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Responsibly Planning Lexington County

The Lexington County 2022 Comprehensive Plan

APPENDICES

A

Fact Book

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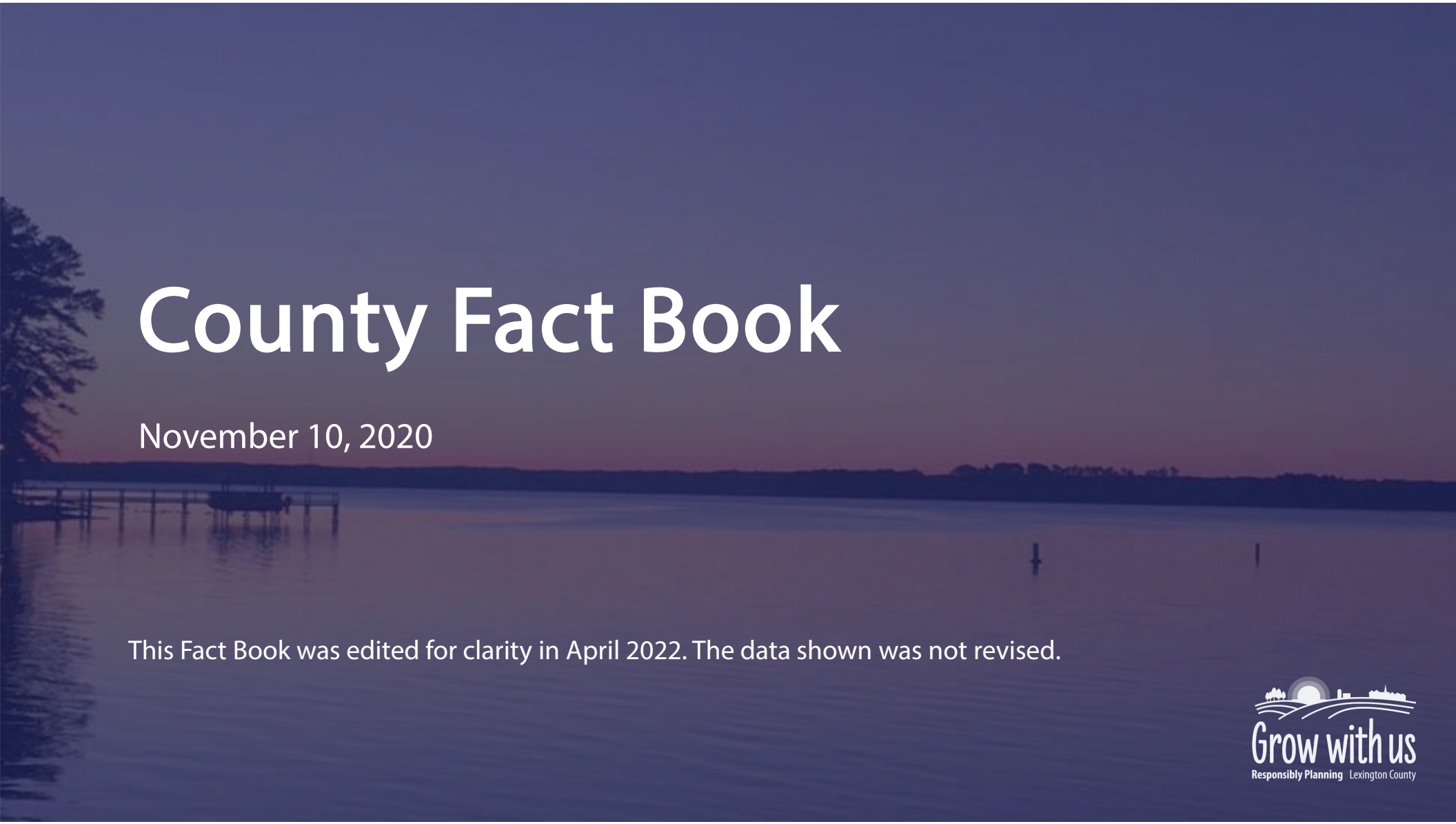

County Fact Book

November 10, 2020

This Fact Book was edited for clarity in April 2022. The data shown was not revised.

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About this Fact Book

This Fact Book provides data on existing conditions and projected future trends to provide a common understanding of the County at the start of this process, and to serve as a resource as the plan is being developed. New data continually becomes available, from the next decennial census being counted in 2020 to updated development features maintained by the County's GIS Department. This fact book freezes the data at a moment in time. It is a useful snapshot of County conditions today and will help inform development of the plan.

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Fact Book Contents

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Resources

Census Data

This County Fact Book uses data from many sources. One of the most common is the US Census Bureau. This federal government agency provides key information from many different products.

- **The Decennial Census**

  As mandated by Article 1 of the US Constitution, a census is conducted every 10 years, with the 2020 Census currently underway. It asks a basic, short set of questions of every person living in the US.

- **The American Community Survey (ACS)**

  The US Census Bureau continually asks a more detailed set of questions to a sampling of about 3.5 million addresses. It covers additional information such as education, employment, internet access, and transportation.

- **OnTheMap**

  OnTheMap provides a graphic representation of the Longitudinal Employer-Household Dynamics (LEHD) Origin-Destination Employment Statistics (LODES) data set, which enables mapping the travel patterns of workers and identifying small-area workforce characteristics.

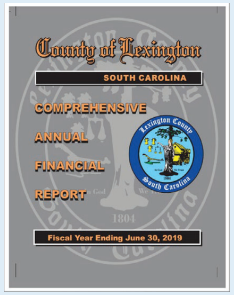
- **Small Area Health Insurance Estimates (SAHIE)**

  SAHIE provides model-based estimates of health insurance coverage for counties and states. The model incorporates data from the decennial census, the ACS, Medicaid, Supplemental Nutrition Assistance Program participation rates, and others.

- **Census Flow Mapper**

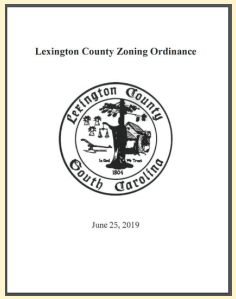
  Census Flows Mapper is a web application that shows county to county migration data (where respondents moved to or from) using data from the ACS

Additional Reference Information



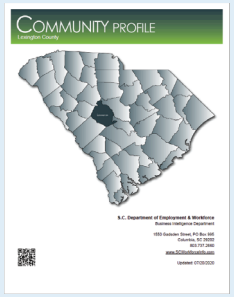
Lexington County Comprehensive Financial Report: FY 2019

https://lex-co.sc.gov/sites/default/files/Documents/Lexington%20County/Departments/Financial/CAFR2019.pdf
9



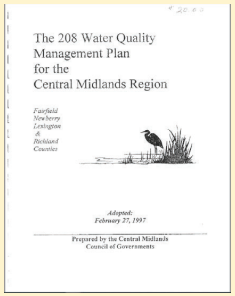
Lexington County Zoning Ordinance

https://lex-co.sc.gov/sites/default/files/Documents/Lexington%20County/Departments/Zoning/Zoning%20Ordinance/ZoningOrdinance.pdf



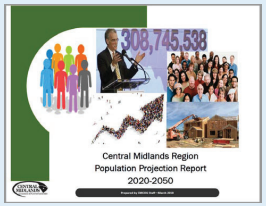
Community Profile (SCDEW)

https://lmi.dew.sc.gov/lmi%20site/Documents/CommunityProfiles/04000063.pdf



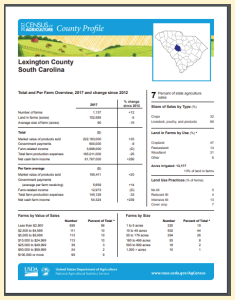
208 Water Quality Plan for the Central Midlands Region (CMCOG)

https://centralmidlands.org/Envplan/1997%20208%20Plan.pdf



Central Midlands Region Population Projection Report 2020-2050 (CMCOG)

https://centralmidlands.org/wp-content/uploads/CMCOG-2050-Population-Projections-Report_final.pdf



Census of Agriculture Community Profile (USDA)

https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/South_Carolina/cp45063.pdf

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Municipal Comprehensive Plans

Many Lexington County municipalities have their own comprehensive plans

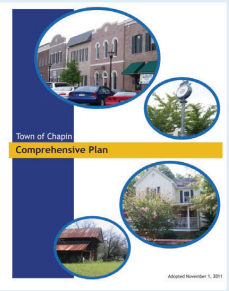
Batesburg-Leesville Comprehensive Plan

http://batesburg-leesville.org/Data/Sites/1/media/ordinances/b-l-comprehensive-plan.pdf

Cayce
Time for Life

Cayce Comprehensive Plan

https://caycesc.gov/client_resources/2010ComprehensivePlan.pdf



Chapin Comprehensive Plan

https://www.chapinsc.com/DocumentCenter/View/109/Town-of-Chapin-Comprehensive-Plan-PDF?bidId=

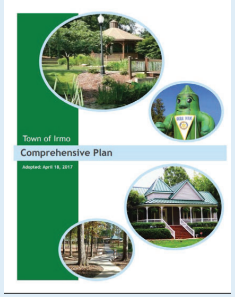
There is an active project to update the plan

Gaston Comprehensive Plan

(Unavailable)

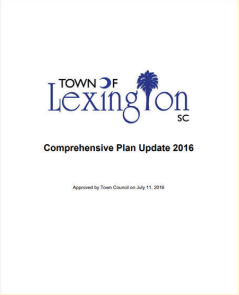
Gilbert Comprehensive Plan

(Unavailable)



Irmo Comprehensive Plan

https://www.townofirmosc.com/wp-content/uploads/Irmo-Comprehensive-Plan-4-18-17-1.pdf



Lexington Comprehensive Plan

https://www.lexsc.com/DocumentCenter/View/335/Comprehensive-Land-Use-Plan-PDF?bidId=

Pelion Comprehensive Plan

(Unavailable)

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Municipal Comprehensive Plans

Pine Ridge Comprehensive Plan

(Unavailable)

Springdale Comprehensive Plan

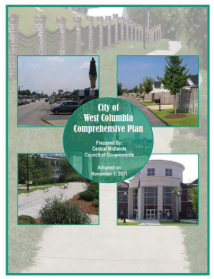
http://www.springdalesc.com/wp-content/themes/twentysixteen/Websites/springdalesc/images/docs/Comp_Plan_Review-_FINAL.pdf

South Congaree Comprehensive Plan

(Unavailable)

Swansea Comprehensive Plan

(Unavailable)



West Columbia Comprehensive Plan

https://westcolumbiasc.gov/wp-content/uploads/2014/09/West-Columbia-Comprehensive-Plan-2011.pdf

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Story Maps

Lexington County's GIS Portal includes story maps that help tell the County's cultural narrative

Museum Tour

Tour of Lexington County Museum Complex

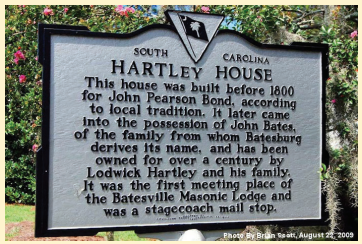
Post Office

This structure may have been built around 1790 in Granby on the Congaree. It later served as Lexington's post office after the Civil War.

https://maps.lex-co.com/museumtour/

Historic Tour

36 Historic Markers in Lexington County



Marker 32-05 - Shelling of Columbia

Marker is at the intersection of Sunset Blvd (U.S. 378) and North Lucan St, on the left when traveling east on Sunset Blvd.

https://maps.lex-co.com/HistoricTour/

Parks and Trails

18 Parks and Trails Around the County

Peachtree Rock Nature Preserve

Peachtree Rock Rd at SC Hwy 6, Lexington, SC, 29073

https://maps.lex-co.com/ParksTrailsTour/

Libraries Tour

Lexington County's Library Branches

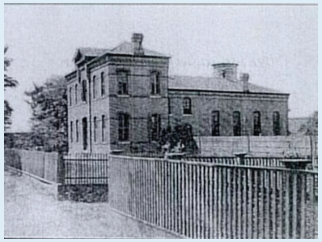
Cayce-West Columbia Branch Library

1500 Augusta Road, West Columbia, SC, 29169

https://maps.lex-co.com/LibrariesTour/

Heritage Tour

Historic Photos and Interesting Sites



Wyse Ferry Bridge, Circa 1919

Wyse's Ferry Bridge as seen crossing the Saluda River in 1919. It is now under Lake Murray, in 160 feet of water.

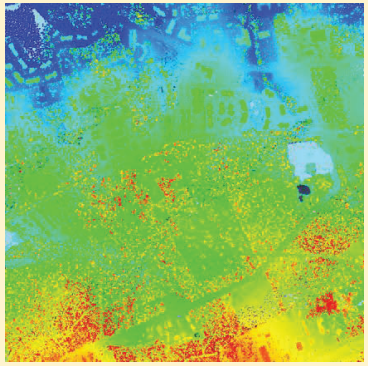
https://maps.lex-co.com/heritagetour/

Ongoing Data Updates

Lexington County One Map (Geographic Information Systems Viewer)

https://maps.lex-co.com/OneMap/

Lexington County's robust Planning & GIS department continually maintains and updates geographic information system layers that may be viewed online. By necessity, the County Factbook is a snapshot in time. Information available through One Map is updated as available.



LiDAR Updates (SCDNR)

https://lex-co.sc.gov/departments/planning-gis/projects

The latest technology is being used to update our picture of Lexington County!

Ongoing Projects

LOWER SALUDA GREENWAY
FEASIBILITY STUDY

Lower Saluda Greenway (ICRC)

https://www.icrc.net/parks/saluda-shoals-park/about/lower-saluda-greenway-feasibility-study

Check out the Lower Saluda Greenway project website and help guide planning for this great community amenity by answering an online survey!

CAROLINA CROSSROADS

Carolina Crossroads I-20/I-26/I-126 Corridor Improvement Project (SCDOT)

https://www.scdotcarolinacrossroads.com/index.html

Read more about the #1 Interstate Priority for South Carolina!

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Ongoing Projects

COMET (Central Midlands Regional Transit Authority)

http://catchthecometsc.gov/

Stay informed on the latest updates to regional transit!

Reimagine the COMET

https://reimaginethecomet.org//

Help shape the future of the COMET transit through surveys and events in this planning effort now in Public Outreach Phase 2! The planning effort is expected to be complete by Spring 2021.

Columbia Airport Master Plan Update

(In Progress 2020)

Three Rivers Watershed Based Plan

https://centralmidlands.org/about/environmental-planning.html

Planning Effort beginning in 2020 to address bacteria impairments identified by the EPA

on the table

Your voice matters.

Powered by CENTRAL CAROLINA Community Foundation

On the Table

https://www.onthetablecola.org/

Join an initiative that gathers neighbors for informal community conversations!

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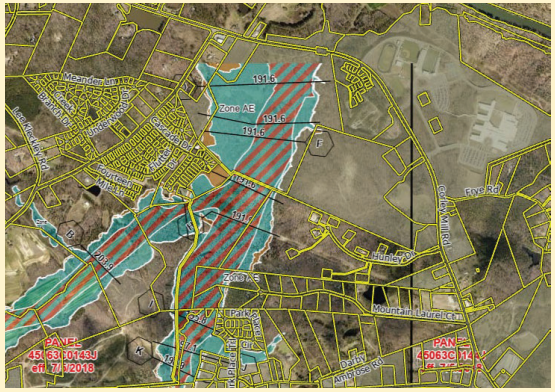
Resiliency Resources

County Floodplain Management Resource Page

Includes FEMA Flood Maps for Lexington County, FEMA Historic Comparison Flood Maps, and additional advisory and regulatory resources:

https://lex-co.sc.gov/departments/community-development/land-development/floodplain-management



Floodplain Management Plan (August 2017)

Considers risks for Dam/Levee Failure, 100-year and 500-year Floods, Stormwater/Localized Flooding, and Hurricane and Tropical Storms

https://lex-co.sc.gov/sites/default/files/Documents/Lexington%20County/Departments/Public%20Works/LexingtonCountyFMP.pdf

Additional Resiliency Readiness

Lexington County participates in a four-county Virgil C. Summer Nuclear Power Generating Station (V.C. Summer) Graded Emergency Preparedness Exercise every two years, where the County's Emergency Operations Center (EOC) is activated and the exercise is graded by FEMA representatives. The most recent event took place on March 2, 2021 at the EOC.. Planning and GIS actively participates in those graded exercises as a support function.

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Introduction and Key Facts

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How We Plan

- Like a business or organization, planning for the future of a community is a cycle.
- Comprehensive planning allows a community to assess past and current trends, future projections and needs, and community aspirations to develop a visionary plan to guide decision-making.
- The comprehensive plan is the first stage of the planning cycle that sets a long-term vision, policies, and actions for implementing the vision. It guides the actions in later stages of planning.

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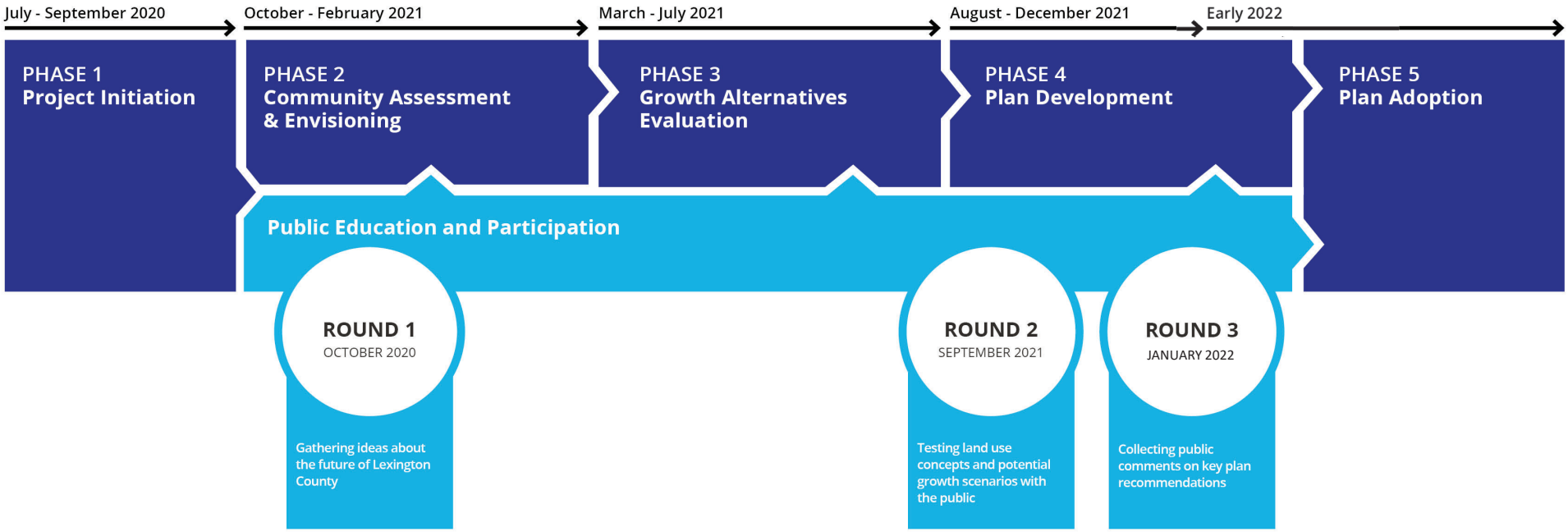
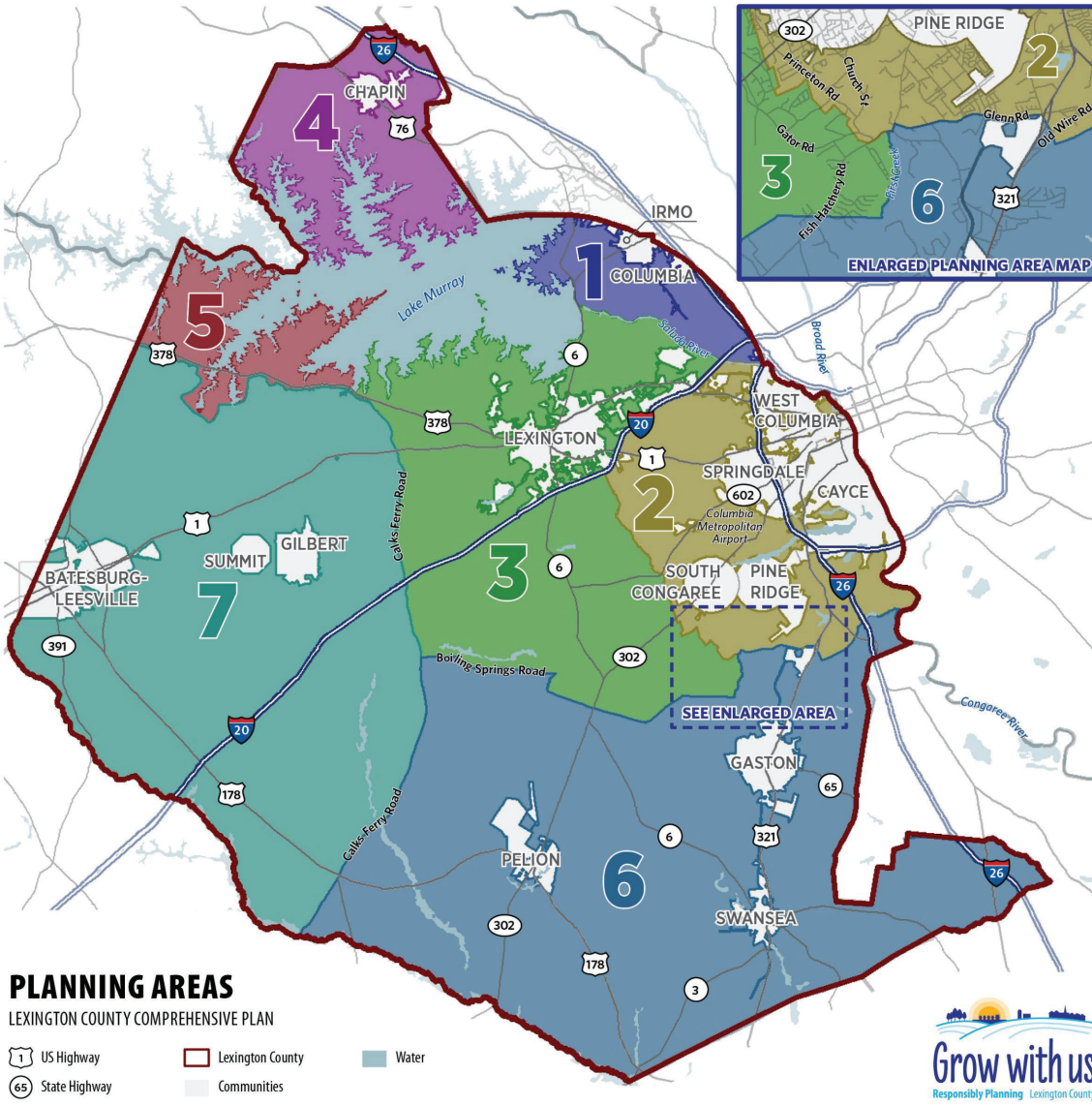
About the Grow With Us –Lexington County Planning Process

The Grow With Us process will result in a new, modern comprehensive plan for Lexington County.



A Plan for Lexington County

- The *Grow With Us* process considers the entirety of Lexington County.
- The final plan will guide action for areas within the County's direct jurisdiction.
- Seven sub-planning areas are used for analysis purposes and are consistent with past planning efforts. They do not necessarily reflect County Council districts, school districts, etc.



Key Lexington County Facts and Trends

- Lexington County is one of the fastest growing counties in the state. It **added 79,000 new residents** between 2000-2018 - a 37% increase in population with a 1.7% growth rate for that period.
- Projections show Lexington County will have an additional **150,000 residents by 2040.**
- Lexington's municipalities are growing. There is **3 times** as much **municipal land** as there was in the initial municipal charters.
- Nearly **three quarters** of the land in the County is either occupied by **rural uses or unimproved residential land.** Much of the other land uses are concentrated in the north and east of the county.
- **Healthcare jobs** are projected to grow in the Midlands, with the expected **five fastest growing careers** all in personal healthcare.

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Key Lexington County Facts and Trends

- Access to transportation is a major factor for employment centers. **Most jobs are clustered** in **municipalities,** near **the river,** around **the airport,** or along **interstates/major roads.**
- About half **(49.4%)** of **County-maintained roads are unpaved**, concentrated in SW and SE areas. More than **220 miles** have been **petitioned for paving.** Existing funding is not sufficient to meet persistent demand to pave unpaved roads.
- Share of **workers commuting by car has increased slightly**, up from 92 percent in 2010 to 93 percent in 2018.
- **Mean travel time to work has increased 4 percent** from 24.6 minutes in 2010 to 25.7 minutes in 2018.
- Demand for **walking, biking, and transit infrastructure** is **growing in the eastern part** of Lexington County near Columbia.

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Population and Demographics

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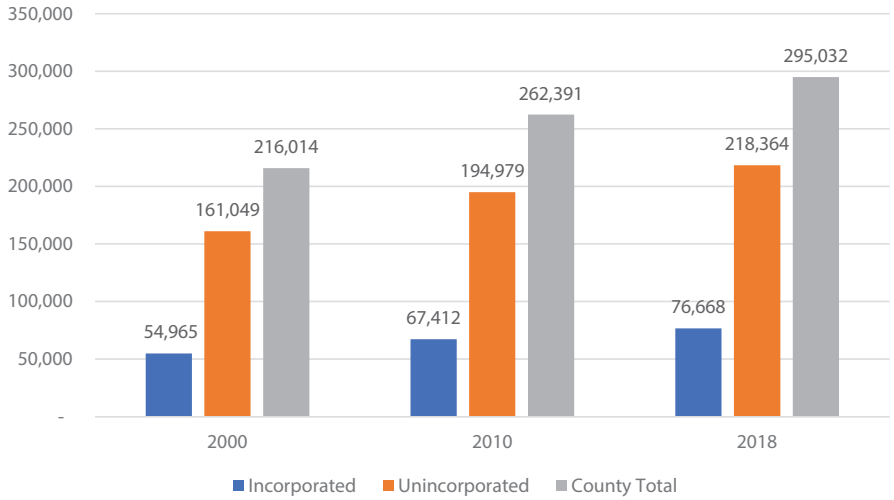
Population Trends

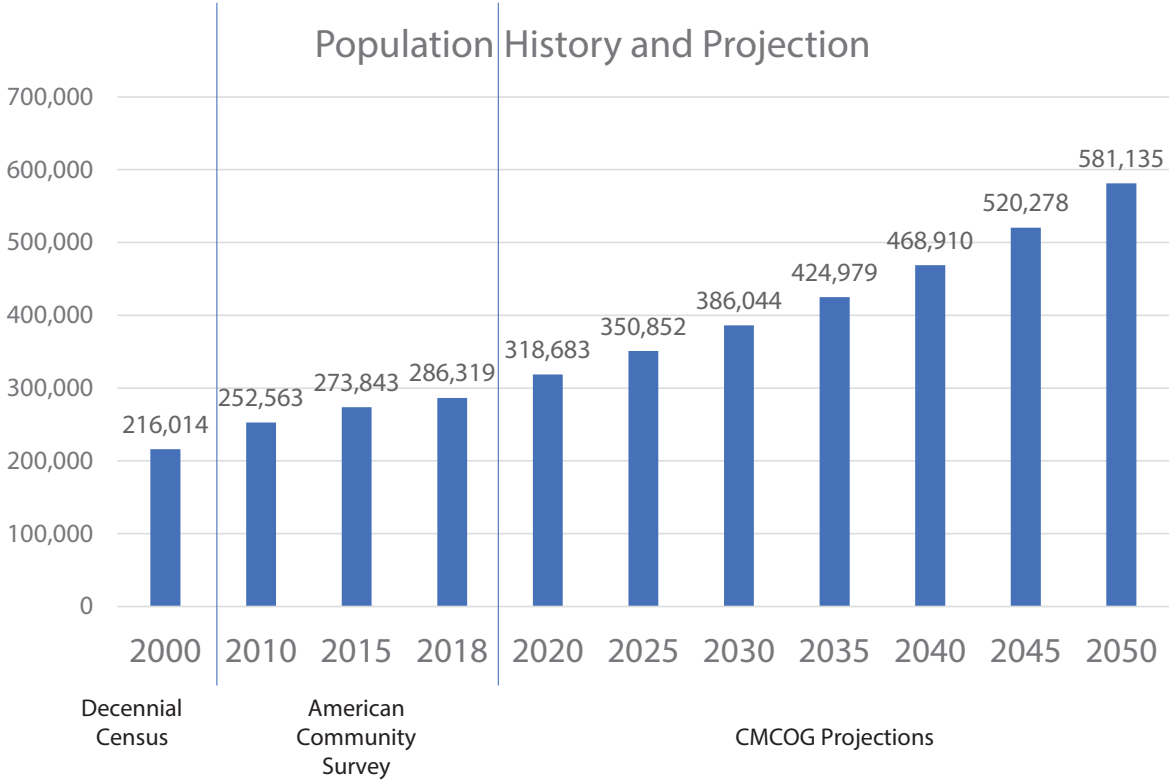


- The County added 79,000 new residents between 2000-2018.
- Majority of the population (74%) resides in unincorporated Lexington County.
- Chapin, Town of Lexington, Summit, Swansea, Columbia, and Pine Ridge were the 6 fastest-growing towns in County.

	Chapin	Lexington (town)	Summit	Swansea	Columbia (pt.)	Pine Ridge	West Columbia	Gaston	Gilbert	Pelion	Irmo (pt.)	Cayce (pt.)	South Congaree	Springdale	Batesburg - Leesville (pt.)
2000	628	9,793	219	533	402	1,593	13,064	1,304	500	553	4,071	12,150	2,266	2,877	5,012
2010	1,445	17,870	402	827	559	2,064	14,988	1,645	565	674	4,165	12,371	2,306	2,636	4,895
2018	1,628	21,737	467	946	595	2,335	17,821	1,686	639	702	4,660	13,334	2,463	2,739	4,916
2000-2018 Pop. Change	159%	122%	113%	77%	48%	47%	36%	29%	28%	27%	14%	10%	9%	-5%	-2%

Population Projections

- Central Midlands Council of Governments (CMCOG) projects an additional 150,000 residents will reside in Lexington County by 2040 with a total population of 468,910.
- Based on current growth patterns, the County can expect a large proportion of new residents to locate in unincorporated areas.



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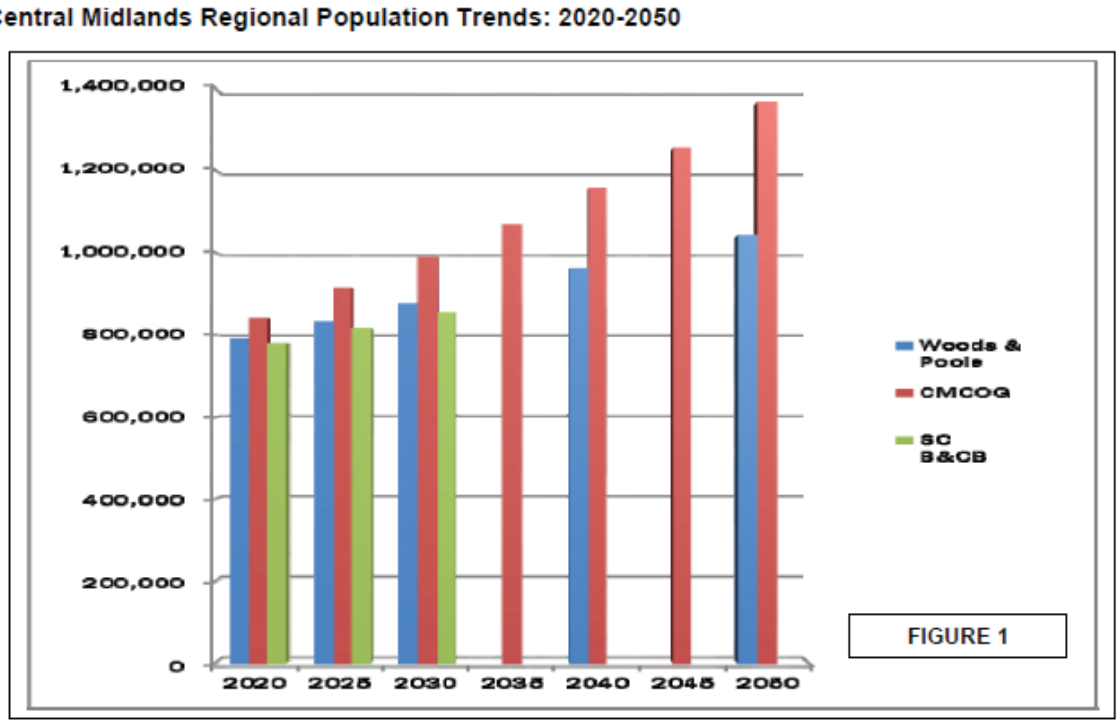
Population Projections

- CMCOG projections trend higher than other state projections or Woods and Poole projections, likely due to an increased importance placed on local migration.



CMCOG Population Projection Report 2020-2050

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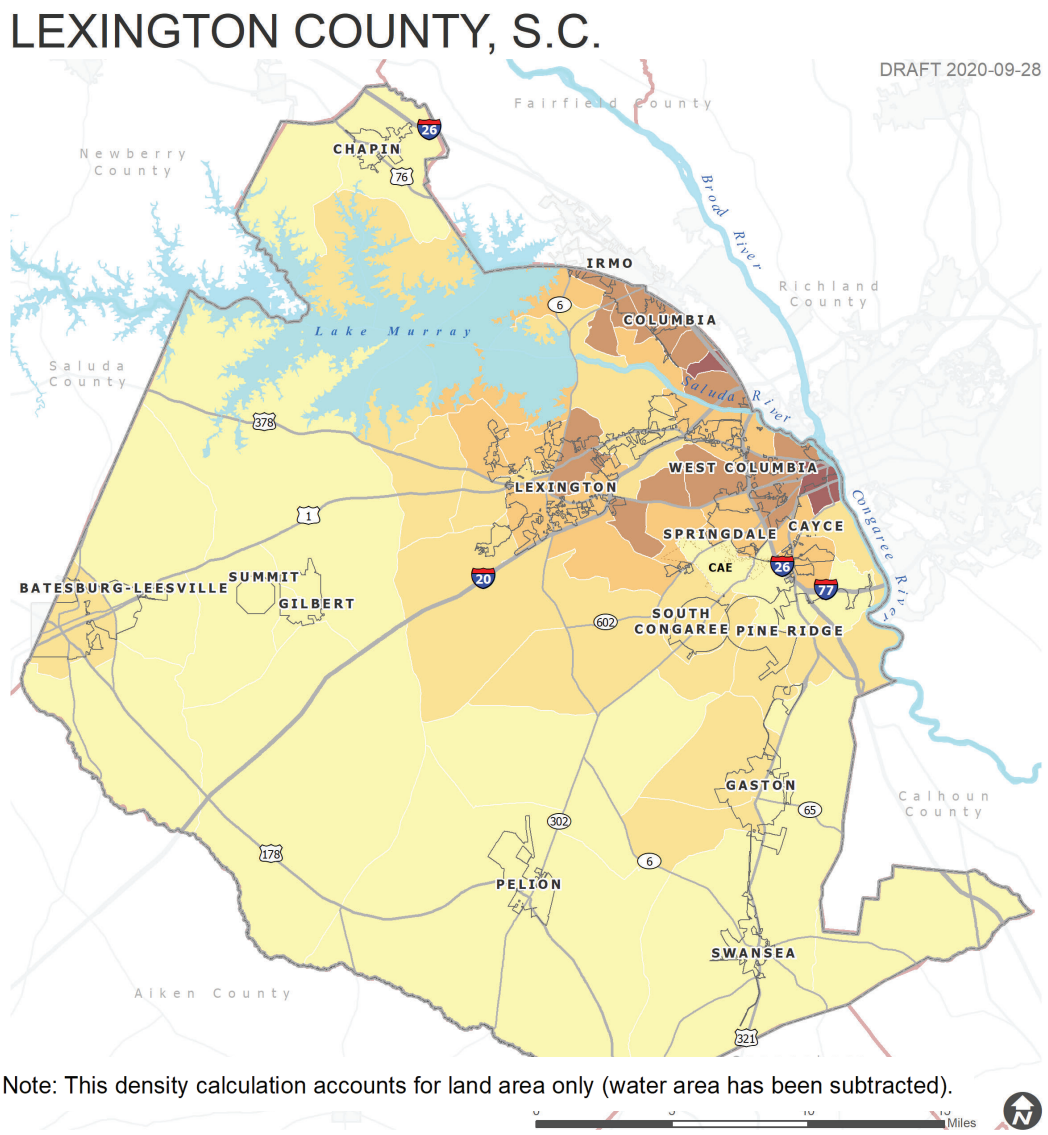
Population Density

- Population density is higher in the east of the County, with density also higher around many municipalities.

Population per Acre by Census Tract

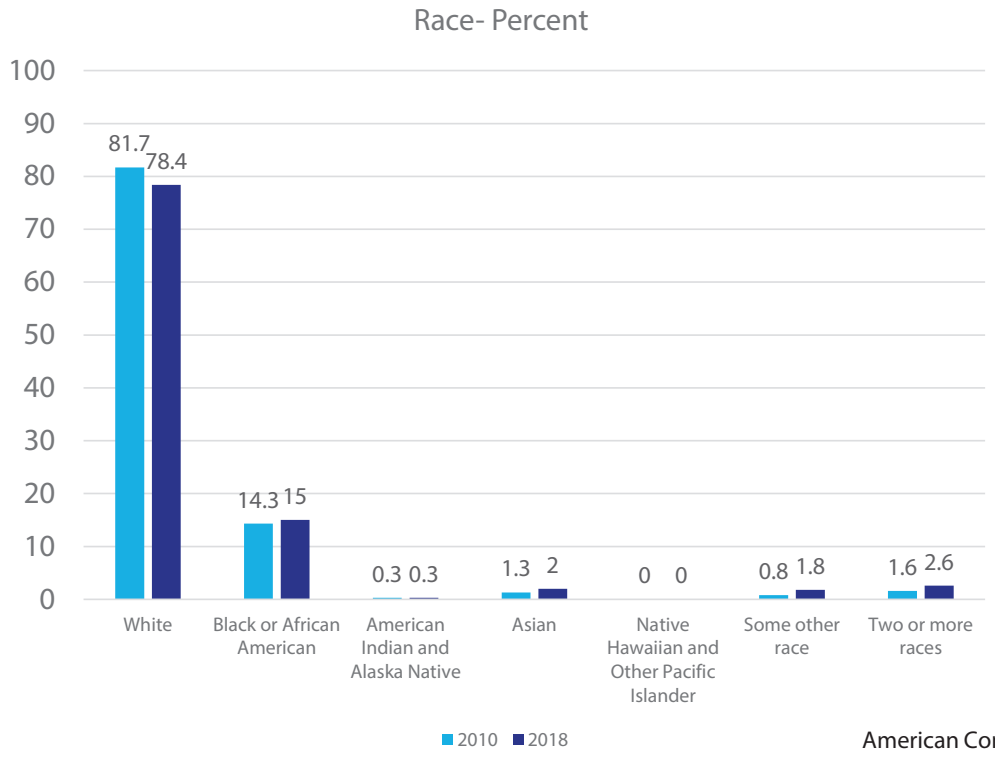
- 0.00 - 0.50
- 0.51 - 1.50
- 1.51 - 2.5
- 2.51 - 4.00
- 4.01 - 6.30

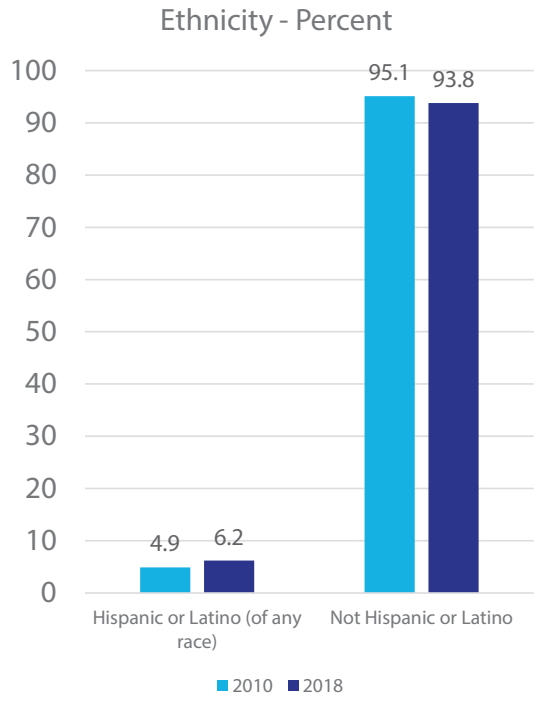


Note: This density calculation accounts for land area only (water area has been subtracted).

Population Facts – Race & Ethnicity

- Only minor changes in racial and ethnic makeup of population since 2010.
- Census and American Community Survey treat Hispanic or Latino as an ethnicity independent of race.





American Community Survey

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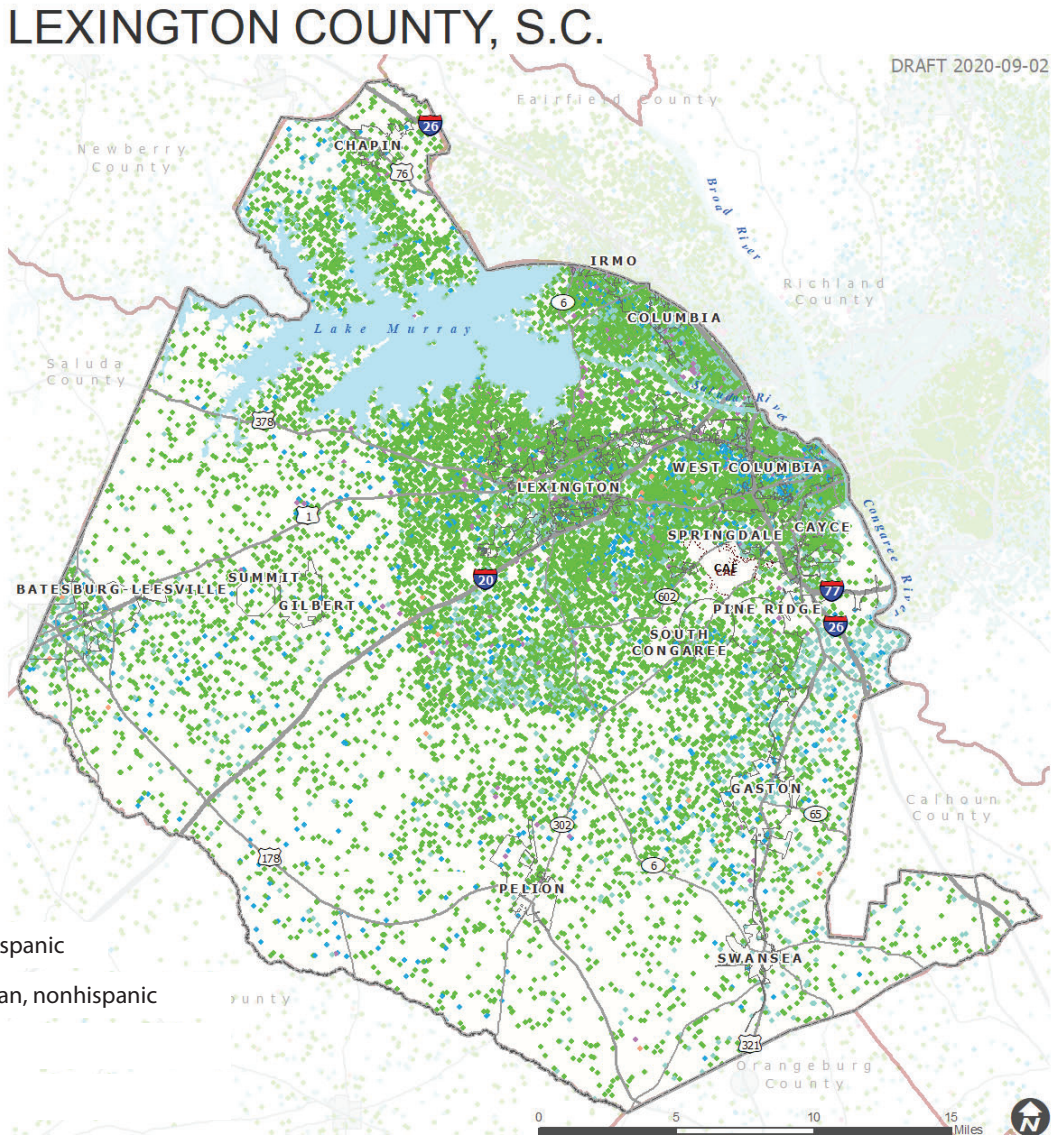
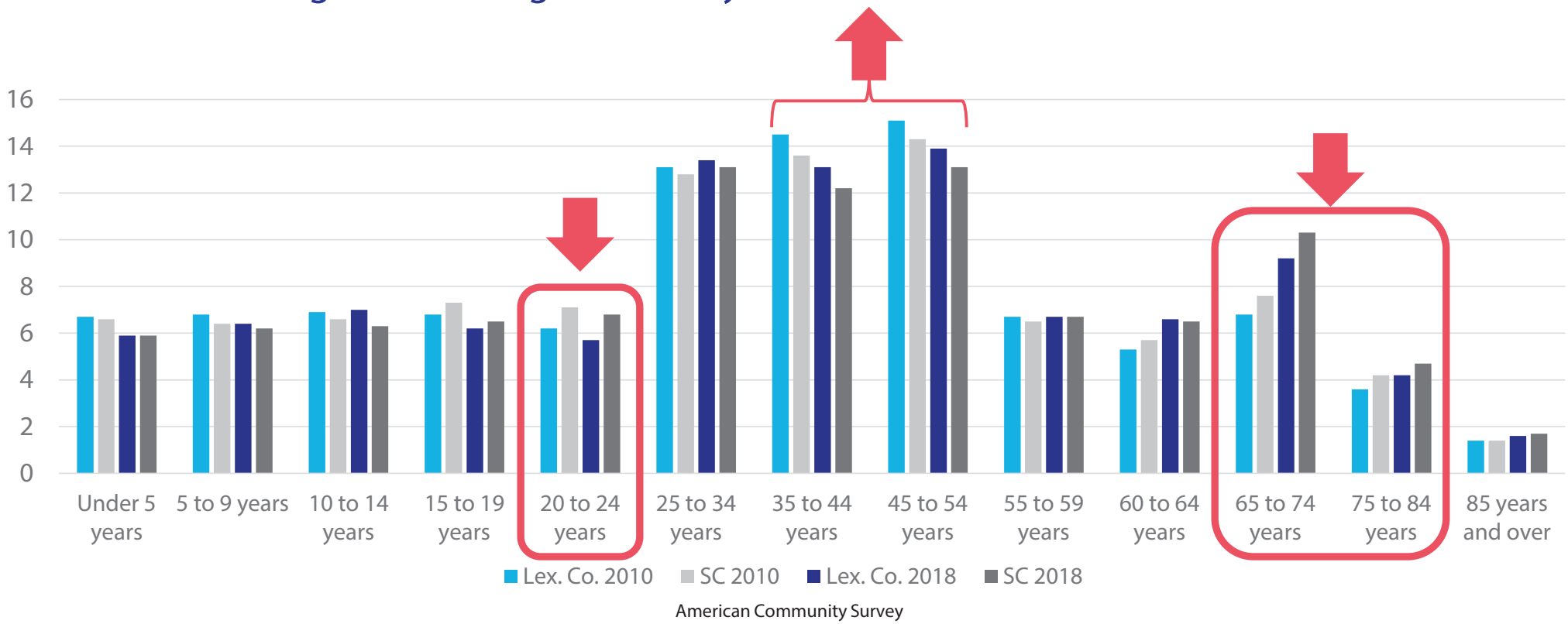
Race & Ethnicity Distribution

- Race and ethnicity are not distributed uniformly across the county.
- This map was developed using data at the census tract level. As such, some boundaries where there is a change in density will appear sharper than may be the case of actual residents' locations.



Population Facts - Age

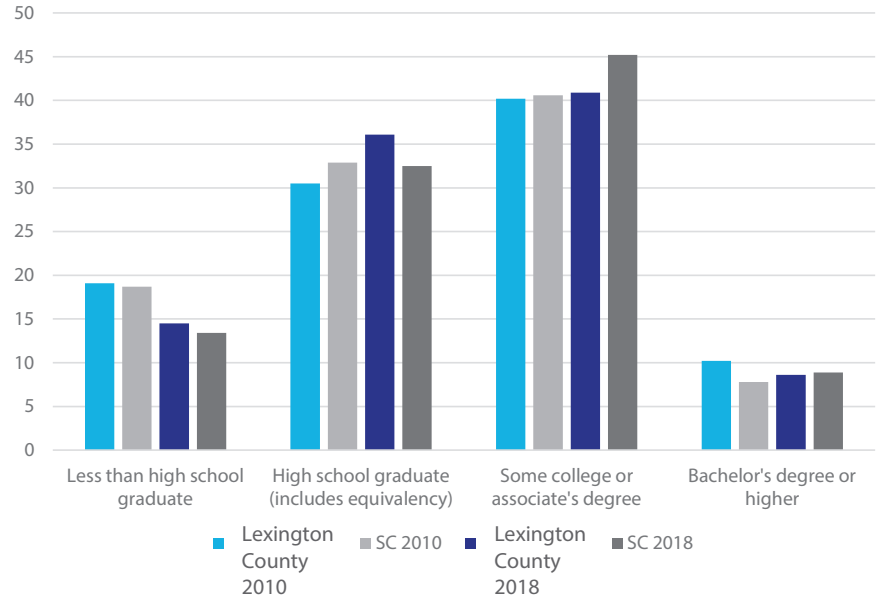
- Lexington County residents are of "family" age.
- 20-24 and 65-84 age cohorts are lower in Lexington County than State; 35-55 age cohorts are higher in Lexington County than State.



