would help reduce government investments to support future development.



Viable Travel Options

The emphasis would be switched from car to transit for trips within the region. Local bus service would connect riders with premium regional transit corridors (bus rapid transit). Widespread use of mixed-use, walkable development principles in the growth centers would help shorten trip length and increase the number of viable travel mode options. Daily travel needs would be primarily served by walking, biking, or transit within, and between, nearby growth centers.



Environmental Stewardship

Protecting land outside the growth centers for open space, farmland, forested areas, or rural living would increase a green print for the region. Low impact development principles also would contribute to a greener landscape in more rural areas.



Jobs-Housing Proximity

Mixed-use, walkable growth centers would significantly increase opportunities to link jobs and housing in close proximity.



Farmland Preservation

Farmland preservation would be a high priority. Working farms would be protected using policies, rules or incentives that promote farming as critical for future economic development. Nearly all farmland identified in the region would be maintained under this scenario.



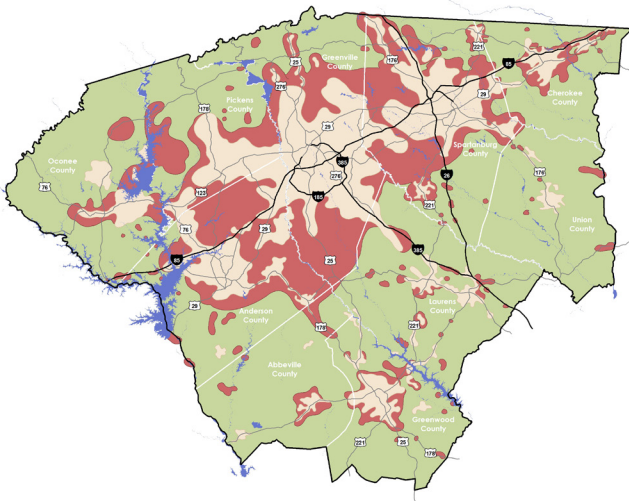
Development Footprint

Future growth would be focused in compact, walkable centers identified throughout the region. Nearby opportunities to live, work, shop and play draw people to urban or urbanizing areas. Land outside the growth centers would be protected for open space, farmland, forested areas, and rural living.

Side-by-Side Comparison of Growth Scenarios

Trend Development Scenario

The Trend Development Scenario shows how the region might develop if adopted community plans are followed for the next 25 years. Future growth would continue to favor low-density, single-use development patterns and intensities moving away from existing city centers, which requires outward expansion of roads, water and sewer lines, fire and police protection, etc. to serve the newly developed areas. This pattern of development consumes a tremendous amount of land — especially rural, farm and forested areas — to accommodate new growth and increases the distance and time spent commuting between home, work and shopping destinations primarily by automobile.

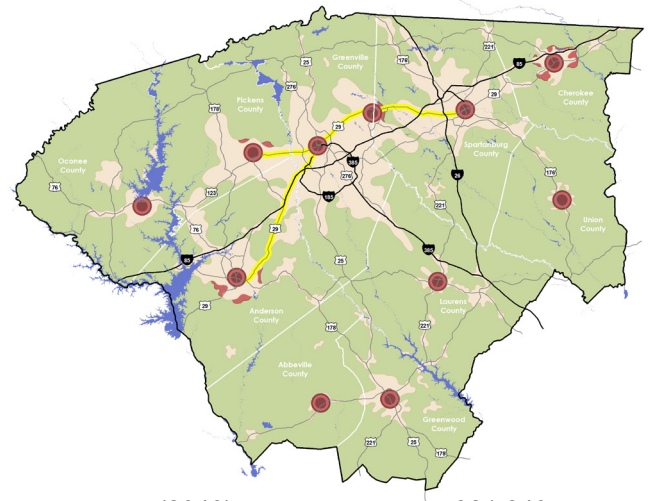


New Residents (2040)	321,849
New Employees (2040)	255,669
Protected Open Space	770 sq. mi.
Total Land Area Developed (square miles)	1,644.5
Housing Mix	90% SF / 10% MF
Jobs-Housing Proximity	Limited Potential
Viable Travel Options	Car
Infrastructure Emphasis	Invest in Expanding Service Areas
Farmland Preservation	Low Priority

Compact Centers Scenario

The Compact Growth Scenario considers how the region might develop if growth were concentrated in regional growth centers identified on the scenario map. The design, scale and intensity of the centers would create unique places in the region, and encourage active living with opportunities to live, work, shop and play in the same community. Land surrounding the future development footprint would remain open space, farmland, forested areas or rural living areas.

This is an extreme scenario for the Upstate, but it provides a dramatic illustration of the merits of extremely compact growth. This scenario would focus all new development for the region in an area roughly the size of the City of Greenville — less than 30 square miles.

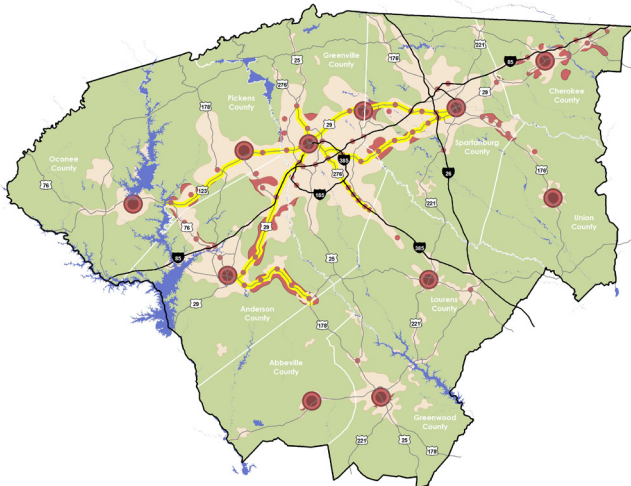


New Residents (2040)	321,849
New Employees (2040)	255,669
Protected Open Space	770 sq. mi.
Total Land Area Developed (square miles)	747.4
Housing Mix	38% SF / 62% MF
Jobs-Housing Proximity	Great Potential
Viable Travel Options	Car, Bus, BRT, Bike & Walk
Infrastructure Emphasis	Invest in Existing Service Areas
Farmland Preservation	High Priority

Major Corridors Scenario

The Major Corridors Growth Scenario considers how the region might develop if growth were concentrated along major transportation corridors. The design, scale and intensity of development in the corridors would create unique places, and encourage active living in a series of centers identified for opportunities to live, work, shop and play in the same community (or at least in close proximity between two or more nearby centers). Targeted investments in premium transit (bus rapid transit) and highway improvements (interstates or limited access highways) would move people efficiently along the corridors and between the identified centers.

This is a moderate scenario for the Upstate that is already happening in some parts of the region.

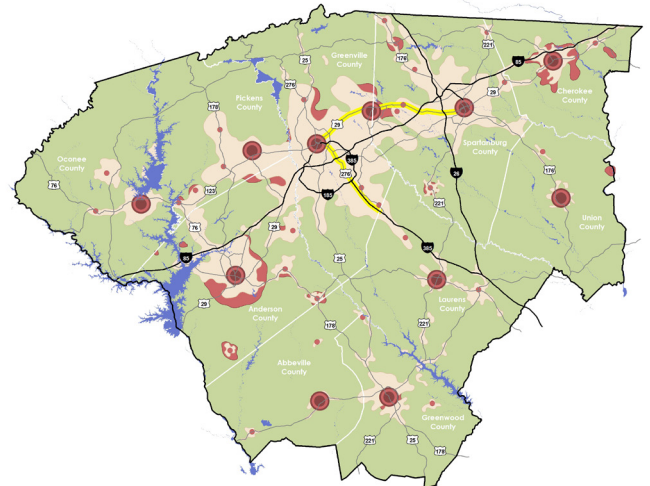


New Residents (2040)	321,849
New Employees (2040)	255,669
Protected Open Space	770 sq. mi.
Total Land Area Developed (square miles)	814.1
Housing Mix	54% SF / 46% MF
Jobs-Housing Proximity	Some Potential
Viable Travel Options	Car, Bus, BRT, Bike & Walk
Infrastructure Emphasis	Invest in Existing & Expand Some Service Areas
Farmland Preservation	High Priority

Rural Villages Scenario

The Rural Villages Growth Scenario considers how the region might develop if growth were concentrated into several activity centers identified throughout the region (a more dispersed, less intense group of centers compared to the Compact Centers Growth Scenario). The design, scale and intensity of the centers would create unique places in the region, and encourage active living with opportunities to live, work, shop and play in the same community, however, residents living in some activity centers may need to visit larger activity centers in the region to meet some of their daily needs (especially employment opportunities). Land surrounding the future development footprint would remain as open space, farmland, forested areas or rural living areas.

This is a moderate scenario for the Upstate that is already happening in some parts of the region.



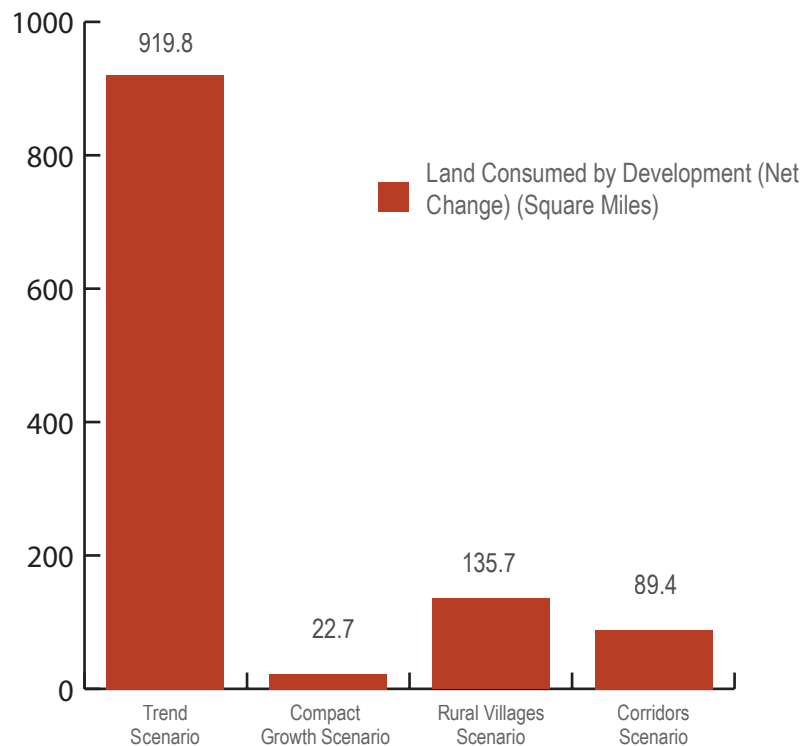
New Residents (2040)	321,849
New Employees (2040)	255,669
Protected Open Space	770 sq. mi.
Total Land Area Developed (square miles)	860.4
Housing Mix	52% SF / 48% MF
Jobs-Housing Proximity	Great Potential
Viable Travel Options	Car, Bus, BRT, Bike & Walk
Infrastructure Emphasis	Invest in Existing & Expand Some Service Areas
Farmland Preservation	High Priority

Regional Implications of Growth

Impacts anticipated with each of the growth scenarios were calculated using CommunityViz software, which reported statistics for the region (all ten counties combined) assuming population and employment growth anticipated for 2040. Comparing the scenario results quantifies the trade-offs associated with following one growth scenario over another.

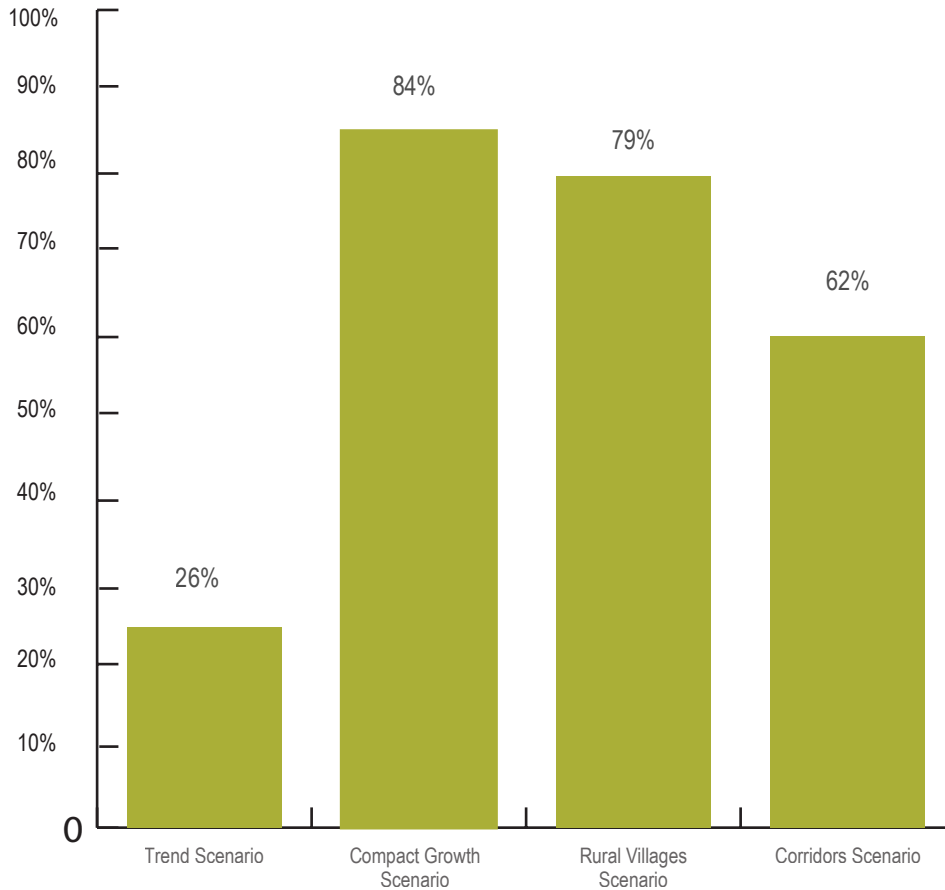
Four performance measures were used to evaluate the growth scenarios: land consumption, local government general fund revenue potential, local government cost-of-services potential (water, sewer, transportation and public safety categories only), and potential return-on-investment (comparing anticipated revenues to anticipated costs-to-serve for each scenario). Results for the performance measures are reported on pages 32 through 37.

New Land Consumed to Accommodate Future Growth at 2040



The Trend Development Scenario consumes significantly more land to accommodate the same number of new people and employees in 2040: nearly 40 times more than the Compact Centers Scenario. Serving a development footprint this much larger than all of the alternative scenarios will have a large, mostly negative, impact on the construction, operation, maintenance and replacement cycles of infrastructure provided by various government agencies and service districts to keep up with growth.

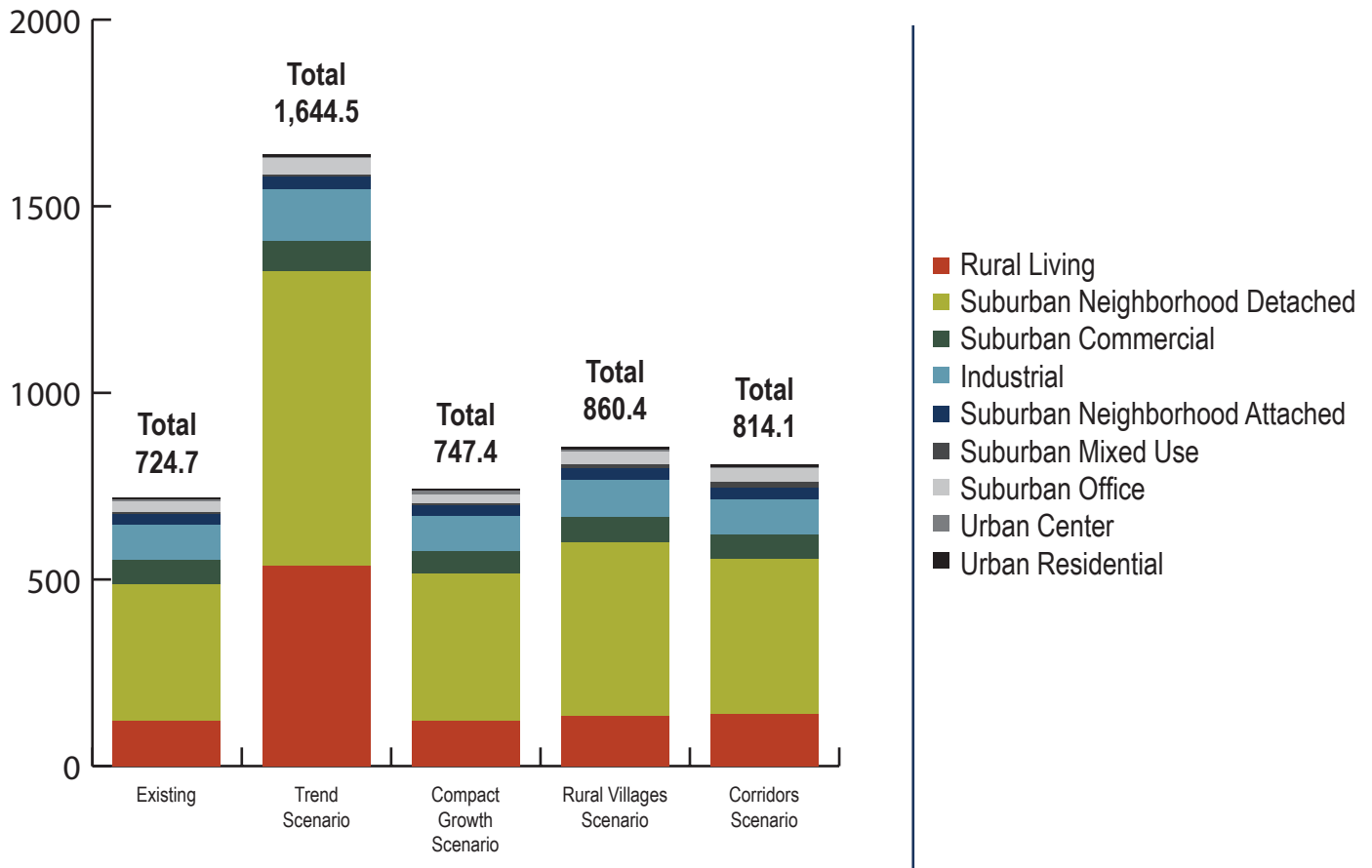
Percent of Future Development Occurring Inside Existing Municipal Limits



A comparison of future development inside and outside existing municipal limits is a general measurement of sprawl. The Trend Development Scenario moves development away from existing city and employment centers. Increasing distances between important destinations residents visit daily — home, work, school and shopping — increases demands on the transportation system, especially for travel by single-occupant automobiles that quickly (and inefficiently) consume capacity in the system. Each of the alternative scenarios more effectively focuses growth into mixed-use, higher-density activity centers, which helps lower vehicle trip generation, reduce trip distance, and increase mode choice — bus, bike or walk — for satisfying residents' daily needs.

