

2018

CLAYTON  COUNTY

COMPREHENSIVE TRANSPORTATION PLAN

COMPREHENSIVE TRANSPORTATION PLAN
UPDATE

WSP USA

0 EXECUTIVE SUMMARY

The Clayton County Comprehensive Transportation Plan (CTP) is a roadmap for the development of the County’s future transportation network, in response to current and future needs and vision for the future. The Clayton County CTP Update addressed all modes of transportation, including roadways and bridges, transit, bicycle and pedestrian facilities, and freight within Clayton County.

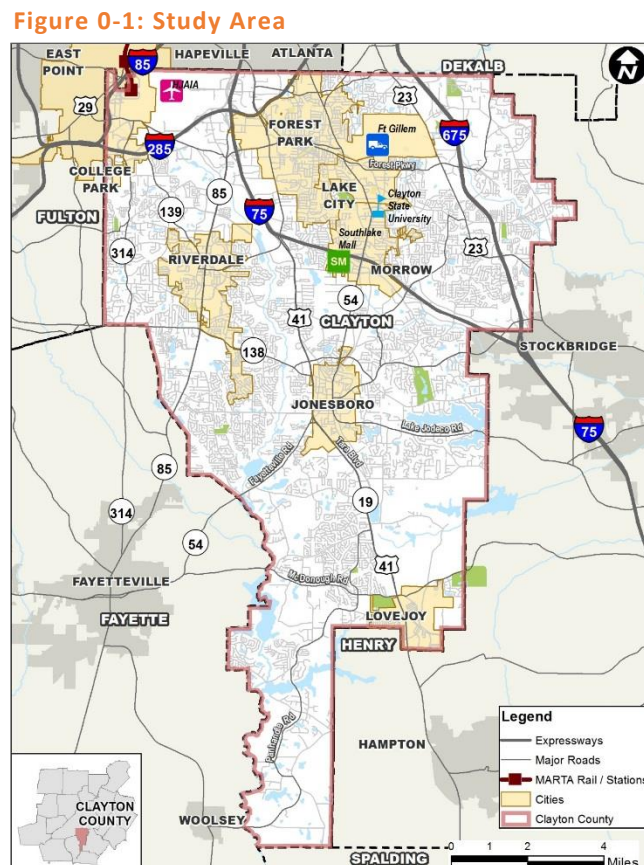
Public outreach played a critical role during the CTP Update. A range of in-person and electronic outreach tactics –the backbone of which was a project website, online survey, three meetings with the Stakeholder Committee, and eight public meetings – were used to generate meaningful feedback from a broad range of stakeholders and residents that contributed to the decision-making process. Public input was used in the development of project goals and objectives, and in the drafting and evaluation of project recommendations.

The goals and objectives of the CTP Update, the foundation for prioritizing current and future needs for developing performance measures for the prioritization of projects, are:

- Enhance and maintain the transportation system to meet existing and future needs
- Ensure the transportation system promotes and supports appropriate land use and development
- Encourage and support safety and security
- Improve connectivity and accessibility
- Enhance mobility for all users of the transportation system
- Promote and support economic development and redevelopment
- Improve quality of life, preserve the environment, and protect neighborhood integrity
- Engage the public with effective outreach strategies

0.1 Needs Assessment

Clayton County (**Figure 0-1**) is bordered by the City of Atlanta, Fulton and DeKalb Counties to the north, Fayette County to the west, Spalding County to the south, and Henry County to the east. Clayton County is home to seven cities including Jonesboro, College Park, Forest Park, Lake City, Lovejoy, Morrow, and Riverdale.



Source: Atlanta Regional Commission (ARC) Open Data



Needs Related to Growth

- Clayton County is expected to grow in population and employment but retain its suburban development characteristics; this is expected to result in increased traffic volumes and demand on the transportation network.
- To support the increased mixed-use development, investment will be needed to ensure mixed-use areas are safe and accessible for pedestrians and bicyclists.
- There is a need to support north-south connectivity to and from Fulton and Henry Counties.

Roadway Network Needs

- Because more than half of trips to and from the county begin and end in Clayton County, there is a need for improved **east-west connectivity** in and around the City of Jonesboro, specifically railroad crossings that would allow for unimpeded flow of traffic.
- There is a need for **capacity, safety, and operational improvements, including improvement for truck operations**, on the roadway network. Identified needs on the state-owned network that would not be addressed by programmed projects are identified by corridor in **Table 0-1**. On the state-owned network, maintenance is needed for SR 85 from I-285 to Forest Parkway, SR 138 from North Avenue to Stockbridge Road (Jonesboro northern bypass).

County-Owned Roadway Network Needs

- Unincorporated Clayton County road network should strive to achieve a **15-year maintenance cycle**.
- There is a need for a **county-owned roads safety program** to add shoulders, straighten out curves, and implement other improvements that will support county roads as they continue to carry increasing numbers of vehicles.
- Capacity improvements are needed on the following segments of county-owned roads:
 - Anvil Block Road at the interchange with I-675 and from I-675 and the Gillem Logistics Center
 - Mt Zion road at the interchanges with I-75 and to the south
 - Rex Road from US 23 to I-675
 - Tara Road near Panhandle Road
- There is the need for intersection improvements on Upper Riverdale Road at:
 - Lamar Hutcheson Parkway
 - Lees Mill Road
 - SR 3/Old Dixie Hwy/I-75 SB ON Ramp- SR 3CO/Tara Boulevard Connector



Table 0-1: Summary of Corridor Needs by Type for the State-Owned Network

	Programmed Project(s)	Access Management	Capacity	Safety	Freight Safety and Operation
SR 3/US-19/US-41/Tara Boulevard*	SR 3/US-19/US-41/Tara Boulevard Widening from Flint River Road to Tara Road (CL-AR-247)	South of the I-75 interchange	SR 3/US-19/US-41/Tara Boulevard: - South of I-75 - Near SR 138 - Flint River Rd - North of Lovejoy - Tara Road	Corridor and intersections at: - Battlecreek Road - Flint River Road - Iron Gate Boulevard - McDonough Road - Mt. Zion Road/Parkwood Way - North Avenue (4 fatalities during 2014-2016) - SR 138 (2 fatalities during 2014-2016) - Smith Street/Robert E Lee Parkway - Tara Road	From I-75 to SR 138/North Avenue Interchange with I-75
SR 54/ Jonesboro Road	SR 54 (Fayetteville Road/Jonesboro Road) Widening from McDonough Road in Fayette Co. to SR 3/US 19/US-41/Tara Boulevard in Clayton Co (CL-041)	Near the I-75 interchange	in Jonesboro	SR 54/Jonesboro Road corridor and near Morrow at: - Battlecreek Road - Forest Parkway - Morrow Road (2 fatalities during 2014-2016)	
SR 85	SR 85 Bridge Replacement and Widening at Camp Creek (Clayton Co./ Fayette Co. Line) (CL-268); SR 85 Widening from Adams Drive to I-75 South including Interchange at Forest Parkway (CL-014) and	Between Roberts Drive and Main Street/Valley Hill Road	SR 85 corridor near intersections with: - SR 138 - SR 139/Valley Hill Road - Bethsaida Road/Lamar Hutcheson Parkway - Church Street/Rountree Road	Intersections at: - Main Street/Valley Hill Road - SR 138	



	Programmed Project(s)	Access Management	Capacity	Safety	Freight Safety and Operation
	SR 85 Widening from SR 279 (Old National Highway) in Fayette Co. to Roberts Drive in City of Riverdale (CL-015)				
SR 138				SR 138 Jonesboro bypass SR 138 between I-75 and I-675 at: - Hannover Parkway - Mount Zion Road	
SR 139/ Riverdale Road		Near I-285 interchange Between Shoreham Drive and Kingswood Circle	SR 139 south of I-285 SR 139 corridor near intersections with: - Phoenix Boulevard - I-285 Eastbound - Main Street	SR 139 corridor and Riverdale Road at: - Forest Parkway/Phoenix Boulevard - Garden Walk Boulevard - Normal Drive/Crystal Lake Road - Flat Shoals	At I-285
SR 314			SR 314 south of I-285	SR 314 corridor	
SR 331/Forest Parkway		Between North Lake Street and North Parkway Between SR 42/US-23/Moreland Avenue and the I-675 interchange	SR 331/Forest Parkway east of I-675	SR 331/Forest Parkway Corridor and at Old Dixie	From SR 54/Jonesboro Road to US-23/SR 42/Moreland Avenue At I-675 At SR 85 At I-75

* The CTP Update cedes all planning on the Tara Boulevard/US 19/US 41 corridor to the ongoing GDOT study of this facility.



Freight-Related Needs

Analysis of existing **freight** network indicates that the more rapid and efficient movement of goods may require:

- Capacity or operational improvements to the I-675 interchange with Forest Parkway
- An additional interchange to serve increasing amounts of truck traffic to the Gillem Logistics Center
- Anticipation and accommodation of the relocation of all cargo facilities at H-JAIA to the South Cargo Area.
- Extension and improvement of Conley Road.
- Based on a safety analysis of at-grade rail crossings in the county, there may be a need for **operational improvement projects at rail crossings** with a history of at-grade crashes. Implementation of potential high capacity transit investments in the county may address these needs in the future.
- There is a need to **anticipate and accommodate the relocation of the North Cargo facilities at H-JAIA**, specifically with the construction of an extension of Conley Road from its current terminus to the H-JAIA.

Bridge Needs

Of bridges that are not programed for rehabilitation, replacement or removal, two bridges have sufficiency ratings less than 50, four bridges are rated functionally obsolete, and two bridges are rated structurally deficient (**Table 0-2**).

Table 0-2: Bridges with Potential Needs

ID	Description	Sufficiency Rating	Year Constructed	Need
063-5016-0	Brown Road at Swamp Creek	10.8	1958	Replacement, Structurally Deficient, Functionally Obsolete
063-5025-0	Huie Road at Jesters Creek Tributary	57.2	1961	Rehabilitation, Functionally Obsolete
063-0075-0	Morrow Road at Jesters Creek Tributary	69.5	1965	Rehabilitation, Functionally Obsolete
063-5012-0	Reynolds Road at Jesters Creek Tributary	71.2	1964	Rehabilitation, Functionally Obsolete
063-0063-0	North Bridge Road at Flint River	82.1	1980	Rehabilitation, Functionally Obsolete

Source: GDOT – Project Search Portal, Geoportal

Sidewalk and Bicycle Facility Needs

There is a need for a flexible sidewalk program to address the most pressing pedestrian needs in the county as they arise. Current needs are greatest at the following intersections and corridors with reported crashes involving **pedestrians or bicyclists**: SR 3/US-19/US-41/Tara Boulevard and SR 85, SR 139, near Clayton State University, and at the high-risk areas identified in the ARC’s *Walk. Bike. Thrive! Bicycle and Pedestrian Safety Improvement Plan*.



Quality of Life Needs

Quality of life analysis undertaken in the subareas analyses indicates that there are opportunities to:

- Support economic development and tourism in Clayton County by creating gateways to the county through effective signage, additional lighting, and streetscaping
- Beautify and support communities through a Complete Streets approach
- Connect schools to residential areas via safe sidewalks and increased parks and green space
- Provide pedestrian facilities in areas with high concentrations of low-income persons for safe and effective access to transit stops

Transit Needs

One-half of the penny MARTA transit sales tax goes to existing bus service, the other half is intended to fund high-capacity transit service in Clayton County. **MARTA staff has recommended commuter rail on new, separate track, in existing Norfolk-Southern right-of-way from East Point to Lovejoy, as the preferred alternative for Clayton County Transit Initiative.** To support the eventual implementation of high-capacity transit in the county, **there is a need for station area planning at proposed station areas**, including land use planning and pedestrian investments at proposed station areas, including Mountain View, Forest Park, Lake City, Morrow, Jonesboro, and Lovejoy.

0.2 Recommendations

CTP Update infrastructure projects and policies related to transportation are recommended based on the needs of the county as described in the Needs Assessment.

Capital Project Evaluation and Criteria

Project recommendations address identified transportation needs in the county. Capital projects were evaluated using criteria based on the CTP Update goals and objectives. The evaluation process was structured after ARC's evaluation framework for the regional planning process. A total score based on both categories was calculated to assess the cumulative priority of each project, with up to 100 points awarded to projects based on Need-Based criteria and up to 50 points based on Deliverability measures.

Capacity and Operations Policy Recommendations

On state routes, GDOT has permit authority and leads access management decisions. **Thus, Clayton County should focus on supporting access on the local network.** To achieve access management, the County should:

- Acquire access rights to protect transportation interests and enable sufficient infrastructure to be built. Access could be acquired through purchase or eminent domain, statutory designation, or the use of deeds.
- Adjust its zoning to mandate a maximum, not a minimum, number of access points. For large developments, Clayton County should require inter-parcel access and/or internal connectivity to support joint-use driveways.



- Emphasize continuous education, case studies, and examples to show that carefully planned development can coexist with effective access management.

Safety Policy Recommendations

The programming of studies to follow up on the CTP Update follows the best practice of also including potential cost for outcomes such as infrastructure or investment recommendations in later phases of the program. Clayton County should also:

- Align efforts with the strategic direction and the emphasis areas identified the Georgia's latest safety plan. The current plan, 2015 Governor's Strategic Highway Safety Plan, is being updated with latest trends and legislative needs.
- Continue focusing efforts and resources on improving highway safety with the long-term goal of slowing and eventually reversing recent upward trends in fatalities and serious injuries.
- Provide innovative pedestrian safety measures in pedestrian crash hot spots.
- Install pedestrian hybrid beacons along pedestrian crash hot spots along identified corridors.

Asset Management Policy Recommendations

To best manage its collective assets, Clayton County should:

- Seek a coordinated, intragovernmental approach to projects.
- Compile a GIS database of existing sidewalk locations and condition to aid in the prioritization, delivery, maintenance of the county's sidewalk network.

Truck Parking Policy Recommendations

Legal, safe facilities for truck parking should be sited within industrial areas along interstate corridors. In the northern part of the county, near I-75 and I-675, there are large industrial areas at a sufficient distance from residential areas that would support truck parking and should be obliged to do so with stipulations about patrolling, safety and quiet hours, to avoid impacts on county residents.

Quality of Life Policy Recommendations

In the long term, Clayton County should adopt a **Complete Streets** approach to support beautification and community improvement efforts. Clayton County also should:

- Develop local and regional land use/economic development strategies coordinated with relevant transportation plans and programs to balance land use and transportation needs.
- Build on the positive revitalization trends in the region, by striving to support mixed-use developments through improved transportation networks and services at identified transit station areas.
- Coordinate with local CIDs to expand the current beautification program throughout the rest of the county.



Transit Recommendations

The CTP Update supports the construction of MARTA's proposed transit expansion project from the existing heavy rail system to Lovejoy (programmed for long range delivery, AR485A and AR485B). Clayton County should prepare for transit with strategic investments in infrastructure at station areas.

Emerging Technologies in Transportation

C/AV application could provide great benefits for trucking and freight delivery, including truck platooning and automated parking and backup assist. It may also be possible to prioritize truck traffic using ITS signalization on Tara Boulevard during off-peak hours, such as between 8 p.m. and 5 a.m. when there is less demand for the roadway.

0.3 Funding

The CTP Update recommends projects in two sets:

- A constrained plan, in which projects chosen for recommendation are programmed for construction based on known, available funding. The constrained plan is provided in short-, mid-, and long-ranges:
 - The **short-range** tier comprises the Five-Year Plan, and runs from 2021 to 2025. It begins in 2021 to correspond with the start of the next possible SPLOST in Clayton County.
 - The **mid-range** tier extends from 2026 to 2030.
 - The **long-range** tier runs from 2031 to 2040.
- An aspirational program of projects that are outside of the funding projected for this plan and are programmed beyond the year of 2041. Project sponsors may promote aspirational projects if funding should become available.

Table 0-3 presents the funding for CTP project recommendations.

Table 0-3: Projected Normal Scenario Transportation Funding through 2040, in millions of 2018 dollars

	Short Range	Mid-Range	Long Range	Total
Projected SPLOST Revenues	\$226.67	\$226.67	\$453.33	\$906.67
Transportation Share of projected SPLOST Revenues (at 50 percent)	\$113.33	\$113.33	\$226.67	\$453.33
LMIG Funding	\$10.55	\$10.55	\$21.09	\$42.19
Total revenue for Transportation	\$123.88	\$123.88	\$247.76	\$495.52

Source: Clayton County, WSP Analysis

0.4 Priority Projects

Projects programmed for short-range delivery from 2021 through 2025 in the Five-Year Plan are presented in **Table 0-4**. Projects programmed for delivery in the mid-range (2026-2030) are presented in **Table 0-8**, and projects programmed for long-range delivery (2031-2040) are presented in **Table 0-6**.



The CTP Update supports the MARTA LPA for a commuter rail project in Clayton County. The CTP Update recommends that the project follow the phasing set forth in **Table 0-7**, **Table 0-8**, and **Table 0-9**.

Table 0-10 presents project recommendations in the unconstrained plan, which includes all the county project recommendations that are not included in the constrained funding tiers. **Table 0-11** includes projects within the limits of one of the cities in Clayton County. Each city can determine which projects, if any, they wish to sponsor.

CTP Update project costs for new recommendations were estimated using values established in the ARC project cost estimation tool. Project costs are for planning purposes only and have not been reviewed or approved by outside parties or agencies



Table 0-4: Five-Year Action Plan (2021-2025)

Project ID	Category	Project Name	Cost	Primary Funding Source	County Share %	County Share \$
MAINTENANCE	Maintenance	Maintenance Program for County-Owned Roads	\$78,210,000	Local	100%	\$78,210,000
BRIDGE	Safety	Bridge Repair Program - Short Range	\$1,500,000	Local	100%	\$1,500,000
FREIGHT	Safety	Freight Safety Study	\$300,000	Local	100%	\$300,000
SIDEWALK	Pedestrian Improvements	Pedestrian improvements as needed on County Roads	\$11,420,000	Local	100%	\$11,420,000
ECONDEV	Quality of Life	Infrastructure Support for Development	\$4,570,000	Local	100%	\$4,570,000
COUNTYROAD	County Road	County Road Safety Program	\$22,631,500	Local	100%	\$22,631,500
SIGNAL	Roadway Safety	Singal Warrant Analyses at 3 locations	\$100,000	Local	100%	\$100,000
6C	Roadway Safety	SR 54/Jonesboro Road @ Battlecreek Road Intersection Improvement	\$1,506,000	State / Federal	50%	\$753,000
9C	Roadway Safety	Upper Riverdale Road @ Lees Mill Road Safety Improvement, includes consolidation of Lees Mill Road Connections at Upper Riverdale Road	\$500,000	Local	100%	\$750,000
3102	Operations	Huie Road/Harper Drive/Rex Road from Jonesboro Road to US 23/SR 42 Install Fiber-Optic Trunk Line with Signal Communication Equipment and CCTV Cameras	\$921,000	Local	100%	\$921,000
3104	Operations	South Main Street from US 19/41/Tara Boulevard to College Street Install Fiber-Optic Trunk Line with Signal Communication Equipment and CCTV Cameras	\$617,000	Local	100%	\$617,000
Total						\$121,772,500



Table 0-5: Mid-Range 2026-2030

Project ID	Category	Project Name	Cost	Primary Funding Source	County Share %	County Costs \$
MAINTENANCE	Maintenance	Maintenance Program for County-Owned Roads	\$78,210,000	Local	100%	\$78,210,000
BRIDGE	Safety	Bridge Repair Program - Short Range	\$1,500,000	Local	100%	\$1,500,000
FREIGHT	Safety	Freight Safety Study	\$1,000,000	Local	100%	\$1,000,000
SIDEWALK	Pedestrian Improvement	Pedestrian improvements as needed on County Roads	\$11,420,000	Local	100%	\$11,420,000
ECONDEV	Quality of Life	Infrastructure Support for Development	\$4,570,000	Local	100%	\$4,570,000
COUNTYROAD	County Road	County Road Safety Program	\$22,631,500	Local	100%	\$22,631,500
2B	Roadway Safety	SR 85 @ Webb Road/Warren Drive Safety Improvement	\$1,506,000	State / Federal	50%	\$753,000
7C	Roadway Safety	SR 138 @ Mt. Zion Road Safety Improvement	\$1,506,000	State / Federal	50%	\$753,000
2G	Operations	SR 85 @ Garden Walk Boulevard Capacity and Operational Improvement - Provide a WB RT lane on Garden Walk Boulevard, Perform signal optimization and retiming, Provide sidewalks	\$391,000	State / Federal	50%	\$395,000
2H	Operations	SR 85 @ Forest Parkway Capacity and Operational Improvement - Add another eastbound RT lane on Forest Pkwy/Clark Howell Hwy	\$120,000	State / Federal	50%	\$60,000
7E	Operations	SR 138 W @ Fielder Road/Autumn Woods Drive Traffic Engineering Study	\$110,000	State / Federal	50%	\$55,000
7G	Operations	SR 138 E @ N McDonough Street Traffic Engineering Study, Add eastbound right-turn lane on SR 138	\$721,000	State / Federal	50%	\$360,500
4405	Capacity	Denny Drive: Extend to Pleasant Hill Road	\$770,000	Local	100%	\$770,000



Project ID	Category	Project Name	Cost	Primary Funding Source	County Share %	County Costs \$
3103	Operations	Stagecoach Road: West Panola Road to Rex Road - Install Fiber-Optic Trunk Line with Signal Communication Equipment and CCTV Cameras	\$268,000	Local	100%	\$268,000
3956	Operations	Conkle Road at Mt. Zion Road/Mt. Zion Boulevard	\$72,000	Local	100%	\$72,000
TOD	Studies	TOD Station Area Scoping Studies at Forest Park, Lake City, Morrow, Jonesboro, and one unincorporated Clayton County	\$1,500,000 (5 @ \$300,000 each)	Local	100%	\$1,500,000
Total						\$124,318,000



Table 0-6: Long Range 2031-2040

Project ID	Category	Project Name	Cost	Primary Funding Source	County Share %	County Costs \$
MAINTENANCE	Maintenance	Maintenance Program for County-Owned Roads	\$156,420,000	Local	100%	\$156,420,000
SIDEWALK	Pedestrian Improvements	Pedestrian improvements as needed on County Roads	\$22,840,000	Local	100%	\$22,840,000
ECONDEV	Quality of Life	Infrastructure Support for Development	\$9,140,000	Local	100%	\$9,140,000
COUNTY ROAD	County Road	County Road Safety Program	\$38,000,000	Local	100%	\$38,000,000
4C	Capacity	SR 314 Widening	\$45,392,000	State / Federal	20%	\$9,078,400
3504	Operations	Conley Road Operational Upgrades - SR 54/Jonesboro Road to Cherokee Trail	\$12,966,000	Local	100%	\$12,966,000
Total						\$248,444,400



Table 0-7: Five-Year Plan Transit Projects funded by the Clayton County-MARTA Sales Tax

Project ID	Category	Project Name	Cost	Primary Funding Source	MARTA/Local Share	MARTA/Local Share
AR-485A	Transit	Clayton County High-Capacity Transit Initiative – Phase 1 From East Point to Jonesboro: Recommended 1 st segment to Mountain View	\$300,000,000 (\$100,000,000 for segment)	Local/ Federal	50%	\$150,000,000 (\$50,000,000 for segment)

Table 0-8: Mid-Range Transit Projects funded by the Clayton County-MARTA Sales Tax

Project ID	Category	Project Name	Cost	Primary Funding Source	MARTA/Local Share %	MARTA/Local Share \$
AR-485A	Transit	Clayton County High-Capacity Transit Initiative – Phase 1 From East Point to Jonesboro: Recommended Second Segment from Mountain View to Jonesboro	\$300,000,000 (\$200,000,000 for segment)	Local/ Federal	50%	\$150,000,000 (\$100,000,000 for segment)

Table 0-9: Long-Range Transit Projects Funded by the Clayton County-MARTA Sales Tax

Project ID	Category	Project Name	Cost	Primary Funding Source	MARTA/Local Share %	MARTA/Local Share \$
AR-485B	Transit	Clayton County High-Capacity Transit Initiative – Phase 2 From Jonesboro to Lovejoy	\$100,000,000	State / Federal	50%	\$50,000,000



Table 0-10: Unconstrained Projects

Project ID	Location	Category	Project Name	Description	Cost	Recommended Funding Source
2A	Riverdale/ County	Roadway Safety	SR 85 Corridor from Forest Parkway to Webb Road/Warren Drive	Road Safety Audit	\$342,000	State / Federal
3A	Riverdale/ County	Roadway Safety	SR 139 Corridor Road Safety Audit	Road Safety Audit	\$259,000	State / Federal
2E	County	Roadway Safety	SR 85 @ Forest Parkway/Clark Howell Highway Safety Improvement	Guide lane assignments by providing mini-skip lines at the intersection, Realignment of the intersection	\$4,068,000	State / Federal
7A	Jonesboro / County	Roadway Safety	SR 138 Road Safety Audit	Road Safety Audit	\$132,000	State / Federal
2C	County	Roadway Safety	SR 85 @ SR 138 Safety Improvement	Add sidewalks connecting to crosswalks	\$846,000	State / Federal
5I	County	Operations	Access Management along Forest Parkway between SR 42/US 23/Moreland Avenue to the I-675 interchange	Consolidate driveways to meet the GDOT minimum driveway spacing requirement	\$181,000	Local
3952	County	Operations	SR 139/Riverdale Road	At Flat Shoals Road	\$71,000	State / Federal
3C	County	Operations	Access Management along SR 139 near I-285 interchange	Consolidate signalized intersections to meet the GDOT minimum signal spacing requirement	\$200,000	State / Federal
3D	County	Operations	Access Management along SR 139 between Shoreham Drive and Kingswood Circle	Consolidate driveways to meet the GDOT minimum driveway spacing requirement	\$24,000	State / Federal
2F	County	Operations	SR 85 @ SR 138 Operational Improvement	EB RT lane on SR 138, Perform signal optimization and retiming	\$409,000	State / Federal
3957	County	Operations	SR 138	At I-675 North	\$80,000	State / Federal
3958	County	Operations	SR 138	At I-675 South	\$80,000	State / Federal



Table 0-11: Project Recommendations in Cities

Project ID	City	Category	Project Name	Description	Cost	Recommended Funding Source
6A	Lake City	Roadway Safety	SR 54/Jonesboro Road Corridor from Thurman Road to Huie Road Road Safety Audit (2.7 mile)	Conduct a Road Safety Audit (RSA)	\$149,000	State / Federal
6B	Morrow	Roadway Safety	SR 54/Jonesboro Road @ Morrow Road Safety Improvement	Provide crosswalk on the east side of the intersection and sidewalk connection to MARTA stops next to rail line	\$1,116,000	State / Federal
4350	Morrow	Roadway Safety	Lake Harbin Road	Construct median on Lake Harbin Road at Lee Street to act as pedestrian refuge to improve bike/ped crossing and to prevent illegal turns near railroad crossing	\$621,000	Local
2N	Riverdale	Roadway Safety	SR 85 @ King Road Signal Warrant Analysis		\$28,000	State / Federal
9B	Riverdale	Roadway Safety	Upper Riverdale Road @ Lamar Hutcheson Parkway Safety Improvement		\$55,000	Local
5B	Lake City	Roadway Safety	SR 331/Forest Parkway @ SR 54/Jonesboro Road Safety Improvement	Provide sidewalks, realign crosswalks and provide ped islands if possible	\$856,000	State / Federal
6F	Morrow	Roadway Safety	SR 54 @ Oxford Drive and Lee Street @ Oxford Drive Safety Improvements		\$248,000	State / Federal
5C	Forest Park	Roadway Safety	SR 331/Forest Parkway @ SR 3/US 19/US 41/Old Dixie Highway Safety Improvement	Intersection Improvement	\$846,000	State / Federal



Project ID	City	Category	Project Name	Description	Cost	Recommended Funding Source
2D	Riverdale	Roadway Safety	SR 85 @ Main Street/Valley Hill Road Safety Improvement - ARC's Intersection Crash Hot Spot 2013	Provide mini-skip lines for the EB LT lane and for SB LT into EB lanes, Realign and provide longer storage lane for the EB LT lane	\$178,000	State / Federal
5A	Lake City/ Clayton	Roadway Safety	Forest Parkway Corridor from SR 3/US 19/US 41/Old Dixie Road to US 23/SR42 Road Safety Audit (4.8 mile)	Conduct a Road Safety Audit (RSA)	\$264,000	State / Federal / Local
4105	Jonesboro	Capacity	New Connector Parkway	Construct new Connector Parkway from South McDonough Street to Old Courthouse, including sidewalks	\$2,444,000	Local
2M	Riverdale	Operations	Access Management along SR 85 between Main Street/Valley Hill Road and Roberts Drive	Consolidate driveways to meet the GDOT minimum signal spacing requirement	\$70,000	State / Federal
5H	Lake City	Operations	Access Management along Forest Parkway between North Lake Street and North Parkway	Consolidate driveways to meet the GDOT minimum driveway spacing requirement	\$22,000	Local
6E	Morrow/ Clayton	Operations	Access Management along SR 54/Jonesboro Road near its interchange with I-75	Consider consolidating signalized intersections to meet the GDOT minimum signal spacing requirement, provide signage at the I-75 interchange	\$200,000	State / Federal
2I	Riverdale	Operations	SR 85 @ Bethsaida Road/Lamar Hutcheson Parkway Capacity and Operational Improvement	Add an EB RT lane on Bethsaida Road, Perform retiming and signal optimization	\$240,000	State / Federal
2J	Riverdale	Operations	SR 85 @ Church Street/Rountree Road Capacity and Operational Improvement	Add a WB RT lane on Rountree Road, Perform retiming and signal optimization	\$316,000	State / Federal



Project ID	City	Category	Project Name	Description	Cost	Recommended Funding Source
2K	Riverdale	Operations	SR 85 N @ Main Street/Valley Hill Road Capacity and Operational Improvement	Provide a northbound right-turn lane and a southbound right-turn lane along SR 85	\$450,000	State / Federal
6D	Morrow	Operations	SR 54/Jonesboro Road S @ I-75 Signage Improvement	Provide adequate signage for I-75 access especially for I-75 S ramp due to driver expectation issue	\$28,000	State / Federal
7F	Riverdale	Operations	SR 138 E @ Taylor Road Traffic Engineering Study	Conduct traffic engineering study, Add eastbound right-turn lane on SR 138	\$721,000	State / Federal
3105	College Park/ Clayton	Operations	SR 314/West Fayetteville Road	Install Fiber-Optic Trunk Line with Signal Communication Equipment and CCTV Cameras	\$1,832,000	State / Federal
3960	Morrow	Operations	Morrow Road	Advanced Traffic Management System (ATMS) Signal Equipment Upgrade - Morrow Road at Skylark Drive/Phillips Drive	\$107,000	Local
3963	Morrow	Operations	Mt. Zion Road	Mt. Zion Road at South Lake Parkway Intersection Improvement	\$80,000	Local
3965	Riverdale	Operations	Roberts Drive	Roberts Drive at Lamar Hutcheson Parkway Intersection Improvement	\$72,000	Local
3968	Morrow	Operations	Mt. Zion Road	Mt. Zion Road at Mt. Zion Circle Intersection Improvement	\$72,000	Local
4351	Morrow	Operations	Southlake Parkway	Reconfigure intersection to provide a single-lane roundabout; safe configuration and signage for bikes and pedestrians	\$1,975,000	Local



Project ID	City	Category	Project Name	Description	Cost	Recommended Funding Source
3959	Forest Park/Lake City	Operations	Phillips Drive, Springdale Road	Advanced Traffic Management System (ATMS) Signal Equipment Upgrade - Phillips Drive at Reynolds Road and at South Avenue, Springdale Road at Whatley Drive	\$320,000	Local
3101	Forest Park/Clayton	Operations	Ash Street & Morrow Road	Install Fiber-Optic Trunk Line with Signal Communication Equipment and CCTV Cameras	\$926,000	Local
3403	College Park/Clayton	Capacity	North Airport Parkway	Widen from 4 to 6 lanes	\$25,791,000	Local



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1 INTRODUCTION

The Clayton County Comprehensive Transportation Plan (CTP) is a roadmap for the development of the County's future transportation network, in response to current and future needs and vision for the future. The Clayton County CTP Update considers all modes of transportation, including roadways and bridges, transit, bicycle and pedestrian facilities, and freight within Clayton County.

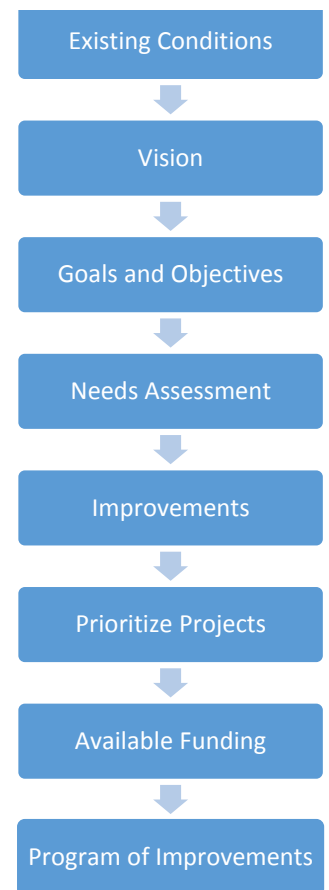
1.1 CTP Update Development Process

Figure 1-1 summarizes the CTP Update development process used to proactively guide future transportation investment:

1. Catalog existing conditions of the transportation system.
2. Determine the public vision for the county.
3. Establish goals and objectives for the CTP that support the vision for the county.
4. Analyze county's existing and projected future conditions to determine transportation needs.
5. Identify a comprehensive list of transportation improvements that will address the county's needs.
6. Prioritize project recommendations on their ability to meet study goals, objectives and address transportation needs.
7. Project potential available transportation funding in the short, medium, and long ranges.
8. Develop a prioritized program of transportation improvements.

Decisions and recommendations made at the local level during the CTP Update process helped shape the Atlanta Regional Commission's (ARC) Regional Transportation Plan (RTP). The CTP Update process provided a bottom-up mechanism for regional transportation planning that allowed localities to establish local priorities, determine their transportation needs, pursue their preferred projects and policies and funding for those projects.

Figure 1-1: CTP Update Process



2 PUBLIC INVOLVEMENT

Public outreach played a critical role during the CTP Update. A range of in-person and electronic outreach tactics were used to generate meaningful feedback from a broad range of stakeholders and residents that contributed to the decision-making process. Public input was used in the development of project goals and objectives, and in the drafting and evaluation of project recommendations.

2.1 Existing Conditions and Needs Assessment

During the inventory of existing conditions and needs assessment phases of the CTP Update, the planning team sought input from the public and stakeholders about the state of transportation in Clayton County.

2.1.1 STAKEHOLDER COMMITTEE KICKOFF

The Stakeholder Committee was convened at the outset of the study to help guide the CTP Update. The committee is composed of representatives from the County and local cities, ARC, MARTA, the Clayton Chamber of Commerce, the Georgia Department of Transportation (GDOT), Community Improvement Districts (CIDs), neighboring counties, and others as identified in partnership with Clayton County.

The Stakeholder Committee kickoff meeting was held on May 10, 2017 to gather input on the community vision for the county and the study's goals, objectives and priorities. The committee identified a need to establish a collective community vision for Clayton County that would guide decisions and set priorities for the CTP Update. In response, the study team designed the online community survey to include a visioning component that would respond to this identified need and set a path for the CTP Update.

2.1.2 STAKEHOLDER INTERVIEWS

Stakeholder interviews were held from July 28 to August 2, 2017 with representatives of Clayton County departments and agencies who had an interest in the process or outcomes of the CTP Update. Interviewees representing the Clayton County Water Authority, Community Services, Senior Services, Police Department, and Convention and Visitors Bureau identified the needs for workforce and economic development, better quality of life and beautification, and safety as the major challenges facing Clayton County.

2.1.3 FREIGHT PANEL DISCUSSION

The study team held a freight panel discussion on Wednesday, July 26, 2017, including representatives from Aerotropolis Atlanta, Kroger Distribution, Clayton State University and others knowledgeable of freight and warehousing issues in the county. The panel members identified the need for:

- Adequate access to and around the growing Gillem Logistics Center. It was reported that under existing conditions, Anvil Block Road and its interchange with I-675 are congested with truck traffic. Subsequently, the Gillem Logistics Center was selected as a subarea for further study.
- Truck parking. Panel attendees reported that parking for large trucks was a bigger concern for them than traffic, because there are few locations in the county where trucks can park that are safe, secure,



Survey respondents also prioritized the draft goals of the CTP Update based on their desired outcomes for the plan. **Figure 2-3** illustrates the results of this exercise.

2.1.5 OPEN HOUSES

A total of 123 participants attended the four open houses -- one in each of the County Commission Districts -- held from October 16 to October 30, 2017. The interactive open house format allowed attendees the opportunity to discuss project-related issues with staff and other attendees and provide input on transportation needs and county mode priorities. Input maps from these meetings were used in the identification of transportation needs and the selection of subareas for additional study.

The meetings included an interactive exercise that was used to determine public support for varying types of projects by mode. Participants were asked to spend \$5 in “Clayton Cash,” representing transportation funding for the next 20 years, across the following categories of transportation projects: Operations and Connectivity, Roadway Capacity, Safety, and Pedestrian, Bicycle and Trails. **Table 2-1** summarizes the total number of Clayton Cash assigned to each project category at each public meeting. The results of this exercise indicate a slight preference for safety improvements, including street lighting, but preference is otherwise evenly distributed among the presented project types.

Figure 2-3: Ranked Priorities



Source: MetroQuest

Table 2-1: Clayton Cash Results

Public Meetings	Safety	Pedestrian, Bicycle, & Trails	Roadway Capacity	Operations & Connectivity
Monday, October 16, 2017 (District 4)	5	6	3	2
Monday, October 23, 2017 (District 3)	62	54	56	55
Tuesday, October 24, 2017 (District 2)	24	30	30	31
Monday, October 30, 2017 (District 1)	42	35	35	27
Total	136	125	124	115
Distribution	27%	25%	25%	23%

2.1.6 SECOND STAKEHOLDER COMMITTEE MEETING

The Stakeholder Committee met on November 15, 2017 to learn the results of the open houses and other outreach efforts. The committee was also presented with the draft subareas analysis for review; additional,



detailed information that the committee provided about these areas and their transportation needs was incorporated into this analysis.

2.2 Recommendations Review

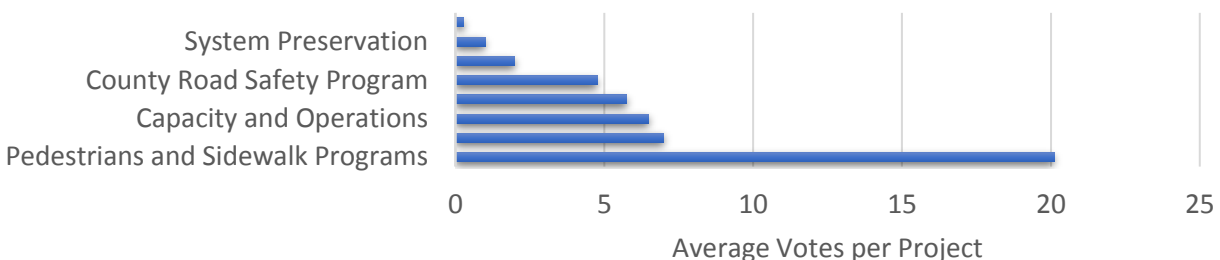
The CTP Update project team presented draft project recommendations for public and stakeholder review. Recommendations were revised and ranked based on the information gathered at the four public open houses and final Stakeholder Advisory Committee meeting.

2.2.1 PUBLIC OPEN HOUSES

A total of 220 participants attended the four project-recommendation-focused public open houses – one in each County Commission District – held from March 8 to March 22, 2018. The interactive open house format provided the public with an opportunity to discuss draft project recommendations with staff and other attendees. Participants could also provide input on project prioritization.

An interactive activity was used to quantify public support for specific projects in the draft recommendations list. The recommended projects were shown on a map and listed on the presentation boards; attendees were asked to place star stickers next to recommended projects that they would prioritize for funding. **Figure 2-4** shows the popularity of projects in each category based on the average number of votes that each project in that category received.

Figure 2-4: Project Type Popularity



Pedestrian and Sidewalk Program projects were the most popular projects. Feedback from these meetings was taken into consideration while finalizing the recommended project list and project prioritization. Notably, interest in rail/transit projects arose throughout the public meetings and subsequent written comments, even though this project category was not specifically addressed in the ranking exercise.

2.2.2 STAKEHOLDER COMMITTEE MEETING

The final stakeholder committee meeting was held on March 28, 2018. The project team presented the draft project recommendations list and gave an update on the results of public involvement activities. Feedback from stakeholders at the meeting mirrored observations made at public meetings; stakeholders were supportive of the all recommended projects and showed preference for pedestrians and sidewalks improvements.



3 CLAYTON CTP UPDATE GOALS AND OBJECTIVES

The goals and objectives of the CTP Update are the foundation for prioritizing current and future needs and later, will serve as the groundwork for developing performance measures for the prioritization of projects. Goals and objectives from the previous CTP were updated to reflect the community vision, regional context, and national guidance.

3.1 Community Vision

The CTP Update is a tool for helping Clayton County move toward the community vision for its future. Because this plan will serve the needs of Clayton County and its residents, community vision drives the goals and objectives of the CTP Update.

3.1.1 STAKEHOLDER INTERVIEWS

Early communication with Clayton County stakeholders identified some of the themes in the community vision for the county. The updates made to address these themes are discussed below.

- **Involving the community in planning and decision-making:** The 2015 ARC Metro Atlanta Speaks Survey indicated that 43 percent of Clayton County residents felt “not involved at all in community.” The CTP Update seeks to overcome this involvement gap through innovative outreach that meets people where they already are, in person and online, to garner community buy-in on the plan and deliver project recommendations that reflect the needs and priorities of the community. Therefore, a new goal has been added to those of the prior 2008 Clayton County CTP, “Engage in Effective Public Involvement and Coordination Strategies.” Two new objectives have also been added to provide a means for achieving that goal:
 - Coordinate with local partners to implement community priorities
 - In partnership with local communities, focus resources equitably and strategically in areas of need and importance
- **Focusing on access to transit in pedestrian planning:** In 2010, the Clayton County transit system, C-TRAN, ended operations. The Metropolitan Atlanta Rapid Transit Authority (MARTA) began bus transit operations in Clayton County on March 21, 2015. The CTP Update will not attempt to duplicate MARTA’s transit planning efforts, so the following objectives that addressed transit have been dropped from the goals of the CTP Update:
 - Expand regional transit options to connect to areas outside of Clayton County
 - Expand transit system to include Bus Rapid Transit
 - Expand transit routes to serve more of the County’s population
 - Develop a partnership to establish and maintain a seamless integrated regional transit network
 - Support development of commuter rail through Clayton County and the region
 - Provide additional park and ride lots in strategic locations



The CTP Update team, however, seeks to support ongoing transit operations in the county with the ongoing inclusion of objectives that seek to maximize the usefulness of the transit system and the return on MARTA's investment, such as by increasing access to transit, for instance, at bus stops, and encouraging Transit-Oriented Development at identified nodes.

- **Livability and quality of life:** The 2015 ARC Metro Atlanta Speaks Survey indicated that over one-third of Clayton County residents were concerned with the quality of life in their neighborhood. In response, the CTP Update added a new objective, "Enhance aesthetics of transportation infrastructure, like the trails system" to support the community's vision for increased livability and quality of life in Clayton County. This objective also provides consideration for and coordination with the recommendations from Clayton County's Master Trails Plan, 2015.

3.1.2 SURVEY AND PUBLIC OPEN HOUSE INPUT

The results of the online public survey indicate that improving safety, providing access to jobs, and moving traffic efficiently are the top three things that the CTP Update can accomplish. The priorities established by survey responses were reviewed and confirmed by the public at a series of four open houses held for the project in October 2017. The collective ranked priorities are shown in Figure 2-3, from highest priority to lowest.

The public's desire to improve safety is reflected in the goal "Encourage and Support Safety and Security." The CTP Update team also responded to this goal with a specific inquiry into safety on county-owned roadways, which are meeting shifting needs as the county urbanizes. The team also sought to include lighting and other measures for pedestrian safety in its recommendations.

The goal, "Promote and Support Economic Development and Redevelopment" reflects the public's concern about access to jobs. For this CTP Update, the team sought beautification and quality of life efforts that would support economic development and bring more jobs to the county; it also sought to support commuting patterns for those who were employed outside of the county.

Finally, the CTP Update team sought to move traffic efficiently, as reflected in the goals, "Enhance and Maintain the Transportation System to Meet Existing and Future Needs," "Improve Connectivity and Accessibility," and "Enhance Mobility for All Users of the Transportation System."

3.2 Regional Framework

The vision presented in the Atlanta Region's Plan Policy Framework, adopted in August 2015, identified the Region's priorities for world-class infrastructure, a competitive economy, and healthy, livable communities. The goals and objectives of the 2008 Clayton County CTP supported this vision for the region and the county, and no changes were made for the CTP Update.

3.3 National Guidance

National guidance on goals and objectives is drawn from the Fixing America's Surface Transportation Act (FAST ACT), the federal transportation bill signed into law on December 4, 2015. The FAST Act expanded the scope



of metropolitan planning processes to include transportation system resilience and reliability, stormwater impacts and enhancing travel/tourism. The Clayton County CTP Goals and Objectives were updated to include two new objectives that reflect the influence of the FAST Act:

- “Improve **resiliency** of the transportation system” was added under the goal to “Enhance and Maintain the Transportation System to Meet Existing and Future Needs.” This objective addresses the need for transportation networks to operate in challenging circumstances, including severe weather events.
- “Support transportation improvements enhancing **travel and tourism** in Clayton County” was added under the goal to “Promote and Support Economic Development and Redevelopment.”

The final goals and objectives for the Clayton County CTP Update are listed in **Table 3-1**. These goals are used in prioritizing CTP update project recommendations. They will also lay the groundwork for system performance monitoring at the local level as the County measures the efficacy of their investments against these goals over time.



Table 3-1: Goals and Objectives of the Clayton County CTP Update
Enhance and maintain the transportation system to meet existing and future needs

- Plan for affordable improvements considering financial constraints
- Preserve and maintain existing multimodal transportation system such as highway, transit, active transportation
- Improve and maintain structurally deficient bridges
- Implement operations improvements to improve system performance and safety
- **Implement** Complete Streets
- **Improve resiliency of the transportation system**

Ensure the transportation system promotes and supports appropriate land use and development

- Maintain consistency with local land use plans
- Secure right-of-way for future transportation facilities
- Encourage transit-oriented development
- Opt for transportation alternatives suited to and supported by land use

Encourage and support safety and security

- Identify safety concerns
- Improve intersections with high crash rates
- Provide safe access from residential subdivisions to major roadways
- Incorporate multimodal facilities
- Increase public awareness on safety issues
- Provide truck only lanes on the interstate system

Improve connectivity and accessibility

- Ensure that planned improvements incorporate reasonable access to Downtown Atlanta, major employment centers, public land uses and recreation sites
- **Improve access to transit for users**
- **Improve** access to Hartsfield-Jackson Atlanta International Airport
- Improve amenities for alternative transportation
- Improve system connectivity
- **Provide** access to schools from planned improvements
- Provide additional grade separation
- Limit access on major corridors



Enhance mobility for all users of the transportation system

- Designate routes for commuters while maintaining routes for local trips
- **Provide** efficient routes to reduce travel time to work
- Identify and improve freight movement corridors
- Relieve congestion for vehicles on surface transportation system
- **Implement** equitable transportation programs

Promote and support economic development and redevelopment

- Build transportation facilities near economic development centers
- Provide a transportation system to support economic development of disadvantaged communities
- Support development of commuter rail
- Improve intermodal freight connectivity
- Protect economic health in downtown areas by enhancing the character through transportation improvements
- **Support transportation improvements enhancing travel and tourism in Clayton County**

Improve quality of life, preserve the environment, and protect neighborhood integrity

- Identify priority environmental resources and ensure their protection
- Incorporate alternative modes that reduce negative air quality impacts
- Minimize adverse community, historical and environmental impacts during planning / construction of transportation projects
- Preserve existing characteristics and aesthetics
- **Enhance aesthetics of transportation infrastructure including trails system**
- Promote energy conservation in the future transportation system

Engage the public with effective outreach strategies

- **Foster coordination with local partners to implement community priorities**
- **In partnership with local communities, equitably and strategically focus resources in areas of need and importance**



4 EXISTING CONDITIONS AND NEEDS ASSESSMENT

This chapter presents the existing conditions of, and identifies transportation needs associated with, demographic and socioeconomic trends, land use patterns (including currently adopted plans for future land use), environmental features, and the existing multimodal transportation systems within the county. Identified needs are a combined outcome of technical analysis such as travel demand modeling and crash analysis, as well as input from the community and stakeholders.

In addition to the county-wide needs analysis, five subareas were selected for more in-depth examination. These specific areas are intended to typify areas of Clayton County's greatest need, where identifying improvements would provide the greatest benefit to Clayton County residents.

4.1 Study Area

Located in the southern portion of the Atlanta region, Clayton County is bordered by the City of Atlanta, Fulton and DeKalb Counties to the north, Fayette County to the west, Spalding County to the south, and Henry County to the east. Clayton County is home to seven cities including Jonesboro, College Park, Forest Park, Lake City, Lovejoy, Morrow, and Riverdale. Clayton County has a land area of 142 square miles, with a 2015 population of 267,234 which amounts to a population density of 2.95 persons per acre. **Table 4-1** summarizes key population and household characteristics of Clayton County in comparison to the Atlanta region based on 2011-2015 American Community Survey by US Census. **Figure 4-1** depicts the project study area, including its location in the 20-County Atlanta region.

Table 4-1: Clayton County Population and Household Characteristics

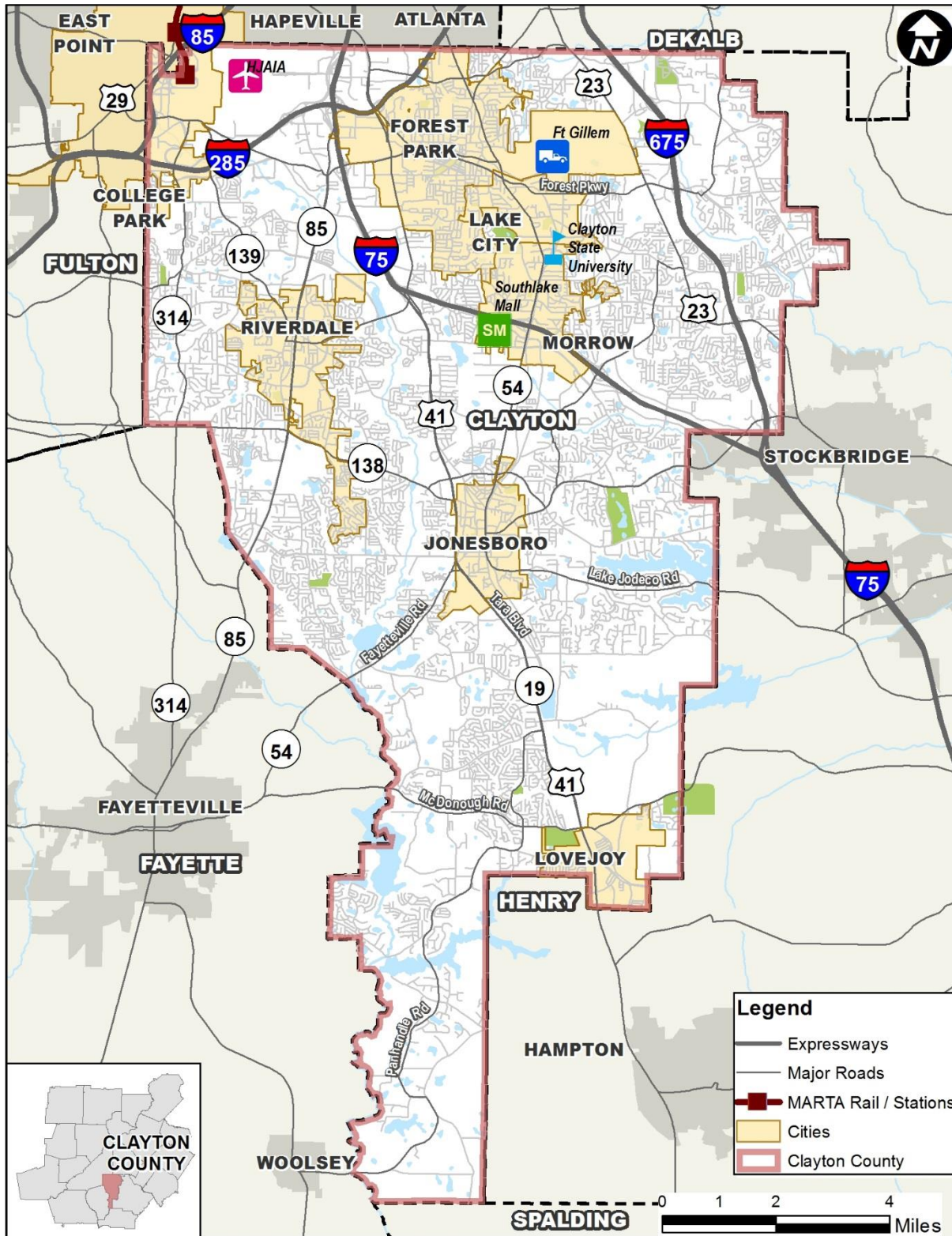
Demographic Characteristic	Clayton County	Atlanta Region
Total Population	267,234	5,518,997
Population Density	2.95 per acre	1.38 per acre
Number of Households	88,793	1,951,995
Percent population in Occupied Housing Units	98.5% (263,357)	98.5% (5,434,986)
Average Household Size	2.97	2.78
Median Age	32.4	35.7*
Percent workers (Age 16 or more) without access to vehicles	3.9%	3.1%
Percent Low Income Population (Income below Poverty Threshold)	25.1% (65,787)	15.6% (847,000)
Median Household Income	\$40,938	\$56,970
Total Minority Population	230,746 (86.3%)	2,830,006 (51.3%)
Percentage population with disability	10.9%	9.7%
Percent population High School graduate or higher (Age 25+)	82.5%	88.1%
Percent population with Bachelor's degree or higher (Age 25+)	18.3%	36.1%

Source: 2011-2015 American Community Survey, US Census.

*Median age value was not available for the cumulative Atlanta region. Median age estimate for Atlanta-Sandy Springs-Roswell MSA was used instead.



Figure 4-1: Study Area



Source: ARC Open Data Portal



4.1.1 POPULATION

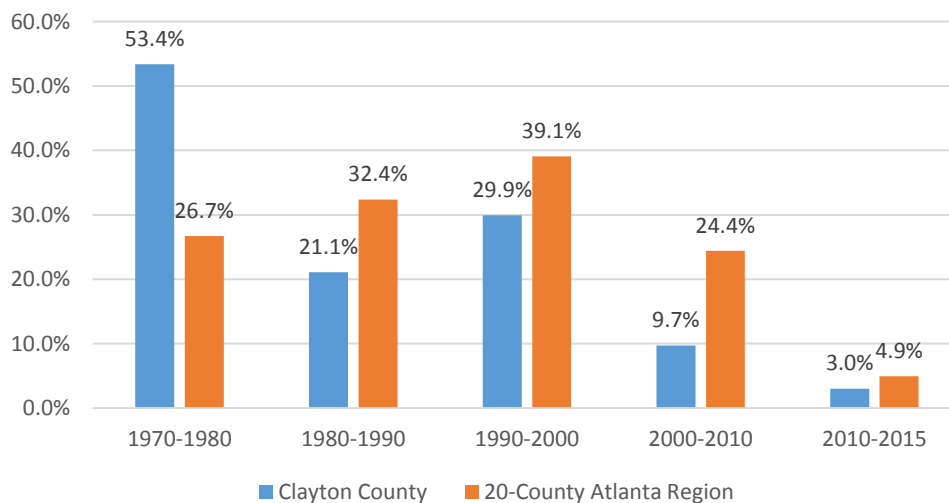
Table 4-2 and **Figure 4-2** present historical population growth rates over the 45-year period from 1970-2015 for Clayton County and the Atlanta region. **Figure 4-3** presents the population growth of Clayton County from 1970 to 2015. Clayton County’s population growth rates have been lower than those of the Atlanta region for each decade between 1970 and 2010, except for the period from 1970-1980. During that period, the County’s population grew by 53 percent, approximately twice the growth rate of the Atlanta region (27 percent growth). Although Clayton County did not sustain that population growth rate after 1980, the County has continued to see an increase in total population, despite suffering and recovering from a small decrease in population in the aftermath of the 2008 recession. In 2006, before the recession, Clayton County’s population was estimated at 271,234, but by 2010, during the recession, its population had fallen to 259,424. By 2015, the population had recovered to pre-recession levels, and was estimated to be 267,234. Data for population and employment through 2040 were obtained from ARC.

Table 4-2: Historical Population Trends of Clayton County (1970-2015)

Year	Clayton County			Atlanta Region		
	Population	Net Change	Percent Change	Population	Net Change	Percent Change
1970	98,043			1,813,411		
1980	150,357	+52,314	53.4%	2,297,321	+ 483,910	26.7%
1990	182,052	+31,695	21.1%	3,040,946	+743,625	32.4%
2000	236,517	+54,465	29.9%	4,228,492	+1,187,546	39.1%
2010	259,424	+22,907	9.7%	5,260,436	+1,031,944	24.4%
2015	267,234	+7,810	3.0%	5,518,997	+258,561	4.9%

Source: 2011-2015 American Community Survey, US Census.

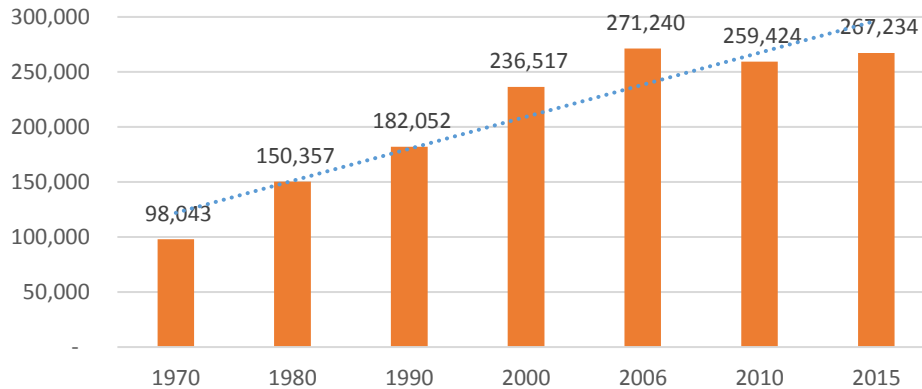
Figure 4-2: Comparison of Historical Population Growth Rates (1970-2015)



Source: 2011-2015 American Community Survey, US Census.



Figure 4-3: Historical Population Trends of Clayton County (1970-2015)



Source: 2011-2015 American Community Survey, US Census.

4.1.2 PROJECTED POPULATION GROWTH

Table 4-3 presents population and employment forecasts for Clayton County through 2040. Clayton County population is projected to grow by 21 percent from 2017 to 2040, from 271,017 to 327,552 people.

Table 4-3: Forecasted Population Growth in Clayton County (2015-2040)

	2015	2017	2020	2030	2040	Total Change 2017- 2040	Average Annual Change 2017-2040
Population							
	267,230	271,017	278,860	300,720	327,550		
Change (during time period)		+3,783	+7,840	+21,860	+26,830	+56,540	+2,460
Percent Change		1%	3%	8%	9%	21%	
Employment							
	138,530	145,409	148,910	159,150	168,290		
Change (during time period)		+6,880	+10,380	+10,240	+9,140	+22,880	+1,190
Percent Change		5%	8%	7%	6%	16%	

Source: Population and Employment forecasts, ARC, all figures rounded

4.1.3 POPULATION DENSITY AND GEOGRAPHIC DISTRIBUTION

Population density measures how many people live in a specific area. Urban areas tend to be densely populated; rural areas, sparsely. Per the 2015 population statistics, Clayton County is more densely populated than the Atlanta regional average, and all but three counties in the Atlanta region and in the state of Georgia, namely



DeKalb (4.18 people per acre), Cobb (3.31 people per acre) and Gwinnett Counties (3.12 people per acre). **Table 4-4** presents the comparison of population density of Clayton County to the region and the state.

Table 4-4: 2015 Population Density of Clayton County

	Clayton County	Atlanta Region	State of Georgia
Area (sq. miles)	142	6,257	57,513
Area (acres)	90,605	4,004,390	36,808,621
2015 Population	267,234	5,518,997	10,006,693
2015 Population Density (per acre)	2.95	1.38	0.27

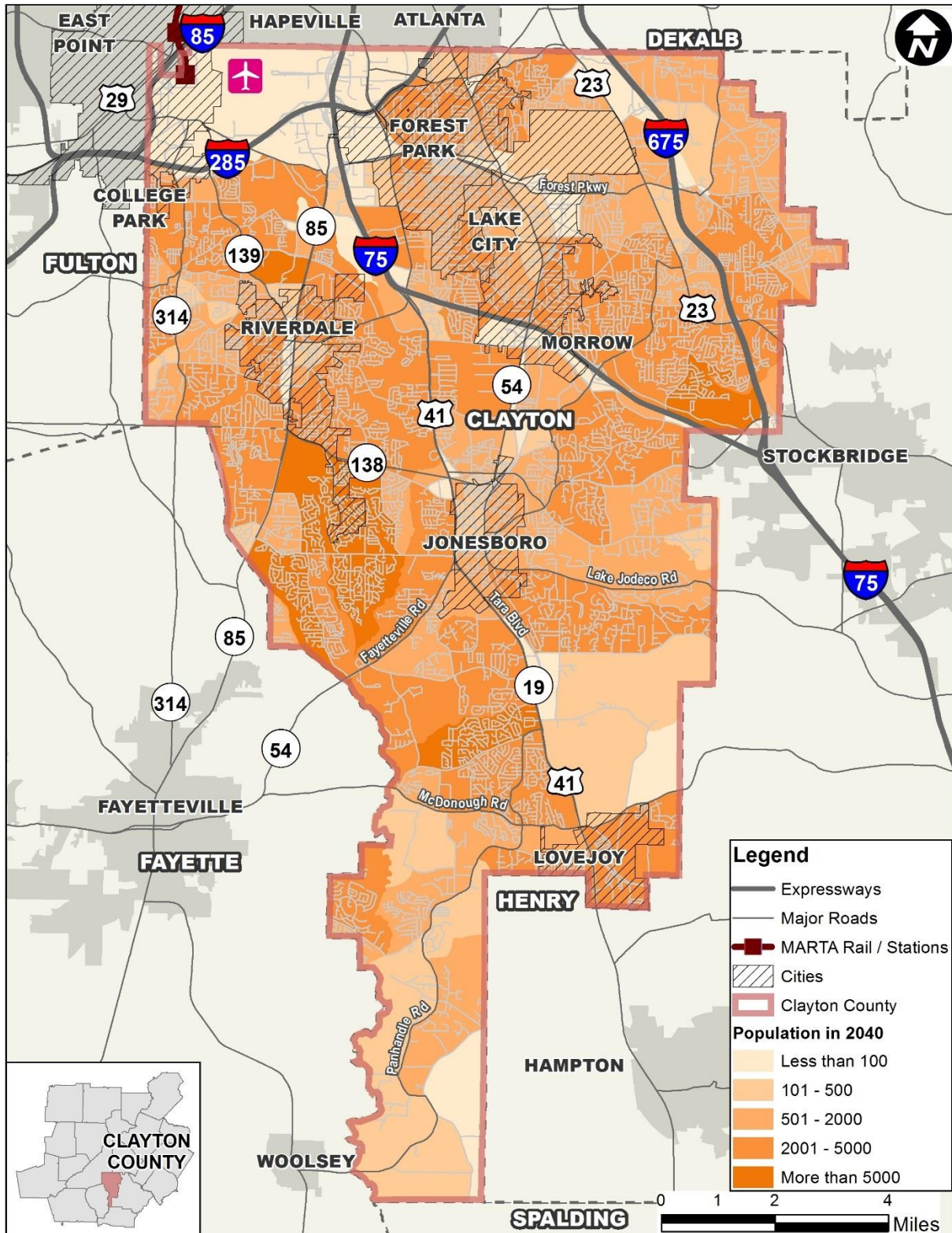
Source: 2011-2015 American Community Survey, US Census.

Figure 4-4 shows the distribution of population in Clayton County. The northern half of Clayton County is more densely populated than rest of the county and includes two significant activity centers, Hartsfield-Jackson Atlanta International Airport (H-JAIA) and Fort Gillem, which is currently redeveloping from a decommissioned military installation to commercial center that focuses on warehousing, freight, and logistics. Areas in incorporated parts of the county, such as the northern section of the Cities of Forest Park and Morrow, and areas near SR 85 in the City of Riverdale, host higher population densities. In unincorporated parts of the county, areas south of Riverdale along with areas with access to major roads such as SR 85, SR 3/US 19/US 41/Tara Boulevard, McDonough Road and the interstates host higher densities.

Figure 4-5 presents the projected geographic distribution of population growth in the county, and **Figure 4-6** presents the projected population density of the county in 2040. Geographically, population growth is expected to be concentrated near employment hubs, and residential areas may expand into the more rural sections of southern Clayton County to take advantage of cheaper property values. Growth is expected to be focused near roads such as SR 85, SR 139, SR 138, US-41, Tara Road, Flint River Road, Fayetteville Road, and Lake Jodeco Road. With the expected population growth in southern parts of the county, there is likely to be an increasing need for alternatives to US-19/SR 41 for improved north-south connectivity.



Figure 4-6: Projected 2040 Clayton County Population Density



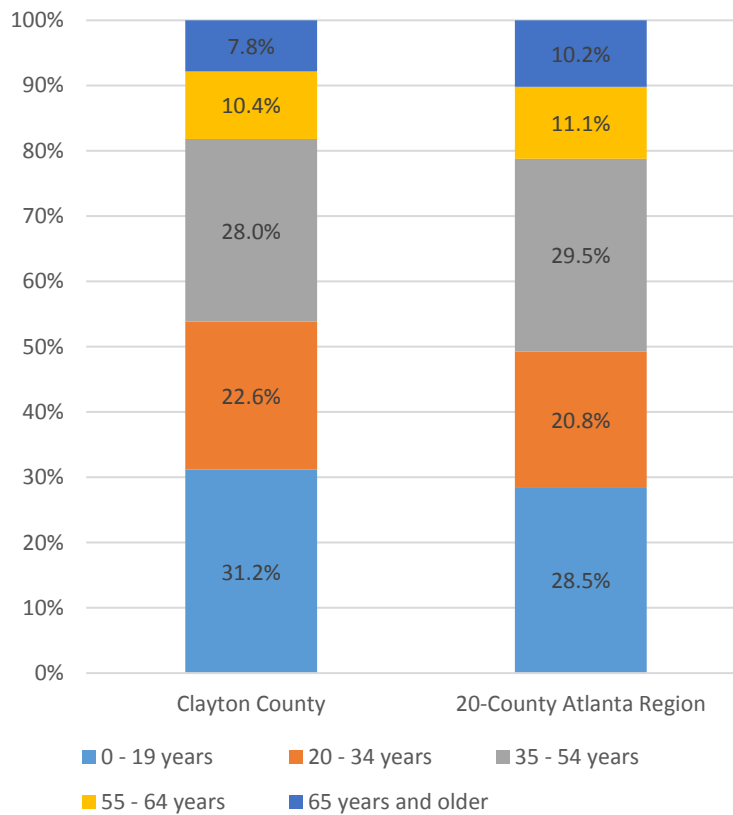
Source: Population and Employment Density forecasts, ARC



4.1.4 AGE/GENERATIONS

Figure 4-7 compares the 2015 age distribution in Clayton County to the Atlanta region. **Figure 4-8** presents the historical age distribution of Clayton County. Residents of Clayton County are slightly younger than those of the Atlanta region. In 2015, the median age in Clayton County was 32.4 years, and 35.7 years in the Atlanta Metropolitan Statistical Area (MSA). As per the 2015 age distribution, Clayton County’s “under 35 years” population is at 53.8 percent of total population 4.5 percent higher than in the Atlanta region, where it is 49.3 percent. Still, the share of the population in Clayton County under 35 years old has fallen over time, from 58.8 percent in 2000 to 53.8 percent in 2015. Clayton County is not an exception to the regional trend of aging population, with 6 percent growth in population of 55 years old and over.