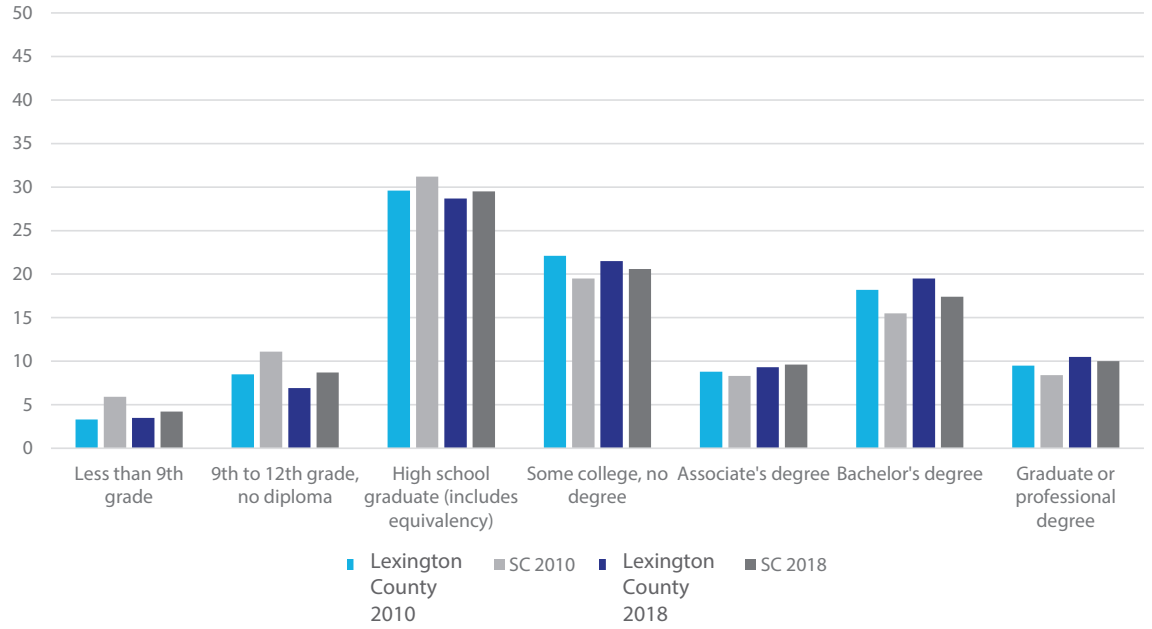
American Community Survey

Population Facts - Education

Educational Attainment Ages 18 - 24



Educational Attainment Ages 25 and Older



41.7% **of residents age 25 or older have completed an associate's degree or higher degree; an additional 22% have completed some college without securing a degree.**

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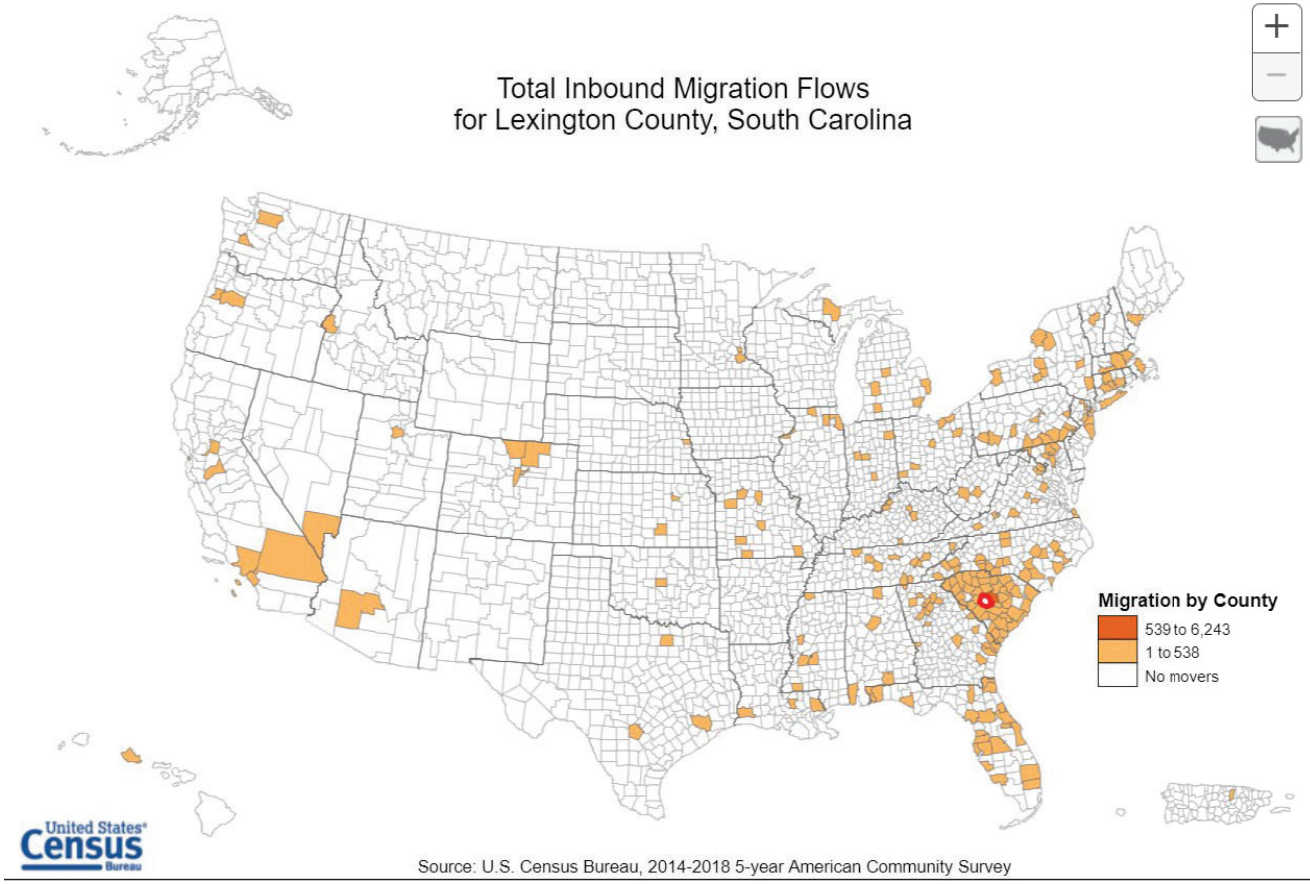
American Community Survey

County to County Migration

- Of all new residents who moved to Lexington County, nearly two thirds (64%) are from elsewhere in South Carolina.
  - Includes 34% of total from Richland County and 3% of total from Kershaw County.
- Next highest states:
  - NC (5.3%)
  - GA (3.4%)
  - NY (3.0%)
    - (highest outside the Southeast)
  - FL (2.8%)



DESTINATIONS OF RESIDENTS LEAVING LEXINGTON COUNTY:
Another County in SC(64%);
NC (7%); GA(6%); FL(4%); TX(3%)

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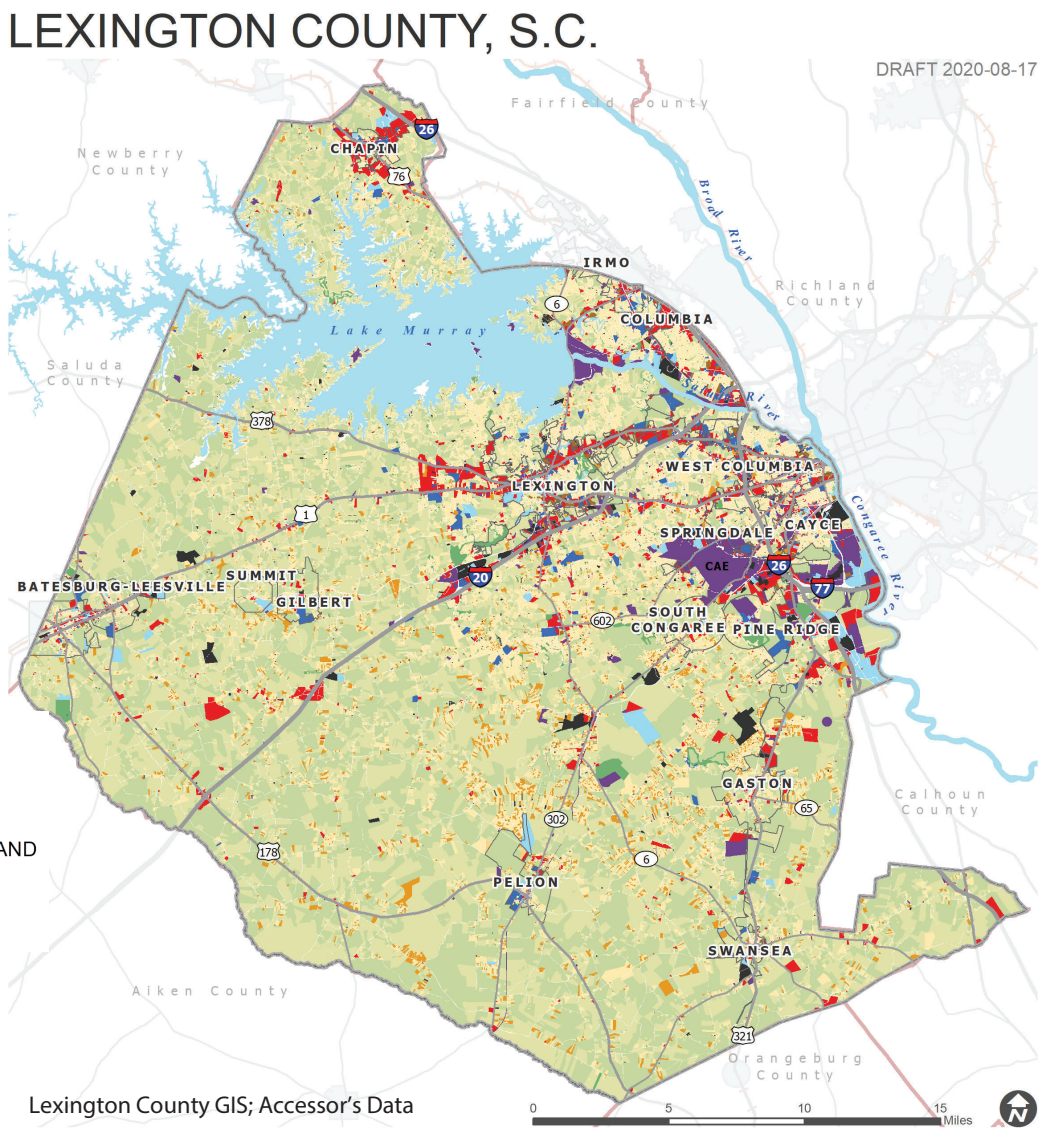
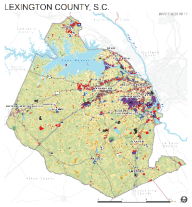
Land Use and Development

Existing Land Use

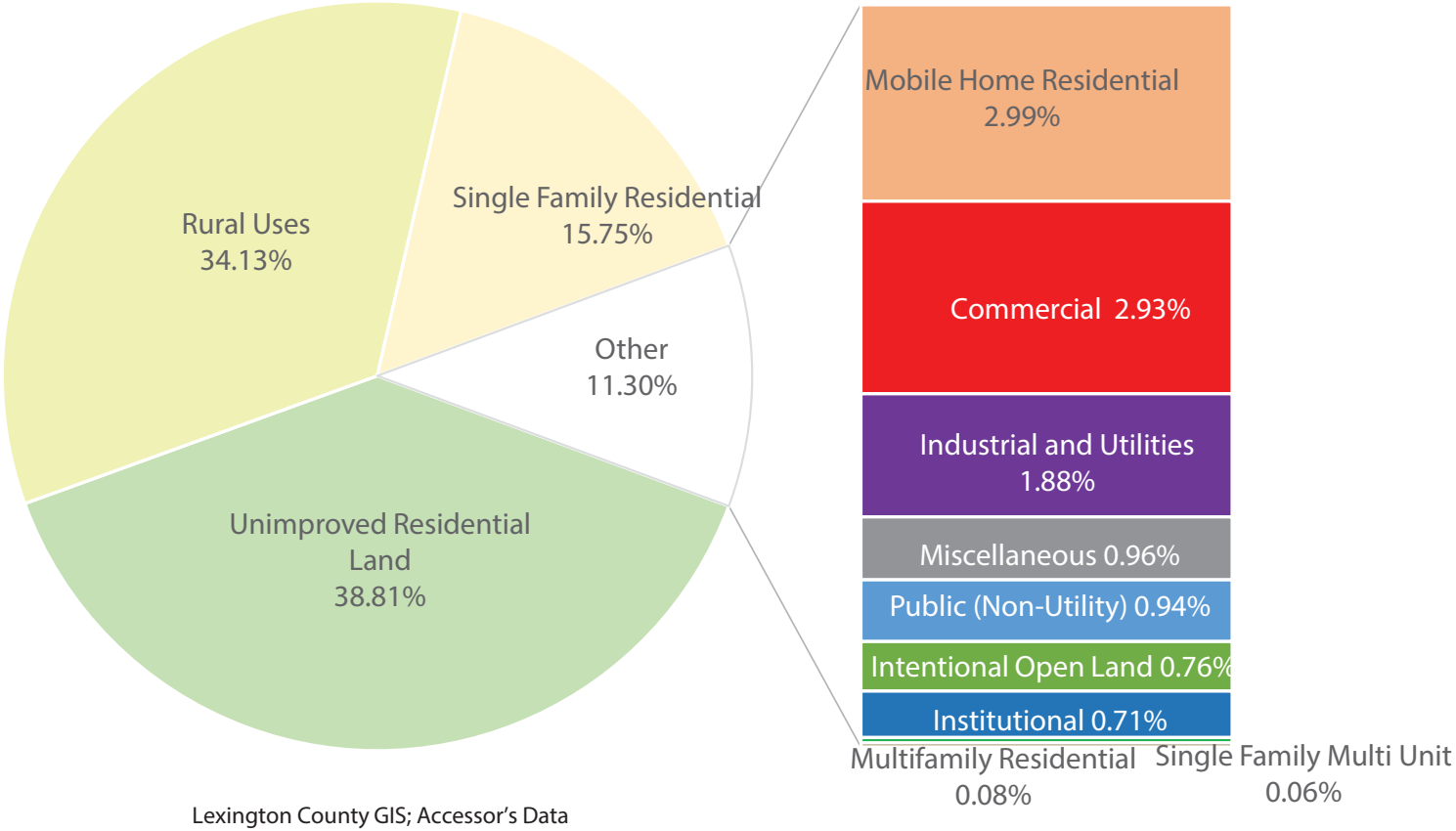
Use Category	Acres
Unimproved Residential Land	149,500
Rural Uses	131,500
Single Family Residential	60,700
Mobile Home Residential	11,500
Commercial	11,300
Industrial and Utilities	7,200
Miscellaneous	3,700
Public (Non-Utility)	3,600
Intentional Open Land	2,900
Institutional	2,700
Multifamily Residential	320
Single Family Multi Unit	230



Existing Land Use



- Three categories comprise the majority of the land:
  - Unimproved Residential Land
  - Rural Uses
  - Single Family Residential
- Other uses are clustered in the north and east and along main roads.



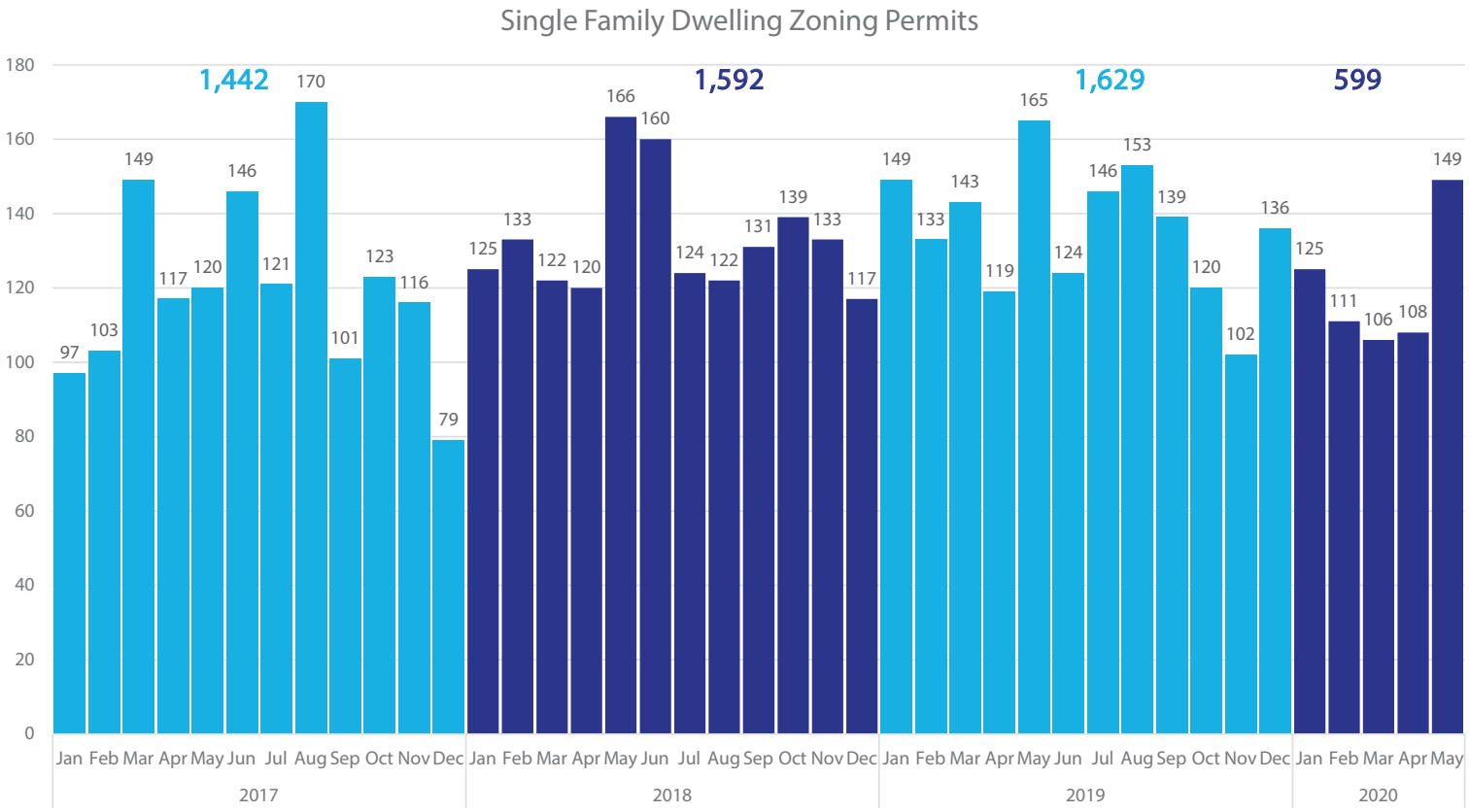
Lexington County GIS; Accessor's Data

Existing Land Use – Data Detail

The largest three categories aggregate several designations from the property assessor's database:

- **Unimproved Residential Land**
  - RURAL - UNIMPROVED
  - RESIDENTIAL - UNIMPROVED
  - LAKEFRONT - UNIMPROVED
  - HOMEOWNERS ASSOC – UNIMPROVED
- **Rural Uses**
  - RURAL - IMPROVED
  - LAKEFRONT - IMPROVED
  - RURAL - MULTI USE
  - NURSERY & GREEN HOUSE
  - NURSERY & GREENHOUSE - MULTI USE
  - LAKEFRONT - MULTI USE
- **Single Family Residential**
  - RESIDENTIAL - IMPROVED
  - LEGAL RES IN COMMERCIAL ZONED AREA
  - RESIDENTIAL - MULTI USE
  - HOMEOWNERS ASSOC - IMPROVED
  - NON PROFIT HOUSING
  - LEGAL RES IN COMM ZONED AREA - MULTI USE

Permitted Development



Single Family Dwellings are the most common zoning permits issued

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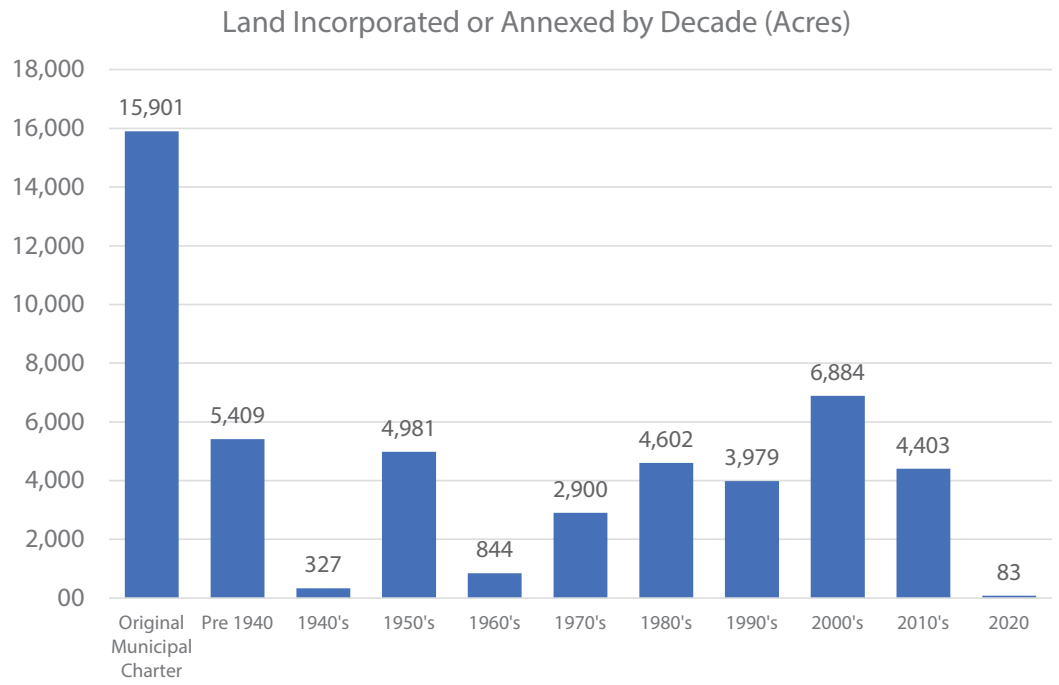
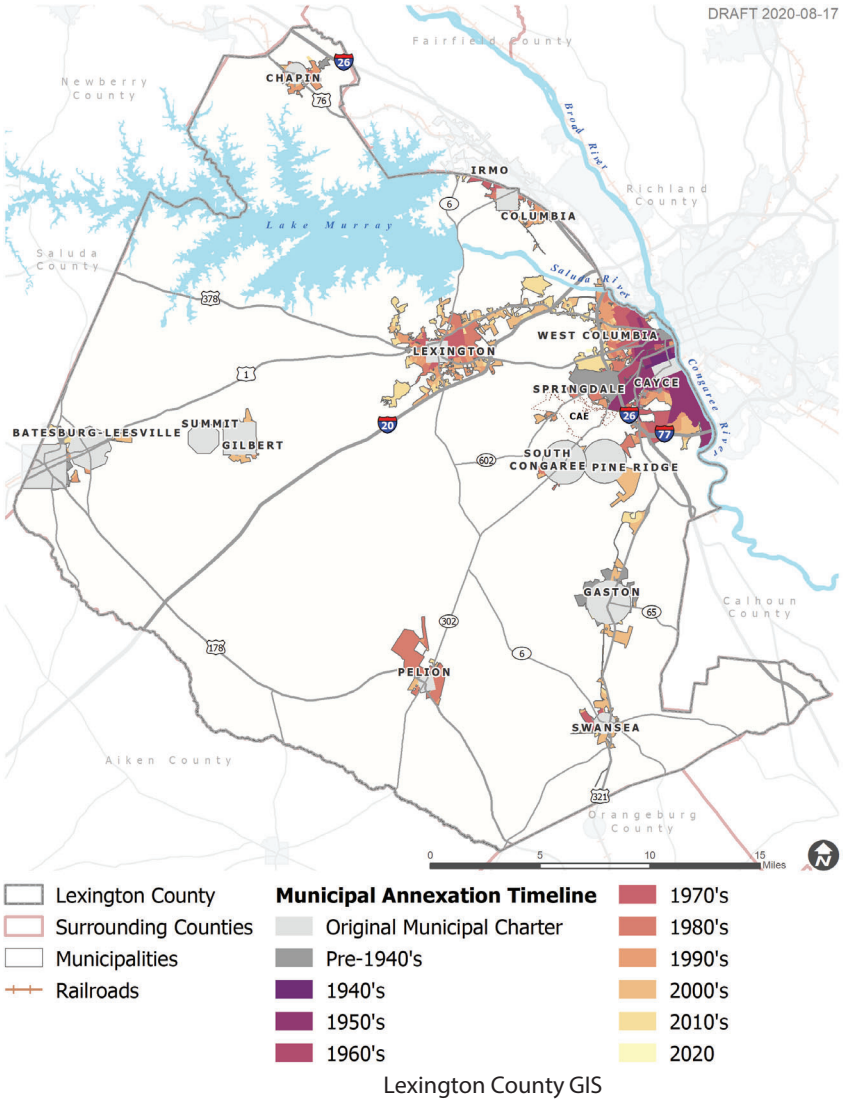
History of Municipal Annexation

- After the original municipal charters, highest amount of land annexed was in the 2000's.
- Thousands of acres per decade have been annexed in six of eight decades since 1940, peaking in the 2000's.
- Total incorporated land is three times the original charters

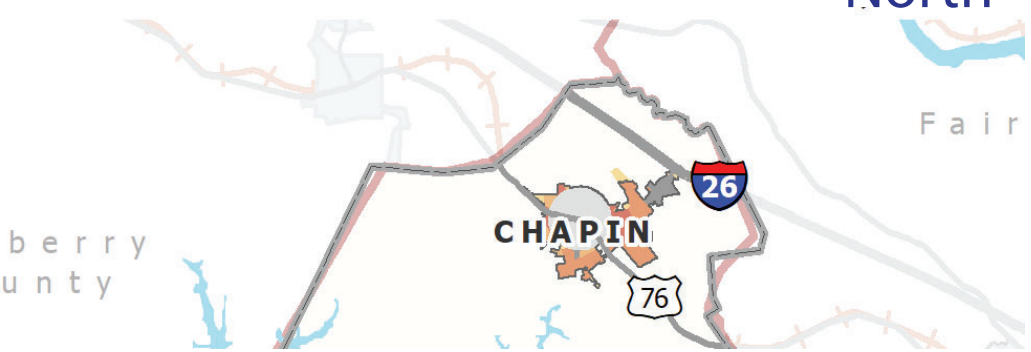


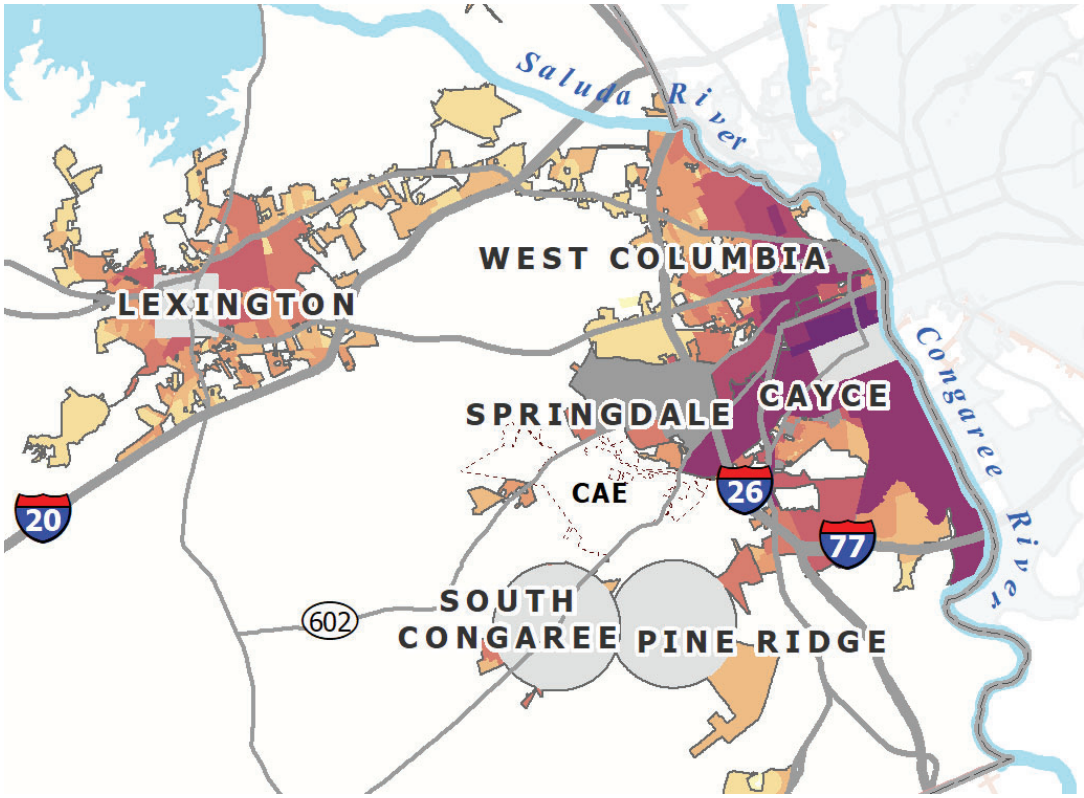


History of Municipal Annexation

North

East

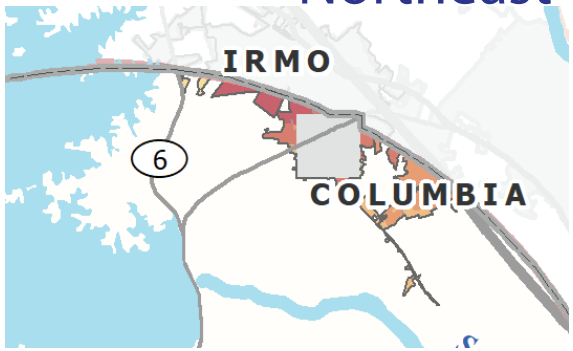




Municipal Annexation Timeline

- Original Municipal Charter
- Pre-1940's
- 1940's
- 1950's
- 1960's
- 1970's
- 1980's
- 1990's
- 2000's
- 2010's
- 2020

Northeast



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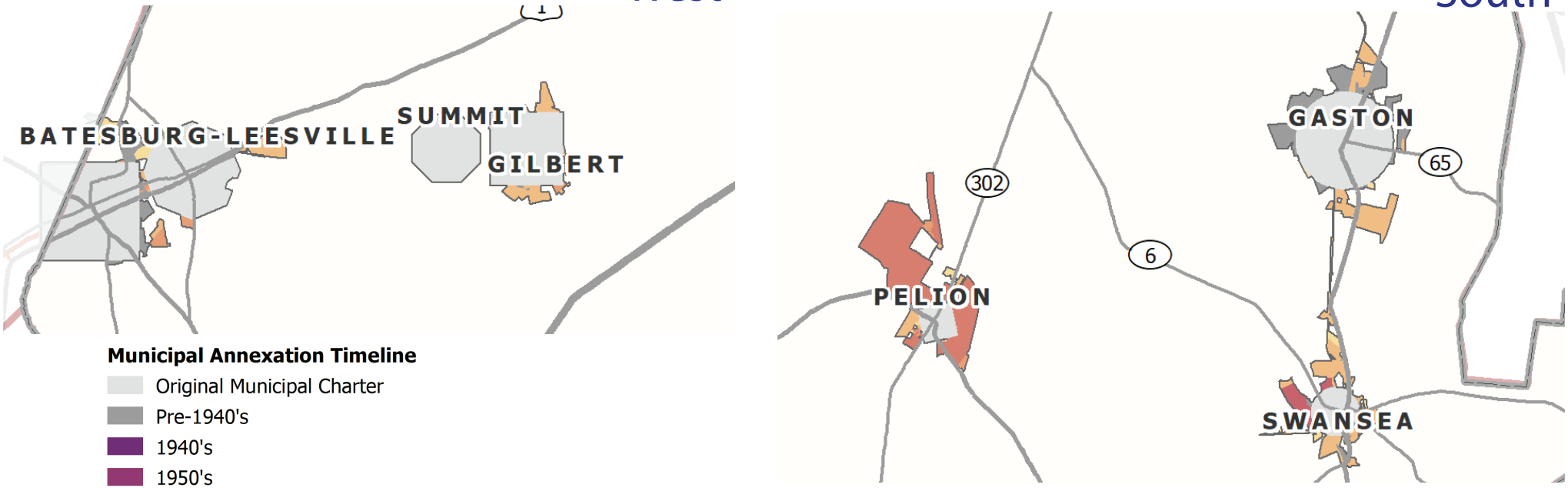
Lexington County GIS; Accessor's Data

History of Municipal Annexation

West

South



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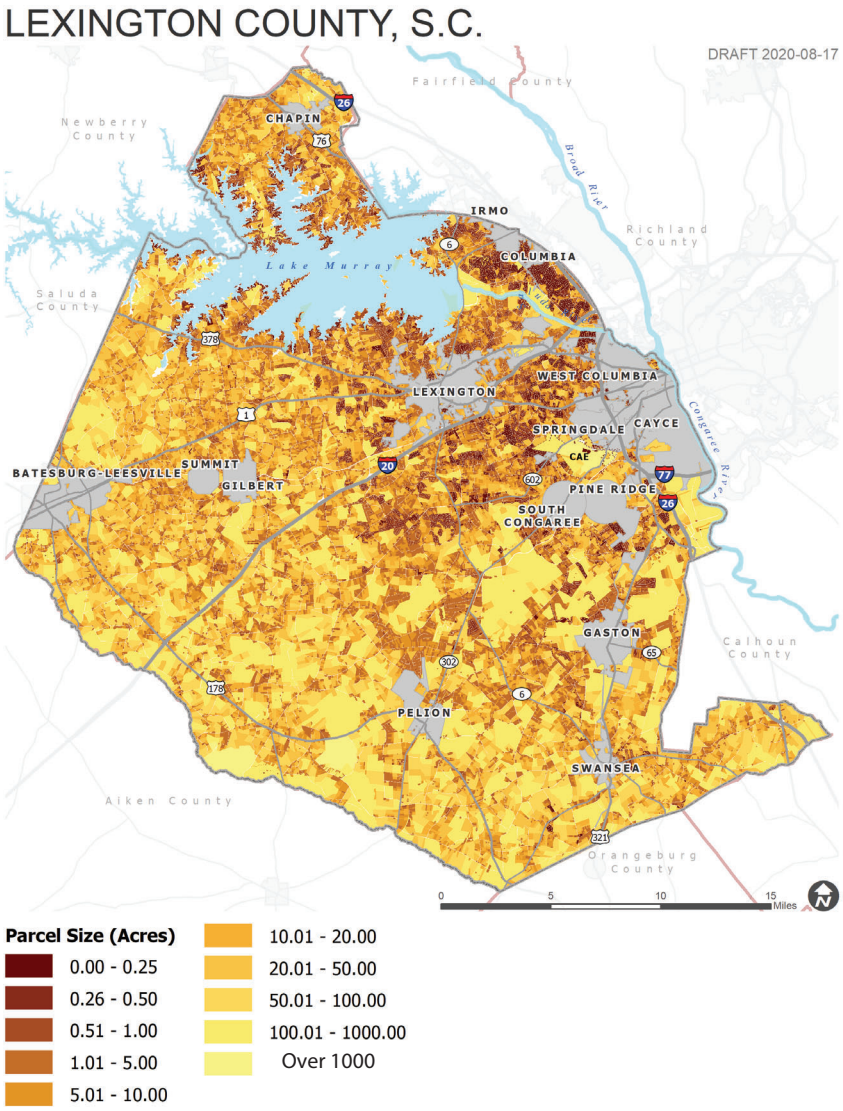
Lexington County GIS; Accessor's Data

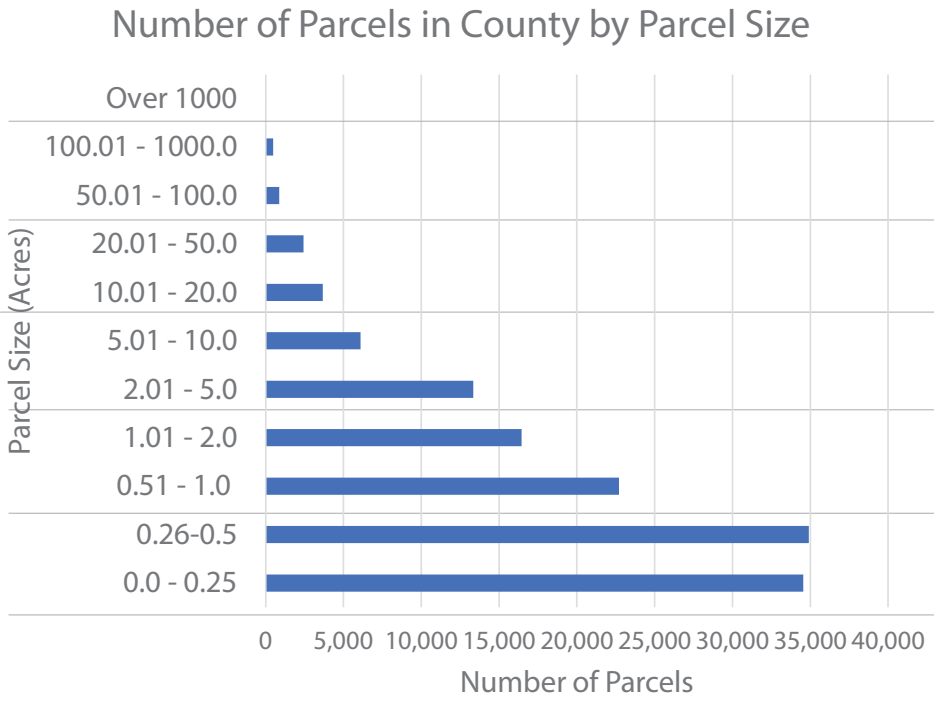
Current Development Pattern – Parcel Size

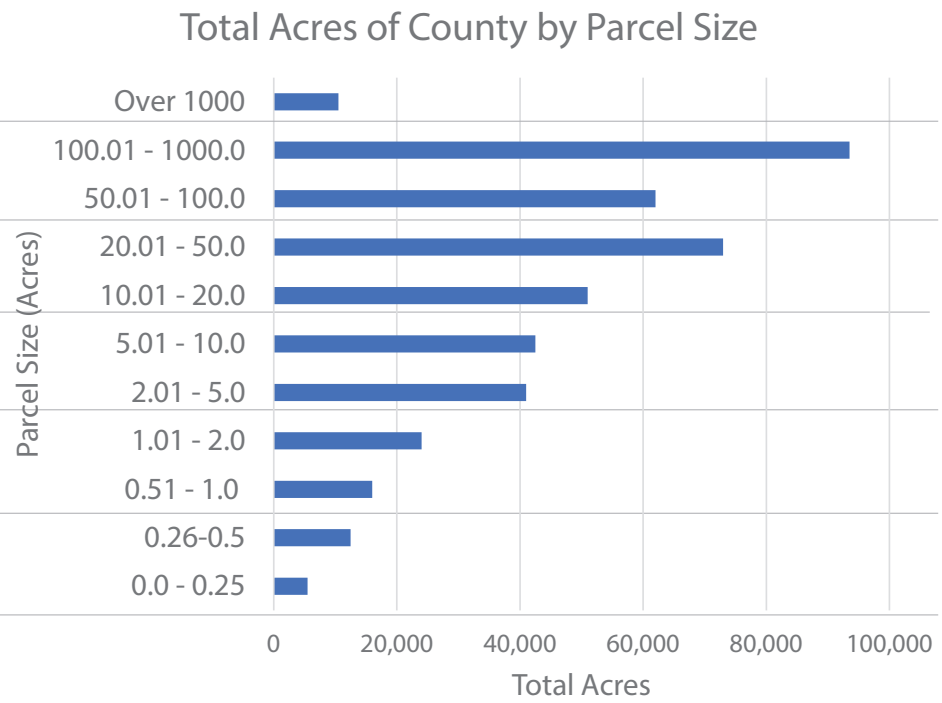
- More than half of all parcels are less than half an acre in size.
- Parcel sizes are mixed throughout the county; however, there is a higher prevalence of smaller parcels north and east.
- Though there are fewer large parcels, their larger size makes up a majority of the County land area.



Lexington County GIS; Accessor's Data

Current Development Pattern – Parcel Size





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Lexington County GIS; Accessor's Data

Zoning And Development Regulations

- Performance-based zoning relies on a combination of a zoning designation on a parcel and a street type designation on the access or frontage to determine allowed development.
- Zoning maps show different colors for different road categories.
- Most land is categorized as “restrictive development.”

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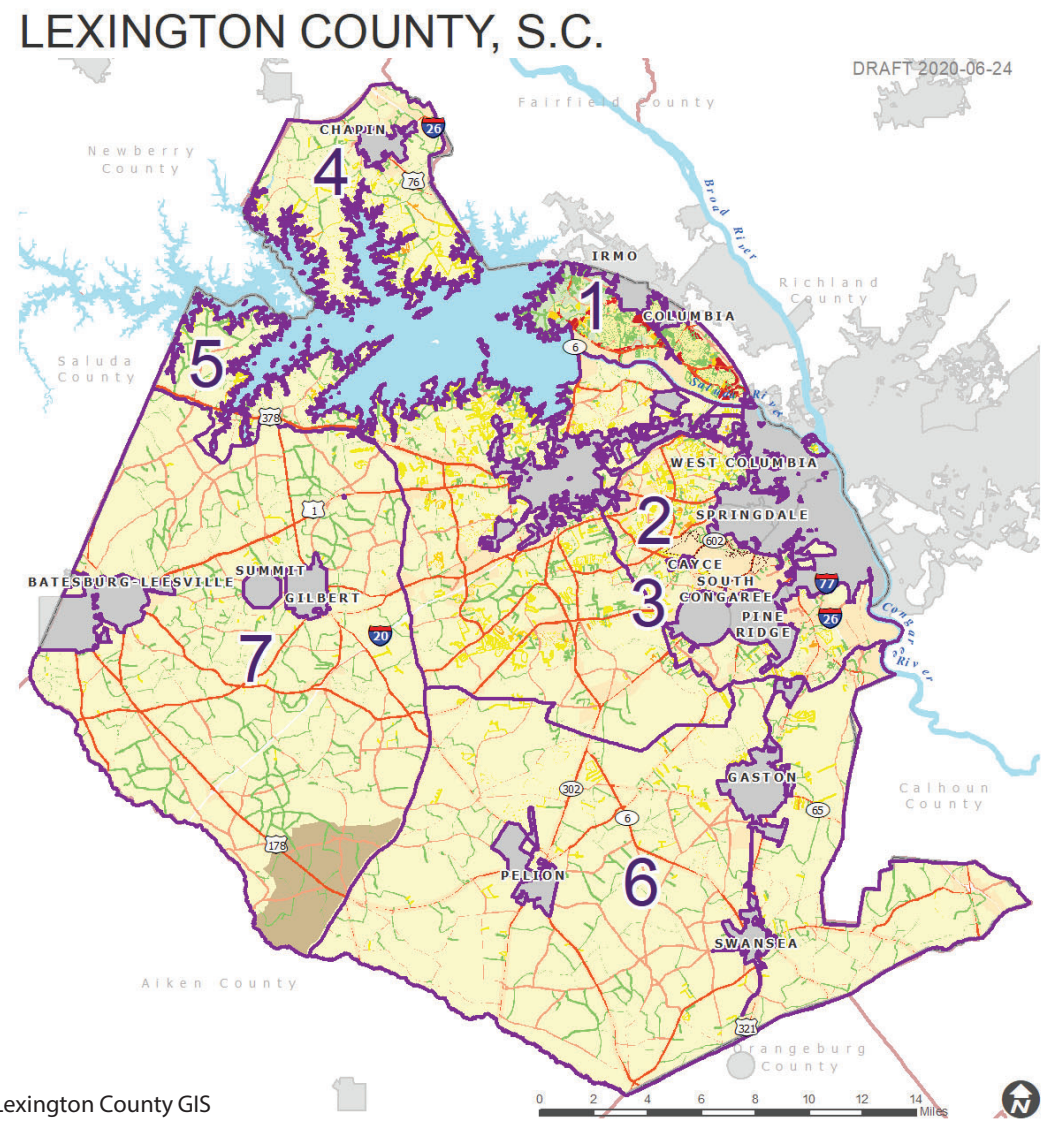
Zoning And Development Regulations

- (Close-up views of zoning districts for each of seven planning areas follows)

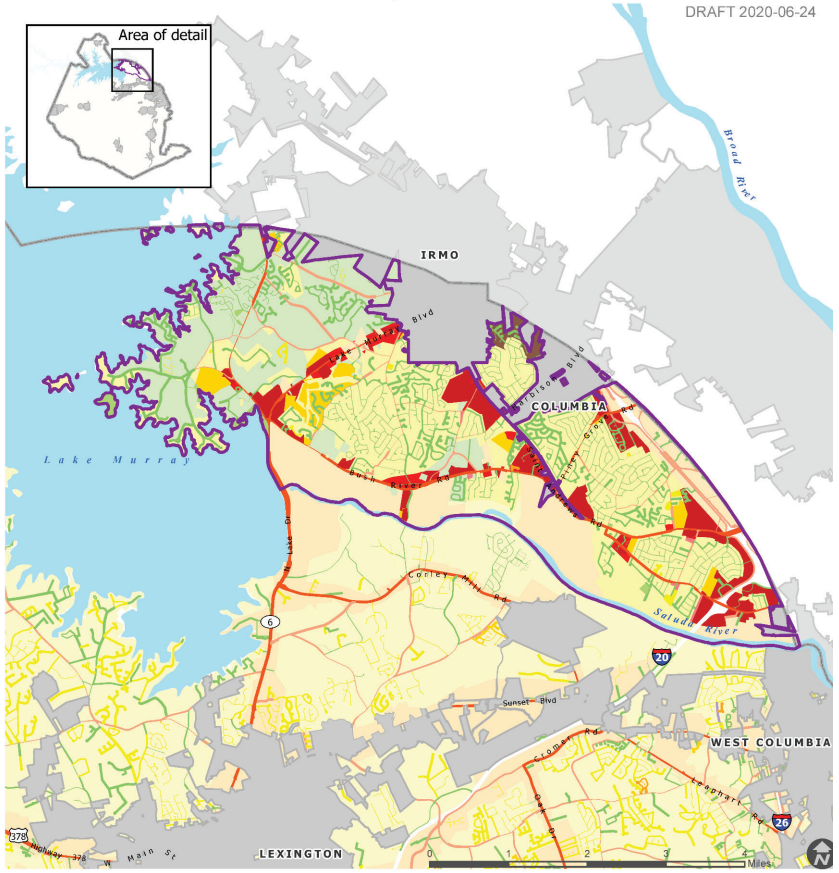


Lexington County GIS

Planning Areas

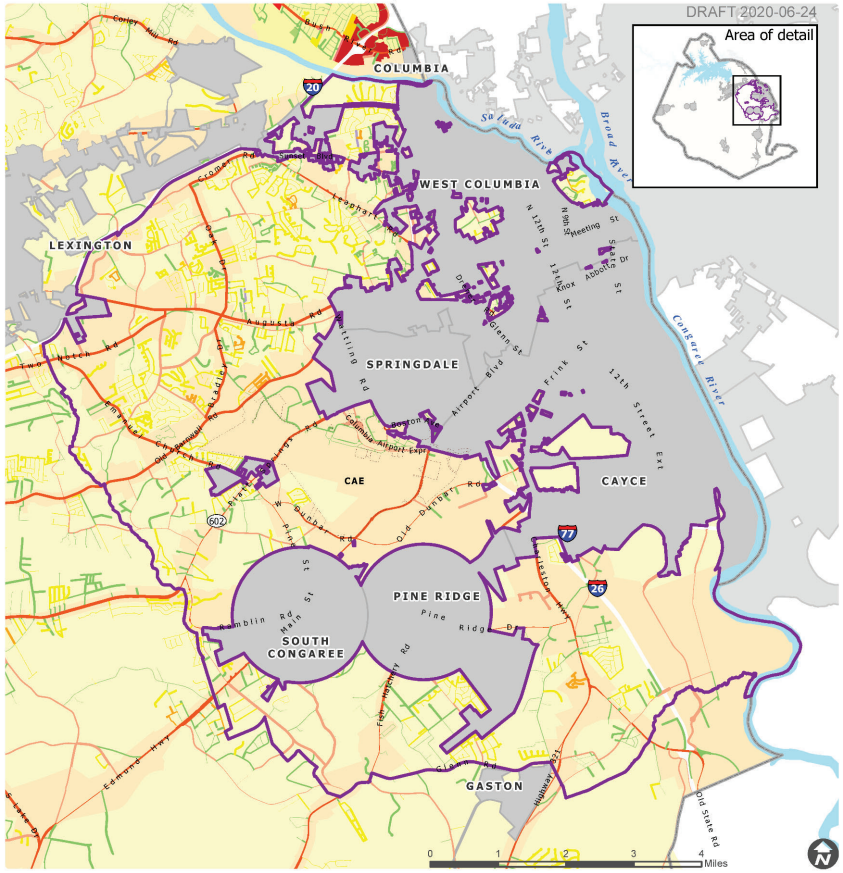
Area 1 – Seven Oaks / Dutch Fork

LEXINGTON COUNTY, S.C.



Area 2 - Eastern

LEXINGTON COUNTY, S.C.



ZONING DISTRICTS

- LC - Limited Commercial
- C1 - Neighborhood Commercial
- C2- General Commercial
- ID - Intensive Development
- LR - Limited Restriction
- PD - Planned Development
- R1 - Low Density Residential
- R2 - Medium Density Residential
- R3 - High Density Residential
- RA - Recreational/Agricultural
- D - Development
- RD - Restrictive Development

STREET CLASSIFICATIONS

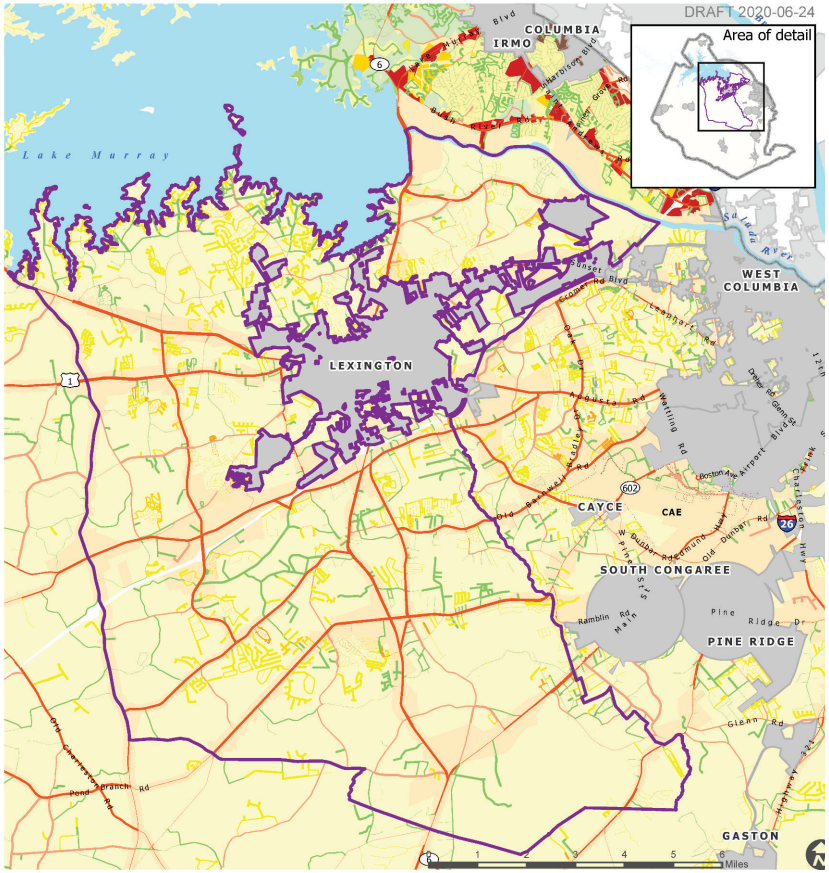
- I - Interstate
- A - Arterial Street
- C - Collector Street
- L - Local Street
- RL4 - Residential Local Four Street
- RL5 - Residential Local Five Street
- RL6 - Residential Local Six Street
- LL - Limited Local Steet
- Municipalities

Lexington County GIS

Planning Areas

Area 3 - Central

LEXINGTON COUNTY, S.C.