Regional Implications of Growth

**Total Land Area Developed in the Upstate by Modeled Land Use Category
(Statistics Reported in Square Miles)**



A concise set of land use categories was developed for the CommunityViz Model (referred to as community types) that generalized all of the different terms, phrases and intensities used to describe future development in various local government comprehensive plans. Normalizing terms and concepts in the region helped standardize the process for scenario planning in a ten-county, nearly 6,000-square mile area. Local planners in the region may elect to use the community types as land use categories for their own plans and studies, or others focused on multi-jurisdictional planning (especially metropolitan planning organizations) may find the community types convenient for plans, studies and models that extend into multiple cities, towns and counties (or portions thereof). Information for community types used in the CommunityViz Model is presented in the Shaping Our Future Community Type Palette, which can be found at www.ShapingOurFutureUpstateSC.org.

Information for each of the growth scenarios was compared to the current year development footprint (2015) and distribution of community types. Low-density, single-use and decentralized development patterns represented in the Trend Development Scenario consumed significantly more land than any of the alternative scenarios to accommodate the same number of new people and employees in 2040. This is driven, in large part, by the region’s seeming preference for large-lot, single-family neighborhoods built far away from city centers — influenced by market demands, government policies, builder preferences, lending practices and residents’ pushback on higher densities. The alternative growth scenarios all demonstrate a more efficient development pattern if these conditions can be changed in the future.

Revenue Potential

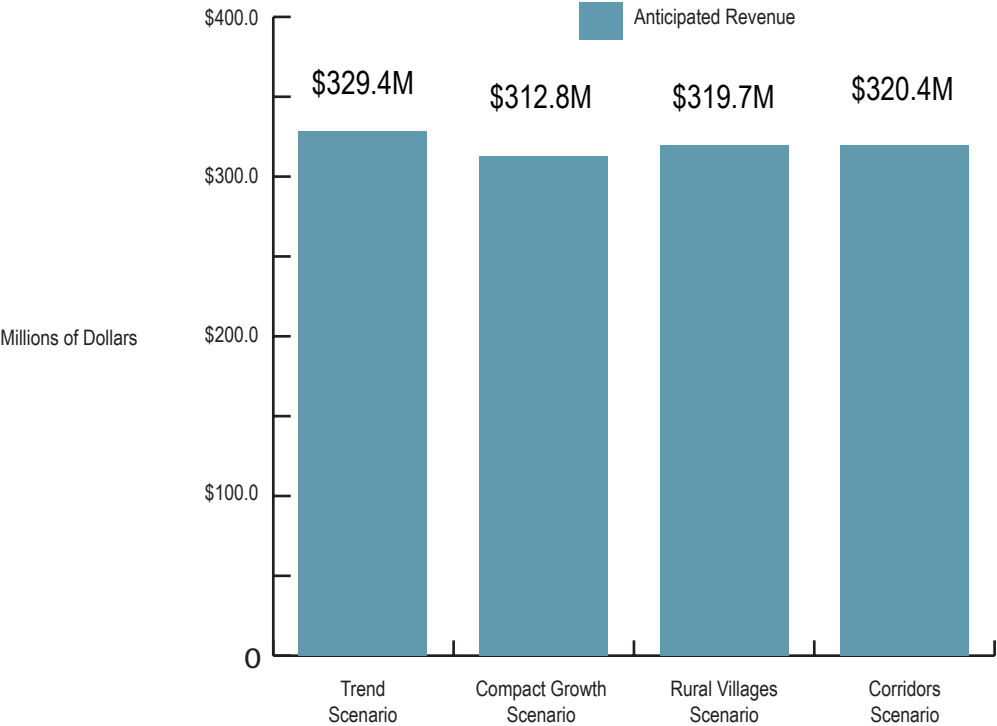
Annualized General Revenue Fund Potential for All Levels of Governments in the Upstate in 2040

Governments rely on general funds and outside sources to provide many services: administration, public safety, public works, capital projects, and health and human services. Increasing government revenues provides the resources for opportunities to do more in the community.

The Shaping Our Future Growth Alternatives Analysis includes a Ten-County Revenue Potential Study, which approximates both the value per acre for future development and the revenue potential for local governments assuming current millage rates, utility service rates, etc., remain unchanged in 2040. A copy of the technical report can be found at www.ShapingOurFutureUpstateSC.org. Rates, equations and key assumptions from the Revenue Study are used in CommunityViz to calculate anticipated fund revenues for all four growth scenarios. (Note: Only portions of the local governments' general fund attributed to water, sewer, roads, transit and public safety were included in the study to compare with categories used in the cost-of-services study. State and federal funding for roads and transit infrastructure were approximated by Urban3 using information published in a study of the South Carolina State Infrastructure Bank by the South Carolina Department of Transportation.)

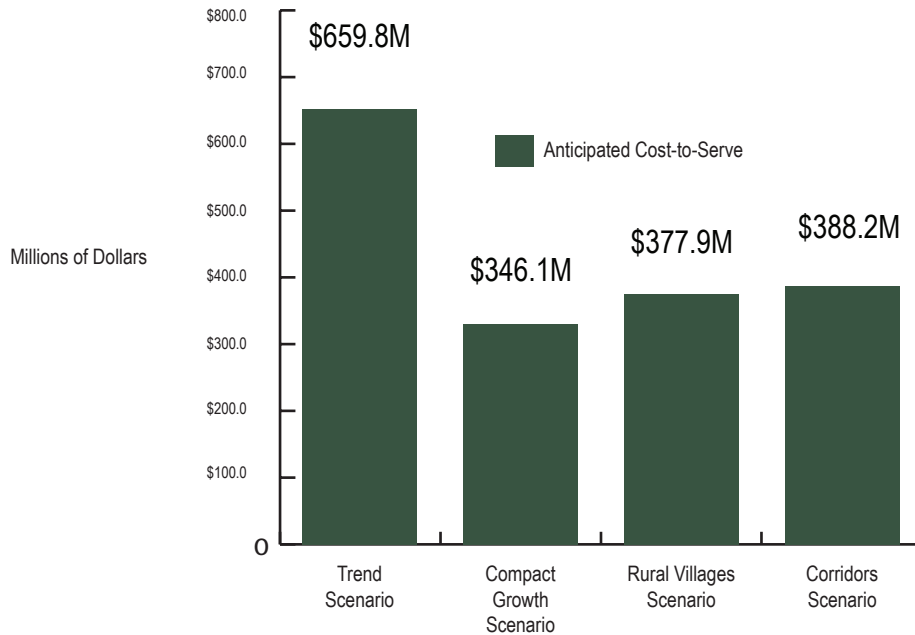
Based on the Revenue Study and CommunityViz modeling, all of the growth scenarios are expected to generate relatively similar amounts of annualized general fund revenues in 2040. Nonetheless, the 'revenue productivity' of each growth scenario varies greatly to achieve similar results, and demonstrates how much more land is needed in the Trend Development Scenario (nearly 40 times more when compared to the Compact Centers Scenario) to achieve similar financial returns. The mixed-use, high-density development patterns in the alternative scenarios generally have higher land and building values per acre when compared to similar uses found in suburban settings, which allows the region to do more with less in terms of land consumption and revenue generation potential. As one example, property appraiser data for Greenville County shows 2.3 acres in Downtown Greenville (near 18 E. Main Street) generates approximately the same amount of County tax revenue as the 73-acre Greenridge Shopping Center on Woodruff Road (see Shaping Our Future Greenville, SC Revenue Analysis Technical Memorandum, Urban 3, LLC, 2017 found at www.ShapingOurFutureUpstateSC.org).

Fiscal Impact - Annual Revenue 2040 (All Categories Combined)



Cost of Government Services

Annualized Cost to Serve Potential for All Levels of Governments in the Upstate in 2040: Water, Sewer, Roads, Transit & Public Safety



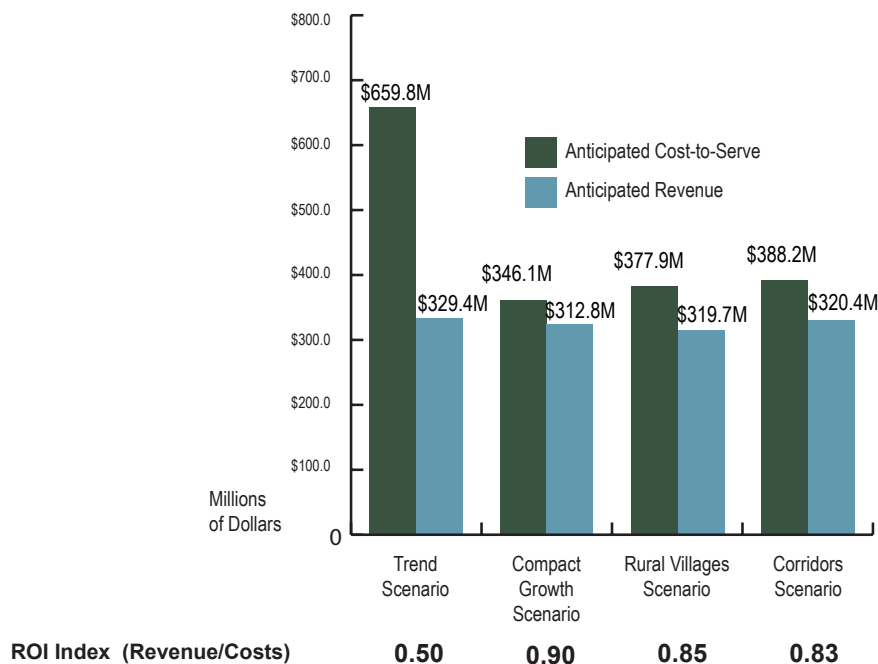
Governments have certain responsibilities to construct, operate, maintain and replace infrastructure in the ten-county region to keep pace with existing and future year development patterns and intensities. Some infrastructure categories — especially roads and most transit systems — rely extensively on state and federal funding, while other categories — water and sewer — operate as enterprise funds, meaning the government-owned utility operates like a business with a separate governing board that sets rates and plans capital improvements based on available funds or bonding capacity. The size of service areas and the development patterns and intensities within them significantly influences the abilities of government at all levels to provide needed infrastructure and maintain it.

The Shaping Our Future Growth Alternatives Analysis includes a Ten-County Cost of Government Services Study, which approximates the average costs — construction, operation, maintenance and replacement — for providing water, sewer, road, transit and public safety (police and fire protection) infrastructure to serve the four growth scenarios. A copy of the study can be found at www.ShapingOurFutureUpstateSC.org. Rates, equations and key assumptions from the Study are used in CommunityViz to calculate anticipated costs for providing services for all four growth scenarios.

The table above highlights government costs for services (local, state and federal combined) for the four growth scenarios: water, sewer, roads, transit and public safety (police and fire protection). The large service areas for providing infrastructure in the Trend Development Scenario drive much higher costs for the ten-county region, which is not a surprise based on the land consumption statistics reported earlier (showing low-density and long-distance service needs). It is important to note any deficits realized for water or sewer infrastructure in the future would likely be addressed using utility rate or revenue bonding tools, meaning both services should not run a deficit in terms of costs vs. revenues in the future. (Note: this study does not try to anticipate rate increase levels in 2040 to generate additional revenue needed to provide services. Nor does it identify premium transit corridors for the Trend Development Scenario — bus rapid transit or regional express bus service — because the low-density, dispersed development patterns in the scenario do not traditionally support such services. Only the three alternative growth scenarios assume increased premium transit service — three different potential networks — and the costs associated with it).

Annualized Return on Investment Potential for All Levels of Government in 2040: Comparing Annualized General Fund Potential to Annualized Cost to Serve Potential

Comparison of Costs & Revenues that Generally Impact Federal, State, & Local Government Budgets (Water, Sewer, Roads, Transit, & Safety)



Return on investment (ROI) is a statistic used by all levels of government to compare expected revenues and expenditures (i.e., revenues divided by expenditures). A ratio of 1.0 or greater represents a condition where revenues equal or exceed expenditures, meaning that revenue generation annualized over 25 years is expected to meet or exceed potential infrastructure costs — construction, operation, maintenance and replacement — annualized over 25 years. Annualized ROI statistics reported would actually fluctuate from year-to-year based on the date of construction, the number of years for operation and maintenance that follow, and the scheduled date for replacement. (Note: the ROI study for the Shaping Our Future Growth Alternatives Analysis does not approximate a schedule of capital improvements to coincide with the location and timing of development between 2015 and 2040.)

Statistics reported for the four growth scenarios indicate that while none is expected to pay for itself in 2040, the Trend Scenario performs substantially more poorly than the three alternatives. The ROI statistics are assuming the responsibilities of all government levels combined, annualized infrastructure costs over a twenty-five year period, and holding constant current millage rates, utility service rates, federal and state government funding levels, etc. However, the ROI statistics for the three alternative growth scenarios could move above and below the 1.0 threshold over the 25 year planning period based on 1) the timing, location and intensity of new development and 2) the lifecycle of some infrastructure following dedication by private developers. The low ROI performance for the Trend Scenario (0.50) means it is unlikely to ever experience conditions where revenues exceed expenditures in a single year unless services are significantly reduced, delayed or privatized to come in line with available revenues. It is also important to note any deficits realized for water or sewer infrastructure in all of the growth scenarios would likely be addressed using utility rate or revenue bonding tools, meaning both services should not run a deficit in terms of costs vs. revenues in the future, but rates would increase for rate payers.

Conditions isolated for local governments in the Upstate (minus road system costs and federal and state revenues for roads) indicate the three alternative growth scenarios do, or nearly do, pay for themselves in 2040: Compact Centers (1.06), Rural Villages (0.96) and Major Corridors (0.93). The Trend Scenario is the only scenario to demonstrate a lower ROI (0.45) for conditions isolated to local governments. Data and tables for local government revenues and expenditures are presented in the Shaping Our Future Ten-County Revenue Study prepared by Urban3, LLC, which can be found at www.ShapingOurFutureUpstateSC.org.



Growth Choices, Challenges & Opportunities

The Upstate region will likely welcome more than 300,000 residents by 2040. The Shaping Our Future Growth Alternatives Analysis is an evaluation of the likely trade-offs that will result depending on how and where that growth is accommodated in the ten-county region. At a smaller geographic scale (i.e. county, city or sub-region), additional topics were studied through a case study series. Studying these “themes” at a smaller geographic scale allowed for deeper and more credible analyses of topics that don’t naturally lend themselves to analysis over a large geographic scale.

Each case study includes specific tools and recommendations that communities within the region could consider advancing to implement one or more of the key themes highlighted in the alternative scenarios presented in this report.

The case studies identified for Shaping Our Future provide greater flexibility for investigating situations in specific areas of the Upstate on a variety of growth-related topics. They recognize the different factors and timelines impacting cities, towns, districts and counties across the ten-county region, and focus the discussion on an easily researchable topic and scale of development relevant to one or more emerging growth areas. The case studies do not answer their questions completely, but provide early insights and allow for further elaboration by others.

Topics for the Shaping Our Future case studies were chosen because of their subject and relevance to issues and opportunities facing specific cities, towns, districts and counties in the region. Other areas in the region not facing similar 'extreme pressures' or 'critical decision points' at this time can learn from the successes and failures of their neighbors. Ultimately, eight case studies are represented in the document, including:

- **Woodruff Road: What Worked and What Did Not?**
- **The Economic Value of Protected Open Space & Local Water Resources**
- **Home Preferences for a Changing Demographic & Lifestyle**
- **Working Farms & Local Food Systems**
- **Preferred Development Patterns, Who Chooses?**
- **Transit in Urban & Suburban Landscapes**
- **Access to Education, the True Cost of School-Siting**
- **The Intersection of Land Use, Communities & Social Equity**

A variety of information and data collection methods were used for informing the case studies, including: software modeling, stakeholder interviews, previous document research, informal surveys, and focus group meetings. Important research questions for guiding each case study were chosen with input from members of the Shaping Our Future project steering committee, with each committee member serving as an advisor for at least one of the topics for study. Committee members provided data, shared contacts and reviewed the work of the project team to maximize impact of the case studies.

The case studies each follow a similar format in the document: a brief discussion about the issue or opportunity; a summary of challenges or opportunities important to the topic; and an overview of specific tools or policies being utilized within the Upstate (or in other similar regions or communities across the United States) to address the issue or take advantage of the opportunity most effectively.



Woodruff Road: What Worked and What Did Not?

Whether you live in Greenville or simply visit the area from other parts of the Upstate, you are most likely familiar with Woodruff Road. With a large amount of retail development, interchanges for both I-85 and I-385 and until recently, no parallel road to divert any of the traffic, it has become to many the poster child for traffic congestion in the Upstate – and how not to grow and evolve.

Woodruff Road began as a two-lane rural state road serving residential traffic. In the 1960s, industrial uses developed, but traffic remained moderate. In 1978, the Greenville Mall opened, bringing additional traffic to the corridor and spurring residential growth. In the early 1980s, the extension of I-385 and I-85 provided additional access to the region, spurring new residential development and bringing

additional traffic. The corridor was quickly transitioning from rural to suburban.

During the transition, most of the area's commercial development was happening along Laurens Road, west of Woodruff Road. Woodruff Road was still considered to be a residential area with a few industrial uses. However, despite the residential zoning, developers were eager to take advantage of the residential growth by providing shops and restaurants to the growing population.

