2014 Transportation Plan

EXISTING CONDITIONS AND NEEDS ASSESSMENT REPORT

DEKALB COUNTY
2014 TRANSPORTATION PLAN

SEPTEMBER 2013

Table of Contents

List of Figures

List of Tables

Executive Summary

Executive Summary

Overview

DeKalb County is performing an update to its current transportation plan in order to establish updated goals and priorities for the transportation system. A new transportation plan will help the County continue to grow in a healthy direction with a transportation system that supports a growing economy and a high quality of life. As a community, DeKalb County itself contains a very diverse group of people with diverse needs, and likewise, the County contains a very diverse transportation system. Specifically, an adopted transportation plan will have two positive benefits:

- Assure that programmed-budgeted county resources are being spent on the highest priority transportation needs
- Position the County to obtain additional funding available at the State and Federal levels

There are four general phases that will occur during the development of this transportation plan:

- Inventory of Existing Conditions
- Assessment of Needs
- Recommendations Development
- Consideration and Adoption

This document is a summary of the first two phases of this process and marks the transition into the development of recommendations. This document provides detailed information on the existing infrastructure and policies of DeKalb County and also provides an overview of transportation needs that have been identified so far in the process. The final transportation plan will include recommendations regarding pedestrian, bicycle, vehicular, transit, freight, and air modes of transportation. Those recommendations can be for physical projects at a location or they may be for countywide policies that might impact those modes.

Information included in this report has been collected using a wide range of sources including:

- Information from previously completed studies
- Field inventory performed by the project team
- Information from DeKalb County and other agencies
- Census data
- Georgia Electronic Accident Reporting System (GEARS)
- Geographic Information Systems (GIS)
- Atlanta Regional Commission's Travel Demand Model
- Public involvement
    - Kickoff Meetings (4 in-person meetings)
    - Needs Assessment Meetings (4 in-person meetings plus one online meeting)
    - Technical Advisory Stakeholder Committee
    - Community Advisory Stakeholder Committee
    - Focus Groups Meetings (pedestrian, bicycle, older adults, minority groups, individuals with disabilities)
    - Meetings with surrounding communities
    - Project website and social media

Early on in the process, a guiding vision statement was developed using input from the stakeholder committees, the public, and the Project Management Team. Also with the vision statement are a set of more specific goals that will be used to help achieve the project vision. Those goals are included later in the body of this report. The vision statement is as follows:

> ***Project Vision Statement***
> *The DeKalb County Transportation Plan is intended to improve mobility for all people, enhance quality of life, facilitate economic vitality, and focus on implementation.*

Over the past several decades in DeKalb County (as well as nationally), money for new transportation infrastructure has declined. Meanwhile, a greater portion of transportation money is being used for system maintenance, leaving less money available to grow our transportation system. One funding challenge that is unique to DeKalb County is that transportation improvements are paid for primarily through money collected through the Homestead Option Sales Tax (HOST). The HOST is a County-wide sales tax that is used to offset property taxes. Every year, at least 80% of money collected through the HOST is used to reduce property taxes throughout the County. The remaining 20%, or a portion thereof, can be used for transportation and other improvements as voted on by the County Commission on an annual basis. In recent years, this money has not been sufficient for meeting maintenance goals within the County, let alone for meeting system expansion goals.

Ensuring that the transportation system meets the diverse needs of the County will require a clear plan that has clear priorities. Given the limited funding coupled with competing demands within the County, tradeoffs and compromise will be needed along the way in order to arrive at a final approved list of priorities. While compromise can appear costly, the cost of not adopting a plan can be much higher. Adopting a prioritized list of projects and policies will enable the County to take action and maintain a transportation system that allows the County to compete economically while continuing to offer a high quality of life.

People Using the Transportation System

DeKalb County's population, currently estimated at 709,140, has been steadily increasing over the last decade with a growth rate of 6.5%. DeKalb County is also currently the most densely populated county in Metro Atlanta. This population growth, though, has not been consistent across all areas of the County. Also, the overall total growth rate is around one-half of the national average and less than one-quarter of the Atlanta Metropolitan Statistical Area's (MSA's) rate of growth. Of note is that some of the population decreases that occurred within the County between 2000 and 2010 took place along the MARTA rail line. A continuation of this trend could have negative implications on transit usage.

Meanwhile, the number of DeKalb County households increased at a much faster pace (9.0%) between 2000 and 2010. With a corresponding decrease in average household size, these differing trends can indicate that new houses are being constructed but for smaller families. Household size in DeKalb County (2.48) is slightly below the national average (2.57) and below the Atlanta MSA average (2.67).

The average age of DeKalb County residents (36.2) is relatively equal to the Atlanta MSA (35.9) and slightly below the national average (38.3). Approximately 46% of DeKalb's population is between 25 and

55 years of age. This age range represents the primary workforce population. DeKalb's population is also aging, with large numbers of individuals 65 years of age or older than previously recorded. Seniors have additional transportation considerations that need to be taken into account.

DeKalb County is a racially diverse county and the distribution of various races and ethnicities has changed over the past twenty years. As of 2013, over one-half of DeKalb County's population is African-American (54%). Caucasians (29%) constitute the second largest group, followed by Hispanics (10%) and Asians (5%). The largest population changes in DeKalb County have been in the minority groups over the last 13 years, similar to population changes across the nation.

DeKalb County's educational attainment levels are relatively high, rating better than the Atlanta MSA and nation. For post-secondary educational attainment, approximately 21% of the population has some college education but no degree. Seven percent of residents have an Associate's degree. About 23% have a bachelor's degree, and approximately 15% have a graduate or professional degree.

DeKalb County's average household income ($60,161) is lower than the Atlanta MSA and nation by approximately $15,000. DeKalb County has been tracking behind the Atlanta MSA since 2000 and the gap is anticipated to grow by 2018.

The number of total daytime employees inside DeKalb County is about 345,040. This represents 13.6% of the total employment base in the Atlanta MSA. There are approximately 29,500 businesses in DeKalb County, which is a significant contribution to the regional economy. DeKalb County businesses constitute 13.5% of the Atlanta MSA's total. The low percentage in the share of businesses of the Atlanta MSA shows that DeKalb is not the cornerstone of the MSA business base.

Places Connected by the Transportation System

When discussing the relationship between transportation and the places that the transportation system connects, future areas of growth and future changes in the land use patterns are often points of focus. An extensive amount of work was done in developing the 2005 Comprehensive Plan for DeKalb County as well as in the revamping of zoning policies. A number of other municipal plans and subarea studies have also been completed throughout the County, providing a strong basis on which to build. Current land use plans and zoning policies show a strong interest on the part of the County in incorporating more mixed use and town center areas; essentially concentrating growth in targeted areas. This is evident when comparing existing and future land use plans with the Atlanta Regional Commission's Unified Growth Policy Map. That form of targeted growth will need to be supported by multiple modes of transportation as opposed to being strictly auto-oriented development. As projects are considered in the development of this transportation plan, opportunities to support that form of growth and to better link transportation with the surrounding land uses will need to be explored. In some cases, additional recommendations to the future land use plan may even be needed in order to improve the viability of specific transportation projects within the County. Land use and transportation changes will need to continue to be coordinated in order to better link destinations with the infrastructure that connects them.

Providing opportunities for children to safely walk and bicycle to school has been identified as a community priority. DeKalb County does not provide school bus service to residences near schools. Even though these residences are within walking distances to schools, many students are still driven to and from school. Improved safety for pedestrians and bicyclists near schools will help reduce the number of students being driven to school.

There is strong opportunity for creating more density near transit rail stations. Much of the land around existing rail stations is underutilized relative to the transit infrastructure that's already available. Through land use and zoning, these transit assets can be leveraged to provide additional growth in a County that is largely built out.

There is an opportunity to address access management concerns along key corridors. Access management is difficult to retrofit along mature corridors and requires coordination between land owners and transportation officials. Zoning overlays with access requirements are needed in order to make improvements such as driveway consolidation, interparcel connectivity, and new local street connections.

Overlay districts and zoning updates can be used to address many different factors affecting multimodal access in activity centers. These overlay districts could include requirements for pedestrian scale architecture and site planning, access requirements for vehicles, pedestrians, bicyclists, and transit, and parking controls.

In general, there is a need for directing transportation infrastructure improvements towards activity centers in order to achieve maximum community benefit. Given the limited finding for transportation improvements, maintenance and improvement of infrastructure within shared community activity centers such as downtowns and around commercial nodes is important.

There are some inconsistencies between the future land use plan, zoning ordinances, and the UGPM. Continuing to address these over time will yield greater efficiencies in investments made in key areas throughout the County.

Real Estate and Market Trends Affecting Transportation

DeKalb County faces many challenges as the community's residential and commercial buildings continue to age. The average age of office buildings in the County is 41.8 years; for industrial buildings, the average is 37.5 years; and for retail buildings it is 36.9 years.

Most areas of DeKalb County do not have major internal economic generators, but instead are more influenced by development shared with or in neighboring jurisdictions. For example, the Perimeter area is jointly supported by northern Fulton County, and western DeKalb County is closely intertwined with the City of Atlanta.

There are many successful commercial nodes across the County and currently there is a slight spillover effect from most of these areas into other parts of DeKalb County.

The retail market in DeKalb County faces many challenges. Retail buildings in the County tend to be fairly old. In many areas, the retail centers and their tenants no longer adequately serve the local population, and there will need to be a re-tenanting of these centers. In other areas, there is simply too much retail space for current market conditions, and retail square footage needs to be removed from the market.

There appears to be untapped potential in building upon the strength of the existing bioscience and life sciences research concentrations in both the Center for Disease Control (CDC) and Emory University to spur further commercial development.

The existing MARTA rail stations are under-leveraged in terms of transit-oriented development. Pairing these stations with the right kind of mixed use development could be beneficial to both the communities in DeKalb County and to MARTA.

Different parts of DeKalb County have very different needs for economic development. No one single approach will work county-wide. The County should look at the strengths and weaknesses of each section of the County and then create an economic development plan suited to each area.

Our Roadway Network

When considering roadway needs within DeKalb County, many aspects must be taken into consideration. Three major focus areas included in this plan are:

- Congestion Relief
- Safety
- Asset Management

Congestion Relief and Providing New Options

DeKalb County is one of the most built-out counties in Metro Atlanta. It has the highest density of people of all the counties in the region and a relatively robust roadway network, particularly inside the perimeter. When considering options for congestion relief, several possible options exist including:

- Widening of existing roadways
- Creation of new roadway connections
- Improvements to intersection geometry
- Signal timing
- Corridor access management
- Improved access to other modes

Change in average annual daily traffic volumes (AADTs) show that volume growth on many of the interstates has slowed or even decreased. This could be due in part to the congestion that persists on a daily basis. Many individuals are looking to principal and minor arterials for alternative routes on their daily commutes. Arterials that have seen growth include Peachtree Road, Clairmont Road, Candler Road, and Memorial Drive. Unfortunately, many of these roadways themselves are already congested. Results from the travel demand model show that many of the arterials in DeKalb County are already over capacity during the PM peak travel period (6-10 PM) with a substantial amount of new roadways

projected to be over capacity by 2040. This is assuming there are no major roadway system improvements.

Vehicular congestion has negative effects on both quality of life and economic vitality. The ability of workers to reach their jobs in a reasonable amount of time is important for DeKalb County to prosper. As projected through 2040, with no vehicular enhancements to the roadways, the 15-, 30-, and 45-minute laborsheds of the four main employment centers within DeKalb (Emory, Northlake, Mountain Industrial, and Perimeter) are all likely to decrease substantially from 2010. Transportation improvements to help workers reach employment centers more efficiently are important, but they should also be considered in conjunction with opportunities to provide more housing close to employment and activity centers to shorten the distance that many workers currently travel.

Arterials in Metro Atlanta are often expected to perform too many functions: provide access to interstates, provide local access to businesses and neighborhoods, and provide a fast, safe, and efficient trip for those traveling through. It is difficult for one roadway to serve all of these purposes well. A review of arterial access management shows that some of DeKalb County's arterials through non-residential/non-greenspace areas are providing too much access to properties along the right-of-way. Some of the roadways that warrant further access study include Clairmont Road, Columbia Drive, Glenwood Road, Memorial Drive, Peachtree Road, North Druid Hills Road, Briarcliff Road, DeKalb Avenue/College Avenue, Chamblee Dunwoody Road, Stone Mountain/Lithonia Road, Covington Highway, Ponce de Leon Avenue, and Shallowford Road.

In addition to improving access management along certain arterials, opportunities also exist to improve signal timing throughout the County. Updates to the current Traffic Control Center (TCC) signal-timing satellite, or the creation of a new TCC, are being considered by the County. A number of upgrades to the system are needed including conversion to new signal controllers, repair and upgrade of detection systems, coordination between all key signals and the County's main control center, and closed-circuit television (CCTV) installation and replacement. Some of these projects are being completed on state routes; however, a number of other projects remain unfunded and unassigned.

Safety

Improving safety along roadways is of national importance. Many federal funding programs focus solely on improving the safe transport of system users. The roadway section focuses on crashes involving all types of vehicles; however, other sections of the report focus on crashes involving heavy vehicles, pedestrians, and bicycles. In general, within DeKalb County, crashes seem to be concentrated in high traffic areas, along interstates (particularly at interchanges), and within activity centers where more (albeit often smaller) roadways are located. Areas with a history of high crash rates, particularly fatal, will be given close attention in the selection of projects.

Asset Management

The ability of an agency to maintain infrastructure is becoming an increasingly bigger concern across America. In the recent long range transportation plan completed by the Atlanta Regional Commission, PLAN 2040, a total of 70% of funding allocated in the plan is going to maintaining the current roadway

and transit system. DeKalb County is one of many agencies struggling to keep up with deteriorating infrastructure. In recent years, over 300 miles of streets have been identified as needing resurfacing each year, but funding programs available through GDOT and the County, along with bond programs have been insufficient, funding only 10-20% of the miles in need of repair.[1] Insufficient funds mean that only the absolute highest priority repairs are made every year. With the compilation of an electronic database of annual pavement ratings, it is possible that pavement deterioration can be tracked and anticipated in order to better predict resurfacing needs, and associated costs, for future years in order to be better prepared to petition for and address funding needs. In addition to deteriorating roadways, fourteen of the bridges within DeKalb County do not meet the minimum sufficiency rating of 50 and are therefore eligible for rehabilitation/reconstruction funding at the federal level.

Our Transit System

DeKalb County's transit needs are met primarily by MARTA, now the ninth largest transit service in the United States carrying more than 470,000 riders to their destinations each weekday in Fulton and DeKalb counties. MARTA operates 118 bus routes and 48 miles of rail rapid transit that serves 38 stations in DeKalb and Fulton counties. MARTA's bus fleet numbers over 550 and serves almost 11,500 stops over a 500 square mile area. Additional transit service is operated by GRTA, which offers express bus service into downtown Atlanta. The following are some of the noteworthy findings related to transit in DeKalb County:

- MARTA's service reductions in 2010 have resulted in significant effects to ridership, an indicator of the service needs in DeKalb County and throughout its operating system.
- DeKalb County's high population density - the highest of any county in metro Atlanta - is conducive to successful transit ridership.
- Land uses near existing MARTA stations are underutilized and could support higher densities and a greater range of land uses given the direct access to high capacity rail.
- One challenge for transit buses occurs when those buses are mixed in with other dense vehicular traffic along highly congested corridors.
- Areas such as the Buford Highway Corridor, Clarkston, Pine Lake, Lithonia, and the I-20 Corridor have populations especially dependent upon good access to transit.
- The older population is a growing segment in the County; this population is also more heavily dependent upon transit, particularly bus and paratransit.
- Equity should be a major factor in considering investments in new transportation priorities to meet the changing distribution of races and ethnicities and the important role they play in the County's economy.
- If transit service is to be significantly expanded in DeKalb County, additional dedicated funding needs to be identified for operations and for capital investment.
- Two major transit expansion projects are being pursued by MARTA: the I-20 East initiative and the Clifton Corridor initiative. Both projects are in the environmental analysis phase and neither project is favored for implementation over the other. There could be distinct advantages in

[1] DeKalb County Public Works Roads & Drainage: Pavement Management System Description; Doc 1973, July 2011.

implementing the projects together. Although the projects are currently moving forward through the environmental phases, funding is not yet identified for the design, construction, and right-of-way for each of these projects.

- The I-20 East initiative and the Clifton Corridor initiative will take a long time to implement even if funding is immediately identified. Due to the time associated with design, right-of-way acquisition, and construction, each of these projects would still take around a decade to complete.
- The status of transit expansion projects and the complexities involved in implementing those projects is often misunderstood by the general public. As is common with major public investments, clear information and consistent communication are needed in order to overcome misinformation that can be spread regarding these projects.

Our Bicycle Network

Bicycle needs across DeKalb County are many. The Level of Service, which is the qualitative measure that characterizes operational conditions within a section of travel, is the measure used to assess the existing conditions of the transportation networks. The current lack of bicycle infrastructure, whether on-road or off-road, results in Level of Service D or lower on many roadways within the County. Some roads with lower volumes can better accommodate bikes despite the lack of infrastructure. Potential future demand maps show that the County has a great opportunity to increase cycling and walking in many areas. Thresholds for targeted Levels of Service will be set and specific recommendations can be formulated by comparing existing and ideal Levels of Service, as a part of this process.

In keeping with planning practices at the regional level, bicycle accommodations on roadways within activity centers will be held to a higher standard than bicycle facilities elsewhere within the County. County staff has set a goal of achieving a Bicycle Level of Service of "B" within activity centers and "C" on the study network roadways outside of activity centers. Currently, the distance weighted average Bicycle Level of Service across DeKalb County is 3.73, which is equal to a Bicycle Level of Service grade of "D". This indicates that the current Bicycle Level of Service falls below the set goals. Roadways within activity centers that have the lowest Bicycle Level of Service Ratings are listed in Section 7.3.

The highest densities of automobile crashes involving bicyclists occurred in downtowns and around other activity centers. This trend reinforces the need to set a higher standard for bicycle facilities within activity centers. It is worth noting that 85% of crashes occurred within ½ mile of a school. This does not necessarily mean that those crashes involved students, but it does indicate that there is a safety need near schools for cyclists if bicycling to school is going to be a safe option for students. It is also worth noting that 75% of crashes occurred along roadways with speed limits between 35 and 45 mph.

There is a growing network of off-road bicycle facilities within DeKalb County, although they are currently disconnected from one another. These trails are important for transportation, but also for encouraging new riders to become comfortable with cycling. Expanding and connecting these trail facilities will improve safety and grow cycling within the County.

Our Pedestrian Network

Many of the roadways within the study network contain 100% sidewalk coverage at least on one side, which improves the comfort and safety of pedestrians walking along the roads. A lack of sidewalks on some roadways, as well as a lack of buffer areas to separate the pedestrian from the drivers, results in poor pedestrian Levels of Service in some areas. A number of the roadways within the study network also rate poorly relative to crossing Levels of Service. The greatest pedestrian safety needs are often in helping people to walk across the street as opposed to along it.

As with the bicycle network, County staff has set a goal of achieving a Pedestrian Level of Service of "B" within activity centers and "C" on the study network roadways outside of activity centers. Currently, the distance weighted average Pedestrian Level of Service across DeKalb County is 3.98, which is equal to a Pedestrian Level of Service grade of "D". This indicates that the current Bicycle Level of Service falls below the set goals. Roadways within activity centers that have the lowest Pedestrian Level of Service Ratings are listed in Section 8.4.

The highest densities of automobile crashes involving pedestrians occurred in areas with high residential and commercial densities which are generally included in the activity centers within DeKalb County. This trend reinforces the need to set a higher standard for pedestrian facilities within activity centers. It is worth noting that 60% of crashes occurred within ½ mile of a school. As with bicycle crashes, this does not necessarily mean that those crashes involved students, but it does indicate that there is a safety need near schools for pedestrians if walking to school is going to be a safe option for students. It is also worth noting that 81% of crashes involving pedestrians occurred along roadways with speed limits between 35 and 45 mph. Also, 75% of crashes involving pedestrians occurred along roadways with no median.

Analysis of roadway crossing difficulty shows that nearly half (47%) of the study network roadways have a Crossing Level of Service rating of "E" or "F." Many of these low scoring roadways are major thoroughfares that pass through activity centers such as Buford Highway and East Ponce de Leon Avenue.

The highest scoring roadways regarding latent demand for bicycles and pedestrians general occur near major employment centers. This further reinforces the need to set a higher standard for pedestrian facilities within activity centers.

Our Freight and Air Transportation Systems

Metro Atlanta ranks fifth in the nation in transportation and logistics employment and is one of the strongest and fastest growing logistics clusters in the nation.[2] Several major industrial corridors exist within the County along with rail lines operated by two major Class I railroad companies. DeKalb County is home to 246 logistics providers who employ nearly 4,000 people and generate $750 million in annual sales.[3] For fiscal year 2011, the following are some statistics related to the movement of freight in DeKalb County:

[2] Source: "Atlanta Regional Freight Mobility Plan", Atlanta Regional Commission, February 2008.

[3] Georgia Center for Logistics Innovations, September 2012

- Inbound truck freight: 3.5 million tons valued at $14 billion
- Outbound truck freight: 3.9 million tons valued at $18.5 billion
- Inbound rail freight: 1 million tons valued at $1.5 billion
- Outbound rail freight: 0.3 million tons valued at $81 million

Given the importance of freight to the local economy and to the quality of life for area residents, it will be important to maintain an awareness of needs related to the movement of freight as other priorities are considered. The following freight-related needs have been identified:

- Truck routes proposed in the Atlanta Regional Commission's ASTRoMaP system have not yet been incorporated into the County's truck route system.
- Many residents and businesses today complain about the routing of trucks through town centers and through residential areas. Unfortunately, because so much of DeKalb County has been built out, few good options are available for finding appropriate alternative truck routes.
- Many roadways designated as freight routes could be improved to more safely and efficiently accommodate freight traffic.
- Much concern exists within the community for at-grade rail crossings that are located in and around town centers throughout the County.
- Analysis of crashes involving heavy vehicles shows high concentrations of crashes occurring around interstate interchanges.
- The redevelopment of the GM Plant in Doraville has the potential to create conflicts with operations at the DeKalb Peachtree Airport due to building heights and noise concerns.

Policies and Programs Impacting Transportation

Several opportunities exist to manage and improve the transportation system through policies and programs. Many policy changes can occur with little or no direct cost to the County. Some programs could even generate outside funding for transportation projects. Some of the policies and programs explored in this report include:

- Transportation Demand Management (TDM)
- Redevelopment initiatives
- Targeted incentives
- Tax Allocation and Community Improvement Districts
- Livable Centers Initiative (LCI)
- Complete Streets

Human Services Transportation

Human Services Transportation (HST) is a category of programs and services that provides non-emergency transportation service to transportation disadvantaged populations. These groups typically include older adults, persons with disabilities, persons with Limited English Proficiency (LEP), and persons with lower incomes. Individuals within these groups can often have unique transportation needs requiring a relatively wider range of transportation services. In general, many of the needs of the

transportation disadvantaged populations could be met with access to high quality public transportation; however, funding limitations prevent MARTA from being able to provide transit service everywhere in the County. Some key findings resulting from this study of Human Services Transportation include:

- Expansion of MARTA's service area and frequencies could reduce much of the demand for additional programs.
- Many older adults and people with disabilities would be able to use MARTA buses and trains if better access to bus stops and train stations were in place. (e.g. sidewalks and bus shelters)
- Many older adults have never used the MARTA bus system and can find it intimidating.
- There is currently not a system in place that accurately inventories and coordinates information between the many different services that are classified as HST programs.
- The ARC has developed a concept called Lifelong Communities that describes communities in which individuals can maintain a high quality of life at any age, even despite changes in mobility needs. Having more neighborhoods that provide a range of transportation options would help offset the need for HST programs.
- DeKalb County purchases or subsidizes HST trips through the state-run Coordinated Transportation System. Due to budget cuts, the number of trips purchased by DeKalb County has steadily declined over the last several years.
- Many people that live in auto-dependent areas are open to relocating to other areas where more transportation choices exist yet they are unable to afford the costs associated with relocating and new housing.
- The Human Development Department reports that many of the vehicles in the state-run and privately run fleets need to be better maintained. Condition issues in vehicles may not be significant when transporting healthy individuals but problems such as broken air conditioning or excessive wear can be more serious when transporting older adults or people with illnesses.
- For individuals that are disabled, taxi services are an important part of their transportation options. Unfortunately, there are very few wheelchair accessible vehicles (usually vans) in the private fleets that are registered within DeKalb County.

How we are Funding our Transportation System

One of the most critical aspects of this transportation plan is the ability to implement the projects within it. As automobiles are becoming more fuel efficient (including more hybrids and electric cars), the federal gas tax becomes more unreliable as a funding source for the Highway Trust Fund. It is incumbent upon local governments to find creative ways to fund (partially or completely) the transportation projects necessary to meet the needs of their constituents.

On July 6, 2012, President Obama signed into law the Moving Ahead for Progress in the 21st Century Act (MAP-21). This was the first federal transportation legislation enacted since 2005 when President Bush signed into law the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). MAP-21 is a two year bill (2013 and 2014) funded by the Highway Trust Fund, which includes the Highway Account (highway and intermodal programs) and the Mass Transit Account

(public transit programs). The monies funding the Highway Trust Fund primarily come from the federal motor fuels tax.

Programs under both the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA) have been revamped. Because MARTA is the designated recipient for all 5307-5340 and 5337 federal transit monies, DeKalb County cannot compete for this money. On the other hand, DeKalb County will have the opportunity to compete more directly for FHWA program funds. The formula programs established for FHWA that are most relevant to DeKalb include the following:

- National Highway Performance Program (NHPP) – focused on building and maintaining the National Highway System
- Surface Transportation Program (STP) – includes categories such as General Safety and Operations, Statewide Flexible (for use by GDOT), and Urban (for use by ARC and includes the LCI program and Last Mile Connectivity among others)
- Congestion Mitigation and Air Quality Improvement Program (CMAQ) – focused on meeting the goals of the Clean Air Act and can be used for new transit projects, transportation demand management, traffic flow/Intelligent Transportation Systems, etc.
- Highway Safety Improvement Program (HSIP) – funding DOT's top priority of safety, focused on the safety projects of greatest importance and need
- Transportation Alternatives (TA) – new formula funding category focused on alternative modes of transportation, including the former programs of Transportation Enhancement (TE), Safe Routes to School (SRTS), and Recreational Trails.

In addition to federal funding dollars for transportation, the State of Georgia raises approximately $1 billion per year in state motor fuel taxes, a portion of which goes to fund transportation projects and match federal funds for transportation. The Local Maintenance and Improvement Grant (LMIG) program is funded from the state motor fuel tax and provided DeKalb and its cities $4.3 million in state funding for road and bridge projects.

DeKalb County has one primary source for funding transportation projects locally – the Homestead Option Sales Tax (HOST). In 1997, residents of DeKalb passed the HOST in which 80% of the monies raised through the sales tax go to homeowner tax relief and the remaining 20% is left to the Commissioners to direct. As much as 100% can go to homeowner tax relief; however, Commissioners have traditionally chosen to put the 20% toward transportation projects throughout the County. During some of the years of the recession, the Commissioners did choose to flex more or all of the money back to the homeowners. In 2012, a total of $108 million was collected in sales tax revenue in DeKalb County. Of that, nearly $87 million went back to property tax relief and the remaining $21.6 million was used for capital. Of that money, approximately $12.5 million went to the cities, leaving DeKalb County with only $8 million for transportation capital. With the conclusion of the bond program, monies previously used for resurfacing also needed additional funding and were taken from the HOST taxes as well.

More detail will be presented in the Recommendations phase with total funding amounts, possible federal and state match opportunities for DeKalb, and a matrix of project types that apply to each of the funding categories.

Health and Environmental Considerations

Public health has become a nationwide concern over the past decade and transportation can play a key role in improving overall health in the community. Beyond basic safety concerns such as vehicle collisions, there are many factors that link transportation with health including air quality impacts from automobiles and increased physical activity through walking and cycling. Additional pedestrian and bicycle facilities as well as better access to public transit can reduce negative air quality impacts and can encourage physical activity while also increasing mobility for all users. The Centers for Disease Control and Prevention (CDC) suggests that creating places for people to be physically active can result in a 25% increase in the percentage of people who exercise three times a week.

The DeKalb County Transportation Plan has also considered environmental impacts relating to the recommendation of transportation projects. Environmental considerations are multifaceted and the factors explored in this report include water resources, watersheds, wetlands, parks, regionally important resources, and climate change.

Next Steps

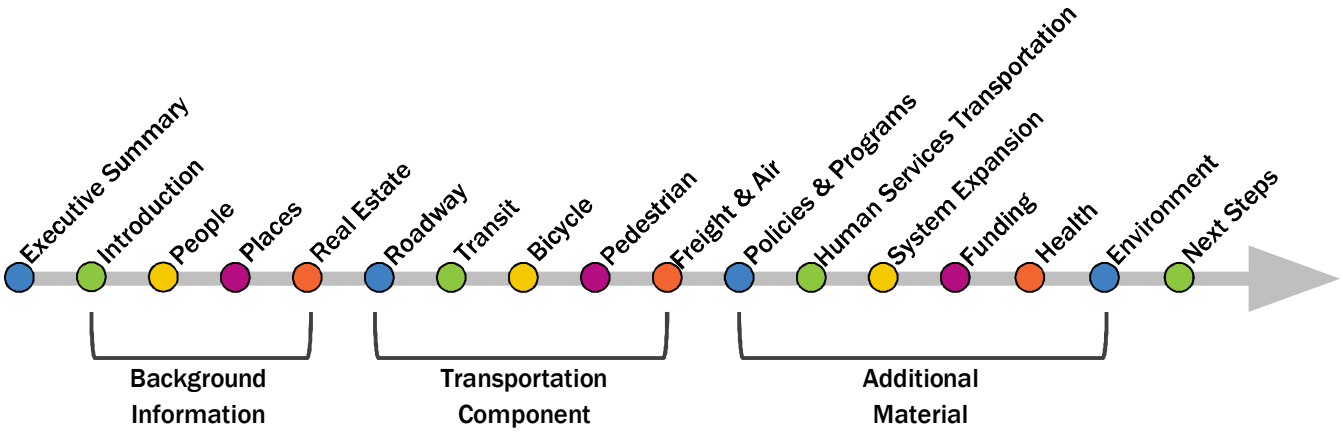
This Existing Conditions and Needs Assessment Report provides information regarding the operation and efficiency of the existing transportation infrastructure and services. Following the completion of this report, a multimodal list of all potential projects will be compiled. This list is intended to be exhaustive and will be significantly larger than the final resulting list of recommended projects. Following the development of the initial exhaustive list, those projects will be subjected to an evaluation process that considers both quantitative and qualitative factors. The process is intended to organize the list using a scoring system so that the highest priority projects can be identified. The factors that will be used to influence the scoring will include cost estimates, technical analysis results, the Atlanta Regional Commission (ARC) travel demand model, conformity with project goals, public opinion, and availability of funding. The evaluation process is expected to take several months and will involve input from many different groups including the County Commission and CEO, County staff, the Project Management Team, the project stakeholder teams, and the general public. Once the final list of recommended projects is developed, the last step will be to obtain formal approval from the County Commission and CEO. This project is scheduled to be completed in the spring of 2014.

How to Review this Document

A transportation system connects people with the places they need or want to be. Understanding transportation in DeKalb County therefore includes understanding characteristics of the people that live and work there and the places they visit on a daily basis. The first four chapters following the Executive Summary provide introductory information about the plan as well as some relevant background information about the residents and employees of DeKalb, land uses and destinations within DeKalb, and the current direction of the real estate market looking forward.

The following five chapters summarize the key transportation modes studied: roadway/vehicular, transit, bicycle, pedestrian, and freight and air. The majority of system inventory and determination of needs is contained in these chapters.

The next six chapters discuss other relevant information for understanding transportation in DeKalb County. These sections highlight policies and programs of interest, human services transportation for those with mobility considerations, current system expansion plans, an overview of current and potential funding sources, and health and environmental considerations. The final chapter will explain more about the next steps that follow the conclusion of the Existing Conditions and Needs Assessment Phase.



Introduction

1 Introduction

1.1 The Purpose for this Plan

DeKalb County is in the process of preparing a new transportation plan for the benefit of its citizens and visitors. This report is an interim deliverable that has been prepared to assist in the development of the transportation plan. An adopted county transportation plan provides several benefits. Most importantly, it:

- Assures that limited county resources are being spent on the highest priority transportation needs
- Positions the County to obtain additional funding that is available at the State and Federal level

Funding a major countywide transportation system is expensive. Not every project or policy that is desired can be afforded, so decisions about how to maintain and expand the system will inevitably involve difficult choices and tradeoffs. Therefore, during the planning process, discussions need to occur that include budget constraints, cost, sustainability, public opinion, equity, and economic vitality. During a countywide transportation planning process, these topics should be part of an open conversation and paired with strong technical analysis so that decisions can be made with all of the necessary information and input. In this way, a transportation plan helps to guide efficient and effective use of the limited public resources that are available.

A county transportation plan is needed also because it will significantly improve the County's chances of being awarded regional, state, federal, and private funds for transportation. Obtaining these outside funds involves participating in a somewhat competitive process. Other counties and regions are asking for money as well, so counties need to be able to justify their funding requests. A countywide transportation plan shows that a county has identified its own highest priorities and has a clear vision for its future. For awarding agencies at the regional, state, and federal level, a locally adopted plan for DeKalb County demonstrates that an investment in DeKalb County will be used wisely and successfully.

A county transportation plan is not directly required by law. Rather, at the regional level, the Atlanta Regional Commission (ARC) is required to develop long-range transportation plan for the region as a whole. This is required by Federal transportation legislation including the current plan, Moving Ahead for Progress in the 21st Century (MAP-21). It states that if regional MPOs do not develop regional transportation plans, then those regions will not be eligible for Federal transportation funds. MPOs like the ARC in turn rely on locally adopted transportation plans from counties and cities to inform the development of the regional transportation plan. Because of the importance of local transportation plans in the regional planning process, the ARC assists with funding for county transportation plans by providing 80% of the total cost.

Because ARC is the agency that develops the regional transportation plan, they have a very strong influence on how State and Federal transportation money is allocated. When deciding which projects to fund, ARC will give preference to counties that have completed and adopted transportation plans. Projects identified from those plans have already been determined to be feasible and of value to the community; they are more likely to be implemented by the responsible city or county.

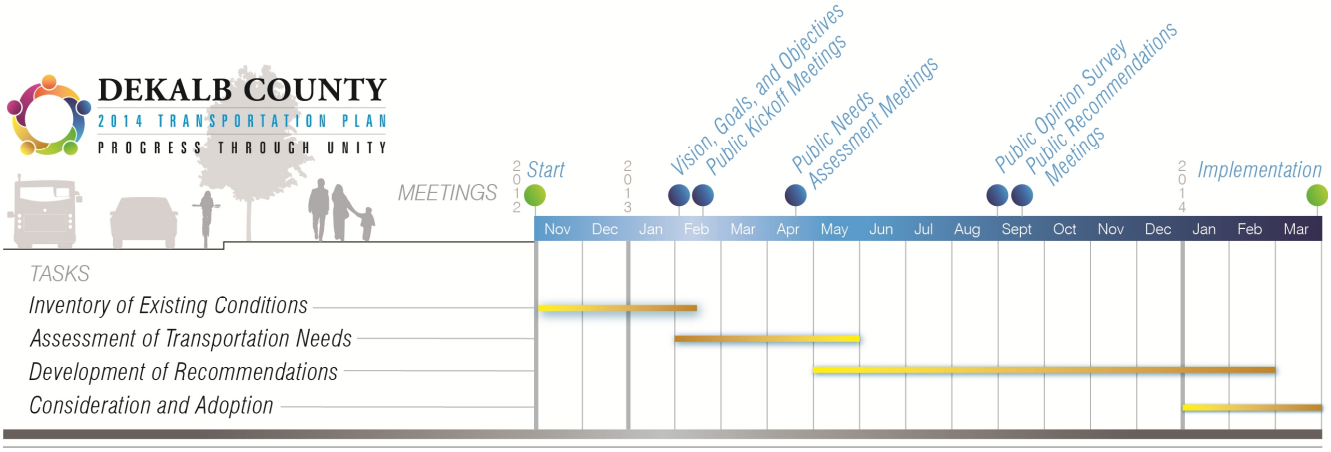
1.2 The Planning Process

The DeKalb County 2014 Transportation Plan is being led by the Public Works Transportation Division of DeKalb County. The planning process is intended to take between 14 and 16 months to complete. The project started in November of 2012 and is scheduled to be completed in the spring of 2014.

There are four main phases of this process that will ultimately make up the plan:

- **Inventory of Existing Conditions** – Includes an inventory of the transportation infrastructure and policies that already exist today.
- **Assessment of Needs** – Includes an assessment of what new infrastructure is needed or what maintenance needs to occur going forward.
- **Recommendations** – This phase will include compiling a master list of potential projects. That list will then be narrowed down into groups of priorities. Some projects will be moved to the bottom of the list based on technical analysis and feedback from the public and elected officials, while other projects will be elevated to the top of the list to become the County's highest priorities.
- **Consideration and Adoption** – Final consideration of the project list and policies by the elected officials as well as adoption by County Commissioners and the CEO.

Figure 1-1: Project Timeline



This document is intended to summarize information collected during the first two phases of the project (the Inventory of Existing Conditions and the Assessment of Needs). During the Recommendations Phase, a key deliverable will be a draft list of recommendations that will be developed based on information gathered during the Assessment of Needs. That draft list will be reviewed and refined by the public, stakeholder groups, agency staff, County staff, and County elected officials. This refinement process will result in a prioritized list of projects that reflects the values of the County. A list of recommended policies will also be developed and considered for inclusion in the plan. At the end of the planning process, the DeKalb County Transportation Plan will need to be voted on and adopted by the County Commission and the County CEO.

Included in the Plan

The resulting transportation plan will provide recommendations regarding pedestrian, bicycle, vehicular, transit, freight, and air modes of transportation. Recommendations can be for physical projects at a location or they can be for countywide policies that might impact transportation. The scope of the plan includes roadways classified by the County or by the Georgia Department of Transportation (GDOT) as collectors and above (roadways used for traffic traveling through the area as opposed to local roads), transit routes, and bicycle and pedestrian paths and trails. Because this is a high level countywide plan, local streets are not included in this plan. Also, because funding for projects is limited, it will be important that recommendations have some degree of regional significance. The study network is shown in Figure 1-2.

DEKALB COUNTY

2014 TRANSPORTATION PLAN

PROGRESS THROUGH UNITY

FIGURE 1-2
PROJECT STUDY AREA

- Atlanta
- Avondale Estates
- Brookhaven
- Chamblee
- Clarkston
- Decatur
- Doraville
- Dunwoody
- Lithonia
- Pine Lake
- Stone Mountain
- Airports
- MARTA Stations
- MARTA Rail
- MARTA Bus Routes
- Trails
- Roadway Study Network
- Major Roads Around DeKalb
- Expressways
- Railroads
- County Boundaries
- DeKalb County

Source: The Atlanta Regional Commission
Prepared by: Kimley-Horn and Associates, Inc.

September 2013

Data Sources

Public Involvement was one of the main methods employed for developing a list of transportation needs throughout the County. Residents and stakeholders in the County represent the greatest source of information for transportation system needs. Many opportunities for public input are being used in this plan including public charrettes, email correspondence, telephone calls, a project website, a statistically valid survey, and Facebook/Twitter.

Previous Studies were reviewed for information on existing conditions and transportation needs. Those previous studies included the previous DeKalb County Transportation Plan (2007), regional transportation studies, plans completed by local municipalities, the most recent DeKalb County Comprehensive Plan, and other miscellaneous studies.

Field Inventory work was performed by the project team in order to catalogue current conditions for many of the characteristics used in this report.

Existing Information Provided by DeKalb County and Other Agencies was used as part of the data collection efforts as well as part of the inventory of transportation needs. Many meetings and conversations occurred with representatives from outside agencies and representatives from different departments within DeKalb County.

Census Data from the US Census Bureau were obtained in order to analyze population trends throughout the County. The *Population and Housing Census* is conducted nationally every ten years with the intent to collect consistent data on the entire population of the United States. The *American Community Survey* is an ongoing census where approximately 250,000 survey forms are sent every month. Information from both of these surveys was used in this report for identifying current population conditions. Nielson Claritas data is used to develop existing conditions and trends reports relative to employment. The most current information was also used for comparing these conditions to years past in order to consider demographic trends. The most recent decennial census was collected in 2010, making this data just over three years old.

Georgia Electronic Accident Reporting System (GEARS) is the new accident reporting system that GDOT has adopted to assist with the collection and reporting of crash records and data analysis. Data were used to note the general locations and frequencies of traffic collisions. Collisions with pedestrians, bicyclists, and heavy vehicles were processed separately in order to prepare subset analyses on these specific types of collisions. Statistics were analyzed for crash data between the years 2009 to 2011.

Geographic Information Systems (GIS) merges cartography, statistical analysis, and computer science technologies in the form of a software tool to assist the visual representation and understanding of geography. More specifically, GIS can be used to analyze and display infrastructure, land features, economic data, and demographic data. Unless otherwise noted, the maps included in this document were created using the software ESRI ArcGIS Version 10.0 (ArcInfo).

The Atlanta Regional Commission's Travel Demand Model is a computer generated simulation of travel patterns in the Atlanta region for both existing conditions and those expected in the future. The model takes into account the existing and planned roadway and transit networks, travel behaviors, land use patterns, and socioeconomic data to analyze current and potential future travel patterns throughout the

region. Additional detail specific to DeKalb County was added to the regional model in order to better consider countywide patterns as a subset of the entire region's network. ARC's travel demand model relies on the software platform of the Citilabs Cube suite of programs.

1.3 Input and Public Involvement

Many methods have been implemented to capture public input into the transportation plan. These methods include:

Stakeholder Groups

Two stakeholder groups were formed to give key guidance to the development of the plan. These include a Technical Advisory Committee made up of County, city, MARTA, GDOT, and GRTA staff as well as a Community Advisory Committee made up of business, industrial, environmental, aging, pedestrian, cycling, neighborhood, low income, environmental justice, and disabled representatives. Each of these groups is intended to meet three to five times throughout the process and will provide key perspectives on transportation needs at decision points along the way.

Public Meetings

Three rounds of public meetings will be held during the development of the plan. These include:

- Kickoff meetings
- Needs Assessment meetings
- Recommendations meetings

Each set of meetings includes four individual meetings spread throughout the County. The first round of meetings (Kickoff Meetings) was held in February of 2013:

- Thursday, February 7th – Lou Walker Senior Center
- Saturday, February 9th – Maloof Center Auditorium
- Monday, February 11th –Exchange Park Multi-Purpose Room
- Tuesday, February 12th – Doraville Civic Center

The second round of public meetings (Needs Assessment Meetings) was held in April 2013:

- Tuesday, April 16th – McNair High School
- Thursday, April 18th –Emory University Winship Ballroom
- Saturday, April 20th – Tucker-Reid H. Cofer Public Library
- Monday, April 22nd – Berean Community Center
- Tuesday, April 23rd – Online Meeting

Focus Group Meetings

There have been several focus group meetings held during the Needs Assessment. These meetings were used to gain specific input on topics that need more detailed discussion and to hear from groups that are traditionally underrepresented in public processes. Focus groups held include Pedestrian, Bicycle, Disabled, Older Adults, Asian, and Transit. The project team also set up a booth at the Latino 5k (held April 7th, 2013 on Buford Highway) to gather input from members of the Hispanic Community. Summaries from each of those meetings are included in the Appendix.

Meetings with Surrounding Counties

The project team will be meeting with members of the adjacent communities (including counties, cities, and Community Improvement Districts (CIDs) in order to discuss cross-jurisdictional transportation priorities.

Other Public Outreach Methods

Other methods of obtaining public input include the use social media, a project website, an online interactive map, online meetings, mobile information kiosks at local malls, newsletters, and presentations at County Commission meetings. The address for the website is www.dekalbtransportationplan2014.com.

1.4 Project Vision and Goals

It is important to have a guiding framework that maintains an overall direction for the plan. Ultimately the transportation plan will result in a prioritized list of projects. Those projects will need to be selected and prioritized using a set of values established by the community. Early in that effort, the Project Management Team drafted a project vision statement and a subsequent set of goals for the transportation plan. The original draft was assembled using ideas collected at the first meeting of the project stakeholders. That draft was then presented back to the stakeholders for comments and then presented to the public for review at the first round of public meetings. The draft list of goals was also compared to the ARC's goals that were used to develop PLAN 2040. After this comparison and after incorporating comments from the public and stakeholders, the Project Vision and Goals were then finalized by the Project Management Team April of 2013. The vision statement and the associated goals are as follows:

Vision Statement

The DeKalb County Transportation Plan is intended to improve the mobility for all people, enhance quality of life, facilitate economic vitality, and focus on implementation:

Goal 1: Improve mobility for all people

- Improve connectivity across multiple modes including vehicular, transit, bicycle, pedestrian, and air
- Promote equity of all people independent of age, race, ethnicity, economic status, and physical ability
- Explore the use of innovation and technology to be used when appropriate
- Create and implement context sensitive design standards.

Goal 2: Enhance quality of life

- Improve the safety of all users of the system for all modes of travel
- Maintain the cleanliness and good repair of transportation infrastructure

- Prioritize transportation projects that enable active healthy communities
- Use transportation infrastructure to help create attractive communities
- Prioritize environmentally sustainable projects using a sensible, balanced approach
- New projects should respect the character and plans of cities, neighborhoods, and adjacent communities.

Goal 3: Improve economic vitality

- Improve access to jobs of both residents and employers in DeKalb County
- Improve access to educational facilities for all students within the County
- Provide for the efficient movement of goods on both rail and truck
- Maintain and enhance real estate values across the County
- Allow for balanced and equitable growth
- Strengthen the connection between transportation and land use

Goal 4: Focus on implementation

- Adequately fund and maintain the existing transportation system
- Select new projects that are able to be efficiently maintained
- Prioritize projects into multiple tiers recognizing the limited funding currently available and prepare for possible additional sources
- Identify new sources of funding to grow local transportation dollars
- Support a renewed trust in elected leaders and public confidence in the process through transparency, open communication, and collaboration across agencies
- Encourage strong community engagement in the planning process and in the future growth and development of the County

1.5 Study Context

The primary purpose of the 2014 DeKalb County Transportation Plan is to identify a transportation system that will support a high quality of life and a strong economy for the people of DeKalb County. Our transportation system directly determines our options for how we live, work, and play. As a community, DeKalb County itself contains a very diverse group of people with diverse needs. Likewise, the County contains a very diverse transportation system that supports the community. As of the beginning of 2013, DeKalb County contains:

- Over 3,000 miles of roadway (785 of which are included in the study network for this plan)
- Approximately half of the MARTA transit system – the 9th largest public transit system in the United States
- 30 miles of bike lanes
- 425 miles of sidewalk
- 43.5 miles of PATH trails
- Approximately 400 miles of rail

Figure 1-3 shows the location of DeKalb County within Metro Atlanta as well as the various transportation assets that connect it to neighboring counties.

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

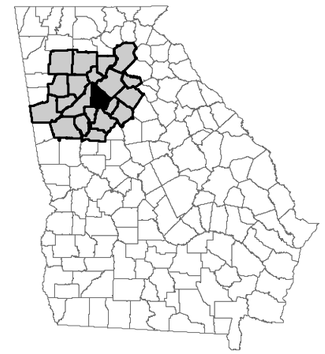


FIGURE 1-3
LOCAL CONTEXT MAP

- DeKalb County
- ARC 20 Counties
- Other Counties
- Parks
- Rivers & Streams
- Lakes & Ponds
- MARTA Rail
- Major Roads
- Expressways

GORDON
PICKENS
LUMPKIN
DAWSON
HALL
BANK
FLOYD
CHEROKEE
BARTOW
FORSYTH
JACKSON
POLK
BARROW
GWINNETT
PAULDING
COBB
HARALSON
DEKALB COUNTY
WALTON
DOUGLAS
DEKALB
FULTON
MORG
CARROLL
CLAYTON
ROCKDALE
NEWTON
FAYETTE
HENRY
JASPER
COWETA
HEARD
BUTTS
SPALDING
TROUP
MERIWETHER
PIKE
LAMAR
MONROE

N

0 2.5 5 10 15 20 Miles

Source: The Atlanta Regional Commission
Prepared by: Kimley-Horn and Associates, Inc.

September 2013

Who Operates and Maintains our Infrastructure?

In addition to the large cost of constructing new infrastructure, existing transportation assets need to be regularly maintained. Sidewalks, asphalt and concrete roadways, bridges, traffic signals, transit facilities, and other infrastructure all deteriorate over time. As we continue to add new infrastructure, the cost for maintaining the existing system then continues to grow. Over the past several decades in DeKalb County (as well as nationally), money for new transportation infrastructure has declined. Meanwhile, a greater portion of transportation money is being used for system maintenance (leaving less money available to grow our transportation system).

There are many different governments and agencies responsible for maintaining these systems. Often, there is overlap between systems and the responsibilities between agencies are shared. Table 1-1 identifies some of the maintenance responsibilities for typical transportation infrastructure.

Table 1-1: Maintenance Responsibilities for Typical Transportation Infrastructure

Type of Infrastructure	Responsibility
Sidewalks	State, County, or Cities depending on the roadway
Resurfacing	State, County, or Cities depending on the roadway
Traffic signals	State, County, or Cities depending on the roadway
Bridges	The State is responsible for bridge inspections. The State, County, and Cities share the repair and replacement costs jointly depending on the facility.
MARTA bus stops, bus routes, and buses	MARTA
MARTA Train stations and train operations	MARTA
GRTA bus stops, bus routes, and buses	GRTA

Role of the Municipalities

This DeKalb County 2014 Transportation Plan is a countywide transportation plan which means that the cities of DeKalb County are included in the planning process. Transportation facilities and issues do not stop at municipal boundaries. The County government and the city governments share common priorities and responsibilities regarding transportation. This transportation plan focuses on roadways that are classified by the County as being collectors or higher, which means that the road has more through traffic than it does traffic using the local driveways and land uses. Where cities have developed their own transportation plans, recommended projects from those plans will be included in the County's plan. This does not necessarily mean that DeKalb County will fund transportation projects within the cities. On a case-by-case basis, the county and cities may share the cost of a project. All cities within DeKalb County, including those that have not prepared transportation plans, have the opportunity to appoint stakeholders to the Technical Advisory Committee.