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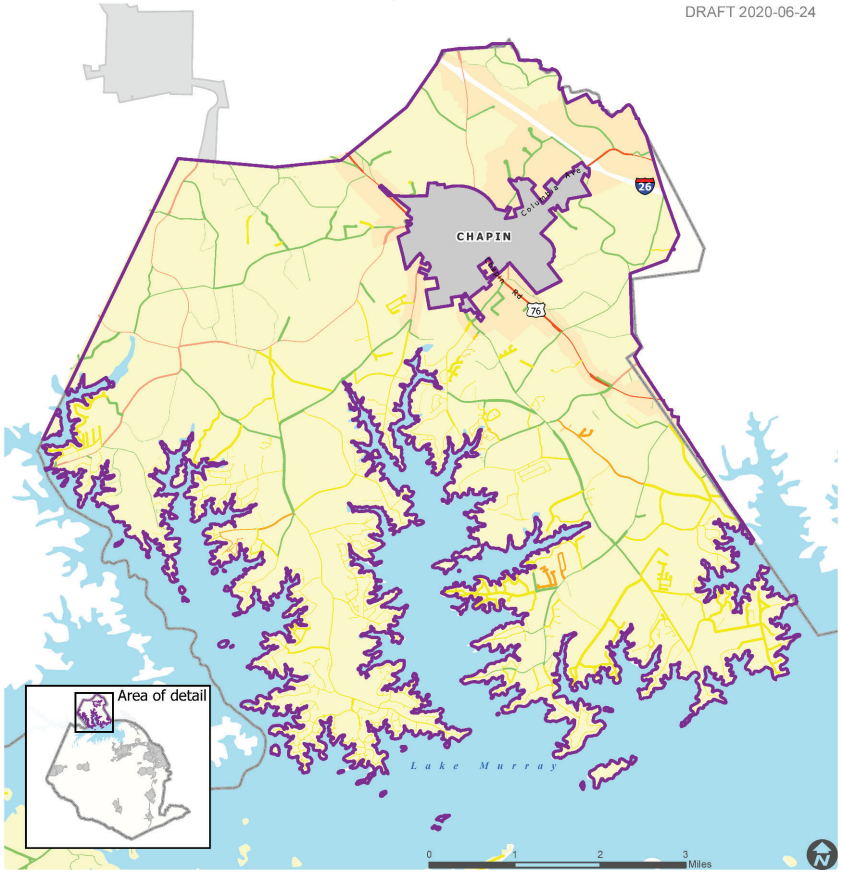
- LL - Limited Local Steet
- Municipalities

Lexington County GIS

Area 4 - Northern

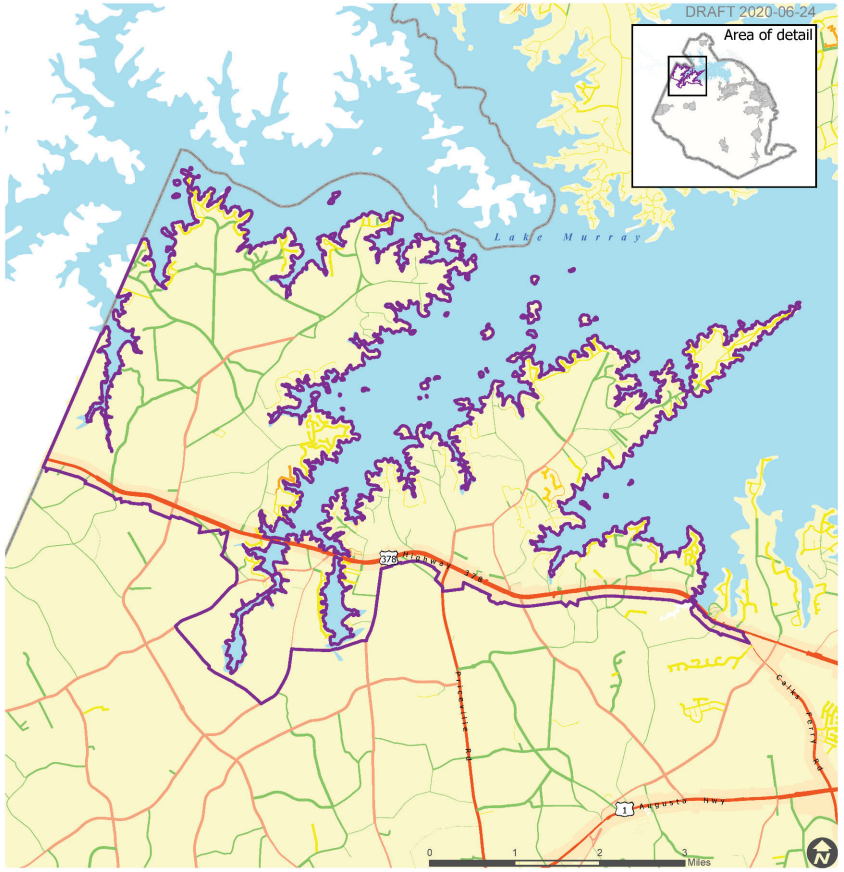
LEXINGTON COUNTY, S.C.



Planning Areas

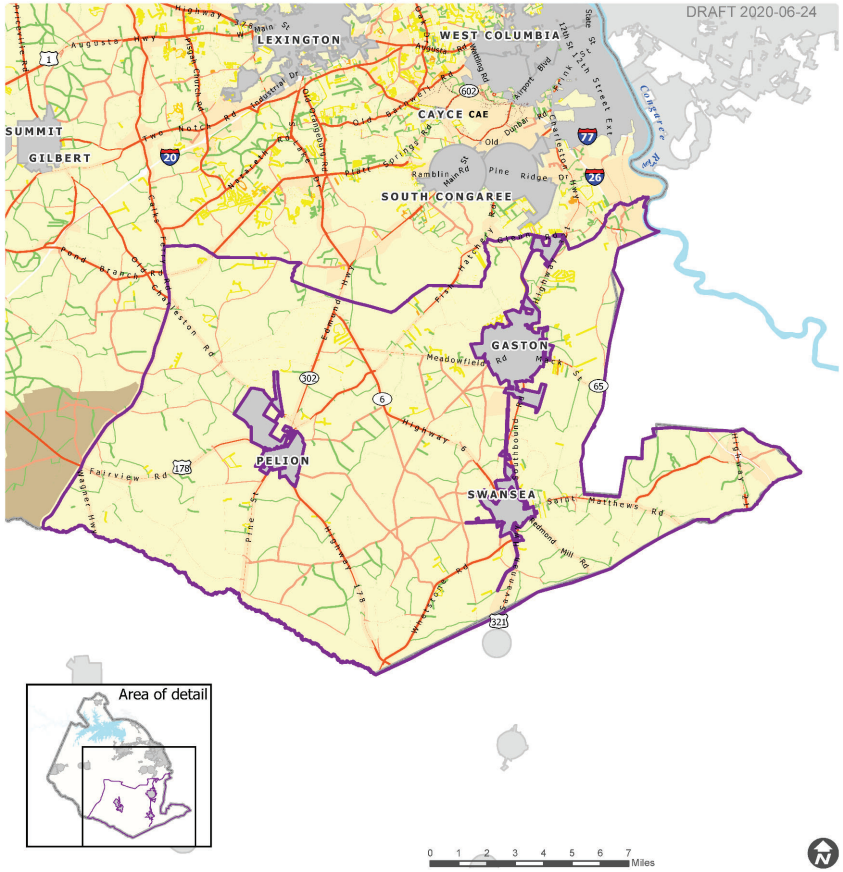
Area 5 – Western Lake Murray

LEXINGTON COUNTY, S.C.



Area 6 - Southern

LEXINGTON COUNTY, S.C.



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- R2 - Medium Density Residential
- R3 - High Density Residential
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STREET CLASSIFICATIONS

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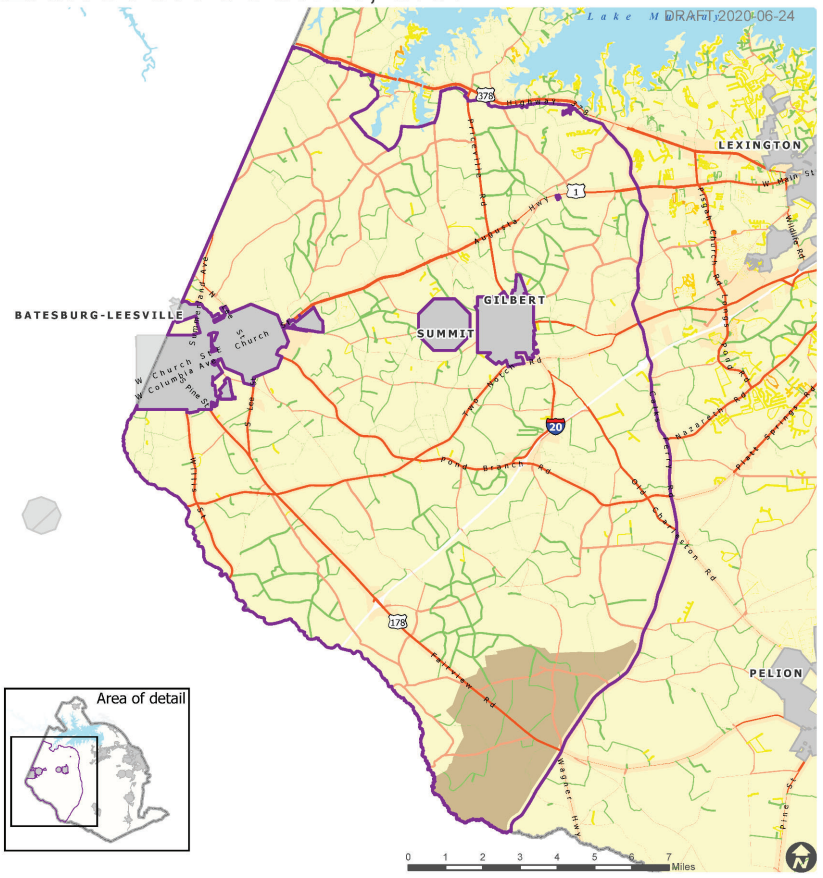
- RL5 - Residential Local Five Street
- RL6 - Residential Local Six Street
- LL - Limited Local Steet
- Municipalities

Lexington County GIS

Planning Areas

Area 7 - Western

LEXINGTON COUNTY, S.C.



ZONING DISTRICTS

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- Municipalities

Lexington County GIS

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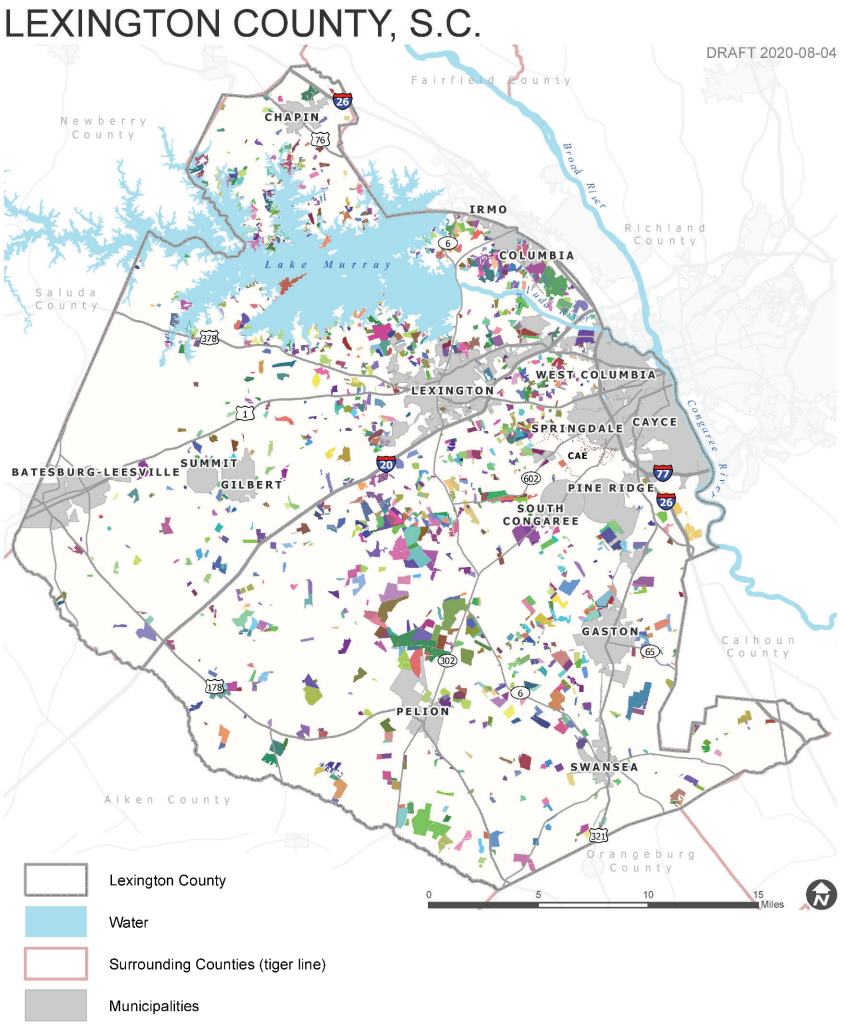
Subdivisions



Lexington County GIS

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Transportation and Mobility

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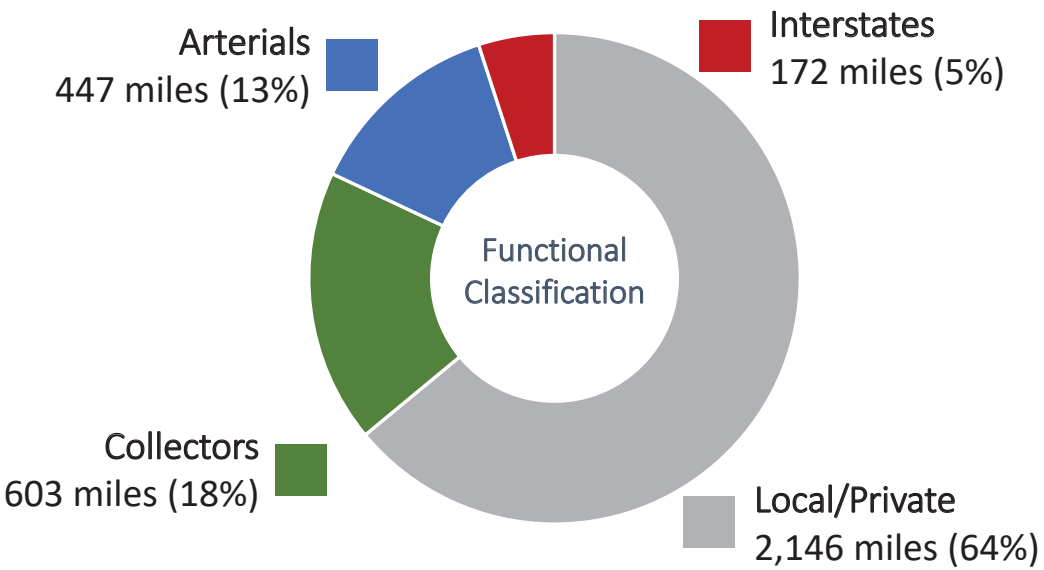
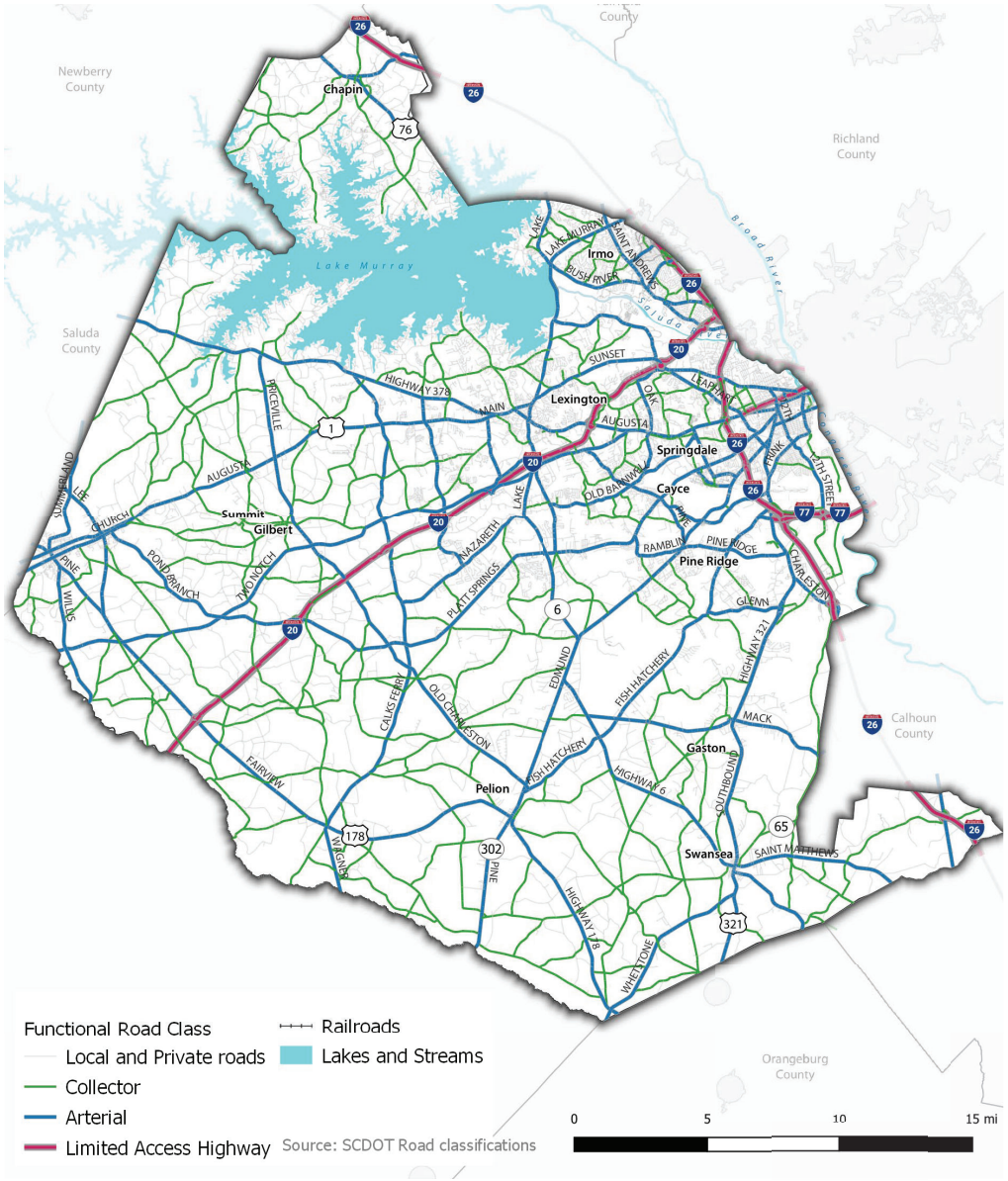
Road Characteristics

Functional Roadway Classifications

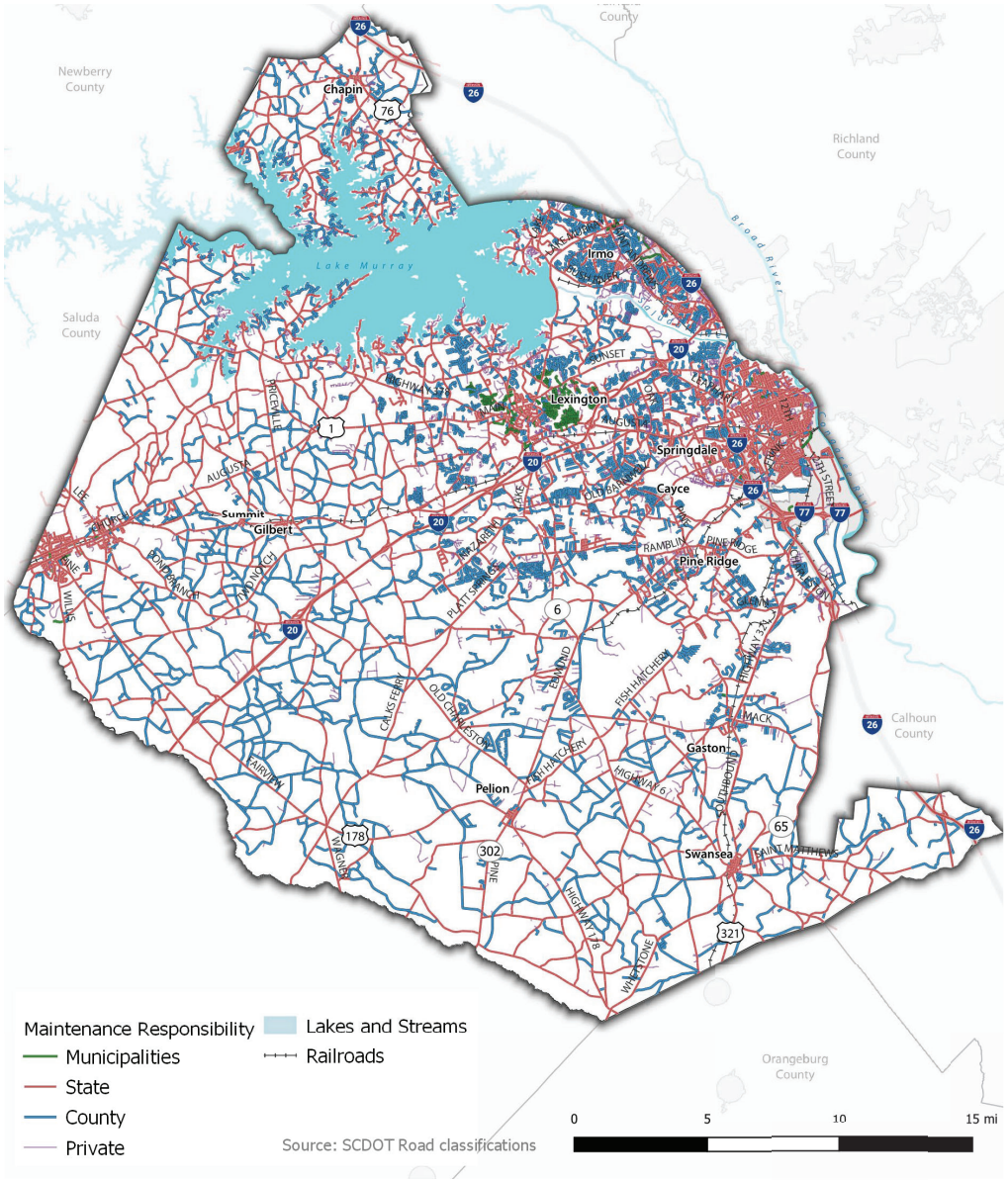
There are 3,368 miles of roads in Lexington County.





Roadway Responsibilities

- More miles of State roads (1,651 miles/49%) than County roads (1,285 miles/38%).
- Most municipalities have mostly State-controlled roads.
- SCDOT will be a key mobility partner.

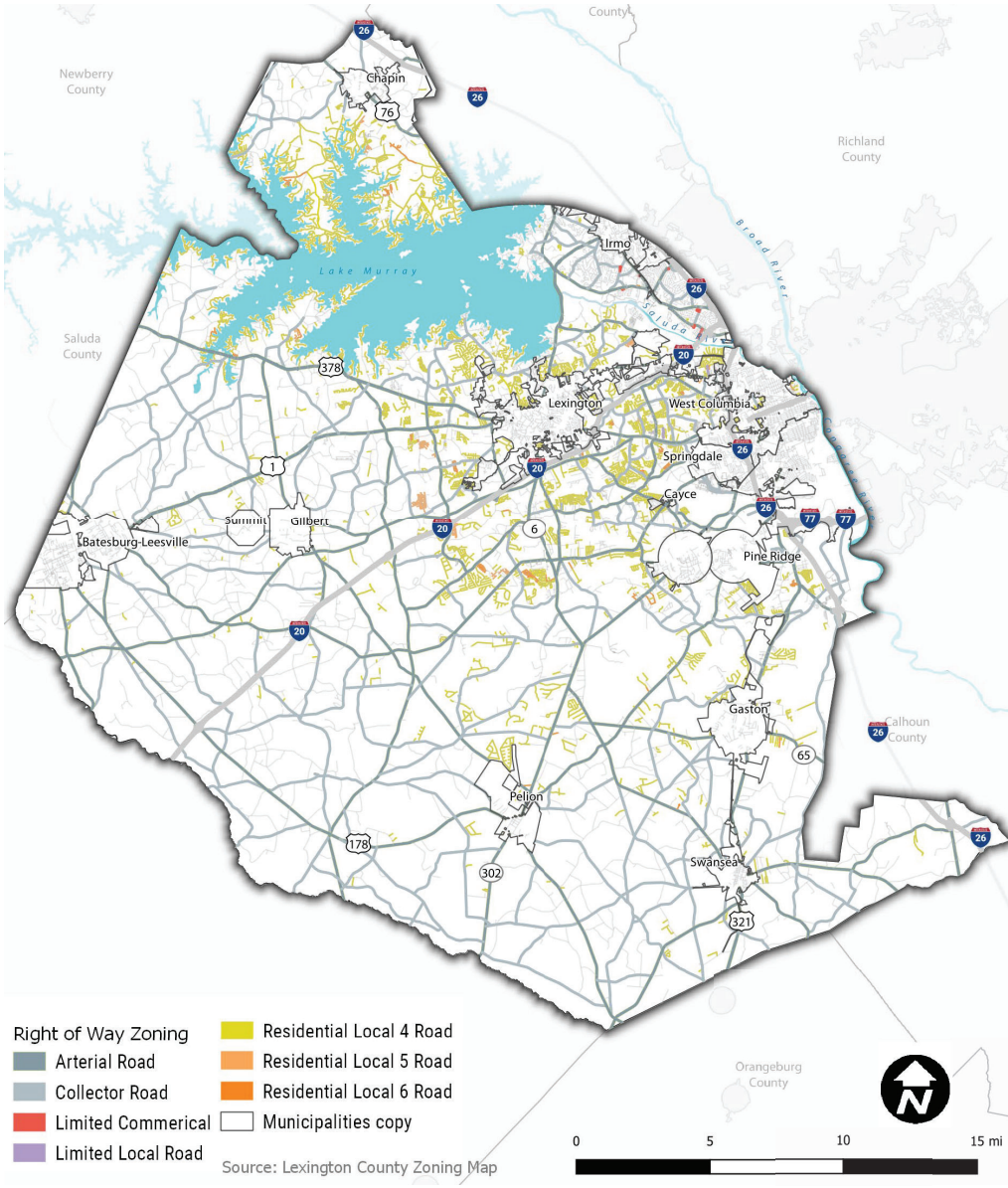


Right-of-way Plan Street Classifications

- County zoning is based on defined street right-of-way classifications.
- This approach to zoning forces higher-intensity uses onto select roads.
- Need to consider network connectivity and access management strategies to mitigate impact.

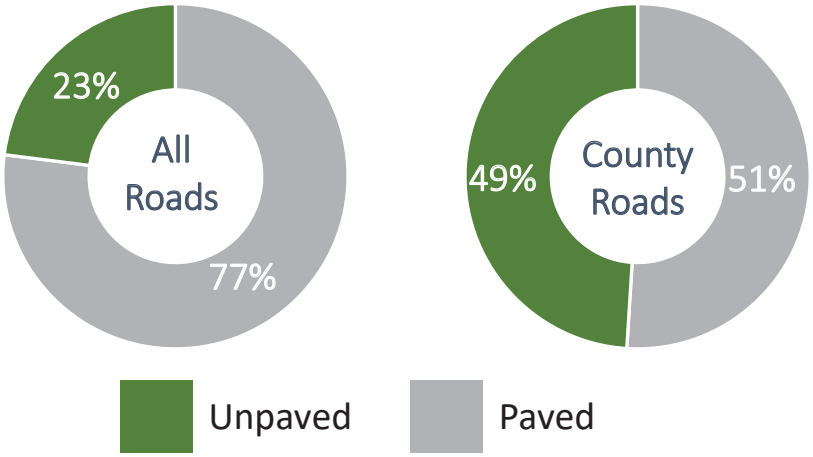
Land Use and Transportation Impacts

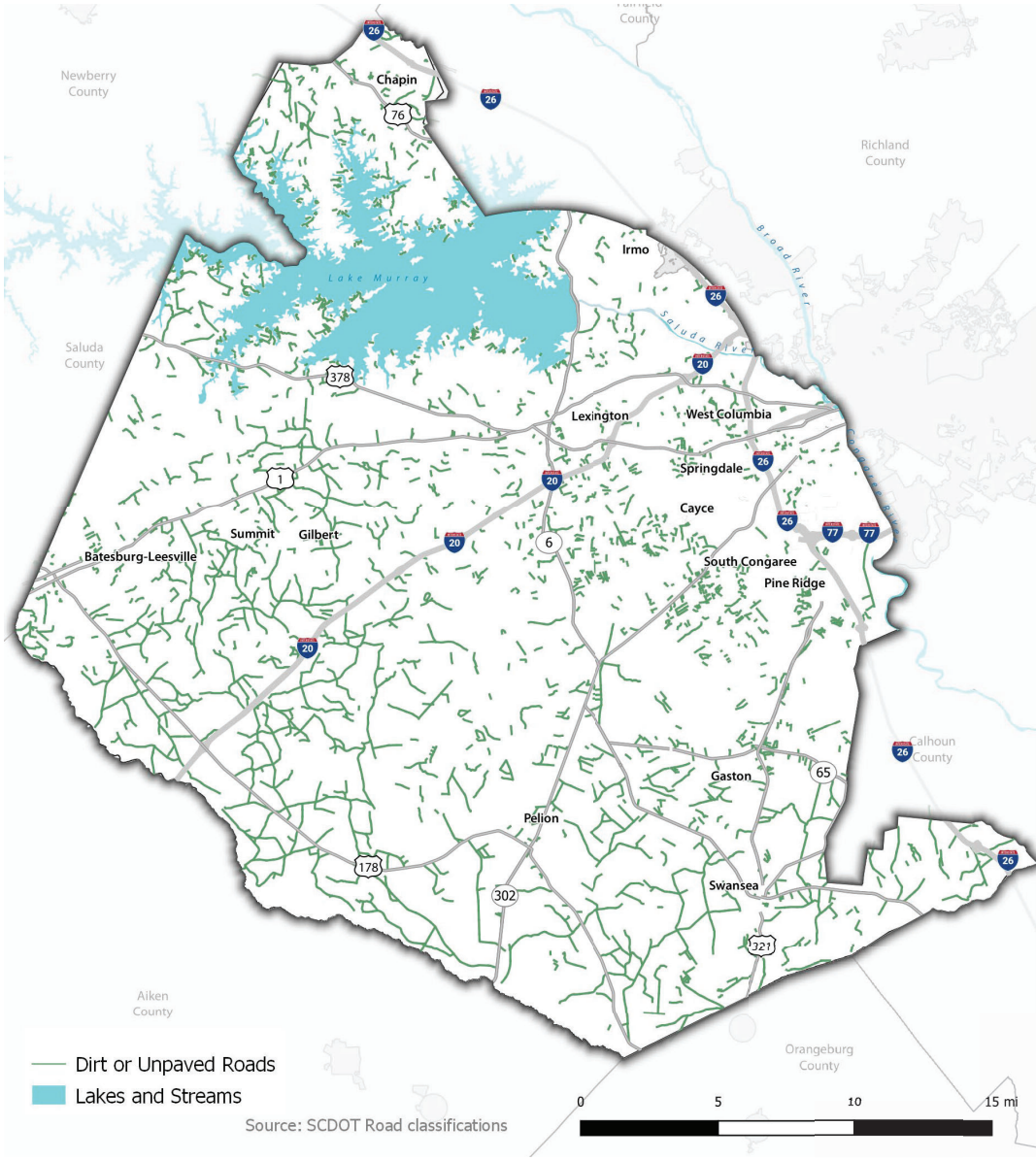
Many of the locations zoned for higher-intensity uses lack an effective street network, like Augusta Road (shown to the left). They also tend to have more driveways along major roads, which can contribute to traffic congestion. The linear nature of the zoning encourages strip commercial development and limits walkable development patterns. The County should consider network connectivity and access management strategies as part of its revised zoning ordinance to help mitigate these impacts.



Pavement Status

- Most unpaved roads in county (82%) are maintained by the County.
- About half (49.4%) of County-maintained roads are unpaved.
- Unpaved roads are concentrated in SW and SE areas.
- More than 220 miles have been petitioned for paving.





Pavement Status

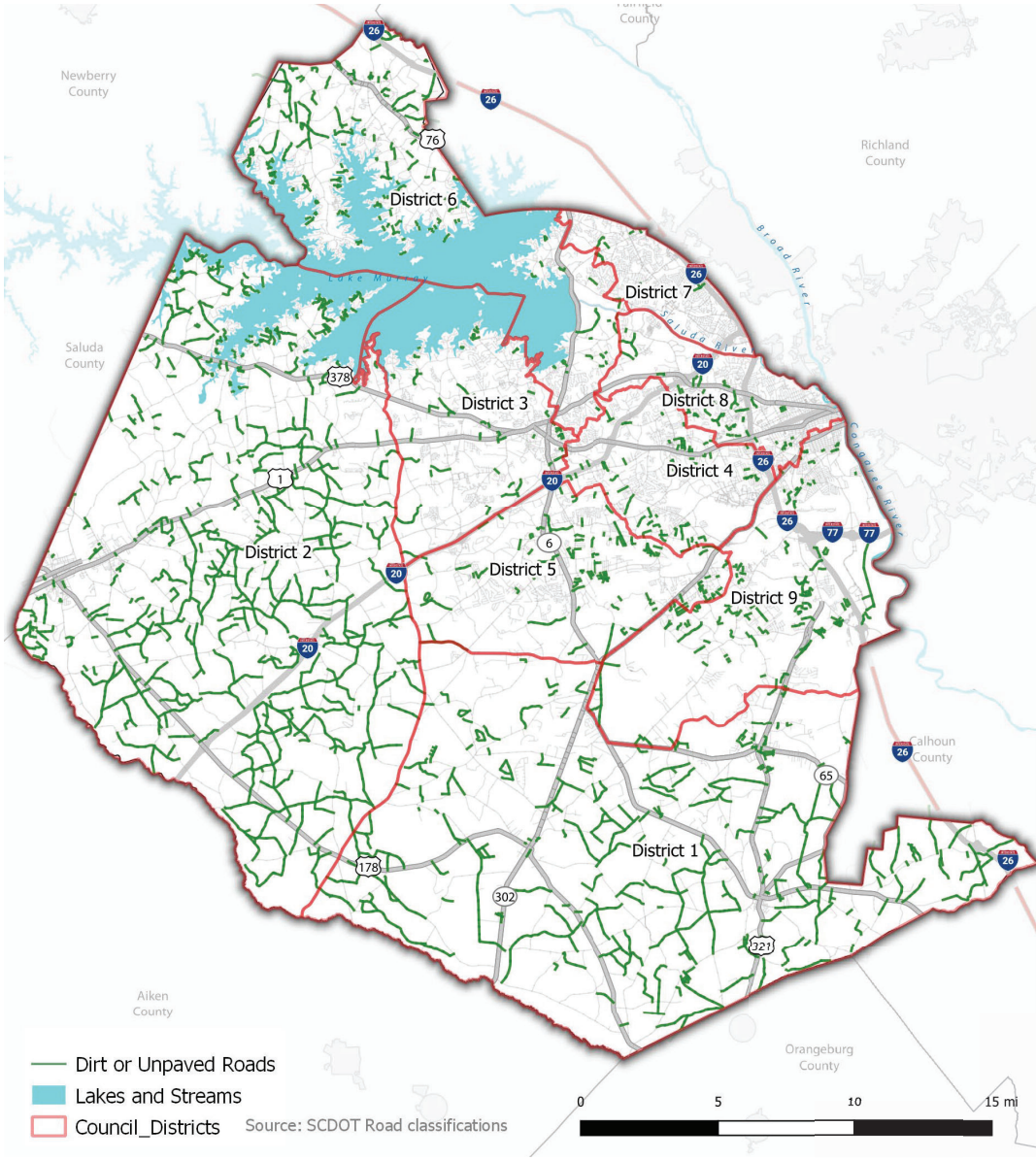
By Council District

- Districts 1 and 2 have the highest percentages and mileage of unpaved roads.

Highest % Unpaved

Council District	1	2	3	4	5	6	7	8	9
Paved Miles	62.39	43.07	87.59	74.68	96.26	90.13	85.38	52.19	53.66
Unpaved Miles	185.66	280.18	16.30	12.99	32.88	48.93	3.00	8.96	32.45
Total Miles	248.05	323	104	87.7	129	139	88.4	61.2	86.1
Percent Unpaved	75%	87%	16%	15%	25%	35%	3%	15%	38%

Source: Lexington County (June 2020)



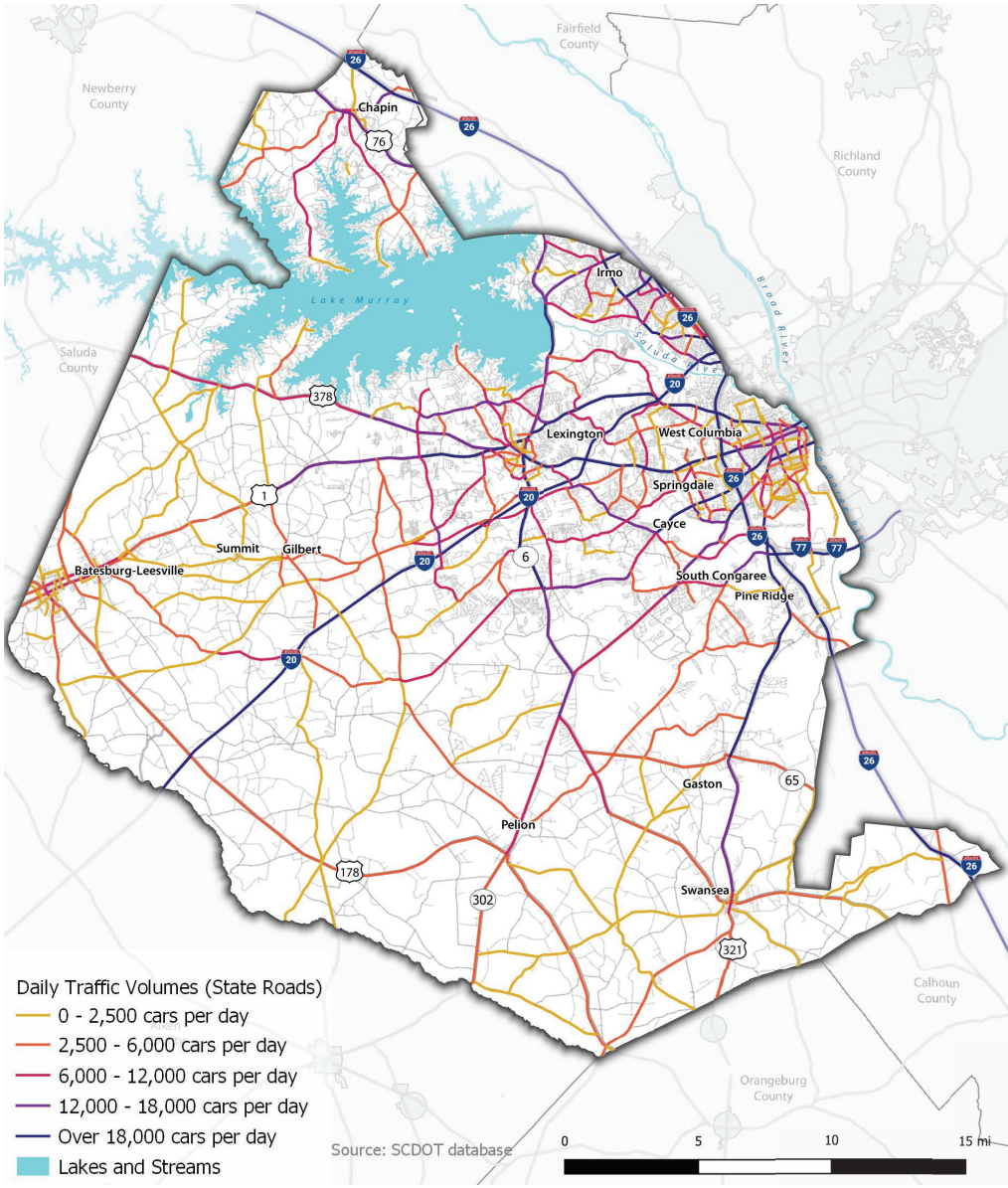
Roadway Performance

Average Annual Daily Traffic
(AADT)

More than half (59.5%) of the roads measured by SCDOT have less than 6,000 vehicles per day.

Top 5 Most Heavily Traveled Segments (Non-Interstate)

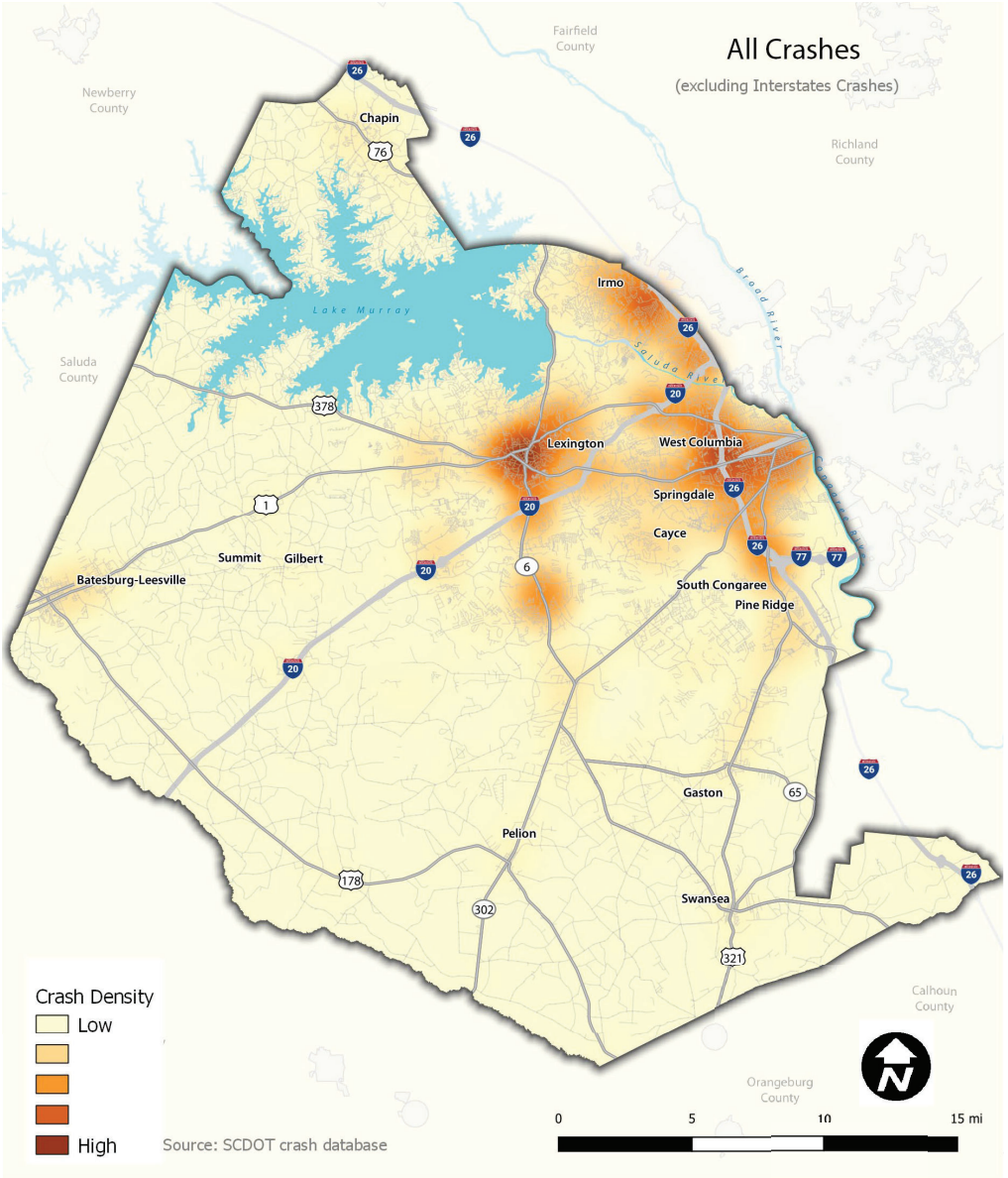
Name	Road Segment	AADT
1. Augusta Rd (US 1)	S- 71 (Woodberry Rd) TO I- 26	44,500
2. Sunset Blvd (US 378)	I- 20 TO S- 30 (Leaphart Rd)	43,900
3. Columbia Ave (US 378)	SC-6 (N Lake Dr) TO S- 392 (Northwood Rd), L- 6056	43,200
4. Sunset Blvd (US 378)	S- 485 (Old Cherokee Rd), L- 2271 TO S- 28 (Hope Ferry Rd), L- 6517	41,000
5. W Main St (US 1)	US 378 (W Main St), S- 176 to US 378 (W Main St), S- 52	34,700



Crash Hotspots

All Non-Interstate Crashes

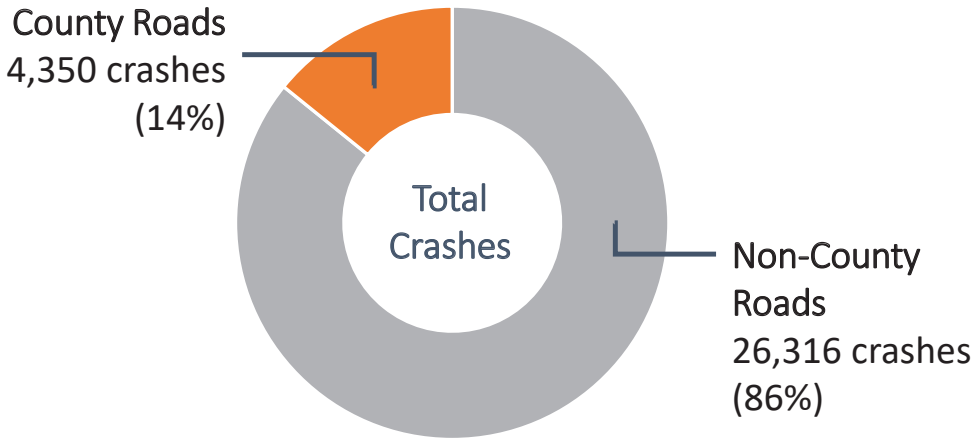
- Sunset Boulevard and West Main Street
- W Main Street and Lake Drive
- Sunset Boulevard and Lake Drive
- Augusta Road around I-26 and Jarvis Klapman Boulevard
- Sunset Boulevard at I-26
- Charleston Highway south of the I-26 interchange
- S Lake Drive and Platt Springs Road
- S Lake Drive and I-20

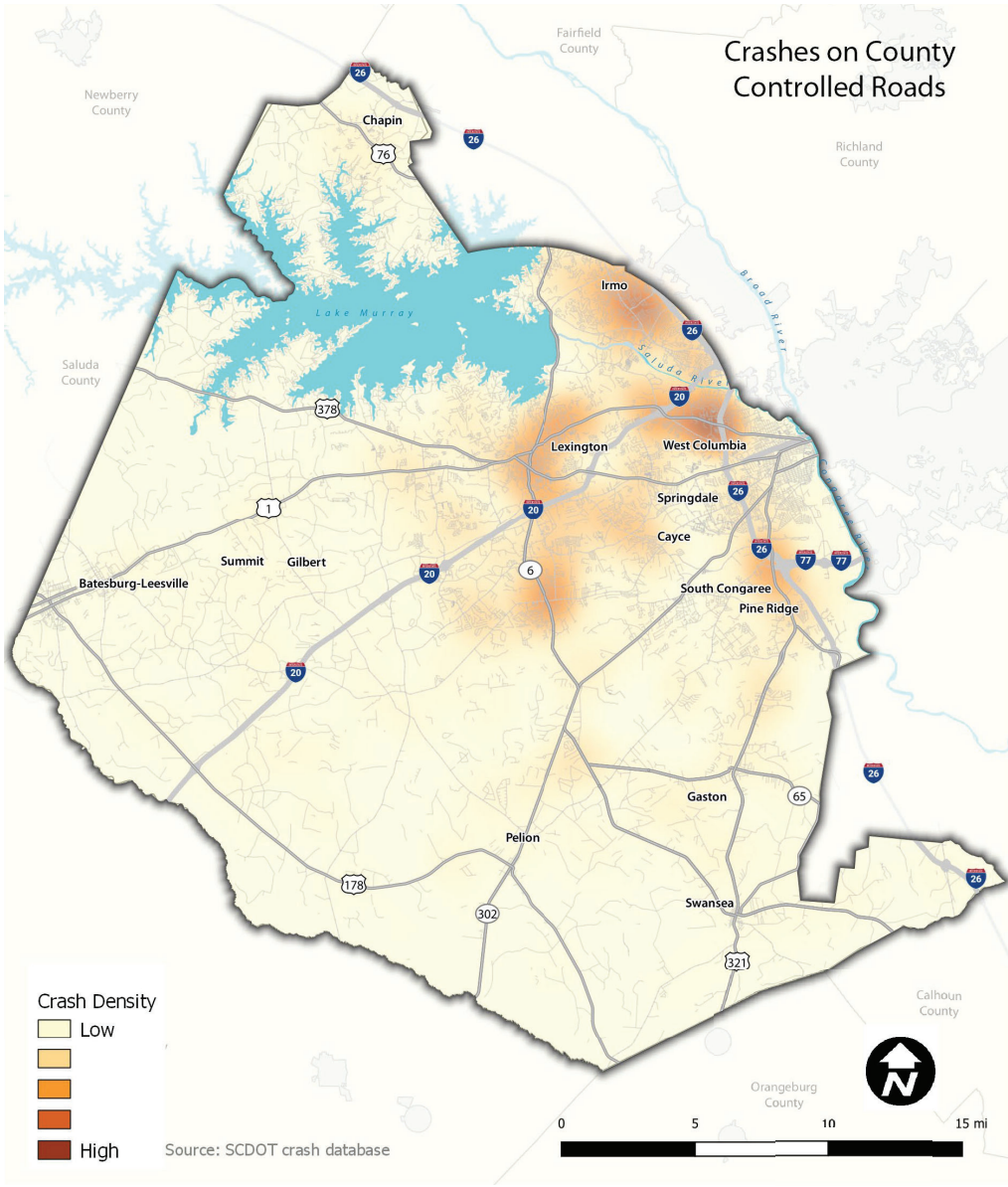


Crash Hotspots

County Road Crashes

- 30,666 total crashes in Lexington County between 2015-2019.
- Share of crashes occurring on County-controlled roads (14%) low relative to share of total County road mileage (38%), likely due to the relatively low volume of trips on these roads compared to State roads.



