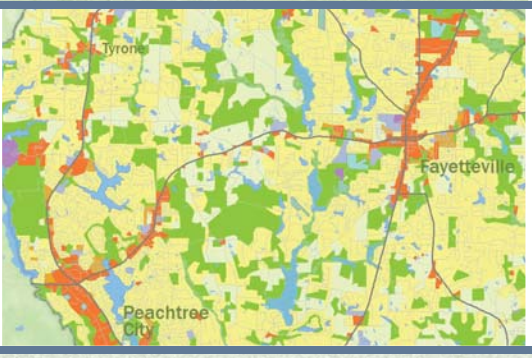
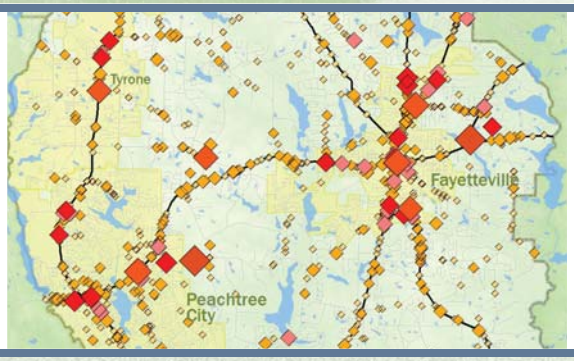
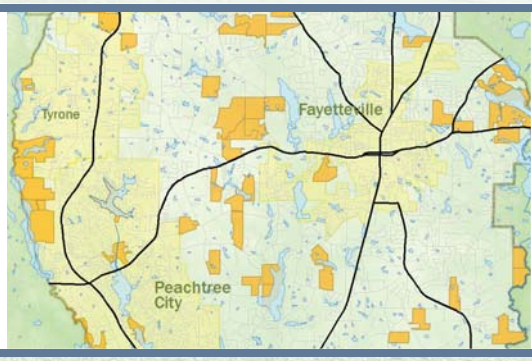
Inventory & Needs Assessment







Chapter 2

2.0 **Introduction**

This chapter identifies current transportation facilities and land use characteristics that exist within the county and reviews these facilities for needed improvements. It constitutes the primary technical foundation for generation of project development concepts to follow in the Fayette Forward process.

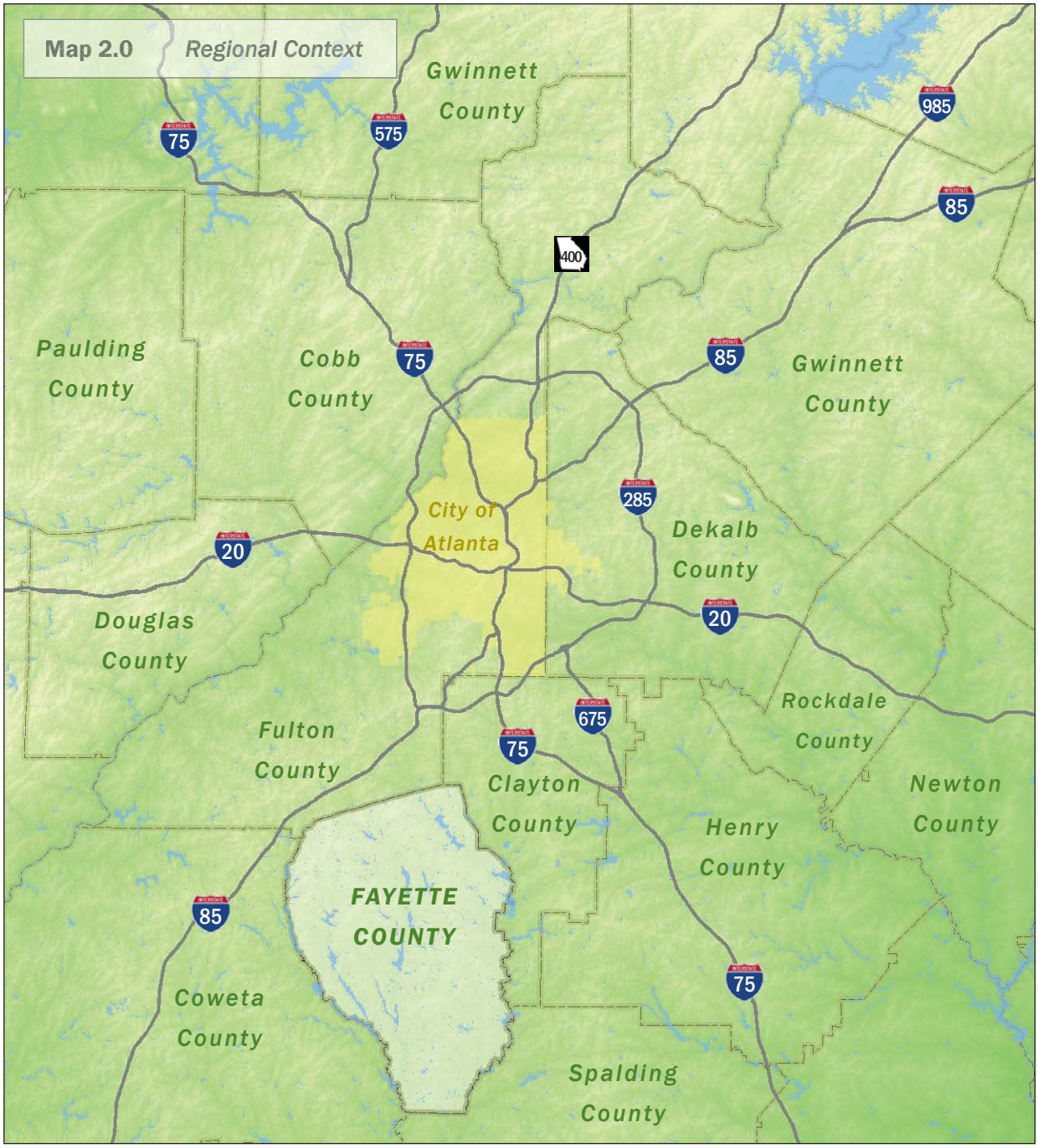
Fayette County is located in the southern Atlanta metropolitan area, bordered by Fulton County to the north, Clayton County to the north and east, Spalding County to the southeast and Coweta County to the west. Its relative proximity to both the city of Atlanta and the Hartsfield-Jackson Atlanta International Airport, the largest single employer in the state of Georgia, spurred dramatic growth in the 1980s and 1990s. Because this growth is somewhat recent, especially when compared to northern metropolitan Atlanta counties, Fayette has been able to maintain a community character based on a rural landscape.

For these reasons, Fayette County's transportation concerns are unique in the Atlanta region. Its current status as a bedroom community places pressure on regional roads for commuting traffic, yet its articulated vision for growing in accordance with its defining rural character suggests that a focus on widened roads and increased vehicular capacity may be incompatible with its desired future.

This chapter's inventory and needs assessment comprises two main functions. Sections 2.1 through 2.4 present a comprehensive inventory of existing conditions and transportation facilities, including demographics and land use. Section 2.5 is an assessment of needed enhancements and improvements to the existing system based on analysis of data, travel demand forecasts and community input from the early parts of the Fayette Forward process. *Note that public involvement and input coming directly from it are discussed in greater detail in Chapter 3 of the Fayette Forward Plan.*

The inventory draws on available geospatial data and previous plans and studies from state, local and regional sources. Among these are plans and studies developed by the Atlanta Regional Commission (ARC) addressing region-wide transportation and mobility issues, and the Southern Regional Accessibility Study (SRAS), a focus on transportation and future land use patterns in five southern Atlanta regional counties. Partly due to its recent completion and timeliness of its issues, the SRAS is cited as a primary source of guidance for transportation conditions and needs in the southern part of the Atlanta metropolitan area.

The needs assessment is based on use of various transportation data as well as the ARC regional travel demand model to understand principal trends and concerns and outline the needs that they present for Fayette County's transportation system. They also include a holistic set of project goals that the Fayette community helped to articulate through public input and suggestions. These goals are intended to provide a way of understanding transportation projects' potential to address a variety of community needs beyond basic mobility.



Fayette County's location within the Atlanta region. Fayette is notable as the only county in the 10-county core region that is not served by an interstate highway. Nonetheless, its proximity to Atlanta and the Hartsfield-Jackson Airport has made it a desirable residential community and has spurred rapid growth and development.

2.1 Land Use & Development Conditions

2.1.1 Existing Land Use Patterns

Approximately three-quarters of the Fayette's land is in the unincorporated County, and this land area is primarily used for agricultural purposes or relatively low-density single family housing. Fayette land use policies establish the smallest allowable lot size as one acre, and much of the county lies in districts designated to have minimum lot sizes of three or five acres. Beyond these single-family residential patterns, much of the county's land is not in active use but is rather held in conservation.

Within the incorporated municipalities, a greater variety of land uses and intensities are permitted. Peachtree City has been constructed as a master-planned community with land uses and intensities determined by its plan. Land uses here emphasize single-family housing and neighborhood commercial and institutional uses. The City of Fayetteville features a similar mix of land uses, with two major retail corridors along State Road 85 north and south of its traditional business district.

The dominant commercial land uses are in incorporated Peachtree City, especially around the intersections of Highways 54 and 74, and along Highway 85, especially north of downtown Fayetteville. A node of retail and office land uses has begun to develop in Tyrone near the intersection of SR 74 and Old Senoia Road. The Town of Tyrone has supported expansion of commercial development into its central commercial district along Old Senoia and Tyrone-Palmetto Road.

To date, nearly 30 percent of the developable, non-conservation land in the county remains undeveloped. The County's future land use policies indicate that the majority of this land would develop as single-family residential uses with intensities similar to those currently seen throughout the unincorporated County.

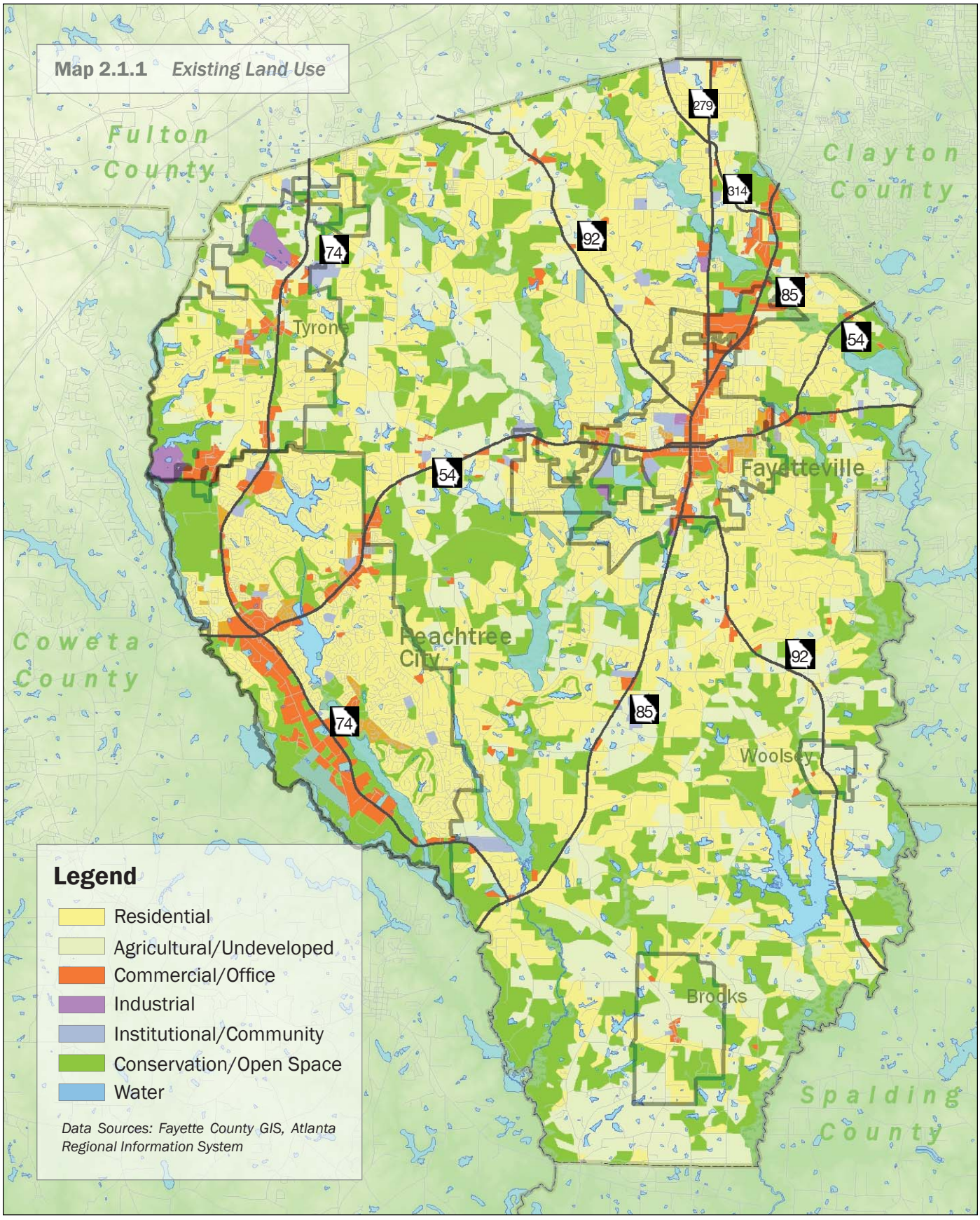
Highway 85 Corridor

Much of the unincorporated County's retail land uses are located along Highway 85 between downtown Fayetteville and the Clayton County line. The corridor includes light industrial/distribution and office land uses as well, and the scale of uses varies. The corridor includes small-scale, single-establishment parcels, older strip shopping centers, and a large regional retail center, the Fayette Pavilion.

Fayette Pavilion is one of the largest single retail centers in the Atlanta metropolitan area and a regional shopping destination drawing customers from throughout the southern part of the region. It and the rest of the Highway 85 corridor constitute a major retail district in the southern metropolitan Atlanta counties, and is marked by older retail spaces struggling to retain business. The Fayette County community perceives that this area is over-supplied with retail space, and multiple comments from public input suggest that it symbolizes a form of development that the Fayette community finds inconsistent with its rural character.

Highway 74 Industrial/Commercial Corridor (Peachtree City)

Highway 74 through Peachtree City provides the main regional access to the commercial and industrial areas of Peachtree City. This district as a whole constitutes a major employment area of the County and is the primary area designated for industrial land use with active freight rail access. Falcon Field, one of the Atlanta region's busiest general aviation airports, is located on this corridor.


Map 2.1.1 Existing Land Use
Fulton County
Clayton County
Coweta County
Spalding County
Tyrone
Peachtree City
Fayetteville
Woolsey
Brooks
279
314
92
74
85
54
Legend
Residential
Agricultural/Undeveloped
Commercial/Office
Industrial
Institutional/Community
Conservation/Open Space
Water
Data Sources: Fayette County GIS, Atlanta Regional Information System

2.1.2 Future Land Use Patterns

The County's vision for future growth is based on preservation of its existing rural character, and the future land use policies of the County's Comprehensive Development Plan are intended to uphold this vision. As a result, much of the County is designated to support future residential development at densities of one dwelling unit per acre or less.

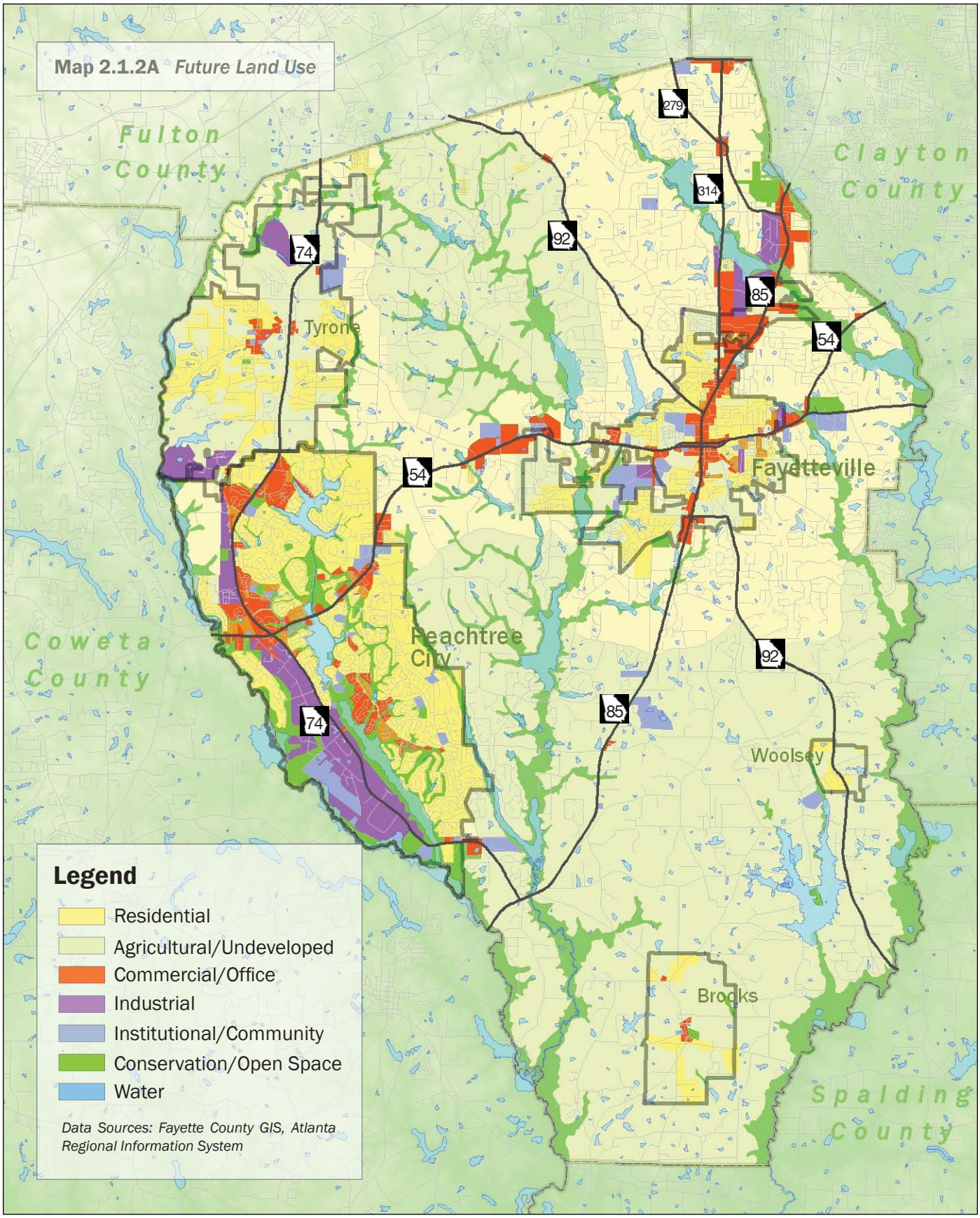
The principal exceptions to this countywide vision are in the existing incorporated municipalities, where residential densities are somewhat higher, and in areas that the municipalities have identified for future annexation. These include an area immediately west of the present city limits of Fayetteville, identified for future development of a hospital-medical office complex that would also include retail space and residential units.

Future Land Use and the Region

Fayette County future land use policies are notably oriented to preserving the County's defining characteristics of open space, estate-style single-family housing and a rural and agricultural landscape.

It was noted that growth in the county has been steady and the county and cities can currently keep up with necessary infrastructure demands generated by growth. The primary growth goal for the county and cities is to grow at a reasonable rate that allows them to maintain the current quality of life. However, a strain is being placed on the county by growth and development occurring on its borders in adjacent counties. Intensive development, particularly warehouse/distribution facilities in southern Fulton County are greatly impacting SR 74, which is a primary corridor used by county residents to access Interstate 85. Substantial growth in eastern Coweta County is expected to impact the county with regard to increased traffic congestion.

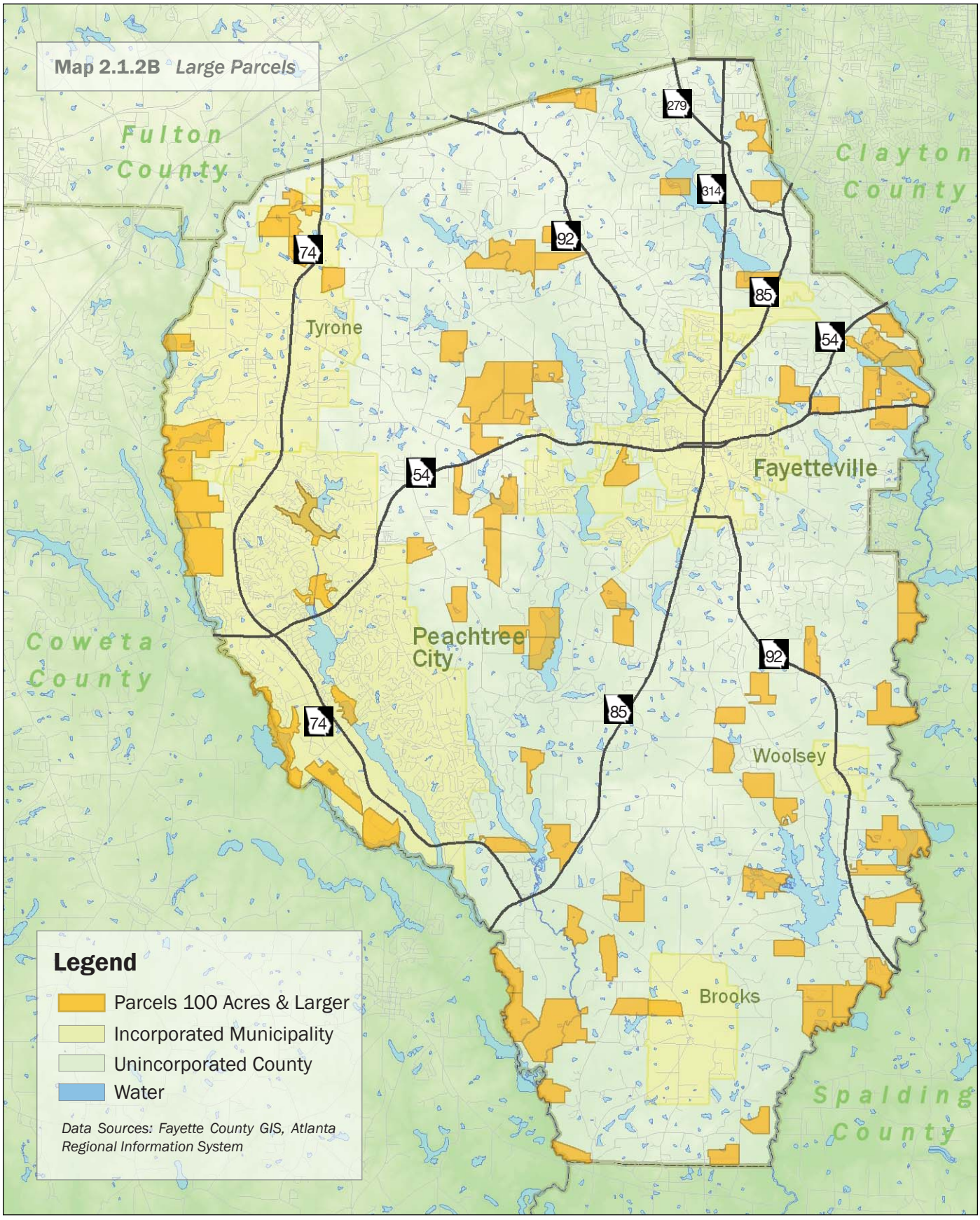
As mentioned previously, future residential development in the unincorporated portion of the county is set by policy to be at densities of one dwelling unit per acre or less. The primary reason for this policy direction is based in infrastructure: the County does not operate or intend to construct central sewer facilities, and individual residential lots must operate on septic tank wastewater systems. The cities of Fayetteville and Peachtree City both have central wastewater engineering infrastructure in place and can consequently attract increased density, but will likely remain less dense than many other cities in the region. Peachtree City and the county seek to attract 'clean industries' and professional jobs while maintaining existing manufacturing base.