A Note Regarding Existing Funding

Money for transportation projects has decreased while maintenance costs of the existing transportation system have continued to increase. Over the previous decade, transportation money within DeKalb County has been provided by bond money and also by money from the Homestead Option Sales Tax (HOST). Almost no money remains from the previous bonds and only a small portion of the HOST

money can be used for transportation. The primary purpose of the HOST is to offset property taxes of homeowners. The portion of the HOST tax that can be used for transportation (up to 20%, as designated by the County Commissioners) is split between the cities and the County. As new cities are incorporated, the portion that is received by the County decreases.

Beyond the HOST and aside from Bonds, the County is limited in how it can raise additional revenue. State laws limit the amount of sales tax revenue that an individual county can collect. DeKalb County, along with Fulton County, has a one cent sales tax that is used to fund MARTA so the maximum amount of sales tax revenue that can be collected in DeKalb County has already been reached. This means that additional sales tax revenue cannot be collected in DeKalb County without a change in state laws.

More information regarding the HOST revenues and distribution to the County and cities is included in Chapter 13 (How We Are Funding Our Transportation System). While reading this document and considering the various transportation needs of the County, it will be important to keep in mind the lack of funding currently available to the County and the need for a new consistent funding source for future transportation maintenance and capital.

Where that all leaves us

Maintaining a transportation system that meets the diverse needs of the County will require a clear plan that has clear priorities. In order to arrive at that vision, given the limited funding and the competing demands, tradeoffs and compromise will be needed along the way. While compromise can appear costly, the cost of not adopting a vision can be much higher. Adopting a prioritized list of projects and policies will enable the County to take action and maintain a transportation system that allows the County to compete economically while offering a high quality of life.

1.6 Peer Review

In addition to understanding how DeKalb County is performing relative to transportation, it is also helpful to understand how it compares with other similar counties around the country. Some basic metrics about each of the counties was considered before selecting five peers for comparison including the metro area population and density, the county population, density, and size, the location of the county within the metropolitan region, the county's ethnic profile, unemployment rates, and overall transit infrastructure. In addition, only counties that conduct their own road building and maintaining were considered (as opposed to counties that rely on the state for all road building activities). The selected counties did not match DeKalb on all metrics, but a sufficient number of matching components made these counties appropriate for comparison. In particular, the county location within the metro region played a significant role in selection. The five counties compared with DeKalb County include Denton County, Texas (Dallas-Fort Worth), Fort Bend County, Texas (Houston), Prince George's County, Maryland (Washington DC), Montgomery County, Philadelphia (Pennsylvania), and Jackson County, Missouri (Kansas City). The following matrix summarizes key questions considered in the comparison including if Home Rule (the authority of a local government to prevent state government intervention with its operations) or Dillon Rule (state preeminence over local governments) applies, if and how the county does transportation planning, who conducts transit planning, how land use and zoning decisions are made, and if a sales tax or other innovative funding source provides money to transportation.

Table 1-2: Peer Review of Other Counties

Basic Metrics	DeKalb County GA	Denton County TX	Fort Bend County TX	Prince George's County MD	Montgomery County PA	Jackson County MO
Metro Area	Atlanta	Dallas-Fort Worth	Greater Houston	Washington DC	Philadelphia	Kansas City
Metro Area Population (2010, with rank)	5,286,728	6,426,214	5,920,416	5,703,948	5,826,742	2,009,342
Metro Area Population (2010 national rank)	9	4	5	7	6	30
Metro Area Density (person/square mile)	630	634	630	371	1,138	260
County Population (2010)	699,893	707,304	535,375	871,233	799,874	676,360
Total Area of County (sq mi)	271	958	886	498	487	616
County Density (person/square mile)	2,583	754	694	1,779	1,653	1,098
Transit Accessibility	rail, bus	rail, bus	bus	rail, bus	rail, bus	bus
Ethnic Profile (2010 Census)	33.3% White 54.3% African American 9.8% Hispanic origin	75.0% White 8.4% African American 18.2% Hispanic origin	50.6% White 21.5% African American 23.7% Hispanic origin	19.2% White 64.5% African American 14.9% Hispanic origin	81.1% White 8.7% African American 20.8% Hispanic origin	66.9% White 23.9% African American 8.4% Hispanic origin
Unemployment Rate	8.9% (2011)	5.2% (2012)	5.4% (2012)	6.6% (2012)	4.3% (2012)	7.4% (2012)
Location in Relation to Major Urban Center	East of center	North of center	Southwest of center	East of center	Northwest of center	East of center
Is the county in a Home Rule or Dillon Rule state? What are the implications? In Home Rule states, the state constitution (through an amendment) allows for cities/municipalities to pass laws to govern themselves as long as the laws obey state and federal constitutions. States under Dillon rule find it difficult to raise revenue/govern property since they have to obtain permission from the state legislature. Counties where Home Rule apply may levy local taxes to raise money for local projects. Some states apply both Home Rule and Dillon rule, meaning that Dillon Rule is applied to all matters not explicitly stated in the Home Rule amendment.	The Georgia Constitution provides for Home Rule by county and city governments. County Home Rule is specifically prescribed while cities may be given the same right by the state legislature. There are nine areas where counties and cities are prohibited from acting: elective offices and salaries, elections and appointments, criminal law, any form of taxation not authorized by the constitution or state law, activities otherwise regulated by the Georgia Public Service Commission, restriction on eminent domain (taking of private property for public use), the courts, the public schools, and private or civil relationships.	Cities may adopt Home Rule once their population exceeds 5,000 and the voters adopt a city charter. Cities with fewer than 5,000 people are considered "general law cities" and have more restrictions in government organization, levying taxes, annexation. Counties were given home rule authority in 1933; however the amendment was repealed in 1969 because no counties had established home rule governments.	Same as Denton County, TX.	Maryland applies both Home Rule and Dillon Rule. Home Rule applies to counties chartered under Article 11A of the Maryland Constitution (Mayor or City Council of Baltimore demands a charter and/or the city or county petitions for a charter approved by the General Assembly to create an elective legislative body that has law-making power in the city/county). Other counties may adopt optional powers of Home Rule (Article 11F) given at the next general election, the county submits a charter under Article 11A. All other counties operate under Dillon Rule.	Pennsylvania applies both Home Rule and Dillon Rule. Counties may apply for Home Rule charters or Optional Plan charters under Chapter 29 of the Pennsylvania State Constitution. Counties applying for Home Rule are required to maintain a commission with elected members. Optional Plans contain optional municipal powers and are chartered in the same way as Home Rule. All other counties operate under Dillon Rule.	Missouri applies both Home Rule and Dillon Rule. Cities that have more than 5,000 people or are incorporated may adopt Home Rule. Home Rule requires the election of commission officials. All other cities operate under Dillon Rule.

Basic Metrics	DeKalb County GA	Denton County TX	Fort Bend County TX	Prince George's County MD	Montgomery County PA	Jackson County MO
Does the county have the authority to build and maintain roads or is it the responsibility of the state?	DeKalb County is responsible for the design, construction, and maintenance of its transportation facilities including roads, bridges, drainage structures, signal systems, etc. Georgia DOT builds and maintains all facilities on the state route or interstate system, and DeKalb County acts as a stakeholder. For projects within city limits, the County provides construction services in return for payment from the cities.	Denton County's Commissioners Court consists of a County Judge and four County Commissioners. It is the responsibility of the County Commissioners to oversee the construction and maintenance the county roads that are within his/her precinct. Texas DOT is responsible for building and maintaining state highways, certain farm to market roads, and roads located near and within state and national parks.	Fort Bend County's Commissioners Court consists of a County Judge and four County Commissioners. The Commissioners Court builds and maintains roads and bridges. Texas DOT is responsible for building and maintaining state highways, certain farm to market roads, and roads located near and within state and national parks.	Prince George's County has authority to build and maintain county roads. Roads are also controlled by individual cities and the Maryland State DOT.	Montgomery County Roads and Bridges Department builds and maintains the bridges and roadway throughout the county. Municipalities are responsible for traffic signals, road name signs, speed limit signs, and stop signs.	The Jackson County Public Works Department builds and maintains the roads through the Road and Bridge Division.
Does the county engage in transportation planning or do they leave it up to the regional agency?	DeKalb County performs its own transportation planning and involves the cities as a part of the process (cities are able to conduct their own transportation planning as well). The results of the DeKalb County planning efforts are provided to the Atlanta Regional Commission as recommendations to be considered in regional planning process. In addition to the County Comprehensive Transportation Plan, there are elements of transportation in the Comprehensive Plan and other smaller subarea studies are completed as well.	Denton County's transportation planning occurs through the regional MPO of North Central Texas (Transportation Department of the North Texas Council of Governments). NTCOG includes Dallas-Fort Worth-Arlington, McKinney and Denton Lewisville. The Denton County Transportation Authority does public transportation planning for Denton County specifically; they are currently updating their Long-Range Service Plan.	Fort Bend County's transportation planning occurs through the Houston-Galveston Area Council and MPO. HGAC MPO also sponsors the Fort Bend County Subregional Planning Initiative.	Prince George's County engages in their own transportation planning. In addition to a full transportation plan, they also have a County General Plan that has a Transportation Systems section. Prince George's County coordinates transportation planning with their regional council National Capital Transportation Planning Board (TPB) which is part of the Metropolitan Washington Council of Governments (MWCOG).	Montgomery County develops their own transportation plan which is a component of their Comprehensive Plan. The plan also includes a Land Use Plan, Water Resources Plan, Economic Development Plan, Housing Plan, Open Space Plan, and Community Facilities Plan. Montgomery County's plan feeds up to the Delaware Valley Regional Planning Commission (DVRPC).	Jackson County's transportation planning occurs through the Mid-America Regional Council (MARC - MPO). While Jackson County does have a planning division in their public works department, this division does not engage in transportation planning specifically; rather, they plan for land use, economic development, and natural resources.

Basic Metrics	DeKalb County GA	Denton County TX	Fort Bend County TX	Prince George's County MD	Montgomery County PA	Jackson County MO
How does the county conduct transportation planning? What elements do their plans include?	DeKalb County conducts a Comprehensive Transportation Plan every four to five years. The plan includes three major components: Existing Conditions, Needs Assessment, and Recommendations. Modes of transportation studied include vehicular (capacity, new connections, asset management, access management, ATMS), transit (bus, rail), bicycle, pedestrian, freight, air, human service transportation, and school access. Additionally, land use, socioeconomics, and market components were included in the plan.	Most recently, Denton County Transportation Authority (DCTA) specifically has been focusing on transit oriented development with the new addition of the A-train.	Regional transportation planning process includes: Phase 1: Initial Assessment - gather info on current and future conditions, revise vision and goals, assess current RTP; Phase 2: Corridor Analysis - revise congestion management process, develop performance monitoring plan, assess and prioritize needs, identify major investment priorities; Phase 3: Regional Analysis - Finalize investment priorities, finalize financial plan/demonstrate fiscal constraint, perform demand modeling, determine regional impacts (air quality, environment, social), and prepare final plan.	The approved Master Plan of Transportation includes general plan context followed by components focusing on trails, bikeways, pedestrian mobility, fixed guideway transit, streets, roads, and highways. Recently focusing on new transit oriented development.	2005 Transportation section of the Comprehensive Plan includes land use and transportation link, bike/ped mobility, aviation, freight, public transit, highways and proposed projects. The Comprehensive Plan also includes Vision Plan, Economic Development Plan, Housing Plan, Community Facilities Plan, Water Resources Plan, Open Space, Natural Features, and Cultural Resources Plan, and Land Use Plan. The planning process includes public involvement; additionally, MCPC also provides planning courses for municipalities.	The Mid-America Regional Council's regional transportation plan, *Transportation Outlook 2040*, includes the Regional Vision, Plan Goals, Land Use Direction, an Adopted Growth Forecast, Transportation Projects, and Performance Measures.
How do they develop policies relating to land use and zoning?	The Planning and Sustainability Department of DeKalb County oversees all land use planning and zoning. Additionally, the Planning Commission and County Commission make official decisions regarding land use and zoning.	Zoning decisions are reviewed by the Denton County Commissioners Court and the Denton County Planning & Zoning Commission.	Zoning decision are reviewed by the Fort Bend County Commissioners Court.	Zoning policies are delegated to and exercised by the County Council sitting and District Council. In Maryland, zoning is one of the police powers.	Zoning decisions are made and reviewed by the Montgomery County Planning Commission. Zoning policies are developed through Commission meetings and public involvement.	Jackson County's Public Works department oversees all land use planning and zoning. A Plan Commission, consisting of nine members, executes the plan. A County Executive and 9-member County Legislature make official decisions regarding land use and zoning.

Basic Metrics	DeKalb County GA	Denton County TX	Fort Bend County TX	Prince George's County MD	Montgomery County PA	Jackson County MO
Is there a county or regional sales tax to fund transportation projects? Does the county employ innovative financing for transportation projects?	DeKalb County currently pays a one-cent sales tax, along with Fulton County, to fund MARTA capital and operations. No other counties currently support MARTA. Additionally, DeKalb has a HOST - Homestead Option Sales Tax, in which 80% of the monies raised go to support homeowner tax relief, and the remaining 20% can be flexed toward services like transportation. During the recession, more money was directed toward property tax relief than the 80% minimum. Other than these two sources, DeKalb County has no additional sales tax to support transportation. The regional sales tax referendum from 2012 did not pass in Metro Atlanta.	Three participating cities (Denton, Lewisville, and Highland) in Denton County each give a portion of their sales tax to DCTA to help fund bus and rail operations. Other cities in Denton County cannot contribute part of their sales tax. There is a newly passed bill that calls for the creation of "finance zones", where incremental revenues of state and property taxes would be dedicated to financing transportation services in that zone. The NCTCOG MPO funds come from fuel taxes, motor vehicle registration, and federal sources. Otherwise, a Bond Program is in place that meets current and future county needs. Utilizes county funds in partnership with local, state, and federal agencies. Bond amount depends on type of project.	Not currently- majority of cities within the county have maximized their sales tax, preventing them from a sales tax in support of transit services. There is potential that local funding could be increased by considering a $1/yr vehicle registration fee	Not currently - transportation projects are funded through TIP and ARRA (American Recovery and Reinvestment Act, 2009).	Not currently - transportation projects are funded through the Jump Start Program where both the county and the municipality fund each project.	Not currently, but Missouri is considering, as a state, whether or not to raise sales tax to benefit transportation projects. The bill is currently being discussed in the Missouri State Senate. Currently, road and bridge replacements are funded by the Road and Bridge Tax Fund, augmented with grants from the State and Federal government.
Who does transit planning for the county?	Transit planning for DeKalb County is predominantly conducted by the Metropolitan Atlanta Rapid Transit Authority (MARTA). The Georgia Regional Transportation Authority also operates some Xpress bus routes within and through the county. The Atlanta Regional Commission coordinates transit activities among all transit providers within the region.	Denton County Transportation Authority in conjunction with the NCTCOG MPO.	Fort Bend County Public Transportation in conjunction with HGAC MPO.	Prince George's County Planning Department in conjunction with the Washington Metropolitan Area Transit Authority, Washington Council of Governments, Central Maryland Regional Transit, and the Maryland Transit administration.	Montgomery County Planning Commission.	Jackson County in conjunction with the Mid-America Planning Commission and Kansas City Area Transportation Authority (KCATA).
Does the county have overlay zoning districts with transportation purposes? (i.e. to encourage transit or transit-oriented development, to impose access management, to create traffic calming effects)	DeKalb County does not currently have overlay districts relating to transportation. The overlay zoning districts that exist include Residential Infill Overlays, Urban Design Overlay Districts, Historic Overlay Districts, Preservation Overlay, Airport Compatible Use Overlay. An update to the zoning code is currently underway, and new overlay zoning districts are under consideration.	No County overlay zoning districts relating to transportation.	No County overlay zoning districts relating to transportation.	Yes- Transit District Overlay (T-D-O): vicinity of Metro stations to maximize transit ridership, serve the economic and social goals of the area, and take advantage of the unique development opportunities that mass transit provides. Development District Overlay (D-D-O): designated as town centers, Metro areas, commercial corridors, employment centers, revitalization areas, historic areas.	No County overlay zoning districts relating to transportation.	No County overlay zoning districts relating to transportation.

Basic Metrics	DeKalb County GA	Denton County TX	Fort Bend County TX	Prince George's County MD	Montgomery County PA	Jackson County MO
Does the county have typical cross sections or complete street policies?	DeKalb County does not currently have a Complete Streets Policy; however, discussions have been initiated at the County level and within special interest groups.	No typical cross sections and no formal complete street policies	No typical cross sections and no formal complete street policies	No typical cross sections; MWCOG, which includes Prince George's County, MD, has the following policies on complete streets: Provide standard sidewalks along both sides of all new road construction within the Developed and Developing Tiers; All road frontage improvements and road capital improvement projects within the Developed and Developing Tiers shall be designed to accommodate all modes of transportation (continuous sidewalks and on-road bicycle facilities should be included to the extent feasible and practical); Small area plans within the Developed and Developing Tiers should identify sidewalk retrofit opportunities in order to provide safe routes to school, pedestrian access to mass transit, and more walkable communities; Develop bicycle-friendly roadways in conformance with the latest standards and guidelines; Evaluate new development proposals in the Developed and Developing Tiers for conformance with the complete streets principles.	No typical cross sections and no formal complete street policies	No typical cross sections; Yes- The Jackson County Planning Commission approved in July 2012 the Complete Streets Resolution which includes the application of complete streets to the transportation vision in the 2040 LRTP.

People

2 People Using the Transportation System

An analysis was performed to quantify relevant aspects of the people using the transportation system in DeKalb County. Information for DeKalb County and the five planning subareas, with comparisons to the Atlanta Metropolitan Statistical Area (MSA[4]) and the United States, are presented to benchmark the relative conditions of the County and its subareas as shown in Figure 2-2. More detailed demographic information for each of the subareas is included in the Appendix.

2.1 Population

The 1950 US Census reported DeKalb County's population density of one person or less per acre. At that time, only Fulton and DeKalb Counties had greater than 0.5 persons per acre, and most counties in the Atlanta metro area were rural. By 1980, some of the more central counties started to become more densely populated, and DeKalb County became the county with the largest population per acre. By 2010, the Atlanta metro area had grown into more than 16 counties, and DeKalb County remained the most densely populated county with approximately four persons per acre on average. The density of DeKalb County is important for two key reasons: 1) Transportation infrastructure is expensive, so having more people concentrated around our transportation assets is more efficient and 2) Transit works better when more people have the ability to access the stations easily. These ideas will be developed further in later parts of the document. Figure 2-3 shows the change in population density across the Atlanta metro region between 1950 and 2010.

From 1990 to 2010, the population density in DeKalb County grew eastward. Most Census blocks populated with more than five to six people per acre were located inside I-285 in 1990. By 2010 there were several locations east of I-285 with average densities greater than eight people per acre. Many of these densely developed census tracts fall along the existing MARTA rail lines. Figure 2-4 shows the change in population density in DeKalb County between 1990 and 2010.

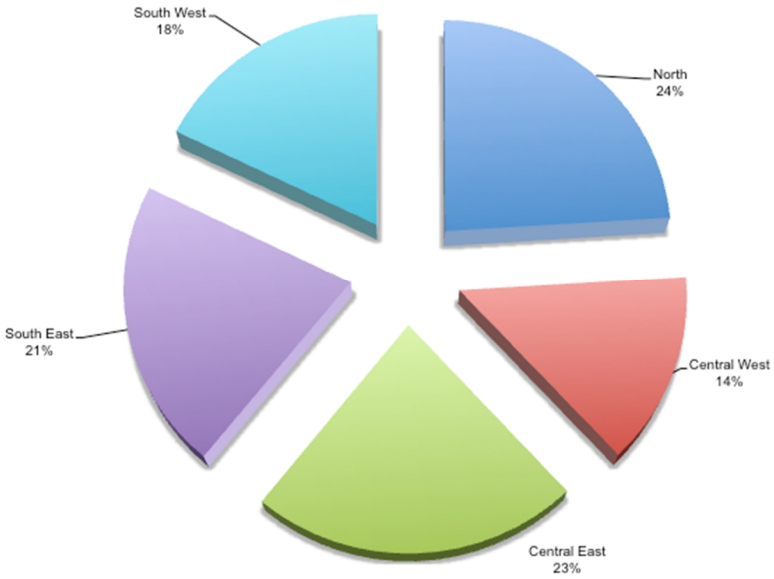
Since the year 2000, DeKalb County's population overall (currently estimated at 709,140) has increased, but some decreases have occurred in the central portions of the County between 2000 and 2010. This includes some of the more dense parts of the County, such as along the east MARTA line, which was just noted in the previous paragraph. A continuation of this trend could have negative implications on transit usage. Figure 2-5 shows the population growth in DeKalb County between 2000 and 2010.

While DeKalb County is the most densely populated county in Metro Atlanta, it had a growth rate (6.5%) between 2000 and 2013 that was one-half of the national average and less than one-quarter of the Atlanta MSA's rate of growth. DeKalb County is expected to continue to grow between 2013 and 2018, at a rate higher than the national average, but below the Atlanta MSA's. DeKalb County accounts for 13% of the Atlanta MSA's population.

[4] The Atlanta-Sandy Springs-Marietta Metropolitan Statistical Area (MSA) is made up of 28 counties: Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Haralson, Heard, Henry, Jasper, Lamar, Meriwether, Newton, Paulding, Pickens, Pike, Rockdale, Spalding, and Walton.

Within DeKalb County, the population distribution varies slightly, but is relatively even across the County, as shown in Figure 2-1. The North (24%) and Central East (23%) subareas each account for approximately one-quarter of DeKalb's population. The South East subarea is close in proportionate size, with 21%. The South West subarea constitutes 18% of DeKalb's population and the Central West subarea comprises 14%.

Figure 2-1: 2013 Population Distribution by Subarea[5]



2.2 Households and Housing

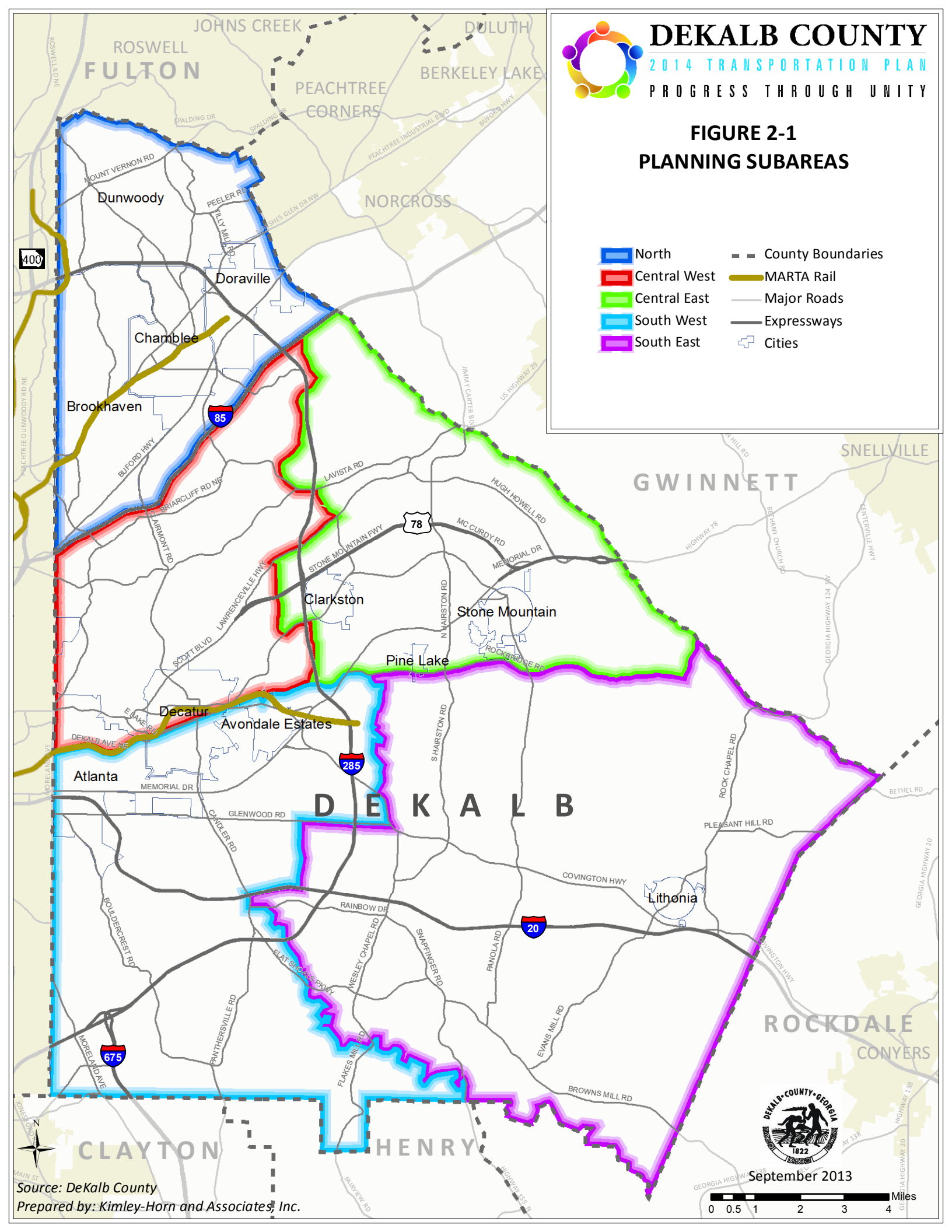
The number of DeKalb County's households increased at a much faster pace (9.0%) between 2000 and 2010 than the population (3.9%). With a corresponding decrease in average household size, these differing trends can indicate that new houses are being constructed but for smaller families. Figure 2-6 illustrates the household growth between 2000 and 2010.

The household and population rate of growth between 2010 and 2013 was 3.4% and 2.5%, respectively. DeKalb County is expected to grow its households by five percent over the next five years. This projected rate is just below the Atlanta MSA (6.2%) but above the national average (3.5%).

Household size in DeKalb County (2.48) is slightly below the national average (2.57) and below the Atlanta MSA average (2.67). There are more single-person households in DeKalb County (32.1%) in comparison to the national average (27.0%) and the Atlanta MSA average (25.7%). This is worth noting, as many times it can be an indicator of the young professional population.

DeKalb County is about 10% below the Atlanta MSA and national averages for owner-occupied housing units and 10% above these averages for renter-occupied housing units. DeKalb County has 57% owner-occupied housing units and 43% renter-occupied housing units. The highest median household values are mostly located in the North and Central West subareas as shown in Figure 2-7.

[5] Source: US Census Bureau, Claritas, Market + Main



Source: DeKalb County
Prepared by: Kimley-Horn and Associates, Inc.

CHANGE IN REGIONAL POPULATION DENSITY FROM 1950 TO 2010

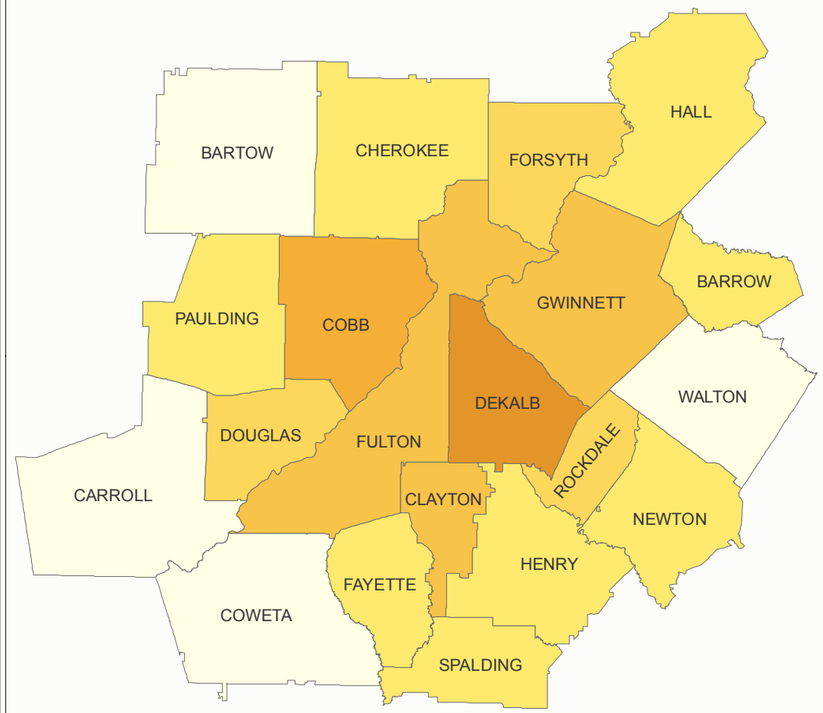
1950

Source: Census 1950

1980

Source: Census 1980

2010



Source: Census 2010

September 2013

Persons Per Acre

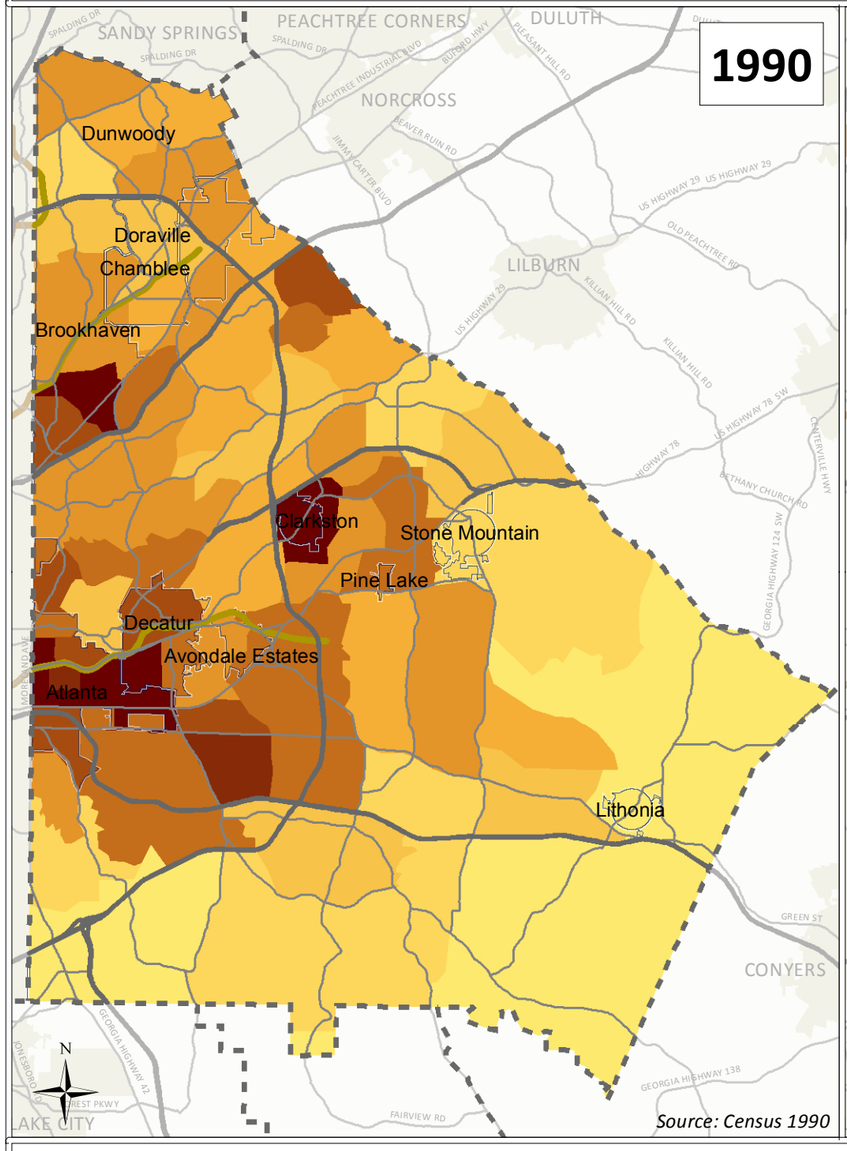
< 0.5	0.5 - 1	1 - 2	2 - 3	3 - 4	> 4

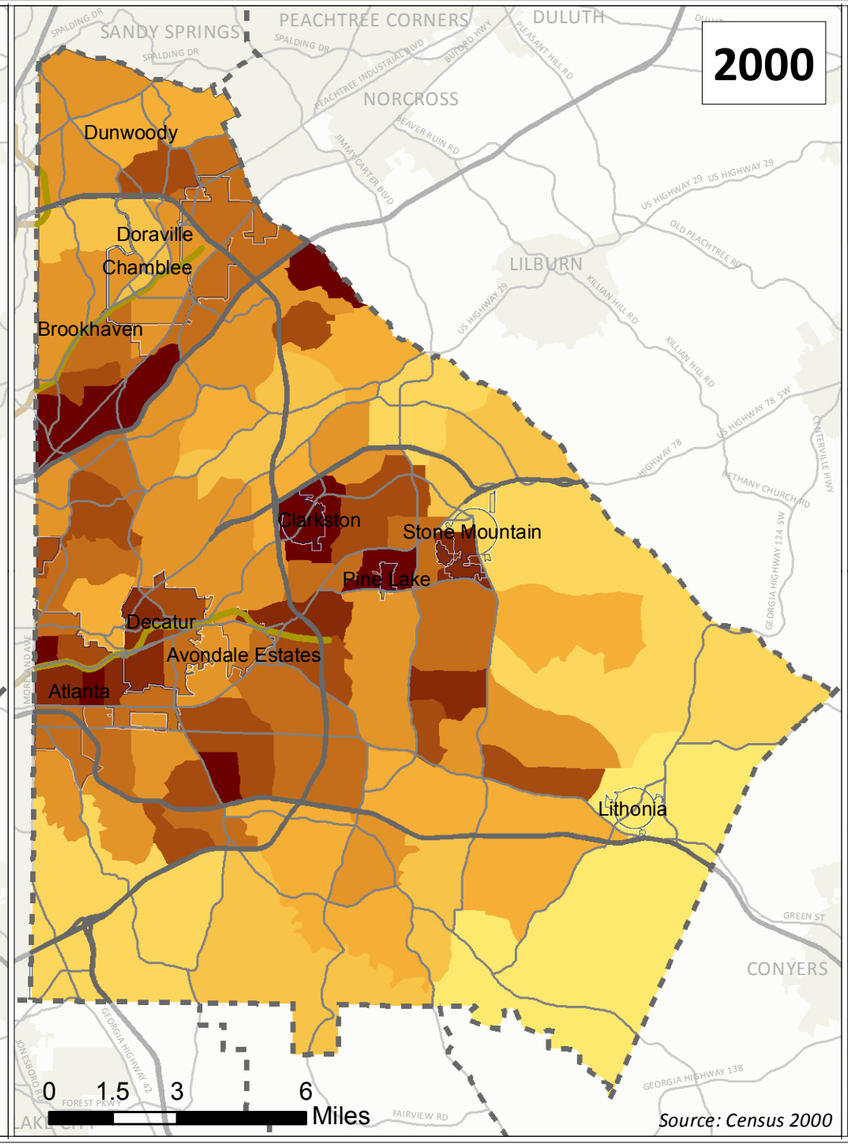
DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

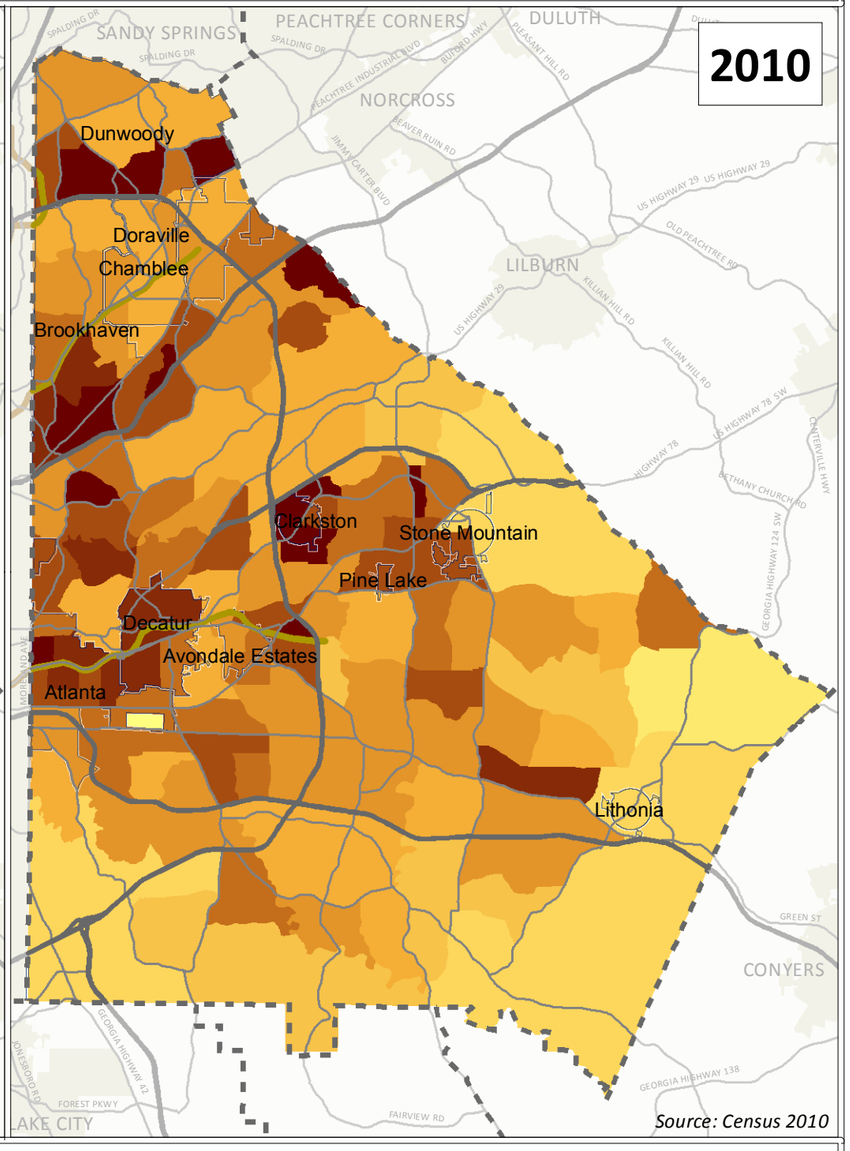
FIGURE 2-3
CHANGE IN POPULATION DENSITY
FROM 1950 TO 2010

Prepared by: Kimley-Horn and Associates, Inc.

CHANGE IN POPULATION DENSITY FROM 1990 TO 2010







September 2013

Persons Per Acre

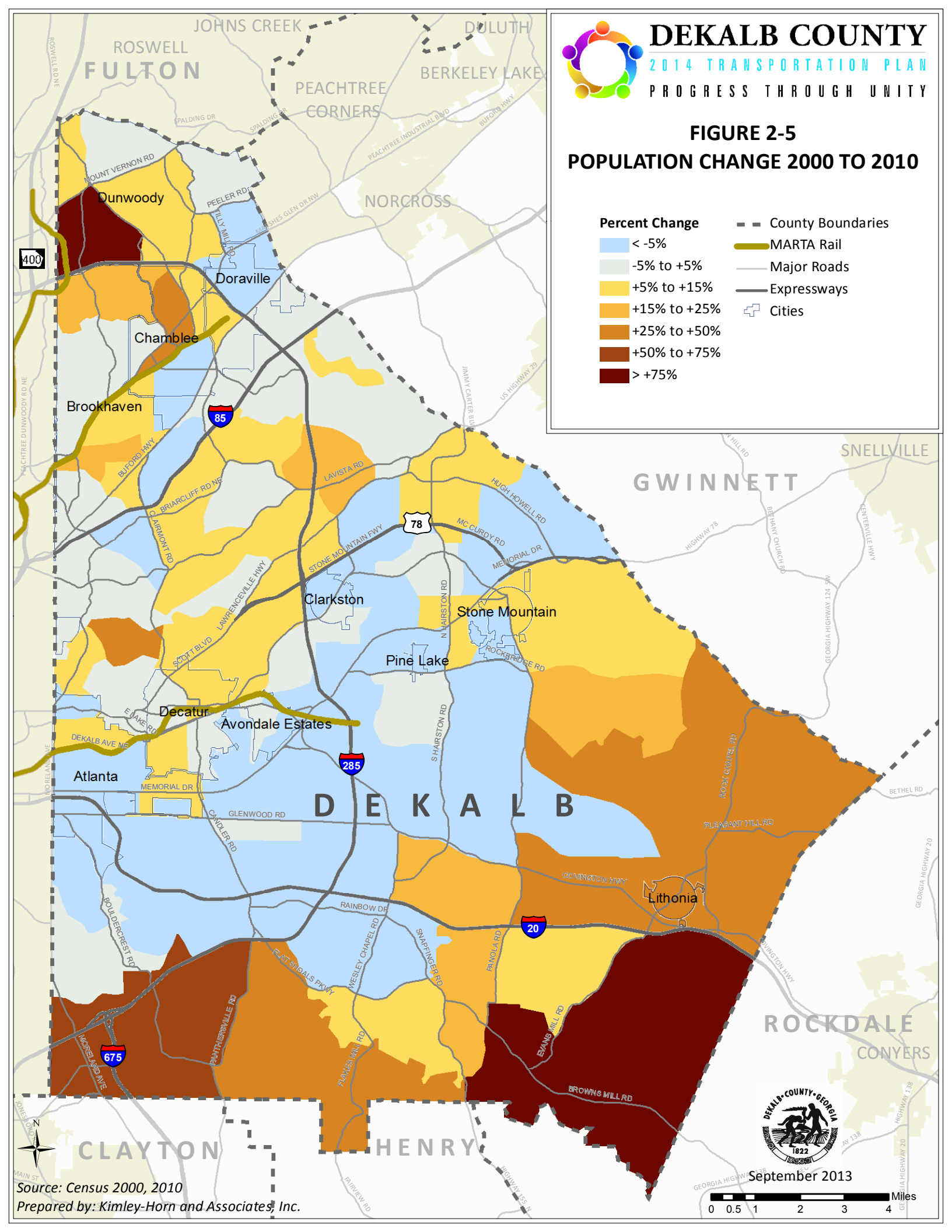
< 0.5	0.5 - 1	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	6 - 7	7 - 8	> 8

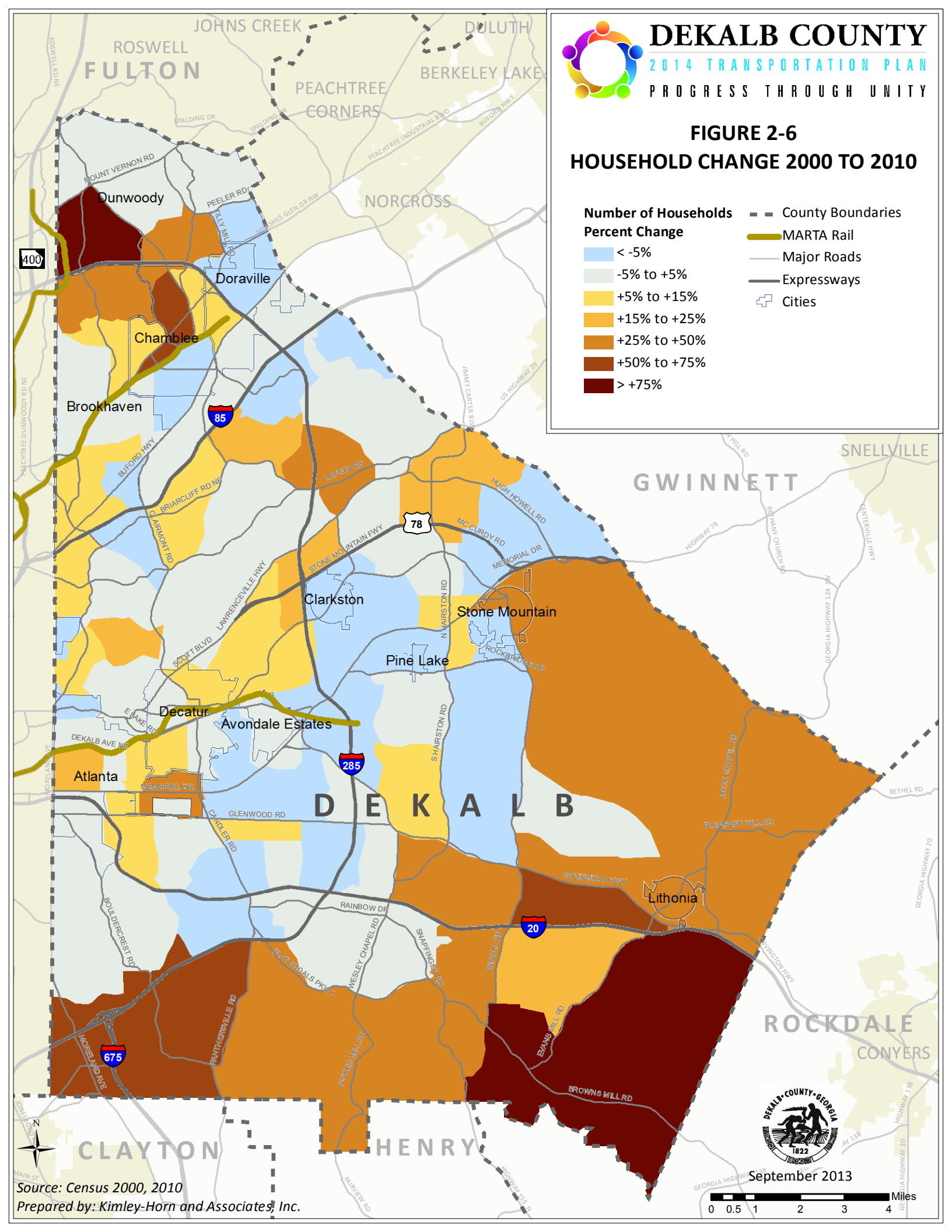
- County Boundaries
- MARTA Rail
- Major Roads
- Expressways
- DeKalb City Boundaries
- Cities Around DeKalb

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 2-4
CHANGE IN POPULATION DENSITY FROM 1990 TO 2010

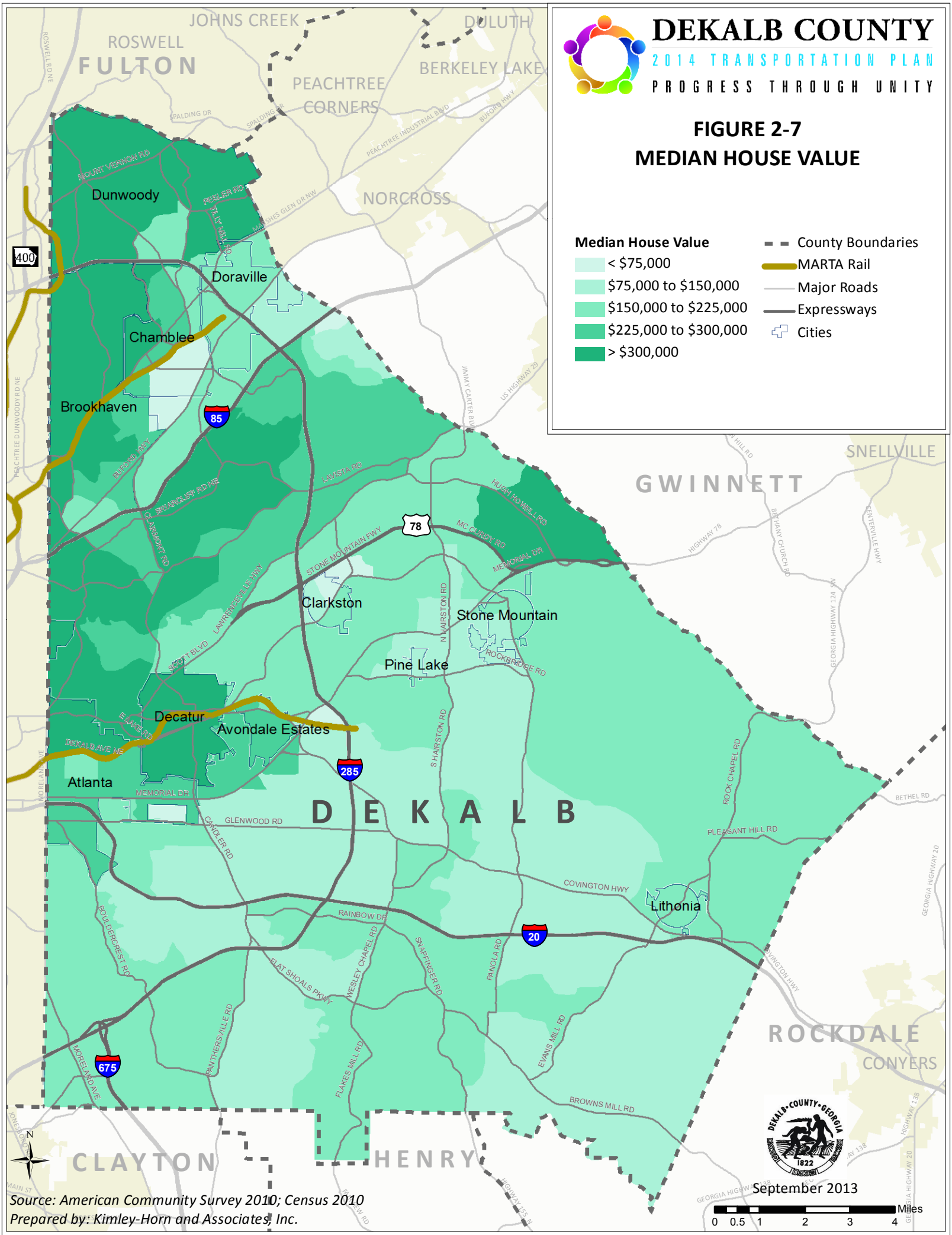
Prepared by: Kimley-Horn and Associates, Inc.


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 2-5
POPULATION CHANGE 2000 TO 2010
Percent Change
< -5%
-5% to +5%
+5% to +15%
+15% to +25%
+25% to +50%
+50% to +75%
> +75%
County Boundaries
MARTA Rail
Major Roads
Expressways
Cities
JOHNS CREEK
DULUTH
ROSWELL
FULTON
PEACHTREE CORNERS
BERKELEY LAKE
NORCROSS
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
Lithonia
SNELLVILLE
GWINNETT
ROCKDALE
CONYERS
CLAYTON
HENRY
DEKALB
400
85
78
285
20
675
Source: Census 2000, 2010
Prepared by: Kimley-Horn and Associates, Inc.
September 2013
Miles
0 0.5 1 2 3 4


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 2-6
HOUSEHOLD CHANGE 2000 TO 2010
Number of Households
Percent Change
< -5%
-5% to +5%
+5% to +15%
+15% to +25%
+25% to +50%
+50% to +75%
> +75%
County Boundaries
MARTA Rail
Major Roads
Expressways
Cities
JOHNS CREEK
DULUTH
ROSWELL
FULTON
PEACHTREE CORNERS
BERKELEY LAKE
NORCROSS
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
Lithonia
SNELLVILLE
GWINNETT
ROCKDALE
CONYERS
CLAYTON
HENRY
DEKALB
400
85
78
285
20
675
Source: Census 2000, 2010
Prepared by: Kimley-Horn and Associates, Inc.
September 2013
Miles
0 0.5 1 2 3 4

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 2-7
MEDIAN HOUSE VALUE



September 2013

Source: American Community Survey 2010; Census 2010
Prepared by: Kimley-Horn and Associates, Inc.