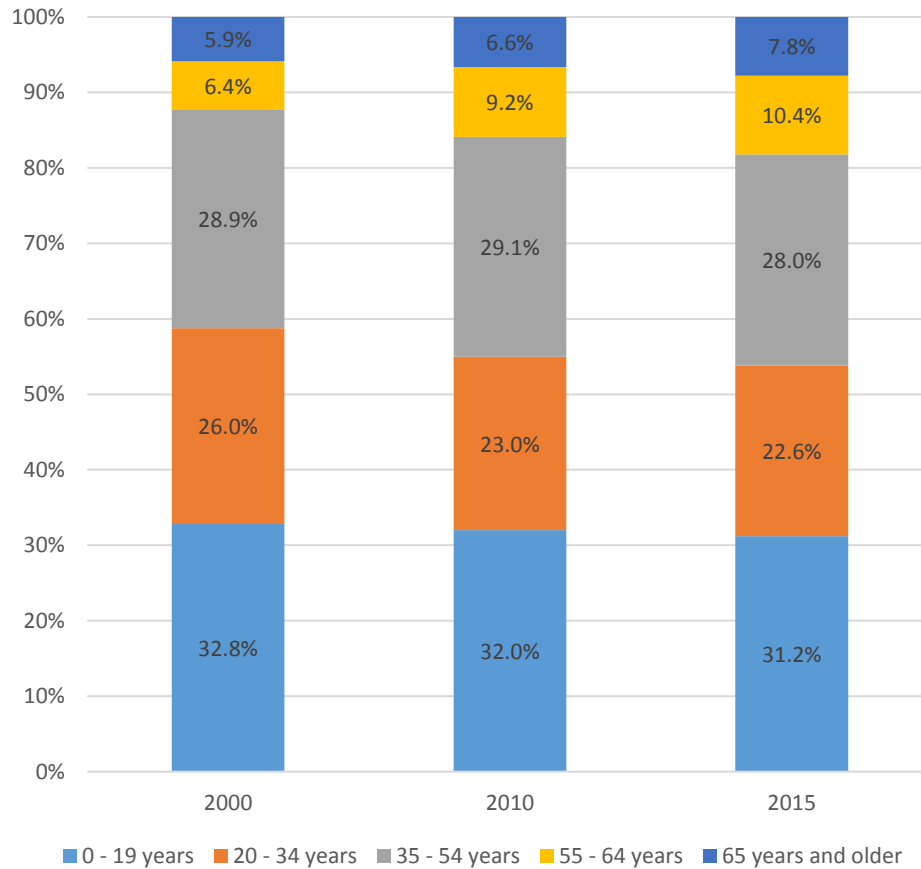
Figure 4-7: Comparison of 2015 Age Distribution



Source: 2011-2015 American Community Survey, US Census



Figure 4-8: Historical Age Distribution of Clayton County



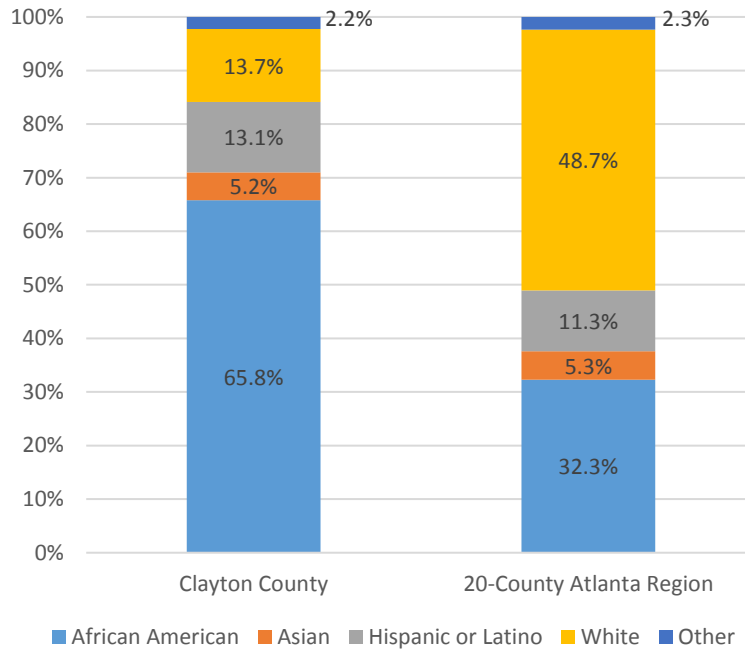
Source: 2011-2015 American Community Survey, US Census

4.1.5 RACE AND ETHNICITY

Figure 4-9 compares race and ethnicity of the 2015 population in Clayton County to that of the Atlanta region. Population groups other than non-Hispanic White were considered as a minority. The county has a greater proportion of African American and Hispanic population than the Atlanta region. As shown in Figure 4-10, the historical trend shows that the proportion of non-white population is growing while that of the white population is decreasing in Clayton County. Figure 4-11 shows that most of the block groups in the county have majority minority population.

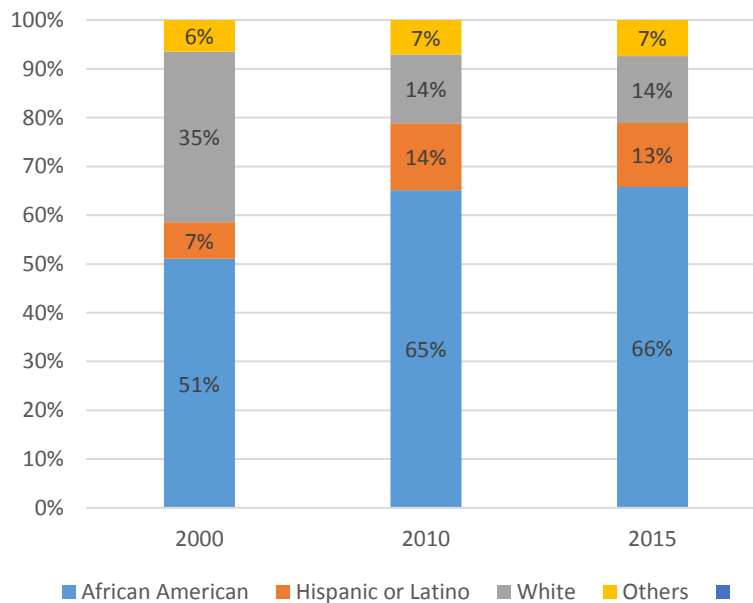


Figure 4-9: Comparison of 2015 Race and Ethnicity



Source: 2011-2015 American Community Survey, US Census.

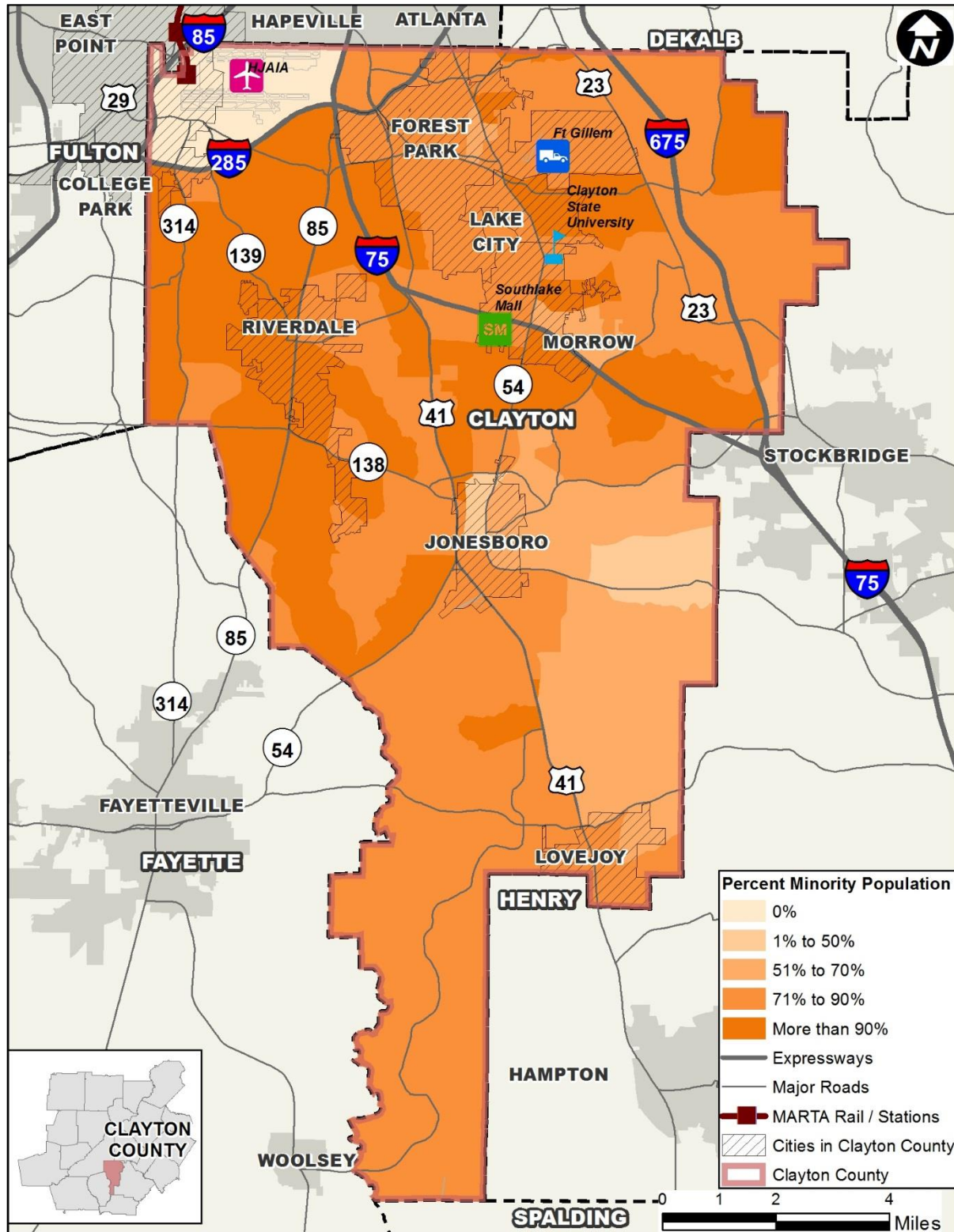
Figure 4-10: Historical Race and Ethnicity of Clayton County



Source: 2011-2015 American Community Survey, US Census



Figure 4-11: Minority Population by Census Blockgroup in Clayton County



Source: 2011-2015 American Community Survey, US Census



4.1.6 HOUSEHOLDS

Clayton County is home to nearly 88,800 households, more than 50 percent of which are home to two or fewer persons. However, with an average household size of almost 3 persons, Clayton County still ranks among the top 10 percent of counties in the state of Georgia in average household size (2011-2015 American Community Survey). **Table 4-5** shows a summary of household characteristics for Clayton County.

Table 4-5: Household Characteristics in Clayton County

Household Characteristic	Estimate
Number of Households	88,793
Average Household Size	2.97
Housing Units	104656
Occupied Housing Units	88,793 (85%)
Population in Occupied Housing Units	263,357 (98.5%)
Population in Owner Occupied Housing Units	139,080 (53%)
Population in Renter Occupied Housing Units	124,277 (47%)
Percent Family Households	66.5% (Household size 3.82)
Percent Non-Family Households	33.5% (Household size 1.28)

Source: 2011-2015 American Community Survey, US Census

4.1.7 INCOME

Clayton County's median household income is nearly \$41,000, which is 30 percent lower than that of the Atlanta region. The historical income distribution trend in Clayton (in **Figure 4-12**) shows a substantial increase in population with annual income less than \$25,000, especially since 2010. Similarly, **Figure 4-13** illustrates that median household income in Clayton County has been lower than that for the State of Georgia and United States since 2000. As shown in **Table 4-6**, a quarter of the population was below the poverty level, approximately 9 percent higher than that proportion of Atlanta region. According to **Figure 4-14**, which shows the distribution of low income population in Clayton County by census block groups, northern parts of the county near SR 3/US 19/US 41/Tara Boulevard along with areas near City of Forest Park and Fort Gillem Redevelopment have higher concentrations of low income population.

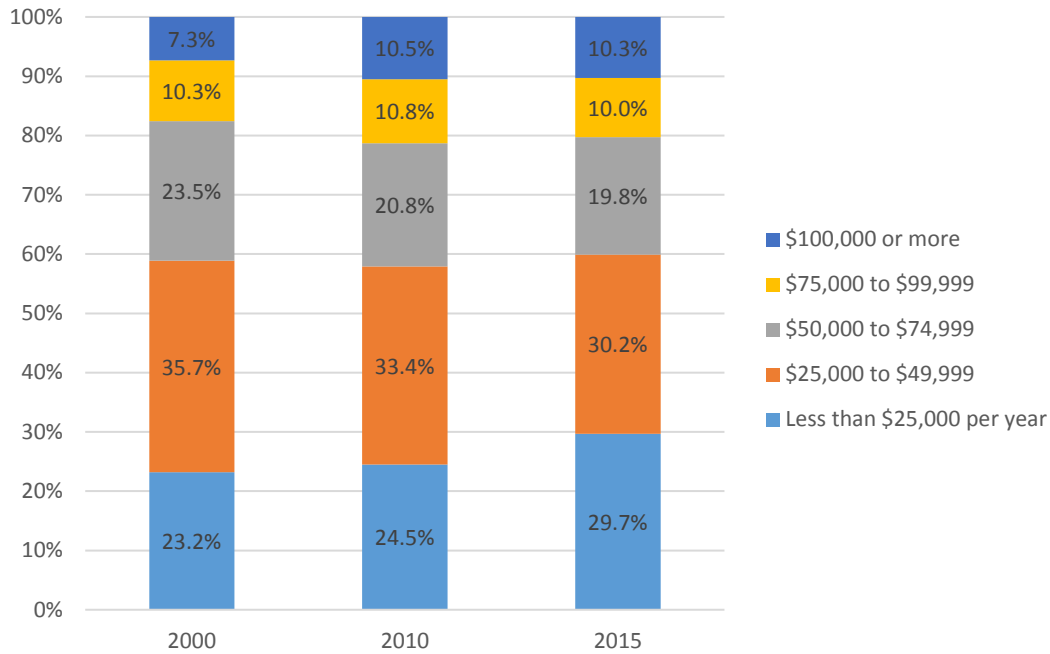
Table 4-6: 2015 Median Household Income and Population in Poverty

	Median Household Income	Percent of Population below the Poverty Level
Clayton County	\$40,938	25.1%
Atlanta Region	\$56,970	15.6%

Source: ARC's Atlanta Region 20-County Data Dashboard.

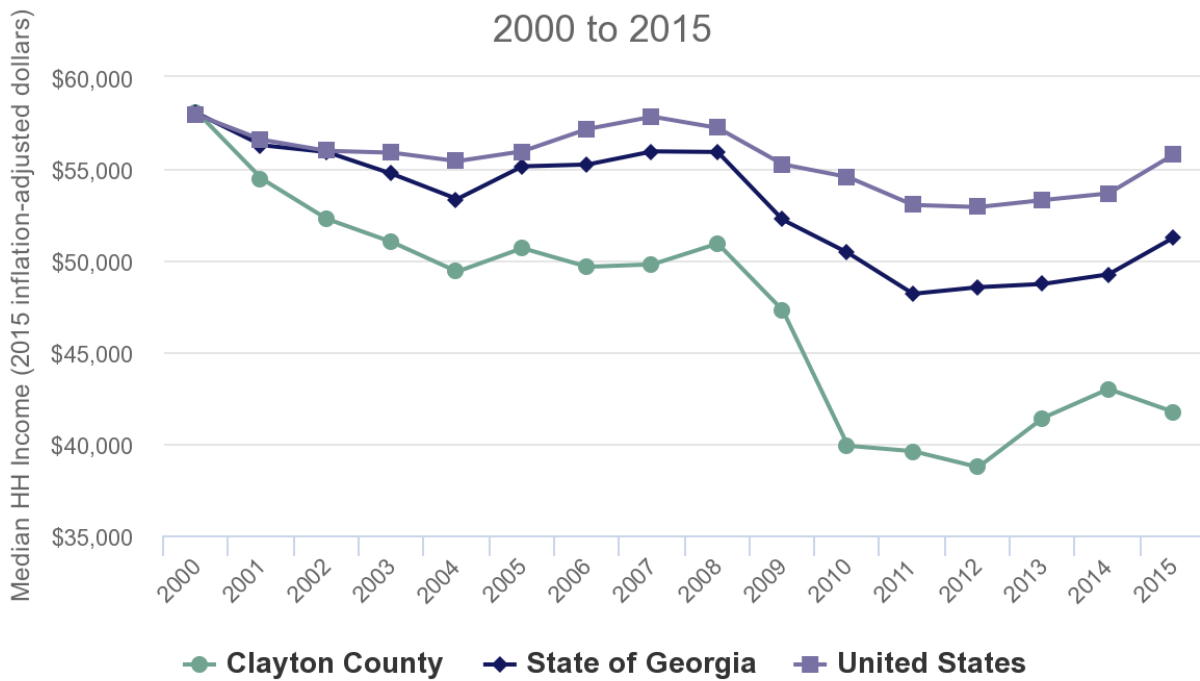


Figure 4-12: Historical Income Distribution of Clayton County



Source: 2011-2015 American Community Survey, US Census

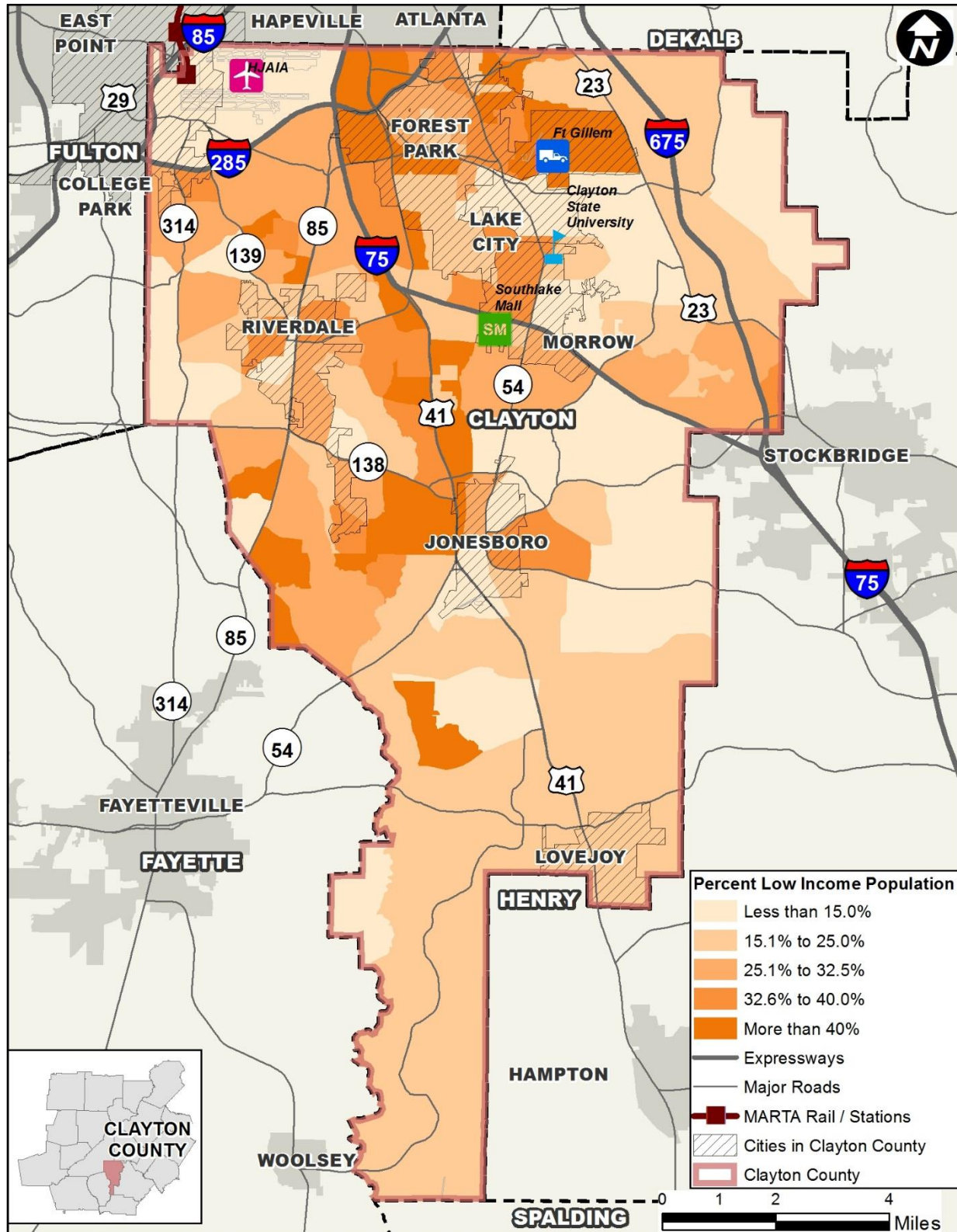
Figure 4-13: Clayton's Median Household Income (2000-2015)



Source: ARC Neighborhood Nexus Clayton County Profile



Figure 4-14: Low Income Population by Census Blockgroup in Clayton County



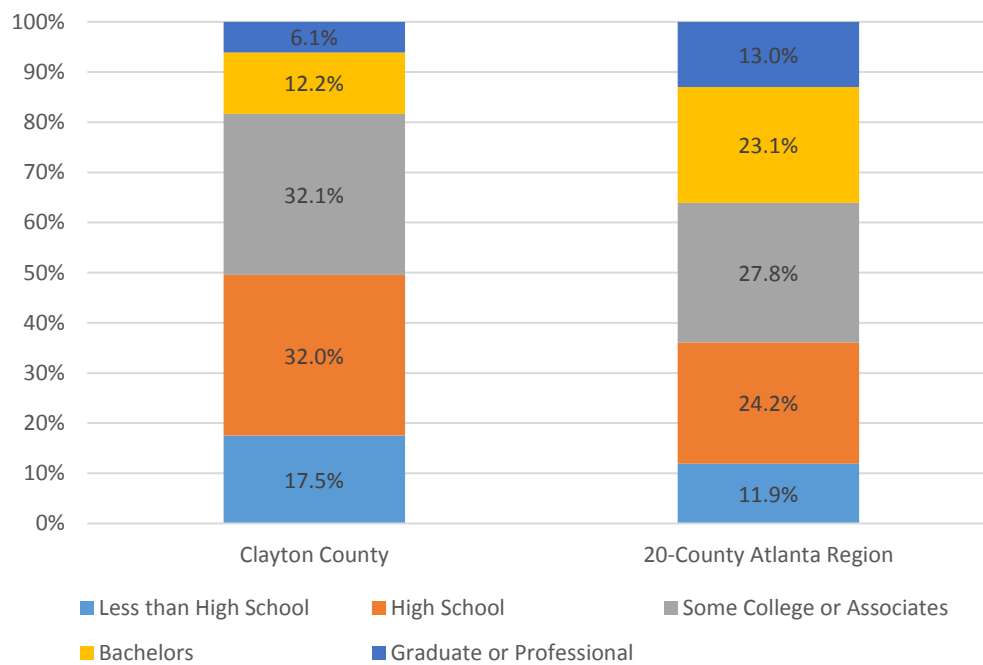
Source: 2011-2015 American Community Survey, US Census



4.1.8 EDUCATIONAL ATTAINMENT

Figure 4-15 compares the percentage of population over the age of 25 by highest level of education attainment in Clayton County with that of the Atlanta region. Clayton County’s educational attainment trails that of the Atlanta region. As of 2015, the high school graduation rate in Clayton County is 69 percent, one of the lowest in the Atlanta region. More than half of adults in the county have completed some college while 17.5 percent of residents over the age of 25 lack a high school diploma, or equivalent. Over 18 percent of the population has a bachelor’s degree or higher (graduate or professional), which is approximately half the share of the Atlanta region with that level of education (36.1 percent).

Figure 4-15: Comparison of Educational Attainment in Clayton County and the Atlanta region



Source: ARC’s Atlanta Region 20-County Data Dashboard (2011-2015 Average)

4.2 Jobs and Economy

Transportation plays a critical role in developing and shaping communities by providing access to employment and other activities. In other words, transportation infrastructure forms the foundation of opportunities for economic growth in the region. This section summarizes employment characteristics of Clayton County including job growth, primary job sectors and major employers, and employment patterns within the county.

4.2.1 EMPLOYMENT STATUS

Table 4-7 summarizes employment status in Clayton and compares it against that in Atlanta region and State of Georgia. **Figure 4-16** illustrates the trends in unemployment rate in Clayton County from 2006 to 2016. Per 2016 annual averages of labor force activity data from Georgia Department of Labor, about 6.6 percent of the



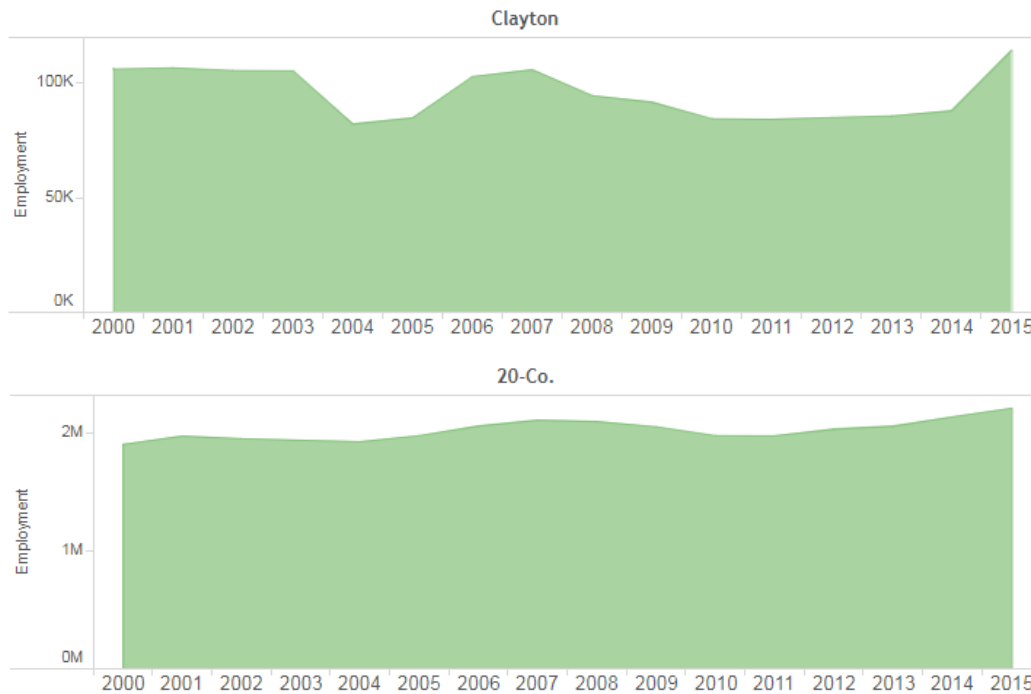
county’s labor force was unemployed in 2016, which was higher than that observed in the Atlanta region or the State of Georgia. The number of employed residents dipped during the recession, which led to the unemployment rate peaking near 14 percent between 2010 and 2011. However, the number of employed residents has been steadily rising since 2011 and the 2016 unemployment rate approached pre-recession levels.

Table 4-7: Employment Status (2016 Annual Averages)

County	Labor Force	Employed	Unemployed	Unemployment rate
Clayton	129,852	121,278	8,574	6.6%
Atlanta Region	2,810,768	2,670,052	140,716	5.0%
Georgia	4,920,464	4,656,255	264,209	5.4%

Source: 2016 Annual Averages, Georgia Department of Labor

Figure 4-16: Employment Trend of Clayton and 20-County Atlanta Region



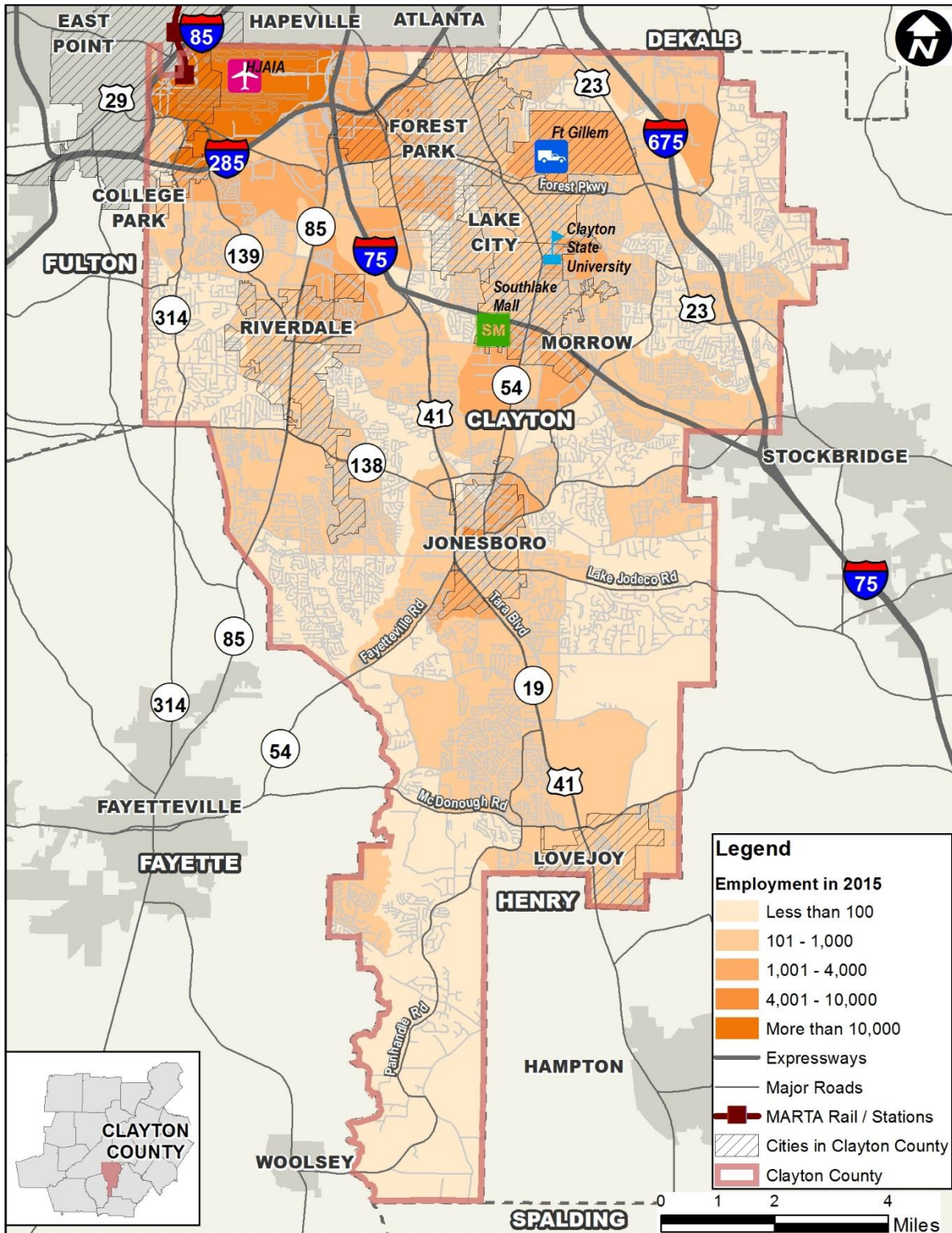
Source: ARC’s Atlanta Region 20-County Data Dashboard.

4.2.2 EMPLOYMENT PATTERNS

The area around H-JAIA has the highest concentration of employment in the county, with nearly a third of its jobs located in the area (based on the ARC’s employment estimates). **Figure 4-17** shows the distribution of employment in Clayton County. Areas near major corridors such as SR 3/US 19/US 41/Tara Boulevard, SR 85, SR 54/Jonesboro Road have a higher concentration of jobs than elsewhere in the county. The Fort Gillem Redevelopment, Clayton State University and Southlake Mall are some of the other major centers of employment.



Figure 4-17: 2015 Employment Estimates by Traffic Analysis Zones in Clayton County



Source: Employment Estimates, ARC



4.2.3 JOB GROWTH

Total employment in the county fell by 20 percent between 2000 and 2010 mainly due to the recession of 2008. However, Clayton County added nearly 30,000 jobs – and had the highest percent increase (35 percent) in employment amongst the Atlanta region – between 2010 and 2015. This increase is still significant after considering the sharp economic downturn that the county and nation experienced between 2007 and 2014. **Table 4-8** compares employment trend in Clayton County with the surrounding counties and the Atlanta region during the period from 2000-2015.

Table 4-8: Total Employment 2000-2015

	2000	2010	2015	Percent Change in Employment 2010-2015
Clayton County	106,040	84,392	114,053	35.1%
DeKalb County	282,749	245,166	262,943	7.3%
Fayette County	26,623	33,193	35,305	6.4%
Fulton County	659,367	638,993	704,791	10.3%
Henry County	24,360	41,816	47,361	13.3%
Atlanta Region	1,899,451	1,975,135	2,205,993	11.7%

Source: ARC’s Atlanta Region 20-County Data Dashboard.

Figure 4-16 graphically illustrates the employment trend during the same period, comparing Clayton County with the major surrounding counties and the Atlanta region. Most of the employment increase in Clayton County has occurred since 2014. In fact, between 2012 and 2016, Clayton County’s unemployment rate demonstrated the largest decline in the metro Atlanta area.

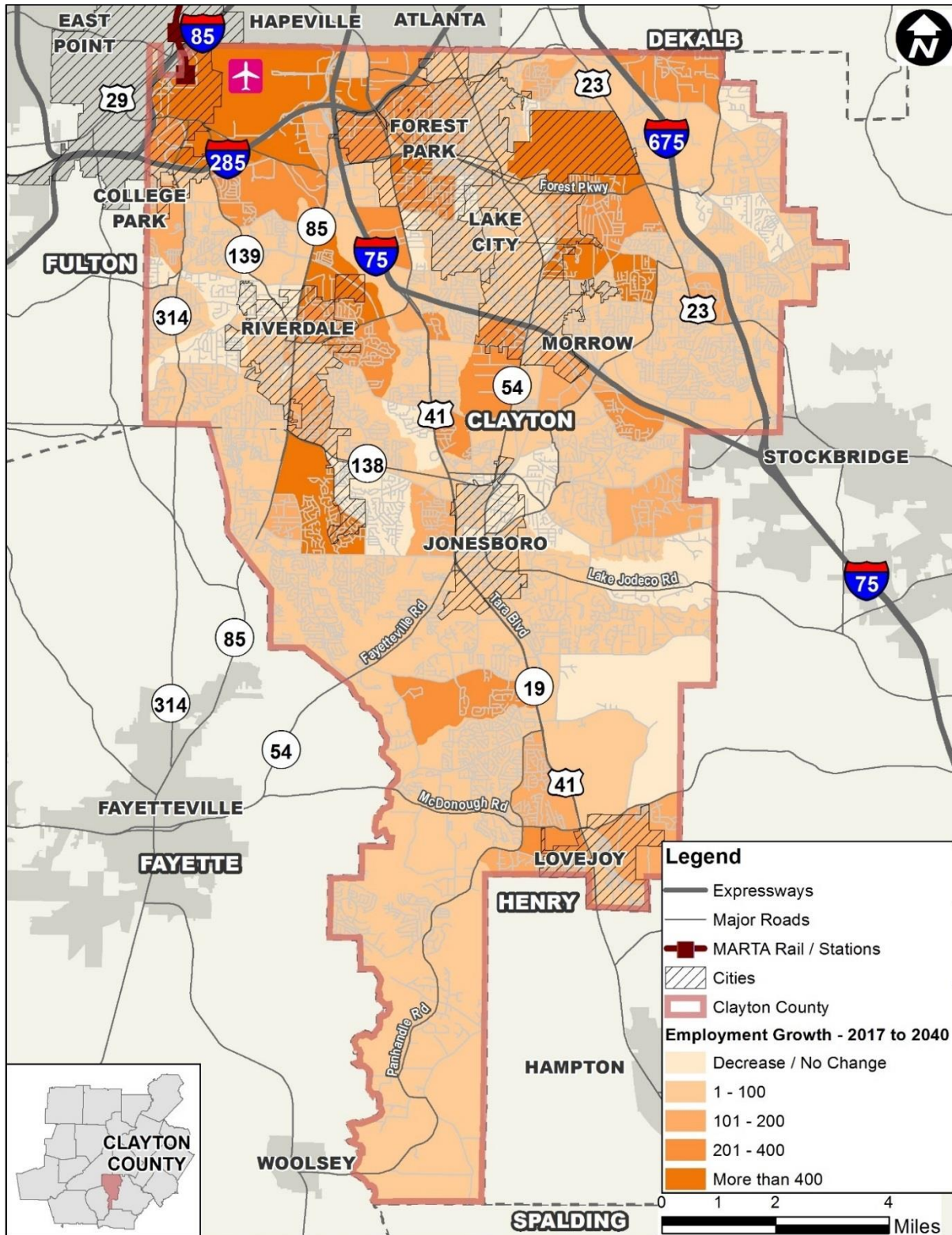
With a historically strong manufacturing presence over the years and the upturn in the overall economy, Clayton is experiencing a resurgence in manufacturing and warehousing-related employment. Major companies such as Kroger (with its 1.3 million-square-foot distribution center at the Fort Gillem development), and the Castellini Group of Companies (one of the largest distributors of produce in the U.S.) chose a Clayton County location in 2014 (Clayton County Market Report, Atlanta Business Chronicle, May 2016). With the creation of the 1,168-acre Gillem Logistics Center and other recent Clayton County deals, favorable job growth is poised to continue.

4.2.4 PROJECTED FUTURE JOB GROWTH

Figure 4-18 illustrates projected employment growth in the county by location from 2017 to 2040, while **Figure 4-19** shows the expected employment density in 2040. Employment is expected to grow at roughly the same rate as population from 2017 to 2040, with a forecast employment increase of 16 percent. The growth in employment is expected to be concentrated in and around existing employment centers, generally located in the northern half of Clayton County and along the US-41 corridor.



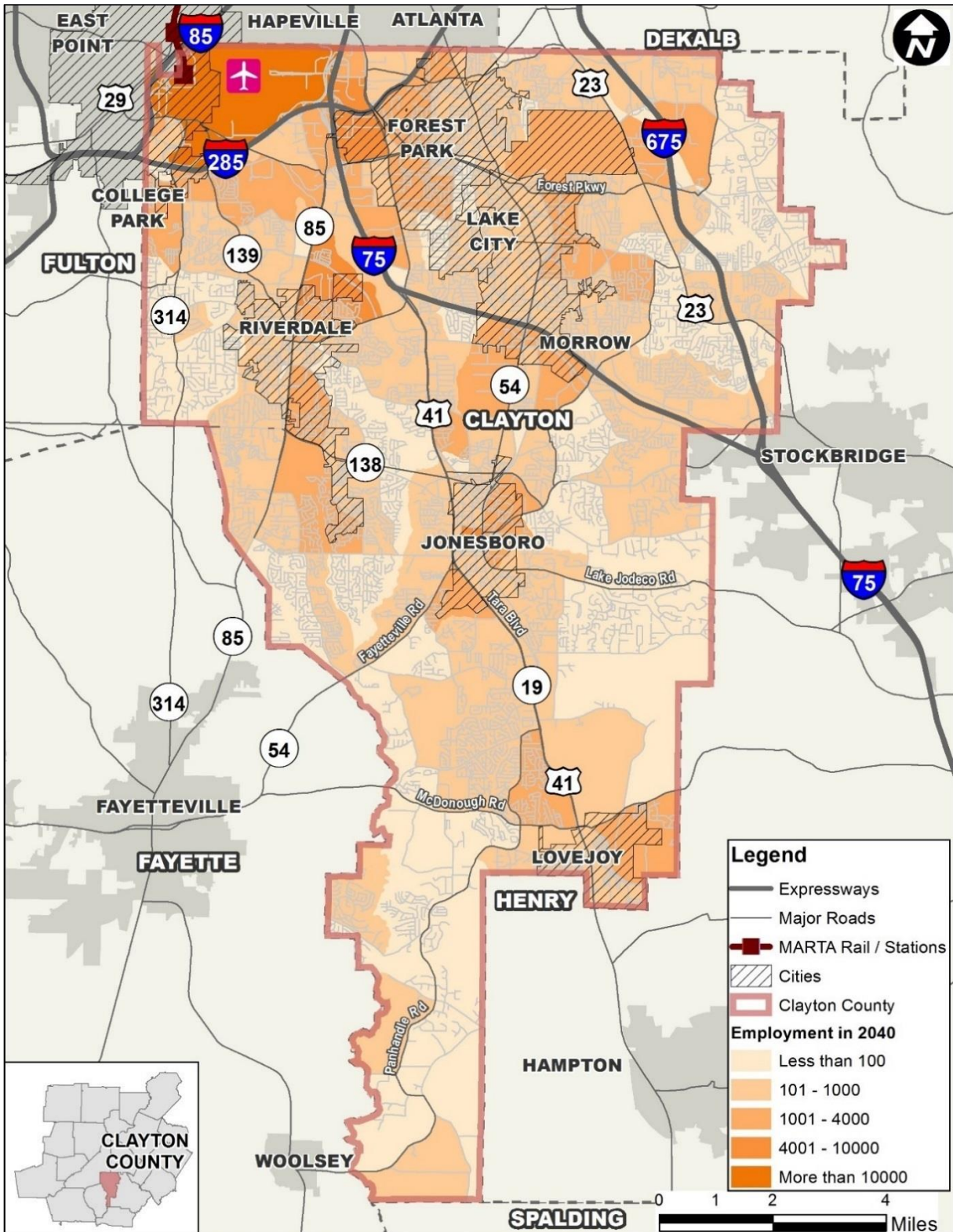
Figure 4-18: Projected Employment Growth, 2017 to 2040



Source: Population and Employment Density forecasts, ARC



Figure 4-19: Projected 2040 Clayton County Employment Density



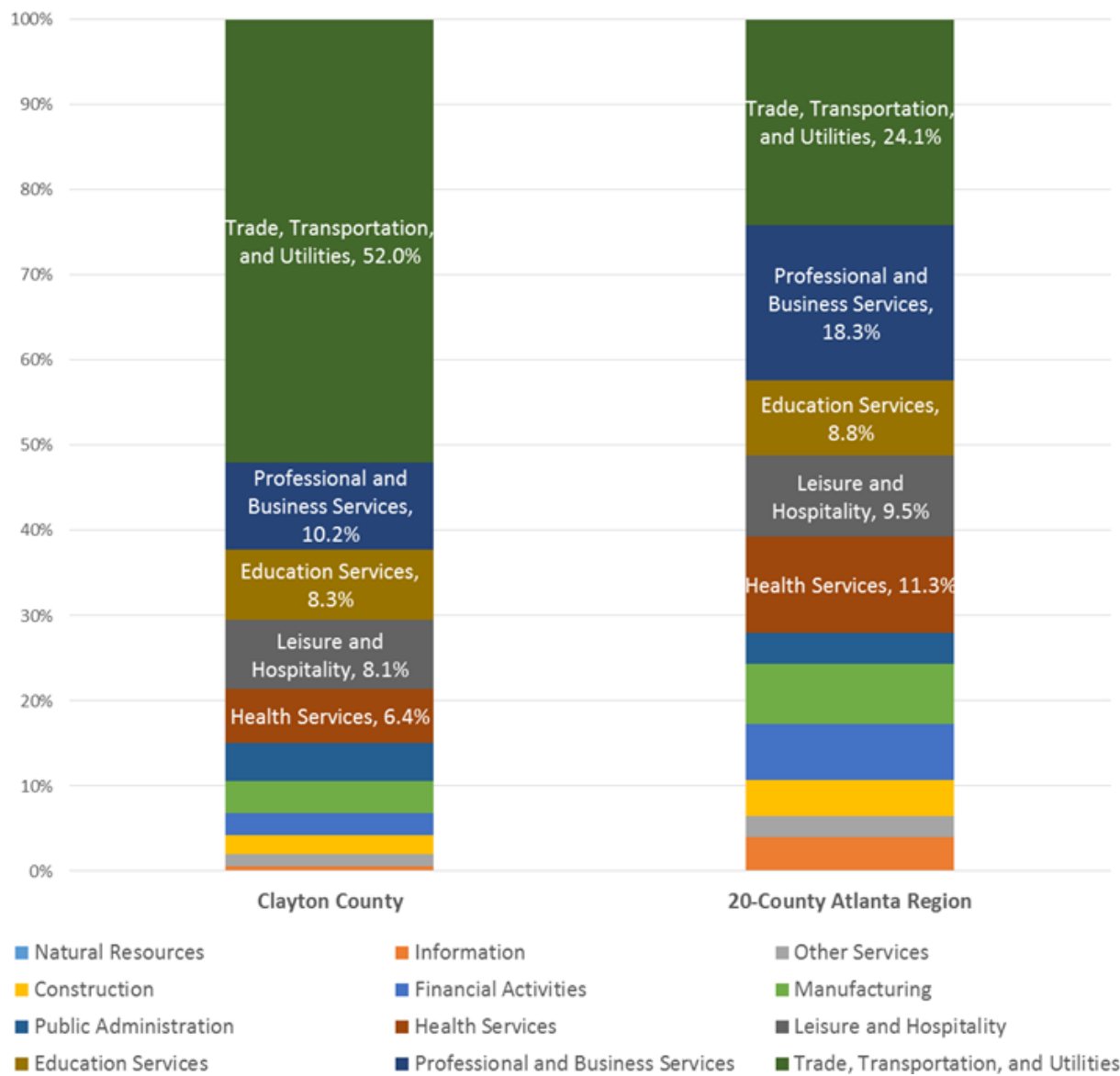
Source: Population and Employment Density forecasts, ARC



4.2.5 EMPLOYMENT SECTORS

Figure 4-20 compares employment by industry in Clayton County with that in Atlanta region. The Trade, Transportation, and Utilities sector, which includes top employer H-JAIA, accounts for more than half of all jobs in the county. The other top five employment sectors include professional and business services (10.2 percent), education services (8.3 percent), leisure and hospitality (8.1 percent), and health services (6.4 percent). The major employment sectors for Clayton County are the same as those of the Atlanta region. However, Clayton County relies more upon its top employment sectors than does the region; for example, the top three sectors make up a little over half of the region’s employment, but over 80 percent of Clayton County’s employment.

Figure 4-20: Comparison of 2015 Employment by Industry



Source: ARC’s Atlanta Region 20-County Data Dashboard



Table 4-9 summarizes employment by industry type in Clayton County and compares it against employment distribution in the *Clayton Area*. Georgia Department of Labor Area Profiles define Clayton Area as comprising of the following Counties: Clayton, DeKalb, Fayette, Fulton, Henry, and Spalding Counties. While the Service-Providing industries account for more than 83 percent of employment in Clayton County, that share is lower than the share of Service-Providing jobs in the Clayton Area, where they account for 90 percent of employment.

Table 4-9: Clayton County and Clayton Area Employment by Industry Type

Industry	Clayton County			Clayton Area		
	Firms	Employment	Weekly Wage	Firms	Employment	Weekly Wage
Good-Producing	397	7,516	\$1,093	5,962	95,357	\$1,413
Service-Providing	3,706	100,039	\$1,093	74,215	1,113,933	\$1,228
Unclassified	228	206	\$623	5,846	4,831	\$1,647
Total - Private Sector	4,331	107,761	\$1,092	80,177	1,209,470	\$1,243
Federal	33	1,400	\$1,420	337	39,097	\$1,742
State	27	2,130	\$855	351	42,802	\$1,079
Local	92	11,316	\$744	695	93,573	\$874
Total - Government	152	14,846	\$824	1,383	175,412	\$1,117
All Industries	4,483	122,607	\$1,060	81,560	1,384,881	\$1,227

Source: Industry Mix – 4th Quarter of 2016, Georgia Department of Labor

4.2.6 MAJOR EMPLOYERS

Clayton County accounts for almost a third of the employment in the Atlanta region in Transportation and Warehousing industry, as reflected in the county's top employers. The JCPenney Co. warehouse and distribution center located in Forest Park is the largest in the state of Georgia, at 2.2 million square feet. The top 12 employers in Clayton County ranked by the number of employees (Clayton County Georgia Economic Development, <http://www.investclayton.com/major-employers>) are:

- Clayton County Public Schools (Education): 7,100
- Delta Tech Ops (Aircraft Maintenance/Repair): 6,000
- Gate Gourmet, Inc. (Catering/Airline Food Service): 1,710
- Southern Regional Medical Center / Prime Healthcare Foundation (Healthcare): 1,100
- JCPenney Co. (Retail Distribution Center): 850
- FedEx Ground Package System, Inc. (Freight): 800
- Fresh Express Inc. (Food Packaging): 800
- TOTO USA (Manufacturing): 700
- Clayton State University (Education): 675
- Kroger Distribution Center (Retail Distribution Center): 579
- Standard Parking (Airport Parking and Shuttles): 562
- R+L Carriers (Freight): 530



4.3 Land Use

Land use influences travel patterns; for example, many commute trips tend to begin in residential areas and terminate in commercial centers. Furthermore, as land use density increases, and more people or jobs are housed per acre, so does the number of trips. The following section provides information on existing and future land uses, developments of regional impact, community facilities, and natural and cultural resources.

4.3.1 ZONING AND EXISTING LAND USE

This section considers the zoning designations of both unincorporated Clayton County and the seven cities within it. Since each city has its own set of zoning districts and associated map, Clayton County's GIS division integrates zoning information from all jurisdictions in the county. Acreages within each land use category in the county are detailed in **Table 4-10**. The categories of these condensed land uses are presented in **Figure 4-21**. **Table 4-11** presents the methods by which zoning and land uses from various districts were converted into a consistent land use palette for easy comparison cross the multiple jurisdictions.

Residential land use accounts for more than half of Clayton County at 53 percent. Residential land uses can be low-density, with 2 to 4 dwelling units per acre, medium-density, with 4 to 8, or high-density with 8 to 14. The dominant residential land use is medium-density residential (24 percent), followed by low density residential (21 percent), and high density residential (7 percent). Manufactured home park land uses accounted for 1 percent of Clayton County.

Agricultural land uses constitute 16 percent of the total land area and are concentrated in the southern portion of the county. Industrial uses account for 15 percent of land area and are positioned within the northern portion of the county near H-JAIA and Fort Gillem. Business/commercial uses (7 percent) and office/public/institutional (2 percent) make up the balance of uses and generally exist near the interchanges at I-75 and I-675 and along the major roadways in Clayton County.

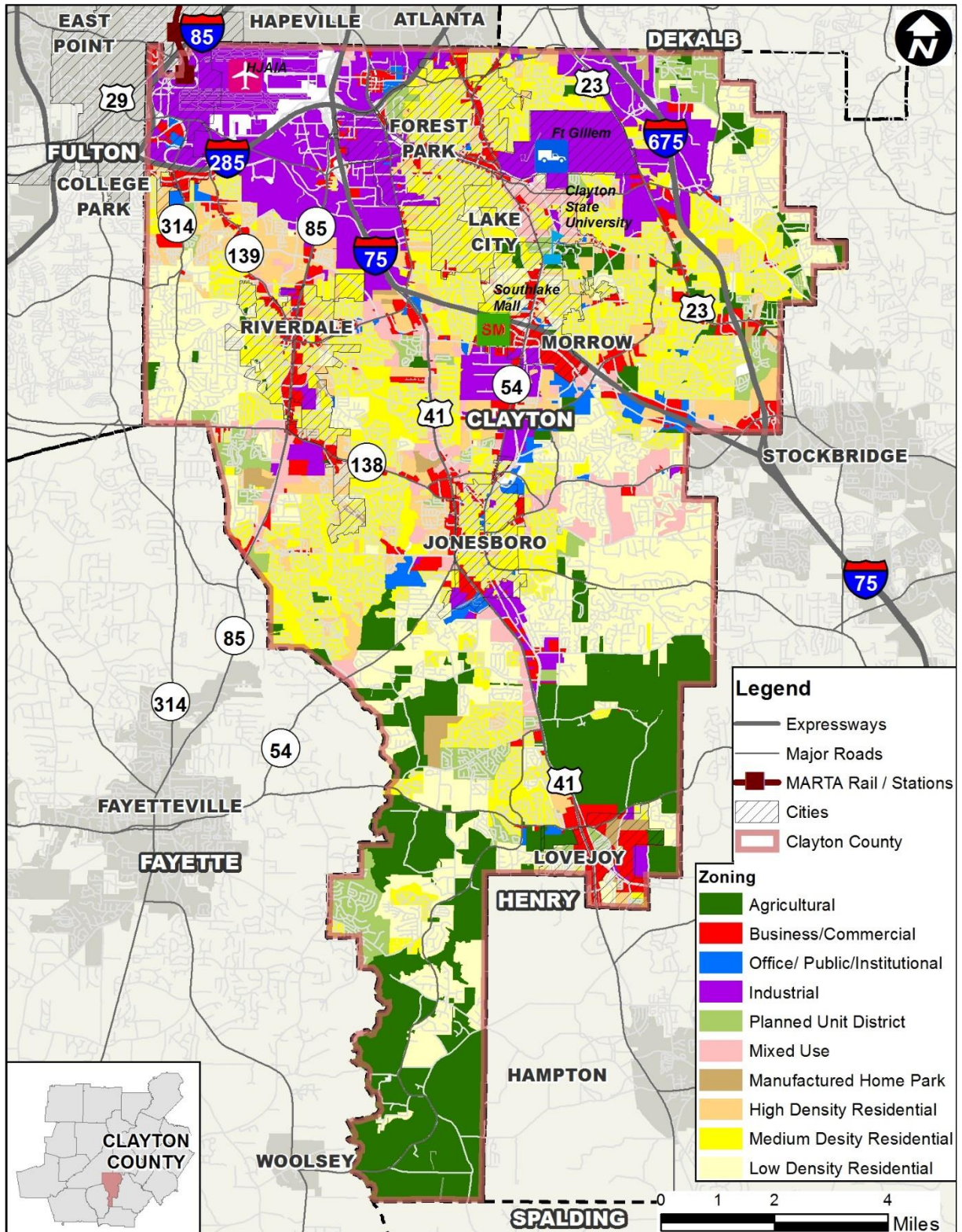
Table 4-10: Clayton County Existing Land Use Composition

Land Use Type	Acreage	Percent of County Area
Agricultural	13,294	16%
Business/Commercial	5,949	7%
Office/Public/Institutional	1,191	2%
Industrial	11,837	15%
Planned Unit District	3,506	4%
Mixed Use	2,239	3%
Manufactured Home Park	745	1%
High Density Residential	5,648	7%
Medium Density Residential	19,869	24%
Low Density Residential	16,939	21%

Source: Clayton County Geographic Information Systems Division



Figure 4-21: Clayton County Existing Land Use



Source: Clayton County Geographic Information Systems Division



Table 4-11: Conversion of Existing Land Uses and Zoning

ZONE	Notes	Map legend	# features	Area (Acres)
	N/A	Not included	9	0
A	Agriculture	Agricultural	53	160
AG	Agriculture	Agricultural	1,395	13,918
BG	General Business	Business/Commercial	15	15
C-2	Central Commercial District	Business/Commercial	2	11
CB	Community Business District	Business/Commercial	262	324
CH	Church	Office/Public/Institutional	1	1
CPUD	Planned Unit Development	Planned Unit District	913	312
CUP	A Hair Salon (Likely Commercial)	Planned Unit District	1	0
CUPD	Community University Planned District	Planned Unit District	12	11
ER	Estate Residential District	Low Density Residential	1,515	3,141
G1	Mixed Use	Mixed Use	91	155
GB	General Business	Business/Commercial	2,387	4,999
HI	Heavy Industrial	Industrial	977	10,208
LI	Light Industrial	Industrial	369	1,638
M	Commercial/Industrial	Mixed Use	124	292
MCD	Medical Center District	Mixed Use	47	376
MU	likely Mixed Use	Mixed Use	1	7
MX	Mixed Use	Mixed Use	790	1,881
NB	Neighborhood Business District	Business/Commercial	86	110
NMX	Neighborhood Mixed Use District	Mixed Use	4	1
OI	Office-Institutional District	Office/Public/Institutional	327	1,212
PI	Public/Institutional District	Office/Public/Institutional	1	3
PUD	Planned Unit Development	Planned Unit District	7,667	3,127
RG75	Residential District - high density of medium to small-sized homes	High Density Residential	3,211	978
RM	Multiple Family Residential	High Density Residential	6,165	4,486
RMH	Manufactured Home Park	Manufactured Home Park	21	602
RMTH	Manufactured Home Park	Manufactured Home Park	916	143
RMX	Regional Mixed Use	Mixed Use	3	10
RS110	Residential District - Medium Density of Medium-sized lots	Medium Density Residential	38,974	17,471
RS110C	Residential District - Medium Density of Medium-sized lots	Medium Density Residential	213	38
RS180	Residential District - low density	Low Density Residential	16,638	12,753
RS180C	Residential District - low density	Low Density Residential	105	20
RS65	Residential District	Medium Density Residential	5,750	2,246
UV	Urban Village (To foster compact urban settings accommodating a mix of office, hospitality, art, entertainment and service uses)	Mixed Use	126	557



4.3.2 FUTURE LAND USE

The Future Land Uses presented in this section were derived by Clayton County from the Comprehensive Plan. It represents a vision for future development for the unincorporated parts of the county. Acreages within each future land use category are listed in **Table 4-12**. **Table 4-13** presents the conversion of land uses between the existing and future land uses for mapping purposes. **Figure 4-22** presents future land uses.

According to the Future Land Use map, residential uses will account for more than half of future land uses (56 percent). The dominant land use will remain medium-density residential (21 percent), followed by low-density residential (18 percent), conservation residential (13 percent), and high-density residential (4 percent).

Future land uses include the Conservation Residential land use designation. Conservation Residential is intended for low-density (less than two dwelling units per acre) single family housing that does not use public utilities. Conservation Residential, together with Agricultural uses, makes up most of the southern portion of the county in future land uses. As these uses grow in the southern portion of the county, Agricultural uses are expected to be 12 percent of future land uses.

The future land use map distinguishes among levels of intensity within commercial and office uses with the designations Greater Commercial, Neighborhood Commercial, and Office/Business. General Commercial uses make up 4 percent of future land uses and include non-industrial, retail, service and entertainment facilities and is intended for larger businesses that may be less appropriate near residential uses. Neighborhood Commercial uses make up less than 1 percent of future land uses and include smaller retail and service uses that are more suitable for location near residential uses. Office/Business uses also make up less than 1 percent of future land uses and include non-retail businesses like office, banking, or other personal business services.

Mixed-use developments make up 17 percent of future land uses. The Mixed Use designation includes transit-oriented, mixed-use development styles with residential densities that are generally 4 to 16 units per acre, as well as development styles that mix office, commercial, light industrial and recreational uses. Mixed-use development is expected to be concentrated near the airport, around Fort Gillem and Southlake Mall, and along highways including SR 3/US 19/US 41/Tara Boulevard north of Jonesboro, Highway 138, Garden Walk Boulevard, and at interchanges on I-75 from Morrow to the Henry County line.

As some industrial development will be constructed under the Mixed Use category, areas with an Industrial land use designation are projected to be roughly 3 percent of future land uses. Heavy Industrial uses account for 3 percent of future land uses and include manufacturing facilities, processing plants, factories, warehousing and wholesale trade facilities, mining or mineral extraction activities, or other similar uses. These uses are often loud, disruptive, or have other effects which may be felt by nearby uses. Light Industrial uses account for less than one percent of future land uses and are typically dedicated to assembly, warehousing, wholesale trade facilities, and other industrial uses which could coexist with some business uses. Industrial areas will continue to be heavily concentrated near the airport and Fort Gillem.



Table 4-12: Clayton County Future Land Use Composition

Land Use Type	Acreage	Percent of Unincorporated County Area
Agricultural	8,342	12%
Conservation Residential	8,777	13%
Industrial	2,298	3%
General Commercial	2,600	4%
Neighborhood Commercial	147	>1%
Mixed Use	11,533	17%
Low Density Residential	12,207	18%
Medium Density Residential	13,817	21%
High Density Residential	2,467	4%
Office/Business	32	>1%
Public/Institutional	259	>1%
Parks/Recreation/Lakes	1,863	3%
Transportation/Utilities	2,684	4%

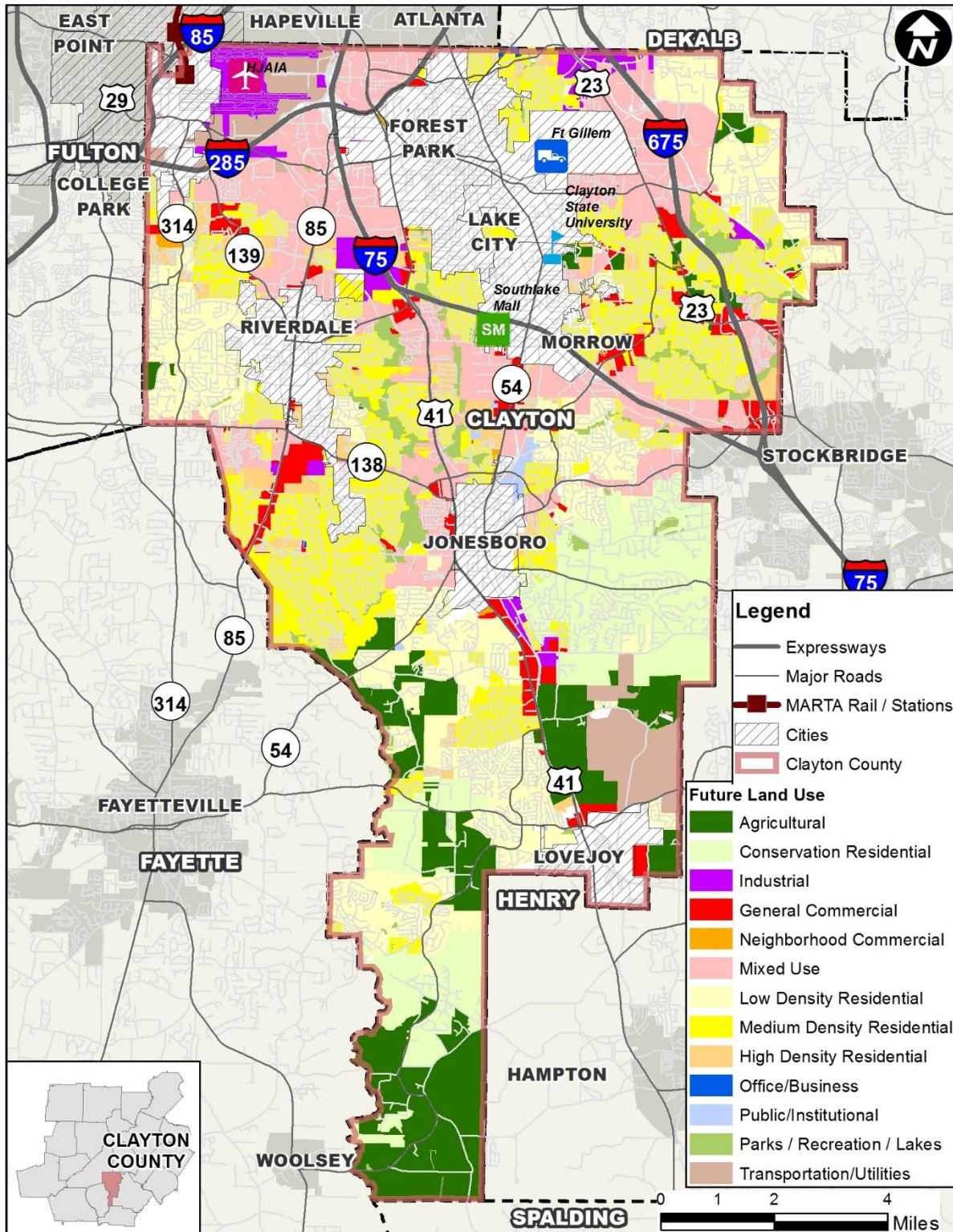
Source: Clayton County Geographic Information Systems Division

Table 4-13: Future Land Use Conversion

FLU Code	Mapped As	# Features	Total Acres	Percent
<Null>	Not included in map	1	-	
' '	Not included in map	17,526	15,005	
TS (dummy code for features with FLU Code RD, RR, XNG)	Not included in map	2,317	10,509	
CITY	Not included in map (not a part of future development map on County's site)	70	21	
CR	Conservation Residential	5,082	8,777	13%
CVR	Agricultural	1,044	8,342	12%
GC	General Commercial	1,214	2,600	4%
HDR	High Density Residential	4,187	2,467	4%
HI	Industrial	373	2,269	3%
LAKE	Parks / Recreation / Lakes	15	1	0%
LDR	Low Density Residential	16,568	12,207	18%
LI	Industrial	8	29	0%
MDR	Medium Density Residential	33,224	13,817	21%
MXD	Mixed Use	5,939	5,289	8%
MXI	Mixed Use	2,174	6,244	9%
NC	Neighborhood Commercial	104	147	0.22%
OB	Office/Business	65	32	0.05%
PI	Public/Institutional	152	259	0.39%
PRC	Parks / Recreation / Lakes	1,400	1,862	3%
TCU	Transportation/Utilities	81	2,684	4%
	Total of FLU included in map	71,630	67,026	



Figure 4-22: Clayton County Future Land Use Map



Source: Clayton County Geographic Information Systems Division



4.3.3 DEVELOPMENTS OF REGIONAL IMPACT (DRI)

Under the Georgia Planning Act of 1989, any large-scale development that is likely to result in regional impacts is subject to review as required by the Georgia Department of Community Affairs (DCA). In the Atlanta region DRIs are subject to review by the ARC, and the Georgia Regional Transportation Authority (GRTA). After the review is complete, the local government retains the authority to make the final decision on whether to approve the development. Three DRI studies, summarized in **Table 4-14**, have been submitted or completed in Clayton County since the previous CTP was published in 2008. Two have since been constructed and a third terminated:

- The completed Anvil Block Land Partners LLC development is a 794,600-square foot warehouse and distribution center located on approximately 56 acres. It is located on Anvil Block road, east of I-675 and west of Bouldercrest Road, as part of the Gillem Logistics Center.
- The completed Fast Park and Relax project constructed 1,763 parking spaces on the north side of C.W. Grant Parkway east of I-75.
- The proposed Jones Petroleum project was determined to not be a DRI and its review was terminated.

Table 4-14: Clayton County Development of Regional Impact (DRI) Studies (since 2008)

DRI ID #	Project Name	Development Type	Date Submitted	Status
2519	Anvil Block Land Partners LLC	Wholesale & Distribution	10/15/2015	Completed
2391	Fast Park and Relax	Any other development types	2/17/2014	Completed
2376	Jones Petroleum	Any other development types	10/31/2013	Terminated

Source: Georgia DCA

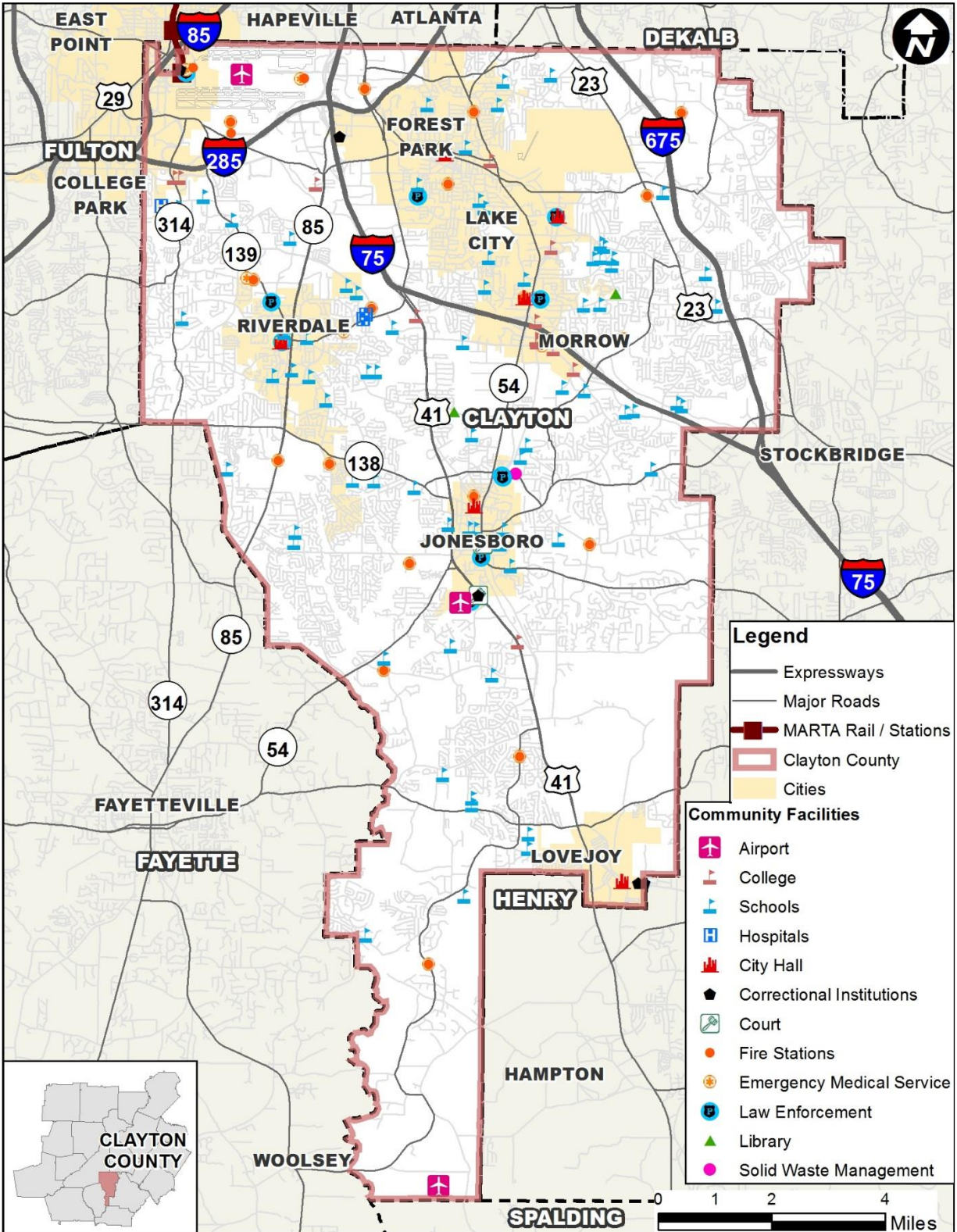
4.3.4 COMMUNITY FACILITIES

Figure 4-23 shows various community facilities located throughout Clayton County including airports, police and fire stations, hospitals, libraries, colleges, schools, governmental facilities, among others. The City of Jonesboro is the county seat and home to the Clayton County Courthouse and the Harold R. Banke Justice Center. The Cities of Lovejoy, Riverdale, Lake City, Morrow, Forest Park and College Park also contain civic and institutional uses, including city halls, libraries, and municipal police and fire departments. H-JAIA, the world’s busiest passenger airport, is in the northwest corner of the county.

Public education is provided by the Clayton County Public Schools (CCPS), which is the fifth largest school system in the state of Georgia. CCPS has over 70 campuses and serves approximately 50,256 students. The county is also home to Clayton State University, a public institution that draws students from throughout the county and surrounding region. Clayton State has approximately 6,600 undergrads on 192 acres near Morrow. There are also 11 private post-secondary education facilities throughout the county, many of them concentrated in Morrow. Southern Regional Medical Center operates both its main campus in Riverdale and a satellite facility, Spivey Station in Jonesboro. There is also a third, smaller facility, Southern Crescent Behavioral Health’s Anchor Hospital in College Park.