In the late 1990s, Wal-Mart and Sam's Club opened on the former site of General Electric, adjacent to I-385. Additional big box commercial developments followed, abandoning their Laurens Road locations. With the growing commercial presence, the corridor

was widened from two lanes to five, and a suburban thoroughfare was born.

In 2004, a major new retail power center, The Shoppes at Greenridge, was developed between I-85 and I-385. The parcel had excellent regional access, but improvements to local access and circulation proved difficult. The addition of 500,000 square feet of retail exacerbated the traffic congestion along Woodruff.

In 2005, the Greenville Metropolitan Planning Organization (MPO), which later became the Greenville Pickens Area Transportation Study (GPATS), began putting together recommendations for the City of Greenville, including strategies for Woodruff Road. At that time, City economic development staff and planners were meeting

regularly with developers. Based on the amount of commercial development being planned, MPO staff recognized that the five-lane corridor would be quickly overwhelmed by the additional traffic. In 2004, traffic volumes on Woodruff Road near Hendrix Drive were 33,500. Modeling of traffic volumes predicted annual average daily traffic counts (AADT) would increase to 45,000, which was well above capacity for the corridor.

MPO staff proposed meetings with the City of Greenville planning and economic development staff and the major developers along the corridor. They had identified a feasible route for a parallel road that would access the back sides of the Woodruff Road developments and could bring circulation improvements to the corridor. The new road would also connect a number of dead-end culs-de-sac and provide options for local traffic to avoid Woodruff. The new road would be two lanes, with turn lanes at intersections. There would also be a two-lane bridge to fly over I-85 to continue

on to Verdae Boulevard, where a large, neotraditional development was planned. The cost estimate for the new two-lane road was projected to be \$12 million. This cost did not include the purchase of right-of-way. Because the region had many other unmet needs, MPO staff felt that it was not in the region's best interest to purchase the right-of-way (at about \$15 per square foot). They believed that the developers should donate the right-of-way instead. The majority of the developers were opposed to the proposed parallel road.

While the "Woodruff Road Parallel Route" ranked first in the region in the 2007 Long Range Transportation Plan, opposition from the developers and a lack of support from the City resulted in the project being listed in the "unmet needs" section of the plan. Traffic along the corridor continued to increase, no longer confined only to rush hour.

In 2007, the Woodruff Road Corridor Study was initiated by the City of Greenville. It

was a collaborative effort, receiving input from a number of stakeholders, including Greenville County, the Greenville-Pickens Area Transportation Study (GPATS), the South Carolina Department of Transportation, and representatives from a number of real estate developments.

The plan addressed the regional context of Woodruff Road, access management strategies, specific interchange modifications, and land use considerations. Finally, because of the goal to develop recommendations that were both functional and implementable, the report concluded with funding strategies. The recommendations in the plan, however, were not binding and many were not followed.

Of the near-term recommendations for I-85/Wodruff Road (considered at the time to be one to three years out), the only one that was immediately addressed was to extend "the monolithic concrete island at the southbound entrance ramp to prohibit through

At the time of the 2007 study, there were more than 120 curb cuts and 17 traffic signals between Verdae Boulevard and SC 14 - a span of less than four miles. The congestion on the road had led to safety concerns for both drivers and pedestrians. The stated goals of the plan were:

- Balance access and mobility in the corridor
- Address corridor safety concerns
- Identify potential aesthetic improvements
- Integrate with planned development
- Develop functional and implementable recommendations



movements to the northbound loop ramp at the adjacent intersection to allow southbound left turn phasing to be upgraded to protected-permitted.” Other I-85/Woodruff Road recommendations are being planned as part of the I-85 at I-385 Interchange project. This includes reconfiguring the northbound entrance ramp, allowing right-in, right-out access at the Shops at Greenridge, and adding a right turn lane to the existing northbound exit ramp. The I-85/I-385 project will also include signal system improvements. An “adaptive” system will record information and allow the signals to adjust to traffic needs.

The 2007 plan also addressed the idea of a parallel access road. In 2013, the project was included in the GPATS 2035 Long-Range Transportation Plan, at an estimated cost of \$41.3 million - more than three times the cost of the project when initially recommended ten years prior. This is exclusive of the cost of right-of-way acquisition and is likely to change once preliminary

engineering is complete. The project is in the environmental evaluation phase. The first year of funding for the parallel road will be 2021, and the estimated completion is 2025. One of the biggest variables with timing is the schedule for right-of-way acquisition. When the parallel road was first envisioned, land costs were beginning to rise. Since that time, they have increased dramatically. The road is envisioned as a boulevard with a center planted median and no commercial curb cuts. There is a planned 10-foot wide greenway on one side of the road, and intersections will be planned as roundabouts. The purpose of the parallel road is to draw traffic from Woodruff Road – while not becoming another Woodruff Road itself.

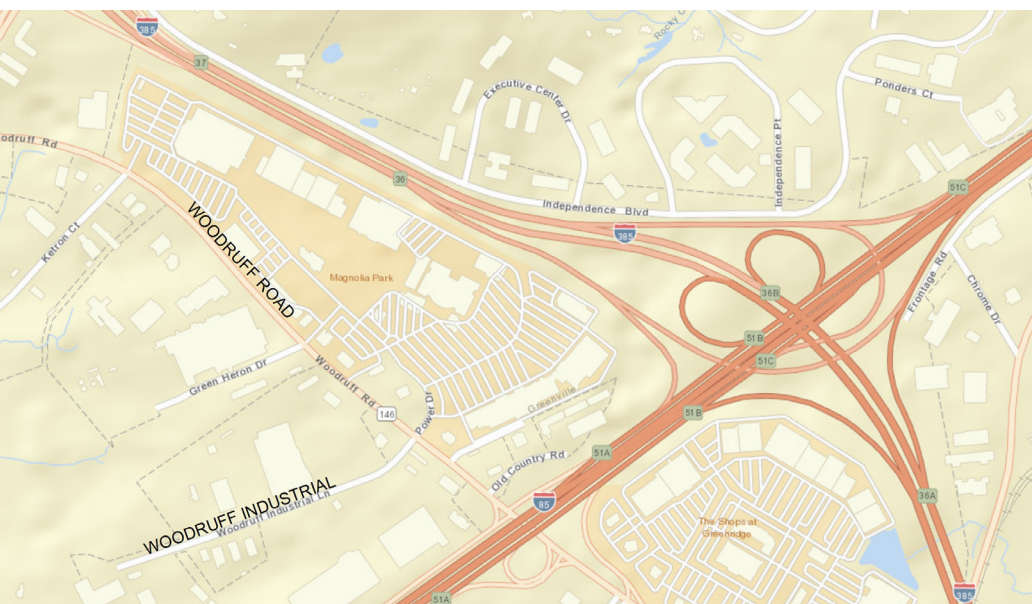
The City also has a short-term fix for parallel access. Piedmont Natural Gas is located on Woodruff Industrial Boulevard. When they dispatch trucks, they are currently forced on to Woodruff Road – a particular problem when they

need to get somewhere in a hurry. Piedmont Natural Gas approached the City about a solution, and the plan is for a two-lane road to connect Green Heron, Woodruff Industrial, and Verdae Boulevard. \$1.2 million for the project is being funded by the City of Greenville, Greenville County, and locally controlled road funds. An additional \$2.1 million is coming from the private sector – partially in the form of a land donation. The City hopes to receive the additional \$400,000 required from other businesses along Woodruff Road.

Greenville is also initiating a major sidewalk project along Woodruff Road. The project will involve sidewalks extending from the Shops at Greenridge to Roper Mountain Road. A concrete barrier from I-85 to Woodruff Industrial will prevent left-hand turns to the Trader Joe’s/Academy Sports shopping center.

One strategy from the 2007 plan that would have provided some of the biggest benefits is internal cross-parcel connectivity. This would have kept cars off of Woodruff Road as they moved between shopping centers. The connectivity was not required by city regulations at the time that the parcels developed, however, and would have involved retrofitting after the area was developed. The City has now begun working with private property owners to allow for connections.

The City has also not completely ruled out widening Woodruff Road, but the County is opposed, for the sake of the business owners along the corridor.



Having good access management regulations in place prior to development is crucial to avoiding another Woodruff Road. At its most basic, access management is the practice of limiting driveway or street intersections on a road to avoid crashes and congestion. Access management techniques can be found at the Federal Highway Administration (FHWA) web page and also the Institute of Transportation Engineers. Accepted techniques include:

- **Signal Spacing:** Increasing the distance between traffic signals improves the flow of traffic on major arterials, reduces congestion, and improves air quality for heavily traveled corridors. The appropriate spacing between signals for a particular corridor depends greatly upon the speed and flow of

traffic, but anything greater than two signals per mile has a significant impact on congestion and safety.

- **Driveway Spacing:** Fewer driveways spaced further apart allows for more orderly merging of traffic and presents fewer challenges to drivers. An overabundance of driveways increases the rate of car crashes.
- **Safe Turning Lanes and Roundabouts:** Dedicated left- and right-turn lanes, indirect left-turns and U-turns, and roundabouts keep through-traffic flowing. Roundabouts represent an opportunity to reduce an intersection with many conflict points or a severe crash history (T-bone crashes) to one that operates with fewer conflict points

and less severe crashes (sideswipes) if they occur.

- **Median Treatments:** Nontraversable, raised medians can be effective in regulating access and reducing crashes.
- **Right-of-Way Management:** R/W should be managed for future widening needs, good sight distance, access location, and other access-related issues.

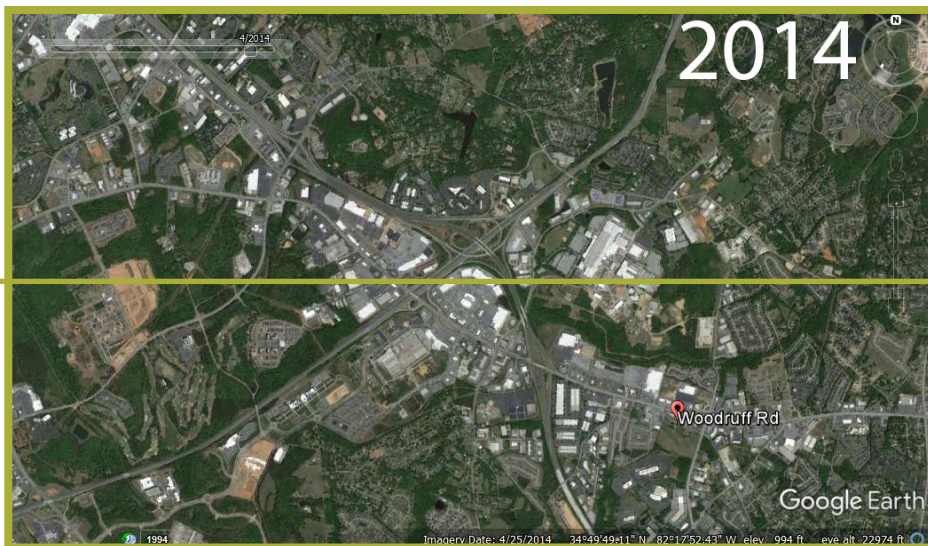
Ideally, good access management needs to be proactive. The key is to have the regulations and analysis in place before parcels develop. Taking a long term view of accessibility to property will help ensure future prosperity of the area. These techniques can prevent the creation of a corridor that no one wants to drive – but is seemingly unavoidable.

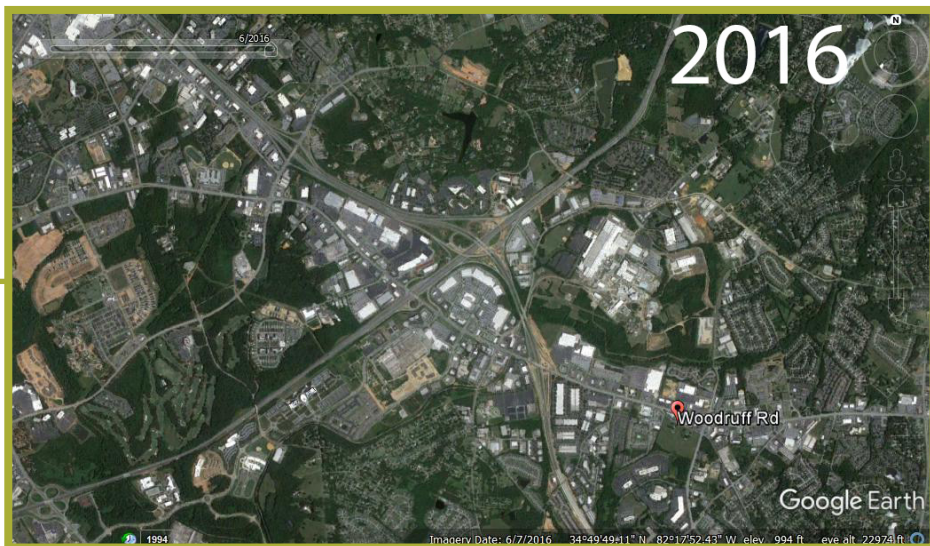
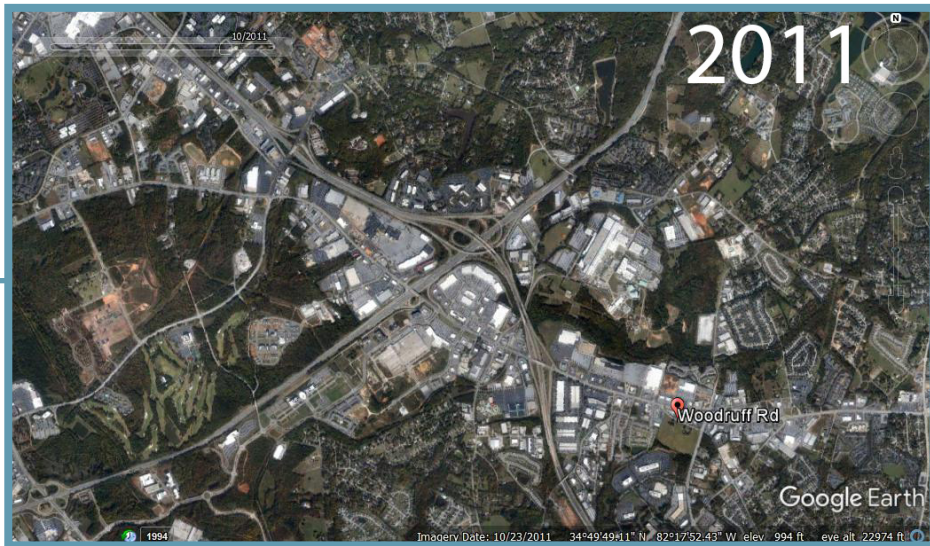
When asked what could have been done to prevent the Woodruff Road of today – and more importantly to prevent another such corridor - Greenville County’s current Transportation Planning Manager had the following recommendations:

- Prohibit commercial curb cuts directly on Woodruff.
- Provide access to commercial developments via parallel back-access roads.
- Maintain connectivity by tying the access road into side streets, such as Feaster, Garlington, Miller, Butler, Woodruff Industrial, Carolina Point, etc. An example of this type of access can be found in Hilton Head.
- Use roundabouts where those side streets and Woodruff Road intersect. Roundabouts need to be a significant distance away from Woodruff Road to avoid becoming clogged due to the traffic signals.
- Establish parking maximums and allow shared parking. Base parking requirements on typical usage rather than holiday needs.
- Require developments like the Shops at Greenridge and Magnolia Park to provide better access and mitigate their traffic impacts.

These comments reflect general “Best Practice” opinions and are not the official recommendations of Greenville County or GPATS.

Changing Development Patterns in the Woodruff Road Corridor, 1994 to 2016







The Economic Value of Protected Open Space & Local Water Resources

Applying an economic value to the natural world seems in some ways to be a paradox. Many of us think of natural spaces as places to escape the everyday world of dollars and cents. While we typically recognize the health and quality-of-life benefits afforded by a forest walk, a favorite fishing hole or a beautiful landscape – we often fail to acknowledge the economic benefits such areas provide. Not surprisingly, farmers, hunters and fishermen often intrinsically understand the value of productive land and clean water – in economic terms. With their livelihoods in some cases dependent on these resources, they have historically been some of the first to advocate for

their proper stewardship and conservation.

Most past attempts, however, to assign economic value to natural areas have focused solely on resources that quickly convert to commodities, such as standing timber.

More recently, however, economists and researchers are taking a more sophisticated look at the economic value of natural areas, open space and local water resources. And some forward-thinking communities and utilities are following suit – taking action to not only preserve, but also capitalize on, the economic value these natural areas provide.

Natural Areas as Local Economic Engines

As anyone who has visited Great Smoky Mountains National Park on a busy summer weekend can attest, the popularity of scenic places has risen dramatically in recent years. Studies have cast new light on how natural areas can serve as local economic engines for nearby communities. While this opportunity may seem obvious for communities outside national parks like Great Smoky Mountains, it is also true for other scenic destinations and publicly-accessible natural areas such as state and city parks, and greenways and blueways. Known as “amenity destinations,”

these communities often have stronger, more diverse economies – especially as compared to other rural areas. Upstate destinations such as Table Rock State Park, Sumter National Forest and Chattooga National Wild and Scenic River draw visitors from around the country. Jocassee Gorges – in Pickens County – has been ranked by National Geographic as “one of the world’s last great places”. Visitors to these destinations support the local economy, especially small businesses critical to the prosperity of smaller towns.

One of the area’s success stories is the Greenville Health System Swamp Rabbit Trail, a 20-mile trail weaving from south of downtown Greenville to north of Traveler’s Rest. The Trail was the product of a multi-year effort of a coalition of public and private resources. Once complete, the uniquely-named trail has sparked an economic resurgence as restaurants and businesses have popped up or even relocated to be alongside it. The most recent estimates of usage suggest that

over a half million people use the trail per year. An extension from downtown Greenville to Verdae – a 1,000+ acre master-planned neighborhood – and the Millennium Campus – a master-planned corporate community – is in the works. Laurens County is also planning to extend the trail into its jurisdiction, a key goal of the Laurens County Trails Association. In nearby Pickens County, the cities of Pickens and Easley worked together to build the 7.5-mile Doodle Trail as a rails-to-trails project, linking the two communities. Also in Pickens County, the Friends of the Green Crescent are advancing a vision to better connect the communities of Clemson, Central, and Pendleton with a network of walking and biking trails – both on and off road. There are similar efforts afoot in Abbeville, Anderson, Spartanburg, and Greenwood counties – at various stages of planning.