2.3 Age Distribution

The average age of DeKalb County residents (36.2) is relatively equal to the Atlanta MSA (35.9) and slightly below the national average (38.3). Age distribution in DeKalb County is shown for 2013 in Figure 2-8. Approximately 46% of DeKalb's population is between 25 and 55 years of age, representing the primary workforce population.

Figure 2-8: 2013 Age Distribution[6]

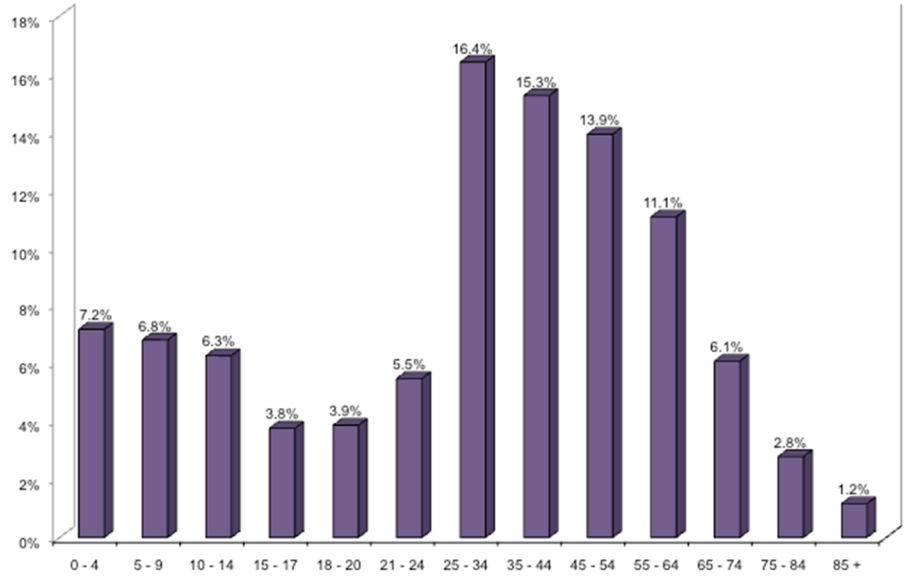
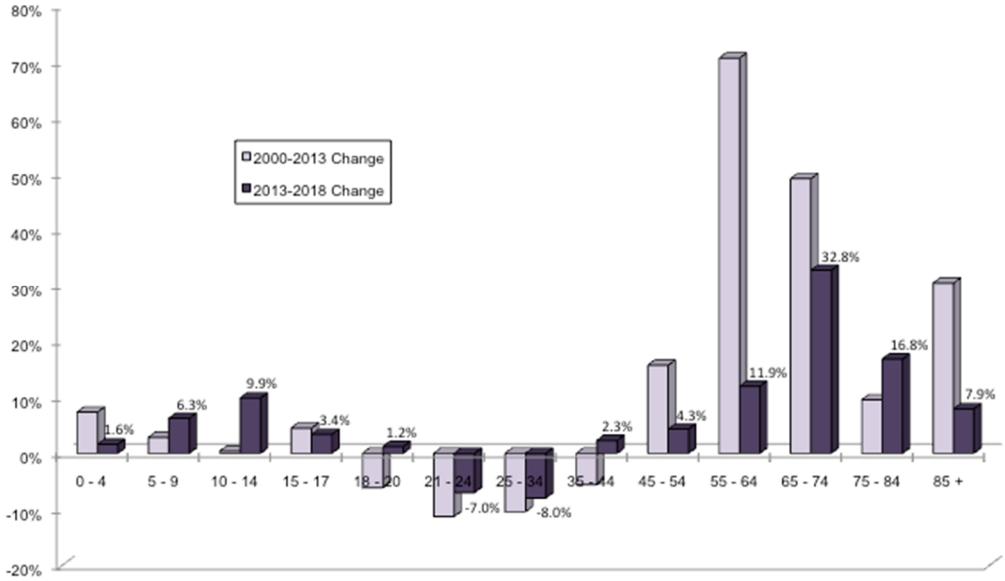


Figure 2-9: 2000 to 2018 Age Distribution Trends[7]



[6] Source: U.S. Census Bureau, Claritas

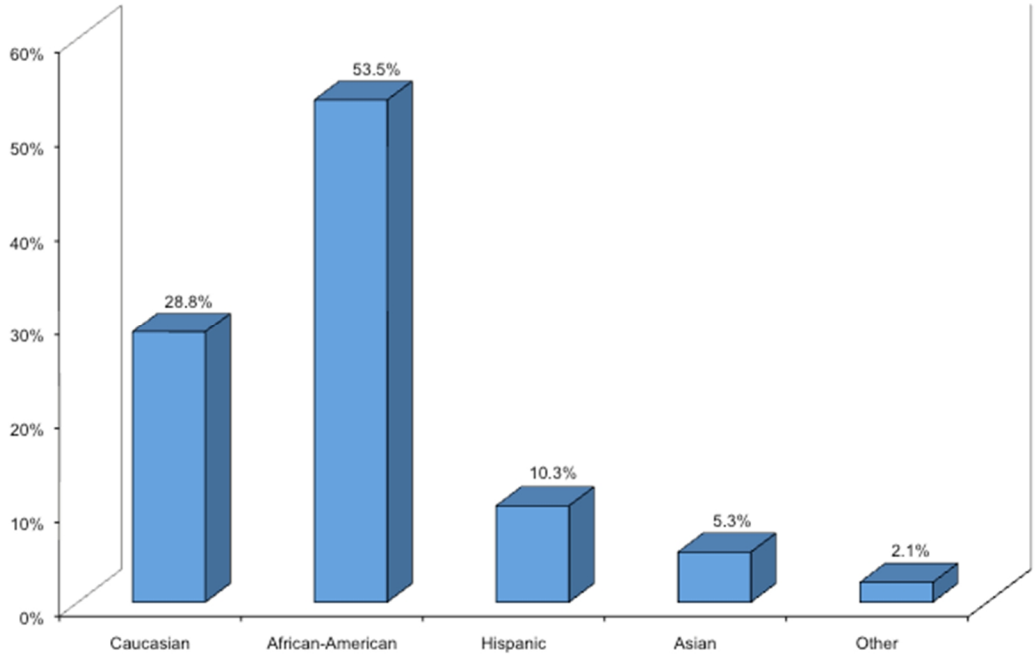
[7] Source: U.S. Census Bureau, Claritas

DeKalb County has gotten older in the last twenty years, and trends show that groups over age 45 (as shown in Figure 2-9) will continue to increase in percentage. As the population ages in DeKalb, it will be important to attract new young professionals in the workforce to the County (twenties and thirties) where an overall decline has occurred. As the County continues to age, creating lifelong communities for residents and transportation systems that respond to the needs of the aging should be an important focus of the transportation plan. The median age for DeKalb is mapped in Figure. Figure 2-13 shows the Census tracts with the highest populations of individuals over the age of 65.

2.4 Racial Composition

DeKalb County is a racially diverse county, and the distribution of various races and ethnicities has changed over the past twenty years as shown in Figure 2-14. As of 2013, just over one-half of DeKalb County's population is African-American (54%). Caucasians (29%) constitute the second largest group, followed by Hispanics (10%) and Asians (5%), shown in Figure 2-10.

Figure 2-10: 2013 DeKalb Racial Composition[8]

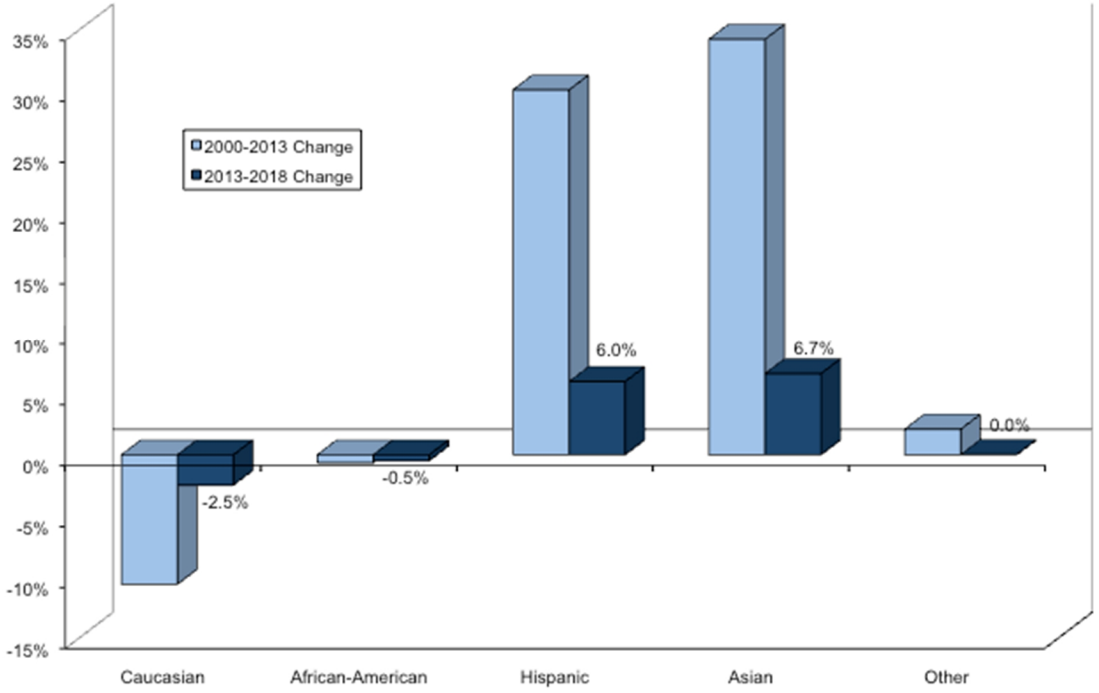


The largest population changes in DeKalb County have been in the minority groups over the last 13 years, similar to population changes across the nation. As illustrated in Figure 2-11, the Asian population grew the most, followed by Hispanics and then persons identified as Others.[9] During the same timeframe, Caucasians decreased by approximately 10% and the African-American population remained basically stable (-0.7%).

[8] Source: U.S. Census Bureau, Claritas

[9] American Indians, Native Alaskans, Native Hawaiians and other Pacific Islanders, and those classifying themselves as more than one race

Figure 2-11: 2000 to 2018 Change in Racial Composition[10]



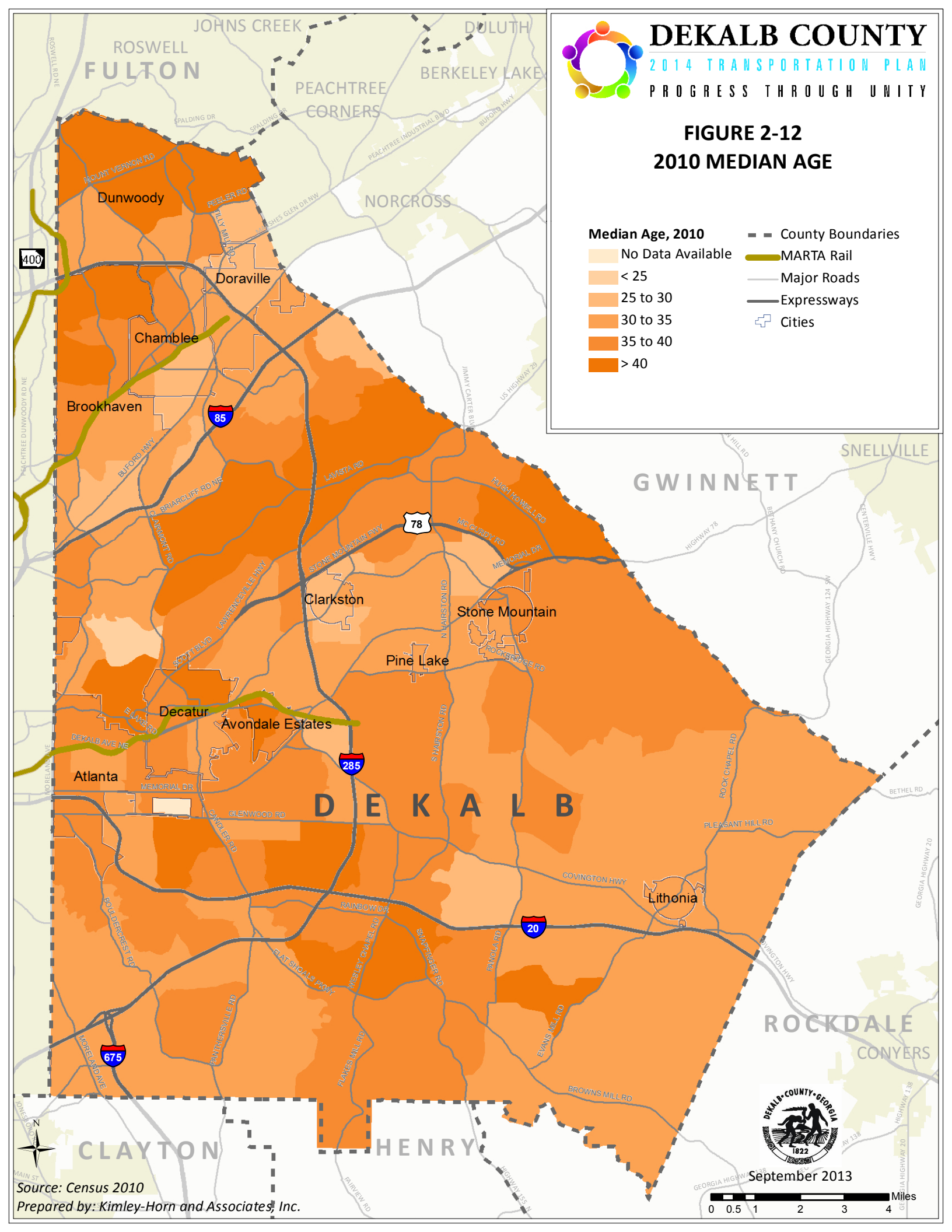
Over the next five years, growth is expected in the minority populations, though not at the same rates as seen over the last decade, as seen in the **Error! Reference source not found.** chart. The Caucasian population is expected to continue to decline at a much slower rate, and the African-American population is expected to remain essentially static. The areas with the largest Hispanic and Asian populations correlate closely with the areas with the highest percentages of people with Limited English Proficiency. Figure 2-15 shows areas with limited English proficiency in DeKalb County.

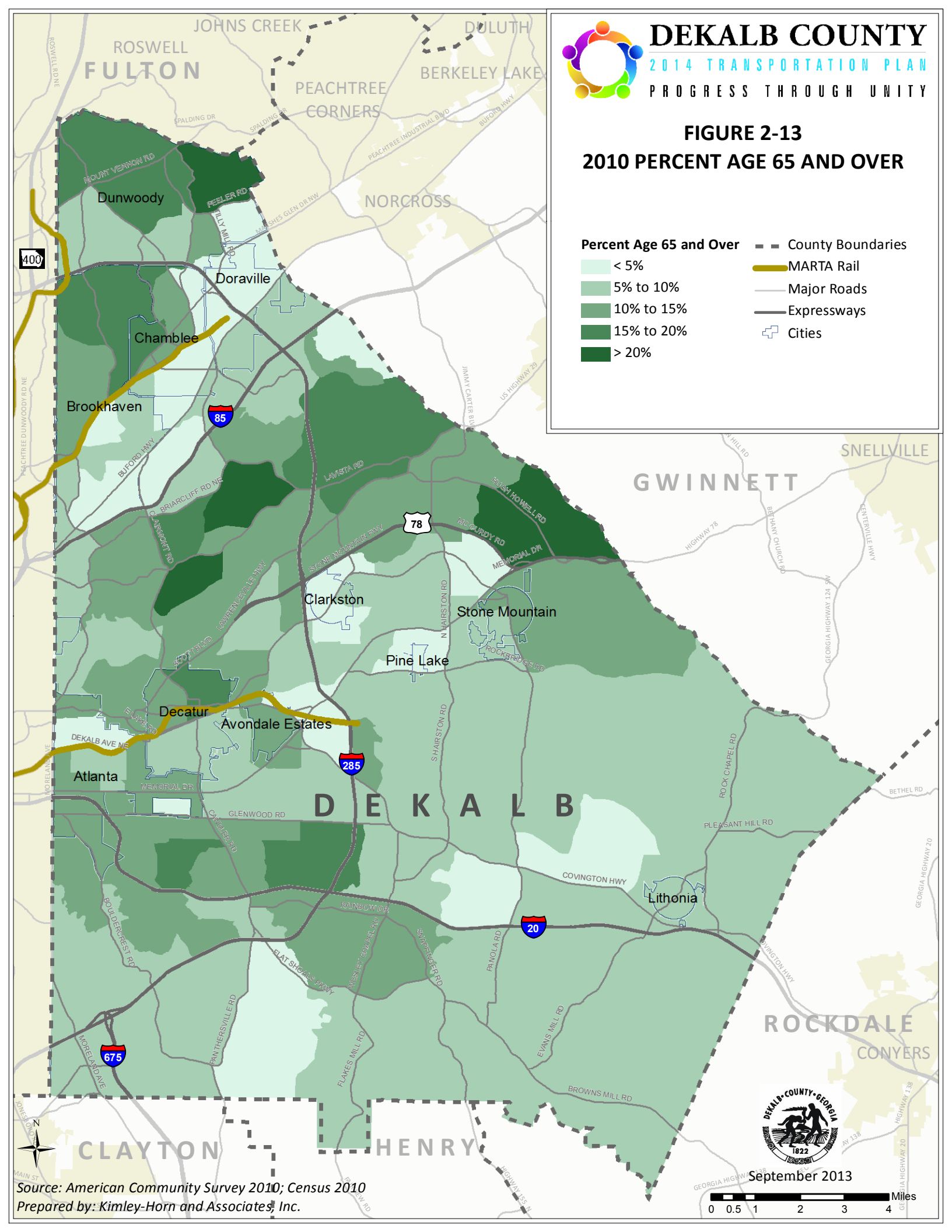
2.5 Educational Attainment

DeKalb County's educational attainment levels are relatively high, rating better than the Atlanta MSA and nation. The proportion of the population that has less than a high school education is slightly smaller than average, at 11.7%, in comparison to the Atlanta MSA (12.4%) and nation (14.6%). The proportion of high school graduates appears lower than average (22.3%), but this is due to the higher than average proportion of college graduates (37.9%) in DeKalb County. The Atlanta MSA and the nation have 34.3% and 28.1% of college graduates, respectively.

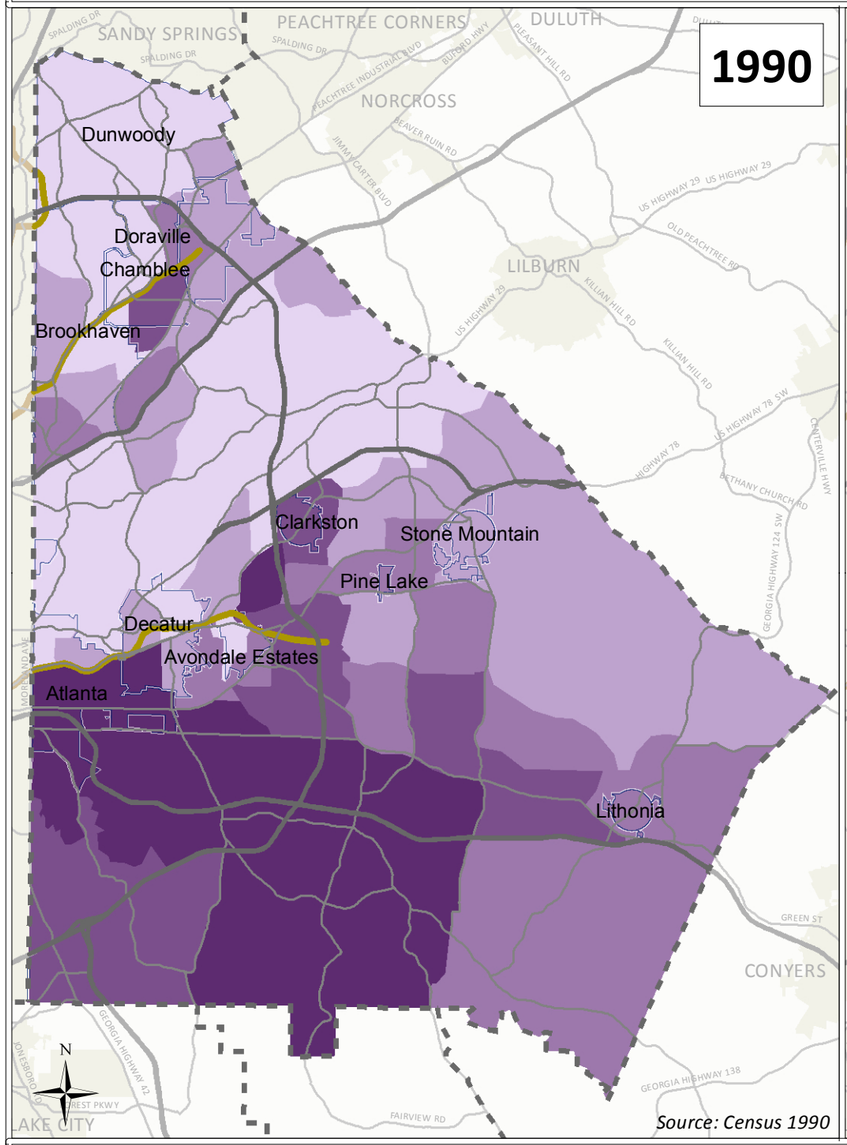
Approximately 6% of DeKalb County's residents have less than a ninth grade education. Another six percent of DeKalb's population have a ninth to twelfth grade education, but did not graduate. For post-secondary educational attainment, approximately 21% of the population has some college education but no degree. Seven percent of residents have an Associate's degree. About 23% have a bachelor's degree, and approximately 15% have a graduate or professional degree. Areas with a high proportion of residents without a high school diploma are shown in Figure 2-16.

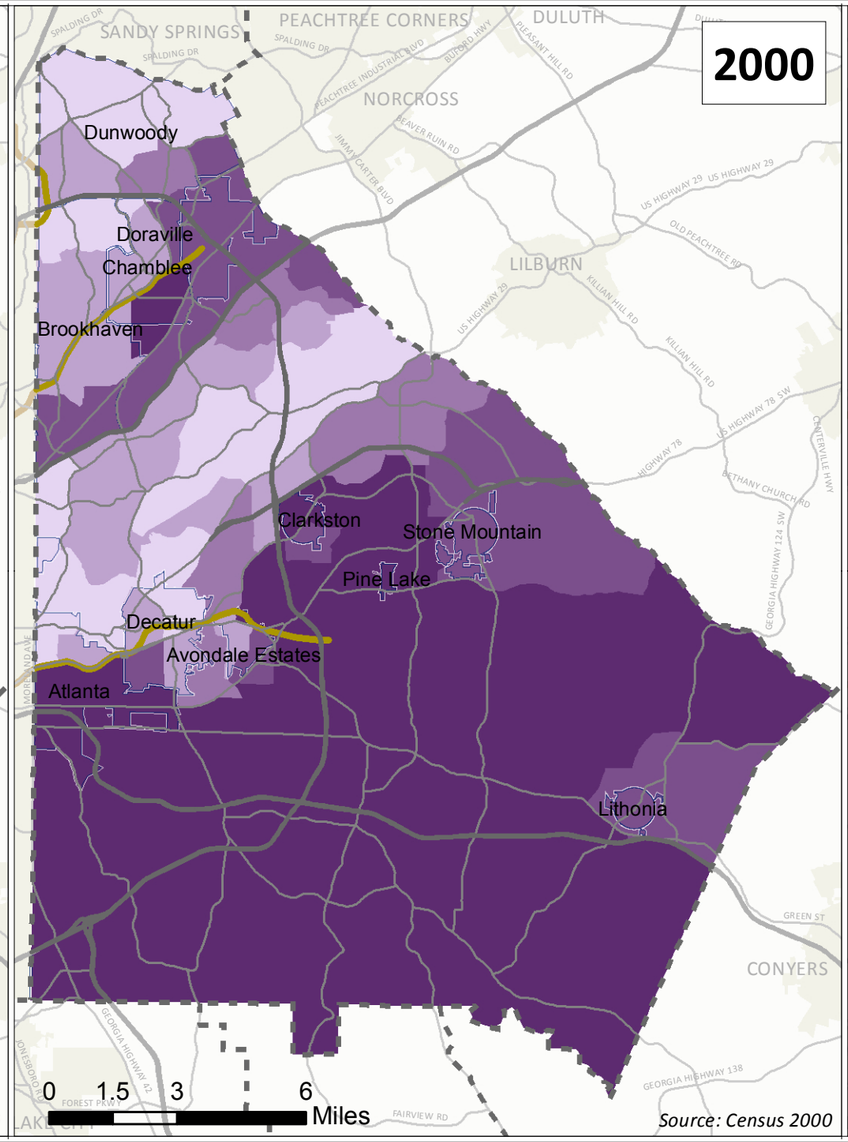
[10] Source: U.S. Census Bureau, Claritas

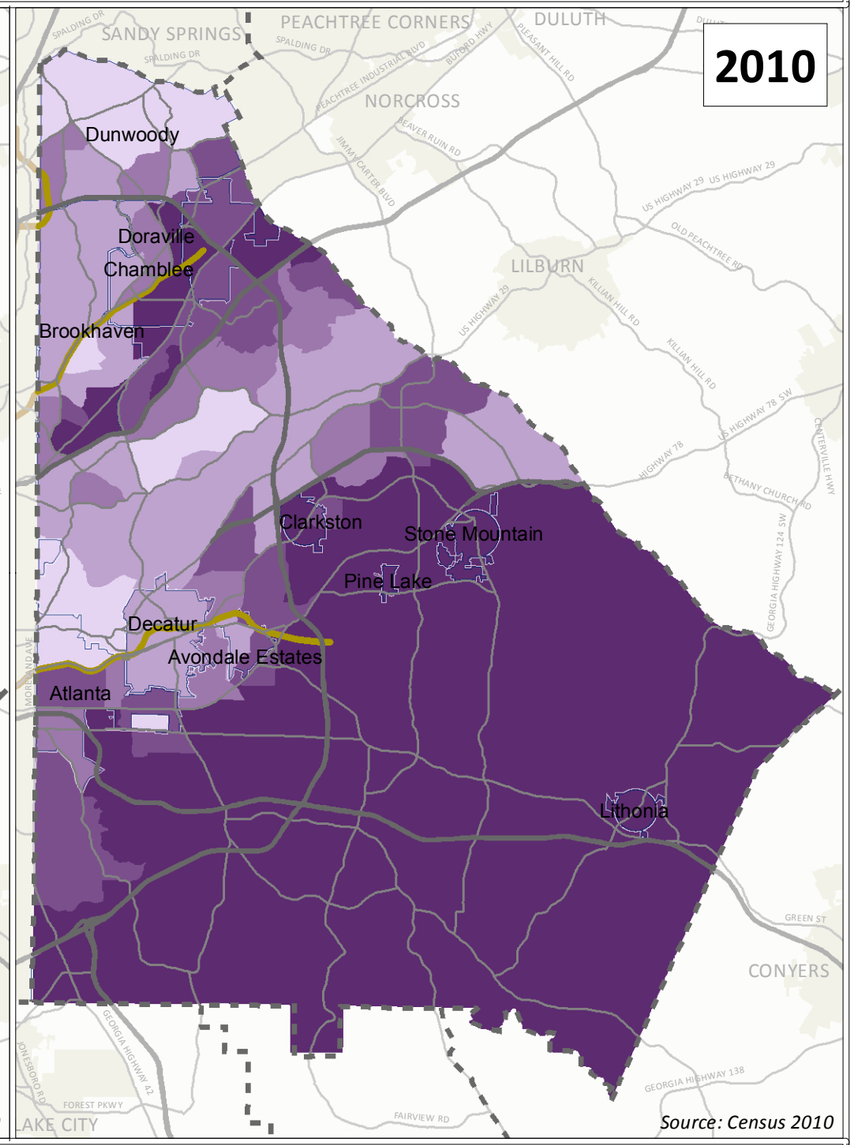

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 2-12
2010 MEDIAN AGE
Median Age, 2010
No Data Available
< 25
25 to 30
30 to 35
35 to 40
> 40
County Boundaries
MARTA Rail
Major Roads
Expressways
Cities
JOHNS CREEK
DULUTH
ROSWELL
FULTON
PEACHTREE CORNERS
BERKELEY LAKE
NORCROSS
Dunwoody
Doraville
Chamblee
Brookhaven
SNELLVILLE
GWINNETT
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
DEKALB
Lithonia
ROCKDALE
CONYERS
CLAYTON
HENRY
400
85
78
285
20
675
Source: Census 2010
Prepared by: Kimley-Horn and Associates, Inc.
September 2013
Miles
0 0.5 1 2 3 4


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 2-13
2010 PERCENT AGE 65 AND OVER
Percent Age 65 and Over
< 5%
5% to 10%
10% to 15%
15% to 20%
> 20%
County Boundaries
MARTA Rail
Major Roads
Expressways
Cities
JOHNS CREEK
DULUTH
ROSWELL
FULTON
PEACHTREE CORNERS
BERKELEY LAKE
NORCROSS
Dunwoody
Doraville
Chamblee
Brookhaven
SNELLVILLE
GWINNETT
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
DEKALB
Lithonia
ROCKDALE
CONYERS
CLAYTON
HENRY
400
85
78
285
20
675
September 2013
0 0.5 1 2 3 4 Miles
Source: American Community Survey 2010; Census 2010
Prepared by: Kimley-Horn and Associates, Inc.

PERCENT NON-WHITE OR HISPANIC FROM 1990 TO 2010







September 2013

Percent Non-White

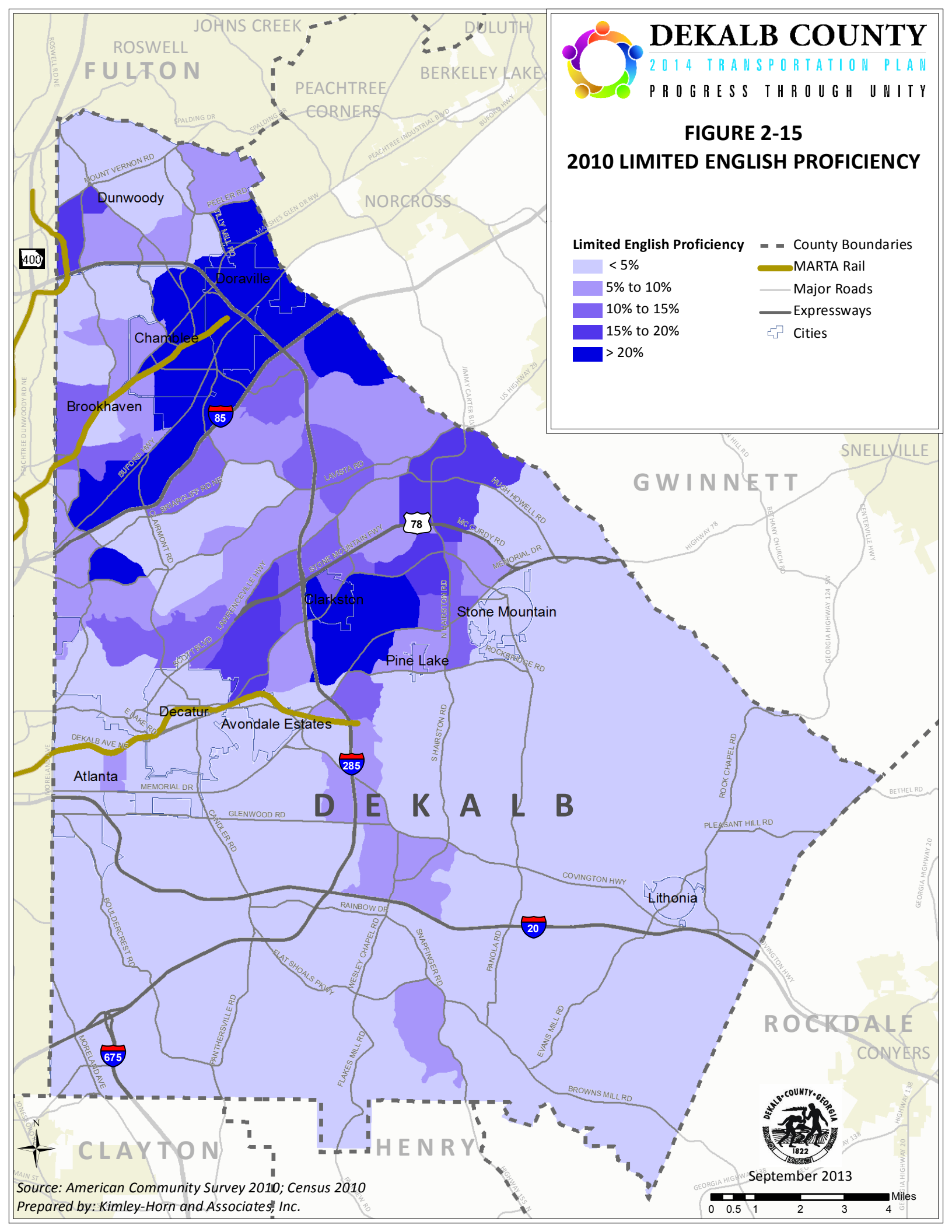
< 20% | 20% - 40% | 40% - 60% | 60% - 80% | > 80%

- County Boundaries
- MARTA Rail
- Major Roads
- Expressways
- DeKalb City Boundaries
- Cities Around DeKalb

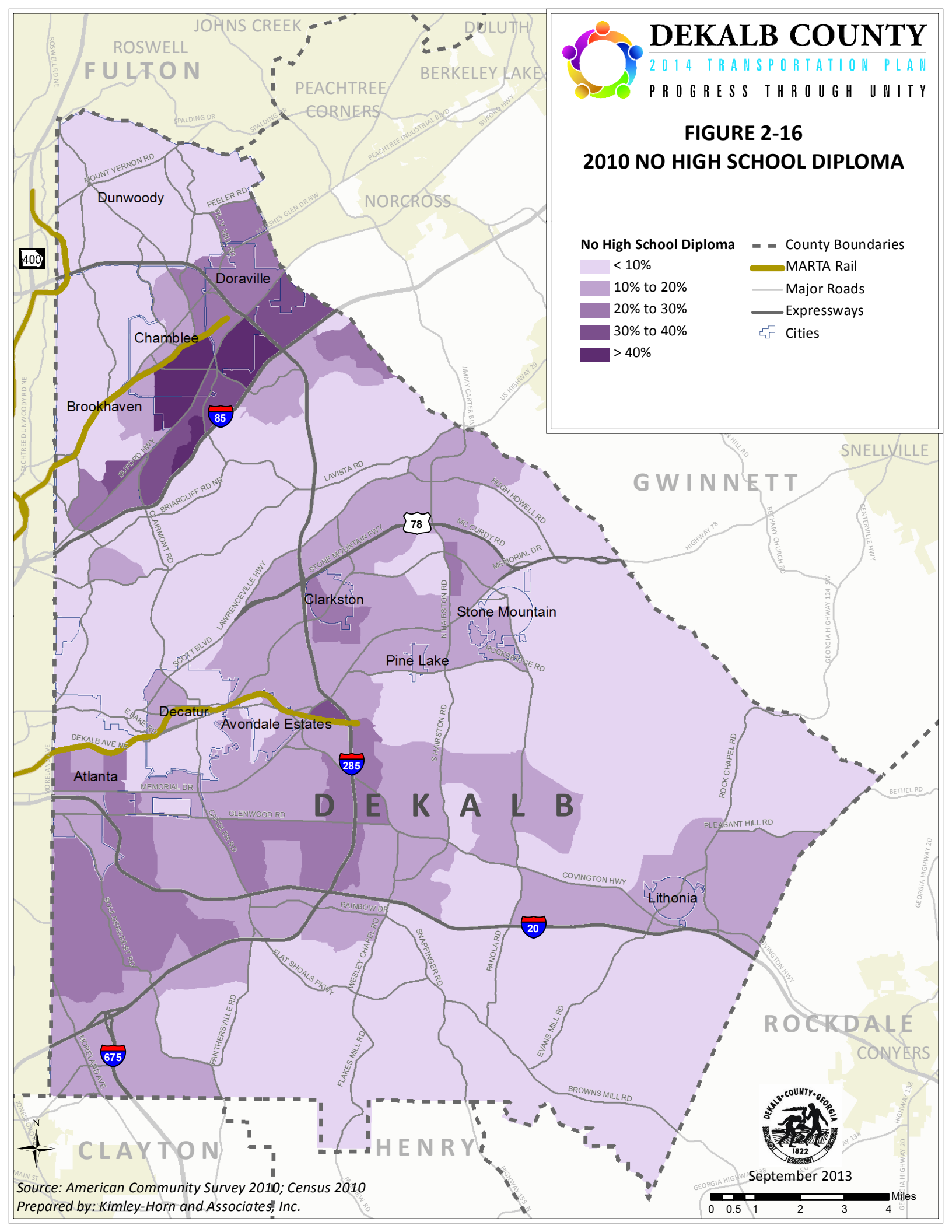
DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 2-14
PERCENT NON-WHITE OR HISPANIC FROM 1990 TO 2010

Prepared by: Kimley-Horn and Associates, Inc.



Source: American Community Survey 2010; Census 2010
Prepared by: Kimley-Horn and Associates, Inc.

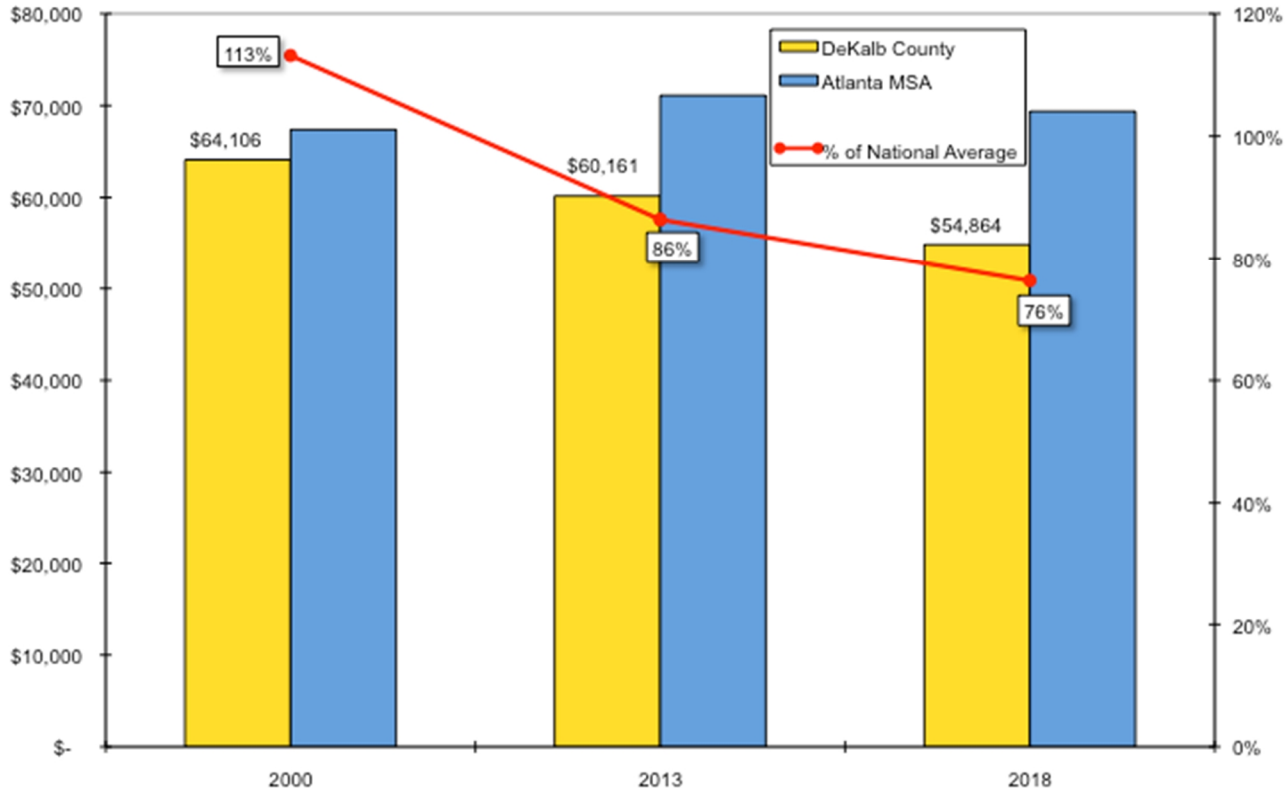


Source: American Community Survey 2010; Census 2010
Prepared by: Kimley-Horn and Associates, Inc.

2.6 Income

Average household income is an informative economic indicator about the relative economic position of communities. DeKalb County's average household income is lower than the Atlanta MSA and nation, as shown in Figure 2-17. The yellow columns show DeKalb County average household incomes for 2000 and 2013 as well as the projected incomes for 2018. In comparison, the blue columns show the average household incomes for the Atlanta MSA for the same time periods. DeKalb County has been tracking behind the Atlanta MSA since 2000 (a difference of approximately $15,000), and the gap is anticipated to grow by 2018. The red trend line shows what percent the average household income in DeKalb County is of the national average. In 2000, DeKalb County's average household income was higher than the national average; however, DeKalb dropped below the national average by 2013, and the difference is projected to continue by 2018. Per capita income and Median household income in DeKalb County in 2010 are shown by Census tracts in Figure 2-22 and Figure 2-23, respectively.

Figure 2-17: Average Household Income Trends 2000 to 2018[11]

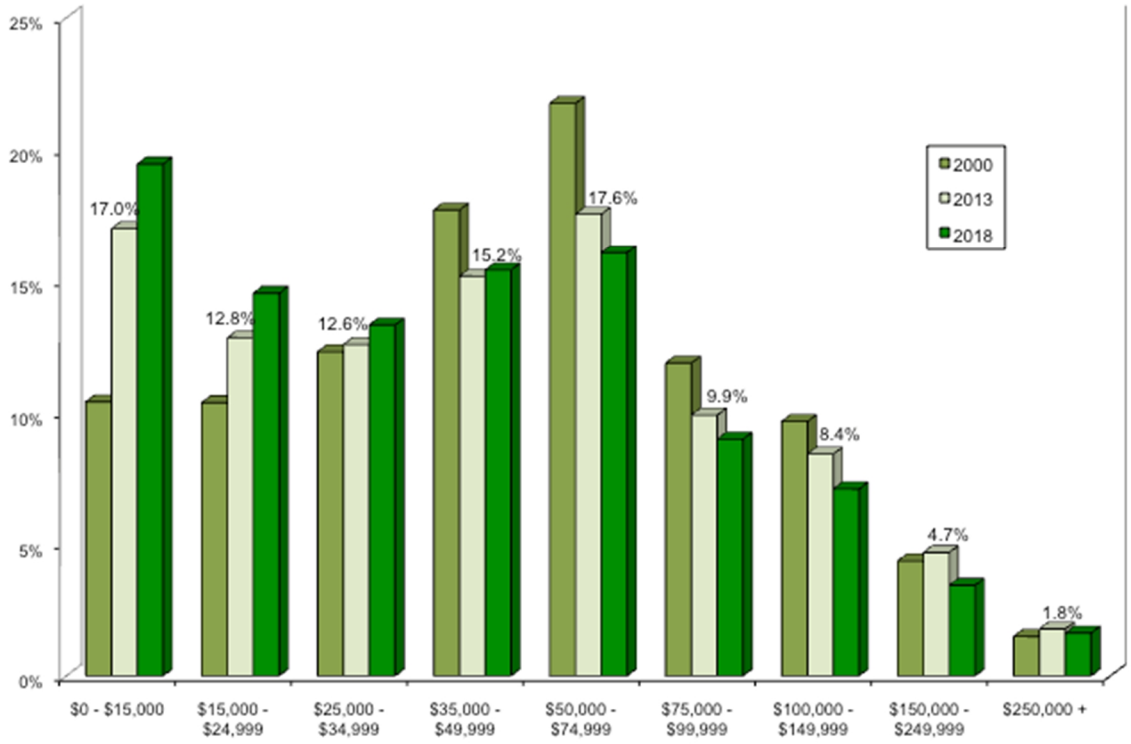


Shown in Figure 2-18, the majority (75%) of DeKalb County's households earn less than $75,000 annually. Approximately 30% of DeKalb's households earn less than $25,000 annually; this is around five percent more than the Atlanta MSA and national proportions. Approximately 15% of DeKalb's households earn more than $100,000 annually; this is around five percent less than the Atlanta MSA and

[11] Source: U.S. Census Bureau, Claritas, Market + Main, Inc.

national proportions. The projections for the next five years show increases in the households earning less than $50,000 and decreases in the households earning more than $50,000.

Figure 2-18: 2000 to 2018 Household Income Trends[12]



Individuals with incomes at or below poverty level were located primarily within the I-285 corridor in 1990. The recent recession had drastic impacts to income across all of DeKalb County, and there are currently several areas outside I-285 with average incomes at or below the poverty level as can be seen in Figure 2-24.

2.7 Employment

The total daytime employees inside DeKalb County are about 345,040. This represents 13.6% of the total employment base in the Atlanta MSA. In terms of biggest employment base, the North subarea, driven largely by the Perimeter area, is the largest employment generator, as shown in Figure 2-19. Central West is the next largest employment area, with generators including the City of Atlanta, Emory University, and CDC located here.

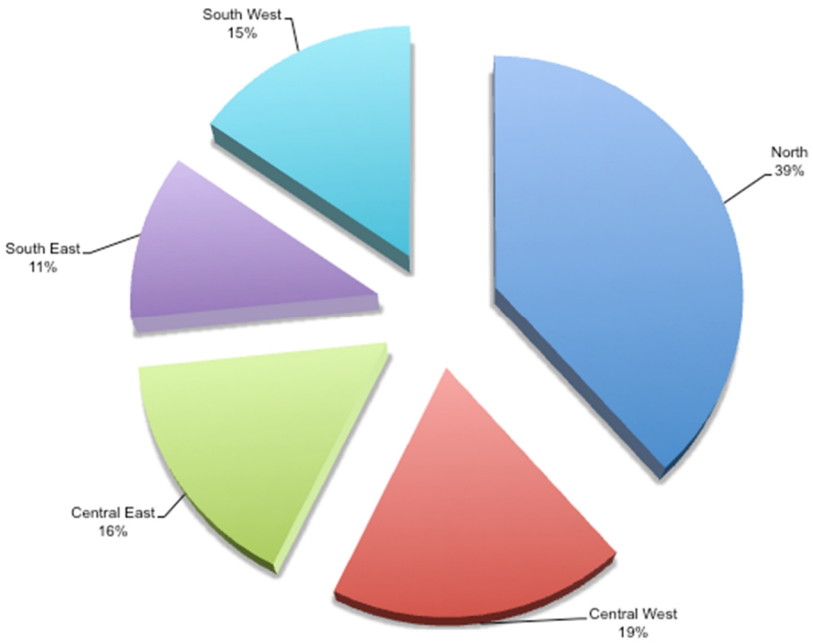
There are approximately 29,500 businesses in DeKalb County, which is a significant contribution to the regional economy. DeKalb County businesses constitute 13.5% of the Atlanta MSA's total.

In terms of sector employment, DeKalb County's largest employment sectors are Services, Retail Trade, Manufacturing, and Public Administration as shown in Figure 2-20. In comparison, the top three industry sectors, in terms of employment, for the Atlanta MSA are Services, Retail Trade, Manufacturing, and

[12] Source: U.S. Census Bureau, Claritas

Finance, Insurance, and Real Estate (FIRE). The proportions for the Services, Retail Trade and Manufacturing sectors are similar between DeKalb County and the Atlanta MSA. Since in both cases, four sectors are really being reviewed (since there are "ties" for third largest), it is worth noting the differences. The Public Administration sector is larger in DeKalb County as a proportion of total employment and the Finance, Insurance, and Real Estate (FIRE) sector is larger in the Atlanta MSA as a proportion of total employment.

Figure 2-19: 2012 Employment Distribution13

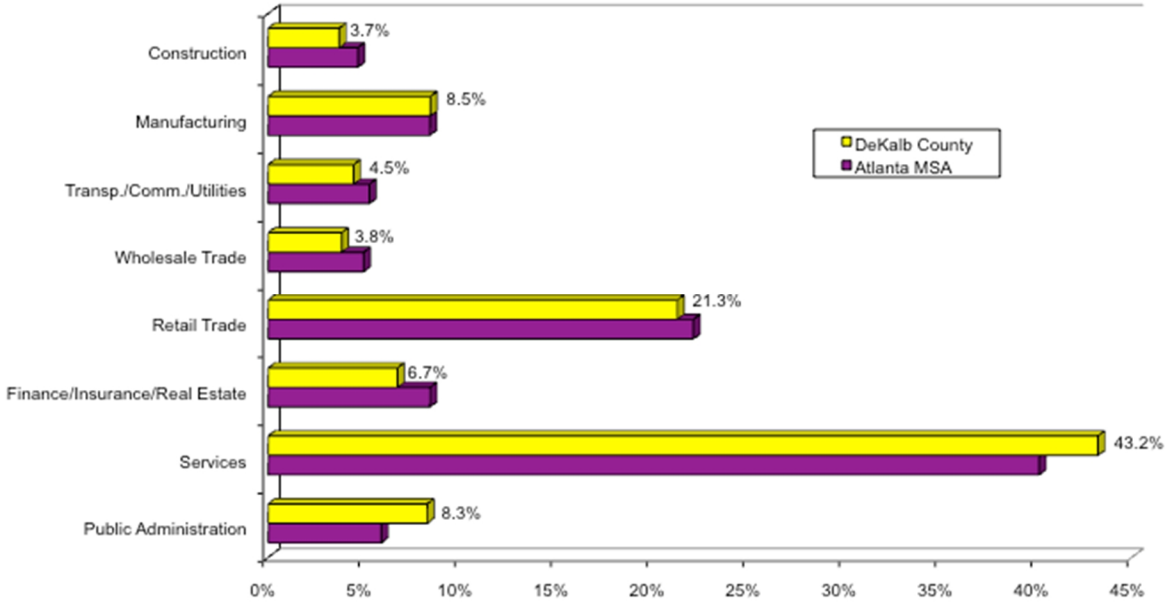


Within DeKalb County, there are significant differences in the individual subareas on how employment is comprised, as shown in the Figure 2-21. Below are the listings of the three largest employment sectors for each planning subarea.