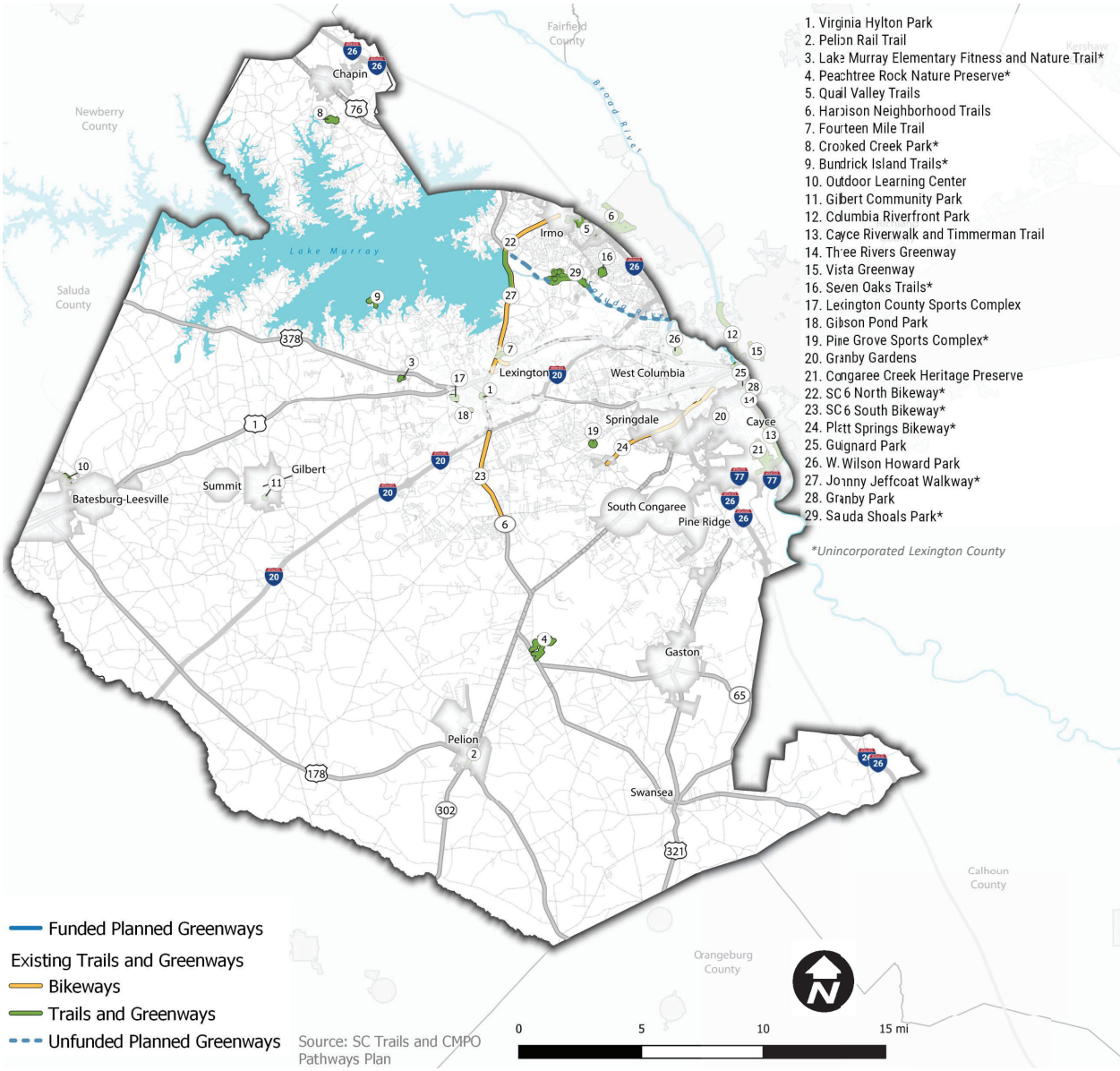


Pedestrian, Bicycle, and Transit Infrastructure

Existing Pedestrian and Bicycle Facilities

Unincorporated Lexington County

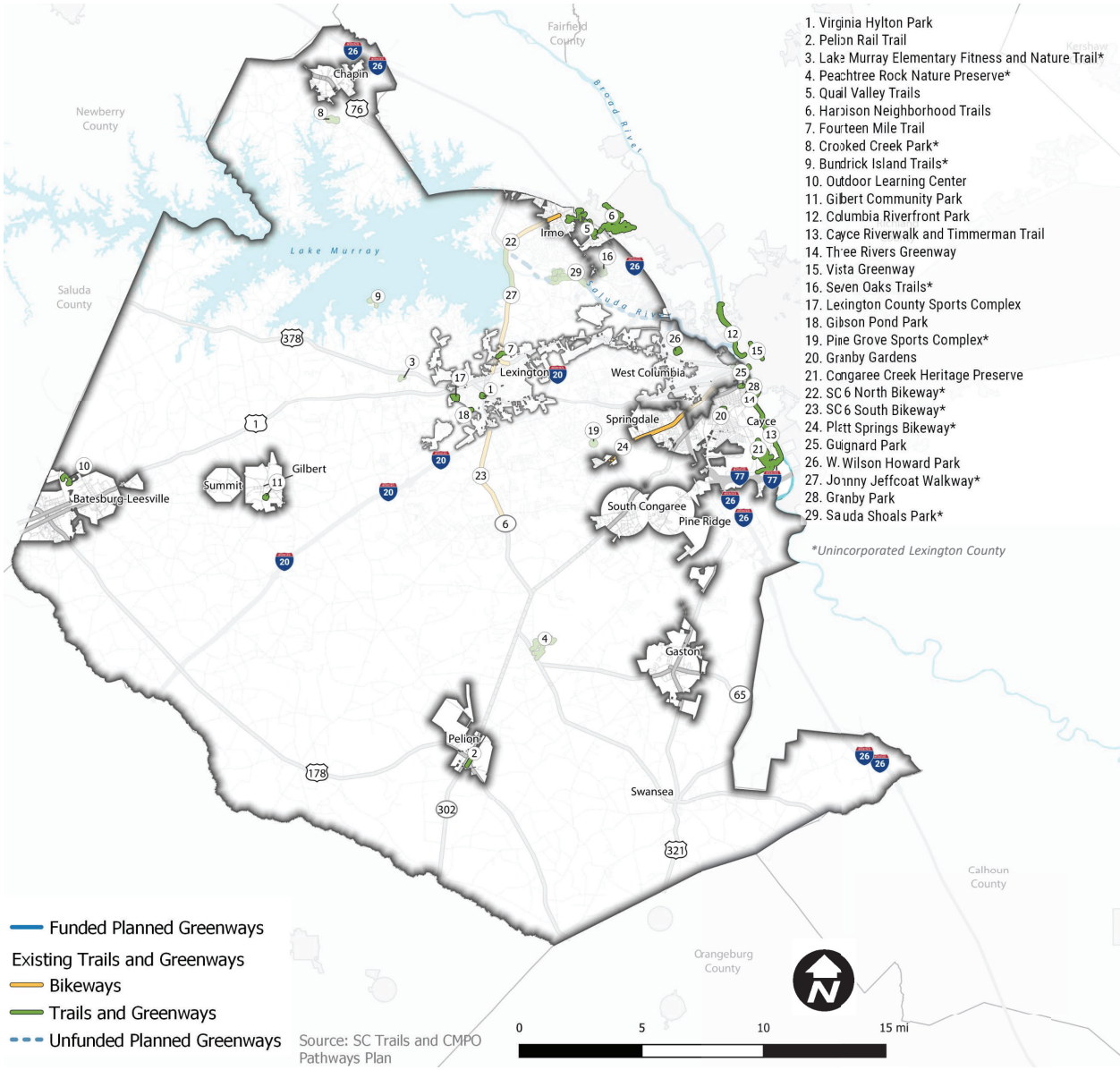
- Existing trails and greenways focused on recreation, not transportation, mainly within parks.
- Existing bikeways limited to unbuffered bike lanes on portions of SC-6 and Platt Springs Rd (45 mph roads) with minimal markings; unlikely to appeal to most potential cyclists.
- Reliable sidewalk and bicycle facility data is not available, and an inventory should be conducted.



Existing Pedestrian and Bicycle Facilities

Nearby Municipalities

- Opportunity to connect to trails and greenways in nearby municipalities.
- Major trail networks in the County are found in the municipalities and in parts of Columbia in Richland County, such as:
  - Cayce:
    - Congaree Creek Trail
    - Cayce Riverwalk and Timmerman Trail
  - Irmo
    - Harbison Community Trails (extends into Columbia and Richland County
  - Columbia Riverfront Park
- Opportunity to expand Blue Bike SC (bike share program in Richland County), which is available for free to COMET riders.



Planned Pedestrian and Bicycle Facilities

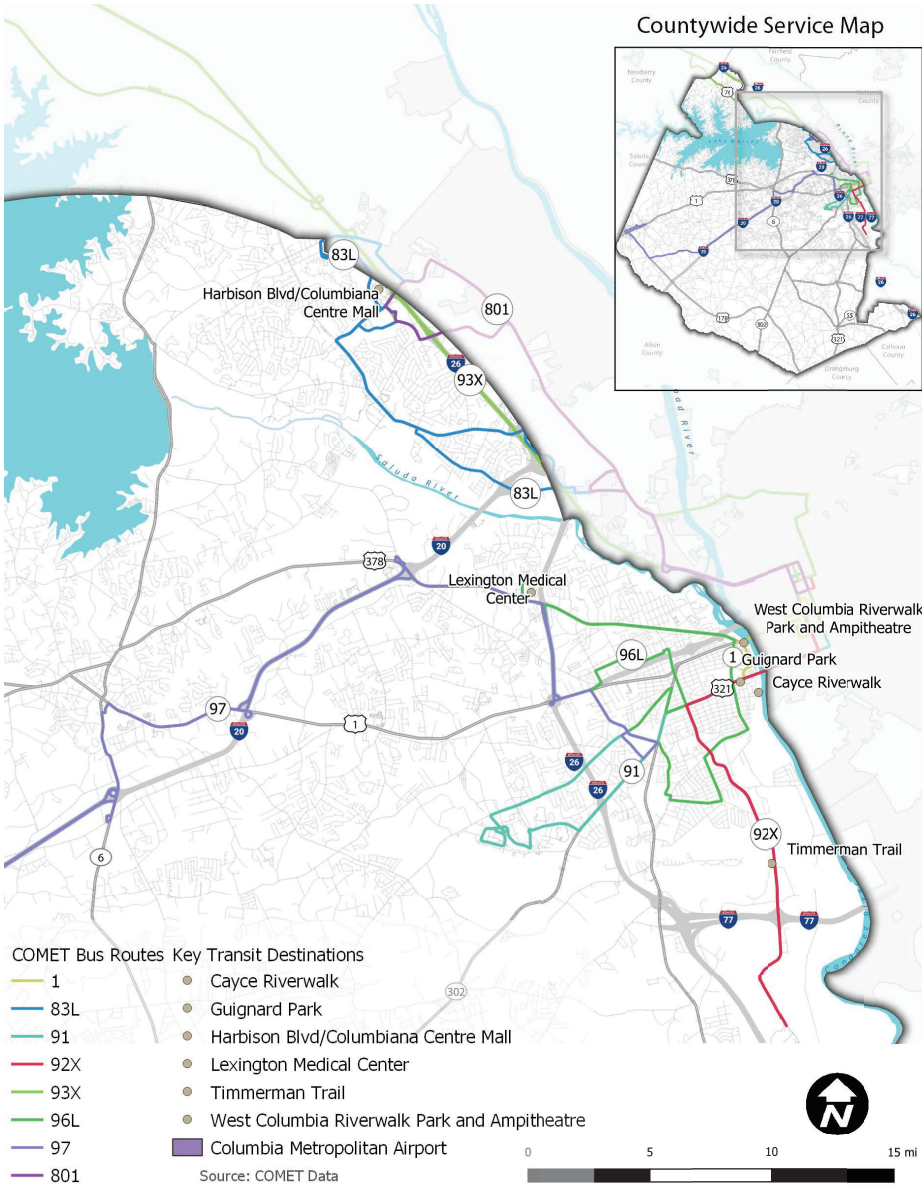
- Most planned trails and greenways within the county are initiatives of municipalities or Central Midlands COG.
- Regional pedestrian and bicycle master plan (right) is outdated (2010).
- Several municipalities have pedestrian and bicycle master plans: Chapin, Swansea, Batesburg-Leesville, Cayce, West Columbia, Springdale.
- Few planned trails or other bicycle facilities in rural areas.

CMCOG Bicycle and Pedestrian Regional Pathways Plan (2010)

Regional Bikeways and Greenways
Source: Central Midlands COG Pathway Plan (2010)

Existing Transit Service

- The COMET is the regional transit provider.
- Service is concentrated in eastern Lexington County to connect municipalities to Downtown Columbia.
- 8 bus routes operate in Lexington County, including access to:
  - Lexington Medical Center
  - Columbia Metropolitan Airport
  - Downtown West Columbia
  - Downtown Cayce
  - Amazon Fulfillment Center
- Low service frequencies limit utility.
  - Ranges from every 30 min (Routes 1, 801) to every 60 minutes (Routes 83L, 91, 96L).
  - 92X and 93X park-and-ride express service routes have one morning and one evening trip.
  - Some routes have no/limited weekend service (Route 91, 93X, 96L).
- Recently added: ReFlex Route 97 for western county (fixed route + flex area).
- Existing available subsidies for Lyft or Uber to fixed routes.



Planned Transit Service

COMET 2020 Vision (2018)

- Few recommended expansions in Lexington County.
- Expanded Dial-A-Ride Transit (DART) flex service for riders with disabilities.
- New Lexington County park-and-ride express routes during peak commute periods:
  - Northwest (I-26) Express: I-26 Exit 97 to Columbiana Mall to Downtown Columbia
  - Gamecock/Event Shuttle: Pick up at Northwest Express park-and-ride lot to USC events
- New bus and shuttle fleet with improved technology and larger bike racks.
- Bus stop enhancements.

COMET Vision 2020

Source: The COMET

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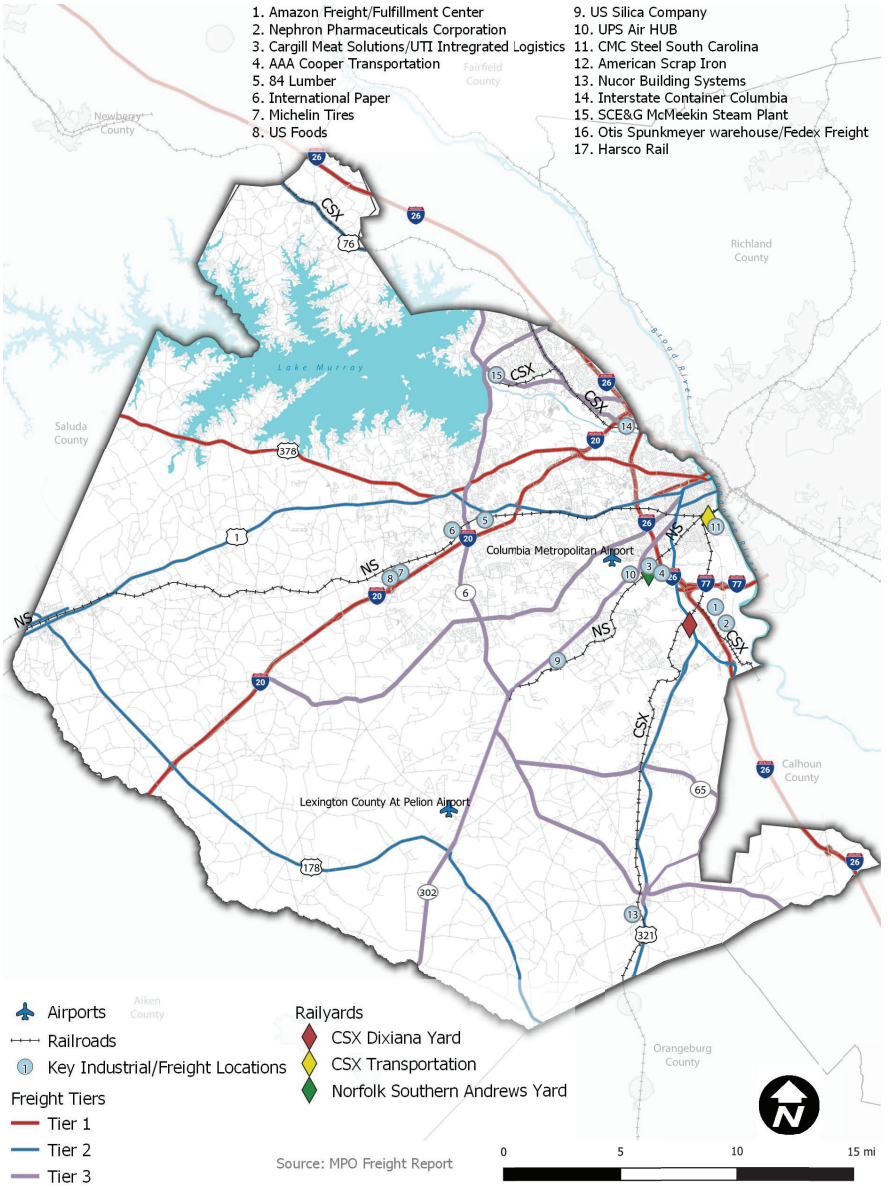
Freight Infrastructure

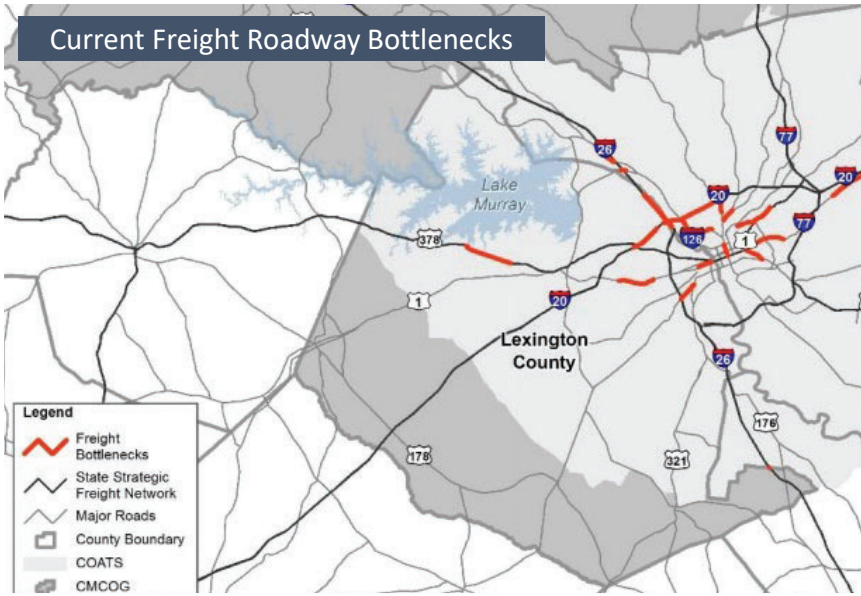
Freight Facilities and Routes

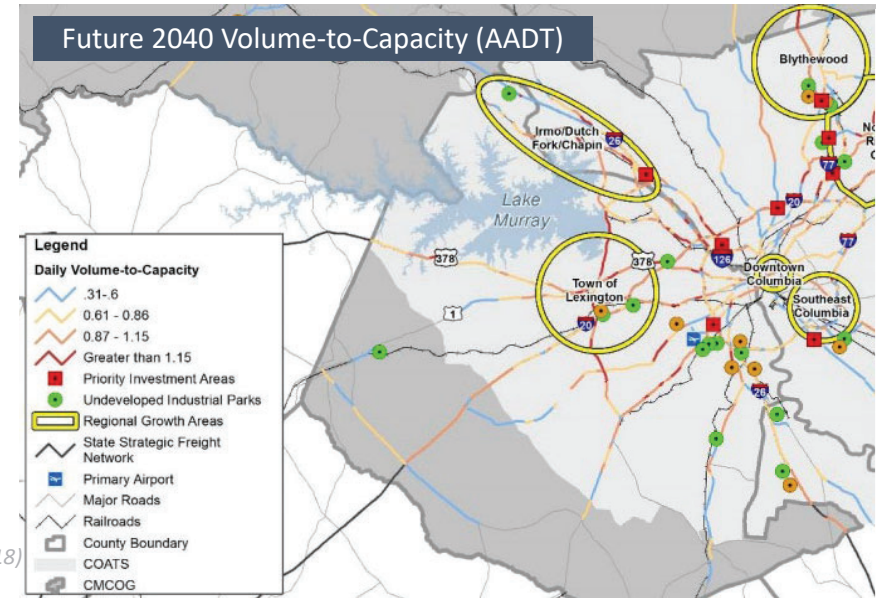
- Two public airports:
  - Columbia Metropolitan Airport (CAE)
    - Major freight hub with a several railyards nearby.
    - One of six UPS regional cargo hubs.
  - Lexington County Airport
- Served by two Class I railroads:
  - Norfolk Southern (132 miles) → Charlotte, Atlanta, Savannah
  - CSX (128 miles) → Savannah, Charleston, Spartanburg, Raleigh-Durham
- Intermodal yards:
  - Norfolk Southern West Columbia TBT Terminal
  - CSX Dixiana Yard
  - CSX Transportation
- Interstates converge near airport and Downtown Columbia.



Freight Roadway Congestion

- CMCOG's *Regional Freight Mobility Plan (2018)* identified existing freight bottlenecks in the county, including portions of:
  - US-378
  - I-20
  - I-26
- By 2040, increased congestion is anticipated near Town of Chapin, Town of Lexington, and CAE.
- Most of these are SCDOT corridors, but there is an opportunity to influence around CAE
- 500-acre commercial and industrial redevelopment near CAE announced by Magnus Development Partners in January 2020 will increase demand.

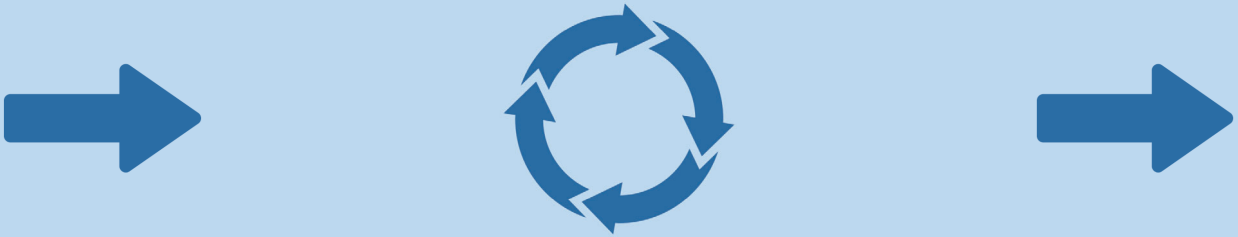




Source: Central Midlands COG Regional Freight Mobility Plan (2018)

Transportation Behavior

Commute Patterns – Inflow & Outflow



Worker Inflow *(Live elsewhere, work in county)*	Live and Work in County	Worker Outflow *(Live in county, work elsewhere)*
73,345	54,354	71,805

- Limited number of people both live and work in Lexington County.
- More people coming in to work in Lexington County than leaving for work.
- Opportunity to create more live/work communities to reduce travel times and vehicle miles traveled.

Source: U.S. Census On the Map (2017)

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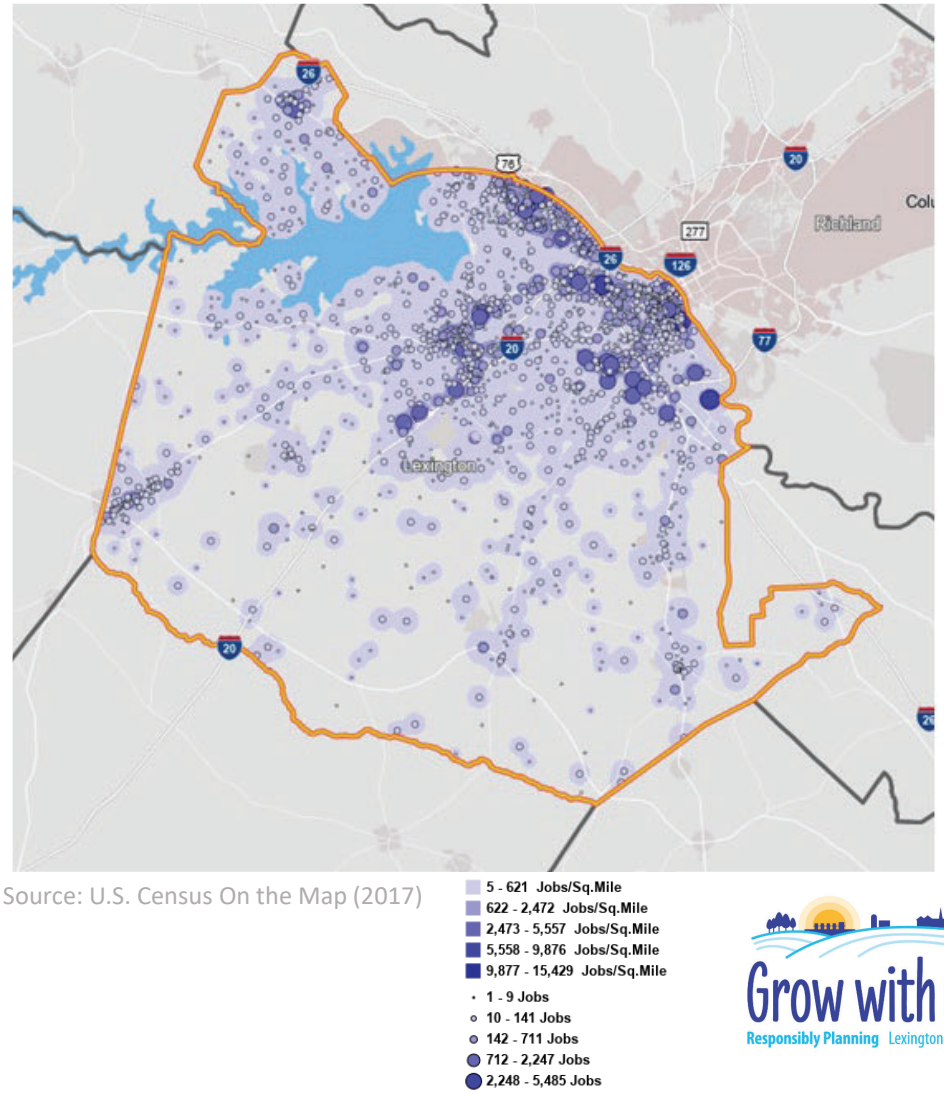
Job Locations

- Access to transportation is a major factor for employment centers.
- Most jobs are clustered in municipalities near the river, around the airport, or along interstates/major roads.
  - I-20
  - US-76
  - US-1
  - US-378
  - US-321
  - SR-302

Lexington Job Locations and Density (2017)



Source: U.S. Census On the Map (2017)

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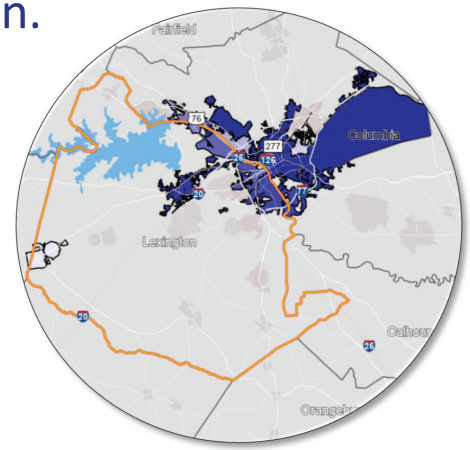
Where Lexington Residents Work

- Resident work locations align with highest job density areas.
- Most popular locations are more urbanized areas near the river (eastern Lexington County and western Richland County) and town of Lexington.



	Places	Workers	Percent of Workers
Top Employment Centers	Columbia, SC	28,297	22.4%
	Lexington, SC	8,249	6.5%
	Cayce, SC	7,171	5.7%
	West Columbia, SC	4,544	3.6%
	Seven Oaks, SC	3,085	2.4%
	Irmo, SC	2,249	1.8%
	Greenville, SC	1,802	1.4%
	St. Andrews, SC	1,795	1.4%
	Forest Acres, SC	1,566	1.2%
	Batesburg-Leesville, SC	1,338	1.1%
	All Other Locations	66,053	52.4%
	All Places	126,159	100%

Sources: U.S. Census On the Map (2017)

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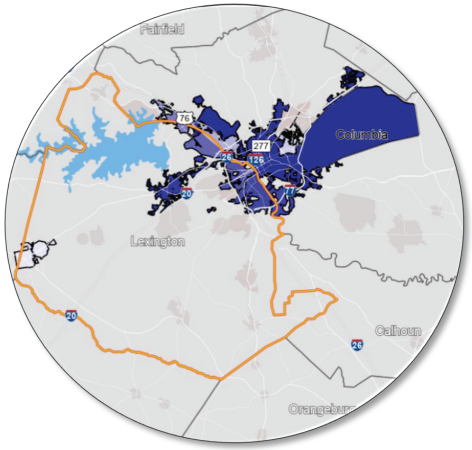
Where Lexington Workers Live

- Most popular locations are more urbanized areas near the river (eastern Lexington County and western Richland County).
- Dispersed workforce.
- Opportunity to attract some existing workers to become residents.



	Places	Workers	Percent of Workers
Top Residences	Columbia, SC	6,432	6.5%
	Lexington, SC	2,808	2.9%
	St. Andrews, SC	2,223	2.3%
	West Columbia, SC	1,890	1.9%
	Seven Oaks, SC	1,868	1.9%
	Cayce, SC	1,758	1.8%
	Red Bank, SC	1,621	1.6%
	Irmo, SC	1,329	1.4%
	Oak Grove, SC	1,308	1.3%
	Dentsville, SC	859	0.9%
	All Other Locations	76,205	77.55%
	All Places	*98,301*	*100%*

Sources: U.S. Census On the Map (2017)

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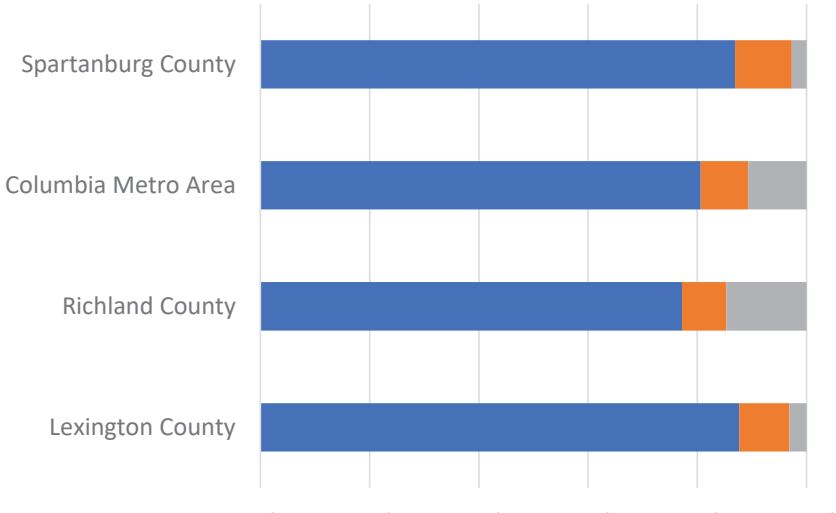
Mode of Travel to Work

Overall

- Almost all Lexington County residents drive to work alone or in a carpool (96.8%).
- On average, nearly 7% more Lexington County residents drive to work than metro area residents.
- Slightly more Lexington County residents carpool to work (9.1%) than the metro average (8.7%)
- Commute behaviors in Lexington County are similar to Spartanburg County outside of Greenville, which has comparable land use patterns.



	Lexington County	Richland County	Columbia Metro Area	Spartanburg County
Drove alone	87.7%	77.2%	80.60%	86.9%
Carpooled	9.1%	8.1%	8.70%	10.4%
Non-car Modes	3.2%	14.7%	11%	2.7%

Percentage of Mode Share

Source: 2018 American Community Survey 5-year estimate

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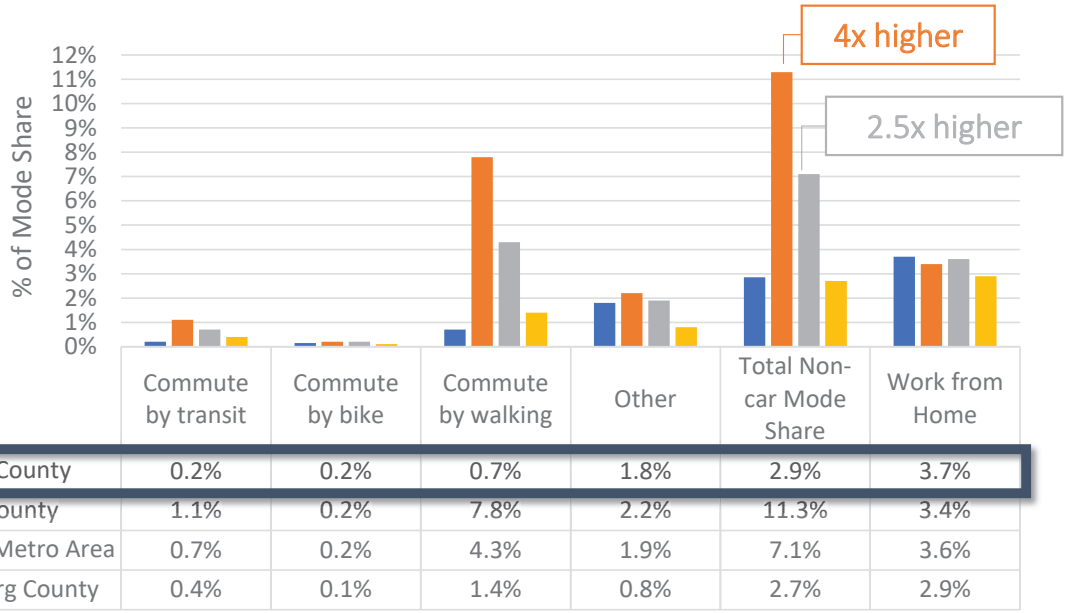
Mode of Travel to Work

Non-car Modes

- Neighboring Richland County has a 4x higher active transportation mode share, likely due to areas with more urban development patterns and more transit service or pedestrian/bicycle infrastructure.
- Lexington County has slightly more residents who work from home (3.7%) than peer communities.



	Commute by transit	Commute by bike	Commute by walking	Other	Total Non-car Mode Share	Work from Home
Lexington County	0.2%	0.2%	0.7%	1.8%	2.9%	3.7%
Richland County	1.1%	0.2%	7.8%	2.2%	11.3%	3.4%
Columbia Metro Area	0.7%	0.2%	4.3%	1.9%	7.1%	3.6%
Spartanburg County	0.4%	0.1%	1.4%	0.8%	2.7%	2.9%

Non-Motorized Mode Share

Source: 2018 American Community Survey 5-year estimate

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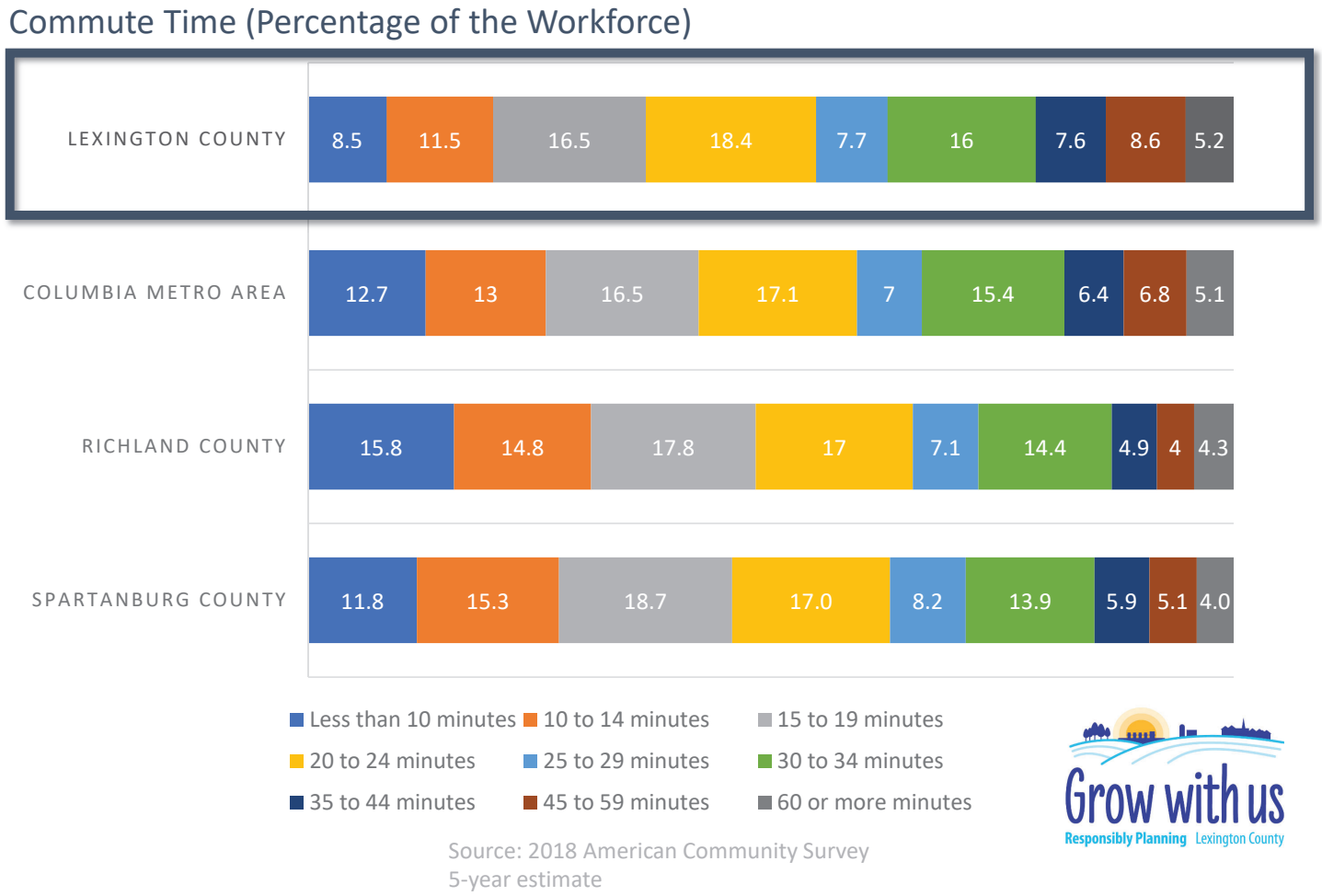
Travel Time to Work

Compared to peer communities, more Lexington County residents (64%) have commutes of 20 minutes or longer.



Source: 2018 American Community Survey
5-year estimate

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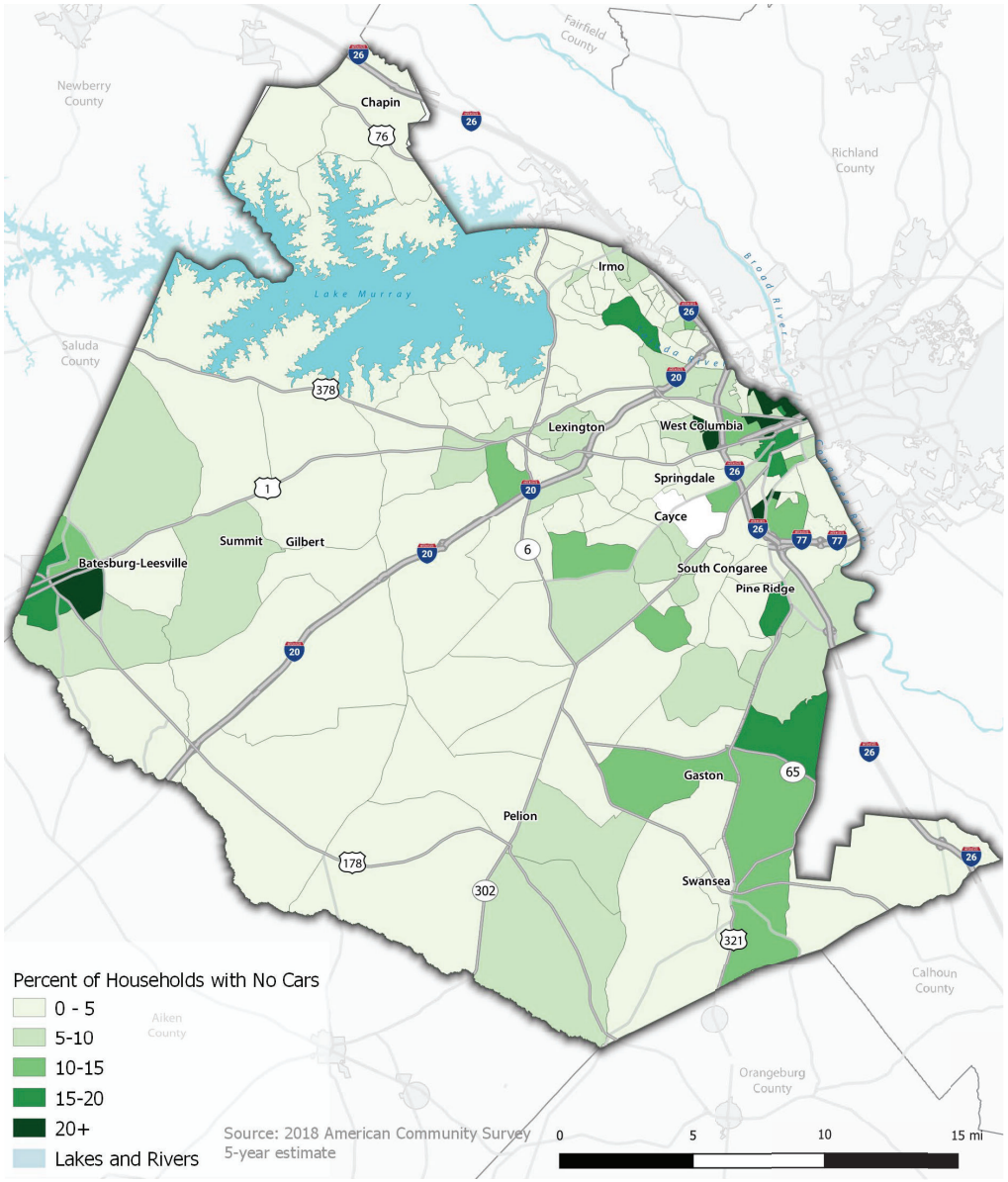
No-Vehicle Households

- The most dense areas of no-vehicle households are within municipalities or surrounding them.
- In most rural Census tracts, the share of households without a car is less than 5%.



County Transportation Spending

“C” Fund Program

- Administered by County Transportation Committee (CTC).
- Daily operations by Public Works Department.
- Annual distribution of approximately $4.2 million[1].
- Majority of spending (80%) on paving dirt roads, asphalt maintenance, and state roads.
- 8% set aside for special projects like SCDOT enhancement grant matches, sidewalks, and school road projects.

[1] *Lexington County Transportation Plan, August 2017*

Program Information | Lexington County Transportation Plan (2017)

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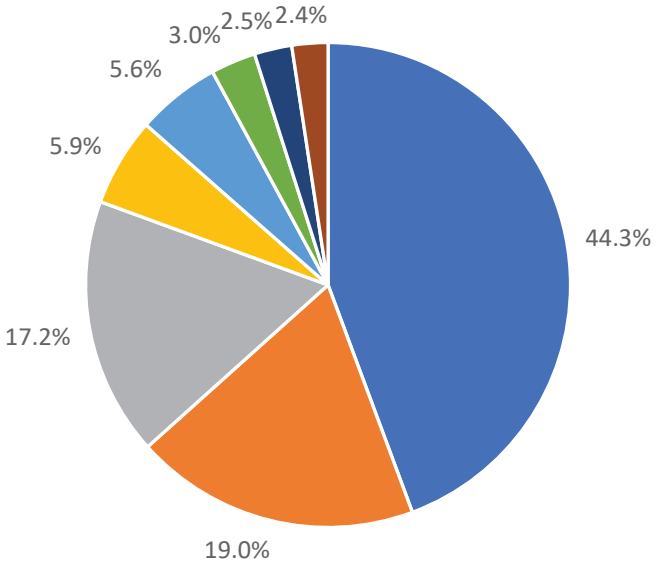
“C” Fund Program

2017 “C” Fund Annual Distribution[1]

Category	2017 Percent	2017 Amount
Dirt to Pave Construction	44.3%	$1,863,000
Asphalt Maintenance Program	19.0%	$800,000
SCDOT Requirement	17.2%	$725,000
Drainage Projects	5.9%	$250,000
Special Projects/Enhancement Grants	5.6%	$236,000
Economic Development	3.0%	$126,000
Personnel/Operating	2.5%	$105,000
Municipal Fund	2.4%	$100,000
Total	**100%**	**$4,205,000**



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[1] *Lexington County Transportation Plan, August 2017*

"C" Fund Program

Unpaved Road Spending

- Public Works Department spends $800,000 to $900,000 per mile paved[1].
- County has already received petitions to pave 220 miles of dirt roads.
- With approximately $2 million annual paving budget, it will take roughly 88 to 99 years to finish paving all the petitioned dirt roads.

Simplified estimate for discussion purposes; does not account for NPV or cost escalation

?

Is this how the community wants to continue to spend half of its annual transportation budget?

Are available funds adequate? Is the County open to considering additional revenue sources?

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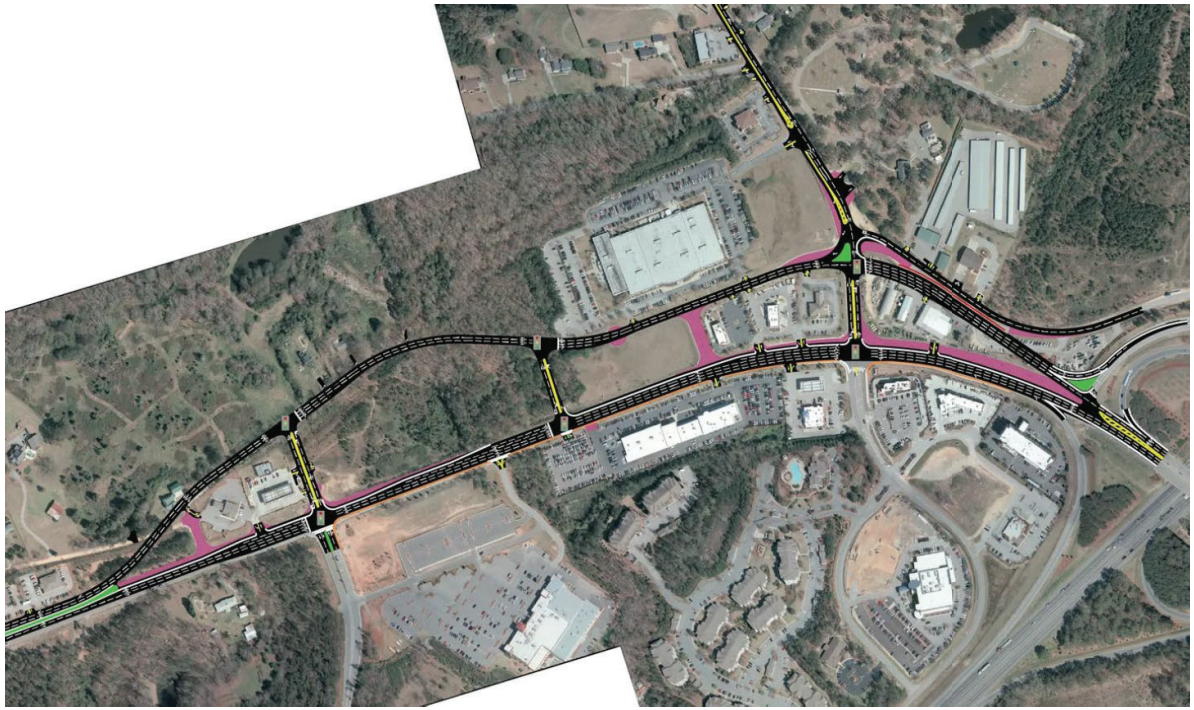
[1] *Lexington County Transportation Plan, August 2017*

Major Projects

Sunset Split

- Reduce congestion at Corley Mill/US 378 (Sunset Boulevard) intersection.
- Splits traffic into two one-way roads.
- Widens US 378.
- Currently in design.



Project Page

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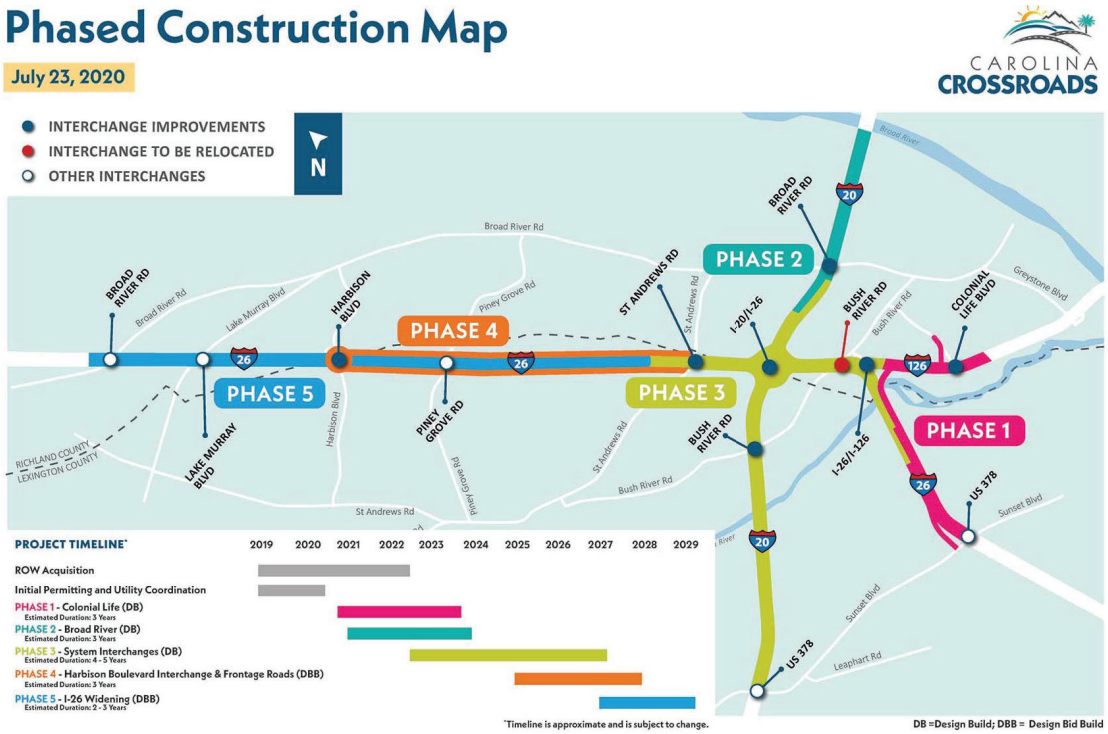
Carolina Crossroads Project

SCDOT

- Crossroads of I-20, I-26, and I-126.
- Reconstructed interchanges.
- Added lanes on I-26.
- Emergency vehicle shoulders.
- Longer, separated exits.
- Construction will begin in 2021 and end in 2029.