Figure 4-23: Clayton County Community Facilities



Source: ARC Open Data Portal



4.3.5 NATURAL AND CULTURAL RESOURCES

A Regionally Important Resource (RIR) is a natural or historic resource that is of sufficient size or importance to warrant special consideration by the local governments having jurisdiction over that resource. The Department of Community Affairs (DCA) requires that Regional Commissions, in coordination with stakeholders, identify important natural and cultural resources throughout the region and develop a plan for protection and management of these resources. Clayton County is home to five features that are listed in the US National Parks Service’s National Register of Historic Places, all of which are identified as RIRs. This includes three historic buildings, one historic district, and an archeological site. A listing of these historic features is provided in **Table 4-15**. Natural and cultural resources are shown in **Figure 4-24**.

Table 4-15: Clayton County Landmarks Listed in the National Register of Historic Places

Site	Resource Type	Location	Listing Year	ID
Crawford-Dorsey House & Cemetery	Building	Lovejoy	1984	84000972
Rex Mill	Building	Rex	1979	79000712
Stately Oaks	Building	Jonesboro	1972	72000382
Jonesboro Historic District	District	SR 54/Jonesboro Road and SR 3/US 19/US 41/Tara Boulevard in downtown Jonesboro	1972	72000381
Orkin Early Quartz Site	Site	Clayton County / Fayetteville	1974	74000671

Source: ARC Open Data Portal

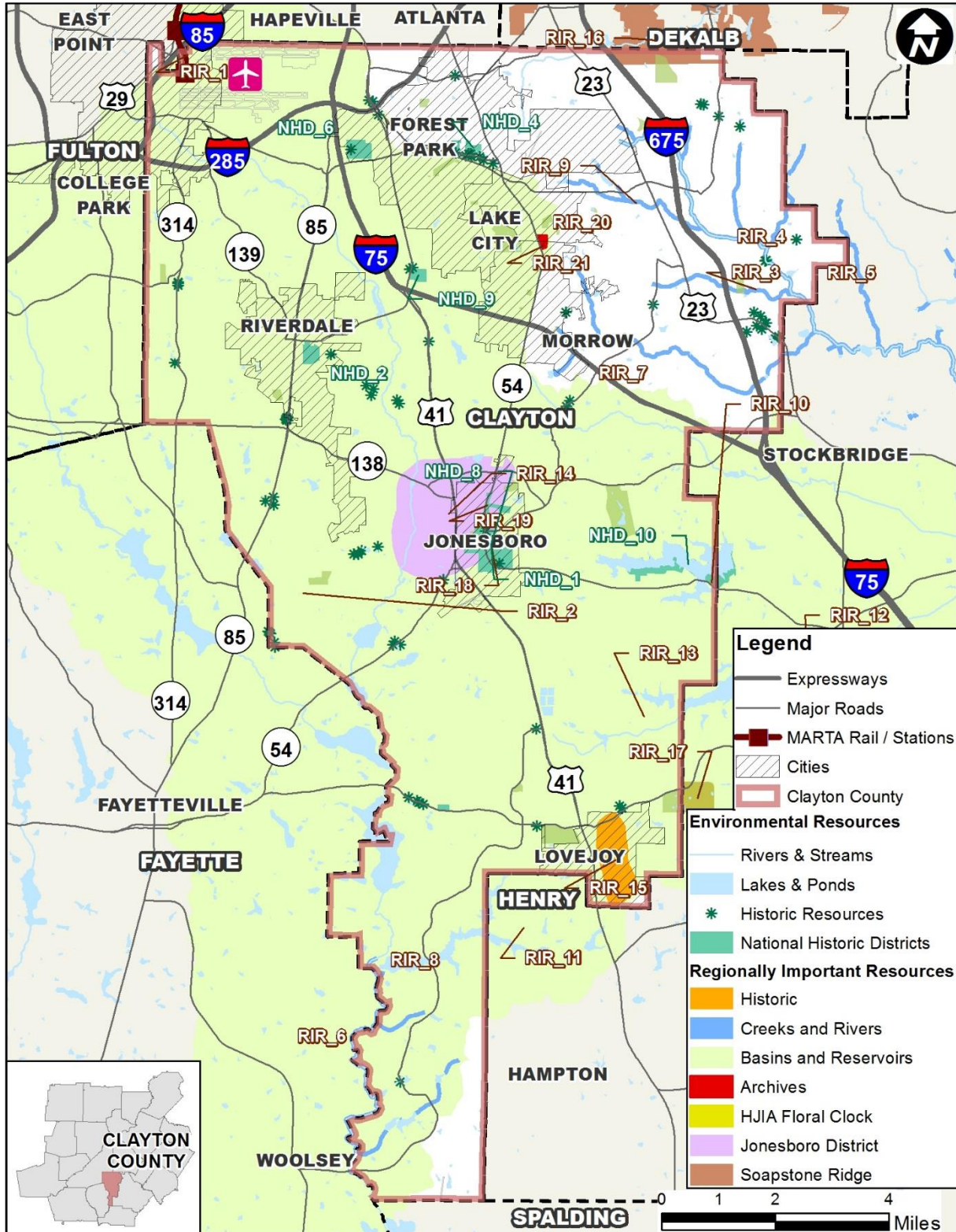
Other RIRs within Clayton County include:

- Georgia State Archives and the National Archives Southeastern Division, recognized as cultural sites
- Soapstone Ridge, an archeological site
- Hartsfield Jackson International Airport Floral Clock, a designed landscape
- Civil war sites such as Jonesborough, Lovejoy’s Station, and Jonesboro Confederate Cemetery.

The plan also classifies the Clayton County Panhandle – the area at the far south of the county – as a Rural Preserve. This area was deemed significant for its preservation of rural character and the Flint River and Flint River Basin. The Flint River originates near the H-JAIA and flows south through Clayton County, and is a critical natural feature in the southern portion of the Atlanta Region.



Figure 4-24: Clayton County Natural and Cultural Resources



Source: ARC Open Data Portal



4.3.6 FUTURE LAND USE

By 2040, more than half of the land in Clayton County is expected to be designated as some form of residential land use, much of which is projected to be in mixed-use developments. As shown on the Future Land Use Map presented in **Figure 4-25**, new residential land uses are projected to occur in the southern portion of the county, where the land is currently used for agricultural purposes. Much of the county will retain the suburban development characteristics currently in place. Coupled with forecasted population and employment growth, traffic volumes will continue to grow and increase demand on the transportation network.

Other projected residential developments could occur under a Mixed-Use designation. The future land use map directs new mixed-use developments toward employment hubs in the northern portion of the county and along major corridors. While new mixed use developments in these areas may increase their residential populations, the proximity of residential, work, and entertainment land uses in a mixed-use development can contribute to reduced traffic growth rates because people can utilize alternate modes of transportation, like walking or biking, to reach their destinations. To support the increased mixed-use development, investment will be needed to ensure these areas are safe and accessible for pedestrians and bicyclists.

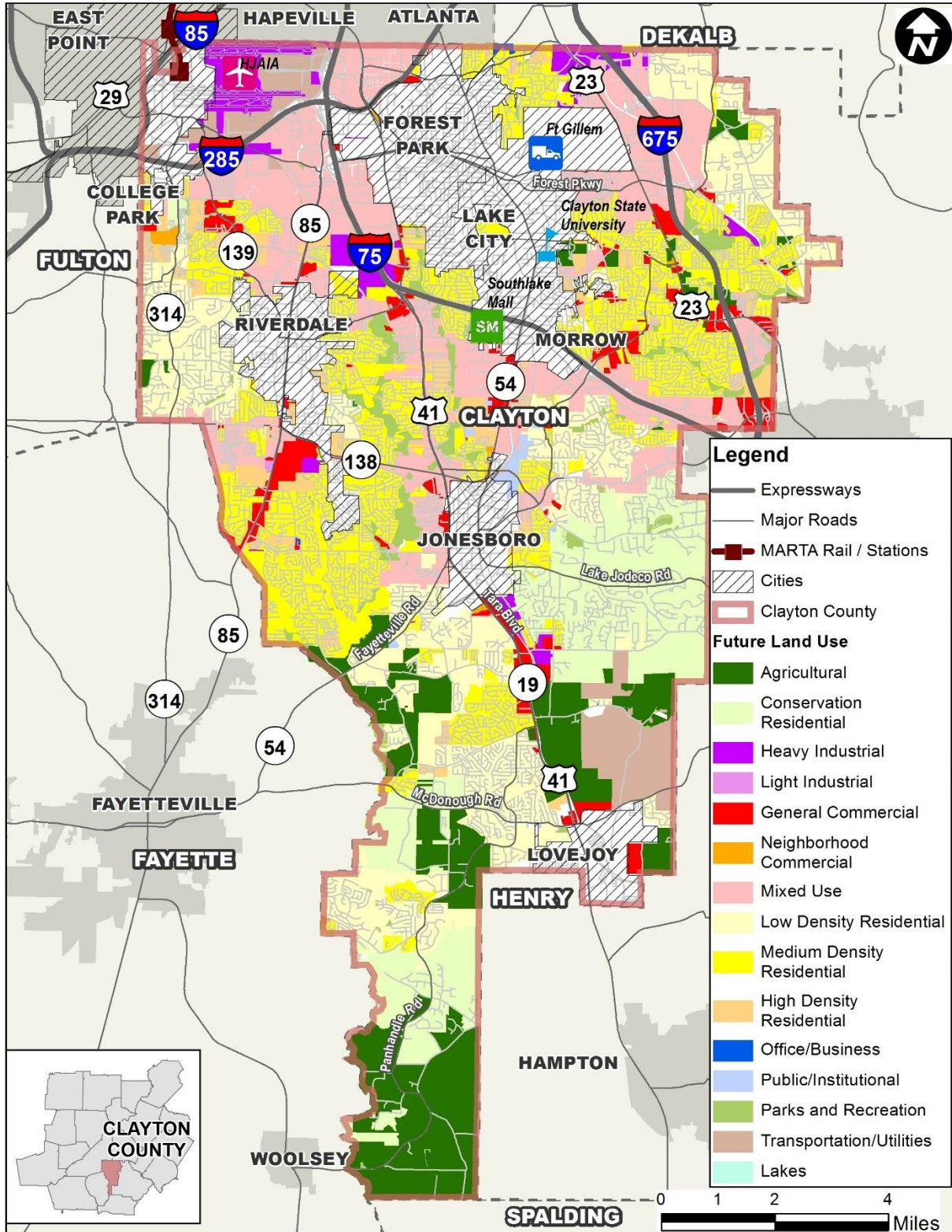
4.3.7 NEEDS RELATED TO CHANGES IN POPULATION, EMPLOYMENT AND LAND USES

The following needs were identified through analysis of changes in population, employment and land uses:

- Clayton County is expected to grow in population and employment but retain its suburban development characteristics. These trends are expected to result in increases in traffic volumes and in demand on the transportation network.
- Increased mixed-use development is expected. Investments will be needed to ensure these areas are safe and accessible for pedestrians and bicyclists.



Figure 4-25: Future Land Use



Source: Clayton County GIS



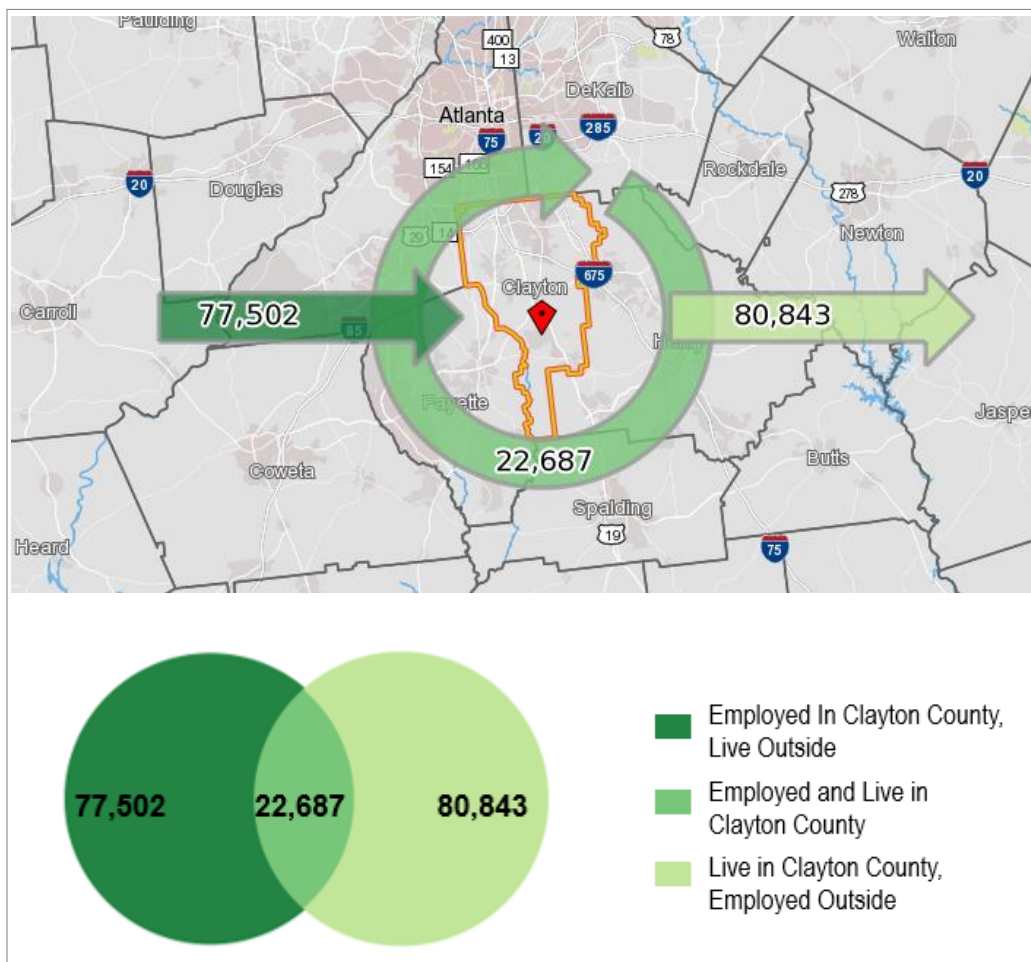
4.4 Travel Patterns

Where Clayton County residents live and work influences travel patterns and the demands placed on the transportation network. This section explores commute statistics including transportation mode to work and average commute travel time by different transportation modes.

4.4.1 WORK AND HOME LOCATIONS

Approximately 22 percent of Clayton County residents are employed within the county while 78 percent of residents work in other counties, primarily in Fulton, DeKalb, Henry, and Fayette Counties. As shown in **Figure 4-26**, the number of people who commute into Clayton County for work are comparable to the number of people who live in Clayton and commute elsewhere for work. Major employment centers in the county include H-JAIA and Clayton State University.

Figure 4-26: Clayton County 2014 Inflow/Outflow Job Counts in 2014



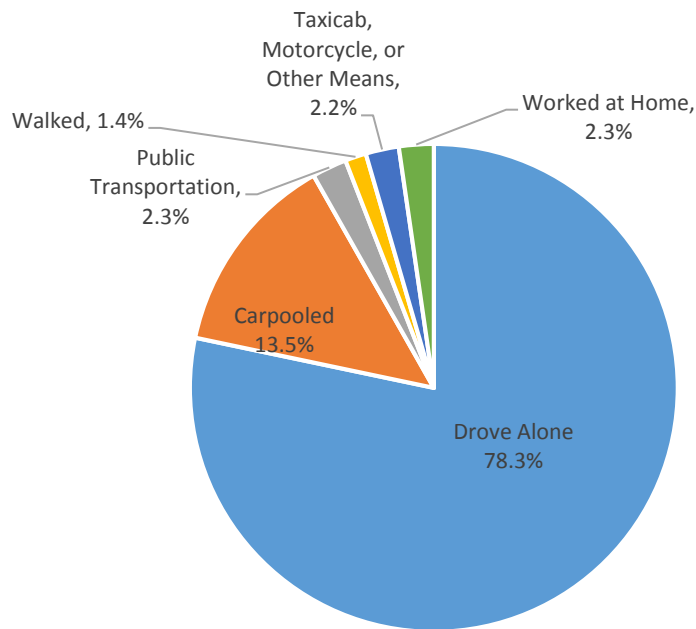
Source: Longitudinal Employer-Household Dynamic data, Center for Economic Studies, US Census



4.4.2 COMMUTE STATISTICS

Approximately 92 percent of the Clayton residents used a private vehicle to get to work, including commuters who drove alone (78.3 percent) and carpooled (13.5 percent). Public transportation, walking, and other modes were means of transportation for 2.3, 1.4, and 2.2 percent of all commuters, respectively. A small portion of the commuters, 2.3 percent, telecommuted by working at home. **Figure 4-27** shows a pie chart for the means of transportation to work.

Figure 4-27: Means of Transportation to Work for Workers 16 and Over in Clayton



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates, Table B08101

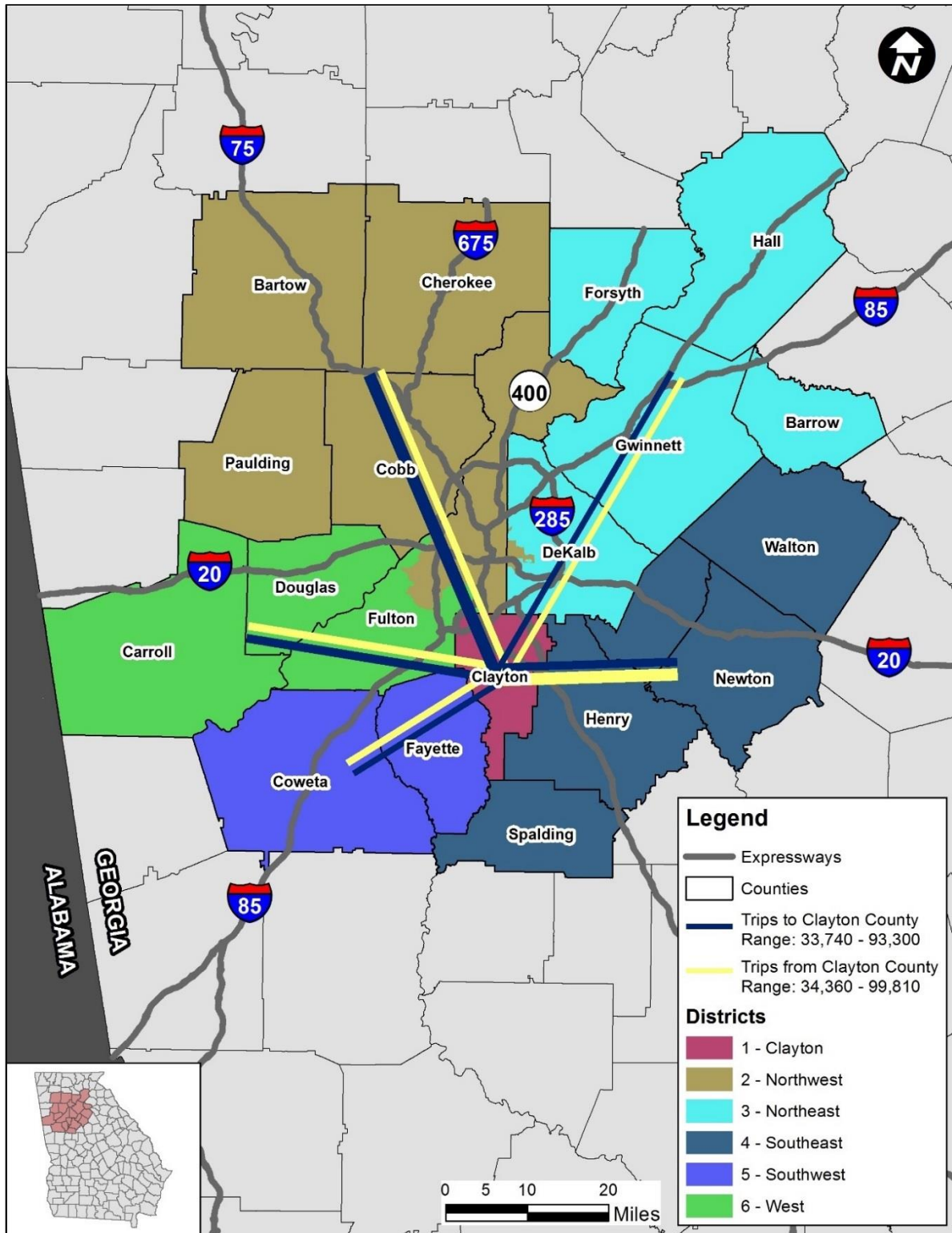
4.4.3 FUTURE TRAVEL PATTERNS

The analysis presented in this section uses results from ARC's Travel Demand Model (TDM) to delineate future travel patterns for the year 2040. The TDM divides the 20-County Atlanta Region into 5,873 traffic analysis zones (TAZs). TDM outputs include a summary of tours and trips among the TAZs. To allow meaningful inferences to be drawn from these data, TAZs were categorized into the following districts:

- Regional Districts, which are used in the analysis of vehicular travel patterns across the Atlanta metropolitan region. **Figure 4-28** illustrates each of these districts and primary in and out flows.
- Counties, which are used in the analysis of regional vehicle trips on a county-by-county basis.
- Intra-County Districts, which are used in the analysis of trips within Clayton County. **Figure 4-29** illustrates intra-county districts.



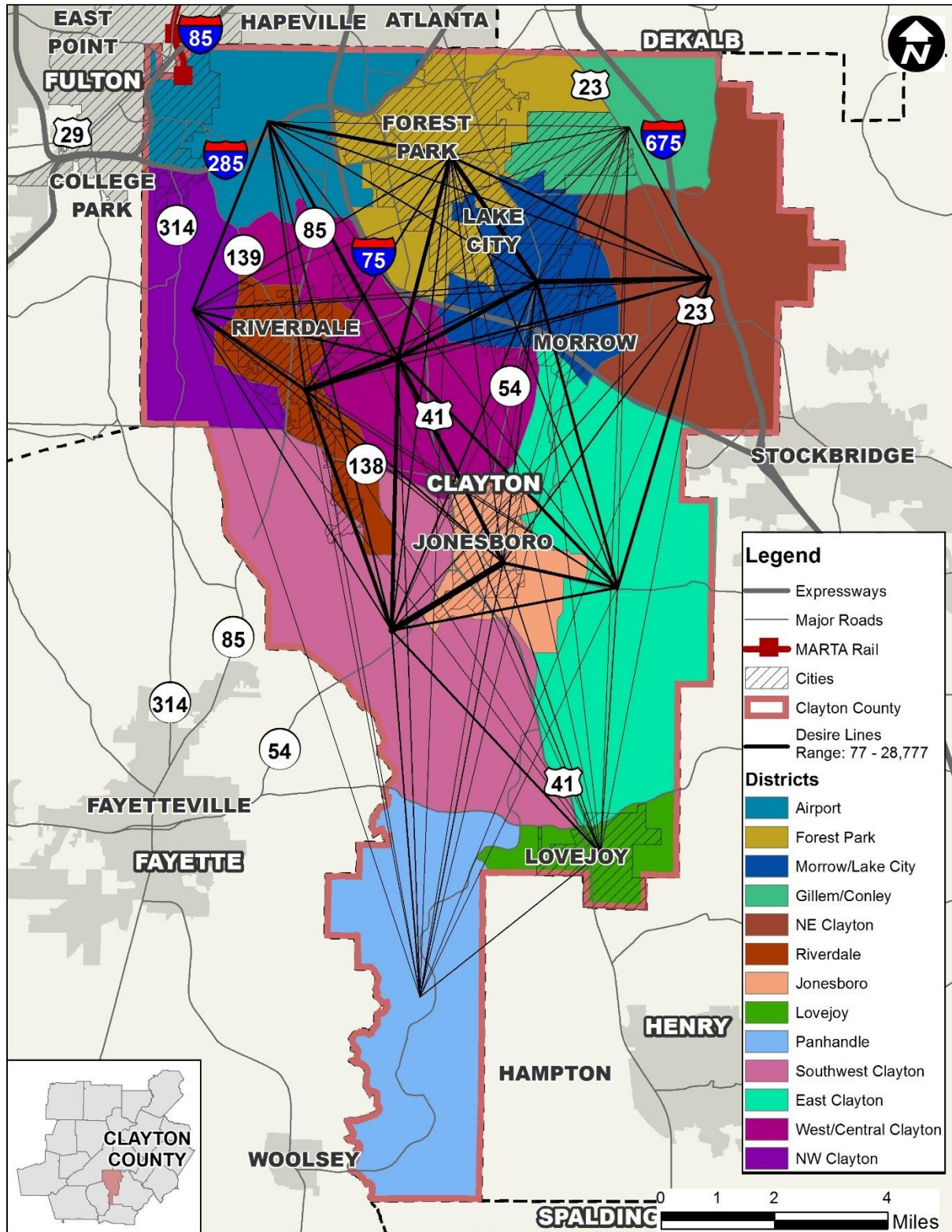
Figure 4-28: TDM districts in Atlanta Region and In and Out Flows



Source: ARC TDM



Figure 4-29: Intra-County Districts and Travel Patterns



Source: ARC TDM



Table 4-16 presents a summary of future regional travel patterns using Regional Districts from the TDM. About 40 percent of trips originating in Clayton County are projected to be extra-county (trips that end outside Clayton County). The largest external destination for trips originating in Clayton County, at about 13 percent of those daily trips, is projected to be Northwest metro Atlanta, which includes City of Atlanta and North Fulton County. The Southeast metro Atlanta region (which includes Henry County) is the largest origin of external trips with a destination in Clayton County, at about 14 percent of daily trips to the county.

Table 4-16: Projected Future Regional Trips from and to Clayton County

	Trips from Clayton County		Trips to Clayton County	
	Number	Percent	Number	Percent
1 – Clayton	429,110	60.6%	429,110	60.5%
2 – Northwest	93,300	13.2%	42,590	6.0%
3 – Northeast	37,880	5.3%	34,360	4.8%
4 – Southeast	53,350	7.5%	99,810	14.1%
5 – Southwest	33,740	4.8%	45,070	6.4%
6 – West	60,740	8.6%	58,350	8.2%
Total	708,120		709,290	

Source: ARC TDM

Table 4-17 shows distribution of future trips starting or ending in Clayton County by county. Fulton and Henry Counties account for the largest share of extra-county trips with a destination in Clayton County, with 12 percent each. Fulton County is also the largest destination of extra-county vehicle trips originating in Clayton County. DeKalb, Henry and Fayette Counties are also among the other prominent destinations from Clayton County.

Table 4-17: Future Vehicle Trips Starting or Ending in Clayton County by County

	Trips from Clayton County		Trips to Clayton County	
	Number of Trips in 2040	Percentage of Regional Trips	Number of Trips in 2040	Percentage of Regional Trips
Clayton	361,990	60.2%	429,110	59.8%
Fulton	126,620	21.0%	86,260	12.0%
Henry	35,190	5.8%	83,490	11.6%
DeKalb	33,850	5.6%	29,490	4.1%
Fayette	24,230	4.0%	35,310	4.9%
Cobb	7,970	1.3%	6,660	0.9%
Gwinnett	2,840	0.5%	5,460	0.8%
Other Counties	7,790	1.2%	33,530	4.7%
Total	601,693		717,724	

Source: ARC TDM



Table 4-18 summarizes the distribution of future intra-county trips. Intra-county travel patterns are not projected to change to any great degree over time from existing conditions. Southwest Clayton and West/Central Clayton are projected to generate the most future trip origins, likely because these areas would house the greatest numbers of residents in 2040; Airport and West/Central Clayton are projected to be the largest destinations within Clayton County because of H-JAIA and expected development around the airport.

Table 4-18: Future Travel Patterns within Clayton County

	Trips Produced in Clayton County		Trips Attracted to a Clayton County Destination	
	Number of Trips in 2040	Percentage of Intra-County Trips	Number of Trips in 2040	Percentage of Intra-County Trips
Southwest Clayton	199,340	15.9%	127,070	10.2%
West/Central Clayton	169,050	13.5%	169,170	13.5%
Northeast Clayton	144,410	11.5%	103,620	8.3%
Forest Park	138,380	11.0%	130,000	10.4%
Airport	117,220	9.3%	173,960	13.9%
Riverdale	87,720	7.0%	98,700	7.9%
Morrow/Lake City	85,410	6.8%	124,280	9.9%
East Clayton	83,700	6.7%	77,690	6.2%
Northwest Clayton	82,520	6.6%	66,220	5.3%
Jonesboro	56,900	4.5%	102,760	8.2%
Panhandle	34,380	2.7%	18,880	1.5%
Lovejoy	32,210	2.6%	31,580	2.5%
Gillem/Conley	23,360	1.9%	28,020	2.2%
Total	1,254,600		1,251,950	

Source: ARC TDM

4.4.4 NEEDS INDICATED BY PROJECTED TRAVEL PATTERNS

The projected future travel patterns in and around Clayton County indicate that:

- There is a need to support north-south regional connectivity to facilitate trips to and from Fulton and Henry Counties.
- There is a need to support east-west intra-county connectivity, because more than half of trips within Clayton county begin and end in Clayton County.



4.5 Roadway Network

This section provides an overview of the roadway network, which includes roadways, the traffic control system, bridges, and roadway conditions in Clayton County. Data for the roadway inventory was collected from the GDOT, Federal Highway Administration's Highway Performance Monitoring System (HPMS) dataset, INRIX dataset from *ARC Freight Mobility Plan Update*, and ARC's open data portal and regional travel demand model.

4.5.1 FUNCTIONAL CLASSIFICATION

Roadway facilities are grouped in categories, called Functional Classifications, which are based on nature of traffic using the facility and physical characteristics of the facility such as number of lanes, access control, separation between directional travel and type of area. Furthermore, Functional Classifications aid in determining eligibility of roads for federal aid.

The FHWA defines the hierarchy of the highway functional classification system and includes the following roadway classes: urban principal arterials, minor arterial streets, collector streets, and local streets for urbanized areas and small urban areas. Owing to the important location of Clayton County in Atlanta region, all roadway facilities in the county are classified to be in urbanized areas. **Table 4-19** summarizes the lane mileage and VMT by functional classification of roads in Clayton County. The functional system for urbanized areas is defined as:

- Urban Principal Arterial – Designed with a focus on providing mobility, especially for longer trips, and often include access control measures, such as interchanges or medians. The principal arterial system is stratified into the following groups: 1) Interstate, 2) Other freeways and expressways, and 3) Other principal arterials without access control.
 1. Interstates: Limited access, divided highways facilitating high levels of mobility for long-distance travel. While Interstates account for only 7 percent of total lane miles in the county, these roads have about 39 percent of total VMT.
 2. Other Freeways and expressways: Similar to Interstates in design but not on the Interstate Highway System. Directional travel lanes on these roadways are usually separated by a physical barrier and are access controlled, apart from a very limited number of at-grade intersections. Clayton County has just about a mile of roads classified as Other Freeways near H-JAIA.
 3. Other Principal Arterials: Provide high levels of mobility and serve major urban centers, usually radiating out from the center. Unlike Interstates and Other Freeways, Other Principal Arterials can be directly accessed from abutting businesses and other land uses. Principal Arterials account for about 6 percent of total lane miles in the county, but contribute about 16 percent of the total VMT.
- Urban Minor Arterial – Interconnects with and augments the urban principal arterial system and provides service to trips of moderate length at a lower level of mobility than principal arterials



- Urban Collector – Gathers traffic from local streets and channels it into the arterial system. The collector system also provides land access and traffic circulation within residential neighborhoods, commercial and industrial areas.
- Urban Local Street – Primarily provides direct access to abutting land and access to the higher classes of roadways. It offers the lowest level of mobility and usually does not contain bus routes. These roadways are often designed to discourage through traffic movements.

Table 4-19: Lane mileage and VMT by functional classification in Clayton County

Road System Type	Lane Mileage	Percent Lane Miles of Total	VMT	Percent VMT of Total
Interstate	188	6.9%	3,232,002	38.6%
Freeway	1	0.0%	12,740	0.2%
Principal Arterial	166	6.1%	1,307,359	15.6%
Minor Arterial	282	10.4%	1,395,129	16.7%
Collector	131	4.8%	336,713	4.0%
Local	1945	71.7%	2,079,338	24.9%
Totals	2,713	100.0%	8,363,280	100.0%

Source: GDOT, Office of Transportation Data, Mileage by Route and Road System Report 445 for 2015

Figure 4-30 illustrates the functional classification of roads in Clayton County based on FHWA’s 2015 HPMS dataset for Georgia. Interstates I-75, I-85, I-285 and I-675 pass through Clayton County. SR 3/US 19/US 41/Tara Boulevard, SR 85, SR 138 are classified as principal arterials, as are other major roads, such as Fayetteville Road and McDonough Road, that provide important connections to urban centers. Except for SR 138, most of the roads that provide east-west connectivity in the county are classified as Minor Arterials.

4.5.2 ROADWAY CAPACITY

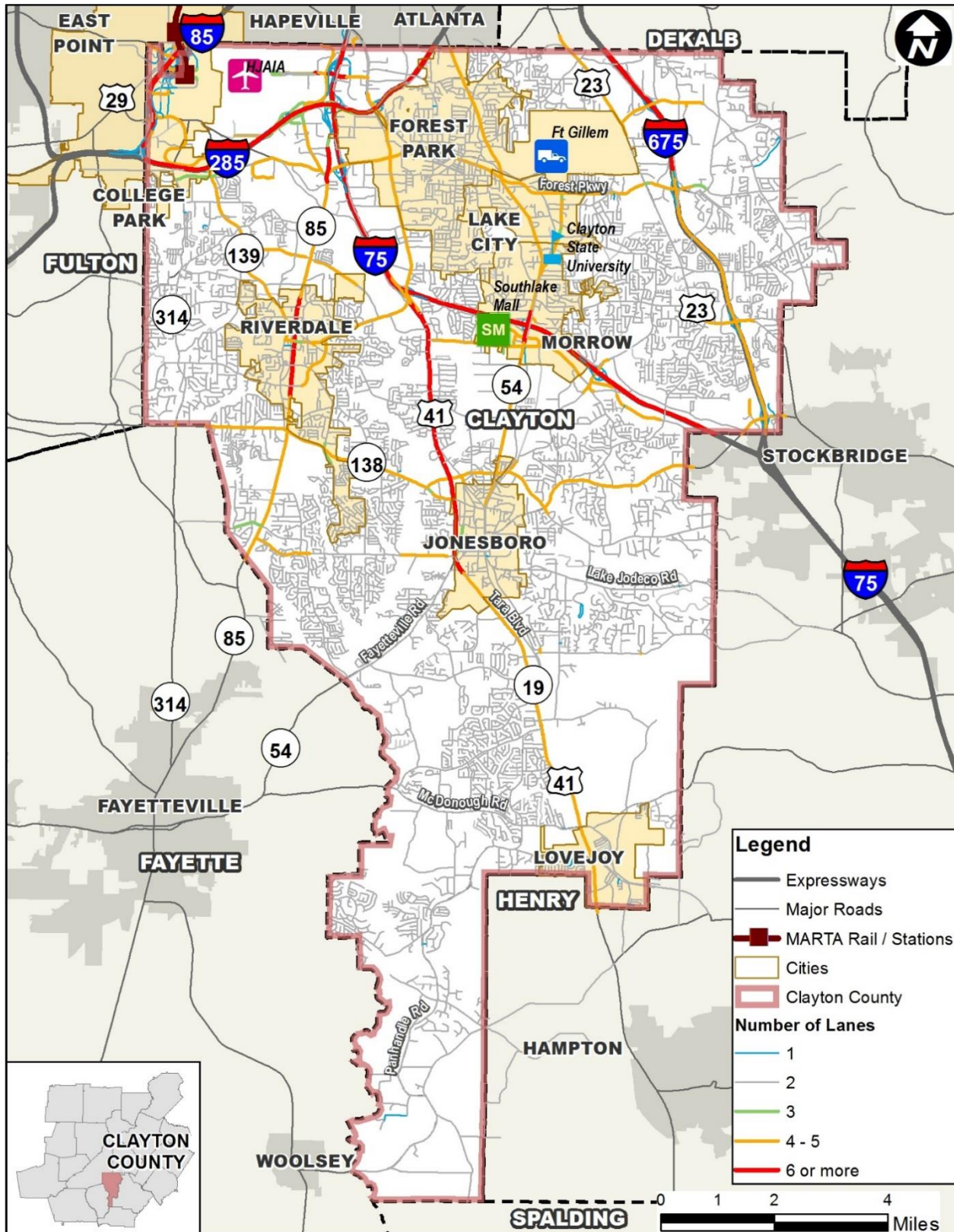
A roadway’s capacity indicates the extent to which it can be used to move people and goods and is determined by the number of lanes combined with other characteristics such as access, land use, area type and geometric design.

Figure 4-31 shows the total number of lanes on roads in Clayton County. Figure 4-32 illustrates the estimated Average Annual Daily Traffic (AADT) volumes for 2015 in Clayton County. Most segments on interstates I-75, I-285 and I-85 had an AADT 80,000 or more. I-675 along with sections on other major roads such as SR 3/US 19/US 41/Tara Boulevard, SR 85 had an AADT volume between 40,000 to 80,000. FHWA’s HPMS 2015 dataset for Georgia was used to get information about number of lanes on roads and AADT in Clayton County.

Figure 4-33 shows projected average weekday traffic volumes in 2040 on roads in Clayton County. SR 85, SR 3/US-19/US-41/Tara Boulevard, SR 138, SR 139, SR 314, Fayetteville Road, Forest Parkway and McDonough Road are all expected to continue to carry high traffic volumes into the future.



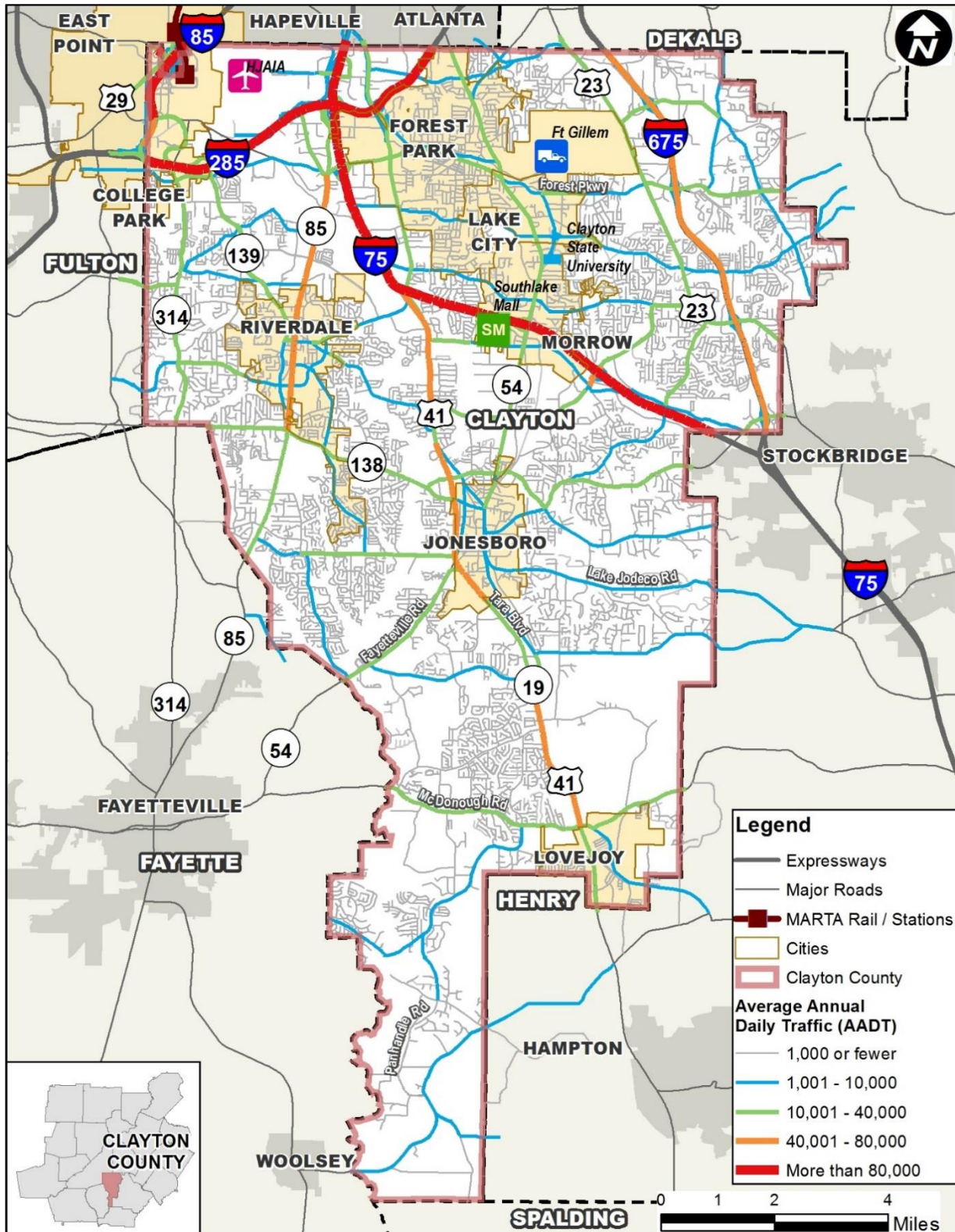
Figure 4-31: Existing Number of Lanes on Roads in Clayton County



Source: HPMS 2015 Dataset for Georgia, FHWA



Figure 4-32: 2015 Average Annual Daily Traffic (AADT) in Clayton County



Source: HPMS 2015 Dataset for Georgia, FHWA



Figure 4-33: 2040 Average Weekday Traffic Volumes in Clayton County



Source: ARC TDM



4.5.3 ROADWAY CONGESTION

Congestion occurs when demand for a roadway exceeds its capacity and results in excessive delay. The level of service (LOS) of a roadway is a measure of delay that assigns a letter grade (A through F) to roadway segments based on the delay experienced during the analysis period; a LOS of E or F indicates an unacceptable level of delay. **Figure 4-34** illustrates levels of service A through F in terms of vehicular flow.

Figure 4-34: Examples of Vehicular Level of Service for Urban Roadways



Source: 2013 Quality/Level of Service Handbook, Florida Department of Transportation

Existing LOS of roadways (6 AM to 10 AM) based on 2017 volumes from ARC's Regional TDM in the AM peak period is shown in **Figure 4-35**, and for the PM peak period (3 PM to 7 PM) in **Figure 4-36**. Demand generally exceeded capacity in the northbound direction during the AM peak period, and southbound during the PM peak period, on segments of the following major roadways:

- Interstates: I-75, I-285, I-675
- SR 3/US-19/US-41/Tara Boulevard
- SR 54
- SR 139
- SR 314
- Anvil Block Road, westbound AM/eastbound PM
- Panola Road/Forest Parkway, westbound AM/eastbound PM
- Rex Road, westbound AM/eastbound PM



Please note:

- The I-75 South Managed Lanes from C.W. Grant Parkway to SR 138 (ARC ID AR-ML-610), programmed for long-range delivery in the ARC's RTP, will add capacity to I-75 but may not relieve congestion in the general-purpose lanes. Some additional capacity will also be provided by the collector/distributor lanes north and southbound between I-285 and SR 331/Forest Parkway (ARC IDs CL-AR-180 and CL-AR-181).
- The need for additional capacity on SR 3/US-19/US-41/Tara Boulevard will be subject to additional inquiry under GDOT's ongoing study of that corridor, and of the programmed widening of that facility from Flint River Road to Tara Road (ARC ID CL-AR-247)
- The need for additional capacity on SR 54/Fayetteville Road/Jonesboro Road will be addressed by the programmed widening of that facility from McDonough Road to SR 3/US-19/US-41/Tara Boulevard (ARC ID CL-041)

Please note that the ARC TDM is a regional model and may have some inconsistencies between its projections for roadway segments and those from other sources, especially when segments are very small and/or local.

Bottleneck Locations

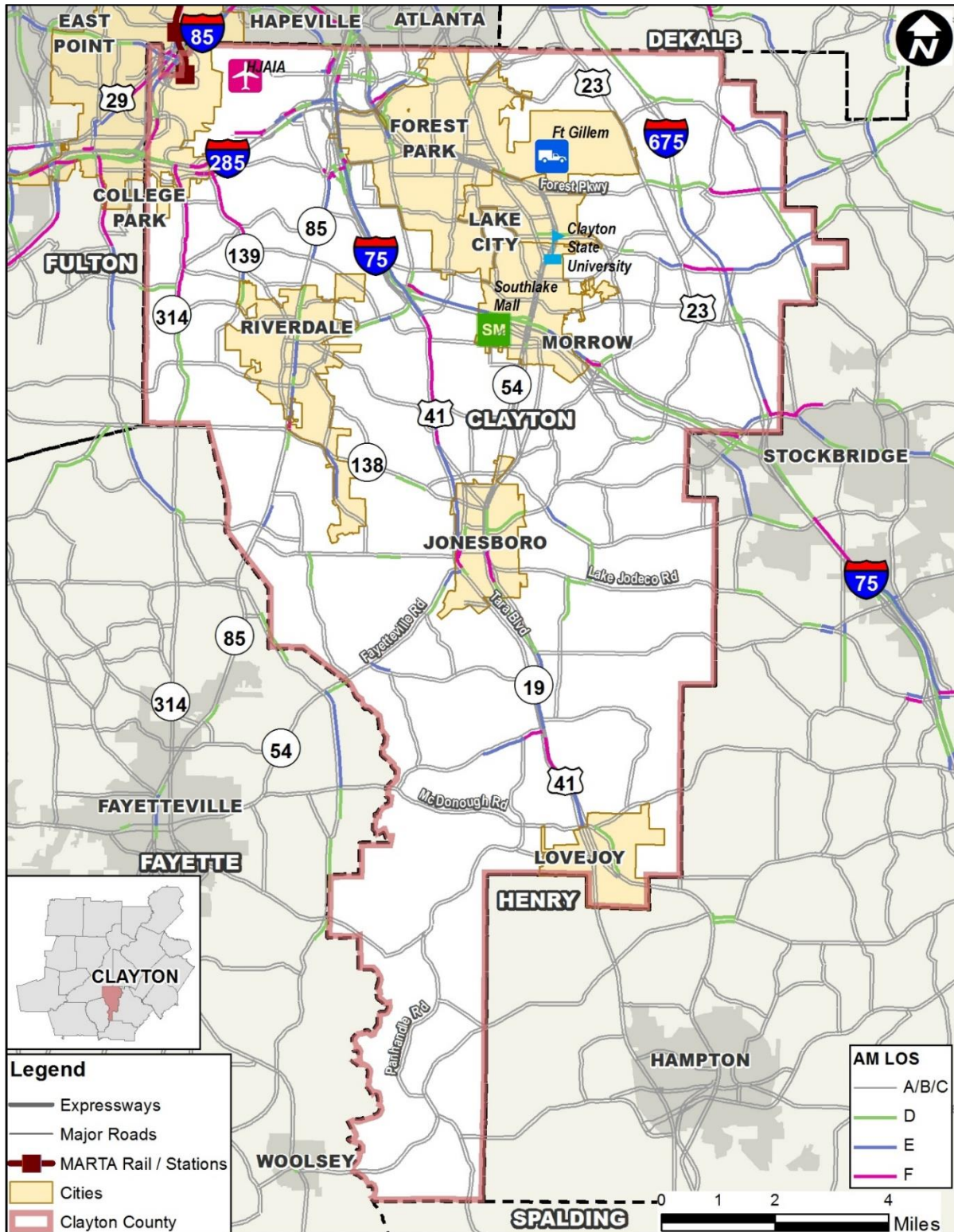
Bottleneck locations were identified through analysis of INRIX data. INRIX uses anonymized, passive cellphone data to locate areas of delay on the roadway network and is more accurate and precise than data from TDM outputs. INRIX data, including 2017 average speed, travel time data at 30-minute intervals, and bottleneck data calculated for both September and October of 2017 were obtained through Clayton County and ARC for this analysis.

Figure 4-37 shows the worst bottleneck locations in Clayton County, based on the bottleneck impact factor. The impact factor is a measure of bottleneck intensity that considers the number of bottleneck occurrences, the average duration of congestion, and the length of congestion throughout the study period (<https://www.fhwa.dot.gov/publications/research/operations/16064/003.cfm>). **Table 4-20** summarizes the top bottleneck locations in Clayton County with an impact factor greater than 10,000.

The bottleneck with the highest impact factor in Clayton County occurs southbound at SR 85 and Garden Walk Boulevard. The corridor with the highest number of bottleneck occurrences is SR 3/US-19/US-41 with 30 bottlenecks, followed by SR 138 with 19 locations, SR 54 and I-75 both with 15 locations, and SR 85 and I-285 with 14 locations each. Two of the top 10 bottlenecks occur at the intersection of SR 138 and SR 85; one is in the southbound direction and the other occurs in the eastbound direction. **Figure 4-38** illustrates the top 10 bottleneck locations in Clayton County.



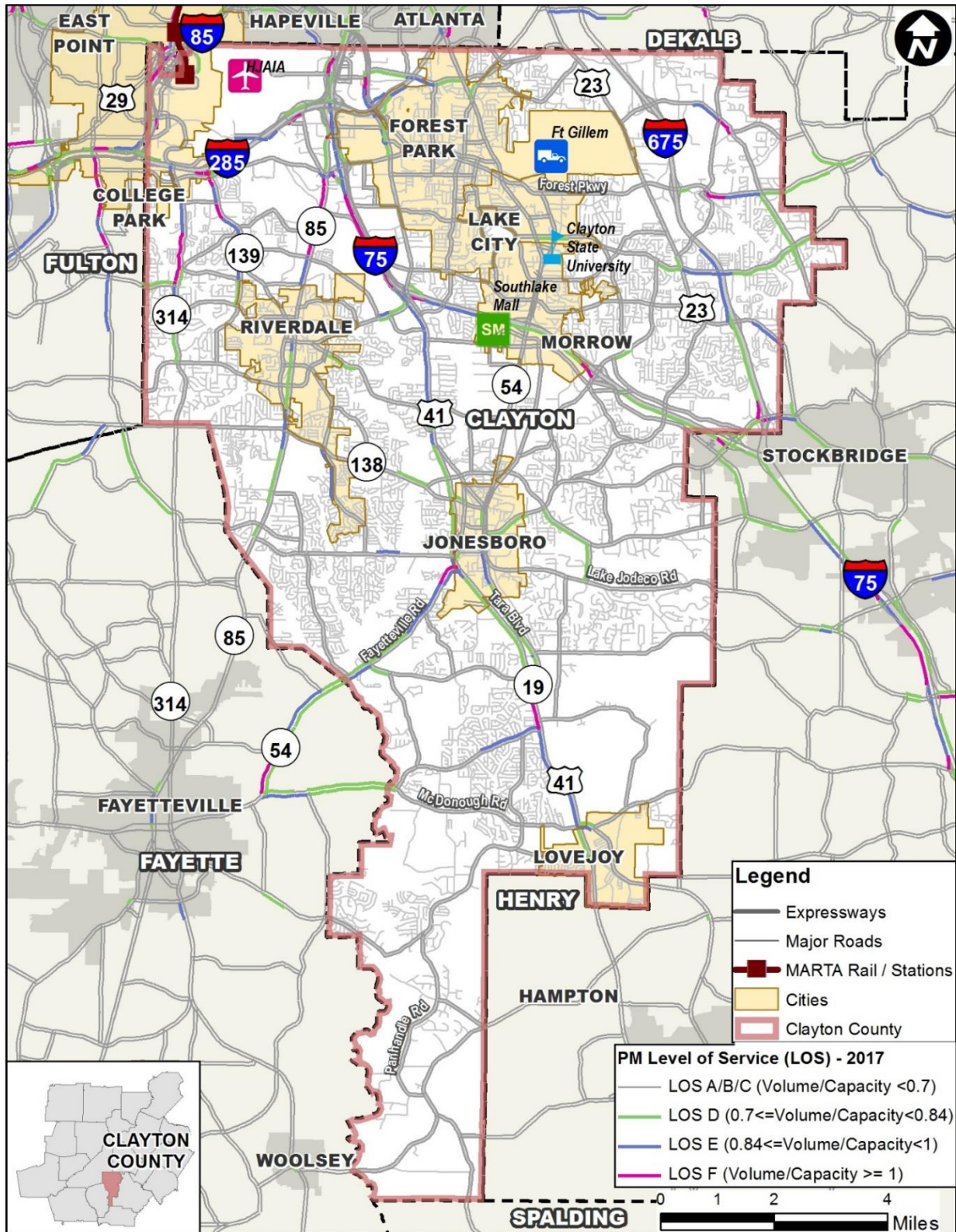
Figure 4-35: Existing (2017) AM Peak Period LOS



Source: ARC TDM



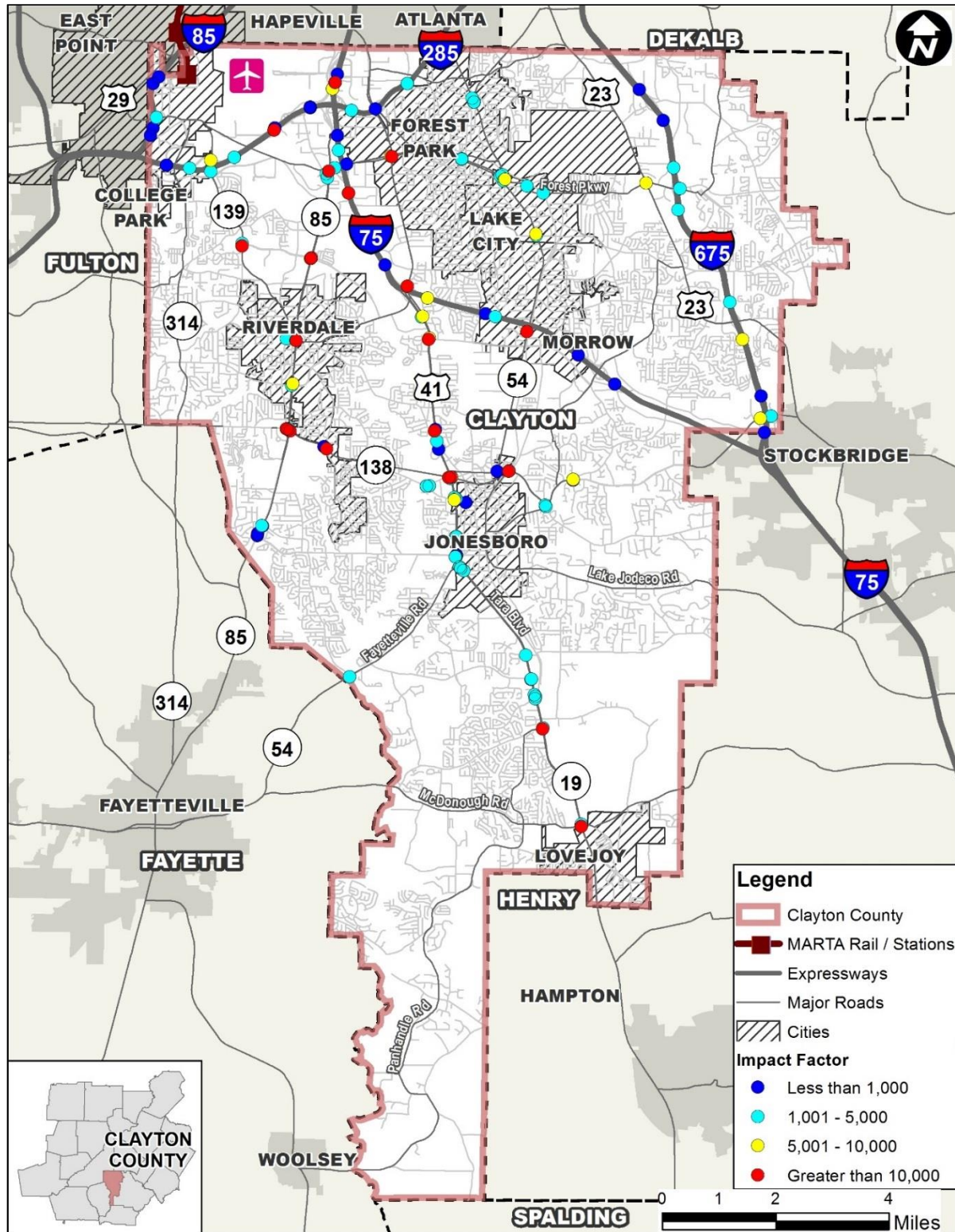
Figure 4-36: Existing (2017) PM Peak Period LOS



Source: ARC TDM



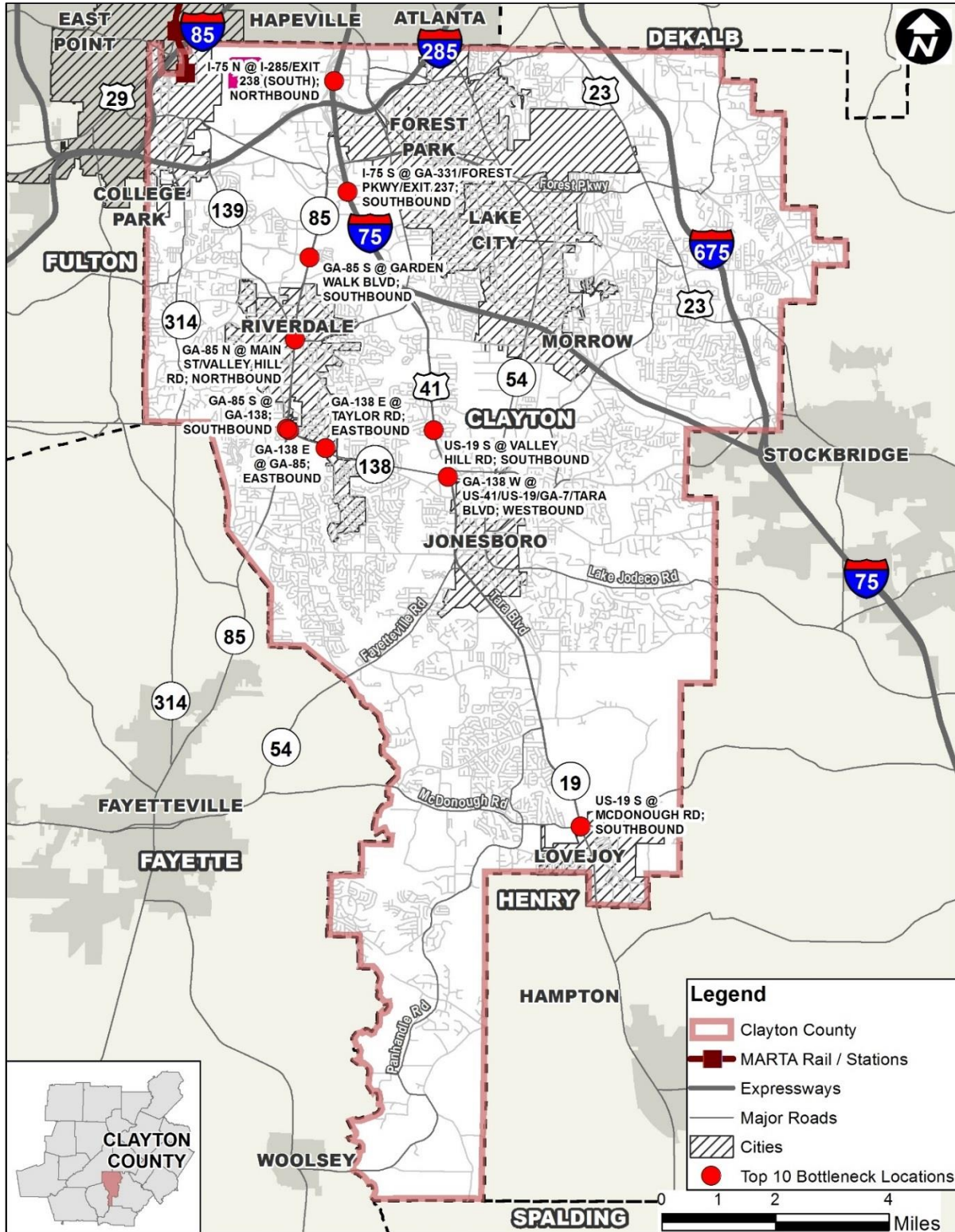
Figure 4-37: Existing Bottleneck Locations in Clayton County (2017)



Source: INRIX data



Figure 4-38: Top 10 Worst Bottleneck Locations in Clayton County (2017)



Source: INRIX data



Please note:

- Delay at intersections on SR 85 from I-75 south to Adams Drive may be addressed by the SR 85 Widening project (ARC ID CL-014), which would widen SR 85 from four to six lanes from Adams Drive to I-75 South

Table 4-20: Top Bottlenecks with a Bottleneck Impact Factor Greater than 10,000

Rank	Location	Direction	Impact Factor
1	SR 85 S @ GARDEN WALK BLVD	SOUTHBOUND	35,694
2	I-75 S @ SR 331/FOREST PKWY/EXIT 237	SOUTHBOUND	33,436
3	SR 85 S @ SR 138	SOUTHBOUND	26,689
4	US-19 S @ VALLEY HILL RD	SOUTHBOUND	26,507
5	I-75 N @ I-285/EXIT 238 (SOUTH)	NORTHBOUND	24,022
6	SR 138 E @ SR 85	EASTBOUND	22,804
7	SR 138 W @ US-41/US-19/SR 7/TARA BLVD	WESTBOUND	21,566
8	US-19 S @ MCDONOUGH RD	SOUTHBOUND	19,327
9	SR 138 E @ TAYLOR RD	EASTBOUND	18,090
10	SR 85 N @ MAIN ST/VALLEY HILL RD	NORTHBOUND	16,535
11	SR 85 N @ GARDEN WALK BLVD	NORTHBOUND	16,190
12	SR 138 E @ N MCDONOUGH ST	EASTBOUND	15,811
13	US-19 S @ MORROW INDUSTRIAL BLVD	SOUTHBOUND	13,678
14	US-19 S @ TARA RD	SOUTHBOUND	13,509
15	I-285 CCW @ I-75	COUNTERCLOCKWISE	13,077
16	SR 331/FOREST PKWY E @ US-41/US-19/OLD DIXIE RD	EASTBOUND	12,793
17	SR 139 S @ GARDEN WALK BLVD	SOUTHBOUND	11,452
18	US-19 N @ I-75/EXIT 235	NORTHBOUND	10,911
19	US-19 N @ SR 138	NORTHBOUND	10,833
20	SR 138 W @ SR 85	WESTBOUND	10,827
21	I-75 N @ I-285/EXIT 238 (SOUTH)	NORTHBOUND	10,826
22	SR 54 S @ I-75/SR 401	SOUTHBOUND	10,319
23	SR 85 N @ SR 331 /FOREST PKWY	NORTHBOUND	10,076

Projected Future Congestion

ARC's TDM was used to forecast traffic conditions for 2040. The future roadway network includes the existing roadway network and projects in the constrained regional transportation plan adopted in 2016. **Figure 4-39** and **Figure 4-40** illustrate the projected LOS on roads in Clayton County in AM and PM peak periods, respectively. With increased traffic, facilities already nearing or exceeding their capacity in 2017 would continuously get worse and operate at an undesirable LOS in 2040. Areas identified that would operate at LOS E or worse in 2040 are:

- SR 85 South of I-75



- SR 85 near SR 138
- SR 139 South of I-285
- SR 314 South of I-285
- SR 3/US-19/US-41/Tara Boulevard:
 - South of I-75
 - Near SR 138
 - Flint River Road
 - North of Lovejoy
- SR 331/Forest Parkway East of I-675
- SR 54/Jonesboro Road in Jonesboro
- South Main Street in Jonesboro
- Rex Road between US-23 and I-675
- Tara Road near Panhandle Road and SR 3/US-19/US-41/Tara Boulevard

Please note:

- As noted earlier, the need for additional capacity on I-75, SR 3/US-19/US-41/Tara Boulevard, and SR 54/Fayetteville Road/Jonesboro Road will be addressed by currently programmed projects.
- The need for additional capacity on SR 85 would be addressed by the widening projects (ARC IDs CL-268, CL-014, CL-015) programmed for that facility.

Needs Indicated by Congestion Patterns

There may be a need for additional capacity on the interstates in Clayton County, as well as on the following state routes, that would not be addressed by a programmed project:

- SR 139
- SR 314

Analysis of future congestion indicates that this north-south pattern will continue, resulting in additional needs for capacity or operations improvements on segments of these additional facilities:

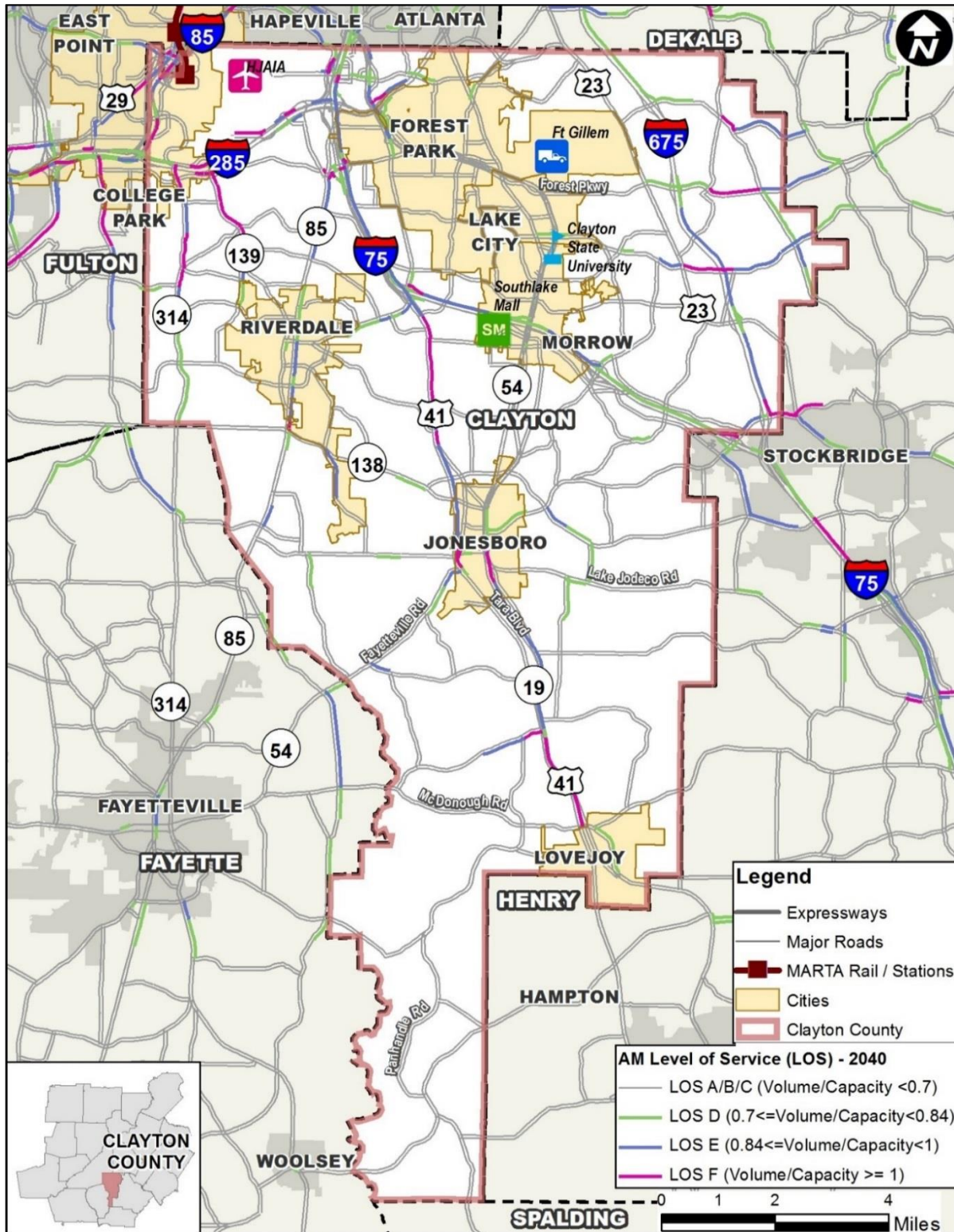
- South Main Street in Jonesboro

Under future conditions, congestion will begin to severely affect the following east-west routes as well:

- Rex Road between US-23 and I-675
- SR 331/Forest Parkway East of I-675
- Anvil Block Road between I-675 and the Gillem Logistics Center (discussed further in the subarea study).