- North: Services (50%), Retail Trade (21%), Finance, Insurance, and Real Estate (11%)
- Central West: Services (45%), Retail Trade (21%), Manufacturing (16%)
- Central East: Services (34%), Retail Trade (21%), Public Administration (13%)
- South East: Services (46%), Retail Trade (23%), Manufacturing (8%)
- South West: Services (39%), Public Administration (23%), Retail Trade (16%)

[13] Source: US Census Bureau, Claritas, Market + Main

Figure 2-20: 2012 DeKalb County and Atlanta MSA Sector Employment[14]

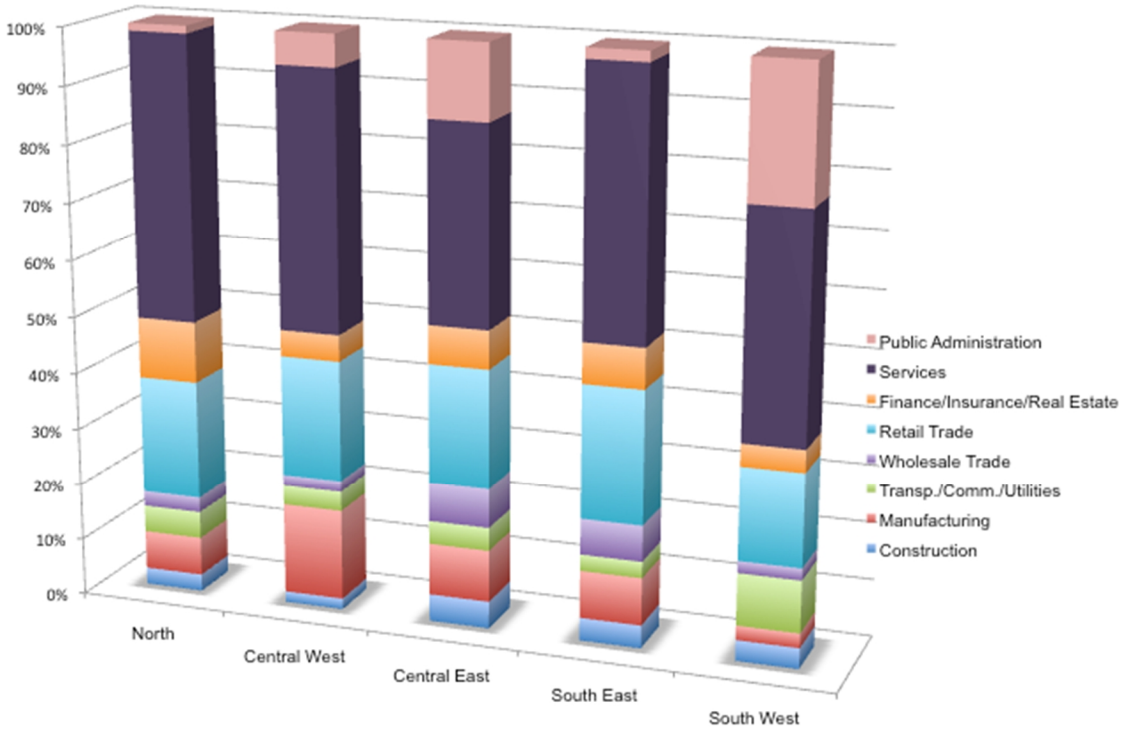


Services and Retail Trade are strong employment sectors in each planning subarea, which mirror the DeKalb County, Atlanta MSA, and national trends. Traditionally, the Finance, Insurance, and Real Estate and Manufacturing sectors are generally higher-paying jobs while the Public Administration sector is generally lower-paying jobs.

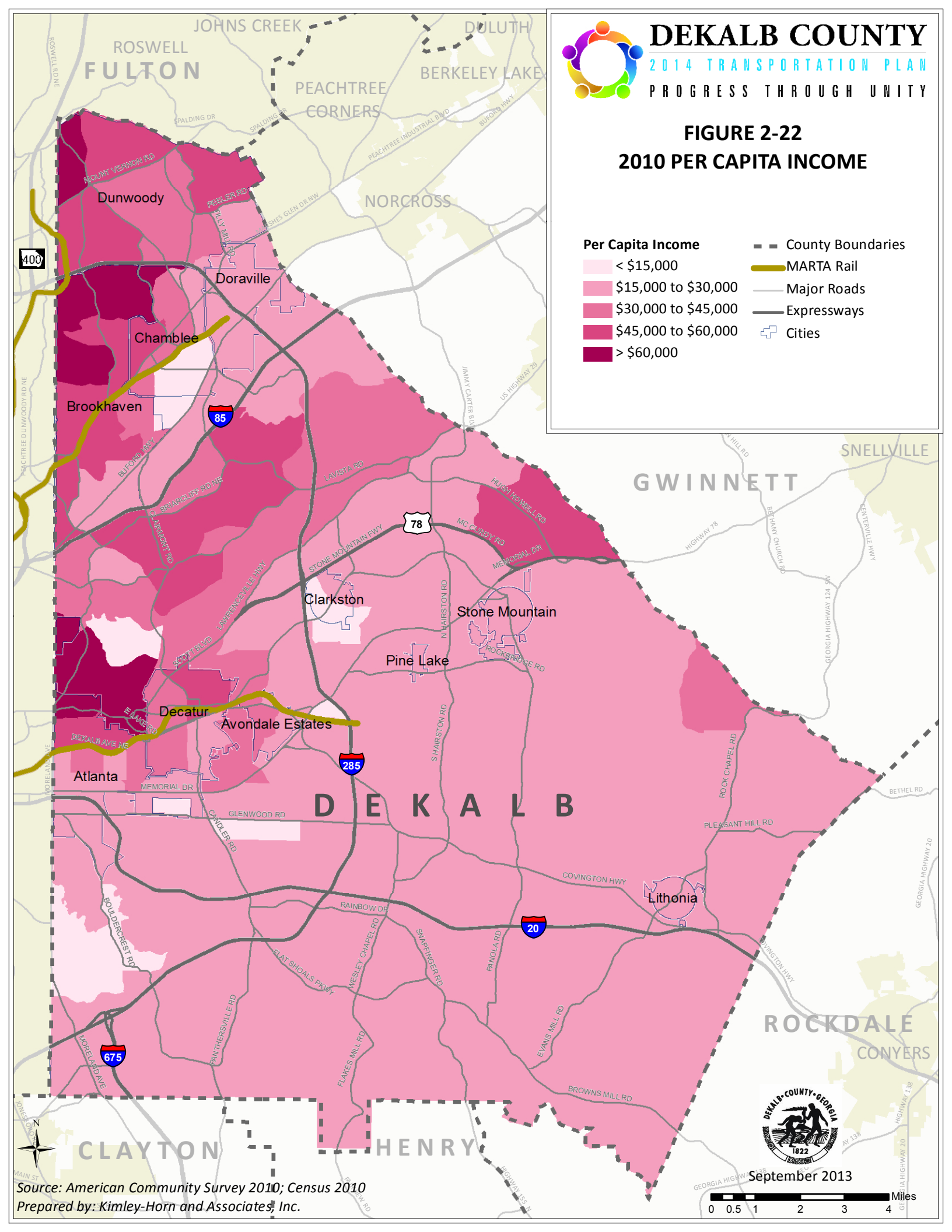
Figure 2-25 shows where people who work in DeKalb County live. People come from across metro Atlanta to work in DeKalb, but as can be noted by the dark green color, many people who work in DeKalb also live in DeKalb. This results in shorter commutes and more possible transportation options. Figure 2-26 shows where the people who live in DeKalb work. Many residents work in Downtown, Midtown, and Buckhead Atlanta as well as many centers within DeKalb County including in Perimeter, Emory/Druid Hills, Decatur, Tucker, and along the I-85 corridor.

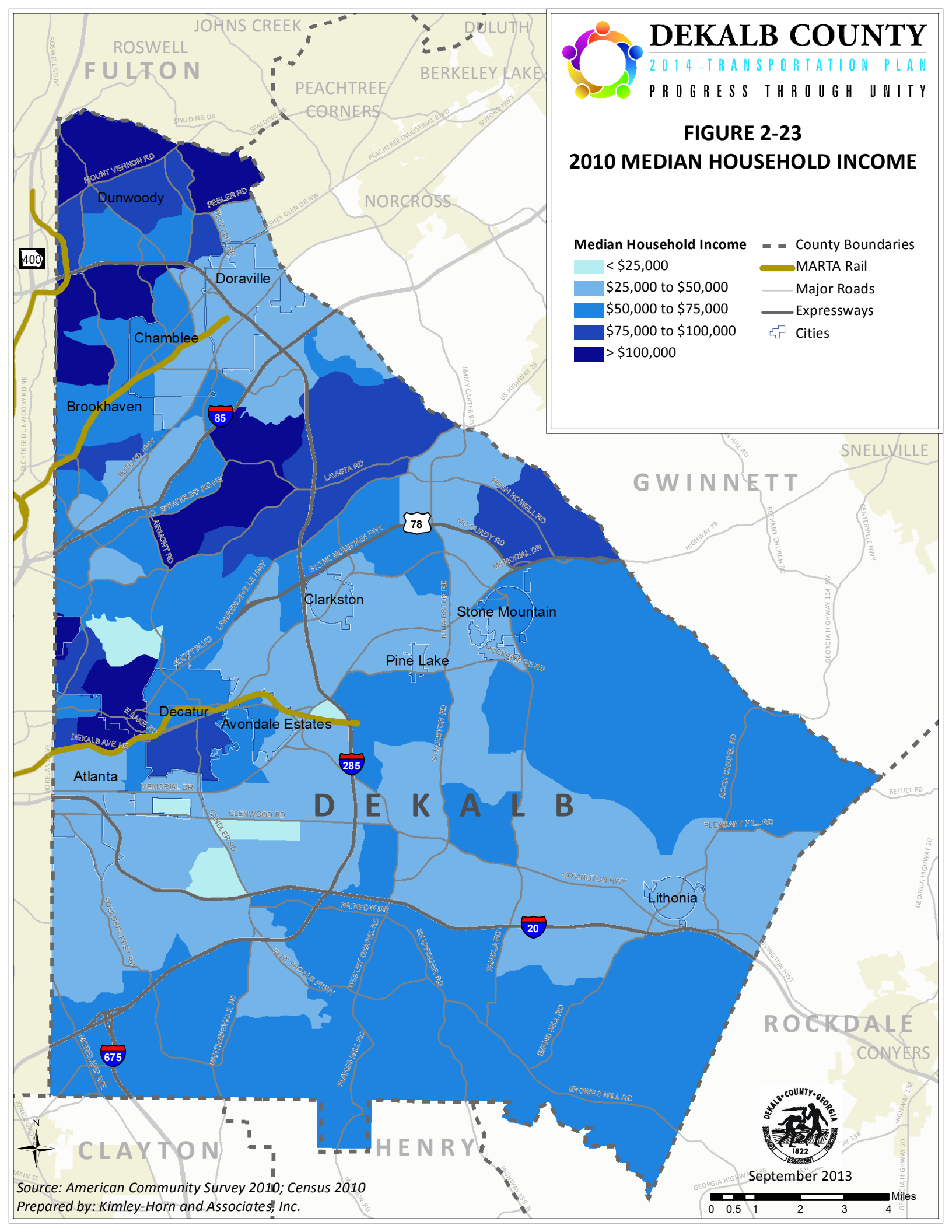
[14] U.S. Bureau of Economics, Claritas, Market + Main, Inc.

Figure 2-21: 2012 DeKalb County Planning Subareas Sector Employment Comparison[15]

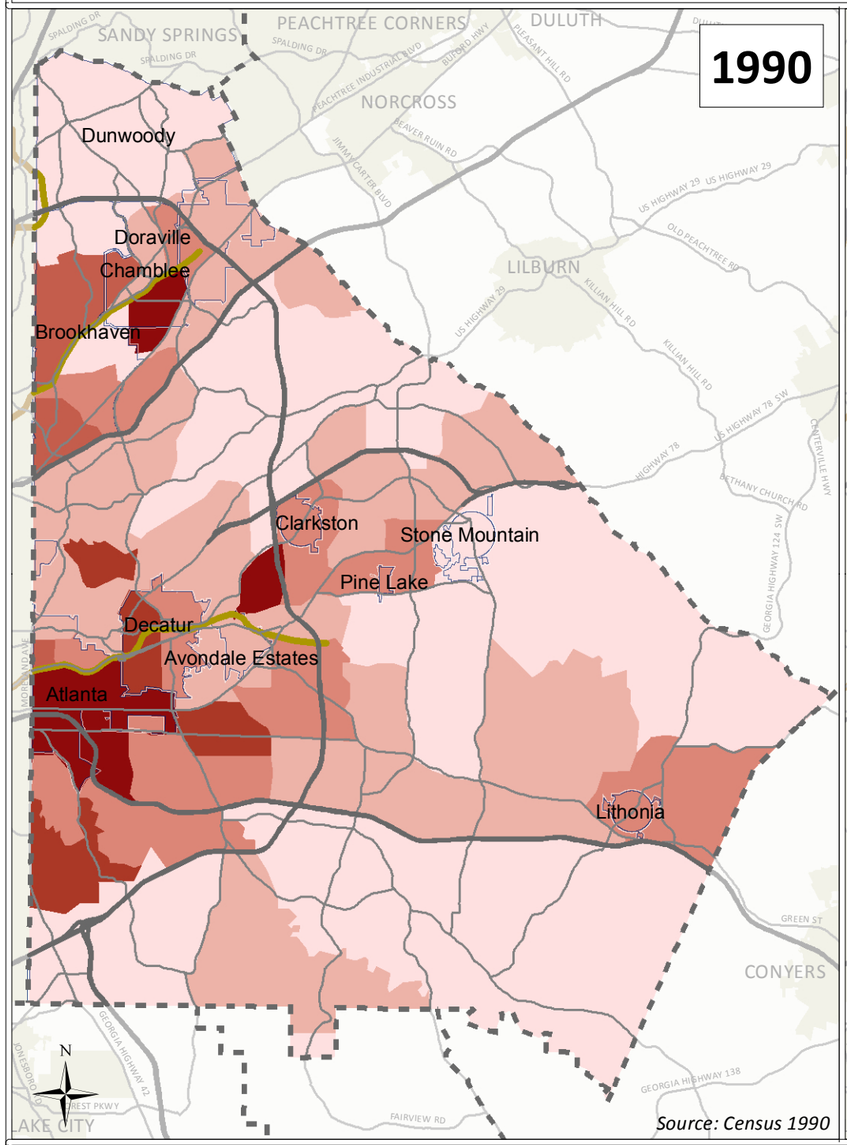


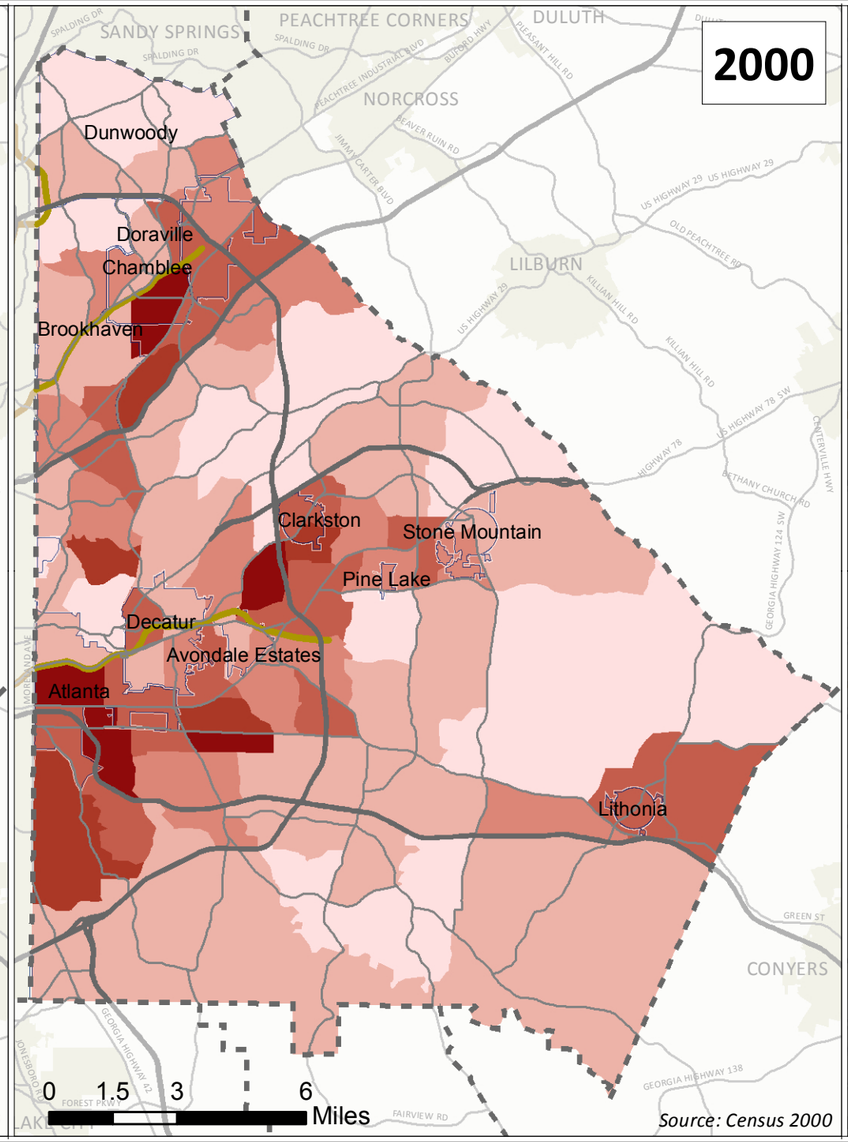
[15] U.S. Bureau of Economics, Claritas, Market + Main, Inc.

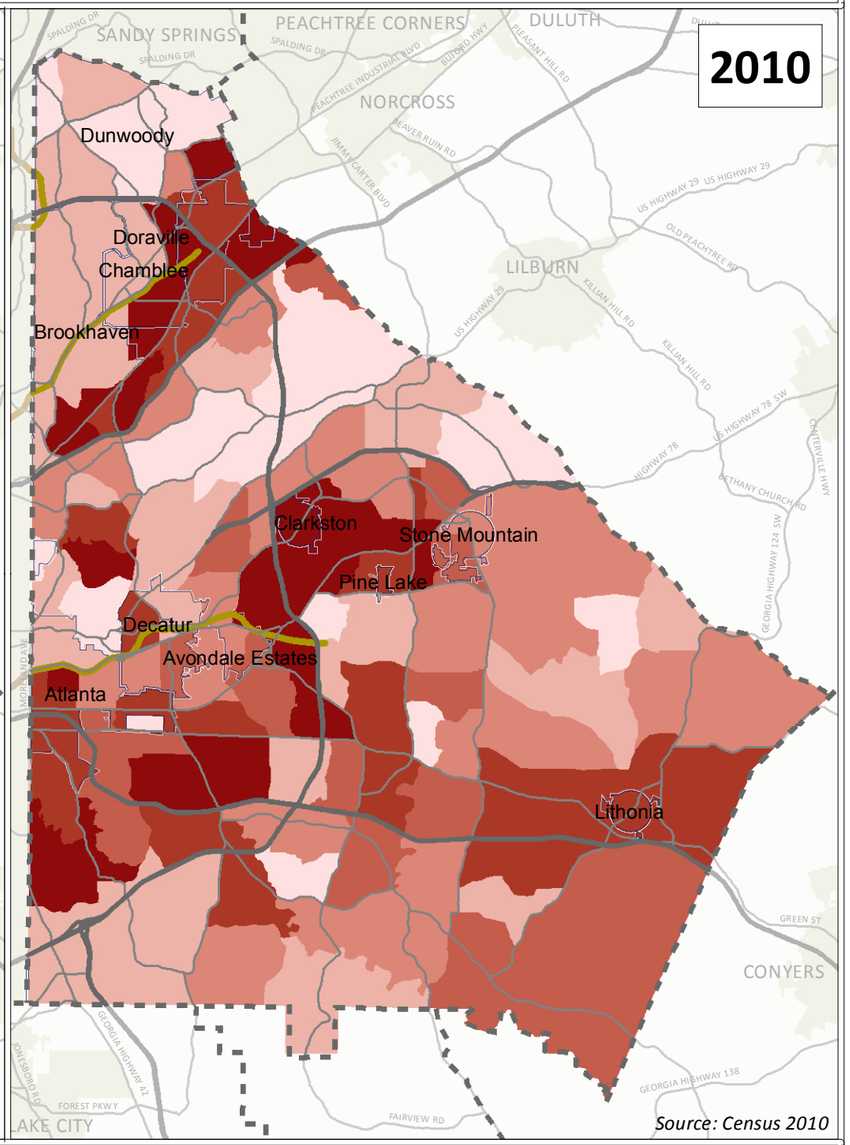

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 2-22
2010 PER CAPITA INCOME
Per Capita Income
< $15,000
$15,000 to $30,000
$30,000 to $45,000
$45,000 to $60,000
> $60,000
County Boundaries
MARTA Rail
Major Roads
Expressways
Cities
JOHNS CREEK
DULUTH
ROSWELL
FULTON
PEACHTREE CORNERS
BERKELEY LAKE
NORCROSS
Dunwoody
Doraville
Chamblee
Brookhaven
SNELLVILLE
GWINNETT
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
DEKALB
Lithonia
ROCKDALE
CONYERS
CLAYTON
HENRY
400
85
78
285
20
675
September 2013
Miles
0 0.5 1 2 3 4
Source: American Community Survey 2010; Census 2010
Prepared by: Kimley-Horn and Associates, Inc.


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 2-23
2010 MEDIAN HOUSEHOLD INCOME
Median Household Income
< $25,000
$25,000 to $50,000
$50,000 to $75,000
$75,000 to $100,000
> $100,000
County Boundaries
MARTA Rail
Major Roads
Expressways
Cities
JOHNS CREEK
DULUTH
ROSWELL
FULTON
PEACHTREE CORNERS
BERKELEY LAKE
NORCROSS
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
Lithonia
SNELLVILLE
GWINNETT
ROCKDALE
CONYERS
CLAYTON
HENRY
DEKALB
400
85
78
285
20
675
Source: American Community Survey 2010; Census 2010
Prepared by: Kimley-Horn and Associates, Inc.
September 2013
Miles
0 0.5 1 2 3 4

PERCENT OF INDIVIDUALS WITH INCOME BELOW THE POVERTY LEVEL FROM 1990 TO 2010







September 2013

Individual Poverty Rate

< 5% | 5% - 10% | 10% - 15% | 15% - 20% | 20% - 25% | > 25%

- County Boundaries
- MARTA Rail
- Major Roads
- Expressways
- DeKalb City Boundaries
- Cities Around DeKalb

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 2-24
PERCENT OF INDIVIDUALS WITH INCOME BELOW THE POVERTY LEVEL FROM 1990 TO 2010

Prepared by: Kimley-Horn and Associates, Inc.

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 2-25
WHERE PEOPLE WHO WORK IN DEKALB LIVE

Workers Per Square Mile

- < 100
- 100 - 300
- 300 - 600
- 600 - 1,100
- > 1,100

- County Boundaries
- MARTA Rail
- Expressways

Miles: 0, 6, 12

Source: U.S. Census Bureau OnTheMap LODES Data 2012

Prepared by: Kimley-Horn and Associates, Inc.

September 2013

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 2-26
WHERE RESIDENTS OF DEKALB WORK

Jobs Per Square Mile

- < 1,000
- 1,000 - 4,000
- 4,000 - 9,000
- 9,000 - 16,000
- > 16,000

- County Boundaries
- MARTA Rail
- Expressways

N

0 6 12 Miles

Source: U.S. Census Bureau OnTheMap LODES Data 2012
Prepared by: Kimley-Horn and Associates, Inc.

September 2013

2.8 Key Socioeconomic Findings

The County population is growing and will continue to grow quickly. DeKalb County has experienced slow growth over the last decade, and is expected to continue growing. In fact, the County is expected to grow at a faster pace than the national rate of growth over the next five years. Still, the recent and projected population and household growth rates for DeKalb are below the Atlanta MSA, which has experienced and is projected to continue undergoing phenomenal growth. Exceeding the pace of population growth between 2000 and 2010 was DeKalb County's number of households, which indicates the possibility of neighborhood reconstruction into dense single-family dwellings.

The population in some areas around transit stations is decreasing which could cause problems for the success of the MARTA rail system moving forward. Transit operates more efficiently when located near concentrated population centers. Beginning with the 1980 Census, DeKalb County as a whole has been the most densely populated county in the Atlanta metro area, with the 2010 Census reporting approximately four persons per acre on average. Many areas of higher population density are currently located near transit facilities yet many of these areas are now decreasing in population, which could pose a challenge for ridership in the future.

Declines are expected in the age groups between 21 and 34 years of age, while the biggest growth is expected in the age groupings over 65 years of age. It is likely that many people are staying and retiring in DeKalb County. This is a great phenomenon, but creating lifelong communities for these individuals and transportation systems that respond to their needs should be an important focus of the transportation plan. Likewise, having a healthy population of workers, such as those between the ages of 21 and 24, can help promote economic vitality. Thus, it will be important to consider methods to attract employers and workers to the County.

DeKalb County's income levels are below the regional and national average. In 1990, most of the population below poverty was located within I-285. However, the recent recession negatively impacted many individuals across the entire County. There has been a decline in this wealth measure in both DeKalb's relative position, as well as the total average household income. The current average household income in DeKalb County is lower than the Atlanta MSA and national averages, a trend that is expected to continue. Further, the five year projections show increases in the households earning less than $50,000 and decreases in the households earning more than $50,000 annually. Decreasing income levels have implications to the transportation system. Particularly, some individuals may not be able to afford a personal automobile and may depend more on walking, biking, and public transportation to reach their jobs or make other necessary trips.

DeKalb County is ethnically and racially diverse. Overall, Hispanic and Asian populations have grown substantially between 2000 and 2013. The African-American population has stayed approximately the same and the Caucasian population has decreased.

Educational attainment levels are high in DeKalb County. DeKalb has a smaller than average proportion of residents with less than high school education and a somewhat low proportion of residents with only high school educations. Meanwhile, a high proportion of residents have college degrees, at nearly 10% higher than the national average.

The jobs-to-housing ratio is 0.47, which means there are nearly twice as many residents in DeKalb County as employees. Even still, DeKalb County is a notable contributor to the employment base in metro Atlanta. DeKalb's strong role in the metro economy is easy to see in its proportion of the Atlanta MSA's employees (13.6%) and businesses (13.5%). Employment though is not evenly distributed across the County. DeKalb County's largest employment sectors are Services, Retail Trade, and Manufacturing, which does closely resemble the Atlanta MSA's economic composition. Much of the employment in DeKalb County is located in the North and Central West subareas.

Places

3 Places Connected by the Transportation System

3.1 Introduction

Land use patterns have significant impacts upon and are impacted by transportation facilities and mobility patterns. The following sections outline general land use trends and policies throughout the County by geographic planning area including existing land uses, future land uses, zoning, unified growth plan, and areas likely to experience significant change.

A variety of map resources were used to explore the relationship between land use patterns and transportation facilities in DeKalb County. These maps included existing land use maps, future land use maps, zoning maps, the region's Unified Growth Policy Map (UGPM), Concept 3, cultural, environmental, and historic resources maps, employment centers mapping, as well as many other resources. Future land use and zoning maps were secured from DeKalb County and the various cities located within the County. To enhance the usefulness of this information, the future land use and zoning categories for the County and the various cities were condensed into similar categories, with respect to density/intensity. This information was then combined into one shapefile for each map.

3.2 DeKalb County Comprehensive Plan Overview

Existing Land Use:

The development pattern of DeKalb County is comparable to the general development pattern of the Atlanta Region and significantly consists of single-family residential with commercial and multi-family uses placed along major highway corridors and intersections. Medium Density Residential accounts for 46% of the land use, followed by 14% for Forested/Undeveloped, Commercial uses at 7%, and High Density Residential at 6%. Infill residential development and activity around the town centers, neighborhood centers, and regional activity centers within the County are indicative of the continual population change and availability of undeveloped land. The majority of the larger, undeveloped tracts are within the southern and easternmost portions of the County, while some smaller tracts still exist within the developed areas.

Future Land Use:

DeKalb County's vision, as provided below, is embodied in the County's nodal development strategy depicted as a series of key activity centers identified as Regional Centers, Town Centers, Neighborhood Centers, and Major Employment Centers.

> "By 2025, DeKalb County will consist of walkable communities connected to recreational and green space areas by trails and sidewalks. The County will develop with less sprawl and include a full range of affordable housing opportunities with neighborhoods protected and enhanced with compatible development. DeKalb County will have seen the redevelopment of declining neighborhoods with stable, established residential neighborhoods maintained at the densities upon which they were originally developed. The County will have a strong economic base, including job and training opportunities. DeKalb County will protect the environment, resulting in cleaner air and water; along with a good transportation system that results in less congestion and increased use of alternative modes of travel. Overall, the

> County will have strong citizen involvement, which fully participates in the planning and development process to improve the quality of life for all residents." (DeKalb County Comprehensive Plan 2005-2025 Community Agenda, p. 51)

DeKalb County will see significant development throughout the five Planning areas that will yield improvements to 47 Activity Centers through patterns that are conducive to them and support the Community Agenda. Communities will see a reduction in the need for automobile travel and an increase in the availability of alternative modes of travel through transit and greater access to pedestrian spaces as a result of plans built around the current state and Areas Requiring Special Attention.

The key areas within the North Planning Area include:

- Perimeter Center area
- Brookhaven area surrounding the MARTA Station
- I-285 and N. Shallowford Road
- Lenox Park area near Roxboro Road
- Century Center office park on Clairmont Road
- Corporate Square office park at North Druid Hills Road along I-85

The Dunwoody Village commercial district, Mount Vernon Road & Dunwoody Club Drive, Peeler Road and Winters Chapel Road, and Ashford Dunwoody and Johnson Ferry Road neighborhood centers are also considered.

The Central West Planning Area addresses the following:

- Oak Grove Commercial Center
- Emory Village
- Northlake Mall area
- Oak Grove Commercial Center
- Briarcliff Road at North Druid Hills Road
- Briarcliff Road at Lavista Road
- Chamblee Tucker Boulevard in proximity of I-285,
- I-85 at N. Shallowford Road
- Toco Hills
- North DeKalb Mall
- Clifton Community Corridor
- Executive Park office park
- Office parks near Mercer University at Chamblee Tucker and I-85
- Presidential Plaza at I-85 and I-285.

The Central East Planning Area includes the following:

- Downtown Tucker area
- Pleasantdale Road corridor from Chamblee Tucker Road to Shadow Walk Lane
- Chamblee Tucker Road at Tucker Norcross Road
- North Hairston Road at Central Drive

- Rockbridge Road at Stone Mountain Lithonia Road

The South West Planning Area includes:

- Glenwood Avenue at Fayetteville Road
- I-285 at Bouldercrest Road
- Cedar Grove at Bouldercrest Road
- Kensington MARTA Station area
- Redan Road at South Indian Creek Drive
- I-20 at Gresham Road
- South DeKalb Mall Area between I-20 and I-285
- Georgia Perimeter College/Georgia Bureau of Investigation along Panthersville Road

Lastly, the South East Planning Area includes:

- Rockbridge Road corridor
- Redan Road
- South Hairston Road
- Stone Mountain Lithonia Road
- Covington Highway
- Flat Shoals Parkway
- Stonecrest Mall area
- Wesley Chapel Road at I-20
- Panola Road at I-20

More detail on each of the five planning areas is included in the Appendix.

Areas Requiring Special Attention:

Throughout the County special attention is being provided to address various areas of concern through 2025. The increased loss of tree cover, environmentally sensitive land, and historical and cultural resources as a result of development activity, which has also led to an increase in environmental pollution, is a focal point. Strategies have been crafted to manage the pace of development and its effects upon greenfield and infill development. Redevelopment of commercial strip malls, large abandoned structures and sites, along with healthy infill development plans will aid in increasing economic vitality and revitalizing communities.

Educational, Community, and Other Institutions and Facilities:

DeKalb County has continually implemented improvements to a vast number of facilities in order to maintain an adequate level of service to meet the demand of residents and non-residential uses. An expansion of precinct boundaries and facility space is projected for Police, Fire, and Emergency Management Systems. In an effort to improve quality of life a plan to increase the inventory of greenspace and public park spaces has been implemented to meet a goal of 12-18 acres of space for every 1,000 residents. In anticipation of the current and expected growth in the commercial, industrial, and/or residential areas improvements to the health service offering will be made based on trends in public health issues, the health care industry, and demographics of the County population. The aging portion of the population will be addressed through improvements within senior facilities and services to promote the

independence of seniors, while creating opportunities for better communication of information for improved health of the aging and reduced stress on caregivers.

DeKalb County is home to 8 different colleges and universities, including Georgia Perimeter College, the fourth largest institution in the university system of Georgia, and has ease of access to the other major institutions of the state including Georgia Tech, Georgia State University, and the University of Georgia – Athens. There are currently 24 public library facilities within the County. Based upon the 2006-2025 Library Facilities Plan approved by the DeKalb County Public Library Board of Trustees in July 2005, there are 21 proposed facility projects to aid in bringing the current system in line with targeted service levels.

Natural/Cultural Resources and Historic Districts:

Water conservation and resource preservation is a priority in DeKalb County to properly address prime resources for drinking water such as the Chattahoochee River. Anticipated improvements with the wastewater treatment plants will significantly aid the reduction of pollutants through the treatment of sewage and protect the soils of the County. A greenway system will also be developed by 2025 to help protect the wetlands and prohibiting development in those areas, which will also preserve the recharge areas in the County and support strategies to improve storm water, water quality and improve runoff.

In respect of the full history of DeKalb County, efforts will continue to be made by the Historic Preservation Commission to promote awareness and expand the knowledge of the public about the 36 different districts, structures, and sites noted on the National Register and the economic value they provide. There will be a continued focus on developing and implementing strategies centered on the preservation of landmarks and adding to the register. Academic research is being utilized to highlight the history and accomplishments of African-Americans in the County over the years so the County can provide a stronger account of its cultural history as well.

3.3 DeKalb County Zoning Ordinance Update Overview

The DeKalb County Zoning Code Update is intended to align the County's development regulations more closely with the County's Comprehensive Plan. Some of the elements of the plan that have been difficult to implement with the current zoning code include achieving the kind of mixed use activity centers envisioned as walkable compact areas and transitioning gracefully to the surrounding suburban areas.

The updated zoning code will include provisions that allow for more compact land development to occur. This is more significant in the activity centers of the Comprehensive Plan where new zoning districts allow for more gradation from single family residential to nodes of mixed-use, compact development. In addition, there are several changes that regulate greenfield development and infill development in less dense areas of the County. These include requiring smaller block sizes, restrictions for dead-end streets, sidewalk and streetscape requirements, and simplified parking requirements. These requirements, if implemented, could potentially increase walking and bicycling and reduce the transportation impact of further growth within the County.

More detail on the zoning for each of the planning subareas is provided in the Appendix. The zoning map for all of DeKalb County is included in Figure 3-1.

Table 3-1: County Zoning Map Key

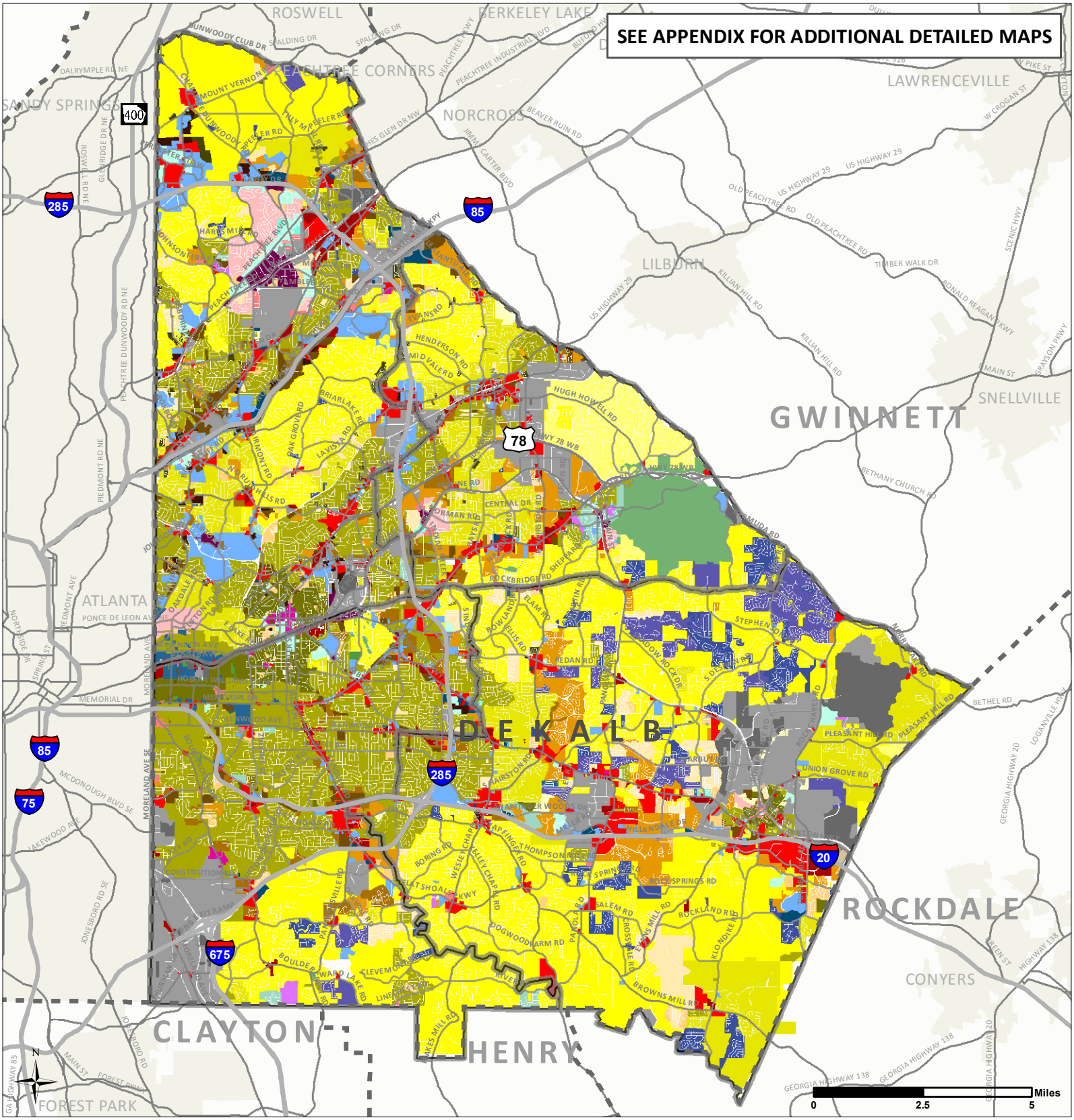
NS Neighborhood Shopping	R-100 Single Family Residential
C-1 Local Commercial	R-85 Single Family Residential
C-2 General Commercial	R-75 Single Family Residential
GS Greenspace	R-60 Single Family Residential
M Industrial	R-50 Single Family Residential
M-2 Heavy Industrial	R-CD Residential Community Development
MHP Mobile Home Park	R-CH Single Family Cluster Development
O-D Office Distribution	R-DT Two and Three Family Residential
O-I Office/Institution	R-A5 Single Family Attached Residential
O-I-T Office/Institution Transitional	R-A8 Single Family Attached Residential
OCR Office Commercial Residential	RM-150 Multifamily Residential
PC-1 Pedestrian Community 1	RM-100 Multifamily Residential
PC-2 Pedestrian Community 2	RM-85 Multifamily Residential
PC-3 Pedestrian Community 3	RM-75 Multifamily Residential
PUD Planned Unit Development	RM-HD Multifamily Residential
R-200 Single Family Residential	NCD Neighborhood Conservatin District
R-150 Single Family Residential	TND Traditional Neighborhood Development

3.4 Developments of Regional Impact

Developments of Regional Impact (DRIs) are developments considered to be large enough that they will have a regional effect, particularly on aspects such as transportation. In Metro Atlanta, DRIs are reviewed by both the ARC (an extension of the Department of Community Affairs) and by GRTA with participation from the local governments in which the developments are located. Applicants are required to complete a formal report that includes a review of existing, no-build (future without the development), and build (future with the development) to determine the types of transportation impacts the development is likely to have. Conditions are then placed on the local government to ensure that the recommended improvements are completed. If the associated transportation projects are not completed, GRTA has the ability to withhold future federal dollars for transportation projects.

If a project has not been active for ten years following the completion of the DRI, a new DRI will be necessary before the project can advance. A total of 17 DRIs are considered "active" within DeKalb County. These developments have current DRIs (2003 or after), have not been built, or have not been terminated. Figure 3-2 shows the active DRIs in DeKalb County.

Other large-scale development that is on the horizon will not be shown as current DRIs. For instance, much planning and discussion has occurred regarding the former GM plant. If a program for the site is every officially established, this would become a DRI as well.



NS
C-1
C-2
GS
M
M-2
MHP
O-D
O-I
O-I-T
OCR
PC-1
PC-2
PC-3
PUD
R-200
R-150
R-100
R-85
R-75
R-60
R-50
R-CD
R-CH
R-DT
R-A5
R-A8
RM-150
RM-100
RM-85
RM-75
RM-HD
NCD
TND
DeKalb Planning Areas

* Zone descriptions noted in document text

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

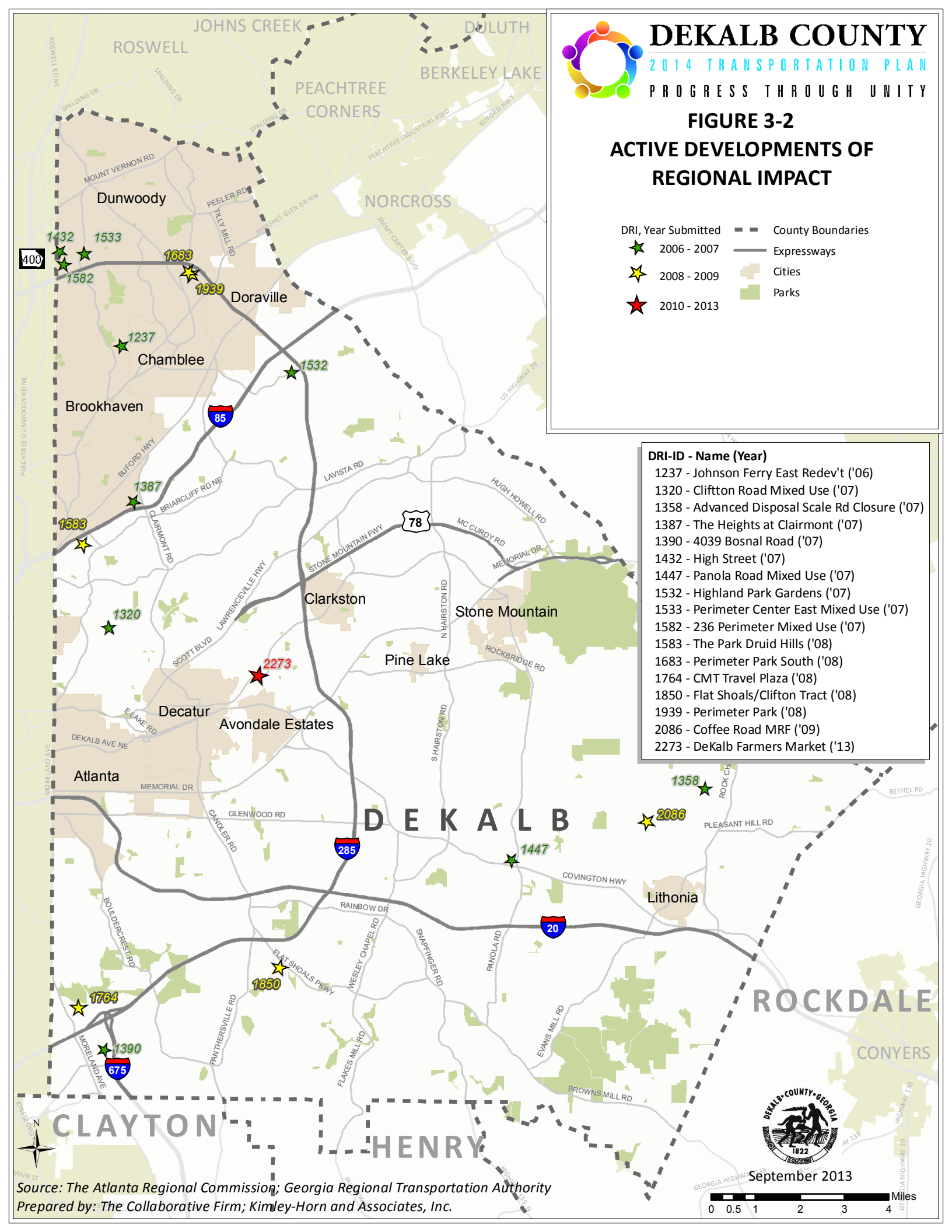
FIGURE 3-1
DEKALB ZONING

Source: DeKalb County
Prepared by: The Collaborative Firm; Kimley-Horn and Associates, Inc.

September 2013

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 3-2
ACTIVE DEVELOPMENTS OF REGIONAL IMPACT



DRI-ID - Name (Year)

1237 - Johnson Ferry East Redev't ('06)
1320 - Cliftton Road Mixed Use ('07)
1358 - Advanced Disposal Scale Rd Closure ('07)
1387 - The Heights at Clairmont ('07)
1390 - 4039 Bosnal Road ('07)
1432 - High Street ('07)
1447 - Panola Road Mixed Use ('07)
1532 - Highland Park Gardens ('07)
1533 - Perimeter Center East Mixed Use ('07)
1582 - 236 Perimeter Mixed Use ('07)
1583 - The Park Druid Hills ('08)
1683 - Perimeter Park South ('08)
1764 - CMT Travel Plaza ('08)
1850 - Flat Shoals/Clifton Tract ('08)
1939 - Perimeter Park ('08)
2086 - Coffee Road MRF ('09)
2273 - DeKalb Farmers Market ('13)

Source: The Atlanta Regional Commission; Georgia Regional Transportation Authority
Prepared by: The Collaborative Firm; Kimley-Horn and Associates, Inc.

September 2013

Miles
0 0.5 1 2 3 4

3.5 Schools, Parks / Open Space, and Civic Infrastructure

Figure 3-3 provides the locations for the elementary schools in the DeKalb County School System and Figure 3-4 provides the locations for the middle and high schools. Atlanta and Decatur City Schools were not included. The solid dots represent schools with attendance areas or school zones. The open dots represent schools without attendance areas, such as alternative or charter schools. Examples of schools without attendance areas include DeKalb Alternative School, Fernbank Science Center, and Kittredge Magnet Elementary School. The colored areas represent the school areas, or the geographic region assigned to a school, from which the students come. Middle and high schools share areas. Not all elementary schools fall directly into a middle and high school area.

Several of the LCI studies completed in DeKalb County such as the Downtown Tucker LCI identify pedestrian connections to downtowns, schools, and parks as being a very high priority.

Figure 3-5, Figure 3-6, and Figure 3-7 illustrates the walk and hazard bussing areas surrounding the schools. Walk areas are defined as a one-mile buffer surrounding each school. Students inside the one mile radius of the school will be transported if the walking distance to school via the most direct route exceeds 1.5 miles. Students inside the one mile radius may also be eligible for transportation if safety concerns such as traffic, lack of sidewalks, or if a student would have to cross a major arterial, are such that the safety of any student will be compromised by having to walk. Hazard bussing areas represent areas where children cannot walk to school from home due to a major road or high traffic area, lack of sidewalks, or other hazards that prohibit safe walking. DeKalb County does not provide bus service to residences within the walk areas.

Table 3-2 and Table 3-3 show which schools have the greatest number of students living within hazard bussing or walk zones within the DeKalb County School System. Elementary schools have the largest numbers of students living within their walk and hazard bussing areas with Indian Creek Elementary School having the largest number of students within the walk zone and Woodward Elementary School having the largest number of students within the hazard bussing area. It is important to note that just because hundreds of students live within the walk zone of the school does not mean that all of those children are walking to school. In some cases, they may get dropped off or carpool with a friend's family. The school system has considered conducting a survey relating to transportation to better understand the modes that children and parents use to get them to school. This data will be important for diagnosing which facilities may be best suited for improvement that can result in the greatest impact. Either way, improving pedestrian and bicycle infrastructure within both the walk and hazard bussing areas is an important focus of the transportation plan.

