

1 INTRODUCTION AND OVERVIEW

The Augusta Regional Transportation Study (ARTS) Metropolitan Planning Organization (MPO) is in the final stage of updating its Metropolitan Transportation Plan (MTP) for 2050. This MTP document is the official multimodal transportation plan developed and adopted through the metropolitan transportation planning process for the ARTS MPO. Updated every 5 years, the MTP envisions and evaluates what the ARTS planning area would look like in the next 10, 20, or 30 years. The MTP recommends transportation projects to improve, maintain, and operate roadways and bridges, public transit, aviation, freight, multi-use trails, and sidewalks. To be eligible for federal funding, projects must be in the MTP first then in the Transportation Improvement Program (TIP). This chapter describes an overview of the ARTS MPO and 2050 MTP then discusses current demographics with future projections, and existing and future land use as important foundations to this MTP update.

1.1 Augusta Regional Transportation Study (ARTS)

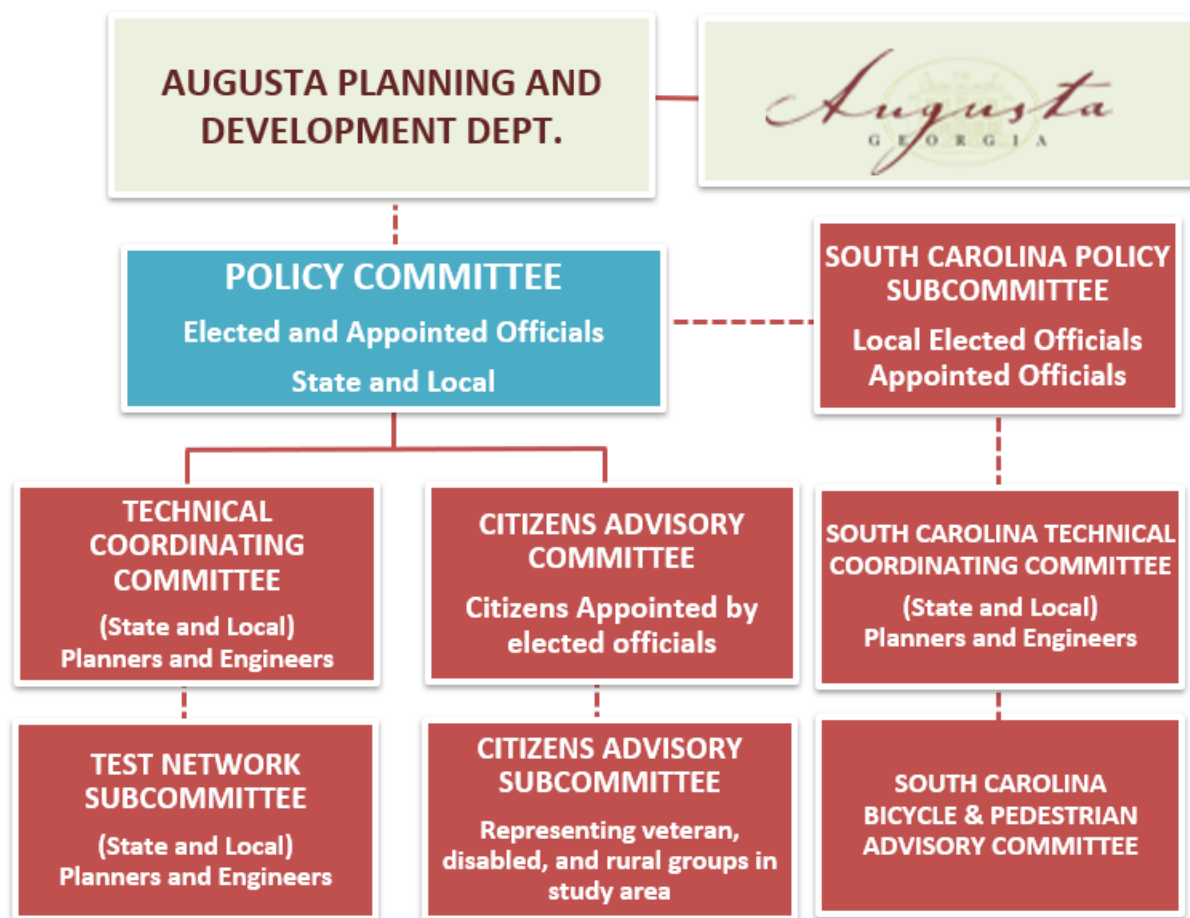
ARTS, as the MPO, is the designated bi-state regional planning entity responsible for long-range transportation planning and project selection for programming federal-aid funds in the Augusta GA – Aiken SC Metropolitan Area. ARTS is comprised of elected and appointed officials from four (4) counties; Richmond and Columbia Counties in Georgia (GA); and Aiken and Edgefield Counties in South Carolina (SC). **Figure 1-1** depicts the boundaries of the ARTS MPO, also referred to as the “ARTS planning area,” which includes all of Richmond County, the eastern portion of Columbia County, most of Aiken County, and a small portion of Edgefield County.

Other key partners in ARTS include representatives from local, state, and federal agencies who are jointly responsible for long-range transportation planning in the region. ARTS is the forum for regional cooperation and coordination in the discussion and decision-making process for programming federal aid funds for transportation investments in the ARTS planning area over the next 30 years.

The ARTS MPO functions through a four-committee structure that includes the Policy Committee (PC); South Carolina Policy Subcommittee; Technical Coordinating Committee (TCC), which includes the Test Network Subcommittee (TNSC); and Citizens Advisory Committee (CAC). Each of these four committees convenes independently or jointly several times per year. The committee structure for the ARTS MPO is presented in **Figure 1-2**.



Figure 1-1. ARTS Planning Area (2019)



Source: ARTS

Figure 1-2. ARTS Committee Structure and Framework (2020)

1.2 2050 Metropolitan Transportation Plan (MTP)

The MTP is the official multimodal transportation plan developed and adopted through the metropolitan transportation planning process for the ARTS planning area. MTP and Long Range Transportation Plan (LRTP) are interchangeable terms, and the ARTS MPO prefers to use MTP from this update onwards. The ARTS MPO approved its 2040 LRTP in 2015 which served as the basis for this MTP update. While some priorities from the 2040 LRTP have changed or been met since 2015, many of the original priorities remain. The MTP goals and priorities are discussed in Chapter 3 of this MTP document and in Technical Report #3: Development of Goals, Objectives and Measures of Effectiveness.

The MTP planning process and policy document are federally mandated and serve as a prerequisite for receiving federal transportation funding. The MTP is a long range planning document, but it also contributes to the annual Unified Planning Work Program (UPWP) and the 4-Year Transportation Improvement Program (TIP). The UPWP is an annual work program that documents the planning priorities for the ARTS planning area and describes all planning activities to be performed with transportation and transit planning funds. The TIP is a multi-year intermodal program including planning for transportation system infrastructure needs, financing and capital improvement programming and project implementation.

The ARTS MTP covers a 30-year planning horizon and is updated at least once every five years. The MTP can be amended at any time, and the ARTS Policy Committee must approve any update or amendment to the MTP. Interested parties, including the public, have an opportunity to review and comment on the MTP. Projects must be included in the MTP before being placed in the ARTS TIP.

The ARTS 2050 MTP includes long-range and short-range strategies and actions that lead to the development of an integrated multimodal transportation system in the ARTS planning area. In addition, the 2050 MTP:

- Identifies near-term demand for passenger and goods movement,
- Identifies Congestion Management System strategies,
- Identifies pedestrian, walkway, and bicycle facilities,
- Assesses capital investment and other measures to preserve the existing transportation system,
- Reflects a multimodal evaluation of the transportation, socioeconomic, environmental, and financial impact of the transportation plan,
- Reflects consideration of local plans, goals, and objectives,
- Outlines, as appropriate, transportation enhancement activities, and
- Includes a financial plan demonstrating that the identified projects can be implemented using current and proposed revenue sources.

A key outcome of this plan update is identifying or confirming local community visions and priorities, reflecting input from all transportation users through a continuing, cooperative, and comprehensive public engagement process. As shown in **Figure 1-3**, the MTP Update engaged the public continually during the plan development process, and;

1. **Recorded** existing transportation conditions in the ARTS planning area
2. **Assessed** existing and future transportation needs
3. **Recommended** projects to address identified needs
4. **Prioritized** projects using study goals, needs and public input
5. **Drafted** short-, medium-, and long-term project programs based on available and potential funding.

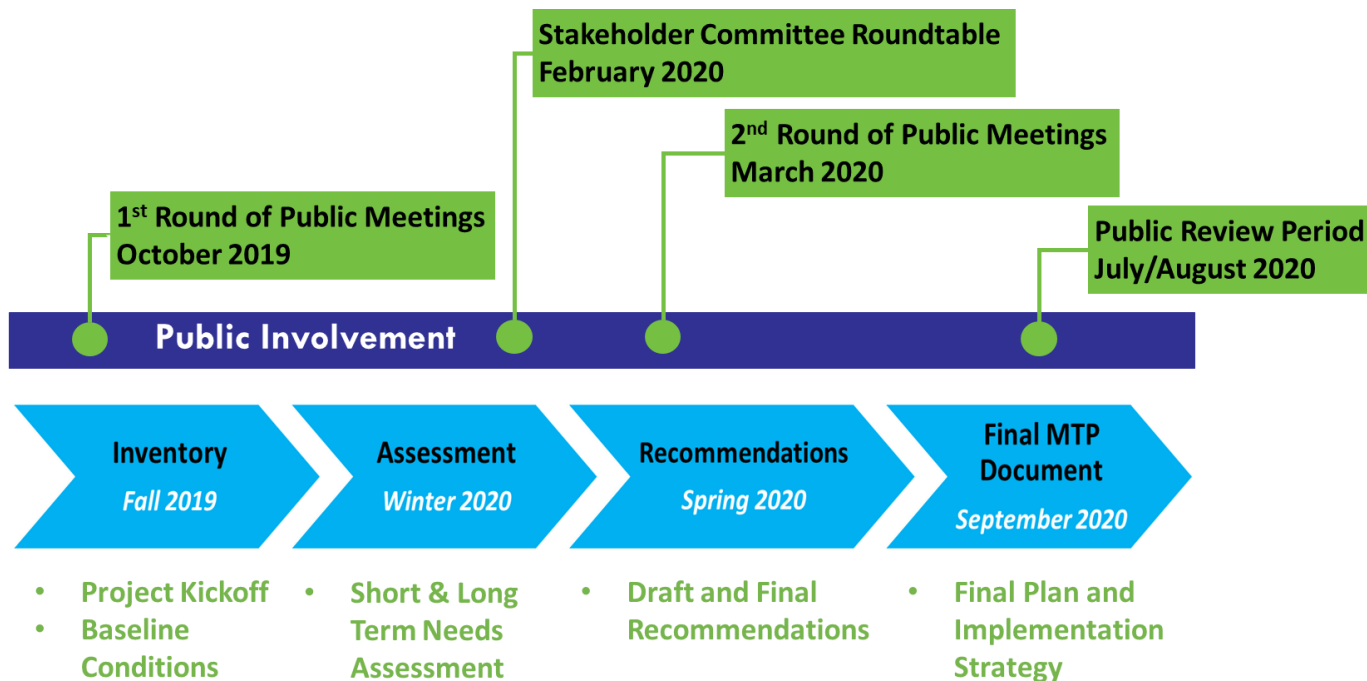


Figure 1-3. ARTS 2050 MTP Plan Development Process (2019)

1.2.1 Organization of the 2050 MTP

This 2050 MTP document is a summarized compilation of the six (6) Technical Reports that were developed during the plan development process. The individual Technical Reports, stand-alone documents with more in-depth analyses on each topic, are attached as appendices to the 2050 MTP.