Source: SCDOT

Project Page | Project Map

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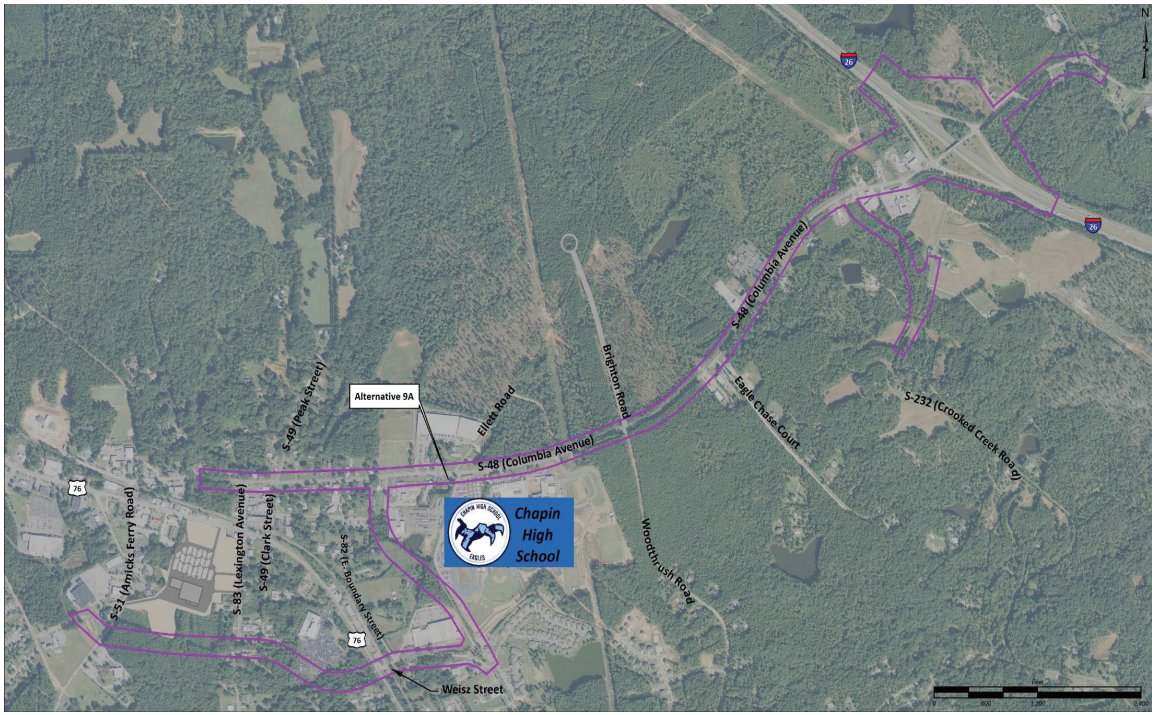
Columbia Avenue (S-48)

SCDOT in Town of Chapin

- Congestion relief project.
- Diverging diamond interchange at I-26 and S-48.
- Two new roads.
- New intersections at:
  - Amicks Ferry Road & New Road 1
  - US 76/Weisz Street & New Road 1
  - Lexington Avenue & New Road 1
  - Columbia Avenue & New Road 2
- Roundabout at Stonewall Court & New Road 2.

Project Page



Source: SCDOT

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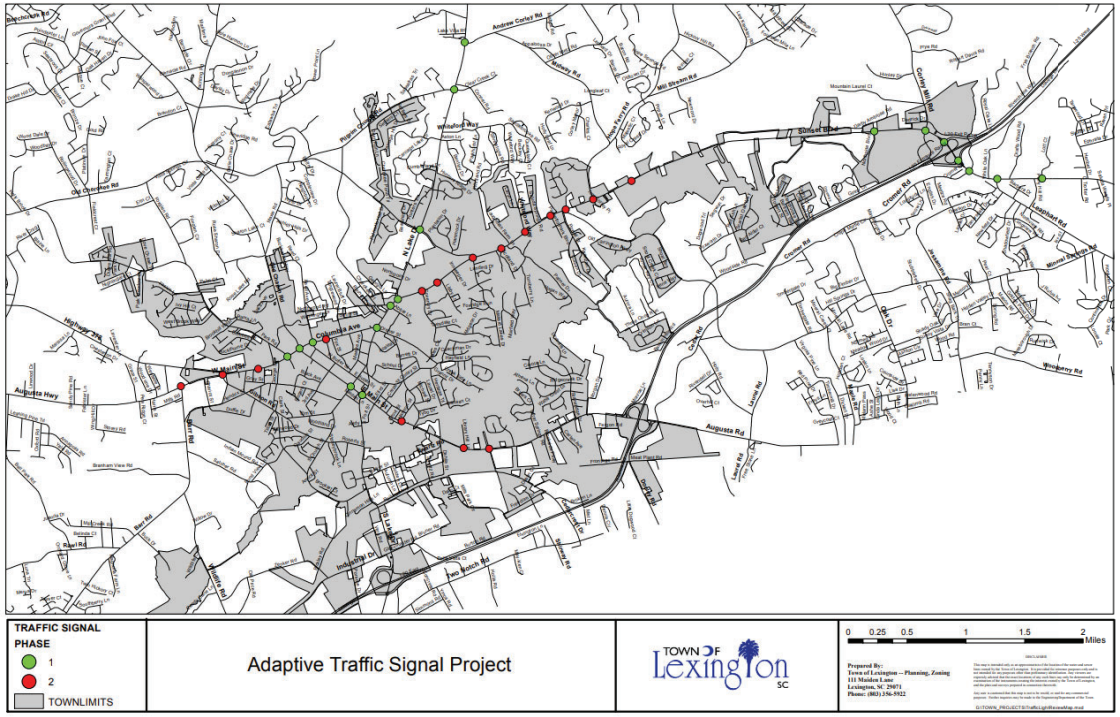
Smart Signal Improvements

Town of Lexington

- 35 signal locations along SC-378 and SC-6.
- Real-time traffic flow monitoring and signal timing adjustments.
- Additional phase funded with support from Lexington Medical Center.
- Traffic signal emitters for ambulances and fire response vehicles to reduce response times.



Project Page

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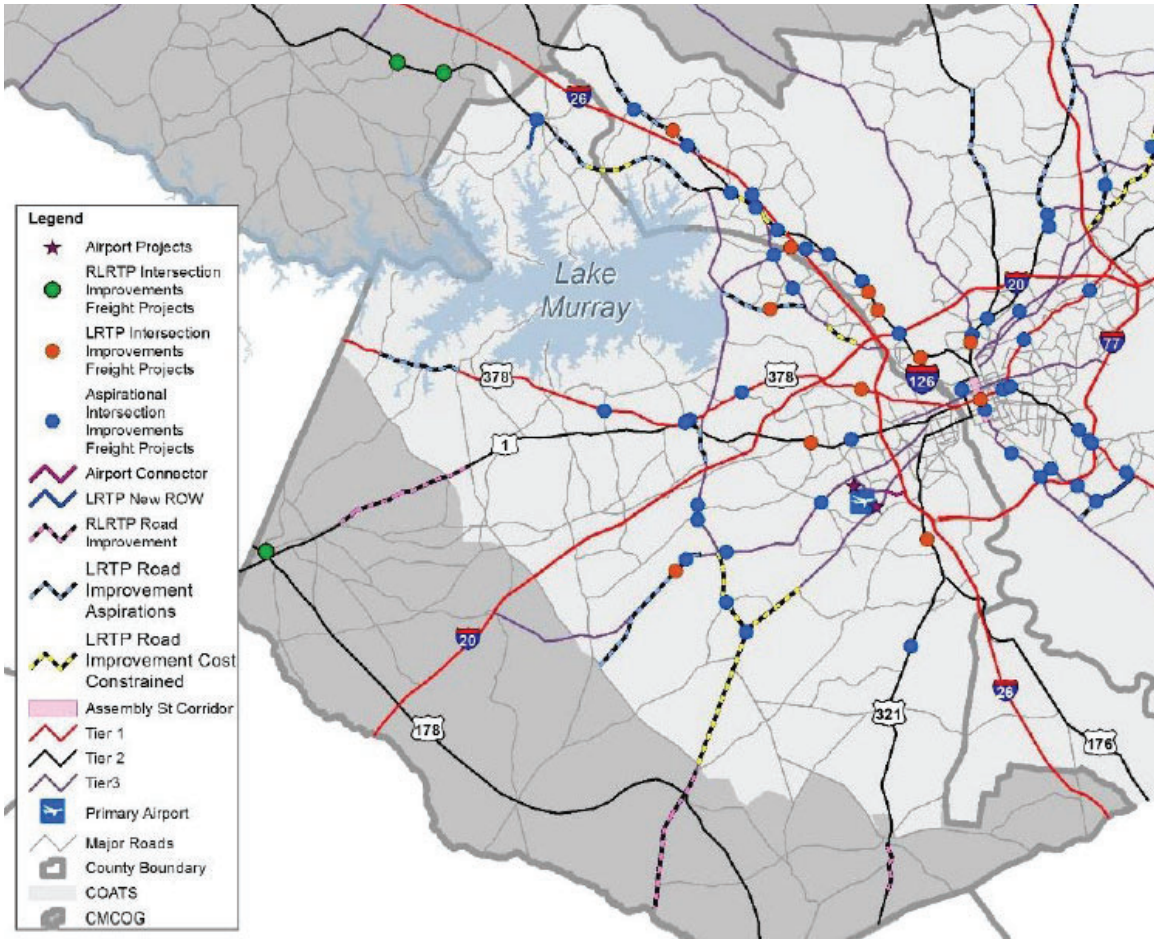
Regional Freight Plan Projects

- Focused on freight routes (mostly state roads) and most recommended projects are cost constrained.
- I-26/I-20/I-126 Interchange Improvements.
- Rehabilitate Calk's Ferry Road Bridge Over I-20.
- Leaphart Road bridge replacement over I-26.
- Widening projects, including:
  - SC 302
  - US 321
  - US 1
  - US 378



Source: Central Midlands COG Regional Freight Mobility Plan (2018)

CMCOG Regional Freight Plan (2018)

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Central Midlands Council of Governments (CMCOG) Long Range Transportation Plan

- Coordinated regional plan.
- Last updated in 2015.
- Currently being updated.
- Travel Demand Model to be completed in 2020.
- New recommendations will be reviewed and reflected in this plan.

2040 Long Range Transportation Plan (2015)

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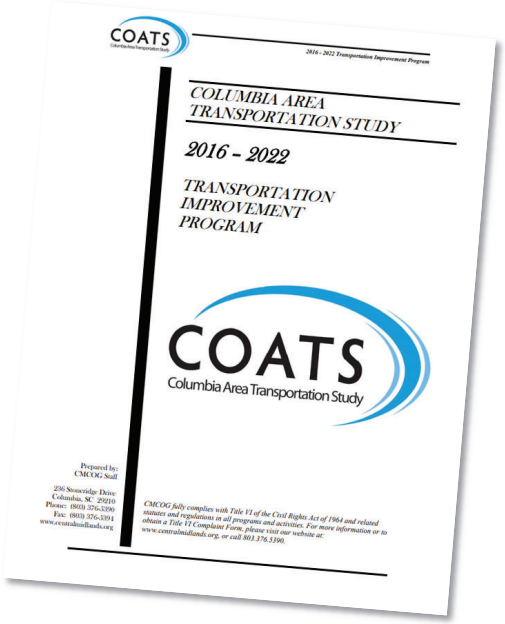
Columbia Area Transportation Study (COATS) Transportation Improvements Program (TIP)

- Projects receiving Federal Highway Administration (FHWA) or Federal Transit Administration (FTA) funds.
- In addition to previously mentioned projects, projects include:
  - Intersection improvements at:
    - Old Orangeburg Rd at Bill Williamson Court
    - US 1 at Oak Drive
    - US 378 at Fairlane Drive
    - US 21 and S-1258
    - S-485 and S-204
    - S-485 and S-408



2016 – 2022 TIP

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Columbia Area Transportation Study (COATS) Transportation Improvements Program (TIP) (Continued)

- In addition to previously mentioned projects, projects include:
  - Widening at:
    - SC-6 (I-20 to SC-602)
    - SC-602 Extension Platt Spring Road
  - Interchange improvements at:
    - I-26 Exit 119
  - Recreational trails:
    - Riverwalk Phase IV in Cayce
  - Bridge replacements:
    - Folk over North Branch
    - US 21 over Congaree River
    - US 1 over I-20
    - US 378 over Twelve Mile Creek
    - Horse Creek – US 378
    - Hollow Creek – US 378
    - I-26 over 302
    - I-26 over Southern Railway
    - I-26 over US 1
  - Sidewalks:
    - Bush River Road sidewalk Project
  - Multiple sidewalk and streetscape projects within municipalities.

2016 – 2022 TIP

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Transportation References

Transportation and Mobility References

This document highlights key conditions and projects in Lexington County.
More detailed information is available in the topic area or geographic area plans
from Lexington County, municipalities, and regional partners that informed this document, including:

Chapin, Swansea, and Batesburg-Leesville Bike and Pedestrian Master Plan (2019)
COATS 2016-2022 Transportation Improvement Program
COATS 2040 Long Range Transportation Plan (2015)
COATS Congestion Management Plan (2015)
COATS Unified Planning Work Program FY 2020 and 2021 (2019)
COMET Compass Book (2013)
COMET Vision 2020 Transit Plan (2018)
CMCOG Bicycle and Pedestrian Regional Pathways Plan (2010)
CMCOG Regional Freight Plan (2018)
Lexington County Transportation Plan (2017)
SCDOT Statewide Transportation Improvement Program
Walk Bike Columbia (2015)
West Metro Bike and Pedestrian Master Plan (2017)

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Public Safety

County-Run Public Safety

PUBLIC SAFETY

SHERIFF

COMMUNICATIONS / 911

EMERGENCY MANAGEMENT

EMS

FIRE

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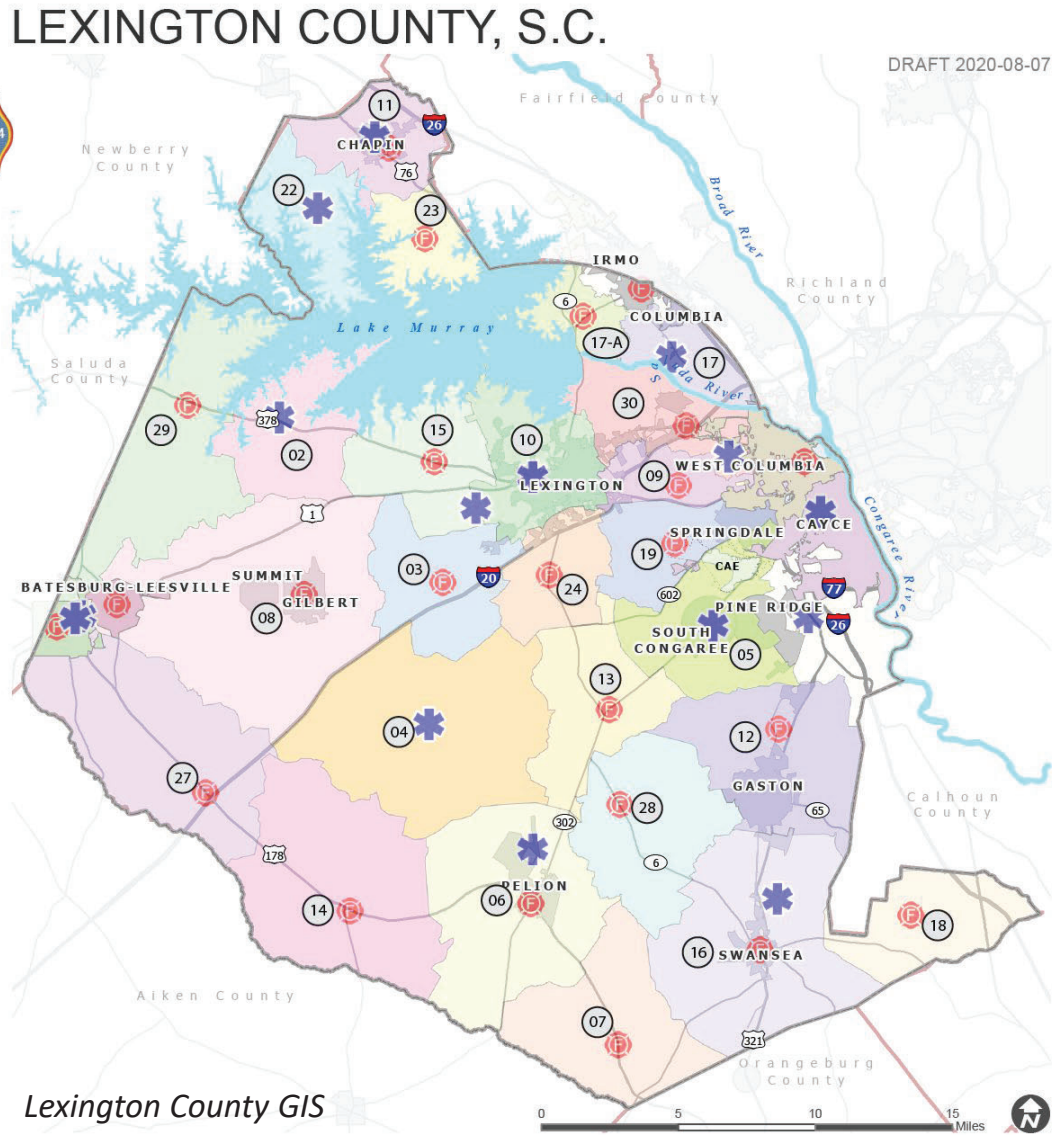
Fire/ EMS

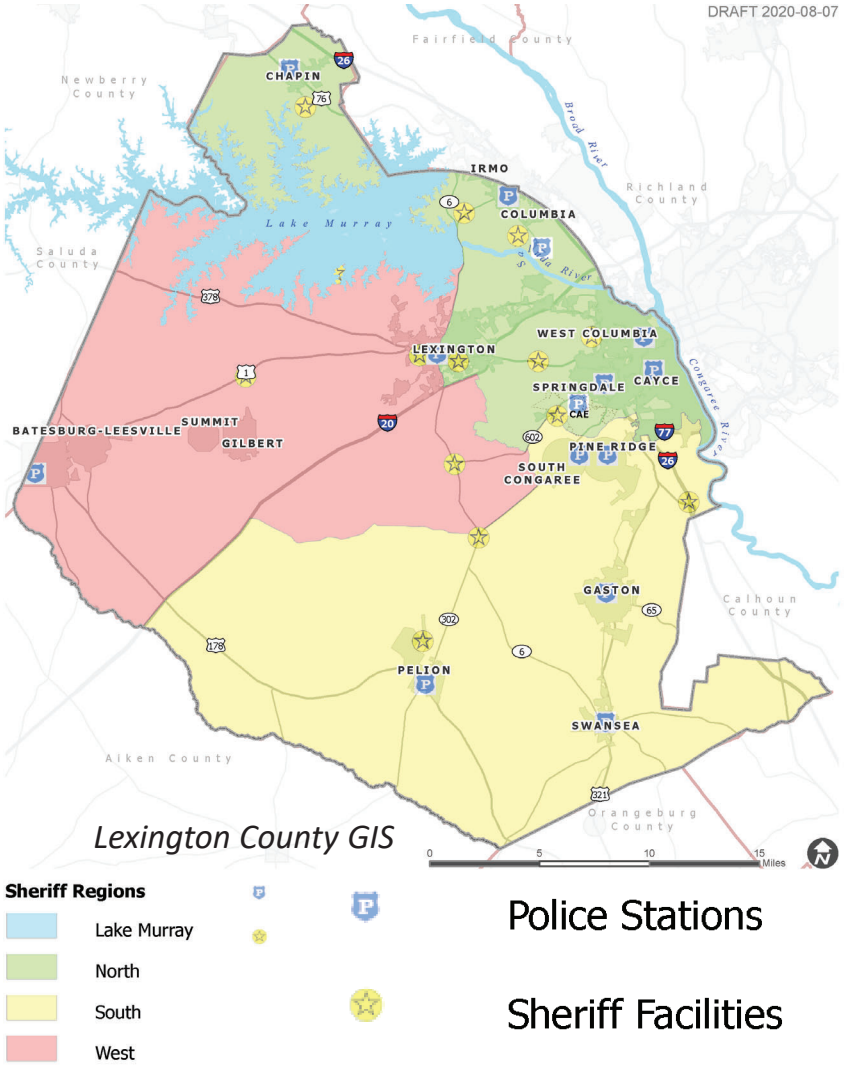
- 15 total EMS Stations.
- 25 total Fire Stations.
- Fire service coverage can be a significant factor in the design and location of development.



Lexington County GIS

Sheriff & Police

- North, South, West, and Lake Murray Sheriff regions.
- 13 Sheriff facilities and 14 municipal police stations.
- Sheriff service includes “unincorporated” holes between municipal lands.



Communications / 9-1-1 and Emergency Management

- **Communications / 9-1-1** answers emergency and non-emergency calls, serves as dispatch, and provides pre-arrival instructions for the County.

- **Emergency Management** assists in disaster preparedness, response, and recovery.

- Both divisions serve the full county, sometimes with municipal liaisons.

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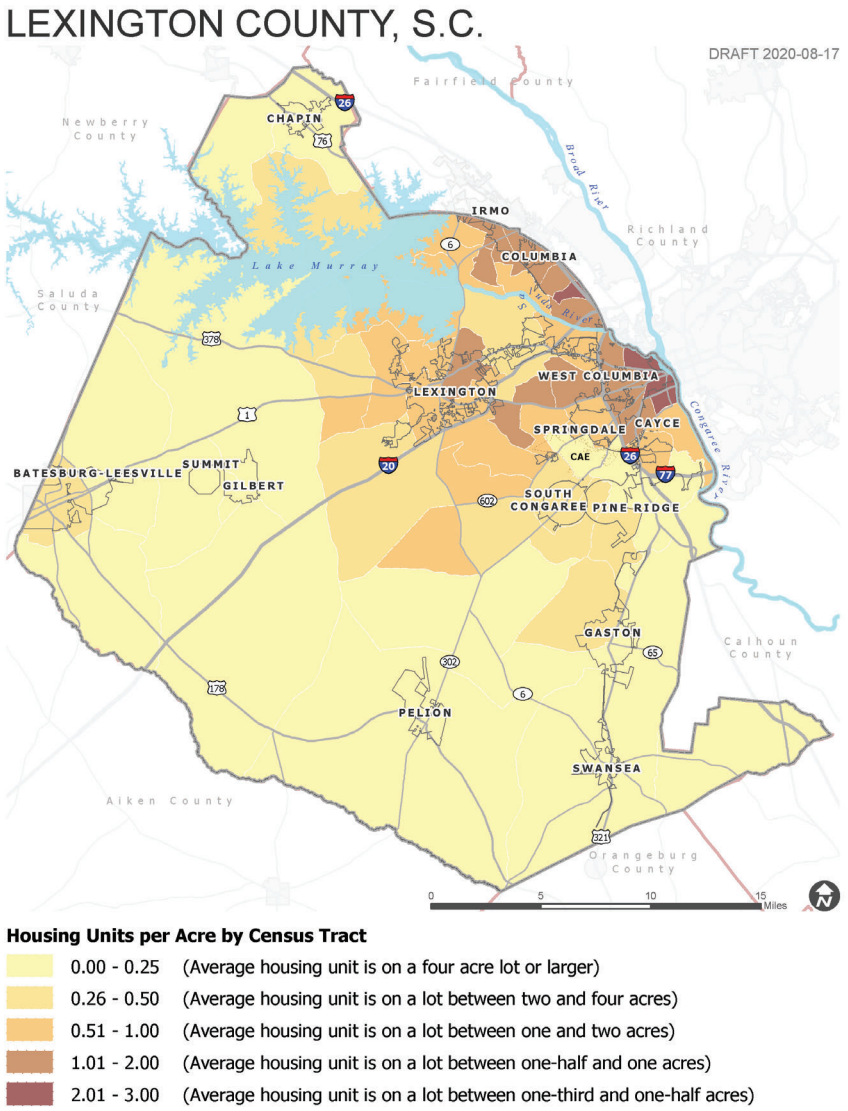
Housing and Neighborhoods

Housing Units per Acre

- Generally lower average number of housing units per acre moving out further from Columbia.
- Keep in mind these are averages based on census tracts and that more than half of lots in the county are ½ acre or smaller.



Housing Stock

- Single family housing, or "1-unit, detached" (a typical suburban home) is the most common housing type in the County.
- A higher percentage of the County's housing is this "1-unit, detached" than the state's housing
- Mobile homes are also a higher percentage of housing in the County than the state

Unit type	Lexington County Housing Units	Lexington County Percent of Housing Units	South Carolina Percent of Housing Units
Total housing units	122,711	-	-
1-unit, detached	82,799	67.5%	62.8%
1-unit, attached	2,463	2.0%	3.1%
2 units	1,704	1.4%	2.1%
3 or 4 units	2,611	2.1%	2.8%
5 to 9 units	3,791	3.1%	4.3%
10 to 19 units	2,895	2.4%	3.5%
20 or more units	3,380	2.8%	5.0%
Mobile home	22,917	18.7%	16.4%
Boat, RV, van, etc.	151	0.1%	0.1%

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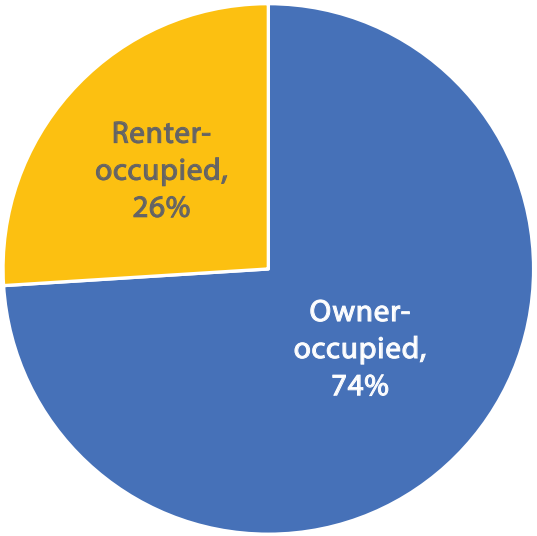
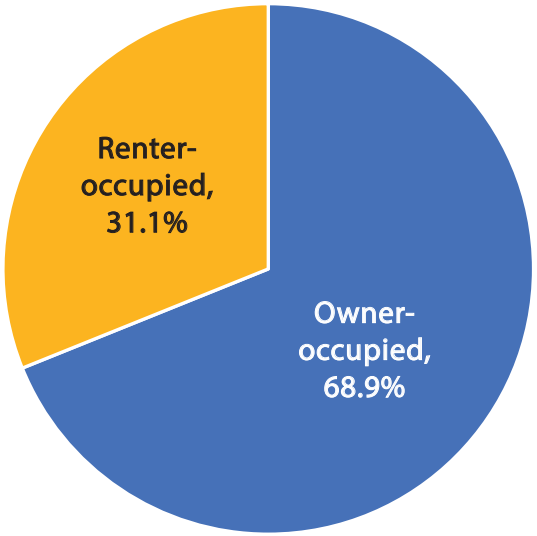
Housing Tenure

Lexington County Housing Tenure, 2018



South Carolina Housing Tenure, 2018



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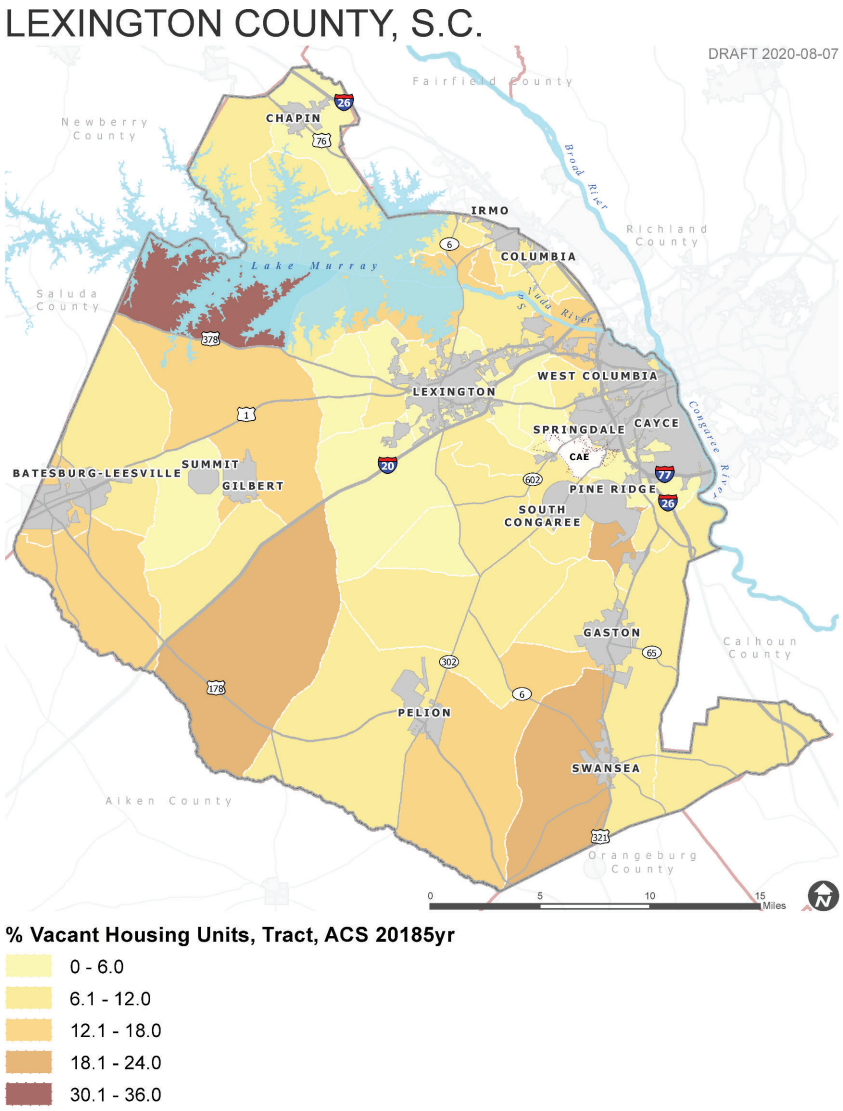
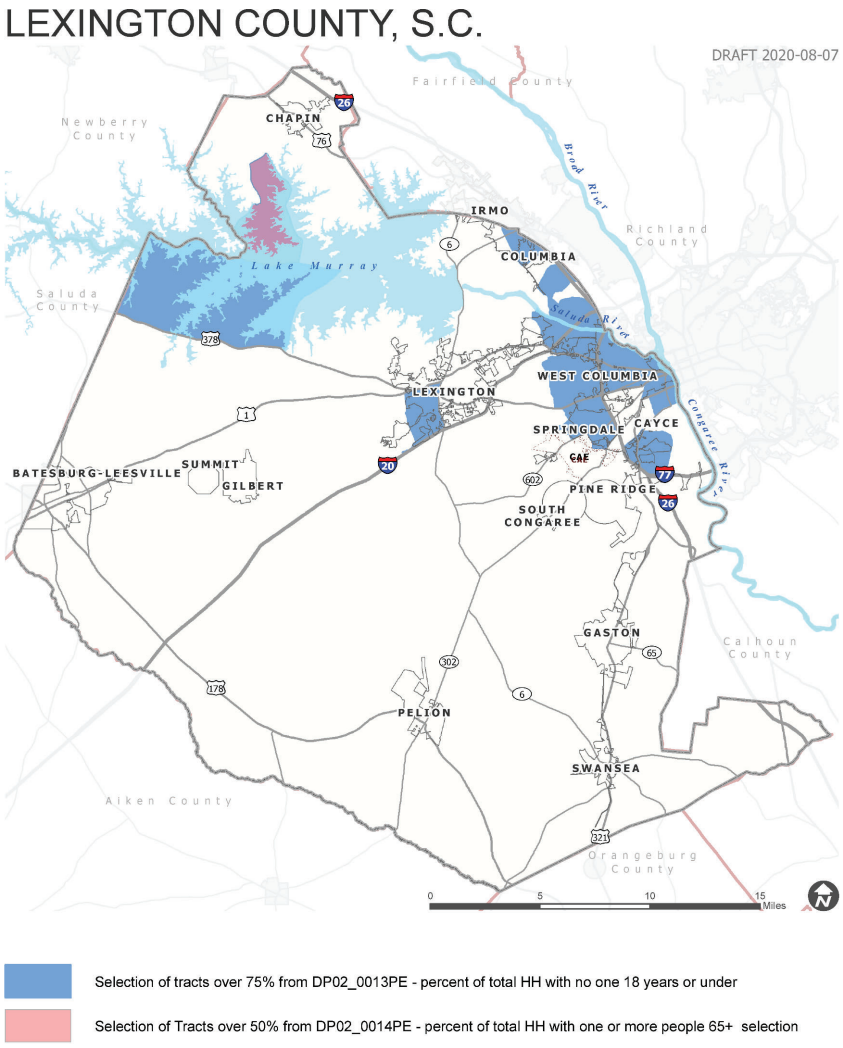
Vacancy Rate

- Vacancy rates are following two independent trends.
- Generally higher rates by Swansea and south of I-20 in the west.
- Highest rates on the lake are due to vacation rentals and second homes. Over 85% of the lakeside vacancies are seasonal/recreational use.



Propensity for Change

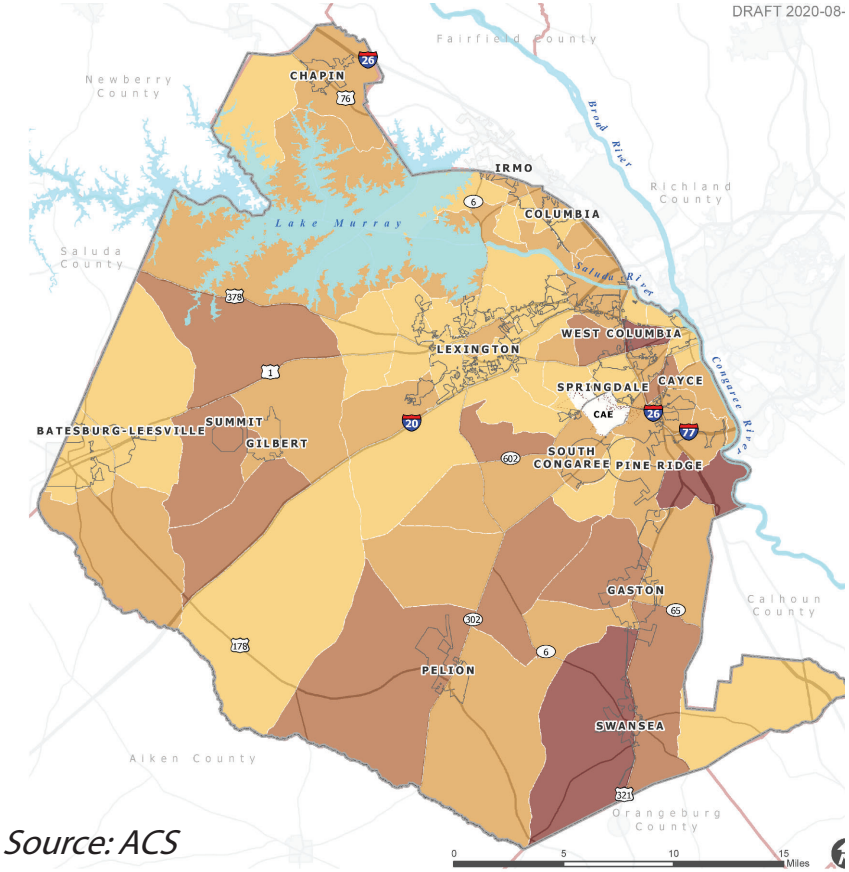
- Evaluates areas that are likely to see turnover in residents in next 20 years focusing on empty nesters and elderly heads of household.
- Only one tract in southern Chapin area where 50% of households have a member at or above the traditional retirement age (65) and 75% of the households in the same tract do not have any minor children.
- There are not large expected areas of household turnover overall.



NOTE: The Census Tracts that appear as PUPRPLE are tracts that fall into both of the above demographic categories

Cost Burdened Households

Ownership

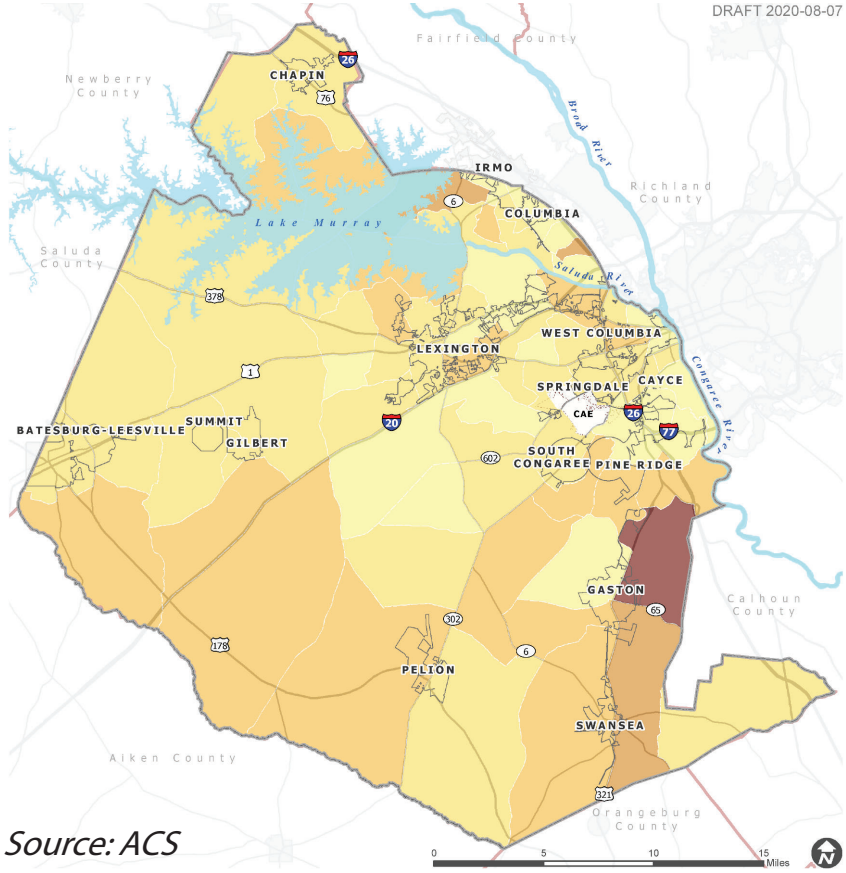


Source: ACS

Percent of households where mortgage/rent and select costs are > 30% household income

- 0 - 5.0
- 5.1 - 10.0
- 10.1 - 20.0
- 20.1 - 30.0
- 30.1 - 40.0
- Over 40

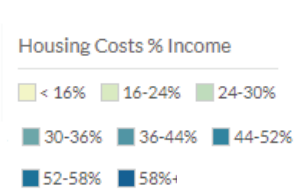
Rental

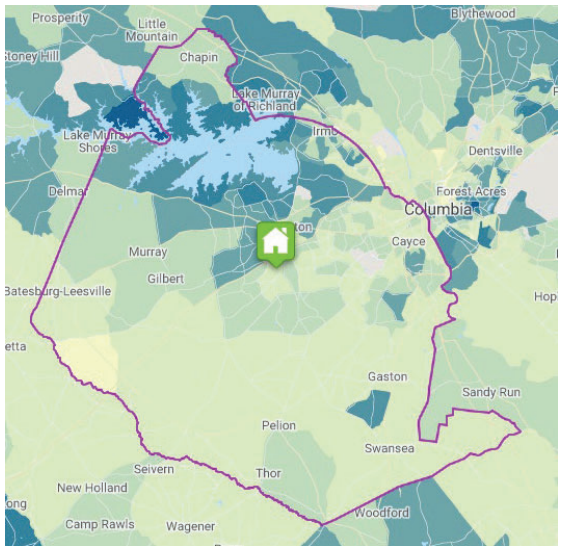


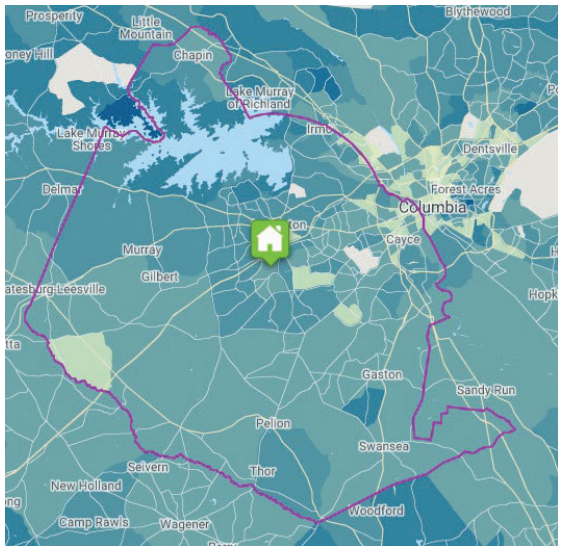
Source: ACS

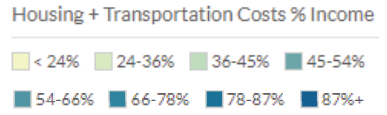
Housing + Transportation Costs

- 30% of income has been a traditional affordability measure for housing costs. Commuting and transportation can also be a major cost imposing on household budgets, and 45% of income dedicated to housing and transportation together can help represent this combined burden.
- Some areas where the median housing cost is below the 30% threshold jump above the 45% threshold for housing and transportation together.
- Some households choose to spend more for things such as proximity to the lake, but the aggregate data still shows pockets of cost burdening not near such an amenity, and that on the aggregate, transportation costs are a significant part of the affordability challenge in the county.









Center or Neighborhood Technology H+T Index

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Median Income

Countywide Statistics

- Median Income:
  - $72,000 (SC: $63,000)
- Median home value
  - $151,900 (SC: $154,800)
- Median monthly rent
  - $907 (SC: $868)

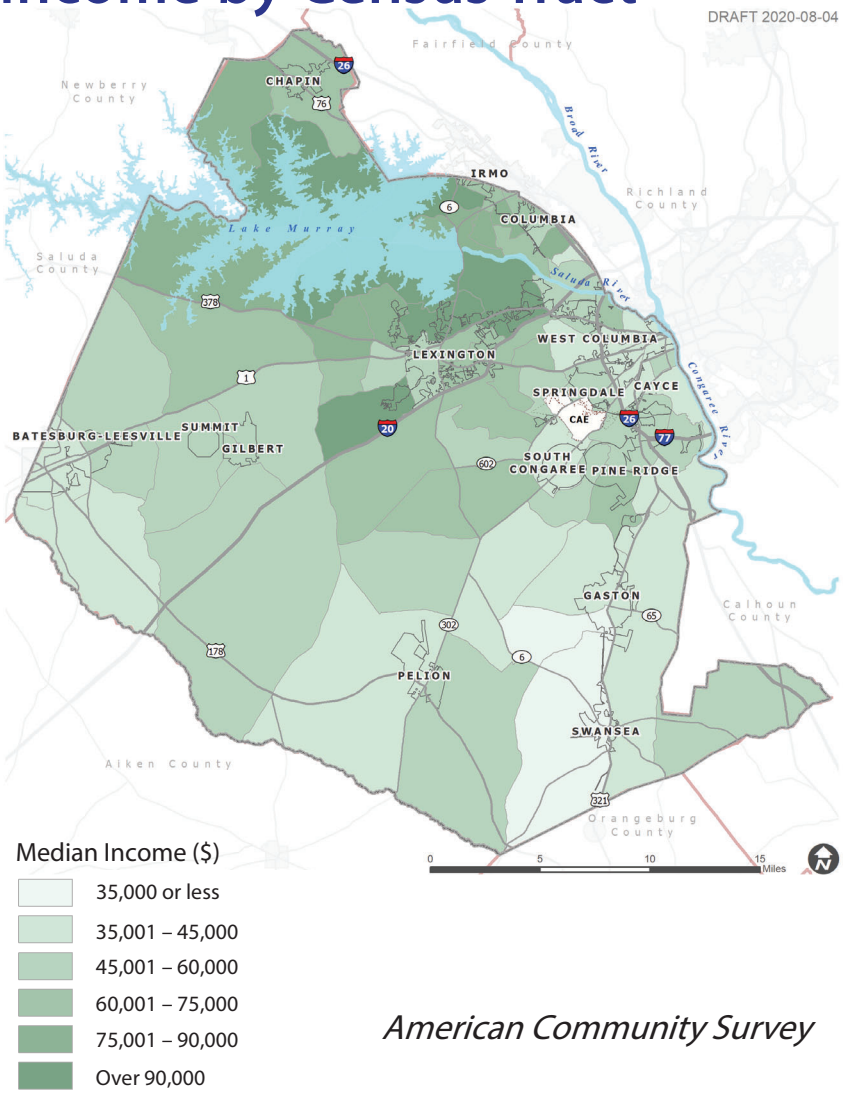
HIGHER THAN STATE

LOWER THAN STATE

HIGHER THAN STATE

American Community Survey

Income by Census Tract



American Community Survey

Economy

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Industries – Large Employers

20 Largest Employers

(Listed Alphabetically)

- AMAZON COM SERVICES INC
- BABCOCK CENTER INC
- CHARTER COMMUNICATIONS LLC
- GENERAL INFORMATION SOLUTIONS, LLC
- INTEGRITY STAFFING SOLUTIONS INC
- LEXINGTON COUNTY
- LEXINGTON COUNTY HEALTH SERVICE DIS
- LEXINGTON COUNTY SCHOOL DISTRICT 1
- LEXINGTON COUNTY SCHOOL DISTRICT 2
- LEXINGTON COUNTY SCHOOL DISTRICT 5
- MICHELIN NORTH AMERICA INC
- NEPHRON STERILE COMPOUNDING CENTER
- PUBLIX SUPER MARKETS INC
- RICHLAND COUNTY COMMISSION FOR TECH
- SCANA SERVICES INC
- SOUTH CAROLINA ELECTRIC & GAS CO
- SOUTHEASTERN FREIGHT LINES INC
- UNITED PARCEL SERVICE
- WAL-MART ASSOCIATES INC
- WALTER P RAWL & SONS INC

Source: S.C. Department of Employment & Workforce - 2019 Q4

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Employment Key Indicators

Key Indicators

- 6.3% Unemployment Rate.
- 3,600 jobs available (classified as “high”).
- Average employment: 126,000 jobs.

SC Works (South Carolina Department of Employment and Workforce) in 2020. Document and updated periodically

RESOURCE: SCDEW COMMUNITY PROFILE RECENT UPDATES:
https://lmi.dew.sc.gov/lmi%20site/Documents/CommunityProfiles/04000063.pdf

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Employment Key Indicators

Midlands Job Projections

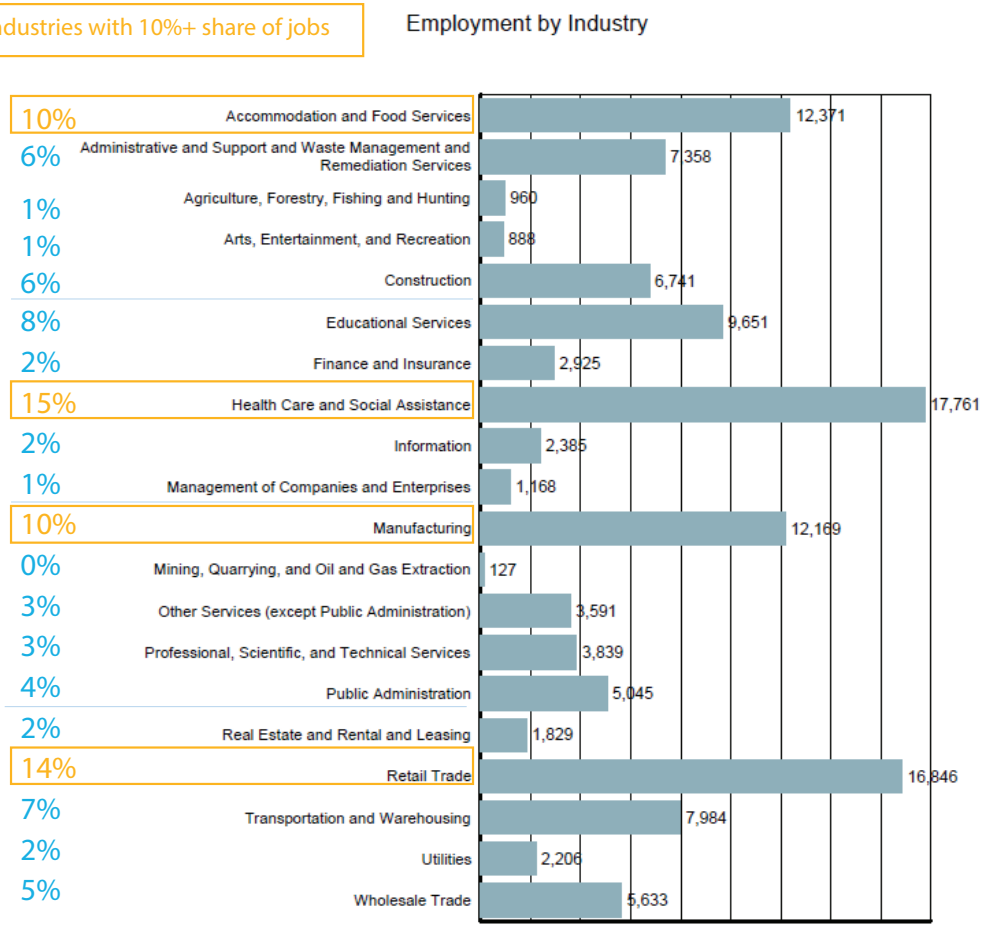
- The top 5 projected percentage growth jobs in the Midlands in the near term are all involved in healthcare, specifically at the point of patient care.