Figure 3-8 shows various community facilities located throughout DeKalb County including police and fire stations, hospitals, libraries, colleges, and senior centers, among others. Understanding where these facilities are located throughout the County and how people can access them is important component of the transportation plan. Many sites are located along existing MARTA rail, while others are located along MARTA bus routes. Some sites may be reached by foot or by bike. Many facilities, however, are most

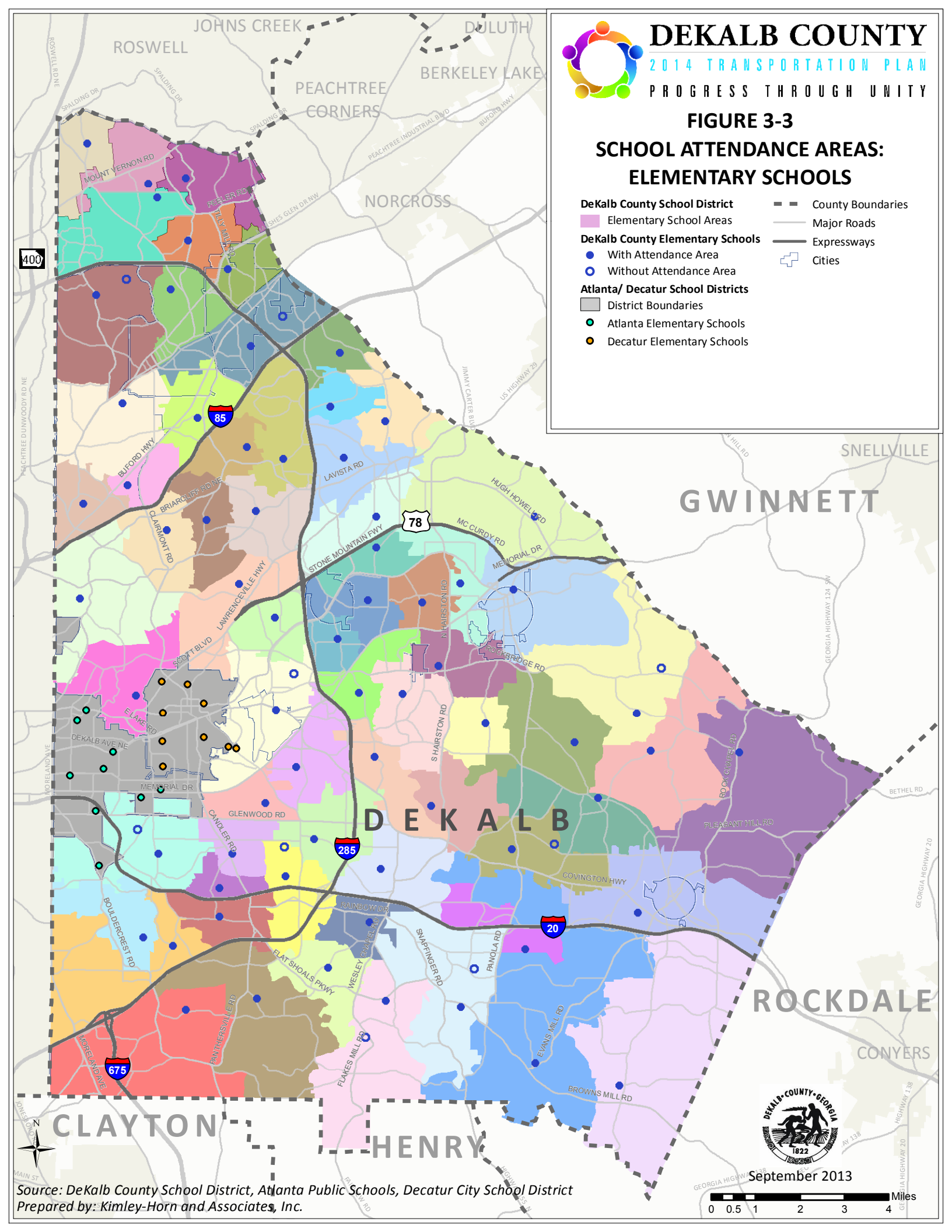
easily accessible by car. Creating opportunities for better access and more options to reach important community facilities and schools is a high priority of this transportation plan.

Table 3-2: Greatest Number of Students within a Hazard Bussing Area

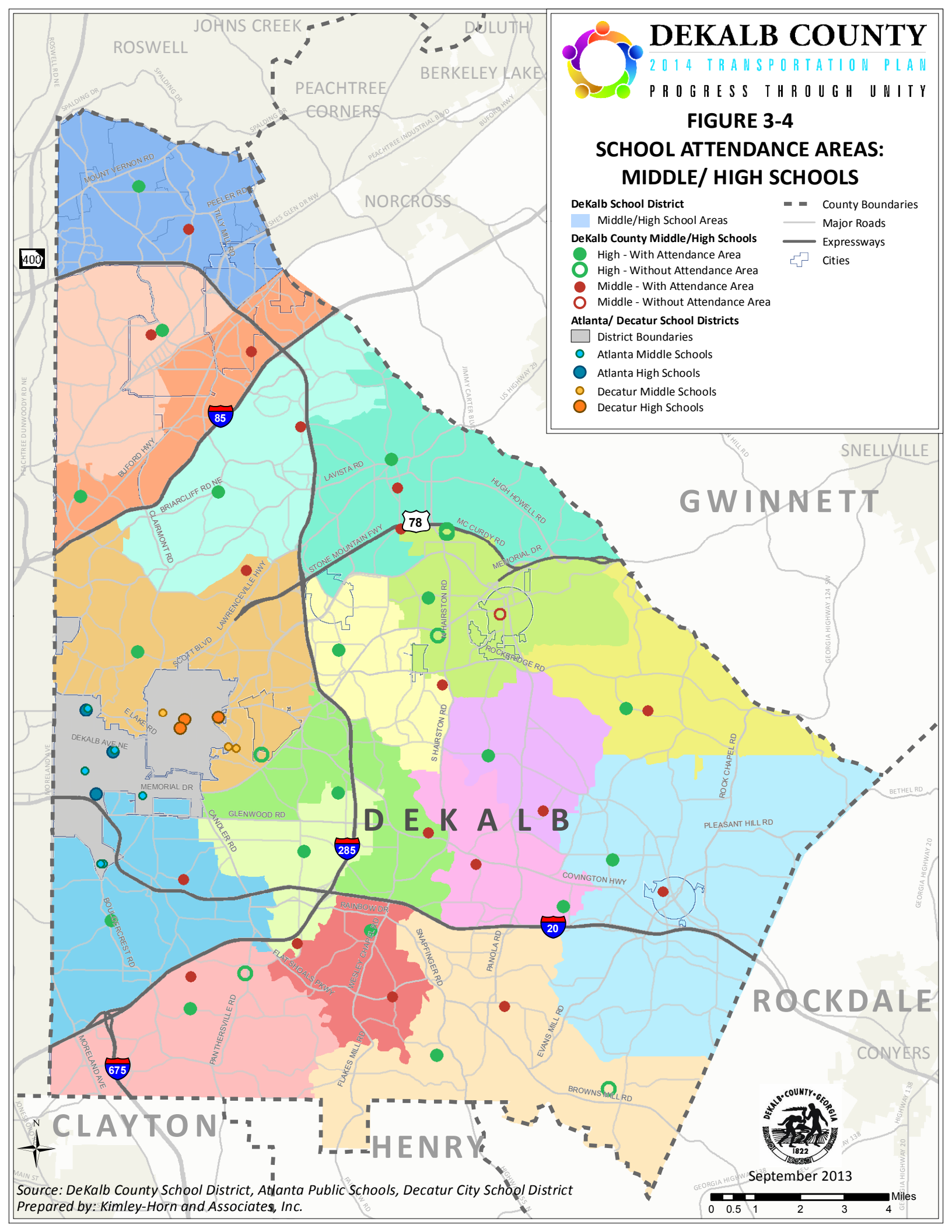
School Name	Number of Students
Elementary School	
Woodward Elementary School	451
Princeton Elementary School	448
Dresden Elementary School	442
Panola Way Elementary School	361
Fairington Elementary School	339
Middle School	
Bethune Middle School	109
Tucker Middle School	100
Henderson Middle School	98
Salem Middle School	75
Stephenson Middle School	75
High School	
Cedar Grove High School	161
Southwest DeKalb High School	136
Columbia High School	127
Redan High School	110
Dunwoody High School	103

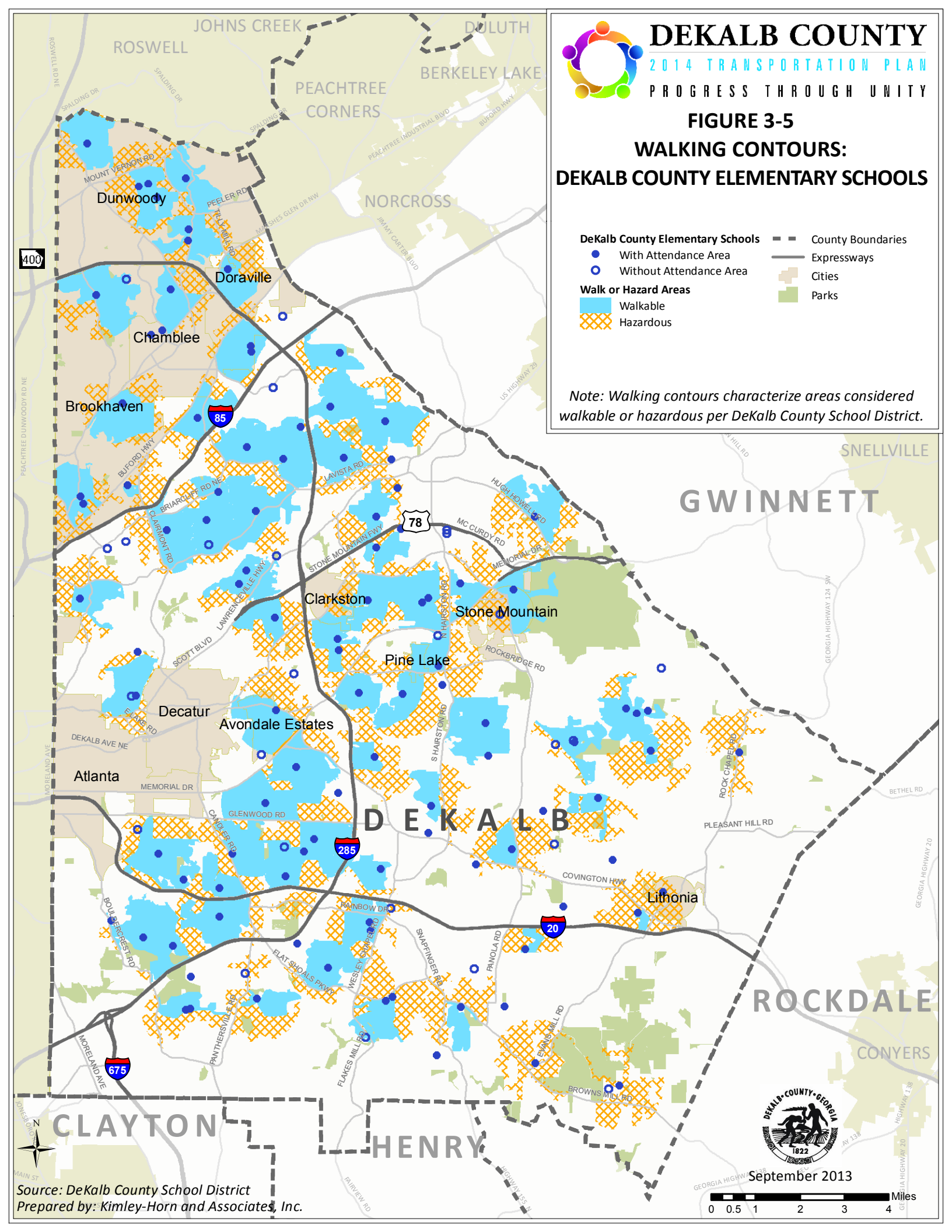
Table 3-3: Greatest Number of Students within a Student Walk Area

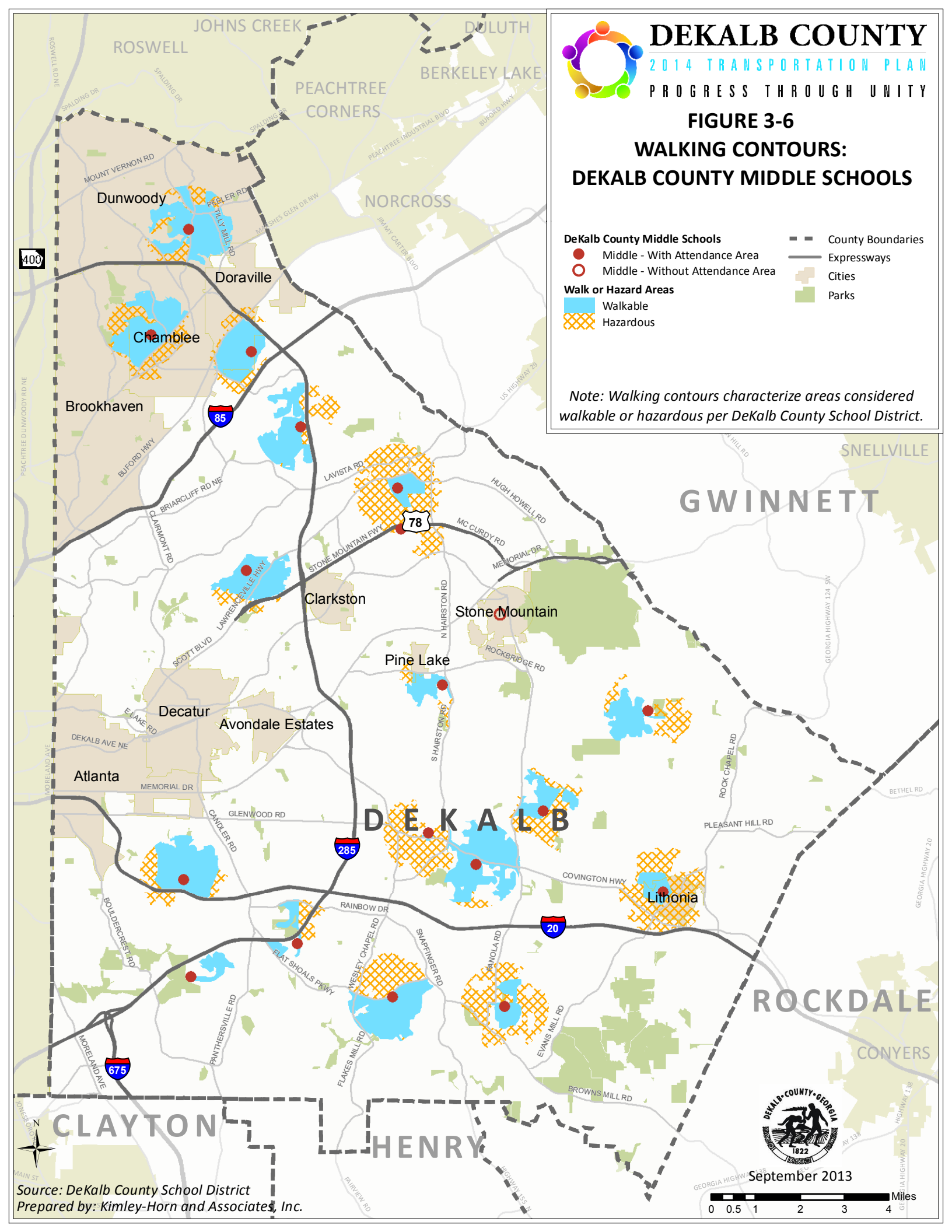
School Name	Number of Students
Elementary School	
Indian Creek Elementary School	933
Miller, E. L. Elementary School	486
Midway Elementary School	359
Dresden Elementary School	358
Snapfinger Elementary School	347
Middle School	
Stephenson Middle School	19
Salem Middle School	18
Redan Middle School	16
Henderson Middle School	15
Chapel Hill Middle School	14
High School	
Stephenson High School	29
Lithonia High School	24
Redan High School	24
Southwest DeKalb High School	23
Columbia High School	20

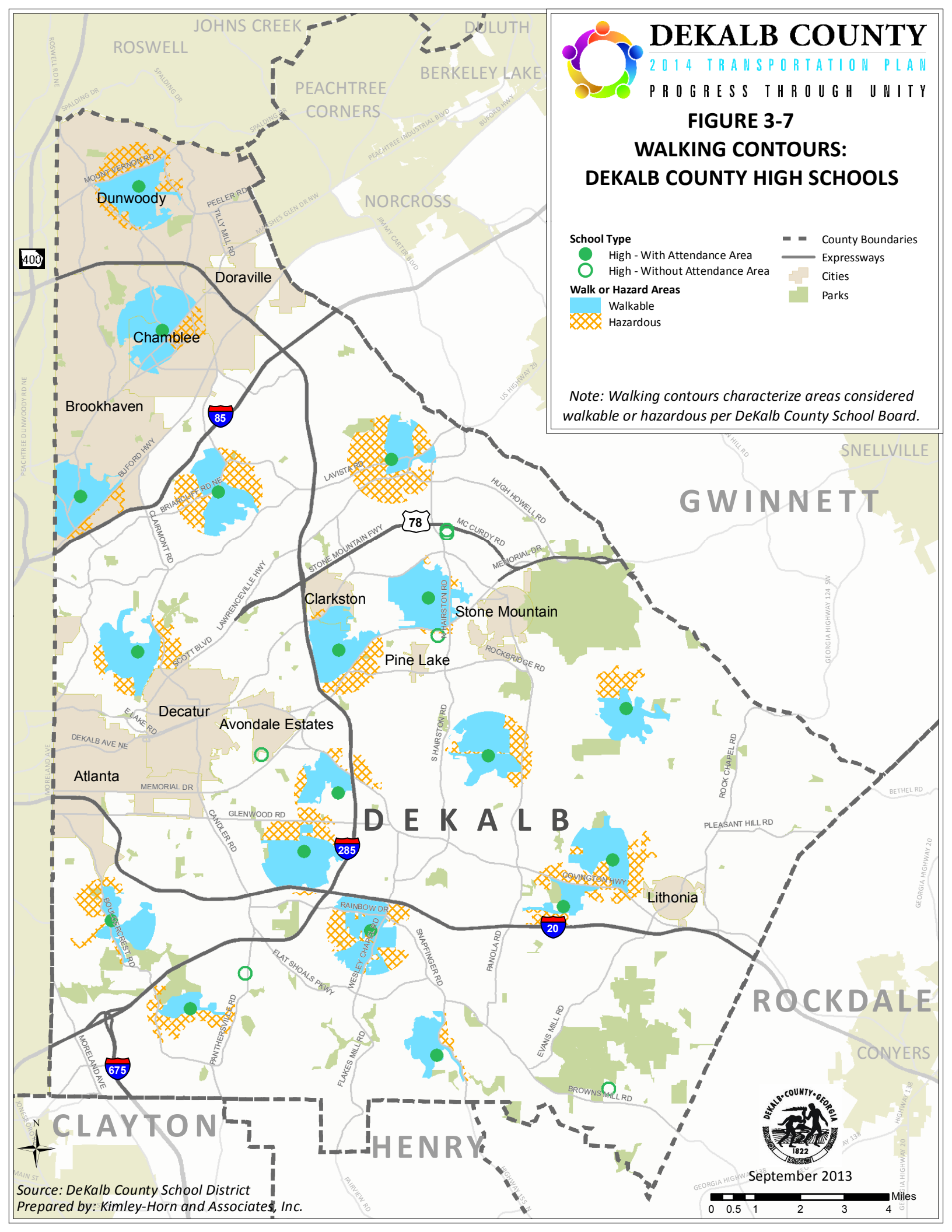


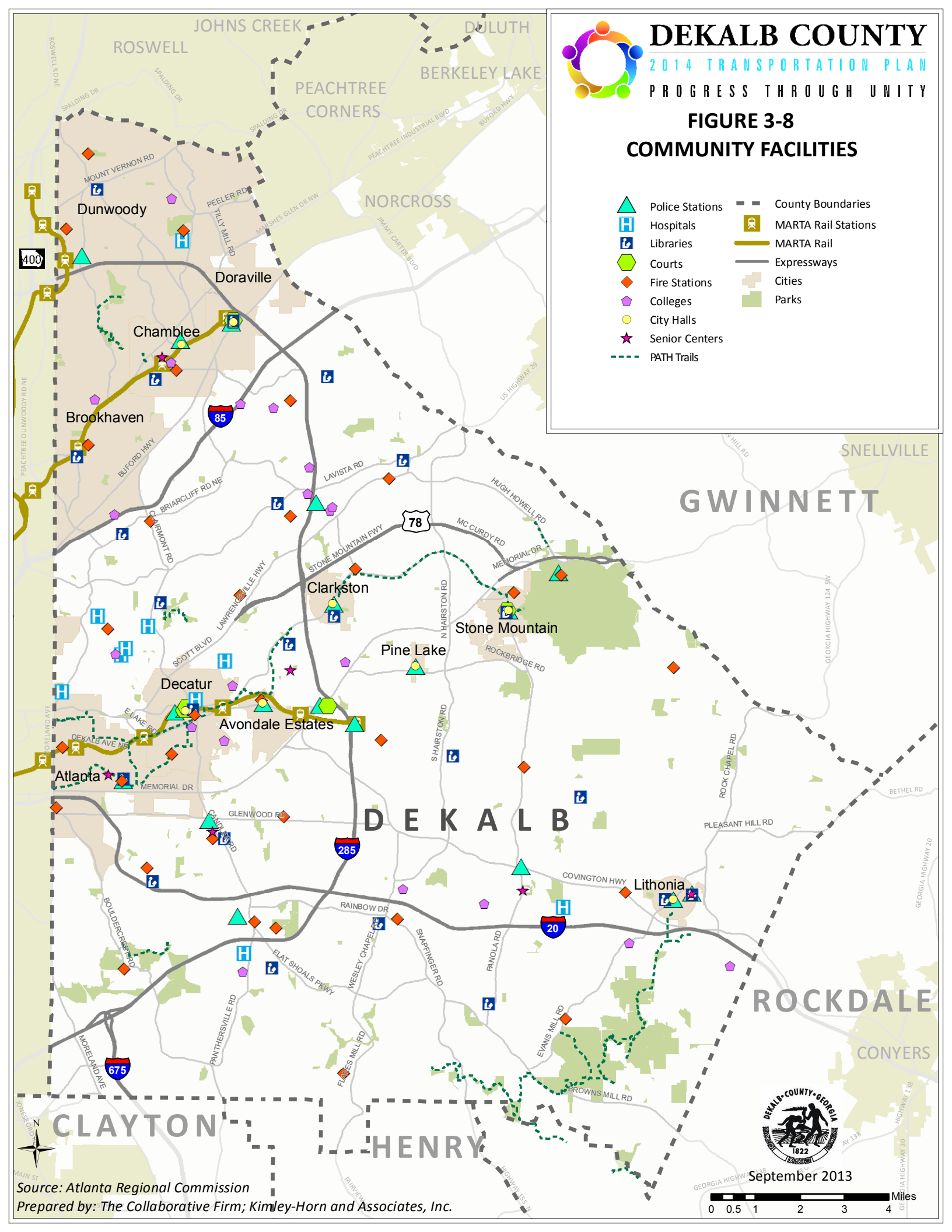
Source: DeKalb County School District, Atlanta Public Schools, Decatur City School District
Prepared by: Kimley-Horn and Associates, Inc.


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 3-4
SCHOOL ATTENDANCE AREAS:
MIDDLE/ HIGH SCHOOLS
DeKalb School District
Middle/High School Areas
DeKalb County Middle/High Schools
High - With Attendance Area
High - Without Attendance Area
Middle - With Attendance Area
Middle - Without Attendance Area
Atlanta/ Decatur School Districts
District Boundaries
Atlanta Middle Schools
Atlanta High Schools
Decatur Middle Schools
Decatur High Schools
County Boundaries
Major Roads
Expressways
Cities
JOHNS CREEK
ROSWELL
DULUTH
BERKELEY LAKE
PEACHTREE CORNERS
NORCROSS
SNELLVILLE
GWINNETT
DEKALB
ROCKDALE
CONYERS
CLAYTON
HENRY
MOUNT VERNON RD
PEELER RD
TILLY MILL RD
BUFORD HWY
BRIARCLIFF RD NE
CLAIRMONT RD
LAVISTA RD
HUGH HOWELL RD
MC CURDY RD
MEMORIAL DR
STONE MOUNTAIN FWY
LAWRENCEVILLE HWY
SCOTT BLVD
N HAIRSTON RD
S HAIRSTON RD
ROCKBRIDGE RD
ROCK CHAPEL RD
PLEASANT HILL RD
BETHEL RD
COVINGTON HWY
DEKALB AVE NE
E LAKE RD
MEMORIAL DR
GLENWOOD RD
CANDLER RD
BOULDERCREST RD
RAINBOW DR
FLAT SHOALS PKWY
WESLEY CHAPEL RD
SNAPFINGER RD
PANOLA RD
EVANS MILL RD
FLAKES MILL RD
PANTHERSVILLE RD
MORELAND AVE
BROWNS MILL RD
85
78
285
20
675
400
Source: DeKalb County School District, Atlanta Public Schools, Decatur City School District
Prepared by: Kimley-Horn and Associates, Inc.
September 2013
Miles
0 0.5 1 2 3 4


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 3-5
WALKING CONTOURS:
DEKALB COUNTY ELEMENTARY SCHOOLS
DeKalb County Elementary Schools
With Attendance Area
Without Attendance Area
Walk or Hazard Areas
Walkable
Hazardous
County Boundaries
Expressways
Cities
Parks
Note: Walking contours characterize areas considered walkable or hazardous per DeKalb County School District.
JOHNS CREEK
ROSWELL
DULUTH
BERKELEY LAKE
PEACHTREE CORNERS
NORCROSS
SNELLVILLE
GWINNETT
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
Lithonia
ROCKDALE
CONYERS
CLAYTON
HENRY
DEKALB
400
85
78
285
20
675
Source: DeKalb County School District
Prepared by: Kimley-Horn and Associates, Inc.
September 2013
Miles
0 0.5 1 2 3 4


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 3-6
WALKING CONTOURS:
DEKALB COUNTY MIDDLE SCHOOLS
DeKalb County Middle Schools
Middle - With Attendance Area
Middle - Without Attendance Area
Walk or Hazard Areas
Walkable
Hazardous
County Boundaries
Expressways
Cities
Parks
Note: Walking contours characterize areas considered walkable or hazardous per DeKalb County School District.
JOHNS CREEK
ROSWELL
DULUTH
BERKELEY LAKE
PEACHTREE CORNERS
NORCROSS
SNELLVILLE
GWINNETT
ROCKDALE
CONYERS
CLAYTON
HENRY
DEKALB
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
Lithonia
MOUNT VERNON RD
PEELER RD
PETTILLY MILL RD
MARSHES GLEN DR NW
PEACHTREE INDUSTRIAL BLVD
BUFORD HWY
SPALDING DR
JIMMY CARTER BLVD
US HIGHWAY 29
ROSWELL RD NE
PEACHTREE DUNWOODY RD NE
LAVISTA RD
HUGH HOWELL RD
MC CURDY RD
MEMORIAL DR
STONE MOUNTAIN FWY
BRIARCLIFF RD NE
CLAIRMONT RD
LAWRENCEVILLE HWY
SCOTT BLVD
N HAIRSTON RD
S HAIRSTON RD
ROCKBRIDGE RD
E LAKE RD
DEKALB AVE NE
MORELAND AVE
GLENWOOD RD
CANDLER RD
ROCK CHAPEL RD
BETHEL RD
PLEASANT HILL RD
COVINGTON HWY
RAINBOW DR
BOULDERCREST RD
FLAT SHOALS PKWY
WESLEY CHAPEL RD
SNAPFINGER RD
PANOLA RD
EVANS MILL RD
PANTHERSVILLE RD
FLAKES MILL RD
BROWNS MILL RD
GEORGIA HIGHWAY 20
GEORGIA HIGHWAY 124 SW
400
85
78
285
20
675
N
September 2013
0 0.5 1 2 3 4 Miles
Source: DeKalb County School District
Prepared by: Kimley-Horn and Associates, Inc.


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 3-7
WALKING CONTOURS:
DEKALB COUNTY HIGH SCHOOLS
School Type
High - With Attendance Area
High - Without Attendance Area
Walk or Hazard Areas
Walkable
Hazardous
County Boundaries
Expressways
Cities
Parks
Note: Walking contours characterize areas considered walkable or hazardous per DeKalb County School Board.
JOHNS CREEK
DULUTH
ROSWELL
BERKELEY LAKE
PEACHTREE CORNERS
NORCROSS
SNELLVILLE
GWINNETT
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
Lithonia
ROCKDALE
CONYERS
DEKALB
CLAYTON
HENRY
400
85
78
285
20
675
MOUNT VERNON RD
PEELER RD
TILLY MILL RD
BUFORD HWY
BRIARCLIFF RD NE
CLAIRMONT RD
LAVISTA RD
HUGH HOWELL RD
MC CURDY RD
MEMORIAL DR
STONE MOUNTAIN FWY
LAWRENCEVILLE HWY
SCOTT BLVD
S HAIRSTON RD
ROCKBRIDGE RD
E LAKE RD
DEKALB AVE NE
MEMORIAL DR
GLENWOOD RD
CANDLER RD
ROCK CHAPEL RD
PLEASANT HILL RD
BETHEL RD
COVINGTON HWY
RAINBOW DR
WESLEY CHAPEL RD
SNAPFINGER RD
PANOLA RD
FLAT SHOALS PKWY
BOULDERCREST RD
PANTHERSVILLE RD
MORELAND AVE
FLAKES MILL RD
EVANS MILL RD
BROWNS MILL RD
N
DEKALB COUNTY GEORGIA 1822
September 2013
0 0.5 1 2 3 4 Miles
Source: DeKalb County School District
Prepared by: Kimley-Horn and Associates, Inc.


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 3-8
COMMUNITY FACILITIES
Police Stations
Hospitals
Libraries
Courts
Fire Stations
Colleges
City Halls
Senior Centers
PATH Trails
County Boundaries
MARTA Rail Stations
MARTA Rail
Expressways
Cities
Parks
JOHNS CREEK
ROSWELL
DULUTH
BERKELEY LAKE
PEACHTREE CORNERS
NORCROSS
SNELLVILLE
GWINNETT
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
DEKALB
Lithonia
ROCKDALE
CONYERS
CLAYTON
HENRY
MOUNT VERNON RD
PEELER RD
TILLY MILL RD
MARSHES GLEN DR NW
JIMMY CARTER BLVD
US HIGHWAY 29
PEACHTREE INDUSTRIAL BLVD
BUFORD HWY
SPALDING DR
ROSWELL RD NE
PEACHTREE DUNWOODY RD NE
LAVISTA RD
HUGH HOWELL RD
BRIARCLIFF RD NE
CLAIRMONT RD
STONE MOUNTAIN FWY
MC CURDY RD
MEMORIAL DR
LAWRENCEVILLE HWY
N HAIRSTON RD
ROCKBRIDGE RD
SCOTT BLVD
S HAIRSTON RD
ROCK CHAPEL RD
BETHEL RD
PLEASANT HILL RD
GLENWOOD RD
CANDLER RD
COVINGTON HWY
RAINBOW DR
BOULDERCREST RD
FLAT SHOALS PKWY
WESLEY CHAPEL RD
SNAPFINGER RD
PANOLA RD
EVANS MILL RD
PANTHERSVILLE RD
MORELAND AVE
FLOWERS MILL RD
BROWNS MILL RD
GEORGIA HIGHWAY 20
GEORGIA HIGHWAY 138
400
85
78
285
20
675
N
DEKALB COUNTY GEORGIA 1822
September 2013
0 0.5 1 2 3 4 Miles
Source: Atlanta Regional Commission
Prepared by: The Collaborative Firm; Kimley-Horn and Associates, Inc.

3.6 Comparison – Existing Land Use Map vs. Future Land Use Map

Detail is provided in the Appendix of the report for each of the five planning subareas as it relates to existing and future land use, zoning, the UGPM, different comprehensive plans and Livable Centers Initiative studies that have been completed, Developments of Regional Impact that are proposed for completion, and special areas for consideration. The following report sections include two comparisons by subarea. Those comparisons are:

- Comparison of the Existing Land Use Map to the Future Land Use Map to highlight where development changes are proposed and
- Comparison of the Future Land Use Map to the Unified Growth Policy Map to understand where differences in vision for future growth exist between DeKalb County and the Atlanta Regional Commission.

North Subarea

The Northern Planning Area of DeKalb County is largely composed of low density residential sliced by commercial and multi-family residential land uses that surround the area's major transit corridors. The future land use map proposes to organize and diversify the land uses, which abut major transportation corridors. The current activity centers at the Brookhaven, Chamblee, Doraville, and Dunwoody MARTA stations as well as at the Chamblee Dunwoody Road and North Peachtree Road intersections are to remain activity centers, yet transition to be areas that cohesively encompass a broader range of land uses. This range of land uses will be created by the implementation of town centers as well as a diverse use of low, medium, and high density mixed use over areas once targeted as solely multi-family residential, high density residential, or commercial.

The areas likely to experience the most change include Buford Highway south of DeKalb-Peachtree Airport, the Brookhaven activity center, and the triangular area of centered around I-285, Ashford-Dunwoody, and Chamblee Dunwoody Road identified as the Georgetown-Shallowford Road character area. Buford Highway south of the DeKalb-Peachtree Airport, is proposed to transition from having surrounding land use areas of just multi-family residential or commercial to being targeted for only low density commercial closest to the highway, yet incorporating a mix of land uses to include medium density mixed use, low density mixed use, low density commercial, as well as town center. The Brookhaven activity center is proposed to transition from an area of intensive institutional, commercial, multi-family residential and high density residential, to being a more walkable, cohesive town center. The Perimeter Center area particularly along Ashford Dunwoody Road will experience change through allowing mixed uses where there were once areas dedicated to commercial, multi-family residential, and high-density residential independent of one another. Lastly, the Georgetown-Shallowford Road area will experience a proposed change similar to that of Perimeter Center, yet to a less intense degree. Land uses along Chamblee Dunwoody Road in the Georgetown-Shallowford area will also evolve from being independently commercial, multi-family residential, institutional to that of a greater degree of mixed use and office institutional development.

Central East Subarea

The future land uses proposed for the Central East Planning Area expand upon existing land uses in the area. There are five major areas of interest, which are intended to transition from their existing land use. The Northlake area, at the intersection of I-285 and Lavista Road is expected to evolve from a commercial area to a high-density mixed-use area. Tucker, along the Lawrenceville Hwy corridor is proposed to change from commercial and institutionally heavy land uses to town center land uses. While a mix of uses occur along Mountain Industrial Boulevard, the dominant use is industrial. The future land uses proposed for this corridor suggest that this area be maintained as industrial. The City of Clarkston is proposed to change from general commercial to a town center downtown with medium density residential and low density mixed use surrounding and replacing the current land uses of multi-family residential and commercial. Another corridor of interest is Memorial Drive. Memorial Drive is currently surrounded by commercial land uses, with scattered instructional intensive land use. The future land use plan shows a mix of larger, distinct areas of low density mixed use, and low density commercial. Similar to Clarkston, Stone Mountain is proposed to shift from commercial to town center and low density commercial. Lastly, Stone Mountain Park is planned to shift from including some large commercial areas within the park, to being identified as only greenspace. Similar to the other areas of DeKalb County, the Central East Planning Area consists primarily of low density residential. However, there are pockets among these areas that are vacant and/or undeveloped. These larger areas are located at near the intersection of Mountain Industrial Boulevard and Hugh Howell Road, at the intersection of Hwy 78 and Memorial Drive, and along the southeastern edge of Stone Mountain Park.

Central West Subarea

Several land use planning changes are slated for this planning area of DeKalb. Development at the heavily traveled intersection of I-85 and Clairmont Road is to be diversified from commercial and multi-family land use to include town center, low density mixed use, and low density commercial. The current zoning at the intersection of I-85 and Chamblee Tucker Road/Mercer University Drive is proposed to change from a mix of commercial and intensive and extensive institutional use to office/institutional. The Northlake Mall area at the intersection of I-285 and Lavista Road is to change from the existing land uses of commercial and industrial/commercial to high density mixed use and industrial. The intersections of North Druid Hills Road / Lavista Road and North Druid Hills Road / Lawrenceville Highway are both planned to evolve from commercial land use to town centers. The intersection of Clairmont Road and Briarcliff Road is to grow from majority vacant/forest land, residential low density, and institutional intensive, and industrial/commercial to primarily greenspace and town center. As a proposed large town center area, the intersection of Clifton and Briarcliff Roads should be considered more thoroughly for future transportation demands. The intersection of North Arcadia Ave and North Decatur Road is suggested to change from commercial to low density commercial and Industrial/commercial and vacant/forest land to mostly industrial uses. The land use changes planned for Decatur include changing all commercial land uses to be medium density commercial. No future land use changes were made for the neighborhood area north of the Edgewood/Candler Park MARTA station.

South East Subarea

The majority of future land use changes for this area include mixed use, higher densities and intensities, and the inclusion of additional vacant/forest lands in land uses. The I-20 and Covington Highway corridors as well as the eastern most portion of this area will likely experience the most growth. Future land uses proposed at the I-20 and I-285 interchange reflect growth from vacant land to low density commercial, growing the Wesley Chapel Road and I-20 intersection from commercial to town center. Other changes include adjusting the Panola Road and I-20 intersection from industrial, commercial, and vacant land to being industrial and town center, the Stonecrest Mall area from commercial to a larger high density mixed use area, and Lithonia's commercial land uses aspire to become town center oriented. The industrial uses currently located in the eastern section of this area along Stone Mountain Lithonia Boulevard, north of Stonecrest Mall, and at the end of Stephenson Road are suggested to remain industrial yet expand to incorporate some of the abundant surrounding vacant/forest land. Covington Highway is proposed to evolve from commercial and vacant/forest land use to low-density commercial and low density mixed use. The area identified by ARC as high-density residential land use along Hairston Road between I-20 and Covington Highway is changing only in designation. The same level of density identified by ARC's LandPro as High Density Residential is identified as suburban in DeKalb's future land use. Lastly, the parkland in the southeastern most corner of this area is suggested to be preserved as greenspace. Due to the future land use proposal for high density mixed use in the Stonecrest Mall area, future public transportation along I-20 may be necessary in the future.

South West Subarea

The future land uses for the South West Planning Area of DeKalb County will not be dramatically different from their current land use. The most significant growth is likely to occur in the planning area's four activity centers: Decatur at the intersection of Ponce de Leon Ave and Church Street, Avondale Estates at the intersection of Memorial Drive and I-285, Belvedere Park at the intersection of Memorial Drive and South Columbia Drive, and between I-20 and I-285 along the Candler Rd corridor. The Avondale Estates area is proposed to evolve from a predominately commercial, institutional intensive, multi-family residential area to a large town center. The commercially dominant areas at Belvedere Park and Candler Drive corridor between I-20 and I-285 will be considered for town center development. The commercial land uses that line the remaining portion of the Candler Road corridor and Covington Highway corridor will be limited to low density commercial. The current industrial area occupying the southwestern most region of this planning area will remain industrial, but will expand to occupy some surrounding vacant/forest land. Additionally, the neighborhood south of the Edgewood/Candler Park MARTA station shows a reduction in residential density from high density residential to medium density residential. It is proposed that this area, along with the northern portion of the area that falls in the Central West Planning Area, be reconsidered and re-evaluated for its future land use proposals. As this neighborhood falls in close proximity to the Edgewood/Candler Park MARTA station, transit-oriented development could be a strategy in the future.

3.7 Comparison – Unified Growth Policy Map/Future Land Use Map

North Subarea

Largely the UGPM and the future land uses for the North Planning area of DeKalb tend to agree, with both showing clusters of commercial and mixed-use activity along the MARTA rail stops and major transportation corridors. There are some differences however. The area around the Chamblee MARTA station on the UGPM is called out as Town Center, while the future land use expands the Town Center by including some lower density mixed use in addition to the core medium density mixed use. In Dunwoody there is a large cluster of mixed use at the intersection of I-285 and Chamblee Dunwoody Road, while this area is listed simply as Regional Employment Corridor on the UGPM. Brookhaven is identified as a Regional Attractor, likely due to Oglethorpe University, on the UGPM, but the future land use for the area includes an even larger Town Center designation that would include a mix of different uses. One other difference is that Buford Highway is shown on the future land use map as low intensity commercial, similar to its current use, but the UGPM map shows the area as region core.

Central East Subarea

The Central East portion of DeKalb Urban Growth Policy Map and future land use seem to match up fairly well. Both indicate a predominance of low density residential with some commercial corridors along Memorial Drive and Lawrenceville Highway. They also both show the industrial area just north of Stone Mountain. However, the future land use shows additional lower density commercial uses along Stone Mountain Highway especially at Brockett Road. The area around Clarkston near the intersection with I-285 and Stone Mountain Highway also has more medium density multifamily use projected, whereas the UGPM identifies the area only as a maturing neighborhood.

Central West Subarea

The UGPM does not seem to have the same extensive vision as the future land use map for the Central West part of DeKalb. While the UGPM points out the maturing neighborhoods and identifies the regional town center of Decatur, it only highlights Scott Boulevard as a commercial corridor and includes a high density mixed use area at Northlake Mall. The future land use plan adds another commercial corridor along Briarcliff through its projection of mixed uses there. It also includes Ponce de Leon Ave as an institutional corridor closer to the City of Atlanta. In addition the future land use plan shows a larger swath of mixed residential and commercial uses for Decatur as well as a large industrial area near Your DeKalb Farmer's Market south of N. Decatur Road.

South East Subarea

The South East portion of DeKalb County also shows some key differences between the UGPM and the future land use. Both agree on the preponderance of low density single family housing through most of the area, the commercial corridor along Covington Highway and the nodes of activity at the I-20 exits at Panola Rd and Wesley Chapel Road. However, there are also some fairly clear discrepancies. Perhaps the most notable is the area east of Rock Chapel Road, which the future land use map shows as a large industrial use but is labeled as rural in the UGPM. Additionally the Industrial areas to the north and east of Lithonia are not reflected in the UGPM map. The area around Stonecrest in the UGPM is simply a Community Activity Center, but the future land use plan indicates a high density mixed use area.

South West Subarea

South West DeKalb's future land use and UGPM are not dissimilar. They both recognize the dominance of low-density single-family housing, the industrial area at the intersection of I-285 and I-675, the importance of South DeKalb Mall, and the potential for development along Candler Rd and Memorial Drive. Both of these aforementioned corridors show a mix of smaller commercial uses, but do not meet the potential of the roadways that pass through them. There is a portion of the study area along Ward Lake Rd that is designated as industrial in the future land use but only as a developing suburb in the UGPM. Additionally, Kensington and Indian Creek MARTA stations are both indicated as town centers in the future land use map, whereas they are not distinguishable from the surrounding neighborhoods for ARC's UGPM.

3.8 Summary of Land Use and Zoning Needs

Figure 3-9, Figure 3-10, and Figure 3-11 show the full County Existing Land Use Map, Future Land Use Map, and Unified Growth Policy Map, respectively.

Providing opportunities for children to safely walk and bicycle to school has been identified as a community priority. DeKalb County does not provide school bus service to residences near schools. Even though these residences are within walking distances to schools, many students are still driven to and from school. Improved safety for pedestrians and bicyclists near schools will help reduce the number of students being driven to school and provide an opportunity to alleviate the roadway network of these trips.

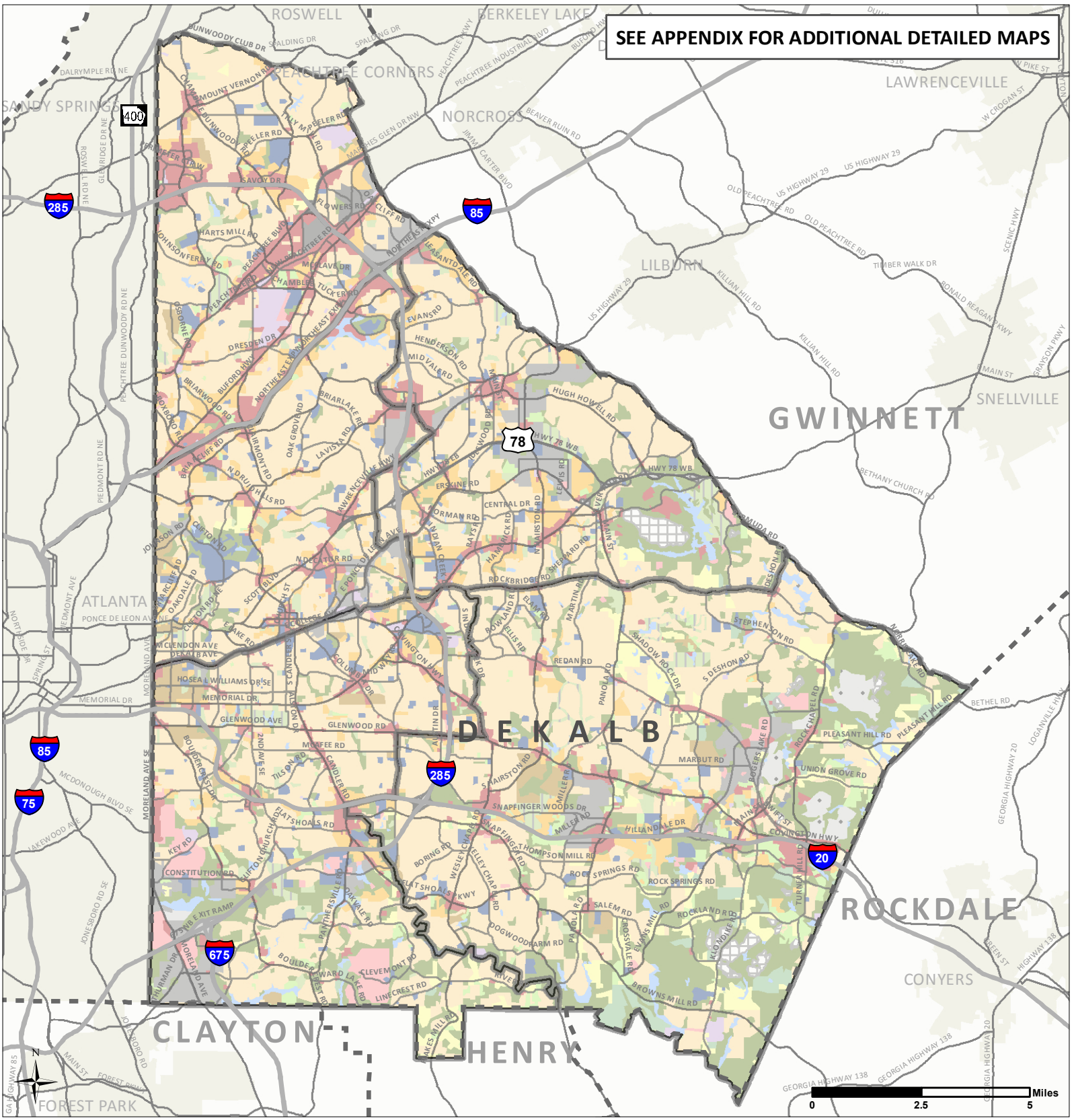
There is strong opportunity to create more density near transit rail stations. Much of the land around existing rail stations is underutilized relative to the transit infrastructure that's already available. Through land use and zoning, these transit assets can be leveraged to provide additional growth in these strategic locations within a County that is largely built out.

There is an opportunity to address access management concerns along key corridors. Access management is difficult to retrofit along mature corridors and requires coordination between land owners and transportation officials. Improvements such as driveway consolidation, interparcel connectivity, and new local street connections could all contribute to a more efficient network of roads, and help improve safety by removing extraneous conflict points.

Overlay districts and zoning updates can be used to address many different factors affecting multimodal access in activity centers. Overlay districts could include requirements for pedestrian-scale architecture and site planning, access requirements for vehicles, pedestrians, bicyclists, and transit, and parking controls. Access management improvements would depend on zoning overlays which would be required in order to make these changes.

Maximum community benefit will be achieved by directing transportation infrastructure improvements towards activity centers. Given the limited finding for transportation improvements, maintenance and improvement of infrastructure within shared community activity centers such as downtowns and around commercial nodes is important. Improved density in areas with high activity levels can provide multiple ancillary benefits including improved system efficiency for transit and a high diversity of services that are easily accessible within a confined area.

There are some inconsistencies between the future land use plan, zoning ordinances, and the UGPM. Continuing to address these over time will yield greater investment efficiencies in key areas throughout the County.



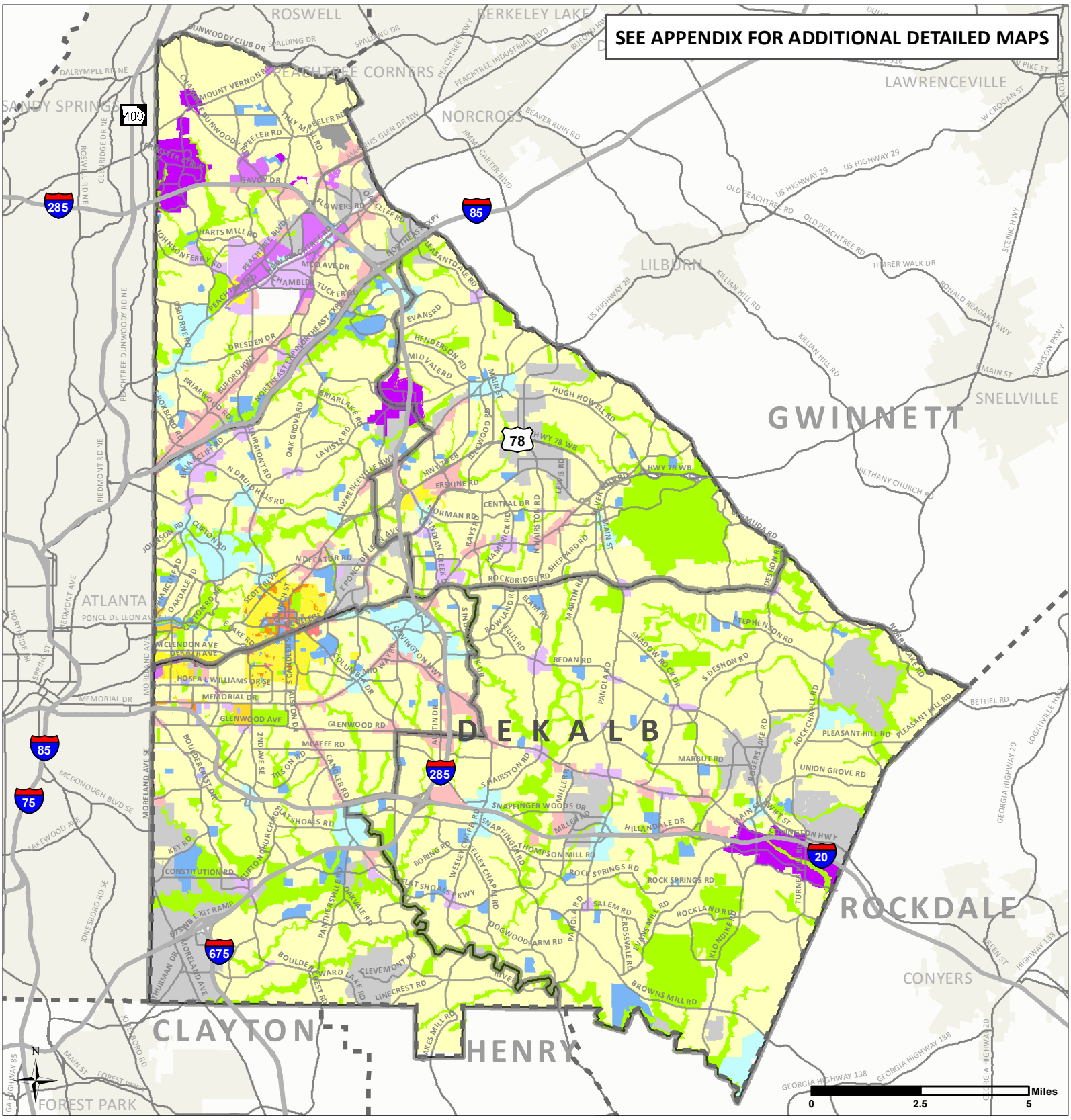
- DeKalb Planning Areas
- Commercial and Services
- High Density Residential
- Multifamily Residential
- Med. Density Single Family Res.
- Low Density Single Family Res.
- Mobile Home Parks
- Other Urban
- Extensive Institutional
- Intensive Institutional
- Industrial
- Ind. & Comm. Complexes
- Limited Access Highways
- TCU
- Transitional Areas
- Agriculture
- Forest
- Parks
- Park lands
- Cemeteries
- Golf Course
- River
- Wetlands
- Reservoirs
- Exposed Rock
- Quarries

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 3-9
EXISTING LAND USE

Source: DeKalb County
Prepared by: The Collaborative Firm; Kimley-Horn and Associates, Inc.