- **Chapter 1 Introduction and Overview** describes key land use and demographics for both existing and future conditions. These are important foundations to the 2050 MTP (from *Technical Report #2*).
- **Chapter 2 Public Involvement** summarizes the public involvement process and outcomes from the two (2) rounds of public engagement periods (from *Technical Report #1*).
- **Chapter 3 2050 MTP Goals, Objectives, and Performance Measures** defines Goals, Objectives, and Measures of Effectiveness (GOMs) based on the 2040 LRTP, latest federal requirements and statewide guidelines, and public and stakeholder input (from *Technical Report #3*).
- **Chapter 4 Regional Transportation Network** identifies current and future multimodal transportation needs of the ARTS planning area based on regional travel patterns, system inventory, multifaceted analyses, and public input (from *Technical Report #2* and *Technical Report #5*).
- **Chapter 5 Project Development, Evaluation, and Ranking** summarizes how a list of the Universe of Projects (unconstrained “wish list” projects) was developed based on the identified needs (from *Technical Report #5*), the project prioritization process (from *Technical Report #4*), and the evaluation of the Universe of Projects list.
- **Chapter 6 Financial Plan and Project Recommendations** summarizes funding forecasts and identifies a list of financially constrained projects prioritized for short-, mid-, and long-terms throughout the horizon of the MTP 2050 (from *Technical Report #6*).

1.3 Demographics and Future Trends

ARTS is centrally located in the Central Savannah River Area (CSRA) in the principal jurisdiction of the City of Augusta. The region bisects the banks of the Savannah River bordering the States of Georgia and South Carolina. The region is home to the Augusta National Golf Club, which hosts the Masters Golf Tournament each year. This historic, world-renowned sporting event draws thousands of golfing fans and tourists to the region. The region is also home of the famed musician James Brown. Also, President Woodrow Wilson's boyhood home is in the Augusta Downtown Historic District. The National Cyber Command at Fort Gordon, Georgia and Aiken's equestrian and horse community in South Carolina also add some unique characteristics to the region.

This section reviews changes in population, demographic characteristics, and employment opportunities in the four-county area from the previous 2040 LRTP. Assessment of existing population, employment, development patterns, and other socioeconomic characteristics of the region is key to understanding the existing demand for transportation services and to identifying infrastructure needs. The socioeconomic make-up of the area also establishes which areas need improvements the most.

All socioeconomic data and existing conditions come from the United States Census' American Community Survey (ACS) unless otherwise noted. Population demographic estimates derive from the 2013-2017 ACS 5-Year Estimates because these are the most reliable data with the largest sample size available for population analysis.

1.3.1 Population

Table 1-1 includes a summary of key demographic characteristics for the four counties that are part of the ARTS planning area. Statistics are from the 2013-2017 ACS 5-Year Estimate, the most recent data at the time of this report's publication. Richmond County has the largest population with nearly 202,000 residents, while Edgefield County has the smallest population with about 27,000 residents. Columbia County has the highest average household size (3.13) in the four-county area. Richmond County has the largest share of minority and low-income populations in the four-county area with nearly 130,000 (64 percent) minority residents and 47,000 (24 percent) low-income residents.

Table 1-1. Demographic Summary (2013-2017 ACS 5-Year Estimate)

Demographic Characteristic	Georgia		South Carolina		Four-County Area
	Columbia County	Richmond County	Aiken County	Edgefield County	
Total Population	143,723	201,568	165,707	26,620	537,618
Population Density	0.77 per acre	0.97 per acre	0.24 per acre	0.08 per acre	0.38 per acre
Number of Households	45,823	72,361	65,703	9,054	192,941
Percent population in Occupied Housing Units	99.7% (143,225)	95.3% (192,160)	98.3% (162,971)	89.4% (23,787)	97.1% (522,143)
Average Household Size	3.13	2.66	2.48	2.63	2.76*
Median Age	36.4	33.7	41.0	42.6	37.1*
Percent Workers (Age 16 or More) without Access to Vehicles	1.0%	3.6%	1.7%	2.5%	2.2%
Percent Low Income Population (Income below Poverty Threshold)	8.6% (12,269)	24.2% (46,692)	16.7% (27,183)	15.5% (3,715)	17.2% (89,859)
Median Household Income	\$74,162	\$39,430	\$47,413	\$47,500	\$51,575*

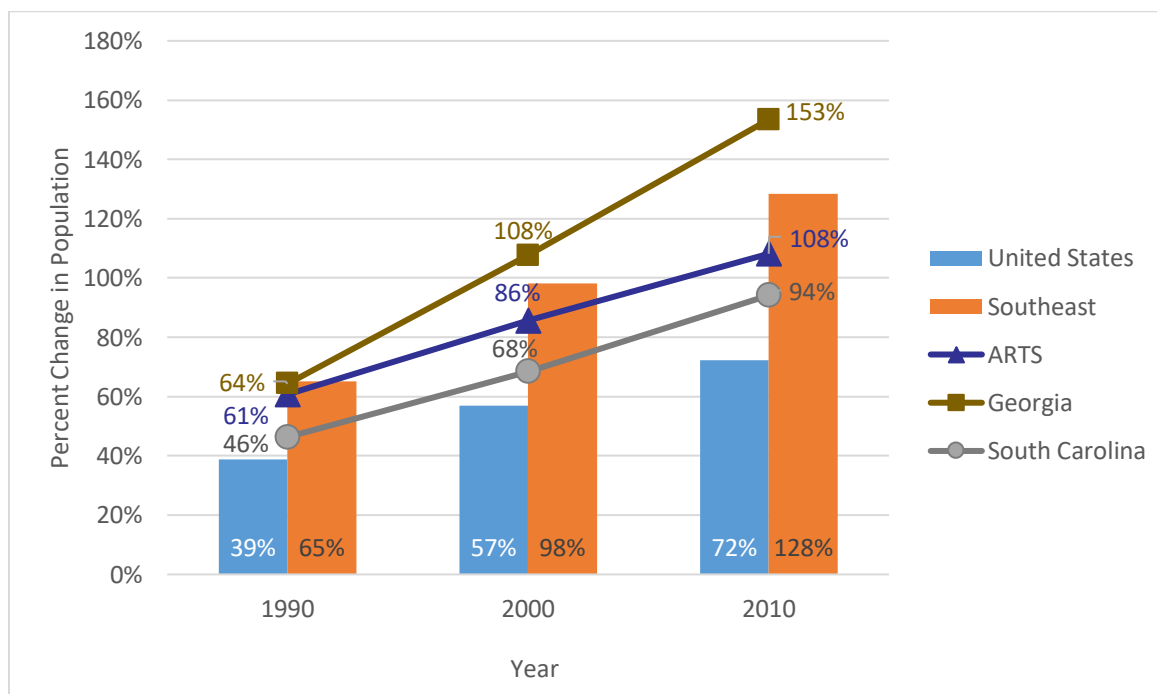
Demographic Characteristic	Georgia		South Carolina		Four-County Area
	Columbia County	Richmond County	Aiken County	Edgefield County	
Total Minority Population	42,918 (30%)	129,926 (64%)	55,262 (33%)	11,580 (44%)	239,686 (45%)
Percentage Population with Disability	11.2%	16.7%	14.1%	16.7%	14.4%
Percent Population High School Graduate or Higher (Age 25+)	92.3%	83.0%	86.2%	81.5%	86.4%
Percent Population with Bachelor's Degree or Higher (Age 25+)	34.4%	21.0%	25.8%	19.5%	26.0%

Source: 2013-2017 ACS 5-Year Estimate

*Weighted average of the respective numbers for four-counties based on their populations.

Historic Population Growth

It is important to assess the history of changes in population to accurately understand where the ARTS planning area is now and how populations may change in the future. **Figure 1-4** compares percent changes in population at different geographical levels such as the ARTS planning area, States of Georgia and South Carolina, Southeast Region, and United States from 1990 to 2010. Population in the southeastern portion of the United States has grown rapidly since 1990, as depicted in **Figure 1-4**. This graph shows the change in population over recent decades relative to the year 1960, an established base year with robust available population data selected for calculating growth rates compared to a historic reference point. Although the four-county region exhibited a slower increase in population growth than Georgia during this time frame, the growth rate still exceeded that of South Carolina and the United States overall, with its 2010 population growing to more than double what it was in 1960.

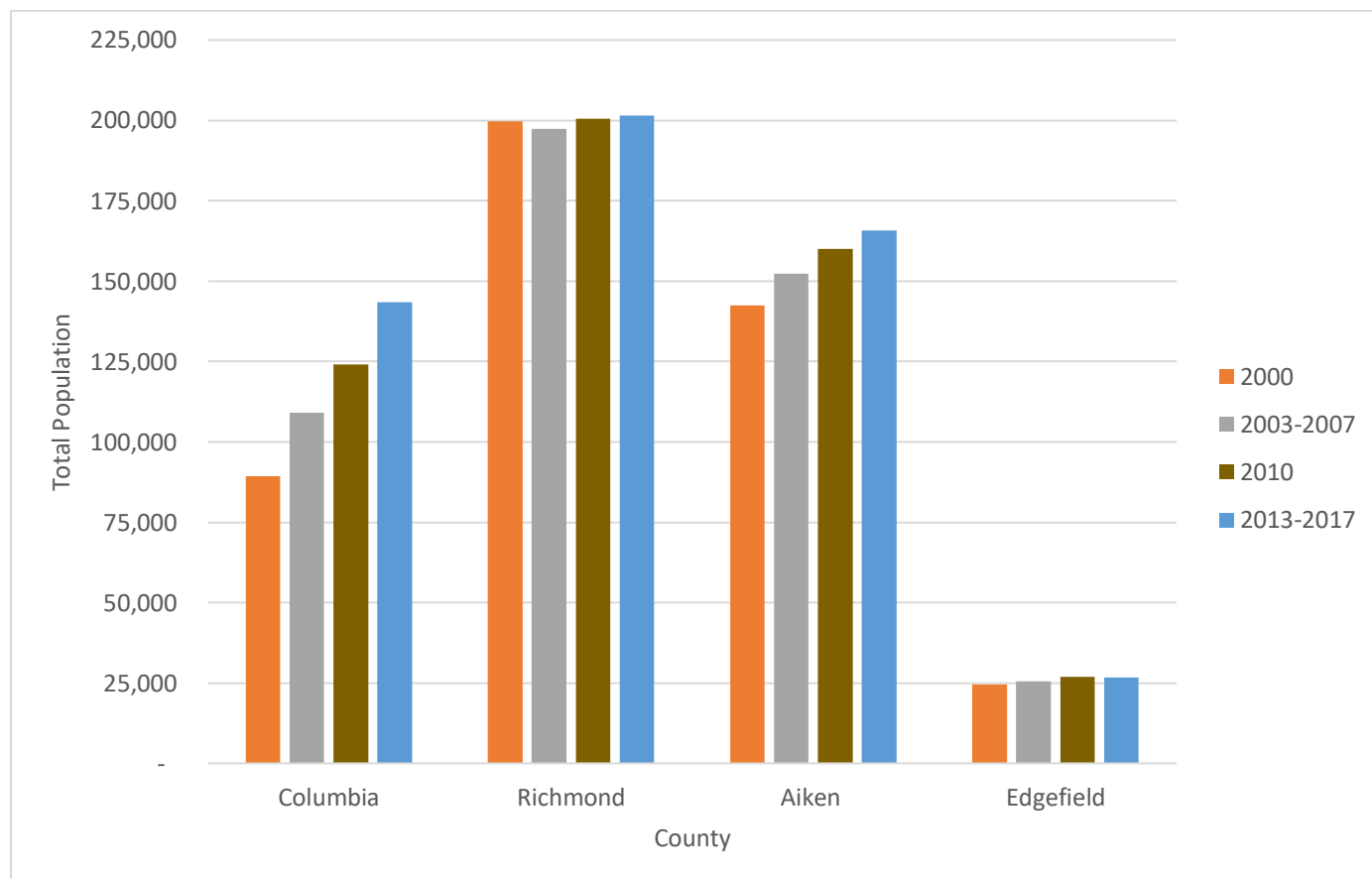


Source: ARTS 2040 LRTP (2015), 1990-2010 US Census

Figure 1-4. Population Change (1990 – 2010) Relative to Base Year 1960

As of 2017, the ARTS planning area remains the second-most populous MPO in Georgia behind Atlanta and the fourth-most populous MPO in South Carolina behind Columbia, Charleston, and Greenville. While the ARTS planning area has grown considerably in the last few decades, it is especially important to see where the growth is occurring in more recent years.