Map 2.1.2A Future Land Use
Fulton County
Clayton County
Coweta County
Spalding County
Tyrone
Peachtree City
Fayetteville
Woolsey
Brooks
279
314
92
74
85
54
Legend
Residential
Agricultural/Undeveloped
Commercial/Office
Industrial
Institutional/Community
Conservation/Open Space
Water
Data Sources: Fayette County GIS, Atlanta Regional Information System

Future Residential Development Patterns

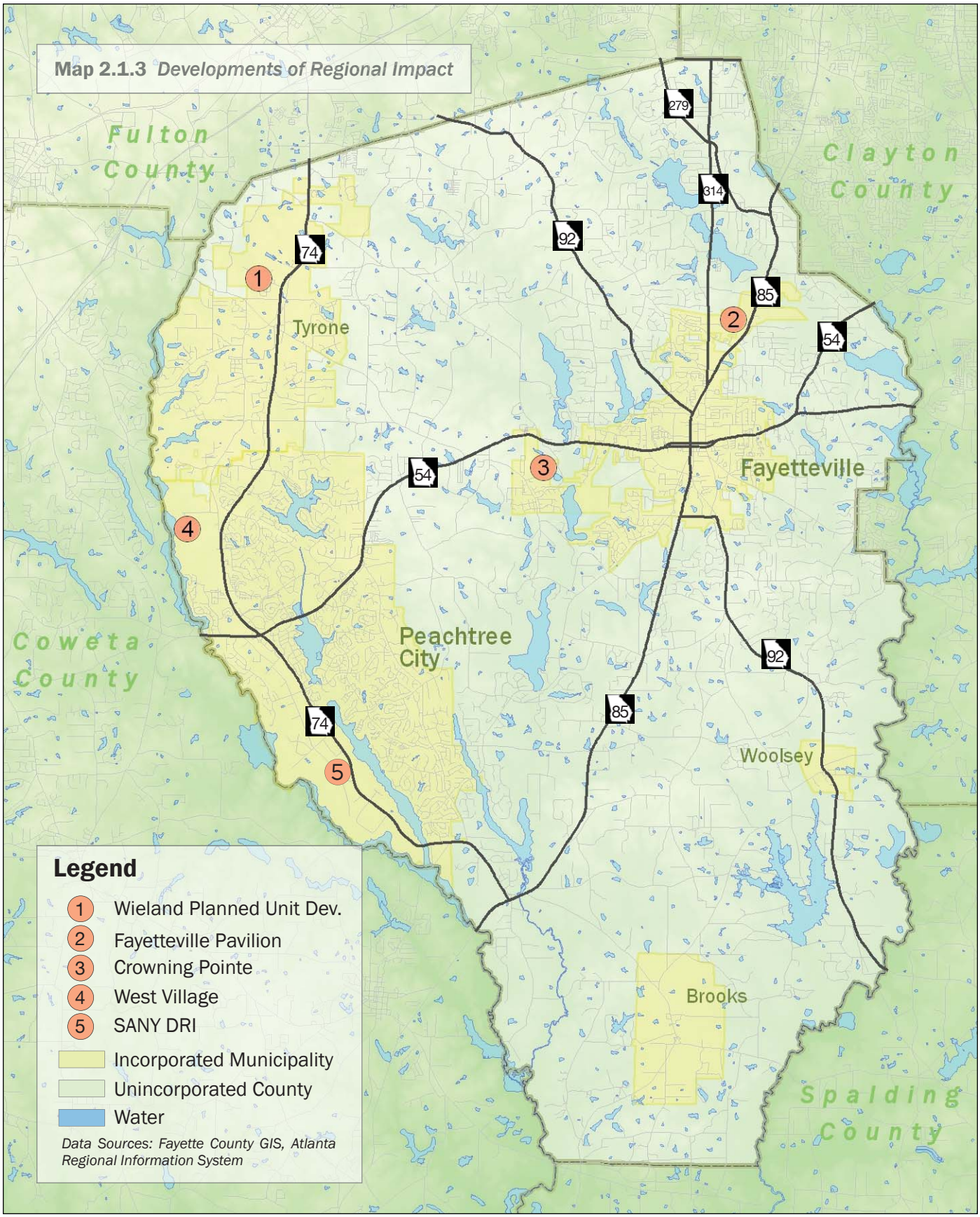
Map 2.1.2B depicts all parcels in Fayette County of 100 acres or greater. Although these may have current active uses, their location and concentrations demonstrate where currently-adopted County land use policies would allow the most new development to happen. That is, these are the parcels in the county where subdivision per allowed densities would yield the greatest amount of development and thus where traffic would be generated.

Many of these parcels have access to a major transportation facility, but many do not. The parcels not immediately adjacent to major transportation corridors, especially those in the southern half of the County, rely on local roads to provide connections. Many of these roads were built with agricultural priorities in mind and feature geometric designs that followed natural constraints of the landscape, such as tight curves, narrow-angle intersections and limited visibility. As these roads were never intended to accommodate widespread residential development, they were not engineered with vehicular safety for high traffic volumes in mind.


Map 2.1.2B Large Parcels
Fulton County
Clayton County
Coweta County
Spalding County
Tyrone
Peachtree City
Fayetteville
Woolsey
Brooks
279
314
92
74
85
54
Legend
Parcels 100 Acres & Larger
Incorporated Municipality
Unincorporated County
Water
Data Sources: Fayette County GIS, Atlanta Regional Information System

2.1.3 Developments of Regional Impact

As of January 2010, Fayette County has five developments of regional impact (DRI's) that have been approved by the Georgia Department of Community Affairs (DCA) and the Georgia Regional Transportation Authority (GRTA). DRI's are developments whose scale and order of magnitude suggests that they will have infrastructure and community impacts beyond their immediate geographic area. DRI-level development review is determined by a series of thresholds based on whether or not the county is in a DCA-defined metropolitan area. Fayette County is classified as a metropolitan county, meaning that the thresholds used for DRI-level review are higher. Due to a combination of Fayette's large-lot zoning requirements, typically small-scale commercial developments and minor concentrations of employment in the County, Fayette has had fewer DRI's than most metropolitan Atlanta counties.


Map 2.1.3 Developments of Regional Impact
Fulton County
Clayton County
Coweta County
Spalding County
Tyrone
Peachtree City
Fayetteville
Woolsey
Brooks
279
314
92
74
85
54
1
2
3
4
5
Legend
1 Wieland Planned Unit Dev.
2 Fayetteville Pavilion
3 Crowning Pointe
4 West Village
5 SANY DRI
Incorporated Municipality
Unincorporated County
Water
Data Sources: Fayette County GIS, Atlanta Regional Information System

2.1.4 Livable Centers Initiative (LCI) Studies

ARC's Livable Centers Initiative is intended to increase modal choice and enhance quality of life in communities throughout the Atlanta region. It encourages local jurisdictions to plan and implement strategies that link transportation improvements with land use development. The intent of this is to create sustainable, livable communities consistent with regional development policies, to reduce automobile travel demand by integrating complementary land uses, and to provide a framework for communities to build transportation systems in cooperation with development.

In Fayette County, two LCI studies have been completed: one for Fayetteville and the other for Peachtree City.

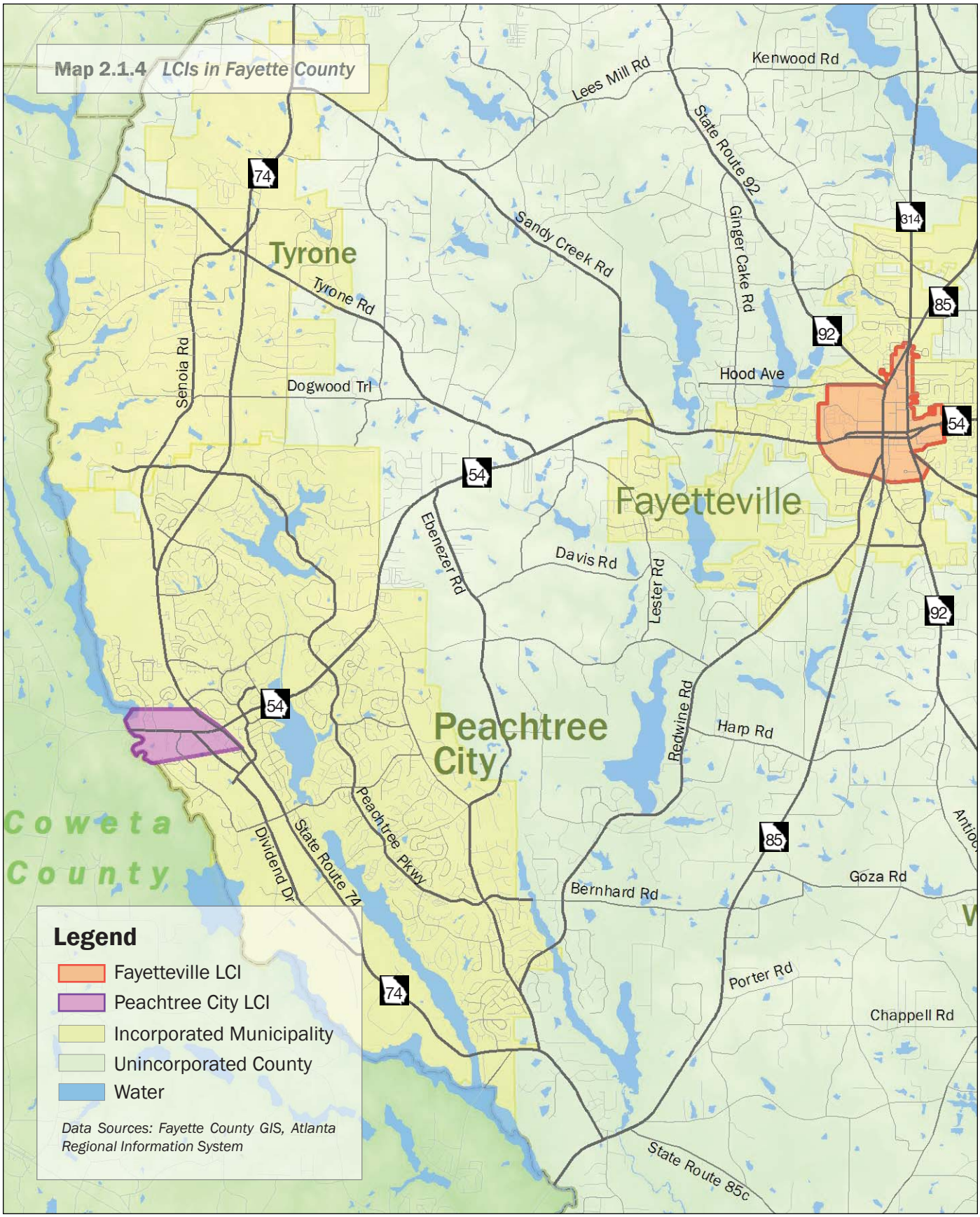
Fayetteville LCI

The Fayetteville LCI focused primarily on the redevelopment and reinvention of downtown Fayetteville as a mixed-use center offering a range of employment, shopping, recreation and housing. Fayetteville's interest in this approach is due mainly to the relatively higher rates of growth in unincorporated Fayette County and a higher priority for the City, its staff and elected officials. In 2002, the Atlanta Regional Commission (ARC) awarded the City of Fayetteville with one of ten regional Livable Center Initiative (LCI) grants to develop a plan for Downtown Fayetteville and the surrounding area. The Livable Center Initiative promotes the development of action plans to enhance livability, connectivity and mobility within existing town centers throughout the Atlanta region, while identifying development and redevelopment opportunities. The program also promotes cooperation between private and public entities to implement plan components, which commonly include regulatory changes, infrastructure investment, development and redevelopment projects and creation or refinement of development incentives.

Peachtree City LCI

The Peachtree City LCI was based on the development and redevelopment of the West Village, an area centered on Highway 54 west of Highway 74. It sought to establish this district as a multi-use town center for Peachtree City, taking advantage of regional connections in Highways 54 and 74 as well as Peachtree City's residential population.

As of the writing of this report, none of the recommendations from either LCI have been adopted as policy by the local governments, although recent reconstruction of Highway 54 has incorporated many of its objectives for multimodal circulation, especially for bicycles and pedestrians. These include tunnels for bicycles and pedestrians under the approach embankment for the bridge over the CSX railroad.

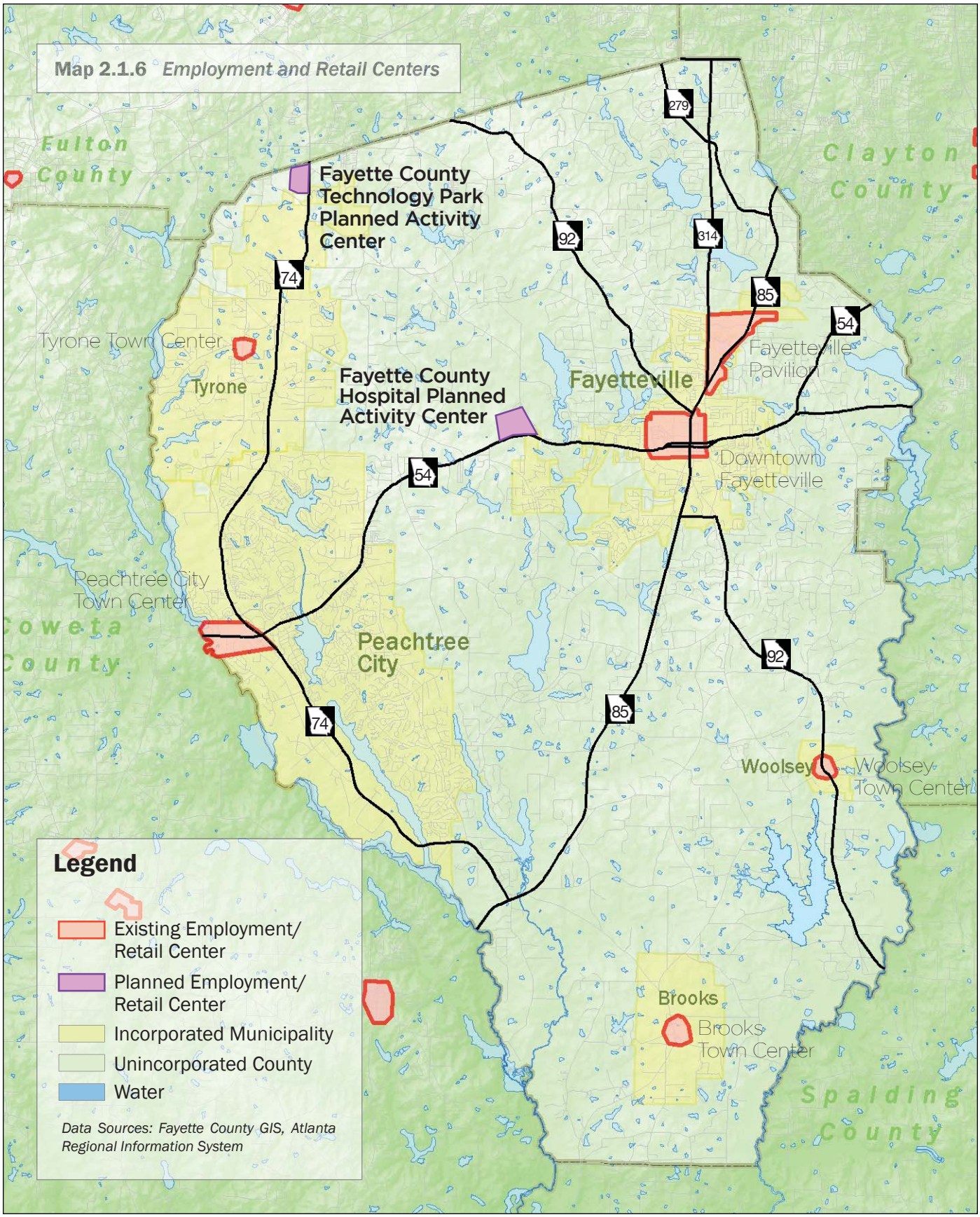

Map 2.1.4 LCIs in Fayette County
Kenwood Rd
Lees Mill Rd
State Route 92
Ginger Cake Rd
Sandy Creek Rd
Tyrone
Tyrone Rd
Senoia Rd
Dogwood Trl
Hood Ave
Fayetteville
Ebenezer Rd
Davis Rd
Lester Rd
Redwine Rd
Harp Rd
Peachtree City
Coweta County
Peachtree Pkwy
Dividend Dr
State Route 74
Bernhard Rd
Goza Rd
Porter Rd
Chappell Rd
State Route 85c
74
54
314
85
92
Legend
Fayetteville LCI
Peachtree City LCI
Incorporated Municipality
Unincorporated County
Water
Data Sources: Fayette County GIS, Atlanta Regional Information System

2.1.5 Employment and Retail Centers

In addition to the areas examined in detail under Fayette County's two LCI studies, ARC has designated several activity centers throughout the County that are existing or potential centers of retail and employment. The largest of these are downtown Fayetteville, the Peachtree City town center at the intersection of State Roads 54 and 74, and the Fayetteville Pavilion retail district north of the city center. The Fayetteville Pavilion and Peachtree City's town center are among the largest retail concentrations in the southern part of the Atlanta metropolitan region and together comprise nearly 3 million square feet of leasable retail space.

Fayette County, in partnership with the City of Fayetteville, is also planning for a major employment center on State Road 54 near the intersection of Sandy Creek Road. This would be focused on a hospital and medical center complex with supporting office and retail land uses. It is intended to meet needs in the County for medical facilities as well as to generate highly skilled, value-added employment. In addition to this, the County has begun planning for a technology park on State Road 74 north of the Tyrone town limits.

The largest of these centers already have access to the County's roadway system, particularly to GDOT highways. Continuing to provide access to these centers will be crucial to the County's economic development efforts.


Map 2.1.6 Employment and Retail Centers
Fulton County
Clayton County
Fayette County Technology Park Planned Activity Center
Tyrone Town Center
Tyrone
Fayette County Hospital Planned Activity Center
Fayetteville
Fayetteville Pavilion
Downtown Fayetteville
Peachtree City Town Center
Peachtree City
Coweta County
Woolsey
Woolsey Town Center
Brooks
Brooks Town Center
Spalding County
279
92
314
85
54
74
Legend
Existing Employment/ Retail Center
Planned Employment/ Retail Center
Incorporated Municipality
Unincorporated County
Water
Data Sources: Fayette County GIS, Atlanta Regional Information System

2.1.6 Schools

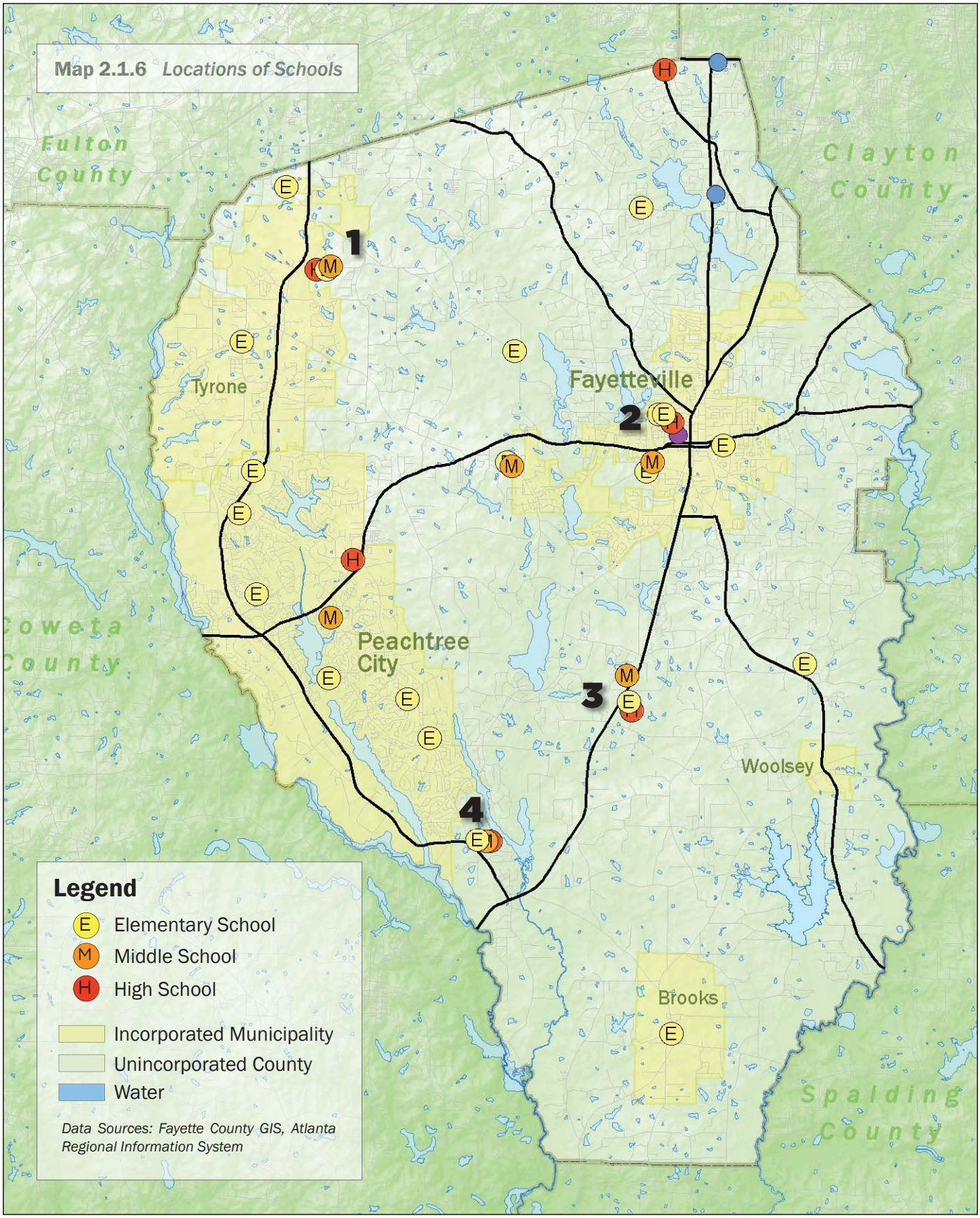
The location of school facilities is an important consideration in community planning. Schools require convenient access from the transportation system, but because of hours of operation and a large number of students who do not drive, notable demand on the transportation system occurs at concentrated times in the morning and afternoon.

In Fayette County, schools in the incorporated municipalities tend to be located with a more even geographic distribution than in the unincorporated County. This is most notable in Peachtree City, which, as a master-planned community, had located school facilities prior to the city's growth and construction. In the unincorporated county, school siting has tended to concentrate elementary, middle and high schools in close proximity. While this has distinct advantages from the perspective of sharing facilities and resources, it creates special demand for the transportation system in that it increases and extends the peak travel period to access these schools.

The table below lists the major locations of school facility 'clusters' in the County and their primary means of access. It also provides a brief description of key operational issues that may need to be addressed to enhance the safety and efficiency of access.