September 2013



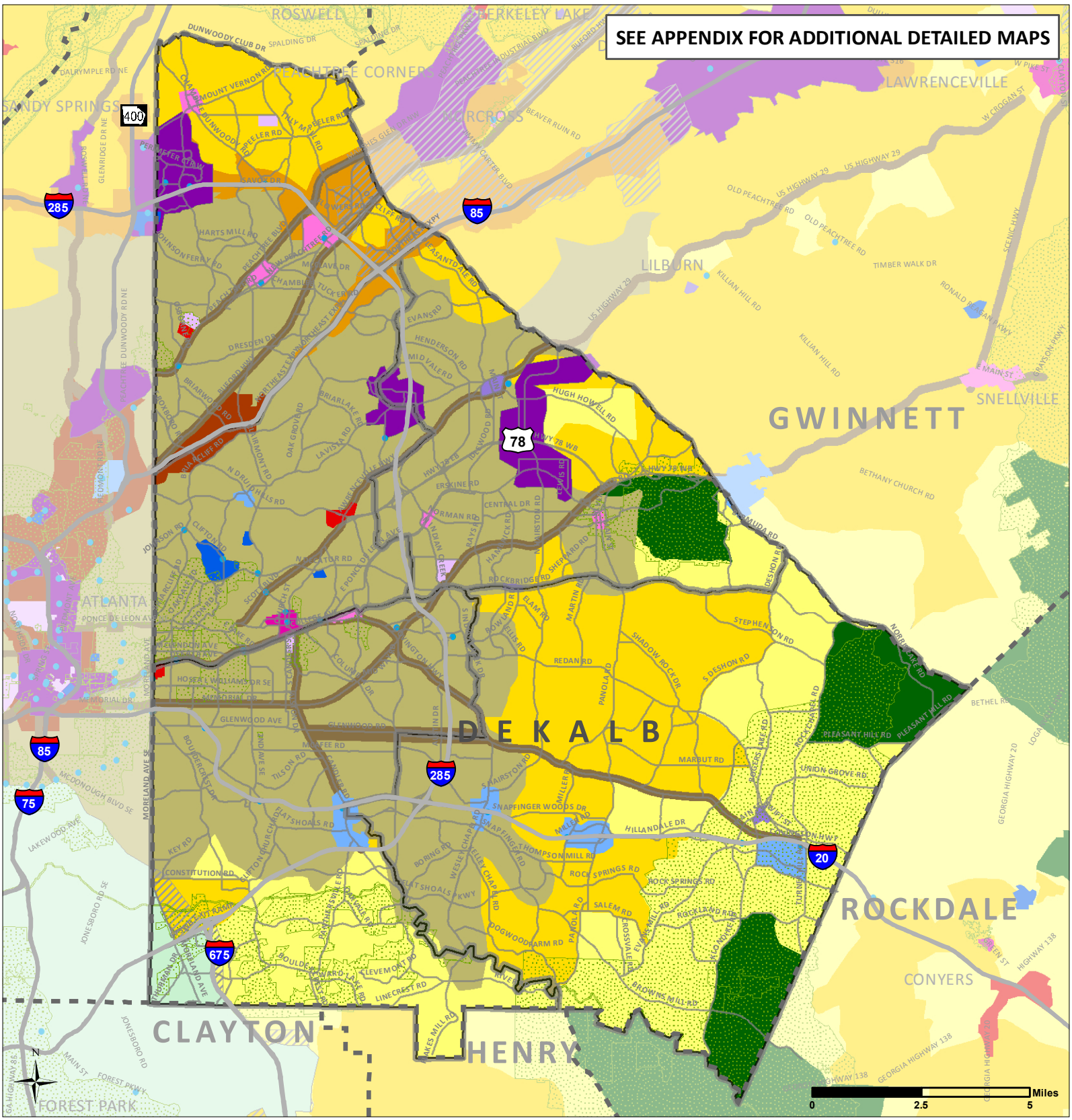
- DeKalb Planning Areas
- Low Density Commercial
- Medium Density Commercial
- High Density Commercial
- Low Density Mixed Use
- Medium Density Mixed Use
- High Density Mixed Use
- Low Density Residential
- Medium Density Residential
- Medium High Density Residential
- High Density Residential
- Very High Density Residential
- Town Center
- Office / Institutional
- Community Facilities
- Industrial
- Greenspace
- Transportation / Communication / Utilities

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 3-10
FUTURE LAND USE

Source: DeKalb County
Prepared by: The Collaborative Firm; Kimley-Horn and Associates, Inc.

September 2013



- DeKalb Planning Areas
- Region Core
- Regional Employment Corridors
- Maturing Neighborhoods
- Established Suburbs
- Developing Suburbs
- Rural Areas
- Redevelopment Corridors
- Regional Centers
- Regional Town Centers
- Major Retail Districts
- University Districts
- Wellness Districts
- Community Activity Centers
- Town Centers
- Village Centers
- Industrial/Logistics Areas
- Regionally Important Resources (Overlay)
- Station Communities

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 3-11
UNIFIED GROWTH POLICY MAP

Source: DeKalb County
Prepared by: The Collaborative Firm; Kimley-Horn and Associates, Inc.

September 2013

Real Estate

4 Real Estate and Market Trends Affecting Transportation

4.1 Residential Market: National Trends and the Metropolitan Area

Residential Market: National & Metro Snapshot

There was a major decline in home sales and residential construction during the economic downturn of the past several years. Fortunately, the housing market appears to have reached bottom and is now beginning to improve. For 2012, the annual total for existing home sales was 4.65 million, up 9.2% from the 2011 figure. The 2012 figure was the highest volume since 2007, when it reached approximately 5.03 million. This also represented the strongest annual increase since 2004.[16]

Because construction is a large part of the local economy, metro Atlanta was especially hard hit by the recession and the slow-down in the housing market. Just as in the rest of the nation, metro Atlanta's housing market is improving with closer-in areas typically performing better than areas that are further from the urban core. In December 2012, the median sales price in metro Atlanta was $165,000. This represented a 38.7% increase year-over-year from the December 2011 median sales price and an increase of 9.3% over the November 2012 figure. Bank-owned sales in December 2012 were 26% of total sales. This was down year-over-year from 47% in December 2011.[17]

4.2 Residential Market: DeKalb County Overview

Residential Sales

DeKalb County has been severely impacted by the downturn in the housing market. Table 4-1 provides an overview of the for-sale housing market in DeKalb County between 2005 and 2011. Whether number of units sold or selling price, the information shows the decline in the housing market from 2005 to 2011.

Table 4-1: Residential Sales, DeKalb County, 2005 to 2011[18]

	2005	2006	2007	2008	2009	2010	2011
New Units Sold	3,430	3,300	2,480	1,510	860	610	590
Resale Units Sold	10,230	10,590	9,330	8,370	8,720	8,130	8,820
Total Units Sold	**13,660**	**13,890**	**11,810**	**9,880**	**9,580**	**8,740**	**9,410**
Median New Price	$180,800	$228,000	$241,000	$234,000	$212,700	$203,000	$199,900
Median Resale Price	$165,000	$166,200	$160,000	$130,000	$87,500	$87,000	$70,900
Median Total Price	**$169,900**	**$178,300**	**$175,000**	**$149,800**	**$102,000**	**$96,000**	**$78,000**

[16] Source: "*Existing Home Sales Slip in December, Prices Continue to Rise; 2012 Totals Up.*" National Association of Realtors; January 22, 2013.

[17] Source: "*ABR Market Brief.*" Atlanta Board of Realtors; December 2012.

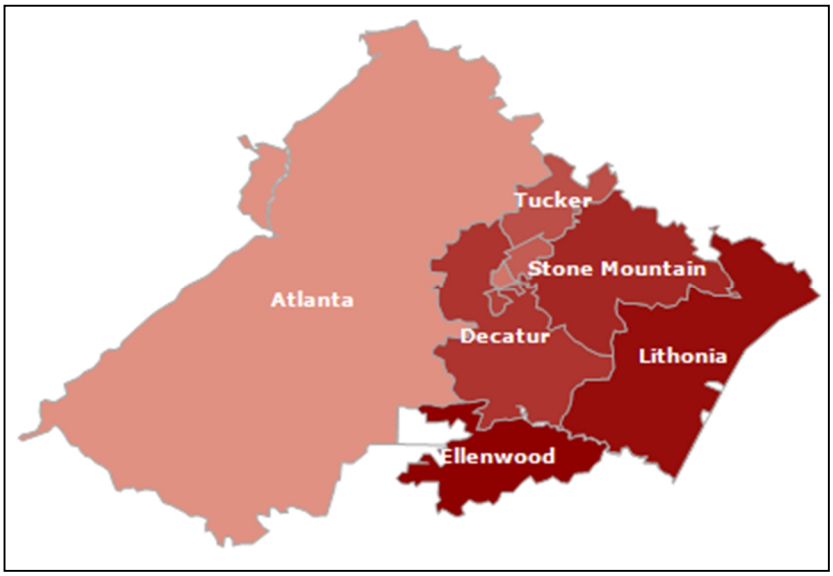
[18] Source: Atlanta Journal-Constitution Home Sales Report, Market Data Center.

Residential Foreclosures

A great deal of the softness in the DeKalb County housing market was caused by the foreclosure crisis. In February 2013, over 4,400 DeKalb County homes were somewhere in the foreclosure process, with an average foreclosure sales price of $91,300. This represents an improvement over the height of the foreclosure crisis. In February 2013, the number of homes auctioned in foreclosure was down 8.2% over the previous month and was down 40.1% over the prior year. The number of bank-owned properties was up 13.3% over the previous month but was down 55.8% over the prior year.[19]

RealtyTrac tracks and publishes statistics for the foreclosure market in metro Atlanta. They provide this data for DeKalb County at a submarket level. While these submarkets are named after various cities in the County, they do not follow the actual boundaries of the cities. Figure 4-1 below displays the RealtyTrac submarkets for DeKalb County. The lighter colors have fewer numbers of foreclosures, and the darker colors have higher numbers of foreclosures.

Figure 4-1: 2013 Foreclosures, DeKalb County[20]



According to RealtyTrac, the February 2013 foreclosure rates for the various submarkets in DeKalb County are as follows.

- DeKalb County – 1 in 297
- Ellenwood area – 1 in 178
- Lithonia area – 1 in 220
- Stone Mountain area – 1 in 290
- Decatur area – 1 in 426
- Avondale Estates area – 1 in 669
- Tucker area – 1 in 676
- Clarkston area – 1 in 790

[19] Source: RealtyTrac, February 2013.
[20] Source: RealtyTrac, February 2013.

In general, the submarkets in southern and eastern DeKalb County had higher rates of foreclosure than those in the north and the west. The Ellenwood area in south DeKalb had the highest rate of foreclosure, while the Clarkston area in central DeKalb had the lowest. For comparison purposes, the Clarkston area is one of the smallest submarkets in the County, and multi-family rental product makes up a large proportion of its housing market.

4.3 Residential Market: Rental by Submarket

Metro Atlanta Apartment Market[21]

With over 430,000 apartment units, metro Atlanta's multi-family rental market is large and varied. Unit types range from high-rise apartments in urban markets to garden apartments in the suburbs. At the end of 2012, the average occupancy rate across the metro area was 92.4%. While this was slightly lower than the average occupancy for the South (93.9%) and for the United States (94.9%), it represented the highest occupancy in metro Atlanta since the fourth quarter of 2007.

The average rent in the metro Atlanta area was $824 per month, representing a rent per square foot of $0.797. Rental rate growth in 2012 was just 1.1%, which was the slowest growth in eight quarters. At the end of the year, Atlanta was one of the few markets in the nation where rents were still below pre-recession levels. New supply levels were at a two decade low with only 1,700 units added during 2012. For the year of 2012, almost 4,400 new apartment units were permitted for construction. This represented almost twice the number approved during the previous year. However, this figure was still well below the record for multi-family permits issued, which was 18,400 for the year-ending third quarter 2000.

DeKalb County Apartment Submarkets[22]

Because DeKalb County is large and economically diverse, apartment market conditions vary greatly across the County. To better understand the local market, MPF Research divides DeKalb County into nine submarkets. Many of these submarkets are named after local cities, but their boundaries are typically much larger than the actual city limits.

Briarcliff Area Apartment Submarket

At the end of 2012, the Briarcliff Area apartment market had approximately 12,600 units, making it one of the largest submarkets in DeKalb County. This submarket includes a significant number of the apartment complexes located along the southeast side of the Buford Highway corridor. Occupancy was 93.7%, which represented an increase of 1.5% during 2012. The average monthly rent was $896 per unit and $0.897 per square foot. Over 2012, the average rent increased by 3.6%. Currently, there is one large apartment project under construction in this submarket, with 443 units.

Chamblee/Brookhaven Area Apartment Submarket

At the end of 2012, the Chamblee/Brookhaven Area apartment market had approximately 12,700 units, making it one of the largest submarkets in DeKalb County. This submarket includes a large number of the apartment complexes along the Buford Highway corridor. Occupancy was 93.3%, which represented

[21] Source: *Atlanta Apartment Market Report*; MPF Research; Fourth Quarter 2012.

[22] Source: *Atlanta Apartment Market Report*; MPF Research; Fourth Quarter 2012.

a decrease of 1.3% over the year. The average monthly rent was $972 per unit and $0.957 per square foot. Over 2012, the average rent increased by 1.1%. Currently, there is one apartment project under construction in this submarket, with 205 units.

Clarkston/Tucker Area Apartment Submarket

At the end of 2012, the Clarkston/Tucker Area apartment market had approximately 8,700 units. Occupancy was 89.1%, which represented a decrease of 0.4% during 2012. The average monthly rent was $679 per unit and $0.638 per square foot. Over 2012, the average rent decreased by 0.8%. Currently, there are no new apartment communities under construction in this submarket.

Decatur Area Apartment Submarket

Typically, demand for apartment units in the Decatur area is very strong. This strength is largely driven by the amenities found in downtown Decatur, as well as local schools. At the end of 2012, the Decatur Area apartment market had approximately 10,800 units. Occupancy was 95.8%, which represented the submarket's highest occupancy rate in five years. The Decatur area had the highest occupancy rate of any of the DeKalb submarkets. The average monthly rent was $922 per unit and $0.927 per square foot. Over 2012, the average rent decreased by 0.6%. Currently, there are no new units under construction, but there are plans to build a 240-unit apartment development in downtown Decatur on property surrounding the Decatur Court office building.

Doraville Area Apartment Submarket

At the end of 2012, the Doraville Area apartment market had approximately 6,900 units. Occupancy was 91.7%, which represented a five-year high. The average monthly rent was $673 per unit and $0.703 per square foot. Average rents increased by 3.0% over 2012, and rental rates have increased in six of the last eight quarters. There are currently no units under construction in this submarket.

Dunwoody Area Apartment Submarket

The Dunwoody Area apartment market is typically one of the best performing markets in metro Atlanta. This strength is driven by the large office employment found in the Perimeter Center area. At the end of 2012, the Dunwoody Area apartment market had approximately 9,200 units. Occupancy was 94.8%, which represented a decrease of 0.6% over the year. The average monthly rent was $1,138 per unit and $1.070 per square foot. Over 2012, the average rent increased by 1.1%. The Dunwoody area had the highest monthly rent and the highest rent per square foot of any of the DeKalb County submarkets. There is no new supply planned for 2013.

Southeast DeKalb Area Apartment Submarket

At the end of 2012, the Southeast DeKalb Area apartment market had approximately 9,100 units. Occupancy was 88.1%, which represented a decrease of 1.0% over the fourth quarter of 2012. The average monthly rent was $703 per unit and $0.66 per square foot. Over 2012, the average rent decreased by 2.3%. Currently, there are no new apartment units under construction in this submarket.

Southwest DeKalb Area Apartment Submarket

At the end of 2012, the Southwest DeKalb Area apartment market had approximately 13,100 units, which was the largest number of units of any DeKalb submarket. Occupancy was 82.5%, which was the lowest occupancy of any of the DeKalb submarkets and the only submarket in metro Atlanta with occupancy under 85%. The average monthly rent was $660 per unit and $0.651 per square foot. Over 2012, the average rent decreased by 1.2%. Currently, there are no apartment units under construction in this submarket.

Stone Mountain Area Apartment Submarket

At the end of 2012, the Stone Mountain Area apartment market had approximately 10,100 units. Occupancy was 89.6%, which represented an increase of 5.5% over the last three quarters of 2012. The average monthly rent was $622 per unit and $0.620 per square foot. This represents the lowest rent per square foot of any of the DeKalb submarkets. Over 2012, the average rent decreased by 1.2%. Currently, there are no new apartment communities under construction in this submarket.

The health of the apartment market varies greatly across DeKalb County. In general, rental rates tend to be much higher in the North and Central West subareas and lower in the Central East, South East, and South West subareas. Similar to the trends seen in rental rates, occupancy rates are much higher in the North and Central West subareas and lower in the Central East, South East and South West subareas.

4.4 Retail Market Assessment

Retail Market: National & Metro Snapshot

Even before the downturn in the national economy, retail space in the United State was overbuilt in many communities. The falling incomes of the last several years have left less disposable income for retail purchases, and internet sales have taken customers away from brick-and-mortar stores. The result is a retail real estate market with a great deal of weakness overall. On the national level, vacancy has stabilized at around 6.8% after steadily increasing during the downturn. However, average rental rates are still decreasing, and were at $14.43 at year-end 2012.[23]

Metro Atlanta's retail market has not escaped the same trends as those causing the national weakness. At the end of 2012, metro Atlanta's retail vacancy rate was 9.8%, which was much higher than the national rate and well above the metro area's pre-recession rates. In addition, rental rates for retail space in metro Atlanta have been steadily decreasing. At the end of 2012, average rental rates were $12.81, down from a high of $15.78 in 2008.[24]

Retail Market: DeKalb County Overview

DeKalb County has a large and very diverse retail market. There are over 3,300 retail buildings in the County, representing approximately 44.0 million square feet of space. The average age of these retail

[23] Source: *The CoStar Retail Report*, National Retail Market; Year-End 2012.

[24] Source: *The CoStar Retail Report*, Atlanta Retail Market; Year-End 2012.

buildings is 36.9 years, and the vacancy rate is 9.3%. The average rental rate is $12.63 per square foot. During 2012, approximately 122,000 square feet of space was absorbed. [25]

The quality and type of retail space varies greatly across the County. There is a strong concentration of high-end retail in the North and Central West subareas, and there is a significant amount of retail constructed during the early 2000s in the South East Subarea. Retail space in the South West Subarea consists largely of older, anchorless strip shopping centers. The Central East Subarea also has a high proportion of aging strip centers, especially along Memorial Drive.

Before the 1960s, downtowns were typically the centers of retail commerce. Although DeKalb County was largely developed after the dominance of downtowns had passed, the County does have several historic downtown shopping districts. The largest and most active downtown is in the City of Decatur. Other downtown business districts can be found in Avondale Estates, Chamblee, Lithonia, Stone Mountain, and the Tucker area.

For the past fifty years, retail development has tended to gravitate around enclosed malls, instead of historic downtowns. There are five enclosed malls in DeKalb County: The Gallery at South DeKalb, North DeKalb Mall, Northlake Mall, Perimeter Mall, and Stonecrest Mall. Stonecrest is the newest of the DeKalb malls, while Perimeter is arguably the most upscale and most successful. North DeKalb Mall, Northlake Mall, and The Gallery at South DeKalb have all transitioned from regional shopping destinations into mostly local-serving shopping centers.

4.5 Office Market Assessment

Office Market: National & Metro Snapshot

The United States office market was greatly impacted by the economic downturn of the past several years. The massive increases in unemployment drove down the demand for office space. The vacancy rate peaked at 13.5% in the first quarter of 2011, and has been gradually decreasing ever since. By the end of 2012, the vacancy rate had fallen to 12.5%. While this is an improvement, it is still higher than the pre-recession vacancy rate of 10.6% in 2006. Rental rates have been rising, with a fourth quarter 2012 average quoted rate of $23.12, the highest average since 2010.[26]

Metro Atlanta was not immune to the effects of the weak economy, and by most measures, the Atlanta office market has fallen behind the national market. At the end of 2012, metro Atlanta's office vacancy was 15.9%, which was much higher than the national figure. This was, however, an improvement over the peak vacancy rate of 17.5% in 2011. The average quoted rental rate at the end of 2012 was $18.77 per square foot. This figure represents a slight improvement, but it is still well below the national average ($23.12) and well below the previous metro Atlanta peak of $20.49 in 2008. [27] With the current trends of positive absorption and fairly low deliveries of new space, it is expected that the vacancy rate will

[25] Source: CoStar Group, February 2013.
[26] Source: *The CoStar Office Report*, National Office Market; Year-End 2012.
[27] Source: *The CoStar Office Report*, Atlanta Office Market; Year-End 2012.

continue to slowly decrease over the short-term. This should also create modest positive pressure on rental rates.

Office Market: DeKalb County Overview

There are just over 2,000 office buildings in DeKalb County, with 39.4 million square feet of space. The average age of these buildings is 41.8 years. At the end of 2012, the vacancy rate was 13.7%, and the average rental rate for full-service gross space was $18.49 per square foot. Absorption for 2012 was negative 16,980 square feet. [28]

Large-scale office uses tend to form in clusters, and it is difficult to create successful new office nodes. DeKalb County is fortunate to already have four concentrations of office space: Perimeter Center, downtown Decatur, Emory/CDC, and Northlake. With the exception of the Perimeter Center area, most of the office buildings in the County tend to be fairly old and a significant number are becoming functionally obsolete.

4.6 Industrial Market Assessment

Industrial Market: National & Metro Snapshot

After suffering through several years of poor economic conditions, the United States industrial market is beginning to rebound. A great deal of the recovery is driven by national retailers and third-party logistics companies who need large, modern distribution space. At the end of 2012, the national vacancy rate was 8.9%, which represented the lowest vacancy since 2008. Quoted rental rates averaged $5.53, which was the highest rental rate since 2009. During the fourth quarter of 2012, approximately 20.6 million square feet of industrial space were delivered, and 39.6 million square feet were under construction.[29]

Metro Atlanta's industrial market is somewhat weaker than the nation's. The metro vacancy rate was 12.0% at the end of 2012, which was much higher than the national rate of 8.9%. Still, this was metro Atlanta's lowest vacancy since 2008, when the rate was also 12.0%. The average quoted rental rate was $3.80, which is much lower than the national rate ($5.53) and still lower than metro Atlanta's peak of $4.39 in 2008.[30]

Industrial Market: DeKalb County Overview

There are 1,400 industrial buildings in DeKalb County with 60.3 million square feet of space. The average age of these buildings is 37.5 years. At the end of 2012, the vacancy rate was 8.5%. The average rental rate for modified gross leases was $4.29 per square foot, while the average for triple net leases was $3.52 per square foot. During 2012, the County experienced negative absorption of just under 3,000 square feet.[31]

Industrial uses typically locate close to major transportation arteries. DeKalb County is no exception to this; most industrial uses in the County are located in clusters along I-285, I-85, I-20, or US 78.

---

[28] Source: CoStar Group, February 2013.

[29] Source: *The CoStar Industrial Report*, National Industrial Market; Year-End 2012.

[30] Source: *The CoStar Industrial Report*, Atlanta Industrial Market; Year-End 2012.

[31] Source: CoStar Group, February 2013.

The industrial market in DeKalb is mature. Industrial uses are sensitive to land price, and because non-residential land in DeKalb is relatively scarce compared to some adjacent counties, large industrial users now typically look much further out from the core of metro Atlanta. Also, industrial uses often locate fairly close to the decision-maker's residence. The low supply of high-end executive housing in some areas of DeKalb hurts the County's ability to attract industry.

4.7 Potential Future Market Trends

Both the economic base and the built environment vary greatly across DeKalb County. Therefore, it is not surprising that certain areas have fared better than others from an economic standpoint. In order to understand future development trends for the County, it is important to look closely at the smaller areas that are especially well-suited for redevelopment or new development.

Each subarea of the County includes several nodes or corridors with opportunities for future growth or redevelopment. Figure 4-2 through Figure 4-6 provide an overview of the areas with the most potential for enhanced market performance. This development outlook is based on current market conditions and performance dynamics, which are always in flux and subject to change.

Market Trends Explanations

The following categories are used on the maps to denote the various redevelopment or development opportunities and potential market enhancements.

Mixed Use Infill

Over the past two decades, developments that include some combination of office, retail, and residential uses have greatly increased in favor with both consumers and with commercial tenants. In areas of the County that have strong real estate dynamics but functionally obsolete commercial properties, it is possible and desirable to redevelop these older properties to include a variety of new commercial and residential uses.

Retail Pruning

As retail markets shift and mature, it is not uncommon for areas to be left with obsolete retail space or just too much retail space in general. In these instances, it is imperative that non-productive retail space be removed from the market so that the remaining space can remain economically viable. This pruning can occur through redevelopment into other uses; it is usually not the result of legislative action.

Retail Re-Tenanting

Over time, shopping centers and retail districts may no longer effectively serve their surrounding trade area. In cases where significant retail space is supportable by the local population but the retail properties are older and tend to struggle, it may be necessary for the buildings to be renovated and for a more appropriate tenant mix to be created.

Office Reinvestment

A great deal of the office space in DeKalb County is fairly old, and much of it is becoming functionally obsolete. In areas with good access and strong amenities, efforts should be made to encourage the rehabilitation and reconfiguration of the older office buildings to serve a new generation of tenants.

Flex/Industrial

Because DeKalb is a maturely developed county, there is not a great deal of land available for additional industrial or flex (office/industrial) space. However, industrial uses help to diversify both the job market and the tax base, and these uses should be encouraged where viable and appropriate.

Existing Residential Reinvestment

In established and mature residential areas, where home values are rising, efforts should be made to encourage the renovation of the existing housing stock.

Residential Densification

Certain established residential areas are largely built-out, but continue to grow in popularity. In these instances, it is possible to accommodate additional growth through infill development. This increases residential supply in the market and leads to an overall increase in density.

Future Market: North Subarea

The North Subarea has several opportunities for mixed use development. The area around Perimeter Mall has been home to a great deal of retail and office development for several decades. Now, more housing is being added to the area, and many of the older office properties are slated for redevelopment with a higher density and a mix of uses. Likewise, the Brookhaven area is beginning to see mixed use development, largely because of spillover growth from the Buckhead district in the City of Atlanta. The Town Brookhaven development is an example of this new mixed use trend, and its success likely points to more of this type of development in the future. The site of the former General Motors plant in Doraville is another likely location for mixed use development. It provides a relatively large site with interstate accessibility and visibility. Further to the south, the Buford Highway corridor provides another opportunity for large-scale redevelopment. Many of the apartment complexes that currently line the corridor are old and are likely reaching the end of their life cycle. Because of the corridor's proximity to the major job center of Buckhead, this area could possibly see both denser residential development and mixed use development.

Future Market: Central East Subarea

The Central East Subarea is a mature market, and many of the major activity centers have passed their peak and are now in need of reinvestment. The area around Northlake Mall was once a significant retail and office node for metro Atlanta, but much of this commercial space is becoming functionally obsolete. Fortunately, the strength of the area's housing stock and its proximity to major interstates provide an opportunity for redevelopment of the office and retail properties. Over the longer term, Northlake Mall may no longer work as an enclosed shopping center, but its location and its strong anchor line-up make it, and the surrounding shopping centers, candidates for redevelopment as mixed use projects. Across I-285 to the east of the mall, several of the older office buildings could attract new tenants if landlords could be incentivized to invest in their properties and bring them up to current standards. To the north and south of US 78, the Mountain Industrial area has historically been an important part of the metro Atlanta industrial market. While the industrial buildings are older and somewhat obsolete, this is still a healthy industrial market that should be enhanced and protected.

There is a great deal of outdated retail in this subarea. The Lawrenceville Highway corridor has a large number of older retail properties that struggle to find tenants. Many of these centers will likely need to be converted to other uses. Retail centers along Memorial Drive also suffer from high vacancies and general disinvestment. Simply put, there is much more retail space along these corridors than the surrounding residential markets can support. It is likely that retail pruning is the only way to create strong and vibrant retail markets in these areas. Older shopping centers with high vacancies should be demolished or converted to other uses so that the more successful centers can thrive. In Stone Mountain's historic downtown, retail vacancies have risen and the area appears to have lost its critical mass of unique specialty shops and restaurants. There are efforts underway to revitalize the area with an emphasis on the arts. These efforts provide an opportunity to re-tenant the downtown with a more successful mix of shops and services.

Future Market: Central West Subarea

The Central West Subarea has numerous opportunities for reinvestment and growth. This is largely because of the strong economic engines of the CDC and Emory University, as well as the retail and restaurant amenities of downtown Decatur. Mixed use development already exists in downtown Decatur and in the area directly around Emory University. Based on the success of the existing projects, it is likely that more mixed use development will follow. The area along I-85 around the North Druid Hills Road interchange is another likely candidate for mixed use development, and plans are already underway to add housing and retail to the Executive Park office development.

Overall, the population and income levels in this subarea are strong and can support a great deal of retail. However, several areas are in need of retail re-tenanting. North DeKalb Mall has lost many of its interior tenants, but the big box tenants facing the exterior continue to do well. There is an opportunity to re-tenant this center as a big box power center or possibly a mixed use lifestyle center. Further to the north along Lawrenceville Highway and in the area just to the south of Northlake Mall, there are older strip shopping centers that need to be renovated and re-tenanted. The North Druid Hills corridor is another area with strong retail potential, but many old, and somewhat outdated, shopping centers.

There are opportunities for flex/industrial redevelopment to the east of Decatur and also along I-285 to the north of US 78. Some of the office areas to the south of Northlake Mall are good candidates for updating and reinvestment because of the strong residential base in the area.

Future Market: South East Subarea

The South East Subarea is home to some of the newest development in the County, largely because it was one of the last areas in DeKalb with significant tracts of vacant land. The area around Stonecrest Mall has yet to fully develop, and the mall could form the nucleus of a new mixed use development. The proposed bus rapid transit or heavy rail station could provide a boost to the long-term viability of this retail center.

The retail area along Wesley Chapel Road to the north of I-20 has suffered from the loss of major retailers, such as Wal-Mart and Kmart. While the area has been successful in drawing new retailers, there is still an opportunity for re-tenanting to create a stronger mix of merchants. Downtown Lithonia also provides an opportunity for retail re-tenanting, leveraging the historic character of the downtown to create

a more successful mix of specialty shops and restaurants. In terms of industrial development, there is an opportunity to improve and increase the industrial space to the west of Lithonia and north of I-20.

Future Market: South West Subarea

The South West Subarea is beginning to see the spillover effects of redevelopment in adjacent areas of the City of Atlanta. This growth provides several opportunities for redevelopment and reinvestment within the subarea. In the residential areas directly to the south and east of the City of Atlanta, many of the older neighborhoods are becoming more desirable, and there is an opportunity for continued reinvestment in the existing residential properties. In the residential areas south of downtown Decatur, development pressure and rising home prices are leading to more infill projects that are gradually increasing the density of the area.

The Memorial Drive corridor has more retail space than can be supported by the local market. It is likely that many of the older and obsolete shopping centers will have to be removed or repurposed in order to stabilize the remaining retail centers. Along College Avenue, between Decatur and Avondale Estates, there is a need to re-tenant the existing centers to provide a better match with the customer base in the area.

The area surrounding the Gresham Road and I-20 interchange provides an opportunity for mixed use development; however the majority of the blighted commercial property in the area would have to be assembled. In addition, a future bus rapid transit transition could greatly increase commercial activity in the area. The Moreland and Bouldercrest corridors are already home to industrial uses in this subarea. There is potential for this area to support additional and more viable flex/industrial development, based on location, if the aesthetics and amenities are improved.

4.8 DeKalb County Market Key Findings

DeKalb Building Infrastructure is Aging. The average age of office buildings in the County is 41.8 years; for industrial buildings, the average is 37.5 years; and for retail buildings it is 36.9 years, and the County faces many challenges as the community's buildings continue to age. Already, many areas of the County are at a crossroads. As buildings become functionally obsolete, major reinvestment will be required to retrofit or renovate these structures. If these investments are not made, areas could sink into disinvestment, and even blight. However, reinvestment in the community will only occur if economic development efforts create market forces that make the expense economically worthwhile.

Most areas of DeKalb County do not have independent internal economic generators, but instead are strongly influenced by development shared with or in neighboring jurisdictions. The Perimeter area is jointly supported by north Fulton County, and western DeKalb County is closely intertwined with the City of Atlanta. It is vital that the County pinpoint opportunities to grow the local economic base. The strongest and most successful internal economic generators in DeKalb County are Emory University and the CDC.

There are several successful commercial nodes across the County. Currently there is little spillover effect from most of these areas into other parts of DeKalb. The geographic concentrations are strong, but the

customer base varies widely across the County; therefore, so do types and viability of the commercial products.

Commercial areas that are in decline present both challenges and opportunities for DeKalb County. While there is an inherent challenges to attract reinvestment into declining commercial properties, there is also valuable infrastructure already in place that can serve as a competitive advantage.

DeKalb's high-end residential areas should be protected from disinvestment. Very often, location choice for office and industrial uses are based on proximity to the home of executives, or high-level employees who are able to make this decision. If DeKalb continues to lose executive housing in certain parts of the County, it will be very difficult to bring high-quality commercial development to the County as a whole, and particularly those nearby commercial areas.

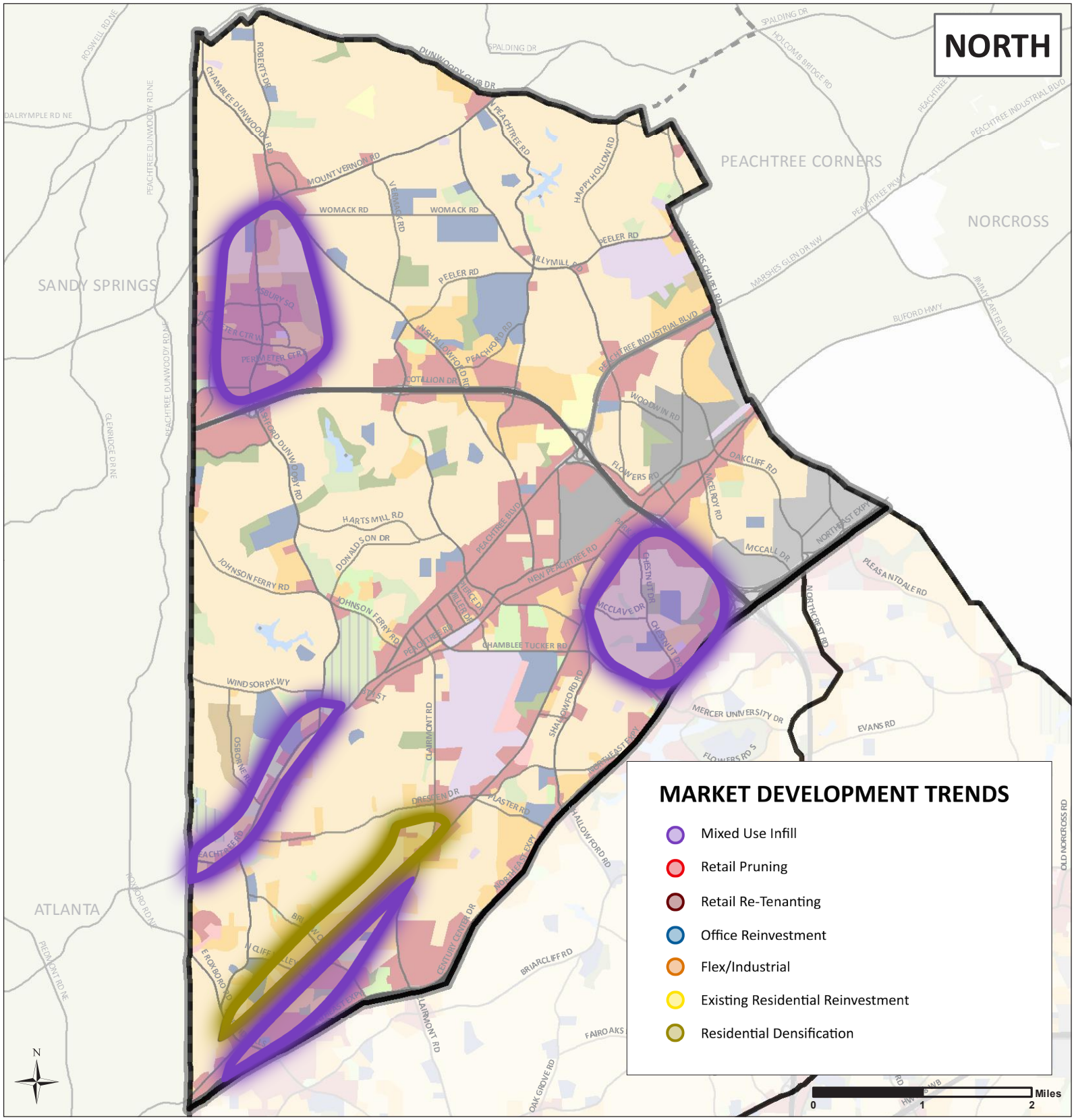
The retail market in DeKalb County faces many challenges including aging buildings combined with a changing market. Retail buildings in the County tend to be fairly old. In many areas, the retail centers and their tenants no longer adequately serve the local population, and there needs to be a re-tenanting of these centers. In other areas, there is simply too much retail space for current market conditions, and retail square footage needs to be removed from the market.

DeKalb County's location near the core of one of the Southeast's most vibrant metropolitan areas is a great asset. The County has the opportunity to create sustained economic growth over the long-term just based on better leveraging its location. However, future growth will depend on creating areas with strong amenities and a high quality of life.

There is untapped potential in the existing bioscience and life sciences research concentrations in both the CDC and Emory University. These assets could be leveraged to spur further commercial development.

The existing MARTA rail stations are under-leveraged in terms of transit-oriented development. This includes the kind of mixed use development that could be mutually beneficial for both MARTA and the communities in DeKalb County.

Different parts of DeKalb County have very different needs for economic development so no single approach will work countywide. The County should look at the strengths and weaknesses of each section of the County and then create an economic development plan suited to each area.



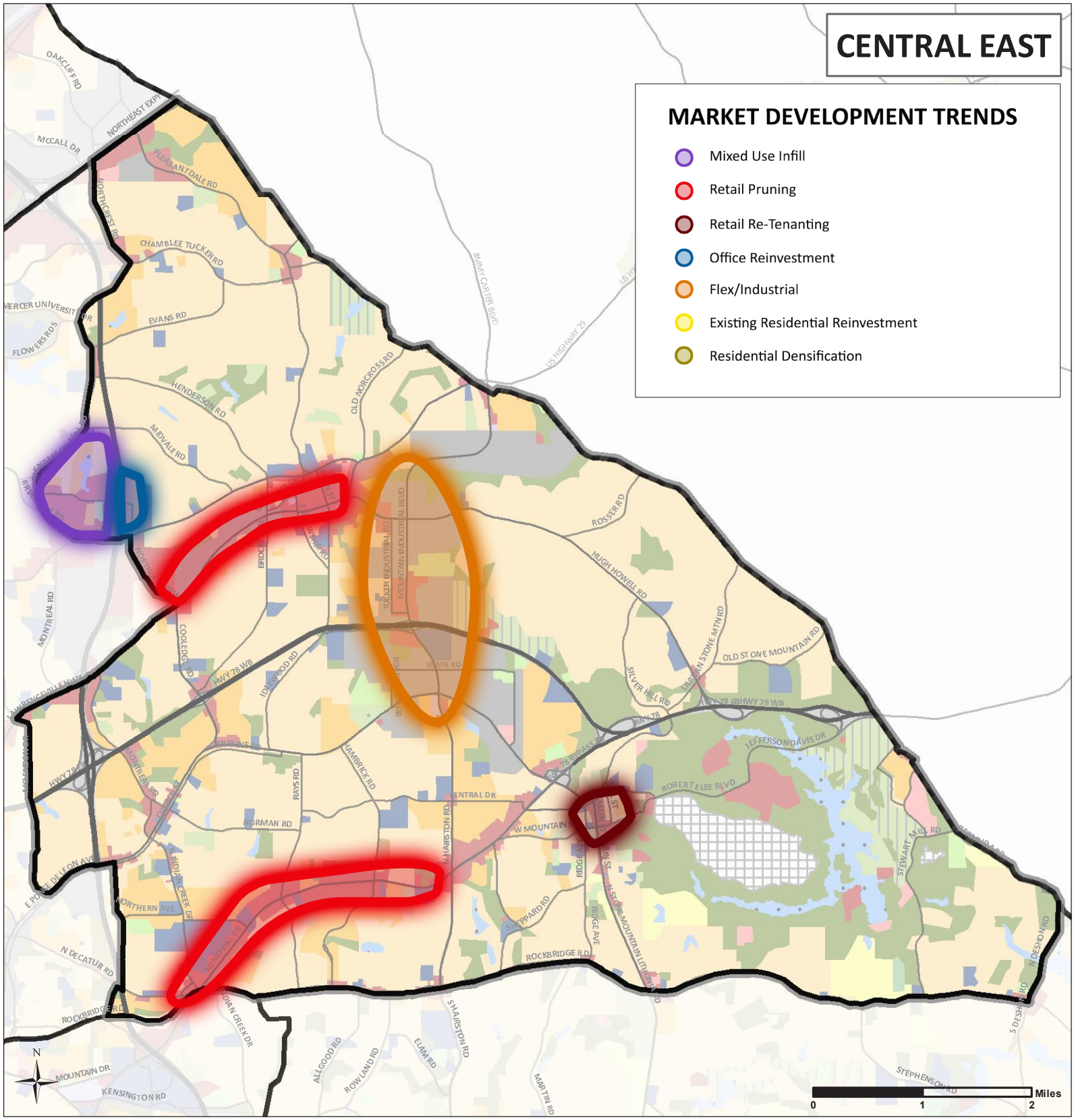
DeKalb Planning Area
Commercial and Services
High Density Residential
Multifamily Residential
Med. Density Single Family Res.
Low Density Single Family Res.
Mobile Home Parks
Other Urban
Extensive Institutional
Intensive Institutional
Industrial
Ind. & Comm. Complexes
Limited Access Highways
TCU
Transitional Areas
Agriculture
Forest
Parks
Park lands
Cemeteries
Golf Course
River
Wetlands
Reservoirs
Exposed Rock
Quarries

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 4-2
EXISTING LAND USE

Source: DeKalb County
Prepared by: The Collaborative Firm and Kimley-Horn and Associates, Inc.

September 2013

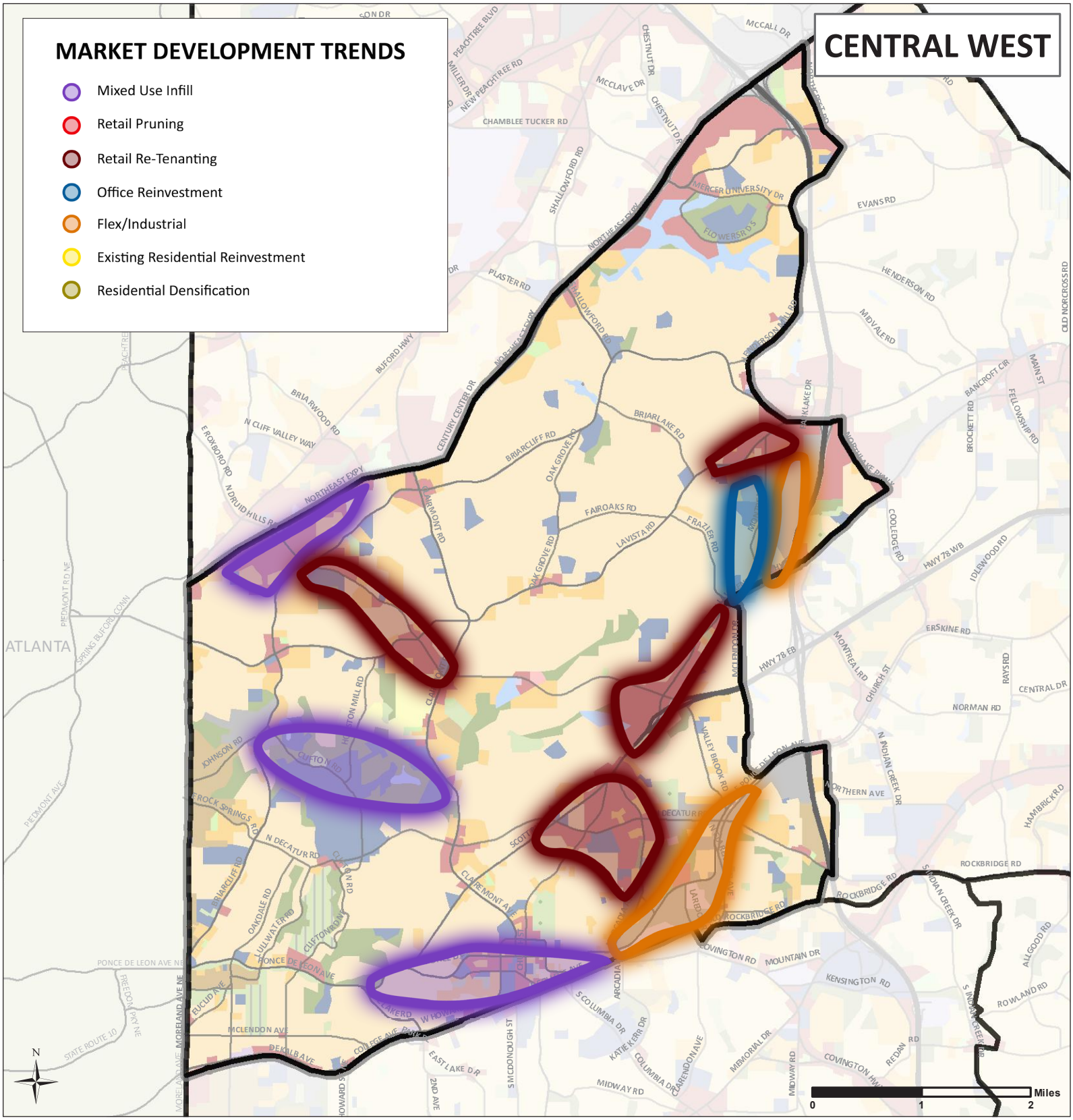


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 4-3
EXISTING LAND USE

Source: DeKalb County
Prepared by: The Collaborative Firm and Kimley-Horn and Associates, Inc.

September 2013



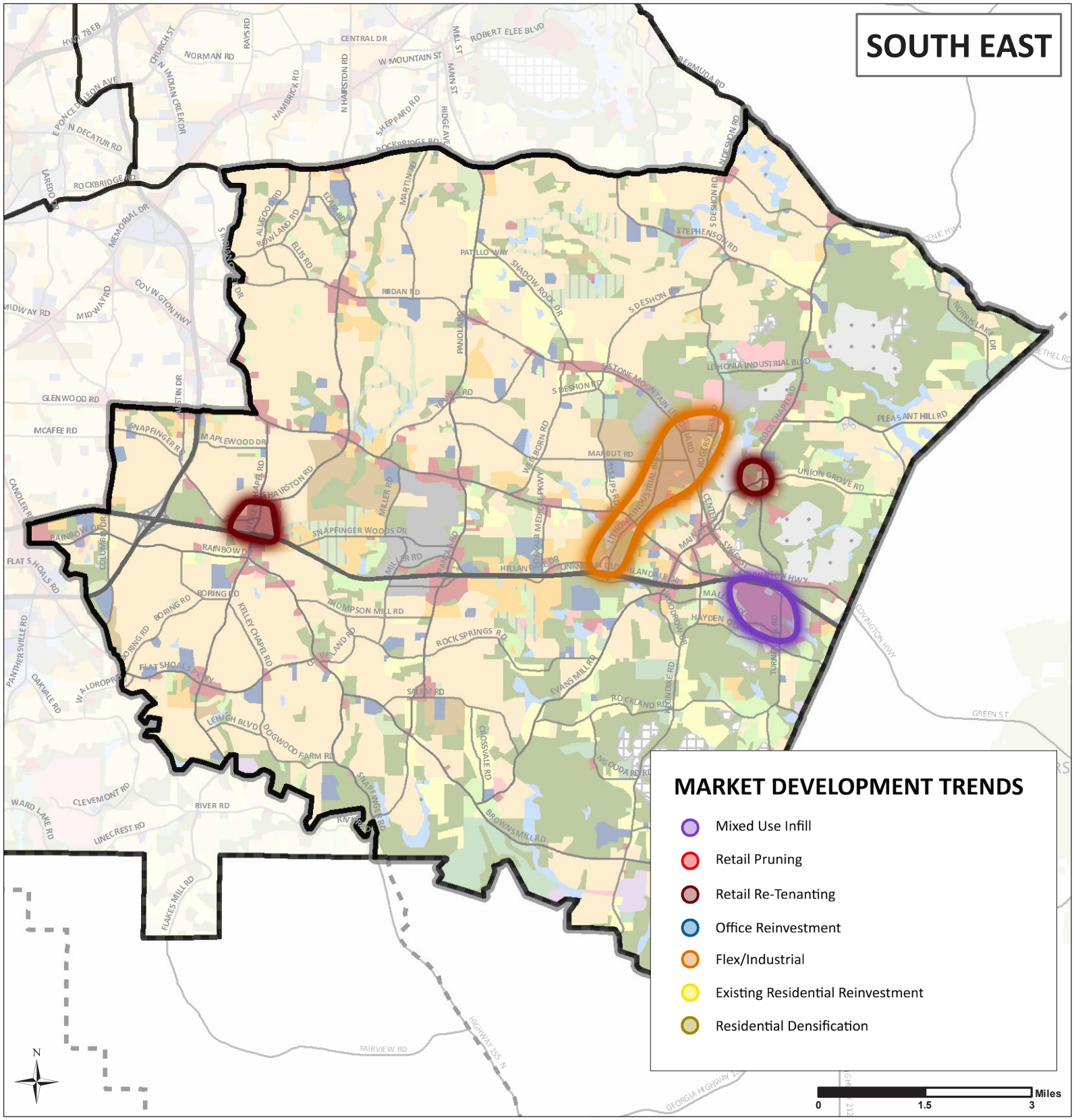
DeKalb Planning Area
Commercial and Services
High Density Residential
Multifamily Residential
Med. Density Single Family Res.
Low Density Single Family Res.
Mobile Home Parks
Other Urban
Extensive Institutional
Intensive Institutional
Industrial
Ind. & Comm. Complexes
Limited Access Highways
TCU
Transitional Areas
Agriculture
Forest
Parks
Park lands
Cemeteries
Golf Course
River
Wetlands
Reservoirs
Exposed Rock
Quarries

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 4-4
EXISTING LAND USE

Source: DeKalb County
Prepared by: The Collaborative Firm and Kimley-Horn and Associates, Inc.