Figure 1-5 illustrates more recent changes in the population from 2000 onward in the four-county area. Population in Richmond and Edgefield Counties has stayed stable since 2000. Edgefield County experienced a minor decrease of just under two percent in population after 2010, but since then it changed course and rose by over half percent. However, Columbia County has experienced rapid growth in the past few years. It grew from under 90,000 in 2000 to about 143,723 (2013-2017 ACS 5-year estimates), an increase of over 60 percent. Aiken County also grew, albeit at a slower pace from Columbia County, from about 142,552 in 2000 to about 165,707 (2013-2017 ACS 5-year estimates), an increase of 16.2 percent.



Source: 2000 US Census, 2003-2007 ACS 5-Year Estimate, 2010 US Census, 2013-2017 ACS 5-Year Estimate

* 2017 refers to the ACS 5-year period estimate for 2013-2017

Figure 1-5. Population by County (2000-2017*)

Population Density and Distribution

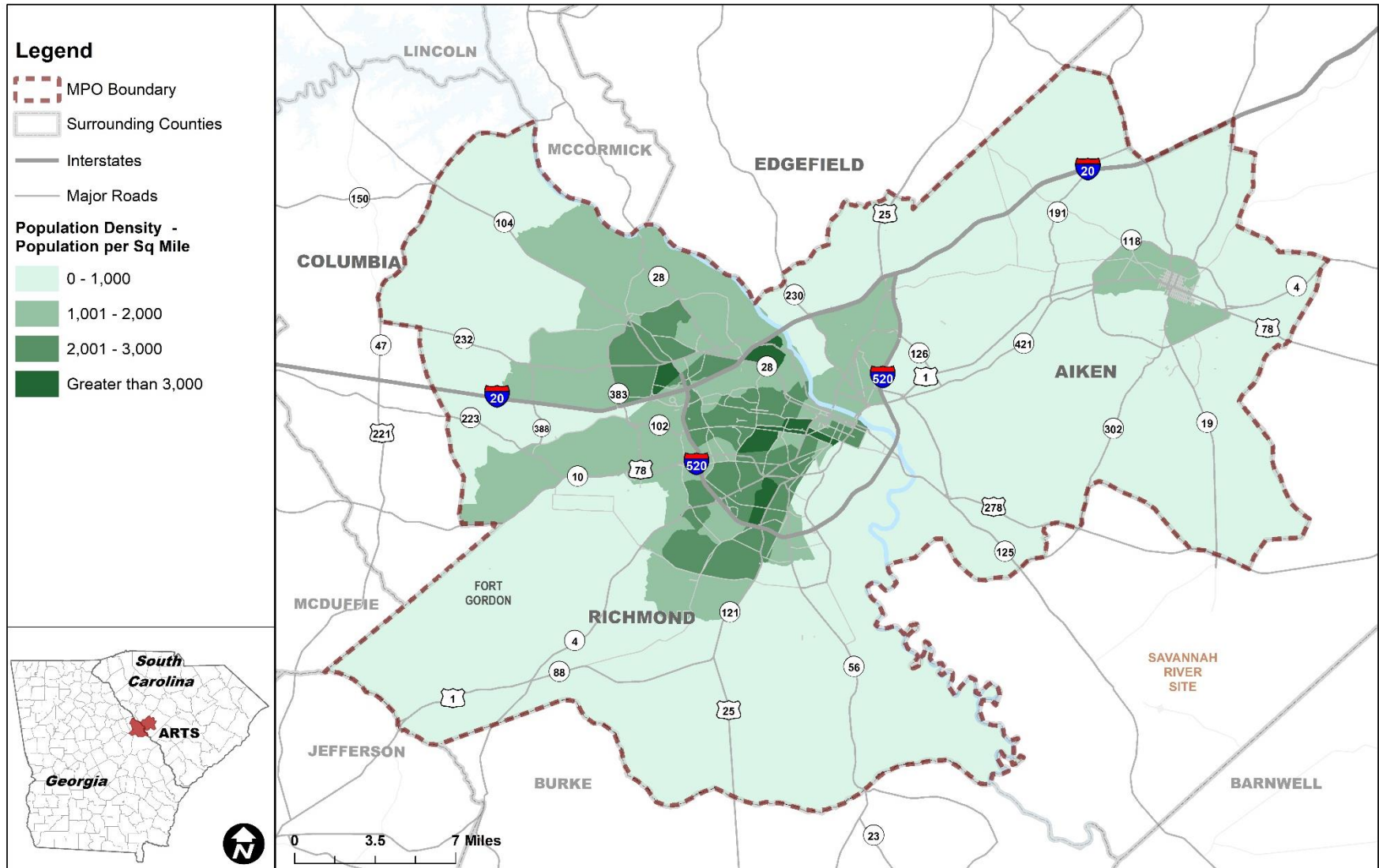
Population density measures how many people live in a specific area, such as a square mile or an acre. Urban areas tend to have a higher number of people within a given geographic area, and rural areas tend to have a smaller number of people per area. Per the 2013-2017 ACS 5-year estimate population statistics, Columbia County and Richmond County both are more densely populated than the four-county area. Conversely, Aiken and Edgefield Counties have lower population densities than the averages for the four-county area, the State of Georgia, and the State of South Carolina. Richmond County has the highest population density with nearly one person for each acre of land area in the County. Edgefield County, on the other hand has the lowest population density in the four-county area with only about 1 person for every 12 acres of land area. **Table 1-2** presents the comparison of population densities of the four counties and their respective states.

Table 1-2. Population Density (2013-2017 ACS 5-Year Estimate)

	Georgia		South Carolina		Four-County Area	Georgia	South Carolina
	Columbia County	Richmond County	Aiken County	Edgefield County			
Total Population	143,723	201,568	165,707	26,620	537,618	10,201,635	4,893,444
Land Area (acres)	185,658	207,571	685,459	320,262	1,398,950	36,808,634	19,238,848
Population Density	0.77 per acre	0.97 per acre	0.24 per acre	0.08 per acre	0.38 per acre	0.28 per acre	0.25 per acre

Source: 2013-2017 ACS 5-Year Estimate

Census tracts in northern Richmond County near Downtown Augusta and those in the eastern part of Columbia County are more densely populated than the rest of the ARTS planning area. Census tracts in the cities of North Augusta and Aiken were also understandably denser than the rest of Aiken County.

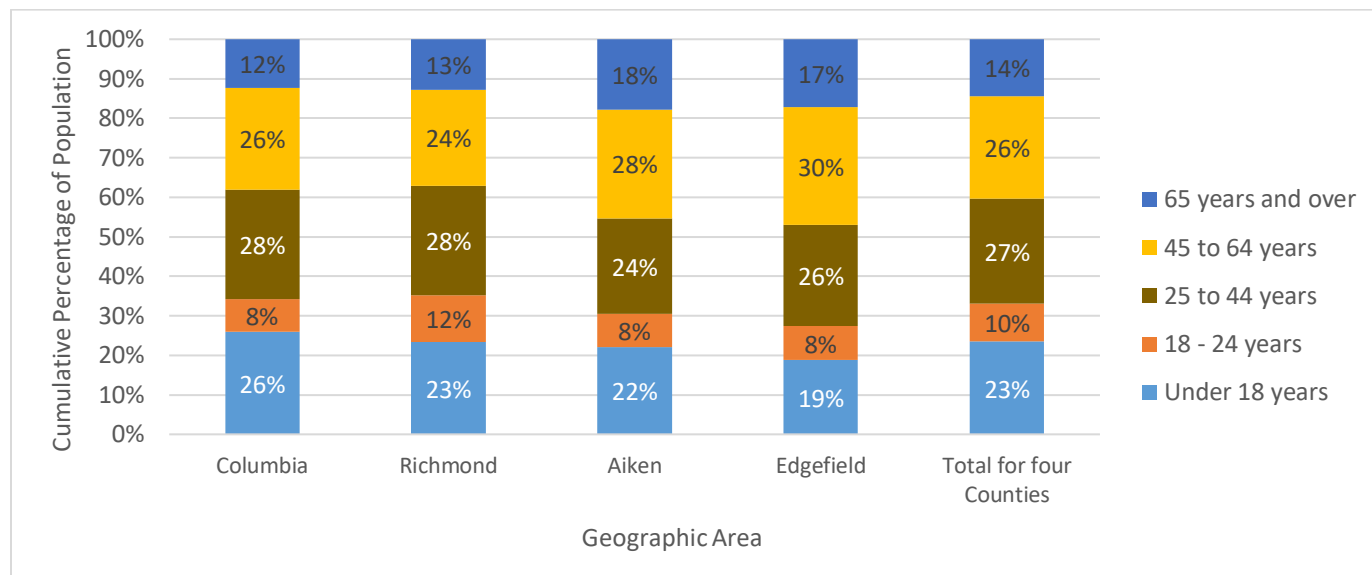


Source: 2013-2017 ACS 5-Year Estimate

Figure 1-6. Population Density by Census Tract (2013-2017 ACS 5-Year Estimate)

Age/Generations

Figure 1-7 illustrates the 2017 age distribution in counties in the ARTS planning area. Columbia and Richmond Counties have higher proportions of the population in younger age groups, and Aiken and Edgefield Counties have higher proportions of the population in older age groups.