Despite these sorts of efforts, the benefits of rural tourism are remarkably patchy. Why do some communities near beautiful natural areas prosper while others do not?

Engaging the Business Community

Cases like the Swamp Rabbit Trail illustrate the importance of public-private partnerships. This is especially important in rural areas where small businesses and entrepreneurs make up a large proportion of the business community. Rural areas tend to have a much higher percentage of sole-proprietor businesses than urban areas. Experience has shown that a willingness by entrepreneurs to engage, try new things and support each other are very important to successful rural tourism efforts. For example, staff from Greenville County have proactively engaged local business owners and churches along the Swamp Rabbit Trail to offer shared parking with trail users. Well organized Chambers of Commerce and similar organizations are key.

Authenticity and Uniqueness

Visitors to rural regions tend to want specific experiences that feel authentic and unique. Destinations



like the Swamp Rabbit or Doodle Trails are built on the beds of historic railroads. The names themselves catch the attention and are genuinely authentic – both are old nicknames for the trains that ran on them.

Understanding what a community has to offer and what visitors are looking for are important steps. Some local development organizations help rural communities look at themselves in new ways by identifying assets such as architecture, art, cuisine, customs, scenic destinations and history. Helping small towns recognize the value in their own communities and shifting perspectives towards wanting to share those assets are important outcomes.

Taking Action

Communities that are near beautiful natural areas do not all prosper equally. Those that do seem to take deliberate actions – finding ways to preserve what makes them special and marketing in a way that helps them stand out. The Spartanburg Convention and Visitors Bureau focuses on five themes which illustrate this trend well: culture, history, agritourism, recreation and products made in Spartanburg. They conducted a Tourism Action Plan and Feasibility Study with funding from a Rural Business Enterprise Grant. They identified goals, target audiences and strategies that played well to the county's strengths. This led to new advertising materials and a modern, multifaceted outreach campaign. The results of the

efforts have borne fruit: people are staying longer and spending more in Spartanburg.

Ecosystem Services: Protecting Water Quality through Strategic Land Conservation

In the last century, researchers have coined terms such as “natural capital” and “ecosystem services” – generally defined as benefits that people receive from the healthy and often complex systems found in the natural world. These services are not just luxuries, but rather, are vital to life on earth. Additionally, when not provided by nature for little or no cost, these services must be provided through other – often costly – means.



For example, we know that deforesting watersheds negatively impacts water quality, making it more difficult and expensive for utilities to treat for human use. Conversely, protecting land surrounding drinking water intakes is a strategic investment to reduce treatment costs down the line and deliver high quality water to customers. Greenville Water, for instance, boasts that its water is exceptionally pure because the land around it is protected. The utility owns, manages and protects 26,000 acres in two watersheds that feed the reservoirs from which some of their drinking water supply is drawn – a visionary approach to water quality treatment implemented decades ago by forward-thinking leaders.

Other Upstate utilities have begun working more recently in partnership with local land trusts, private landowners and others to utilize voluntary land protection as a proactive means to encourage stewardship of soil and water on private lands in strategic locations.

Evaluating the Impacts of Development Patterns on Ecosystem Services in the Upstate

When land is converted from fields and forests to urban development, any ecosystem services that were once being provided by that land are lost. Though it is difficult to quantify these types of benefits, recent advances in the field are making this kind of research more accessible.

One software program known as InVEST – developed by researchers at Stanford University – are helping communities across the globe better understand which lands within their jurisdictions naturally provide essential functions such as providing high-quality habitat or sequestering carbon. Similarly, InVEST can highlight which lands – if developed – would likely cause the most damaging impacts to water quality. Such information can be provided to local utilities, local governments and others to enable more strategic investments in land protection and to inform future land use planning and decision-making.

In the Upstate, Dr. John Quinn and his students at Furman University are using InVEST to quantify and map benefits provided by currently undeveloped lands across the Upstate region. As part of the Shaping Our Future project, the Furman researchers examined the degree to which undeveloped lands in the Upstate provide value in terms of water quality protection, high quality habitat and carbon sequestration. They forecasted how those lands would be impacted assuming each of the four growth scenarios that were compared as a part of the growth alternatives analysis.

Not surprisingly – in large part due to the massive amount of land consumed – the Trend Scenario produced the least favorable outcomes in every case. In other words, the InVEST model predicts that if Upstate communities continue on their current growth trajectory, they stand to lose the greatest amount of value currently being derived from natural areas as related to critical habitat, carbon sequestration and water quality protection.

Fortunately, many impacts from land use change on ecosystem services can be mitigated with thoughtful planning. Leaving vegetative buffers along streams, thoughtfully managing timber and agricultural lands, and strategic land protection can go a long way towards mitigating the impacts of development on ecosystem services.

A recent application of this innovative modeling software is the development of an Upstate Critical Lands Map. Through a partnership of Upstate Forever, Furman University and Pacolet Milliken Enterprises, the region's most environmentally sensitive lands in regards to water quality and high quality habitat have been identified and mapped. Other factors such as adjacent protected lands, historic sites and drinking water sources also helped pinpoint these special places. Upstate Forever will use the results of this work to guide future land protection efforts and provide local Upstate governments important data to inform future comprehensive planning and land use policy decisions.



Oconee Forever

Guided by local citizens, Oconee Forever supports initiatives to conserve and enhance the quality of water and watersheds, forests, wildlife habitat, rural areas, working farms, scenic vistas, and historical sites in the county. Oconee Forever's origins were inspired by the fight to preserve Stumphouse Tunnel, near Walhalla. The tunnel was first proposed in 1835 as part of a new route between Charleston and the Ohio River Valley. By the late 1850s, South Carolina had spent over a million dollars on the project, but the State was unwilling to spend more, and the project was abandoned, leaving a partially completed tunnel. In 2007, a developer attempted to purchase the property from the

City of Walhalla, but eventually, a consortium of non-profit conservation groups, private individuals, and the state raised the money to preserve the area for public use. Today, the tunnel is part of a 439-acre preserve that includes some of the most important and celebrated natural and historic landmarks in the region. Stumphouse Mountain was saved through the combined efforts of Oconee Forever, the South Carolina State Conservation Bank, and additional private and public funds and stakeholders.

Oconee Forever's efforts are accomplished by advocating at County Council meetings, supporting conservation-related initiatives, educating private landowners on voluntary options for conserving their land, and

using fundraisers as a way of highlighting the importance of conservation in the area. One of group's biggest successes was helping establish the Oconee County Conservation Bank (OCCB), a local government agency created to provide grants to landowners who wish to conserve their land in perpetuity. Oconee Forever was instrumental in passing the 2011 ordinance that created the bank. Duke Energy donated \$618,000 to the OCCB as part of a 30-year relicensing agreement recently signed for the Keowee-Toxaway Hydroelectric Project. The OCCB is now ready to provide their first grants.

Advocacy for conservation causes can be difficult in Oconee. While polls indicate the local population greatly

values the environment and protection of natural resources, there is also resistance to government-led conservation efforts, and conservationists often face criticism and skepticism. Oconee Forever encourages and motivates participation by “pro-conservation” residents in political and community processes.

Oconee Forever’s annual event targeting larger landowners raises awareness of conservation easements/agreements. Oconee County now has the third highest number of conservation agreements in the Upstate, following Greenville and Spartanburg Counties.

Conservation agreements are voluntary contracts signed by the landowners that limit the future uses of the land. Uses that do not interfere with the conservation value of the property – such as maintaining a family residence, adding limited new residences, farming, fishing, hunting, and timber management – are generally allowed, while commercial, industrial, and residential subdivisions are not. Conservation agreements ensure that properties remain in their current state. If the land has significant historic or natural resources, federal and state tax incentives are possible.

Through their efforts, Oconee Forever encourages locals to become involved with current initiatives in the County and enables them to take direct actions to preserve their land.

Spartanburg Water provides water to nearly 200,000 people in an 864-square-mile area and has taken on a number of initiatives to protect their source waters. Among the many actions taken:

- They have provided grants to the Spartanburg Area Conservancy, resulting in the preservation of thousands of acres of land in the Pacolet, Tyger, and Broad River watersheds through conservation easements.
- They are working to identify sources and causes of pollution in the South Pacolet River Watershed, including Lake Bowen and Municipal Reservoir No. 1, and will partner with Upstate Forever to identify properties for long-term protection.
- They have an aggressive Comprehensive Maintenance and Operations Management program to reduce inflow and infiltration (I&I) and sanitary sewer overflows (SSOs) in 950 miles of collection lines in Spartanburg County, significantly improving water quality in the streams and tributaries of the Tyger and Pacolet Rivers.
- They have actively managed buffer zones surrounding Municipal Reservoir 1, Bowen, and Blalock Reservoirs.
- They have supported the RXcycle prescription drug take-back program, which has prevented hundreds of pounds of expired drugs from being flushed down toilets and entering streams.
- They have sponsored Lake Sweeps for 27 years, cleaning up hundreds of tons of waste from around the Bowen and Blalock Reservoirs.



Home Preferences for a Changing Demographic & Lifestyle

Baby boomers were the largest American generation – until the millennials took over. They may be separated by a generation, but they have at least one thing in common – they are shaping housing trends across the country.

Baby boomers continue to drive change in the US, as they have done throughout their entire lives. According to the US Census Bureau, the baby boomer generation (officially those born between 1946 and 1964) represents almost 20% of the population. The Census Bureau's American Community Survey (ACS) shows that in the 10-county Upstate region, the percentage of baby boomers is closer to 25%.

The oldest of the baby boomers are in or nearing retirement, and the youngest are quickly becoming empty nesters. This

growing population of retirees doesn't necessarily want to live in traditional retirement communities. The boomer generation is more active than generations past and wants options and choices in their homes and neighborhoods. While many seniors are choosing to age in place, others are looking to downsize from the suburbs and are seeking townhouses, condos, and apartments. They want to be close to children and grandchildren, and because they won't be driving indefinitely, they're looking for walkability and access to transportation.

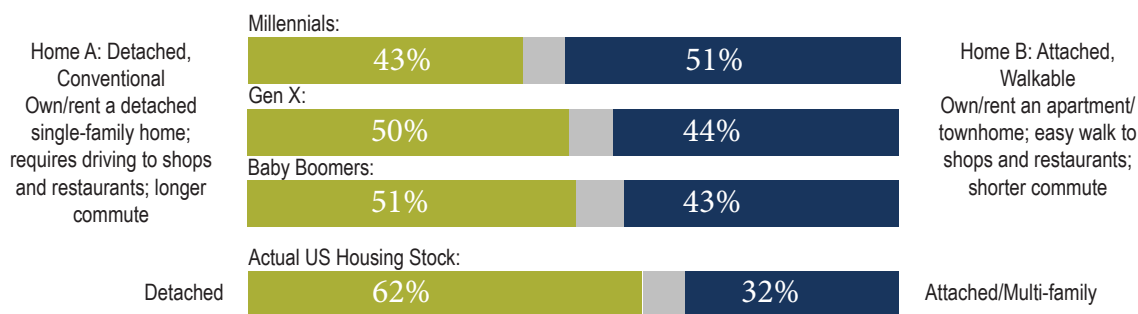
Another trend is that boomers are working longer, or at least working part-time after leaving lifelong careers. Some of these semi-retirees are willing to relocate to cities that have affordable housing and recreational opportunities, as well as economies that can

support jobs – and good weather. Greenville is noted as an attractive destination for this type of lifestyle.

Millennials (loosely defined as those born between the early 1980s and the early 2000s) are a generation on the rise, making up approximately 25% of the US population (with a similar percentage in the Upstate). Millennials are delaying both marriage and settling down – and they're delaying home purchases as well. One reason may be that today's young people are making less money than earlier generations and, often saddled with student debt, are struggling harder to put away savings.

According to a Harvard University study, affordability plays a large part in millennial home-buying behavior. Homeownership rates are down for millennials compared with past generations. In 2015, the homeownership rate for the under

Would You Prefer Home A or Home B?



Source: National Association of Realtors, 2015; US Census Bureau

35-year-old population was at an all-time low of 31%, down from 43% in 2005. The Harvard study also found that homeownership rates for millennials were 5% higher in metropolitan areas where median home prices were 20% below the national median – millennials are more likely to buy homes in lower-cost markets. According to Census data, the national median home price is \$195,700. In the Upstate, the median home price ranges from \$72,600 in Union County to \$156,200 in Greenville County.

Those who might be interested in buying homes find it harder to locate suitable housing because of the mismatch between their preferences and the size and location of existing housing. According to the National Association of Realtors (NAR),

among the trends for millennials are smaller and more urban homes with less outdoor space. They want to be closer to the urban core for easy access to

LendingTree, an online loan marketplace, recently released analysis of national mortgage requests for borrowers 35 and under between August 2016 and February 2017. Greenville ranked 66th on the list, with 35.3% of mortgages requested by millennials.

services and activities. Millennials are willing to sacrifice space for increased flexibility and mixed-use neighborhoods. A recent survey by the NAR suggests that there is a disparity between current housing supply

and what buyers prefer. While 51% of millennials and 43% of Baby Boomers in the survey would prefer to live in attached, walkable homes, 62% of the national housing stock is single-family detached homes that in most cases require a car for most travel needs. According to the ACS, almost 68% of the housing stock in the Upstate is single-family detached.

One obstacle to providing alternatives to traditional single family housing is neighborhood opposition - or NIMBY mentality. Homebuilders are often met with resistance when they try to provide new or innovative products. In many cases, there is a disparity between what people say they want and what they're willing to support in their backyards.



MissingMiddleHousing.com is powered by Opticos Design. Illustration © 2015 Opticos Design, Inc.



One additional trend to note is the growing need for multi-generational housing. This is defined as housing that accommodates more than one adult generation and can include millennials moving back home as well as aging baby boomers moving in with children.

How can the Upstate accommodate these housing trends?

One approach is to allow – and promote – “Missing Middle” housing. The phrase was coined by Daniel Parolek, a California architect with Opticos Designs. In a recent interview with AARP, Mr. Parolek noted that, “most people consider single-family homes as small-scale housing and apartment buildings as large scale. I’m saying that what’s in between those two extremes is ‘missing.’ It’s missing because we haven’t built a lot of them in the last 60 to 70 years, partly because of zoning barriers... We often say that what the young want, the baby boomer generation needs — less reliance on their cars and a desire to be part of a strong community. Walk-ability is key!”

Missing Middle neighborhoods consist of multi-unit housing types such as duplexes, fourplexes, courtyard apartments, multi-plexes, and townhomes that are generally not much bigger than a large single-family house. The housing is integrated into single-family, walkable neighborhoods and provides a similar experience and curb appeal to those homes. The scale is significantly smaller than typical apartment

complexes, and owners enter the buildings directly from the street. These are the types of neighborhoods that developed before the 1940s, and they are often among the most sought-after neighborhoods in any town. These neighborhoods provide diverse housing choices and can generate enough density to support transit and small-scale commercial development. Missing Middle housing serves as a bridge between higher density, larger-scale buildings and single-family detached neighborhoods. Because the units have more of a single-family feel and are better integrated into neighborhoods, they can be more palatable to NIMBY neighbors.

While the Upstate has a number of older mill villages and inner ring neighborhoods close to downtowns that have this type of diverse, walkable housing, new construction of this sort is most often found in planned communities known as Traditional Neighborhood Developments (TNDs).

A TND includes a variety of housing types, a mixture of land uses, an active center, a walkable design, and sometimes a transit option within a compact neighborhood scale area. TNDs can be developed either as infill in an existing developed area or as a new large-scale project.

The National Association of Homebuilders lists four elements that are critical to successful Missing Middle-type housing:

- A walkable context - Homes work best in an existing or newly created walkable urban context. For new neighborhoods, well designed site plans are essential.
- Smaller, well-designed units - Smaller unit sizes enable developers to spend more per square foot to achieve a higher quality or to keep costs down.
- Fewer parking spaces – The homes should offer no more than one off-street parking space per unit to increase site plan yield. Ample street parking should be available.
- They feel like home – The units should have less of the feel of apartment complexes and more of the feel of a single-family home.

Baxter Village

Baxter Village was built on a portion of 7,000 acres of land formerly owned by Fort Mill's Close family. The family had an interest in managed growth in their hometown and developed the Clear Springs Development Company (CSDC) to oversee the implementation of their plan to counteract typical suburban sprawl and conserve open space. In order to build the type of compact, traditional development called for in the plan, the CSDC assisted York County in creating a new TND zoning district.



Baxter Village was the first mixed-use component of the Clear Springs Plan, combining townhomes, single-family homes, and garage apartments with commercial, retail, office, and civic spaces. Baxter now contains over 1,400 homes and 430,000 square feet of retail, office, and civic space. In addition, Baxter Village provides more than 500 acres of open space linked by a trail system.



The community incorporates the principles of TNDs, including a 40-acre town center, an elementary school, a YMCA, a public library, an urgent care center, a daycare center, restaurants, shops, offices, several pocket parks, and a variety of housing choices. The scale is appropriate for pedestrians, with narrow, walkable streets lined by trees and sidewalks.



Patrick Square

Clemson's Patrick Square was begun in 2009, after years of pre-planning that included community meetings and feedback. In 2015, the SC Homebuilders Association named Patrick Square the "Community of the Year". There are sidewalks on both sides of the street, front porches, access to open space, historically-inspired Southern architecture, and a variety of housing choices, including townhomes, duplexes, condos, and even a few accessory dwelling units. Of the 400 total units, 250 are single-family homes. The 179-acre mixed-use development includes a Town Center with restaurants, retail, and a boutique Inn. All homes are within easy walking distance to the commercial center and the open space – which makes up approximately one third of the development and connects to a local city park.