September 2013



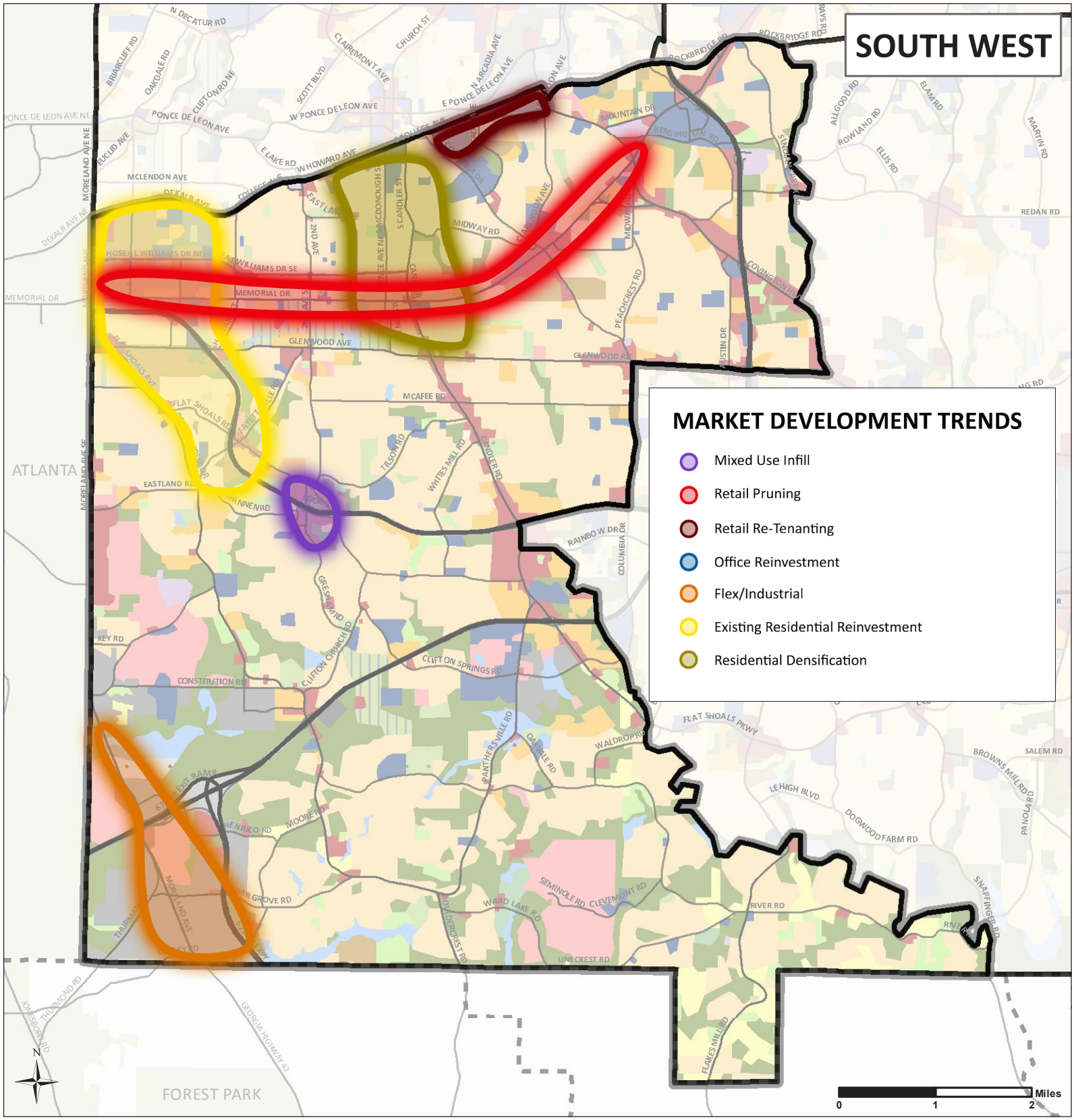
DeKalb Planning Area
Commercial and Services
High Density Residential
Multifamily Residential
Med. Density Single Family Res.
Low Density Single Family Res.
Mobile Home Parks
Other Urban
Extensive Institutional
Intensive Institutional
Industrial
Ind. & Comm. Complexes
Limited Access Highways
TCU
Transitional Areas
Agriculture
Forest
Parks
Park lands
Cemeteries
Golf Course
River
Wetlands
Reservoirs
Exposed Rock
Quarries

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 4-5
EXISTING LAND USE

Source: DeKalb County
Prepared by: The Collaborative Firm and Kimley-Horn and Associates, Inc.

September 2013



- DeKalb Planning Area
- Commercial and Services
- High Density Residential
- Multifamily Residential
- Med. Density Single Family Res.
- Low Density Single Family Res.
- Mobile Home Parks
- Other Urban
- Extensive Institutional
- Intensive Institutional
- Industrial
- Ind. & Comm. Complexes
- Limited Access Highways
- TCU
- Transitional Areas
- Agriculture
- Forest
- Parks
- Park lands
- Cemeteries
- Golf Course
- River
- Wetlands
- Reservoirs
- Exposed Rock
- Quarries

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 4-6
EXISTING LAND USE

Source: DeKalb County
Prepared by: The Collaborative Firm and Kimley-Horn and Associates, Inc.

September 2013

Roadway

5 Our Roadway Network

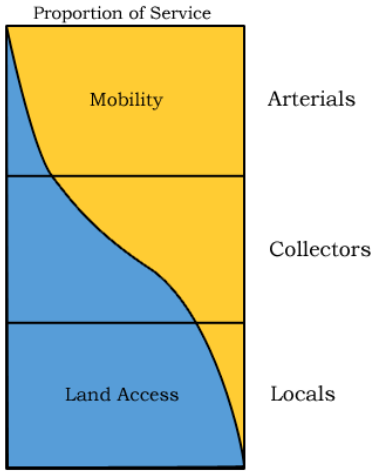
Approximately 3,000 miles of roadway exist in DeKalb County. The study network used in the transportation plan is a subset of the overall roadway system. The study network includes all roadways that are a collector or higher functional classification on either the GDOT or DeKalb County functional classification system (described in more detail below) for a total of 785 miles of roadway. Some mapping and analysis was conducted for the entire system, where data were available; the majority of inventory and mapping occurred on the selected study network.

5.1 Functional Classification

Summary of streets into "functional" classifications aids communication about the transportation system amongst policy makers, planners, engineers, and citizens. The functional classification system categorizes streets along a general hierarchy that accounts for the inverse relationship between *access* and *mobility* as shown in Figure 5-1, which are two major considerations to help distinguish between arterials and local streets. Roadways that are higher speed and higher volume typically provide less access while roadways that are lower volume and lower speed can more comfortably accommodate greater access.

The primary purpose of local or neighborhood streets is to provide a high level of access. These streets are intended to serve localized areas or neighborhoods with low speeds and low volumes, including local commercial and mixed-use land uses, and are not intended for use by large volumes of through traffic. The primary function of arterials is to provide a high level of mobility for vehicles by carrying more traffic at higher speeds and higher volumes. A challenge of this increased vehicular mobility and high speeds is the possibility of reduced safety and mobility of pedestrians and bicyclists along the corridor.

Figure 5-1: Access versus Mobility



Source: Federal Highway Administration[32]

The Georgia Department of Transportation classifies the existing public street network in DeKalb County as one of the following: Interstate, Freeway, Principal Arterial, Minor Arterial, Collector, and Local

[32] http://www.fhwa.dot.gov/planning/processes/statewide/related/functional_classification/fc02.cfm

Roadway. DeKalb County provides a slightly different classification system of Freeways, Major Arterials, Minor Arterials, Collectors, and Local Roadways. The two classification systems exist because they are used for different purposes. The GDOT classification system is used to assist with funding prioritization – in general, the higher the functional classification, the higher the funding priority. In order to prevent counties from classifying all of their roads as high classifications (to make those roads more competitive for funding), GDOT has created guidelines for how county roadways can be classified. Those guidelines assign maximum percentages to regulate how much of a network can be classified in each category. This system, while generally intended to create a fair playing field places DeKalb County at a slight disadvantage as compared with other counties. DeKalb County is more urban than other counties in the region and it is also near the hub of the metro area so the roadway network is more likely to have a higher percentage of arterials and freeways.

On the other hand, DeKalb County bases much of its zoning, ordinances, funding, design criteria, and other items on the County-determined functional classification of its roadways. For example, a major arterial will most likely have a different cross-section design than a local roadway. Also, a higher classified roadway might receive higher priority for the construction of sidewalks than a smaller more local road. Because so many internal decisions are based on the functional classification, the County created its own functional classification system based solely on the intended function of the roadway. When DeKalb County is working with GDOT to fund roadway projects, the GDOT functional classification system is used. When DeKalb is primarily funding a project on its own or determining design criteria that impact adjacent developments, the DeKalb functional classification system is used.

Table 5-1 illustrates the differences in the two classification systems. In general, DeKalb County tends to classify streets at a higher classification level than the Georgia Department of Transportation.

Table 5-1: Miles of GDOT Functional Classification in the DeKalb study network[33]

Functional Classification	GDOT	DeKalb County
Interstate	55 miles	n/a
Freeway	12 miles	66 miles
Major/Principal Arterial	53 miles	302 miles
Minor Arterial	274 miles	197 miles
Collector	200 miles	115 miles
Local Road	181 miles	36 miles

Table 5-2 illustrates the functional classifications for the roadways considered within the study network of the DeKalb County CTP. Due to the large extent of the geographical area this plan considers, there are many other local roadways within DeKalb County that are not specifically addressed in this study.

[33] Note: The DeKalb County column only includes the amount of miles in the study network.

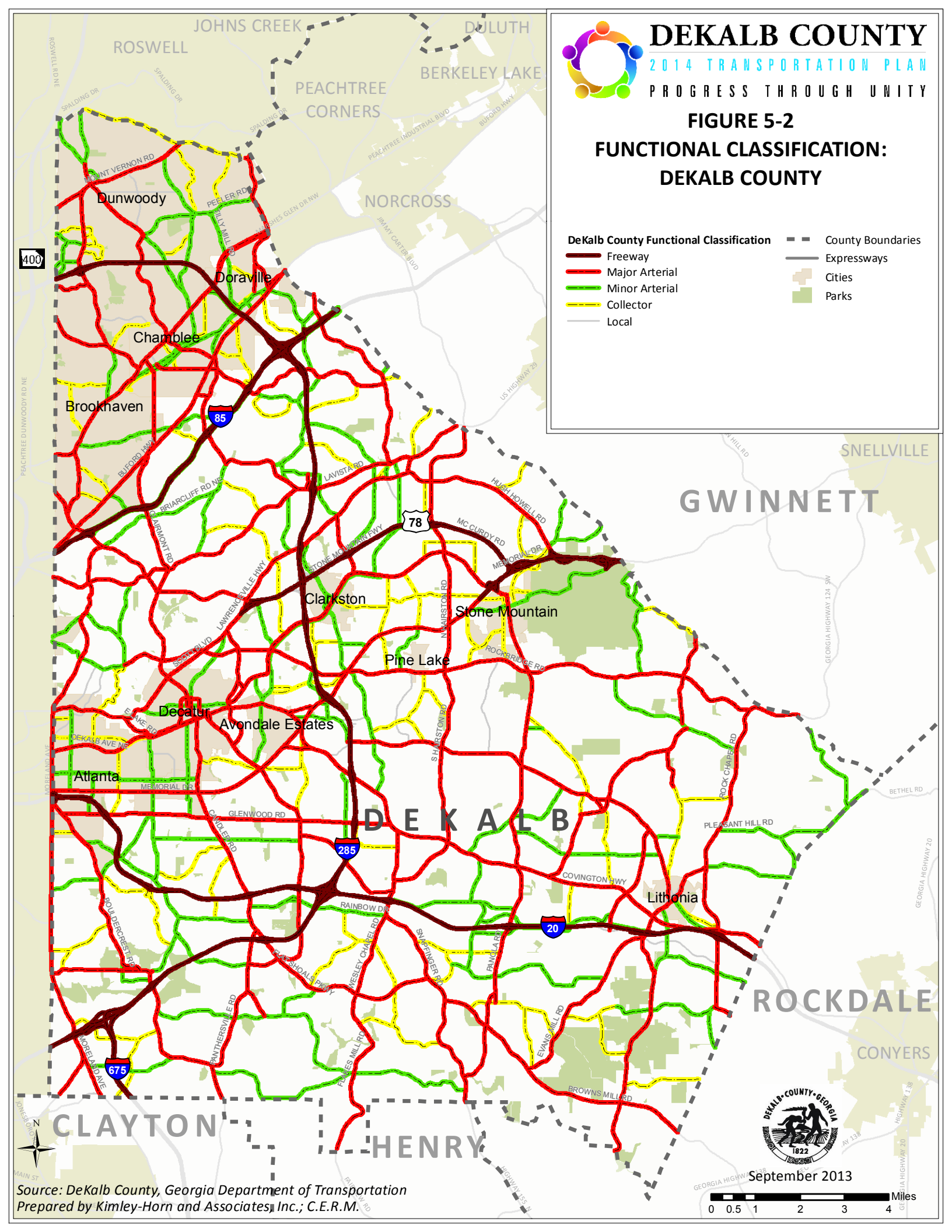
Table 5-2: Examples of Roadways by Functional Classification in DeKalb County

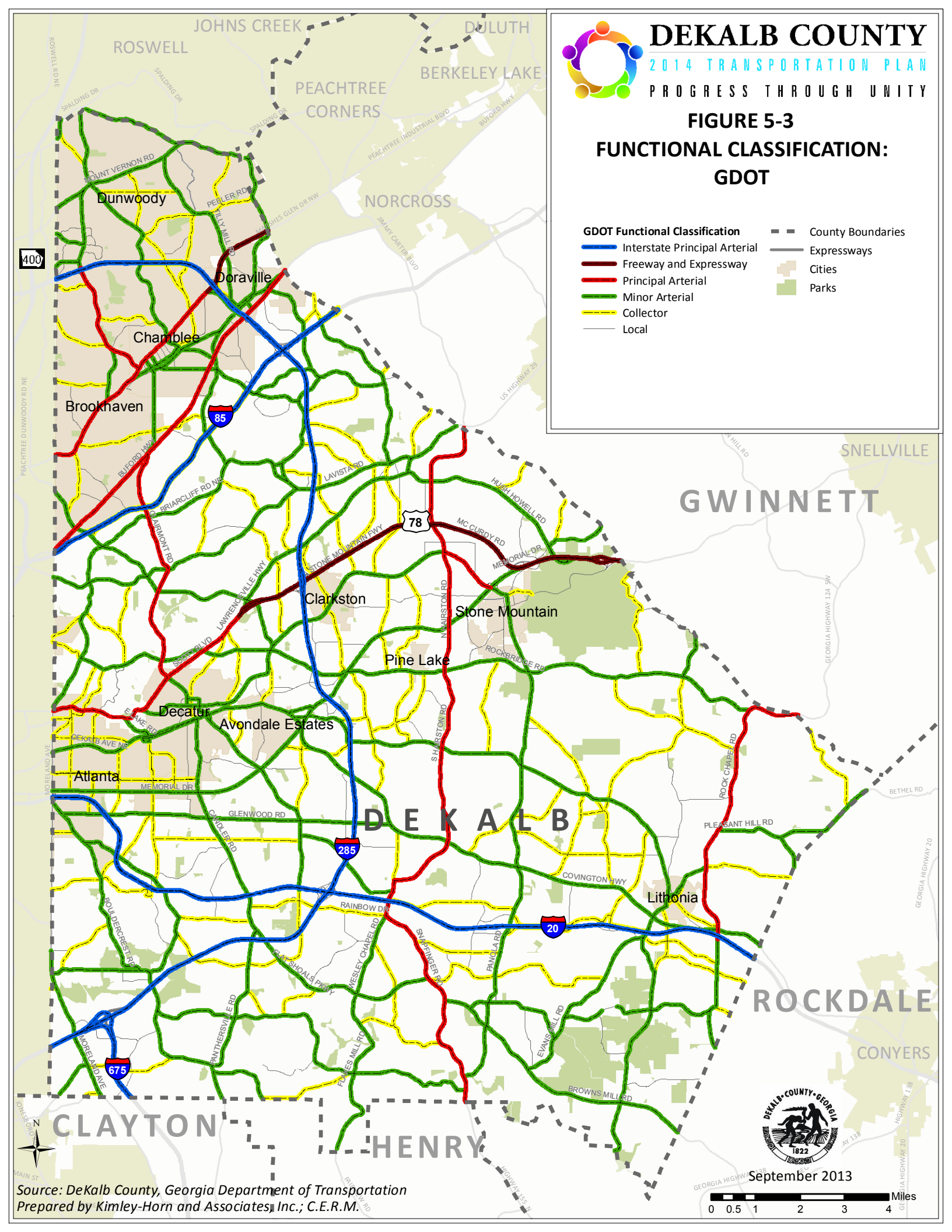
Functional Classification	Examples in DeKalb County
Interstate and Freeway	I-285, I-85, I-20, and I-675, freeway portions of Highway 78
Major/Principal Arterial	Ashford Dunwoody Road, Peachtree Road, Buford Highway, Clairmont Road, Scott Boulevard, Snapfinger Road, S. Hairston Road, and Rock Chapel Road
Minor Arterial	Briarcliff Road, Flat Shoals Road, River Road, and Tilly Mill Road
Collector	Hambrick Road, McLendon Avenue, Rainbow Drive, and Thompson Mill Road

Interstates and freeways provide the most mobility and least access, as access is only available at grade-separated interchanges. These facilities typically serve longer distance travel. Principal arterials serve medium to longer distance travel and typically connect minor arterials and collector streets to interstates and freeways. These facilities should have tightly controlled access and few, if any, individual site driveways. Generally, roadway improvements and maintenance on freeways, interstates, and principal arterials are funded by the Georgia Department of Transportation or sometimes by local governments.

Minor arterials primarily provide mobility have more closely spaced intersections, more individual site driveways, and generally lower posted speeds than major arterials. The minor arterial network is primarily intended to serve travel within the local area. These roadways connect other minor arterials, principal arterials, and collector streets and generally have four-lane or six-lane cross sections with left-turn lanes at intersections and major driveways. Similarly, collectors provide critical connections in the roadway network by bridging the gap between arterials and local roadways.

Minor arterials provide a higher level of access to adjacent land uses than principal arterials and typically have lower traffic volumes. Collectors typically provide less overall mobility, operate at lower speeds, have greater access flexibility with adjacent land uses, and serve shorter distance travel than arterials. The primary purpose of the collector street system is to collect traffic from neighborhoods and distribute to the system of principal and minor arterials throughout an area. For the most part, collectors and minor arterials are maintained by the local government, but while the cost of improvement for minor arterials may be the responsibility of GDOT or the local government, collectors are rarely built and/or funded by GDOT. . Local roads and streets provide the most access and the least amount of mobility. These facilities typically connect to one another or to other collector streets, and provide a high level of access to adjacent land uses and frequent driveways. Local roadways typically serve short distances and have low posted speed limits. Most roadways within DeKalb County are local roads. However, only a few roadways classified as local were included in this plan's study network. Those included were selected because they serve a more regional purpose than a typical local roadway.


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 5-2
FUNCTIONAL CLASSIFICATION:
DEKALB COUNTY
DeKalb County Functional Classification
Freeway
Major Arterial
Minor Arterial
Collector
Local
County Boundaries
Expressways
Cities
Parks
JOHNS CREEK
ROSWELL
DULUTH
BERKELEY LAKE
PEACHTREE CORNERS
NORCROSS
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
Lithonia
SNELLVILLE
GWINNETT
ROCKDALE
CONYERS
CLAYTON
HENRY
DEKALB
400
85
78
285
20
675
September 2013
0 0.5 1 2 3 4 Miles
Source: DeKalb County, Georgia Department of Transportation
Prepared by Kimley-Horn and Associates, Inc.; C.E.R.M.


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 5-3
FUNCTIONAL CLASSIFICATION:
GDOT
GDOT Functional Classification
Interstate Principal Arterial
Freeway and Expressway
Principal Arterial
Minor Arterial
Collector
Local
County Boundaries
Expressways
Cities
Parks
JOHNS CREEK
DULUTH
ROSWELL
BERKELEY LAKE
PEACHTREE CORNERS
NORCROSS
SNELLVILLE
GWINNETT
ROCKDALE
CONYERS
CLAYTON
HENRY
DEKALB
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
Lithonia
400
85
78
285
20
675
September 2013
Miles
0 0.5 1 2 3 4
Source: DeKalb County, Georgia Department of Transportation
Prepared by Kimley-Horn and Associates, Inc.; C.E.R.M.

5.2 National Highway System and the Regional Strategic Thoroughfare System

A subset of the study network being considered as a part of this plan falls on one or two other strategic systems. The National Highway System (NHS) predominantly includes interstates, key principal arterials (providing access to ports, airports, public transportation facilities, or intermodal facilities), the Strategic Highway Network (STRAHNET – critical to the nation's defense system), and connectors to some of these facilities. These roadways are eligible for specific federal funding dollars called the National Highway Performance Program (NHPP). shows the interstates and arterials that are included on the NHS in orange. Additionally, the Regional Strategic Thoroughfare System (RSTS) is shown in purple. These facilities are part of a regionally significant roadway system in Metro Atlanta, as designated by the Atlanta Regional Commission. Many of the principal and minor arterials (as classified by GDOT) are included on this system. Federal funding for widening will only be considered for roadways included on one of these systems, as outlined in PLAN 2040. The only exceptions to this are areas with regionally significant crash rates.

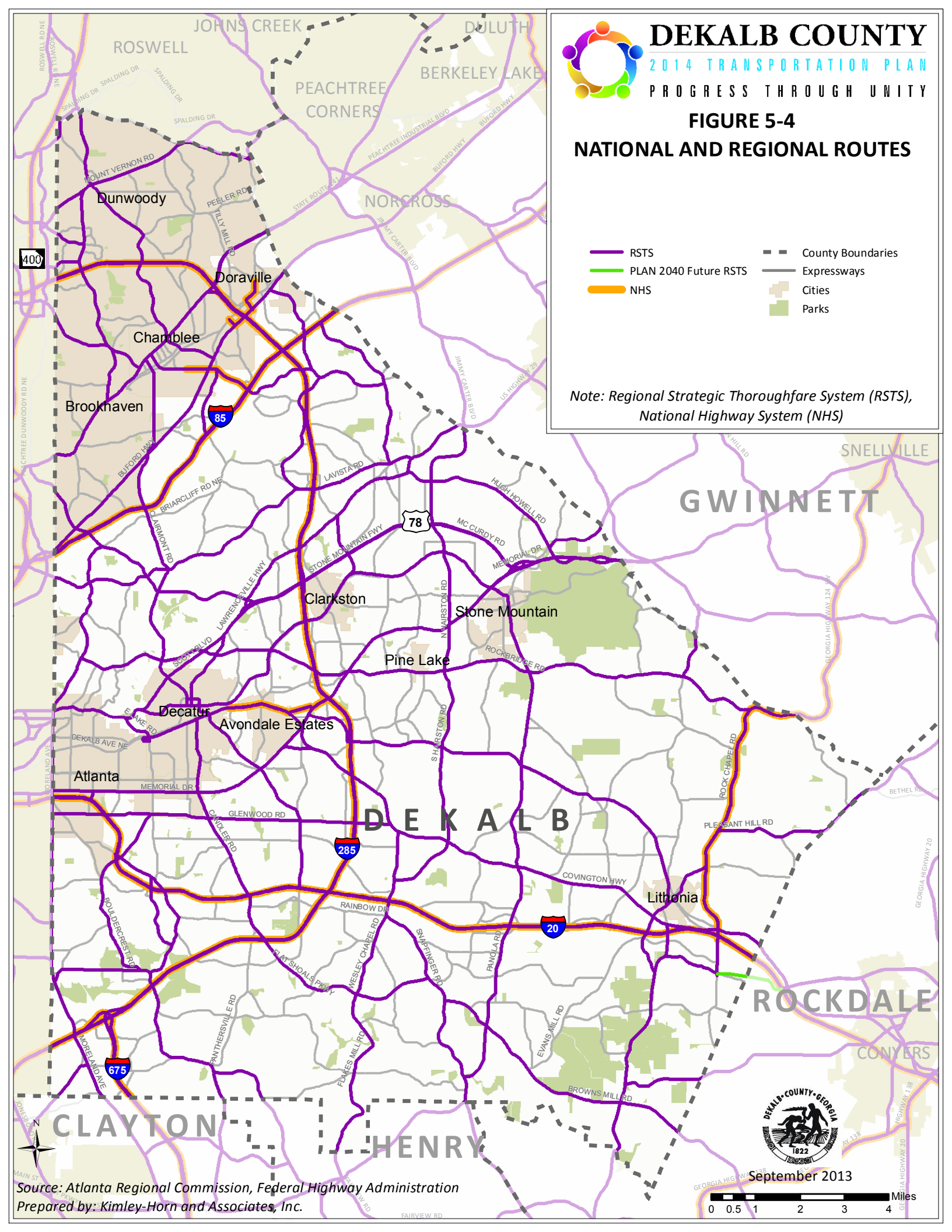
5.3 Number of Lanes

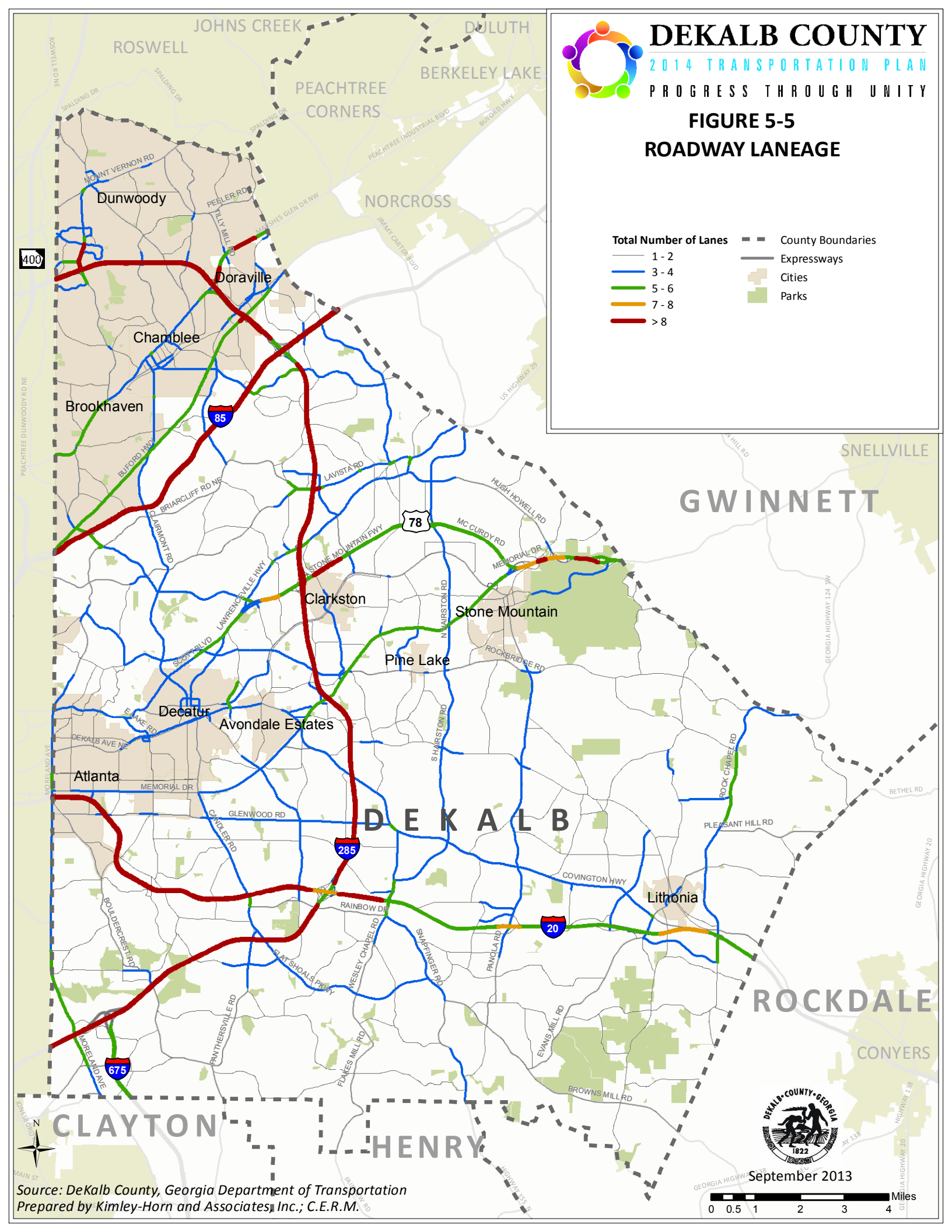
The number of lanes is a primary characteristic used to determine a road's capacity. The majority of roads in DeKalb County and in the study network are two-lane roadways. Table 5-3 presents the number of miles for the different number of through lanes throughout the study network.

Table 5-3: Roadway Laneage

Number of Lanes	Mileage
14	<1
13	<1
12	9
11	<1
10	11
9	1
8	22
7	3
6	41
5	9
4	165
3	8
2	458
1	47

Figure 5-5 illustrates the number of lanes for the DeKalb County study network. Most local streets and roadways are excluded from the study network. The one-lane segments consist of mostly ramps and access routes. The total mileage in this study network is approximately 785 miles.


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 5-4
NATIONAL AND REGIONAL ROUTES
RSTS
PLAN 2040 Future RSTS
NHS
County Boundaries
Expressways
Cities
Parks
Note: Regional Strategic Thoroughfare System (RSTS), National Highway System (NHS)
JOHNS CREEK
DULUTH
ROSWELL
BERKELEY LAKE
PEACHTREE CORNERS
NORCROSS
SNELLVILLE
GWINNETT
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
DEKALB
Lithonia
ROCKDALE
CONYERS
CLAYTON
HENRY
400
85
78
285
20
675
MOUNT VERNON RD
PEELER RD
TILLY MILL RD
BUFORD HWY
PEACHTREE INDUSTRIAL BLVD
JIMMY CARTER BLVD
US HIGHWAY 29
LAVISTA RD
BRIARCLIFF RD NE
CLAIRMONT RD
HUGH HOWELL RD
MC CURDY RD
MEMORIAL DR
STONE MOUNTAIN FWY
LAWRENCEVILLE HWY
N HAIRSTON RD
S HAIRSTON RD
ROCKBRIDGE RD
SCOTT BLVD
E LAKE RD
DEKALB AVE NE
MEMORIAL DR
GLENWOOD RD
CANDLER RD
ROCK CHAPEL RD
PLEASANT HILL RD
BETHEL RD
COVINGTON HWY
RAINBOW DR
BOULDERCREST RD
FLAT SHOALS PKWY
WESLEY CHAPEL RD
SNAPFINGER RD
PANOLA RD
EVANS MILL RD
PANTHERSVILLE RD
MORELAND AVE
FURNES MILL RD
BROWNS MILL RD
GEORGIA HIGHWAY 124 SW
GEORGIA HIGHWAY 20
GEORGIA HIGHWAY 138
DEKALB COUNTY GEORGIA 1822
September 2013
0 0.5 1 2 3 4 Miles
Source: Atlanta Regional Commission, Federal Highway Administration
Prepared by: Kimley-Horn and Associates, Inc.



Source: DeKalb County, Georgia Department of Transportation
Prepared by Kimley-Horn and Associates, Inc.; C.E.R.M.

5.4 Posted Speed

Posted speed limits were collected along each of the roadways within the DeKalb County study network. Posted speed limits exist in 5-mph increments between 25 mph and 70 mph. A road's posted speed limit typically falls within a range that is based on function, area type, and specific conditions. The interstates and freeways are typically signed for 50 mph and above. The more suburban collectors and arterials tend to fall within the 40-45 mph range while the urban facilities include more speeds in the range of 30-35 mph. Figure 5-8 illustrates the posted speed limits for roadways within the study network.

5.5 Traffic Control System

Traffic congestion is one of the most pressing concerns for DeKalb County. The active management of all modes of traffic and dissemination of traffic information is essential to the motoring public. Advanced Traffic Management Systems (ATMS) allow government agencies to better manage the traffic along the roadway and to disseminate traffic information to drivers for their use. DeKalb County's numerous commuter corridors coupled with the wide variety of users (vehicles, buses, pedestrians, bikes, etc.) necessitate the active monitoring and management of traffic to fully use the capacity of the network, while also allowing users to take advantage of the multiple alternative routes. ATMS components include:

- Traffic signal controllers
- Closed circuit television (CCTV) cameras
- Dynamic message signs
- Communication equipment
- Control center monitoring equipment and software
- Operations enhancements, such as bus priority, traffic responsive, etc.

Figure 5-6: Signal Timing Satellite TCC Monitors Showing Intersections

The County currently operates and maintains approximately 675 signals. The County manages their sign traffic signals from their Traffic Control Center (TCC). The County's existing TCC is located on Camp Road in Decatur. The TCC is staffed weekdays by two operators from 8:00 to 4:30, and is responsible for monitoring signal operation, monitoring closed circuit television (CCTV) cameras, repair dispatch, and providing information to police/fire/rescue when needed. As of June 2013, the TCC operators can monitor and manage 283 signals that are currently communicating back to the TCC. Additionally, there are 65 signal locations using an older traffic signal program that is currently being phased out. These intersections are only available in the TCC. The County has six CCTV cameras which would typically be able to be viewed at the TCC. The County also has a connection to the Georgia Department of Transportation's (GDOT's) CCTV network through the TCC. Through this connection the operators at the TCC are able to utilize approximately 30 of GDOT's CCTV cameras to monitor traffic in the County and verify any issues that arise in the field.

The vast majority of the traffic signals in the County have been upgraded to state of the art 2070 traffic controllers. Traffic controllers are the "computers" located in the field that the County can program to tell the signal how to operate. 2070 controllers are the most recent generation of traffic signal computer that provide the County with additional flexibility in programming the operation of the signals. There are still older controllers operating at about 90 locations in the County that are due to be upgraded to this more recent 2070 standard. There are five intersections on Church Street, 10 intersections on Clairmont Road, eighteen intersections on SR 10 (Avondale Highway), ten intersections on Clifton Road, and 22 intersections in downtown Decatur that are currently scheduled for upgrades to 2070 controllers through various projects. The County Transportation Division operates a Signal Timing Satellite TCC at the Northlake Parkway office. The center equipment is used to adjust signal timings for non-emergency purposes.

In addition to traffic signals, the County currently operates and maintains approximately eight (8) pedestrian only signals (often referred to as "HAWK Signals"), 74 flashing beacons, and 300 School Zone Flashers. The County communicates to its traffic signals, CCTV cameras and other ITS devices through a complex communication network that include fiber optic cable, wireless communication and telephone dial-up systems.

Additionally the County has recently implemented MARTA's bus rapid transit system along Memorial Drive from Kensington Road to Goldsmith Road. This system allows transit buses to gain priority at the traffic signals and provides better progression for the transit vehicles.

The County participates in GDOT's Regional Traffic Operations Programs (RTOP). RTOP is a GDOT funded project where a consultant led team assists the County in the operation and maintenance of its traffic signals along corridors of regional significance. DeKalb County currently has seven corridors that are part of the RTOP project:

- Moreland Avenue
- Ponce De Leon Avenue/Scott Boulevard (SR8)
- Peachtree Road
- Lawrenceville Highway Clairmont Road
- Memorial Drive
- Covington Highway

Figure 5-7: TCC Signal Controllers

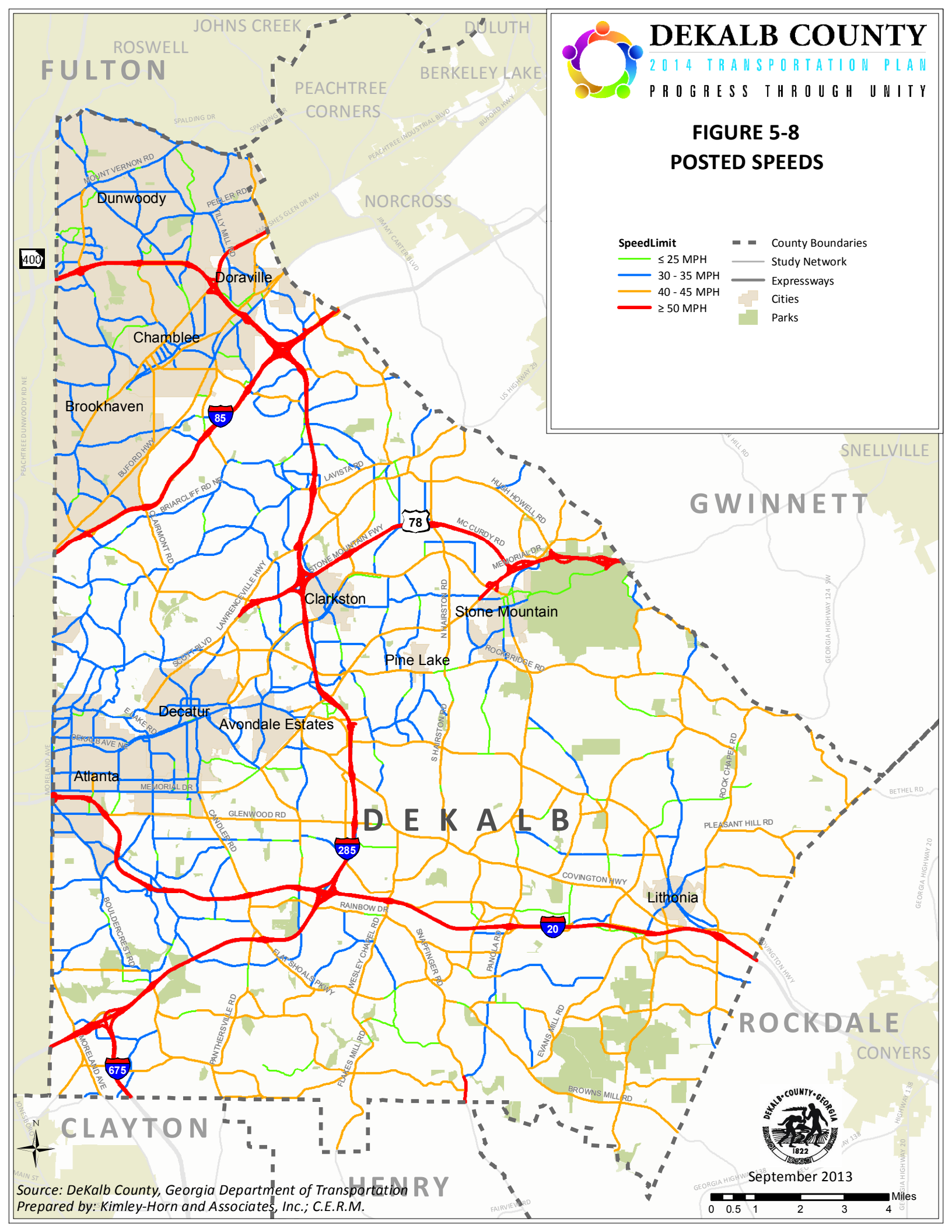
The cities of Dunwoody, Atlanta, and Brookhaven operate and maintain their own signals, while signals in other DeKalb County jurisdictions are maintained by the County. Figure 5-9 illustrates traffic signal locations as well as fiber optics maintained by DeKalb County.

Below is an overview of the status of the existing field equipment the County operates and maintains:

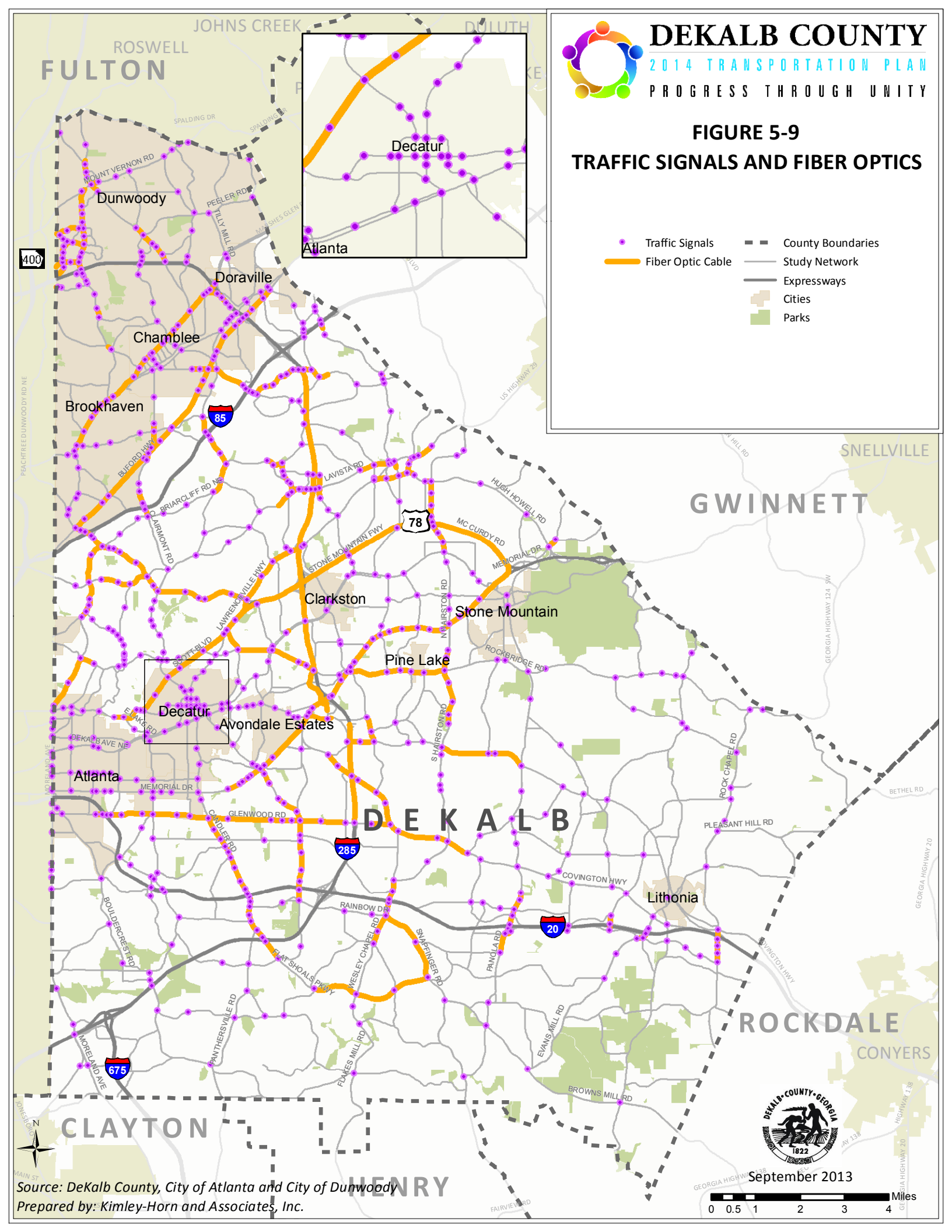
- Approximately 675 total signals.
- As of June 2013, 348 signals currently communicate with the TCC or Signal Timing Satellite TCC
- There are legacy NEMA Aries controllers and cabinets to be replaced at approximately 90 locations
- There are several groups of signals around County currently with outdated or no communication to central
- There are approximately 100 remote signals with no communication and none necessary
- There are 30-40 current signals that have Ethernet access but no switch
- There are 6 CCTV cameras, none of which are currently operational

In May of 2007, the County completed an ATMS Master Plan. The ATMS Master Plan developed a framework for ATMS expansion in the County. Below is a summary of the critical areas for ATMS expansion identified in the 2007 ATMS Master Plan and the status of each item.

- Update TCC/Signal Timing Satellite TCC – There have been some updates to the TCC but not a complete update. The County is investigating a new, central location or expansion of the existing location.
- Satellite TCC's – Temporary/mobile TCC set-up in Tucker and Decatur.
- CCTV Replacement – Currently underway through RTOP and County led projects.
- CCTV Installation – Currently underway through RTOP and County led projects.
- Detection Installation – Detection is being upgraded and repaired as part of the RTOP project and as part of other County led projects
- Communications – the majority of the signals now have communication and the County is in the process of migrating to all Ethernet communication
- Changeable Message Signs (CMS) – Currently not a priority
- Traffic Signals – Since the May 2007 Master Plan the County has upgraded numerous signals to 2070 and installed communication between groups of signals.
- School Flasher Paging System – Install of the first 50 out of 201 locations was scheduled for January 2013



Source: DeKalb County, Georgia Department of Transportation
Prepared by: Kimley-Horn and Associates, Inc.; C.E.R.M.



Source: DeKalb County, City of Atlanta and City of Dunwoody
Prepared by: Kimley-Horn and Associates, Inc.

5.6 Access Management

Access management is the systematic control of the location, spacing, design, and operation of driveways, median openings, interchanges, and street connections to a roadway. It also involves roadway design applications, such as median treatments and auxiliary lanes, and the appropriate spacing of traffic signals.[34] By improving access management along a corridor, it is possible to improve corridor operations and to increase the capacity of the facility without widening the cross-section of the roadway.

DeKalb County is heavily developed; therefore, opportunities for designing new facilities with aggressive access management measures are sparse. While enhancing and retrofitting access management on existing roadways is more difficult, it can be accomplished through the addition of medians or removal of left-turning traffic from through lanes, driveway consolidation, improved inter-parcel access, and at times grade separation of key intersections.

North Druid Hills Road is identified in the North Druid Hill LCI as a corridor that needs better access management from both a safety and traffic flow perspective.

Freeways and interstates have inherently excellent access management. The goal of the analysis within DeKalb County, therefore, focuses on arterials (both principal and minor) as key facilities requiring improvement. Three key characteristics were inventoried and mapped as relevant to determining the quality of access management on each facility: median type, driveway spacing, and signal location.

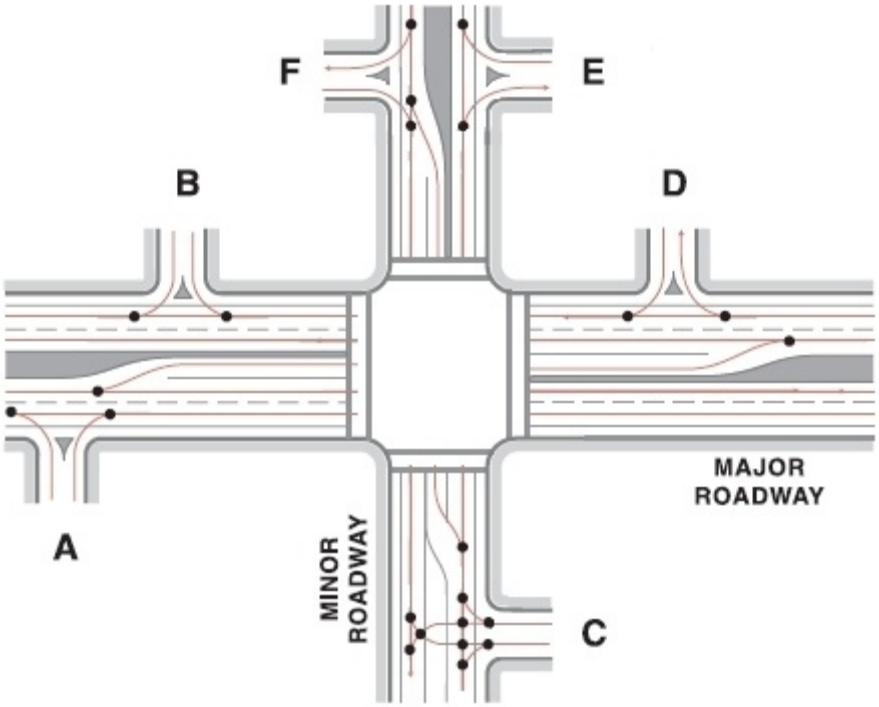
Median Type

Different types of medians can provide varying levels of access management. Landscaped or concrete medians are non-traversable in nature and allow the driver to turn left only at designated locations. When medians breaks and signals are well-spaced, these types of medians have a tremendous ability to reduce turning conflicts and to keep through traffic moving. Two-way-left-turn lanes do not restrict when or where a vehicle can turn; however, they provide a separate lane for left-turning traffic, which allows the through movements to continue efficiently. When a roadway lacks a median treatment, vehicles are able to turn at any roadway or driveway, which reduces travel speeds and increases the number of vehicle conflicts.

In addition to improving the capacity of a roadway, medians can also improve the safety of roadways by reducing conflict points. The difference in conflict points for intersections with and without a non-traversable median can be seen in Figure 5-10. The intersection without a median control, intersection "C", has ten potential conflict points compared to two or three conflict points at other intersections where medians exist. Finally, medians can also be used as pedestrian refuges for those crossing multi-lane roads. While this is less of a factor relating to access management, it is an important component of reducing vehicle/pedestrian collisions along roadways.

[34] *Access Management Manual*, Transportation Research Board

Figure 5-10: Vehicular Conflict Points for Various Median Scenarios[35]



The majority of the roads in DeKalb County are two-lane roads with no median. Other roads contain medians that consist of a center two-way left-turn lane, raised concrete, landscaping, or a striped median (pavement that is not intended for travel). I-20, I -285, and I-85 have concrete medians separating the directional flow of traffic. Excluding the freeways, landscaped medians are the most common type of median used in DeKalb County, followed by center two-way left-turn lanes. Figure 5-11 illustrates the median locations by type for the DeKalb County study network.