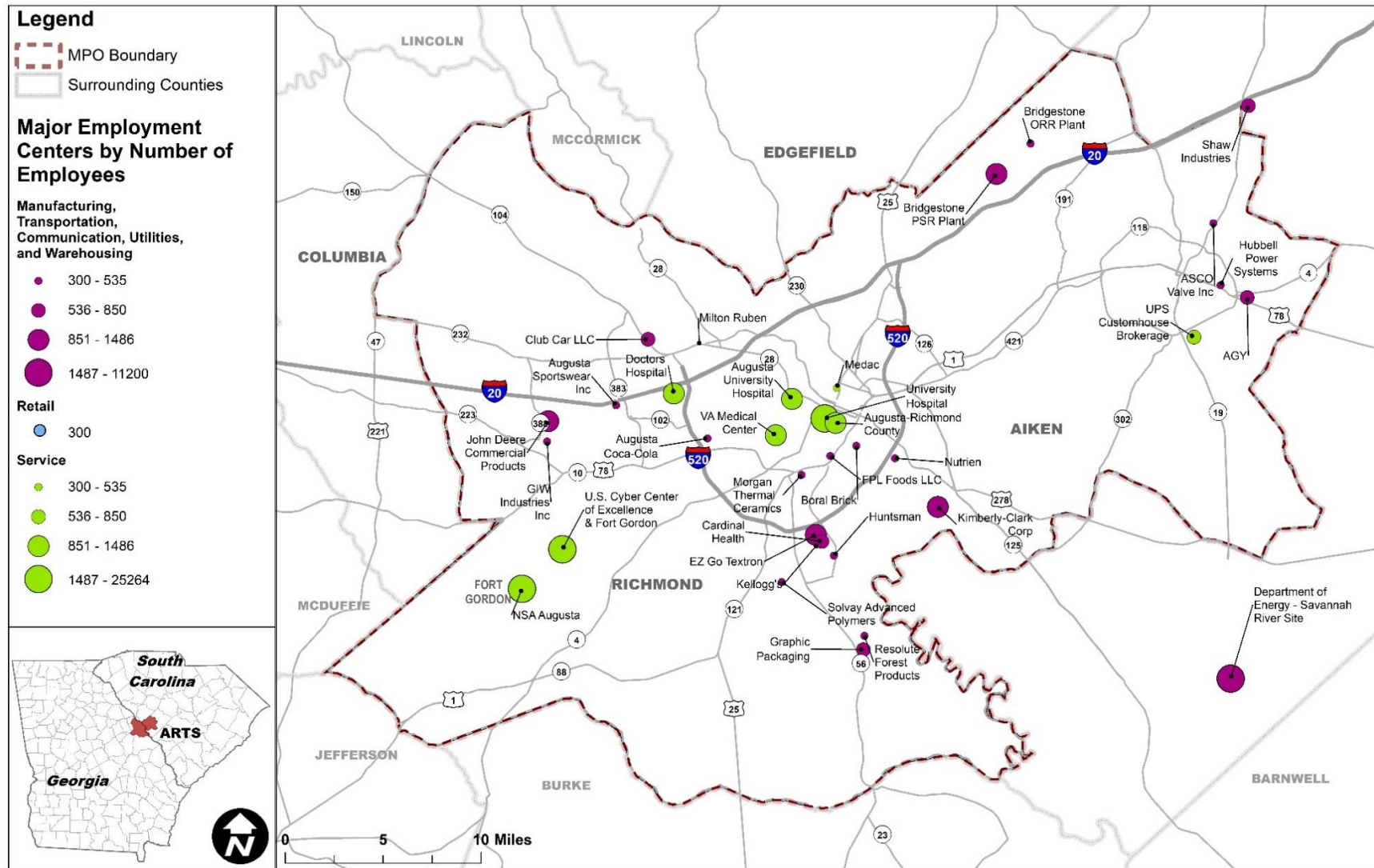


Source: 2013-2017 ACS 5-Year Estimate

Figure 1-7. Population Age Groups by County (2013-2017 ACS 5-Year Estimate)

1.3.2 Jobs and Economy

Transportation plays a critical role in developing and shaping communities by providing access to employment and other activities. In other words, transportation infrastructure forms the foundation of opportunities for economic growth in the region. According to the 2017 National Household Travel Survey (NHTS), trips made to and from work, as well as trips due to work-related business, accounted for 16 percent of annual person miles traveled and 13 percent of all person trips. Thus, in addition to the number of housing units provided, the presence of employment sites within an area is a significant contributor to overall traffic. This section analyzes current employment data, collected from the Georgia Department of Labor and South Carolina Department of Employment and Workforce, to understand the nature of current employment opportunities within the ARTS planning area. **Figure 1-8** illustrates major employment centers within and in close proximity to the ARTS planning area, such as the US Cyber Center of Excellence, Fort Gordon, Savannah River Site, and Augusta University Hospital, by their sectors and number of employees.

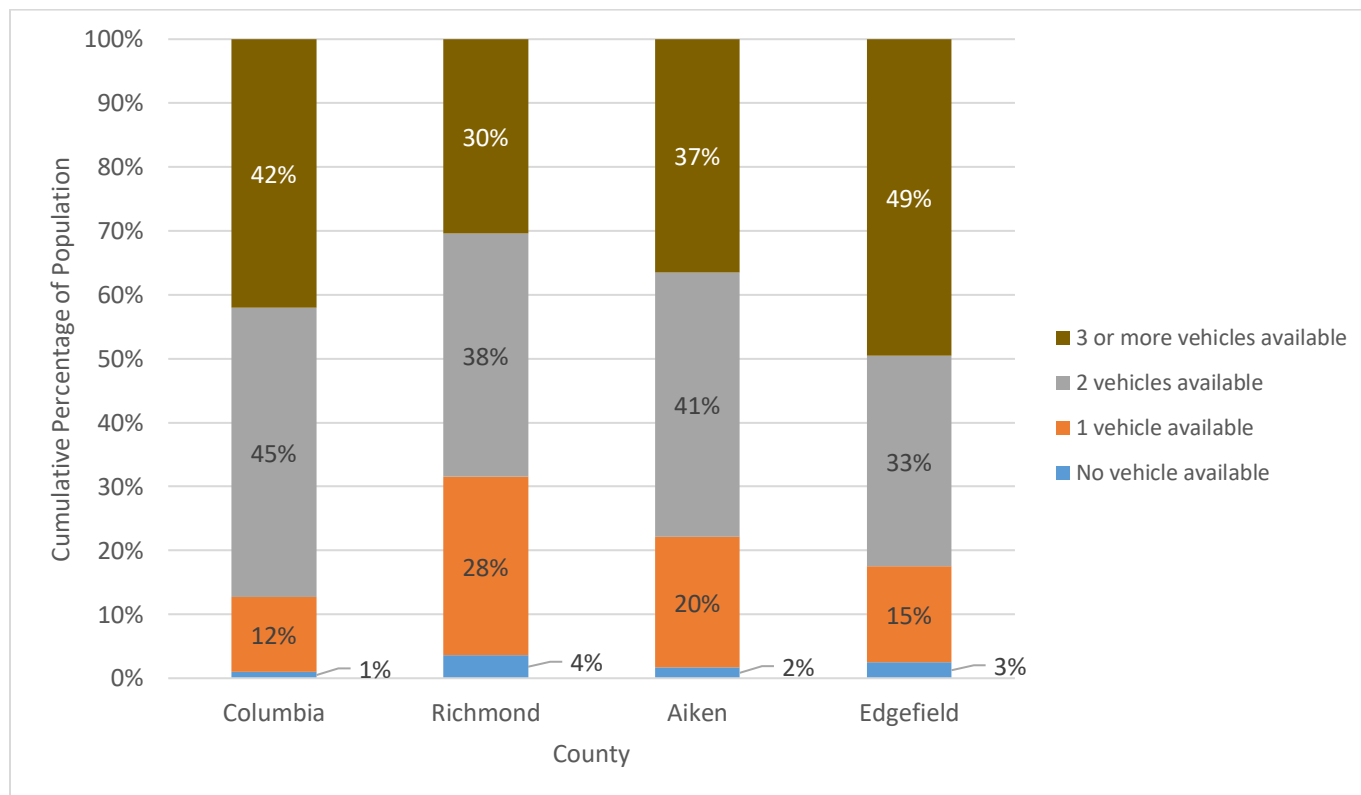


Source: Augusta Economic Development Authority, Development Authority of Columbia County, Aiken Chamber of Commerce

Figure 1-8. ARTS Planning Area Employment Centers (2019)

Vehicle Availability

The four counties in the ARTS planning area contain approximately 193,000 households. **Figure 1-9** illustrates the percentage of these households without access to a vehicle. Richmond County has the highest percentage of such households at nearly 4 percent, while Columbia County has the smallest with about one percent of households without access to a vehicle.



Source: 2013-2017 ACS 5-Year Estimate

Figure 1-9. Percent Households by Number of Vehicles Available (2013-2017 ACS 5-Year Estimate)

Employment Status

Table 1-3 provides a summary of employment status in the ARTS planning area relative to state and national levels. Columbia and Edgefield Counties have lower unemployment rates than do the rest of the planning area, Georgia, South Carolina, and United States. Richmond County has the highest unemployment rate compared to the other counties in the ARTS planning area.

Table 1-3. Employment Status of Residents (2013-2017 ACS 5-Year Estimate)

Area	Population 16 Years and Over	Civilian Labor - Employed	Civilian Labor - Unemployed	Armed Forces	Not in Labor Force
Columbia County	111,009	56.9%	3.5%	3.3%	36.3%
Richmond County	159,145	49.5%	6.5%	3.4%	40.6%
Aiken County	133,252	53.1%	5.3%	0.3%	41.4%
Edgefield County	22,350	46.6%	3.7%	0.1%	49.7%

Area	Population 16 Years and Over	Civilian Labor - Employed	Civilian Labor - Unemployed	Armed Forces	Not in Labor Force
Four-County Area	425,756	52.4%	5.2%	2.2%	40.2%
South Carolina	3,926,466	55.5%	4.3%	0.8%	39.3%
Georgia	7,985,333	57.7%	4.7%	0.6%	37.1%
United States	255,797,692	58.9%	4.1%	0.4%	36.6%

Source: 2013-2017 ACS 5-Year Estimate

Employment Sectors

Statistics shown in **Table 1-4** reflect the proportions of jobs located within a geographic area, regardless of employee's county of residence. The ARTS planning area has similar job shares to the states of Georgia and South Carolina and the nation in various sectors, including Retail, Information, Transportation and Warehousing, and Utilities, and Other Services except Public Administration. Notably, Edgefield County has comparatively higher shares of jobs in the Agriculture, Forestry, Fishing and Hunting and Mining, and Manufacturing industries than the other ARTS planning area counties, both states, and the country. Likewise, Richmond and Columbia Counties have comparatively higher shares of jobs in the Educational Services, and Health Care and Social Assistance sector. Richmond County also has a notably higher proportion of jobs in Arts, Entertainment, and Recreation, and Accommodation and Food Services.

1.3.3 Future Trends

Future projections of socioeconomic data are an integral part of developing the MTP and will be used as foundations for estimating existing as well as future travel demand within the area. A base year of 2015 and future horizon year of 2050 were used in this process. Socioeconomic data projections were developed in close coordination with local planning partners and GDOT during the planning process for forecasting future population, household and employment within the ARTS planning area.

The 2050 population and employment projections use the following data sources for reference:

- Georgia Governor's Office of Planning and Budgeting (OPB)
- South Carolina Revenue and Fiscal Affairs Office (RFAO)
- American Community Survey (ACS)
- Projections from Local Comprehensive Plans
- Woods & Poole
- REMI Data
- Georgia Statewide Travel Demand Model (GSTDM) 2015/2050
- 2010/2040 ARTS LRTP Projections

Using the above data sources, blended annual growth rates were estimated for population and employment for four counties respectively. For Edgefield County's population, the annual growth rate of 1.08% from Edgefield County 2019 Comprehensive Plan was used per the County's direction, as it was assumed to be a more likely indicator of the future growth for the County.