Table 2.1.6 Major School Locations and Access

Number on Map	*Schools*	*Major Access Means*	*Access Concerns*
1	Burch Elementary/ Flat Rock Middle/ Sandy Creek High	All accessed from Jenkins Road; Sandy Creek Road and SR 74 also important to access	Southbound left turns at SR 74/ Jenkins Road; turning movements and sight distance at Jenkins/Ellison intersection; motorist speed in turning movements at Sandy Creek/ Jenkins intersection
2	Hood Avenue Primary/ Fayetteville Intermediate/ Fayette County High	Accessed from Tiger Trail and Lafayette Avenue; SR 54 and SR 85/92 also important to access	Turning movements from Lafayette to SR 85; Tiger Trail/Lafayette intersection; signal timing for Lafayette Avenue at SR 54
3	Sara Harp Minter Elementary/Whitewater Middle/ Whitewater High	All accessed from SR 85 or Lisbon Road and Goza Road	Sufficient turning movement storage space on SR 85; unsignalized control of school entrance/SR 85 intersection
4	Peeples Elementary/ Rising Starr Middle/ Starr's Mill High	Accessed from SR 74 and Panther Path/Redwine Road	Unsignalized control of SR 74/ school entrance intersection; sufficient turning movement storage space on SR 74
Data Sources: Fayette County GIS			


Map 2.1.6 Locations of Schools
Fulton County
Clayton County
Coweta County
Spalding County
Tyrone
Fayetteville
Peachtree City
Woolsey
Brooks
1
2
3
4
Legend
Elementary School
Middle School
High School
Incorporated Municipality
Unincorporated County
Water
Data Sources: Fayette County GIS, Atlanta Regional Information System

2.1.7 Natural and Environmental Resources

Fayette County is a complex and rich county in terms of natural resources, being part of several drainage basins and containing the headwaters of the Flint River. Because the County has not been intensely developed, many of its wetland and stream corridors are largely intact. These certainly contribute to the county's appeal as a rurally-oriented residential community and indeed provide recreational amenities. Horton Creek and Whitewater Creek are the main corridors within the county, with Line Creek and the Flint River forming its western and eastern boundaries, respectively.

Water Resources

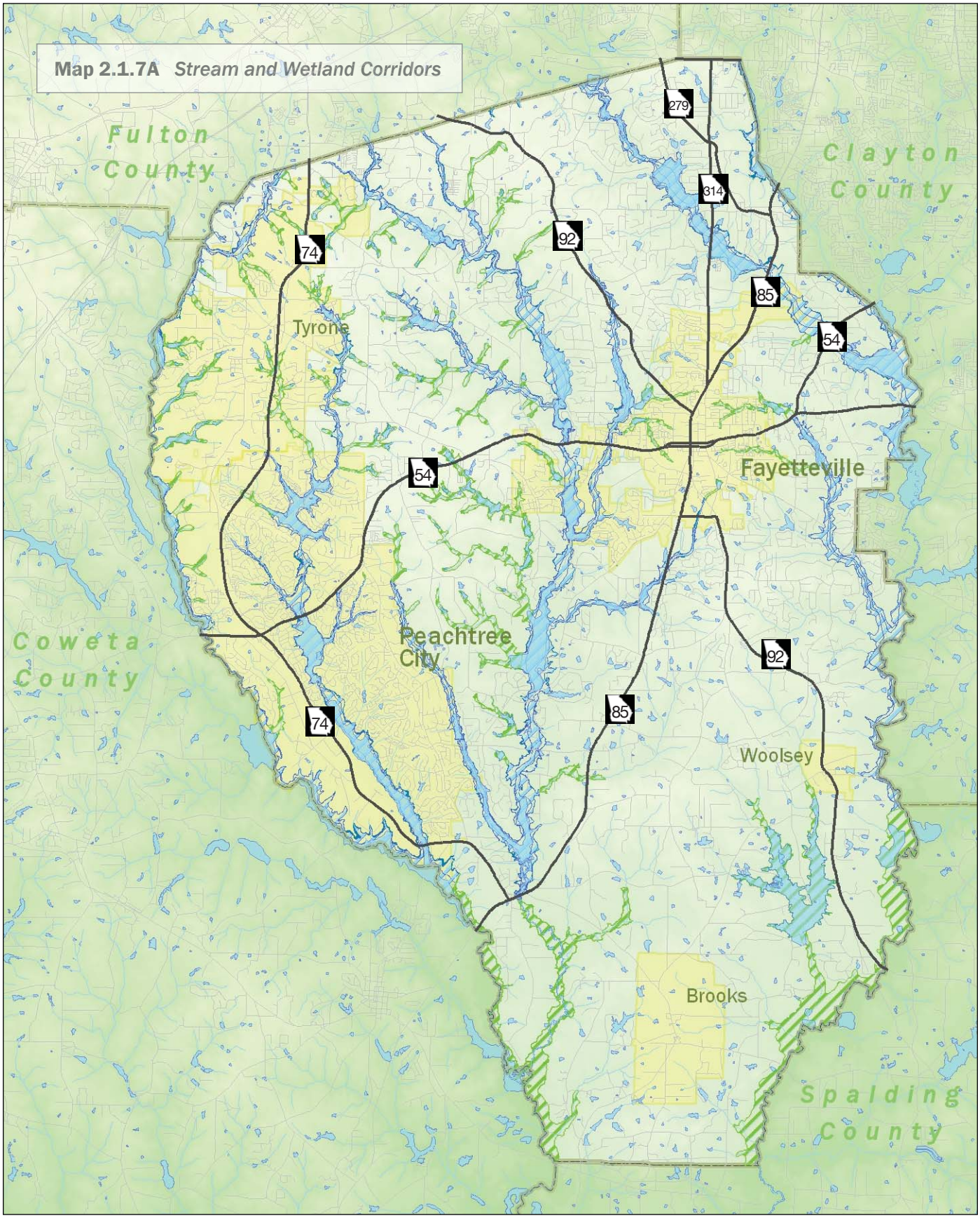
The county is under the jurisdiction of the Metropolitan North Georgia Water Planning District, which covers much of the rest of the Atlanta region. The District administers a long-range water management plan that sets forth strategies and recommendations for effective watershed management and stormwater control. The watershed plan provides requirements for local programmatic efforts, including six model ordinances which provide for post-development stormwater management, floodplain management, conservation/open space development, illicit discharge and illegal connection controls, litter control and stream buffer protection.

The County is nearly self-sufficient in terms of water. The Fayette County Water System currently has a total production capacity of 20.375 million gallons per day (MGD). This capacity includes the 13.5 MGD at the Crosstown Water Plant, 6.0 MGD at the South Fayette Water Plant and an additional 0.825 MGD from four wells at various locations. The City of Fayetteville has a water treatment plant with a capacity of 3.9 MGD. The City of Atlanta has also allocated 4.0 MGD to Fayette County.

The County's water system includes three water storage reservoirs and one currently under construction:

- *Lake Kedron*, located in northern Peachtree City, is a 235-acre reservoir which stores approximately 1.0 billion gallons of water and will safely yield 3.5 MGD during drought conditions.
- *Lake Peachtree*, in the southern part of Peachtree City, is a 250-acre reservoir which will yield 0.5 MGD during drought conditions.
- *Lake Horton*, in south Fayette County, stores 3.5 billion gallons of water and will yield 16-18 MGD during drought conditions.
- *Lake McIntosh*, currently under construction, lies on Line Creek south of SR 54. This new 650-acre reservoir will yield 10.4 MGD of additional capacity in drought conditions.

Although surface water only forms eight percent of the County's overall geographic area, the preponderance of streams, ponds and lakes suggests that roads and other transportation facilities frequently need to cross bridges. This generates environmental concern in that the structures used in these crossing alters natural topography and drainage patterns. In addition, the construction and widening of roads adds impervious surfaces, which concentrate stormwater runoff in certain places and potentially distribute pollutants into drinking water supply.


Map 2.1.7A Stream and Wetland Corridors
Fulton County
Clayton County
Coweta County
Spalding County
Tyrone
Peachtree City
Fayetteville
Woolsey
Brooks
279
314
92
74
85
54
54
92
74
85

Within Fayette County's watersheds, impervious surface areas constitute as much as 23 percent of all land area. Map 2.1.7B and Table 2.1.7 illustrate each watershed and its impervious surface content.

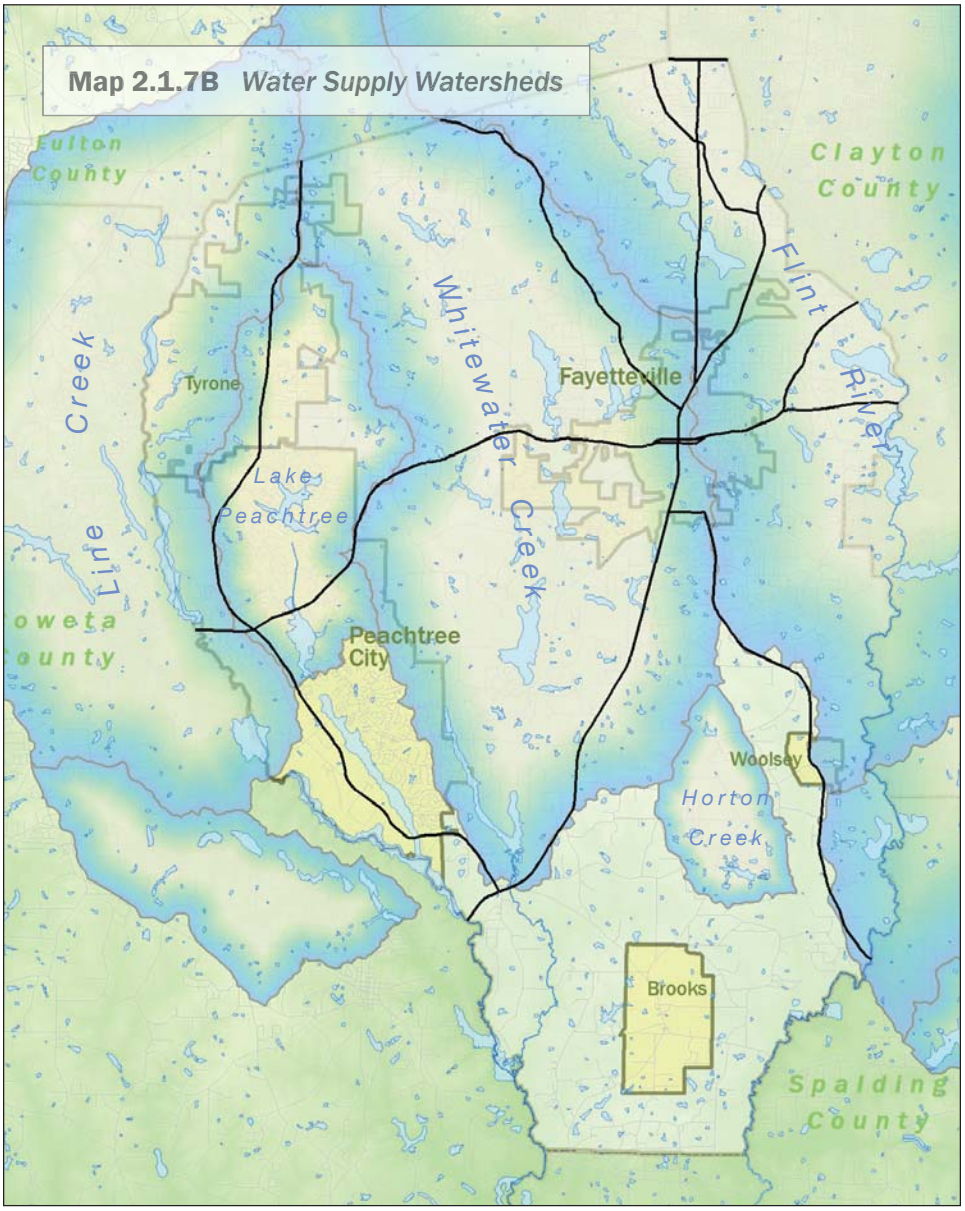


Table 2.1.7 **Impervious Surface Areas**

Drinking Water Supply Watershed	*Impervious Surface Area*
Flint River	**22.8%**
Flat Creek	**16.8%**
Line Creek	**10.6%**
Horton Creek	**3.0%**
Whitewater Creek	**9.1%**

Data Sources: Atlanta Regional Commission Environmental Planning Division

Air Quality

As part of the 10-county Atlanta region, Fayette County is in what planners refer to as *nonattainment* status with regard to the Clean Air Act, meaning it does not meet federal air quality standards for ozone and fine particulate matter. The Clean Air Act and Amendments of 1990 define such an area as a locality where air pollution levels persistently exceed National Ambient Air Quality Standards. Designating an area as nonattainment is a formal rulemaking process, and the United States Environmental Protection Agency (EPA) normally takes this action only after air quality standards have been exceeded for several consecutive years. Nonattainment areas are given a classification based on the severity of the violation and the type of air quality standard they exceed. Violations of these standards and subsequent nonattainment classification can disqualify a region from receiving federal highway funding. This means that on roads eligible for federal funding assistance, up to 80 percent of the total project funding can be withheld as a consequence of not meeting these federal standards. However, demonstrated progress in improving air quality and returning to attainment, documented in a *conformity determination,* can be made for transportation plans and programs within air quality nonattainment areas in order for federal transportation funding to be allocated, without restriction, to the region.

The most recent conformity determination was provided as part of ARC's Envision6 regional transportation plan and the transportation improvement program for 2008-2013. A positive conformity determination was provided for both the ozone and particulate matter standards in October 2007.

Though Fayette County, by virtue of its lower population and lower intensity of urbanization, does not generate moving vehicle emissions to the same degree that other metropolitan counties do, its proximity to the Hartsfield-Jackson Airport places the northern part of the County near a major concentration of emissions and urban heat island.

2.2 Population & Demographic Trends

2.2.1 County Population and Growth Trends

Fayette County is one of the faster-growing counties in the Atlanta region, reflecting more recent overall growth in the southern Atlanta metropolitan area. Its current official population of 91,000 from the 2000 Census is a nearly 45 percent increase over its 1990 population. Indeed, the population has more than tripled since 1980.

Between 2000 and 2030, ARC has projected that the County's population will increase to nearly 161,000, or by 76 percent. Of note, however, is that 2007 Census population estimates show a slowing rate of growth, suggesting that the County's available residential lands are being developed and that remaining opportunities for development and population growth are in more remote parts of the County. This is particularly noteworthy given that Peachtree City, Fayette County's large master-planned community, has largely been constructed and is accommodating its projected build-out population.

The County understands that continued residential growth will likely not greatly increase population beyond current levels due to limited availability of developable land and the County's current land development policies (see Section 2.2.2 of this report for a discussion of future land use policies). While there remains available land for development, it will not develop at intensities currently seen in Fayetteville or Peachtree City. Nonetheless, additional growth is expected and the County's population, based on estimates in its comprehensive growth plan, could reach 150,000 by 2030.

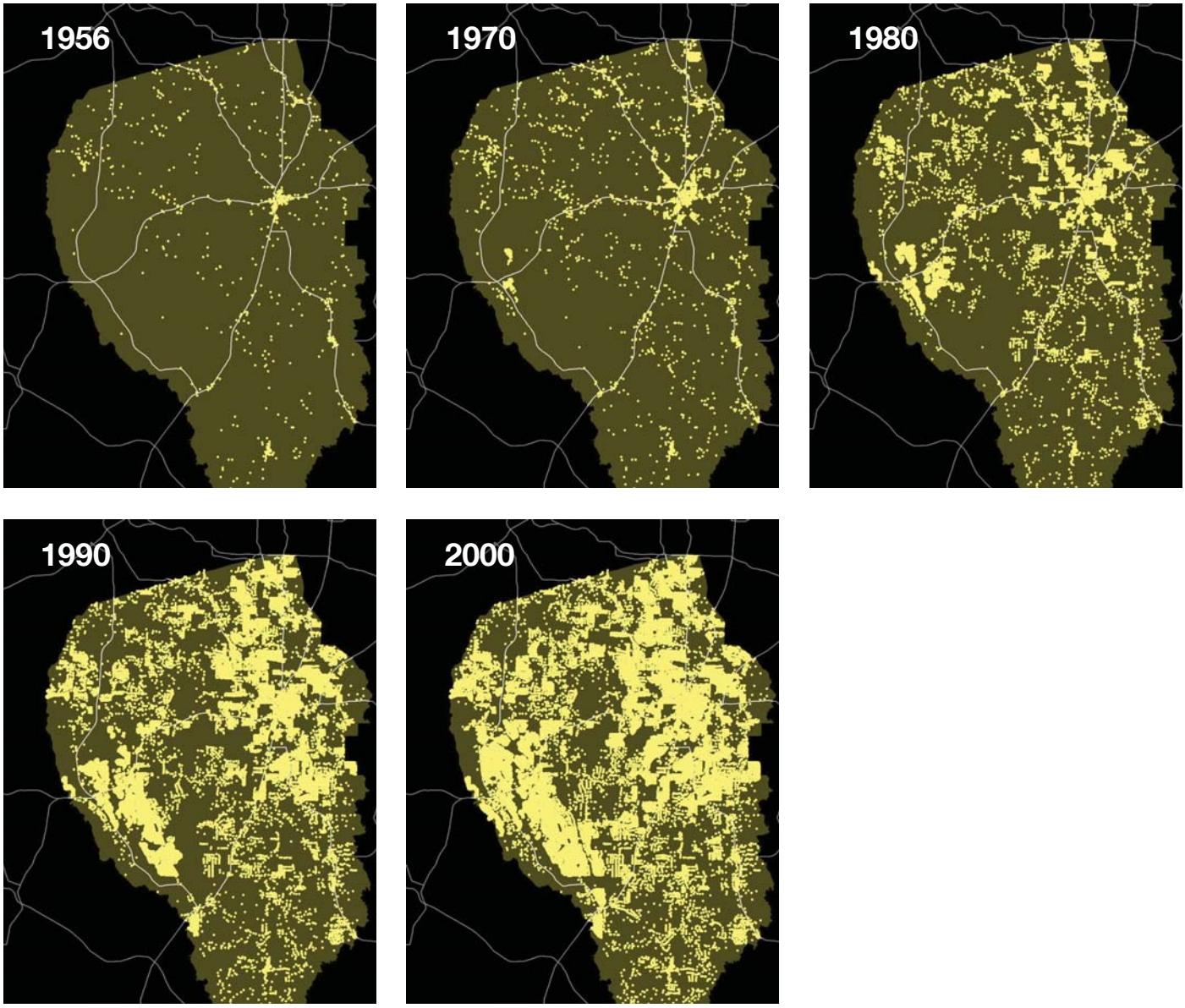
When considered hand-in-hand with the County's future land use policies, this growth implies an increased need for connection to Fayette County's commercial and employment centers, most of which are located along the major arterial thoroughfares.

Table 2.2.1 **Fayette County Population Growth Trends**

Year	*Population*	*Percent Growth*	*Regional Population*	*Percent Growth*
1960	8,199	N/A	1,312,474	N/A
1970	11,364	38.6%	1,500,823	14.4%
1980	29,043	155.6%	1,896,182	26.3%
1990	62,415	114.9%	2,557,800	34.9%
2000	91,263	46.2%	3,429,379	34.1%
2008 (ARC Estimate)	106,000	15.5%	4,099,600	19.5%

Data Sources: Atlanta Regional Commission, United States Census. *Note that ARC's regional population is a composite of the 10-county core region, not a population of the entire Atlanta MSA per the Census.*

Maps 2.2.1A **Fayette County Population Growth Trends**

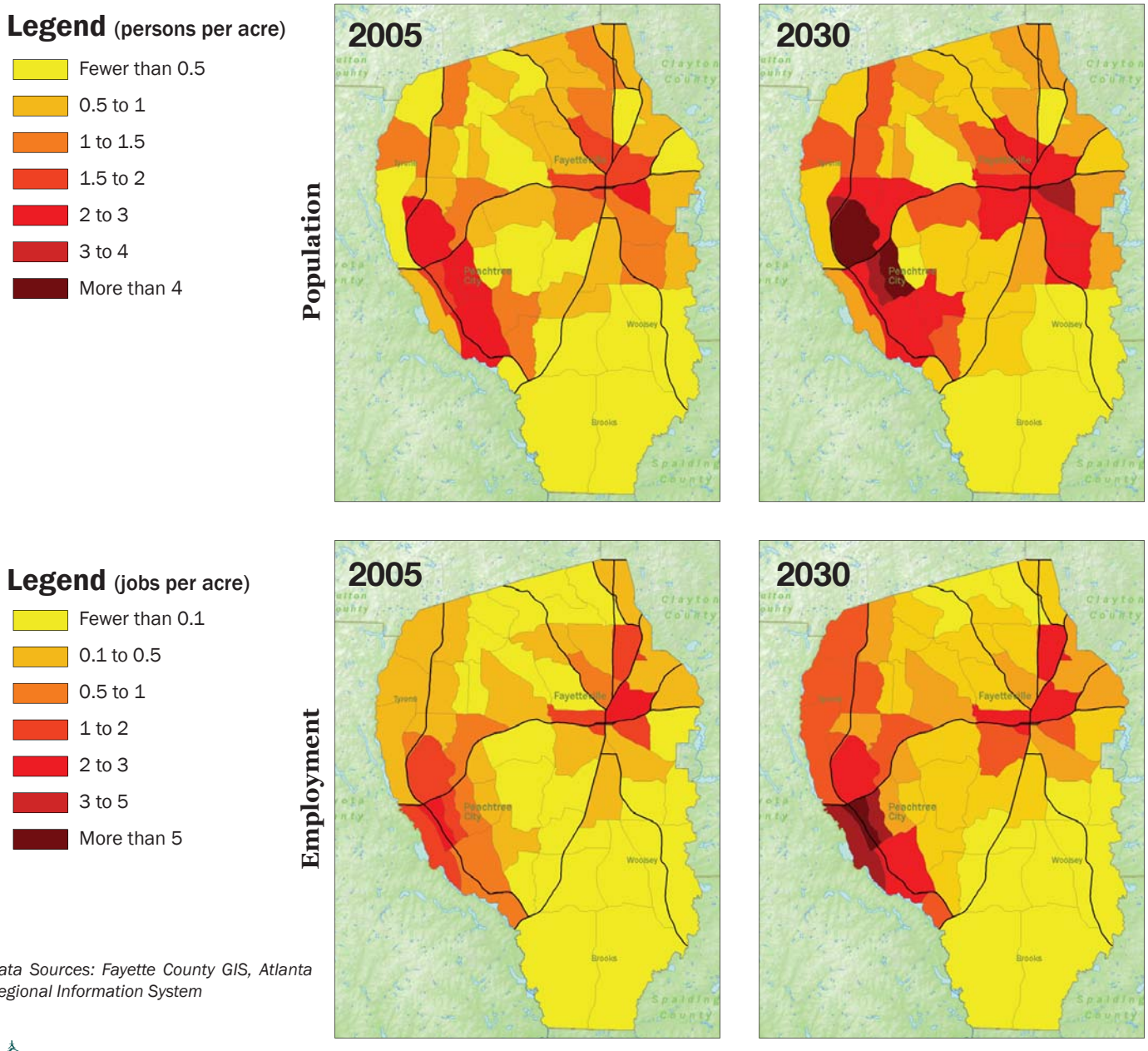


The maps above track Fayette County's historical growth through the second half of the twentieth century. Depicting parcels by their centroids, the maps illustrate when a structure on a parcel was first built to estimate overall development and growth in the county. Peachtree City's first major development happened in the 1960s and its master plan had largely been completed by 2000. Fayetteville, due in part to its proximity to Hartsfield-Jackson Airport, began to expand in the 1980s. Today the bulk of available land for development is in the south and northern-central portions of the County.

Population and Employment Density

Based on ARC projections, growth in the County's overall population and employment densities is expected to occur primarily in its existing city centers (Fayetteville and Peachtree City). Further growth is expected to happen along major corridors such as State Road 74. When compared to other areas in the Atlanta metropolitan region, these population and employment densities are low, even in projection for the year 2030. This suggests that public investments to address Fayette County's transportation needs are likely to be concentrated near its existing population centers and that certain kinds of investment strategies that typically serve higher-density environments, such as premium rapid transit, may not be effective in Fayette County.

Maps 2.2.1B **Current and Projected Population and Employment Densities**



Data Sources: Fayette County GIS, Atlanta Regional Information System

2.2.2 Demographics

Fayette County is notable as having the highest average median household income of any county in the Atlanta region. When examined at the census tract level, nearly every tract exceeds this average, implying that the county is generally affluent throughout and that areas of relatively low income are limited. As income is not reported in the Census at geographies smaller than the block group and as many of Fayette's tracts are coterminous with a single block group, the tract has been used as the primary geography of identification.

These trends in household income are reflected in the County's balance of housing tenure. Of the 31,524 households in the county, 27,252, or 86 percent, are in home ownership. The remaining 14 percent are rental households. The level of home ownership in the County is significantly higher than the regionwide average of 66 percent.