Form-Based Codes

While these planned developments provide a variety of housing choices, they are often on the higher end of the market. Missing Middle housing should be incorporated in to existing, more affordable neighborhoods as well. According to Opticos Designs, this type of housing is not effectively regulated by conventional, density-based zoning, where there is usually a gap in the range of housing types that are allowed in zoning districts. Single-family zones may only allow single-family detached uses, while multi-family zones usually allow much taller and wider structures. It is difficult to provide for blended density neighborhoods with conventional zoning language.

Form-based codes are a different way of regulating the built environment – instead of regulating by use, requirements focus on the form of a structure. As a result, homes and other uses such as commercial can be built in much closer proximity to one another. In regards to the residential components of a form-based code, a range of housing types is established and allowed in specific areas throughout the community. Each type has a minimum lot size and maximum number of units allowed. For each type of housing, there are supplemental form standards that are regulated. Form based codes generally rely heavily on graphic representations of housing types. They address the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks. Because these codes are very specific about what the built form of development should look like, they can result in an expedited development process.

4: Building Design & Infill Standards | 4.5 Building Types

4.5 BUILDING TYPES			PERMITTED ZONING DISTRICT(S)
	SKETCH	PLAN	
1. Carriage House: an accessory structure that provides small, flexible living spaces adjacent to a main house. These are often used for rental housing, and may be located above a garage or parking area.			T3, T4, T5
2. Single Family Detached House: the predominant residential building type in Beaufort. This house sits on a private lot and can vary in size from a small cottage to a large mansion. Setbacks and frontage types vary by Transect Zone.			T3, T4
3. 2-3 Unit House: a house-form that seamlessly fits in to a predominantly single-family neighborhood, but contains multiple dwelling units. The units may be side by side, or stacked. They typically have separate entrances off of the street, but may share a common entrance. They are located under one roof and do not have parapets dividing the units.			T3, T4, T5
4. Rowhome: these attached residential buildings contain more than three units in a row. Three or fewer is considered a 2-3 unit building. They may have parapet walls dividing the units, or be combined under one roof form. They are elevated above the street a minimum of 3' for privacy, and are typically accessed by stoops. They may also utilize the forecourt and porch frontage types.			T3, T4-N, T5
5. Apartment House: these larger-scale buildings feature 4 or more dwelling units. They often occupy corner lots, or are located in combination to create their own blocks. The ground floor is raised a minimum of 18" for privacy. When located within a primarily single family neighborhood, these buildings should assume similar characteristics and setback as the surrounding buildings.			T4, T5, RMX, IC
6. Livework/Mixed-Use: these buildings feature a first floor commercial space at grade, with office or residential living above. They are typically attached but may be freestanding structures. The ground floor has a substantial amount of glazing and often utilizes the shopfront frontage type. They may be fee-simple structures, or condominium-style.			T4, T5, RMX, LI, IC
7. Liner Buildings: these narrow structures are 25-30 feet deep and are placed close to the street frontage. They are typically used to conceal surface or structure parking, or large-scale commercial buildings. They may contain a variety of uses including ground floor commercial, and upper level offices or residential.			T4, T5, RMX
8. Large Footprint Building : these are buildings which have a footprint greater than 20,000 square feet. They are often big-box, national retailers. In the T4 & T5 transect zones they should be integrated into the streetscape or screened with liner buildings.			T4, T5, RMX, IC, LI
9. Structured Parking: a multi-level parking deck that may take up all or a significant portion of a block.			T4, T5, RMX, IC, LI
10. Gas/Fuel Station: a series of fuel pumps in conjunction with a convenience or retail store.			T5, RMX

Draft March 1, 2016

The Beaufort, SC Code | 75

Beaufort County, in coastal South Carolina, adopted a form-based Community Development Code in December of 2014. The new development rules are easy to understand and well-illustrated. The code also has a strategy for transitioning from the prior zoning rules. The process began in May 2010, when the County, in conjunction with the City of Beaufort and the Town of Port Royal, engaged the services of a planning firm that specializes in the development of form-based codes. The goal was the development of a multi-jurisdictional code with common language and zoning districts. The original cost of the code was \$550,000, with \$350,000 paid for by Beaufort County and \$100,000 each paid for by the Town of Port Royal and the City of Beaufort. The Town of Port Royal adopted the new code in 2014 as well. The City of Beaufort is still in the adoption process.

Accessory Dwelling Units

Accessory dwelling units are a fairly simple method of providing additional housing to meet the needs of both millennials and baby boomers. An accessory dwelling unit (ADU) is a second small dwelling on the same grounds as (or attached to) a regular single-family house. An ADU could be an apartment over a garage, a small house (on a foundation) in the backyard, or a basement apartment. Legally an ADU is part of the same property as the main home and cannot be bought or sold separately. The owner of the ADU is the owner of the main home. ADUs are known by other names, as well: granny flats, mother-in-law units, carriage houses, or secondary dwelling units.

Typically, a family owns the primary dwelling and creates an ADU to provide a nearby but autonomous space for a grown child or an aging

parent. ADUs can also provide rental income that might allow an older home owner to age in place.

ADUs were a common feature of single-family homes in the early 20th Century. The rapid growth of suburbs and the high demand for low density development after World War II, however, led most jurisdictions to prohibit their construction. Due to the shifting demographics and trends noted above and an awareness that ADUs can be an inexpensive way to increase the supply of affordable housing, more and more municipalities are again allowing their construction.

There are typically size restrictions on ADUs, and they should be designed to blend in with the surrounding architecture so that they fit in with established neighborhoods and preserve community character.



Accessory Dwelling Unit
Patrick Square

Sample ADU Regulations

The City of Spartanburg allows accessory dwelling units in their downtown area. The units may not be larger than twenty-five percent of the gross floor area of the principal structure, with a minimum habitable area of not less than 500 square feet. The unit can be the second story of a detached garage, as long as it does not exceed the height of the principal structure.

The City of Clemson allows “guest cottages” as a conditional use. Guest cottages are limited to 900 square feet.

The City of Greenville is currently in the process of reviewing regulations for carriage houses. Per the proposed language, the houses would be limited to 900 square feet or no larger than 50% of the principal structure’s footprint and would require design elements similar to the principal structure.



Working Farms & Local Food Systems

Most food in the United States is produced hundreds and sometimes thousands of miles from where it is consumed. This requires significant energy and cost for handling and transportation, increases food spoilage during the journey, and undermines local markets that often grow or produce similar products. 2011 data from the Bureau of Labor Statistics show that South Carolina residents purchase \$11 billion of food each year. Over 90% of it comes from outside the state. Substituting South Carolina food for a significant portion of this imported food could add billions of dollars-worth of food sales to the state's domestic product.

With the rise of farm-to-table restaurants and farmer's markets, however, the demand for local

food is on the rise. In fact, according to Making Small Farms into Big Business, a 2013 report commissioned by the State, local food demand currently exceeds supply, and more farmers are needed.

At the same time, local farmland is under constant threat from development, especially in rapidly-urbanizing Spartanburg, Anderson, and Greenville Counties. According to the SC Farmland Trust, the state is losing 35 acres of farmland per day. For the most part, farmers want to farm and don't necessarily want to "give in" to development, but they may feel they have little choice. Aging farmers may not have heirs who wish to farm. Younger farmers, just starting out, may not be able to find affordable land. Many of them – young and old – may not be able to connect with appropriate

markets. (See box below.) Making Small Farms into Big Business describes a number of ways to strengthen smaller farms and help them to reach their markets. Food hubs should be cultivated throughout the state. As defined by the National Food Hub Collaboration, a food hub is a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers in order to satisfy wholesale, retail, and institutional demand. The study notes that up to four food hubs could be supported in South Carolina. The state's first local food hub – GrowFood Carolina – launched as an initiative of the Coastal Conservation League in 2011 in downtown Charleston.

Food hubs, in turn, will be dependent on smaller food nodes. A food node is a cluster of farms in close proximity to each other, working in collaboration and using common food production infrastructure. These food nodes have the potential to build local efficiencies in food trade. As an example, a grouping of farmers might be able to build a joint-

For many new and established farmers, finding available and affordable land can be a huge challenge. On the other hand, aging farmers may want to keep their land in farming but may not have an interested family member willing to take over. Other land owners may want to make their land available for farming. The challenge is in linking the farmers with those who have the land.

SC Farm Link wants to play matchmaker. Farm Link, sponsored by the South Carolina Department of Agriculture, can facilitate conversations between land owners and farm seekers – with no cost and no obligation. Other states with similar programs keep current databases of farmers and available farmland to browse online.

<https://agriculture.sc.gov/divisions/external-affairs-economic-development/sc-farm-link/>

use building that would allow each of them to wash, sort, and package their products for sale. Food hubs could then further aggregate products for sale to larger markets.

At the other end of the market, consumers need to be educated about the importance of local food systems. We have spent too much time removed from the land and unaware of where our food really comes from and the impact that it has on our economy. The potential impact if every South Carolina resident purchased \$5 of food each week directly from a farmer in the state would be about \$1.2 billion per year.

Voluntary Agricultural Districts

Agricultural district programs, commonly known as voluntary agricultural districts (or VADs), have been used in the US since 1965 as a response to the threats facing agriculture and agricultural lands. The goal of VADs is generally to protect agricultural resources, increase agricultural viability, and to create a secure climate for agriculture.

Districts can help to maintain the critical mass of farms necessary to maintain farming infrastructure such as tractor dealers and feed stores. Additionally, they can enhance the sense of pride and identity within farming communities and – in cases where public VAD signage is installed – build awareness and visibility for agriculture and farmland in general.

According to Farmlandinfo.org, a partnership between the US Department of Agriculture Natural Resources Conservation Service and American Farmland Trust, there are a total of 19 agricultural district programs in 16 states. The programs vary from state to state, and benefits and restrictions can be tailored to meet local needs.

To protect agricultural resources, some states protect farmland from annexation and eminent domain. Many also require that state agencies limit construction of infrastructure, such as roads and sewers, in agricultural districts. Some states encourage local planning by limiting district authorization to jurisdictions with comprehensive or farmland protection plans, requiring the adoption of land use regulations to protect farmland, and requiring the involvement of planning bodies in the development and approval of districts.

South Carolina does not currently have any VADs in place. Some states require enabling legislation for these districts. However, since South Carolina is a home rule state, the attorney general has noted that the lack of enabling legislation does not preclude them from being enacted locally. A number of other states in the Southeast region do have VAD programs.

Virginia

In Virginia, land owners voluntarily initiate the creation of these districts. At least 200 acres are required to form a district, but multiple properties can be included. By establishing a district, property owners agree not to convert their farm or forestland to commercial, industrial, or residential uses for a period of four to ten years. In return, lands in these districts have reduced taxes based on actual use rather than fair market value and are allowed exceptions to laws that would restrict farming or forestry.

Additional Benefits Offered by Virginia VADs

- Districts offer some protection from eminent domain, as acquisition of land or easements for power lines, roadways, and other infrastructure within a district is subject to special review.
- Districts prohibit the expenditure of public funds for non-farm related purposes within a district except under special circumstances.
- Districts offer protection from nuisance lawsuits.
- Districts offer assurance that the district will be taken into account in local planning decisions, such as rezoning.

North Carolina

The North Carolina general statutes authorize the creation of both VADs and Enhanced Voluntary Agricultural Districts (EVADs) to encourage the preservation and protection of farmland from non-farm development and to recognize the importance of agriculture to the economic and social well-being of North Carolina. 88% of counties in the state have some type of VAD ordinances.

In order to qualify as a VAD, the farm must meet the definition of agriculture, as defined by statute. The farm must be managed in accordance with the Soil Conservation Service's erosion control practices. Additionally, EVADs must have a recorded irrevocable conservation agreement for at least ten years from the date the agreement is executed. Local governments may require a minimum acreage or a minimum number of farms to create districts. The program also provides for the creation of an Agricultural Advisory Board to administer districts.

Benefits

- Participating farms are given signs identifying them as members of a district and noting that the land is committed to agriculture as a way of life.
- Notice on the property (as well as in computerized land records) alerts neighbors of the potential for noise, odor, dust, or slow moving vehicles associated with farming.
- Landowners with VADs can have water and sewer assessments waived.
- Public hearings are required for any proposed condemnation.
- District members may be eligible for farmland preservation funds.
- The Agricultural Advisory Board associated with the VAD acts as advisor to the local governing board on issues that affect the agricultural economy.

EVADs have additional benefits, including priority consideration for State grants.

A model ordinance can be found on the North Carolina Cooperative Extension web site.

Feed & Seed

While South Carolina has a robust agricultural economy, the disconnect between consumers and local producers has prevented the Upstate from establishing a well-developed local food economy. Despite this, Feed & Seed, an anticipated future food hub to be based in Greenville, thinks the future of farming in the Upstate is bright. Staff and board members at Feed and Seed believe that facilitating access can increase demand for local food. If the farmers are assisted in achieving profitability by meeting the increased market demand, then the incentive for families to maintain generational transference of farms will protect those farms from development.

FEED & SEED
LOCAL FARMS FOR
LOCAL FOOD
SO. CAROLINA

The food hub being created in Greenville will provide local farmers a more efficient way to sell their crops to not only individual consumers (as is done at farmers' markets), but also large-scale consumers like restaurants, hospital systems, Head Start programs, and school districts. As a hub, Feed & Seed will be able to purchase product from several smaller farmers, aggregate that product, and sell it in the larger quantities necessary for larger organizations. Feed & Seed will have a market place, processing facility, and a commercial component. The facility is currently in the engineering phase and is expected to open in downtown Greenville by the end of 2017.

Feed and Seed has established relationships with 35 farmers across the 10-county Upstate region. An additional 300 farmers have expressed interest, so that number will likely grow as the opening nears. With these growing relationships, Feed and Seed will not only be able to facilitate the sale of existing product, but will also be able to advise farmers on what the market needs so that they are better able to meet demand.

Feed and Seed sees that farming in the Upstate is varied and rich. Executive Director Mike McGirr says that few farmers specialize in just one product. "From the apples of Oconee to the beef of Anderson, the peaches of Spartanburg and the spirits from the Dark Corner... there isn't one story to tell, but hundreds. Goat meat and goat milk. Jersey milk and Wagyu beef. Heritage turkeys and propagated mushrooms. Hydroponic greens and bottomland tomatoes."



Grown in Spartanburg, S.C.

Growninspartanburg.com promotes agritourism in Spartanburg County. The web site points the way to farms, farm stands, and farmer's markets in the County. By following the self-guided tour, visitors can eat farm-to-table food, learn about working farms, pick strawberries or pumpkins, visit farm animals, and learn about how food service changes lives.



Valuing Working Farms and Forests

The value of private forests and farmlands to the region's economy is often not well understood. The value those land areas represent in the context of local government finances is even less understood. Organizations such as the American Farmland Trust (AFT) and others have extensively studied the value of agricultural land as compared to other land uses. These cost of community services studies have looked at agricultural land uses as compared to other land uses.

Just over the North Carolina state border in Gaston County, research from North Carolina State University found that "property in agricultural land uses is found to be a net contributor to the local [county government] budget, generating \$1.13 in revenues for every dollar of public services that it receives". Another study in nearby Union County, GA found that ratio to be \$1.38 to every dollar spent on county public services (police, fire, schools, etc.). While this ratio of revenue to expenses is almost always higher for commercial and industrial uses, residential development is almost always lower. Gaston County found that residential development generated only \$0.81 for every dollar spent to provide services while in Union County the value was \$0.88. These "cost of community services" studies have consistently found these patterns to be true while varying some from state to state .



The Swamp Rabbit Cafe & Grocery (SRCG) is a bakery, cafe, and full-service grocery with the mission to support local farms in the Upstate. They accomplish this mission through connecting their farmers directly to consumers and chefs. In the past five years SRCG has bought from more than 250 small family farms and more than 300 local artisan food makers. SRCG pays its farmers a premium for their products and this is in line with their philosophy to pay a fair price to help farmers earn a living wage and stay in business. On a busy day, more than 1,500 customers walk through SRCG's doors looking for local food, and hundreds of customers have attended one of SRCG's Cook Local cooking classes.

In 2015, SRCG secured a \$100,000 grant from the US Department of Agriculture (USDA) to expand its grocery and increase its role as a regional food hub, and in 2016 it was awarded a \$345,000 grant from the USDA to add a whole animal butchery, with the goal to expand its market for local meat farmers.

Agricultural Zoning

Zoning can be an important tool for farmland preservation. Because zoning can be used to regulate the uses of land, it can protect agricultural areas by minimizing land use conflicts from incompatible uses. As municipalities grow, the influx of non-agricultural land uses to previously agricultural areas often creates conflict between farming activities and non-farming activities. New residents often object to such “nuisances” as noise and odors (from animals or manure) and complain that agricultural operations are interfering with their right to enjoy their property. The segregation of land uses minimizes the number of non-farming landowners impacted by farming activities and reduces the conflicts that may arise. In addition, agricultural zoning can help the agricultural sector by maintaining a critical mass of agricultural land. Limited residential or commercial development is not necessarily prohibited in agricultural zoning. Support businesses, such as suppliers and processors, can exist in close proximity. Residential uses may be allowed but require very large lot sizes. Minimum lot sizes in agricultural zoning districts should be no smaller than ten acres, and ideally, they would be greater than 25 acres.

Stakeholders likely to be affected by agricultural zoning should be involved in the process. Local farmers, agricultural organizations, landowners, developers, and realtors are among those who represent different points of view on farmland preservation. Each of these groups should be consulted (and often educated) when considering agricultural zoning. Stakeholders can also assist in determining the most appropriate areas for agricultural zoning. These areas generally contain contiguous tracts of productive farmland of substantial size.