The total control numbers for population and employment were calculated for all four counties using the recommended annual growth rates, which were approved by the local planning partners. Household Size Trends (population/household) were used to project 2050 households based on 2050 population projections and estimated

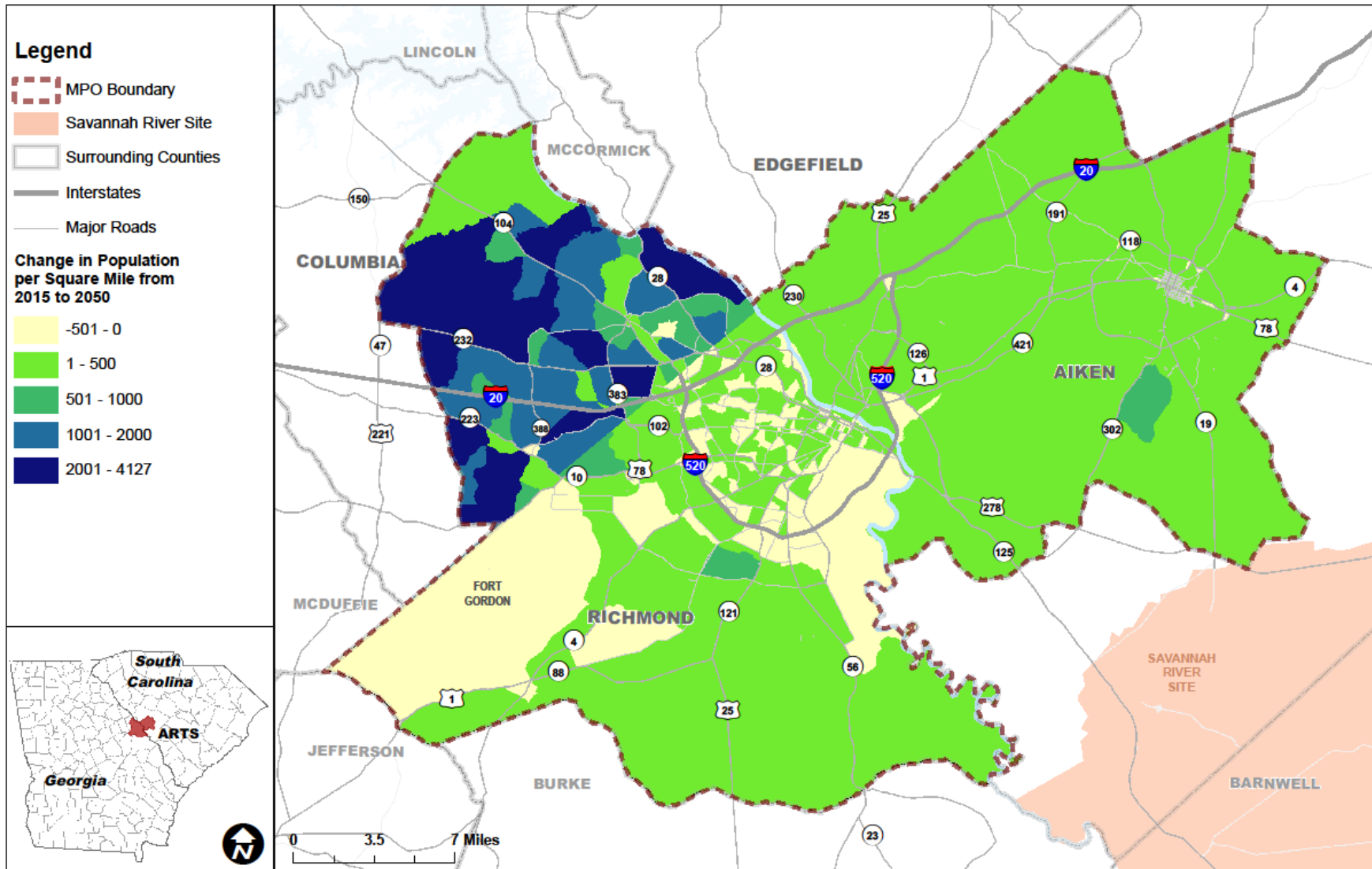
household size in 2050. The 2050 control totals for population, households, and employment are shown in **Table 1-4**.

Table 1-4. 2050 Control Totals for Population and Employment Projections (Model Run 2019)

County	2050 Total Population	2050 Total Household	2050 Total Employment	Population Growth (2015 – 2050)	Households Growth (2015 – 2050)	Employment Growth (2015 – 2050)
Columbia	263,005	96,975	50,357	125,223 (91%)	46,868 (94%)	19,733 (64%)
Richmond	205,836	77,248	150,359	12,958 (7%)	5,440 (8%)	23,049 (18%)
Aiken	197,142	89,062	64,556	33,715 (21%)	15,491 (21%)	20,850 (48%)
Edgefield	34,669	13,556	10,469	10,859 (46%)	4,457 (49%)	1,170 (13%)
Grand Total	700,652	276,841	275,741	182,755 (35%)	72,256 (35%)	64,802 (31%)

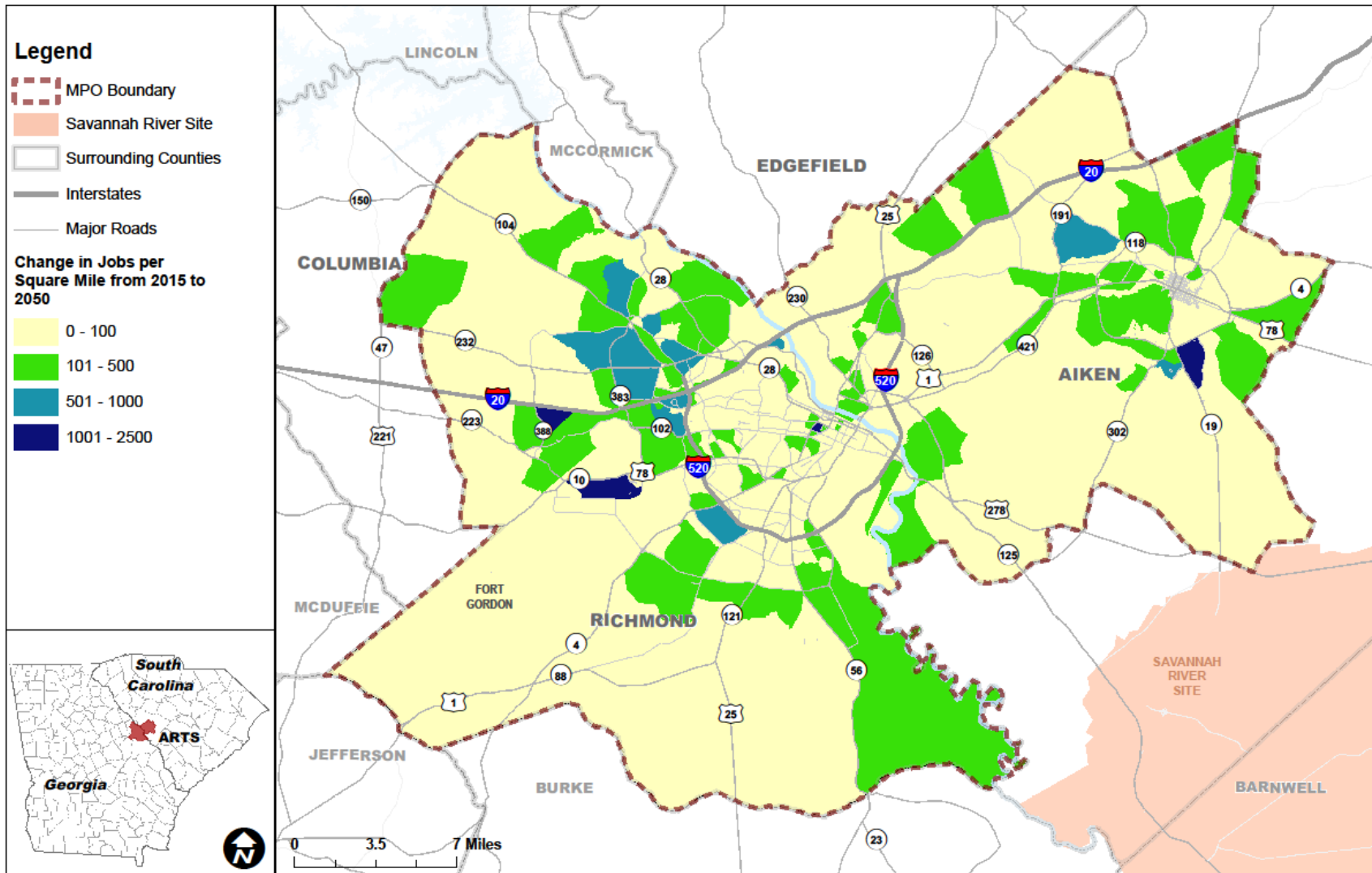
Source: OPB, RFAO, ACS, Edgefield County (2019), Woods & Poole, REMI, GSTDM, ARTS MPO (2010)

The future forecast indicates that significant population and employment growth is expected in Columbia and Aiken Counties. Columbia County is expected to nearly double its population from the 2015 estimates, adding nearly 125,000 residents to the County by 2050. Similarly, employment growth of nearly 64 percent is expected in Columbia County. Aiken is not far behind with nearly 48 percent growth in the number of jobs. Population in Richmond County, on the other hand, is projected to stay relatively stable with an increase of about 7 percent, but the number of jobs in Richmond County is expected to grow by 18 percent, adding nearly 23,000 jobs. **Figure 1-10** and **Figure 1-11** illustrate growth in population and employment in the ARTS planning area. High growth in population and employment may also suggest some capacity and operational improvements to accommodate this growth. With growth patterns spread across the planning area, it is essential to accommodate inter-county connections, including those for transit and non-motorized modes.



Source: GDOT - ARTS Travel Demand Model Update, First Network Analysis (2019), GDOT - ARTS Travel Demand Model Update, Third Network Analysis (2019)

Figure 1-10. Modeled Population Growth per Square Mile for Traffic Analysis Zones (TAZ) in the ARTS Planning Area, 2015 to 2050



Source: GDOT - ARTS Travel Demand Model Update, First Network Analysis (2019), GDOT - ARTS Travel Demand Model Update, Third Network Analysis (2019)

Figure 1-11. Modeled Job Growth per Square Mile for TAZs in the ARTS Planning Area, 2015 and 2050

1.4 Environmental Justice Considerations

Historically, minority and low income populations have been underrepresented in the transportation decision-making process. This section describes the methods by which these populations were identified in the ARTS planning area and how these populations were engaged in the MTP Update process. Specifically, identification of underrepresented population centers helped inform potential sites for information distribution, public engagement activities and meetings.

Executive Order 12898 defines Environmental Justice (EJ) populations as persons belonging to any of the following groups:

- Black/African American;
- Hispanic;
- Asian American;
- American Indian or Alaskan Native; and
- Low Income – a person whose household income is at or below the poverty guidelines established by the US Department of Health and Human Services (HUD).

The ARTS MTP outreach process went beyond the federal definition of EJ populations for minority and low income to include other groups such as senior population, population with limited English proficiency (LEP) and households without access to a vehicle. Areas that exceed the threshold for low-income or minority EJ status were areas of focus for EJ outreach during the MTP Update. EJ outreach included coordination with organizations that represent the interests of Environmental Justice populations of concern, including churches, neighborhood and advocacy groups. Preliminary inquiry into the ARTS planning area's population indicates the presence of minority communities consisting of Black/African American, Asian and Hispanic persons.