Fayette's high levels of household income suggest that automobile ownership and use are likely to be common and that levels of transit and walking dependency are likely to be low. Indeed, the 2000 Census shows that only six percent of households in the County do not have access to an automobile, and the community survey conducted as part of the Fayette Forward planning process shows that 80 percent of respondents had either two or three vehicles in their households.

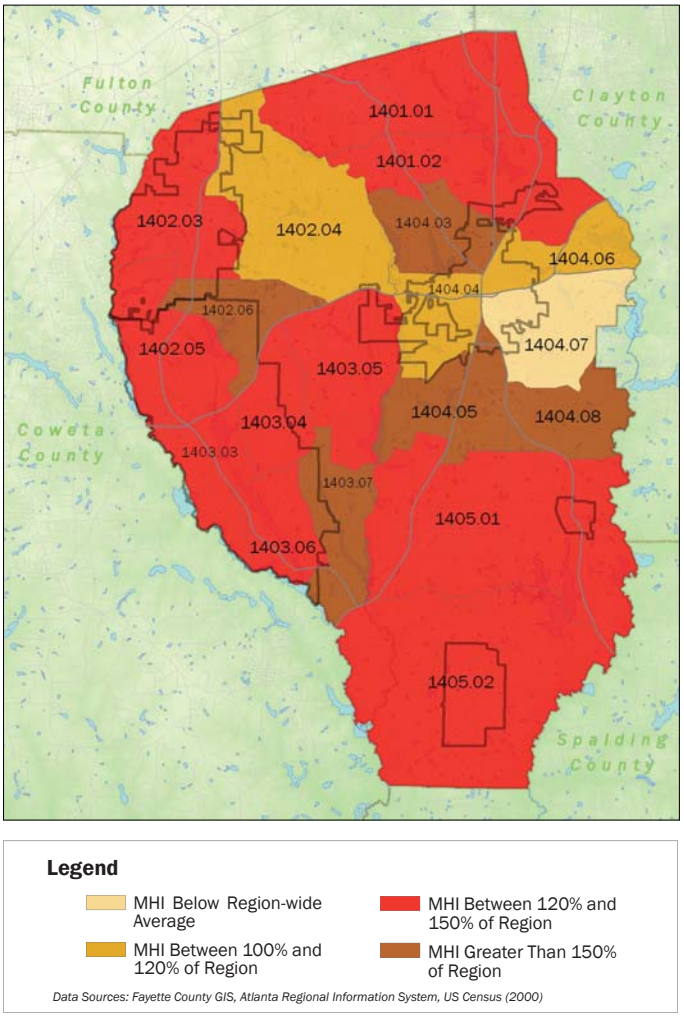
Notwithstanding this, the average number of cars per household is lower than the regional average according to ARC community profile information. A major reason for this is that Fayette County has a higher proportion of senior citizen residents than most other counties in the region. When viewed at the census tract level, the difference between Fayette and the region is even more pronounced: all but three of the census tracts have higher proportions of senior citizens than the region as a whole (7.6 percent), and two tracts have higher proportions than the United States as a whole (12.4 percent). This is not surprising, especially considering that Peachtree City is one of the County's first major developments and has led to a major increase in population since 1980, and its planned character as a golf-based resort community was intended in part to appeal to a retirement-age population. What is notable, however, is that the high proportion of senior citizens relative to the rest of the region is distributed throughout other parts of the county and is most notable in and around Fayetteville. This implies a different set of needs than simply providing for a county with a growing population.

Indeed, the senior citizen population of Fayette County does not fit the same overall profile of affluence as Fayette County as a whole. As Maps 2.2.2A and 2.2.2B illustrate, the areas of greatest concentration of senior citizens (as measured by census tract) are also those among the least relatively affluent in the County. Fayette Senior Services, a non-profit organization that partners with the Fayette County Board of Commissioners in providing social aid services and maintaining a community center, estimates that the senior citizen population in Fayette County will grow by approximately 450 percent from 2009 to 2040, by far the greatest percentage growth anticipated for any county in the region. The overall growth of the County is estimated by ARC at approximately 80 percent in the same time period. When the County's land use policies are considered as the basis for a development buildout, this growth rate is less. The rapid growth forecast for the senior citizen population for this period outpaces the county as a whole, suggesting that Fayette County is likely to have an older average population (and a much higher percentage of senior citizens) than today. As

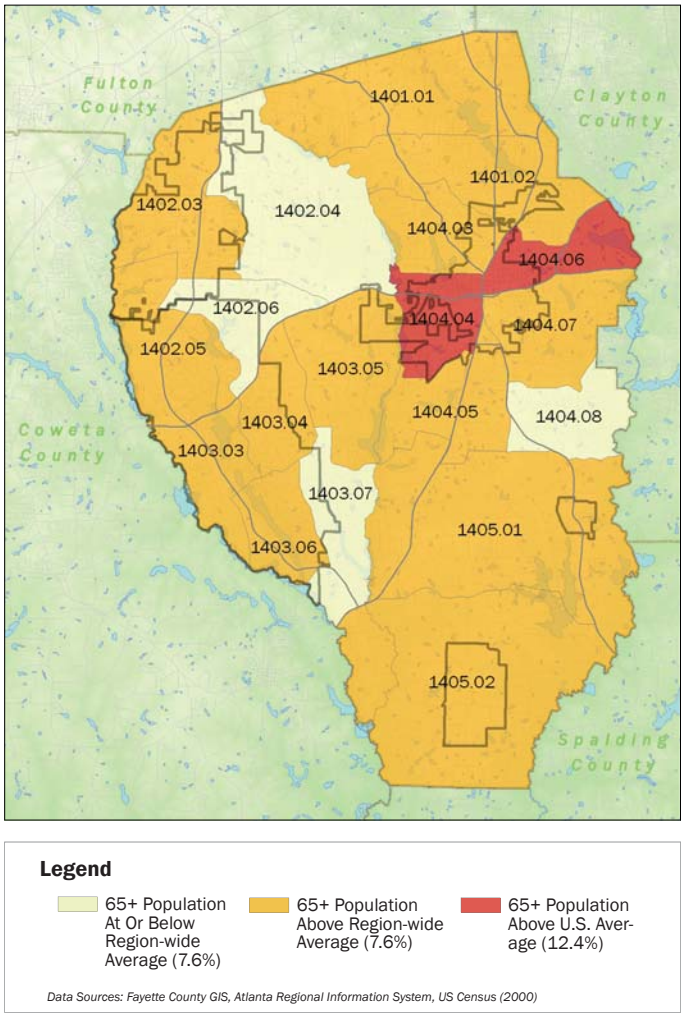
discussed in Section 2.5.8, this suggests that the percentage of Fayette County's non-driving population will also increase.

Fayette has five Environmental Justice (EJ) communities as designated in ARC's Beyond Race and Poverty report. These are based on census block groups and are designated for those block groups with a percentage of African-Americans greater than 30.4 percent, a percentage of Hispanics greater than 7 percent, a percentage of Asians greater than 3.6 percent, or a poverty rate that is greater than 9.1 percent. Fayette has one EJ area based on the proportion of its African-American population, in the north of the county along the boundaries with Fulton and Clayton Counties. Its remaining four EJ communities are based on the proportion of their Asian populations, and are located in Peachtree City, Tyrone and East Fayetteville.

Map 2.2.2A *Median Household Income Relative to Region*



Map 2.2.2B *Proportion of Residents aged 65 & Greater Relative to Region*



The maps above show general demographic makeup of Fayette County. On the left are census tracts displayed by median household income (MHI) relative to the ARC average. Only one tract has an MHI below the regionwide average, and most have an MHI at least 20 percent greater than the regionwide average. On the right are census tracts displayed by the proportion of their population aged 65 or older. Most of Fayette County's tracts exceed the regionwide average of 7.6 percent, suggesting a generally higher level of senior citizen population in the County.

2.2.3 Population and Employment

Another notable factor in Fayette County's demographic profile is its high concentration of educated residents, with over 92 percent having a high school diploma and 36 percent having a four-year college degree. These levels of education are indeed higher than the regional average of 84 percent and 32 percent, respectively, and imply that future employment growth in the County can be expected in industries requiring skilled, highly-educated workers.

Currently, however, many Fayette County residents who have high-paying, professional employment in industries matching the county's educational profile are not employed in the County. As a result, many Fayette residents currently travel outside of the County for work, underscoring a need for regional transportation connections, especially to major professional job centers.

Indeed, it is the mutual goal of the County and its municipalities to attract more high-paying, professional-sector employment. Such initiatives as the hospital campus west of Fayetteville (see Section 2.1.2) allow the County to expand its current job base and bring important community functions and services to Fayette residents and workers. However, these examples only occur in Fayetteville or areas that it has selected for annexation or in Peachtree City.

The ARC Envision6 employment forecast indicates a growth of 150 percent to 88,000 jobs by 2030. Although employment is anticipated to grow at a faster rate than population, an important finding is that the county will still lack enough jobs to accommodate the increase in population. The ratio of jobs to population was 0.3 jobs per person in 2000, and it is expected to increase only slightly to 0.34 jobs per population in 2030. Georgia Department of Labor data indicated that the statewide jobs-per-labor force ratio in 2000 was 0.55. This jobs-to-population imbalance indicates that for every two workers in the county, it is likely that one of them has to commute outside of the county to work.

Table 2.2.3 **Fayette County Population and Employment Characteristics**

Demographic Indicator	*Fayette County*	*Atlanta Region*
Total Number of Households (2000)	31,524	1,504,871
Households in Home-Ownership Tenure	27,252 (86.4%)	999,564 (66.4%)
Households in Rental Tenure	4,272 (13.6%)	505,307 (33.6%)
Median Household Income (1999)	$71,227	$51,948
Number of Residents aged 25 or older	59,016	2,630,798
Residents aged 25 or older with a high school diploma	54,514 (92.4%)	2,209,481 (84.0%)
Residents aged 25 or older with a four-year college degree	21,347 (36.2%)	843,161 (32.0%)

Data Sources: Atlanta Regional Commission, US Census (2000)

2.3 **Roadway Inventory**

2.3.1 Inventory of Major Roadways

Fayette County's roads are largely two-lane rural facilities that historically accommodated farm-to-market movements. As the County has grown, these facilities have begun carrying more traffic to state highways and to interstates in neighboring Fulton, Coweta and Clayton Counties. Additionally, these roadways have taken on an added function of collector and arterial traffic distribution as the County's land has been developed for primarily residential uses. Many pre-existing characteristics of these rural roads, such as narrow sections or shoulders, limited clear zone and roadside recovery area and acute angles of intersection have not been altered or enhanced as the County has grown and these facilities carry increased traffic volumes.

In total, Fayette County has 984 miles of roadway centerline. This includes 54.5 miles of unpaved roadways, mostly gravel.

Georgia Department of Transportation Facilities

The Georgia Department of Transportation (GDOT) maintains 79 miles of road centerline in Fayette County. GDOT's facilities comprise the major multi-lane arterials throughout the County and the vast majority of all traffic signals and control infrastructure (see section 3.3). In Fayetteville, a section of State Road 54 approximately of 0.8 miles is a couplet of one-way streets (Stonewall and Lanier Avenues) that pass through downtown Fayetteville.

In addition, State Roads 85 and 92 are briefly conjoined through downtown Fayetteville (as Glynn Street), traveling north to south and intersecting with the State Road 54 couplet.

Existing County and Municipal Facilities

Of the remaining 905 miles of centerline in the county, Fayette County maintains 745 miles. These include the 54.5 miles of unpaved roads in the County as well as some roads in the smaller incorporated municipalities. Most of the County's roads are two-lane facilities that either serve an historical rural function or relatively recently constructed residential streets.

Planned and Work-In-Progress County Facilities

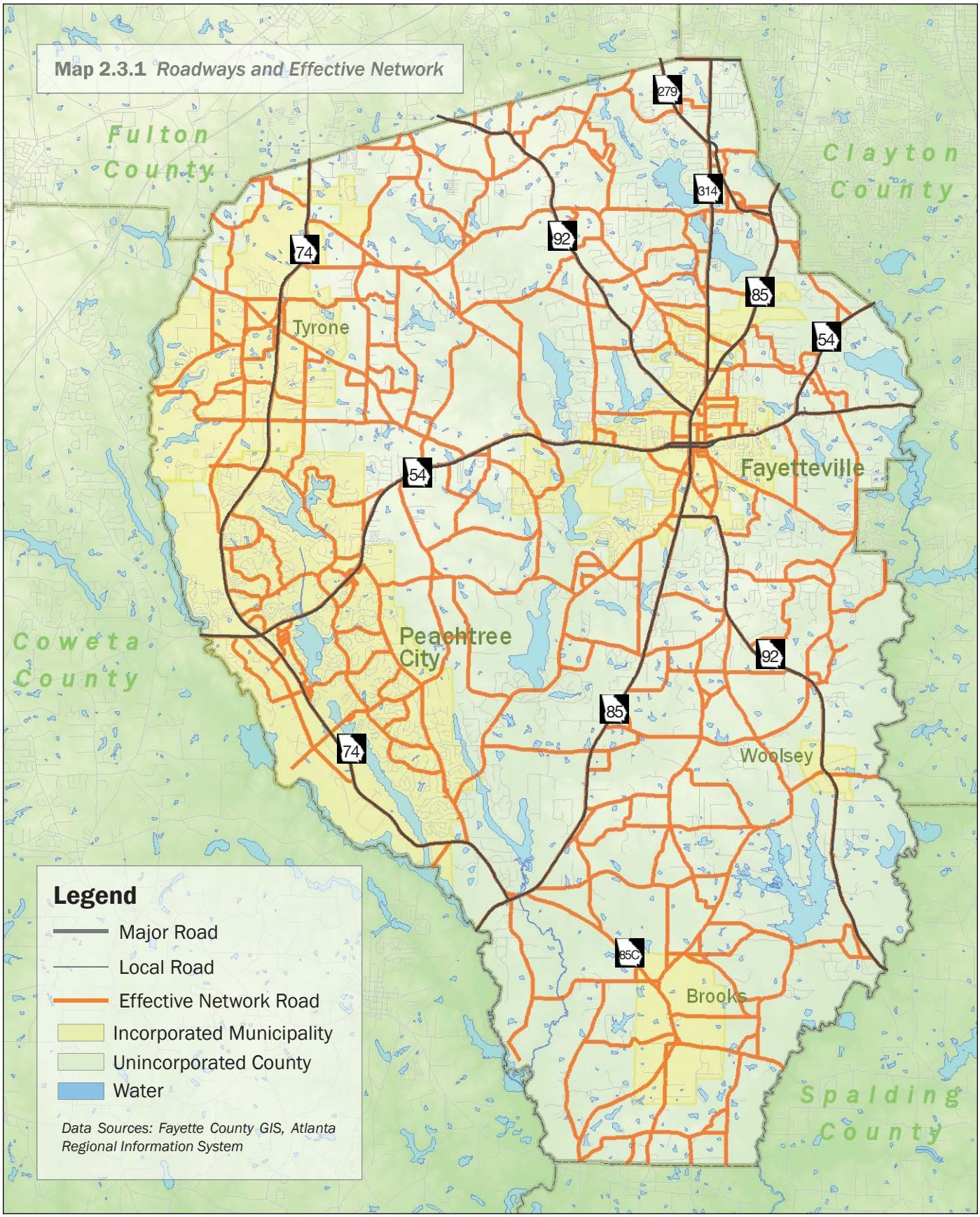
In its 2003 Transportation Plan, Fayette County recommended the construction of two roadways serving a bypass function, intended to relieve traffic congestion in downtown Fayetteville and along the State Road 85 corridors north and south of the city. The West Fayetteville Bypass, the first of these to be developed into a capital project, is divided into three phases for planning and programming purposes. At the time of this report's writing, the first phase (from Highway 54 to Sandy Creek Road) is designed and under construction, and the second phase (from Sandy Creek to State Road 92) is in planning and preliminary engineering. The third phase, south of State Road 54, is in a concept development stage.

The East Fayetteville bypass, intended to connect from State Road 92 south of Fayetteville to State Road 85 north of Fayetteville, is in preliminary design and environmental assessment as of late 2009.

Existing and Effective Network

One measure of a roadway system's strength in providing route alternatives and direct paths of travel is how much of its overall street inventory contributes to a connected network of streets. Thus, measuring the *effective network* versus the total *existing network* demonstrates the extent of streets that can be expected to carry countywide movements and, consequently, share the traffic burden.

Of Fayette County's 984 miles of centerline, approximately 417 miles, or 42 percent, contribute to effective network. Though data are not available to compare, it can be reasonably assumed that far more of the county's roadways constituted an effective network before the rapid residential growth of the last 30 years. Examining current development patterns shows that street additions are typically dead-end streets and cul-de-sac patterns, reflecting a broad societal taste for these patterns in residential development and real estate (and in many communities, reflecting piecemeal land development in the absence of strong policy guidance). To be sure, this is not unique to Fayette County, and is indeed common to suburban environments throughout the United States. This pattern of development, if allowed to continue, will result in more vehicle trips on the same effective network and precipitate more funds being used for roadway construction and widening.


Map 2.3.1 Roadways and Effective Network
Fulton County
Clayton County
Coweta County
Spalding County
Tyrone
Peachtree City
Fayetteville
Woolsey
Brooks
279
314
92
74
85
54
Legend
Major Road
Local Road
Effective Network Road
Incorporated Municipality
Unincorporated County
Water
Data Sources: Fayette County GIS, Atlanta Regional Information System

2.3.2 Functional Classification

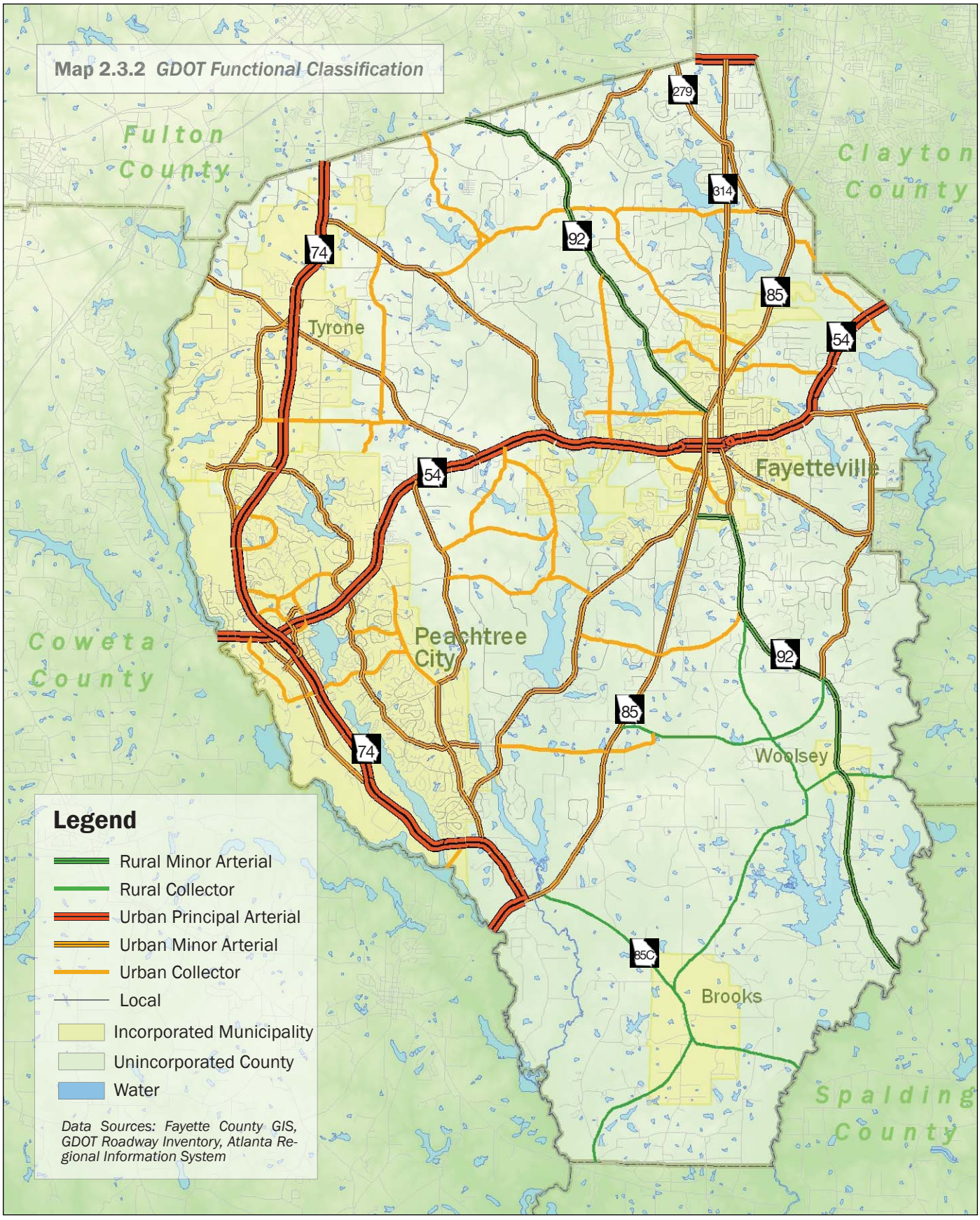
Fayette County's roads are largely two-lane rural facilities that historically accommodated farm-to-market movements. As the County has grown, these facilities have begun carrying more traffic to state highways and to interstates in neighboring Fulton, Coweta and Clayton Counties.

Of the County's 984 miles of roadway centerline, most are classified as rural roads. These include many of the suburban streets in the unincorporated county, but they also include many roads that predated residential subdivision. These are largely in the south part of the county between State Road 85 and State Road 92. State Road 92 itself is classified as a rural arterial, both south of Fayetteville and north of it (where many other road classifications are urban-based).

The table below shows overall centerline mileage per classification type based on Georgia DOT's road inventory. The different classes as specified here are used by GDOT and reference the nationally-used classification system developed by the American Association of State Highway and Transportation Officials (AASHTO) and the Federal Highway Administration (FHWA). The primary distinction between arterials, collectors and local roads is their focus on mobility and access: arterials are intended to serve a principal mobility function, where local streets are intended to provide access. Collector streets serve as a distribution between locals and arterials. Typically, rural roadways are designed with higher moving speeds, meaning they require smoother curves, wider 'clear zones' (or areas where a vehicle leaving the road unintentionally can 'recover' and return to the roadway), and greater spacing between driveways and intersecting roads. Urban roads are designed for lower moving speeds and keep in mind the greater frequency of other vehicles. Urban roads also tend to be designed with higher vehicle capacity, to meet a generally greater travel demand in urban areas.