Charleston County has three agricultural preservation zoning districts, as well as a “Resource Management” district. The purpose of the agricultural preservation districts is to implement the Agricultural Preservation (Rural Area) policies of the County’s comprehensive plan. According to the plan, the majority of land

within the Rural Area contains soil types recognized by the U.S. Department of Agriculture as the best farmland for agricultural production. As stated in the plan, “designation of farmland preservation areas recognizes the importance of preserving Charleston County’s farming resources, including individual farms and areas of productive soils, as well as a way of life valued by the community.” The agricultural preservation districts (AG-15, AG-10, and AG-8) allow residential densities of one dwelling unit per 15 acres, one dwelling unit per ten acres, and one dwelling unit per eight acres. Resource Management areas are generally undeveloped land used primarily for timber production, wildlife habitat, recreational and commercial fishing, and limited agriculture. These areas are limited to one dwelling unit per 25 acres.



Preferred Development Patterns, Who Chooses?

Land use policies and ordinances, demographics, developer interests, market trends, personal property rights – each has a part to play in shaping communities. With all of these moving parts, how can visions be realized? How do all of the pieces fit together? What brings private investment?

Local governments have many opportunities to steer and shape development. They have the right – and responsibility – to establish the ground rules through community-based planning and proactive land use management. Land use planning and policies are among the most crucial pieces of the puzzle and help to determine whether the private sector will bring investment and to what degree community needs and interests will be reflected as that investment occurs.

Creating the right kind of environment for the right kind of development – while respecting and balancing community needs – takes time, effort, coordination, and patience, but the work done up front will pay off in the long run. Unfortunately, many Upstate communities do not take advantage of some of the basic tools at their disposal. Localities that do are able to more effectively accommodate and manage growth, while retaining their unique character.

The South Carolina Comprehensive Planning Enabling Act of 1994 provides local governments the legal authority to undertake a continuous planning process for growth and development in their jurisdictions. Plans are required for communities that have established a Planning Commission. The Act stipulates that plans must be re-evaluated at least every five years, and new plans must be adopted at least every ten years. Broad-based citizen participation is encouraged throughout. Unfortunately, many Upstate communities do not have current comprehensive plans in place, and many communities that do, fail to follow those plans – leading to frustrations for developers and community members alike.

The true comprehensiveness of the plan differs from community to community, but any time, effort, and funds spent on creating a market-receptive plan – that also reflects the vision of the community – will be beneficial in leveraging additional and appropriate investment. This is the opportunity to bring all of the players – developers and those impacted by it – together to ensure that once development comes, it is suited to both the character and needs of the community. With broad-based participation, goals can be crafted that are realistic,

achievable and grounded in a community vision.

Once a plan is developed and adopted, the real challenge can be sticking to it. South Carolina does not require consistency with adopted plans in land use decisions. The Upstate is an area that strongly values property rights. While many citizens do not appreciate being told what to do with their property – and may perceive any effort related to planning, zoning, or other proactive land use management as doing just that – they may be equally as likely to oppose a particular development on their neighbor's land. The success of any plan ultimately depends on the will of the elected officials, and it can be difficult to balance the best interests of the community with the desires of an individual property owner.

The most successful places, however, proactively engage in community-based visioning and planning, adopt the plans created, and follow those plans once adopted. They also build on opportunities – seeking out partnerships with the private sector to advance the type of investment they want to see and supporting developers throughout the development process.

According to the Municipal Association of South Carolina's Comprehensive Planning Guide for Local Governments, comprehensive plans must include the following elements:

- **Population:** Population information with historic trends and projections. This includes general population, household information, educational attainment, and income characteristics. This information should provide an understanding of future potential in the area.
- **Economic:** Economic information, including historic trends and projections and information on the labor force.
- **Natural Resource:** An assessment of natural resources.
- **Cultural Resources:** An assessment of cultural resources such as historic structures or unique scenic resources.
- **Community Facilities:** A summary of community facilities, including water supply and treatment plans, solid waste plans, fire protection, and expansion of general government facilities.
- **Housing:** An analysis of existing housing and a review of local regulations that may work against the development of affordable housing.
- **Land Use:** An assessment of future land use needs, based on the findings of the previous elements.
- **Transportation:** The transportation element should be developed in coordination with the land use element.
- **Priority Investment:** A recommendation for future investment priorities and funds to be used for those projects.

Local governments must consider many things when making land use decisions. What impact will those decisions have on a community's social equity? How will those decisions impact surrounding natural resources and quality-of-life for current residents? Additionally, it pays for local governments to base land use decisions on careful market analysis. They need to understand what will be in demand at least five to ten years in the future and zone accordingly. Local demographics are important, but communities also need to look beyond their borders, analyzing relative geographies over multiple time periods. National trends must also be evaluated in order to maintain strong land use policies. For example, a new generation is getting their shopping done online, and as a result, "brick and mortar" stores are generally on the decline. An increased trend towards working from home means that suburban office parks are becoming economically and physically obsolete. Millennials and baby boomers are changing housing trends – looking away from the suburbs to smaller homes in more urban areas. This awareness of changing trends needs to be an ongoing part of the land use planning process.



Downtown Greenville

The seeds of downtown Greenville's renaissance were planted in the 1970s. Across the country, downtown storefronts were being shuttered as people moved to the suburbs and businesses moved to the malls. Greenville leaders recognized this threat in 1977 when a regional mall opened just three miles from downtown, and they developed a systematic approach to focus on the area. They began in 1979 with a Main Street streetscape design, reducing it from four lanes to two with widened sidewalks to accommodate both easier walking and outdoor dining. After that came a series of public/private partnerships, beginning with the Greenville Commons, incorporating a hotel, convention

center, offices, retail, parking and a public plaza. The City used federal grant money, and local business people provided additional capital.

The success of Greenville Commons led to additional public/private partnerships, including a number of mixed-use developments. The City relied on consultants to create master plans and took an active leadership role in implementing those plans, making strategic investments and cultivating relationships with the private sector. By engaging with the private sector, City leaders were able to better understand the true needs of both the downtown and the developers who were willing to invest there. In the 1980s, City leaders realized that their downtown waterfall could be

a big draw – unfortunately, it was covered by a four-lane highway bridge. A park master plan was developed for the area, and eventually, Greenville paid to have the bridge taken down. Included in the project was the construction of a 355-foot-long pedestrian suspension bridge that provides a view of the falls. Falls Park on the Reedy is now one of the City's most popular attractions.

Among the City's other contributions to the downtown are strict design standards, maintenance of landscaping, benches, trash cans, statues, public art, user-friendly signage, and family-friendly events. City leaders recognize that even small contributions go a long way.

Greenville's downtown has been a national model of success, with national awards and frequent visits from community leaders from across the country. There are a number of lessons that can be learned from their success that can be applied anywhere:

- It is important for elected officials to reach out to the business community and to understand their needs.
- Infrastructure investment is important. Cities can provide parking, landscaping, and public spaces – but smaller contributions are important as well.
- Ordinances should encourage appropriate development.
- Expedited review and approvals benefit everyone.
- Involve the whole City – not just the planning department.
- Bring everyone to the table in the planning process.
- Follow the plan. If it was worth it to invest in it in the first place, it's worth it to see it through.
- The City maintained focus on the downtown by providing periodic progress reports on the goals and strategies developed in the plans.
- Results take time. Investments and decisions made by Greenville in the 1970s continue to pay off today.



City of Greenwood

In the 1980's, Belk and JC Penny moved out of the City of Greenwood's Uptown district. By 2000, the Uptown had become dominated by offices for professional workers with little weekend activity, according to Greenwood City Manager Charlie Barrineau who presented during the Shaping Our Future 2015 Speaker Series. With an intent to revitalize the Uptown, City leaders began by changing city code to allow for second floor residential, a key ingredient for encouraging downtown living and weekend vibrancy. Leaders also set to work developing a downtown vision, engaging community members and elected officials from the start to ensure eventual plan adoption and implementation. City leaders relied on private investment to catalyze public investment – leading to the adoption of a 2% hospitality tax. Barrineau also reported the following key 'lessons learned' from Greenwood's experience: seeking out what has worked for other similar communities; identifying an anchor; communicating progress through social media and branding/marketing; inspiring entrepreneurs; celebrating successes with festivals and events that bring community members Uptown; and tracking the data necessary to effectively demonstrate return-on-investment (i.e. business licenses and permits, property values, vacancy rates, etc.). In Greenwood's case, for instance, as city leaders began implementing the adopted Uptown vision they were able to showcase a 13% increase in Uptown property values between 2009 and 2013 and a 40% increase in hospitality business growth for the same period. They were also able to highlight a 102% increase in Uptown hospitality business gross revenues from April 2013 to March 2014 as compared to the same period just three years prior.



Travelers Rest

About 10 miles from Greenville, Travelers Rest (or TR as it's known) is a small community doing big things. In just the last five years, the City has seen the opening of dozens of new restaurants and businesses in the downtown and has become a popular destination as a “trail town.” The transition of this once sleepy city has been years in the making and includes multiple plans, visionary leaders – and the good fortune of having the Swamp Rabbit Trail (SRT) running through its heart.

Even before the opening of the SRT in 2009, however, the City was already creating a vision. The 2000s were a transformative time, with a variety of efforts spearheaded by then-Mayor Roy Reynolds. In 2003, Travelers Rest commissioned a retail market study that provided economic development recommendations and noted that the conversion of an abandoned rail corridor to a biking trail presented economic opportunities.

The 2006 Comprehensive Plan recognized the potential for a walkable, dense urban district, complete with specialty shops, and included a number of recommendations, including:

- Place decorative lighting along Main Street.
- Work with County officials to transform the former “Swamp Rabbit” rail line into a greenway/trail system.
- Encourage infill development between existing businesses in order to create a more concentrated retail district.
- Increase the widths of sidewalks to increase pedestrian traffic.
- Develop a city-wide wayfinding system.
- Conduct a Master Plan, concentrating on ways to revitalize the downtown area.
- Conduct a feasibility study of a streetscape and beautification plan.

In 2006 and 2009, the City completed downtown streetscape plans. These projects identified key streetscape improvements needed to create a safer, pedestrian-friendly environment in the downtown.

In 2012, the City commissioned another retail market study, which was updated in 2014 and is currently being updated again. Among its major recommendations is that Travelers Rest should continue to cultivate its reputation as the hub of outdoor recreation, pedestrian-friendly shopping and dining, and high-quality living for residents and visitors.

In 2015, Travelers Rest completed a bicycle master plan, which includes the recommendation that by 2025, all households in the City will be within a quarter-mile of a bikeway.

The planning never stops for Travelers Rest. They are currently working on a corridor plan for Poinsett Highway, they're nearing completion of a new comprehensive plan, and they're exploring the idea of a public art master plan. Throughout these endeavors, the City engages developers and potential investors, and they believe that a lot of investment has resulted from that collaborative process.

While the plan-making is important, action is essential, and TR has excelled at this, as well.

The City has completed a placemaking and branding effort that includes wayfinding signage, community gateways, and pedestrian-scaled kiosks on the trail that point visitors to downtown businesses.

Trailblazer Park is a performing arts and cultural center that is home to the Travelers Rest Farmers Market, an open-air amphitheater, and numerous festivals. Cyclists and pedestrians can access Trailblazer Park via a spur trail connection to the Swamp Rabbit Trail. The park is on the former site of a high school, and the school's original plan was to use the vacant site as bus parking. The City recognized the site's potential, however, and partnered with the Greenville County Recreation Department to purchase the land.

The City of Travelers Rest finds itself in the enviable position of being able to leverage its recent successes and its shared community vision to establish itself as a hub of economic activity and a regional destination for active recreation, shopping, dining, and living options.



Get in Your Element



Transit in Urban and Suburban Landscapes

Public transit in the United States is credited with reducing traffic congestion, improving air quality, and offering more choices for getting around – and trends propelling the expansion of transit riders nationwide are not slowing. Baby boomers are increasingly seeking travel alternatives, for a variety of reasons – including both personal economics and health. Increased health issues among aging baby boomers is also creating a need for demand-response service, as people who no longer have access to a car or the ability to drive still need to get to their doctors. On the other end of the age spectrum, millennials are driving less. For a generation heavily in debt, cars can be too expensive, and there is a trend among millennials to live in denser,

more transit-friendly locations. Low-income residents, regardless of age, often can't afford gas, insurance, or car repairs.

Transit advocates claim that any city (urban or suburban) with sufficient population or employment density to cause traffic congestion has sufficient population and employment to support some level of public transit investment. Urban areas in the region are most likely to provide the density, mix, and pattern of development for a more traditional transit system, which provides access to nearby destinations using a series of interconnecting routes and high-frequency service. However, even in these areas, there is work to be done in terms of both infrastructure and

perception. In areas like the Upstate where buses are the only transit option, most people will drive if they can afford a car. There is a perception that buses are only for those with no other option.

Development characteristics for more suburban areas typically do not support traditional transit systems without major subsidies, and transit advocates in these areas try to identify one or more transit investment corridors that collect riders from surrounding low-density areas (using park-and-ride facilities) and connect them to major destinations in more urban areas where parking availability or pricing and road congestion levels discourage single-occupant vehicle travel. Service in suburban transit corridors is typically focused on

peak morning and evening commute periods.

Providing traditional transit service in rural areas (fixed-route service with regular service times) is often difficult and expensive. Customers need to travel further, and more federal and state transit dollars go to funding service in urban and suburban areas. However, research by Reconnecting America finds nearly 40% of the United States transit-dependent population — senior citizens and disabled or low-income individuals — live in rural areas.

Transit Service in Urban Upstate Region Areas

A recent study by the Piedmont Health Foundation found that one of the primary impediments to economic success for many citizens in Greenville County is a lack of transportation. For many, this lack of transportation limits access to health care, employment, education, and other services in the Upstate region. In a community survey conducted for the study, over 2/3 of the respondents believed Greenville County would be a better place if people could travel without cars. Despite this apparent public support, however, Greenlink — the public transportation service provider in Greenville County — receives just \$3.76 per capita from local sources. As a comparison, Charleston, SC receives \$17.79 per capita, and Nashville, TN receives \$71.45 per capita.

Transit thrives in the most urban areas of the United States — New York, Chicago, Los Angeles and San Francisco — because they far exceed the levels of development density, land use mix, and infrastructure (especially a gridded network of streets and short block lengths) needed to support a comprehensive, efficient and robust transit system. In such areas, transit investment may be a ‘no brainer’ for elected officials, transportation organizations, business leaders, or residents (the builders, operators and customers for a robust transit system). Areas like Greenville and Spartanburg — the most urban areas of the Upstate — currently lack those transit-supportive conditions (or at least to the degree necessary for transit to be highly efficient). This offers a possible explanation as to why transit is not supported more heavily by local governments in the Upstate.

Transit-supportive conditions — particularly in downtown areas such as Greenville and Spartanburg — are improving as initiatives to promote more density and a mix of

complementary uses (residential, employment and shopping) continue to take hold; however, high-quality transit service (primarily defined by number of routes and service frequency) has been slow to follow — and ridership is low. According to analysis of data from the Census done by the web site FiveThirtyEight.com in 2014, the Greenville metropolitan area saw monthly ridership of 2.3 trips per capita. Spartanburg saw 0.7 trips per capita. This ranks Greenville and Spartanburg as 272 and 289, respectively, of 290 metropolitan areas on the list.

Metropolitan Area	Monthly Trips per Capita
Greenville, SC	2.3
Spartanburg, SC	0.7
Chattanooga, TN	7.8
Nashville, TN	9.9
Charleston, SC	8.5
Charlotte, NC	20.9
Greensboro, NC	17.8
Louisville, KY	15.7

Suburban Areas

In the late 19th and early 20th centuries, transit service supported the development of “streetcar suburbs” outside of city centers, allowing residents to live further

How can we make buses a more attractive option? Make them more like trains. Trains generally have better design, speed, shelters, schedules, and easier to follow routes. Bus systems can incorporate some or all of these features.

away from their daily needs for employment and shopping. Over time however, the rise of the automobile, the boom of lower-density, less-walkable suburban development, and the expanding footprint away from corridors leading back to a single city center significantly lowered the ability of transit providers to move people in the area. Trips linking suburb-to-suburb destinations, low employment densities, and free parking at suburban-scale employment and shopping centers are not generally conducive to riding transit (or increasing transit demand).

Further, suburban workers own more cars than their urban counterparts, and the high rate of off-peak and weekend trips in the suburbs tends to coincide with times transit options are less frequent or simply unavailable. People living and working in the suburbs have a choice for commuting, and they are overwhelmingly choosing the automobile for their daily travel needs today.

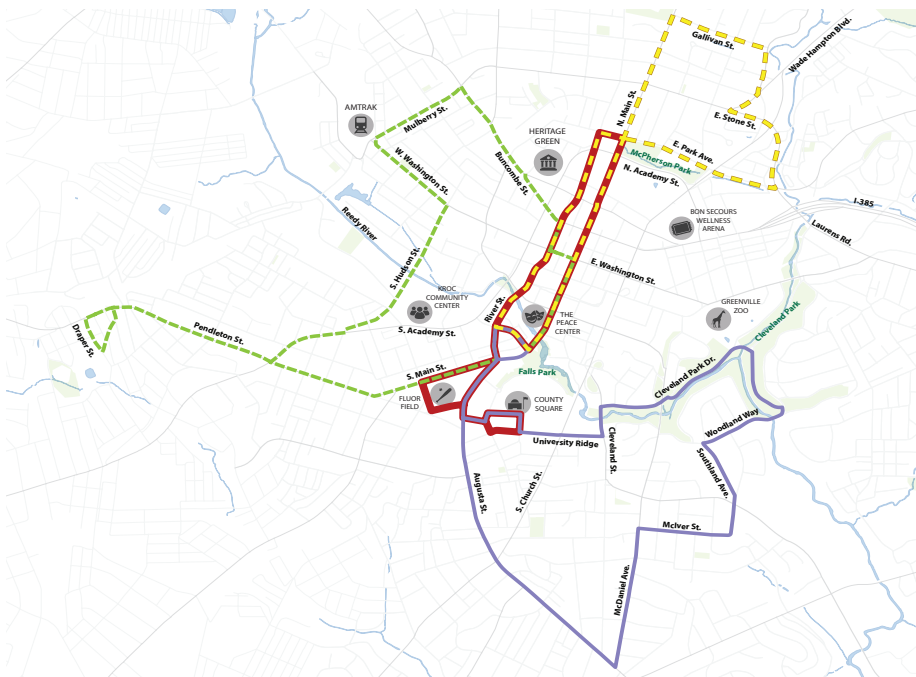
In recent years, however, some suburban communities are changing their land development trends and taking steps to create conditions

more favorable for transit – increasing ridership potential. For example, more mature suburban communities near employment hubs in Charlotte and Raleigh, North Carolina, are seeing infill development opportunities with higher densities and a mix of uses concentrated in walkable centers. Transit providers are quickly working to link new centers in the suburbs with the city center and other nearby suburban centers, which provides for a more regional and integrated transit system.