At a minimum, the EJ component of the engagement strategy also included:

- Distribution of study information via public libraries and social and community organizations as they express interest or are identified through the stakeholder process.
- Translation services, as needed, to ensure suitable communication.
- Distribution of notification of public involvement opportunities to EJ media outlets.

Considering the reach of the transportation systems to such populations, it is important to provide comprehensive transportation solutions to all residents of the ARTS planning area. Actively engaging this population in the planning process itself is also important.

1.4.1 Environmental Justice Assessment

Environmental Justice thresholds for the five categories discussed in this section are summarized in **Table 1-5**. These thresholds were derived from the four-county area average in each category. **Figure 1-17** illustrates the number of categories that exceed their respective threshold for each census tract. While any census tract that exceeds the EJ threshold for at least one category will be considered an EJ area, census tracts with higher numbers of categories exceeding their thresholds indicate a potentially more sensitive area that will likely need some special attention in the planning process. Any project recommendations made in these areas would be assessed further for any impacts to specific EJ neighborhoods and communities.

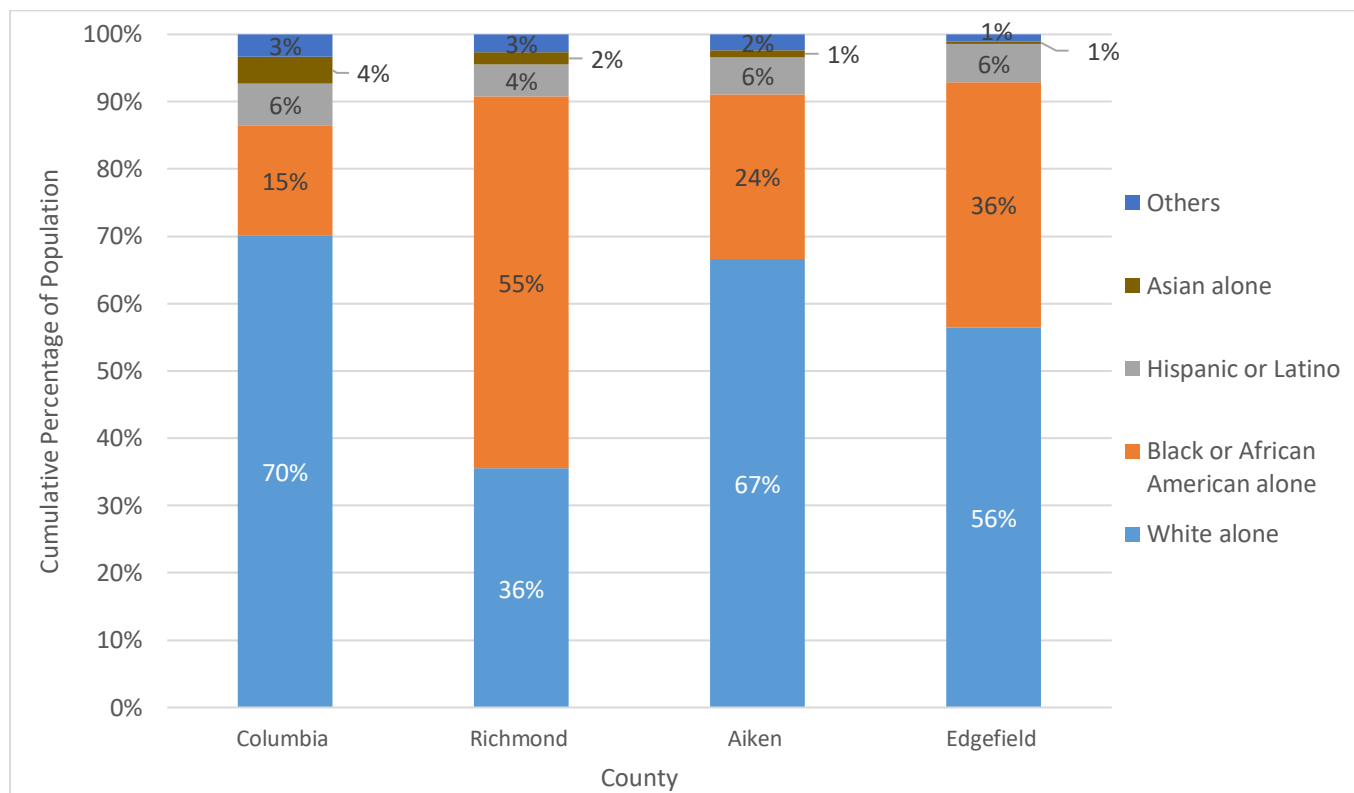
Table 1-5. Environmental Justice Thresholds in the ARTS Planning Area (2013-2017 ACS 5-Year Estimate)

Demographic	ARTS Planning Area	Threshold
Total Population	460,015	-
Occupied Household Units	165,311	-
Minority Population	211,252	45.9%
Seniors	65,245	14.2%
Population with Income below Poverty Line	78,145	17.5%
Population that can Speak English less than "Very Well"	11,477	2.7%
Housing Units without a Vehicle	11,184	6.8%

Source: 2013-2017 ACS 5-Year Estimate

1.4.2 Race and Ethnicity

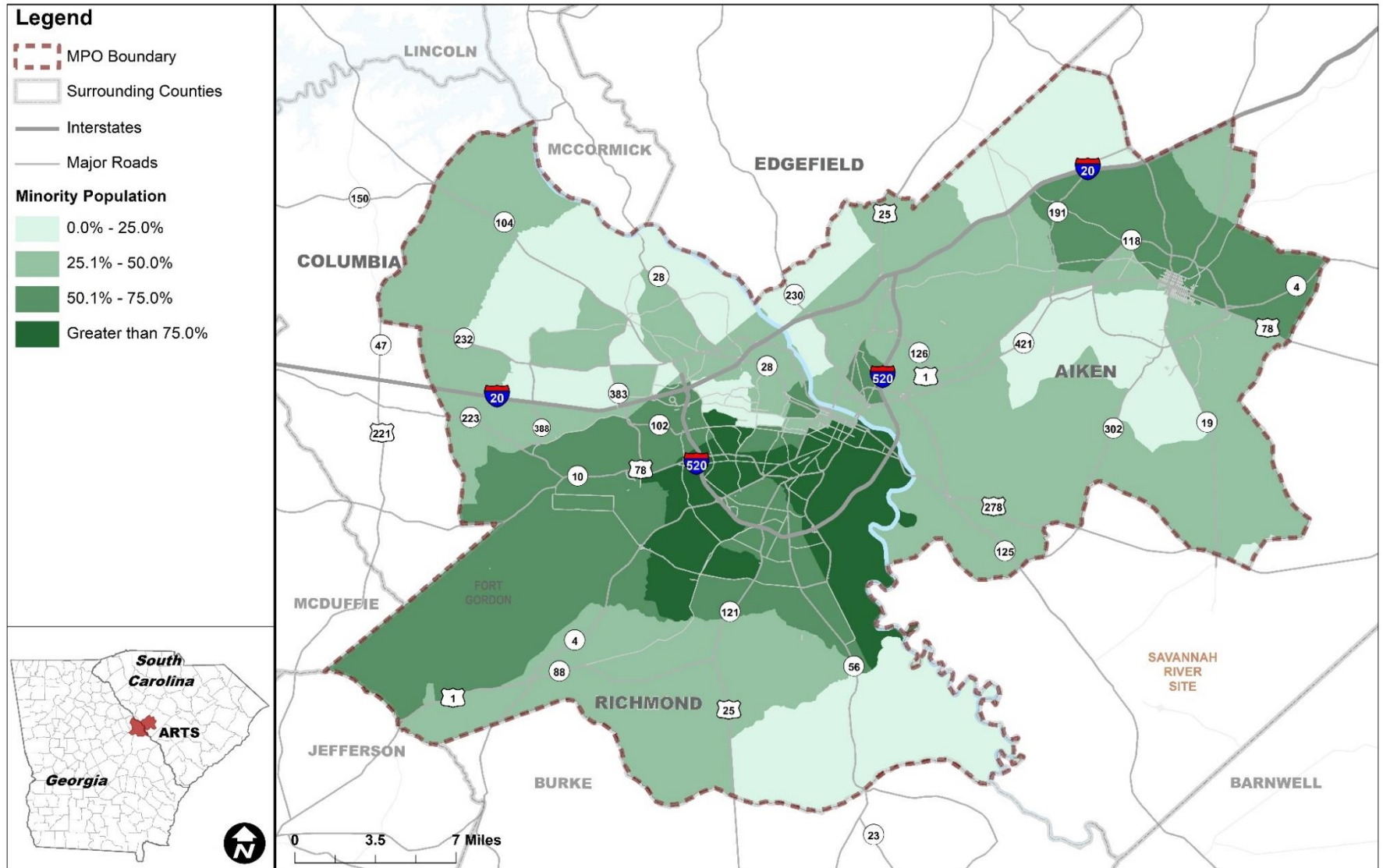
Figure 1-12 summarizes racial composition for each of the counties in the ARTS planning area. Richmond County has the highest proportion of minority communities at nearly 65 percent of the population; the majority of the population in Richmond County is Black or African American (nearly 55 percent). Columbia County has the lowest percentage of minority population, about 30 percent. Aiken County has a comparable share of minority population with about 34 percent.



Source: 2013-2017 ACS 5-Year Estimate

Figure 1-12. Racial Composition by County (2013-2017 ACS 5-Year Estimate)

Figure 1-13 provides further details about geographical distribution of minority populations in the ARTS planning area. In many Richmond County census tracts, minority populations make up 50 percent or more of the population. Some census tracts in southeastern parts of Columbia County bordering Richmond County and the Cities of Aiken and North Augusta also have minority populations of 50 percent or more. In some areas in the eastern and central parts of Richmond County, minority populations make up 75 percent or more of the population.