***Table 2.3.2* Overall Centerline Mileage per Classification**

Code	*Classification Type*	*Mileage*
RURAL		
06	Minor Arterial	**17.8**
07	Major Collector	**15.6**
08	Non-Federal Aid Minor Collector	**8.0**
09	Local	**532.4**
URBAN		
14	Urban Principal Arterial	**34.8**
16	Minor Arterial	**87.1**
17	Collector Street	**61.9**
19	Local	**226.4**
Data Sources: GDOT Road Inventory for Fayette County, Fayette County GIS		

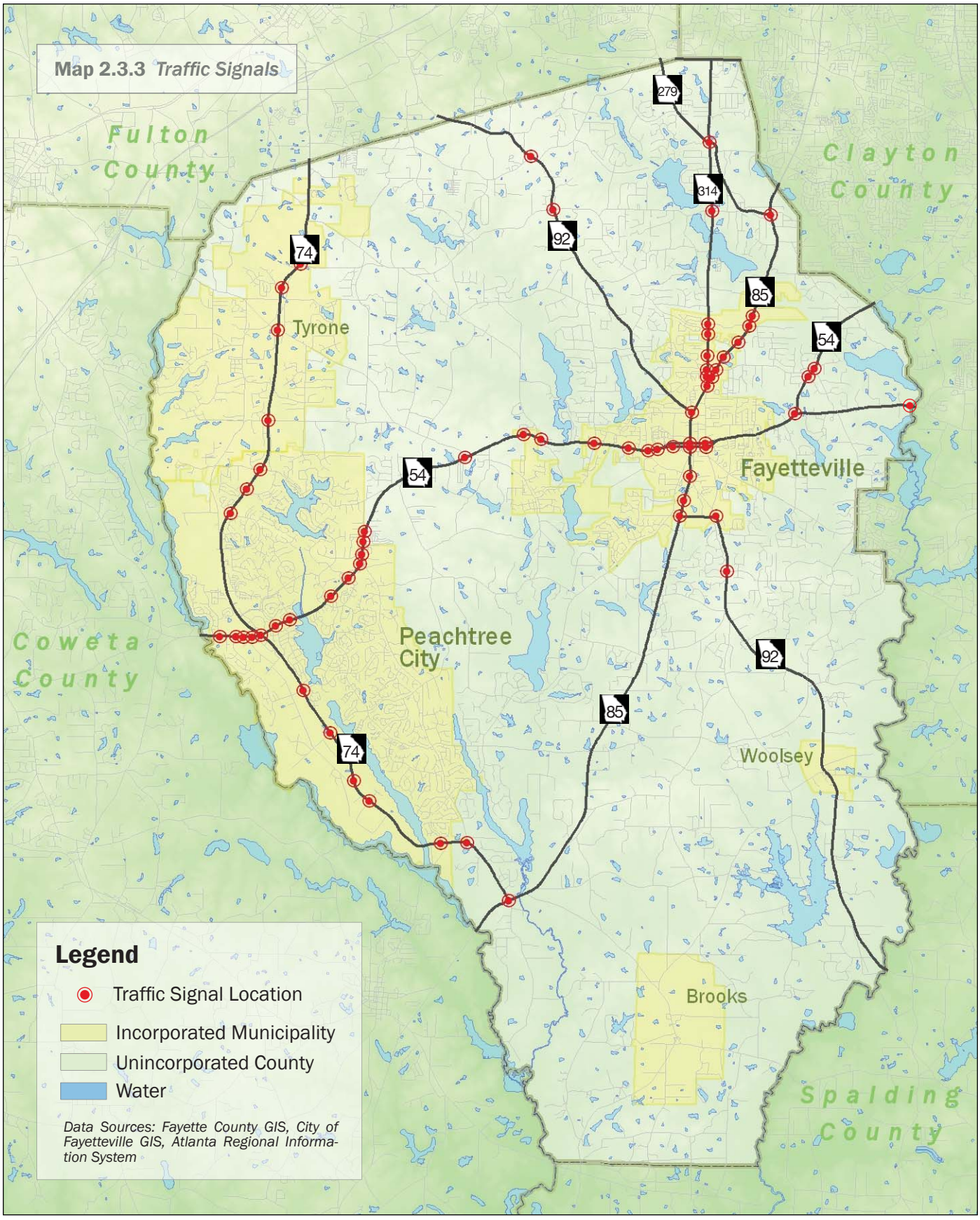

Map 2.3.2 GDOT Functional Classification
Fulton County
Clayton County
Coweta County
Spalding County
Tyrone
Peachtree City
Fayetteville
Woolsey
Brooks
279
314
92
74
85
54
350
Legend
Rural Minor Arterial
Rural Collector
Urban Principal Arterial
Urban Minor Arterial
Urban Collector
Local
Incorporated Municipality
Unincorporated County
Water
Data Sources: Fayette County GIS, GDOT Roadway Inventory, Atlanta Regional Information System

2.3.3 Traffic Control Infrastructure

There are currently 65 signals in Fayette County, and all but one of these control intersections on GDOT routes. Maintenance responsibilities for these signals are shared between GDOT and the County and its municipalities, though GDOT makes decisions on signal timing.

Due mostly to the absence of interstates in Fayette County, more advanced forms of traffic control and monitoring, such as real-time congestion monitoring and reporting through variable message signs, are not in place.

One noteworthy pattern is the difference in signal spacing between the different state routes, as illustrated on the map to the right. Highway 54, the east-west spine of the county connecting Peachtree City and Fayetteville, has several higher-volume intersections through Peachtree City that warrant signal placement. West of Highway 74 in particular, it also serves an access function for one of the County areas of intense commercial development. Highway 74, on the other hand, has signals spaced farther apart, with fewer access points to local development. With the exception of the intersection with Highway 54, these signals provide longer movement times to Highway 74 to facilitate its traffic flow. This different pattern of signal spacing reflects historic needs for access.


Map 2.3.3 Traffic Signals
Fulton County
Clayton County
Coweta County
Spalding County
Tyrone
Peachtree City
Fayetteville
Woolsey
Brooks
279
314
92
74
85
54
Legend
Traffic Signal Location
Incorporated Municipality
Unincorporated County
Water
Data Sources: Fayette County GIS, City of Fayetteville GIS, Atlanta Regional Information System

2.3.4 Bridges

GDOT defines a bridge as a horizontally-spanning structure built over water or any depression or obstacle (such as a railroad) to allow the passage of pedestrians or vehicles. These differ from culverts, which are the diversion of a water feature into a constrained, covered structure over which a roadway is built.

Presently, Fayette County has 73 bridges, including two pedestrian overpasses in Peachtree City. As the County does not have any interstate highways and a limited amount of railroads (see Section 2.5.2 of this report), most of these bridges cross streams or reservoirs.

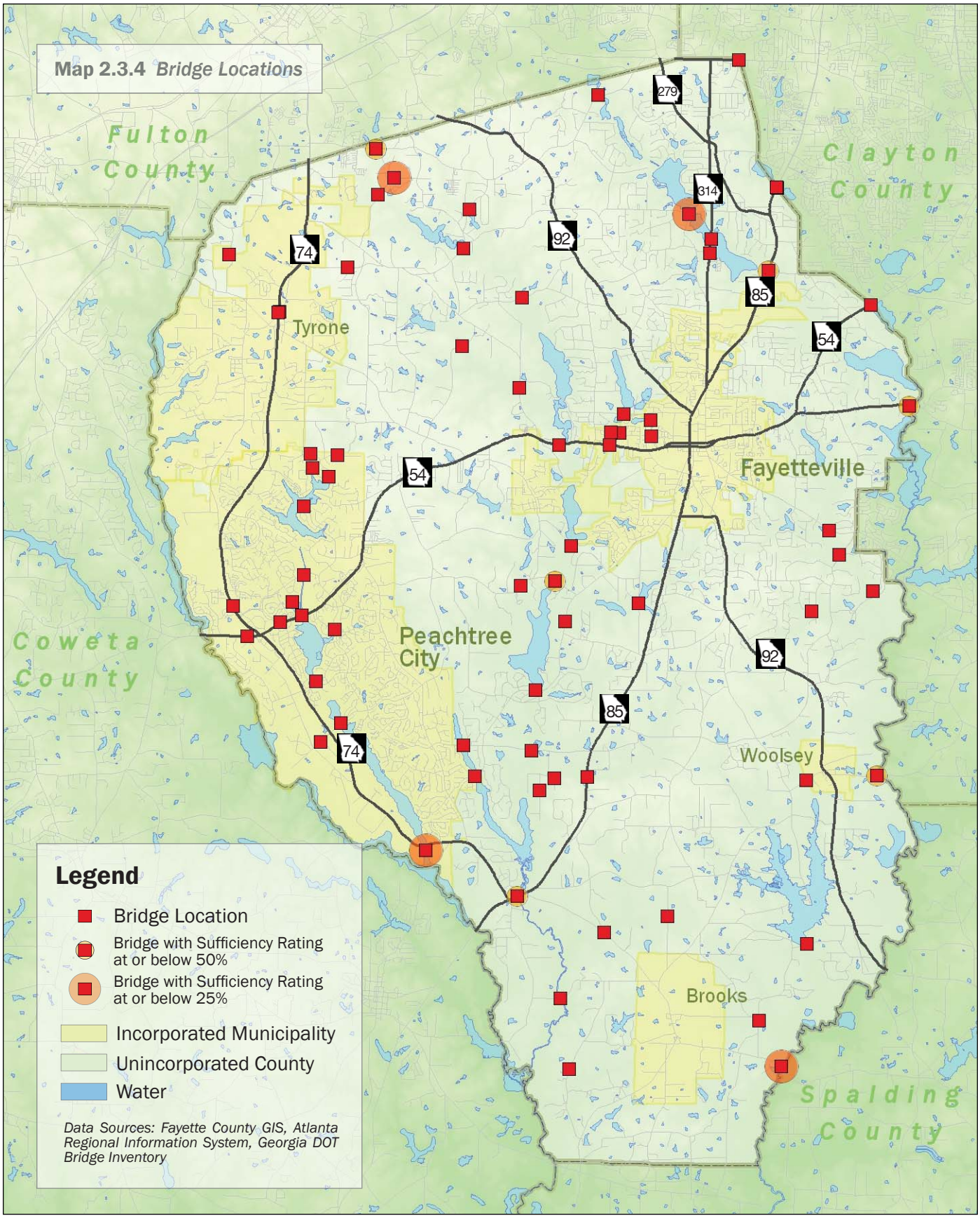
GDOT regularly inspects all bridges in the County for safety and maintenance needs, and this inspection program includes all vehicular roadway bridges in the county. GDOT's report of these inspections includes a sufficiency rating based on a combination of factors including (but not limited to) structural condition, surface type, protective guard railing and foundation type and condition. Most of the County's bridges are in good condition, with over half of the 73 bridges (43) carrying sufficiency ratings of 80 or above. Nine of the County's bridges have sufficiency ratings below 50, indicating more severe structural deficiencies in need of repair or replacement. These bridges are shown in the table below.

The map to the right illustrates the locations of these bridges. Those with sufficiency ratings at or below 50 percent are shown with distinct symbols.

Table 3.4 **Bridges with Low Sufficiency Ratings**

GDOT Bridge ID	*Primary Road*	*Bridge Crosses*	*Year Built*	*Sufficiency Rating*
113-0019-0	McIntosh Road	Flint River	1950	**9.2**
113-5005-0	Coastline Road	CSX Railroad	1940	**10.3**
113-5030-0	Kenwood Road	Morning Creek	1972	**17.5**
113-0008-0	Highway 74	Flat Creek	1959	**21.4**
113-5024-0	Ebenezer Church Road	Whitewater Creek	1965	**36.2**
113-0009-0	Highway 85	Whitewater Creek	1950	**44.5**
113-0020-0	Hampton Road	Flint River	1974	**45.0**
113-5004-0	Milam Road	Whitewater Creek	1960	**46.3**
113-0025-0	McDonough Road	Flint River	1956	**47.9**

Data Sources: GDOT Bridge Inventory and Sufficiency Reports, National Bridge Inventory


Map 2.3.4 Bridge Locations
Fulton County
Clayton County
Coweta County
Spalding County
Tyrone
Peachtree City
Fayetteville
Woolsey
Brooks
279
314
92
74
85
54
Legend
Bridge Location
Bridge with Sufficiency Rating at or below 50%
Bridge with Sufficiency Rating at or below 25%
Incorporated Municipality
Unincorporated County
Water
Data Sources: Fayette County GIS, Atlanta Regional Information System, Georgia DOT Bridge Inventory

2.4 **Multimodal Inventory**

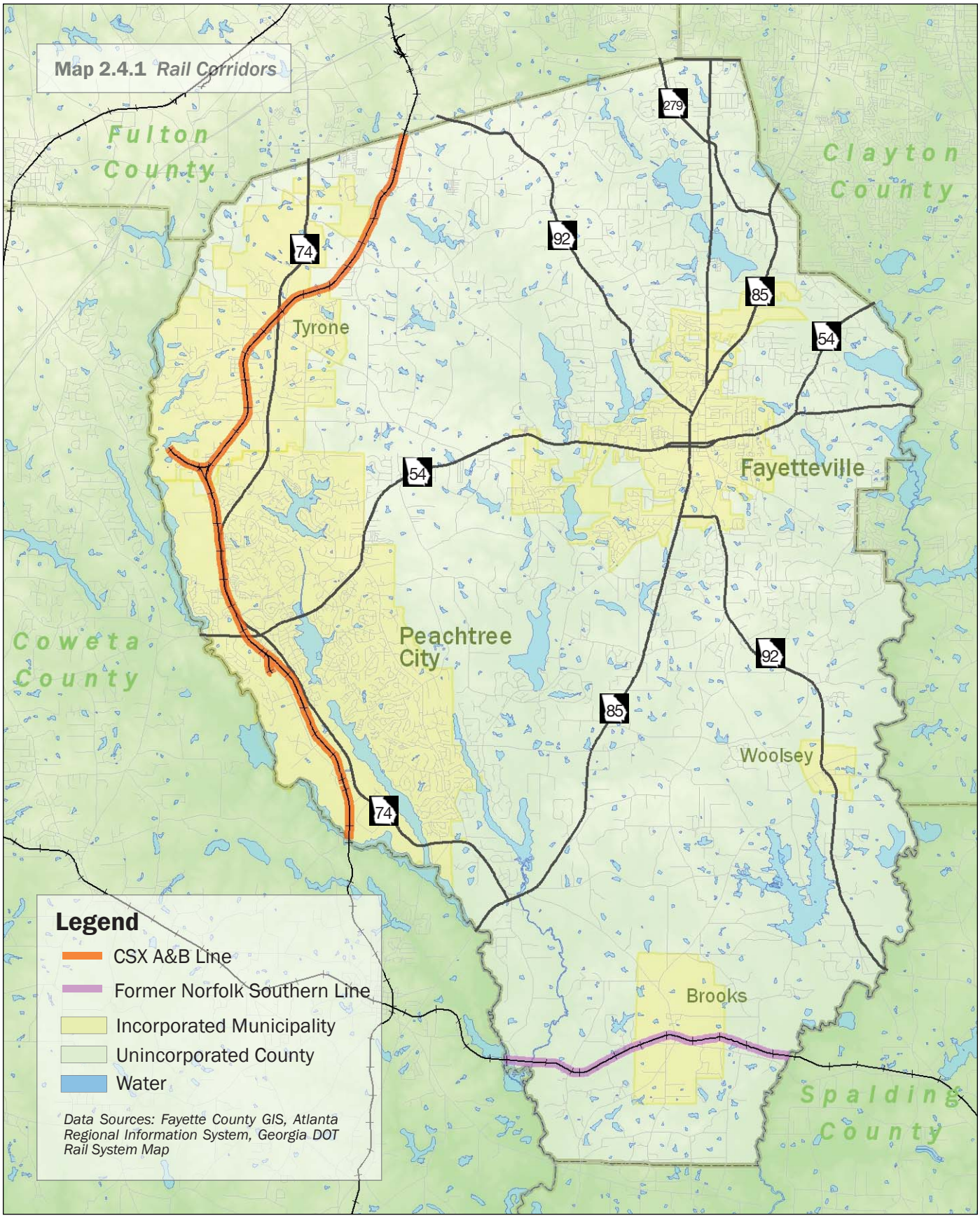
2.4.1 Existing Rail Inventory

Currently, Fayette County has 22.3 miles of rail right-of-way in two discrete segments that intersect outside of the County. Of this rail, 16.8 miles run generally parallel to the County's western boundary and pass through the cities of Tyrone and Peachtree City. This portion is owned and operated by CSX Transportation. It connects to the Tilford Yard transfer facility in Atlanta and continues south to CSX's main southeastern hub at Waycross. This is one of CSX's active mainlines through Georgia. In 2004, this line carried nearly 35 million tons of freight.

Most of the county's active industrial land uses are located along this corridor, and it includes two service spur lines: one in the south of Tyrone to serve the Shamrock Industrial Park and another to serve a quarry west of SR 74 on Jenkins Road in the north of Tyrone. The latter spur crosses SR 74 at grade and requires that SR 74 traffic be stopped when the railroad is in use. Both of these spurs require truck connections for freight and other industrial needs to other parts of the region.

The remaining 5.5 miles of rail right-of-way in Fayette, passing generally east to west through the southern portion of the County and through the city limits of Brooks, are the former Central of Georgia Railroad. This line is now owned by Norfolk Southern. It is inactive and rail has been removed through most of its length.

The County does not currently have inter-city passenger rail service. The closest inter-city passenger rail facility is the Amtrak station in Atlanta.


Map 2.4.1 Rail Corridors
Fulton County
Clayton County
Coweta County
Tyrone
Peachtree City
Fayetteville
Woolsey
Brooks
Spalding County
279
92
74
85
54
Legend
CSX A&B Line
Former Norfolk Southern Line
Incorporated Municipality
Unincorporated County
Water
Data Sources: Fayette County GIS, Atlanta Regional Information System, Georgia DOT Rail System Map

2.4.2 Freight Corridors

Metropolitan Atlanta is the fourth-largest freight distribution nexus in the United States, behind New York, Los Angeles and Chicago. In 2005, over 953 million tons of freight were moved through it. Its extensive network of highways, rail and air-based freight movement have long given it preeminence in the Southeast. However, the spine of this freight movement system is the Interstate highway system, which does not move through Fayette County.

The major thoroughfares through Fayette County are its state highways. The links between Highways 85, 279, 314 and the Hartsfield-Jackson Airport are especially important in freight movements in and out of the county. Although Fayette does not have large concentrations of industrial land uses relative to other metropolitan Atlanta counties, its proximity to Hartsfield-Jackson Atlanta International Airport and its cargo distribution operations suggests that it is an important link in the southern part of the metropolitan area.

ARC has developed a Priority Freight Highway Network as part of the Atlanta Regional Freight Mobility plan intended in part to prioritize transportation funds on corridors that serve the movement of freight as well as people. This is illustrated on the following page, and in Fayette County includes State Roads 54, 74, 85 and 92.

Map 2.4.2 *ARC Freight Corridors Map*

2.4.3 Aviation

Fayette County contains two airports within its boundaries. Falcon Field in Peachtree City (ICAO code KFFC) is a general aviation airport owned and operated by the Peachtree City Airport Authority. It accommodates a variety of aviation related activities including corporate/business jets, recreational flying, experimental aircraft, expedited shipping of small parcels and postage, police and law enforcement aircraft, and aerial photography and surveying. The airport has 57 hangar spaces, 115 apron parking spaces, 107 auto parking spaces and an 8,000-square foot terminal/administration building. Rental cars are available. It is classified as a Level III public airport by GDOT, a classification used for business airports of regional impact. It includes a mile-long paved runway as well as a fuel station, and functions primarily for business travel to and from Peachtree City. Willow Pond Airport, located along Lester Road southwest of Fayetteville, is a private grass strip used as an airpark and owned and maintained by adjacent property owners.

The nearest airport providing scheduled commercial passenger air service is the Hartsfield-Jackson Atlanta International Airport (H-JAIA, ICAO code KATL) located in Fulton and Clayton Counties. H-JAIA is the preeminent airport for the Atlanta region, a major hub in the United States commercial aviation system and the busiest airport in the world in terms of both aircraft movements (takeoffs and landings) and passenger activity (enplanements and deplanements).

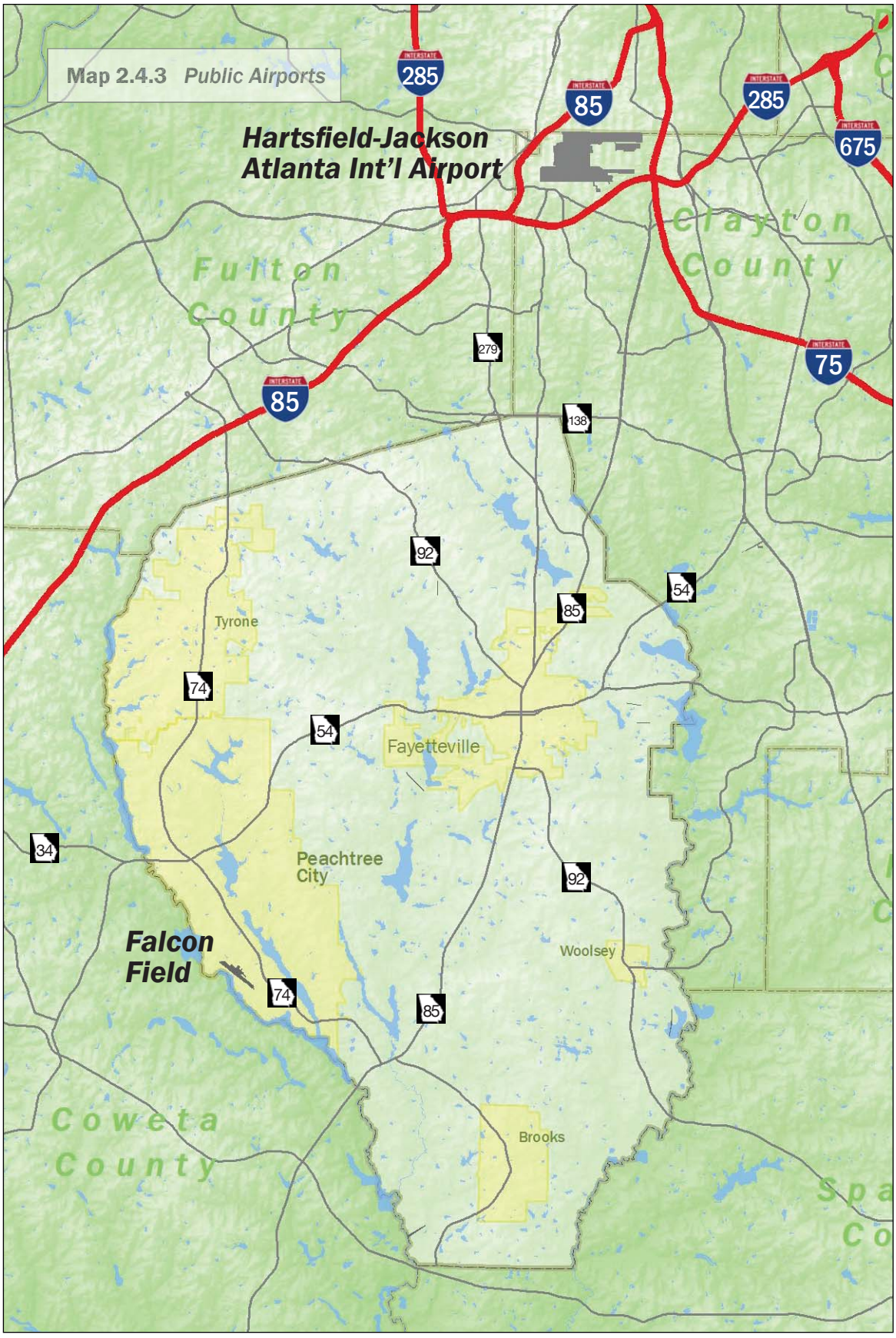
H-JAIA is also the only airport in the Atlanta region that offers scheduled air cargo service. Through a combination of commercial passenger carriers, all-cargo carriers and integrated express carriers, H-JAIA serves all domestic air cargo hubs, primary international gateways and over 40 secondary international destinations. In 2005 H-JAIA handled 846,200 tons of air cargo, inclusive of domestic and international, freight, express and mail. That year it was the tenth busiest among U.S. airports and 25th among all world airports in terms of gross tonnage.

Fayette County has been strongly influenced by its proximity to H-JAIA, especially since the airport's reconstruction in the late 1970s and subsequent increases in operational capacity. The airport's growth has made it the largest single employer in the state of Georgia and many residents of the south Atlanta metropolitan area work there or in adjacent centers of employment.