What Can Be Done to Increase Transit Opportunities in the Upstate?

Create Concentrated Development Districts & Corridors

Transit works best when it connects relatively dense concentrations of mixed-use development along corridors. This development pattern provides the density, mix of uses, and close proximity of destinations needed for transit to thrive. Providing a mixture of development along corridors



When the modern trolley system began in Greenville in 2014, it was mainly used as novelty transportation for fans to and from Greenville Drive baseball games. It evolved into a downtown tourist attraction that also serves as small-scale public transportation. This year, the Greenville Transit Authority will expand the trolley routes into residential neighborhoods for the first time. Two existing routes will remain in the downtown area, but one new route will run a trolley west of downtown to the Village of West Greenville and a second new line will run south into the Augusta Road and Cleveland Park neighborhoods to the zoo. These expanded routes will run between May and October and be reviewed in November. The trolley service, paid for by the City's hospitality tax, is free to passengers, and there is a Trolley Tracker app to track the real-time location of the trolleys. While the primary focus will still be on service to hospitality, tourism, and leisure venues, the expansion into residential neighborhoods will offer those residents new opportunities for using public transit.

— apartments, condominiums, office buildings, and mixed-use buildings — also provides for balanced, all day, two-way flows of transit riders. Recent studies by City Observatory have also advocated for higher “destination densities” in city centers (as opposed to only higher housing densities) because concentrating employment in the region supports widespread use of transit along identified routes into the city. Creating the option for suburban residents to use transit daily to access their job in the city center reduces overall road congestion, greenhouse gas emissions and pollution, household transportation costs, etc.

Transit-Oriented Development

Transit-oriented development, or TOD, is a type of community development that includes a mixture of housing, office, and retail uses integrated into a walkable neighborhood and generally located within a half-mile of public transportation. These areas are typically built at higher densities. Mixed-use developments with higher densities justify increased transit service by increasing the number of possible riders for the system, while proximity to a transit station will attract more residents and/or employers to the area that are seeking to use public transit for a portion of their travels. TODs can offer a variety of housing types with varying price points and can minimize the travel distance between certain land uses.

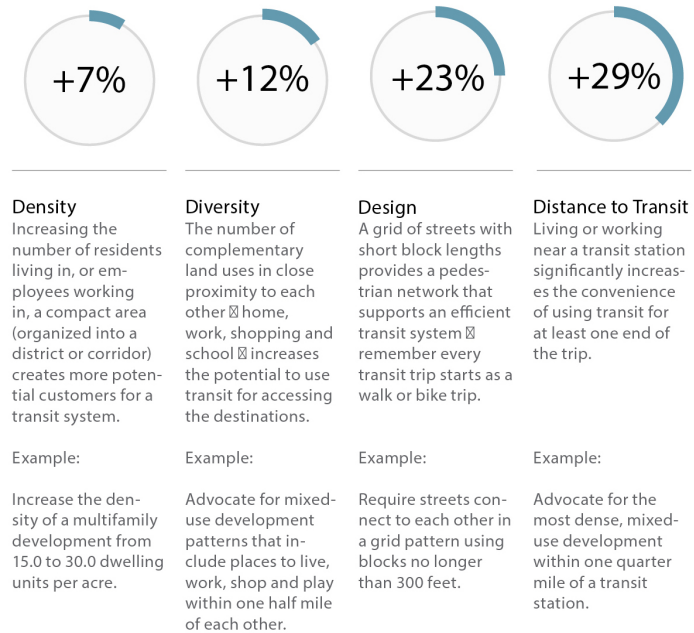
Minimum residential density necessary for local buses is seven units per acre. However, bus rapid transit – or “express” buses – require 15 dwelling units per acre. The densities in Greenville and the surrounding urban/



How can we influence transit ridership in a community?



Studies show improving one or more of the following development conditions in a community can lead to measurable increases in transit ridership:



Density
Increasing the number of residents living in, or employees working in, a compact area (organized into a district or corridor) creates more potential customers for a transit system.

Example:
Increase the density of a multifamily development from 15.0 to 30.0 dwelling units per acre.

Diversity
The number of complementary land uses in close proximity to each other – home, work, shopping and school – increases the potential to use transit for accessing the destinations.

Example:
Advocate for mixed-use development patterns that include places to live, work, shop and play within one half mile of each other.

Design
A grid of streets with short block lengths provides a pedestrian network that supports an efficient transit system – remember every transit trip starts as a walk or bike trip.

Example:
Require streets connect to each other in a grid pattern using blocks no longer than 300 feet.

Distance to Transit
Living or working near a transit station significantly increases the convenience of using transit for at least one end of the trip.

Example:
Advocate for the most dense, mixed-use development within one quarter mile of a transit station.

suburban areas are lower than these recommended, and densities and non-residential intensities will need to increase in targeted areas for improved and increased transit in the future. Great opportunities exist in urbanizing areas of the region to introduce transit-oriented development projects generally following the premium transit corridors identified in both the Greenville Transit Vision Plan and Spartanburg Transit Vision and Master Plan: US Highway 123 (Greenville to Easley to Clemson), US Highway 276 (Greenville to Travelers Rest), US Highway 29 (Greenville to Greer to Spartanburg), SC Highway 20 (Greenville to Greenville Memorial Medical Campus), and US Highway 276 (Greenville to Fountain Inn).

2010, the Greenville County Economic Development Corporation (GCEDC) completed a Multimodal Alternatives Feasibility Study with a focus on a corridor paralleling Highway 276 from the City of Greenville to Fountain Inn – the majority of which at the time was privately held by GCEDC. The study detailed the need for TODs and outlined a vision for growth, with detailed recommendations including station locations. More recently in January 2013, the City of Greenville released a Transit Feasibility Analysis which focused primarily on the same corridor mentioned above. Among the many conclusions of the study was that “the ability of the Greenville region

to develop in environmentally and economically sustainable ways is largely contingent upon their readiness to capitalize on development opportunities near existing or planned transportation assets.” The study also found that there are ample opportunities throughout the corridor to redevelop under-utilized surface parking lots and vacant properties as mixed-use, higher-density, pedestrian-friendly nodes (TODs). The study was a part of a larger effort led by the City, which also resulted in recommended TOD design standards.

However, additional study is necessary – especially in areas outside the City of Greenville. The cities and towns in these corridors should proactively study land use in these corridors for potential TOD development opportunities and coordinate with officials from Greenlink, SPARTA, Spartanburg County Transportation Service Bureau, Electric City Bus, and Clemson Area Transit to identify ways to bring land use and transportation together to support public transit as a viable

transportation mode in the Upstate.

Improve Supply of Transit in Suburban and Rural Upstate Region Areas

Land use strategies could encourage transit-oriented development along major corridors for some locations in the region; however, most will remain suburban or rural in terms of development densities and patterns for many years to come. In these areas, transit providers will need to change system strategies to be more flexible, interconnected, and ever present in the landscape. Moving from a corridor-based transit network to a grid transit network for routes in suburban areas could cast a larger net, and allow more customers to get from “anywhere to everywhere” using the transit system. Timed-transfers within a grid route network could also let buses operate in unison and provide better service for suburb-to-suburb trips. Dedicated busways (including bus on shoulder programs for all interstates in the region) would provide efficient travel corridors for transit while allowing

buses the freedom to leave the dedicated facilities to filter into lower density neighborhoods and employment centers.

Cities across the United States are experiencing great success serving their suburban areas with a grid route network, timed-transfers system, and some level of dedicated busways — notably Oakland, CA; Tidewater, VA; Houston, TX; and Bellevue, WA.

Involve the Private Sector

Federal law (under TEA-21) entitles all employers to subsidize employees up to \$105 per employee per month for the cost of using public transportation. Employers get a full tax deduction and don't have to pay payroll taxes. Employees get affordable transportation to work, and the more people who take the bus to work, the more perceptions of typical bus riders will change.

TARC Means Business

In 2007, Humana, Inc. – one of Louisville, Kentucky's largest employers – approached the Transit Authority of River City (TARC) to request additional trolley service in the

The City of Clemson and Clemson Area Transit (CAT) recognize the importance of communicating regularly on transit and land use issues. With the exception of individual single-family homes, every project in Clemson is evaluated in terms of how it integrates with CAT. In fact, the City of Clemson Planning Department and CAT communicate and collaborate almost daily. Especially given the growing size of Clemson University, this sort of proactive planning is critical -- and appears to be paying off. According to the City of Clemson's Comprehensive Plan, data from the 2007-2012 American Community Survey indicates that while only .6% of South Carolina residents commute to work using public transportation, in Clemson that figure is 3.6%. Also according to the plan, the CAT system services three counties, five cities and four higher educational institutions, and city staff report that ridership in 2015 was roughly 1.8 million.

downtown area. As a result of the discussions following that request, Humana now pays TARC to allow all of its downtown employees to ride the system without paying the fare, using their employee IDs as their pass. Humana also partnered with TARC on a project to provide real-time next trolley arrival information in the lobbies of its offices and promotes transit use by its associates through transit fairs, new-employee orientation sessions, and development of park-and-ride lots. In order to break even originally, Humana needed 60 employees to give up their parking passes, and it didn't take long to exceed that number. During the first seven months of the program, Humana associates used the bus for a total of more than 150,000 rides. TARC and Humana consider the program a win-win: not only do employees benefit, but the program is changing the perception of riding the bus in Louisville. TARC Means Business also partners with the University of Louisville and Louisville Metro Government.

Consolidated Transit Services in the Upstate

Fixed-route transit service in the Upstate is limited to the most urban areas of the region served by Greenlink, SPARTA, the Spartanburg County Transportation Services Bureau, Clemson Area Transit, and Electric City Transit in Anderson. Several transit master plans, long-range transportation plans,

Allendale County, SC

Allendale County, South Carolina provides one example for how to run a rural transit system with limited resources. In 2003, local leaders came together to find solutions for serving the mobility needs of a senior and low-income population that needed access to employment, education and healthcare services. They hired a "mobility manager" that matched residents with available seats on transit vehicles operated by various organizations (aging service, disability board, rural health care and Medicaid transit providers) depending on the pickup and drop off locations of the residents. Passengers that needed to reach destinations not along scheduled routes were placed on demand-response vehicles, which were operated by various transit agencies using an agreed upon "per passenger mile rate" established by the mobility manager.

Bringing together the services of various transit agencies in the county significantly increased both ridership and system efficiencies. Data published by Reconnecting America found the number of trips per month increased by 670% (from 113 to 871 trips per month) and 44% of those riders were using the system for daily travel to work. Funding for the project came from several public, private and non-profit sources, including the South Carolina University Transportation Center, Sisters of Charity, Allendale County, Allendale Alive, the South Carolina Department of Transportation and the Lower Savannah Council of Governments (using FTA Section 5310 Elderly and Disabled Program Funds).

and comprehensive plans for the areas served by these agencies recommended consolidating agencies for more efficient operations, or at least providing better connections between the different service areas for longer, more regional trips in the region using transit. Key centers to link immediately using a multi-agency system should include Greenville, Spartanburg, Greer, Easley and Anderson.

The need to convene a committee or board to study

agency consolidation is not new in the Upstate (see the Spartanburg Transit Vision and Master Plan); however, the urgency to do so may coincide with the Federal Registrar publishing a call to consolidate urban areas into contiguous, or in close proximity, regions for transportation planning. This change, if it took effect, would also consolidate federal and state funding for transit operations, maintenance, and capital projects (among other categories).



Access to Education, the True Cost of School-Siting

In past generations, students lived near their schools. In 1969, 87% of students lived within a mile of school, and 90% of them walked or biked to school. Due to more dispersed development patterns over the last several decades, high land prices, school consolidations leading to larger school populations, and little coordination between town halls and school districts, many schools today are being built on the outskirts of towns and suburban neighborhoods.

Even in situations where schools are located near residential neighborhoods, the lack of safe pedestrian and bicycle infrastructure limits transportation options for students living within

those neighborhoods to get to school. By 2001, according to Safe Routes to Schools, only 21% of students lived within a mile of school, and by 2009, only 13% of students walked or biked. This trend of separating many schools from their students and failing to connect schools to adjacent neighborhoods with safe pedestrian and bicycle infrastructure leads to an increase in transportation costs for school districts and a reduction in physical activity for kids. Those who don't take the bus are most often driven to school by parents, increasing costs to families and adding to traffic congestion. Schools are central pieces of any community. Historically, they were often the focal point of

the neighborhood. Decisions about where to locate schools affect not only the students, but also land use development patterns, transportation infrastructure investment, and other costs associated with government-funded community services including school transportation costs – as well as the overall health of the community.

Because schools can have such a major impact on communities, it makes sense to coordinate with local governments on school site selection. Unfortunately, this doesn't often happen. According to South Carolina state statute, the Office of School Facilities (OSF) is required to approve every school site, whether a purchase, a donation, a land swap, or a lease of land or buildings. Districts are also required to comply with local

zoning ordinances and to consult with the local planning commission on the proposed site's compatibility with the comprehensive plan. However, if the site is in conflict with the plan, the school district can proceed anyway, as long as they publicly state their intentions and give a reason. While the State recommends that the district work to resolve any problems, there is no requirement. In practice, school districts often make their land purchases prior to approaching local governments, and the sites are often on the fringes of the community.

Like the schools and the students they serve, in many communities, planning and decisions about school siting and other community priorities are disconnected. Districts can promote smart school siting by working with communities to locate facilities near where students live, whether by retaining and improving centrally located schools or by building new schools within communities instead of on their outskirts.

School districts should have a voice in the comprehensive planning process to be sure that their needs are articulated in the plan. This gives districts and local governments the opportunity to discuss and agree on criteria for locating new or renovating existing school sites.

Two of the major issues driving school sites to the fringes of communities are land costs and land availability. The closer the land is to developed areas, the

more expensive it may be. Schools are competing for land in the open market, just like everyone else. Schools also generally require larger pieces of land. Though South Carolina is one of a few states that has eliminated minimum acreages for facilities, the South Carolina Department of Transportation is also required to sign off on school plans. All site issues or changes pertaining to access, stacking, traffic patterns, and parking require review and approval, and these requirements can push schools to larger parcels. (Greenville County was able to solve the stacking issue at AJ Whittenburg Elementary School by collaborating with the neighboring Kroc Center. The Center allows the school's stacking lanes on their property.)

There are financial advantages to making smart school siting decisions. The annual cost of

According to the US Environmental Protection Agency, improved coordination between schools and local government agencies on school siting decisions can yield multiple community benefits, including:

- Better learning environments and educational outcomes.
- Schools can serve as neighborhood anchors to promote a strong sense of community, strengthen existing neighborhoods, and support reinvestment in older neighborhoods
- Communities can spend public money as efficiently as possible and provide benefits to the community at large.
- School locations can reinforce local land use and development priorities to improve quality of life.



busing students in the United States is approximately \$17 billion. Some school districts are even forced to transfer general school funds to the transportation budget. Cutting down on the distances traveled and increasing the possibility of walking and biking can cut down on these transportation costs. Renovating existing buildings, when possible, can also lead to savings.

Another advantage of smart school siting is the possibility of joint use facilities. Facilities that can be used by the public after school hours can help bring schools back to their central importance within communities. School districts and local governments should work together to plan these facilities. The City of Greenville has several City parks that

function as school playgrounds, and a number of high schools allow the public to rent their fields.

There are health benefits associated with locating schools closer to neighborhoods, as well. Schools are often too far from homes for walking and biking to be practical, and when distance isn't an issue, other barriers – such as a lack of sidewalks – often exist. This has been linked to childhood obesity as well as children's lack of attention in class. Closer schools can mean more walking and biking, as well as the ability to use a school field or playground after school.

Unfortunately, even school districts with the best of intentions on smart school siting can encounter neighborhood opposition - or NIMBYism. Not everyone wants to live by a school. Among the

most common concerns are increased traffice and, in the case of high schools, lighting on athletic fields. While there is no easy answer to NIMBYism, keeping neighbors informed and involving them in the process through public meetings can help to allay fears. By working together, local governments, school districts, and the communities they both serve can guarantee that school siting decisions benefit both healthy students and a healthy community.

According to Safe Routes to Schools, "smart school siting" supports a community-centered facility for education, safe access to physical activity, and overall accessibility that improves quality of life for students and communities.



New and existing schools should be as well integrated as possible into surrounding neighborhoods. To accomplish this, schools and local governments can work together to:

- Remove barriers such as fences around schools and playing fields. If fences are for security, gates can be included for access.
- Provide trails, sidewalks, or bike paths to connect neighborhoods to schools.
- Control vehicle access and parking so it does not create safety conflicts with pedestrian and bike access.

Tega Cay Elementary School (Fort Mill, SC)

While Fort Mill School District did not approach the City of Tega Cay in advance of the purchase of land for Tega Cay Elementary, the coordination with the community began shortly thereafter when the City approached the Superintendent about annexing the property into the municipal boundaries. Once the annexation was complete, the City and the district began working together on the site plan and layout of the new school, including several meetings with the district's designer.

One City official noted that the district was always amenable to working with Tega Cay and that the final layout and design of the facility reflects the coordination. There is an understanding by the Fort Mill School Board, the District Superintendent's Office, City Council, and City Management that cooperation and communication are essential to

both good schools and good government.

The two-story facility is located on a smaller footprint than a standard elementary school, and there is immediate access to several neighborhoods. The district provided not only the required sidewalks but also a multi-use trail that provides access to the neighborhoods behind the school. This easy access generates

tremendous bike and foot traffic. There is an amphitheater on the school campus that can be used for community activity, and when not in use by the school, the field space is open to the public. As a result, the school campus has become the center of the community. The City is now using the same concept of community focus and partnership on a plan for a new middle school.