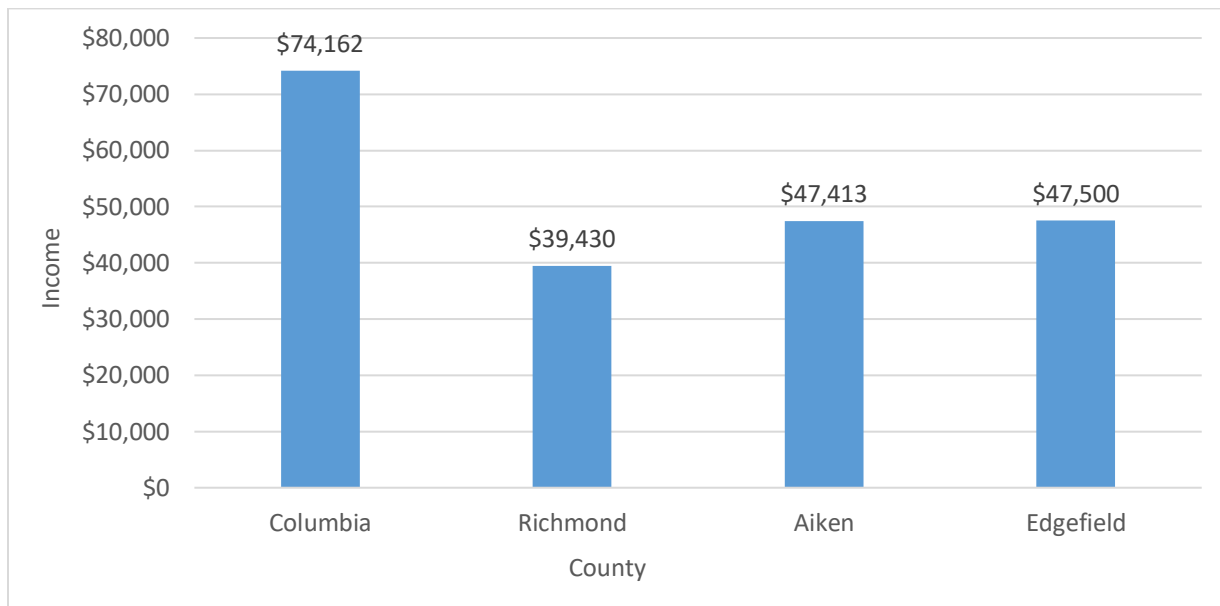


Source: 2013-2017 ACS 5-Year Estimate

Figure 1-13. Percent Minority Population in ARTS Planning Area by Census Tract (2013-2017 ACS 5-Year Estimate)

1.4.3 Income

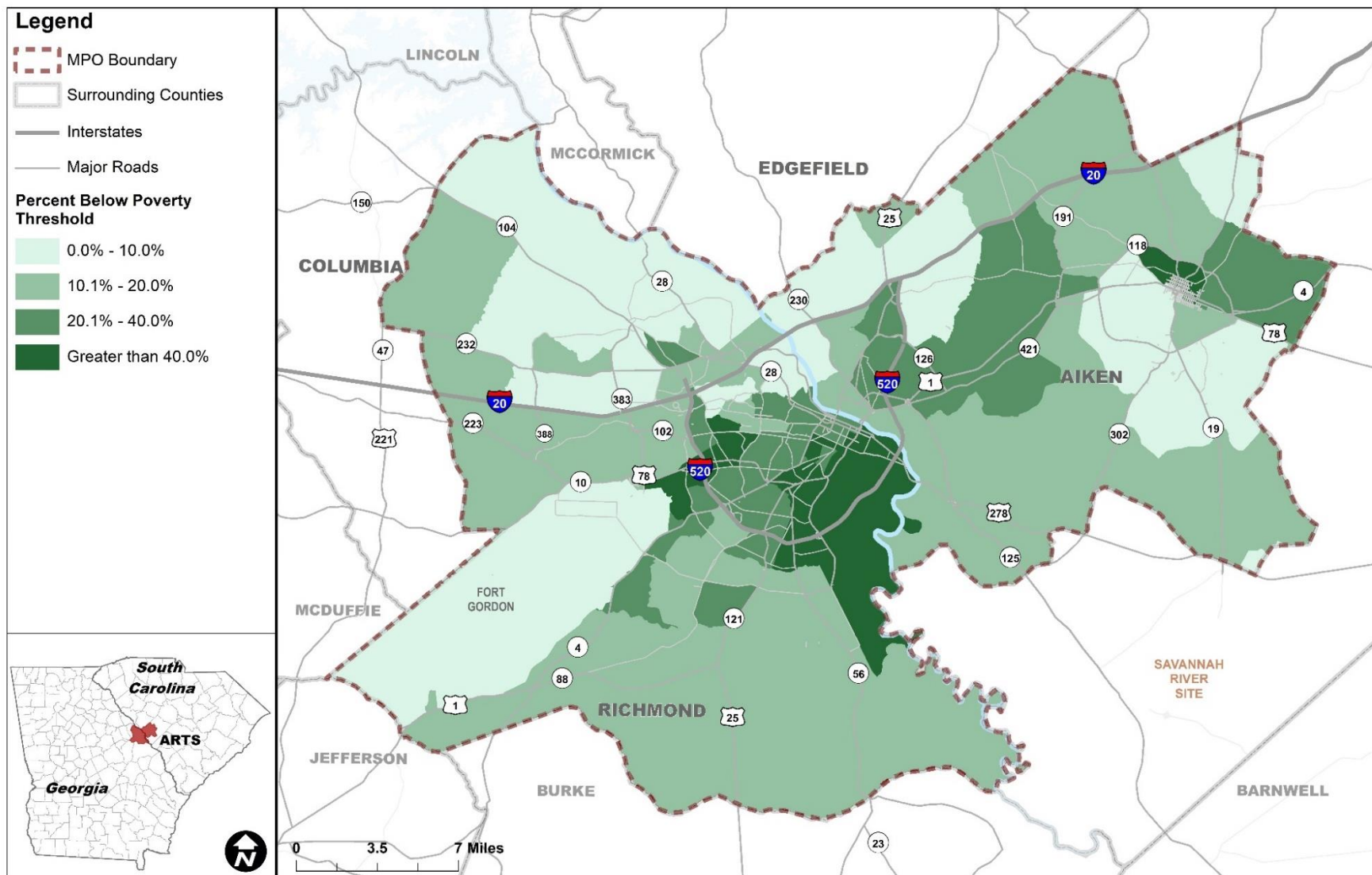
Columbia County has the highest median household income at nearly \$74,000, while Richmond County has the lowest at about \$39,000 (see **Figure 1-14**). Nearly 30 percent of households in Richmond County have incomes below \$30,000, compared to about 13 percent of households in Columbia County. Columbia County has just above 30 percent of households with incomes above \$100,000, while about 13 percent of households in Richmond County have incomes at this level.



Source: 2013-2017 ACS 5-Year Estimate

Figure 1-14. Median Income by County (2013-2017 ACS 5-Year Estimate)

ACS provides an estimate of population with household income below poverty line (also known as poverty threshold). **Figure 1-15** illustrates the geographic distribution of individuals below the poverty threshold in the ARTS planning area. Census tracts in the northeastern portion of the City of Augusta, tracts northeast of Fort Gordon, and the City of Aiken have higher concentrations of individuals below the poverty threshold. Nearly 20 percent of the individuals in Richmond County have incomes below the poverty threshold, while large portions of Columbia, Aiken, and Edgefield Counties have populations with 10 percent or fewer individuals below the poverty threshold.

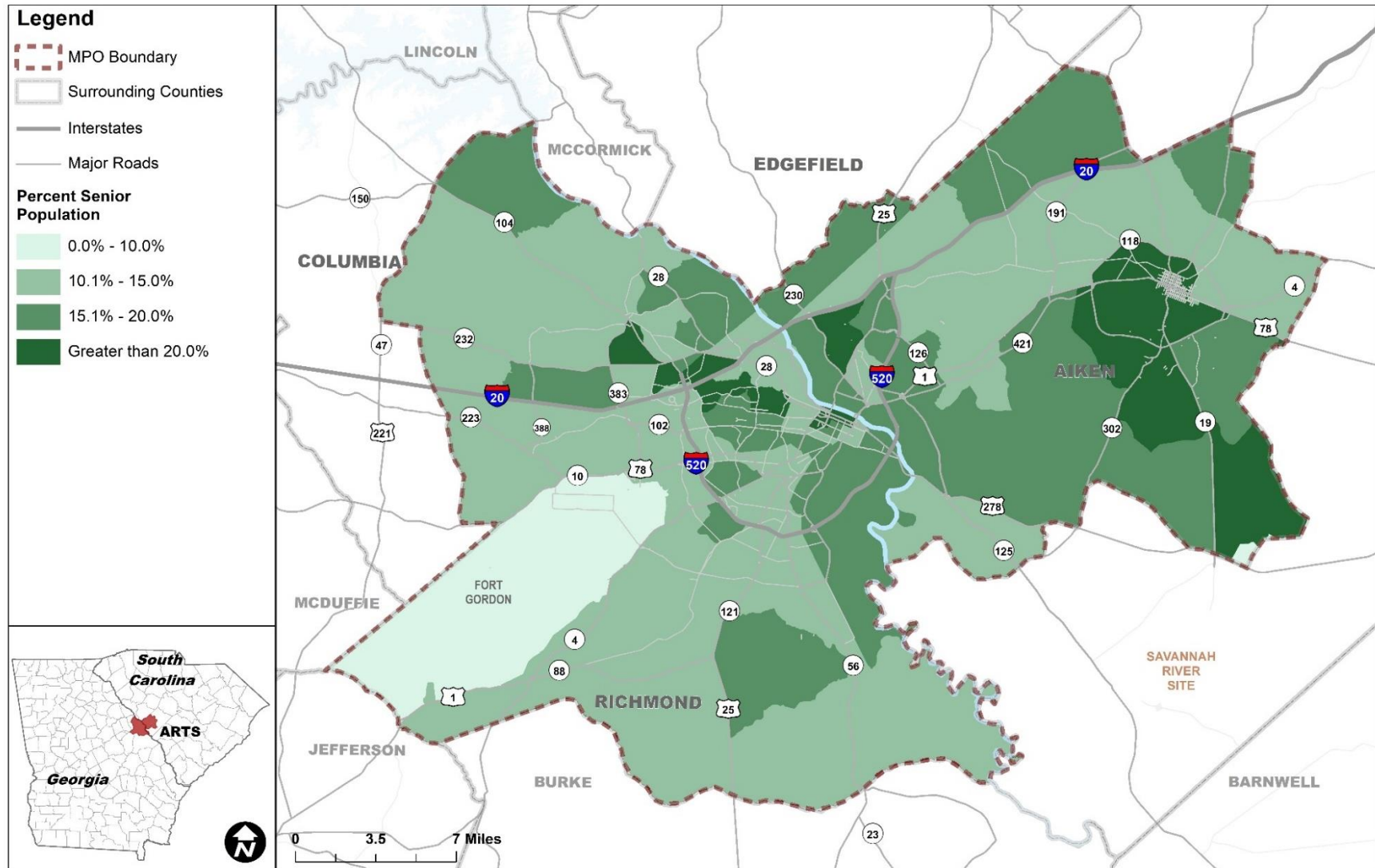


Source: 2013-2017 ACS 5-Year Estimate

Figure 1-15. Population Below Poverty Threshold in ARTS Planning Area by Census Tract (2013-2017 ACS 5-year Estimate)

1.4.4 Senior Population

Figure 1-16 illustrates the geographical distribution of the senior population age 65 or above in the ARTS planning area. Census tracts near the City of Aiken, northern parts of the City of Augusta, and eastern parts of Columbia County have higher shares of senior populations.