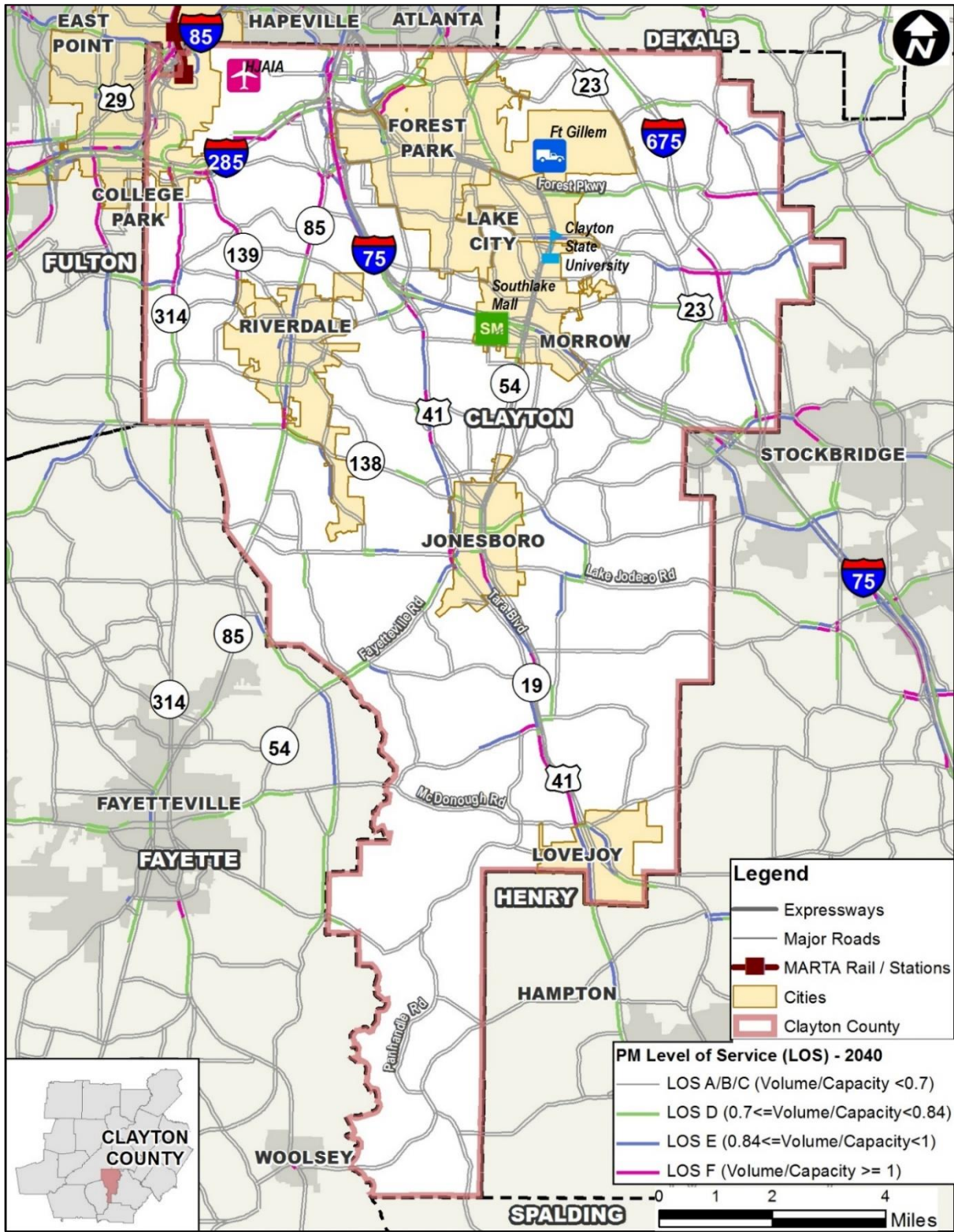
Figure 4-39: 2040 AM Peak Level of Service in Clayton County



Source: ARC TDM



Figure 4-40: 2040 PM Peak Level of Service in Clayton County



Source: ARC TDM



Analysis of INRIX bottleneck data indicates that there may be a need for operational improvements at the following intersections that would not be addressed by a programmed capacity project:

- I-75 Southbound at SR 331/Forest Parkway/Exit 237
- I-75 Northbound at I-285/Exit 238 (South)
- SR 138 Eastbound at SR 85 and at Taylor Road

Based on the subarea analyses, the following intersections may need improvements to alleviate current delay during AM or PM peak that will not be addressed by a programmed capacity project:

- SR 85 at SR 139/Valley Hill Road

4.5.4 TRAVEL DEMAND MANAGEMENT

Travel demand management (TDM) strategies are intended to address congestion by reducing the demand for, instead of increasing the supply of, transportation infrastructure and services. In Clayton County, travel demand management services are managed, as they are elsewhere in the Atlanta Region, by the ARC's Georgia Commute Options program. Georgia Commute Options offers a variety of programs to commuters – Cash for Commuters, rideshare matching, teleworking facilitation, and a guaranteed ride home program, among others – to reduce the number of single-occupancy vehicle drivers on the road at peak hours.

In Clayton County, Georgia Commute Options also offers financial incentives to riders who use the State Road and Tollway Authority (SRTA) vanpool program. SRTA contracts with private sector vendors who supply the vans and place individual riders in vanpool groups. The GCO service matches commuters with similar trip origins and destinations to share rides in a SRTA vanpool.

4.5.5 TRAFFIC CONTROL SYSTEM

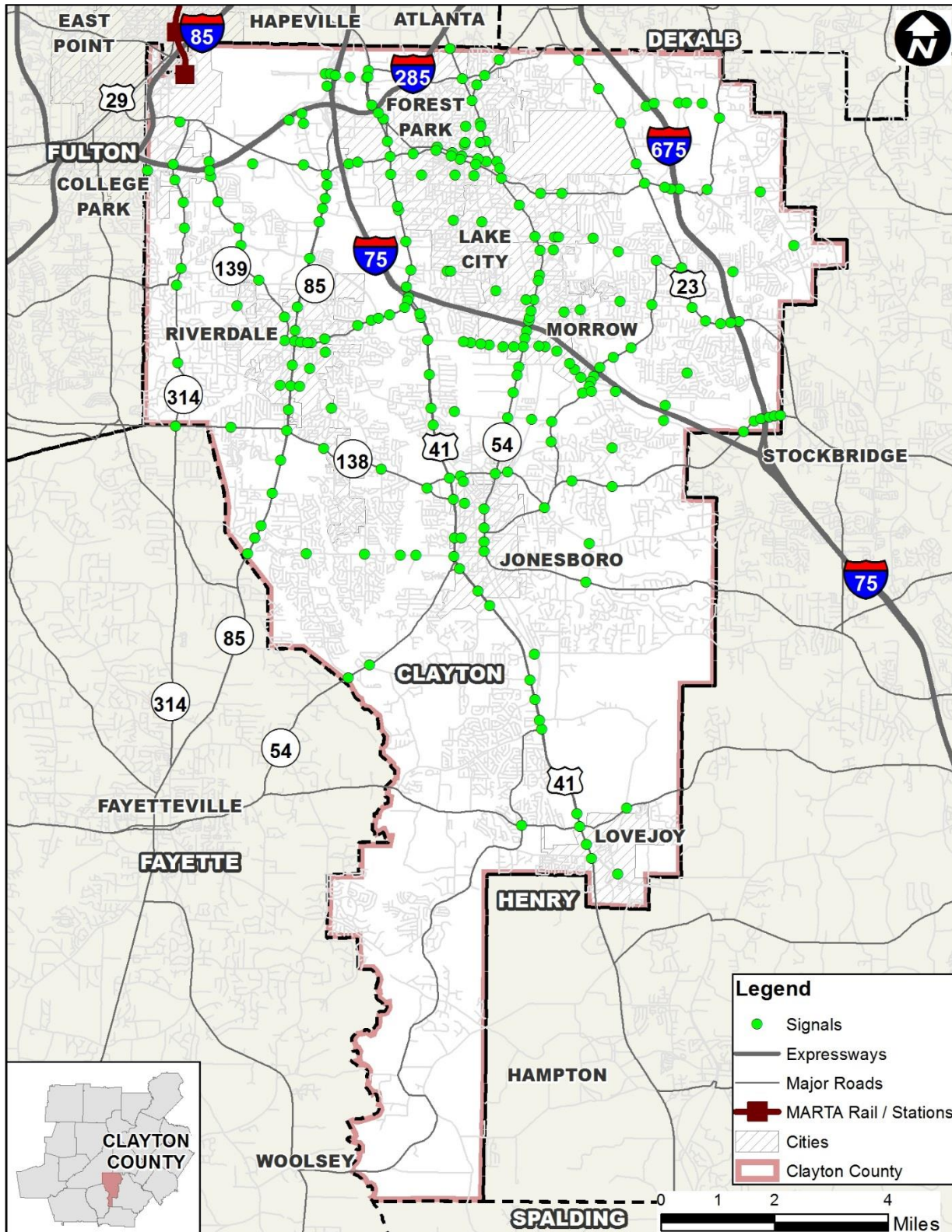
Clayton County's traffic control system consists of traffic signals, flashers, close-circuit televisions (CCTVs), fiber optic communication systems, and the Clayton County Traffic Control Center (TCC). Data from GDOT and field observations show that a total of 252 traffic signals are currently operating at intersections in Clayton County. The locations of all signalized intersections are illustrated in **Figure 4-41**. According to the Clayton County website, the Clayton County TCC has control over 135 traffic signals, 44 CCTV cameras, and three (3) changeable message signs. The center continuously monitors the flow of traffic along its major arterials to provide "real-time" information concerning crashes, lane closures, road construction, signal malfunctions, and other incidents.

ITS

Intelligent Transportation Systems (ITS) refers to the use of technology along a corridor, such as cameras and ramp meters, to enhance traffic operations. Clayton County has ramp meters on I-75 north- and southbound at Mount Zion, Jonesboro Road, and Forest Parkway.



Figure 4-41: Traffic Signals - Clayton County



Source: Clayton County - 2008 Comprehensive Transportation Plan, Consultant Analysis



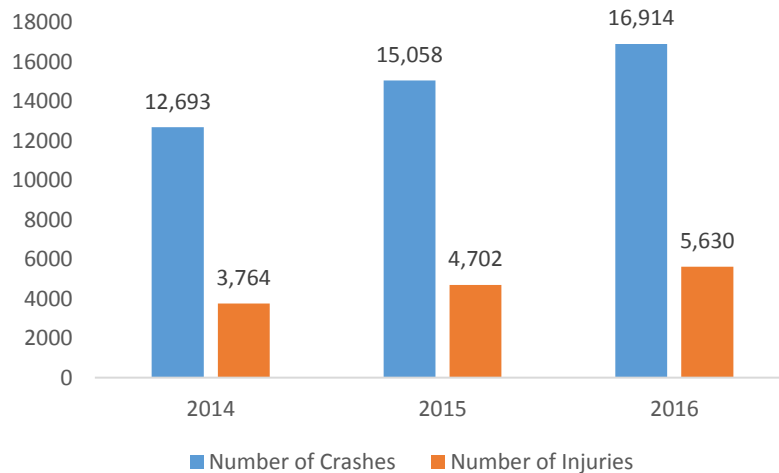
4.5.6 CRASH ANALYSIS

This section presents crash history data for Clayton County. Crash data were gathered through GDOT using Georgia Electronic Accident Reporting System (GEARS) database. The GEARS data are presented here with a caveat. In recent communications, the GDOT accident analysis group has specified that GEARS data are incomplete and may only represent 90 percent of the total crashes. The GEARS data are presented here not as an account of Clayton County’s entire crash history, but as a measure of crash patterns in the county.

Crashes, Crash Types, and Crash Rates

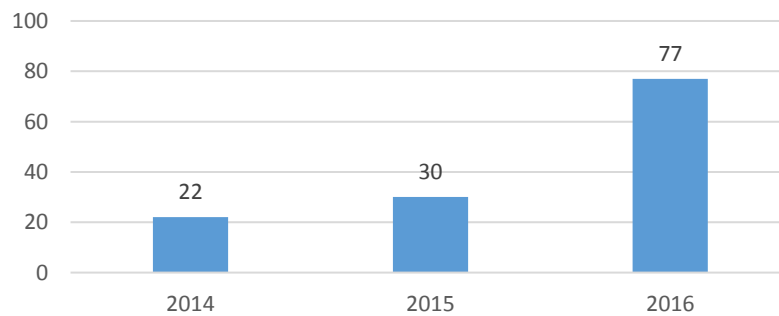
There were 44,665 crashes, 14,096 injuries, and 129 fatalities reported across Clayton County during the 3-year period from 2014 to 2016. As shown in **Figure 4-42** and **Figure 4-43**, the total number of crashes and injuries increased at a steady rate during that time while the total number of fatalities jumped in 2016, nearly 2.6 times higher than those of 2015. The number of fatalities rose sharply both statewide and around the United States in 2015 and 2016 as well. Georgia experienced a 14 percent increase in fatalities since 2014, the biggest two-year jump in more than five decades.

Figure 4-42: Number of Crashes and Injuries in Clayton County



Source: GEARS dataset – GDOT

Figure 4-43: Number of Fatalities in Clayton County

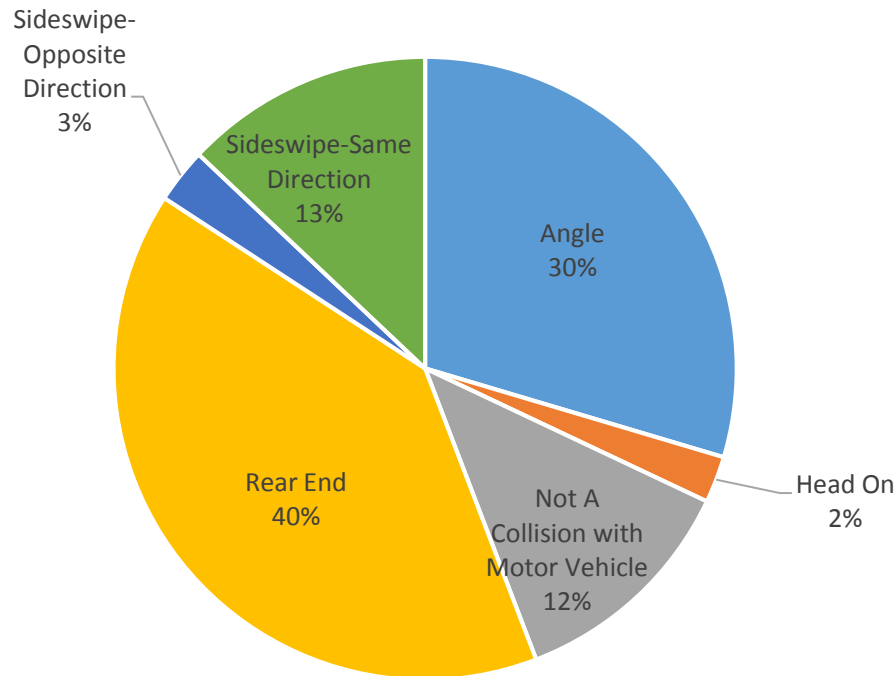


Source: GEARS dataset – GDOT



As illustrated in **Figure 4-44**, rear end collisions (40 percent) were the most common types of crashes occurred in the county followed by angle collisions (30 percent). Approximately 6 percent of crashes (2,817) included a heavy vehicle involving either a single unit truck or a tractor/trailer, 0.6 percent of crashes (268) involved a pedestrian, and 0.1 percent of crashes (48) involved a bicyclist.

Figure 4-44: Number of Collisions by Maneuver (All crashes 2014-2016)



Source: GEARS dataset – GDOT

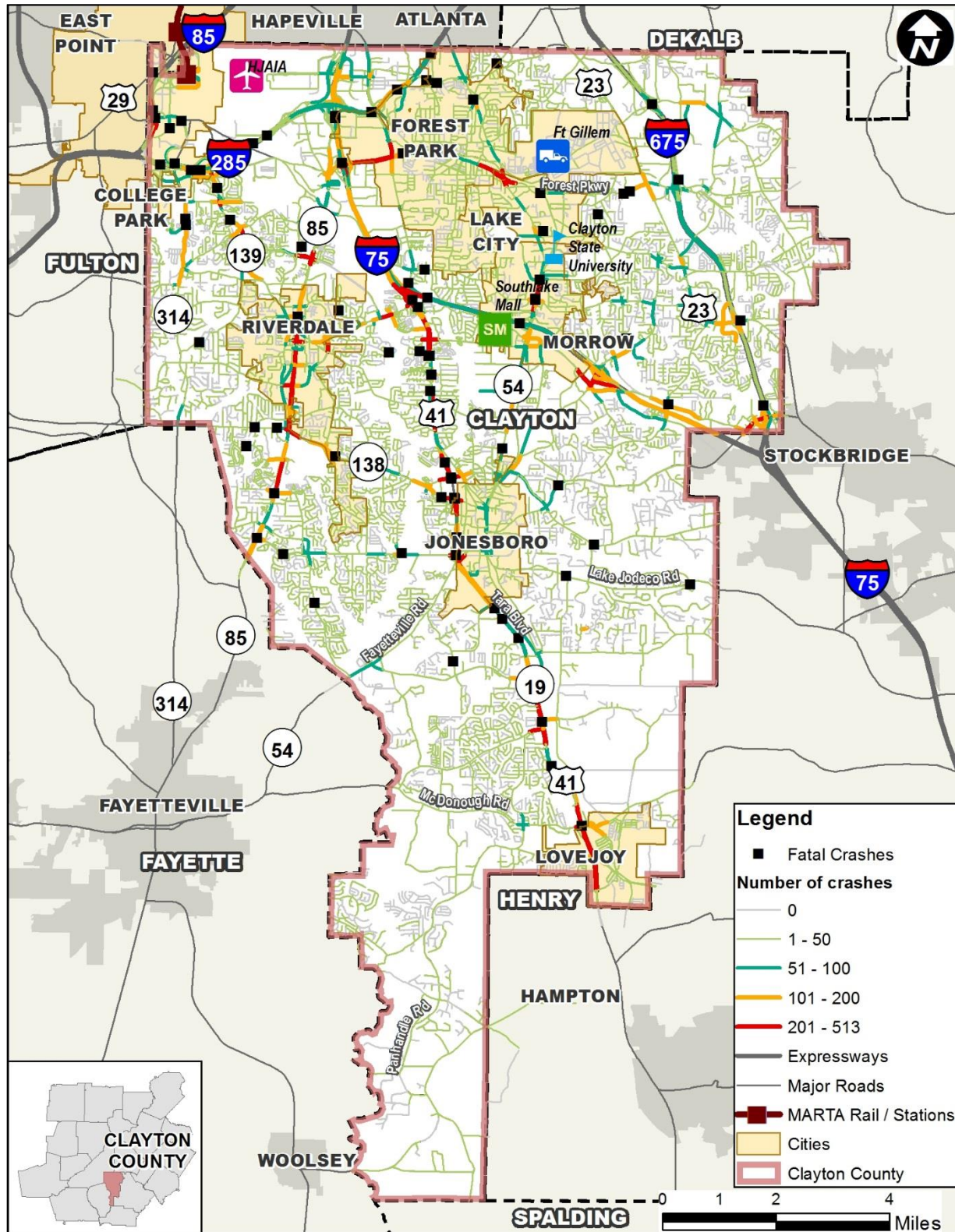
High Crash Locations

High crash locations in Clayton County include Interstates, State Routes and US Highways, as shown in **Figure 4-45** and **Figure 4-46**. Road segments with higher number of crashes can be found on I-75, SR 85, SR 3/US 19/US 41/Tara Boulevard and Forest Parkway. I-285 and US 19/41 were observed to have high number of fatal crashes. In addition to the highways identified above, roads such as SR 139, Flint River Road and Mount Zion Boulevard were also observed to have higher crash densities.

Figure 4-47 shows the locations of crashes involving bicycle and pedestrians. Roads such as SR 139, SR 85, SR 3/US 19/US 41/Tara Boulevard, Upper Riverdale Road and roads near Clayton State University were observed to have a high number of crashes involving bicycle and pedestrians, which correlates with expected locations of high pedestrian or bicycle activity.



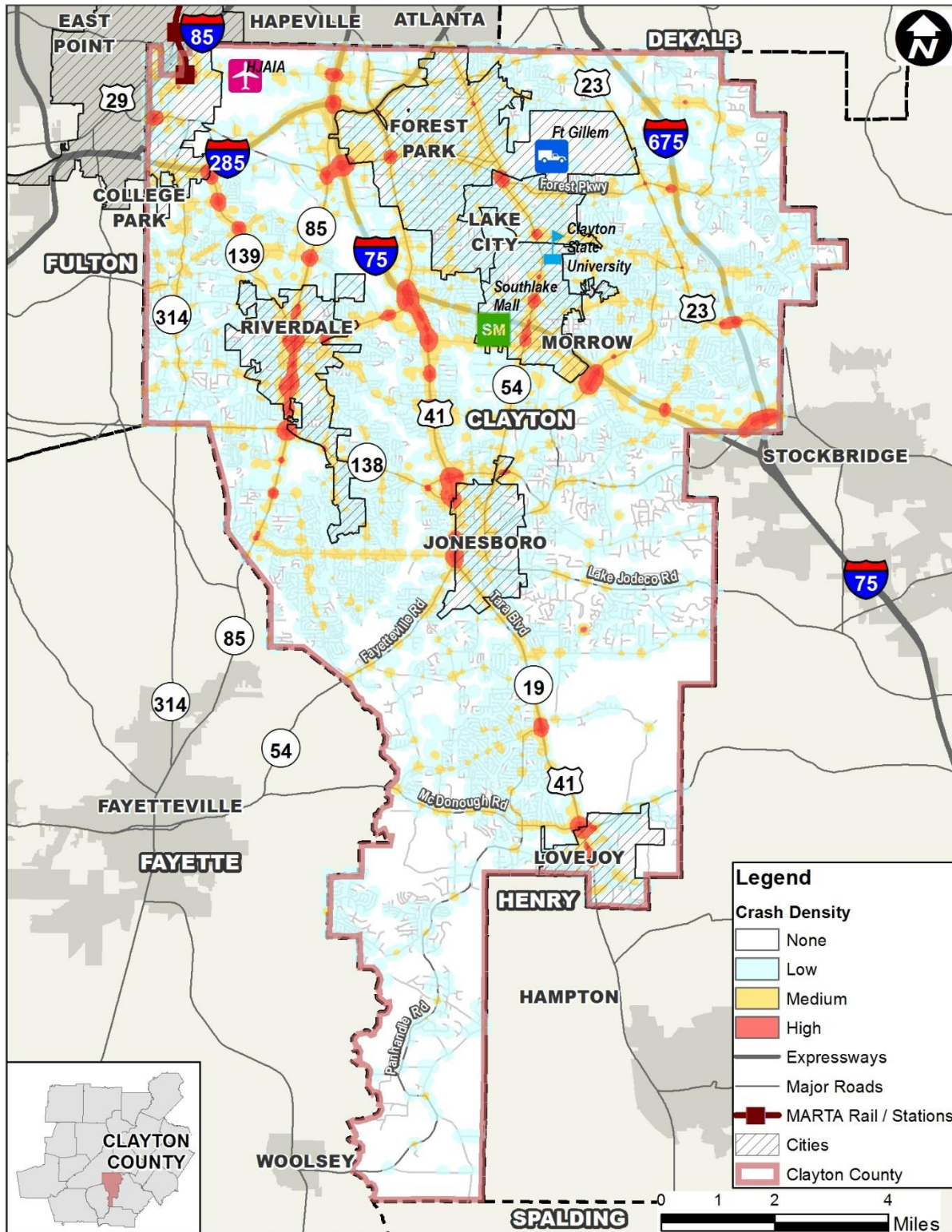
Figure 4-45: Number of Crashes and Locations of Fatal Crashes in Clayton County, 2014-2016



Source: GEARS dataset – GDOT



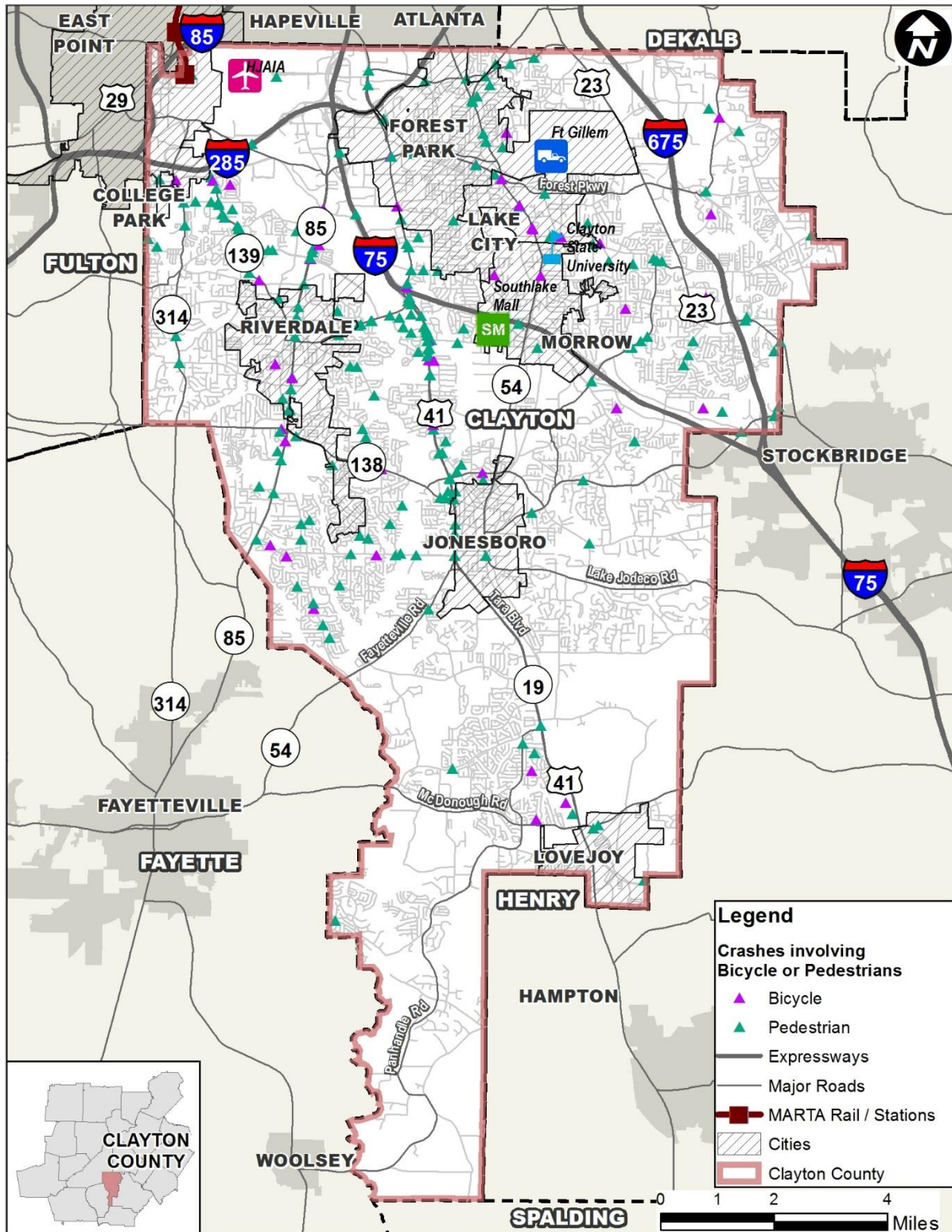
Figure 4-46: Relative Crash Density and High Crash Intersections in Clayton County, 2014-2016



Source: GEARS dataset – GDOT



Figure 4-47: Crashes involving Bicycles and Pedestrians in Clayton County



Source: GEARS dataset – GDOT



Twenty-eight intersections with an average of 50 or more crashes per year in the recorded period were identified in the Existing Conditions Report. **Table 4-21** includes a list of high crash intersections along with number and severity of crashes near intersections.

Table 4-21: High Crash Intersections in Clayton County, 2014-2016

Intersection	# Crashes	# Injuries	# Fatalities
SR 3/US-19/US-41/Tara Blvd and SR 138	367	112	2
SR 85 and SR 138	343	103	0
Upper Riverdale Rd and Tara Blvd Connector	312	134	0
SR 3/US-19/US-41/Tara Blvd and McDonough Rd	303	104	1
SR 3/US-19/US-41/Tara Blvd and Flint River Rd	284	113	1
SR 3/US-19/US-41/Tara Blvd and Mount Zion Rd/Parkwood Way	246	101	0
SR 85 and Garden Walk Blvd	227	113	0
SR 85 and Main St/Valley Hill Rd	219	72	0
Upper Riverdale Rd and SR 3/Old Dixie Rd	211	85	0
SR 3/US-19/US-41/Tara Blvd and North Ave	202	83	4
SR 3/US-19/US-41/Tara Blvd and Battlecreek Rd	194	80	1
SR 54/Jonesboro Rd and Forest Pkwy	192	37	0
SR 3/US-19/US-41/Tara Blvd and Tara Rd	192	71	0
Upper Riverdale Rd and Lees Mill Rd	185	81	0
Riverdale Rd and SR 331/Forest Pkwy/Phoenix Blvd	180	58	0
Riverdale Rd and Normal Dr/Crystal Lake Rd	179	70	0
SR 85 and Webb Rd/Warren Dr	175	59	1
SR 54/Jonesboro Rd and Battlecreek Rd	171	58	0
SR 331/Forest Pkwy and SR 3/Old Dixie Rd	165	57	0
Riverdale Rd and Garden Walk Blvd	165	83	0
Upper Riverdale Rd and Lamar Hutcheson Pkwy	165	52	0
Flat Shoals Rd and Riverdale Rd	164	74	0
SR 54/Jonesboro Rd and Morrow Rd	164	36	11
SR 3/US-19/US-41/Tara Blvd and Smith St/Robert E Lee Pkwy	159	79	1
SR 138 and Mount Zion Rd	157	62	0
SR 85 and SR 331/Forest Pkwy	155	36	0
SR 138 and Hannover Pkwy N	154	48	0
SR 3/US-19/US-41/Tara Blvd and Iron Gate Blvd	150	63	0

Source: GDOT GEARS Database



Locations of Severe Crashes

Clayton County saw a total of 129 fatal crashes in the period from 2014 to 2016, while about 14,100 crashes resulted in an injury during this period. Many of the locations with higher rates of severe crashes also have high rates of overall crashes; both crash frequency and severity correspond with high traffic volumes. Figure 4-48 shows locations of fatal and injury-causing crashes in Clayton County from 2014 to 2016.

Apart from I-285, a relatively large number of fatal crashes were observed on:

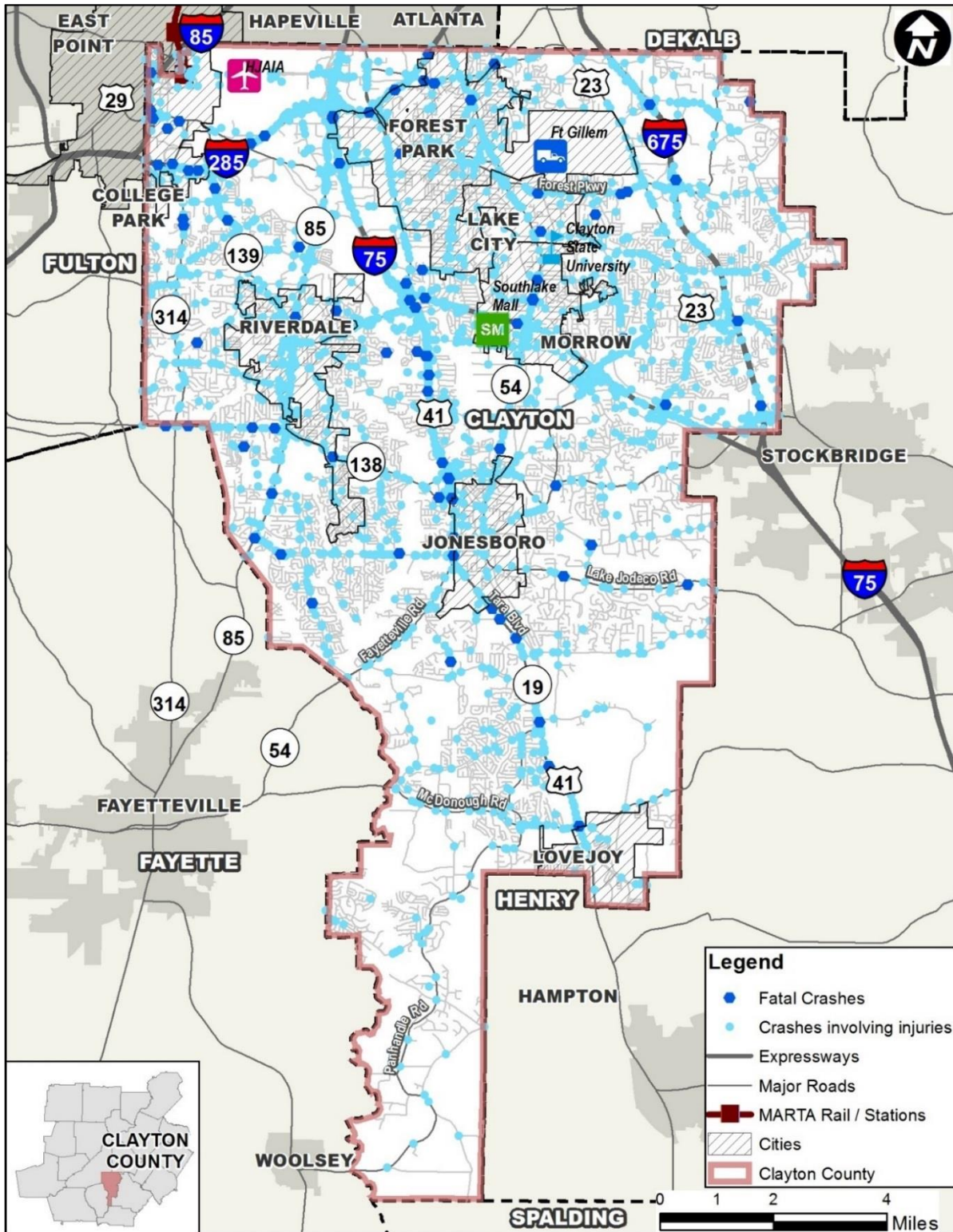
- SR 3/US-19/US-41/Tara Boulevard
- SR 85
- SR 138
- SR 139
- SR 314
- SR 54/Jonesboro Road
- SR 331/Forest Parkway
- Flint River Road
- Lake Jodeco Road

In addition, the following roadways had a high number of crashes involving at least one injury:

- Upper Riverdale Road
- Mt Zion Boulevard
- Fielder Road
- US-23/SR 42/Moreland Avenue
- Rex Road
- McDonough Road



Figure 4-48: Severe Crashes in Clayton County, 2014-2016



Source: GDOT GEARS Database



County Road Safety

The most-travelled county roads in Clayton County were subjected to a special safety assessment because the safety needs of these facilities can be overshadowed in a more general analysis. Crash rates¹ were calculated on segments of the identified country roads to compare with statewide averages for roads of the same functional classification. To allow the analysis to focus crashes along the study corridors rather than intersection-related crashes, all crash records that occur at major intersections along these roads were excluded from the analysis. **Table 4-22** through **Table 4-31** summarize the number of fatal crashes, fatalities, injury crashes, injuries, and all crashes that occurred along the corridors; segment crash rates; and statewide average crash rates for roads of the same functional classification.

Most crash categories along these study corridors significantly exceed the statewide averages. This analysis indicates that there are many more crashes on selected county roads than on similar roadways throughout the state, with very few exceptions along Noah’s Ark Road and Panhandle Road. Segment crash rates higher than the statewide averages are presented as bold texts, and crash rates at least twice as high as the statewide averages are highlighted in red blocks.

Safety Needs

Based on crash analysis, the following intersections and segments may need safety improvements, in order of general crash propensity and severity:

- SR 3/US-19/US-41/Tara Boulevard corridor and intersections at:
 - Battlecreek Road
 - Flint River Road
 - Iron Gate Blvd
 - McDonough Road
 - Mount Zion Road/Parkwood Way
 - North Ave
 - Smith Street/Robert E Lee Parkway
 - SR 138
 - Tara Road
- SR 85 corridor and intersections at:
 - Clark Howell Hwy/Forest Parkway
 - Garden Walk Boulevard
 - Main Street/Valley Hill Road

¹ Crash rates are expressed per 100 million vehicle miles traveled (100 MVM) and are determined by the following equation:

$$\text{Crash Rate} = \frac{\text{Total Number of Crashes} \times 10^8}{\text{AADT} \times \text{Length of Segment} \times 365 \times \text{Number of Years}}$$



Table 4-22: Bouldercrest Road Crash Rate Comparison with Statewide Averages

Year	AADT	Number of Crashes					Segment Crash Rates (per 100 MVM)					Statewide Avg. Crash Rates (per 100 MVM) - Rural Minor Arterial				
		Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	5,320	0	0	4	6	14	0.00	0.00	98	147	343	1.96	2.23	50	74	164
2015	6,010	0	0	4	5	18	0.00	0.00	87	109	391	2.13	2.42	48	74	152
2016	6,200	0	0	4	4	27	0.00	0.00	84	84	568	2.42	2.74	49	74	145

Table 4-23: Stagecoach Road Crash Rate Comparison with Statewide Averages

Year	AADT	Number of Crashes					Segment Crash Rates					Statewide Avg. Crash Rates (per 100 MVM) - Rural Major Collector				
		Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	3,817	0	0	6	7	13	0.00	0.00	125	146	270	2.74	3.11	63	89	199
2015	3,970	0	0	6	10	18	0.00	0.00	120	200	360	2.71	2.88	63	90	194
2016	4,110	0	0	7	9	20	0.00	0.00	135	174	386	2.73	3.02	96	89	186

Table 4-24: Freeman Road Crash Rate Comparison with Statewide Averages

Year	AADT	Number of Crashes					Segment Crash Rates					Statewide Avg. Crash Rates (per 100 MVM) - Rural Local Road				
		Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	1,760	0	0	4	10	11	0.00	0.00	173	432	476	1.88	1.88	54	73	203
2015	1,830	0	0	3	4	15	0.00	0.00	125	166	624	1.70	1.73	58	80	220
2016	1,870	0	0	2	3	15	0.00	0.00	81	122	610	2.07	2.16	63	89	229

Table 4-25: Fitzgerald Road Crash Rate Comparison with Statewide Averages

Year	AADT	Number of Crashes					Segment Crash Rates					Statewide Avg. Crash Rates (per 100 MVM) - Rural Local Road				
		Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	3,280	0	0	2	5	6	0.00	0.00	93	233	280	1.88	1.88	54	73	203
2015	3,360	0	0	4	6	14	0.00	0.00	182	273	638	1.70	1.73	58	80	220
2016	3,440	0	0	5	7	13	0.00	0.00	222	311	578	2.07	2.16	63	89	229



Table 4-26: Mundy's Mill Road Crash Rate Comparison with Statewide Averages

Year	AADT	Number of Crashes					Segment Crash Rates					Statewide Avg. Crash Rates (per 100 MVM) - Rural Major Collector				
		Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	4,870	0	0	4	6	32	0.00	0.00	76	113	604	2.74	3.11	63	89	199
2015	5,070	0	0	6	7	27	0.00	0.00	109	127	490	2.71	2.88	63	90	194
2016	5,190	0	0	11	16	37	0.00	0.00	195	283	655	2.73	3.02	96	89	186

Table 4-27: Fielder Road Crash Rate Comparison with Statewide Averages

Year	AADT	Number of Crashes					Segment Crash Rates					Statewide Avg. Crash Rates (per 100 MVM) - Rural Minor Arterial				
		Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	7,464	0	0	13	19	43	0.00	0.00	116	169	383	1.96	2.23	50	74	164
2015	8,127	0	0	18	29	45	0.00	0.00	147	237	368	2.13	2.42	48	74	152
2016	9,341	0	0	10	14	50	0.00	0.00	71	100	356	2.42	2.74	49	74	145

Table 4-28: Noah's Ark Road Crash Rate Comparison with Statewide Averages

Year	AADT	Number of Crashes					Segment Crash Rates					Statewide Avg. Crash Rates (per 100 MVM) - Rural Major Collector				
		Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	7,130	0	0	4	4	23	0.00	0.00	46	46	264	2.74	3.11	63	89	199
2015	7,410	0	0	10	12	26	0.00	0.00	110	132	287	2.71	2.88	63	90	194
2016	7,570	0	0	7	11	35	0.00	0.00	76	119	378	2.73	3.02	96	89	186

Table 4-29: Maddox Road Crash Rate Comparison with Statewide Averages

Year	AADT	Number of Crashes					Segment Crash Rates					Statewide Avg. Crash Rates (per 100 MVM) - Rural Local Road				
		Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	7,460	0	0	5	7	18	0.00	0.00	98	137	354	1.88	1.88	54	73	203
2015	7,760	0	0	10	18	35	0.00	0.00	189	340	661	1.70	1.73	58	80	220
2016	7,950	1	1	7	12	26	18.43	18.43	129	221	479	2.07	2.16	63	89	229



Table 4-30: Panhandle Road Crash Rate Comparison with Statewide Averages

Year	AADT	Number of Crashes					Segment Crash Rates					Statewide Avg. Crash Rates (per 100 MVM) - Rural Minor Collector				
		Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	3,915	0	0	9	9	37	0.00	0.00	75	75	307	2.84	2.84	78	105	277
2015	4,070	0	0	17	26	50	0.00	0.00	136	207	399	3.54	4.05	79	108	248
2016	4,160	0	0	11	18	40	0.00	0.00	86	140	312	3.90	4.25	71	97	208

Table 4-31: Walker Road Crash Rate Comparison with Statewide Averages

Year	AADT	Number of Crashes					Segment Crash Rates					Statewide Avg. Crash Rates (per 100 MVM) - Rural Local Road				
		Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	2,630	0	0	3	4	9	0.00	0.00	152	203	457	1.88	1.88	54	73	203
2015	2,690	0	0	4	5	10	0.00	0.00	199	248	497	1.70	1.73	58	80	220
2016	2,750	0	0	7	8	13	0.00	0.00	340	389	632	2.07	2.16	63	89	229



- SR 138
- Webb Road/Warren Drive
- SR 138 between I-75 and I-675 at:
 - Hannover Parkway
 - Mount Zion Road
- SR 139/Riverdale Road corridor and intersections at:
 - Forest Parkway/Phoenix Boulevard
 - Garden Walk Boulevard
 - Normal Drive/Crystal Lake Road
- SR 314 corridor
- SR 54/Jonesboro Road near Morrow at:
 - Battlecreek Road
 - Forest Parkway
 - Morrow Road
- SR 331/Forest Parkway
- Lake Jodeco Road
- Mt. Zion Boulevard south of I-75
- Upper Riverdale Road at:
 - Lamar Hutcheson Parkway
 - Lees Mill Road
 - Old Dixie Road
 - SR 3/US-19/US-41/Tara Boulevard Connector
- SR 331/Forest Parkway and SR 3/ US-19/US-41/Old Dixie Road
- Flat Shoals Road and Riverdale Road
- County Roads Corridors
 - Bouldercrest Road
 - Stagecoach Road
 - Freeman Road
 - Fitzgerald Road
 - Mundy’s Mill Road
 - Fielder Road
 - Noah’s Ark Road
 - Maddox Road
 - Panhandle Road
 - Walker Road



4.5.7 ACCESS MANAGEMENT

Access management is the proactive management of vehicular access points to land parcels adjacent to all manner of roadways². Good access management promotes safe and efficient use of the transportation network; effective access management strategies can result in improved traffic flow and improved safety for vehicles, bicyclists, and pedestrians.

The functional classification of a roadway indicates whether it prioritizes access or mobility. As shown in **Figure 4-49**, major arterial roadways are intended to provide mobility while collector and local streets are intended to provide access to local land uses.

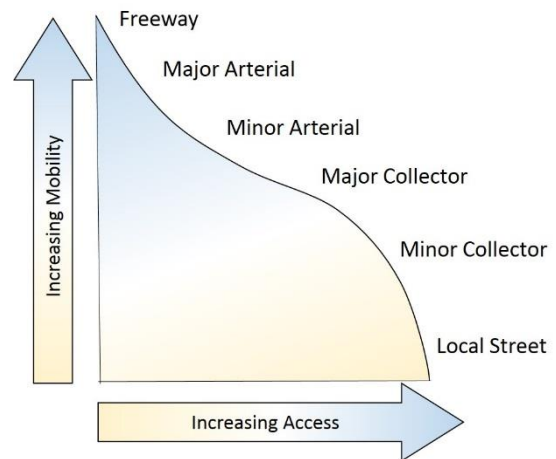
Based on stakeholder input and preliminary review, the following corridor segments were considered for access management needs:

- **SR 3/US-19/US-41/Tara Boulevard south of its interchange with I-75:** The Stakeholder Committee identified this corridor as being congested and crash prone due to the number of driveways.
- **SR 54/Jonesboro Road near its interchange with I-75:** The Stakeholder Committee identified this corridor as being congested and crash prone due to the number of driveways.
- **SR 85 in Riverdale:** This corridor, due to its relatively high speed limits and laneage, presents an opportunity to improve traffic operations and safety through better access management.
- **SR 139 near H-JAIA:** Segments of the SR 139 corridor pose access management concerns due to tightly-spaced, signalized intersections and driveways.
- **SR 331/Forest Parkway:** With the ongoing Gillem Logistics Center redevelopment adding traffic volumes on this facility, access to facilities on Forest Parkway will need to be managed to maintain an efficient system.

The first of these locations is discussed below; the others are discussed in the subarea analyses.

For each facility, the spacing of driveways, crossovers and intersections were compared to the standards established by the GDOT *Regulations for Driveway and Encroachment Control* manual (Revision 4.0, 2016). **Table 4-32** shows GDOT minimum driveway spacing criteria for different posted speeds. **Table 4-33** presents spacing standards for median crossovers and signalized intersections. Driveways that are spaced too closely can impact traffic operations from right-turn conflict overlap (drivers must monitor more than one right-turn merging movement). Additionally, closely spaced driveways can interfere with each other and restrict capacity.

Figure 4-49: Relationship between Access and Mobility



Source:

https://ops.fhwa.dot.gov/access_mgmt/what_is_accsmgmt.htm

² https://ops.fhwa.dot.gov/access_mgmt/what_is_accsmgmt.htm (accessed July 7, 2017)

Proper spacing of signals restricts unwarranted access points and improves the normal flow of the through traffic.

Table 4-32: GDOT Spacing Criteria for Driveways, Public Roads, and Side Streets

Posted Speed (MPH)	Minimum Driveway Spacing (Feet)
25	125
30	125
35	150
40	185
45	230
50	275
55	350
60	450
65	550

Source: GDOT Regulations for Driveway and Encroachment Control Manual

Table 4-33: GDOT Spacing Standards for Median Crossovers and Signalized Intersections

Characteristics		Minimum Crossover Spacing	Minimum Spacing of Signalized Intersections
Rural	<ul style="list-style-type: none"> Roadways have shoulders Posted speed limits are greater than 45 mph Lower land use density 	1,340 feet	2,640 feet
Urban	<ul style="list-style-type: none"> Roadways have curb and gutter, sidewalks Posted speed limits of 45 mph or below Higher land use density 	1,000 feet	1,320 feet

Source: GDOT Regulations for Driveway and Encroachment Control Manual

SR 3/US-19/US-41/Tara Boulevard

Figure 4-50 shows the roadway segment of SR 3/US-19/US-41/Tara Boulevard approximately ¼ mile south of the I-75 interchange. Twelve driveways are on the southbound section within a segment that is less than 1000 feet long, between Arrowhead Boulevard and Parkwood Way/Mt. Zion Road. Average driveway spacing of this area is only 83 feet, significantly less than the recommended driveway spacing of 230 feet for facilities posted speed limit of 45 mph.

Figure 4-51 illustrates five tightly spaced signalized intersections along SR 54/Jonesboro Road near the I-75 interchange. Current spacing does not meet GDOT’s minimum spacing requirement of 1,320 feet for signalized urban roadway sections.



Figure 4-50: Driveway Spacing South of the I-75 Interchange at SR 3/US-19/US-41/Tara Boulevard



Figure 4-51: Signalized Intersection Spacing near I-75 Interchange at SR 54/Jonesboro Road



Access Management Needs

Access management can be achieved through a variety of methods, including traffic signal upgrades, provision of medians, turn lanes, and restrictions, adequate spacing of driveways, and intelligent transportation systems. Based on the analysis presented in this document and in the subarea analysis, the following locations may need access management measures:

- SR 3/US-19/US-41/Tara Boulevard south of the I-75 interchange
- SR 54/Jonesboro Road near the I-75 interchange
- SR 85
- SR 139/Riverdale Road
- Forest Parkway east of Jonesboro Road

4.5.8 ROADWAY CONNECTIVITY

Roadway connectivity can be evaluated based on how well a roadway network connects destinations. This section summarizes areas with potential connectivity needs.

Roadway Connectivity Needs

An assessment of east-west connectivity presented indicates that there is a need for improved east-west connectivity in and around the City of Jonesboro, specifically railroad crossings that would allow for unimpeded flow of traffic. As shown in **Figure 4-52**, SR 138 is the only state route that connects between the western and eastern ends of the county, through the SR 138 Jonesboro bypass. McDonough Road provides east-west connection through south Clayton from/to Fayette and Henry Counties. Both these roads are classified as principal arterials. A few other roads provide partial east-west connections, including SR 331/Forest Parkway in north Clayton, and SR 54/Fayetteville Road and Lake Jodeco Road near Jonesboro. Some of these roads intersect with major north-south freight railways operated by Norfolk Southern between Atlanta and Macon. At-grade rail crossing locations can pose operations and safety issues and can also potentially hinder movement of people and goods between east and west Clayton.

4.5.9 BRIDGES

Of the 159 bridges on the Clayton County roadway network, 65 are on county roads, 30 are on state routes, 62 are on interstates and associated interchanges, and 4 are located within and owned by H-JAIA.

All bridges in Clayton County are presented by sufficiency rating in **Figure 4-53**. GDOT updates bridge sufficiency ratings based on bi-annual inspections as required by the FHWA. GDOT bridge inspectors assign sufficiency ratings that take into consideration the bridges' structural condition, potential functional obsolescence, and importance to the traveling public. Ratings go from 0 to 100, where a score of 0 represents a bridge entirely deficient while a score of 100 represents a structurally acceptable bridge.



Figure 4-52: Roadways Providing East-West Connections

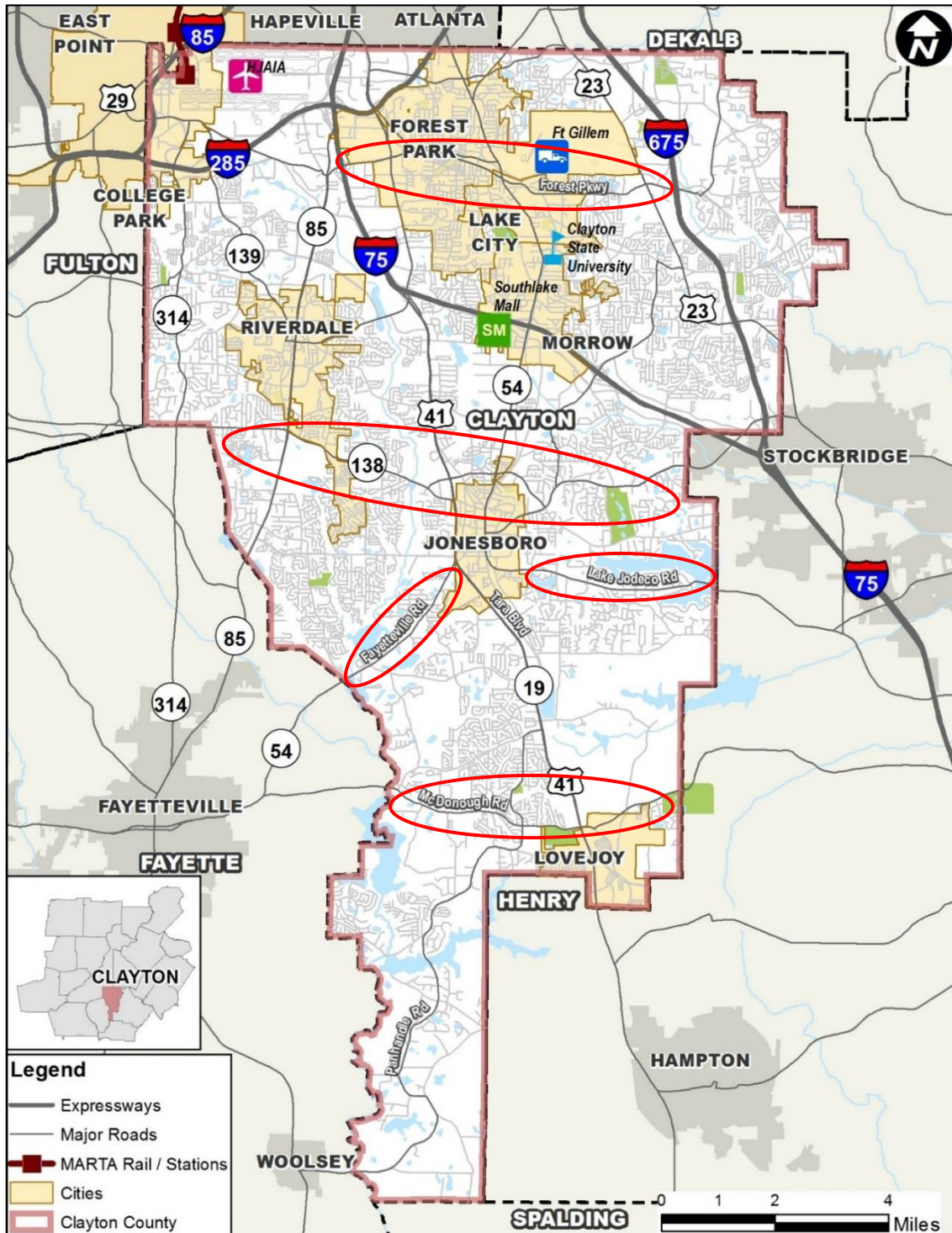
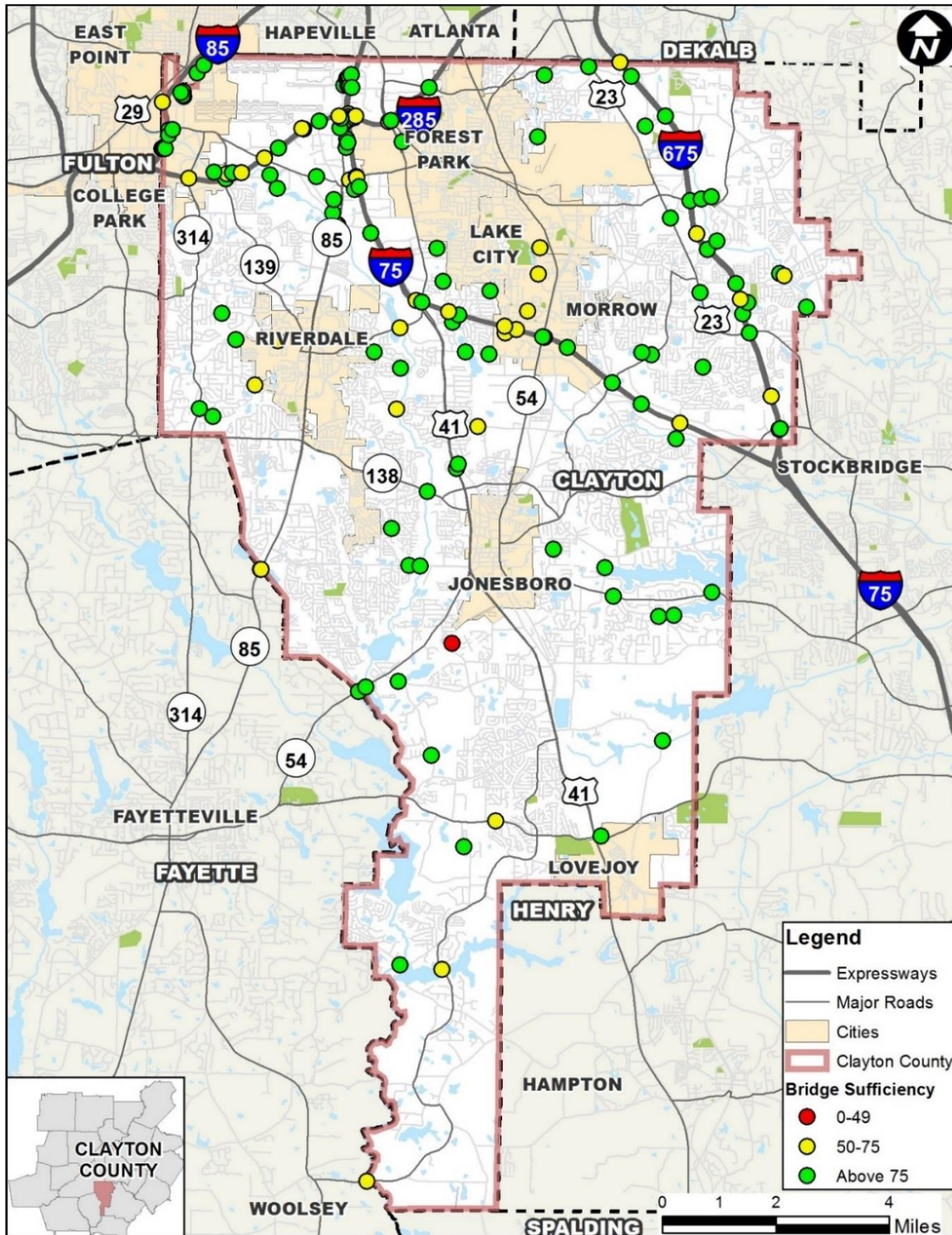


Figure 4-53: Clayton County Bridge Locations and Sufficiency Ratings



Source: GDOT – Project Search Portal, Geoportal



Through consultation with structural and bridge engineers it was established that a bridge with a sufficiency rating above 75 is likely to maintain an acceptable rating for at least 20 years given adequate maintenance. Bridge structures with a sufficiency rating between 50 and 75 may have a useful life of less than 20 years and could potentially require major rehabilitation or reconstruction work during the time horizon covered by this study. Bridges with a sufficiency rating of 50 or lower were identified as potentially deficient. There are 2 bridges with sufficiency ratings less than 50, and 38 bridges with sufficiency ratings greater than 50 but less than 75. It should be noted that sufficiency ratings account for a variety of structural, cosmetic and safety factors. Thus, a low sufficiency score does not necessarily signal impending failure.

GDOT inspectors also perform a status evaluation that considers:

- If the bridge is Functionally Obsolete, or has a design that is no longer appropriate for its current task.
- If the bridge is structurally deficient, with a defect present in the deck, superstructure or substructure.

There are five bridges that are rated functionally obsolete. There is one structurally deficient bridge in Clayton County, the bridge on Rex Circle over Big Cotton Indian Creek (063-0086-0), owned by Clayton County. It has a sufficiency rating of 8.0 and is intended for replacement based on load capacity or roadway geometry. Bridges in need of rehabilitation or replacement are mapped in **Figure 4-54**.

Two of the bridges included in this table are programmed for replacement in the next few years (See planned and programmed projects in Table 5-1). The bridge over the Flint River on Valley Hill Road (063-0076-0) is programmed for replacement in 2019 as a part of the widening of Valley Hill Road from Upper Riverdale Road to Battle Creek Road. The bridge over Camp Creek on SR 85 (113-0013-0) is programmed for replacement and widening in 2020.

Table 4-34: Bridges with Sufficiency Ratings 75 or Below in Clayton County

Bridge ID	Description	Sufficiency Rating	Year Constructed	Need
063-5016-0	Brown Road at Swamp Creek	10.8	1958	Replacement, Structurally Deficient, Functionally Obsolete
063-0076-0	Valley Road at Flint River	55.0	1955	Rehabilitation
063-5025-0	Huie Road at Jesters Creek Tributary	57.2	1961	Rehabilitation, Functionally Obsolete
063-0052-0	I-285 at Flint River	59.0	1959	Rehabilitation
063-5057-0	10-28 Run (NLVR) at I-285	61.1	2006	Rehabilitation
113-0013-0	SR 85 NBL at Camp Creek	62.5	1947	Rehabilitation
063-0067-0	Fielder Road at I-75	63.2	1969	Rehabilitation
063-0068-0	Bethsaida Road Road at Camp Creek	63.2	1969	Rehabilitation
113-0020-0	Hampton Road at Flint River	63.3	1974	Rehabilitation



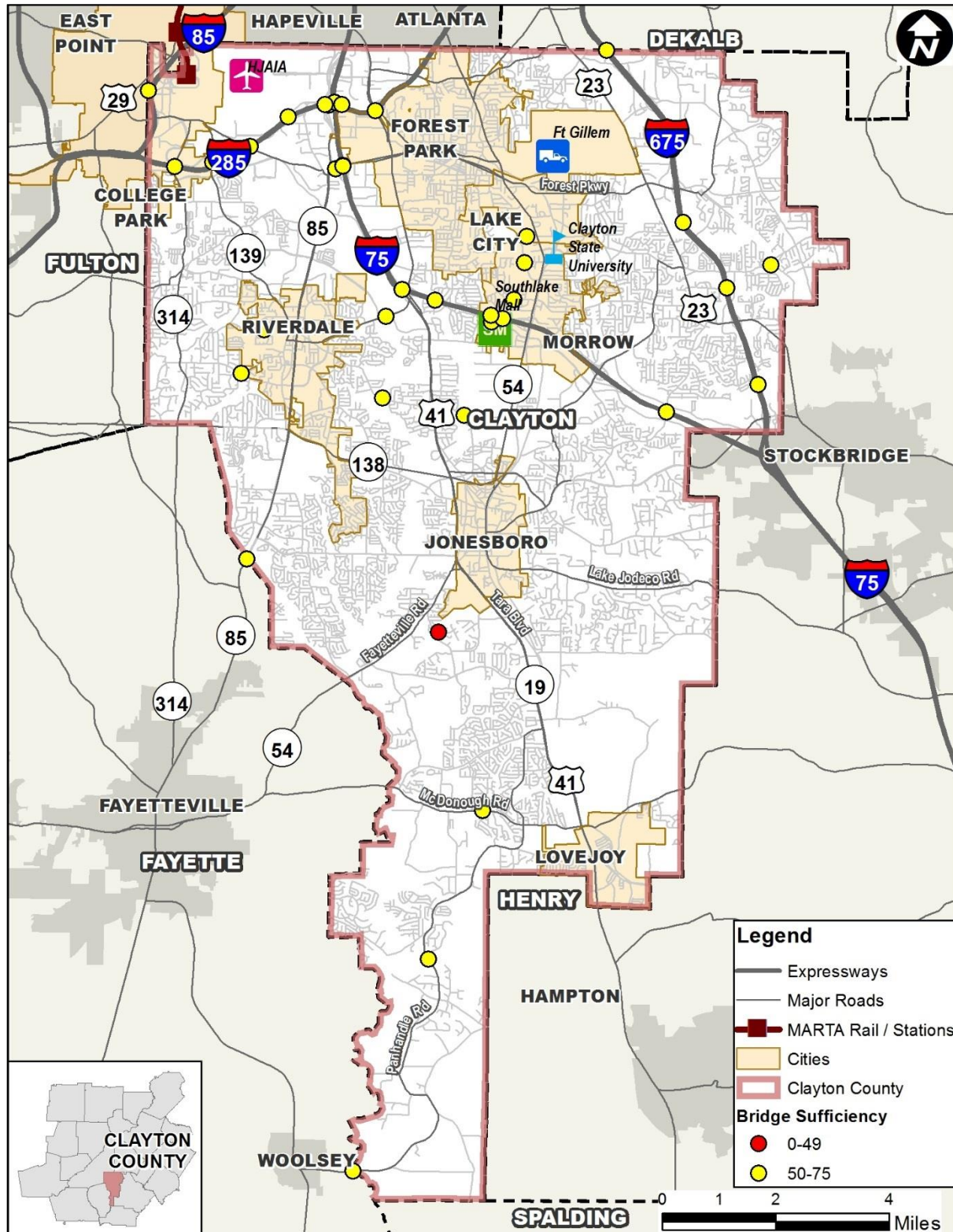
Bridge ID	Description	Sufficiency Rating	Year Constructed	Need
063-0021-0	SR 139 & WBL at Sullivan Creek	65.7	1959/1983	Rehabilitation
063-0081-0	Battle Creek Road at Jestors Creek	68.7	1964/1997	Rehabilitation
063-0077-0	Upper Riverdale Road at Flint River	69.0	1962/1981	Rehabilitation
063-0054-0	I-285 at SR 314	69.4	1985	Rehabilitation
063-0075-0	Morrow Road at Jestors Creek Tributary	69.5	1965	Rehabilitation, Functionally Obsolete
063-0035-0	I-75 at Jestors Creek Tributary	70.0	1965	Rehabilitation
063-0036-0	I-75 at Jestors Creek	70.0	1965	Rehabilitation
063-0039-0	I-75 at Jestors Creek Tributary	70.0	1965	Rehabilitation
063-0053-0	I-285 at Sullivan Creek	70.0	1959/2003	Rehabilitation
063-0127-0	I-675 at Panther Creek	70.0	1984	Rehabilitation
063-0128-0	I-675 at Tar Creek	70.0	1984	Rehabilitation
063-0129-0	I-675 at Upton Creek	70.0	1984	Rehabilitation
063-0130-0	I-675 at Big Cotton Indian Creek	70.0	1984	Rehabilitation
063-0133-0	I-675 at Conley Creek	70.0	1984	Rehabilitation
063-0045-0	I-285 Ramp at I-285 Ramp TO I-75 NBL	70.4	1954/1984	Rehabilitation
063-5067-0	River Glenn Drive at Camp Creek Tributary	70.8	1990	Rehabilitation
063-0027-0	SR 331 at Mud Creek	70.8	1959	Rehabilitation
063-0029-0	SR 331 (WBL) at I-75 and (1) Ramp	70.8	1959	Rehabilitation
063-5012-0	Reynolds Road at Jestors Creek Tributary	71.2	1964	Rehabilitation, Functionally Obsolete
063-5073-0	Rex Road at Big Cotton Indian Creek	71.9	2008	Rehabilitation
063-5079-0	Ole Town Morrow Road at Jestors Creek	71.9	2008	Rehabilitation
063-5072-0	Conrac Access Roadway at I-85	71.9	2008	Rehabilitation
063-0049-0	I-285 and Ramps at Mud Creek	72.0	1959	Rehabilitation
063-5017-0	Panhandle Road at Shoal Creek	72.1	1983	Rehabilitation
063-5042-0	US 19 SR3 Conn. at I-75 (NBL & SBL)	72.9	1996	Rehabilitation
063-0105-0	I-285 at I-285 Ramp TO I-75 SB	73.1	1985	Rehabilitation
063-0028-0	SR 331 (EBL) at I-75 and (1) Ramp	74.3	1959	Rehabilitation
063-0025-0	Old Dixie Highway at I-285 & (2) I-285 RampS	74.3	1959	Rehabilitation
063-0102-0	I-75 (NBL Ramp) at I-75	74.5	1985	Rehabilitation
063-0065-0	McDonough Road at Hurricane Creek	74.9	1974	Rehabilitation
063-0063-0	North Bridge Road at Flint River	82.1	1980	Rehabilitation, Functionally Obsolete

* Programmed for replacement

Source: GDOT – Project Search Portal, Geoportal



Figure 4-54: Bridge Needs in Clayton County



Source: GDOT – Project Search Portal, Geoportal



4.5.10 SYSTEM PRESERVATION

This section presents general roadway maintenance needs, as well as specific roadway segments on the state network in need of maintenance.

State Route Maintenance Needs

The condition of the road is a major factor affecting ride comfort and quality. Roughness of a road surface is measured using the International Roughness Index (IRI). IRI is usually reported in inches per mile, with higher rating indicating rougher roads. FHWA considers a roadway with IRI of 95 inches per mile or less to have good ride quality, and a roadway with an IRI of 170 inches per mile or less to have acceptable ride quality. Data on quality of pavement and resulting ride quality was collected from HPMS. 2015 HPMS dataset for Clayton County includes IRI measurements for about 66 miles of major roadways. **Figure 4-55** illustrates performance on major roads in Clayton County for which IRI data was available in HPMS.

Ride quality on majority of roadway segments in Clayton County for which IRI measurements were available was rated “good” at 95 inches or less per mile. Segments with IRI ratings of more than 170 inches per mile were determined to have unacceptable ride quality and need maintenance, based on FHWA guidance.

The areas of greatest need are found on the following facilities, which are not programmed for improvements which would improve pavement quality:

- SR 138 from North Avenue to Stockbridge Road (Jonesboro northern bypass)
- SR 85 from I-285 to Forest Parkway

Maintenance Needs for the Local Network

The County maintains the roadway network made up of locally owned facilities. The standard desired by Clayton County is a 15-year maintenance cycle, in which all the roads on the local network are maintained once every 15 years. As presented in **Table 4-35**, the annual cost of achieving this standard for all local roads would be \$19.7 million, and \$15.6 million for Unincorporated Clayton County network. The cost-per-mile for maintenance assumed in this analysis is based on Clayton County’s February 2018 contractor let for local road maintenance.