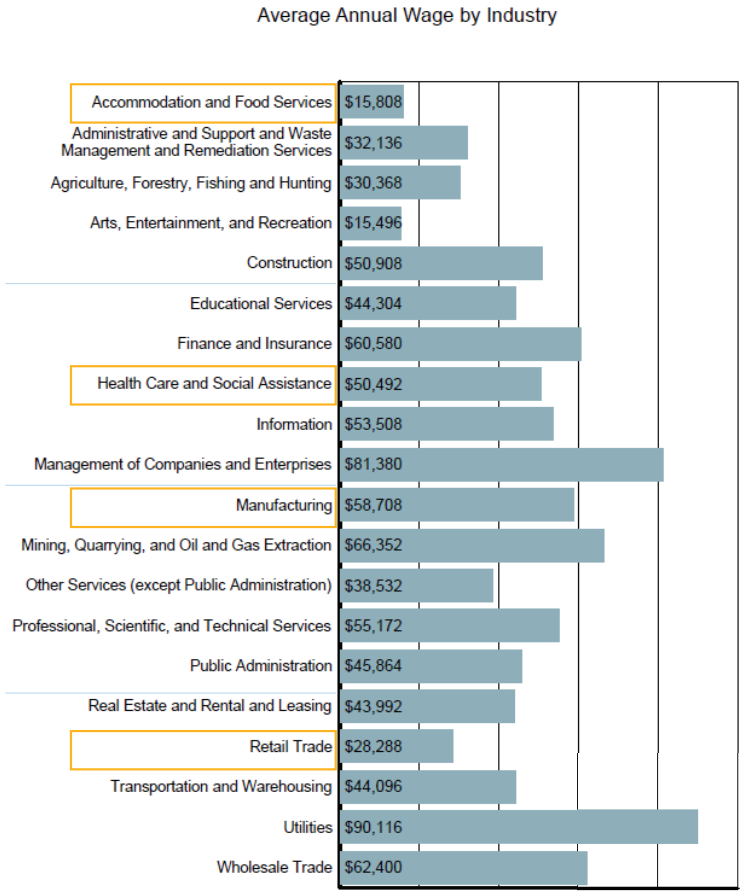
Midlands Occupation	2016 Estimated Employmen	2026 Projected Employmen	Percent Change	Average Salary
Home Health Aides	1,645	2,449	49	$ 21,096
Personal Care Aides	2,548	3,575	40	$ 22,117
Physician Assistants	227	312	37	$ 103,340
Physical Therapist Assistants	260	354	36	$ 55,742
Nurse Practitioners	347	471	36	$ 97,573
Statisticians	108	146	35	$ 66,916
Massage Therapists	386	505	31	$ 40,182
Software Developers, Applications	969	1,262	30	$ 86,612
Medical Assistants	1,702	2,211	30	$ 31,107
Combined Food Preparation and Serving Workers, Including Fas	10,875	14,126	30	$ 18,003
Physical Therapists	542	704	30	$ 89,274

Lexington County Community Profile, employees in the County (South Carolina Department of Employment and Workforce)

Industries – Employment and Wages

Industries with 10%+ share of jobs





Lexington County Community Profile, employees in the County (South Carolina Department of Employment and Workforce)

Agriculture

United States Department of Agriculture
National Agricultural Statistics Service

2017 CENSUS OF AGRICULTURE

Farms by Value of Sales

	Number	Percent of Total [a]
Less than $2,500	638	56
$2,500 to $4,999	111	10
$5,000 to $9,999	113	10
$10,000 to $24,999	113	10
$25,000 to $49,999	39	3
$50,000 to $99,999	24	2
$100,000 or more	99	9

Farms by Size

	Number	Percent of Total [a]
1 to 9 acres	220	19
10 to 49 acres	502	44
50 to 179 acres	294	26
180 to 499 acres	93	8
500 to 999 acres	18	2
1,000 + acres	10	1

Market Value of Products Sold in 2017
$222 million

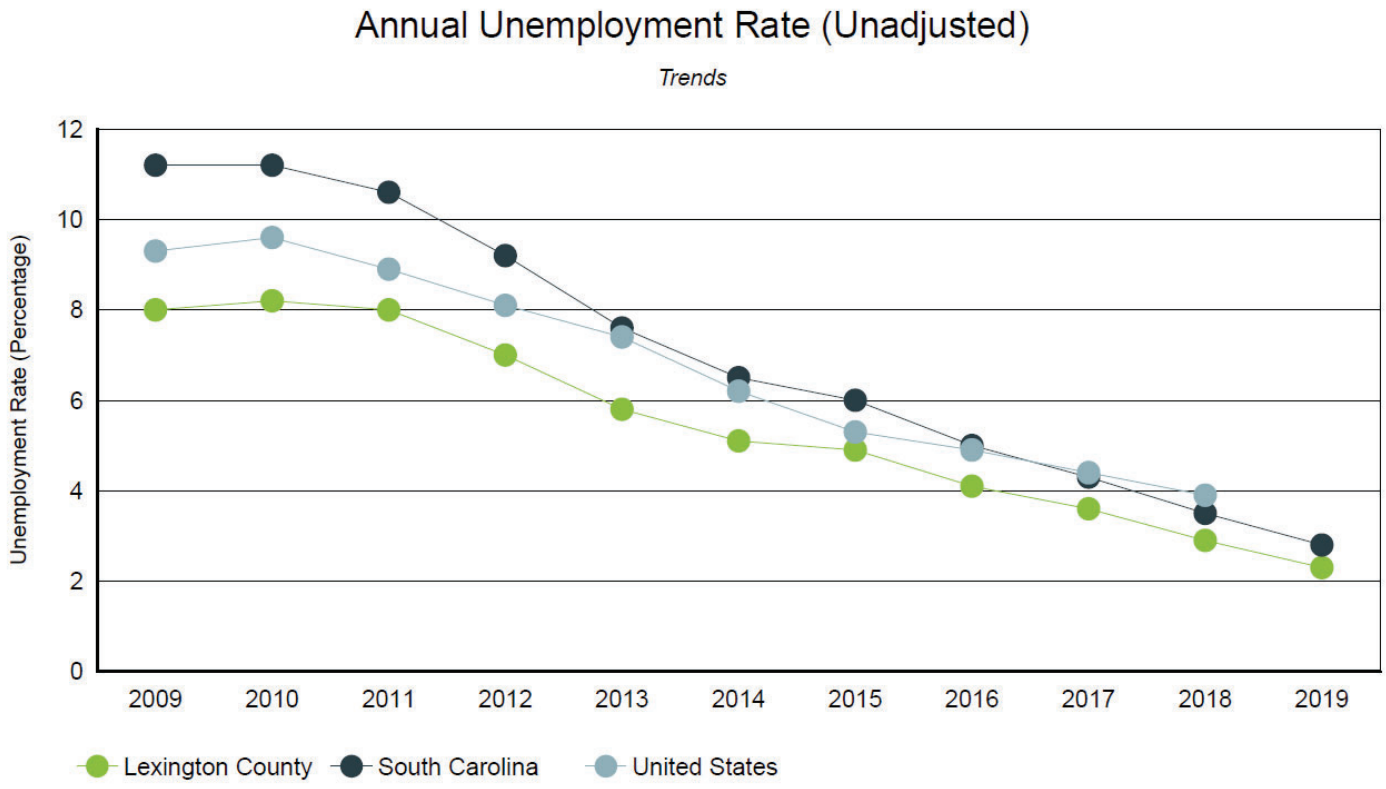
% Change 2012 – 2017
+35%

% of Total State Agricultural Sales
7%

Total Producers [c]	**1,755**
Age	
<35	125
35 – 64	1,031
65 and older	599
Other characteristics	
With military service	233
New and beginning farmers	410

RESOURCE: USD Census of Agriculture 2017
https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/South_Carolina/cp45063.pdf

Unemployment



Lexington County Community Profile (South Carolina Department of Employment and Workforce)

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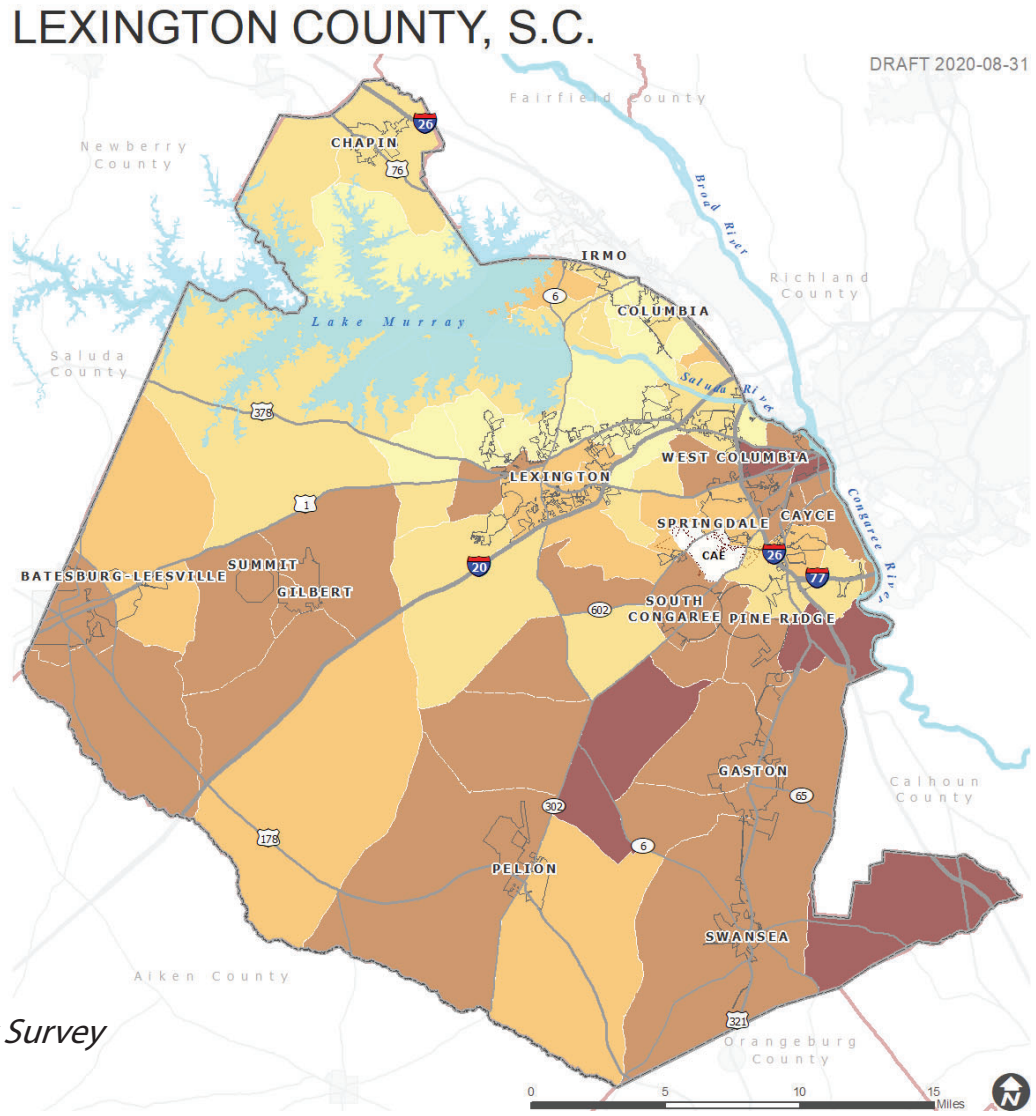
Poverty

- Higher proportion impoverished away from Lake Murray
- Some of the highest readings are in the east, though the west also has larger tracts which may obscure some localized pockets of need



% POPULATION BELOW POVERTY LINE

- 0.0 - 5.0
- 5.1 - 10.0
- 10.1- 15.0
- 15.1 - 25.0
- 25.1 - 35.0

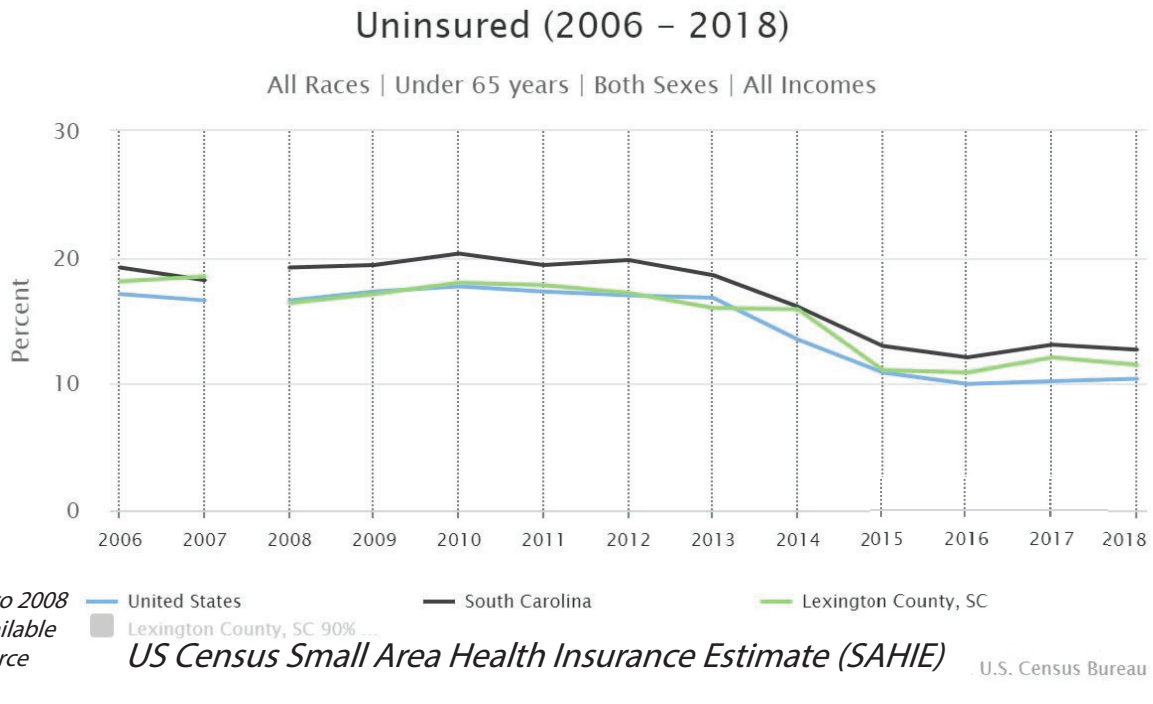
American Community Survey

Health Insurance

Since 2014, there has been a larger percentage of residents uninsured in Lexington County than the US, though a smaller percentage than all of SC.

2018

- USA Uninsured: 10.4%
- SC Uninsured: 12.7%
- Lexington County Uninsured: 11.5%



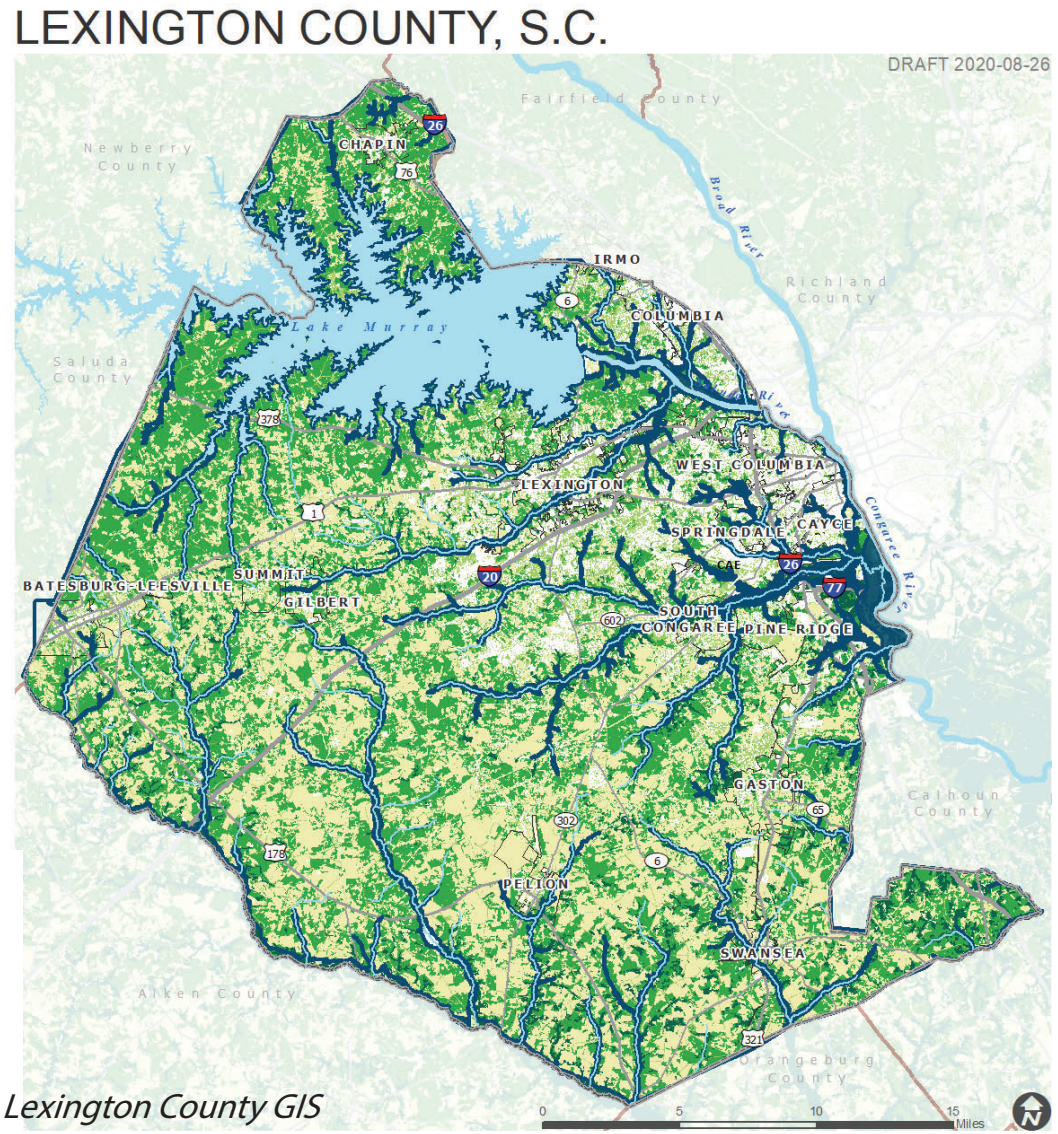
2007 to 2008 Unavailable in source data

US Census Small Area Health Insurance Estimate (SAHIE)

Natural Resources

Land Features

- More upland forest near Lake Murray.
- More fields and pastures in the south and west.
- More developed open space and urban areas in the east.

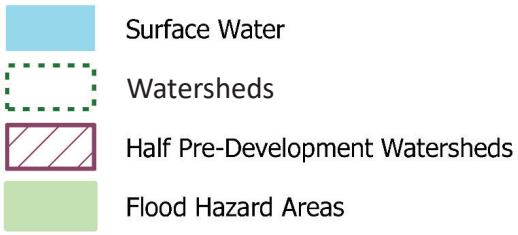


Lexington County GIS

- Wetlands
- Urban / Developed / Other
- Fields / Pastures / Herbaceous / Barren
- Developed Open Space
- Upland Forest
- Flood Hazard Areas

Water Features

- Watersheds can help explain water quality and potential for gravity-dependent infrastructure such as sewers.
- Half Pre-Development Explained
  - Water passes through land, especially during storms. Half of pre-development watersheds are areas where new development must limit water runoff to half the amount that occurred before development. These are all near developed areas where hard impervious surfaces may be increasing the risk of floods during storms.

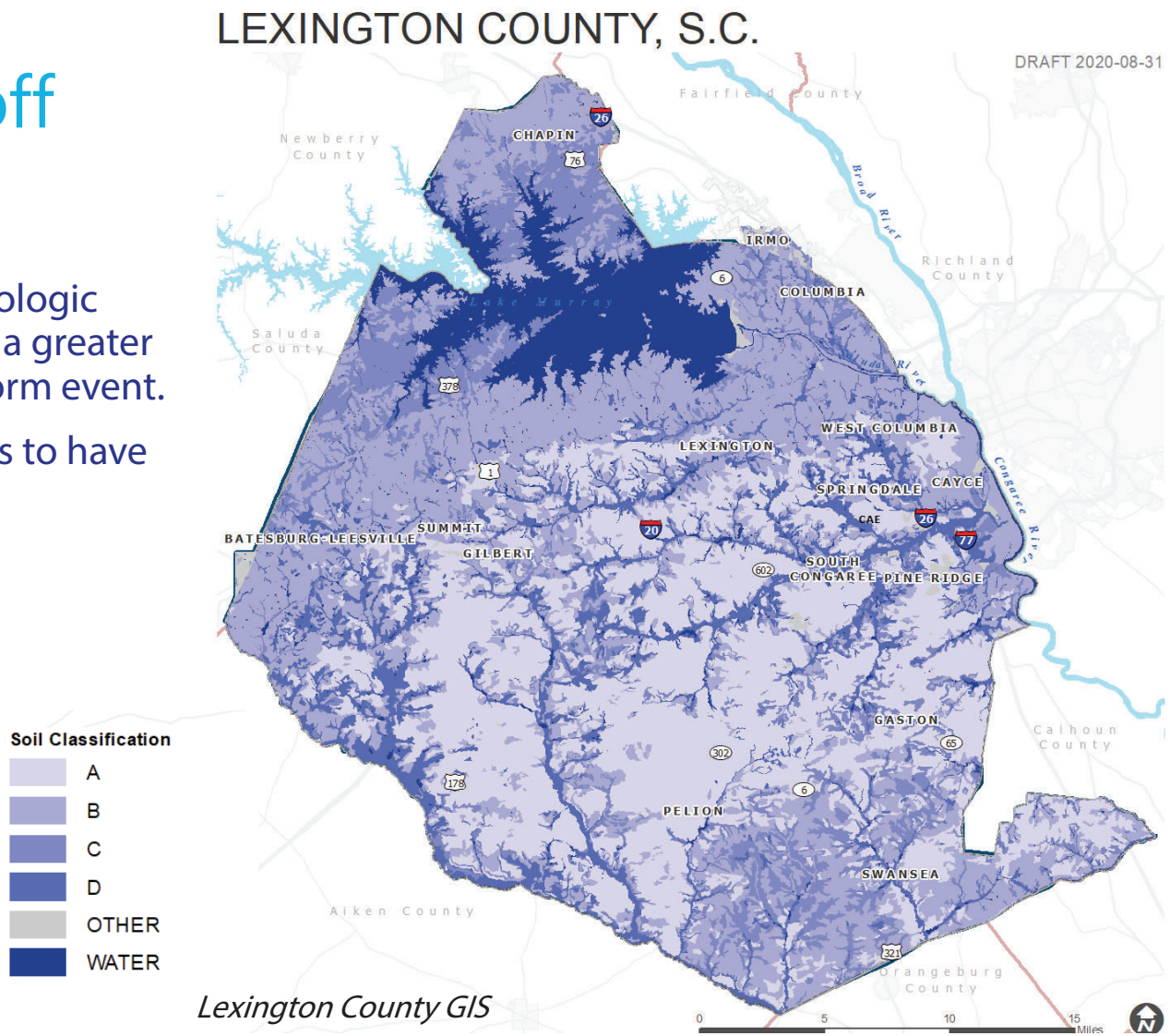


Lexington County GIS

Soil Features – Permeability & Runoff

- The USDA categorizes soils into 4 hydrologic groups, A to D, with each letter having a greater propensity to cause runoff during a storm event.
- A tends to have more sand and D tends to have more clay.

RESOURCE: USDA HYDROLOGIC SOIL GROUPS DESCRIPTIONS
https://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=17757.wba



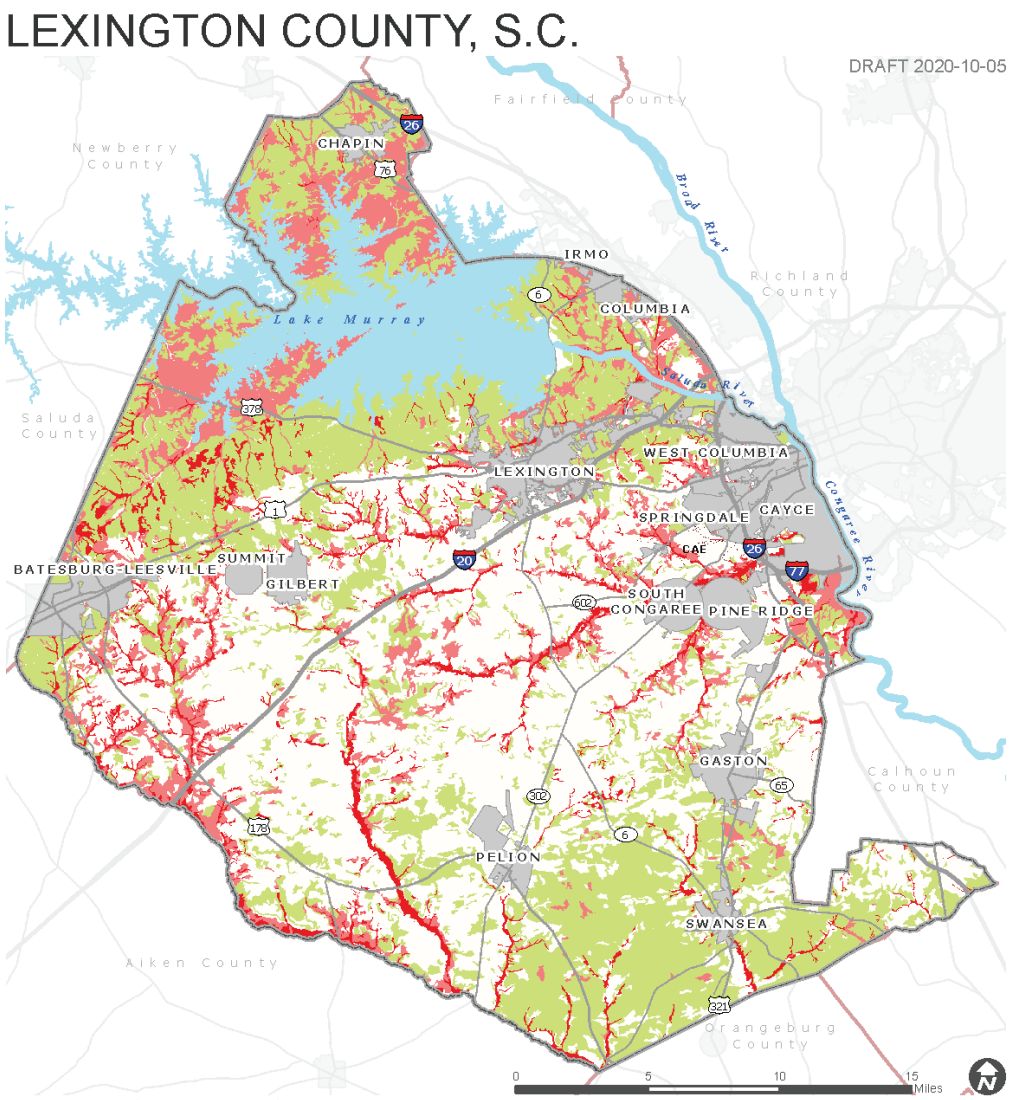
Lexington County GIS

Soil Suitability: Septic and Agriculture

- Soil conditions can be a limit on development or a sign of particularly fertile agricultural land.
- Soil quality where there would be issues developing on a septic system is marked in shades of red.
- Particularly agriculturally fertile or "loamy soils" are marked in green.
  - Though loam is seen as a generally desirable agricultural attribute, different specific crops may grow best in different conditions.

Soil Suitablility for Septic Systems and Agriculture

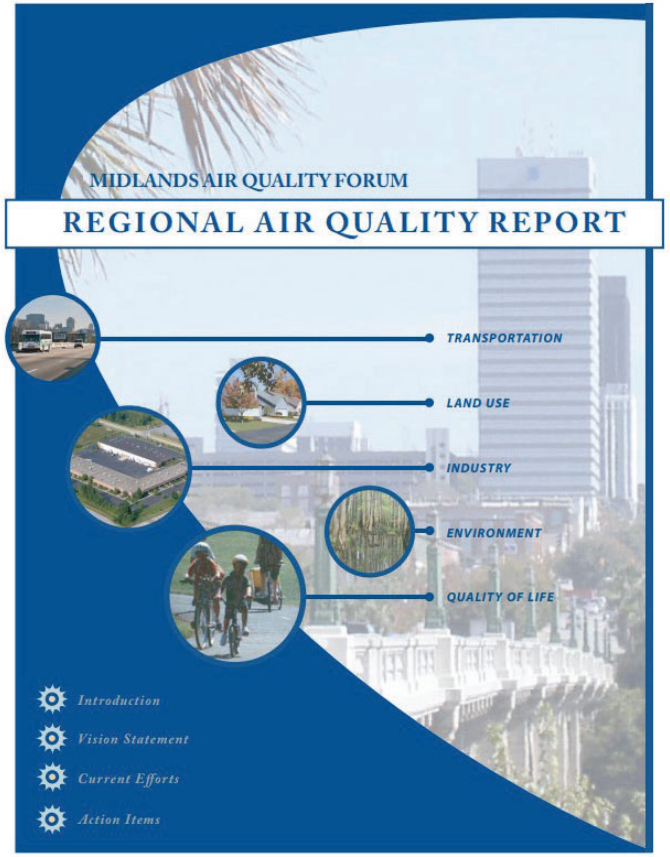
- Generally Unsuitable for On-Site Septic Systems
- Provisionally Suitable for On-Site Septic Systems (Requires Certain Conditions)
- Likely Suitable for Septic Systems Generally Suitable for Agriculture (Loamy Soil)
- Likely Suitable for Septic Systems Not Generally Suitable for Agriculture (Non-Loamy Soils)



Lexington County GIS

Air Quality

- The Central Midlands Council of Governments (CMCOG) identified the need to address local non-attainment for Ozone and Particulate Matter (PM2.5) in its **2007** Air Quality Report.
- There are currently no longer areas in non-attainment for any criteria air pollutants.
- County Initiatives include:
  - Air Quality Policy
  - No Idling Policy
  - Outdoor Burn Ordinance
  - Lawn Mower Exchange
  - Promotion of Commuter Alternatives



RESOURCE: REGIONAL AIR QUALITY REPORT:
http://www.centralmidlands.org/pdf/Midlands_AQ_Report.pdf

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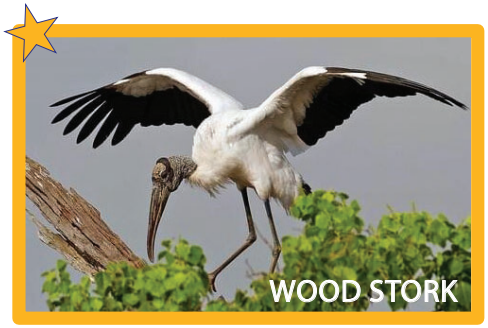
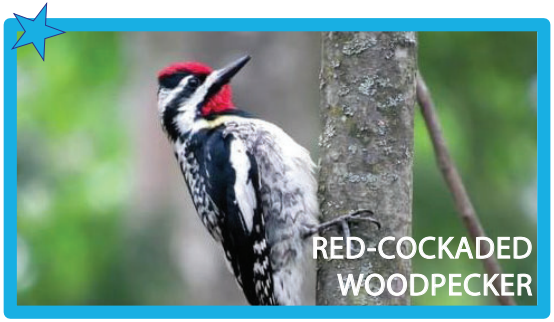
Wildlife Conservation

- The South Carolina Department of Natural Resources identifies 3 Endangered and 4 Threatened species present in Lexington County.
- The US Fish and Wildlife Service identifies an additional 3 At-Risk Species in Lexington County.
- The COWASEE Basin, which includes Lexington and other Midlands counties, is a priority waterfowl restoration area centered on the 24,000-acre Congaree National Park.


WOOD STORK


RED-COCKADED WOODPECKER

Scientific Name	Common Name	Federal Status	State Status	Global Rank	State Rank
Alligator mississippiensis	American Alligator	LT: Threatened	ST: Threatened	G5	S5
Clemmys guttata	Spotted Turtle	ARS*: Risk, priority	ST: Threatened	G5	S5
Danaus plexippus	Monarch Butterfly	ARS*: Risk, Priority	--	G4	--
Haliaeetus leucocephalus	Bald Eagle	--	ST: Threatened	G5	S2
Moxostoma robustum	Robust Redhorse	ARS*: Risk, priority	--	G1	--
Mycteria americana	Wood Stork	LT: Threatened	SE: Endangered	G4	S1S2
Perimyotis subflavus	Tricolored Bat	ARS*: Risk, priority	--	G2G3	S1S2
Picoides borealis	Red-cockaded Woodpecker	LE: Endangered	SE: Endangered	G3	S2
Acipenser brevirostrum	Shortnose Sturgeon	LE: Endangered	SE: Endangered	G3	S2
Heterodon Simus	Southern Hog-nosed Snake	--	ST: Threatened	G2	S1S2

RESOURCE: LEXINGTON COUNTY SPECIES LIST AT SC DEPARTMENT OF NATURAL RESOURCES:
https://www.dnr.sc.gov/species/lexington.html

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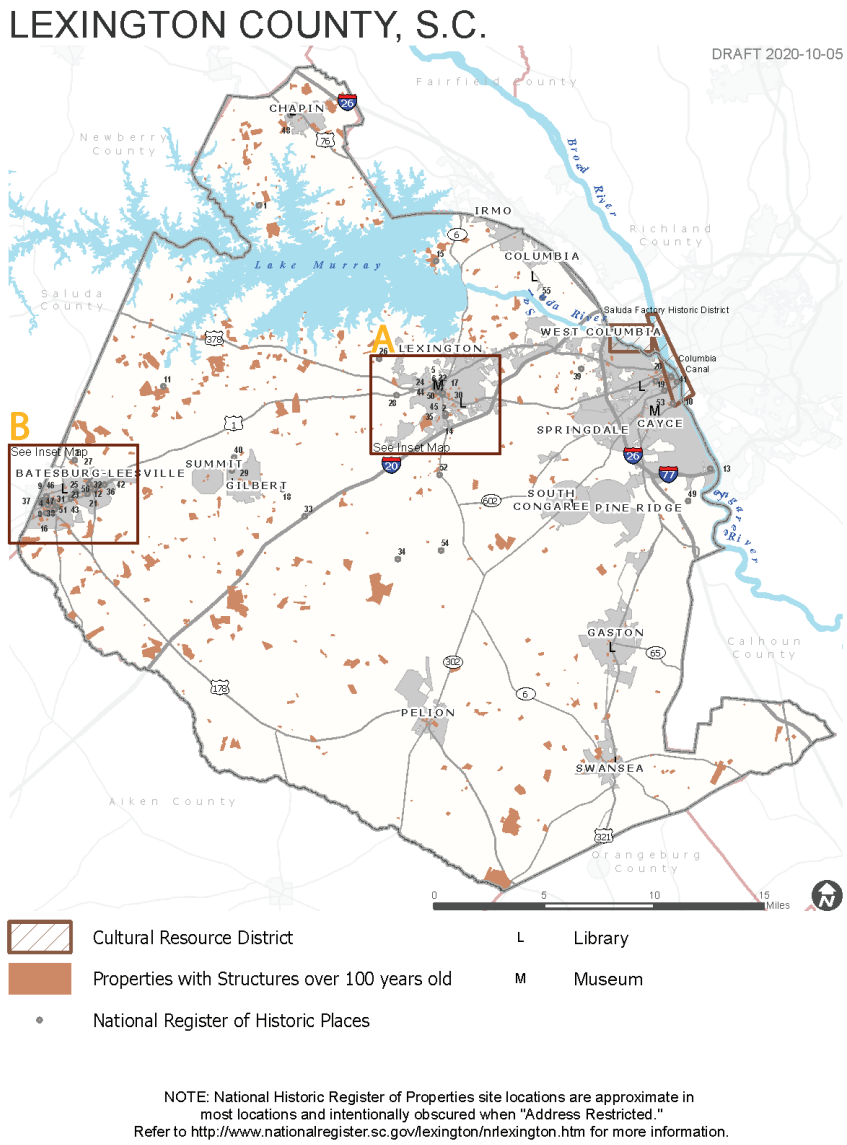
Cultural Resources

Cultural Resources

- Over 1,000 lots with structures over 100 years old.
- 10 Library branches.
- 2 Cultural districts.
- 2 Museums.
- 56 sites on the National Historic Register



NOTE: National Historic Register of Properties site locations are approximate in most locations and intentionally obscured when "Address Restricted." Refer to http://www.nationalregister.sc.gov/lexington/nrlexington.htm for more information.

Cultural Resources:
National Register of Historic Places

1 Ballentine-Shealy House
2 Bank of Western Carolina
3 D.D.D. Barr House
4 Batesburg Commercial Historic District
5 W. Q. M. Berly House
6 William Berly House
7 Lemuel Boozer House
8 Simon Bouknight House
9 Cartledge House
10 William J. Cayce House
11 Cedar Grove Lutheran Church
12 Church Street Historic District
13 Congarees Site (Address Restricted)
14 C. E. Corley House
15 Jacob Wingard Dreher House
16 Broadus Edwards House
17 Fox House
18 David Jefferson Griffith House (Address Restr.)
19 Guignard Brick Works
20 Gunter-Summers House
21 Hampton Hendrix Office
22 James Harman Building
23 Hartley House
24 Ernest L. Hazelius House
25 Henry Franklin Hendrix House
26 John Solomon Hendrix House
27 Thomas Galbraith Herbert House
28 John Jacob Hite Farm (Address Restricted)
29 J. B. Homan House
30 Home National Bank
31 A. C. Jones House
32 Leesville College Historic District
33 Henry Lybrand Farm (Address Restricted)
34 Manning Archaeological Site (Address Restr.)
35 Major Henry A. Meetze House
36 Crowell Mitchell House
37 McKendree Mitchell House
38 Mitchell-Shealy House
39 Mount Hebron Temperance Hall
40 Music Hall Evangelical Lutheran Church (Restr.)
41 New Brookland Historic District
42 Old Batesburg Grade School
43 Old Batesburg-Leesville High School
44 Charlton Rauch House
45 David Rawl House
46 John Jacob Rawl House
47 Rawl-Couch House
48 Robinson-Hiller House
49 South Appalachian Mississippian (Address Restr.)
50 Simmons-Harth House
51 Southern Railway Depot
52 James Stewart House
53 Still Hopes
54 Taylor Site (Address Restricted)
55 Vastine Wessinger House
56 Reverend Frank Yarborough House

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Cultural Resources – Destinations

- Lexington County has many attractions and destinations that add vibrancy to the County. A sampling of some are listed below

- Lexington County Museum
  - Historic buildings and homes housing furniture, artifacts, and local history.

- Lexington Baseball Stadium
  - Home of the Blowfish, just one of many talented sports teams that call the County home from Dixie baseball, to successful high school sports, and community support for the collegiate teams across the river and around the state.

- South Carolina State Farmer's Market
  - Shop year round for fresh produce, specialty products, and artisan items. The peak season for locally grown produce runs from April through early October.
- Lexington County Peach Festival
  - Yearly celebration of the community, Independence Day, and the Queen of all fruits, the peach.

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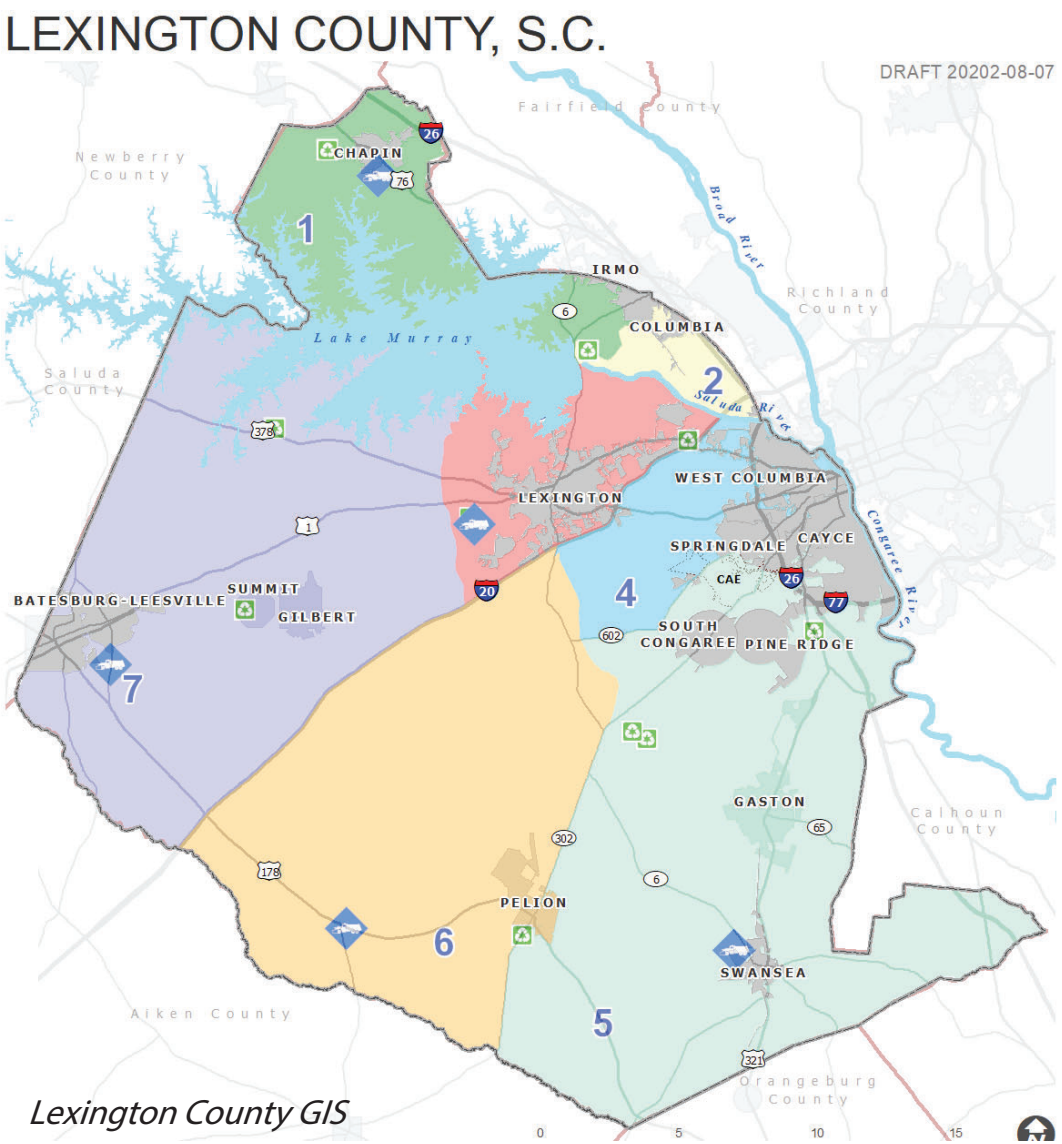
Cultural Resources –Venues & Performances

- Icehouse Amphitheater
  - 900-seat venue hosts a wide array of community events including live music and concerts.
- Saluda Shoals Park
- Riverbanks Botanical Garden
  - Connected to Riverbanks Zoo, featuring themed areas for native and exotic plants and a kids' splash zone.
- West Columbia Riverwalk Park & Amphitheater
- Village Square Theater
  - Intimate community theater offering a variety of plays, plus drama workshops for students.
- OnStage Productions
- Lake Murray Symphony Orchestra
  - Performing arts group based in Irmo.

Community Facilities and Utilities

Solid Waste and Public Works

- Franchise areas for service collection.
- Household waste ultimately disposed of outside the county.
- Lexington County landfills contain construction and fill waste.

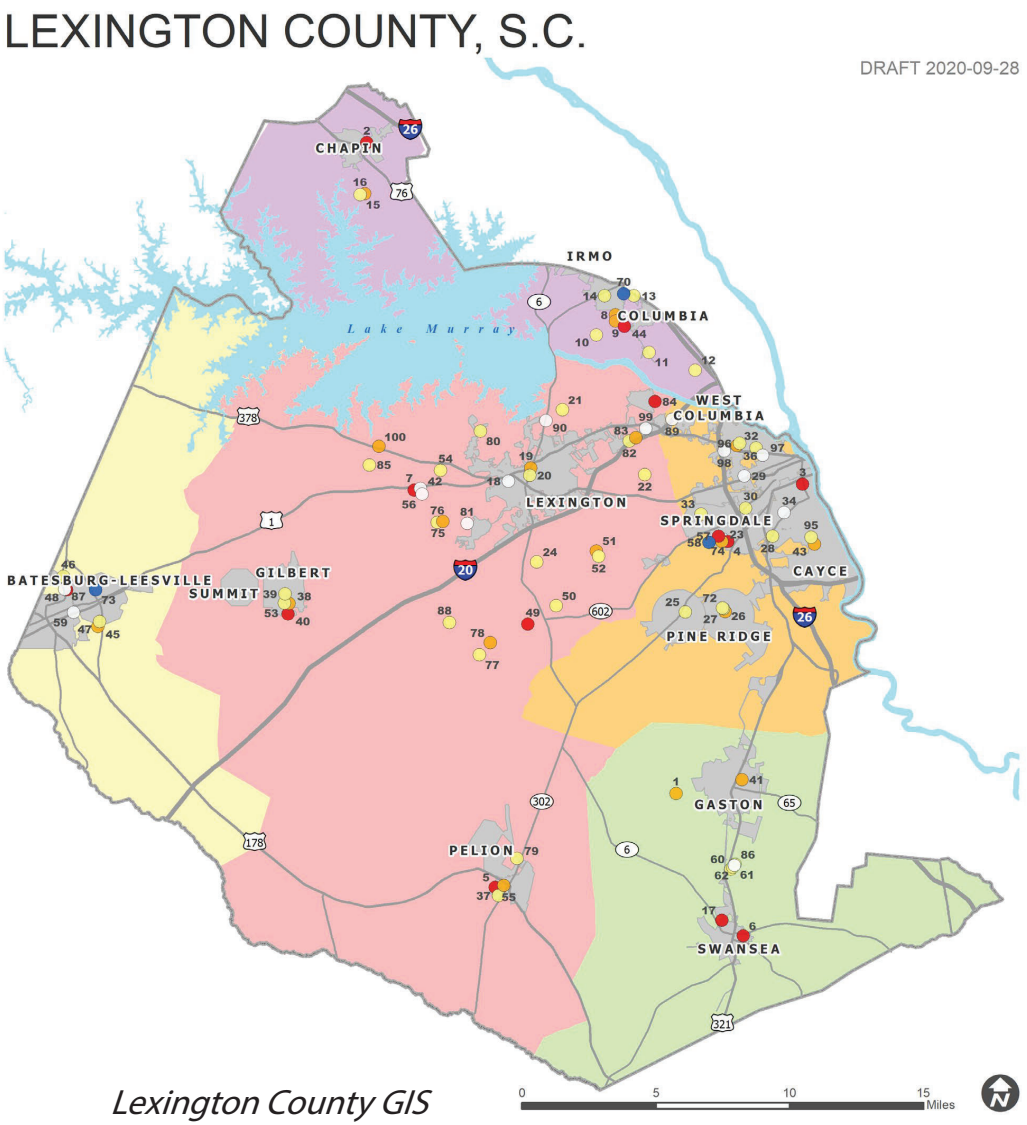


Lexington County GIS

Education

- Five independent school districts, including Lex-Rich 5 (which also includes parts of Richland County):
  - 13 high schools, 18 Middle Schools, 37 Elementary Schools
- Three Midlands Technical College campuses.
- Other Schools:
  - 15 private schools, vocational schools, learning centers, etc.

School District		Lexington County Schools	
	1		Elementary School
	2		Middle School
	3		High School
	4		Other
	5		Midlands Technical College



Lexington County GIS

1 Sandhills Middle School
2 Chapin High School
3 Brookland-Cayce High School
4 Airport High School
5 Pelion High School
6 Swansea High School
7 Lexington High School
8 Crossroads Intermediate School
9 Irmo Middle School
10 Nursery Road Elementary School
11 Leaphart Elementary School
12 Seven Oaks Elementary School
13 Harbison West Elementary School
14 Irmo Elementary School
15 Chapin Elementary School
16 Chapin Intermediate School
17 Swansea High School Freshman Academy
18 Rosenwald Community Learning Center
19 Lexington Middle School
20 Lexington Elementary School
21 Midway Elementary School
22 Oak Grove Elementary School
23 Fulmer Middle School
24 Red Bank Elementary School
25 Congaree Elementary School
26 Wood Elementary School
27 Pine Ridge Middle School
28 Davis Elementary School for Technology
29 Lexington Two Community Center
30 Pair Education Center
32 Saluda River Academy for the Arts
33 Springdale Elementary School
34 Granby Education Center
36 Northside Middle School
37 Pelion Elementary School
38 Gilbert Middle School
39 Gilbert Elementary School
40 Gilbert High School
41 Frances Mack Intermediate School
42 Lexington Technology Center
43 Busbee Creative Arts Academy
44 Irmo High School
45 Batesburg-Leesville Middle School
46 Batesburg-Leesville Primary School
47 Batesburg-Leesville Elementary School
48 Batesburg-Leesville High School
49 White Knoll High School
50 Saxe Gotha Elementary School
51 White Knoll Middle School
52 White Knoll Elementary School
53 Gilbert Primary School
54 Lake Murray Elementary School
55 Pelion Middle School
56 Alternative Learning Center
57 Will Lou Gray Opportunity School
58 Midlands Technical College - Airport Campus
59 Batesburg-Leesville Lifelong Learning Center
60 Sandhills Elementary School
61 Sandhills Primary School
62 Lexington Four Adult Education
70 Midlands Technical College - Harbison Campus
72 Congaree-Wood Early Childhood Center
73 Midlands Technical College - Batesburg-Leesville
74 SC Vocational Rehabilitation Dept
75 Pleasant Hill Middle School
76 Pleasant Hill Elementary School
77 Carolina Springs Elementary School
78 Carolina Springs Middle School
79 Forts Pond Elementary School
80 New Providence Elementary School
81 Heritage Christian Academy
82 Meadow Glen Elementary School
83 Meadow Glen Middle School
84 River Bluff High School
85 Rocky Creek Elementary School
86 Early Childhood Center
87 Lexington Three Fine Arts Center
88 Deerfield Elementary School
89 Columbia Adventist Academy
90 Lake Murray Montessori School
95 Cayce Elementary
96 Riverbank Elementary School
97 East Point Academy Middle School
98 East Point Academy Elementary School
99 Northside Christian Academy
100 Beechwood Middle School

*Some numbers not listed are from non-school items in the dataset

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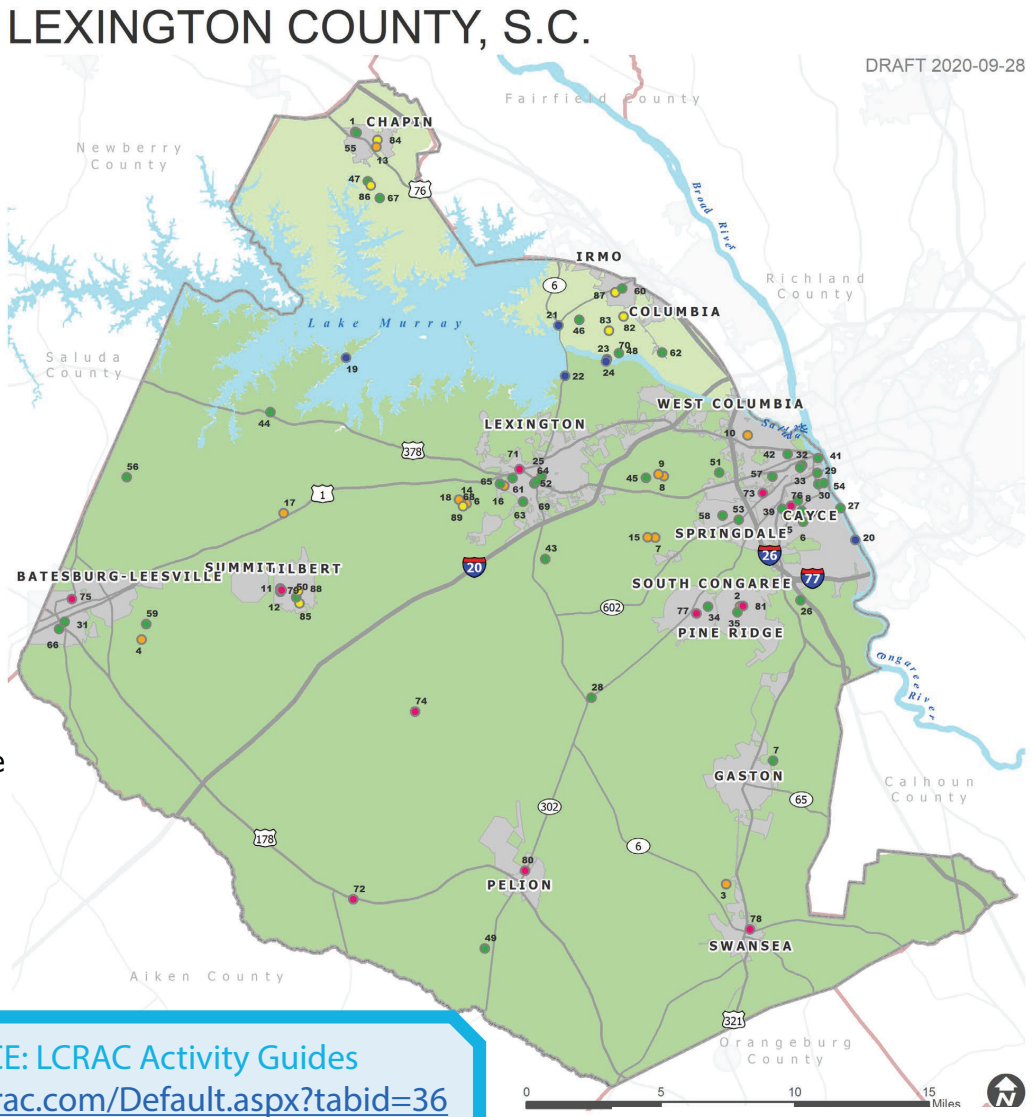
Parks

- Two independent districts have provided park services to the County for decades:
  - LCRAC: 3 community centers; 9 leisure centers and gymnasiums; 14 parks; 7 senior centers; 23 sports complexes; 2 tennis facilities; and walking trails.
  - ICRC: 4 signature parks +1 new park featuring walking trails.
- Municipalities and institutional partners also provide parks.