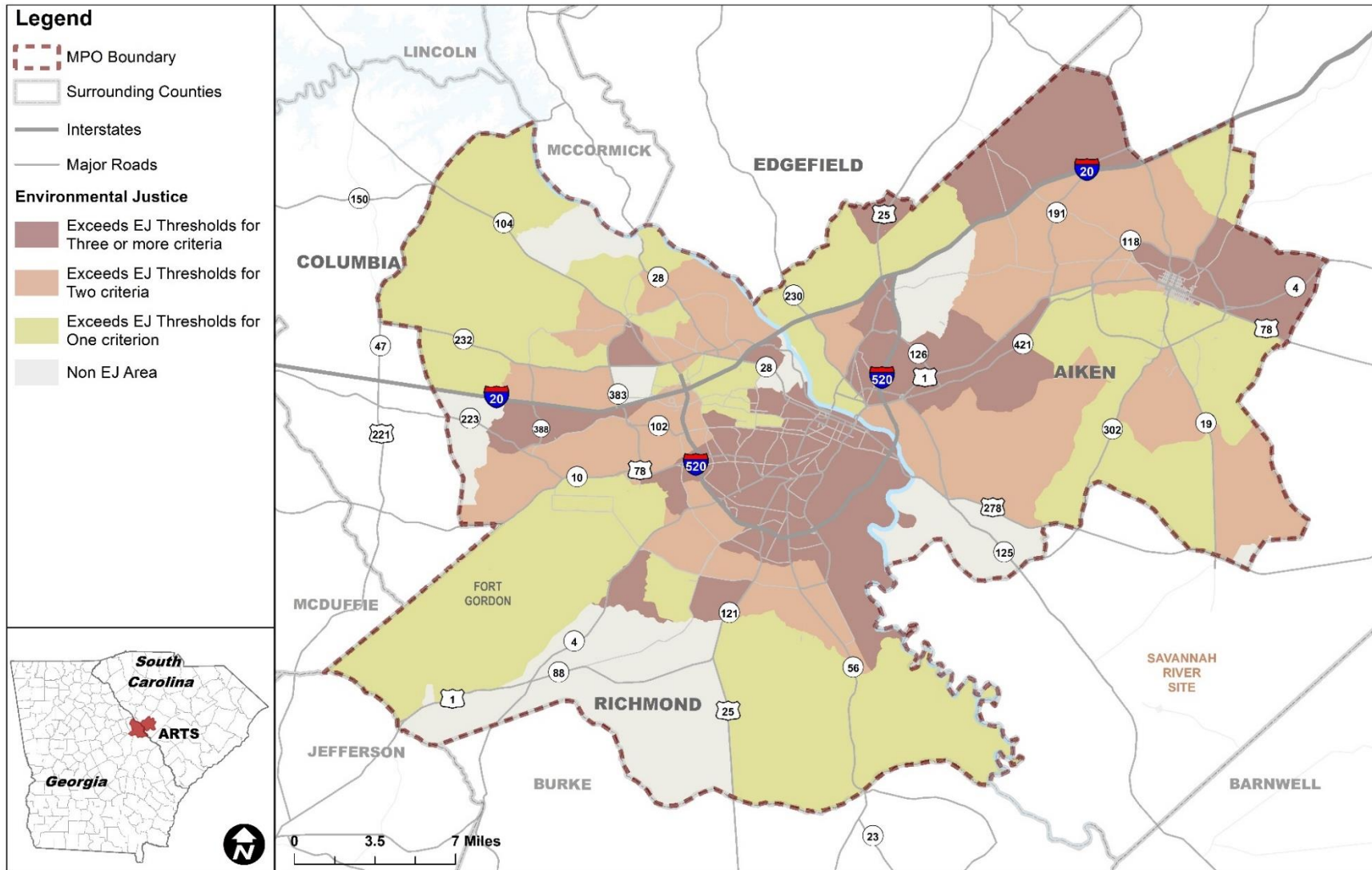


Source: 2013-2017 ACS 5-Year Estimate

Figure 1-16. Percent Senior Population-Age 65 or Above by Census Tract (2013-2017 ACS 5-year Estimate)

1.4.5 Population with Limited English Proficiency

The Census defines the LEP population as individuals greater than 5 years of age and speaking English less than “very well”. The LEP population in the ARTS planning area includes people speaking Spanish, Asian, and Indo-European languages. The LEP population needs to be given special attention during the planning process to effectively include all groups within the ARTS planning area. About 2.7 percent of the population in the ARTS planning area was identified as LEP. The planning process for the MTP update has incorporated translations of project-related surveys and key materials into Spanish and Korean languages to widen the reach of public input.



Source: ARTS 2040 LRTP (2015), 2013-2017 ACS 5-Year Estimate

Figure 1-17. Environmental Justice Areas by Census Tract (2013-2017 ACS 5-Year Estimate)

1.5 Land Use

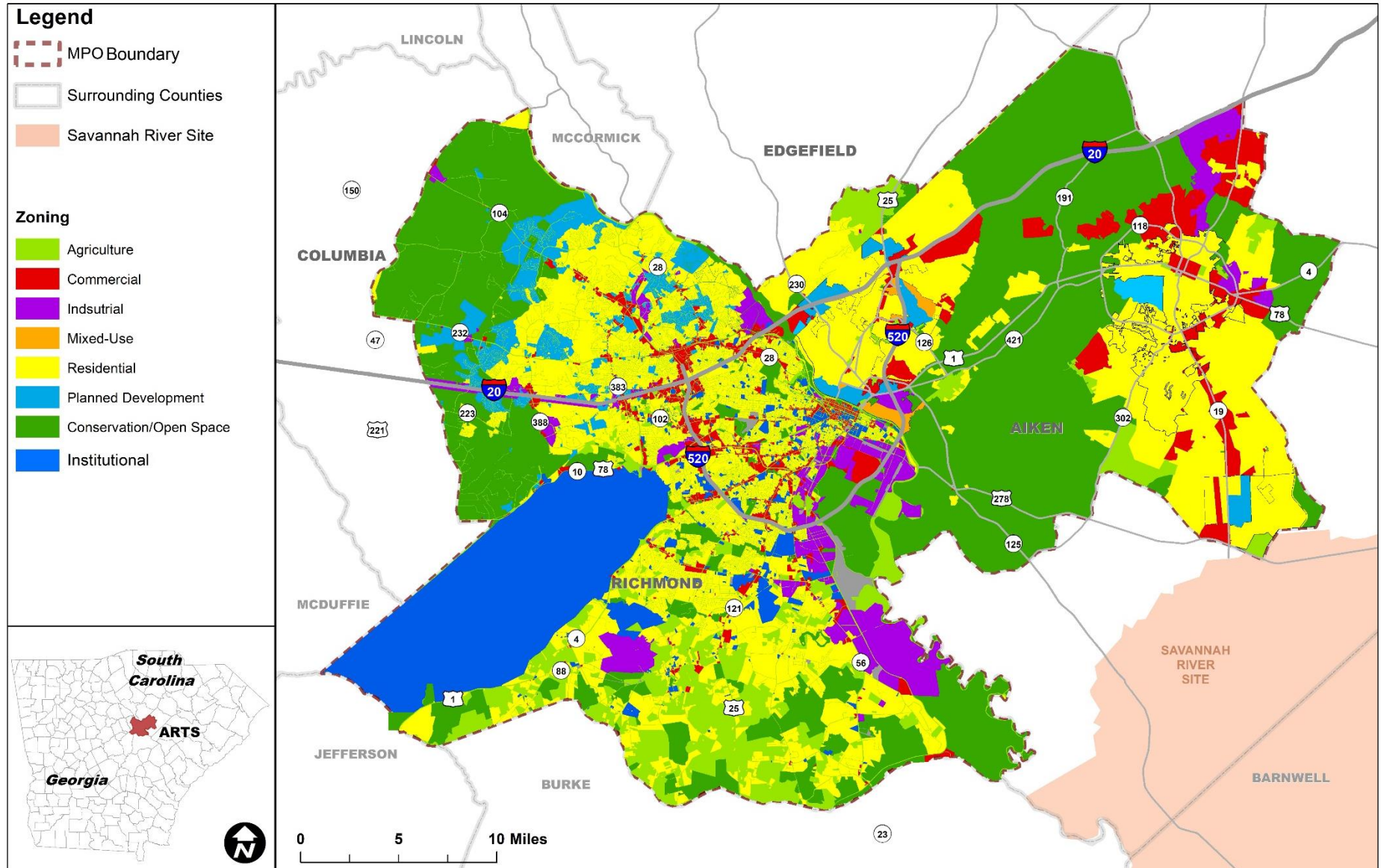
Linking land use and transportation decisions would allow for effective mobility and efficient movement of persons and goods and promote coordinated land use and development patterns. This section summarizes existing and future land uses and expected growth in the ARTS planning area to identify key areas for consideration during this MTP update.

1.5.1 Existing Zoning

Figure 1-18 illustrates the existing development patterns. These land uses are based on each individual county's and city's adopted zoning maps, and categories have been combined to simplify the display and emphasize the primary land use within each zone. There are several limitations to this type of map: zoning is not land use, so there may be clusters of existing land uses not depicted here. In addition, several areas within the ARTS boundary do not have publicly available zoning information, such as Fort Gordon.

There are large swaths of residential land use throughout central Augusta, eastern Columbia County, Edgefield County, and the southeastern portion of Aiken County. Areas that permit multifamily residential development ("Residential MF") are likely denser and may require additional mobility infrastructure including sidewalks, trails and bicycle facilities. Likewise, areas marked for "planned development" may require transportation infrastructure improvements in anticipation of future demand.

Commercial and business development typically cluster along arterial and collector streets, especially near areas of higher residential density. Large employers and industrial land uses are generally located along railroad lines, interstate highways or in the center of the city or county.



Source: ARTS MPO, Aiken County, Columbia County

Figure 1-18. ARTS Planning Area General Zoning Categories (2019)

1.5.2 Future Land Use

Chapter 3 of the Technical Report #2 describes the existing and future land use in the ARTS planning area in further detail. A summary of the future land uses is provided below.

In Columbia County, planned concentrated density in southeastern Columbia County may indicate a need for future capacity improvements and corridor enhancements. Activity centers and town centers may indicate a need for additional mobility infrastructure for vehicles as well as pedestrians and cyclists. The City of Grovetown aims for radial open space corridors, land uses that transition from a dense urban character to a suburban residential character, and mixed use in the north part of the city.

Richmond County's future land use plan calls for commercial, industrial, and office development primarily centered on the interstates, while continuing to strengthen employment centers in the urban center of Augusta. Low density and rural residential land uses are prescribed mostly outside of I-520. These development patterns will determine locations with the greatest need for increased connectivity.

Unincorporated Aiken County's land use goals include preservation of rural and agricultural land. Development should be highly context-sensitive and located primarily in existing urban areas. The City of Aiken, on the other hand, has primarily residential land uses with some commercial clusters and corridors. These locations may require additional connectivity and increased transportation infrastructure capacity.

The City of North Augusta sets forth a future land use plan illustrating large areas of mixed-use development and a primary commercial corridor, indicating that these locations will need additional connectivity and mobility capacity in the future. Abundant residential land use may indicate a large portion of people commuting outside of the area for work and recreation.

The portion of Edgefield County within the ARTS planning area is primarily residential with only a small neighborhood commercial corridor. This may indicate a high demand for transportation infrastructure during commuting hours for the people who live in Edgefield and work elsewhere.

Chapter 1 Key Points

- The Augusta Regional Transportation Study (ARTS) Metropolitan Planning Organization (MPO) is in the final stage of updating its Metropolitan Transportation Plan (MTP) for 2050. Updated every 5 years, the MTP is the official multimodal transportation plan developed and adopted through the metropolitan transportation planning process for the bi-state ARTS planning area: all of Richmond County and the eastern portion of Columbia County in Georgia; and part of Aiken County and a small portion of Edgefield County in South Carolina.
- As of 2017, the ARTS planning area remains the second-most populous MPO in Georgia behind Atlanta and the fourth-most populous MPO in South Carolina behind Columbia, Charleston, and Greenville. Areas in northern Richmond County near Downtown Augusta and those in the eastern part of Columbia County are more densely populated than the rest of the ARTS planning area.
- Significant population and employment growth is expected in Columbia and Aiken Counties. Columbia County is expected to nearly double its population with employment growth of nearly 64 percent by 2050. Aiken is expected to have nearly 48 percent growth in the number of jobs. Meanwhile, growth in Richmond County is projected to stay relatively stable with an increase of about 7 percent in population and 18 percent in employment.