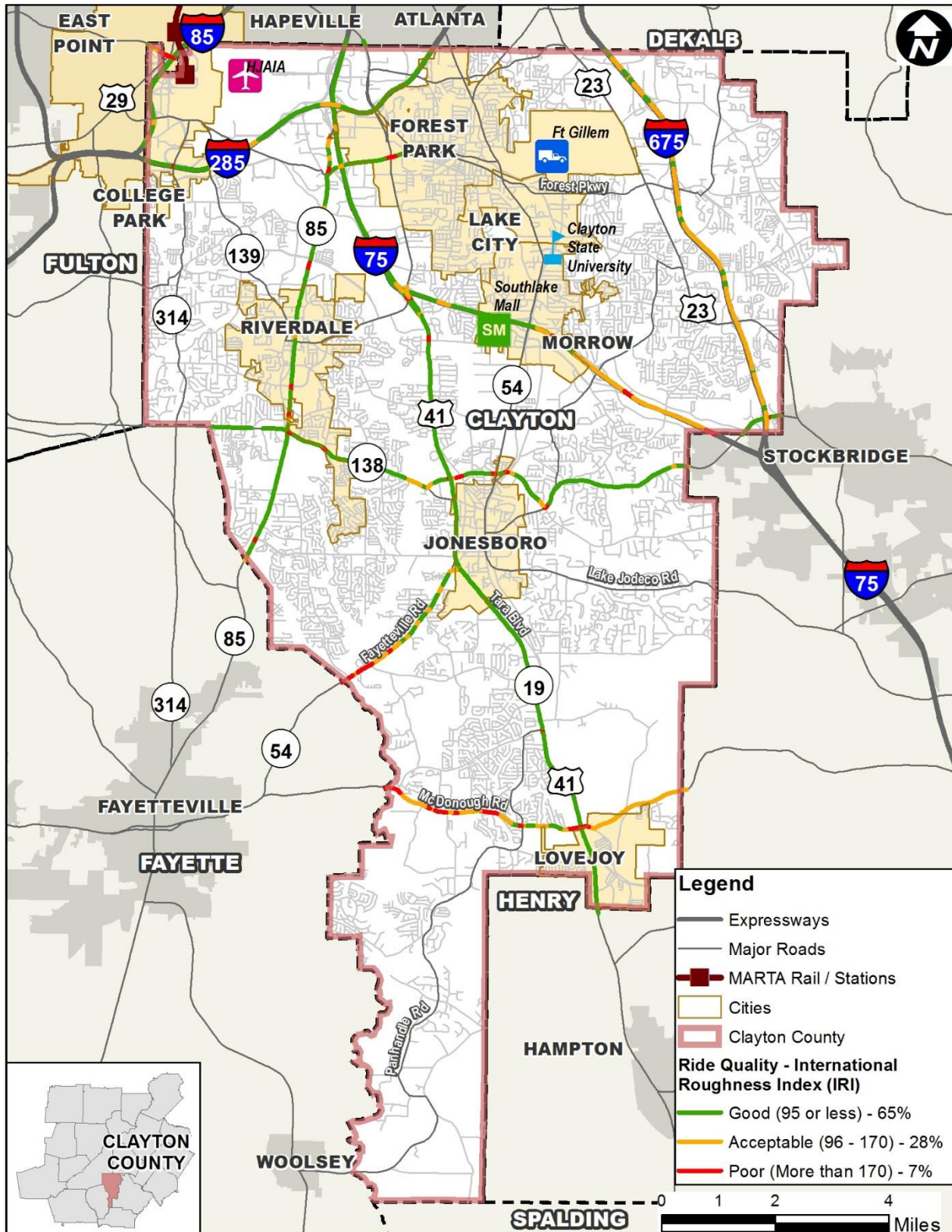
Table 4-35: Costs of a 15-year Maintenance Cycle for the Local Road Network in Clayton County

	Length, in Miles	Cost per mile	Cost of One Maintenance Cycle	Annual Cost for 15-year Maintenance Cycle
Unincorporated	869	\$270,000	\$234,630,000	\$15,642,000
Forest Park	79	\$270,000	\$21,330,000	\$1,422,000
Jonesboro	29	\$270,000	\$7,830,000	\$522,000
Lake City	18	\$270,000	\$4,860,000	\$324,000
Lovejoy	18	\$270,000	\$4,860,000	\$324,000
Morrow	29	\$270,000	\$7,830,000	\$522,000
Riverdale	50	\$270,000	\$13,500,000	\$900,000
Total	1092	\$270,000	\$294,840,000	\$19,656,000

Source: GDOT, Clayton County



Figure 4-55: Ride Quality on Roads in Clayton County



Source: HPMS 2015 Dataset for Georgia, FHWA



4.6 Freight

This section gives an overview of the freight-related needs in Clayton County as identified by a panel interview and recent, relevant statewide and regional studies. The most recent *Atlanta Regional Freight Mobility Plan Update* (2016) identified seven freight clusters, areas that generate and attract disproportionately high volumes of freight. **Figure 4-56** shows the Airport/Clayton freight cluster identified in this study which encompasses much northern Clayton County.

4.6.1 TRUCK FREIGHT

This analysis concentrates on truck freight routes in Clayton County, defined as facilities that are in either:

- The National Highway Freight Network (NHFN), which classifies I-75 and I-285 in Clayton County as part of the Primary Highway Freight System (PHFS); I-85 and I-675, as other interstate systems not on the PHFS.
- ARC's *Atlanta Strategic Truck Route Master Plan* (ASTRoMaP) (2010) regional truck route network:
 - US-23 north of SR 331
 - SR 3/US-19/US-41/Tara Boulevard
 - SR 54/Jonesboro Road west of SR 3/US-19/US-41/Tara Boulevard
 - SR 138
 - SR 331/Forest Parkway between US-23 and SR 3/US-19/US-41/Tara Boulevard

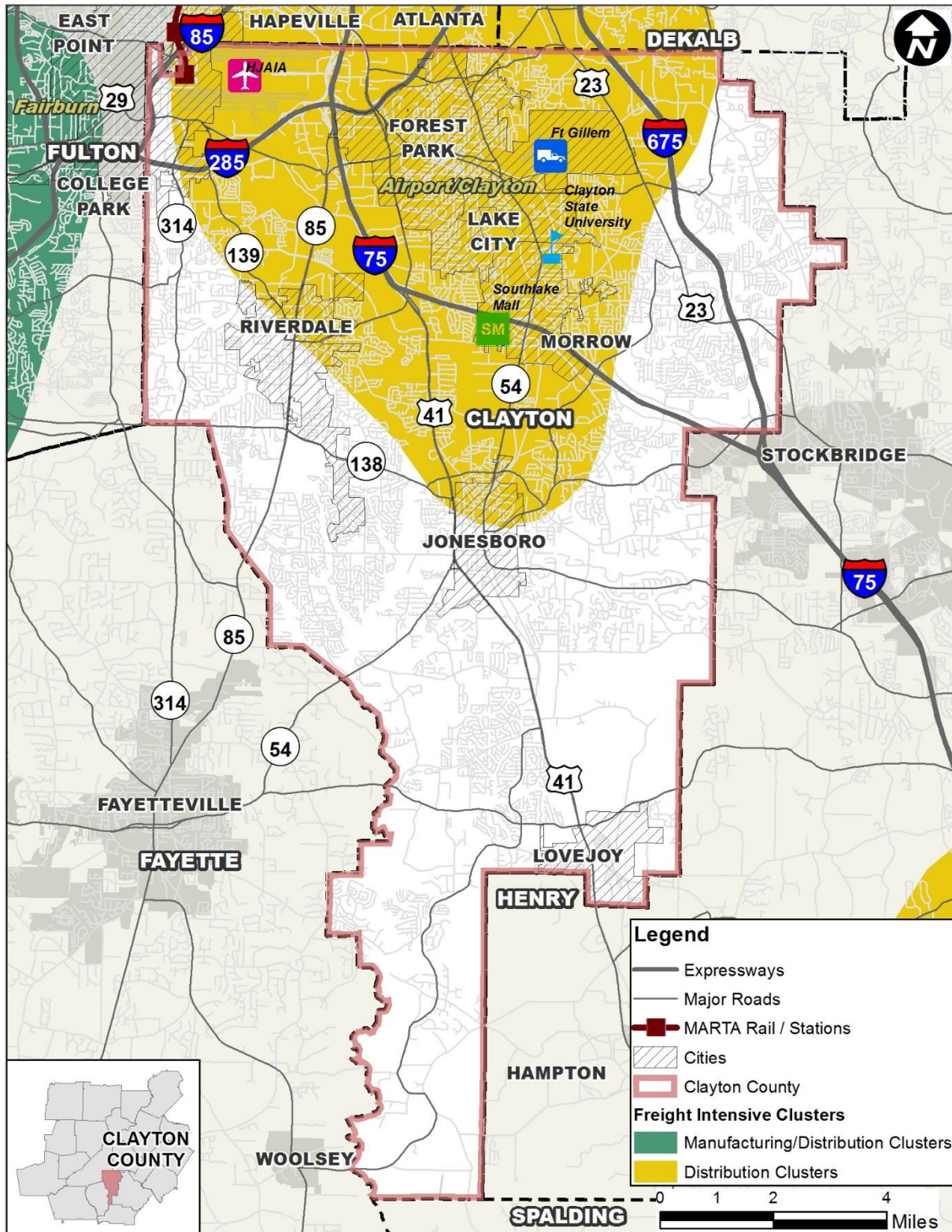
The National Highway Freight Network (NHFN) was established as a part of Fixing America's Surface Transportation Act (FAST Act). Freight-specific federal funding is available for roads in the NHFN. Under the NHFN, I-75 and I-285 in Clayton County are classified as part of the Primary Highway Freight System (PHFS); I-85 and I-675, as other interstate systems not on the PHFS. Figure 4-57 illustrates national and regional truck routes in and around Clayton County.

Several major roadways were also defined as regional truck routes as part of the *ARC's Atlanta Strategic Truck Route Master Plan* (ASTRoMaP), adopted in 2010. Clayton County highways included in this plan as regional truck routes include:

- US 23 north of SR 331
- SR 3/US 19/US 41/Tara Boulevard
- SR 54/Jonesboro Road west of SR 3/US 19/US 41/Tara Boulevard
- SR 138
- SR 331 between US 23 and SR 3/US 19/US 41/Tara Boulevard



Figure 4-56: Airport/Clayton Freight Cluster in ARC's Latest Freight Mobility Plan



Source: Atlanta Region Freight Mobility Plan Update - ARC



Long distance truck movements through Clayton County occur primarily on the interstate facilities in the northern half of the county, I-75, I-675, I-85, and I-285. I-285 is the designated truck route around the City of Atlanta, thus most of the freight that moves through the Atlanta metro area utilizes I-285. I-75 is a major thoroughfare for freight going to or from the Port of Savannah via I-16. I-675 is a short link between I-75 and I-285 that connects with I-285 northeast of I-75. I-85 is a major route between Montgomery, Alabama and Atlanta.

Most truck freight originating in Clayton County comes from H-JAIA and the surrounding area in northern Clayton County. Fort Gillem, which was deactivated in 2011 as part of the Department of Defense Base Realignment and Closure (BRAC) process, is in the process of being redeveloped as an industrial complex called Gillem Logistics Center. This development is expected to include a 1,168-acre master planned industrial park by the first quarter of 2018, potentially adding another eight (8) million square feet of industrial space to the county's industrial inventory of approximately 54.5 million square feet (Clayton County Market Report, Atlanta Business Chronicle, May 2016).

Congestion and Travel Time Reliability on Freight Routes

Segments of the following ARC-identified truck routes in Clayton County were indicated to have volumes nearing or exceeding capacity:

- SR 3/US-19/US-41/Tara Boulevard
- SR 138 near SR 85
- Forest Parkway near Jonesboro Road
- US 29

The *Atlanta Regional Freight Mobility Plan Update* (2016) also found reliability to be very poor on I-75, I-675, SR 3/US-19/US-41/Tara Boulevard and I-285. The report noted that heavy delays at the I-75 interchange with I-285 are typical. *Georgia Statewide Freight and Logistics Plan* (2011) identified the I-75 corridor as having the potential to be one of the most congested long-haul corridors in the state by 2050.

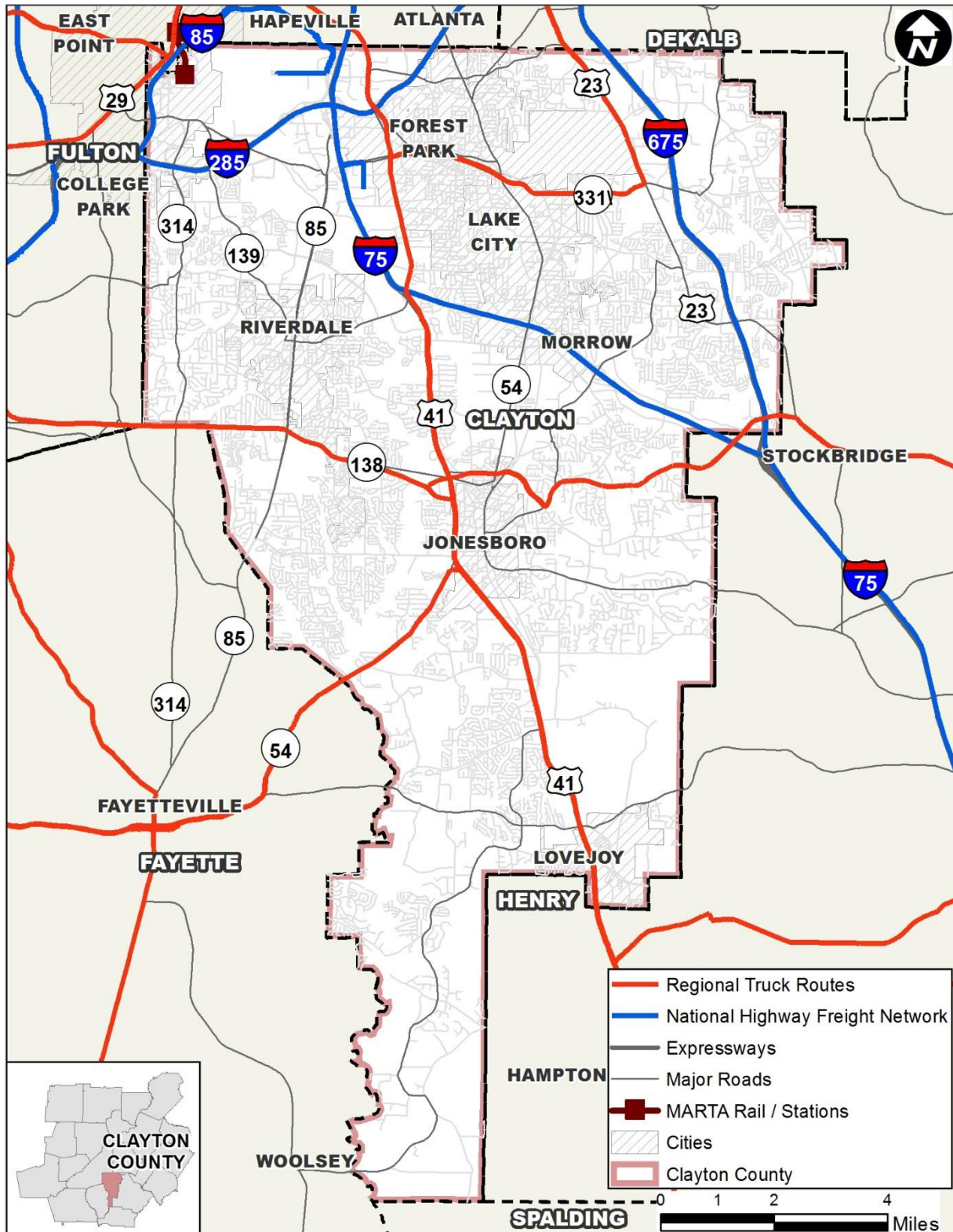
Safety on the Freight Network

The *Atlanta Regional Freight Mobility Plan Update* (2016) identified two non-interstate corridors in Clayton County as having relatively high crash rates compared to the rest of the region:

- SR 3/US-19/US-41/Tara Boulevard from I-75 to SR 138/North Avenue - estimated crash rate of 1,117 per year per 100 million truck miles traveled
- Forest Parkway from SR 54/Jonesboro Road to US-23/SR 42/Moreland Avenue - estimated crash rate of 967 crashes per year per 100 million truck miles traveled



Figure 4-57: Truck Routes in Clayton County



Source: ARC Open Data Portal



Figure 4-58 presents relative density of freight-related crashes in Clayton County from 2014 to 2016, based on GDOT's GEARS dataset. The following locations have high freight-related crash density relative to the county:

- I-75 and I-285 interchange
- Forest Parkway at I-675
- Anvil Block Road at I-675
- SR 85 and Forest Parkway and Forest Parkway at I-75
- SR 139 at I-285
- SR 3/US-19/US-41/Tara Boulevard at I-75
- Mt. Zion Boulevard at I-75

Truck Parking

In 2012, MAP-21 legislation mandated an electronic logging device (ELD) rule, which went into effect December 2017, that directs all motor carriers to install automatic computers that monitor a driver's hours of service. Intended to help create a safer work environment for drivers and the public, the ELD dictates that truck drivers may only drive for a maximum of 11 hours per day, after which the driver must stop for a minimum of 10 hours. This makes parking for commercial trucking vehicles a major concern, even greater than traffic, especially in areas near cargo-oriented developments like the Gillem Logistics Center.

Clayton County's current zoning disallows the parking of semi-trailers and other large vehicles on streets in residential areas (Sec 62-204). Truck parking is allowed in commercial areas. Clayton County has three existing truck stops, two accessible from I-75 and one from I-675. The *Atlanta Regional Truck Parking Assessment* estimates that in Clayton County by 2045, there will be deficits of 900 spaces on I-285, up to 300 spaces on I-75, and 150 spaces on I-675, making it the point of convergence for needed truck parking in the region.

Truck Freight Needs

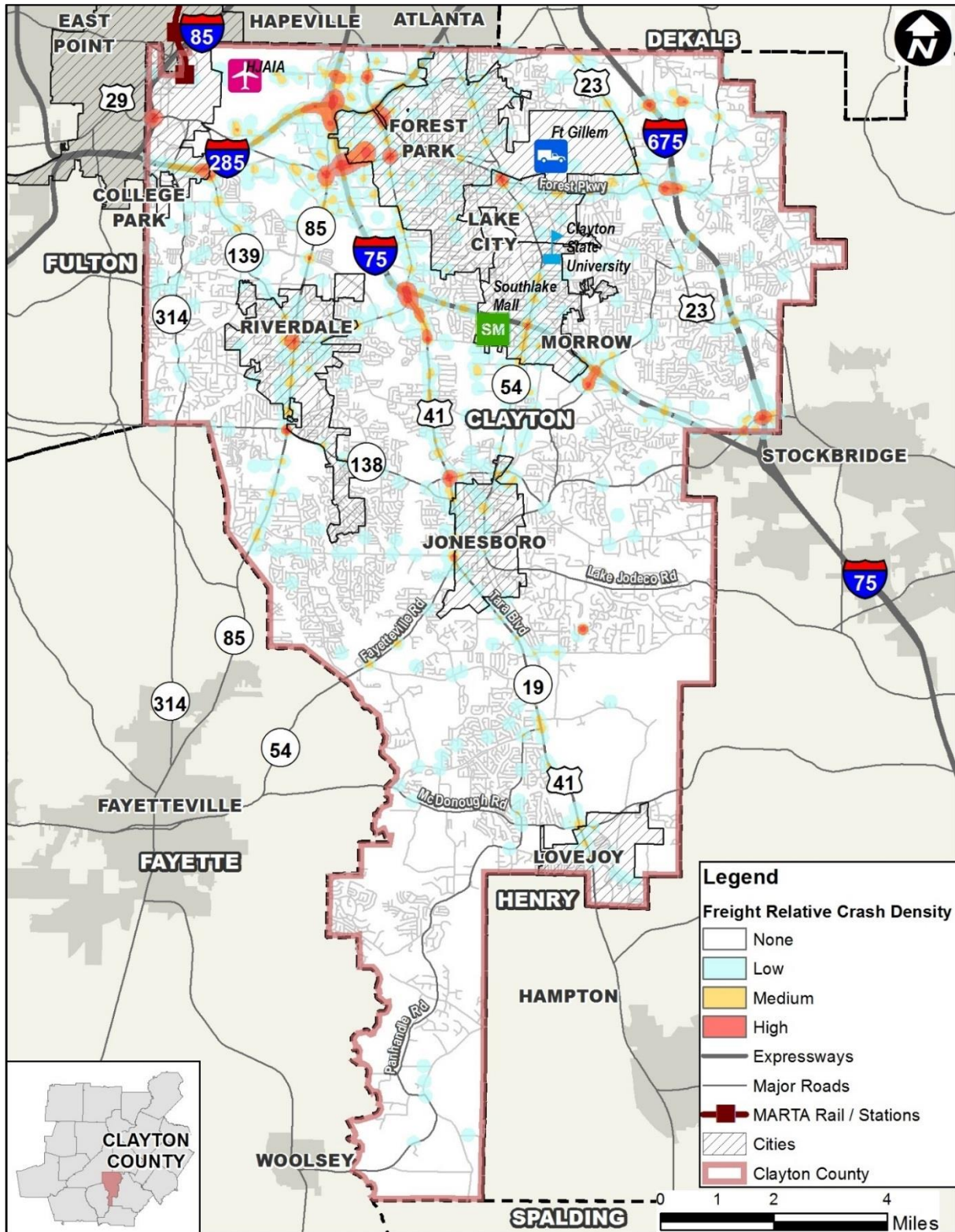
To facilitate the safe movement of goods, safety and operational improvements may be needed on the following facilities and intersections:

- SR 3/US-19/US-41/Tara Boulevard
- Forest Parkway from SR 54/Jonesboro Road to US-23/SR 42/Moreland Avenue
- Forest Parkway at I-675
- Anvil Block Road at I-675
- SR 85 and Forest Parkway and Forest Parkway at I-75
- SR 139 at I-285
- SR 3/US-19/US-41/Tara Boulevard at I-75
- Mt Zion Boulevard at I-75

There is a need both for more truck parking in the county and region, and for careful consideration as to its siting to support residential quality of life.



Figure 4-58: Freight Relative Crash Density on Freight Routes in Clayton County, 2014-2016



Source: GDOT GEARS Database



4.6.2 FREIGHT RAIL

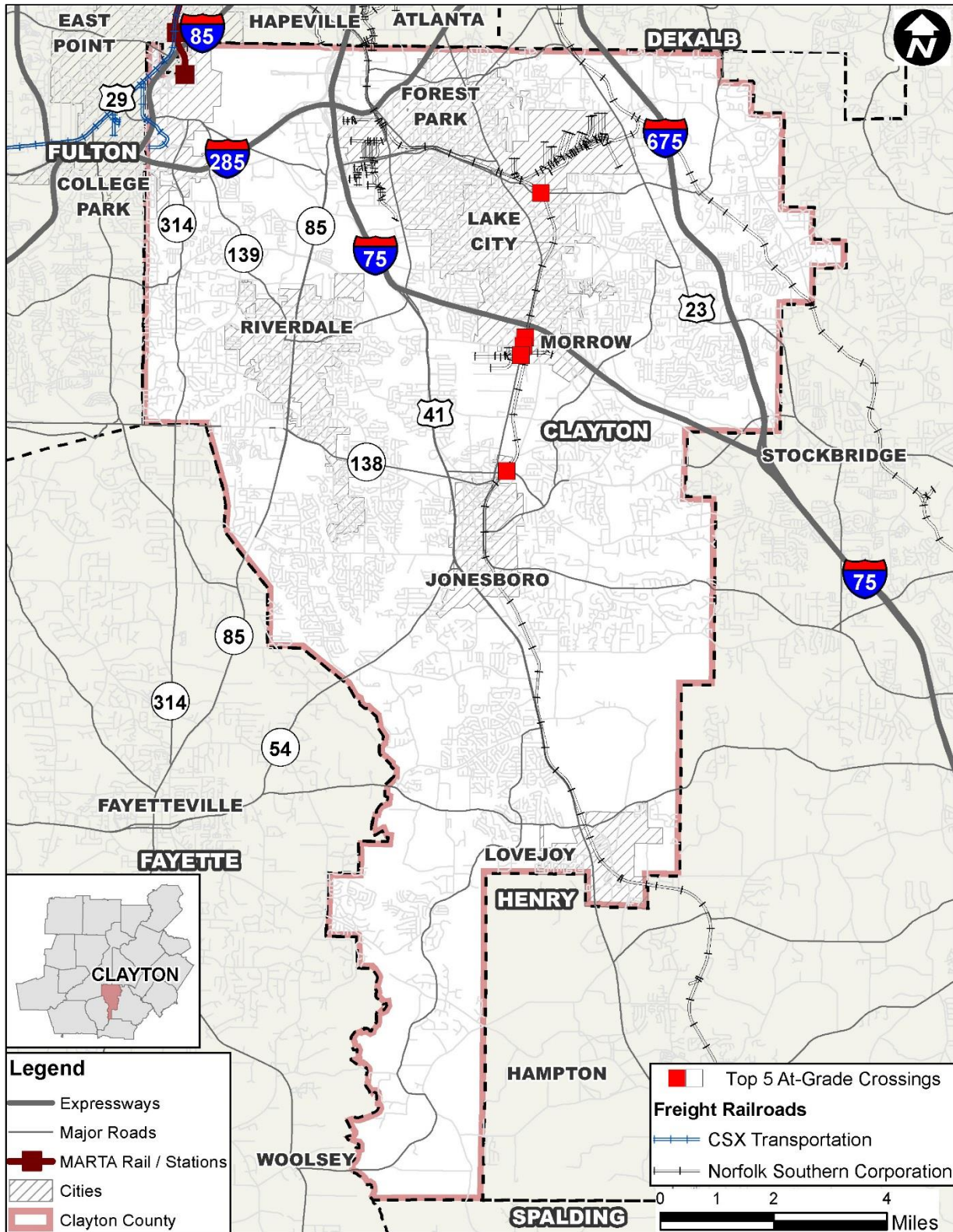
Figure 4-59 illustrates the coverage of freight railways in Clayton County by operator. Freight rail information taken from the *Georgia State Rail Plan* (2015) and *Georgia Statewide Freight and Logistics Plan* (2011). There are three Class I rail lines that pass through Clayton County:

- The “Atlanta South” subdivision operated by Norfolk Southern Corporation (NS) between Atlanta and Macon, which is estimated to see between 15 and 25 trains per day with an annual traffic density of 40+ million gross tons (MGT). This line does not experience bottlenecks under existing traffic conditions but is expected to experience significant growth over the upcoming years.
- The “Griffin” subdivision operated by NS, which runs with unlisted frequency and has annual traffic density of between 1 and 5 MGT. It does not experience bottlenecks under existing conditions and is not expected to see a significant increase in traffic, but was nonetheless identified as being deficient because clearances along the route do not meet the industry standard of 22’-6” required to carry double stack cars.
- A major east-west link operated by CSX Transportation (CSXT) between Atlanta and Montgomery, Alabama), a small segment of which lies in the extreme northwestern portion of Clayton County. This line was reported to carry 17 trains per day with a traffic density of 25-43 MGT. It experiences bottlenecks under existing conditions and is expected to have significant growth in traffic along the route.

The *Georgia State Rail Plan* (2015) identified a project that would construct an intermodal facility on the east side of H-JAIA that would provide intermodal shippers access to the Norfolk-Southern main line between Atlanta, Lovejoy, and Macon.



Figure 4-59: Rail Facilities in Clayton County



Source: GDOT



Rail-Roadway Intersections

According to the Federal Railroad Administration (FRA), Office of Safety Analysis, there are 69 locations where railroads and roadways intersect in Clayton County, as listed in **Table 4-36**. Of these locations, 49 are at-grade crossings accessible to the public. Of these public at-grade crossings approximately 60 percent have a full combination of gates, flashing lights, and bells while the remainder are controlled by only flashing lights, crossbucks, or no signs at all.

Table 4-36: Railroad Crossings in Clayton County

Crossing ID	Railroad	Public/Private	Highway	Cross Street	Position of Crossing	Warning Devices
935005T	NS	Public	CR1351	REX RD	RR Under Grade	N/A
935004L	NS	Public	SR413	I-675 SB	RR Under Grade	N/A
947286N	NS	Public	I-675	I-675 NB	RR Under Grade	N/A
935308C	NS	Private		INDUSTRIAL	RR at Grade	Signals
935309J	NS	Public	CR 1372	SOUTHERN RD	RR at Grade	Crossbucks
935310D	NS	Private		INDUSTRIAL	RR at Grade	Signals
935311K	NS	Private		INDUSTRIAL	RR at Grade	Signals
935312S	NS	Public	US ARMY	S 18TH ST	RR at Grade	Crossbucks
935313Y	NS	Public	US ARMY	S 11TH ST	RR at Grade	Crossbucks
935314F	NS	Private		YARD	RR at Grade	Signals
935315M	NS	Private		YARD	RR at Grade	Signals
935316U	NS	Private		YARD	RR at Grade	Signals
935317B	NS	Private		INDUSTRIAL	RR at Grade	Signals
935318H	NS	Private		INDUSTRIAL	RR at Grade	Signals
904080U	NS	Public	CR208	OLD DIXIE HWY-1	RR at Grade	Flashing Lights
904081B	NS	Public	CR1373	SOUTHLAKE PKWY	RR at Grade	Gates, Lights, Bells
904099L	NS	Public	CR 208	OLD DIXIE HWY-2	RR at Grade	Flashing Lights
904581Y	NS	Public	CR 1551	FOREST PARKWAY EX	RR at Grade	Gates, Lights, Bells
904115T	NS	Public	CR 1349	TERRELL PARKWAY	RR Under Grade	N/A
718144S	NS	Public	CR 1328	NOAH'S ARK RD	RR at Grade	Gates, Lights, Bells
718147M	NS	Public	CR 537	FREEMAN RD	RR at Grade	Gates, Lights, Bells
718150V	NS	Public	CS 603	E LOVEJOY RD	RR at Grade	Crossbucks
718152J	NS	Public	CS606	TALMADGE RD	RR at Grade	Flashing Lights
050340X	CSX	Public	CS 103101	LESLEY DRIVE	RR at Grade	Gates, Lights, Bells
904841P	NS	Public	CR 1570	CLAYTON STATE BLD	RR at Grade	Gates, Lights, Bells
904842W	NS	Public	SR138	JONESBORO BYPASS	RR at Grade	Gates, Lights, Bells
904843D	NS	Public	CS 1167	SOUTHLAKE PKWY	RR at Grade	Gates, Lights, Bells
718389H	NS	Public	CR 1350	ANVILBLOCK RD	RR Under Grade	N/A
718149B	NS	Public	SR920	MCDONOUGH RD	RR Under Grade	N/A
718123Y	NS	Public	SR401	I-75	RR Over Grade	N/A
718119J	NS	Public	CS.1561	HARPER DR.	RR Over Grade	N/A



Crossing ID	Railroad	Public/Private	Highway	Cross Street	Position of Crossing	Warning Devices
717983R	NS	Public	SR407	I 285 SR 407	RR Over Grade	N/A
717982J	NS	Public	SR3	OLD DIXIE HWY	RR Under Grade	N/A
717970P	NS	Public	SR54	JONESBORO RD	RR Over Grade	N/A
929887A	NS	Public	ped	WALKWAY	RR at Grade	No Signs or Signals
717980V	NS	Public	CR208 - IND SPUR TRK	OLD DIXIE HWY	RR at Grade	Gates, Lights, Bells
717968N	NS	Public	CR 72	BURKS DRIVE	RR at Grade	No Signs or Signals
717971W	NS	Public	CS 865	PHILLIPS DR.	RR at Grade	Gates, Lights, Bells
717972D	NS	Public	CS 899	ASH ST.	RR at Grade	Gates, Lights, Bells
717973K	NS	Public	CS 781	LAKE DR.	RR at Grade	Gates, Lights, Bells
717974S	NS	Public	CS 733	WEST ST.	RR at Grade	Gates, Lights, Bells
717975Y	NS	Public	CS 755	HALE RD	RR at Grade	Gates, Lights, Bells
717976F	NS	Public	CR 308	KENNEDY RD	RR at Grade	Crossbucks
717977M	NS	Public	CR 309	BARNETT RD.	RR at Grade	Crossbucks
717979B	NS	Public	CR 211	LAKE MIRROR PL.	RR at Grade	Crossbucks
717981C	NS	Public	UNKNOWN	OLD DIXIE HWY.	RR at Grade	Crossbucks
717985E	NS	Public	CS 1162	CHARLES GRANT PKW	RR at Grade	Gates, Lights, Bells
718394E	NS	Public	CR	MIL WALK	RR at Grade	Gates, Lights, Bells
718395L	NS	Public	CR 109	HOMESTEAD RD.	RR at Grade	Gates, Lights, Bells
718120D	NS	Public	CR 31	OXFORD DR	RR at Grade	Gates, Lights, Bells
718121K	NS	Public	CR 1348	LAKE HARBIN RD	RR at Grade	Gates, Lights, Bells
718122S	NS	Public	CS 1159	ADAMSON PRKWY	RR at Grade	Gates, Lights, Bells
718124F	NS	Public	CS 1340	MT ZION RD	RR at Grade	Gates, Lights, Bells
718125M	NS	Public	CS1169	BARTON RD	RR at Grade	Crossbucks
718127B	NS	Public	SR 54	JONESBORO RD	RR at Grade	Flashing Lights
718128H	NS	Public	CR722	COMMERCE RD	RR at Grade	Crossbucks
718130J	NS	Public	CS1169	BARTON RD	RR at Grade	Crossbucks
718135T	NS	Public	CR32	OTIS CAMP RD	RR at Grade	No Signs or Signals
718136A	NS	Public	CR1342	BATTLECREK. RD.	RR at Grade	Gates, Lights, Bells
718138N	NS	Public	CR 4	OLD MORROW RD	RR at Grade	Crossbucks
718140P	NS	Public	CS571	JOHNSON ST.	RR at Grade	Gates, Lights, Bells
718141W	NS	Public	CR-2302	SPRING ST	RR at Grade	Gates, Lights, Bells
718142D	NS	Public	CS 552	W. MILLS ST	RR at Grade	Gates, Lights, Bells
718143K	NS	Public	CS 551	COLLEGE ST.	RR at Grade	Gates, Lights, Bells
718388B	NS	Public	CR126	E. CONLEY RD	RR at Grade	Gates, Lights, Bells
718391J	NS	Public	CR 127	GRANT ROAD	RR at Grade	Gates, Lights, Bells
718392R	NS	Public	CR 1575	BOLDERCREST RD	RR at Grade	Gates, Lights, Bells
935003E	NS	Public	CR 2565	BONSAL ROAD	RR at Grade	Crossbucks
717978U	NS	Public	GA 331 W	FOREST PARKWAY	RR Over Grade	N/A

Source: Highway-Rail Crossing Inventory Data, Federal Railroad Administration



The top five at-grade crossing locations in Clayton County AADT are detailed in **Table 4-37** and shown in Figure 4-59. While these locations have high AADT volumes they have a relatively low frequency of trains, varying from two to seven trains per day.

Table 4-37: Top 5 At-Grade Crossings in Clayton County, by AADT

Crossing ID	Railroad	Road Name	AADT	% Trucks	Trains/Day
904843D	Norfolk-Southern	Southlake Pkwy	30,830	5%	6
718127B	Norfolk-Southern	Jonesboro Road	28,210	4%	2
718124F	Norfolk-Southern	Mt Zion Road	21,380	2%	6
904581Y	Norfolk-Southern	Forest Pkwy	13,920	2%	6
904842W	Norfolk-Southern	Jonesboro Bypass	13,180	6%	7

Source: FRA Web Accident Prediction System (WBAPS)

The *Atlanta Regional Freight Mobility Study* identified the top ten at-grade crossings in terms of train volume in the Atlanta metro area. Clayton County was home to two of them, at Bouldercrest Road and at Mill Walk. These crossings each experience 47 trains per day and were reported to have truck AADT volumes of 25 and 39, respectively. These are both local roads with low traffic volumes – AADT of 500 on Bouldercrest and 1,940 on Mill Walk. There are also grade separated crossings less than a quarter mile away from both crossings.

Data from the FRA Office of Safety Analysis was obtained to inventory at-grade rail crossings and identify safety issues. During the period between 2007 and 2017, 17 crashes occurred at 11 at-grade rail crossings in Clayton County. During this time, no fatalities occurred, but there were seven injuries. Five of the seven injuries occurred during three collisions at the railroad crossing at Talmadge Road near Lovejoy Road in the City of Lovejoy. This crossing is controlled by flashing lights only. The remaining two injuries occurred during a crash at the crossing on East Conley Road, which is a gated crossing. Overall, at-grade crashes with trains are a small fraction of the crashes that occur in Clayton County; only 0.01% of crashes analyzed for this study between 2014 and 2016 involved collisions with trains.

Rail Freight Needs

Based on a safety analysis of at-grade rail crossings in the county, there may be a need for operational improvement projects at rail crossings with a history of at-grade crashes. It is assumed that implementation of potential high capacity transit investments in the county would address these needs in the future; however, the county may want to look at short-term strategies to enhance safety at these crossings.

4.7 Aviation and Air Cargo

Clayton County is served by one public airport, H-JAIA. H-JAIA is the world's busiest airport, with over 104 million passengers and nearly 650,000 tons of cargo moving through the airport in 2016. The airport provides more than 63,000 jobs onsite, many of which are filled by Clayton County residents. H-JAIA is accessible from I-85, I-285, and SR 3/US 41/Old Dixie Highway.

In May 2012, H-JAIA opened the Maynard H. Jackson Jr. International Terminal, the final major component recommended in the 1999 Master Plan, and began the planning cycle anew. The 2015 master plan for H-JAIA



details plans to modernize the domestic terminal, expand cargo operations and concourses, replace and expand the existing north and south parking decks, and construct a mixed-use commercial development on airport property.

4.7.1 AVIATION NEEDS

The *Hartsfield-Jackson Atlanta International Airport Master Plan (2015)* identifies several needs to maintain and improve service at the airport. These projects include:

- Domestic terminal through concourse D modernization
- Runway 9L end-around taxiway
- Domestic terminal parking structures reconstruction and expansion
- Expansion of Cargo Building E
- Runway 26L Extension
- Construction of Concourse G
- North Cargo relocation and expansion
- Construction of an additional closely spaced runway

H-JAIA is owned by the City of Atlanta and operated by the Atlanta Department of Aviation. Clayton County is not responsible for improvements to the facility. Projects planned at H-JAIA will be contained to the airport property. The biggest impact that airport expansion will have on the surrounding transportation network and land uses is the need to accommodate additional passenger and freight traffic as these projects are completed.

4.7.2 AIR CARGO

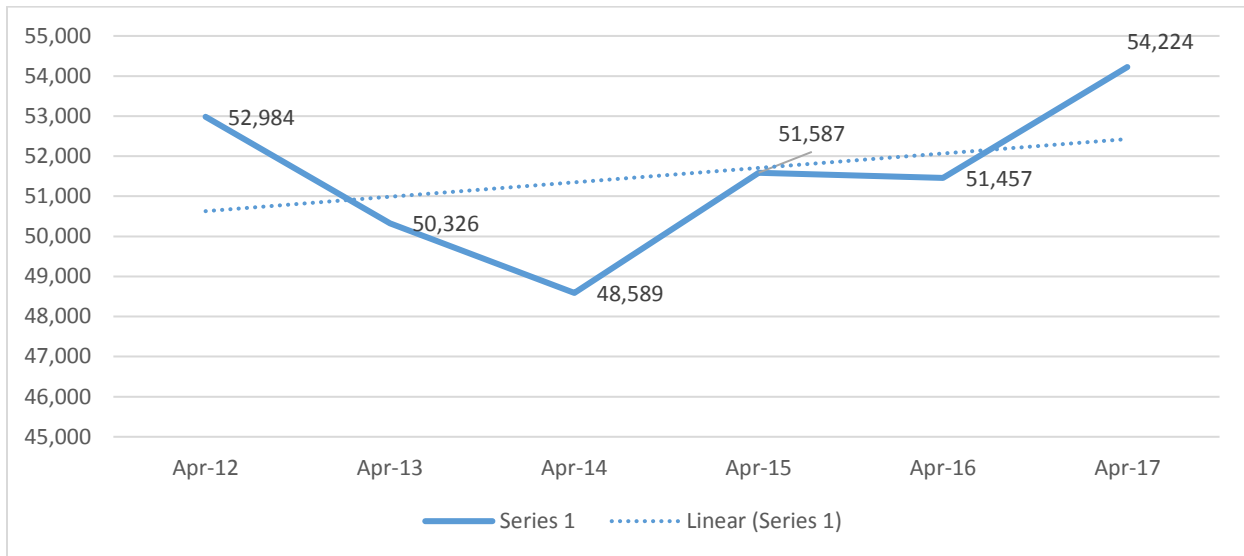
According to the *Georgia Statewide Freight and Logistics Plan (2011)*, there are no significant air cargo capacity issues at H-JAIA. The *Hartsfield-Jackson Atlanta International Airport Master Plan (2015)* predicts that existing air cargo facilities will be sufficient to handle needs until 2031.

In April 2017, 54,224 metric tons of freight, express and mail moved into or out of H-JAIA, up 5.38 percent from April 2016 (see **Figure 4-60**). Though it has fallen and recovered since 2012, air cargo activity has risen slightly over the five-year period.

The *ATL 2013 Economic Impact Summary* estimated that air cargo activities at HJAIA are responsible for almost 27,300 jobs in the Atlanta region and 6.7 billion in business revenue. It also reported that approximately 9,150 airport-based jobs at H-JAIA were related to air cargo.



Figure 4-60: Comparison of April Air Cargo Activity, 2012-2017



Source: Monthly Airport Traffic Report, April 2017, April 2016, April 2015, April 2014, and April 2013, Department of Aviation, Hartsfield-Jackson Atlanta International Airport

The 2015 airport master plan projects that the total cargo weight at ATL will increase by 46 percent from 2011 to 2031, from 663,136 to 1,414,000. To accommodate this growth in cargo operations, the plan proposes the relocation and expansion of the North Cargo facilities so that they are proximate to the South Cargo facilities. This is a high-priority project that is expected to be completed by 2019. The projected growth in air cargo, along with the relocation of air cargo operations and expansion of freight support services like warehousing near the airport, will place additional demands on the roadways in Clayton County that access these facilities.

With the relocation of the freight area, freight trips from the Air Cargo area (Loop Road) are likely to increase. Increased freight traffic on this route would most likely create the need for another direct freight access facility to I-285 that allows for drivers to avoid the congestion at the I-75/I285 interchange. In this scenario, the need increases for the previously considered project on Conley Road, which would create a new east-west connection to the airport.

Air Cargo-Related Freight Needs

There is a need to anticipate and accommodate the relocation of the North Cargo facilities at H-JAIA, specifically with the construction of an extension of Conley Road from its current terminus to the H-JAIA. It is also expected that the upcoming *Aerotropolis Freight Cluster Study* will address air cargo and other freight-related needs in this area.

4.8 Transit

Transit is a critical component of Clayton County’s transportation network. As shown in **Figure 4-61**, Clayton County’s transit system consists of rail and bus services. MARTA Red and Gold rail lines connect H-JAIA to other destinations in metro Atlanta north of the county. For circulation within the county, 21 MARTA and GRTA bus



lines serve various destinations in the northern Clayton County and between Jonesboro and Lovejoy at the southeast.

In November 2014, Clayton County voters approved a referendum to allow MARTA to expand into the county. The action was based on an agreement between Clayton County and MARTA in July 2014, which stipulated that, in exchange for transit service, Clayton County would collect a one-cent sales tax for MARTA services, projected to generate roughly \$45 million per year. The agreement stipulated that one-half of the tax would be directed to bus service in the county and the other half would be used to fund a future commuter rail or a comparable form of high-capacity service connecting to the county from the MARTA regional rapid transit system.

In MARTA's *Clayton Extension Report* (July 2014), the county transit expansion was envisioned as passenger rail service, within the Norfolk Southern right-of-way, either on shared track or in new, exclusive track. Project planning and construction were expected to occur in two phases:

- From the existing MARTA East Point station south to Jonesboro, projected to be open for service in 2022, with estimated capital costs from \$250 million to \$414.6 million and an estimated \$10 million to \$12 million in annual operating costs.
- From Jonesboro south to Lovejoy, to undergo advanced planning if warranted by demand and conditions. The report did not provide estimates for delivery years or costs.

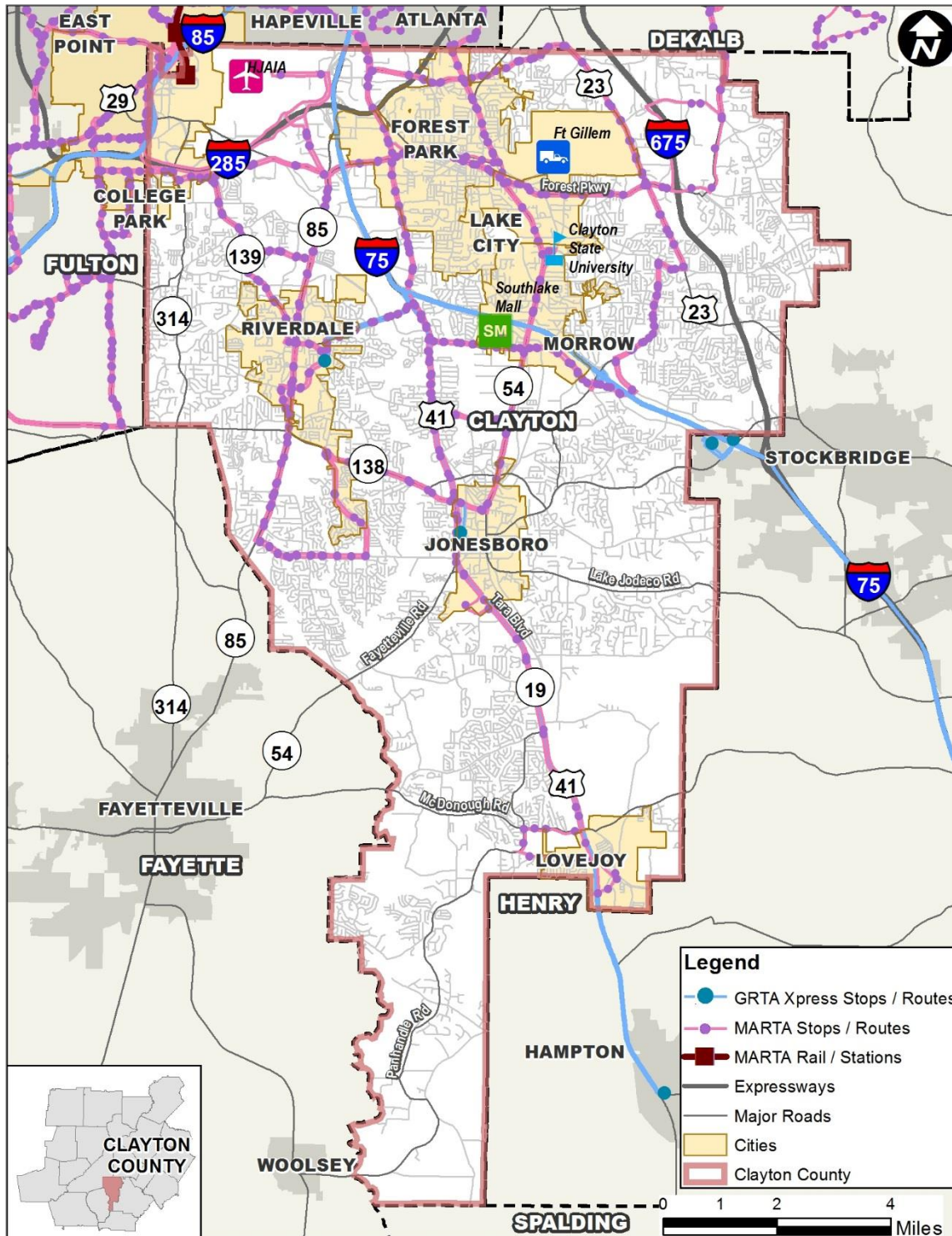
Generalized station locations were identified at the following, with specific locations expected to change over the course of the planning process:

- East Point
- Hapeville
- Mountain View | Airport
- Forest Park | Fort Gillem
- Clayton State University
- Morrow | Southlake Mall
- Jonesboro

MARTA is undertaking the Clayton County Transit Initiative to identify the preferred mode and alignment for the planned expansion of high-capacity transit into the county. The initiative will identify any changes in the proposed project from the Clayton Extension Report (2014) necessary to address the area's current transit needs and fiscal realities.



Figure 4-61: Existing Transit Service in Clayton County



Source: ARC Open Data Portal



The Atlanta Business Chronicle Reports³ that **MARTA staff has recommended commuter rail on new, separate track, in existing Norfolk-Southern right-of-way from East Point to Lovejoy, as the preferred alternative for Clayton County Transit Initiative.** It is expected that a network of local bus routes would connect commuter rail stations with community activity centers around Clayton County. All items related to the Clayton County Transit Initiative are in draft form until adopted by the MARTA Board.

The locally preferred alternative (LPA) will be submitted to the MARTA Board of Directors for approval. An adopted LPA is one important step towards a project's ability to compete for federal transit funding. MARTA hopes to have approval from the FTA to move forward with the commuter rail project by 2020. The study will continue to advance remaining corridors for arterial and bus rapid transit analysis, and initiate environmental review process.

4.8.1 TRANSIT NEEDS

The forthcoming transit expansion project is a top priority for Clayton County. It is imperative that MARTA – which has been tasked with determining the mode, alignment location and length, station locations, costs, funding, phasing, and timing – completes the Transit Initiative in the near future so that it can complete its mandate to “commence service on any operable portion of the Clayton Extension as soon as practicable.”⁴

To support the eventual implementation of high-capacity transit in the county, there is a need for station area planning at proposed station areas. In addition to supporting nodal development through land use planning, Clayton County should prioritize pedestrian connectivity to transit stops at proposed station areas for the high-capacity transit investment, including Mountain View, Forest Park, Lake City, Morrow, Jonesboro, and Lovejoy. Clayton County should also consider other pedestrian amenities, such as clear wayfinding signage, which will help guide riders to the nearest stops and station and inform them about nearby destinations.

4.9 Active Transportation and Access to Transit

Active transportation refers to any form of self-propelled, human-powered transportation such as walking or biking. This section summarizes existing inventory of pedestrian and bicycle facilities including sidewalks, bike lanes, and multi-use trails in Clayton County. The project team conducted a review of aerial imagery maps and reached out to all Clayton cities to gather sidewalk and bike lane information on the major roadways. ARC's *Walk. Bike. Thrive!* (2016), GDOT's *Georgia Bicycle and Pedestrian Plan* (1998) - Statewide Route Network, and *Georgia Official Bicycle Map* (2010) were also reviewed.

4.9.1 SIDEWALKS AND PEDESTRIANS

In Clayton County, sidewalks are located mainly in city cores near activity/employment centers, such as Riverdale and Jonesboro. However, development has occurred along major thoroughfares throughout Clayton County. Auto-centric development often does not include sidewalks in roadway design, but it may still attract

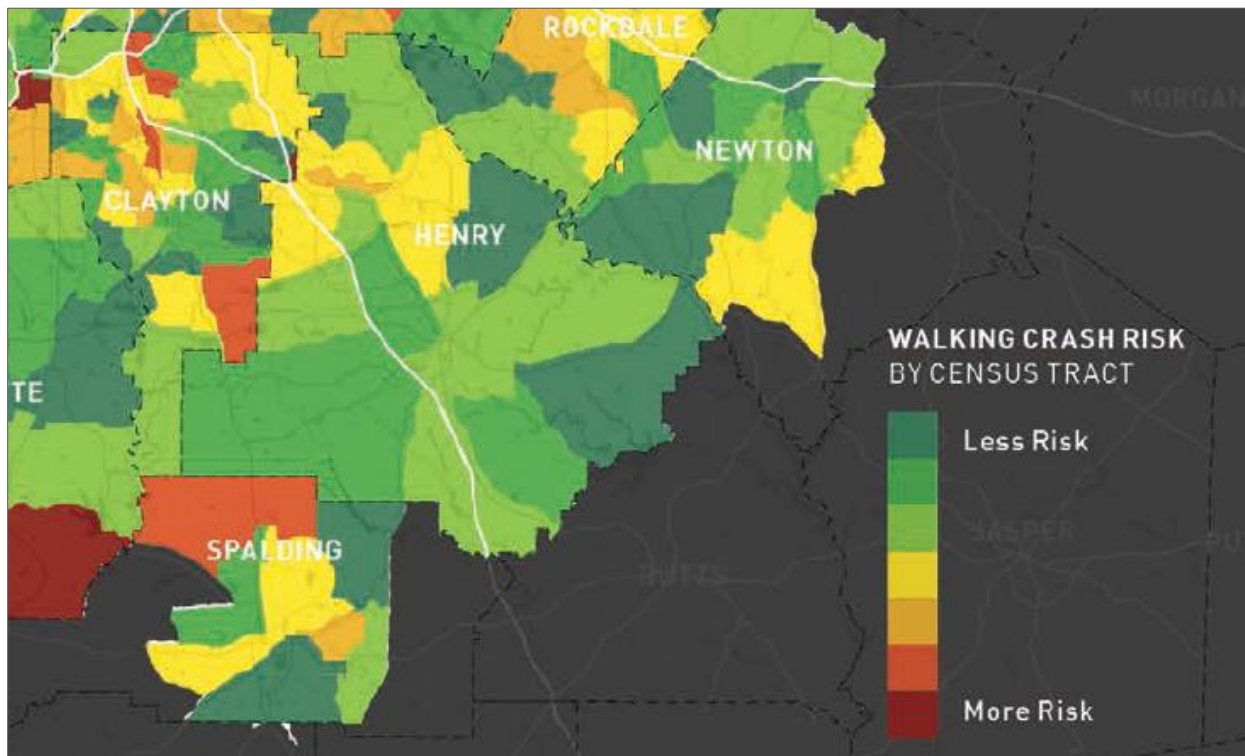
³ Atlanta Business Chronicle, “Commuter rail is MARTA’s choice for Clayton County,” 13 July 2018

⁴ MARTA and Clayton Rapid Transit Contract



pedestrian activity. ARC's *Walk. Bike. Thrive!* plan found that walking is generally less safe in areas that prioritize high-speed automobile travel, and that many auto-oriented places in the region, like those in Clayton County, tend to have more affordable housing that attracts residents who are more likely to rely on walking, to access transit, jobs, and meet their daily needs. This mismatch of pedestrian activity and infrastructure results in pedestrian crash risk. **Figure 4-62** illustrates areas in Clayton County identified by ARC's *Walk. Bike. Thrive!* as having a high walking crash risk.

Figure 4-62: Walking Crash Risk Map by Census Tract in Clayton County

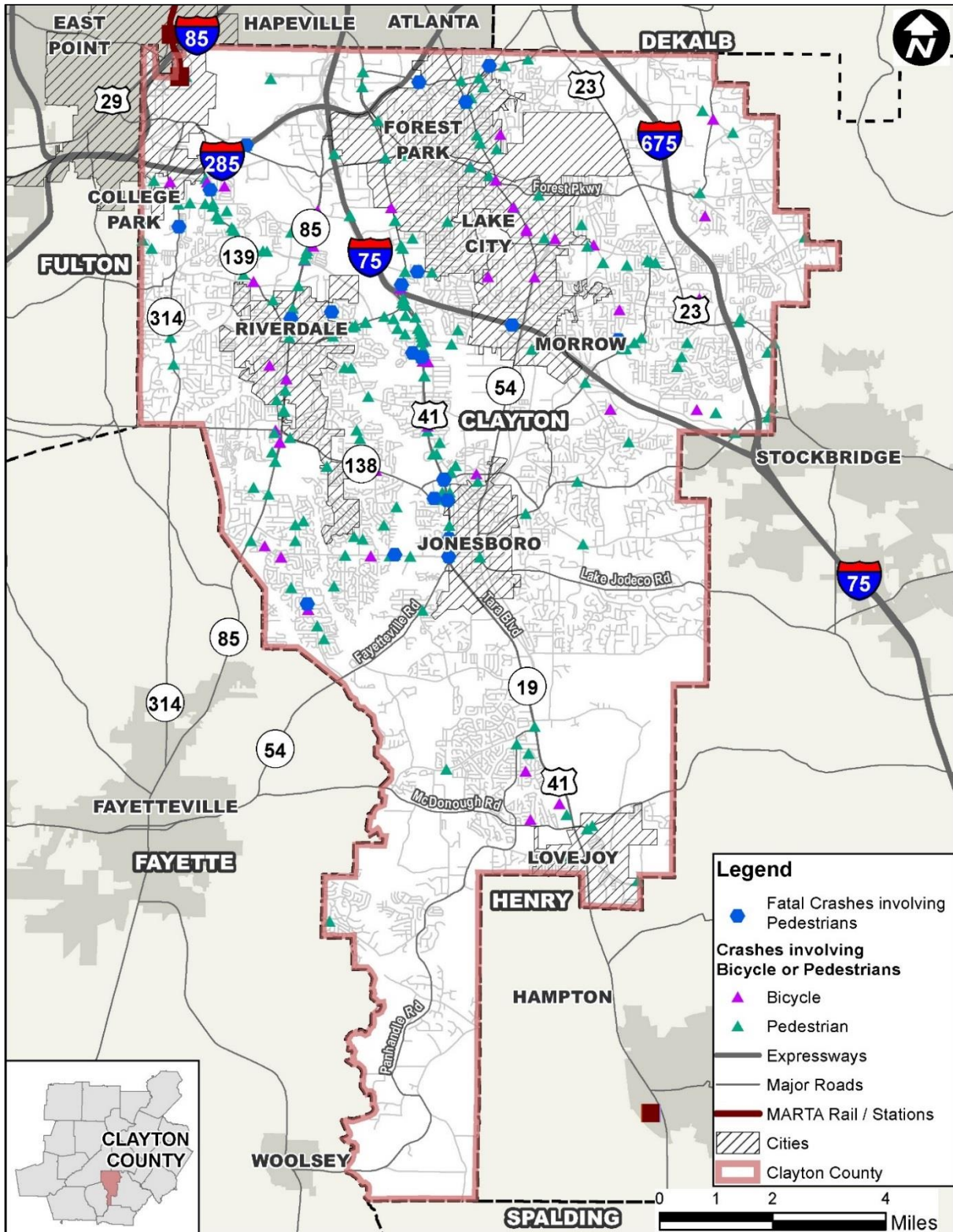


Source: ARC's *Walk. Bike. Thrive!*

Figure 4-63 illustrates locations of crashes involving cyclists and pedestrians. Roughly 316 crashes involving bicycles or pedestrians were reported between 2014 and 2016 in Clayton County. About 28 of these accidents were fatal, and another 241 (about 76 percent) of the bicycle- and pedestrian- related crashes involved an injury. While pedestrian crashes are a small portion of total crashes in Clayton County (less than one percent), pedestrian crashes are far more likely to end in a fatality or injury; nearly 10 percent of pedestrian crashes result in a fatality, compared to 0.2 percent of all other crash types. As with the crash analysis presented earlier, the pedestrian safety assessment relies upon analysis of GDOT GEARS data from 2014 to 2016.



Figure 4-63: Crashes Involving Bicycles and Pedestrians in Clayton County



Source: GDOT GEARS Database

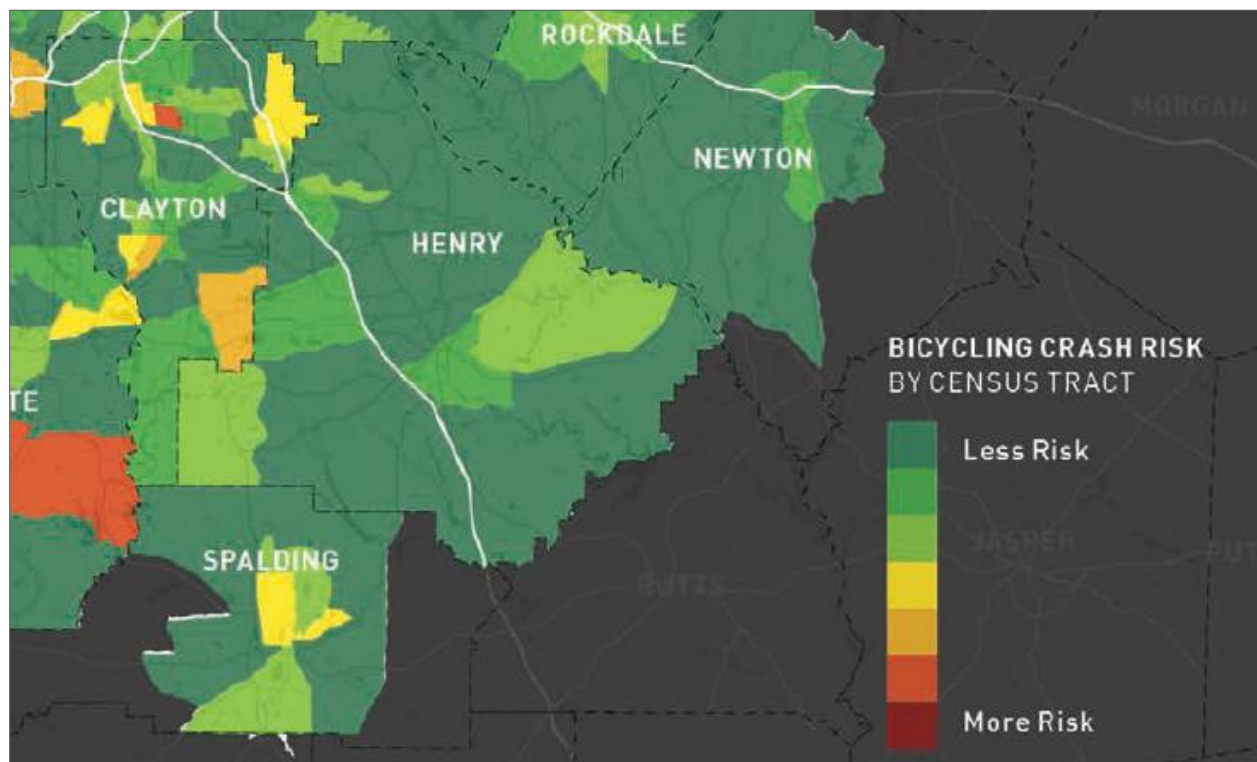
4.9.2 BIKE LANES AND BICYCLISTS

A review of the Georgia's *Official Bicycle Map* (2010) indicates that there the following Clayton County roadway segments are designated as state bicycle routes:

- Central Route 15A includes a 4-mile segment along SR 92/McDonough Road between US 19/41 and SR 92/McDonough Road and 1.5-mile segment of CR 607/Hastings Bridge Road in Lovejoy between Talmadge Road and Henry County line
- Little White House Corridor Route 45 includes segments of both US 29/SR 14/Roosevelt Highway and SR 139/Riverdale Road that are both less than 1 mile, and a 5.7-mile segment along SR 314/West Fayetteville Road between I-285 and Fayette County line

Only one bike lane was identified in Clayton County, and it is located on the Riverdale Road between Sullivan Road and West Fayetteville Road in the city of College Park. As a result, most cyclists must share the road with other vehicles. The conflicts between fast-moving automobile traffic and bicyclists on major facilities results in bicycle crash risk. **Figure 4-64** illustrates those areas in Clayton County that were identified by ARC's *Walk. Bike. Thrive!* plan as where patches having higher bicycling risk.

Figure 4-64: Bicycling Crash Risk Map by Census Tract in Clayton County



Source: ARC's *Walk. Bike. Thrive!*



4.9.3 PEDESTRIAN AND BICYCLIST PRIORITY AREAS

The project team identified areas within one-half mile of various destinations within Clayton County, such as schools, colleges, shopping centers, parks or greenspaces and downtown areas, as illustrated in **Figure 4-65**. Such areas are likely to have a high demand for pedestrian or bicycle access. Treating such areas with higher level of priority can potentially provide an efficient way to improve pedestrian and bicycle access in Clayton County. Apart from downtown, areas near Clayton State University, McDonough Road, Mount Zion Boulevard, SR 314 south of the city of College Park, SR 85, SR 3/US-19/US-41/Tara Boulevard, SR 139, and Jonesboro Road are also likely to have a high demand for pedestrian and bicyclist access.

4.9.4 ACTIVE TRANSPORTATION FOR COMMUTERS

Spatial analyses revealed that the major issue with the existing sidewalk network for commuters is its lack of connectivity between work sites and residential areas. As noted in the Existing Conditions Report, most existing sidewalks are built around the major employment centers in the city downtowns. Though the sidewalks provide access to facilities near work sites, the sidewalk network is segmented and does not connect major residential areas. As a result, walking is not a viable commute option for many Clayton County residents, even if the work site is within walking distance. Better connectivity for sidewalks in the following communities/ neighborhoods would encourage walking activities for commuters:

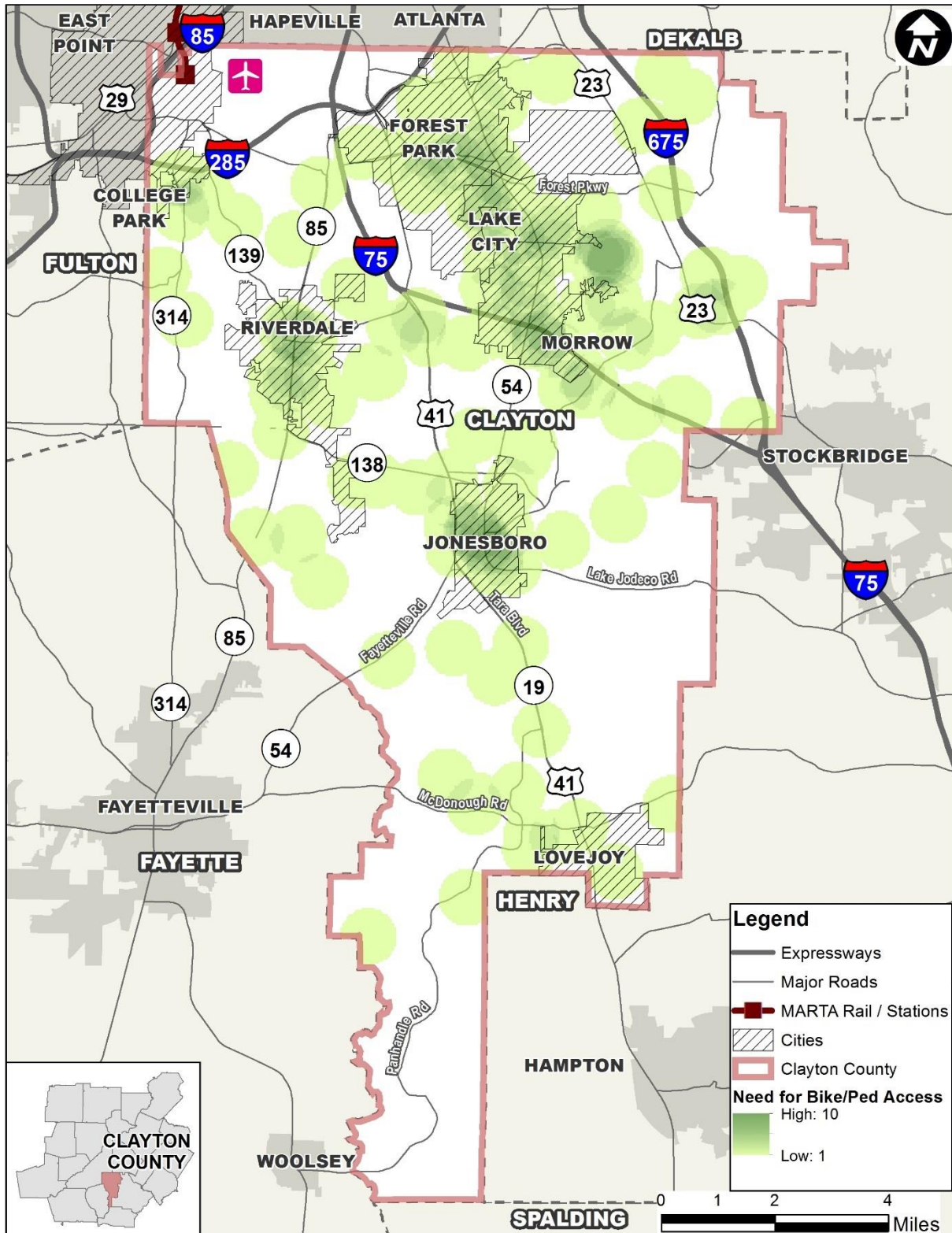
- Wexwood and Wesley Park
- Foxrun
- Conley
- Allendale Heights
- Williamsburg Park
- Wilkshire Estates
- Woodstone
- Irondale
- Bonanza

4.9.5 ACTIVE TRANSPORTATION FOR TOURISTS

The project team considered the sidewalk availability on roadway segments that connect multiple destinations, including schools, colleges, libraries, malls, parks, and city downtowns, within one-half mile. Some areas that can benefit from adding new sidewalks include Harper Drive and Rex Road in Lake City and downtown Jonesboro.



Figure 4-65: Pedestrian Priority Areas Based on Destinations



Source: ARC Open Data Portal



4.9.6 ACTIVE TRANSPORTATION FOR ACCESS TO TRANSIT

For riders of the existing MARTA bus system, sidewalks connecting the transit stops can greatly facilitate the transit experience. By comparing the location of existing sidewalks and the roadway segments that contain multiple bus stops within one-half mile (as illustrated in **Figure 4-66**) the project team identified the following transit corridors without sidewalks:

- Major highways such as SR 3/US-19/US-41/Tara Boulevard, SR 54, SR 85, SR 138, SR 139, US-23, and Mount Zion Boulevard have multiple segments without sidewalk on either side of the road, leading to a lack of safe pedestrian access from surrounding neighborhoods to transit stops on these roads.
- Along Riverdale Road in Williamsburg Park
- Along US-41 between I-75 and Jonesboro
- Wesley Wood and Wexwood neighborhoods
- Along Macon Highway / US-23 and Fielder Road near Allendale Heights
- Flint River Road between Glenwood Drive and Lexington Drive

Finally, once riders reach the bus stop, they often face an unsheltered and unseated wait. A recent report pointed out that there are only nine bus shelters amongst more than 500 bus stops in the county (<http://www.ajc.com/news/local-govt--politics/clayton-transit-future-marta-rail-high-speed-buses/MH5x82m3UrmlpE0ziL16PL/>). There is a need for amenities like benches and trash cans at bus stops.