Table 2.4.3 **Comparison of Aviation Facilities Serving Fayette County**

	Falcon Field	*H-JAIA*
Annual Aircraft Operations (Year)	52,592 (2004)	980,386 (2005)
Aircraft Based at Airport	180	0
Distance from Atlanta Central Business District	25 miles southwest	7 miles south
Ratio of Operational Demand to Airport Capacity (2006)	29%	86%

Data Sources: Atlanta Regional Freight Mobility Plan Needs Assessment, FAA Airport Master Records, GDOT Airport Directory


Map 2.4.3 Public Airports
Hartsfield-Jackson
Atlanta Int'l Airport
Fulton
County
Clayton
County
Tyrone
Fayetteville
Peachtree
City
Falcon
Field
Woolsey
Brooks
Coweta
County
285
85
285
675
75
279
138
92
54
85
74
54
34
92
74
85

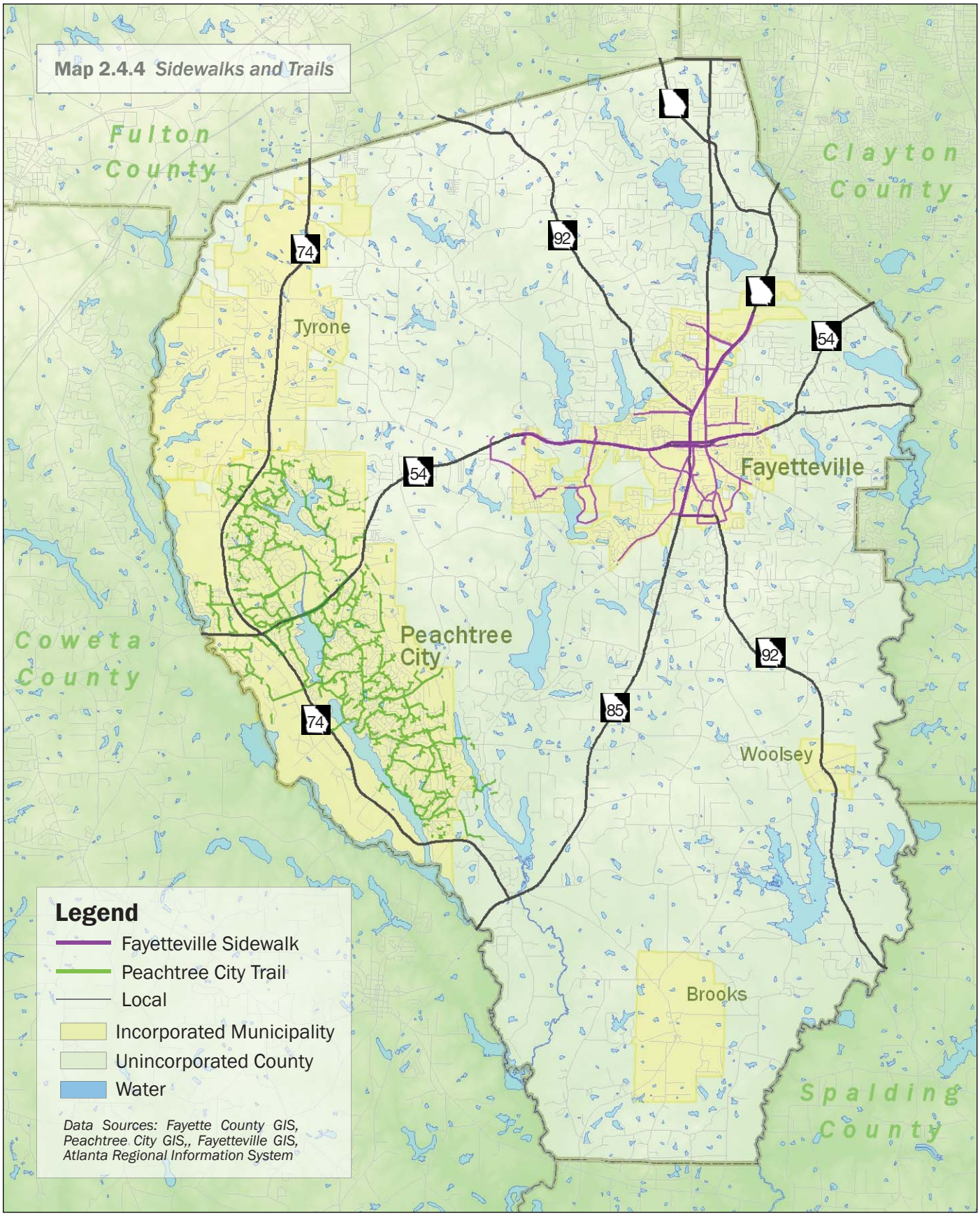
2.4.4 Sidewalks, Trails and Bicycle Facilities

Many of the existing sidewalks in Fayette County are located in its incorporated areas. Various locations in the unincorporated County have sidewalks along roadways, either through development or through inclusion in a public roadway project. Generally speaking, the County does not often build sidewalks or require their construction on new streets that are added through private development.

Fayetteville has 36 miles of sidewalks, many of which are located along major roadways such as State Road 85 and State Road 54. Currently it has plans to add to this network, primarily through current SPLOST-generated funding. Though the City of Peachtree City does not have conventional sidewalks on most of its local streets, it does have an extensive network of off-street, multi-use trails that are designed for golf cart access through the community. This network also accommodates bicycle and pedestrian use and is the primary means of pedestrian and non-motorized connectivity.

As a result, and to encourage the provision of additional multi- use paths for all residents, the City's Land Development Ordinance requires that all new developments provide a connection to the existing path system. This alone increases the length of the overall path network on a regular basis. Additionally, the City has provisions within the Public Improvements Program to annually design and construct the multi-use path system to areas that are not currently being served and to regularly maintain the overall path system (*source: Peachtree City LCI, 2001*).

Multi-use trails do not exist evenly throughout the County outside of Peachtree City. Those that do exist have been constructed in disconnected pieces. As a result, cyclists and pedestrians wishing to use off-road trails are limited in movement through the county. This disconnect in bicycle movement is complicated by the county's lack of on-street or on-road facilities. Currently, Fayette County does not have any dedicated on-street bicycle lanes, either on GDOT highways or on local roads. Due to the rural character of many of Fayette's roads, the addition of on-road facilities would likely be through widened, smooth shoulders allowing cyclists a safe riding area outside of the travel lane, and many of the County's roadways currently do not feature such shoulders in their design.


Map 2.4.4 Sidewalks and Trails
Fulton County
Clayton County
Coweta County
Spalding County
Tyrone
Peachtree City
Fayetteville
Woolsey
Brooks
74
92
54
85
Legend
Fayetteville Sidewalk
Peachtree City Trail
Local
Incorporated Municipality
Unincorporated County
Water
Data Sources: Fayette County GIS, Peachtree City GIS,, Fayetteville GIS, Atlanta Regional Information System

2.4.5 Transit

Fayette County currently does not have any scheduled transit service. The nearest available transit is in Clayton County, where Metropolitan Atlanta Rapid Transit Authority (MARTA) rail service terminates at the Hartsfield-Jackson Airport station, and in the Fulton County communities of Fairburn and Palmetto, which are served by MARTA buses. Clayton County's local C-Tran bus service terminated on March 31, 2010.

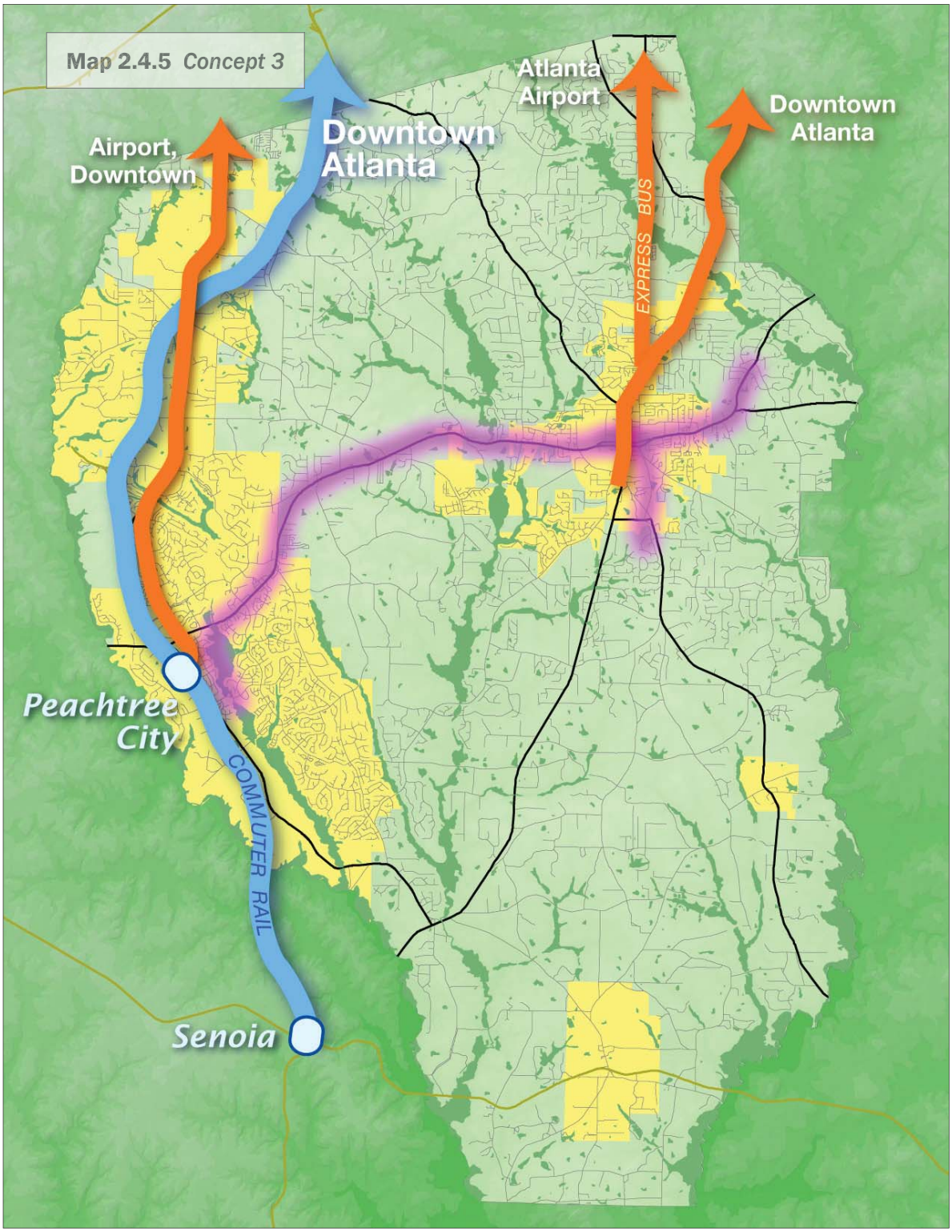
The Georgia Regional Transportation Authority (GRTA) also serves Clayton and Coweta Counties with its Xpress commuter bus service. This service provides scheduled commuter operations (into Atlanta in the morning commute period and out of Atlanta in the afternoons) with limited reverse commute service. There is currently not direct service in Fayette County, although most GRTA Xpress routes terminate at a park-and-ride facility. Fayette residents have access to these services through the facilities in adjacent communities. In Coweta County, the terminating park-and-ride facility is in Newnan; in Clayton County facilities are located in at the Clayton County Justice Center and Riverdale.

Though not implemented or thoroughly detailed as specific projects, the Transit Planning Board convened by the state of Georgia, GRTA and other agencies has developed a regionwide transit vision, known popularly as Concept 3. This vision was formed in cooperation with local government staff and officials and incorporates a range of transit technologies in an effort to appropriately match transit facilities with their land use environments. In Fayette County, this includes commuter rail from Peachtree City and Tyrone to Atlanta on existing CSX railroad as well as commuter and local bus services from Peachtree City and Fayetteville north to Atlanta.

In addition to the Concept 3 vision, the Southern Regional Accessibility Study identifies many strong candidate areas for potential transit service, noting that most are along existing high-capacity infrastructure. In Fayette, these include Peachtree City and Fayetteville, both already large population centers for the region and both emerging as retail destinations.

Cross-county transit along the State Road 54 corridor is also identified as part of the Concept 3 vision (shown on Map 4.5 in magenta), yet existing and future land use patterns are not inclined to support ridership justifying scheduled transit service. This is an area of the county between several of its activity centers, however, and community input regarding intra-county transit did express that this corridor may be better served by demand-responsive transit, particularly oriented to Fayette County's senior citizen population.

Both of these findings of transit potential have seen support within Fayette County for commuter-based transit to Atlanta and the Hartsfield-Jackson Airport, though it is important to note that public opinion on transit service to Fayette County remains divided. Opposition to the idea of transit service as expressed by members of the Fayette community is largely due to perceived community impacts from the introduction of transit service.



The Concept 3 transit vision in Fayette County.

2.5 **Needs Assessment**

The inventory in the preceding sections of this report suggests that the primary needs of Fayette County's transportation system extend beyond road-based improvements. However, road infrastructure constitutes the bulk of the County's current transportation and as such needs to be optimized and enhanced to meet the County's future population and employment growth.

This report compares the current infrastructure to the projected population and employment over the next 20 years. It seeks to identify deficiencies where transportation infrastructure is not sufficient to serve the future needs of the County and forms the basis for forthcoming work in developing transportation project concepts and recommendations.

2.5.1 Inputs to the Needs Assessment

The ARC travel demand model was used in forecasting future travel patterns and assessing how those relate to infrastructural capacity. Its assignment of vehicular traffic to certain routes, represented as links in a network, is based on a region-wide distribution of projected employment and population and the demand for travel between the places where this population and employment is located. However, multiple other inputs were considered in understanding the extent of transportation needs throughout Fayette County, described in the following sections.

Stakeholder and Public Input

The study team interviewed nearly 40 local, regional, and state stakeholders during the plan development process. The following issues and concerns were recurring themes expressed by stakeholders during the interview process.

- Fayette County's **rural character** is a quintessential element of the community
- Patterns of commercial development along major highways greatly detract from this character
- **Senior citizens need travel options** beyond driving
- **Traffic light synchronization** is a major problem within the county
- **Roadway design is often in conflict** with the type of community Fayette residents wish to preserve
- A number of **dangerous intersections** exist within the county

The following recommendations were identified by stakeholders to help improve accessibility and mobility within Fayette County.

- Require developers to provide proper infrastructure for commercial and residential properties.
- Explore **shuttle-based transportation** in Fayetteville and other activity centers in the County
- **Improve access to Interstate 85**

- Provide **more pedestrian facilities** in the manner of the Peachtree City trail system
- **Educate drivers** to share the road with cyclists
- Explore **commuter-oriented public transportation** options

Travel Demand Model Assumptions

The ARC travel demand model is based on a four-level construction similar to many other travel demand models that relies on socioeconomic input data summarizing current and projected population and employment: (1) the computation of trip generation; (2) distribution of trips; (3) assignment of mode split and vehicle use (i.e. whether vehicles are occupied by a single driver/passenger or by multiple passengers); and (4) assignment of traffic to model links. Its assignment of vehicular traffic to certain routes, represented as links in a network and derived from the amounts of residential population, households and employment within the different traffic analysis zones (TAZs) of the region, is based on a region-wide distribution of these factors.

The model was used to understand likely traffic patterns and areas of roadway congestion. In addition, it was used to understand where traffic volumes are likely to be considerably below a roadway's capacity. To do this, the Fayette Forward team revisited the region-wide growth projections from ARC and developed socioeconomic input data more closely matching the County's land use policies and expected growth, described in more detail in Chapter 5. These two indicators together point out locations where *capacity adjustment* is needed: either the addition of capacity or the conversion of existing roadway geometries to better fit the actual vehicle travel demand and offer travel options to other users.

Roadways with Volumes Exceeding Capacity

Roadway capacity is conventionally defined as the volume of vehicular traffic a roadway can carry. As a variety of contextual factors, such as traffic signals and intersecting streets can affect a road's capacity, roadway level of service is usually estimated based on a ratio of traffic volume to capacity. The ARC travel demand model provides generalized guidance of capacity based on the number of intersections in a given distance and whether or not the roadway is in an urban or rural setting. This can be used to calculate the volume-to-capacity (V/C) ratio of a given roadway, with a letter-based level of service rating assigned to different ranges of these ratios. A roadway is said to be at capacity when its V/C ratio reaches or exceeds 1.0, although conventional transportation planning usually recognizes that V/C ratios approaching 1.0 are likely to reach capacity in the short term. The model shows that most of Fayette County's roadways are used within their capacity, but that very few carry traffic volumes exceeding capacity. Section 2.5.2 discusses this topic in greater detail and points out where some sections reflecting a capacity deficiency in the travel demand model likely do not show this deficiency from a standpoint of moving vehicle lanes, but rather through other factors affecting roadway capacity.

Roadways with Volumes Significantly Below Capacity

Many of Fayette County's roadways are utilized within comfortable levels of service, yet few of Fayette's roads carry volumes that would allow an easy reduction of lanes. These types of cross-section conversions are easily accomplished when the section consists of a single cartway (in other words, when the section is not divided by a raised median). In most cases, the multi-lane road sections that carry volumes below typical levels for a four-lane section are roadways that have been designed especially for aesthetic reasons. Both Jeff Davis Drive and Peachtree Parkway are examples of these types of roads designed with a bifurcated section in mind, and reduction of the overall number of lanes will likely require significant engineering changes in addition to their alteration of a specifically-envisioned street section.

Traffic Counts

GDOT takes counts of daily traffic volumes at stations throughout the state. At any given station location, these may not be actual counts from year to year as counting equipment is moved between stations. In the years where counts are not actually taken, GDOT provides estimates.

In addition, the Fayette Forward project team collected turning movement counts at key intersections in the County to have a more detailed understanding of traffic operations and the implications of potential design decisions.

Accident Data from GDOT Inventory

GDOT also maintains a statewide inventory of vehicle accidents as reported by local and state law enforcement agencies. Data are collected on a continuous basis, although refinement of the location data is performed by GDOT for complete years at a time. Due to the required time for processing and refinement, this study analyzed data from 2005 through the end of 2007.

Population, Household and Employment Projections

ARC uses an official set of population and employment projections as the basis for future iterations of the regional travel demand model. These are based on both regionwide and area-specific growth patterns and generally continue trends shown over the past. As such, Fayette County can be expected to achieve considerable growth by 2030.

Working Goals for CTP Projects

Fayette Forward is a comprehensive transportation plan developed with the dual intent of tying transportation planning decisions to land use in a way that responds more closely to community needs and informing future regional long-range transportation plans. As such, the Fayette community helped to identify a series of goals to which transportation projects developed through the Fayette Forward process should respond. These goals are described in the following subsections.

Refer to Chapter 3 for a discussion of the public involvement process and the organizational context of Fayette Forward in which these goals were developed. During later public outreach efforts, the Fayette Forward planning team modified these goals, eliminating the goal on regional strategies and incorporating this idea into the goal supporting fiscal sustainibility in project planning and development.

Support the County's Vision for Positive Growth

Fayette County has committed through a legacy of public policies to grow and develop in a manner that emphasizes open space and less density of development than other parts of the Atlanta region. In terms of transportation, this means pursuing projects and policies that do not distract from this vision.

Develop Safe and Balanced Choices

Fayette County's transportation system should serve different users and travel modes, and it should do so in a way that provides safe and comfortable travel. In terms of transportation, this means addressing multiple modes, focusing on existing safety problems, and providing more route options to travelers so that the transportation system is clear and intuitive.

Develop Regional Strategies

As a part of the Atlanta region, Fayette County's transportation needs are closely tied to those of other jurisdictions. For example, many Fayette residents do not work in the County, meaning that their work-based travel takes them into other communities that also have their own needs and concerns. In terms of transportation, this means pursuing projects that meet these goals and provide mutual benefit to regional partners, especially neighboring counties.

Maintain Fiscal Sustainability

In planning for transportation infrastructure, the cost of construction is considered as a primary factor. However, the cost of maintenance should be considered as well, especially with regard to facilities that are the responsibility of Fayette County itself. The purpose of this goal is to help identify projects that help the county to meet its needs for future population and employment growth but that the County can afford to construct and maintain.

Preserve Community Character

Fayette County is a desirable place because it offers a scenic, rustic environment featuring ample open space and natural amenities. Yet it is within reasonable driving distance of the Atlanta airport and major employment centers of the region. This goal is intended to express that environment as a defining element of the County's identity and charges transportation investments to preserve it.

Desirable Places for All Citizens

The county is home to children, families and senior citizens. Transportation investments should seek to allow the County to continue accommodating these populations, understanding that personal mobility, in whatever form it takes, and livability are closely tied.

2.5.2 Roadway System Needs

As the foundation of Fayette County's overall transportation system, the roadway system is used most heavily in meeting the County's movement and distribution needs. This needs assessment focuses on roadway capacity, both at the time of this study and based on future projections.

Current Capacity Deficiencies

Based on results from the travel demand model for current and future years, Fayette County's roads operate within reasonable levels of service. Using a 2005 model year as a baseline, no roadways carry volumes that exceed capacity or where volume-to-capacity ratios even exceed 0.85. This suggests that from a capacity standpoint the County's roadway system is adequate for its population and transportation needs. It should be noted, however, that this definition does not take into account other roadway factors that limit capacity, especially geometric design, spacing of turning movements and traffic signal coordination.

Projected Capacity Deficiencies

Based on results from the travel demand model for current and future years, certain roadway links are projected to carry volumes that approach or exceed their vehicle-carrying capacity. These are described in the table below.

Table 2.5.2A **Roadway Segments at LOS E or F, 2030 Travel Demand Model**

Facility Information	*Roadway LOS*
Lanier Avenue (SR 54 westbound), between Lafayette Avenue and Campaign Trail	**F**
SR 54, west of McDuff Parkway (crossing Line Creek into Coweta County	**F**
SR 92, between Westbridge and Rivers Road	**F**
SR 54, between McDuff Parkway and Huddleston Road	**E**
Jeff Davis Drive, between Stonewall Avenue and Lanier Avenue	**E**
Palmetto Road, between Briarwood Road and Line Creek	**E**
SR 85 at SR 314/Jeff Davis Drive	**E**
SR 279 between Lafayette Drive and North Drive	**E**
Data Sources: Atlanta Regional Information System, GDOT GIS, Fayette County GIS	

Many of the segments described in this table are short lengths, often less than 1000 feet. That there is a notable deficiency in these segments but not throughout a greater corridor suggests that through-moving capacity is not what limits the roadways, but rather geometric factors such as intersection design or signal coordination.

Table 2.5.2B **Description of Roadway and Intersection Levels of Service**

Levels of Service	*General Description*	*Roadways*	*Intersections*
A	***Traffic flows with very little delay and speeds are optimal. Most vehicles do not stop at all.***	Primarily free flow operations at average travel speeds (90% of free flow speed); vehicles seldom impeded in their ability to maneuver; minimal delay at signalized intersections.	Very low control delay per vehicle (up to 10 seconds per vehicle); vehicle progression is extremely favorable; very little stopping.
B	***Traffic flows with very little delay and speeds may be slightly reduced. Very infrequent and short waits at traffic signals. More vehicles stop at intersections than for LOS A.***	Generally unimpeded operations at average travel speeds (about 70% of free flow speed); ability to maneuver slightly restricted; infrequent delays at signalized intersections not bothersome.	Control delay per vehicle ranging between 10 and 20 seconds; good progression, short cycle lengths; more stopping with increasing levels of average delay.
C	***Traffic speeds continue to slow. Some vehicles may stop at this level, although many vehicles still pass through the intersection without stopping.***	Stable flow; ability to maneuver more restricted; lower average speeds (about 50% of free flow speed); longer queues likely to develop at many signalized intersections.	Control delay per vehicle ranging between 20 and 35 seconds; fair progression, longer cycle lengths; significant stopping of vehicles at this level; some individual cycles begin to fail.
D	***Congestion becomes more noticeable. Many vehicles stop, and the proportion of vehicles not stopping declines.***	Bordering on unstable flow; still lower average speeds (about 40% of free flow speed); small increases in flow rate or adverse signal progression may cause significant increases in delay.	Control delay per vehicle ranging between 35 and 55 seconds; unfavorable progression or long signal cycles or high V/C ratios may result in ever increasing delays; many vehicles stop, and individual cycle failures are noticeable.
E	***Low speeds and traffic backups at intersections. Often considered to be the limit of acceptable delay.***	Capacity - characterized by significant delay and low average speeds (about 33% of free flow speed); aggravated by poor signal progression and high signal density; extensive delays at key signalized locations.	Capacity - control delay per vehicle ranging between 55 and 80 seconds; often unfavorable progression or long signal cycles or high V/C ratios result in high delay values; and individual cycle failures are frequent occurrences.
F	***Very slow speeds and congestion. Long traffic backups. Very likely to wait for multiple greens to get through an intersection. This is considered to be unacceptable to most drivers.***	Congestion – arterial flow at extremely low speeds; frequent intersection congestion at most critical signalized intersections, with long delays and extensive queuing.	Congestion - control delay per vehicle exceeds 80 seconds; arrival rates exceed capacity; many cycle failures; long delays and extensive queuing.