Lexington County GIS

RESOURCE: ICRC 2020-2030 Strategic Plan
https://www.icrc.net/sites/default/files/uploads/2020_30_master_plan_summary.pdf

RESOURCE: LCRAC Activity Guides
https://www.lcrac.com/Default.aspx?tabid=362819

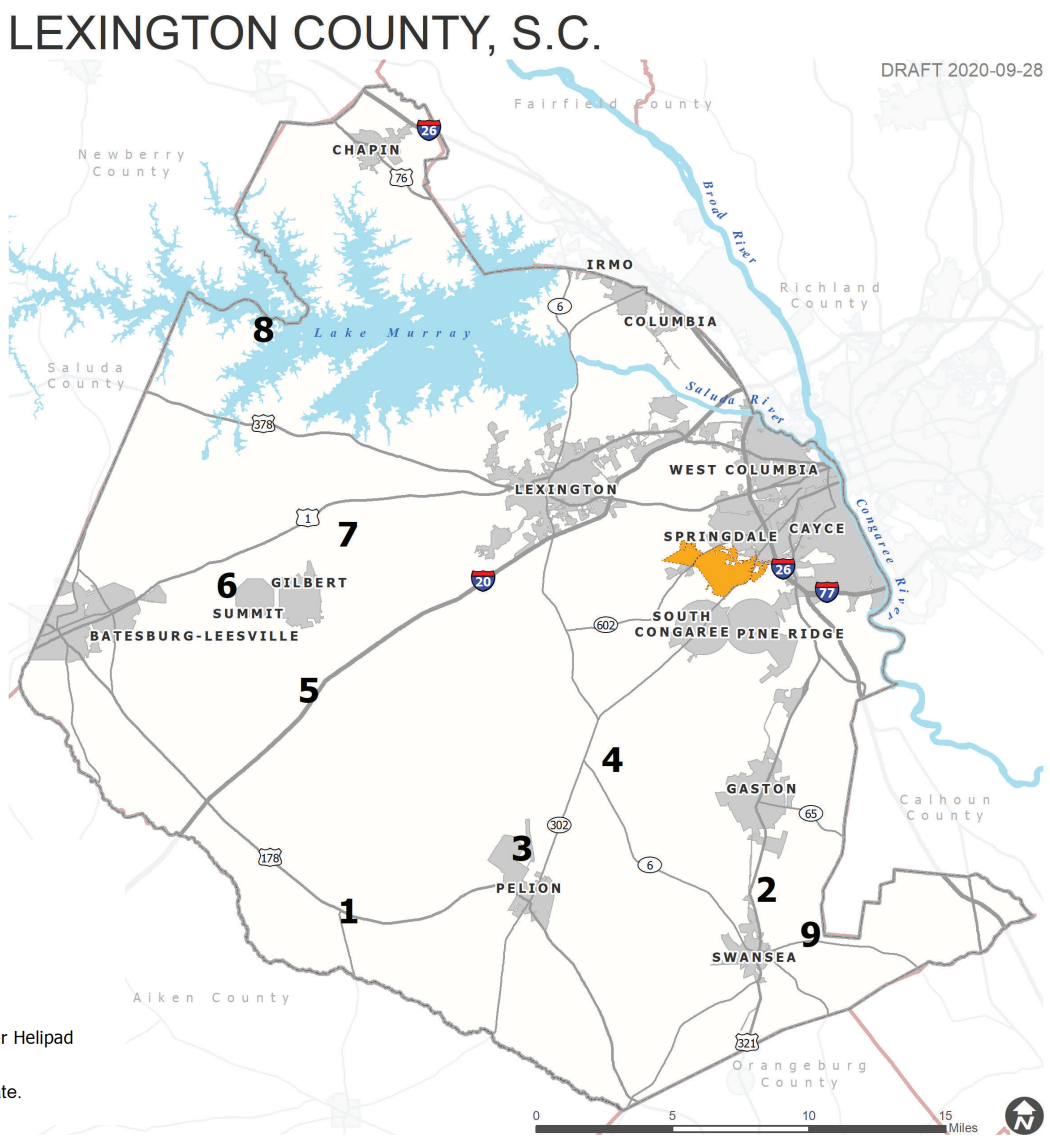
1 Chapin Recreation Complex
2 Midlands Sports Complex
3 Swansea Sports Complex
4 Brodie Road Sports Complex
5 Reco Ball Field
6 Ball Park Road Recreation Complex
7 Pine Grove Sports Complex
8 Oak Grove Sports Complex
9 Lexington County Tennis Complex
10 Howard Sports Complex
11 Gilbert Sports Complex
12 Gilbert Soccer & Softball Complex
13 Boundary Field
14 Ball Park Road Gymnasium
15 West Columbia Soccer Complex
16 Lexington County Sports Complex
17 Gilbert Church Softball Complex
18 Lexington Girls Softball Fields
19 Shull Island Landing
20 Thomas A. Newman Boat Landing
21 Lake Murray Public Access
22 Lake Murray Public Access
23 Saluda River Public Access
24 Saluda River Public Access
25 Corley Street Park
26 Bray Park
27 Riverland Park
28 Edmund Park
29 Guignard Park
30 State Street Park
31 Batesburg-Leesville Town Park
32 Douglas Reeves Community Park
33 B Avenue Park
34 South Congaree Town Park
35 Pine Ridge Park
36 Sunnyside Park
37 Gaston Ball Park
38 Granby Gardens Park
39 Glenwood Park
40 Andrew J. Burnette Park
41 C.M. Jack Carraway Community Park
42 Rosamounda Percell-Butler Community Park
43 Red Bank Park
44 Hollow Creek Park
45 Halleywood Park
46 Beverly Brandes Community Park
47 Crooked Creek Park
48 Saluda Shoals Regional Park
49 Cooper Park
50 Gilbert Town Park
51 Pine View Ball Park
52 Virginia Hylton Park
53 Felton C. Benton Park
54 Cayce Riverwalk Park
55 Derrick Park
56 Ridge Road Park
57 Eric L. Fowler Community Park
58 Springdale Park
59 Banks Park
60 Irmo Town Park
61 Willie B. Caractor Park
62 Seven Oaks Park
63 Gibson Pond Park
64 Lexington Square
65 Lexington Paw Park
66 Twin City High Community Park
67 Melvin Park
68 LCRAC Maintenance Bldg
69 LCRAC Administration Bldg
70 ICRC Administration Center
71 Lexington Leisure Center
72 Fairview Community Center
73 Tri-City Leisure Center
74 Boiling Springs Community Center
75 Batesburg-Leesville Leisure Center
76 Spires Recreation Center
77 South Congaree Equestrian Center
78 Swansea Senior Center
79 Gilbert Senior Center
80 Pelion Senior Center
81 Pine Ridge Senior Center
82 Irmo Middle School Athletic Complex
83 Nursery Road Elementary Athletic Complex
84 Chapin High School Athletic Complex
85 Gilbert Middle School Athletic Complex
86 Chapin Elementary Athletic Complex
87 Irmo Elementary School Athletic Complex
88 Gilbert Elementary Athletic Complex
89 Wildcat Hollow Athletic Field


LEXINGTON COUNTY TENNIS COMPLEX (LCRAC)


SALUDA SHOALS REGIONAL PARK (ICRC)

Air Travel

- Columbia Metropolitan Airport is the region's major airport.
- Nine local, private, or general aviation airports and facilities are a resource distributed throughout the County, south of the lake.



CAE - Columbia Metropolitan Airport

Local, private, or General Aviation Airports and Facilities

1 - Eagles Nest - Fairview Airpark
2 - Gaston Airport
3 - Lexington County Airport at Pelion
4 - Darden Airport
5 - Gilbert International Airpark
6 - The Farm Airport
7 - Whiteplains Airport
8 - Shealy Airport
9 - Lexington Medical Center Helipad

NOTE: The locations of the numbered Local, private, or General Aviation Airports and Facilities are approximate.

Sewer and Water Management Areas

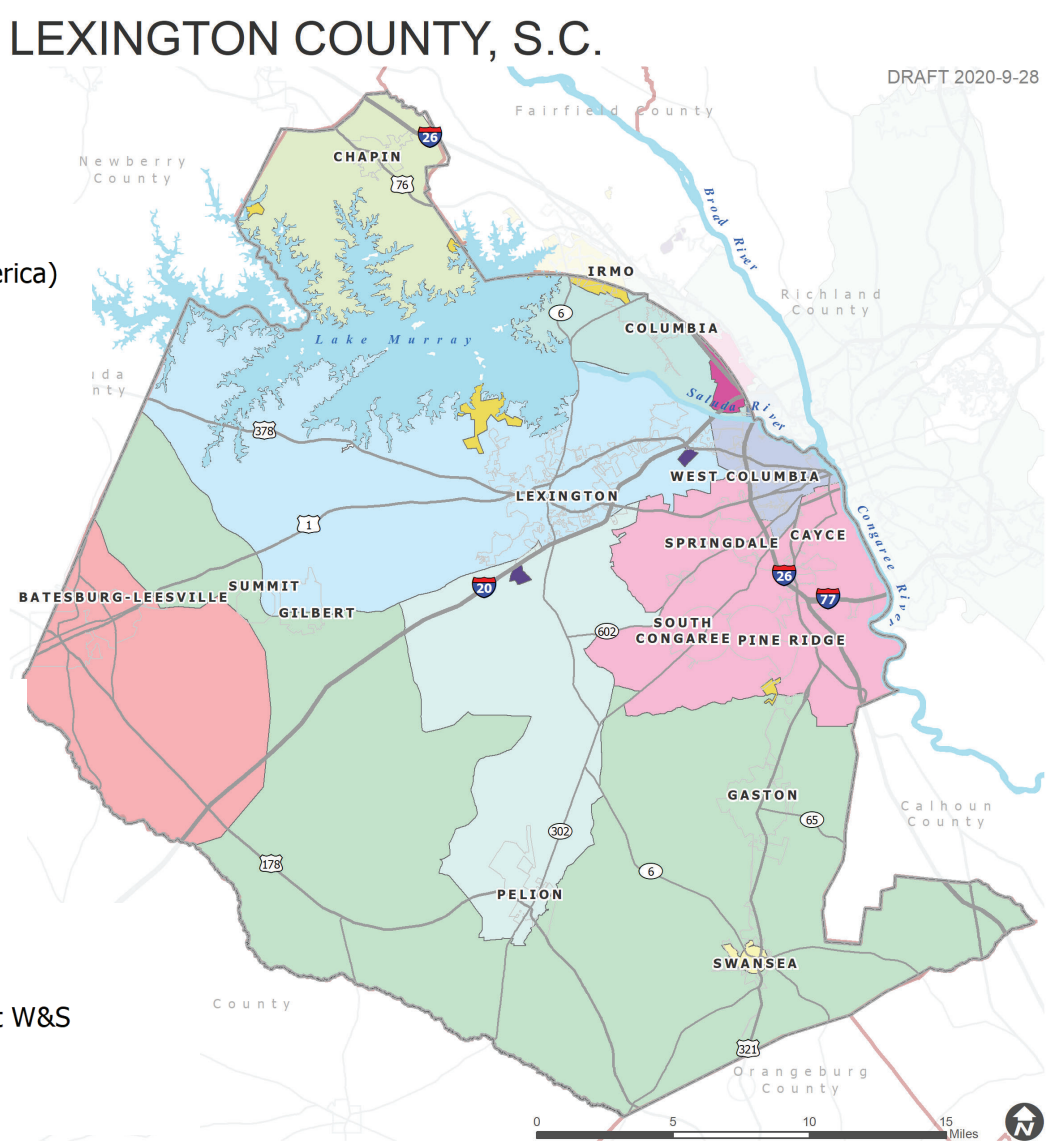
- Lexington County includes 4 private sewer providers and 9 public sewer management areas.
- Treatment is consolidated according to the "208 Water Quality Plan" (Section 208 of the Clean Water Act) coordinated by CMCOG. Many management areas feed into common treatment facilities in Cayce.
- Some services cross the County for treatment in Richland County.
- Joint W&S area extended south to serve schools in Pelion.
- Service areas for providing drinking water are less distinct and multiple nearby providers may compete on the edges.

Private Service Areas

- Alpine Utilities (NI America)
- Bush River Utilities
- Carolina Water Service
- Midlands Utility

Public Management Areas

- Batesburg-Leesville
- Cayce
- Chapin
- City of Columbia
- Lexington
- Lexington County
- Lexington County Joint W&S
- Swansea
- West Columbia



Priority Investment

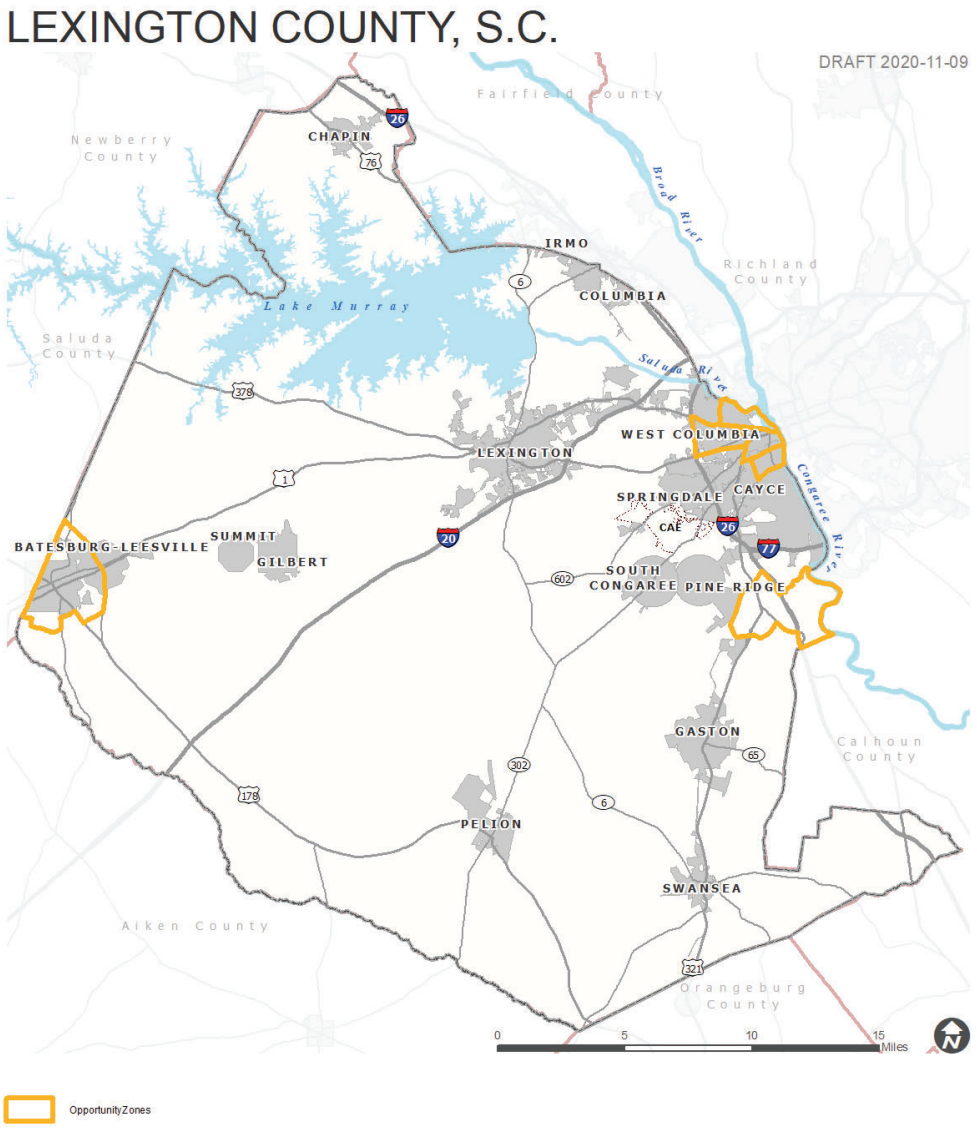
Investment Areas

Investment Sites

- 13,000 acres of the county are in areas identified as Opportunity Zones – a federal program where some investments are eligible for preferential tax treatment.

REFLECTS DATA AVAILABLE JUNE 2020

RESOURCE: OPPORTUNITY ZONES FAQ:
https://www.irs.gov/credits-deductions/opportunity-zones-frequently-asked-questions



Business Parks

Three Featured Business Parks Owned or Partially Owned by the County:

1- SAXE GOTHA INDUSTRIAL PARK

- 714 total acres, 60-acre contiguous available.
- All utilities available, highway and rail access.
- Partially within Qualified Opportunity Zone.

2- CHAPIN BUSINESS AND TECHNOLOGY PARK AT BRIGHTON

- 220 total acres, 48-acre contiguous available.
- Adjacent to I-26 and close to Samsung plant.

3- BATESBURG LEESVILLE INDUSTRIAL PARK

- 189 total acres, 24-acre contiguous available.
- All utilities available, borders Norfolk Southern Railroad.
- Near other retail .

Other Notable Business Parks:

4- COLUMBIA METROPOLITAN AIRPORT (CAE) - WEST

5-LEXINGTON COUNTY INDUSTRIAL PARK (Private)

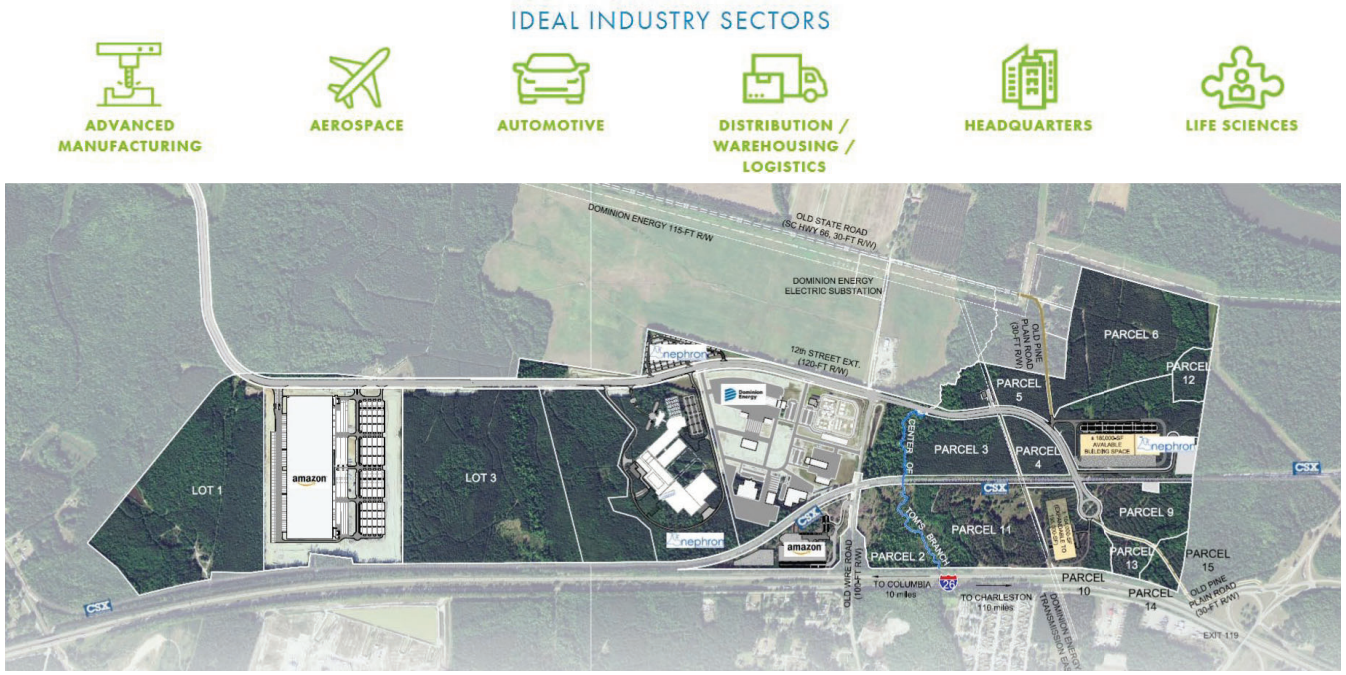
Additional Private and Municipally Owned Business Parks are also throughout the County.

RESOURCE: LEXINGTON COUNTY FEATURED BUSINESS PARKS:
https://lexingtoncountyusa.sc.gov/featured-parks/
RESOURCE: LEXINGTON COUNTY AVAILABLE REAL ESTATE:
https://lexingtoncountyusa.sc.gov/available-real-estate

Details of Sites Maintained and Advertised (Example)

SAXE GOTHA INDUSTRIAL PARK

- Zoned for intensive development.
- Current tenants include Amazon, Nephron, Dominion energy.
- Suggested use for automotive and aerospace suppliers and other advanced manufacturing.



RESOURCE: SAX-GOTHA INDUSTRIAL PARK
https://lexingtoncountyusa.sc.gov/featured-parks/saxe-gotha-industrial-park/

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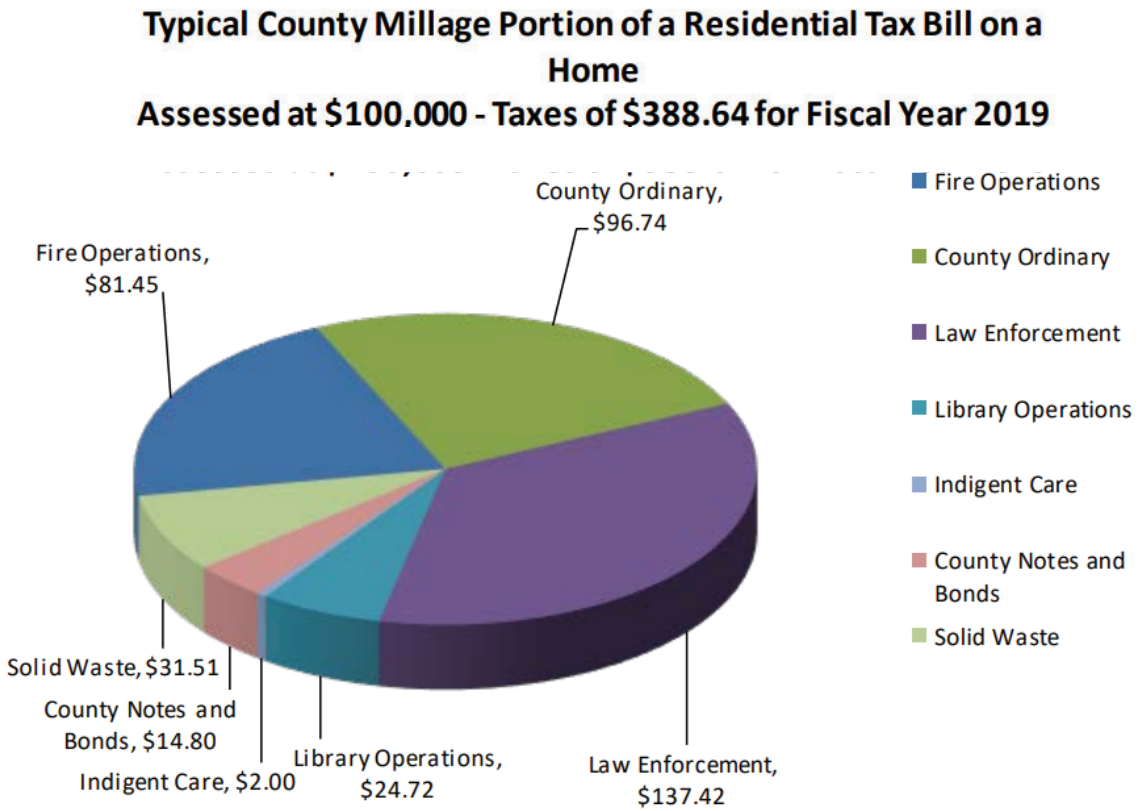
Budgetary Resources

Revenue Collection- County Millage

- Law enforcement, County Ordinary operations, and Fire operations comprise the majority of County millage.

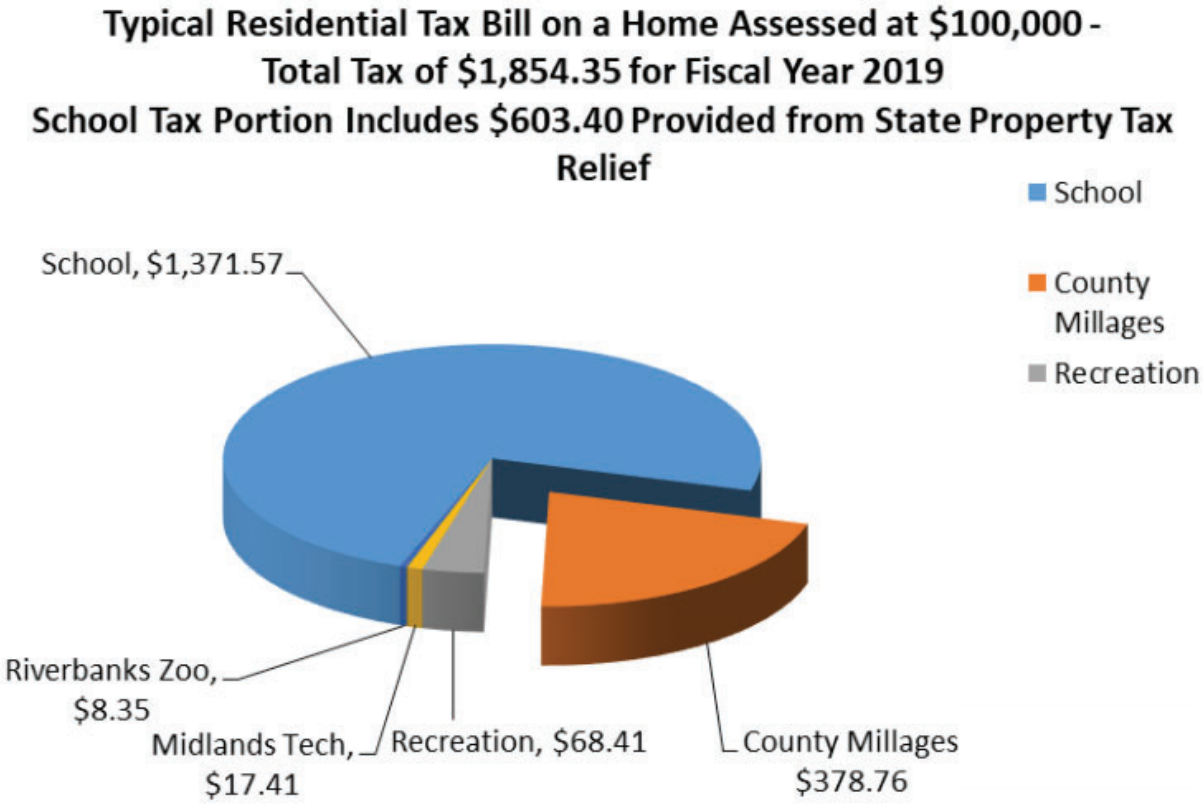
RESOURCE: COMPREHENSIVE FINANCIAL REPORT
https://lex-co.sc.gov/sites/default/files/Documents/Lexington%20County/Departments/Financial/CAFR2019.pdf



Lexington County FY 2019 Annual Financial Report

Revenue Collection- County Millage

- County millage only a portion of residential tax bill.

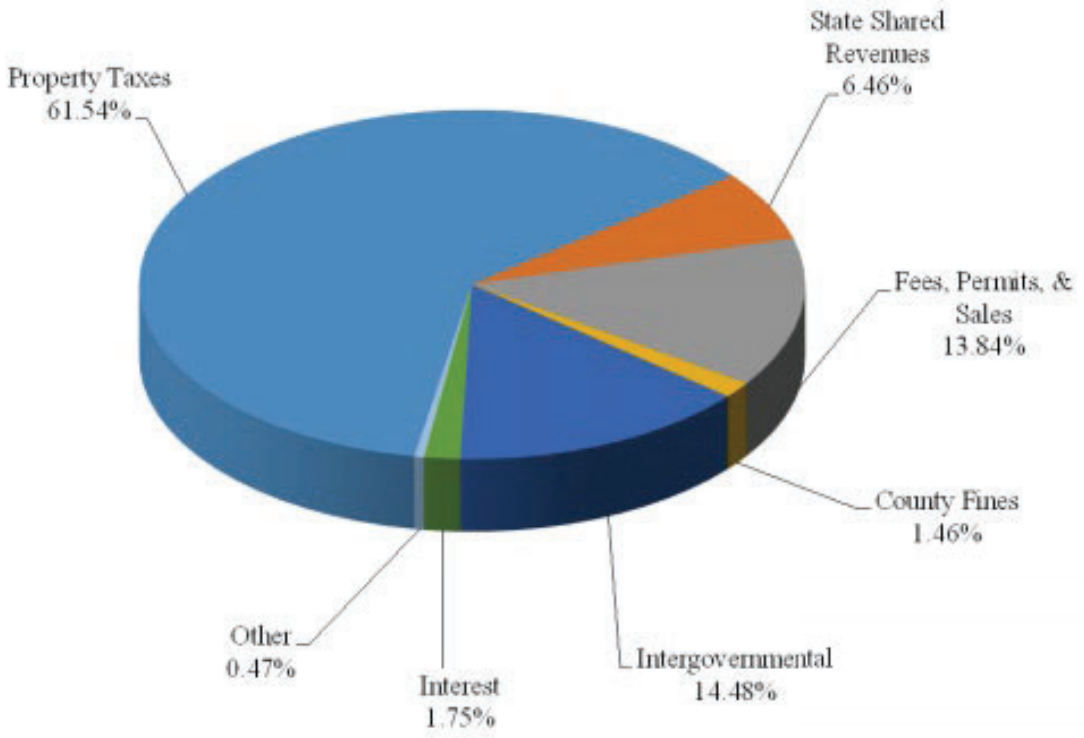


Lexington County FY 2019 Annual Financial Report

RESOURCE: COMPREHENSIVE FINANCIAL REPORT
https://lex-co.sc.gov/sites/default/files/Documents/Lexington%20County/Departments/Financial/CAFR2019.pdf

Revenue- County Total

- $180 million in yearly revenue.
- Property taxes account for 61.5%.

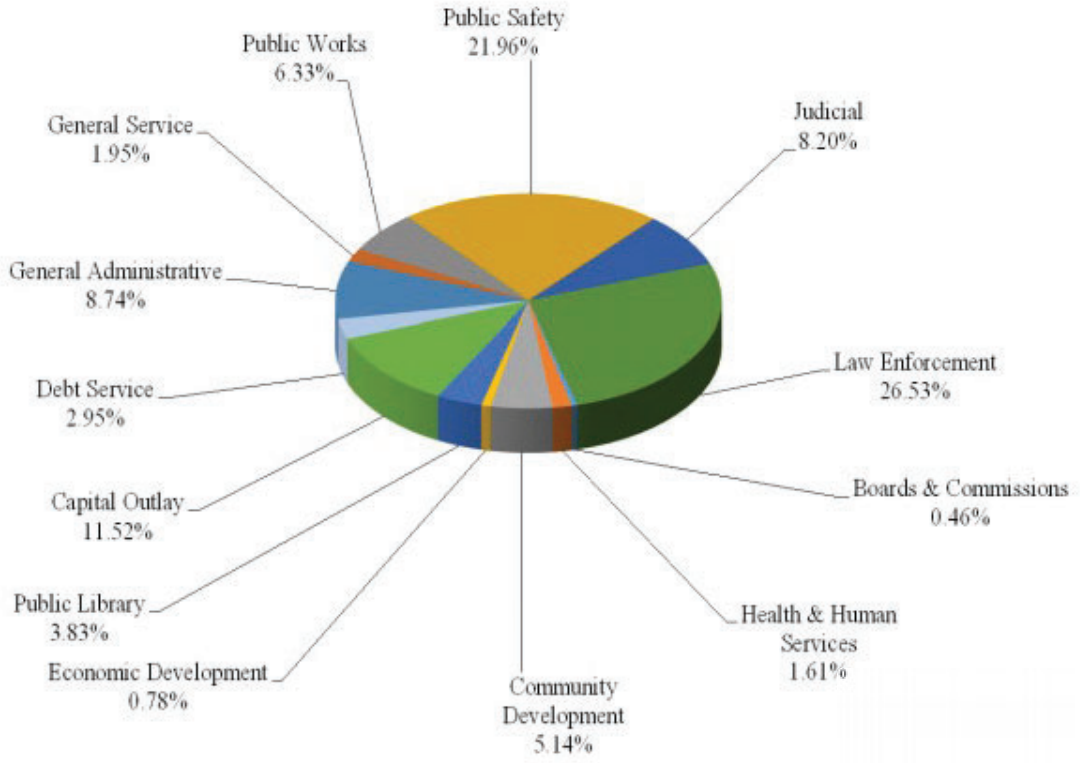


Lexington County FY 2019 Annual Financial Report

RESOURCE: COMPREHENSIVE FINANCIAL REPORT
https://lex-co.sc.gov/sites/default/files/Documents/Lexington%20County/Departments/Financial/CAFR2019.pdf

Expenditures- County Total

- $175 million in yearly expenditures.
- Split among the various departments.
- Public Safety and Law Enforcement are the only categories using >20%.



Lexington County FY 2019 Annual Financial Report

RESOURCE: COMPREHENSIVE FINANCIAL REPORT
https://lex-co.sc.gov/sites/default/files/Documents/Lexington%20County/Departments/Financial/CAFR2019.pdf

Financial Planning

- Developing a five-year Capital Improvement/Replacement Plan listed in Lexington County's 2020 Fiscal Policy Document, updated yearly.
- CI/RP to include cost of maintenance.
- Annual capital budget based on five-year CI/RP.
- County targets 25% of total annual operating budget available in reserve at end of fiscal year.
- Maximum debt service 15% of expenditures.

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B

Transportation Appendices

Transportation Design Guidance

Peer Funding Profiles

Transportation Design Guidance

Introduction

Streets and roads are a vital component of the economy and health of Lexington County and must meet the needs of residents, workers and visitors. The County's current street network is diverse and includes streets in a grid network with sidewalks in various downtowns, transitional suburban arterial roads, as well as rural neighborhoods and developments built without sidewalks, curbs, gutters and storm sewer networks. Development patterns and contexts vary substantially from one part of the County to another. The eastern part of Lexington County that is closer to Columbia tends to be more auto-oriented with wide roadways and fast-moving traffic. The western part of the County is characterized by a rural context, with two lane roads that link agricultural land and low-density residential development to other parts of the County and beyond.

Goals for Street Design

As Lexington County continues to grow, it is working toward a goal of improving mobility and accessibility and create a safe and efficient multimodal transportation network that serves people of all ages, abilities, and incomes. The network should be designed to be:

Safe

Enhance the safety and comfort of all users, with an emphasis on children, seniors, and disabled individuals. Facilities are designed to minimize the frequency and severity of crashes, and to limit conflicts between nonmotorized users and motor vehicles.

Accessible

People of all abilities are able to move through Lexington County, with facilities that meet or exceed ADA standards.

Comfortable

Streets and trails are designed to minimize stress, anxiety, discomfort, or other safety concerns for users.

Connected

Connected streets distribute traffic and reduce congestion by relieving pressure from major roads. All destinations are accessible using safe facilities for pedestrians, cyclists, drivers, and transit riders.

Equitable

Street designs prioritize the most vulnerable users—pedestrians and cyclists—and investments focus on providing facilities in areas with the greatest need.

Attractive

Facilities are well maintained and features like landscaping, lighting, and building design help create an inviting environment.

What are Complete Streets?

Complete Streets are multimodal roadways designed and operated to provide safe and comfortable access for all roadway users regardless of their age, ability, or choice of transportation mode. People on foot or bike, motorists, and transit should be able to safely use every street and roadway, even if one mode has priority over another on a particular corridor. Complete Streets may be local streets or regional thoroughfares, but each features context-sensitive designs, is rooted in community vision and values, and enables communities and the region to thrive.

Complete Streets

Creating this safe, attractive, multimodal network means the County will need to retrofit many of its existing streets and apply new design principles to future street and trail projects in the county. Future streets should be designed using a Complete Streets approach, which are designed and operated to enable safe use and support mobility for all users, including people who are walking, biking, or riding transit. As many of Lexington County's existing streets lack sidewalks and/or bicycle facilities, incorporating these facilities into future street design projects will be essential shifting toward a safer and more inclusive network.

Best practice strategies for designing Complete Streets are outlined below, with a focus on some of the key facility types and issues for Lexington County. These offer direction for the type of transportation network that aligns with the community input and established goals of this Comprehensive Plan. The approach to Complete Streets should be context-sensitive. In other words, Complete Streets in the rural portions of Lexington County will look different from Complete Streets in West Columbia or Batesburg-Leesville. As a next step, the County will build on this guidance to develop more detailed, regulatory design guidelines for future public and private roadway and trail projects in the County.

The categories described below that refer to street types—Suburban Arterial and Collector Streets, Local Neighborhood Streets, And Rural Streets—generally correspond with the functional classification of streets within the county; however, Rural Streets is not functional classification. This category is included to illustrate that the types of users and associated design needs differ depending on context. These categories are more broad than the existing street classifications used in the Lexington County Zoning Map. For example, Residential Local One, Two, Four, Five, and Six Streets in the existing zoning are different kinds of Local Neighborhood Streets. In developing regulatory design guidelines as a next step, these categories should be reviewed and additional detail and variation should be added to create and map a complete, revised set of street classifications with associated guidelines.

Suburban Arterial and Collector Streets

Suburban Arterial and Collector Streets typically serve employment and entertainment centers, commercial, and

institutional land uses. They may also include small business or retail nodes. These streets are currently dominated by motor vehicle traffic but have a strong need to accommodate and encourage pedestrian and bicycle activity. These streets often have bus stops and are key routes in Lexington County's transit network. Street design for Suburban Arterial and Collector Streets emphasizes safety for pedestrians and bicyclists by focusing on providing appropriate sidewalks, opportunities for pedestrians and bicyclists to safely cross the street, reducing speeds, providing street tree plantings, street lighting, and separation from high volumes of traffic.

Local Neighborhood Streets

Local Neighborhood Streets serve predominantly residential areas with low volumes of motor vehicle traffic. They are used primarily for local trips and are characterized by lower volumes of vehicular traffic. These streets are not more than a single-lane in each direction and not intended for through-traffic. Pedestrian and bicycle activity may be common along these streets. Neighborhood streets should have sidewalks on both sides of the street, though in retrofit applications, a sidewalk on one side of the street may be an interim objective in existing neighborhoods with

Figure 2 Sample Arterial and Collector Street Layout

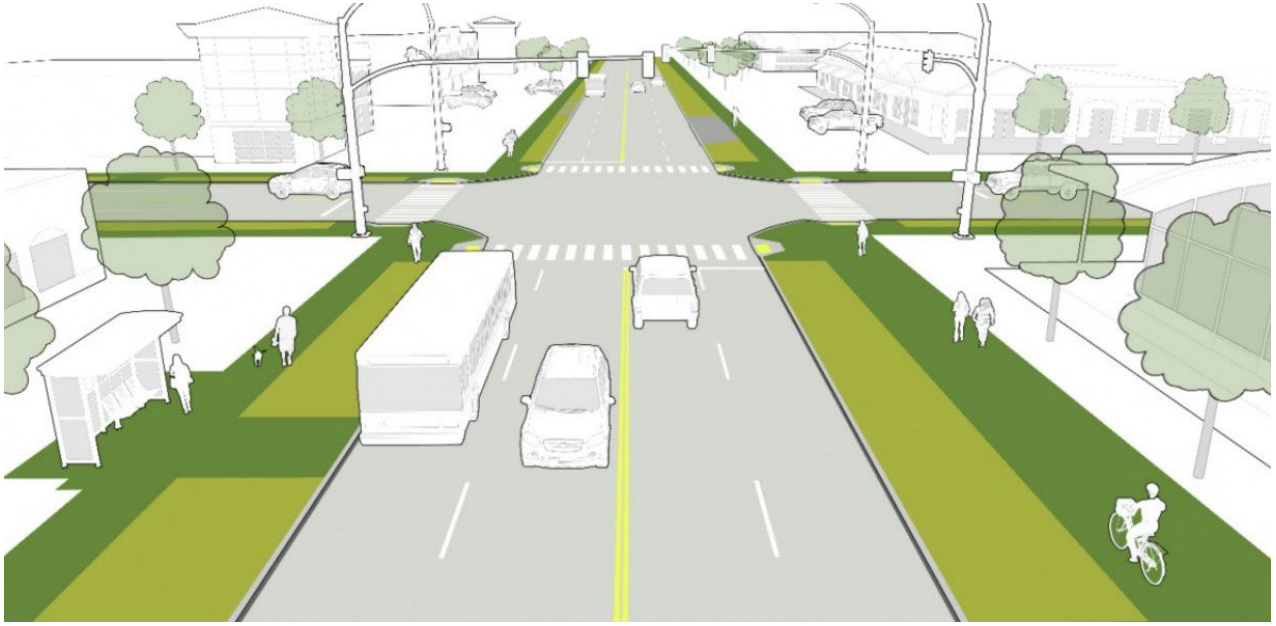
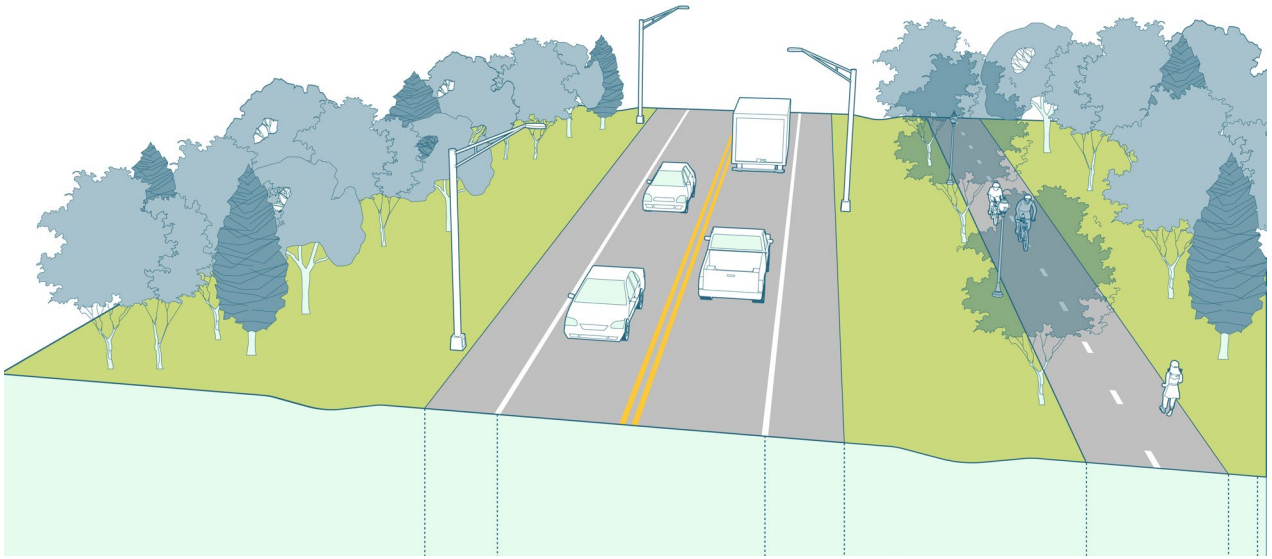


Figure 3: Sample Local Street Layout

Figure 4: Sample Rural Street Layout



National and State Design Guides

The Federal functional classification system promoted by the Federal Highway Administration (FHWA) and the American Association of State Highway and Transportation Officials (AASHTO) Green Book5 establishes a street hierarchy based on automotive mobility and property access. It sorts streets into three primary categories: Arterials, Collectors, and Local Streets. This traditional classification system is built almost exclusively around a vehicular perspective rather than the multimodal objectives of person throughput and goods movement.

In Lexington County, the Federal functional classification will still be used; however, the context-based street types presented in this guide will serve as an overlay and supplement to the Federal functional classifications.

All roads should meet AASHTO standards, recognizing that AASHTO allows for flexibility. Additional guides are maintained by FHWA and the National Association of City Transportation Officials (NACTO).

limited right-of-way. Most, but not all, Local Neighborhood Streets in Lexington County offer on-street parking. Design for Local Neighborhood Streets should focus on encouraging slow speeds, pedestrian safety, healthy street trees, and well-defined routes to nearby parks, transit, and schools.

Rural Streets and Roads

Rural streets are designed to connect small and rural communities over longer distances. Pockets of small town commercial or residential uses are separated by longer distances of rural or agricultural uses. While multimodal trips may be fewer along rural roads, the need for appropriate infrastructure is no less. Depending on context and demand, providing basic transit stop amenities paved shoulders, pedestrian lanes, and sidepaths allow people who live and work in rural areas to be connected to the larger region. Due to higher speed vehicle traffic, designs should provide an ample offset from vehicle traffic for pedestrians and bicyclists. Trees should be set back to allow for a clear/offset zone.

Sidewalks

Sidewalks play a critical role in the character, function, enjoyment, and accessibility of neighborhoods, main streets, and other community destinations. Sidewalks are the place typically reserved for pedestrians within the public right-of-way, adjacent to property lines or the building face. In addition to providing vertical and/or horizontal separation between vehicles and pedestrians, the spaces between sidewalks and roadways also accommodate street trees and other plantings, stormwater infrastructure, street lights, transit facilities, and bicycle racks. This section provides an overview of key principles and provides recommended widths for different street types.

Accessibility

Sidewalks must be safe and accessible for everyone, regardless of physical abilities or age. They should be welcoming to people in wheelchairs, those pushing strollers, and those with carts or suitcases. Sidewalks should have continuous and unobstructed pathways and sight lines, and they must be designed to follow state and county standards for accessibility, as well as the requirements of the Americans with Disabilities Act (ADA).

Materials

Sidewalk design plays a major role in establishing and reinforcing neighborhood and city identity. A specific palette of materials, colors, and patterns can be used to identify a neighborhood or district. The key components of sidewalk construction are proper material selection, good detailing, and quality installation. These components work together to create smooth, stable, slip resistant, and durable sidewalks. Materials and details should be selected to minimize gaps, discontinuities, rough surfaces, or any other vibration-causing features. Details should be designed to prevent the creation of tripping hazards as materials settle and age and to avoid uncomfortable or painful bumps and vibrations for pedestrians using wheeled devices such as walkers, strollers, and wheelchairs. New or reconstructed sidewalk materials should always match those of existing sidewalks to create a continuous walking and visual experience.

Sidewalk Zones

From the perspective of Complete Streets, the sidewalk consists of four parts: the Frontage Zone, the Pedestrian Zone, the Furnishing Zone, and the Curb Zone. Although the boundaries between them can sometimes be blurred, each zone serves a distinct purpose in a Complete Street.

Figure 5: Sidewalk Zones Diagram

Dividing the sidewalk into four distinct parts ensures that each will be given the detailed attention required to make the whole work together as an integrated system.

Frontage Zone: The Frontage Zone is a shy zone adjacent to property line. (A shy zone is the area that is offset from a building, object, vehicle, or other vertical element to allow comfortable clearance for cyclists, pedestrians, or others passing through.) It occupies the area of the pedestrian realm between the pedestrian zone and buildings along the street. On most sidewalks the frontage zone allows for shy distance to fences and building walls. (A shy distance measures the offset from a vertical element. The recommended distance is dependent on the type of vertical element, user, and context) In residential areas, the Frontage Zone may be occupied by front porches, stoops, lawns, or other landscape elements that extend from the front door of buildings to the edge of the pedestrian zone. The Frontage Zone of commercial properties within walkable business districts may include architectural features or projections, outdoor retail displays, café seating, awnings, signage, and other uses of the public right-of-way. Frontage Zones may vary widely in width from just a few feet to several yards and may include a combination of public right-of-way and private property. Some areas may not require a frontage zone adjacent to open space or parks.

Pedestrian Zone: The Pedestrian Zone is the portion of the sidewalk space used for active travel. For it to function, it must be kept clear of any obstacles and be wide enough to comfortably accommodate expected pedestrian volumes including those using mobility assistance devices, pushing strollers, or pulling carts. To maintain the social quality of the street, the width should accommodate pedestrians passing singly, in pairs, or in small groups as anticipated by density and adjacent land use. The quality of the surface is of the utmost importance in the Pedestrian Zone and must meet accessibility standards referenced in these guidelines. The surface material should be smooth, stable, and slip resistant, with minimal gaps, rough surfaces, and vibration-causing features.

Furnishing Zone: This area is between the curb and the Pedestrian Zone. It may be occupied by a variety of street fixtures such as streetlights, street trees, bicycle racks, parking meters, signposts, signal boxes, benches, transit facilities, trash and recycling receptacles, and newspaper boxes.

In commercial areas, it is typical for this zone to be hardscape pavement, pavers, or tree grates. In residential, or lower intensity areas, it is commonly a planted strip.

Curb Zone: The Curb Zone is the interface between the sidewalk and the travel lanes, or in some cases bicycle or transit facilities that are located between the curbs. This area plays a critical access function, particularly in higher activity areas like main streets or village centers. It may include features like rideshare pick-up/drop-off areas, shared micromobility (bike or scooter) docking or parking stations, transit stops, loading, or on-street parking. The function of the adjacent street will inform how this zone should be designed to manage the applicable curbside activities.

Preferred Widths for Sidewalk Zones

When determining sidewalk zone widths, factors to consider include the available right-of-way, anticipated pedestrian volumes, ridership projections for locations near transit, and the locations of bus shelters and transfer points.

The width of the various sidewalk zones will vary given the Street Type, the available right-of-way, the scale of the adjoining buildings and the intensity and type of uses expected along a particular street segment. Parameters for these widths are set to complement the character of the surrounding area and the anticipated pedestrian activities. For example, a Main Street lined with retail that encourages window shopping necessitates greater widths while an Industrial street simply needs to provide adequate space for pedestrians to pass one another. As a next step, street types should be applied to all streets within the county to support application of adopted design standards.