4.9.7 TRAILS

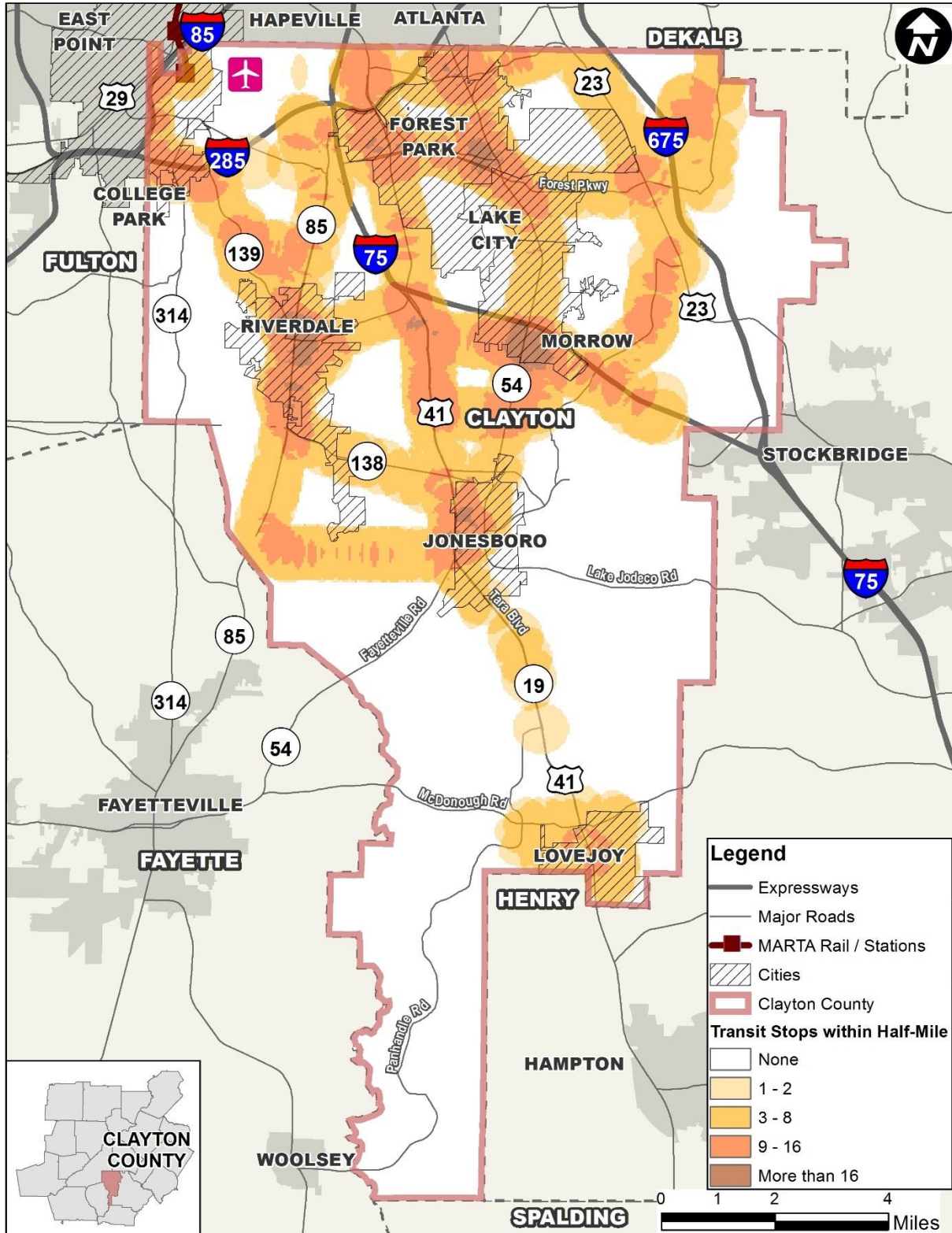
Clayton County is planning for 112 miles of new greenway trail with good inter-connectivity per the Clayton County's *Greenway Trail Master Plan* (February 2015). This plan helped identify the need to:

- Extend and strengthen existing trails within Clayton County
- Maintain existing trails
- Improve perception of safety on trails
- Connect major destinations
- Connect existing parks and greenspace
- Identify regional connections to the City of College Park, City of Atlanta, and DeKalb County

Please refer to Clayton County's Greenway Trail Master Plan (February, 2015) document and **Figure 4-67** below for more information. In addition, the Aerotropolis Atlanta CIDs proposed a network of trails connecting around H-JAIA in the *AEROATL Greenway Plan* (2017). These trails were devised to connect destinations, downtowns, and trail networks in surrounding counties.

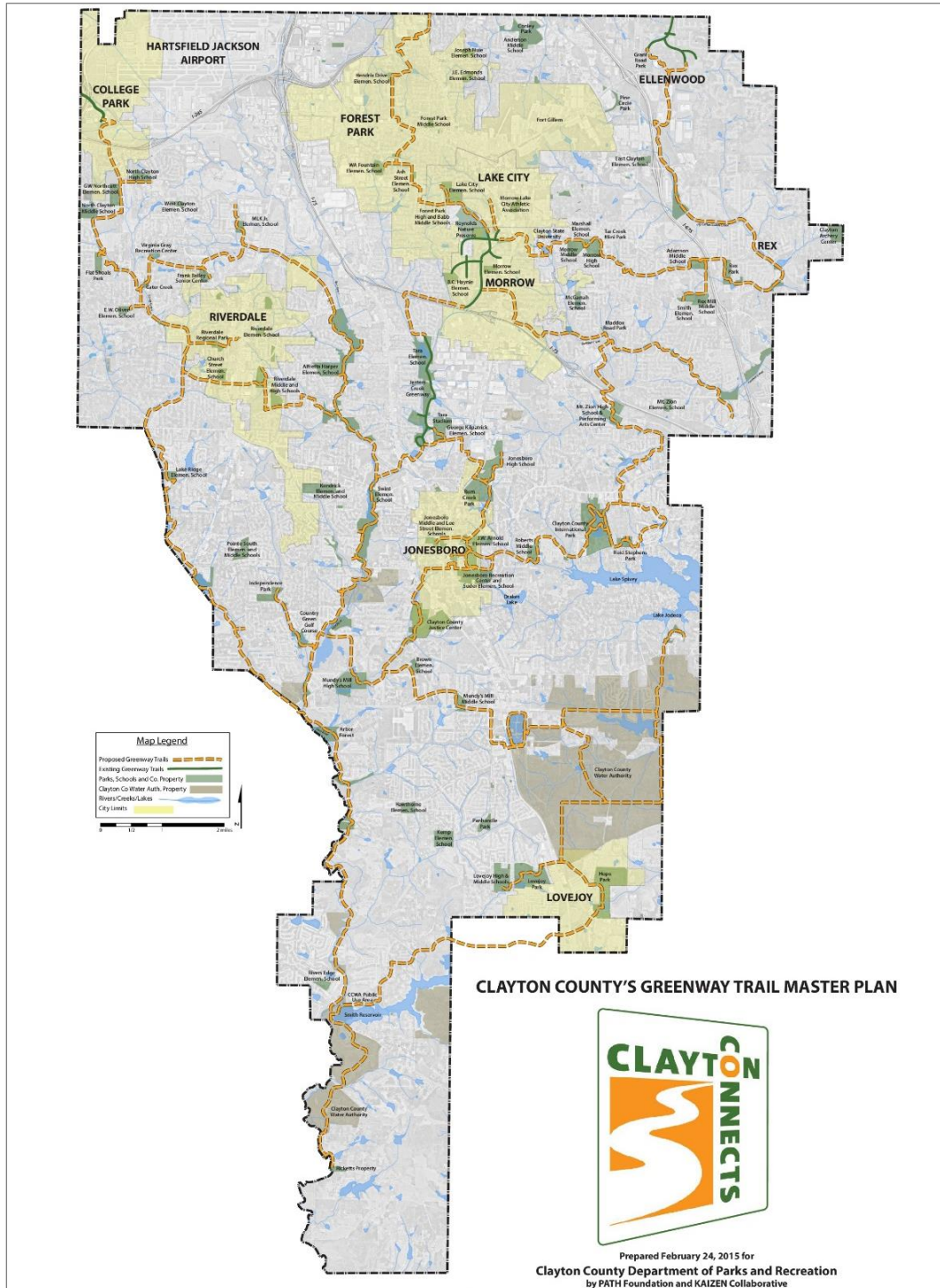


Figure 4-66: Pedestrian Priority Areas based on Existing Transit Stop Locations



Source: MARTA Transit Feed

Figure 4-67: Clayton County's Proposed Trail Systems



Source: Clayton County's Greenway Trail Master Plan



4.9.8 ACTIVE TRANSPORTATION NEEDS

Based on analysis of GEARS crash data, high numbers of bicycle- and pedestrian-related crashes were identified on SR 3/US-19/US-41/Tara Boulevard, SR 85, Flint River Road/Thomas Road area, SR 139, and near Clayton State University. The SR 85, SR 139, SR 314 and Flint River Road corridors have been analyzed in more detail as a part of subarea analysis.

Additionally, over the course of the study, the public and stakeholders have shared concerns about safety and security related issues. In response, lighting, visibility and other measures of safety and security will be considered in the project development process.

Travel patterns, priority areas, and destinations were analyzed to proactively anticipate areas of bicycle and pedestrian need. In some places, pedestrian needs correspond with sidewalks, but there are other areas of frequent pedestrian activity that do not have pedestrian infrastructure in place. The ARC *Walk. Bike. Thrive! Bicycle and Pedestrian Safety Improvement Plan* identifies high risk areas in the Atlanta Region that will be referenced in the project development process. In anticipating pedestrian activity, the County should prioritize sidewalks in and around the locations of employment, shopping and other destinations, as well as transit stops. There is a need for the County to complete the sidewalk network connecting to and around these areas.

Many residents expressed support for the proposed trails network as a quality of life asset for the county. Moving forward, Clayton County should continue implementing the Trail Master Plan. According to the Clayton County Parks and Recreation Department, Phase 1 of the plan is now completed, and Phase 2 will begin construction in the next few months, followed by Phase 3 (the last phase).

4.10 Subarea Analyses

This section presents further analysis for five key subareas identified in Clayton County. The locations of these subareas were determined based on the CTP Update goals, stakeholder input, and the existing and future needs identified through analysis. The data used to identify the five subareas are:

- Input from the Stakeholder Committee Meetings on May 10, 2017 and November 15, 2017
- Input from stakeholder interviews and freight panel discussion in the week of July 24, 2017 and July 31, 2017
- MetroQuest online survey
- Public open houses and workshops in each Commission District on Oct. 16, 23-24, and 30, 2017
- National and regional routes map
- Functional classification map
- 2015 AADT maps
- 2015 PM Peak LOS map
- 2040 AADT maps – based on ARC’s travel demand model run
- 2040 PM Peak LOS map – based on ARC’s travel demand model run
- Number of crashes and locations of fatal crashes map



- High crash locations map
- Crashes involving bike and pedestrians map
- The *Atlanta Region’s Plan*, Transportation Assessment, 2015
- *GDOT Tara Boulevard Corridor Study*

Table 4-38 lists the selected five subareas and how their areas of potential improvements align with the key CTP Update goals. **Figure 4-68** maps the selected locations of the subareas.

Table 4-38: Selection of Subareas and CTP Goal Matrix

Subarea Name	Safety	Connectivity & Accessibility	Mobility & Operations	Economic Development	Access Management	Quality of Life & Aesthetics
SR 85 Corridor	X		X		X	X
Connections to the Airport	X		X		X	X
Gillem Logistics Center	X	X	X	X		
East-West Connections	X	X				X
Flint River Road Corridor	X					X

4.10.1 SR 85 CORRIDOR SUBAREA

Functionally classified as a principal arterial, SR 85 is a major north-south thoroughfare that passes through the City of Riverdale. The 5.7-mile segment of the SR 85 corridor between its intersection with Webb Road/Warren Drive in the south end and its intersection with Forest Parkway in the north end has been selected as a subarea for further study. The area was selected based on current and future needs identified in the areas of safety, mobility and operations, access management, and quality of life.

Safety

This segment of SR 85 has one of the highest number of reported crashes in Clayton County, second only to SR 3/US 19/ US 41/Tara Boulevard. **Table 4-39** summarizes the number of fatal crashes, fatalities, injury crashes, injuries, and total number of crashes that occurred during the last three years (2014-2016).

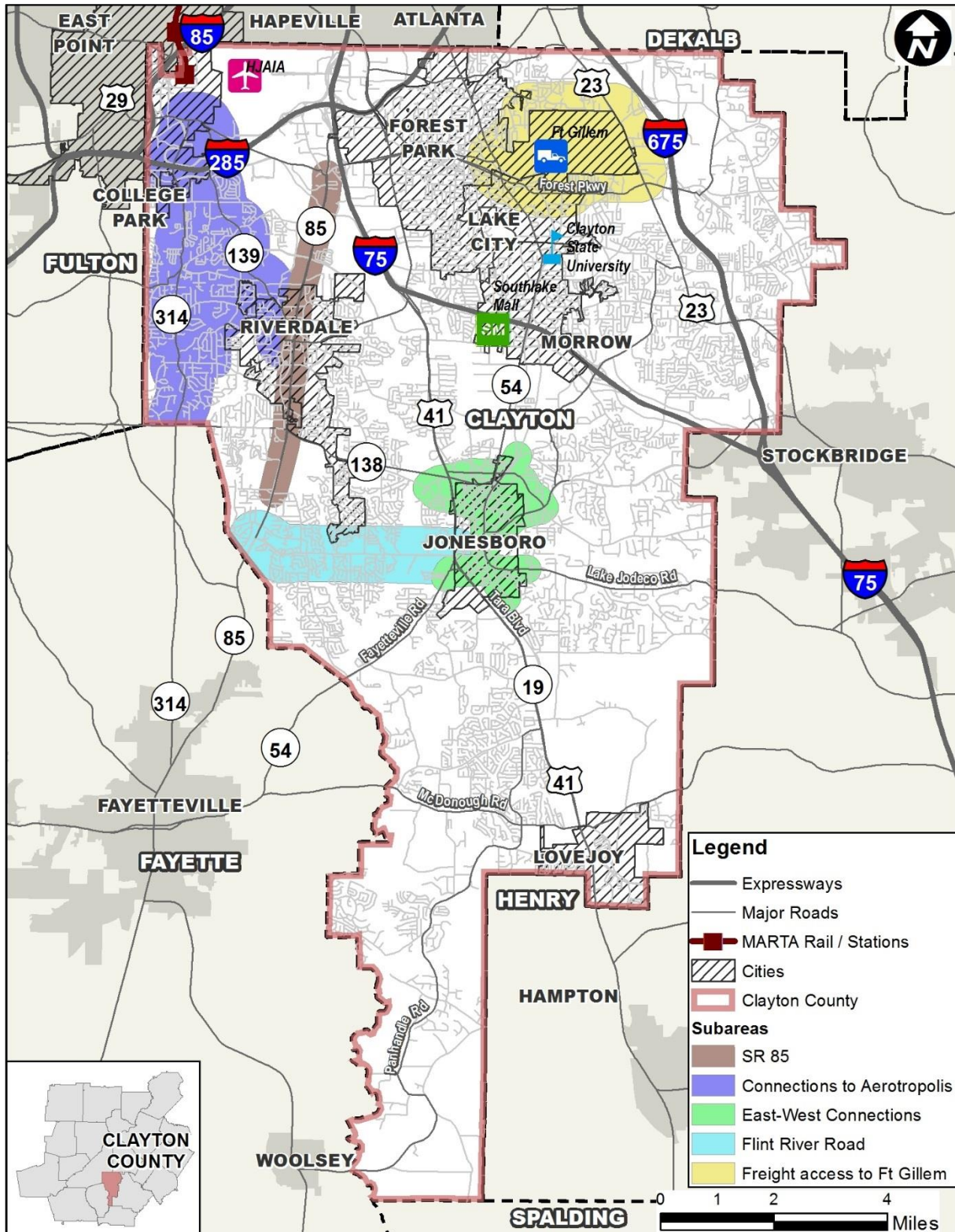
Table 4-39: SR 85 Corridor Crash Data (2014-2016)

	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	1	1	204	323	921
2015	-	-	228	342	1,014
2016	1	1	189	297	906
Total	2	2	621	962	2,841

Source: GDOT GEARS Database



Figure 4-68: Subarea Overview Map



Crash rates⁵ for this segment of the SR 85 corridor were then calculated and compared with the statewide average rates for roadways with the same functional classification to determine potential safety deficiencies. **Table 4-40** summarizes crash rates for the I-85 corridor and **Table 4-41** shows statewide average crash rates for principal arterials (non-freeway, urbanized). The comparison reveals that, in 2014, 2015, and 2016, crash rates in the SR 85 corridor significantly exceed statewide average rates for injury crashes, number of injuries, and number of all crashes. These crash rates are nearly twice as high as the statewide averages for 2014 and 2015. The 2014 crash rate for fatal crashes also slightly exceeds statewide averages. The crash rates that exceed the statewide averages are highlighted in bold text in Table 4-40.

Table 4-40: SR 85 Corridor Crash Rates (2014-2016)

	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	1.17 (+ 102%)	1.17	243 (+ 181%)	385 (+ 194%)	1,129 (+ 192%)
2015	-	-	268 (+ 194%)	401 (+ 195%)	1,259 (+ 216%)
2016	1.11	1.11	216 (+149%)	338 (+155%)	1,062 (+169%)

Table 4-41: Statewide Average Crash Rates for Urban Principal Arterial (2014-2016)

	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	1.15	1.23	134	199	589
2015	1.24	1.34	138	206	583
2016	1.47	1.62	145	218	628

Source: GDOT

In addition, the intersection of SR 85 at Main Street/Valley Hill Road in Riverdale was identified as one of the region’s top intersection crash hotspots in the ARC’s 2015 *Atlanta Region’s Plan Transportation Assessment*. This intersection was the only one in Clayton County identified by the ARC study.

Mobility and Operations

Existing traffic volumes and signal timing data along the SR 85 corridor were obtained through GDOT’s Regional Traffic Operations Program (RTOP). Synchro 9 software was used to interpret capacity analysis results. **Table 4-42** and **Table 4-43** summarize intersection LOS and roadway segment LOS during peak hours, respectively.

⁵ Crash rates are expressed per 100 million vehicle miles traveled (100 MVM) and are determined by the following equation:

$$Crash\ Rate = \frac{Total\ Number\ of\ Crashes \times 10^8}{AADT \times Length\ of\ Segment \times 365 \times Number\ of\ Years}$$



Table 4-42: Existing LOS of Major Intersections along the SR 85 Corridor

Intersection with SR 85	AM Peak		PM Peak	
	Delay (s/vehicle)	LOS	Delay (s/vehicle)	LOS
Forest Parkway	40.3	D	88.6	F
Atlanta South Parkway/Lee Street	3.6	A	16.4	B
Air Logistics Drive	2.5	A	7.5	A
Lees Mill Road	71.2	E	29.3	C
Airport South Parkway	8.2	A	13.4	B
Garden Walk Boulevard	32.1	C	36.7	D
Adams Drive/Allen Drive	11.3	B	18.1	B
Howard Street/Denham Street	6.9	A	11.6	B
SR 139/Valley Hill Road	25.6	C	116.2	F
Roberts Drive	50.0	D	27.6	C
Bethsaida Road/Lamar Hutcheson Parkway	36.5	D	110.9	F
Church Street/Roundtree Road	47.7	D	59.0	E
SR 138	83.8	F	94.5	F

Source: Synchro 9, GDOT's Regional Traffic Operations Programs (RTOP)

Table 4-43: Existing LOS of Roadway Segments along the SR 85 Corridor

Cross Street	Northbound SR 85		Southbound SR 85	
	Arterial Speed (mph)	Arterial LOS	Arterial Speed (mph)	Arterial LOS
Forest Parkway	10.0	F	3.6	F
Lee Street	31.9	B	17.0	D
Air Logistics Drive	31.6	B	31.9	B
Lees Mill Road	8.2	F	17.9	D
Airport South Parkway	39.6	A	27.7	C
Garden Walk Boulevard	36.0	A	29.0	B
Adams Drive/Allen Drive	35.6	A	34.6	B
Howard Street/Denham Street	30.3	B	38.1	A
SR 139/Valley Hill Road	28.5	B	18.6	D
Roberts Drive	18.7	D	35.1	A
Bethsaida Road/Lamar Hutcheson Parkway	28.8	B	13.0	F
Church Street/Roundtree Road	15.4	E	22.4	C
SR 138	17.2	D	15.7	E

Source: Synchro 9, GDOT's RTOP

The following six intersections along the SR 85 corridor are operating nearly at the capacity or currently failing either during AM or PM peak hour, according to the Synchro analysis:

- Forest Parkway
- Lees Mill Road
- SR 139/Valley Hill Road



- Bethsaida Road/Lamar Hutcheson Parkway
- Church Street/Roundtree Road
- SR 138 - failing during both AM and PM peak hours

Roadway segment analysis along the SR 85 corridor also indicates that travel speeds on northbound and southbound SR 85 are slowest near these same intersections. The arterial speed and LOS shown in Table 4-43 represent worst conditions either during AM or PM peak hour.

Access Management

The SR 85 corridor north of the Adams Drive/Allen Drive intersection and south of the Roberts Drive intersection is a four-lane highway with a raised or depressed median, depending on location. Between these two intersections, the SR 85 corridor in the heart of City of Riverdale is a six-lane highway with a continuous center turn lane. This 1.2-mile segment has a total of 84 driveways on the both directions of the corridor with an average driveway spacing of 73 feet. With a 45 mph of posted speed limit, minimum driveway spacing is 230 feet per GDOT Spacing Criteria for Driveways, Public Roads, and Side Streets.

The density of driveways is the highest along the SR 85 corridor between Main Street/Valley Hill Road and Roberts Drive, shown in **Figure 4-69**. There are 39 driveways located in this 0.4-mile segment, including 21 driveways in the southbound direction and 18 driveways in the northbound direction. Average driveway spacing is only 57 feet within this segment of the corridor. A continuous center left-turn lane allows drivers to access businesses on both sides, which may in turn interrupt drivers on the both directions of the SR 85 corridor. There is a need to reduce traffic turbulence and maximize capacity along the SR 85 corridor. Consolidating and reconfiguring driveways that are spaced too closely is one approach to addressing this need.

Quality of Life

SR 85 is one of the most significant north-south corridors in Clayton County, passing through the heart of Riverdale. Stakeholder committee members and residents expressed concerns regarding sidewalk/crosswalk connectivity, pedestrian access near bus stops, aesthetics and beautification, effectiveness of signage and lighting, and roadway restriping along the SR 85 corridor.

The 1.4-mile segment between King Road/Camp Street and Bethsaida Road/Lamar Hutcheson Parkway has a well-connected sidewalk in the both directions of SR 85. Crosswalks are also provided for all directions of pedestrian movements at signalized intersections and over most driveways. The rest of the corridor has either a sidewalk on one side of the street only or no sidewalk at all. Pedestrians must walk along shoulders on one of the county's most traveled routes, which presents safety issues. About half of the SR 85 corridor is within the City of Riverdale, and the City is currently working on a sidewalk access plan that is anticipated to address some of the gaps in sidewalk connectivity.

Pedestrian access near transit stops is another important issue in the corridor. As shown in **Figure 4-70**, a couple of MARTA bus routes run along the SR 85 corridors and major streets connecting to SR 85. In addition, MARTA's ongoing Clayton County Transit Initiative is evaluating alternatives of transit corridors and different



technology options. SR 85 is one of these transit corridors being considered by MARTA. To better provide a safe access of pedestrians to transit stations along the corridor, pedestrian facilities such as sidewalks and crosswalks would need to be provided consistently.

There is the opportunity to support economic development and tourism in Clayton County by turning the SR 85 corridor into a gateway to the county by improving aesthetical aspects of the corridor through effective signage, additional lighting, and streetscaping. In the long term, a concept of Complete Streets can also be introduced as part of beautification and community improvement efforts. Complete Streets are designed and operated to enable safe access for all users, including pedestrians, bicyclists, and transit riders of all ages and abilities, not just motorists. Complete Streets are one of the ways that can enhance liveliness and livability of a community by making it easy to cross the street, walk to shops, bicycle to work, and walk to and from transit stations. Coupled with effective and visually appealing signage for wayfinding, additional lighting for safety and security, and roadway restriping, these improvements would not only enhance the safety of all users traveling the SR 85 corridor, but also attract more businesses and visitors making the community economically viable.

4.10.2 CONNECTIONS TO THE AIRPORT

Hartsfield-Jackson Atlanta International Airport (H-JAIA) is one of the most significant activity and employment centers in Clayton County, providing more than 63,000 jobs onsite, many of which are filled by county residents. Providing a safe and efficient connection to and from H-JAIA, for passengers, employees and truck freight, is a critical task that directly affects the county's economy. The area in northwest Clayton and the south of the H-JAIA, sometimes referred to as Cherry Hills, is one of the most promising areas for accelerated growth in Clayton County. The inauguration of the Aerotropolis Atlanta CIDs and the Porsche development in this area indicate that there will be increasing interest in development around the airport. This area is also in the Northwest Clayton Tax Allocation District (TAD), one of the seven TADs in the county, and has been awarded for the Northwest Clayton Livable Center Initiative (LCI) grant by ARC.

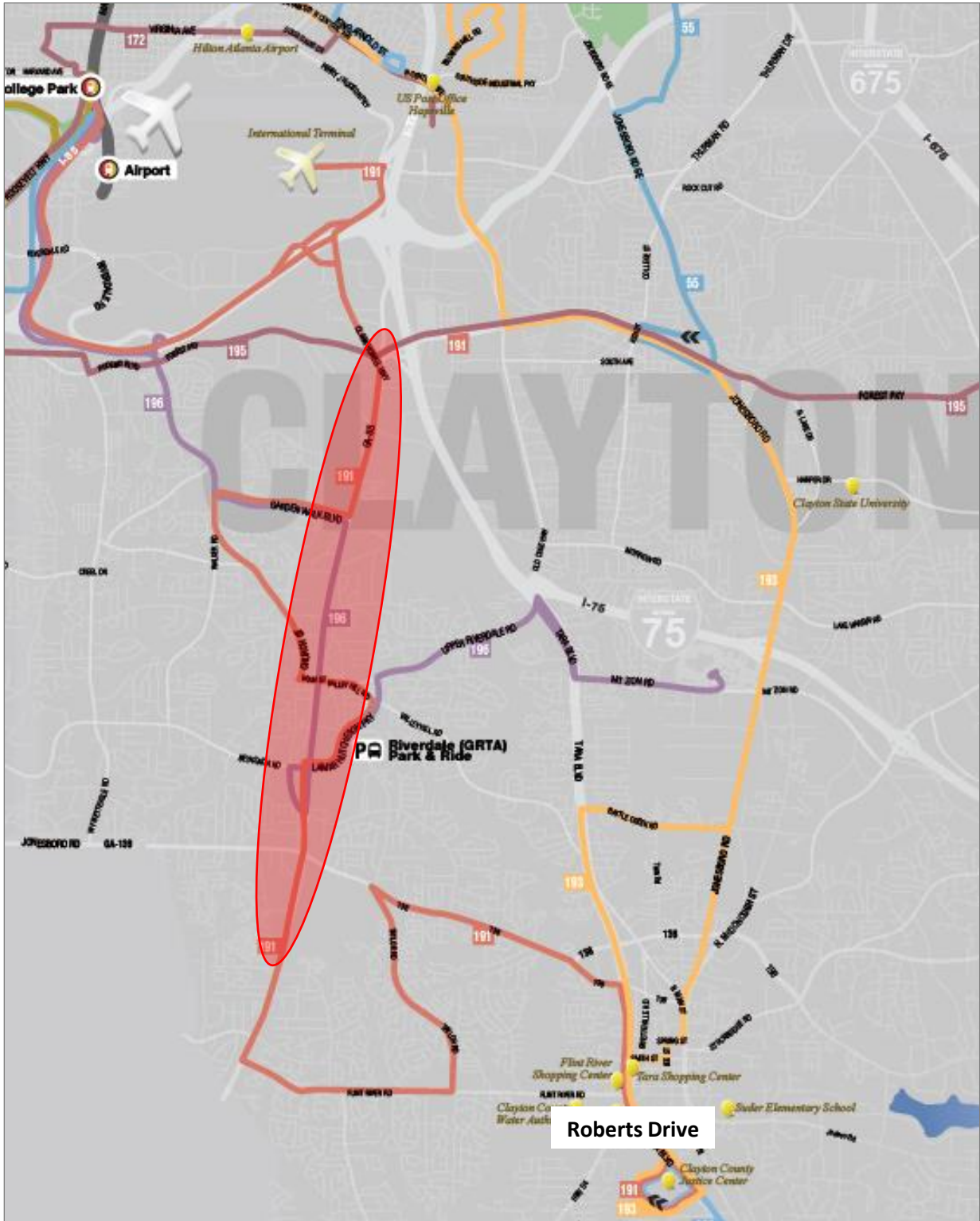
In the northwest corner of the county, SR 139/Riverdale Road and SR 314/W Fayetteville Road are major north-south thoroughfares running in parallel. Functionally classified as a minor arterial, SR 139 and SR 314 provide connections between H-JAIA and the Riverdale and Fayetteville, respectively. This area was selected as a subarea for further study based on current and future needs identified in the areas of safety, mobility and operations, access management, and quality of life.



Figure 4-69: Aerial Photo of the SR 85 Corridor with the Highest Driveway Density



Figure 4-70: MARTA Bus System Map around the SR 85 Corridor



Source: MARTA Website

Safety

This section discusses safety needs for this subarea based on latest crash data on SR 139 and SR 314, two major corridors in the subarea, both functionally classified as minor arterials. **Table 4-44** and **Table 4-45** summarize the number of fatal crashes, fatalities, injury crashes, injuries, and total number of crashes that occurred during the last three years (2014-2016) for the SR 139 and SR 314 corridors, respectively. Crash rates for these corridors were then calculated and compared with the statewide average rates for roadways with the same functional classification to determine potential safety deficiencies.

Table 4-44: SR 139 Corridor Crash Data (2014-2016)

	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	-	-	115	179	556
2015	2	2	170	256	678
2016	2	2	173	284	653
Total	4	4	458	719	1,887

Source: GDOT GEARS Database

Table 4-45: SR 314 Corridor Crash Data (2014-2016)

	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	-	-	48	68	166
2015	-	-	56	83	223
2016	3	3	53	77	184
Total	3	3	157	228	573

Source: GDOT GEARS Database

Table 4-46 and **Table 4-47** summarize crash rates for the SR 139 and SR 314 corridors, respectively. Comparison to statewide average crash rates for minor arterials (urbanized) indicates that the corridors have safety deficiencies, SR 139 more severely than SR 314. In all years analyzed, crash rates in the SR 139 corridor significantly exceed statewide average rates for injury crashes, number of injuries, and number of all crashes. These crash rates are twice as high as the statewide averages for 2015 and 2016. In addition, the 2015 and 2016 crash rates for fatal crashes and number of fatalities are more than two times higher than the statewide averages.

For the SR 314 corridor, crash rates approach or moderately exceed statewide averages rates for injury crashes, number of injuries, and number of all crashes. The 2016 crash rates for fatal crashes and fatalities significantly exceeds the statewide averages by over 500 percent, but this year could represent an outlier in the data. The crash rates that exceed the statewide averages are highlighted in bold text in **Table 4-46** and **Table 4-47**.



Table 4-46: SR 139 Corridor Crash Rates (2014-2016)

	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	-	-	217 (+ 150%)	338 (+ 156%)	1,049 (+ 175%)
2015	3.67 (+ 218%)	3.67 (+ 210%)	312 (+ 200%)	470 (+ 202%)	1,244 (+ 195%)
2016	3.57 (+233%)	3.57 (+223%)	309 (+198%)	507 (+218%)	1,165 (+178%)

Table 4-47: SR 314 Corridor Crash Rates (2014-2016)

	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	-	-	173 (+ 119%)	244 (+ 113%)	597
2015	-	-	196 (+ 125%)	290 (+ 125%)	780 (+ 122%)
2016	10.20 (+666%)	10.20 (+637%)	180 (+115%)	262 (+113%)	625

Table 4-48: Statewide Average Crash Rates for Urban Minor Arterial (2014-2016)

	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	1.21	1.25	145	216	601
2015	1.68	1.75	156	233	637
2016	1.53	1.60	156	232	655

Source: GDOT

Mobility and Operations

The project team obtained existing traffic volumes and signal timing data along the SR 139 corridor through GDOT's RTOP. Data for the SR 314 corridor were not available because the portion of SR 314 in Clayton County is not included as part of GDOT's RTOP corridors. Synchro 9 software was used to interpret capacity analysis results for SR 139. **Table 4-49** and **Table 4-50** summarize intersection LOS and roadway segment LOS during peak hours, respectively.

All intersections along the SR 139 corridor currently operate at an acceptable LOS during AM or PM peak hours, according to the Synchro analysis. The intersections with SR 314, Phoenix Boulevard, Norman Drive, and Main Street operate at LOS D during AM and/or PM peak hours. Travel speeds on northbound and southbound SR 139 are slowest near intersections of I-285 eastbound, Phoenix Boulevard, and Main Street. The arterial speed and LOS shown in Table 4-50 represent worst conditions either during AM or PM peak hour.



Table 4-49: Existing LOS of Major Intersections along the SR 139 Corridor

Intersection with SR 139	AM Peak		PM Peak	
	Delay (s/vehicle)	LOS	Delay (s/vehicle)	LOS
SR 314	52.0	D	21.6	C
I-285 Westbound	16.1	B	27.2	C
I-285 Eastbound	27.8	C	28.6	C
Phoenix Boulevard	51.9	D	41.9	D
Norman Drive	29.8	C	35.8	D
Flat Shoals Road	22.9	C	21.4	C
Garden Walk Boulevard	11.2	B	12.8	B
East Fayetteville Road	10.3	B	13.2	B
King Road	27.0	C	19.7	B
Main Street	19.5	B	36.0	D

Source: Synchro 9, GDOT's RTOP

Table 4-50: Existing LOS of Roadway Segments along the SR 139 Corridor

Cross Street	Northbound SR 139		Southbound SR 139	
	Arterial Speed (mph)	Arterial LOS	Arterial Speed (mph)	Arterial LOS
SR 314	41.0	A	18.5	D
I-285 Westbound	27.2	C	36.9	A
I-285 Eastbound	14.3	E	17.5	D
Phoenix Boulevard	15.8	E	9.8	F
Norman Drive	34.4	B	25.3	C
Flat Shoals Road	20.7	D	36.5	A
Garden Walk Boulevard	34.9	B	28.9	B
East Fayetteville Road	37.7	A	38.3	A
King Road	25.7	C	39.8	A
Main Street	8.1	F	29.9	B

Source: Synchro 9, GDOT's RTOP

H-JAIA is planning to add an additional 7,900-foot runway, and this sixth runway is expected to ease air traffic concerns and cut down on potential runway incursions. Relocation and expansion of the existing North Air Cargo operations to the South Air Cargo Terminal will collocate operations and create a new cargo building and supporting ramp to provide additional cargo facility capacity for all-cargo/freighter carriers. Potentially included in this development is a cargo fumigation facility to support cargo activities. The shift in freight services at the airport will likely increase the traffic burden on routes south of the airport in Clayton County.

Access Management

This section summarizes access management needs along the SR 139 and SR 314 corridors. SR 139 is a four-lane highway mainly with a continuous middle turn lane while SR 314 is a two-lane highway with turn lanes at select locations. Northern ends of these corridors provide connections to I-285 and I-85. While the SR 314



corridor doesn't have apparent access management concerns, a few segments of the SR 139 corridor pose such concerns due to tightly spaced signalized intersections and driveways.

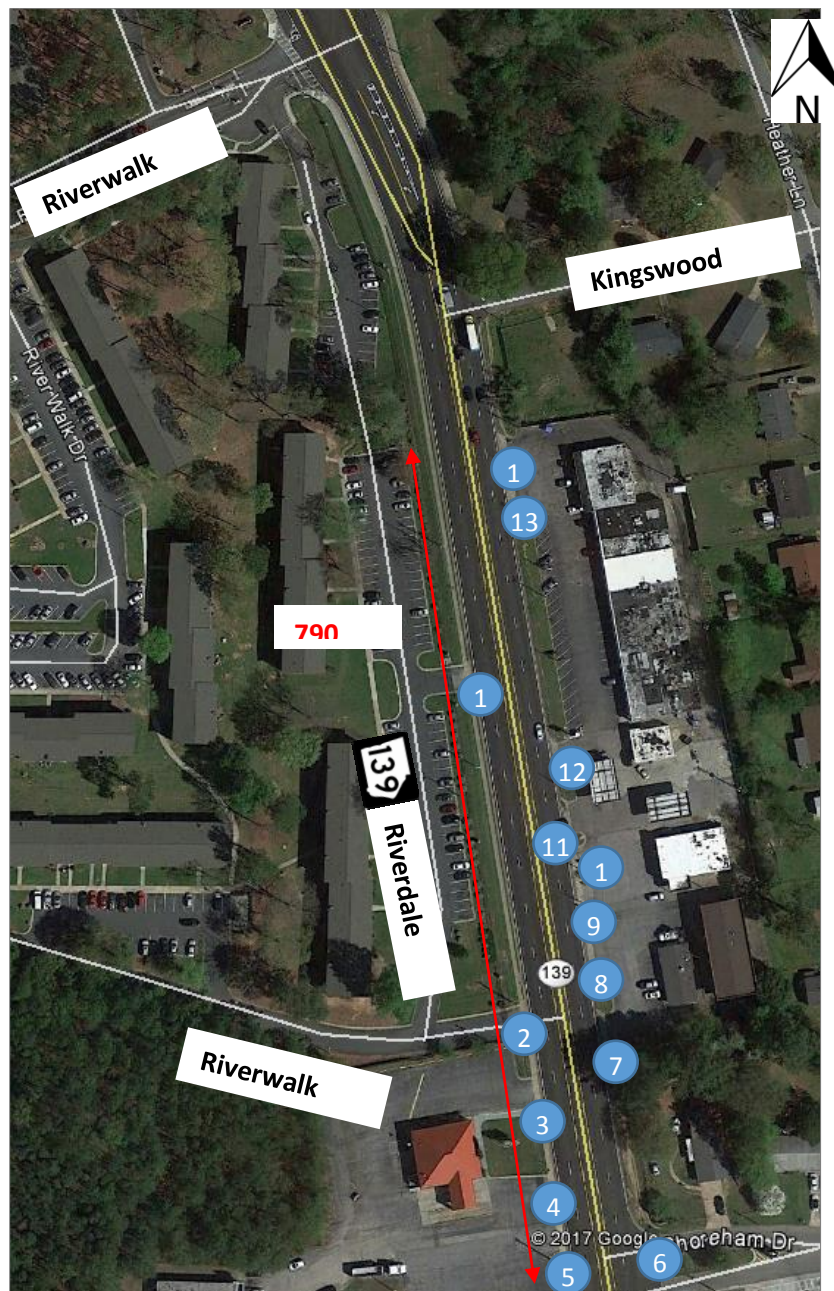
Figure 4-71 shows the SR 139 segment near the I-285 interchange where three signalized intersections are tightly spaced at the intersections of Phoenix Boulevard, the I-285 eastbound ramp, and the I-285 westbound ramp. The GDOT standard for minimum spacing of signalized intersections is 1,320 feet in urban roadway segments according to GDOT Spacing Criteria for Driveways, Public Roads, and Side Streets. However, spacing of the three consecutive intersections is 600 feet and 790 feet, respectively indicating the signal spacing is significantly less than minimum requirement.

Figure 4-71: Aerial Photo of the SR 139 Corridor near I-285 Interchange



The density of driveways is the highest along the SR 139 corridor between Kingswoods Circle and Shoreham Drive, shown in **Figure 4-72**. There is a total of 14 driveways located in this 790 feet-segment including 5 driveways in the southbound direction and 9 driveways in the northbound direction. A two-way-left-turn lane enables drivers to access businesses on both sides, which may in turn interrupt drivers in both directions. Average driveway spacing is only 56 feet within this segment of the corridor as opposed to GDOT’s minimum driveway spacing standard of 230 feet for 45 mph posted speed limit. Thus, there is a need consolidate and reconfiguring driveways that are spaced too closely is one approach to addressing this need.

Figure 4-72: Aerial Photo of the SR 139 Corridor with the Highest Driveway Density



Quality of Life and Other Needs

As mentioned earlier, rapid development is projected for this area in the future. The airport expansion plan, the Aerotropolis Atlanta CIDs, the TAD, the and LCI all indicate that development around the airport is going to be significant driver for the Clayton County economy as well as the region. Stakeholder committee members and residents also expressed concerns about quality of life issues like sidewalk/crosswalk connectivity, pedestrian access near bus stops, aesthetics and beautification, and effectiveness of signage and lighting along the SR 139 and SR 314 corridors.

Sidewalk safety and pedestrian-friendly streetscape improvement needs, primarily the need to fill in gaps in the existing sidewalk system, were identified along SR 139/Riverdale Road, SR 314/Fayetteville Road, and Phoenix Boulevard. The area also lacks a framework of community spaces and safe pedestrian routes. There is a need to connect schools with residential areas via safe sidewalks as well as a need for increased parks and green space.

There is the opportunity to improve the appearance of the area by enhancing the SR 139 and SR 314 corridors through effective signage, additional lighting, streetscaping, and landscaping. An overall improvement in area appearance would have a positive impact on the safety and security of the community. In the long term, the Complete Streets concept can also be introduced as part of beautification and community improvement efforts. Complete Streets are designed and operated to enable safe access for all users, including pedestrians, bicyclists, and transit riders of all ages and abilities, not just motorists. Complete Streets are one of the ways that can enhance liveliness and livability of a community by making it easy to cross the street, walk to shops, bicycle to work, and walk to and from transit stations. Coupled with effective and visually appealing signage for wayfinding, additional lighting for safety and security, and roadway restriping, these improvements would not only enhance the safety of all users traveling the SR 139 and SR 314 corridors, but also attract more businesses and visitors and improve the area's economic viability.

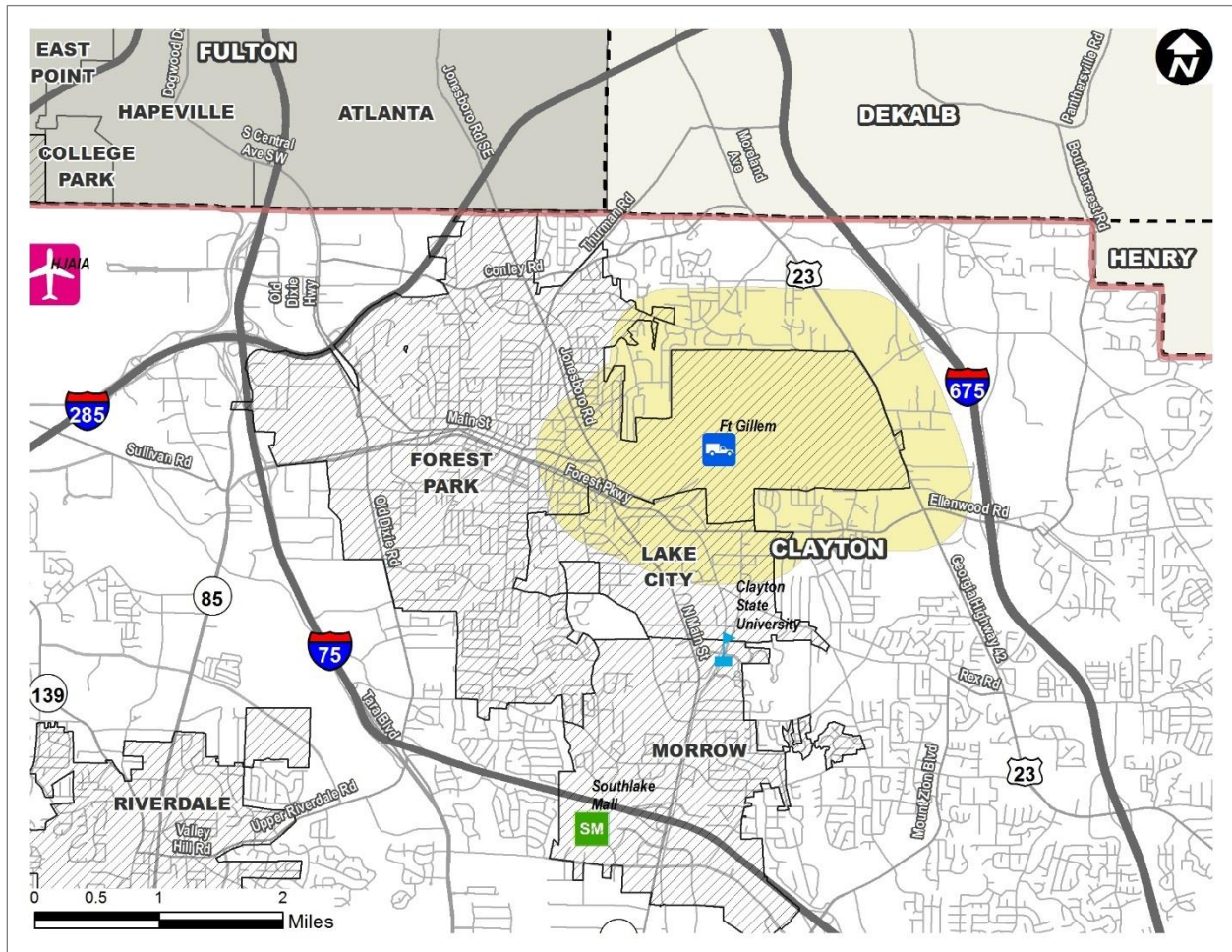
4.10.3 GILLEM LOGISTICS CENTER SUBAREA

Historically, logistics and distribution oriented businesses have been attracted to Clayton County for its location. Now, the Gillem Logistics Center is capitalizing on its strategic location in northern Clayton County for the redevelopment of the former Fort Gillem U.S. Army base into logistics and warehousing uses. The Gillem Logistics Center and its surrounding area, shown in **Figure 4-73**, were selected as a subarea for further study based on current and future needs identified in the areas of safety, mobility and operations, access management, and economic development.

This subarea is proximate to H-JAIA, as well as to intermodal facilities that provide access to the Port of Savannah, such as interstates I-75 and I-85, and national Class I railroads (CSX and Norfolk Southern). It is also easily accessible from major urban corridors/principal arterials, including SR 3/US 19/US 41/Tara Boulevard, SR 42/US 23/Moreland Avenue, SR 54/Jonesboro Road, SR 85, and SR 138.



Figure 4-73: Sub Area 3 - Gillem Logistics Center



Gillem Logistics Center

The entire Gillem Logistics Center is a master-planned redevelopment of 1,168 acres of the former Fort Gillem U.S. Army Base, which was deactivated in 2011. The redevelopment process began in 2014, and the site has begun transitioning into an industrial complex that can accommodate over 8 million square feet of distribution facilities that will serve the entire southeast region. Planned facilities on the site range from 100,000 square feet to 1.5 million square feet. The master plan for the redevelopment can be found in **Figure 4-74**.

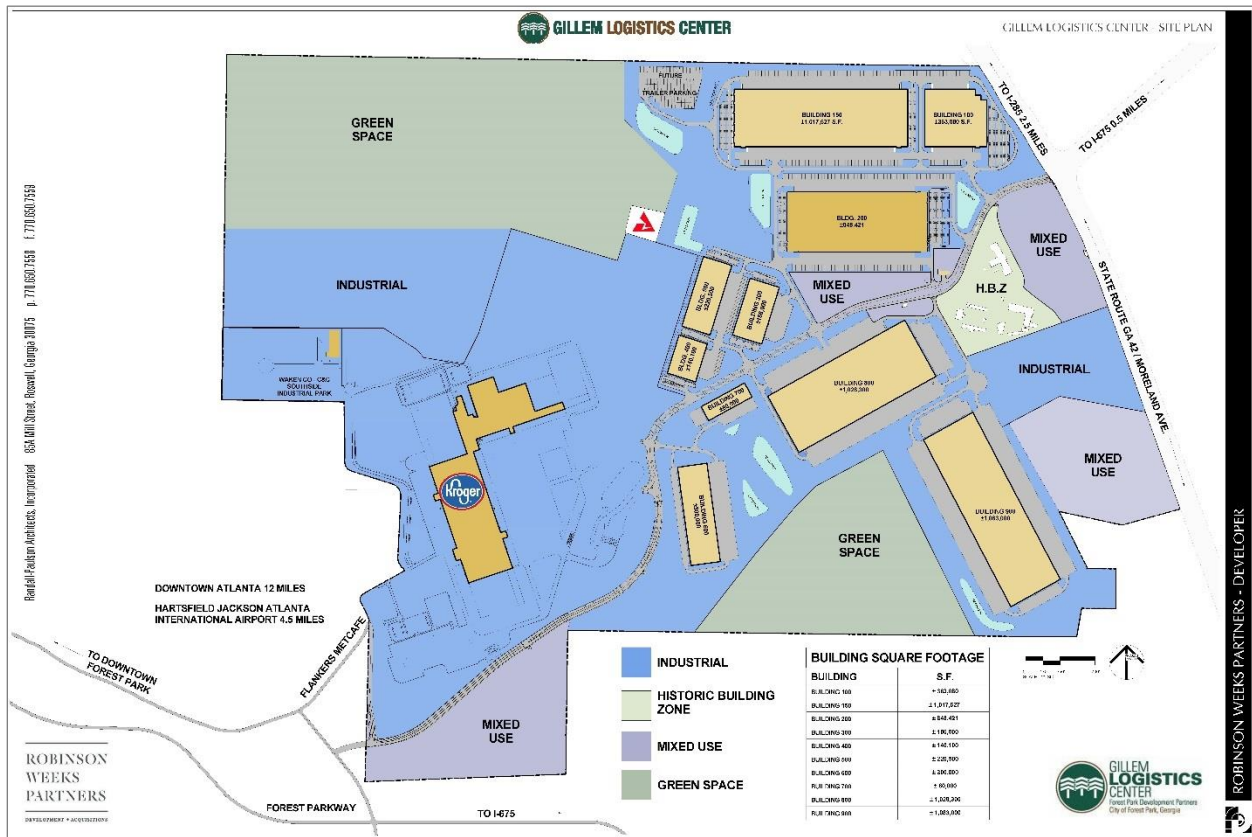
The site has its main entrance on its eastern side at Anvil Block Road on SR 42/US 23/Moreland Avenue. To the west, Anvil Block Road becomes the development’s spine road, Hood Avenue. The main entrance is about one-half mile from the Anvil Block Road interchange with I-675. A second entrance is on the development’s west side at Main Street on SR 54/Jonesboro Road.



To the south of the site, SR 331/Forest Parkway connects the Gillem Logistics Center with the H-JAIA area and has interchanges with I-75, I-85 and I-675. Its interchange with I-75 is roughly one and one-half miles south of the interchange at Anvil Block Road.

The first major tenant of the redevelopment site is The Kroger Company, which has a 1.4 million square foot regional distribution center there. The building provides cross dock loading and abundant truck trailer storage. Today, the Kroger warehouse handles over 1,000 trucks alone each day.

Figure 4-74: Gillem Logistics Center Master Plan



Source: Robinson Weeks Partners, gillemlogisticscenter.com

4.10.3.1.1 Safety

This analysis compares the crash rates on the following three main facilities in this subarea – all minor urban arterials – to the statewide average annual for the facility type to determine if there is a need to address safety issues in this subarea:

- The 4.2-mile-long segment of SR 42/US 23/Moreland Avenue from Rex Road to the Henry County line
- The 2.7-mile-long segment of SR 54/Jonesboro Road from Thurman Road to Huie Road
- The 4.8-mile-long segment of SR 331/Forest Parkway from Old Dixie Road to SR 42/US 23/Moreland Avenue.



Crashes and crash rates are presented in Table 4-51 through Table 4-56. Statewide averages for minor urban arterials are presented in

Table 4-48.

Crash rates on SR 331/Forest Parkway and SR 54/Jonesboro Road are consistently significantly higher than the annual state average for minor urban arterials for all crash categories, except for fatal crashes and fatalities during years where no fatal crashes occurred. SR 42/US 23/Moreland Avenue experienced higher than statewide average crash rates for total crashes, injury crashes, and injuries in 2015 while only the total crashes were higher than average in 2014 and only the injury rate was higher than the statewide average in 2016.

Table 4-51: Forest Parkway Corridor Crash Data (2014-2016)

	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	-	-	64	92	296
2015	3	3	66	91	286
2016	1	1	65	84	294
Total	4	4	195	267	876

Source: GDOT GEARS Database

Table 4-52: US 23 Corridor Crash Data (2014-2016)

	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	-	-	26	37	147
2015	-	-	44	63	157
2016	-	-	32	54	140
Total	-	-	102	154	444

Source: GDOT GEARS Database

Table 4-53: Jonesboro Road Corridor Crash Data (2014-2016)

	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	-	-	35	44	256
2015	-	-	51	76	275
2016	1	1	59	82	307
Total	1	1	145	202	838

Source: GDOT GEARS Database

Table 4-54: Forest Parkway Corridor Crash Rates (2014-2016)

	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	-	-	265 (+183%)	381 (+176%)	1,226 (+204%)
2015	12.08 (+719%)	12.08 (+690%)	266 (+171%)	366 (+157%)	1,151 (+181%)
2016	3.91 (+256%)	3.91 (+245%)	254 (+163%)	329 (+172%)	1,151 (176%)



Table 4-55: US 23 Corridor Crash Rates (2014-2016)

	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	-	-	125	178	706 (+117%)
2015	-	-	206 (+132%)	294 (+126%)	733 (+115%)
2016	-	-	145	245 (+106%)	636

Table 4-56: Jonesboro Road Corridor Crash Rates (2014-2016)

	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	-	-	323 (+223%)	406 (+188%)	2,360 (+393%)
2015	-	-	457 (+293%)	681 (+292%)	2,465 (+387%)
2016	8.72 (+570%)	8.72 (+545%)	514 (+330%)	715 (+308%)	2,676 (+409%)

4.10.3.1.2 Mobility and Operations

AADT and truck percentages for arterials in the subarea are presented in **Table 4-57**. Roads connecting to the main entrance of Gillem Logistics Center carry relatively high volumes of truck traffic – 12 to 17 percent. US 23, SR 54/Jonesboro Road and SR 331/Forest Parkway are all on the ASTRoMaP truck route system.

Table 4-57: AADT and Truck Percentages on Subarea Arterials

Facility	Location	AADT	Truck Percentage
Forest Parkway/SR 331	west of Jonesboro Road/SR 54	17,600	6%
Forest Parkway/SR 331	west of SR 42	16,700	7%
Forest Parkway/SR 331	west of I-675	20,600	4%
Jonesboro Avenue	at west entrance	25,600	3%
Moreland Avenue/US 23	south of Anvil Block Road	14,500	12%
Moreland Avenue/US 23	north of Anvil Block Road	16,400	17%
Anvil Block Road	east of Moreland Avenue/SR 23	13,000	15%
Anvil Block Road	west of I-675	15,600	16%

Source: GDOT 2016 Geocounts Data

The Freight Panel convened for this study reported that the interchange of Anvil Block Road at I-675 has seen commercial vehicle traffic steadily rise with the growth of the redevelopment; they expected that it would grow much more congested as the redevelopment site filled in with new distribution facilities. In addition to the Gillem Logistics Center, there are clusters of shipping companies located along the I-675 corridor that require relief from the congestive volumes of trucks headed to the logistics center on this facility. Relief might come from the widening of the entrance ramp at Anvil Block Road, an additional ramp on the Cedar Grove

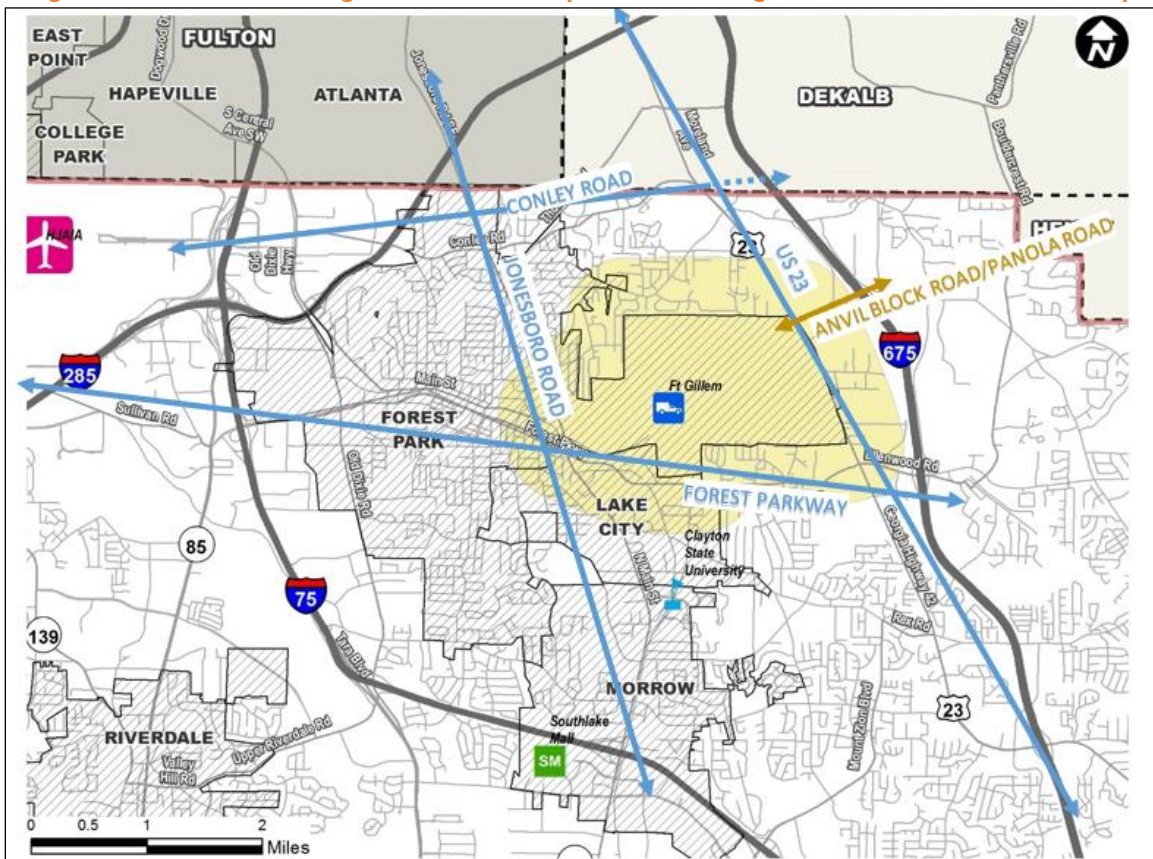


Road interchange with I-675, or a new interchange on Conley Road at I-285. The ARC is currently planning a 2018 study of interchange feasibility for the last option. An interchange at this location would provide easier truck access to the center’s western entrance on Jonesboro Road.

4.10.3.1.3 Truck Access and Connectivity

Figure 4-75 presents connectivity accessibility of Subarea 3. East-west connectivity inside the Gillem Logistics Center is provided by an internal trunk road that has been widened to four lanes and improved to connect in the west to Flankers Road and Rateree Drive and to Moreland Avenue/SR 23 in the east.

Figure 4-75: Subarea 3 Regional Connectivity and Gillem Logistics Center Site Accessibility



External to the site, there is strong regional connectivity for east-west and north-south movements. North of Gillem Logistics Center, Conley Road connects east-west from I-75 and I-285 to SR 42/US 23/Moreland Avenue. To its south, Forest Parkway/Sullivan Road connects east-west from I-285 and I-75 to US 23 and I-675. Jonesboro Road and SR 42/US 23/Moreland Avenue connect to I-285 to I-75 west and east of the site, respectively.

The main point of access to the Gillem Logistics Center is at Anvil Block Road. Due to its proximity to the Anvil Block Road interchange with I-675, most truck traffic accesses the site via Anvil Block Road and I-675. With the arterials that form a grid around the site, there is the opportunity to reduce the reliance on this interchange by improving access from other major facilities.



4.10.3.1.4 Access Management

This section summarizes access management needs for arterials this subarea. Typical sections for SR 331/Forest Parkway, SR 54/Jonesboro Road, SR 42/US 23/Moreland Avenue and Anvil Block Road are presented in **Table 4-58**. Access to adjacent parcels along SR 42/US 23/Moreland Avenue is already managed with a median north of Anvil Block Road, and driveway spacing along Anvil Block Road, which not controlled, is not an issue. Therefore, no further inquiry was needed into access management on this facility.

Two segments of Forest Parkway were determined to have a high frequency of driveways and little to no management of existing access: North Lake Street to North Parkway and SR 42/US 23/Moreland Avenue to the interchange with I-675.

Table 4-58: Typical Sections for Subarea Arterials

Facility	Location	Typical Section	Driveway Spacing Issues?
SR 331/Forest Parkway	west of SR 42	4 lanes	Yes
SR 331/Forest Parkway	west of I-675	4 lanes with continuous center turn lane	Yes
SR 42/US23/ Moreland Avenue	south of Anvil Block Road	2 lanes	Yes
SR 42/US23/ Moreland Avenue	north of Anvil Block Road	2 lanes 4 lanes, divided, with 6-foot continuous raised median	Yes
Anvil Block Road	In subarea	4 lanes with continuous center turn lane	No

Source: Google Earth

Forest Parkway from North Lake Street to North Parkway

The density of driveways is high along the SR 331/Forest Parkway corridor between North Lake Street and North Parkway, as shown in **Figure 4-76**. There are 19 driveways located in this 1,900 feet-segment including 12 driveways in the westbound direction and 7 driveways in the eastbound direction. This section is an undivided 4-lane highway, and drivers can access businesses on both sides, which can interrupt drivers on both directions of the corridor. Average driveway spacing is only 100 feet within this segment of the corridor as opposed to the GDOT minimum driveway spacing standard of 185 feet for 40-mile posted speed limit.



Figure 4-76: Aerial Photo of Forest Parkway between North Lake Street and North Parkway


Forest Parkway from SR 42/US 23/Moreland Avenue to the I-675 Interchange

As shown in **Figure 4-77**, there are 22 driveways located in this 1,880 feet-segment, 11 in each direction. This section is a 4-lane highway with a two-way-left-turn lane in the median enabling drivers to access businesses on both sides, which may in turn interrupt drivers on the both directions of the corridor. Average driveway spacing is only 85 feet within this segment of the corridor as opposed to the GDOT minimum driveway spacing standard of 185 feet for 40 mph posted speed limit. This segment includes a school zone with a posted speed limit of 25 mph during school commute hours.

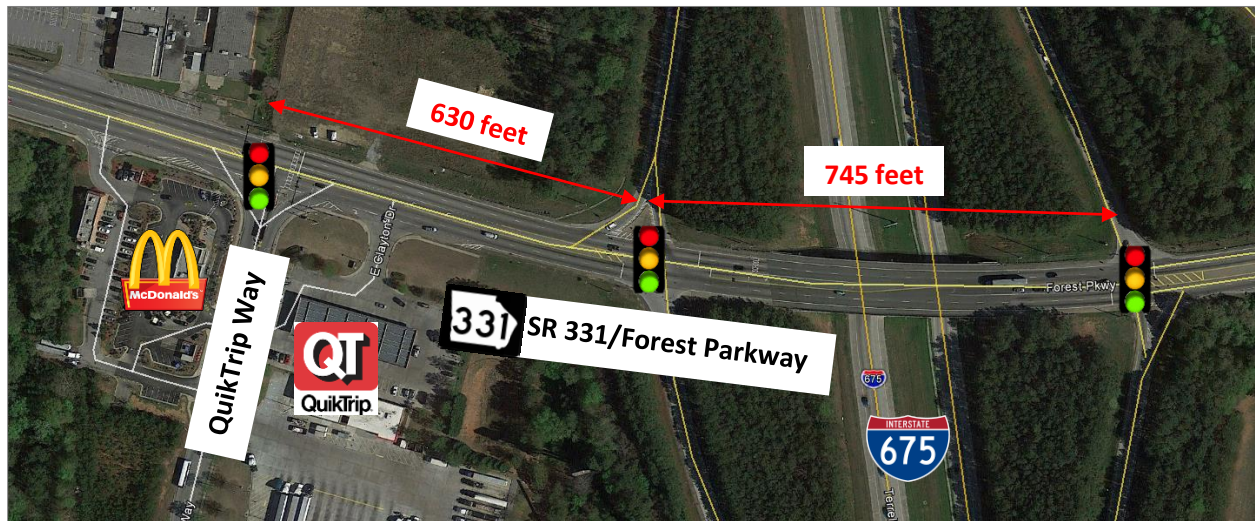
Figure 4-77: Access Management Needs along SR 331/Forest Parkway near SR 42/US 23/Moreland Ave


Figure 4-78 shows the SR 331/Forest Parkway segment near the I-675 Interchange where three signalized intersections are tightly spaced at the intersections of QuikTrip Way, the I-675 southbound ramp, and the I-675 northbound ramp. The GDOT standard for minimum spacing of signalized intersections is 1,320 feet in



urban roadway segments. Spacing of the three consecutive intersections is 630 feet and 745 feet, respectively, which is significantly less than minimum requirement.

Figure 4-78: Access Management Needs along SR 331/Forest Parkway near I-675 Interchange



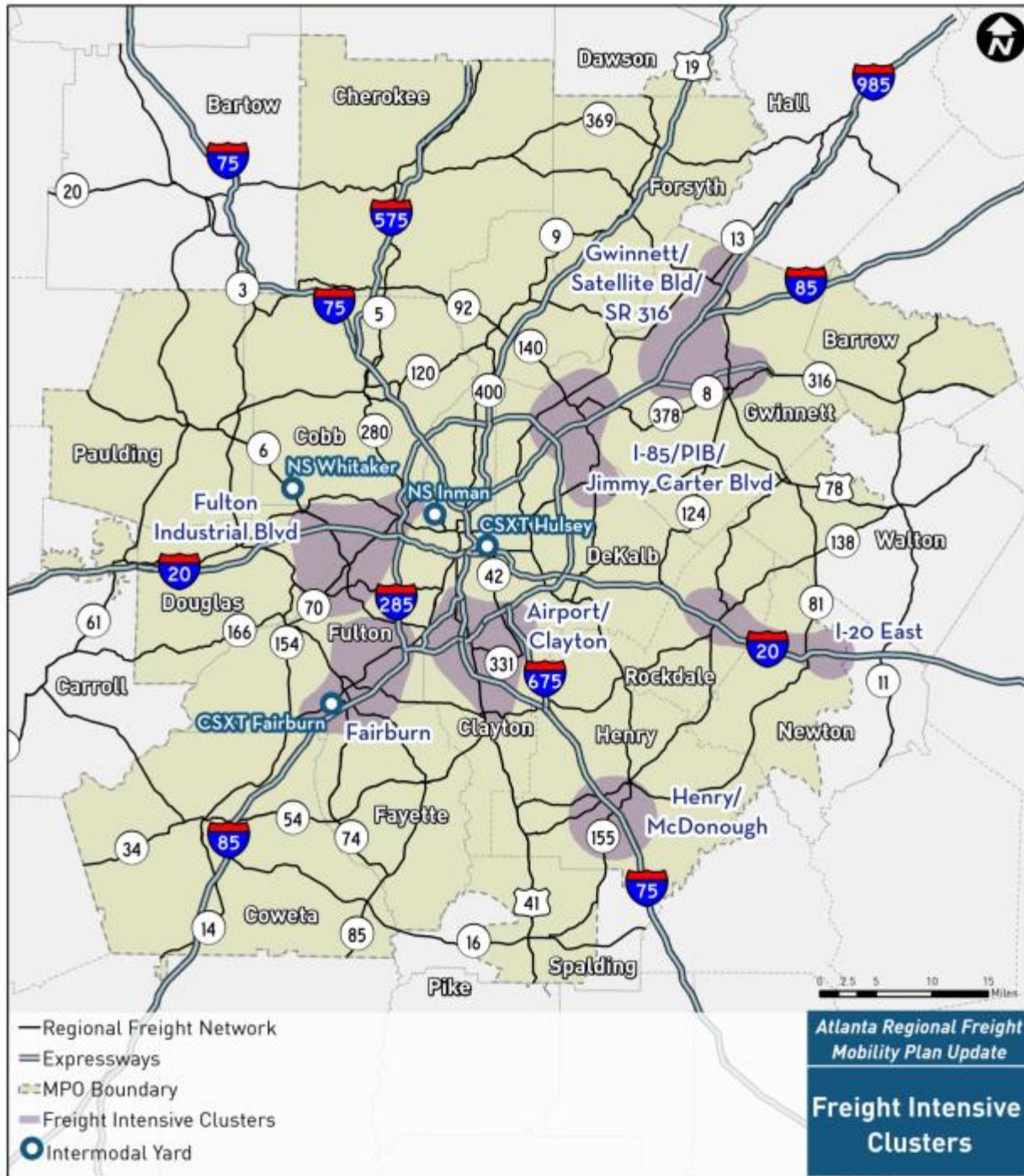
4.10.3.1.5 Economic Development and Quality of Life

This area is important for the economy of the County as well as the region. The subarea sits within the Airport/Clayton Freight Cluster identified by the ARC's *Atlanta Regional Freight Mobility Plan Update (2016)*. As shown in **Figure 4-79**, that plan defined freight intensive clusters as the areas that contain a significant share of the region's manufacturing and warehousing/distribution facilities, and generate and attract disproportionately large volumes of freight, primarily trucks. The Airport/Clayton Cluster makes up 5 percent of the region's leased warehouse and distribution area, 2 percent of its leased manufacturing space, and 9 percent of its vacant industrial land. It is also a prominent truck trip end location based on truck GPS data collected for the GDOT *Freight and Logistics Study*. It is also an advantage to reliably reach the Region Core (Downtown Atlanta) and Buckhead areas within 60 minutes of travel time during the PM peak hour, from the Airport/Clayton Cluster.

Most of this subarea is inhabited by light industrial, industrial, and commercial land uses. There are, however, a number of residences in the area as well. Single family neighborhoods can be found south of the Gillem Logistics Center along SR 331/Forest Parkway and to the west and north of Boundary Road/Fort Gillem to the north. Residents in these areas may experience externalities from the trucks associated with the redevelopment site, including increased and increasing truck traffic. There is a need to address the quality of life issues that living near truck-centric commercial areas can bring. Siting and containment of logistics sites would be critical to provide a more attractive environment for residents nearby and minimize potential externalities from a higher truck traffic. Sidewalks, bike lanes, and aesthetic improvements along SR 331/Forest Parkway can be considered to provide a safe access to pedestrians and cyclists.



Figure 4-79: Freight-Intensive Clusters in Metro Atlanta



Source: Atlanta Regional Freight Mobility Plan Update (2016), ARC

As the largest city in Clayton County, Forest Park has a population of roughly 19,000 and a density of 2,019 people per square mile, which is more than double the population density for the Atlanta region. Siting of major employers in transportation and warehousing in Forest Park and the Gillem Logistics Center provides



opportunities for residents to work near their homes. More pedestrian and bike-friendly streets in this area would have a positive impact on the image of the area with a potential for more business interest and investment in the area, not only for freight and warehousing businesses but ideally for office parks and other land uses.