Source: Highway Capacity Manual

2005 travel demand model roadway links. All links in Fayette County perform at or above Level of Service D.

2030 travel demand model roadway links with projected volumes. Refer to Table 5.2.2 for a list of specific links performing at LOS E or LOS F. Note that all of these links are relatively short and that they generally occur in areas of confluence (such as State Road 92 between Rivers and Westbridge). This suggests that the road does not have insufficient through-moving capacity, but that closely-spaced intersections, lack of turning movement storage and other features may be impeding the road's mobility potential.

Maintenance and Preservation of Existing Roadway System

Of Fayette County's 984 miles of roadways, only 79 miles are maintained by GDOT. The remainder of the County's roadway system comprises local roads, which are the maintenance responsibility of the County or the incorporated municipalities.

As discussed in Section 2.4.4, ten of the County's 73 bridges currently have sufficiency ratings below 50. Several projects for bridge replacement or upgrade have been identified in the County's 2003 Transportation Plan and subsequent list of SPLOST program projects. The County should explore replacement or upgrade of the bridges not identified in the SPLOST program and, at a minimum, continue to monitor them for functional obsolescence and structural integrity.

Bridge and Culvert Needs

As discussed in Section 2.3.4, nine of the County's bridges currently have sufficiency ratings below 50. The County and GDOT will need to continue monitoring the structural sufficiency of these bridges and consider the bridges with the most urgent structural sufficiency needs for replacement. In addition, the County will need to continue repairing and replacing culverts. This has been a significant expense in the County's roadway maintenance program and the County will need to ensure that its distribution of resources to this program meets its need for culvert maintenance.

Coordination with Land Use Planning

The County's rural character is undoubtedly one of its touchstones, and a strong program of land use policy has preserved this quality through the requirement of large residential lots (see Section 2.2.2 of this chapter). Continuing to monitor the needs of the County's transportation system as new development happens will be critical to accommodating this development safely and efficiently.

The inventory section of this report suggests two principal patterns in how current transportation infrastructure is mismatched with existing development: most rural roadway design was not intended to accommodate a largely residential population using the County's roadway system for home-based work and home-based shopping trips; and a lack of connectivity as residential development has continued throughout the County.

As the County continues to develop along the tenets of its land use policies, the dominant pattern of travel will continue to be automobile use. However, the development that continues in the County can help to strengthen the transportation system in a way that mitigates the impact of increased traffic. Current subdivision development patterns, focused on cul-de-sac street patterns and single points of entry, limit options for travel routes from new development and consequently increase traffic volumes on a small number of roadways. The County's effective street network (see Section and Map 2.3.1) shows that much of the land available for development, especially for residential subdivision, is in parts of the county where the effective network is relatively sparse. Added streets and roads that contribute to the effective street network will greatly help to distribute traffic in multiple patterns, thus allowing potentially shorter trips from selection of the most direct route and minimizing potential traffic congestion.

2.5.3 Vehicle Operations Needs

Accommodating Traffic

As reported in the Inventory (see Section 2.3.3), the County currently has 65 traffic signals. Many of these are maintained and operated by GDOT as they control intersections on GDOT roads, though some signals are controlled by local governments. This difference in responsibility in the more urbanized areas of the county, coupled with relatively close signal spacing, increases traffic delay along these corridors and impacts travel times. Vehicle-carrying capacity on these roadways is adequate to serve existing volumes, but traffic signal coordination is needed to improve overall efficiency of corridor movement.

This becomes increasingly important as traffic through the county increases. According to the Atlanta regional travel demand model, total daily trips generated within Fayette County are expected to increase from 863,116 in 2005 to 1,403,096 in 2030. However, few of the county's roadways are projected to see greatly degraded levels of service. This suggests that current transportation infrastructure is largely sufficient and that additions as forecast in the 2030 travel demand model which are defined in the Envision6 regional transportation plan will help to distribute trips through the county.

In spite of this increase, congestion along major roadway corridors is not forecast to be severe enough to greatly impact overall travel speeds, implying that these roads (the only roads that the ARC travel demand model recognizes and to which it assigns volumes) have been designed and traffic-engineered to favor movements. Overall declines in free-flow speed in 2030 from 2005, presumably due to added traffic from population and employment growth, see a slightly greater difference when congested speeds are compared. This is detailed in Table 2.5.3A. None of these arterial travel speeds reflects failing or near-failing levels of service per Highway Capacity Manual (HCM) standards on corridor levels of service and average travel speeds, but the trend displayed here does suggest a greater volume in congested conditions, thus increasing delay at intersections along these roads. It suggests that arterials and collectors are bearing all congestion and points to a need for alternative routes to further distribute traffic through the county.

Table 2.5.3A **Comparison of Free-Flow and Congested Speeds**

Facility Type	*2005*		*2030*	
	Free-Flow	*Congested*	*Free-Flow*	*Congested*
Principal Arterial	42.4	39.0	39.5	33.8
Minor Arterial	37.0	35.2	35.5	31.2
Major Collector	33.1	30.3	32.7	27.7
Minor Collector / Other Local	25.6	20.9	25.5	20.1

Local Travel Patterns

In analyzing these trips in and through Fayette County, it is important to understand the special role that Fayetteville and Peachtree City have as the county's primary centers of population. Tables 2.5.3C through 2.5.3E, on the opposite page, detail the distribution of trips in the County as a whole and from sub-areas of the County composed of traffic analysis zones (TAZs) that make up Fayetteville and Peachtree City. Of note are the proportions of trips that stay within the County and within these subareas.

Another finding of note is the change in average trip lengths in the County and its two major cities relative to those of the entire region. As shown in Table 2.5.3B, trip lengths in the region are expected to remain the same, even slightly decline, where they show a slight increase in Fayette County. This suggests that the County's residential development is expected to continue into the southern parts of the County but that employment and retail land uses that complement it are not following. To be sure, this is consistent with the County's land use policy for largely residential development and continued agricultural uses in this part of the County. However, it does point to a need to explore new street connections as this part of the County develops so that new trips have as many options for direct (and therefore shorter) trip alignments as is practical.

While on the whole Fayette County's vehicle miles traveled (VMT) per capita is comparable to the Atlanta region's, even slightly lower than the regional average, the per capita VMT for Peachtree City and its immediate surrounding areas is slightly higher than the regional average and that for Fayetteville is considerably higher. This suggests to an apparent need for Fayetteville residents to drive more per day on average, possibly due to limited employment opportunities in Fayetteville or the location of most of Fayetteville's community serving retail land use north of the majority of the city's population. It may also suggest a greater geographic distribution of jobs for Fayetteville residents. This trend is less pronounced in the 2030 model forecasts, suggesting that added residential population in Fayetteville has been balanced with complementary community elements (such as jobs, schools and retail areas) that may help to shorten trips and reduce demand for driving (thus presumably reducing per capita VMT).

Table 2.5.3B **Comparison of Average Trip Lengths**

	Average Trip Length in Miles	
	2005	*2030*
ARC Region	12.5	**12.3**
Fayette County	11.6	**12.1**
Fayetteville	10.8	**11.0**
Peachtree City	10.9	**11.9**

Table 2.5.3 C Comparison of Projected Trips In and Through Fayette County

	County of Fayette		*Fayette Originating Trips*	*All Fayette Trips*	*Fayette Originating Trips*	*All Fayette Trips*
	2005	*2030*	*2005*	*2005*	*2030*	*2030*
	Trip Volumes		**Percent of Trip Volumes**			
I - I	202,833	335,293	37%	24%	38%	24%
I - E	338,517	538,515	63%	39%	62%	38%
E - I	321,766	529,288	-	37%	-	38%
Total - Originating in Fayette	541,349	873,808	***I - I: Internal-Internal Trips:*** *those that have both trip ends within Fayette County* ***I - E: Internal-External Trips:*** *Trips begin in Fayette but ends elsewhere* ***E - I: External - Internal Trips:*** *Trips begin outside of Fayette but end within it*			
Total - Fayette	863,116	1,403,096				

Table 2.5.3 D Comparison of Projected Trips In and Through Fayetteville

	Fayetteville		*Fayette Originating Trips*	*All Fayette Trips*	*Fayette Originating Trips*	*All Fayette Trips*
	2005	*2030*	*2005*	*2005*	*2030*	*2030*
	Trip Volumes		**Percent of Trip Volumes**			
I - I	32,786	39,783	31%	15%	29%	15%
I - E	74,114	98,786	69%	35%	71%	37%
E - I	105,680	132,046	-	50%	-	49%
Total - Originating in Fayetteville	106,899	138,569	***I - I: Internal-Internal Trips:*** *those that have both trip ends within Fayette County* ***I - E: Internal-External Trips:*** *Trips begin in Fayette but ends elsewhere* ***E - I: External - Internal Trips:*** *Trips begin outside of Fayette but end within it*			
Total - Fayetteville	212,579	270,615				

Table 2.5.3 E Comparison of Projected Trips In and Through Peachtree City

	Peachtree City		*Fayette Originating Trips*	*All Fayette Trips*	*Fayette Originating Trips*	*All Fayette Trips*
	2005	*2030*	*2005*	*2005*	*2030*	*2030*
	Trip Volumes		**Percent of Trip Volumes**			
I - I	49,352	67,048	35%	20%	35%	19%
I - E	92,481	125,936	65%	38%	65%	36%
E - I	100,861	156,705	-	42%	-	45%
Total - Originating in Peachtree City	141,833	192,984	***I - I: Internal-Internal Trips:*** *those that have both trip ends within Fayette County* ***I - E: Internal-External Trips:*** *Trips begin in Fayette but ends elsewhere* ***E - I: External - Internal Trips:*** *Trips begin outside of Fayette but end within it*			
Total - Peachtree City	242,694	349,689				

2.5.4 Safety Needs

Another important concern in assessing vehicular need is safety. Data maintained by GDOT representing accidents throughout the county for 2005, 2006 and 2007 were analyzed for major patterns and occurrences. These data were compared to accident records maintained by the Fayette County Sheriff's Office. In the three consecutive years analyzed, approximately 9,600 accidents occurred in Fayette County. Data were summarized for analysis by vehicle type, roadway conditions, environmental conditions, and major harmful events. Accidents were also analyzed by severity, including any fatalities associated. The assessment of accident patterns discussed in this section does not include the Fayette County data, mainly because location reporting for this data does not allow a precise co-location of data points with those collected by GDOT.

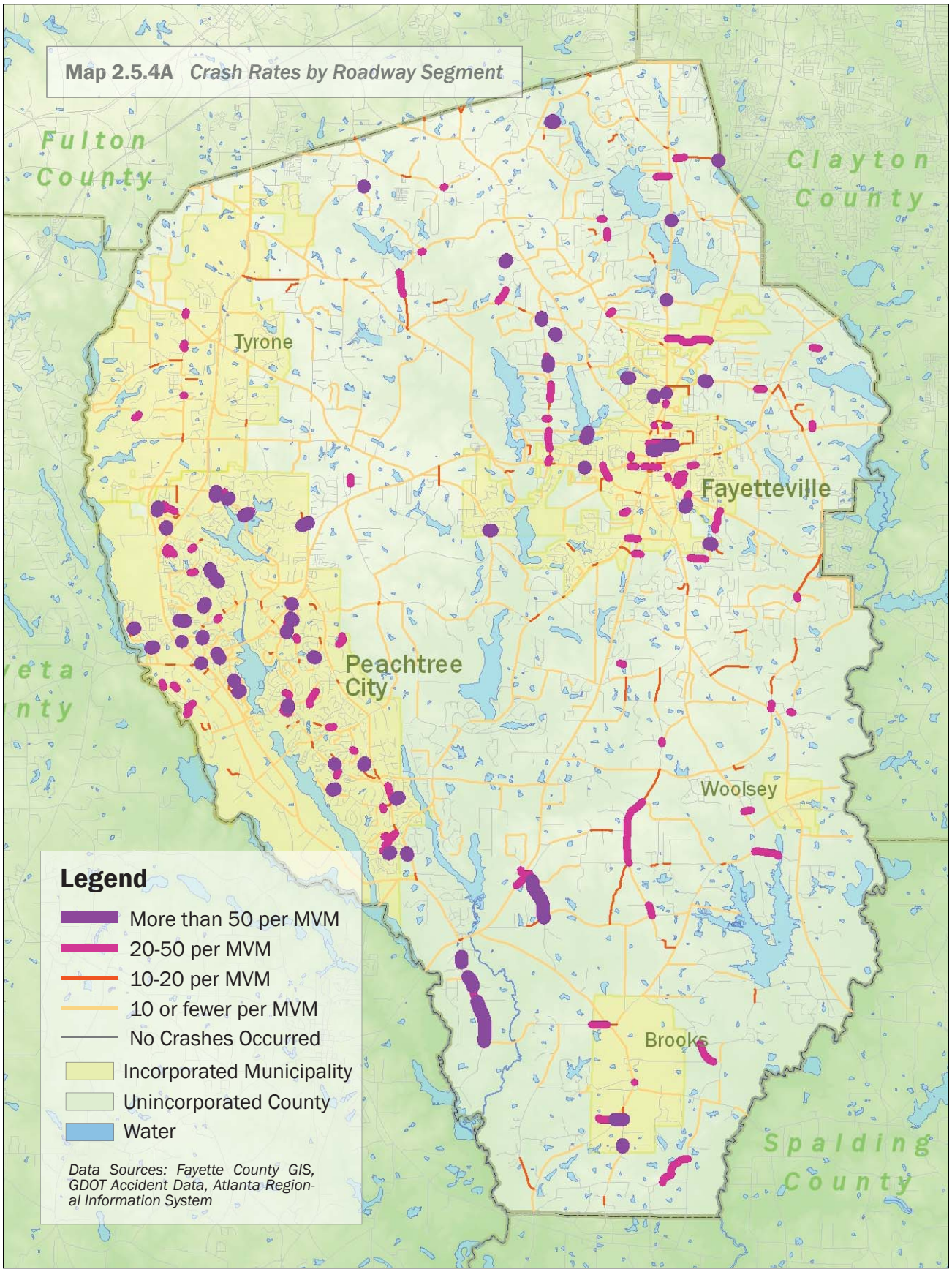
The major roadways of Fayette County, especially those maintained by GDOT, carry far greater volumes than the local roads throughout the County. To establish a meaningful basis for comparison between different roadways, crash data were corrected for volume exposure to yield crash rates on each roadway segment of the County. This correction used a methodology generally described in GDOT's 2006 Five Percent Report, where accidents are counted along a roadway segment and compared to that segment's length and average daily traffic volume. The following analysis steps were done to arrive at the crash rates for each roadway segment within the county:

1. The annual average number of crashes in each of the reported locations was calculated by dividing the total number of crashes was divided by 3 years.
2. The crash data set was linked to GDOT's roadway data through a GIS spatial join operation to get an understanding of each roadway segment's crash density, or the number of crashes per year per roadway mile.
3. Finally, the crash rate per million vehicle miles travelled was calculated by multiplying each segment's crash density by 1,000,000 and dividing this by the roadway's AADT and 365. This is represented by the following formula:

$$\textbf{Crash Rate} = \frac{\text{Crash Density x 1,000,000}}{\text{segment length x AADT x 365}}$$

In addition, to determine areas with potential safety issues, the calculated crash rates for the various segments within the County were compared with the average statewide crash rates reported for 2007. The comparison was made by each segment's roadway functional classification. Segments that have higher crash rates compared to statewide averages were identified as segments with potential safety concerns.

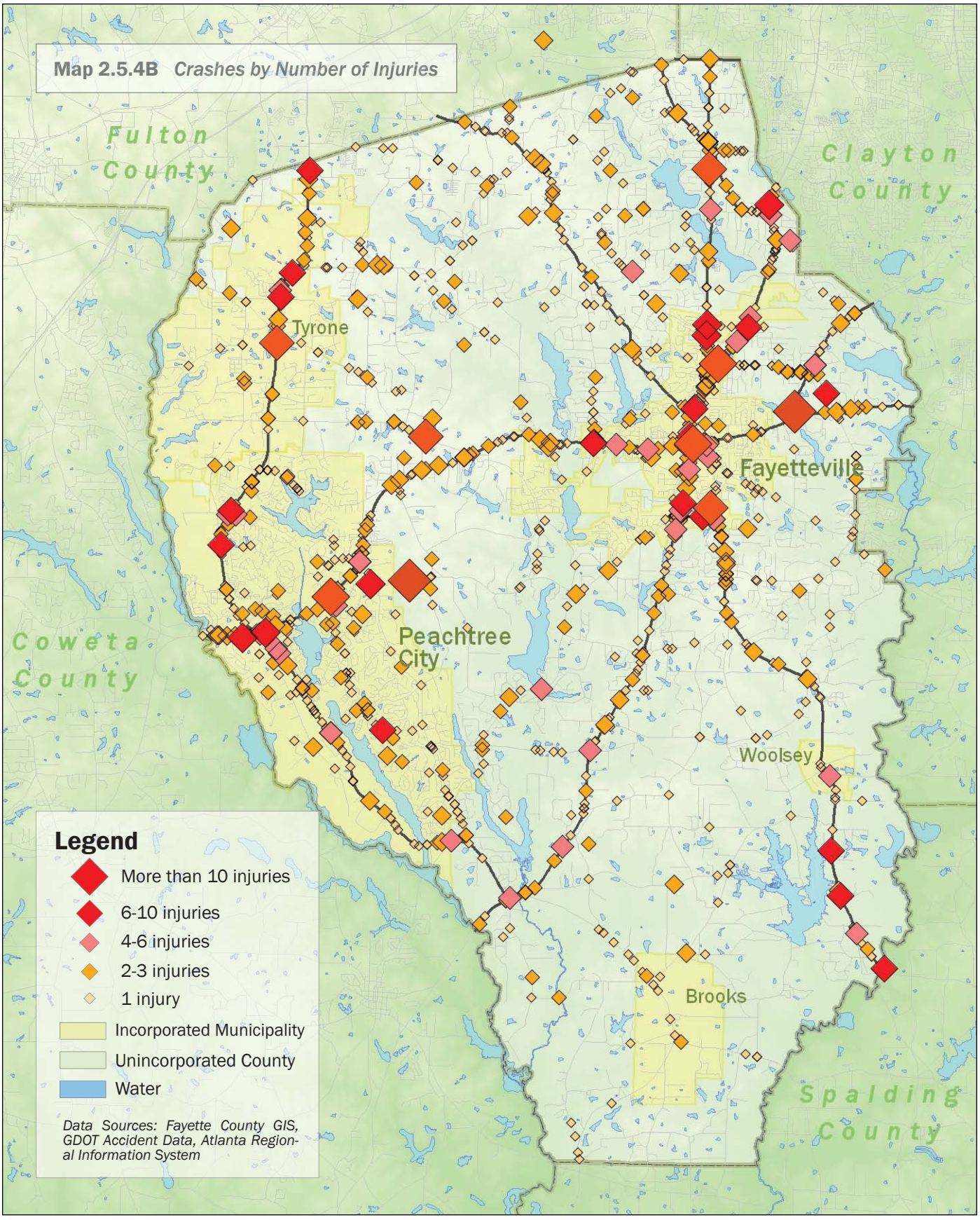
As a result, as shown in Map 2.5.4A, many of the highest crash rates occur on short segments of roadway, especially in Peachtree City. To some extent, these are outliers due to low volumes and are not a true expression that these roadways are more dangerous than the rest of the County. They do point out potential problem locations, however, and investigating individual accident records at these locations suggests key underlying causes.

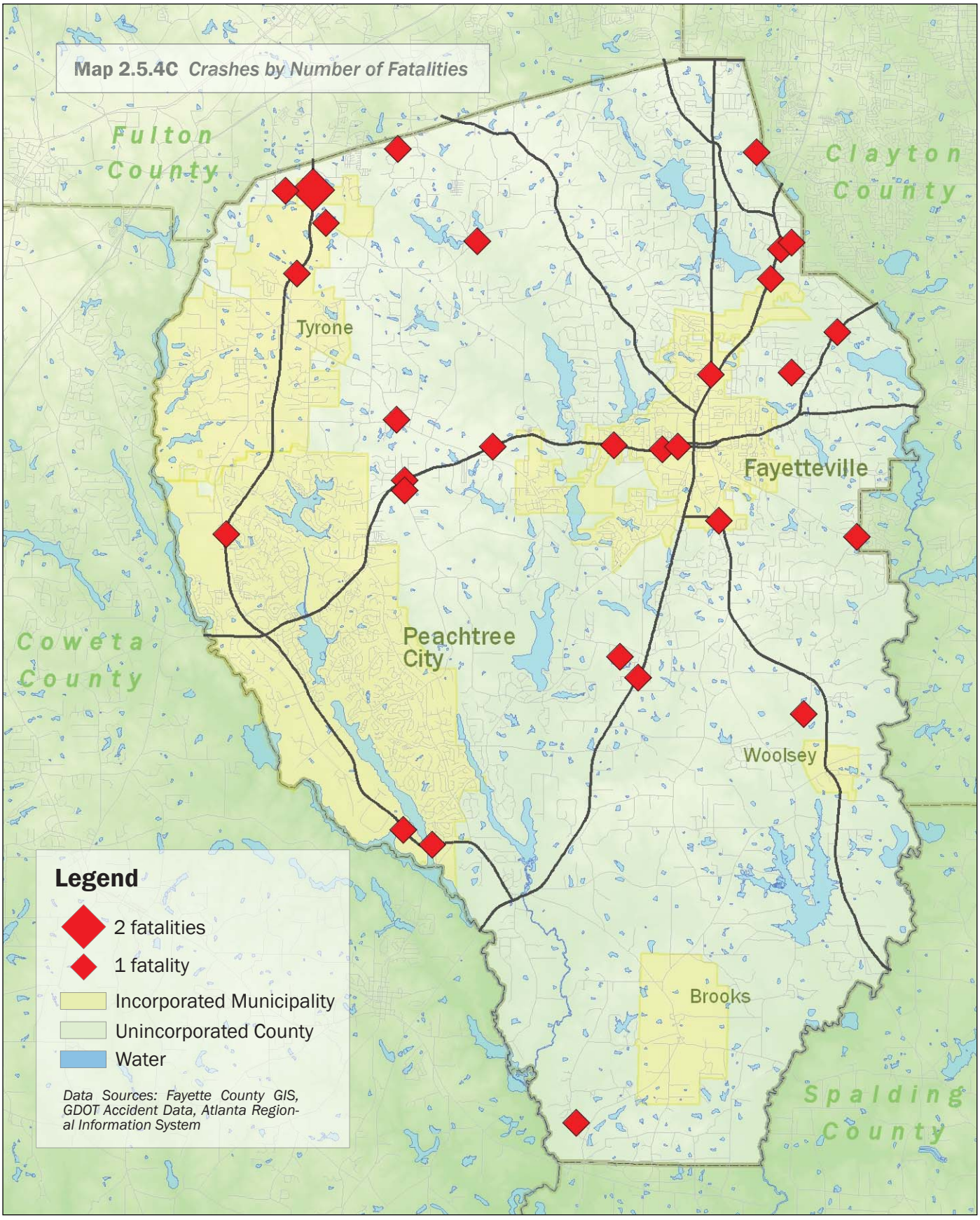

Map 2.5.4A Crash Rates by Roadway Segment
Fulton County
Clayton County
Tyrone
Fayetteville
Peachtree City
Woolsey
Brooks
Spalding County
Legend
More than 50 per MVM
20-50 per MVM
10-20 per MVM
10 or fewer per MVM
No Crashes Occurred
Incorporated Municipality
Unincorporated County
Water
Data Sources: Fayette County GIS, GDOT Accident Data, Atlanta Regional Information System

Maps 2.5.4B and 2.5.4C illustrate crash locations by injuries and fatalities, which help to demonstrate the true areas of concern with regard to roadway safety. As it would be expected, the greatest concentrations of high-injury crashes are on high-volume roads. The section of SR 54 between SR 74 and the Coweta County line has a high number of crashes overall; it and SR 85 north of Fayetteville have the highest overall concentration not correcting for exposure. Major locations, when volume exposure is factored in, include the following:

- SR 279 and SR 314
- SR 279 and Helmer Road
- South Jeff Davis Drive and Jimmie Mayfield Boulevard (Fayetteville)
- Tyrone Road and Senoia Road (Tyrone)
- Peachtree Parkway and Loring Lane (Peachtree City)
- Quarters Road and Redwine Road
- Lees Lake Road and Lees Mill Road

One particular issue of note is that 27 percent of the crashes (2,591 out of 9,602 total) occurring in Fayette County during this time period did not involve vehicle-vehicle collisions as the first harmful event. Nearly half of these (1,157 out of 9,602 total) involved motorists striking deer, and approximately 300 other crashes involved motorists leaving the roadway and colliding with trees or running aground in ditches. This relatively high amount can be explained partially by Fayette County's largely rural landscape and vegetation cover, especially as dense tree canopies and proximity of trees to the roadway limit sight distance and place motorists at risk when motorists are traveling at high speeds. These conditions are compounded on curving roadway sections and roads that are not illuminated, as vehicle headlight illumination may provide limited assistance in long-distance visibility. While roadway lighting and revised street sections would help to correct these problems, they also affect Fayette County's rural character and commit the County to expensive upgrading and reconstruction of roads that may be functionally acceptable. These conditions do imply a need for conscientious posting of speeds to match the design of the roadway, as well as a need for maintenance of pavement, roadway shoulders, and retroreflective pavement markings to ensure that the passable space of the roadway is clearly visible.