During the 2015 update of the City's comprehensive plan, school district staff participated on the section on land use, population, and priority investment – an approach not used in previous plans. Because one of the City's core values identified for the plan was "exceptional education," they felt that it was necessary to receive early advice and support from the Fort Mill School District. The 2015-2025 plan states that, "coordination with the School District is vital in regard to the impacts of residential development on district facilities. New zoning regulations or development standards should support the role

of school facilities as neighborhood gathering places, while ensuring compatibility with community character."

The City's participation with the School District goes beyond the Comprehensive Plan and the location and siting of schools, with staff serving on the Strategic Planning Committee for the district. The committee is tasked with examining the challenges, trends, and opportunities facing Fort Mill Schools, where the number of students living within the district is increasing by the population of an entire school each year.

Pine Street Elementary School (Spartanburg, SC)

While new school buildings seem to attract the most attention, there are a number of schools with long histories in the region that are still serving students. Pine Street Elementary is the oldest building still used as a school in the area. Opened in 1929, the building has housed elementary school students for the last 88 years. Rather than relocating to a new facility, Pine Street Elementary was restored and expanded in the early 2000s in order to maintain Spartanburg's oldest school as a neighborhood school.

The project restored many of the original features of the building, while adding a two-story wing for classrooms, a new cafeteria, a multi-purpose room, and an arts wing. The new construction uses details from the original structure. In 2016, the school was placed on the National Register of Historic Places.

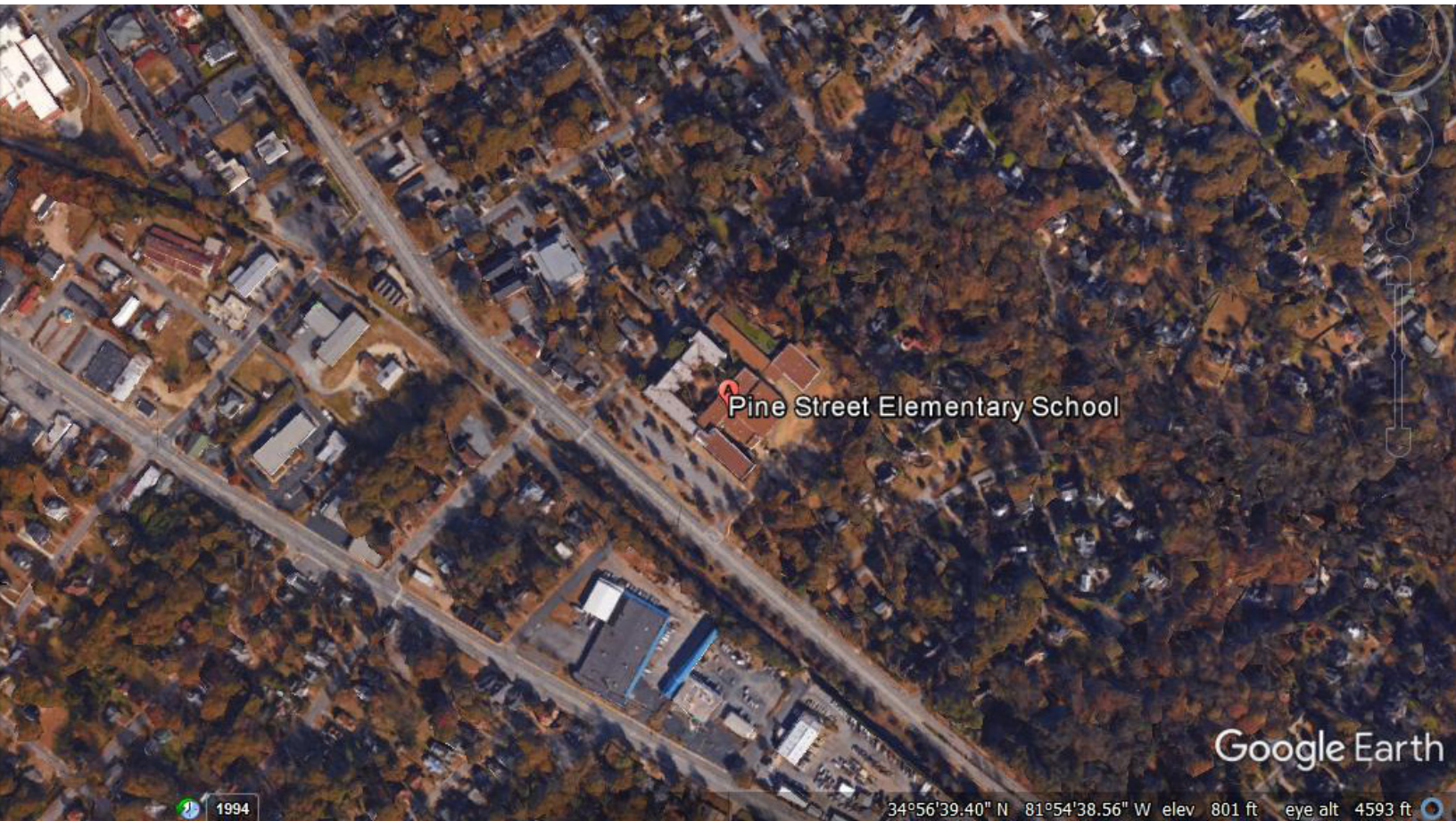
In 2008, Pine Street Elementary began a comprehensive Safe Routes to School (SRTS) program. SRTS is a federally funded program, managed in South Carolina by the state Department of Transportation (SCDOT). The school received a 2-year grant of \$200,000 to increase walking and biking and to improve supporting infrastructure. Initiatives included an annual Walk/Bike to school day and Walking & Wheeling

Wednesdays. Both activities are still held today. Although 40% of students live less than a mile and a half from school (considered walking distance), at the beginning of the grant period, only 6.1% of students walked or biked to school. By the end of the grant, that had increased to 10%.

Richland District One (Richland County, SC)

Richland County District One recently rebuilt three schools on the sites of the existing schools. In November 2002, a \$381 million bond referendum was approved to upgrade the district's middle schools, high schools, and athletics facilities. A portion of the funding was used for the complete reconstruction of two middle schools and one high

school. All were in poor condition and considered inadequate for current classroom needs. The original Dreher High School, built in 1938, was demolished in 2005 to make way for a new \$42,000,000 complex with 80,000 more square feet than the original structure, a large commons area, a 2,000-seat gym, classrooms, meeting facilities, arts facilities, an auditorium, and a media center. The architecture reflects the tradition of the old school and includes a wall built from bricks of the old building. The District's Director of Facility Services notes that there was a substantial savings to the District in not having to purchase additional property. While that was not a primary consideration in the decision, it added to the attraction of building on the existing sites.



The Intersection of Land Use, Communities & Social Equity

While there are many factors that have a role in the ability to achieve personal success, where someone lives can play a significant role in whether they are able to reach their full potential. Cities are collections of neighborhoods, and not all of them are created equal. Less affluent neighborhoods generally have limited access to quality schools, healthy food, good jobs, and quality healthcare. Children who grow up in more affluent neighborhoods – even children who have experienced poverty – are more likely to complete high school, attend college, and avoid teenage pregnancy. This phenomenon has been labelled “the neighborhood effect.”

There is no easy answer to this problem, but the lesson that has been learned over many years of neighborhood revitalization efforts is that, while access to affordable housing is essential, it's not just

about the housing - it really is about the whole neighborhood.

The multi-pronged approach necessary for successful community revitalization is epitomized by Purpose Built Communities, an Atlanta-based organization that takes a holistic approach to community revitalization. The approach is modeled on the success of the East Lake community in Atlanta.

In the mid-90s, East Lake was home to a dilapidated housing project, with high unemployment, and a crime rate 18 times the national average. In 1995, Tom Cousins, a local philanthropist and real estate developer, established the East Lake Foundation to help to transform the neighborhood. Working with neighborhood residents, government, and public and private partners, the Foundation developed a model for community revitalization that

incorporates housing, education, and community wellness in an inclusive neighborhood setting.

Today, the thriving East Lake neighborhood is home to a mixed-income apartment community where half of the 500-plus units are rented at market rate and half rent to families who qualify for public housing subsidies. Crime is down 97%.

The neighborhood's Drew Charter School was formed by a partnership including parents, Atlanta Board of Education representatives and the East Lake Foundation. Drew is a mixed-income school, serving families from the East Lake community, as well as students from around the City of Atlanta. Prior to the school's opening in 2000, the graduation rate at the local high school was only 30%. In 2017, Drew Charter School will graduate 100% of its first senior class.



The Purpose Built Communities approach has five essential elements:

- Defined Neighborhood
- Strong Local Leadership
- Mixed-Income Housing
- Cradle-to-College Education
- Community Wellness

Northside Initiative (Spartanburg, SC)

The Northside neighborhood in Spartanburg was once a thriving and vibrant community centered around Spartan Mills – the largest mill in the County. By the late 1990s, however, the area had begun to decline, and in 2001, Spartan Mills shut down. The economic decline that followed resulted in houses falling into disrepair, foreclosures, vacant properties, a decline in population, and an increase in crime. The housing crisis only exacerbated the problems.

In 2008, the City began to focus on the Northside through the Community Services Department and, because of the high crime rate, the Police Department. In 2010, Mayor Junie White determined that the Northside neighborhood needed strong leadership and sought the help of former Mayor Bill Barnet. They formed the Northside Advisory Group (which later evolved into the Northside Development Group) to better understand the needs of the neighborhood. The group met regularly for an extended period in order to truly understand what might work to revitalize the neighborhood and to develop a plan for moving forward. The process

was funded by a US Department of Housing and Urban Development Choice Neighborhood Planning Grant. The City of Spartanburg, the Housing Authority of the City of Spartanburg, and the Northside Development Group partnered in the process. The group focused on four areas for transformation – People, Neighborhood, Housing, and Education. In 2014, a final neighborhood plan was created and adopted by both City Council and the neighborhood leadership.

One of the biggest boosts to the initiative came when Virginia-based Edward Via College of Osteopathic Medicine (VCOM) announced it had selected the former Spartan Mills site as the location for its Carolinas Campus. A partnership with Purpose Built Communities, the Atlanta-based non-profit known for its holistic approach to neighborhood revitalization, was beneficial to the project as well.

The City of Spartanburg has supported the redevelopment of the Northside Neighborhood with both funding and technical assistance. Since 2010, the City has partnered with the Northside Neighborhood Association and the Northside Development Group to

demolish substandard housing and address neighborhood blight and has made zoning changes in the downtown area that will promote the type of development called for in the plan. However, while the City's involvement has been important, strong local leadership is essential to any neighborhood revitalization effort, and the Northside Development Group has been crucial to the success of the area.

The focus of the Northside Initiative is on people. The goal is to provide opportunities for education and job training, a better place to call home, and new amenities for physical activity and healthy living.

Northside Harvest Park

Harvest Park offers Northside residents a chance to buy healthy produce within walking distance for the first time in more than a generation, transforming this former food desert. Northside Harvest Park is home to the Monarch Cafe and Fresh Food Store, Hub City Farmers' Market's Saturday Market, and HCFM's Urban Farm. The half-acre Urban Farm is focused on year-round, sustainable, and innovative farming methods. Food grown there ends up in the Mobile Market or at Monarch Cafe.

48.7% of housing units in Spartanburg are owner-occupied. 51.3% are rentals. The median owner-occupied home price is \$121,000. Median rent is \$692.



Cleveland Academy of Leadership

Cleveland Academy of Leadership recently became the first 205-day elementary school in South Carolina. It is also a Lighthouse Leader in Me school, where students practice the seven habits of highly effective people. These recent changes at Cleveland Academy are aimed at making the elementary school a magnet for families looking for a good school in a good neighborhood.

Dr. T.K. Gregg Community Center

The Oakview apartments were federally subsidized, low-income housing units built in the late 1940s and early 1950s that had fallen into disrepair. The complex was condemned by the City of Spartanburg in December of 2015 and was recently demolished to make way for a state-of-the-art community center. (All of the residents of Oakview were relocated to other housing – some even moving in to new units in Northside.) When completed, the center will house

after-school programs, computer and financial literacy classes, workout and exercise classes, and meeting space for community and service groups.

Butterfly Branch Greenway

The City of Spartanburg has begun both the condemnation process and the engineering process for “daylighting” the Butterfly Creek, which was previously covered and piped to accommodate industrial development. The City is using the project as mitigation for extending the runway at the airport. Plans call for a linear park running on both sides of the newly uncovered creek.

Housing

After completing a “Model Block” redevelopment effort on Brawley Street, the Northside is now embarking on its first large-scale development project. The plan is for a 90-unit mixed-income housing development, as well as a mixed-use development with a mixed-income

housing component. The goal is to provide both affordable and market rate housing.

With all of this progress, the Northside is well on its way to becoming, in the words of Mitch Kennedy (Spartanburg Community Services Director), a “completely revitalized, mixed-income, mixed-use neighborhood attractive to families and businesses, located close to downtown and served by a mix of highly rated educational opportunities, recreational amenities and responsive and engaged social services.”

50.7% of housing units in Anderson are owner-occupied 49.3% are rentals. The median owner-occupied home price is \$125,000. Median rent is \$623.





Brawley Street, Spartanburg

61 Hills, Anderson

Greenville-based Homes of Hope is in the process of developing a 68-unit affordable housing project in Anderson. The \$9.6 million undertaking is the nonprofit's largest single-site development to date.

The new units will be built on the former site of Earl Homes. These multi-family, low-income units were redeveloped several times with tax credits. However, the cinder-block units were old and distressed, with high vacancy rates, and eventually the bank determined that it was more economically feasible to demolish them than to rehabilitate them again. The bank demolished the building and put the vacant lot up for sale.

Homes of Hope recognized the need for market-quality rental housing in Anderson – particularly in the absence of Earl Homes. They were able to work out a good price from the bank and favorable financing from Community Works Carolina, a non-profit lender in Greenville who had expanded to Anderson. In 2013, they purchased the 16-acre site with a plan to build 68 single-family homes. The City is incentivizing the project by reimbursing all fees paid for each year of the build-out. Eight houses are currently built, and 28 more will break ground in the near future.

The development will offer energy-efficient, market-quality homes for both renters and homeowners at a mixture of family incomes and will have a real neighborhood feel. Some of the homes will be sold at market rate, some will be sold

with special financing to keep them affordable, and some will be affordable rentals. (Affordable rates will be determined using a formula based on the local median income.) The development will also include pocket parks and ample green space. It is located close to downtown Anderson, as well as to the Westside Community Center, which houses health services, a satellite library, and recreational activities for youth and seniors.

One of the tools used by Homes of Hope for maintaining healthy, mixed-income neighborhoods is to rarely sell the rental housing – and to keep that housing in market-quality condition. Strong management is important in that respect. When a renter is financially stable enough to afford a mortgage, the strategy is to

assist them in finding the right new home and then make the original unit available to another low-income renter. When Homes of Hope does sell a house to a low-income family at a subsidized rate, they attach a second mortgage for the discounted amount. If the house is subsequently sold at market rate, the original owner is obligated to repay the second mortgage – and that money is reinvested into other affordable housing. The other option is to sell to another low-income family (again at a subsidized rate), who would then assume the same second mortgage restriction. This is another tool for keeping the neighborhood affordable.

According to Homes of Hope president Don Oglesby, the key to a successful neighborhood is to always develop sites by mixing incomes together, giving a wide range of income diversity to the

community. Homes of Hope offers financial wellness training for all residents of their housing, hoping to help to break poverty cycles in families and insuring sustainable success.

Inclusionary Zoning

One method of promoting more equitable neighborhoods throughout a community is inclusionary zoning (IZ). IZ policies either require or encourage new residential developments to make a certain percentage of the housing units affordable to low- or moderate-income residents. As a tradeoff, many IZ programs provide cost offsets to developers, such as density bonuses that allow the developer to build more units than conventional zoning would allow, or fast-track permitting that allows developers to build more quickly.

Supporters of IZ maintain that

it can create affordable housing units without isolating poor and working families into economically segregated communities. Communities built using inclusionary zoning have the potential to be more diverse, both economically and racially. IZ increases the chances that low and moderate income families will live in healthy communities.

The Town of Davidson, NC, encourages the production of affordable housing by requiring 12.5% of homes in all new developments to be affordable. The Town also allows developers to pay a fee in lieu of building the housing under certain circumstances and will use those fees exclusively for affordable housing endeavors.

To be considered affordable, homes must sell at a price that income-eligible households can own without spending more than approximately



61 Hills, Anderson

23% of their gross income for principal and interest on the mortgage. For-sale units created by the ordinance must be maintained as affordable for 99 years. Long-term affordability is ensured through deed restrictions that contain a resale formula designed to provide a fair return to owners, while at the same time ensuring that the units will be resold at a price affordable to future income-qualified households. With inclusionary zoning, affordable units are built at the same time – and in the same places – as market rate housing.

City of Greenville

The City of Greenville recently convened an affordable housing committee made up of elected officials, community leaders, and volunteers. The committee, working with a consultant, found that gentrification is displacing low-income households near the downtown area. Another key finding was that the City has a shortage of about 2,500 affordable units. The housing that is affordable is concentrated in poorer neighborhoods and not distributed throughout the community. The City has pledged \$2 million (with another \$1 million coming from private sources) to be used for rental assistance, homeowner rehab support, and site acquisitions and improvements. The full findings of the study can be found in “Balancing Prosperity and Housing Affordability in Greenville: Findings and Recommendations from the Affordable Housing Steering Committee.”

Housing cost burden relates to housing costs as a share of income. The government standard for a “housing cost-burdened” household is one where 30% or more of household income goes to housing costs.

Cost-Burdened Households	
County	Percentage
Abbeville	37.5%
Anderson	33.9%
Cherokee	31.7%
Greenville	32.5%
Greenwood	38.3%
Laurens	34.5%
Oconee	37.2%
Pickens	36.4%
Spartanburg	33.7%
Union	35.3%





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