4.10.4 EAST-WEST CONNECTIONS

Clayton County residents and stakeholder committee members stated that there is a need for better east-west connectivity, especially near the City of Jonesboro in the center of the county. Major arterials, such as SR 3/US 19/US 41/Tara Boulevard, SR 54/Jonesboro Road, SR 85, SR 139, and SR 314, adequately serve north-south travel in the county. East-west connectivity, however, is limited by the presence of few east-west roads and the obstacle of the rail line. The area around Jonesboro with the SR 138 bypass was selected as a subarea for further study based on current and future needs identified in the areas of safety, connectivity and accessibility, and quality of life.

Safety

This section discusses safety needs for the major corridors that provide east west connections based on latest crash data: SR 138, the SR 138 bypass, Fayetteville Road, Lake Jodeco Road, and Stockbridge Road. While some of these corridors present crash rates exceeding the statewide averages for a category or two between 2014 and 2015, the SR 138 bypass stands out with safety deficiencies along the corridor.

Table 4-59 summarizes the number of fatal crashes, fatalities, injury crashes, injuries, and total number of crashes that occurred during the last three years (2014-2016) for the SR 138 bypass. Table 4-41 shows statewide average crash rates for the same functional classification, principal arterials (non-freeway, urbanized).

Crash rates for all categories in the SR 138 bypass significantly exceed statewide average rates in 2015, ranging from approximately four to nine times higher than the statewide averages. Similarly, 2014 and 2016 crash rates substantially exceed statewide average rates for injury crashes, number of injuries, and number of all crashes.

Table 4-59: SR 138 Bypass Crash Data (2014-2016)

	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	-	-	55	85	293
2015	2	2	90	137	376
2016	-	-	67	109	285
Total	2	2	212	331	954

Source: Georgia Electronic Accident Reporting System (GEARS)



Table 4-60: SR 138 Bypass Crash Rates (2014-2016)

	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	-	-	325 (+ 242%)	502 (+ 252%)	1,730 (+ 294%)
2015	11.48 (+ 926%)	11.48 (+857%)	517 (+ 374%)	787 (+ 382%)	2,159 (+ 370%)
2016	-	-	374 (+258%)	609 (+279%)	1,591 (+253%)

Connectivity and Accessibility

SR 138 is the only state route that connects between the western end and the eastern end of the county, through the SR 138 Jonesboro bypass. McDonough Road provides east-west connection through south Clayton from/to Fayette and Henry Counties. Both these roads are classified as principal arterials. A few other roads provide partial east-west connections, including SR 331/Forest Parkway in north Clayton, and SR 54/Fayetteville Road and Lake Jodeco Road near Jonesboro. Some of these roads intersect with major north-south freight railways operated by Norfolk Southern between Atlanta and Macon. At-grade rail crossing locations can pose operations and safety issues and can also potentially hinder movement of people and goods between east and west Clayton.

Figure 4-80 shows rail line crossing locations in the subarea, and they are all at-grade crossings. The crossing at the SR 138 Jonesboro Bypass is one of the top five public at-grade crossing locations in Clayton County by AADT.

Quality of Life

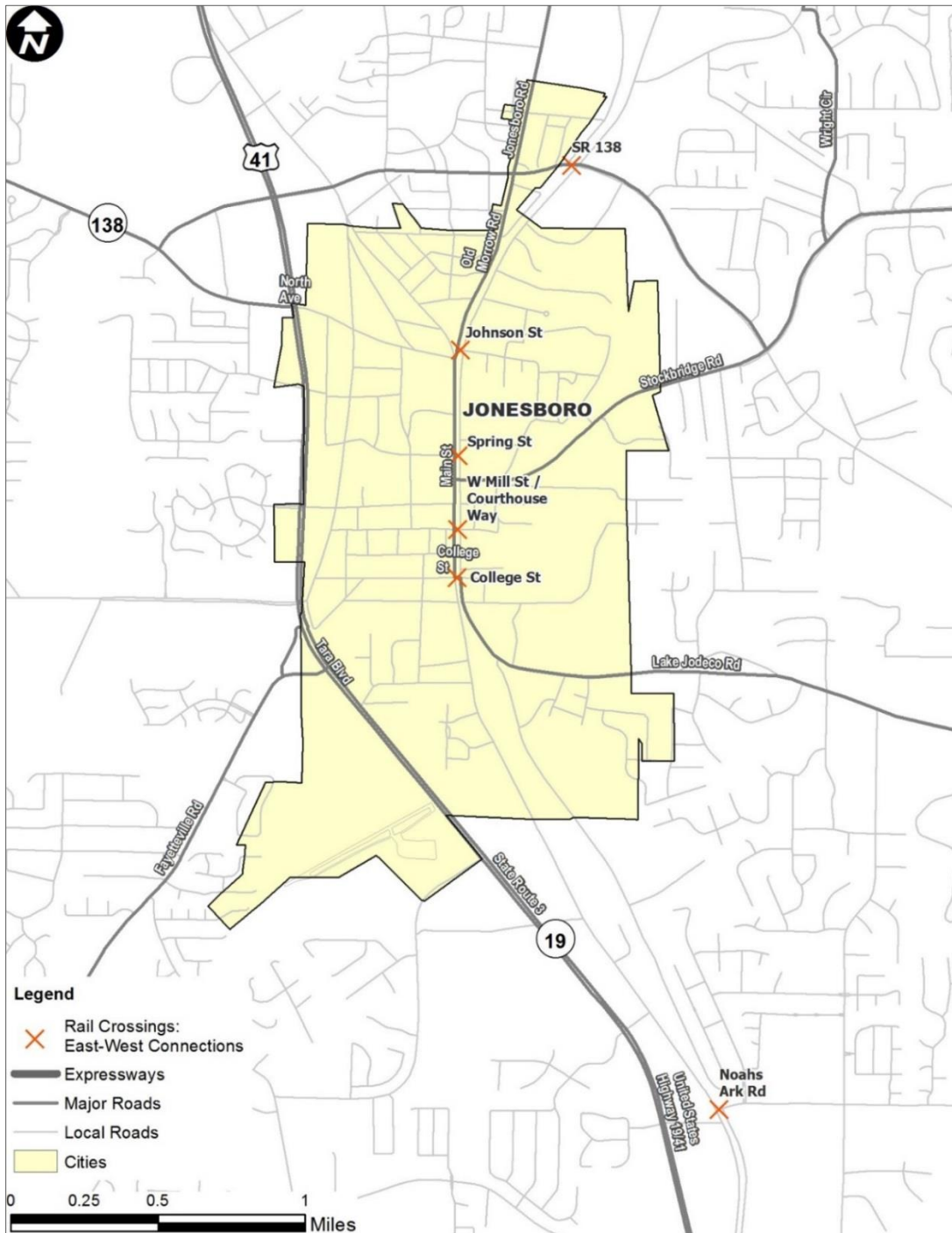
SR 138 and Fayetteville Road are Principal Arterials. SR 138 is the most significant east-west corridor in Clayton County, bypassing just north of Jonesboro. Stakeholder committee members and residents expressed concerns regarding aesthetics/beautification and effectiveness of signage and lighting along the SR 138 corridor.

The vicinity of this subarea has a higher concentration of low income population than the rest of the county, as shown in Figure 4-14. Low income areas often correlate with areas of car ownership and access, which means that residents are often-transit dependent. Therefore, the socioeconomic condition of this subarea reinforces the need for pedestrian facilities to provide safe and effective access to transit stops.

As shown in **Figure 4-81**, MARTA bus Route 191 travels along SR 138 via Tara Boulevard and SR 85, and connects commuters to/from H-JAIA. Improving the safety of all users including drivers, pedestrians, and bicyclists should be one of the top priorities along the corridor by providing consistent sidewalks and crosswalks. Pedestrian facilities enhanced with pedestrian safety features could also be considered near transit stops.

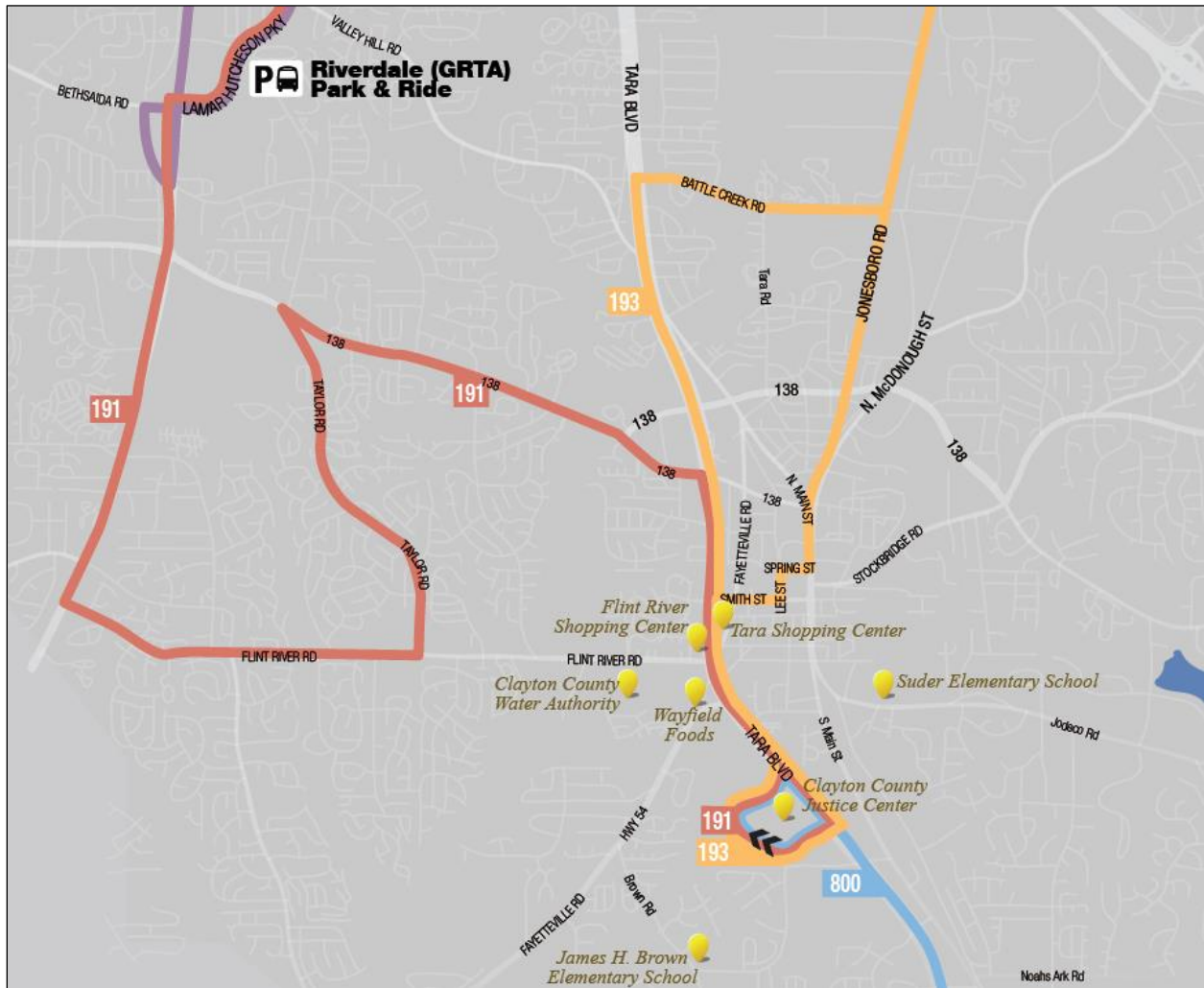


Figure 4-80: At-Grade Rail Crossing Locations in Subarea



Source: Google Earth



Figure 4-81: MARTA Bus System Map around the City of Jonesboro


Source: MARTA Website

4.10.5 FLINT RIVER ROAD CORRIDOR SUBAREA

Stakeholder committee members and residents repeatedly expressed an interest in having more pedestrian-friendly and aesthetic improvements along Flint River Road west of Jonesboro. The Flint River Road/Pointe S Parkway corridor between SR 85 and US 19/US 41/Tara Boulevard was selected as a subarea for further study based on current and future needs identified in the areas of safety and quality of life. The following sections take a closer look at sidewalks and other pedestrian facilities along the corridor.

Safety

This section discusses safety needs for the Flint River Road corridor based on the latest crash data. This road is functionally classified as a minor arterial.



Table 4-61 summarizes the number of fatal crashes, fatalities, injury crashes, injuries, and total number of crashes that occurred during the last three years (2014-2016) for the corridor. **Table 4-62** summarizes crash rates for the Flint River Road corridor where the crash rates that exceed the statewide averages are highlighted in bold text. Table 4-48 shows statewide average crash rates for the same functional classification, minor arterials (urbanized).

Table 4-61: Flint River Road Corridor Crash Data (2014-2016)

	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	1	1	64	110	258
2015	1	1	91	145	309
2016	2	2	76	131	286
Total	4	4	231	386	853

Source: GDOT GEARS Database

Table 4-62: Flint River Road Corridor Crash Rates (2014-2016)

	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	5.77 (+ 476%)	5.77 (+ 461%)	369 (+ 254%)	634 (+ 294%)	1,487 (+ 247%)
2015	5.61 (+ 334%)	5.61 (+ 320%)	510 (+ 327%)	813 (+ 349%)	1,732 (+ 272%)
2016	10.90 (+713%)	10.90 (+681%)	414 (+266%)	714 (+308%)	1,559 (+238%)

Figure 4-82 highlights number of crashes and locations of fatal crashes around the Flint River Road corridor. All crash rates for the last three years significantly exceed statewide average rates, ranging between 2.5 and 7.1 times higher than the statewide averages. Fatal crashes have occurred each year during the last three years along the corridor where 2016 crash rates for fatal crashes and number of fatalities are extremely high.

Figure 4-83 shows locations of crashes involving bicycles and pedestrians around the Flint River Road corridor, circled in red Half of the fatal crashes along the Flint River Road corridor involved bicyclists or pedestrians, as shown in. Just a small portion of all injury crashed involve cyclists and pedestrians.

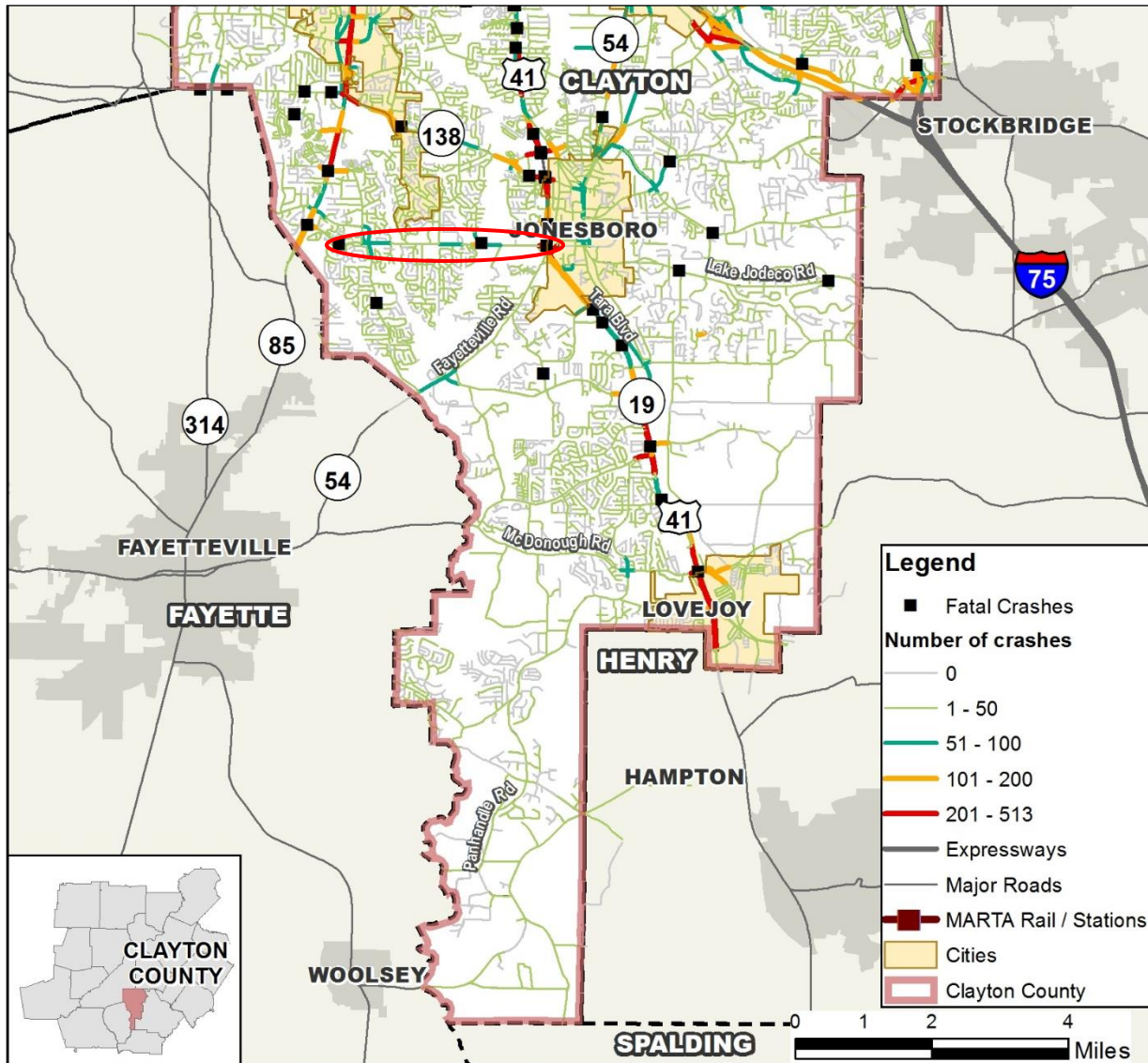
Table 4-63: Number of Crashes Involving Cyclists/Pedestrians in Flint River Road Corridor (2014-2016)

	Fatal Crashes	Fatalities	Injury Crashes	Injuries	All Crashes
2014	-	-	2	2	2
2015	1	1	3	3	3
2016	1	1	2	2	3
Total	2	2	7	7	9

Source: GDOT GEARS Database



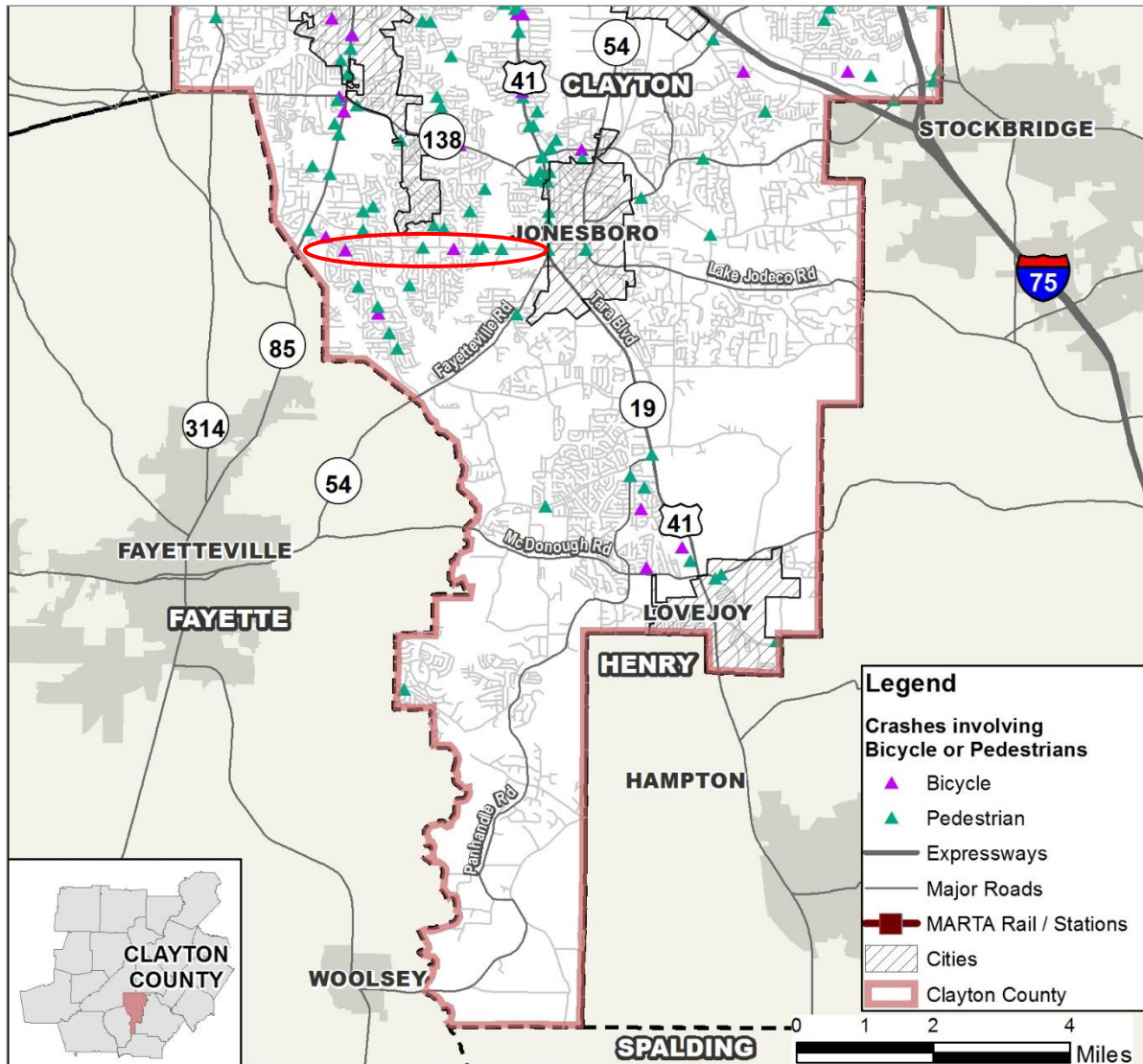
Figure 4-82: Locations of Fatal Crashes around the Flint River Road Corridor, 2014-2016



Source: GDOT GEARS Database



Figure 4-83: Crashes involving Bicycles/Pedestrians around the Flint River Road Corridor, 2014-2016



Source: GDOT GEARS Database

A search of news articles in the Atlanta Journal-Constitution indicates that there were at least four fatalities reported along Flint River Road in 2017. One of these fatal crashes occurred in December 2017 and involved pedestrians who were attempting to cross Flint River Road in front of the Flint River Crossing Apartments. A preliminary review indicates the need for pedestrian facilities enhanced with pedestrian safety features such as pedestrian refuge islands, pedestrian hybrid beacons (also known as high-intensity activated crosswalk or HAWK signals), or rectangular rapid flash beacons (RRFB) or at identified pedestrian crash hotspots. A pedestrian hybrid beacon is a traffic control device used to stop road traffic and allow pedestrians to cross safely, as shown in **Figure 4-84**. The RRFB is a device using LED flashing beacons in combination with pedestrian warning signs, to provide a high-visibility strobe-like warning to drivers when pedestrians use a crosswalk.



RRFBs are a lower cost alternative to traffic signals and pedestrian hybrid beacons and have been proven to significantly more effective at increasing driver yielding rates to pedestrians at pedestrian crosswalks.

Figure 4-84: Example of Pedestrian Hybrid Beacon Applications



Source: https://safety.fhwa.dot.gov/ped_bike/tools_solve/fhwasa14014/ (Photo Credit: Mike Cynecki)

Figure 4-85: Example of RRFB Applications



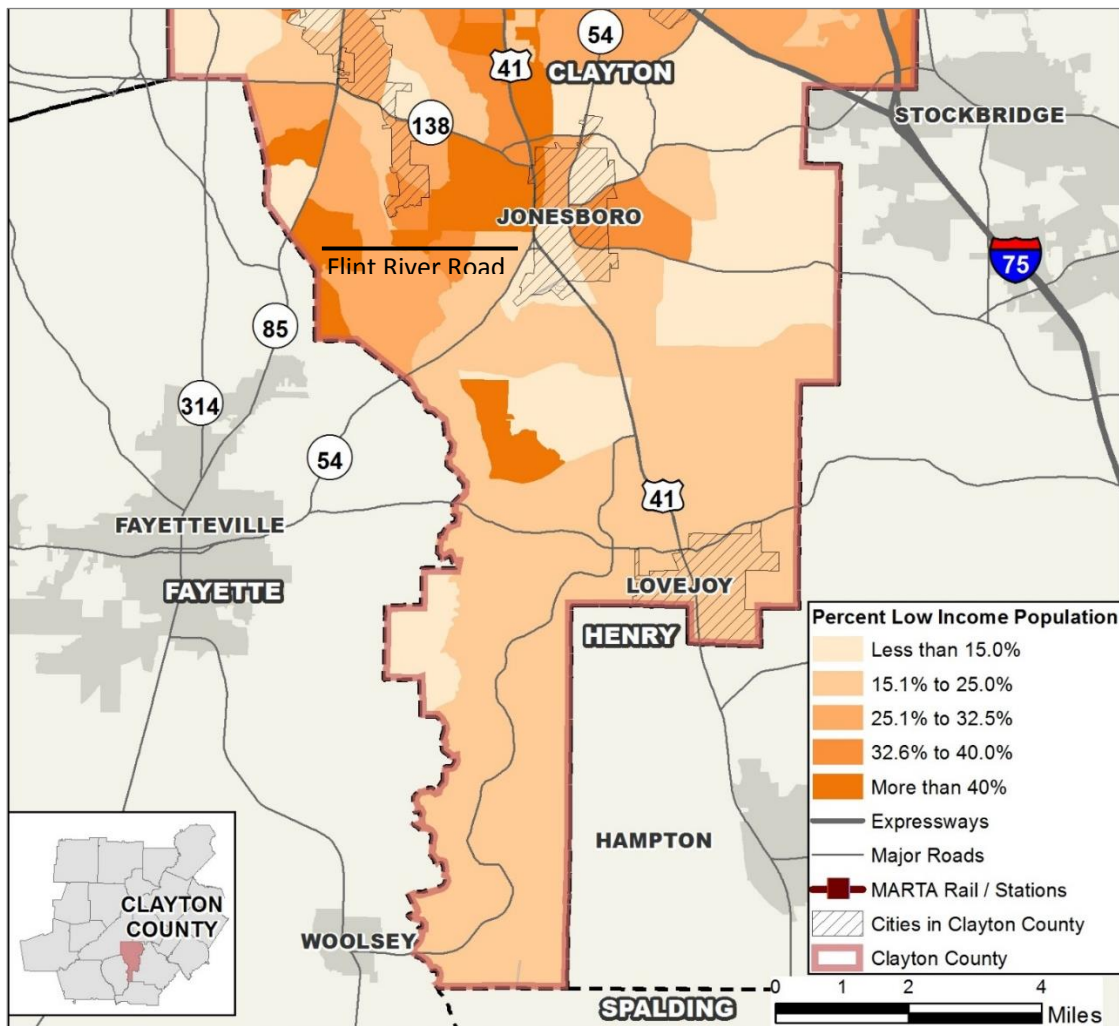
Source: <https://www.tapconet.com/solar-led-division/rectangular-rapid-flash-beacons>

Quality of Life

The vicinity of this subarea has a higher concentration of low income population than the rest of the county, as shown in **Figure 4-86** based on the 2011-2015 American Community Survey (ACS), US Census. The socioeconomic condition of this subarea reinforces the need for pedestrian facilities to provide safe and effective access to transit stops because many of the residents along this corridor would need to walk to nearest MARTA bus stops. Inconsistent provision of sidewalks and crosswalks along this corridor poses a significant safety risk forcing these commuters to jaywalk or walk along shoulders on busy roadways, as witnessed by police officers and other stakeholders.

MARTA bus Route 191 travels along Flint River Road via Tara Boulevard, SR 138, and SR 85 and connects commuters to/from H-JAIA. Improving the safety of all users including drivers, pedestrians, and bicyclists should be one of the top priorities along the corridor by providing consistent sidewalks and crosswalks.

Figure 4-86: Low Income Population by Census Blockgroup around the Flint River Road Corridor



Source: US Census



5 PLANNING CONTEXT

This section presents studies and projects that create an overarching regional and local planning framework for the CTP Update. In the case of two major ongoing studies – GDOT’s *Tara Boulevard Corridor Study* and MARTA’s *Clayton High-Capacity Transit Initiative (HCTI)* (see **Section 7.1**) – final recommendations were not available while the CTP Update was ongoing. The results of these two studies will significantly affect how Clayton County supports its transportation systems and how it distributes available funding to pedestrian and quality-of-life improvements. However, recommendations from GDOT’s study and MARTA’s Clayton HCTI were not available at the time of the writing of this report.

While this CTP Update cannot list recommended projects from these studies specifically, it is important to note that this CTP Update identified Tara Boulevard as well as transit access as major needs in the county. Chapter 8 lists a combination of specifically recommended projects, along with “buckets of funding” for each implementation period. These funding buckets would provide flexibility in supporting projects recommended in the ongoing studies. The next CTP Update should fully incorporate the results from these studies and develop further recommendations directly related to the study outcomes. Ongoing studies, their parameters, and their impacts on the CTP Update are discussed below.

5.1 2008 Clayton Comprehensive Transportation Plan

Clayton County approved its last Comprehensive Transportation Plan (CTP), entitled *Connecting Clayton*, in 2008. *Connecting Clayton* set the vision and framework for major public investments in transportation improvements and identified long-range transportation strategies, projects, and programs to address anticipated multimodal needs and issues through the year 2030. The outcome of this analysis and extensive community outreach process was an Implementation Program with a prioritized set of recommended CTP projects and a Capital Improvement Program. The total cost of the CTP program was approximately \$1.66 billion for 103 critical projects in five-year action plan (FY 2009-2013), 61 moderate range projects (FY 2014-2018), and 10 long-range projects (FY 2019-2030). The Implementation Program included both then-existing and new projects for the life of the plan and categorized these projects based on priority. The project categories and time periods were broken down as the following:

- Critical Projects (Five-Year Action Plan): FY 2009-2013
- Moderate Range Projects: FY 2014-2018
- Long-Range Projects: FY 2019-2030

5.1.1 STATUS OF PROJECTS

Several transit projects in the 2008 CTP were recommended in support of the County’s public transit service, C-TRAN. Since the adoption of the CTP, C-Tran terminated its service and on November 4, 2014 voters in Clayton County approved a referendum to dedicate a one-cent sales tax for the expansion of Metropolitan Atlanta Rapid Transit Authority (MARTA) service in to Clayton County. MARTA began bus service in Clayton County in 2015.



Completed Projects: Since the Clayton County Comprehensive Transportation Plan's adoption in 2008, 16 of its 103 recommendations (approximately 16 percent) in its short-term project action plan (FY 2009-2013) have been completed, as well as one project (CL-239 Panola Road widening) from the 61 recommendations from its moderate range plan (FY 2014-2018). A list of the completed projects as of July 2017 is as follows:

- **SPLOST 25** Clark Howell Highway at SR 85/Sullivan Road
- **SPLOST 27** Old Rex-Morrow Road/Maddox Road/Rex Road
- **SPLOST 38** Widen and resurface Woolsey Road
- **SPLOST 43** Intersection improvement Elliot Road at Conkle Road
- **CTP-PN-02** Stockbridge Road 5-Foot Sidewalks and Accessible Crossings along ARC Regionally Significant Transportation System (RSTS) Routes, North McDonough Street to Walt Stephens Road
- **CTP-PN-18** Garden Walk Boulevard – Pedestrian improvements for transit corridor, from SR 139/Riverdale Road to SR 85
- **CTP-PN-30** SR 54 – Pedestrian improvements for recreational/tourism corridor, from South Lake Plaza Drive to south of I-75 Off-ramp
- **AR-607** Park-and-Ride Facilities for Xpress Bus Service, in the vicinity of the Clayton Justice Center
- **CL-162A** Downtown Jonesboro – Pedestrian improvements, Phase 1
- **CL-237B** Clayton County ATMS/ITS Enhancements and Implementation
- **CL-254** SR 138 Traffic Signal Upgrades at 12 locations
- **CL-255** SR 42 Traffic Signal Upgrades at 5 locations
- **CL-AR-245** Forest Park Downtown – Pedestrian improvements
- **CL-AR-BP093** Transit-Oriented Pedestrian Improvements on Multiple Streets
- **CL-AR-BP094** SR 54/Jonesboro Road Bicycle/Pedestrian Underpass and Crosswalks
- **CL-AR-BP241** Forest Park Sidewalks to Schools, Phase III
- **CL-239** Panola Road – Widen from 2 to 4 lanes, from Bouldercrest Road to Bailey Drive

Projects under Construction: Nine (9) projects of its 103 short-term recommendations (approximately 9 percent) are currently being under construction. Only one project (CL-238 Godby Road widening) out of 61 recommendations is under construction from its moderate range plan (FY 2014-2018) as of July 2017. A list of the projects that are currently being under construction is as follows:

- **CTP-PN-24** Flint River Road – Pedestrian improvements for transit corridor, from Taylor Road to Flint River Crossing
- **CTP-PN-39** Godby road – Pedestrian improvements to fill gaps in system, from Southampton Road to Phoenix Parkway
- **AR-510** C.W. Grant Parkway Grade Separation at Norfolk Southern RR Line – Includes realignment of Conley Road and US 19/41 in vicinity
- **CL-020A** Flint River Road Upgrade from Glenwoods Drive to Kendrick Road



- **CL-041** SR 54/Fayetteville Road/Jonesboro Road – Widen from 2 to 4 lanes, from McDonough Road in Fayette County to SR 3/US 19/US 41/Tara Boulevard in Clayton County
- **CL-162B** Downtown Jonesboro Pedestrian Improvements, Phase 2
- **CL-230A (SPLOST 21)** Anvil Block Road – Widen from 2 to 4 lanes, from Lunsford Drive to Bouldercrest Road
- **CL-230B (SPLOST 22)** Anvil Block Road – Widen from 2 to 4 lanes, from Bouldercrest Road to Allen Drive
- **CL-AR-BP239** Forest Park Sidewalks to Schools, Phase I – Six (6) of the 25 streets have been completed. The rest of the streets, nineteen (19), are currently under construction.
- **CL-238** Godby Road – Widen from 2 to 4 lanes, from Southampton Road to SR 314 (West Fayetteville Road)

5.2 Planned and Programmed Improvements

The planned and programmed improvements in Clayton County specified in the ARC's Transportation Improvement Program (TIP) and the Clayton County Special Local Option Sales Tax (SPLOST) work program are summarized in **Table 5-1** and **Figure 5-1**.

Programmed projects include widenings of several major arterials. Two of the four programmed widening projects, on SR 54/Jonesboro Road and on SR 3/US 19/US 41/Tara Boulevard, will provide additional capacity to the two major facilities that access Jonesboro from the south. Two bridge replacements are also included in programmed projects.

A review of planned projects indicates that major investments in the interstate and MARTA transit system are planned in Clayton County over the next 25 years. New collector-distributor lanes and managed lanes are proposed on the I-75 corridor, both of which would be valuable in serving both the county's existing truck and commute travel patterns. Projects also include an expansion of the MARTA rapid transit system into Clayton County.



Table 5-1: Clayton County Planned and Programmed Improvements

Project Code	Project Type	Status	Project Description	Sponsor	PE	Row	Utility	Construction	Funding				
									Federal	State	Local	Bonds	Total
CL-267	Roadway / Bridge Upgrade	Programmed	Valley Hill Road Bridge Replacement at Flint River	Clayton Co.	2014	2017	2019	2019	\$1.7M	\$0	\$4.9M	\$0	\$6.6M
CL-268	Roadway / Bridge Capacity	Programmed	SR 85 Bridge Replacement and Widening at Camp Creek (Clayton Co./ Fayette Co. Line)	GDOT	2014			2020	\$2.2M	\$546K	\$0	\$0	\$2.7M
CL-243	Roadway / GP Capacity	Programmed	Valley Hill Road Widening from Upper Riverdale Road to Battle Creek Road	Clayton Co.	2006	2017		2019	\$0	\$0	\$18.9M	\$0	\$18.9M
CL-AR-247	Roadway / GP Capacity	Programmed	SR 3/US 19/US 41/Tara Boulevard Widening from Flint River Road to Tara Road	GDOT	2011	2017	2019	2019	\$17.7M	\$14.2M	\$0	\$0	\$31.9M
CL-019	Roadway / GP Capacity	Programmed	Mount Zion Boulevard Widening from Southlake Parkway to Lake Harbin Road	Clayton Co.	1997	2016	2019	2019	\$16.5M	\$4.1M	15.8M	\$0	\$36.4M
CL-041	Roadway / GP Capacity	Programmed	SR 54 (Fayetteville Road/Jonesboro Road) Widening from McDonough Road in Fayette Co. to SR 3/US 19/US 41/Tara Boulevard in Clayton Co.	GDOT	2014	2011		2017	\$44.8M	\$11.2M	\$0	\$0	\$56M
CL-012	Roadway / GP Capacity	Long Range (2022-2030)	US 23 (Moreland Avenue) Widening from Lake Harbin Road to Anvil Block Road	GDOT					\$34.8M	\$8.7M	\$0	\$0	\$43.5M



Project Code	Project Type	Status	Project Description	Sponsor	PE	Row	Utility	Construction	Funding				
									Federal	State	Local	Bonds	Total
AR-ML-610	Roadway / Managed Lanes	Long Range (2031-2040)	I-75 South Managed Lanes from C.W. Grant Parkway to SR 138	GDOT					\$137.6M	\$34.4M	\$0	\$141M	\$313M
CL-014	Roadway / GP Capacity	Long Range (2022-2030)	SR 85 Widening from Adams Drive to I-75 South including Interchange at Forest Parkway	GDOT					\$16.4M	\$4.1M	\$0	\$0	\$20.5M
CL-015	Roadway / GP Capacity	Programmed	SR 85 Widening from SR 279 (Old National Highway) in Fayette Co. to Roberts Drive in City of Riverdale	GDOT	2014	2018	2019	2019	\$22.0M	\$5.5M	\$0	\$0	\$27.5M
CL-017	Roadway / GP Capacity	Programmed	Battle Creek Road Widening from Valley Hill Road to Southlake Parkway	Clayton Co.	1997	2016	2019	2019	\$9.5M	2.4M	13.5M	\$0	\$25.4M
CL-063	Roadway / GP Capacity	Long Range 2022-2030	Mount Zion Road Widening from Richardson Parkway to SR 138	Clayton Co.	2005				\$0	\$0	\$14.75M	\$0	\$14.75M
CL-064	Roadway / GP Capacity	Programmed	US 23 Widening from SR 138 (North Henry Boulevard/ Stockbridge Road) to I-675 in Clayton Co.	GDOT	2014	2017	2020	2020	\$26.7M	\$6.7M	\$0	\$0	\$33.4M
CL-101	Roadway / GP Capacity	Programmed (2022-2040)	SR 920 (McDonough Road) Widening from SR 54 (Jonesboro Road) in Fayette Co. to SR 3/US 19/US 41/Tara Boulevard in Clayton Co.	GDOT	2006	2017	LR	LR	\$50.4M	\$12.6M	\$0	\$0	\$63M
HE-920B	Roadway / GP Capacity	Programmed (2022-2030)	SR 920 (McDonough Road/Jonesboro Road) Widening	GDOT	2014	2018	LR	LR	\$65.8M	\$16.5M	\$0	\$0	\$82.3M

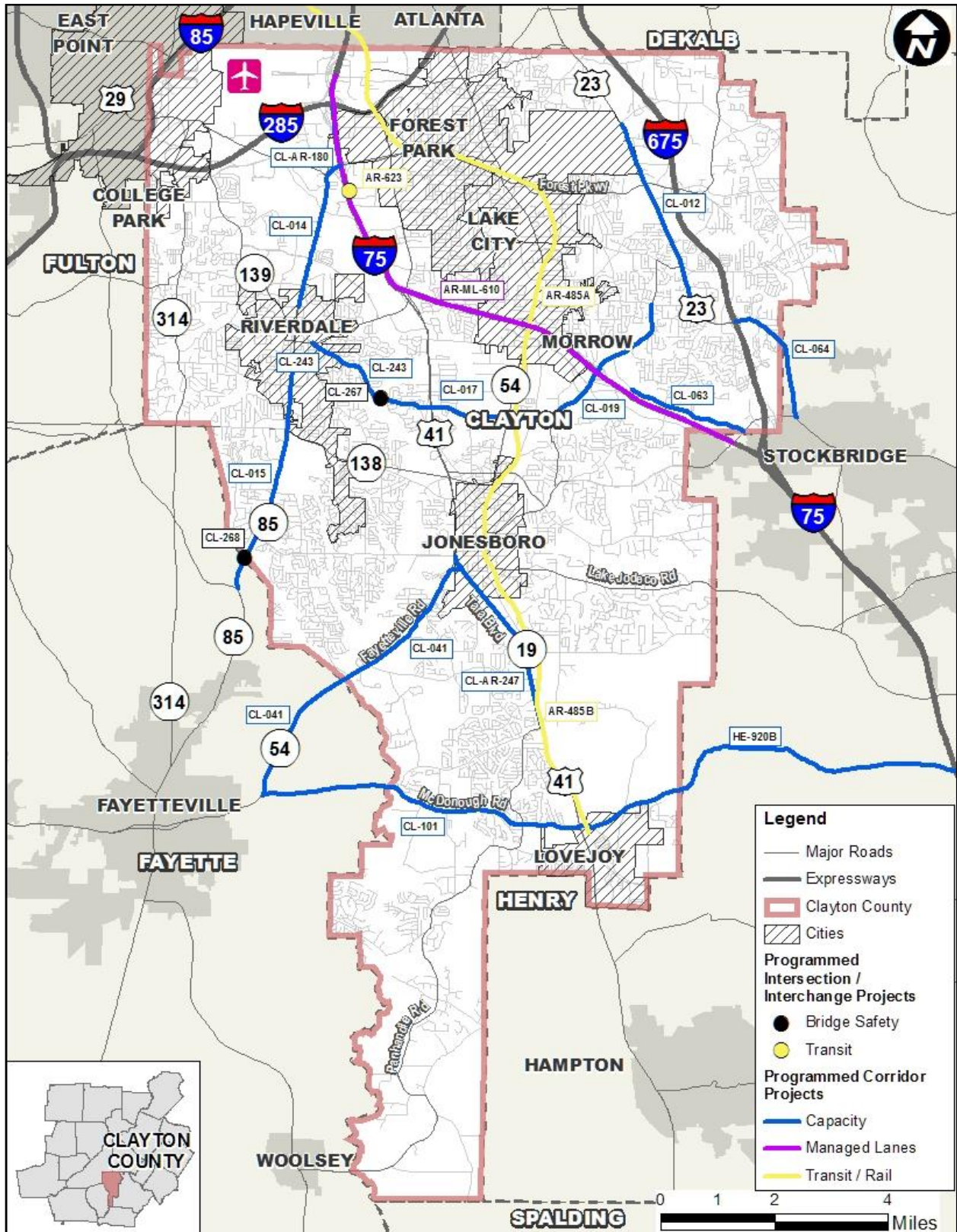


Project Code	Project Type	Status	Project Description	Sponsor	PE	Row	Utility	Construction	Funding				
									Federal	State	Local	Bonds	Total
			from SR 3/US 19/US 41/Tara Boulevard in Clayton Co. to I-75 South in Henry Co.										
AR-485A	Transit / Rail Capital	Long Range (2022-2030)	Clayton Co. High Capacity Transit Initiative – Phase 1 from Jonesboro to Lovejoy	MARTA					\$135M	\$0	\$165M	\$0	\$300M
AR-485B	Transit / Rail Capital	Long Range (2031-2040)	Clayton Co. High Capacity Transit Initiative – Phase 2 from Jackson Street to Atlanta Beltline/Irwin Street	MARTA					\$45M	\$0	\$55M	\$0	\$100M
CL-AR-180	Roadway / Interchange Capacity	Long Range (2022-2040)	I-75 Southbound Collector/Distributor Lanes from I-285 to SR 331 (Forest Parkway)	GDOT					\$38.4M	\$9.6M	\$0	\$0	\$48M
CL-AR-181	Roadway / Interchange Capacity	Programmed	I-75 Northbound Collector/Distributor Lanes from SR 331 (Forest Parkway) to I-285	GDOT	2014	2016	2018	2018	\$42.2M	\$10.6M	\$0	\$0	\$52.8M

Source: ARC – The Atlanta Region’s Plan RTP Project List



Figure 5-1: Map of Planned and Programmed Improvements



Source: ARC – The Atlanta Region’s Plan RTP Project List



5.3 Review of Studies

This section describes key findings from relevant county- and local-level studies, Livable Centers Initiatives studies, and other regionally significant studies that have occurred since the 2008 CTP was adopted.

5.3.1 CLAYTON GREENWAY TRAIL MASTER PLAN

The goal of the Clayton County *Greenway Trail Master Plan (2015)* was to establish a greenway trail network to reduce dependency of automobiles and promote a healthier, happier lifestyle for residents. This plan identified 112 miles of linear parks and trails to connect parks, schools, businesses, and neighborhoods. The CTP Update was undertaken in concordance with Clayton County’s ongoing efforts to realize the Parks and Recreation Department’s Greenway Trail Master Plan, and supports all recommendations from that study.

5.3.2 ARC’S ATLANTA REGIONAL TRUCK PARKING ASSESSMENT

ARC recently completed the *Atlanta Regional Truck Parking Assessment* that provided recommendations for both infrastructure projects and policies that could be implemented to address truck parking needs across the Atlanta region. Many cities and counties identified truck parking as a major issue in their jurisdiction, and Clayton County is not an exception. In fact, parking for commercial trucking vehicles is a critical concern noted by stakeholders, even greater than traffic-related concerns, especially in areas near truck-oriented developments like the Gillem Logistics Center. Recent federal requirements in Hours-of-Service and Electronic Logging Devices are expected to worsen current truck parking deficiencies.

The *Atlanta Regional Truck Parking Assessment Study* identified Clayton County as a point of convergence for needed truck parking in the region. To add and expand parking supply, this study recommended that CTPs identify locations of authorized and unauthorized truck parking. The study also echoed the finding of the *2016 Atlanta Regional Freight Mobility Plan Update* by recommending Freight Cluster Plan programs to inventory authorized and unauthorized parking and identify potential solutions. The CTP Update addresses this need under **Section 7.4.2**.

5.3.3 AEROTROPOLIS ATLANTA COMMERCIAL IMPROVEMENT DISTRICTS EFFORTS

The *Atlanta Aerotropolis Blueprint (2016)* focused on balancing economic growth with quality of life to create a sustainable and attractive investment environment. It identified key opportunities in Clayton County, including redevelopment opportunities in Mountain View and a proposed “cargo city” on the airport’s south side.

The Aerotropolis Atlanta CIDs are currently executing the Gateway Enhancement Program, which has recommended improvements at the following five interchanges in the county for landscaping and other enhancements:

- I-85 interchange at SR 139/Riverdale Road
- I-285 interchange at SR 139/Riverdale Road
- I-75 interchange at SR 331/Forest Parkway



- I-75 interchange at I-285
- I-285 interchange at Clark Howell Highway

Beautification and branding focus on landscaping and other enhancements through installing wayfinding signage, lighting, fencing, pedestrian features, and monuments (see **Figure 5-2**).

Figure 5-2: Examples of Wayfinding and Branding Signage



Source: 2016 Master Plan Executive Summary, Aerotropolis Atlanta CIDs, Feb 2017

The Aerotropolis Atlanta CIDs are also kicking off a Freight Cluster Plan in 2018. In this study, the CIDs would examine the existing and future projected conditions of freight movement around the airport and identify improvements that will facilitate continued movement of all kinds of cargo in and through the airport area partnering with the H-JAIA, Fulton and Clayton Counties, and cities (including College Park and Forest Park).

5.3.4 GDOT TARA BOULEVARD CORRIDOR STUDY

The ongoing GDOT study of Tara Boulevard/US 19/US 41 is analyzing alternatives for operational and multi-modal improvements along the corridor between I-75 and Lovejoy Road, and capacity needs between I-75 and State Route (SR) 20 in Henry County. Because GDOT is currently undertaking this in-depth analysis of this crucial corridor, the CTP Update is not presenting any project recommendations on Tara Boulevard.

The GDOT study is identifying various alternatives and costs, benefits, challenges, and opportunities associated with each alternative. The study will also prioritize potential improvements while evaluating impacts the various options would have on the operations of Tara Boulevard, the conditions of other roads in the area, and the character of the surrounding areas. Strategies being considered range from traditional and innovative capacity improvements to innovative intersections, access management, and intelligent transportation systems along the corridor.



5.3.5 CONLEY ROAD INTERCHANGE SCOPING STUDY

In the Mountain View area in the northwest portion of Clayton County, the realignment of Conley Road and Charles W. Grant Parkway is underway (<http://www.investclayton.com/mountain-view-area/>),. With the completion of this \$50 million project, Conley Road will become a major freight corridor that connect east-west to the Hartsfield-Jackson Atlanta International Airport (H-JAIA) from the nearby Mountain View area.

In addition, there is an ongoing scoping study that is considering a new interchange at Conley Road and I-285, which is included in ARC's 2018 Unified Planning Work Program. Because it addresses needs identified by this study, the CTP Update recommends the construction of an interchange at this location.

5.3.6 OTHER COMPREHENSIVE TRANSPORTATION PLANS

Clayton County is bordered by five counties, four of which contain major roadway connections with Clayton County: Fulton, DeKalb, Henry, and Fayette. The most recent CTP available for these Counties were reviewed to identify types of recommended projects adjacent to Clayton County.

Fayette County is in the process of updating its CTP. Prior to this effort, it most recently updated its CTP in November 2010. Specific recommendations made in the Fayette County CTP that may impact Clayton County include:

- Increase capacity of SR 54/Jonesboro Road (2 lanes to 4 lanes)
- Increase capacity of SR 920/McDonough Road (2 lanes to 4 lanes)
- Increase Capacity of SR 85 (4 lanes to 6 lanes)
- Build a bridge connecting Hillsbridge Road in Fayette County to Inman Road in Clayton County
- Various pedestrian improvements on corridors adjacent to Clayton County

Henry County most recently updated its CTP in May 2016. Specific recommendations made in the Henry County CTP that may impact Clayton County include:

- Future connections to MARTA in Clayton County
- Increase Capacity of SR 920/McDonough Road/Jonesboro Road (2 lanes to 4 lanes)
- Trail connections to Clayton County
- Various pedestrian improvements on corridors adjacent to Clayton County

DeKalb County most recently updated its CTP in June 2014. Specific recommendations made in the DeKalb County CTP that may impact Clayton County include:

- Multimodal corridor improvements on Bouldercrest Road

5.3.7 LOCAL STUDIES

The state of Georgia requires all incorporated municipalities to develop comprehensive plans as a blueprint for community development. **Table 5-2** summarizes comprehensive plans of the seven municipalities in Clayton, although it should be noted that the City of Morrow was updating their comprehensive plan at the time of writing this report.



Table 5-2 also includes findings from Atlanta Aerotropolis Blueprint. The Blueprint focuses on expanding the airport to include an additional runway to meet increased cargo demands and create supportive infrastructure such as warehousing to service the logistics industry.

Table 5-2: County and Local Studies

Title (Year)	Focus Areas and Goals	Relevant Recommendations
College Park Comprehensive Plan (2011)	Create an accessible, efficient, and safe transportation network that provides connections between land uses.	Enhance and expand pedestrian and bicycle facilities. Improve connectivity in the City, particularly south of Camp Creek Parkway. Improve access to public transit.
City of Forest Park Comprehensive Plan (2010)	Alternatives to transportation by automobile, including mass transit, bicycle routes, and pedestrian facilities should be made available in each community. Greater use of alternate transportation should be encouraged. Ensure roadway network continues to operate at community’s adopted level of service.	Develop a transit oriented development in the city’s downtown centered on a multi-modal transit station which would serve commuter rail, busses, and underground parking. Consider elevated monorail to link Forest Park to the Airport. Improve pedestrian facilities through streetscape projects and requiring new developments to construct sidewalks. Guide roadway projects through the development of a “thoroughfare plan” to categorize roadways by their appropriate function within the city’s transportation network.
Jonesboro Comprehensive Plan Update (2015)	Spur economic development through redevelopment of downtown Jonesboro and city gateways.	Redevelop Main Street as a primary destination for residents and visitors. Redevelop SR 3/US 19/US 41/Tara Boulevard to become an attractive gateway into the city. Link neighborhoods and connect to the region via high-quality transportation options.
City of Lake City Comprehensive Plan (2013)	Enhance the quality of life for residents by providing a strong sense of community, attractive business climate, and providing highest level of service delivery and infrastructure possible	Promote Lake City as a place through gateway projects like additional signage and improved landscaping. Improve safety at intersection of SR 331/Forest Parkway and SR 54/Jonesboro Road and expand bicycle facilities by adding sharrows to Phillips Drive.



Title (Year)	Focus Areas and Goals	Relevant Recommendations
City of Lovejoy Comprehensive Plan (2014)	Encourage development or expansion of businesses and industries that are suitable for the community. Maximize use of existing infrastructure. Maintain downtown as the focal point of the community by fostering compact, walkable, mixed-use development. Encourage alternatives to transportation by automobile, including walking, cycling, and transit.	Encourage the development of downtown as the vibrant center of Lovejoy, promote infill developments to complement downtown. Mandate pedestrian connectivity for all new developments. Encourage development that supports the commuter rail system. Incorporate traffic calming designs throughout Lovejoy. Ensure new development does not cause decline to existing levels of service.
City of Morrow Comprehensive Partial Update (2009)	Create a multimodal community by increasing pedestrian traffic, facilitating passenger rail, and supporting alternative travel opportunities while maximizing connectivity to minimize traffic congestion.	Implement bridge improvements at the I-75 interchange and intersection improvements along Highway 54. Expand and enhancing the roadway network
City of Riverdale Comprehensive Partial Update (2009)	Promote alternative modes of transportation such as transit, bicycling, and walking. Improve safety for pedestrians through traffic calming measures, improving pedestrian facilities, and decreasing vehicle traffic, especially within neighborhoods	Encourage “complete streets” policy that emphasizes connectivity and safety. Support the creation of a unified and comprehensive system of pedestrian wayfinding signs. Endorse traffic calming techniques and well-defined pedestrian crosswalks throughout Riverdale. Promote mixed use developments along SR 85.

5.3.8 LIVABLE CENTERS INITIATIVE (LCI) STUDIES

Many Clayton County municipalities have received funding under the Livable Centers Initiative (LCI) grant program administered by the ARC to develop plans that create vibrant and walkable communities. **Table 5-3** summarizes six LCI projects in Clayton County.

Table 5-3: LCI Studies

Title (Year)	Focus Areas and Goals	Recommendations
Forest Park LCI (2001)	Promote medium to high density, mixed use development. Provide residential opportunities for all income levels. Encourage connectivity by providing multi-modal connectivity to transit stations. Promote infill development within the study area while preserving the historic character of Forest Park.	Establish a Commuter Rail Transit Village with gateways at Fort Gillem, Main Street, and Forest Parkway. As of the most recent update (2011) the City of Forest park had acquired the site to construct a rail station and amended zoning ordinances to move forward with mixed-use development. The Forest Park downtown streetscape was nearly completed.



Title (Year)	Focus Areas and Goals	Recommendations
Jonesboro LCI (2003)	Provide housing opportunities downtown, encourage mixed-use development, expand market opportunities, increase Jonesboro's existing sense of place and community identity, increase pedestrian connections and safety, plan for future transit and commuter rail stops and expanded parking needs.	Close West Mill Street rail crossing to vehicular traffic, construct two parking decks, and improve sidewalks and pedestrian amenities throughout study area. Provide a downtown shuttle service. Install gateways and several streetscape projects. Support development of Town Plaza, a mixed use development on Broad Street. There were no updates available at the time of writing.
Morrow LCI (2001)	Develop the 14-acre study area surrounding proposed commuter rail station to create a central sense of arrival into the town center. The development should provide traffic calming design on SR 54/Jonesboro Road, provide night life/entertainment activities for students and visitors, provide housing for young retirees.	Recommended development plan that includes residential units, retail, offices, live-work units, parking, and a community garden in a compact, walkable space. The rail station will have an auto drop-off at the "residential green" and a bus drop-off on Clayton State Boulevard. A roundabout is proposed on SR 54/Jonesboro Road at Clayton State Boulevard. As of the most recent update (2005) the National Archives and expanded student housing had been completed and the city was in the process of finalizing designs for the proposed parking deck.
NW Clayton County LCI (2011)	Revitalize the study area to provide economic, residential, and recreational opportunities for persons of all ages and backgrounds while anticipating air quality, mobility, and accessibility needs of the residents, employees, businesses, and visitors.	Focus redevelopment efforts on three areas: Cherry Hills subdivision, Gobby Road corridor, and Norman Drive at West Fayetteville Road. Improvements to the transportation network include streetscape improvements, intersection/interchange improvements, new roadways/extensions, and improved and expanded transit service. As of the most recent plan update (2011) several streetscape and intersection/interchange improvement projects were completed and rezoning had taken place to make way for mixed-use development.
Southlake Mall and Mixed Use District LCI (2011)	Retrofit and redevelop vacant land in Southlake Mall district. Enhance the civic realm, livability, and connectivity in the area.	Create a "Town Center District" that encompasses Southlake Mall and surrounding areas. Locate the proposed commuter rail station adjacent to Southlake Festival Plaza surrounded by a transit oriented development. Develop a mixed-use district at Morrow Road and Jonesboro Road. Create a "green loop: that connects all nodes, parks, and open spaces. There were no updates available at the time of writing.
Riverdale LCI (2006)	Encourage development and redevelopment and promote a variety of land uses and activities and create a pedestrian friendly environment.	Study area was divided into three sub areas: Upper Riverdale Enclave, Lamar Hutcheson Enclave, and Riverdale Town Center. Highlights of the recommendation follow. Encourage mixed-use developments in sub areas. Improve pedestrian facilities, particularly along SR 85. Consolidate retail and commercial activities along SR 85 into a comprehensive plan and enhance visual quality and character along the corridor. Create a multi-use path to connect various nodes, activities, and uses. There were no updates available at the time of writing.



5.3.9 OTHER RELEVANT STUDIES

Table 5-4 summarizes the findings from other significant regional studies performed by GDOT and ARC.

Table 5-4: Other Relevant Studies

Title (Year)	Focus Areas and Goals	Recommendations
GDOT State Rail Plan (2015)	Enhance safety and security. Provide for a reliable, enhanced, and interconnected passenger rail system. Promote expanded intermodal connectivity. Develop an energy efficient and environmentally sustainable rail system. Preserve and improve the existing infrastructure. Enhance economic development and competitiveness.	Continue enhancements to public grade crossings. Expand rail-related data collection. Promote benefits of existing rail passenger services through marketing. Preserve strategic rail rights-of-way and support development of the rail system. Preserve, protect, improve, and expand intercity rail passenger service and continue to study of additional intercity passenger services. Increase movement of goods by rail and emphasize rail-related intermodal and other improvements to ensure diverse and robust rail network.
GDOT Atlanta Regional Managed Lanes Implementation Plan (2015)	Improve mobility options available to people and freight. Provide a financially feasible system. Enhance inter-regional connectivity and reliability. Emphasize the efficiency, operation, and preservation of the existing transportation system.	Recommended several locations for new managed lanes including new dynamic flex lanes along I-75 in Clayton County. Other corridors included include I-285 north of I-20, I-20, I-85, SR 316, and GA-400 north of I-285.
GDOT Statewide Freight & Logistics Plan (2012)	Identify multimodal improvements to the freight network to solve issues related to the capability, capacity, and connectivity of the system, especially considering additional strains that will develop as the Georgia economy continues to grow.	Port improvement projects at the Port of Savannah to accommodate larger cargo ships. Improve current deficiencies in Class I railroad and shortline railroads. Highway projects to address issues with long-haul interstate corridors, interstate interchanges, urban bypasses, smaller urban and rural freight corridors, and highway safety.
ARC Atlanta Regional Freight Mobility Plan (2016)	Provide world-class infrastructure, build a competitive economy, and ensure the region is comprised of healthy, livable communities.	Identified 91 projects with the ability to advance the goals of <i>The Atlanta Region's Plan</i> including bridge upgrades, capacity enhancements, new/upgraded interchanges, roadway operations, intersection operations, railroad crossings, air cargo facilities, and other project types. Project in Clayton County include the widening of US 23/Moreland Avenue and improving intersection radii at the intersection of SR 3/US 19/US 41/Tara Boulevard and SR 54/Fayetteville Road.



6 PROJECT DEVELOPMENT AND EVALUATION

The study team developed a list of recommended projects and policy recommendations based on the needs identified around the county. This chapter revisits these needs by types of facilities and summarizes the project evaluation criteria. The recommended projects will be prioritized using these criteria in **Chapter 5**.

6.1 Project Evaluation and Criteria

The CTP Update team developed project recommendations to address identified transportation needs in the county. **Chapter 7** presents the policy and capital project recommendations by category.

Capital projects were evaluated using criteria based on the CTP Update goals and objectives. The evaluation process was structured after ARC's evaluation framework for the regional planning process, so that eligible projects might transition from the CTP Update to the RTP seamlessly. Performance measures used in the evaluation criteria were grouped into two broad categories:

- **Need-Based** is used to evaluate the severity of a set of needs that a project would be expected to address. Need-based score was used to rank projects in each project type by the intensity of their respective needs.
- **Deliverability** is used to evaluate project readiness and support for the project. Deliverability scores were used to identify potential timelines for project implementation.

A total score based on both categories was calculated to assess the cumulative priority of each project, with up to 100 points awarded to projects based on Need-Based criteria and up to 50 points based on Deliverability measures. **Table 6-1** lists potential evaluation criteria and performance measures for identified projects by their project type.

A variety of data sources such as ARC's travel demand model, Open Data portal, GDOT crash and bridge sufficiency rating data, US Census Bureau and American Community Survey data, land use and community facilities data from Clayton County, National Wetlands Inventory, and transit routes and stops inventory data from the Metropolitan Atlanta Regional Transit Authority (MARTA) were utilized to estimate scores for each performance measure.



Table 6-1: Evaluation Criteria and Performance Measures

Evaluation Criteria	Measures	Calculation Methodology	Maximum Score	
			Capacity / Operations	Safety
Need-Based Scores				
Severity of Congestion - Existing	Delay	Less than 45 seconds per vehicle per trip; 45 seconds to 120 seconds; 120 seconds or more	10	5
	Traffic volume in peak direction	Less than 18,000; 18,000 to 36,000; 36,000 or more	10	
	Identified as a bottleneck in INRIX data	None; 1; top 10 bottlenecks in Clayton/concentration of bottlenecks	10	
Severity of Congestion - Future	Delay	Less than 45 seconds per vehicle per trip; 45 seconds to 120 seconds; 120 seconds or more	10	5
	Traffic volume in peak direction	Less than 18,000; 18,000 - 36,000; 36,000 or more	10	
Connectivity/Parallel Relief	Supports access to regional centers, Supports connections between major destinations, Improves an alternate route to another corridor	Local/Minimal; Moderate; Countywide/Regional	10	5
Freight Activity	Truck VMT, % trucks	Truck VMT: Less than 5,000; 5,000-25,000; 25,000 or more % Trucks - Less than 15%, 15% to 25%, 25% or more	5	
	Number of crashes	0; less than 100; 100 or more	5	25
	Fatalities/Injuries	Fatalities: None; 1; 2 or more Injuries: None; less than 20; 20 or more	5	25
Security of Transportation System	Improves security and comfort on transportation system	Directly impacts security / comfort		10
Support Economic Vitality	Number of jobs within 1/4 mile	Less than 500; 500 – 2,500; 2,500 or more	10	10
Quality of life/ Beautification	Improves quality of life / appeal of surrounding area; considers multiple modes	Directly improves quality of life	15	15
Need-Based Scores			100	100



7 RECOMMENDATIONS

CTP Update infrastructure projects and police are recommended based on the identified transportation needs of the county. Technical analysis was confirmed by field visits, and supplemented by Clayton County staff recommendations, stakeholder committee input, and public comments.

7.1 Capacity and Operations Recommendations

Many of the county’s most immediate capacity needs are on state-owned facilities that are currently programmed for widening by GDOT in the TIP. Therefore, with these exceptions, CTP Update project recommendations focus on making the most of the Clayton County’s limited transportation funding by improving intersection operations and managing access along major arterials.

7.1.1 RECOMMENDED PROJECTS

The CTP Update identifies capacity and operational improvements projects to address traffic congestion issues (**Table 7-1** and **Figure 7-1**). Addressing intersections that act as bottlenecks on the roadway network is one relatively inexpensive means of improving overall network performance. Intersection improvements also do not create new surface maintenance needs with their implementation. The performance of intersections can be improved by adding dedicated turn lanes and optimizing signal timing based on the latest turning movement counts.

Table 7-1: Capacity and Operational Improvements Projects

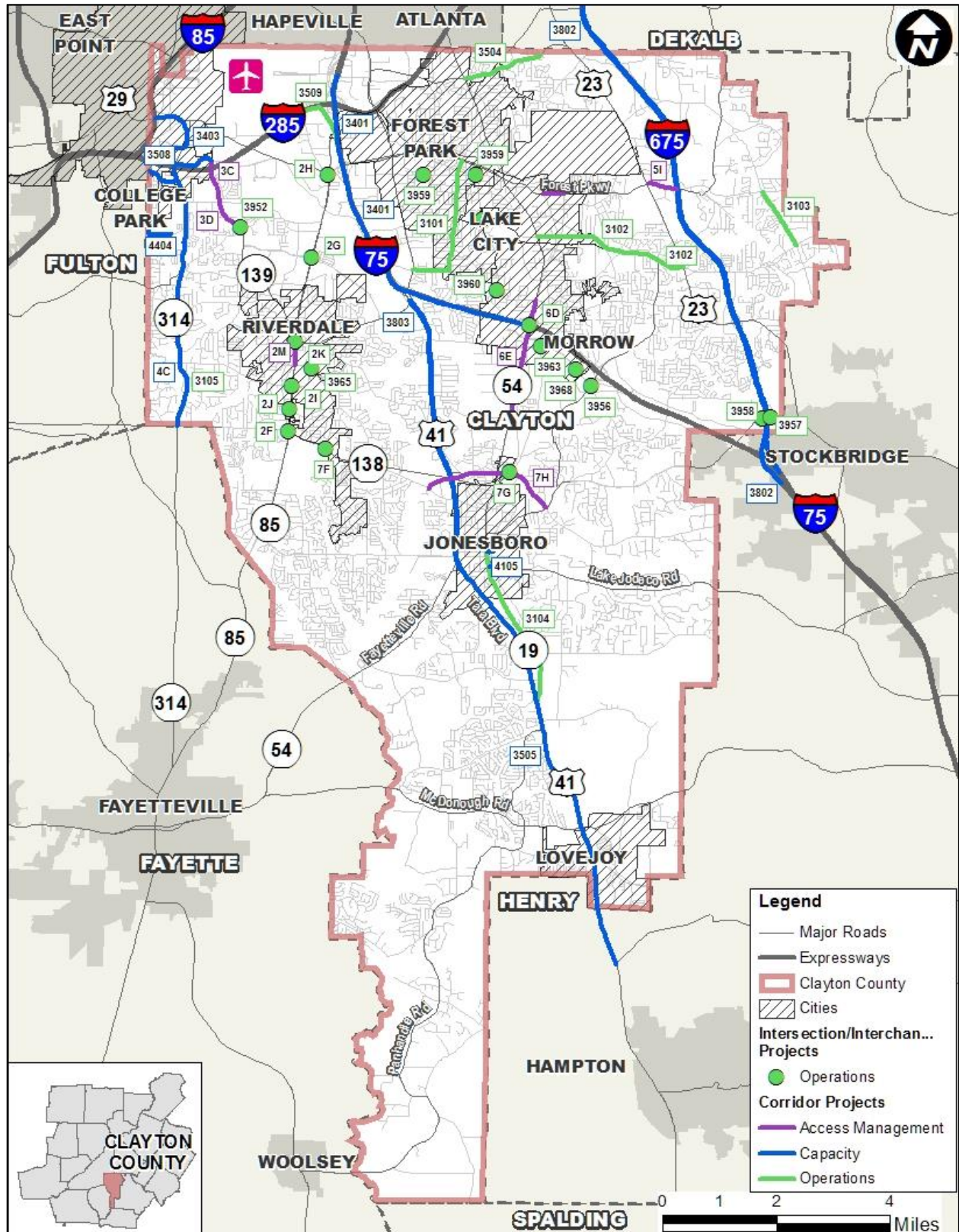
Project ID	Corridor	Category	Project Name
2F	SR 85	Operations	SR 85 @ SR 138 Capacity and Operational Improvement
2G	SR 85	Operations	SR 85 @ Garden Walk Boulevard Capacity and Operational Improvement
2H	SR 85	Operations	SR 85 @ Forest Parkway Capacity and Operational Improvement
2I	SR 85	Operations	SR 85 @ Bethsaida Road/Lamar Hutcheson Parkway Capacity and Operational Improvement
2J	SR 85	Operations	SR 85 @ Church Street/Rountree Road Capacity and Operational Improvement
2K	SR 85	Operations	SR 85 N @ Main Street/Valley Hill Road Capacity and Operational Improvement
2M	SR 85	Access Management	Access Management along SR 85 between Main Street/Valley Hill Road and Roberts Drive
3C	SR 139	Access Management	Access Management along SR 139 near I-285 interchange
3D	SR 139	Access Management	Access Management along SR 139 between Shoreham Drive and Kingswood Circle
4C	SR 314	Capacity	SR 314 Widening
5H	SR 331	Access Management	Access Management along Forest Parkway between North Lake Street and North Parkway



Project ID	Corridor	Category	Project Name
5I	SR 331	Access Management	Access Management along Forest Parkway between SR 42/US 23/Moreland Avenue to the I-675 interchange
6D	SR 54	Operations	SR 54/Jonesboro Road S @ I-75 Signage Improvement
6E	SR 54	Access Management	Access Management along SR 54/Jonesboro Road near its interchange with I-75
7F	SR 138	Operations	SR 138 @ Taylor Road Traffic Engineering Study
7G	SR 138	Operations	SR 138 @ N McDonough Street Traffic Engineering Study
4105	New Construction	Capacity	South McDonough Connector Construction
4405	Denny Drive	Capacity	Denny Drive Extension
3403	North Airport Parkway	Capacity	North Airport Parkway Widening
3101	Ash Street & Morrow Road	Operations	ITS Installation on Ash Street & Morrow Road
3102	Huie Road & Harper Drive & Rex Road	Operations	ITS Installation on Huie Road/Harper Drive/Rex Road
3103	Stagecoach Road	Operations	ITS Installation on Stagecoach Road
3104	South Main Street	Operations	ITS Installation on South Main St.
3504	Conley Road	Operations	Conley Road Operational Upgrades
3105	SR 314	Operations	ITS Installation on SR 314
3952	SR 139	Operations	SR 139 at Flat Shoals Road Operations Improvement
3956	Conkle Road	Operations	Conkle Road at Mt. Zion Rd/Mt. Zion Blvd Operations Improvement
3957	SR 138	Operations	SR 138 at I-675 N Operations Improvement
3958	SR 138	Operations	SR 138 at I-675 S Operations Improvement
3959	Phillips Drive & Springdale Road	Operations	ITS Installation at Intersections on Phillips Drive and Springdale Road
3960	Phillips Drive	Operations	ITS Installation at Morrow Road and Phillips Drive
3963	Mt. Zion Road	Operations	Mt. Zion Road at South Lake Parkway Intersection Improvement
3965	Roberts Drive	Operations	Roberts Drive at Lamar Hutcheson Parkway Intersection Improvement
3968	Mt. Zion Road	Operations	Mt. Zion Road at Mt. Zion Circle Intersection Improvement



Figure 7-1: Locations of Capacity and Operational Improvements Projects



Intersection operations project recommendations in the CTP Update address these issues. As an example, **Figure 7-2** shows before and after the Anvil Block Road improvements at the intersection with Bouldercrest Road in northeast Clayton County. Recommended as part of the previous CTP, this project widened the two-lane road to four lanes with either a raised median or a center turn lane and added dedicated turn lanes at intersections, 16-foot outside shoulders with curb and gutter, and 5-foot wide sidewalks.