Map 2.5.4B Crashes by Number of Injuries
Fulton County
Clayton County
Coweta County
Spalding County
Tyrone
Fayetteville
Peachtree City
Woolsey
Brooks
Legend
More than 10 injuries
6-10 injuries
4-6 injuries
2-3 injuries
1 injury
Incorporated Municipality
Unincorporated County
Water
Data Sources: Fayette County GIS, GDOT Accident Data, Atlanta Regional Information System


Map 2.5.4C Crashes by Number of Fatalities
Fulton County
Clayton County
Tyrone
Fayetteville
Peachtree City
Coweta County
Woolsey
Brooks
Spalding County
Legend
2 fatalities
1 fatality
Incorporated Municipality
Unincorporated County
Water
Data Sources: Fayette County GIS, GDOT Accident Data, Atlanta Regional Information System

2.5.5 Bicycle and Pedestrian Needs

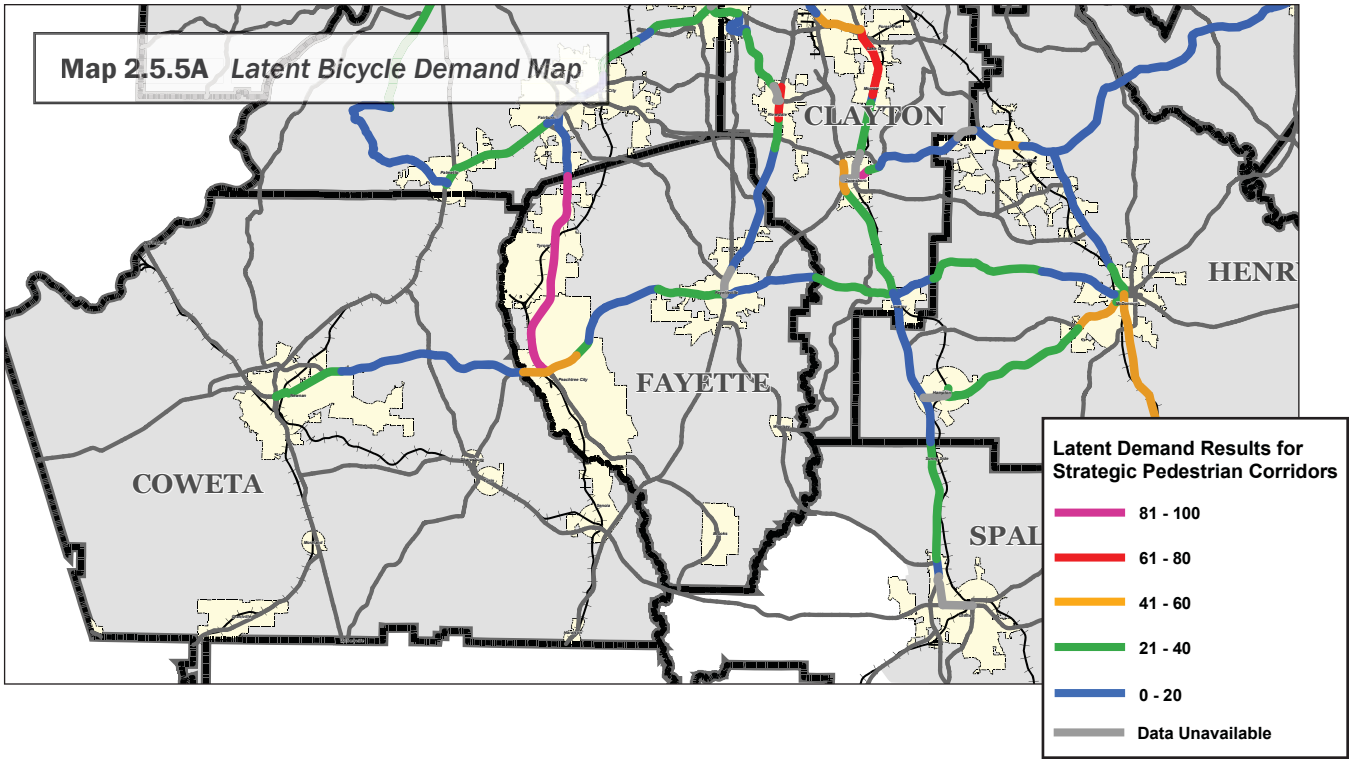
County citizens have expressed interest in expanding their recreational facility options, and even Fayette residents who do not live in Peachtree City have pointed to its system of golf cart paths as an amenity for the entire county. The large and active bicycling community in the County, which tends to prefer use of existing roads over off-road trails and paths for long-distance cycling, also wishes to see more systematic improvements to existing roadways to better delineate space for bicycles.

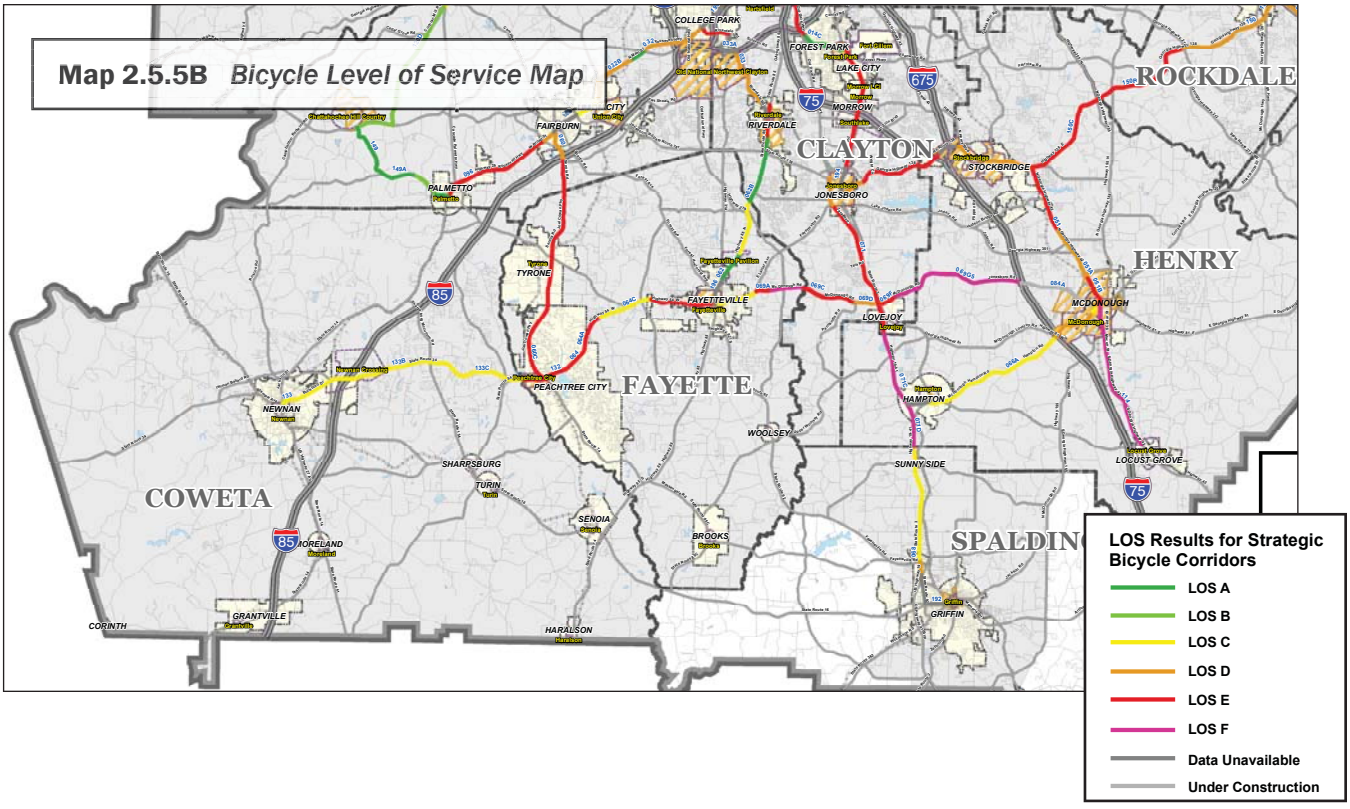
In addition, the potentially greater intensity of development in parts of Peachtree City and Fayetteville, especially in the vicinity of intersections already carrying high traffic volumes and experiencing vehicle delay, suggests that improved walking and bicycling conditions could help to connect residents to shopping and employment without driving. Public input throughout the early stages of the Fayette Forward process suggested that these improvements were desired by the community.

However, past regional studies have not shown Fayette County's roadway system to be easily amenable to such enhancements. The Southern Regional Accessibility Study evaluated major arterial corridors (primarily state routes) and classified each as having a 'difficult' level of bicycle suitability. The Atlanta Regional Strategic Bicycle Corridors plan identifies four principal routes through Fayette County. These are Highway 54 from the Coweta County line east to McDonough Road, McDonough Road from Highway 54 east to the Clayton County line, Highway 74 from Highway 54 to the Fulton County line, and Highway 85 north from Highway 54 to the Clayton County line. As part of this plan, ARC assessed latent demand for bicycle facilities and current levels of service along these roadways. Suitability was determined using a formula which considered such characteristics as total volume, percent of trucks, and posted speed of the corridor. Generally speaking, all of these facilities are not currently desirable for bicycle travel principally due to their heavy traffic volumes and/or high speeds.

Given this, the primary importance in establishing stronger bicycle and pedestrian connections will be utilizing a more thorough range of Fayette County's existing roadways than simply its high-capacity arterials. While these are the most direct routes, technical analysis of previous studies as well as community preference and feedback have both shown these to be highly challenging and potentially unsuitable roadways due to their design and to travel speeds. Smaller, local roads through the county are not uniformly well-equipped to handle on-street bike lanes, either. This suggests that the need for expanding bicycle options may be met through off-road trails that would allow pedestrian use as well.

In terms of pedestrians, the large scale of much of the unincorporated county's residential development and its subsequent use of automobiles as a dominant travel mode suggests that sidewalks and regular connections are not practical on all streets. Instead, the focus for sidewalks and other pedestrian connections should be in the incorporated municipalities as well as at key locations where pedestrians are active (especially around schools and parks).


Map 2.5.5A Latent Bicycle Demand Map
CLAYTON
HENR
FAYETTE
COWETA
SPAL
Latent Demand Results for Strategic Pedestrian Corridors
81 - 100
61 - 80
41 - 60
21 - 40
0 - 20
Data Unavailable


Map 2.5.5B Bicycle Level of Service Map
COLLEGE PARK
FOREST PARK
LAKE CITY
ROCKDALE
FAIRBURN
MORROW
RIVERDALE
CLAYTON
LITHONIA
PALMETTO
JONESBORO
HENRY
TYRONE
FAYETTEVILLE
MCDONOUGH
LOVEJOY
PEACHTREE CITY
FAYETTE
HAMPTON
NEWNAN
WOOLSEY
SUNNY SIDE
LOCUST GROVE
SHARPSBURG
TURIN
COWETA
SENOIA
BROOKS
SPALDIN
JORELAND
GRANTVILLE
GRIFFIN
CORINTH
HARALSON
LOS Results for Strategic Bicycle Corridors
LOS A
LOS B
LOS C
LOS D
LOS E
LOS F
Data Unavailable
Under Construction

2.5.6 Regional Access Needs

Fayette County's major employment centers include locations outside of the county itself, especially Hartsfield-Jackson Airport and the business districts of central Atlanta. As a result, there is a clear need to maintain and enhance access from the County to the north.

Access to Interstate 85

Presently, access to Interstate 85 (itself providing the most direct access to the airport) is one of the principal concerns of north-south movement in Fayette County. State Route 74 has an interchange with I-85 in south Fulton County and this is the primary access point for Peachtree City and much of northern Fayette. As a result, the interchange carries heavy volumes, and the capacity of the northbound onramp to I-85 is exceeded in the morning peak period. Highway 74 also carries heavy volumes on its approach to I-85, leading to increased delay at intersections in northern Fayette.

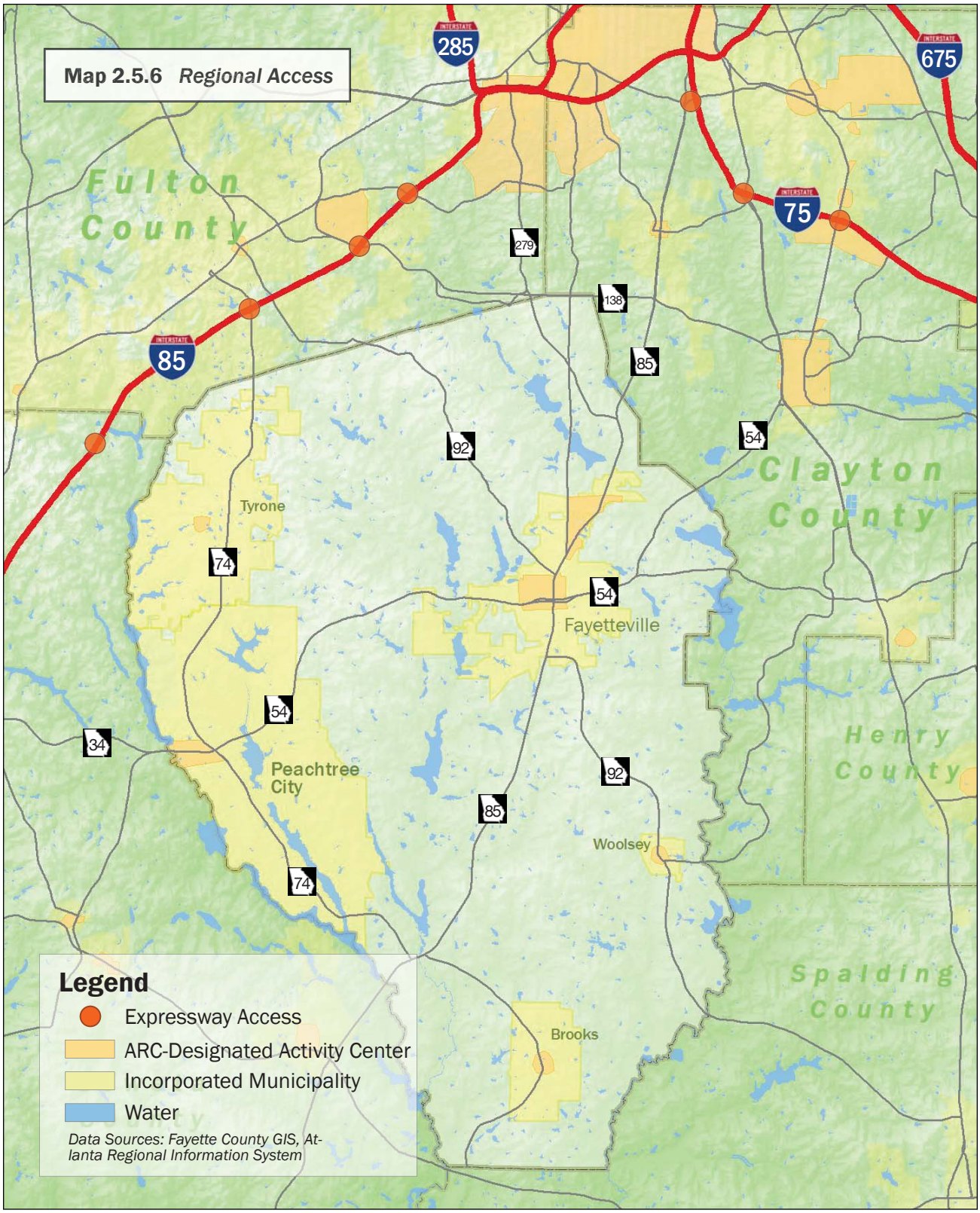
Fayette residents and workers use a number of other ways to reach I-85, though none is as direct as Highway 74. One complicating issue is that Highway 92, another primary north-south corridor through the County, does not have direct access to I-85. Motorists using Highway 92 must transition to another route, such as Highway 314 or Highway 279, or they must take an east-west route in northern Fayette or southern Fulton Counties to reach Highway 74, using that interchange.

Access from northern Fayette County to I-85 needs to be improved so that congestion at the 74/I-85 interchange is not compounded and so that vehicle miles traveled are not unduly increased for Fayette County trips. This suggests that additions to the transportation network, working in concert with potential new access to I-85, may be needed. However, it should be noted that Fayette residents do not uniformly share this view. Many have noted that improved I-85 access makes the county more attractive for development, which is something they do not want. Any project concept that proposes a solution to this issue should be well discussed with the community to achieve consensus.

Access to Interstate 75

The main access to Interstate 75 is through northeastern Fayette County on Georgia Highway 85, connecting through Riverdale to reach I-75 just south of the airport and I-285. Geographically speaking, this access is relatively direct. From a traffic movement perspective, however, several intersections along Highway 85 experience notable levels of delay in peak periods. Traffic signals are not coordinated between Fayette County and Clayton County, meaning that motorists face additional delay.

Fayette also has access to I-75 east through Clayton County, most notably on Highway 54 and McDonough Road. These access routes are not as direct for trips to the Atlanta airport and the city of Atlanta, though they are the most direct route for southbound trips along Interstate 75.


Map 2.5.6 Regional Access
285
675
75
85
279
138
85
92
54
Fulton County
Clayton County
Tyrone
74
54
Fayetteville
54
34
Peachtree City
92
85
Woolsey
74
Henry County
Spalding County
Brooks
Legend
Expressway Access
ARC-Designated Activity Center
Incorporated Municipality
Water
Data Sources: Fayette County GIS, Atlanta Regional Information System

2.5.7 Aviation Needs

Fayette County's two airports continue to serve a primarily general aviation need, though Falcon Field is likely to grow. According to GDOT's Georgia Aviation System Plan Airport Summary Report, service areas for Level III general aviation airports typically encompass a 45-minute drive time, where Level III commercial airports have a 60-minute service area. Level III airports should also provide appropriate levels of public amenities. The service area within a 45-minute drive of Falcon Field includes most of Fayette County, especially as congested conditions on most of the county's roads do not greatly increase travel time over free-flow conditions. However, due to Falcon's location along the southwest boundary of the county, the major challenge in maintaining service for a large part of the county within this drive-time goal will be in accommodating east-west movement. As the southern portion of the county continues to grow, additional east-west network connectivity will be needed as not to add traffic volume to the existing network roads and as not to increase trip lengths.

With this, it is important that access from Highway 74 be preserved and that potential secondary street connections make the airport accessible to other parts of Peachtree City and Fayette County. Given that this airport serves a passenger role and is not intended to handle major freight distribution operations, heavy truck movements are not likely to be a major need in additional connections.

The County's residents and workers will continue to use Hartsfield-Jackson as a primary passenger facility due to its accommodation of scheduled commercial service. The principal issue of access to Hartsfield-Jackson Airport is closely related to the general issue of north-south movement through Fayette County: access to Interstate 85 is constrained and depends heavily on Highway 74. Airport access via Interstates 75 and 285 is primarily used for cargo vehicles, though these vehicles when serving Fayette County use one of the County's north-south routes for access. They typically enter the county on Highways 85 or 279, regardless of their destination within the county.

By 2030, the volume of air cargo shipped by the region is expected to increase by nearly 150 percent. This increase will also correspond to an increase in truck traffic generated to complete delivery of the cargo. Naturally, bottlenecks typically occur near or at airport access points where air cargo drayage traffic is funneled. This is compounded when passenger traffic mixes with truck traffic at the same access points. H-JAIA traffic is separated between a western entrance (passengers, who access the airport facility from I-85) and an eastern entrance (cargo vehicles, who have access from I-75 and I-285).

2.5.8 Transit Needs

The general land use patterns already prevalent throughout unincorporated Fayette County (and planned to continue through adopted land use policies) do not readily support high capacity, scheduled transit service. As shown in Section 2.2.1, projected densities for the year 2030 suggest that the highest-density areas, located in Peachtree City and Fayetteville, will have average densities of approximately four (4) persons per acre. Although employment and shopping destinations in the County are relatively concentrated, residential origin areas are characterized by relatively low densities and few pedestrian facilities to connect residents to transit stop locations.

Furthermore, Fayette's demographic patterns, with the exception of a significant senior citizen population, do not suggest that transit is needed to serve a large low-income population without access to vehicles. The relatively high median household incomes and prevalence of multiple-vehicle households suggests that most households' transportation needs are met by privately owned vehicles.

That is not to suggest that transit has no useful role in Fayette County. Throughout the public involvement process, Fayette County residents expressed a concern for the mobility of senior citizens, especially those who can no longer safely or comfortably drive themselves. The services provided by Fayette Senior Services meet some of this need, but administrators of this service have emphasized that dramatic growth in demand for these services cannot be met with existing service levels and resources. Additionally, the Peachtree City LCI Advisory Board expressed an interest that other alternate forms of transportation be explored to serve not only the West Village corridor of Highway 54, but also the remainder of Peachtree City. These forms of transportation were envisioned to include carpooling, van pools, and potential designation of existing surplus parking areas within retail centers as park-and-ride lots.

As shown in Section 2.2.1, however, current and projected population and employment densities in the County show little propensity for local transit service. Although transit is provided throughout the world in a variety of land use contexts and intensities and common thresholds for transit feasibility do not always apply, it is generally the case in the United States that local bus transit service on fixed routes and schedules begins to be feasible at residential densities over seven dwelling units per acre. Given that the most dense parts of the County are not projected to exceed seven persons per acre and given that the average household size of Fayette County is currently and is projected to remain greater than one person, this suggests that the County does not have the densities to support fixed-route local transit.

Although propensity for transit use *within* the County remains low, from the standpoints of both demographics and land use support for transit, many Fayette County residents expressed an interest in commuter-based transit service to connect Fayette communities to major employment centers throughout the region, especially Hartsfield-Jackson Airport and Downtown and Midtown Atlanta. As proposed in Concept 3, this could take the form of commuter rail service from Atlanta to Senoia that would offer stops at Peachtree City and Senoia (in Coweta County). Such transit connections also potentially take the form of commuter-oriented express bus service as currently provided by GRTA.