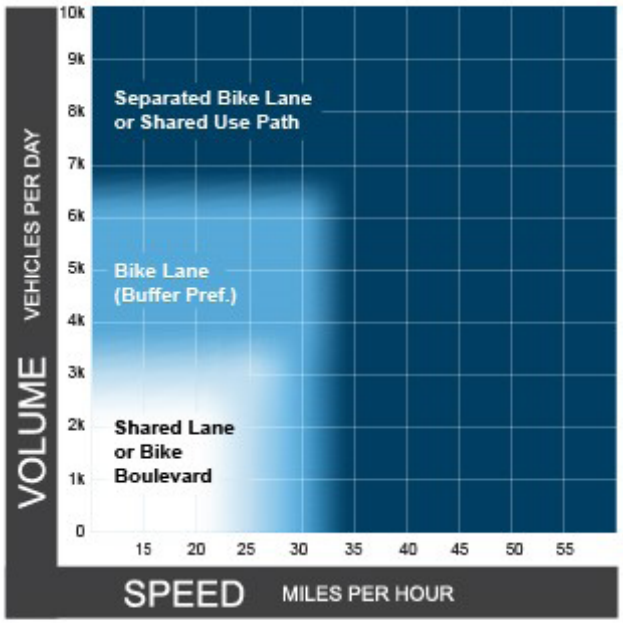
Figure 6: Preferred Widths for Sidewalk Zones

Street Type	***Frontage Zone*** Door Swings, awnings, café seating, retail signage, lawns, fences, landscaping.	***Pedestrian Zone*** Zone should be clear of any and all fixed obstacles. Clear space for pedestrian travel only.	***Furnishing Zone*** Street lights and utility poles, street trees, bicycle racks, transit stops, green stormwater infrastructure, street furnishings, signage, ditches.	***Total Width***
Suburban Arterial and Collector Streets	2 to 5 feet	5 to 15 feet	6 to 10 feet	13 to 30 feet
Local Neighborhood Streets	2 feet	5 to 6 feet	6 to 7 feet	13 to 15 feet
Rural Streets and Roads	not applicable	5 to 10 feet	6 to 10 feet	11 to 20 feet

Bicycle Facilities

Selecting the most appropriate bicycle facility type for any given street is one of the most important steps in realizing a truly functioning multimodal transportation network. A community can have hundreds of miles of bicycle facilities, but if they are the wrong facilities or along the wrong streets, they may experience very little use and be deemed unsuccessful. Matching the right facility type to the right street is paramount to achieve a network that attracts everyone – a network that provides a high level of user comfort, safety, and mobility. Selecting bicycle facilities requires a balance of community priorities for local land use context, analysis, engineering judgment, available funding, and physical constraints of the existing street. Facility selection is iterative; as more data about the street and surrounding context is gathered, use of existing facilities is documented, and land use changes occur over time, the type of facility that planners and designers deem most appropriate may change and evolve. The FHWA Bikeway Selection Guide is a valuable resource for bikeway selection. It uses vehicle speed and traffic volumes to assist practitioners with planning and designing bikeways for all ages and abilities. While vehicle speed and traffic volumes are key indicators, these factors, as mentioned previously, should be complemented by

Figure 7: Bicycle Facility Selection Guide



Notes

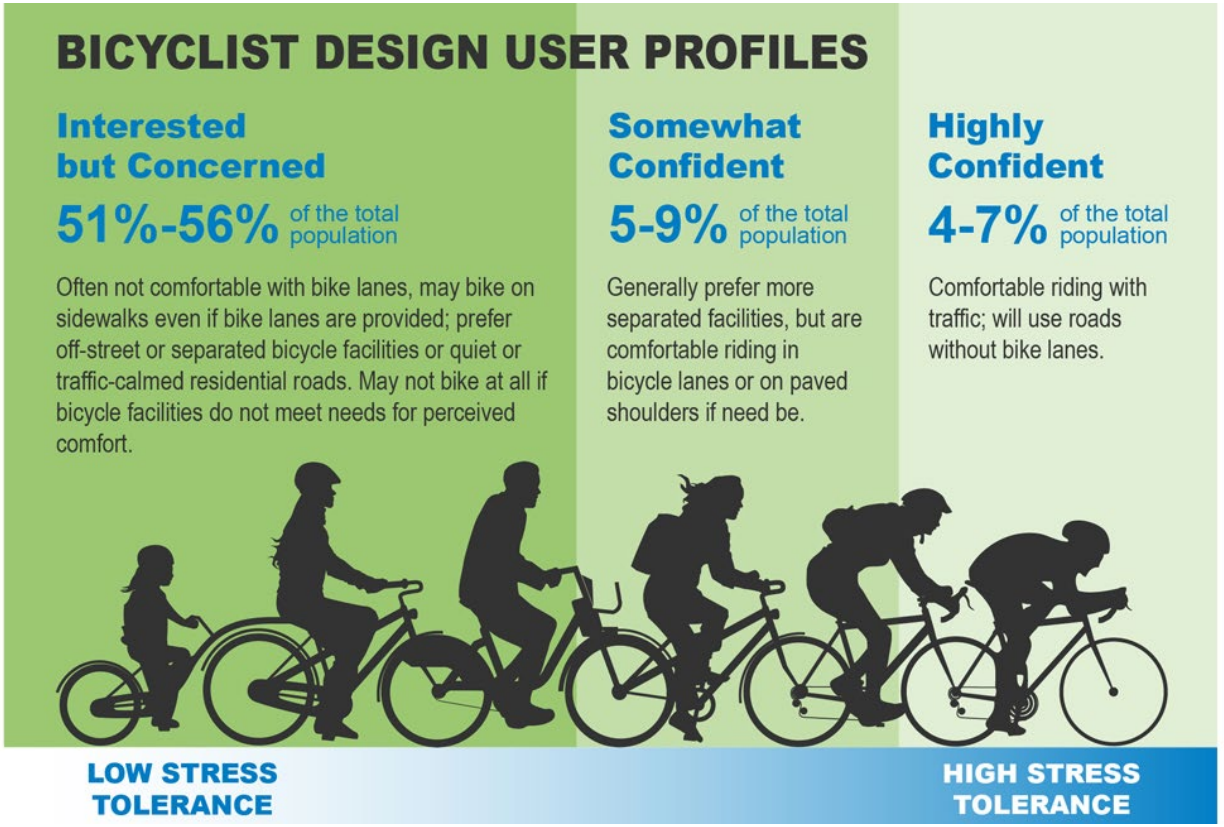
1 *Chart assumes operating speeds are similar to posted speeds. If they differ, use operating speed rather than posted speed.*

2 *Advisory bike lanes may be an option where traffic volume is <3K ADT.*

3 *See Section 4.4 for a discussion of alternatives if the preferred bikeway type is not feasible.*

(FWHA)

Figure 8: Bicyclist Design User Profiles



actual physical constraints, community desires, and budgetary limitations.

The figure below illustrates a typical range of cyclist types. The greatest percentage of the population—upwards of 51-56%—falls into the "Interested but Concerned" category. The "Interested but Concerned" are most comfortable cycling separated from motorized vehicles. On the other end of the spectrum, only roughly 4-7% of the population is "Experienced and Confident," comfortable sharing the road with motorized vehicles. In the middle, approximately 5-9% are "Casual and Confident," comfortable cycling for short distances with motorized vehicles. (Approximately 30% are not interested in bicycling at all.) These percentage values are typical ranges for most communities in the US.

Designing For "Interested but Concerned" & "Experienced And Confident" Bicyclists

Bicyclists' comfort levels decrease proportionally with increases in motor vehicle volumes and a widening differential between the speed of bicycles and the speed of adjacent traffic. As a result, both traffic volume and traffic speed are important considerations when choosing an appropriate bikeway type for a given location. In general, as both volume and speed increase, there is a greater need for separation of the bikeway from traffic to appeal to a wider cross-section of people. Wider bikeways (i.e., more than the standard five feet) also help to mitigate the effects of volume and speed, albeit to a lesser extent than increasing facility separation with painted buffers or physical barriers.

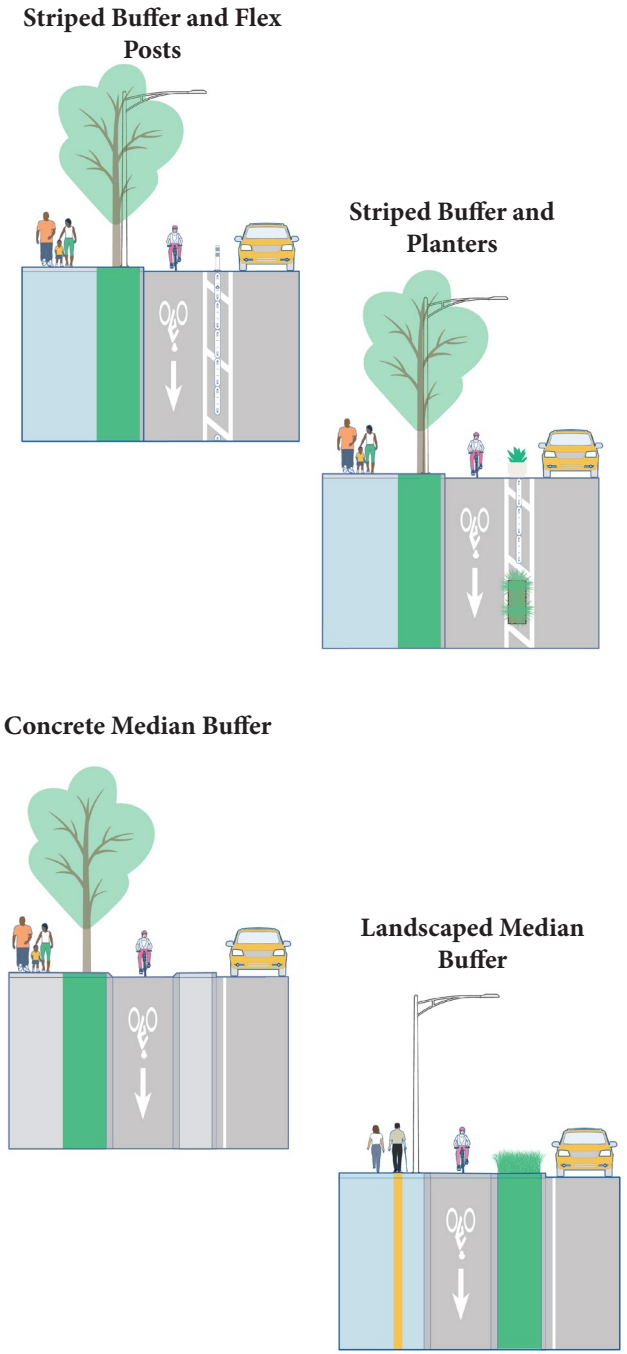
From a bicyclist comfort point of view, separated bike lanes and shared use paths are generally preferable to traditional bicycle lanes, shoulders, or buffered bike lanes once traffic volumes reach 6,000 vehicles per day or prevailing motor vehicle speeds exceed 35 miles per hour. In addition to traffic volume and speed, land use is also an important factor in selecting the appropriate bicycle facility type for a given roadway.

Bicycle Facility Types

Separated Bike Lanes

Separated bike lanes (SBLs, also called protected bike lanes or cycle tracks) provide a greater physical distance from motorized travel making them more attractive to a wider range of bicyclists than traditional striped bike lanes, particularly on higher volume and higher speed roads. SBLs are intended for exclusive use by bicyclists;

Figure 9: Separated Bike Lane Diagrams



they are not intended for pedestrians. Where on-street parking is present, they eliminate the risk of a user being hit by an opening car door. The vertical physical separation of SBLs also prevents people driving cars from driving, stopping, or waiting in the bikeway. Additionally, they provide greater comfort to pedestrians by moving the sidewalk further away from motorized traffic and separating them from bicyclists operating at higher speeds.

SBLs require both horizontal separation and vertical separation to be effective, safe, and comfortable for users of all ages and abilities. Vertical barriers provide both a perceived and real protection from motorized vehicles and can consist of a variety of elements, including flex posts, low-profile composite curbs, planters, concrete barriers, and temporary or permanent curbs/medians. Vertical separation can also be used to protect multi-use paths.

Use

- Bikeways on or adjacent to streets with actual operating speeds over 30 mph or where average daily traffic exceeds 6,000 vehicles per day.
- Bikeways where on-street parking is present and significant turnover of that parking is experienced.

Guidance

- Require a street buffer that is separated from the street by vertical elements.
- Avoid narrowing sidewalks beyond the minimum necessary to accommodate pedestrian demand.
- Prevent the narrowing or elimination of the street buffer, as it is critical to the safety of SBLs.
- Narrow travel and parking lanes to minimum widths in constrained corridors before narrowing bikeway width. This can include decreasing the number of travel lanes, narrowing existing lanes, and/or adjusting on-street parking.
- Maintain a minimum bike lane width of 5’ for one-way SBLs and 8’ for two-way bikeways to ensure bicyclists can safely pass other bicyclists.

Additional Considerations

- Use of flex posts or low-profile curbs offer the least separation from traffic and should be used as an interim solution.
- Protecting bikeways with landscaping and/or on-street parking offer a high degree of separation, comfort, and safety to bicyclists.
- Use of grade separation can provide an additional physical and visual cue to reinforce the distinction of the bikeway

from adjacent motor vehicle travel lanes and pedestrian spaces, but these will often require roadway reconstruction.

- Employing one-way SBLs in the direction of motorized travel provides intuitive and simplified transitions to existing bike lanes and shared travel lanes.
- Implementation of two-way SBLs require special attention to properly transition contra-flow bicyclists into existing bike lanes and shared travel lanes.
- Consider the need for specialized equipment to maintain separated bicycle lanes, as traditional street sweepers are too large to access them. Smaller street sweepers are available, and local governments should explore the opportunity to share the investment and use of such with one another.

Buffered Bike Lanes

Buffered bike lanes provide horizontal separation in the form of pavement striping, but they do not provide any vertical separation like an SBL. Buffered bike lanes are typically used as a low-cost way to quickly reallocate space on lower volume streets without the need for capital construction. They also allow bicyclists to ride side-by-side or to pass bicyclists of varying speeds.

Use

- Bikeways on or adjacent to streets with actual operating speeds over 30 mph or where average daily traffic exceeds 6,000 vehicles per day.
- Bikeways where on-street parking is present and significant turnover of that parking is experienced.

Guidance

- Consider actual operating speeds of motorized vehicles, posted speed limits, and land use context when selecting the most appropriate material for vertical separation.
- Precast and permanent curb are appropriate on streets with speeds up to 45 mph.
- Parking stops can be used on streets with speeds up to 40 mph.
- Locate vertical elements within the buffer or on the outside edge line of SBLs and multi-use paths. When installing vertical elements, a minimum buffer width of 2' is recommended.
- Install painted edge lines and vertical elements to guide drivers to park at least 3' from the bikeway when parking is adjacent to the bikeway.

Additional Considerations

Figure 10: Buffered Bike Lane - Parking Protected Bike Lanes with Door Zone Buffer

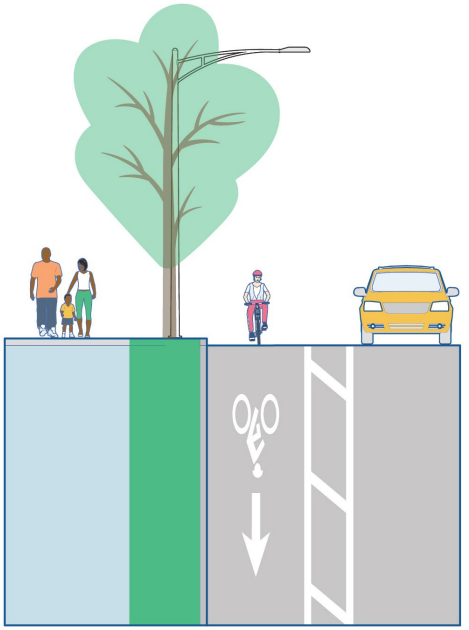
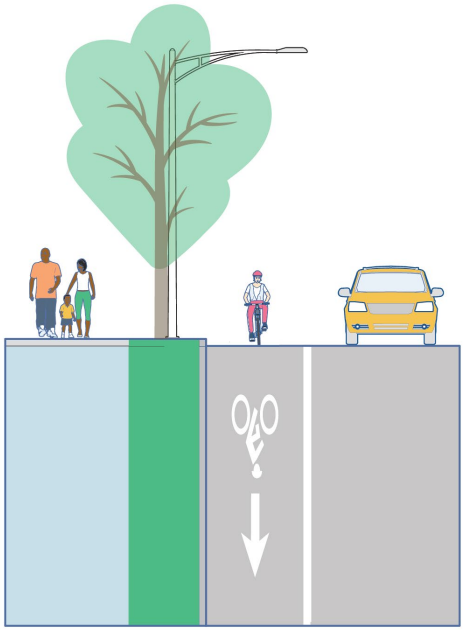


Figure 11: Striped Bike Lane - Unbuffered



- Use of any vertical barrier introduces additional but varying maintenance considerations.
- Consider the visual environment where the vertical separation will be employed before selecting a material type.
- Assume a 1' to 2' shy distance from vertical elements when determining where to site vertical elements relative to the bikeway.
- Where right of way and funding are available, use of landscaped islands between bikeways and motor vehicle travel lanes provides protection for bicyclists and other micromobility users, beautification, and sustainable stormwater infrastructure
- Consider using flexposts, low-profile composite curbs, planters, and precast concrete curbs as temporary, lower-cost solutions for rapid implementation, pilot projects, and interim designs.
- Use concrete or weighted plastic barriers during construction activity to guide people walking, bicycling, or using other micromobility devices around construction zones.

Striped Bike Lanes

Striped bike lanes are located directly adjacent to motor vehicle travel lanes, providing no horizontal or vertical separation. They are delineated by a single pavement stripe and bike lane markings.

Use

- Bikeways on streets with actual operating speeds less than 35 mph or where average daily traffic less than 6,000 vehicles per day.

Guidance

- Use a minimum width of 5' for a striped bike lane; the preferred width is 6'. The width of the lane must be exclusive from the gutter.
- Provide additional width to add a door zone marked with Parking T's or hatch marks where high on-street parking turnover is expected.
- Install contra-flow bicycle lanes on one-way streets to allow two-way bicycle travel to improve bicycle network connectivity.

Additional consideration

- Understand that stopping, standing, and parking in striped bike lanes may be problematic in areas of high parking demand and deliveries, especially in commercial and residential areas.
- Consider wider bike lanes or buffered bike lanes in locations with high on-street parking turnover.

Advisory Shoulder

Advisory shoulders are paved spaces for people walking, bicycling, and using micromobility devices on roadways where there is not enough space for typical bike lanes. This facility creates a yield situation in which motorists a able to use the entire roadway when bicyclists, pedestrians, and micromobility users are not present, but motorists must yield to those vulnerable users when they are present.

Use

Streets too narrow for bike lanes and normal-width travel lanes.

Guidance

- Use a minimum width of 13' for the center travel lane; maximum width is 18'. Center lanes wider than 18' may encourage excessive vehicle speeds.
- Use a preferred width of 6' for advisory shoulders; 4' is acceptable in constrained right of way. If motor vehicle speeds exceed 50 mph, moderate to heavy volumes of traffic exist, and/or above- average bicycle usage is present, then advisory shoulders may be need to be wider than 6'.
- Avoid the use of rumble strips, as they will greatly discourage bicycling and potentially cause damage to bicycles and injury to bicyclists.

Additional considerations

Understand that advisory shoulder treatments require FHWA permission to experiment.

Neighborhood Bikeway

Neighborhood bikeways are suitable for quiet streets that connect through residential neighborhoods. They should be attractive to all ages and abilities. These treatments are designed to prioritize bicycle, pedestrian, and micromobility device through-travel, while discouraging high-volume motor vehicle traffic and maintaining relatively low motor vehicle speeds. Treatments vary depending on context, but often include elements of traffic calming, including traffic diverters, speed humps, chicanes, pavement markings, and/or signage.

Use

Bikeways on streets with actual operating speeds up to 25 mph or where average daily traffic is below 3,000 vehicles per day.

Guidance

- Place stop signs or traffic signals along the neighborhood bikeway in a way that prioritizes the bicycle movement, minimizing stops for bicyclists whenever possible.
- Include traffic calming measures such as street trees, traffic circles, chicanes, and

Figure 12: Advisory Shoulder

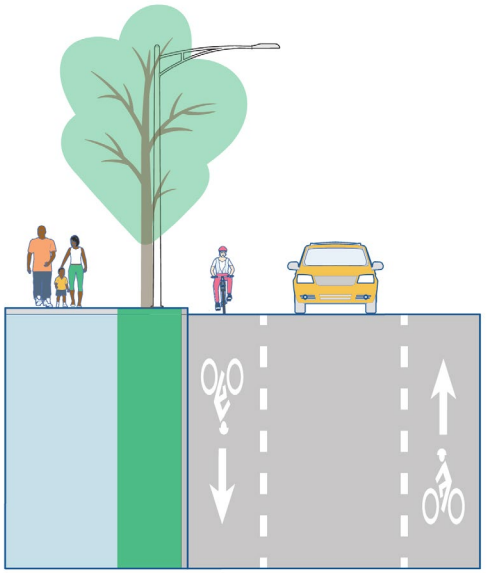


Figure 13: Neighborhood Bikeway

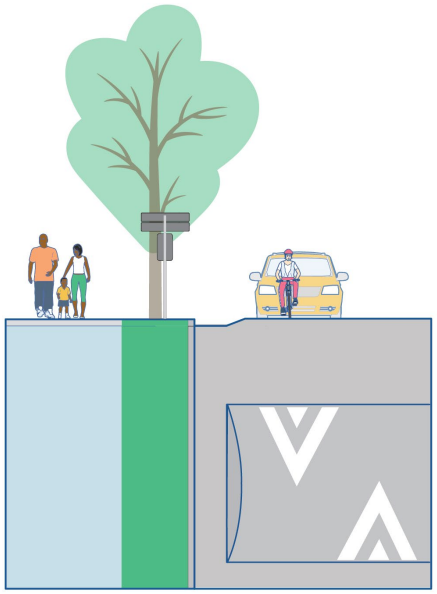


Figure 14: Shared Lane

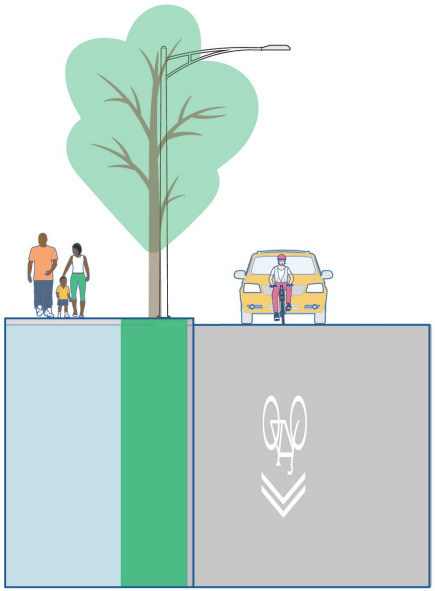
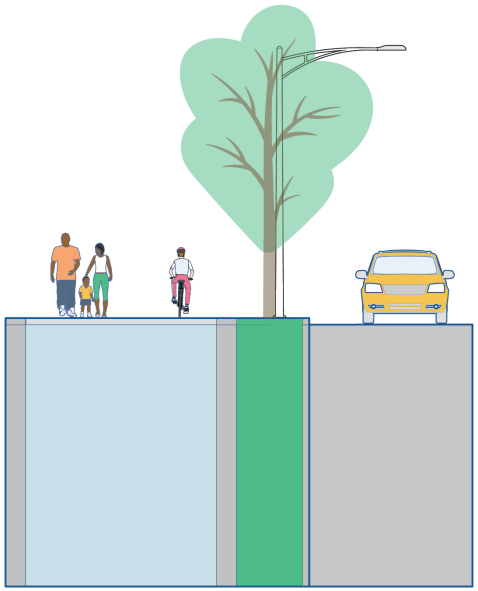


Figure 15: Shared Use Path



speed humps.

Additional Considerations

- Consider using traffic diverters or semi-diverters to redirect cut-through vehicle traffic and reduce traffic volumes while still enabling local access to the street.
- Understand that additional treatments for major street crossings may be needed, such as median refuge islands, rapid flashing beacons, bicycle signals, and HAWK or half signals. A High-Intensity Activated Crosswalk (HAWK) signal is a type of pedestrian-activated beacon that is used for high-visibility crosswalks that are not located at signalized intersections. They are activated by a push button or through automatic detection, allowing pedestrians to cross by stopping vehicular traffic with a red signal. It is also known as a Pedestrian Hybrid Beacon (PHB).

Shared Lane

Shared lanes require bicyclists to ride in mixed traffic with motorized vehicles. They provide no dedicated space for bicyclists. Typically, only the most experienced bicyclists are comfortable in shared lane environments.

Use

- Streets where other bicycle facility types are not possible and with operating speeds of 35 mph or less.
- Streets interior to areas where drivers intuitively drive slower like parks, school campuses, and recreation areas.

Guidance

- Include shared lane markings and signs to inform drivers that bicyclists may travel in the lane and clearly mark where bicyclists should be expected.
- Use of shared lane markings is only allowed on streets with operating speeds of 35 mph or less.

Additional Considerations

- Realize that the comfort and safety of shared lanes is variable based on motorized traffic conditions, including vehicle operating speeds, average daily volumes of vehicles, and street maintenance.
- Understand that the majority of bike/car crashes occur in shared lanes that are inappropriate for their contexts.

Shared Use Path

Shared use paths or paved trails are two-way facilities that are grade-separated from motor vehicle traffic and used by people walking, wheeling, bicycling, and using other micromobility devices. They are often called trails or greenways when located

in an independent alignment (such as a greenbelt or abandoned railroad). When they follow roadways, they are often called sidepaths. Many people express a strong preference for separating walking and bicycling from motor vehicle traffic when compared to on-street bikeways.

Use

- Multi-use facilities adjacent to streets with actual operating speeds in excess of 35 mph or where average daily traffic is over 7,000 vehicles per day.
- Multi-use facilities in dedicated right of way like utility easements, along streams and rivers, and in former railroad corridors.

Guidance

- Use a width of 10' to 12' with 8' being the minimum for short distances in constrained areas. Heavy volumes or a high proportion of pedestrians may require wider widths than 12'.
- Design multi-use paths according to state and national standards, including establishing a design speed (i.e., typically 18 mph) and appropriate geometry.
- Give priority to path users at intersections with roadways, including separation physically and timing and through the inclusion of high-visibility crossing treatments.
- Minimize the number of driveway and street crossings along the path.

Additional Considerations

- Consider separating bicyclists from pedestrians where higher volumes are expected through the construction of parallel paths for each mode.
- Do not consider multi-use paths a substitute to accommodating more confident bicyclists in the roadway

Trails

Trails are located outside of the road right-of-way. They provide two-way travel designated for walking, bicycling, jogging, skating, and traveling by scooter, wheelchair, and other devices. Trails are typically 10 feet wide. Widths at constrained pinch points can be reduced to 8 feet and may widen to 14 feet wide where usage is likely to be higher. On trails with very high levels of walking and bicycling, spaces for pedestrians and bicyclists are often separated to reduce conflicts and improve comfort. In these situations, trails can be widened to 19 feet wide, including 8 feet for walking and 11 feet for bicycling. Trails may be called greenways or shared use paths, particularly when they are located in an independent alignment such as along a

waterway or other sensitive environmental areas.

Design guidance includes:

- At a minimum, lighting should be provided at path/roadway intersections and should be provided at other locations where personal security may be an issue or where nighttime use is likely to be high.
- Whether the trail is stop- or yield-controlled, roadway and path approaches to an intersection should provide sufficient stopping sight distances so that motorists, bicyclists, and pedestrians can avoid obstacles or potential conflicts within the intersection. Sight distances are based on site conditions and user-based factors. Calculate sight triangles as per the AASHTO Bike Guide.
- The intersection should be conspicuous to all users, which may require trimming or removing landscaping or other fixed objects that limit sight lines and designing intersections to as close to a right angle as practical, given existing conditions.
- Intersections and approaches should be designed with relatively flat grades, when feasible.
- Designers should use speed reduction techniques for trail users and drivers, where needed.
- Trail crossings on uncontrolled multi-lane roads should be avoided where feasible.
- Where a trail crosses a street that is too wide for the design user to make a single, continuous crossing, a median refuge island should be provided. Median islands should be a minimum of 6 feet wide to provide adequate space for multiple people to wait, and preferably 10 feet at trail crossings of 4 to 6 lanes.

Transit Access

Access to transit service is a foundational component of a safe, sustainable transportation system. Effectively connecting bicycle and pedestrian infrastructure with transit stops will have a measurable impact on the mobility, health, and access to goods, services, and opportunities for Lexington County's residents.

Transit-stop design, including amenities and location, should be determined in consultation with the transit operators. All stops must be ADA compliant, meaning they must include landing pads, curb heights that allow for the loading and unloading of passengers in wheelchairs, and a continuous, accessible sidewalk to

connect to the existing sidewalk network. Transit stops should be designed to accommodate passenger activity at all doors of the transit vehicle.

Basic transit stops have a pole-mounted sign indicating the transit provider and route(s), while higher volume transit stops generally have more amenities such as benches, shelters, traveler information, trash receptacles, bicycle parking, and other features.

Transit stops must allow for accessible movement of pedestrians along the sidewalk as well as space for waiting, queuing, and disembarking from transit vehicles. In constrained sidewalk conditions, meeting both demands can be challenging. It requires careful and sensitive placement of transit stops and fixtures in concert with other elements of the street edge, such as street trees, streetlights, signal cabinets, storm drains, and other elements.

Green Streets & Green Infrastructure

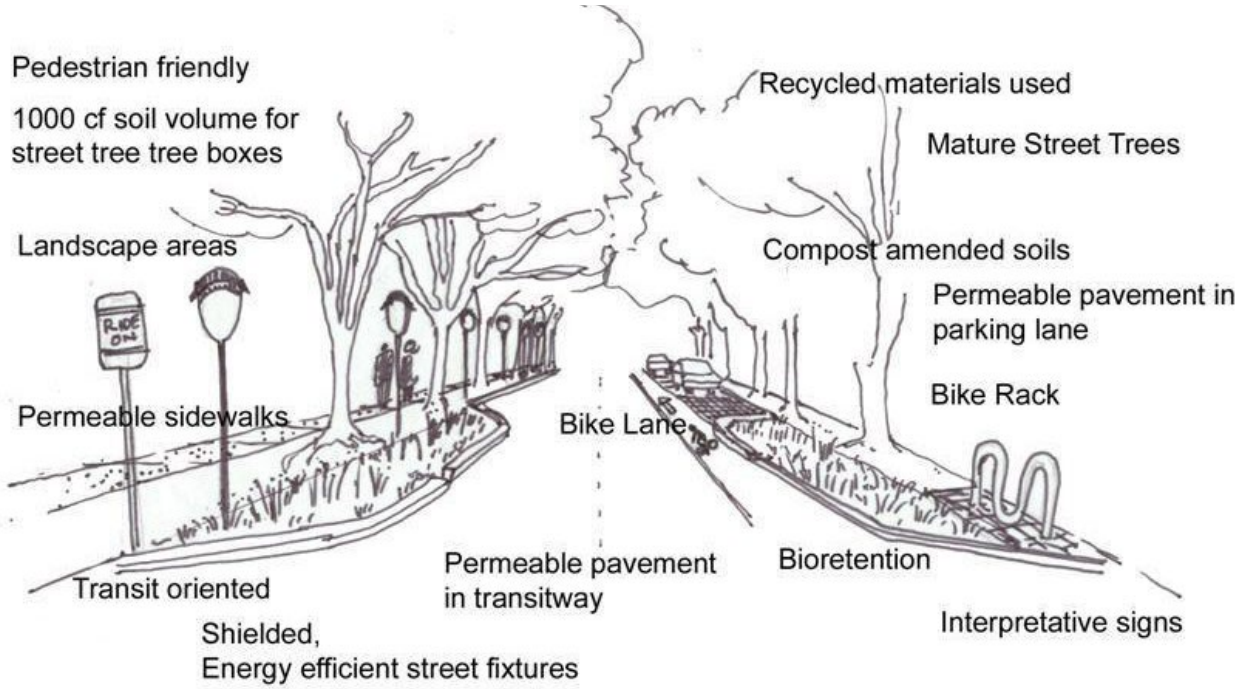
Green streets help to filter polluted runoff before it flows into the storm drain system or infiltrates into groundwater. Green streets can also increase resiliency of the built environment and allow for better adaptation to climate change by mitigating carbon emissions. Additional benefits of green streets include:

- Enhanced aesthetics and placemaking
- Improved water quality and protection of riparian habitats along local rivers and streams
- Expanded habitat and food sources for birds, insects, and small animals
- Improved air quality and mitigation of the heat island effect
- Improved pedestrian and bicyclist comfort
- Traffic calming

Green street elements are typically incorporated as amenities within the public right-of-way. Green street techniques are often compatible with traffic calming measures such as road diets, curb extensions, buffers, medians, and roundabouts.

This section is organized around the two most common categories of green street elements: A) Urban Forestry, and B) Green Stormwater Infrastructure. Street designers are encouraged to incorporate additional green and sustainable features, making use of low-maintenance and recycled materials, and preserving water and energy resources wherever feasible.

Figure 16: Anatomy of a Green Street



Urban Forestry

One critical component of green infrastructure is the urban forest system. Trees and vegetation within and adjacent to the right-of-way can contribute to the overall function of the urban forest system. Trees provide numerous benefits, including opportunities for recreation; a sense of enclosure for drivers and comfort for pedestrians; habitat corridors and food source for animals; improved air and water quality; protection of biodiversity; erosion protection and stormwater runoff reduction; urban heat island reduction; improved physical and mental health; and climate change mitigation.

Stormwater Management / Green Infrastructure

Several green stormwater infrastructure best management practices (BMP) are suitable for streetside applications due to their adaptability to narrow, constrained spaces, including:

- Impervious area disconnection and vegetated filter strips
- Bioretention facilities and rain gardens
- Grass swales and bioswales
- Tree box filters and stormwater planters
- Permeable pavements

When implementing these streetside green infrastructure BMPs, designers must consider existing and potential streetscape constraints, such as:

- Space availability – Evaluate physical constraints above and below grade that may limit facility capacity and depth;
- Soils – Evaluate soil suitability at the site and infiltration potential to determine feasibility of infiltration and the need for underdrains;
- Public access – Consider curbside activity such as drop-offs, loading, bus stops, access to parking, and the need to maintain accessible pedestrian routes;
- Safety – Minimize potential trip or fall hazards while limiting permeable pavements to pedestrian and parking areas;
- Utilities – Avoid locations where utilities will encroach longitudinally on stormwater facilities and protect crossing utilities;
- Drainage – Locate BMPs in proximity to existing storm drain infrastructure to provide overflow/underdrain connections;
- Protection of existing built infrastructure – Locate BMPs to avoid impacts to

existing buildings, curb lines, utility poles, lighting, traffic signals, and other roadside features; and

- Maintenance access – Establish BMPs in areas where they can be readily accessed by maintenance equipment and personnel.

Types of Green Infrastructure:

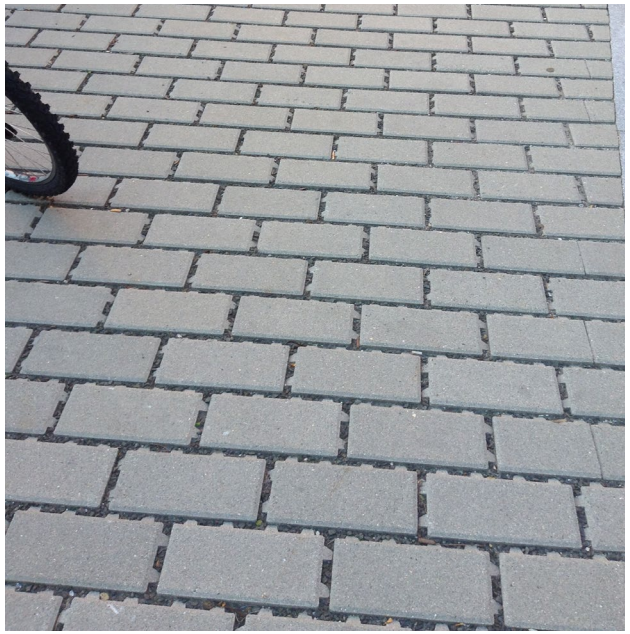
Rain Gardens & Bioretention Facilities: Rain gardens and bioretention facilities use soil and gravel layers, along with plants, to filter and treat runoff. Bioretention areas are typically designed with grading that provides temporary ponding and storage of runoff from small storm events.

Stormwater Planters / Tree Box Filters: Tree box filters and stormwater planters are similar to bioretention facilities in that they use soil and plants to filter and treat runoff; however, they are typically smaller in size. These facility types are typically used when space is limited or when infiltration is not permissible (e.g., adjacent to a building foundations or other structural elements). Given their smaller size, the use of these facilities typically requires an underdrain and/or overflow connection to a storm drain piping system.

Grass Swales and Bioswales: Grass swales and bioswales are stormwater conveyance channels that attenuate stormwater flows through soil and vegetation to filter and treat runoff while improving downstream water quality. Grass swales typically parallel roadways and are designed to reduce flow velocities and promote infiltration. Bioswales include soil media (i.e., bioretention media) to provide temporary storage volume and to facilitate infiltration while providing runoff conveyance.

Permeable Paving Materials: Permeable paving materials allow a portion of stormwater runoff to infiltrate through the pavement as opposed to traditional paving materials that divert all runoff to the storm drain system. Water permeates through the pavement into a stone reservoir below ground, ultimately allowing the water to infiltrate and recharge the water table or local waterway. Permeable materials can filter pollutants, reduce runoff flow rates, improve water quality, and reduce the volume of infrastructure necessary to direct and convey stormwater offsite.

Figure 17: Bioretention and Permeable Paving



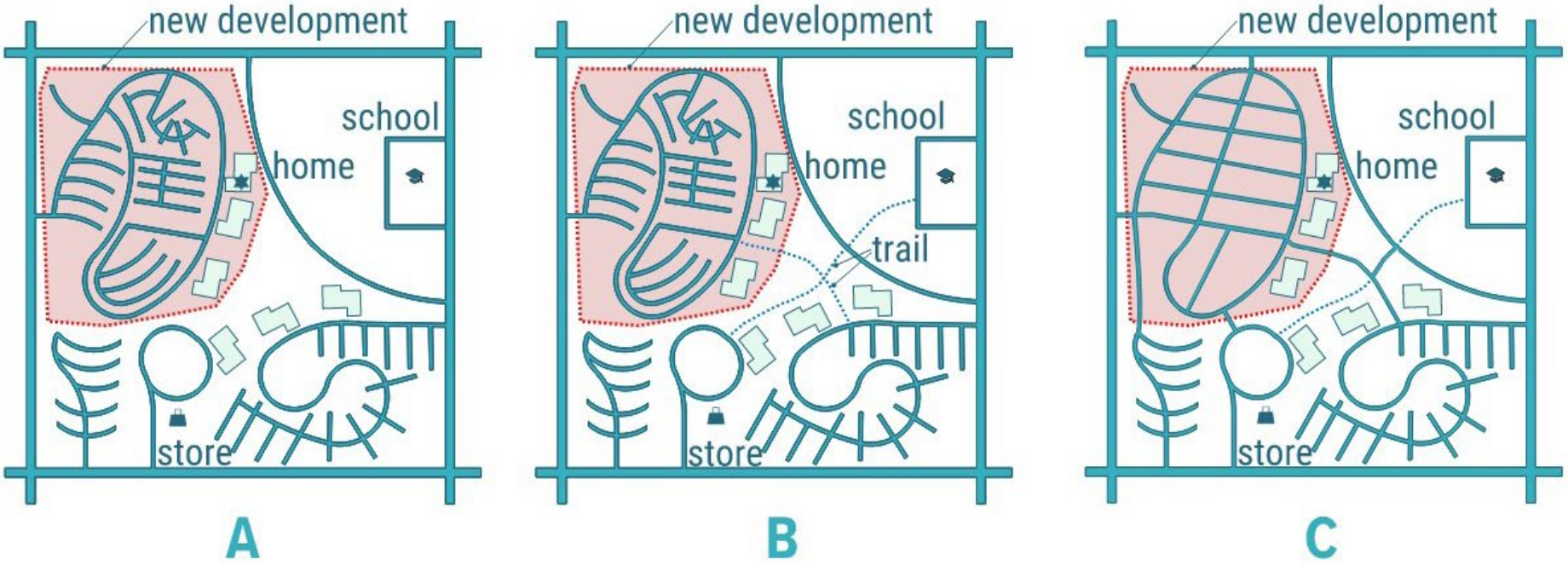
Alleviating Congestion

A more connected street network can help improve livability by reducing traffic volumes and congestion on major streets. Roadway designers should take every opportunity to improve network connectivity in the county. This includes providing connections within individual developments, between developments, and taking opportunities to close gaps in the existing street grid. In some cases, these new connections will be streets open to all travel modes. In general, developers, designers, and planners should aim to provide access in the four cardinal directions and avoid the dead-end pattern of conventional cul-de-sacs.

Figure 18 shows a hypothetical example of how trail and street connectivity can improve access through infill development in Lexington County. Whereas Option A shows conventional suburban design that limits all transportation and emergency access and promotes congestion at a single intersection:

- Option B is an improvement compared to A, because it includes a bicycle and pedestrian trail that connects the new development to the existing street network and nearby destinations.
- Option C is the preferred alternative because it provides multimodal access within the new development and multiple primary and secondary connections to surrounding land uses.

Figure 18: Trail and Street Connectivity



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Peer Funding Profiles
December 2021
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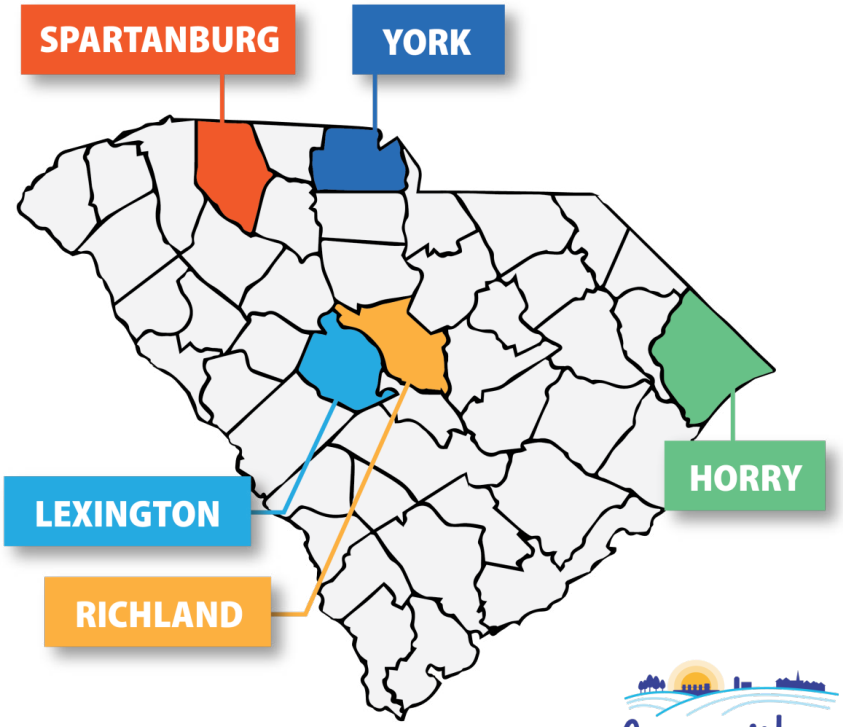
Peer Funding Profiles

Transportation funding profiles for four peer counties were created as a point of reference for Lexington County as it considers potential increases in dedicated funding for transportation planning, design, and construction.

They provide a snapshot of how each county is using local, state, and federal funding for transportation projects, based on publicly available data sources. Additional funding may be used but is not readily accessible for online review.



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Peer Counties

County	*2010 Population	*Land Area Sq. Mile	*# of Miles of Rural Roads
Lexington	262,391	700	2,412
Horry	269,291	1,134	3,004
Richland	384,504	757	2,417
Spartanburg	284,307	811	3,035
York	226,073	683	1,773

*Source: https://www.scdot.org/projects/pdf/cProgram/Apportionment20-21.pdf

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State and Federal Funding Sources

South Carolina C-Fund Program

- Is a partnership between South Carolina's counties and the SC Department of Transportation.
- The funds come from a portion of state gasoline tax revenue.
- The funds are used for the improvement of state, county and city roads as well as other local transportation projects.
- The funds are distributed to each county based on population, land area and rural road mileage.
- Projects are selected by each county's Transportation Committee.

State Transportation Improvement Program (STIP)

- Each state is required to develop a statewide transportation improvement program (STIP).
- The STIP must be developed in cooperation with metropolitan planning organizations (MPO's), public transit providers, or regional transportation planning organizations (RTPO).
- Projects are submitted for funding and must meet criteria established by the MPO or RTPO. One primary criteria is that the project is on or along a federally functional classified road.
- There are different categories of STIP funds, some of which require a local match.

State and Federal Funding

County	*SC C-Funding 2020 – 2021	**STIP 2021 -2027
Lexington	$4,057,000	$675.7 M
Horry	$4,923,600	$582.2 M
Richland	$5,041,800	$513.8 M
Spartanburg	$4,680,300	$475.9 M
York	$3,425,300	$600.5 M

*Source: https://www.scdot.org/projects/pdf/cProgram/Apportionment20-21.pdf

** Source: https://www.scdot.org/inside/planning-stip.aspx

STIP totals do not include the $1,115.9 billion system upgrade accounted for in both Lexington County's and Richland County's STIP Reports.

The STIP funds are used on Federally Functional Classified Roads

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Typical Local Funding Sources

Sales Tax	Bonds	Capital Improvements Plans/Programs	General Fund
In the state of South Carolina, upon referendum approval, a county may levy a Sales and Use Tax or a Capital Project Sales Tax of one percent on the gross proceeds of sales within the county area. The funds collected may be used for a variety of capital needs as identified during the referendum, including transportation and other projects.	The selling of bonds to investors is a long-term financing option that state and local governments use to borrow funds for public infrastructure that is repaid with interest. This funding option is popular due to the large dollar costs for capital projects that have a long-life. Types of bonds: General Obligation Lease-Revenue Traditional Revenue	Funding for a formal Capital Improvement Plan (CIP) or Program may come from a variety of sources. They typically include funds allocated from revenue collected by a jurisdiction and is included in an annual budget.	General Fund are revenue collected allocated by a jurisdiction that may include property taxes, licenses and permits, local taxes, and service charges. These funds can be allocated for capital projects and large infrastructure. In some cases, jurisdictions without formal CIPs still have this designated resource in their General Fund.

Local Funding Highlight

Horry County Sales Tax Program

RIDE 3 Penny Sales Tax

Voters elected in 2016 to support a one-cent Capital Project Sales Tax for roads.

They are estimating to receive **$592 million** over the 8-year life of the program. This averages to over **$74 million** per year.

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Local Funding Highlight

Horry County Sales Tax Program

Current Projects

- 5 paving projects: paving 100 miles of dirt roads and resurfacing 100 miles of paved roads
- 14 Road construction projects: widenings, extensions, intersection improvements, realignments
- An Environmental Study with ROW acquisition

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Local Funding Highlight

Spartanburg County

Bond Referendum

- Voters elected in 2017 to support a one-cent sales tax to be collected over 6 years.
- A total of just over $7.5 million is estimated to be collected and used for road and bridge projects over the 6 years.
- The 2017 referendum also included approval of $151.5 million for Spartanburg County Judicial facilities and $65.3 million for the City of Spartanburg City Hall and County Administrative Building.

Local Funding Highlight

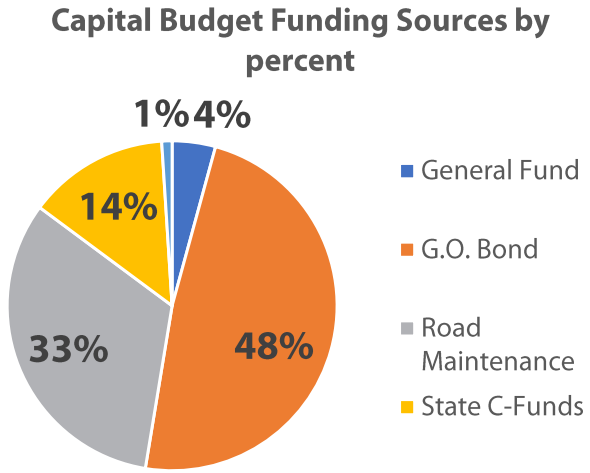
Spartanburg County
Capital Improvement Program

The City of Spartanburg also allocates funding specifically for road projects in its annual Capital Improvement Program.

Capital Budget

2019/20	2020/21	2021/22	2022/23	2023/24	5-Yr Total
$23.5M	$7.46 M	$17.4 M	$7.90 M	$17.8 M	**$74.14 M**

5-year total averages to **$9.27 million** per year over 8 years



Local Funding Highlight

York County Sales Tax Program

Pennies for Progress

1997	2003	2011	2017	20 Year Total
$99.26 M	$173 M	$186 M	$278 M	**$736.26 M**
14 Projects	25 Projects	14 Projects	16 Projects	**69 Total Projects**
20-year total averages to **$92.03 million** per year over 8 years				

Local Funding Highlight

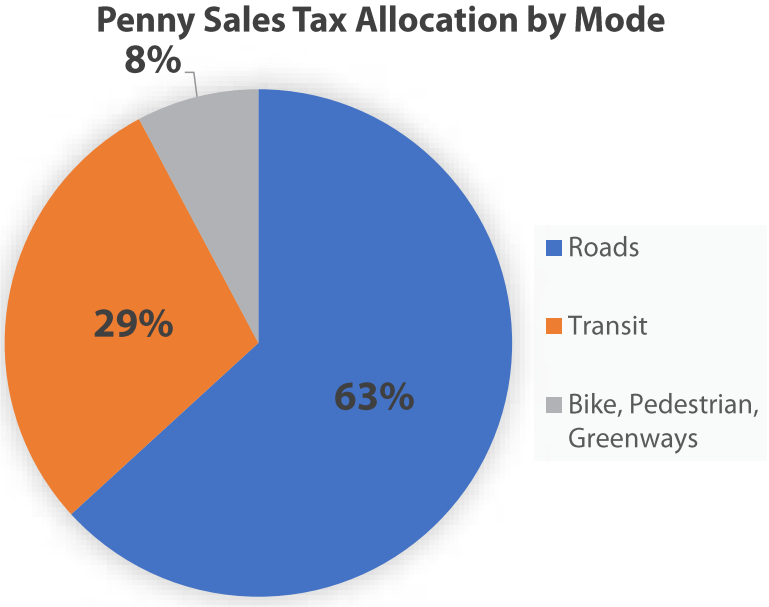
Richland County

Transportation Penny Sales Tax Program

Voters elected in 2012 to support a one-cent sales tax to be collected over 22 years.

Roads	Transit	Bike, Ped, and Greenways	22- Yr Total
$656.02 M	$300.99 M	$80.88 M	**$1,037.89** M
22-year total averages to **$129.7 million** per year over 8 years			

More than 250 projects have been completed since the inception of the Penny Program.



Local Funding Highlight

Richland County

Transportation Penny Sales Tax Program

1. **Roadways:** The total budgeted amount is $656,020,644. These funds are utilized for widenings, intersection improvements, dirt road paving, resurfacing, special projects and the Interchange Improvement at Broad River and I-20.
2. **The Comet:** The total budgeted amount is $300,991,000. These funds are utilized to improve mass transit services, through increased frequency, development of new routes, and extended routes.
3. **Bikeways, Pedestrian Improvements and Greenways:** The total budgeted amount is $80,888,356. These funds are utilized to enhance the pedestrian and bicyclist experience through bike paths, sidewalks, and greenways.