Figure 7-2: Before and After the Anvil Block Road Improvements at Bouldercrest Road



Source: Clayton County

Several of the recommended operations projects focus on managing access to improve traffic flow and safety by reducing conflict points. As an example, in northeast Clayton County, a 1.2-mile segment of Forest Parkway/Panola Road east of Bouldercrest Road was recently widened and is showcasing successful access management strategies, such as corridor-wide raised medians to reduce conflict points, dedicated turn lanes at intersections and median breaks, and desirable driveway spacing. As shown in **Figure 7-3**, the corridor also includes sidewalks on both sides of the roadway for pedestrian activities.

Figure 7-3: Access Management along Forest Parkway/Panola Road East of Bouldercrest Road



Source: Google Earth



7.1.2 ACCESS MANAGEMENT POLICY RECOMMENDATIONS

Effective corridor access management balances overall safety and corridor mobility for all users along with the access needs of adjacent land uses. Access management can preserve the flow of people and freight, and enable safe access to businesses and neighborhoods using a combination of policies and strategies, such as closing, consolidating, or improving driveways, median openings, and intersections; adding or redesigning medians; and planned spacing of intersections, median openings, and driveways.

Access management can be achieved by applying these planning, regulatory, and design strategies:

- On state routes, GDOT has permit authority and leads access management decisions. **Thus, Clayton County should focus on supporting access on the local network.** The ensuing gains in safety and efficiency should support the existing network and aid Clayton County in avoiding the need to widen local facilities.
- **Clayton County should acquire access rights to protect transportation interests and enable sufficient infrastructure to be built** – Acquiring access rights has proven beneficial to control access on important arterial highways in preserving safety and mobility. Access could be acquired through purchase or eminent domain, statutory designation, or the use of deeds.
- Clayton County’s 2007 *Land Disturbance and Right-of-way Construction Guidelines* provides minimum driveway spacing requirements based on posted speed limit. In accordance with sound access management policy, the guidelines also recommend joint-use driveways for commercial and industrial uses. However, Clayton County’s latest Zoning Ordinance (February 2018 version) identifies the minimum number of vehicular access points to public streets that a development requires based on the number of residential units or the number of required parking spaces included in the development. **Clayton County should adjust its zoning to mandate a maximum, not a minimum, number of access points. For large developments, Clayton County should require inter-parcel access and/or internal connectivity to support joint-use driveways.**
- Despite the safety and efficiency advantages of properly managed access, local business owners often expect economic damage from the closure of median breaks, relocation of driveways, or limit on the number of roadway access points. However, better access management can ultimately improve business in many cases by improving mobility on the system, making it easier to get to and from destinations. **Clayton County should emphasize continuous education, case studies, and examples to show that carefully planned development can coexist with effective access management.**

7.2 Safety Recommendations

The numbers and rates of fatalities and serious injuries from automobile crashes have been trending upward in recent years in Georgia (Georgia Governor’s Office Highway Safety Website). This CTP Update includes projects intended to support the reversal of recent upward trends in overall fatalities and injuries by identifying the plausible causes and locations of the most critical safety issues in the county. **Table 7-2** and



7.2.1 COUNTY ROAD SAFETY PROGRAM

While local roads are less traveled than state highways, they have a much higher rate of fatal and serious injury crashes. Nationwide, the Fatality Analysis Reporting System (FARS) and Federal Highway Administration Highway Statistics Series (2014) show that local roads experience a fatality rate three times that of the Interstate Highway System.

The CTP Update recommends that Clayton County employ a County Road Safety Program. FARS data indicate that 27 percent of all fatal crashes occur at roadway curves, and 80 percent of all fatal crashes at curves are roadway departure crashes. Thus, the County Road Safety Program includes the reconstruction of existing County-owned roadways with strategic roadside design elements such as clear zone addition or widening, slope flattening, retroreflective signs and pavement markings, and shoulder addition or widening that can prevent roadway departure crashes. In some areas, installing roadside barriers to shield unmovable objects or embankments may be an appropriate treatment as well. **Table 7-3** identifies several corridors for inclusion in the program; It is not necessary that Clayton County upgrade all and only these corridors in the program.

Table 7-3: Potential County Road Safety Program Projects

Project ID	Project Name
12A	Bouldercrest Road Safety Improvement from Forest Parkway to Dekalb County Line; Hotspot Intersections: Anvilblock Road at Bouldercrest Road, Forest Parkway/Panola Road at Bouldercrest Road
13A	Stagecoach Road Safety Improvement-from Henry County Line to Anvilblock Road
13B	Stagecoach Road @ Rex Road Safety Improvement
14A	Freeman Road Safety Improvement from McDonough Road to SR 3/US 19/US 41/Tara Boulevard
15A	Fitzgerald Road Safety Improvement from Mundy's Mill Road to Tara Road; Mundy's Mill Road at Fitzgerald Road
16A	Mundy's Mill Road Safety Improvement from SR 3/US 19/US 41/Tara Boulevard to SR 54/Fayetteville Road
17A	Fielder Road Safety Improvement from SR 138 to US 23
17B	Fielder Road @ Mt. Zion Road Safety Improvement
18A	Noah's Ark Road Safety Improvement from South Main Street to Henry County Line
19A	Maddox Road Safety Improvement from Mount Zion Boulevard to Rex Road
19B	Maddox Road @ Mt. Zion Boulevard Safety Improvement
19C	Maddox Road @ Lake Harbin Road Safety Improvement
20A	Panhandle Road Safety Improvement from Woolsley Road to Tara Road
21A	Walker Road Safety Improvement from Bethsaida Road to Riverdale Road, SR 139; East Fayetteville Road at Walker Road

Figure 7-4 provides descriptions and locations of recommended safety improvement projects.

Table 7-2: Safety Improvements Projects



Project ID	Corridor	Project Name
2A	SR 85	SR 85 Corridor from Forest Parkway to Webb Road/Warren Drive Road Safety Audit (5.7 mile)
2B	SR 85	SR 85 @ Webb Road/Warren Drive Safety Improvement
2C	SR 85	SR 85 @ SR 138 Safety Improvement
2D	SR 85	SR 85 @ Main Street/Valley Hill Road Safety Improvement - ARC's Intersection Crash Hot Spot 2013
2E	SR 85	SR 85 @ Forest Parkway/Clark Howell Highway Safety Improvement
2N	SR 85	SR 85 @ King Road Signal Warrant Analysis
3A	SR 139	SR 139 Corridor Road Safety Audit (4.7 mile)
5A	SR 331	Forest Parkway Corridor from SR 3/US 19/US 41/Old Dixie Road to US 23/SR42 Road Safety Audit (4.8 mile)
5B	SR 331	SR 331/Forest Parkway @ SR 54/Jonesboro Road Safety Improvement
5C	SR 331	SR 331/Forest Parkway @ SR 3/US 19/US 41/Old Dixie Highway Safety Improvement
6A	SR 54	SR 54/Jonesboro Road Corridor from Thurman Road to Huie Road Road Safety Audit (2.7 mile)
6B	SR 54	SR 54/Jonesboro Road @ Morrow Road Safety Improvement
6C	SR 54	SR 54/Jonesboro Road @ Battlecreek Road Safety Improvement
6F	SR 54	SR 54 @ Oxford Drive and Lee Street @ Oxford Drive Safety Improvements
7A	SR 138	SR 138 Road Safety Audit (2.4 mile)
7C	SR 138	SR 138 @ Mt. Zion Road Safety Improvement
9B	Upper Riverdale Rd	Upper Riverdale Road @ Lamar Hutcheson Parkway Safety Improvement
9C	Upper Riverdale Rd	Upper Riverdale Road @ Lees Mill Road Safety Improvement, includes consolidation of Lees Mill Road Connections at Upper Riverdale Road
20B	Panhandle Road	Panhandle Road @ Lovejoy Road Signal Warrant Analysis
20C	Panhandle Road	Panhandle Road @ Tara Road Signal Warrant Analysis
23C	Huie Road	Huie Road at Jesters Creek Tributary Bridge Rehabilitation (Bridge ID: 063-5025-0)
23D	Morrow Road	Morrow Road at Jesters Creek Tributary Bridge Rehabilitation (Bridge ID: 063-0075-0)
23E	Reynolds Road	Reynolds Road at Jesters Creek Tributary Bridge Rehabilitation (Bridge ID: 063-5012-0)
23F	North Bridge Road	North Bridge Road at Flint River Bridge Rehabilitation (Bridge ID: 063-0063-0)
27A	Walt Stephens Road	Walt Stephens Road @ Crane Road Signal Warrant Analysis
3750	Upper Riverdale Road	Upper Riverdale Road at Flint Creek Bridge Upgrade
3550	Conley Road	Conley Road at I-285 South Bridge Widening
3551	US 23	US 23/Moreland Avenue at Upton Creek Bridge Widening



4350	Lake Harbin Road	Lake Harbin Road at Lee Street Safety Improvements
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7.2.2 COUNTY ROAD SAFETY PROGRAM

While local roads are less traveled than state highways, they have a much higher rate of fatal and serious injury crashes. Nationwide, the Fatality Analysis Reporting System (FARS) and Federal Highway Administration Highway Statistics Series (2014) show that local roads experience a fatality rate three times that of the Interstate Highway System.

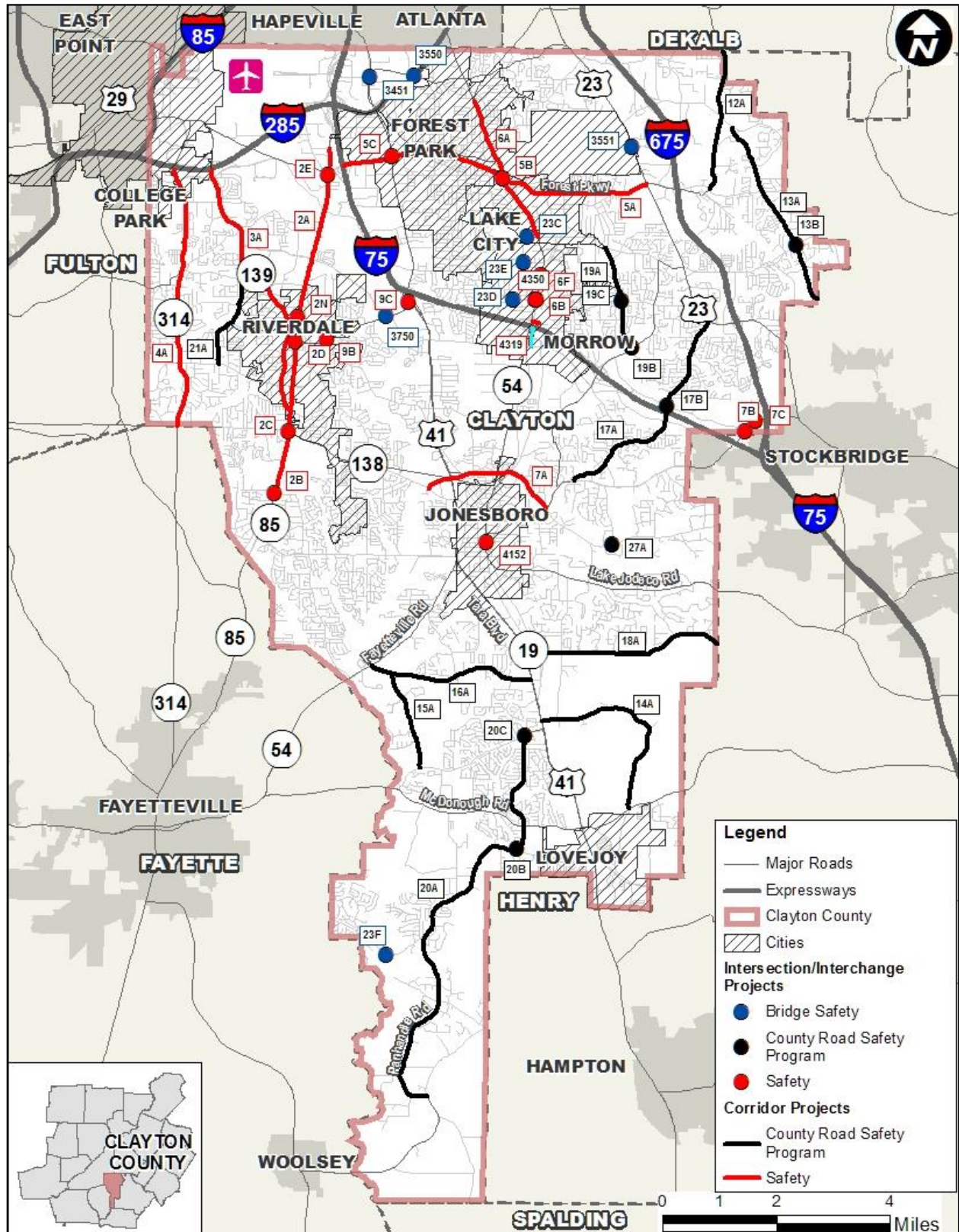
The CTP Update recommends that Clayton County employ a County Road Safety Program. FARS data indicate that 27 percent of all fatal crashes occur at roadway curves, and 80 percent of all fatal crashes at curves are roadway departure crashes. Thus, the County Road Safety Program includes the reconstruction of existing County-owned roadways with strategic roadside design elements such as clear zone addition or widening, slope flattening, retroreflective signs and pavement markings, and shoulder addition or widening that can prevent roadway departure crashes. In some areas, installing roadside barriers to shield unmovable objects or embankments may be an appropriate treatment as well. **Table 7-3** identifies several corridors for inclusion in the program; It is not necessary that Clayton County upgrade all and only these corridors in the program.

Table 7-3: Potential County Road Safety Program Projects

Project ID	Project Name
12A	Bouldercrest Road Safety Improvement from Forest Parkway to Dekalb County Line; Hotspot Intersections: Anvilblock Road at Bouldercrest Road, Forest Parkway/Panola Road at Bouldercrest Road
13A	Stagecoach Road Safety Improvement-from Henry County Line to Anvilblock Road
13B	Stagecoach Road @ Rex Road Safety Improvement
14A	Freeman Road Safety Improvement from McDonough Road to SR 3/US 19/US 41/Tara Boulevard
15A	Fitzgerald Road Safety Improvement from Mundy's Mill Road to Tara Road; Mundy's Mill Road at Fitzgerald Road
16A	Mundy's Mill Road Safety Improvement from SR 3/US 19/US 41/Tara Boulevard to SR 54/Fayetteville Road
17A	Fielder Road Safety Improvement from SR 138 to US 23
17B	Fielder Road @ Mt. Zion Road Safety Improvement
18A	Noah's Ark Road Safety Improvement from South Main Street to Henry County Line
19A	Maddox Road Safety Improvement from Mount Zion Boulevard to Rex Road
19B	Maddox Road @ Mt. Zion Boulevard Safety Improvement
19C	Maddox Road @ Lake Harbin Road Safety Improvement
20A	Panhandle Road Safety Improvement from Woolsley Road to Tara Road
21A	Walker Road Safety Improvement from Bethsaida Road to Riverdale Road, SR 139; East Fayetteville Road at Walker Road



Figure 7-4: Locations of Safety Improvements Projects



7.2.3 BRIDGE REPAIR PROGRAM

The CTP Update recommends that Clayton County adopt a bridge repair program to address bridge safety needs identified by this study, and maintenance issues on local bridges. Bridge needs include a replacement or a removal of structurally deficient bridges and rehabilitation of functionally obsolete bridges. Two bridge upgrade projects have been carried over from the previous CTP due to insufficient shear capacity of concrete superstructure. An inspection is recommended before bridge repairs since their sufficiency ratings are in the acceptable range.

7.2.4 SAFETY POLICY RECOMMENDATIONS

The programming of studies to follow up on the CTP Update follows the best practice of also including potential cost for outcomes such as infrastructure or investment recommendations in later phases of the program.

Other Policy Recommendations:

- Align Clayton County's efforts with the strategic direction and the emphasis areas identified the Georgia's latest safety plan. The current plan, 2015 Governor's Strategic Highway Safety Plan, is being updated with latest trends and legislative needs.
- Continue focusing efforts and resources on improving highway safety with the long-term goal of slowing and eventually reversing recent upward trends in fatalities and serious injuries.
- Provide innovative pedestrian safety measures in pedestrian crash hot spots.
- Install pedestrian hybrid beacons along pedestrian crash hot spots along identified corridors.

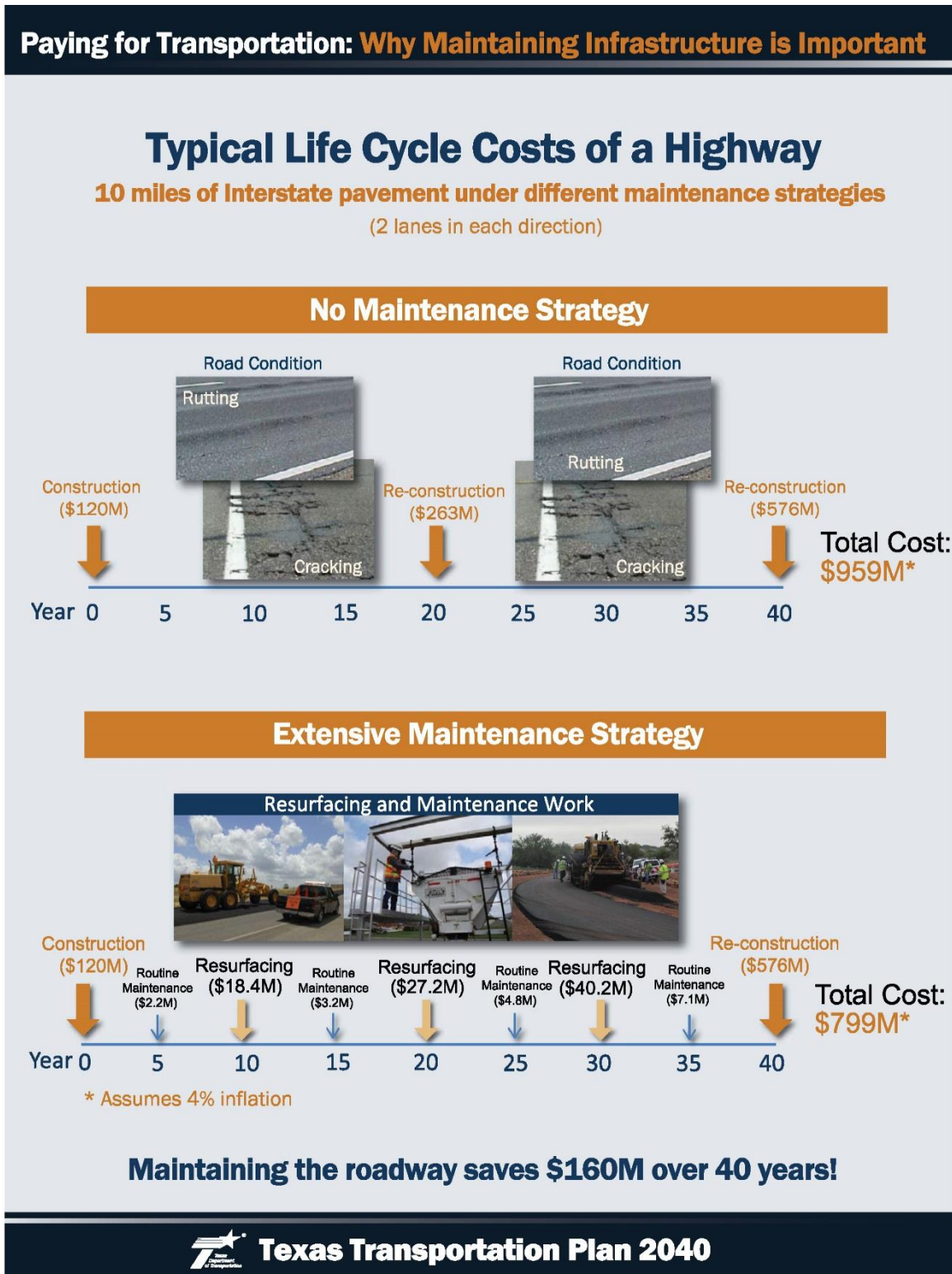
7.3 Asset Management

Regular maintenance is not a drain on transportation funds; conversely, it can reduce costs over the lifecycle of a roadway, as shown in the poster for the Texas Transportation Plan 2040 in **Figure 7-5**. Indeed, Clayton County is not alone in seeking to establish better maintenance practices; after years of underfunding for transportation, many other counties and states are reckoning with the costs of postponed maintenance.

Clayton County seeks to meet a 15-year roadway maintenance cycle for roads on the local road network. This goal represents a combination of the industry-standard 12-year cycle and the available funding for maintenance of county roadways. Because the 15-year cycle is a goal, it is understood that Clayton County will strive to meet it, within the parameters of available funding, competing needs, and other unforeseeable circumstances. It should be noted that a 15-year cycle indicates that county roads will be maintained, on average, every 15 years; the timeframe for individual roadways may be longer or shorter. Table 4-35 presents the level of maintenance funding needed to support a 15-year cycle for each priority period. It is assumed that this expenditure will be made from local funds with assistance from State Local Maintenance Improvement Grant funding. Initiation of the new maintenance program is delayed until 2021 to coincide with the next anticipated SPLOST cycle.



Figure 7-5: TxDOT Poster, "Life Cycle Costs of a Highway"



Source: TxDOT, <ftp://ftp.dot.state.tx.us/pub/txdot-info/tpp/2040/life-cycle-costs-of-a-highway.pdf>



7.3.1 POLICY RECOMMENDATIONS

To best manage its collective assets, Clayton County should seek a coordinated, intragovernmental approach to projects so that all costs are accounted for in delivering new transportation projects and community facilities. There is an opportunity to better cooperate with the County Water Department to consider impacts on utilities and costs of utility relocations in the total cost of project delivery. Clayton County School District should similarly seek out input from the Transportation and Development Department in choosing school sites so that site costs accurately value any additional access and connectivity improvements required, such as roads, sidewalks, and signalization of intersections.

7.4 Freight Recommendations

Freight-related industries are important for the economy of the county as well as the region. The CTP Update includes projects intended to support freight safety and operations and mitigate truck parking needs identified in the county.

7.4.1 RECOMMENDED PROJECTS

The CTP Update is recommending a freight safety program to study freight-related needs on freight routes in the county – such as SR 139, SR 331/Forest Parkway, Anvil Block Road and Mt. Zion Boulevard. In addition, Clayton County should coordinate with the Aerotropolis CIDs on their upcoming freight cluster study.

7.4.2 POLICY RECOMMENDATIONS: TRUCK PARKING

The ARC's recently completed the *Atlanta Regional Truck Parking Assessment* found that there is a deficiency of truck parking in the region. There is the opportunity in the county to direct truck parking to appropriate areas. In fact, two new truck parking facilities are planned for the county now, as a market-driven response to the existing demand for parking. The county currently has three truck stops, two accessible from I-75 and one accessible from I-675. Two truck-parking facilities are currently under construction in the SR 54/Jonesboro Road and Southlake Parkway area, south of Southlake Mall.

Understandably, the county's current zoning ordinances prohibit parking of commercial vehicles, buses, trailers, trucks, or equipment in all residential zoning districts, but permit parking in commercial areas. The I-285, I-75, and I-675 corridors are expected to have significant future deficit associated with growth in truck parking. While most industrial zoning districts are concentrated along I-285, I-75, and I-675, where the greatest truck parking needs are, a significant portion of these corridors are still surrounded by residential zoning districts. Therefore, legal, safe facilities for truck parking should be sited within industrial areas along these corridors. In the northern part of the county, near I-75 and I-675, there are large industrial areas at a sufficient distance from residential areas that would support truck parking and should be obliged to do so with stipulations about patrolling, safety and quiet hours, to avoid impacts on county residents.

7.5 Pedestrian and Quality of Life Recommendations

Sidewalk and crosswalk connectivity, safer pedestrian access near bus stops, and aesthetics and beautification of transportation corridors and communities are some of the top stakeholder and public priorities for the CTP



Update. There is also a significant opportunity to support local economic development and promote better presentation of the surrounding community by establishing aesthetically pleasing gateways to the county at major interchanges and transportation corridors.

7.5.1 RECOMMENDED SIDEWALK PROGRAM

It is recommended that Clayton County adopt a sidewalk program. The program would allow Clayton County to identify projects based on its needs and opportunities – which change over time. A sidewalk program would allow for flexibility in project delivery and in addressing needs, such as upcoming infrastructure improvements, the construction of new schools or other community resources, that this CTP Update cannot anticipate. In prioritizing sidewalk and pedestrian project needs for the program, the Clayton County should consider the criteria described below.

Transit Stops and Stations

After comparing the location of existing sidewalks and the roadway segments that contain multiple bus stops within one-half mile (as illustrated in Figure 4-66), the project team identified several state highways – SR 3/US-19/US-41/Tara Boulevard, SR 54, SR 85, SR 138, SR 139, US-23 – that have multiple segments without sidewalk on either side of the road, leading to a lack of safe pedestrian access from surrounding neighborhoods to transit stops on these roads. They also identified these issues on the following locally owned facilities, where the sidewalk program should be used to address gaps in the pedestrian network:

- Mount Zion Boulevard
- Streets such as Webb Road, Maple Drive, Oak Drive, Thomas Road in Wesley Wood and Wexwood neighborhoods
- Macon Highway / US-23 and Fielder Road near Allendale Heights
- Flint River Road between Glenwoods Drive and Lexington Drive

In the long term, it is recommended that once MARTA announces the locations of planned transit stations resulting from the Clayton County Transit Initiative, Clayton County should use the sidewalk program to provide appropriate pedestrian and bicycle facilities in and around station areas. Per the ongoing transit study, MARTA staff recommended Commuter Rail as a preferred mode in Clayton County. Of the seven corridors considered in this study, MARTA staff has identified the Norfolk Southern/State Route 54 corridor was identified as a top alternative in July 2018. It is recommended that Clayton County should conduct scoping study to improve access around the proposed stations areas once MARTA has finalized the station locations.

High-Crash Locations

Analysis of fatal crashes in the county in recent years indicates that most fatalities involved pedestrians hit by a vehicle while they were crossing roadways in the dark without crosswalks, pedestrian signals, and/or adequate lighting provided. In fact, 31 percent of all fatal crashes in the county in the last three-year study period (2014-2016) were attributed to pedestrian crashes – more than two times higher than the national statistics. Based on analysis of GEARS crash data, high numbers of bicycle- and pedestrian-related crashes were



identified on SR 3/US-19/US-41/Tara Boulevard, SR 85, Flint River Road/Thomas Road area, SR 139, SR 314, and near Clayton State University. In areas where mid-block crossings are frequent, such as near bus stops, raised medians and pedestrian crossing islands (or refuge areas, as shown in **Figure 7-6**) may be needed to effectively reduce pedestrian crashes.

Figure 7-6: Examples of a Median and a Pedestrian Crossing Island



Priority Areas by Destinations in Clayton County

The project team identified areas within one-half mile of various destinations within the county, such as schools, colleges, shopping centers, parks or greenspaces and downtown areas, as illustrated in Figure 4-65. Treating such areas with a higher level of priority could provide an efficient way to improve pedestrian and bicycle access in the county. Apart from downtown, areas near Clayton State University, McDonough Road, Mount Zion Boulevard, SR 314 south of the city of College Park, SR 85, SR 3/US-19/US-41/Tara Boulevard, SR 139, and SR 54 Jonesboro Road are also likely to have a high demand for pedestrian and bicyclist access. Some areas that can benefit from adding new sidewalks, by improving their access to popular destinations, include Harper Drive and Rex Road in Lake City and Downtown Jonesboro, respectively. Additionally, better connectivity for sidewalks in the following communities/ neighborhoods would encourage walking activities for commuters: Wexwood and Wesley Park, Foxrun, Conley, Allendale Heights, Williamsburg Park, Wilkshire Estates, Woodstone, Irondale, and Bonanza. “Neighborhood Access-ways” or “Local Access Trail Network” listed in ARC’s *Walk. Bike. Thrive! Bicycle and Pedestrian Safety Improvement Plan* is a possible solution to provide off-street walking/biking connections to improve connectivity between neighborhoods, parks, schools, commercial nodes etc.

Figure 7-7 presents examples of pedestrian-friendly streets and developments as envisioned in the *Clayton East-West Corridor Design Guidelines*. **Figure 7-8** shows before and after renderings of the CIDs’ *Virginia Avenue Corridor Study*, expected to be completed in mid-2018. In creating spaces like these, pedestrian projects should spur development and redevelopment through catalytic public investment.



Figure 7-7: Examples of Pedestrian-Friendly Streets



Source: Clayton East-West Corridor Design Guidelines

Figure 7-8: Proposed Redevelopment and Sidewalk Improvements on Virginia Avenue



Source: 2016 Master Plan Executive Summary, Aerotropolis Atlanta CIDs, Feb 2017



Social Equity

Equity in multi-modal access is vital in maintaining a transportation network that benefits all sections of population. ARC's *Walk. Bike. Thrive! Bicycle and Pedestrian Safety Improvement Plan* recognizes the importance of equity in developing bicycle or pedestrian networks as well. The CTP Update team recommends that the sidewalk program should also consider areas with a high share of minority population and areas with a high proportion of low-income population.

Context

In rural areas, a trail or path along one side of the roadway may be more appropriate than a curb, gutter or sidewalk. The Transportation and Development Department should work with the Parks and Recreation Department to support the continued implementation of trails where they are a better choice for pedestrian connectivity than sidewalks. ARC's *Walk. Bike. Thrive! Bicycle and Pedestrian Safety Improvement Plan* outlines a decision-making process to help develop multi-modal project concepts based on specific needs of the corridor. This decision-making process is based on bicycle or pedestrian need of the area, corridor specific context and constraints, potential effectiveness of a solution, and alternatives. Clayton County can use this process to develop specific characteristics of each project in the sidewalk program as needed. Additionally, a perception of safety and security related issues in some of the communities across the county was commonly shared during public and stakeholder outreach process. Aspects such as lighting, visibility would also be considered in the project development process.

Trails

The *Greenway Trails Master Plan* recommended adding about 112 miles of trails in the county. An initial segment of the proposed trail network was identified in each Commission District of the county for implementation. The plan also identified cost estimation methodology and an implementation strategy to implement other trail segments in the future. The Transportation and Development Department should work with the Parks and Recreation Department to create connections – sidewalk or trail – between the trail system and nearby destinations and activity centers. Figure 4-67 illustrates the proposed trails network in the county.

7.5.2 POLICY RECOMMENDATIONS

In the long term, Clayton County should adopt a **Complete Streets** approach to support beautification and community improvement efforts. Complete Streets are designed and operated to enable safe access for all users, including pedestrians, bicyclists, and transit riders of all ages and abilities, not just motorists. Applying Complete Streets concepts is one of the ways that can enhance liveliness and livability of a community by making it easy to cross the street, walk to shops, bicycle to work, and walk to and from transit stations. Coupled with effective and visually appealing signage for wayfinding, additional lighting for safety and security, and roadway restriping, these improvements would not only enhance the safety of all users traveling major corridors in the county, but also attract more businesses and visitors.

Clayton County should develop local and regional land use/economic development strategies coordinated with relevant transportation plans and programs to balance land use and transportation needs. Clayton



County recently enacted a zoning moratorium and re-examined its zoning ordinance and maps concurrently to encourage economic development and redevelopment and restructure existing zoning districts and adopt new districts and regulations. Proposed new zoning districts would include office institutional, urban village, mixed use, general business, and mixed-use commercial-industrial districts. The following areas of interest have been identified for rezoning:

- Old Dixie Highway area (Urban Village)
- Old Dixie Highway and Tara Boulevard area (Office Institutional – 3 story minimums)
- Walt Stephens area (Urban Village)
- Old Ivy Place (Urban Village)
- Jonesboro Road (Urban Village)

Figure 7-9 illustrates a comparison of existing conditions and future desirable improvements with mixed-use development, street trees, medians and pedestrian refuges, and crosswalks.

Figure 7-9: Examples of Before and After Mixed-Use Developments



The urban village district is intended to foster compact urban setting accommodating a mix of office, hospitality, art, entertainment, and service uses. Such settings are intended as gathering places for convenience shopping, employment, and recreation and to enhance urban living. **Building on the positive revitalization trends in the**



region, Clayton County should strive to support such mixed-use developments through improved transportation networks and services in the identified areas. To implement desirable development trends in corridor levels, Clayton County also developed overlay design guidelines for SR 3/US 19/US 41/Tara Boulevard, US 23/SR 42, and east-west corridors such as SR 138, Walt Stephens Road, Jodeco Road, and Noah's Ark Road.

Clayton County should consider coordinating with the CIDs and expanding the current beautification program led by CIDs throughout the rest of the county as desired. In addition to the interchanges previously identified, SR 3/US 19/US 41/Tara Boulevard, SR 54/Jonesboro Road, SR 85, SR 138, SR 139/Riverdale Road, SR 331/Forest Parkway are some of the major transportation corridors that would benefit from creating attractive gateways into the county to enhance the area's perception. These gateways would play a critical role in establishing a positive first impression for those visiting the county and Atlanta.

Data

Compiling a GIS database of existing sidewalk locations and condition would aid in the prioritization, delivery, maintenance of the county's sidewalk network.

Americans with Disabilities Act Compliance

ADA concerns about access to public facilities should not begin and end with the facilities themselves. Consideration should also be given to the intersection treatments and sidewalk network surrounding them.

Walking or Biking Oriented Redevelopment

In addition to filling in the sidewalk network in a manner that meets the above criteria, Clayton County could also use sidewalk funding to redevelop some of their car-centric corridors as places where people can walk, shop, dine and work safely.

7.6 Transit Recommendations

The CTP Update supports the construction of MARTA's proposed transit expansion project from the existing heavy rail system to Lovejoy. This project is currently listed in the ARC RTP in two phases: AR485A and AR485B. The CTP Update recommends constructing the first phase in two segments to reflect local priorities, with the first segment proposed from College Park to Mountain View.

The ARC RTP assumes that half of construction funding for the transit expansion will come from federal sources. For federal funding to occur, MARTA will need to announce an LPA, and then evaluate the LPA alignment and station areas according to the FTA-determined level of environmental study. Finally, the project must successfully compete for funds in the nationally competitive federal Small Starts, New Starts, or other applicable federal transit program. The timing of these items is unclear and will require additional study by MARTA and ARC to determine compatibility with local priorities for transit project phasing.

It is recommended that MARTA pursue station location and area in coordination with local governments so that stations are placed where they are needed, desired, and can be supported by current and future infrastructure. Clayton County should prioritize pedestrian connectivity to transit stops at proposed station



areas for the high-capacity transit investment, including Mountain View, Forest Park, Lake City, Morrow, Jonesboro, and Lovejoy. Clayton County should also consider other pedestrian amenities, such as clear wayfinding signage. Wayfinding will help guide riders to the nearest stops and station and inform them about nearby destinations. Additionally, stop facilities (e.g., schedule, shelter, bench, lighting) would also add to transit riders' comfort, and help improve perception of safety and security. The investment timetable for last-mile pedestrian connectivity projects like these, and including local transit circulators, should reflect the phasing of the MARTA study.

The CTP Update also recommends that the county prepare for transit with strategic investments in infrastructure at station areas. To accomplish this, scoping studies to identify infrastructure improvements around proposed rail station locations are recommended at Forest Park, Lake City, Morrow, Jonesboro, and one unincorporated Clayton County. While these are programmed with County funds in the mid-term, it is recommended that the County, perhaps in coordination with MARTA, seek funding for these studies collectively through the FTA's Pilot Program for Transit-Oriented Development Planning (Section 20005(b)). The Pilot Program is intended to aid local governments and transit agencies integrate land use and transportation in advance of major transit investments to promote transit ridership and economic development.

7.7 Emerging Technologies in Transportation

Two main forms of emerging automobile technology – Connected vehicles (CV) and Automated vehicles (AV) – are expected to play a continued key role in determining the form and function of transportation systems. C/AV application could provide great benefits for trucking and freight delivery, including truck platooning and automated parking and backup assist. The trucking and manufacturing industry is a major economic driver in the county. Truck-platooning technology would allow a lead driver to manually drive while drivers in the several following vehicles would cede control of the spacing of the vehicle and possibly also its lateral positioning (steering) to the system.

One possible improvement in the county would be to prioritize truck traffic using ITS signalization on Tara Boulevard. During off-peak hours, such as between 8 p.m. and 5 a.m. when there is less demand for the roadway from residents, trucks would have green-light priority along the corridor. By incentivizing truck traffic at these less in-demand hours, Clayton County could reduce truck traffic from this key corridor during high-demand commuting times.



8 IMPLEMENTATION AND FUNDING

A grounded financial context is required for realistic transportation planning that delivers measurable improvements. The CTP Update recommends projects in two sets:

- A constrained plan, in which projects chosen for recommendation are programmed for construction based on known, available funding. The constrained plan is provided in short-, mid-, and long-ranges.
- An aspirational program of projects that have not been included in the constrained plan but which would be programmed for construction should funding become available.

This section describes how project costs were estimated, available funding was projected, and resulting tiers of funding available for project programs. It also discusses the potential sources of project funding from federal and state sources for projects in the Aspirational Program.

8.1 Project Cost Estimate Methodology

8.1.1 GENERAL METHODOLOGY

CTP Update project costs for new recommendations were estimated using values established in the ARC project cost estimation tool. When a project type or component did not have a suitable equivalent in the ARC project cost estimation tool, the project team researched similar projects that had been recently completed to calculate a unit cost. Engineers with extensive experience reviewed unit cost estimations in Georgia to confirm that they were valid approximations. Right-of-way cost was also estimated using the ARC cost estimation tool methodology for projects that recommend construction outside of the existing curb-to-curb width. Legacy projects sourced from the previous CTP and local plans assume the cost estimate associated with them are still valid and all project costs were converted to 2018 dollars.

The exception to this methodology is that no costs were estimated for freight safety and operations projects. Instead, a program cost of \$300,000 was assumed to fund these studies. This figure is based on the average grant amount ARC awarded to each of four freight clusters in 2017, including the required local match. The scopes of the freight cluster plans outlined by ARC are similar to the types of projects recommended in this program including transportation planning, traffic engineering, safety, intersection design, cost estimation, and future needs analysis.

8.1.2 TRANSIT METHODOLOGY

The first segment of the high-capacity transit project is proposed to be from College Park to Mountain View, which is about 30 percent of the total length of the first phase of the project from College Park to Jonesboro. The cost estimates included in the CTP Update are based on the conservative assumption that the recommended first segment of the new service will cost about one-third of the total project cost listed in the ARC RTP. Project costs are for planning purposes only and have not been reviewed or approved by outside parties or agencies.



8.2 Funding

This section discusses committed and potential available funding sources at the federal, state and local levels of government for the projects recommended by this plan. It concludes with a summary of the anticipated funding to support implementation of recommended projects through 2040.

8.2.1 LOCAL FUNDING

Clayton County has committed local funds toward projects in ARC’s TIP. Local funding for transportation comes mainly from the County’s SPLOSTs. Some funds come from the County’s general fund and from city governments, which also maintain general fund programs for transportation improvements.

Committed Local Funds

Table 8-1 presents the committed local funding for programmed projects in the county. Clayton County currently has \$21.65 million in local funds in FY 2018 through 2040 committed to projects in the ARC’s TIP and RTP, which represents programmed projects in the region. All county projects included in the TIP fall into the short-range or mid-range investment phases. No county projects are included in the RTP as long-range projects, although one project is included in the aspirational list.

The CTP Update separates funding and projects into the following tiers:

- The **short-range** tier comprises the Five-Year Plan, and runs from 2021 to 2025. It begins in 2021 to correspond with the start of the next possible SPLOST in Clayton County.
- The **mid-range** tier extends from 2026 to 2030.
- The **long-range** tier runs from 2031 to 2040.
- **Aspirational** projects are outside of the funding projected for this plan and are programmed beyond the year of 2041. Project sponsors may promote aspirational projects if funding should become available.

Table 8-1: Local Funds Committed to Projects in the ARC TIP (in millions of dollars)

	Short -Range	Mid Range	Long Range	Total
Local	\$17.55	\$4.10	\$0.00	\$21.65
All Committed Funds	\$210.12	\$53.10	\$0.00	\$263.22

Source: ARC TIP

8.2.1.1.1 SPLOST Funds

Clayton County began collecting revenue for the five-year Roads and Recreation SPLOST in 2004, for a six-year SPLOST in 2009 and another six-year SPLOST in 2015. **Table 8-2** presents existing and projected Clayton County SPLOST collections from the 2004, 2009 and 2015 SPLOSTs on a whole and annual basis. Clayton County has collected an annual average of \$45 million in SPLOST funds and projects since 2009. It is assumed that Clayton County will continue to collect an average of \$45.33 million per year in SPLOST revenue in 2018 dollars through 2040.



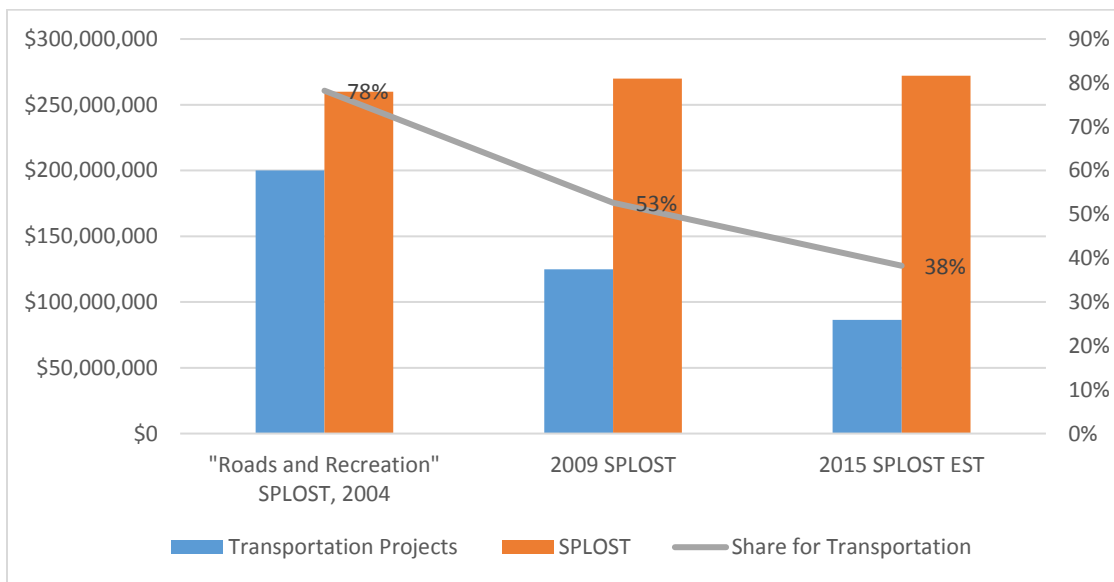
Table 8-2: Clayton County SPLOST Revenue (in millions of dollars)

	Approximate Revenue	Number of years in SPLOST	Revenue per year
2004 SPLOST	\$260.00	5	\$52.00
2009 SPLOST	\$269.80	6	\$44.97
2015 SPLOST (projected)	\$272.00	6	\$45.33

Source: Clayton County Annual Operating Budget 2018

Figure 8-1 illustrates the Clayton County SPLOST expenditures for all items and for transportation projects. Transportation spending has accounted for an average of 58 percent of all Clayton County’s SPLOST spending since 2004, but the share of funding has been trending downward over time. For the purposes of projecting future SPLOST collections for the CTP Update, it is assumed that 50 percent of future SPLOST spending would support transportation projects. It is also assumed that SPLOSTs would be reappraised through the horizon year of 2040.

Figure 8-1: Clayton County SPLOST Expenditures



Source: Clayton County Budget Book, FY 2018, in current estimated costs

Table 8-3 details projected local funding (SPLOST revenues) through 2040. SPLOST revenues from FYs 2018, 2019, and 2020 are not included, as those moneys already have projects attached to them and will not be used to fund projects recommended by the CTP Update.

Table 8-3: Projected SPLOST Revenues FY 2018 through FY 2040 (in millions of 2018 dollars)



	5 Year Action Plan	Mid-Range	Long Range	Total
Projected SPLOST Revenue	\$226.67	\$226.67	\$453.33	\$906.67
Revenue for Transportation Projects	\$113.33	\$113.33	\$226.67	\$453.33

Source: Clayton County

8.2.1.1.2 Local Sales Tax Revenue for Transit Investments

Under the agreement between MARTA and Clayton County, the County has collected a one-half penny sales tax for the planned rapid transit expansion since July 1, 2015 (the start of FY 2016). These collected funds are held in a separate account from MARTA or the County's other revenue streams until they can be directed toward their intended purpose. Per MARTA, the tax collects approximately \$27 million annually, although the return, as with SPLOST funding, fluctuates with consumer spending. As of July 2018, the start of Fiscal Year (FY) 2019, MARTA had collected about \$71 million in the Clayton County High Capacity Transit Fund, or about \$23.6 million annually. These funds are MARTA's to administer per the parties' 2014 agreement. The current and projected level of these funds for future programming based on the rate of current collections is presented in

Table 8-4.

The CTP Update assumes that transit projects will seek federal funding for construction via the Federal Transit Administration (FTA) New Starts program with a local match of 50 percent of total project cost. Seeking federal funding allows transit agencies to leverage local funds to meet the investment demands of high-capacity transit.

Table 8-4: Estimated Clayton County/MARTA High-Capacity Transit Fund, in millions of dollars

Estimated Funds from Sales Tax	Fund Balance - Close of FY 2018	FY 2019- FY 2020	5 Year Action Plan	Mid-Range	Long Range
By Tier		\$47	\$118	\$118	\$283
Cumulative	\$71	\$118	\$236	\$354	\$637

Source: MARTA

8.2.2 STATE FUNDING

The passage of the Transportation Funding Act of 2015 (TFA 2015) is projected to eventually add \$750 million to \$1 billion in state funding for transportation, double the level of state funding previously available to address repair, improvements and expansion of the state's transportation network. In addition to 11 new megaprojects, the state funds are directed toward infrastructure projects and maintenance of roadways both on and off the state route network.

State funds projected for use in county projects are limited to those currently included in the ARC's Regional Plan, which are presented in **Table 8-5**. Currently, \$107.37 million in state funding is committed to projects within the county in the TIP through 2040. There is the potential that some state funds will be shifted from short and mid ranges into the long range due to delay in project implementation. Additional local funding, employed as a match to state investment, may be useful in directing state funds to county improvements and avoiding delay in implementation. It should also be noted that additional state funds could become available through 2040.



Table 8-5: State Funding Committed to Clayton County Projects through 2040, in millions of dollars

	Short Range	Mid Range	Long Range	Total
State	\$97.57	\$9.80	\$0.00	\$107.37
Total	\$210.12	\$53.10	\$0.00	\$263.22

Source: ARC TIP

Local Maintenance and Improvement Grant Program

GDOT distributes funds under the Local Maintenance and Improvement Grant (LMIG) Program for use in improving roads and bridges within county or city rights-of-way. TFA 2015 increased LMIG funds by approximately 30 percent over 2015 levels. Eligible projects include—but are not limited to—safety, economic development, resurfacing, sidewalk, maintenance and bridge rehabilitations and replacements. Funds for projects are distributed to local governments by a formula based on local population and local road network mileage. To support more expensive projects, LMIG funds can be rolled over for up to three fiscal years. Local governments must commit to 30 percent in local matching funds to access LMIG funds.

Table 8-6 presents the LMIG funding available to unincorporated Clayton County from GDOT in 2018. **Table 8-7** presents the projected LMIG funds available to Clayton County through 2040. It is assumed that available LMIG funds will remain flat through the end of the long-range period at 2018 levels.

Table 8-6: 2018 LMIG funding for Unincorporated Clayton County, in millions of dollars

City	2018 LMIG Formula Amount
Unincorporated	\$2.11

Source: GDOT

Table 8-7: LMIG Funding for County Local Road Networks during Programmed Period, 2021 to 2040, in millions of dollars

	Annual LMIG Funding 2021-2040	5 Year Action Plan (Short-Range)	Mid-Range	Long-Range	Total
Unincorporated	\$2.11	\$10.55	\$10.55	\$21.09	\$42.19

Source: GDOT

8.2.3 FEDERAL FUNDING

Federal funds projected for use in county projects are limited to those currently included in the ARC’s Atlanta’s Regional Plan, which are presented in **Table 8-8**. A total of \$165.21 million in federal funds are committed to projects in the county in the TIP. As with state funds, no funding is committed for projects in the long-range period, and it is possible that funds from earlier periods could be reassigned to the long-range period due to project implementation delay. Additional local funding, employed as a match to the federal and state investment, may be useful in directing additional federal funds to county improvements in a timely manner.



Some projects resulting from this CTP Update may qualify for additional federal funding. **Section 8.3** includes a more detailed discussion of potential sources for additional federal funding.

Table 8-8: Federal Funding Committed to Clayton County through 2040, in millions of dollars

	Short Range	Mid-Range	Long Range	Total
Federal	\$95.00	\$39.20	\$0.00	\$134.20
Total	\$210.12	\$53.10	\$0.00	\$263.12

Source: ARC TIP Constraining Project Tiers

Table 8-9 summarizes the projected funding available to support local transportation improvements within Clayton County through 2040.

Table 8-9: Projected Normal Scenario Transportation Funding through 2040, in millions of 2018 dollars

	Short Range	Mid-Range	Long Range	Total
Projected SPLOST Revenues	\$226.67	\$226.67	\$453.33	\$906.67
Transportation Share of projected SPLOST Revenues (at 50 percent)	\$113.33	\$113.33	\$226.67	\$453.33
LMIG Funding	\$10.55	\$10.55	\$21.09	\$42.19
Total revenue for Transportation	\$123.88	\$123.88	\$247.76	\$495.52

Source: Clayton County

8.3 Other Potential Funding Sources

Projects included in the Aspirational Program are not attached to identified funding. However, if the opportunity arises, Clayton County may decide to apply for funding to pursue implementation using moneys from one of the following identified programs.

8.3.1 FUNDING FOR SAFETY IMPROVEMENTS

The Georgia Governor’s Office of Highway Safety (GOHS) awards grants every year to develop innovative highway safety programs to save lives in Georgia. Originated from the federal National Highway Traffic Safety Administration grant, this fund is to promote the development and implementation of innovative programs to address highway safety problems relating to alcohol/impaired driving, pedestrian and bicycle safety, motorcycle safety, occupant protection, and other highway safety programs. The grants range from \$10,000 to \$300,000 for a single grantee for fiscal year 2019. **Clayton County, cities, and citizen groups should apply for funding from the GOHS to address pedestrian safety concerns and implement educational programs for their drivers.** Pedestrian crashes accounted for nearly 28 percent of all traffic fatalities in the county during the last three-year period (2014-2016), which is significantly higher than an annual average of 15 percent reported by the National Highway Traffic Safety Administration.



Another funding possibility is through GDOT's Highway Safety Improvement Program (HSIP). This federal-aid program provides funding to infrastructure-related highway safety improvements to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned roads (<https://safety.fhwa.dot.gov/hsip/>). Projects that comprise the HSIP are usually moderately-sized projects that include intersection improvements, signal upgrades (LEDs), ramp improvements, corridor improvements, turn lanes, signage, corridor improvements and traffic engineering studies. Other programs that are also a focus of the HSIP funding include the Railroad-Highway Crossing Program, High Risk Rural Roads (HRRR) Program, and Off-System Safety Program. The HRRR Program is dedicated to safety improvements of rural roadways because rural areas in Georgia have much higher fatalities than urban areas. The Off-System Safety Program aims to enhance safety on local roadways through low-cost safety improvements. Clayton County's safety deficiencies identified along most travelled county roads would be a good candidate for consideration for this funding opportunity.

8.3.2 FUNDING FOR FREIGHT-RELATED IMPROVEMENTS

Freight projects identified by the recommended freight safety study are expected to apply for funding through one of the programs administered by ARC. The passage of the federal transportation Fixing America's Surface Transportation Act in 2015 created a funding source expressly and exclusively for freight. It established a competitive grant process and a formula program to fund freight improvements through 2020. It is assumed that if the Transportation Bill is extended, as previous bills were, the freight funding would be extended as well.



9 PRIORITY PROJECTS

Project recommendations resulting from the CTP Update have been prioritized and grouped into project tiers for funding and delivery. The first tier of projects is programmed for short-range delivery from 2021 through 2025 in the Five-Year Plan presented in **Table 9-1**. Projects programmed for delivery in the mid-range (2026-2030) are presented in **Table 9-2**, and projects programmed for long-range delivery (2031-2040) are presented in **Table 9-3**.

The CTP Update supports the MARTA LPA for a commuter rail project in Clayton County. The CTP Update recommends that the project follow the phasing set forth in **Table 9-4**, **Table 9-5**, and **Table 9-6**. The CTP Update assumes that transit projects will seek FTA federal funding with a 50 percent local match. Federal funding requires completion of environmental and other studies that may delay funding and implementation. Should MARTA determine to expedite construction of the first or other phases of this project, they may choose to do so without federal funding if they have sufficient sales tax funds or can secure funding from the state.

Table 9-7 presents project recommendations in the unconstrained plan, which includes all the county project recommendations that are not included in the constrained funding tiers. **Table 9-8** includes projects within the limits of one of the cities in Clayton County. Each city can determine which projects, if any, they wish to sponsor.



Table 9-1: Five-Year Action Plan (2021-2025)

Project ID	Category	Project Name	Cost	Primary Funding Source	County Share %	County Share \$
MAINTENANCE	Maintenance	Maintenance Program for County-Owned Roads	\$78,210,000	Local	100%	\$78,210,000
BRIDGE	Safety	Bridge Repair Program - Short Range	\$1,500,000	Local	100%	\$1,500,000
FREIGHT	Safety	Freight Safety Study	\$300,000	Local	100%	\$300,000
SIDEWALK	Pedestrian Improvements	Pedestrian improvements as needed on County Roads	\$11,420,000	Local	100%	\$11,420,000
ECONDEV	Quality of Life	Infrastructure Support for Development	\$4,570,000	Local	100%	\$4,570,000
COUNTYROAD	County Road	County Road Safety Program	\$22,631,500	Local	100%	\$22,631,500
SIGNAL	Roadway Safety	Singal Warrant Analyses at 3 locations	\$100,000	Local	100%	\$100,000
6C	Roadway Safety	SR 54/Jonesboro Road @ Battlecreek Road Intersection Improvement	\$1,506,000	State / Federal	50%	\$753,000
9C	Roadway Safety	Upper Riverdale Road @ Lees Mill Road Safety Improvement, includes consolidation of Lees Mill Road Connections at Upper Riverdale Road	\$500,000	Local	100%	\$750,000
3102	Operations	Huie Road/Harper Drive/Rex Road from Jonesboro Road to US 23/SR 42 Install Fiber-Optic Trunk Line with Signal Communication Equipment and CCTV Cameras	\$921,000	Local	100%	\$921,000
3104	Operations	South Main Street from US 19/41/Tara Boulevard to College Street Install Fiber-Optic Trunk Line with Signal Communication Equipment and CCTV Cameras	\$617,000	Local	100%	\$617,000
Total						\$121,772,500



Table 9-2: Mid-Range 2026-2030

Project ID	Category	Project Name	Cost	Primary Funding Source	County Share %	County Costs \$
MAINTENANCE	Maintenance	Maintenance Program for County-Owned Roads	\$78,210,000	Local	100%	\$78,210,000
BRIDGE	Safety	Bridge Repair Program - Short Range	\$1,500,000	Local	100%	\$1,500,000
FREIGHT	Safety	Freight Safety Study	\$1,000,000	Local	100%	\$1,000,000
SIDEWALK	Pedestrian Improvement s	Pedestrian improvements as needed on County Roads	\$11,420,000	Local	100%	\$11,420,000
ECONDEV	Quality of Life	Infrastructure Support for Development	\$4,570,000	Local	100%	\$4,570,000
COUNTYROAD	County Road	County Road Safety Program	\$22,631,500	Local	100%	\$22,631,500
2B	Roadway Safety	SR 85 @ Webb Road/Warren Drive Safety Improvement	\$1,506,000	State / Federal	50%	\$753,000
7C	Roadway Safety	SR 138 @ Mt. Zion Road Safety Improvement	\$1,506,000	State / Federal	50%	\$753,000
2G	Operations	SR 85 @ Garden Walk Boulevard Capacity and Operational Improvement - Provide a WB RT lane on Garden Walk Boulevard, Perform signal optimization and retiming, Provide sidewalks	\$391,000	State / Federal	50%	\$395,000
2H	Operations	SR 85 @ Forest Parkway Capacity and Operational Improvement - Add another eastbound RT lane on Forest Pkwy/Clark Howell Hwy	\$120,000	State / Federal	50%	\$60,000
7E	Operations	SR 138 W @ Fielder Road/Autumn Woods Drive Traffic Engineering Study	\$110,000	State / Federal	50%	\$55,000
7G	Operations	SR 138 E @ N McDonough Street Traffic Engineering Study, Add eastbound right-turn lane on SR 138	\$721,000	State / Federal	50%	\$360,500
4405	Capacity	Denny Drive: Extend to Pleasant Hill Road	\$770,000	Local	100%	\$770,000



Project ID	Category	Project Name	Cost	Primary Funding Source	County Share %	County Costs \$
3103	Operations	Stagecoach Road: West Panola Road to Rex Road - Install Fiber-Optic Trunk Line with Signal Communication Equipment and CCTV Cameras	\$268,000	Local	100%	\$268,000
3956	Operations	Conkle Road at Mt. Zion Road/Mt. Zion Boulevard	\$72,000	Local	100%	\$72,000
TOD	Studies	TOD Station Area Scoping Studies at Forest Park, Lake City, Morrow, Jonesboro, and one unincorporated Clayton County	\$1,500,000 (5 @ \$300,000 each)	Local	100%	\$1,500,000
Total						\$124,318,000



Table 9-3: Long Range 2031-2040

Project ID	Category	Project Name	Cost	Primary Funding Source	County Share %	County Costs \$
MAINTENANCE	Maintenance	Maintenance Program for County-Owned Roads	\$156,420,000	Local	100%	\$156,420,000
SIDEWALK	Pedestrian Improvements	Pedestrian improvements as needed on County Roads	\$22,840,000	Local	100%	\$22,840,000
ECONDEV	Quality of Life	Infrastructure Support for Development	\$9,140,000	Local	100%	\$9,140,000
COUNTY ROAD	County Road	County Road Safety Program	\$38,000,000	Local	100%	\$38,000,000
4C	Capacity	SR 314 Widening	\$45,392,000	State / Federal	20%	\$9,078,400
3504	Operations	Conley Road Operational Upgrades - SR 54/Jonesboro Road to Cherokee Trail	\$12,966,000	Local	100%	\$12,966,000
Total						\$248,444,400



Table 9-4: Five-Year Plan Transit Projects funded by the Clayton County-MARTA Sales Tax

Project ID	Category	Project Name	Cost	Primary Funding Source	MARTA/Local Share	MARTA/Local Share \$
AR-485A	Transit	Clayton County High-Capacity Transit Initiative – Phase 1 From East Point to Jonesboro: Recommended 1 st segment to Mountain View	\$300,000,000 (\$100,000,000 for segment)	Local/ Federal	50%	\$150,000,000 (\$50,000,000 for segment)

Table 9-5: Mid-Range Transit Projects funded by the Clayton County-MARTA Sales Tax

Project ID	Category	Project Name	Cost	Primary Funding Source	MARTA/Local Share %	MARTA/Local Share \$
AR-485A	Transit	Clayton County High-Capacity Transit Initiative – Phase 1 From East Point to Jonesboro: Recommended Second Segment from Mountain View to Jonesboro	\$300,000,000 (\$200,000,000 for segment)	Local/ Federal	50%	\$150,000,000 (\$100,000,000 for segment)

Table 9-6: Long-Range Transit Projects Funded by the Clayton County-MARTA Sales Tax

Project ID	Category	Project Name	Cost	Primary Funding Source	MARTA/Local Share %	MARTA/Local Share \$
AR-485B	Transit	Clayton County High-Capacity Transit Initiative – Phase 2 From Jonesboro to Lovejoy	\$100,000,000	State / Federal	50%	\$50,000,000



Table 9-7: Unconstrained Projects

Project ID	Location	Category	Project Name	Description	Cost	Recommended Funding Source
2A	Riverdale/ County	Roadway Safety	SR 85 Corridor from Forest Parkway to Webb Road/Warren Drive	Road Safety Audit	\$342,000	State / Federal
3A	Riverdale/ County	Roadway Safety	SR 139 Corridor Road Safety Audit	Road Safety Audit	\$259,000	State / Federal
2E	County	Roadway Safety	SR 85 @ Forest Parkway/Clark Howell Highway Safety Improvement	Guide lane assignments by providing mini-skip lines at the intersection, Realignment of the intersection	\$4,068,000	State / Federal
7A	Jonesboro / County	Roadway Safety	SR 138 Road Safety Audit	Road Safety Audit	\$132,000	State / Federal
2C	County	Roadway Safety	SR 85 @ SR 138 Safety Improvement	Add sidewalks connecting to crosswalks	\$846,000	State / Federal
5I	County	Operations	Access Management along Forest Parkway between SR 42/US 23/Moreland Avenue to the I-675 interchange	Consolidate driveways to meet the GDOT minimum driveway spacing requirement	\$181,000	Local
3952	County	Operations	SR 139/Riverdale Road	At Flat Shoals Road	\$71,000	State / Federal
3C	County	Operations	Access Management along SR 139 near I-285 interchange	Consolidate signalized intersections to meet the GDOT minimum signal spacing requirement	\$200,000	State / Federal
3D	County	Operations	Access Management along SR 139 between Shoreham Drive and Kingswood Circle	Consolidate driveways to meet the GDOT minimum driveway spacing requirement	\$24,000	State / Federal
2F	County	Operations	SR 85 @ SR 138 Operational Improvement	EB RT lane on SR 138, Perform signal optimization and retiming	\$409,000	State / Federal
3957	County	Operations	SR 138	At I-675 North	\$80,000	State / Federal
3958	County	Operations	SR 138	At I-675 South	\$80,000	State / Federal



Table 9-8: Project Recommendations in Cities

Project ID	City	Category	Project Name	Description	Cost	Recommended Funding Source
6A	Lake City	Roadway Safety	SR 54/Jonesboro Road Corridor from Thurman Road to Huie Road Road Safety Audit (2.7 mile)	Conduct a Road Safety Audit (RSA)	\$149,000	State / Federal
6B	Morrow	Roadway Safety	SR 54/Jonesboro Road @ Morrow Road Safety Improvement	Provide crosswalk on the east side of the intersection and sidewalk connection to MARTA stops next to rail line	\$1,116,000	State / Federal
4350	Morrow	Roadway Safety	Lake Harbin Road	Construct median on Lake Harbin Road at Lee Street to act as pedestrian refuge to improve bike/ped crossing and to prevent illegal turns near railroad crossing	\$621,000	Local
2N	Riverdale	Roadway Safety	SR 85 @ King Road Signal Warrant Analysis		\$28,000	State / Federal
9B	Riverdale	Roadway Safety	Upper Riverdale Road @ Lamar Hutcheson Parkway Safety Improvement		\$55,000	Local
5B	Lake City	Roadway Safety	SR 331/Forest Parkway @ SR 54/Jonesboro Road Safety Improvement	Provide sidewalks, realign crosswalks and provide ped islands if possible	\$856,000	State / Federal
6F	Morrow	Roadway Safety	SR 54 @ Oxford Drive and Lee Street @ Oxford Drive Safety Improvements		\$248,000	State / Federal
5C	Forest Park	Roadway Safety	SR 331/Forest Parkway @ SR 3/US 19/US 41/Old Dixie Highway Safety Improvement	Intersection Improvement	\$846,000	State / Federal
2D	Riverdale	Roadway Safety	SR 85 @ Main Street/Valley Hill Road Safety Improvement - ARC's Intersection Crash Hot Spot 2013	Provide mini-skip lines for the EB LT lane and for SB LT into EB	\$178,000	State / Federal



Project ID	City	Category	Project Name	Description	Cost	Recommended Funding Source
				lanes, Realign and provide longer storage lane for the EB LT lane		
5A	Lake City/ Clayton	Roadway Safety	Forest Parkway Corridor from SR 3/US 19/US 41/Old Dixie Road to US 23/SR42 Road Safety Audit (4.8 mile)	Conduct a Road Safety Audit (RSA)	\$264,000	State / Federal / Local
4105	Jonesboro	Capacity	New Connector Parkway	Construct new Connector Parkway from South McDonough Street to Old Courthouse, including sidewalks	\$2,444,000	Local
2M	Riverdale	Operations	Access Management along SR 85 between Main Street/Valley Hill Road and Roberts Drive	Consolidate driveways to meet the GDOT minimum signal spacing requirement	\$70,000	State / Federal
5H	Lake City	Operations	Access Management along Forest Parkway between North Lake Street and North Parkway	Consolidate driveways to meet the GDOT minimum driveway spacing requirement	\$22,000	Local
6E	Morrow/ Clayton	Operations	Access Management along SR 54/Jonesboro Road near its interchange with I-75	Consider consolidating signalized intersections to meet the GDOT minimum signal spacing requirement, provide signage at the I-75 interchange	\$200,000	State / Federal
2I	Riverdale	Operations	SR 85 @ Bethsaida Road/Lamar Hutcheson Parkway Capacity and Operational Improvement	Add an EB RT lane on Bethsaida Road, Perform retiming and signal optimization	\$240,000	State / Federal
2J	Riverdale	Operations	SR 85 @ Church Street/Rountree Road Capacity and Operational Improvement	Add a WB RT lane on Rountree Road, Perform retiming and signal optimization	\$316,000	State / Federal
2K	Riverdale	Operations	SR 85 N @ Main Street/Valley Hill Road Capacity and Operational Improvement	Provide a northbound right-turn lane and a southbound right-turn lane along SR 85	\$450,000	State / Federal



Project ID	City	Category	Project Name	Description	Cost	Recommended Funding Source
6D	Morrow	Operations	SR 54/Jonesboro Road S @ I-75 Signage Improvement	Provide adequate signage for I-75 access especially for I-75 S ramp due to driver expectation issue	\$28,000	State / Federal
7F	Riverdale	Operations	SR 138 E @ Taylor Road Traffic Engineering Study	Conduct traffic engineering study, Add eastbound right-turn lane on SR 138	\$721,000	State / Federal
3105	College Park/ Clayton	Operations	SR 314/West Fayetteville Road	Install Fiber-Optic Trunk Line with Signal Communication Equipment and CCTV Cameras	\$1,832,000	State / Federal
3960	Morrow	Operations	Morrow Road	Advanced Traffic Management System (ATMS) Signal Equipment Upgrade - Morrow Road at Skylark Drive/Phillips Drive	\$107,000	Local
3963	Morrow	Operations	Mt. Zion Road	Mt. Zion Road at South Lake Parkway Intersection Improvement	\$80,000	Local
3965	Riverdale	Operations	Roberts Drive	Roberts Drive at Lamar Hutcheson Parkway Intersection Improvement	\$72,000	Local
3968	Morrow	Operations	Mt. Zion Road	Mt. Zion Road at Mt. Zion Circle Intersection Improvement	\$72,000	Local
4351	Morrow	Operations	Southlake Parkway	Reconfigure intersection to provide a single-lane roundabout; safe configuration and signage for bikes and pedestrians	\$1,975,000	Local
3959	Forest Park/Lake City	Operations	Phillips Drive, Springdale Road	Advanced Traffic Management System (ATMS) Signal Equipment Upgrade - Phillips Drive at Reynolds Road and at South	\$320,000	Local



Project ID	City	Category	Project Name	Description	Cost	Recommended Funding Source
				Avenue, Springdale Road at Whatley Drive		
3101	Forest Park/ Clayton	Operations	Ash Street & Morrow Road	Install Fiber-Optic Trunk Line with Signal Communication Equipment and CCTV Cameras	\$926,000	Local
3403	College Park/ Clayton	Capacity	North Airport Parkway	Widen from 4 to 6 lanes	\$25,791,000	Local