Driveway Spacing

Driveway spacing is another key component of access management. For the purpose of this report, driveways are considered to be any private street or drive that connects a building or private destination to a public roadway. In general, driveways include residential driveways, private streets, and entrances to commercial developments. Driveway connections directly impact roadway function because they create opportunities to slow the passing of vehicles through a system. Additionally, when driveways are spaced very close together, it is difficult for a driver to differentiate between adjacent driveways while preparing to turn. Driveways can also be a safety concern for cyclists and pedestrians if drivers are not cognizant of the presence of either when turning into the driveway.

Specific requirements for access spacing (minimum distances between driveways and cross streets) can vary based on roadway type, speed limit, adjacent land use, and other factors. There is no one set of guidelines that are always applicable. The Transportation Research Board (TRB) *Access Management Manual*, provides guidelines on access spacing based on a number of different criteria. Through a review

[35] Source: USDOT FHWA – Intersection Safety Briefs, http://safety.fhwa.dot.gov/.../fhwasa10005/brief_13.cfm

of research on a number of different criteria, they created Table 5-4 as a base set of guidelines for access spacing.

Table 5-4: Example of Guidelines for Access Spacing (ft) on Suburban Roads[36]

Functional Class of Roadway	Undivided Roadway	Divided Roadway		
		Full Median Opening	Directional Median Opening	Right In/ Out Only
Principal Arterial	2640	2640	1320	990
Minor Arterial	660	1320	660	330
Collector	330	Not applicable, medians typically not used		
Local Road	100			

Average driveway spacing (not including unsignalized intersections) was calculated for segments of the principal and minor arterials throughout DeKalb County. Roadways with the largest spacing are shown in yellow while roadways with the smallest driveway spacing (less than 150 feet) are shown in dark blue in Figure 5-12. A vast majority of the arterials in DeKalb County, particularly those in more urban areas, average less than 150 feet between driveways on both sides of the roadway.

Traffic Signal Spacing

The spacing of traffic signals is also important to developing good access management. More traffic signals over smaller distances results in more stop-and-go traffic along a corridor. As signals are placed closer together, it becomes increasingly difficult to time them so that the mainline travel receives long bands of green time. These stop-and-go patterns result in more startup time for drivers and less travel time which in turn creates more congestion.

Access Management Corridor Performance

A number of factors affect access management, so it is difficult to define exactly which roads have good or bad access management. For purposes of general classification, the three factors described above – medians, driveway spacing, and signal spacing – were combined into one map to shed some light onto which arterials have better or worse access management. Medians, often the largest predictor of good access management, were weighted to 50% with driveway spacing and signal spacing both being estimated at 25%. Within each of the three categories, the characteristics on the roadways were given values between 0 and 100. Raised medians and traversable medians on two- and four-lane roads were rated the highest while roadways with no medians were rated the lowest. The larger the spacing between driveways and signals, the more points a section of roadway received.

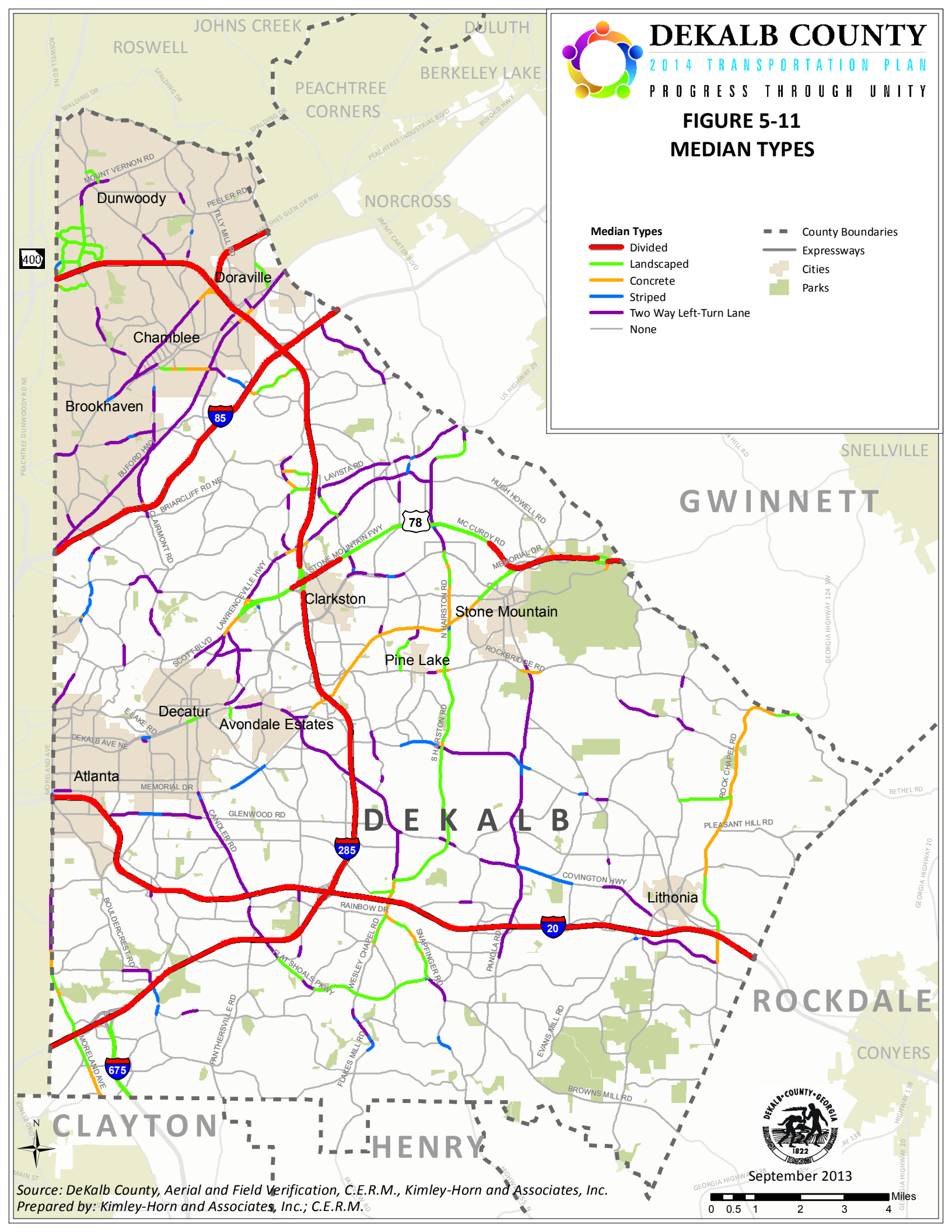
[36] Source: *Access Management Manual*, Transportation Research Board 2003

Table 5-5: Median, Driveway, and Signal Spacing

Weight	Factor	Score
50%	***Median***	
	Raised/flush non-traversable (Concrete/Landscaped)	100
	Traversable (TWLTL/Striped) 2/4 lane road	100
	Traversable (TWLTL/Striped) 6 lane road	75
	None	0
25%	***Driveway Spacing***	
	> 350 ft	100
	230-350 ft	66
	150-230 ft	33
	< 150 ft	0
25%	***Signal Spacing***	
	> 2640 ft	100
	1000-2640 ft	75
	660-1000 ft	25
	< 660 ft	0

The composite score for each roadway was then mapped between 0 and 100, with roadways receiving a 0 having the worst access management and roadways receiving 100 with the best. Table 5-5 shows all of the principal and minor arterials with their respective access management scores.

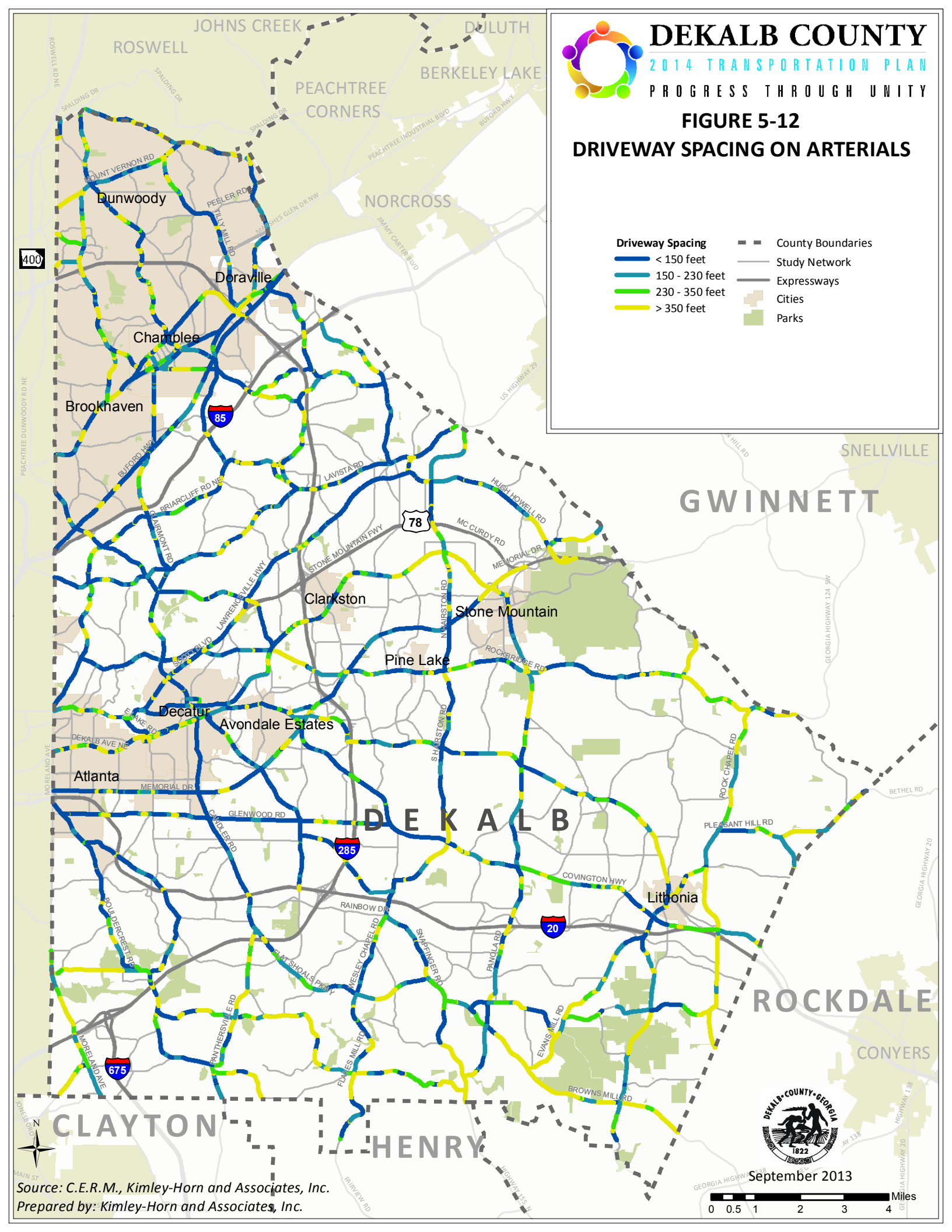
Taking the access management discussion one step further, the principal and minor arterials were overlaid on the existing land use map. Access control is most important along roadways with high and frequent turning movement volumes. For that reason, access management is not as necessary in residential areas (single family residential, particularly) as it is in commercial areas. The land uses that are shown in Figure 5-14 are all non-residential and non-greenspace uses, including commercial, institutional, and industrial. Roadway segments with poor or fair (red or orange) access management ratings were then intersected with those land uses to identify the areas that are most in need of improved access management. While small segments of roadway are not of concern, other corridors with more consistent access needs do surface.



Source: DeKalb County, Aerial and Field Verification, C.E.R.M., Kimley-Horn and Associates, Inc.
Prepared by: Kimley-Horn and Associates, Inc.; C.E.R.M.

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

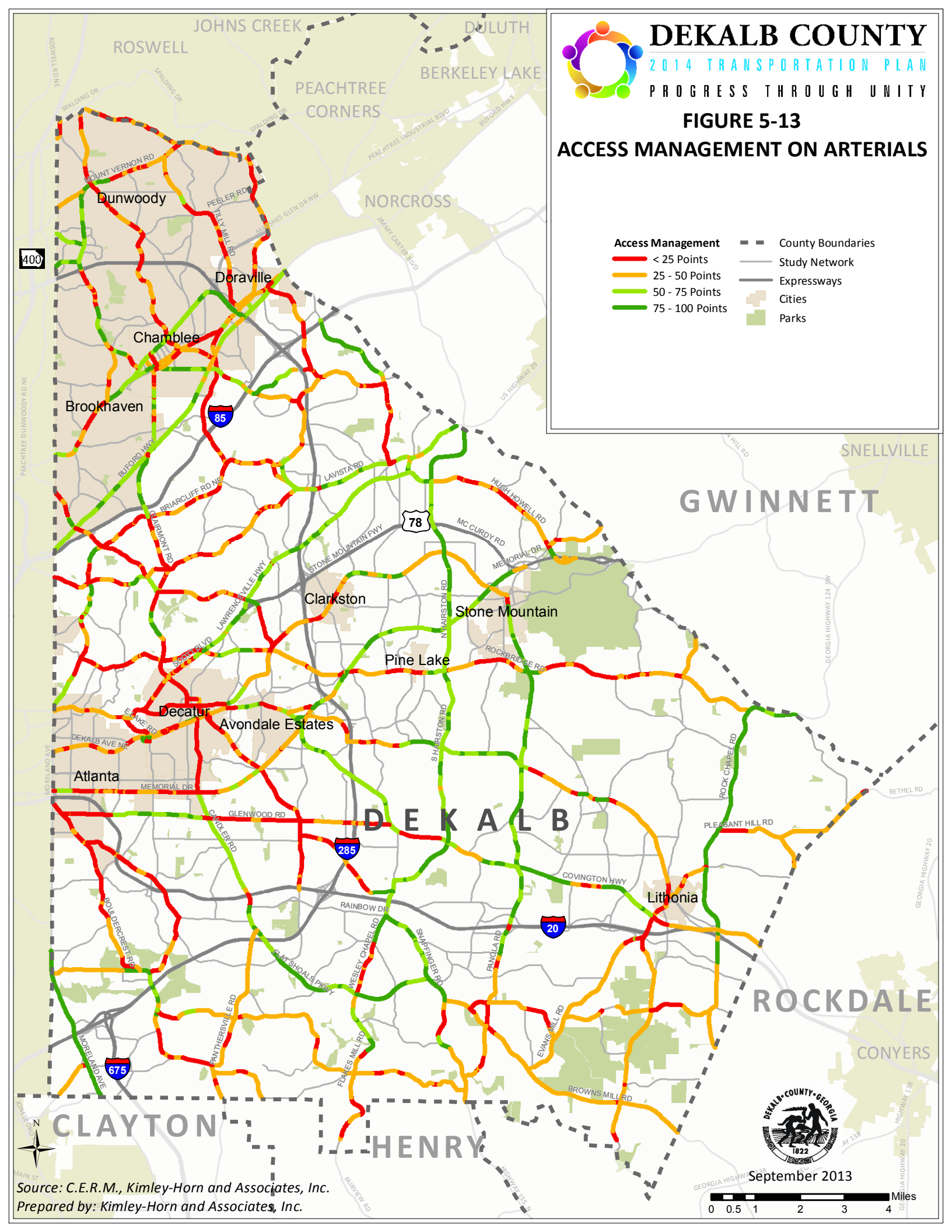
FIGURE 5-12
DRIVEWAY SPACING ON ARTERIALS



Source: C.E.R.M., Kimley-Horn and Associates, Inc.
Prepared by: Kimley-Horn and Associates, Inc.

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

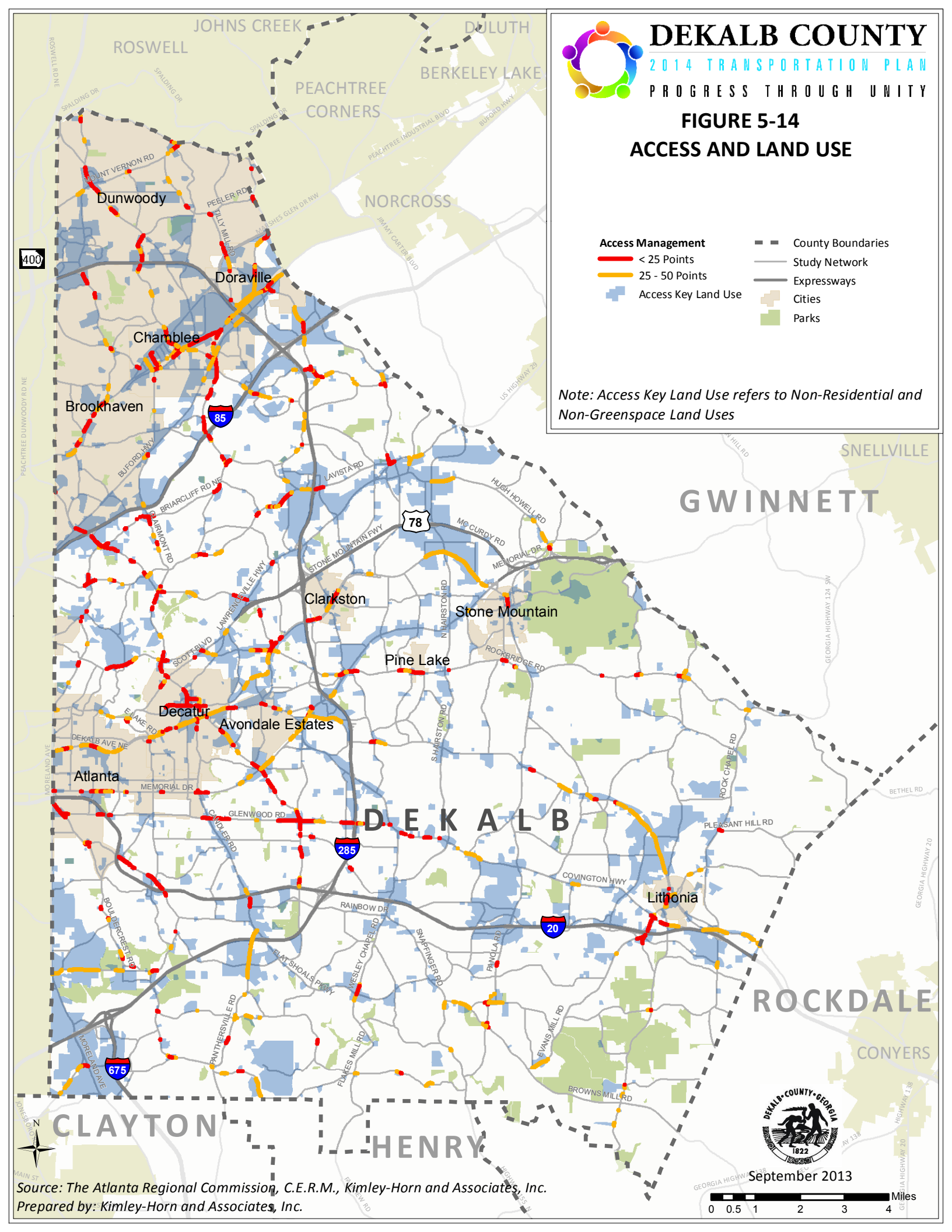
FIGURE 5-13
ACCESS MANAGEMENT ON ARTERIALS



Source: C.E.R.M., Kimley-Horn and Associates, Inc.
Prepared by: Kimley-Horn and Associates, Inc.

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 5-14
ACCESS AND LAND USE



Source: The Atlanta Regional Commission, C.E.R.M., Kimley-Horn and Associates, Inc.
Prepared by: Kimley-Horn and Associates, Inc.

The length of roadway meeting certain thresholds was calculated for each corridor. Those with a large number of miles scoring fewer than 25 points on the access management analysis are included in Table 5-6 below. Additionally, the miles scoring fewer than 50 are also included in the table. Columbia Drive / Commerce Drive has the greatest mileage (3.09 miles) scoring fewer than 25 points in non-residential and non-greenspace areas. Other roads that surfaced in this analysis include Chamblee Dunwoody Road, Glenwood Road, N. Decatur Road / Rockbridge Road, Clairmont Road / Clairmont Avenue, North Druid Hills Road / E. Roxboro Road, Ponce de Leon Avenue, Covington Highway / E. College Avenue, Lavista Road, and Shallowford Road.

Table 5-6: Top Corridors Needing Improved Access Management in Non-Residential Areas

Road	Miles scoring <25	Miles scoring <=50
Columbia Drive / Commerce Drive	3.09	4.20
Chamblee Dunwoody Road	2.44	4.76
Glenwood Road	2.24	3.21
N. Decatur Road / Rockbridge Road	2.00	5.99
Clairmont Road / Clairmont Avenue	1.79	3.48
N. Druid Hills Road / E. Roxboro Road	1.77	2.93
Ponce de Leon Avenue	1.57	7.36
Covington Highway / E. College Avenue	1.49	7.24
Lavista Road	1.31	3.56
Shallowford Road	1.26	2.54

Summary of Access Management Needs

DeKalb County is heavily developed. While designing new facilities with strict access management policies may be an opportunity in some limited cases, retrofitting existing facilities is the more likely scenario. This is of particular interest in areas with substantial commercial land uses. The analysis documented above highlighted some key corridors for further access management study including Columbia Drive / Commerce Drive, Chamblee Dunwoody Road, Glenwood Road, and N. Decatur Road / Rockbridge Road, to name a few of the highest scoring roadways.

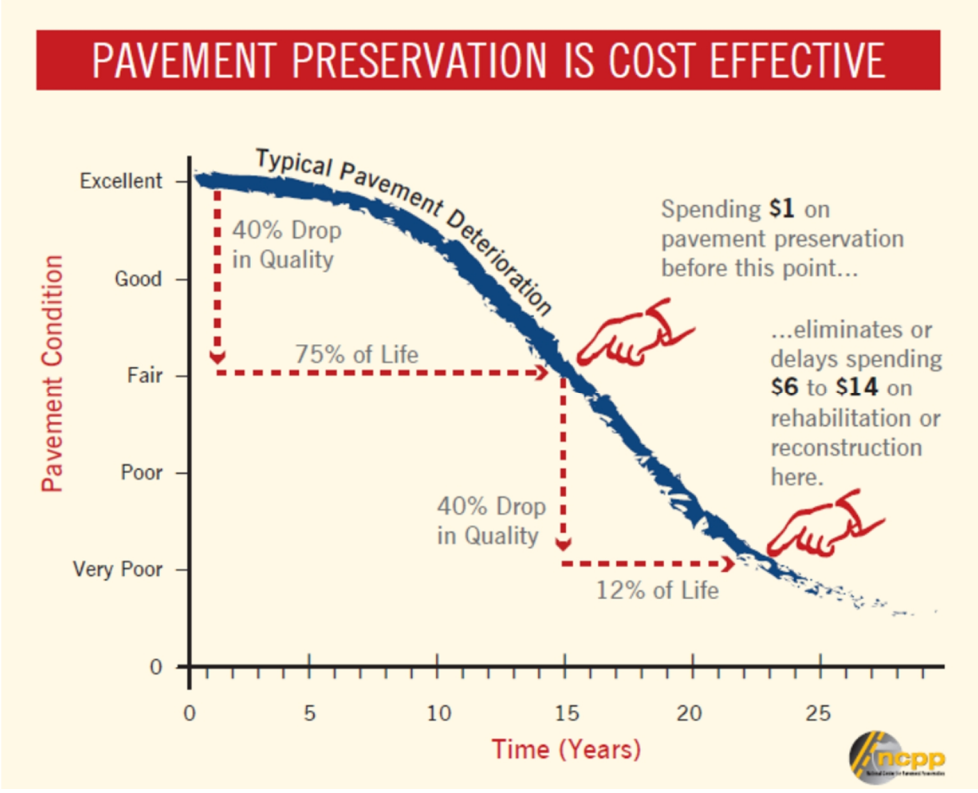
These facilities should be assessed further through access management corridor studies to find opportunities for the addition of medians or removal of left-turning traffic from through lanes, driveway consolidation, improved inter-parcel access, and at times grade separation of key intersections. The development of countywide access management policies may also be beneficial for retrofitting existing facilities and constructing new roadways.

5.7 Asset Management and Pavement Degradation

State and county transportation departments nationwide are facing increasing challenges with funding transportation improvements. DeKalb County is not an exception, with an ever-increasing backlog of needed repair and replacement and with challenges associated with procuring funding for those projects. Traditional approaches for road asset management have been reactive rather than proactive when it comes to maintenance and repair. However, national research appears to indicate that a more proactive approach may assist with both prolonging the life of pavement as well as better allocating funds.

Although maintenance and repair are also priorities, the philosophy of "worst first" has been the norm when considering which projects have the greatest need for funding. This philosophy neglects to consider the benefits of investing small amounts into maintenance today in order to defer major rehabilitation or replacement while extending the lifecycle, and cost, of the overall transportation system, as demonstrated in Figure 5-15 from the National Center for Pavement Preservation.

Figure 5-15: Pavement Preservation is Cost Effective[37]



National practices of asset management are evolving to a more holistic approach that considers the full lifecycle of assets and the benefits of consistent maintenance rather than deferring until major rehabilitation or replacement is the only option. Research has shown that preventative maintenance can be an extremely effective and efficient manner to preserve and improve the quality of an entire roadway

[37] Source: National Center for Pavement Preservation, http://www.pavementpreservation.org

system. DeKalb County would benefit from the investment of a robust preventative maintenance program to extend pavement longevity and better keep-up with maintenance and replacement backlogs.

DeKalb Pavement Management System

The DeKalb Public Works, Roads and Drainage Division conducts an annual inspection of 2,280 miles of County roadway as part of its pavement management system. The inspection draws from GDOT's pavement condition rating system, Computerized Pavement Condition Evaluation Survey (COPACES), which considers the structural condition of these roadways. Although available funds are utilized to extend the life of DeKalb County roads and reduce long-term pavement maintenance costs, only structurally deficient streets can be resurfaced, which may preclude some of the preventative maintenance that could assist with further preservation of the system.

There are eleven types of pavement distress that are evaluated by DeKalb County including transverse and longitudinal cracking, alligator (fatigue) cracking, potholes, patching, rutting, edge raveling, depressions, oxidation, missing stone, and bleeding. Each of these items is rated based on scales that have a minimum of zero points and maximums between 4 and 12 points; higher points signify poorer condition. Overall scores do not exceed 60 points, but a pavement is considered to need major reconstruction if determined to have 30 or more points. Each September the County prepares a resurfacing list based on the highest rated streets. This list is first submitted to GDOT for resurfacing under the Local Maintenance Improvement Grant (LMIG). GDOT selects projects from that list based on funding levels available and an additional road inspection by GDOT; not all County projects are funded through GDOT. The County considers the remaining list for available County funds, after GDOT has selected projects. Finally, highest rated roads not funded by GDOT or the County are selected to be resurfaced under the Bond program when funds are available. Unfortunately, the bond program ended in 2010, so the additional monies needed for some of the resurfacing come out of other transportation funds. There is never enough funding to resurface all of the streets on the list, causing those with the highest rating to be considered first. For example, in 2009 there were approximately 325 miles of streets rated 30 or higher. Of those, 66.37 miles of roadway were resurfaced in 2009 with 44.29 through the County funded program and 22.08 through the now defunct Local Assistance Resurfacing Program (LARP). In 2010, 333 miles were rated 30 or higher; approximately 37 miles were resurfaced through County and LMIG funding programs.[38] Figure 5-16 shows the current condition of county-evaluated roads. Roadways not included on the map are evaluated separately by either GDOT or some municipalities.

Because this information is collected on a yearly basis, DeKalb County has been able to update an electronic database of pavement ratings. A current project through the department of GIS is considering the change in pavement ratings over time based on this data collection effort. This analysis provides some information on how fast a specific roadway is deteriorating and could assist with predicting needed repair that may help defer or eliminate the need for major rehabilitation or reconstruction. Similar to GDOT's Georgia Pavement Management System (GPAMS) program, the current DeKalb database may be able to help predict current and future needs to help provide a list of work that needs to be performed.

[38] DeKalb County Public Works Roads & Drainage: Pavement Management System Description; Doc 1973, July 2011.

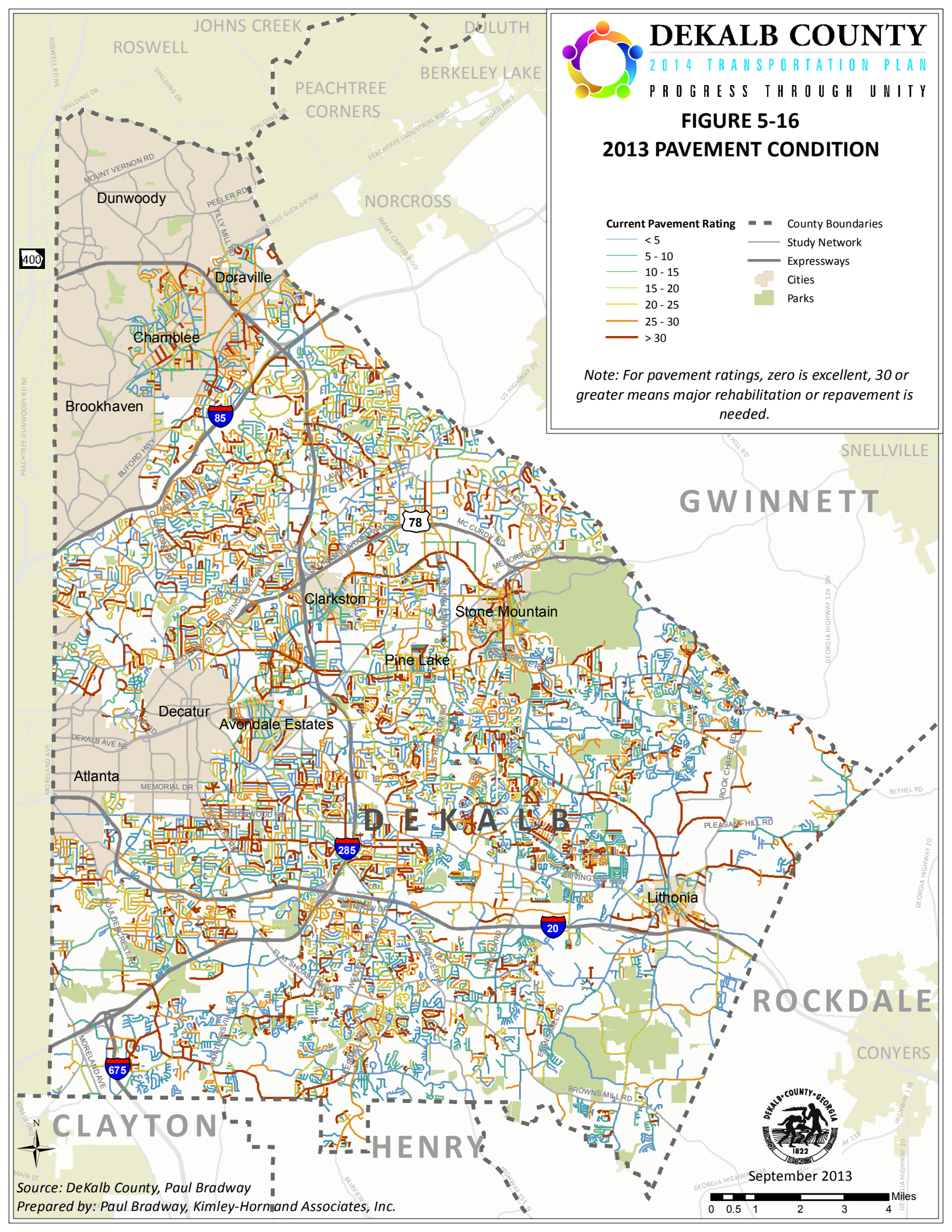

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 5-16
2013 PAVEMENT CONDITION
Current Pavement Rating
< 5
5 - 10
10 - 15
15 - 20
20 - 25
25 - 30
> 30
County Boundaries
Study Network
Expressways
Cities
Parks
Note: For pavement ratings, zero is excellent, 30 or greater means major rehabilitation or repavement is needed.
JOHNS CREEK
DULUTH
ROSWELL
BERKELEY LAKE
PEACHTREE CORNERS
NORCROSS
Dunwoody
Doraville
Chamblee
Brookhaven
SNELLVILLE
GWINNETT
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
DEKALB
Lithonia
ROCKDALE
CONYERS
CLAYTON
HENRY
85
78
285
20
675
400
Source: DeKalb County, Paul Bradway
Prepared by: Paul Bradway, Kimley-Horn and Associates, Inc.
September 2013
0 0.5 1 2 3 4 Miles

Table 5-7: Pavement Rating and Degradation

Roadways	Miles of Rating > 30	Average Rating	Miles Rate of Degradation > 1	Average Degradation
E. Ponce de Leon Avenue	3.99	27.03	1.05	0.85
N. Decatur Road	3.58	30.89	4.85	1.10
S. Stone Mountain Lithonia Road	3.01	31.00	0.00	0.75
Union Grove Road	2.95	31.33	0.00	0.25
Bouldercrest Road	2.74	32.00	0.00	0.38
Linecrest Road	2.12	33.00	2.12	2.75
Henderson Road	1.95	33.00	0.00	0.38
McAfee Road	1.79	31.00	0.00	0.38
Briarcliff Road	1.70	31.00	0.00	0.38
Austin Drive	1.62	33.00	0.00	0.38
Midvale Road	1.54	31.00	0.00	0.63
Ward Lake Road	1.49	33.00	0.00	0.38
Ridge Avenue	1.43	31.71	0.00	0.32
Moore Road	1.27	32.00	1.27	1.88
Sheppard Road	1.24	33.64	0.00	0.56
Peachcrest Road	1.17	34.00	0.00	0.44
River Road	1.14	31.00	1.14	1.20
Waldrop Road	1.10	32.00	0.00	0.56
Fairoaks Road	1.03	31.00	0.00	0.75
Maplewood Drive	1.00	32.00	0.00	0.25
Redan Road	0.00	9.00	5.59	1.14
Rockbridge Road	0.89	29.37	4.99	1.92
S. Indian Creek Drive	0.00	21.00	2.99	1.75
Henderson Mill Road	0.00	25.00	2.82	1.13
Rainbow Drive	0.00	27.00	2.02	1.38
Clifton Springs Road	0.00	10.00	1.99	1.29
Phillips Road	0.00	12.00	1.80	1.11
Mountain Industrial Boulevard	0.00	16.00	1.77	2.14
Winters Chapel Road	0.00	27.00	1.60	1.13
Clifton Church Road	0.00	16.00	1.54	1.25
Chamblee Dunwoody Road	0.00	23.00	1.50	1.29
Gresham Road	0.00	11.00	1.49	1.25
Panola Road	0.00	24.00	1.42	1.25
Hambrick Road	0.00	23.00	1.33	1.63
Old Stone Mountain Road	0.00	22.00	1.16	1.38
Thompson Mill Road	0.00	13.00	1.12	1.22

"Using GIS to predict future road treatments and repaving needs may reduce costs for DeKalb County and abate the backlog of roads needing treatment or repaving."[39] Current rates of degradation have been determined through this project and are shown in Figure.

Table 5-7summarizes some of the top resurfacing needs in the County. This analysis considers only study network roadways that DeKalb County maintains. The individual segments considered had a current rating of greater than 30 or a degradation rate greater than one. Those summarized in the table had a minimum of one mile of roadway meeting either criterion. The top portion of the table had more than one mile of roadway with a current pavement rating greater than 30. The bottom portion of the table had more than one mile of roadway degrading at a rate of greater than one. Some met both criteria.

The roadways shown in red are of particular interest. They either met both criteria or met one criterion with the second criterion approaching the threshold. Only one roadway, E Ponce de Leon Avenue had an average rating and degradation rate below the thresholds; however, nearly four miles of the road currently exceed the pavement rating of 30, so even though the average of segments considered is not 30, it is a roadway of critical importance. Four roadways currently meet both thresholds: N. Decatur Road, Linecrest Road, Moore Road, and River Road. Other roadways meeting one criterion and approaching a second include S. Stone Mountain Lithonia Road, Rockbridge Road, Henderson Mill Road, Rainbow Drive, and Winters Chapel Road. It may be valuable to focus on some of these facilities that are close to a rating of 30 but are degrading more quickly (often due to high volumes of truck traffic) to repair them before complete reconstruction is necessary.

Transportation Asset Management – The Strategic Direction of GDOT

Following national objectives, in 2011 GDOT adopted a strategic direction for Transportation Asset Management (TAM), which will help the Department to inform both policy and resource allocation to efficiently and effectively manage the state's transportation system. Transportation agencies have found that focusing on asset preservation is more cost effective in the long-run and assists with extending the useful lives of assets. GDOT's TAM document notes that "while TAM is a good practice for lean times, it is prudent for use during robust times, as well."[40]

Furthermore, GDOT notes that transportation agencies should develop a Transportation Asset Management Plan (TAMP) that aligns both with its strategic plan as well as serve to be a "business plan" to guide the organization as a whole with managing its assets.

The TAMP program is not meant to provide a fix for crises or emergency repairs, but intends to prevent such major problems by prolonging the life cycles of the most critical assets and planning in advance for future replacements. Allocation of resources will likely be based, for example, on areas with the highest traffic volumes, maintenance needs, or needs that impose the greatest overall risk to society.

GDOT may impose strategic direction of asset management on funding decisions in the near future. It will benefit DeKalb to consider aligning pavement management practices with those of GDOT in order to

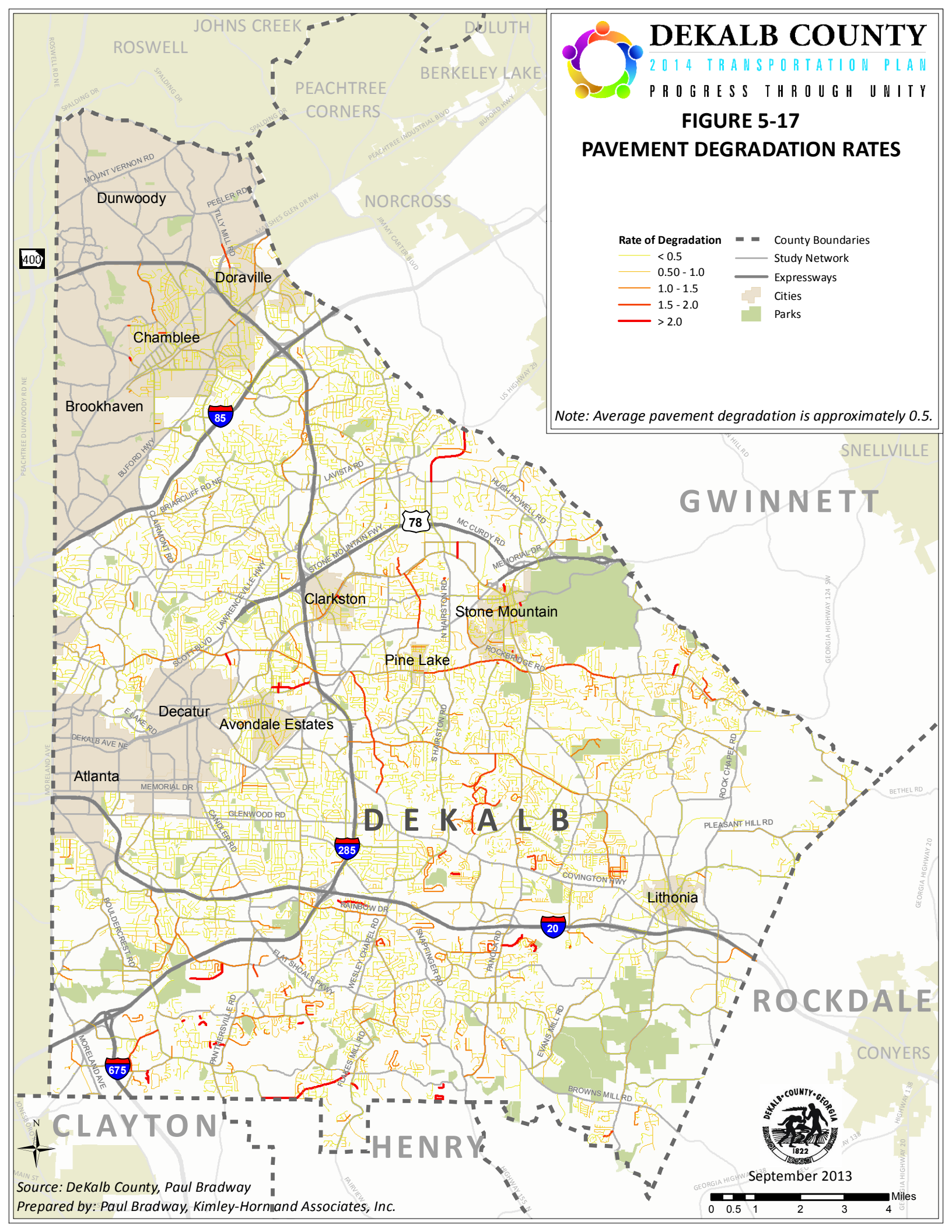
[39] Bradway, Paul; *Road Repaving Prioritization Procedures*, May 2013

[40] Transportation Asset Management – The Strategic Direction of Georgia Department of Transportation, 2011.

better petition funds for projects. Currently the County submits a list consisting of a number of miles of the highest rated streets for possible resurfacing under the Local Maintenance Improvement Grant (LMIG) program. The County may want to consider prioritizing assets by total volume and public need to perhaps address areas that are higher priority resources for the County, even if these resources may not have the highest (poorest quality) rating.

Summary of Asset Management Needs

DeKalb County continues to monitor its pavement needs on an annual basis. Using the data collected by the County, an analysis was conducted to show which facilities are in current need of resurfacing (rating > 30) and which roads are deteriorating faster than others (degradation rate > 1). The facilities meeting one or more of these criteria for more than one mile were listed in Table 5-7. High interest corridors include E. Ponce de Leon Avenue, N. Decatur Road, Linecrest Road, Moore Road, River Road, S. Stone Mountain Lithonia Road, Rockbridge Road, Henderson Mill Road, Rainbow Drive, and Winters Chapel Road. The County currently prioritizes roadway resurfacing according to a worst-first methodology. Some combination of the worst roadways and those degrading the fastest could be considered moving forward. Additional funds to complete resurfacing are also needed, allowing the County to better manage its facilities instead of responding to the roadways in worst condition first.



Source: DeKalb County, Paul Bradway

Prepared by: Paul Bradway, Kimley-Horn and Associates, Inc.

5.8 Bridge Inventory

Bridges inspected by GDOT are checked for sufficiency every two years as required by the Federal Highway Administration. These reviews produce a sufficiency rating[41] for each bridge inspected. The sufficiency rating is a value assigned on a scale of 0 to 100 where a 100 rating represents perfect condition and a 0 rating represents total failure. The sufficiency rating has an effect on what level of funding the bridge is available for rehabilitation or replacement. A sufficiency rating of 80 or less qualifies the bridge for federal rehabilitation funding while a sufficiency rating of 50 or less qualifies the bridge for federal replacement funding. Table 5-8 shows the bridges in DeKalb County color-coded by funding qualification.

Table 5-8: DeKalb County Bridge Sufficiency Ratings, 2012

Condition	Federal Funding Eligibility	Number in County
Good (sufficiency rating > 80)	Ineligible	231
Fair (sufficiency rating > 50, <80)	Eligible (repair funding)	136
Poor (sufficiency rating <=50)	Eligible (replacement funding)	13
Not Rated	N/A	6

Summary of Bridge Replacement Needs

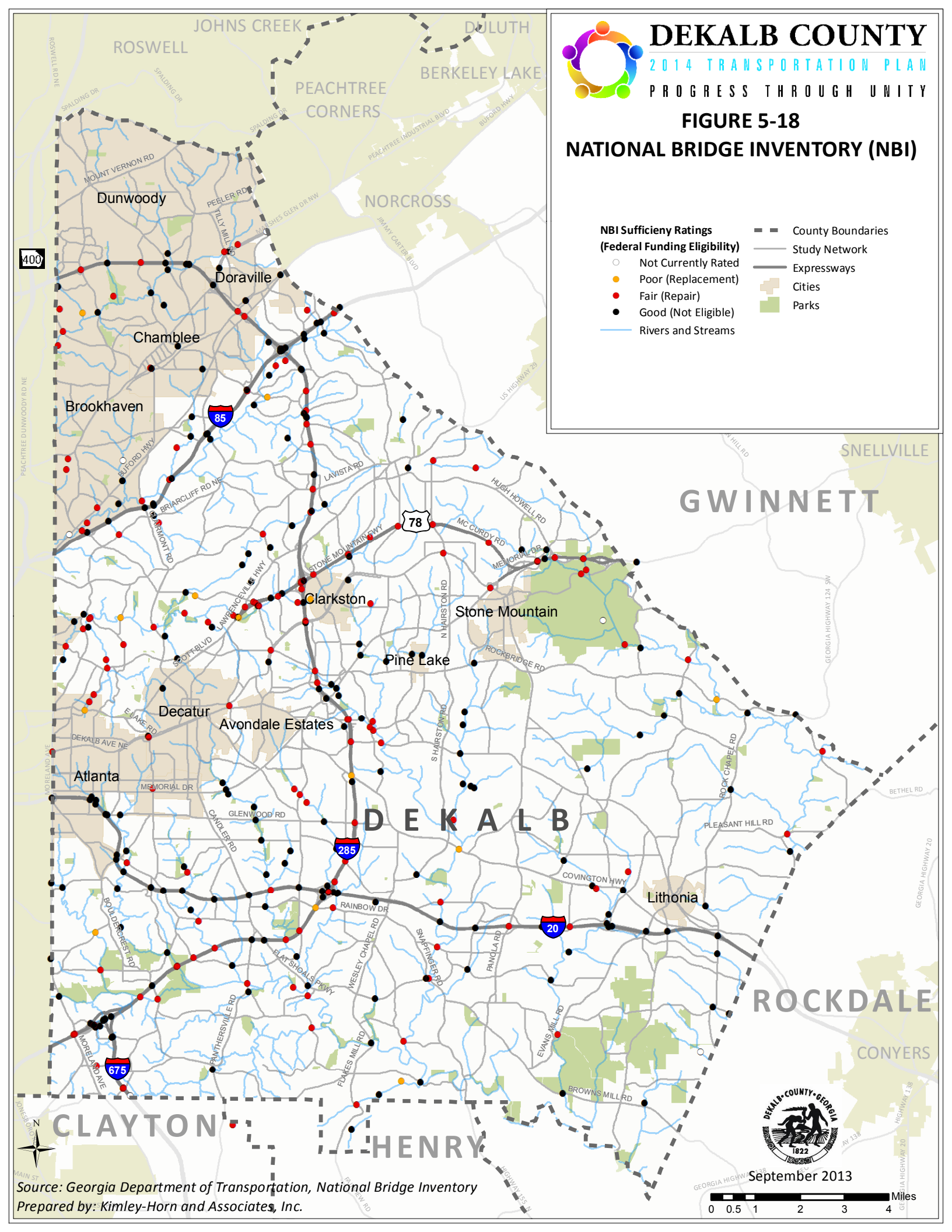
Those bridges that are eligible for federal replacement funding (with a sufficiency rating of 50 or less) include:

- Mercer University Drive over Peachtree Creek, North Fork (Sufficiency Rating 7)
- North Druid Hills Road over Norfolk Southern Railroad (25)
- Key Road over Entrenchment Creek (41)
- Covington Highway over Snapfinger Creek (41)
- Ponce de Leon Ave over Lullwater Creek (42)
- Rockbridge Road over Stone Mountain Creek (43)
- Casa Drive over South Fork Peachtree Creek (45)
- Nancy Creek Road over Nancy Creek Tributary (47)
- Covington Highway over I-285 (SR 407) (48)
- Houston Mill Road over Peachtree Creek South Fork (49)
- Right Frontage Road (Parallel to Lawrenceville Highway over Peachtree Creek South Fork (49)
- Rainbow Drive over I-285 - I-20 Ramp (49)
- Hearn Road over Corn Creek (50)

[41] Per FHWA's *Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges*, a bridge's sufficiency rating calculates four separate factors to obtain a numeric value which is indicative of bridge sufficiency to remain in service.

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 5-18
NATIONAL BRIDGE INVENTORY (NBI)



Source: Georgia Department of Transportation, National Bridge Inventory
Prepared by: Kimley-Horn and Associates, Inc.

September 2013

5.9 Annual Average Daily Traffic and Growth on Key Corridors

Average annual daily traffic (AADT) volumes for 2011 were obtained from the Georgia Department of Transportation. Figure 5-19 illustrates the 2011 AADT as well as the change in AADT between 2006 and 2011, along major corridors within the DeKalb County study network. The *size* of the circle indicates the overall volume. The larger the circle is, the higher the volume of traffic at that section of the roadway. The percent change in AADT between 2006 and 2011 is expressed by the symbol *color* with dark blue representing the highest positive change and red representing the highest negative change. As expected, the highest traffic volumes are found along the interstates followed by freeways and major arterials. Many of the interstates have decreased in traffic over the five-year period while some of the arterials have increased in traffic. I-285 and I-20 appear to have decreased in AADT throughout DeKalb County as a whole, while I-85 close to the I-285 interchange has experienced some growth. Other key arterials that have increased in volume include Peachtree Road, Clairmont Road, Candler Road, and Memorial Drive.

5.10 ARC Travel Demand Model

2010 Roadway Level-of-Service

The Highway Capacity Manual states that Level-of-Service (LOS) is a measure of operating conditions experienced by motorists. The LOS is an indication of delay and is measured on a grading scale from "A" to "F"- "A" represents the best conditions and "F" represents the worst conditions. LOS A typically occurs on roadways with free-flowing conditions and little delay, while LOS F typically occurs on roadways with high congestion and heavy delay (approaching gridlock). LOS D is generally considered acceptable because the roadway is busy, yet traffic is still flowing at a reasonable speed. LOS E is typically when a roadway is operating at capacity.

The Atlanta Regional Commission's 2010 travel demand model (TDM) was used to determine the baseline conditions of roadway operation throughout DeKalb County. The regional travel demand model encompasses twenty counties; therefore, additional detail is necessary for a subarea study such as a county transportation plan. Two primary sets of adjustments were made to the model: revisions to the socioeconomic data and revisions to the roadway network. Socioeconomic data (population, households, and employment) are stored in the travel demand model within Traffic Analysis Zones (TAZs) and are the basis for generation of trips. In many locations throughout the County, TAZs were split to provide more local level detail. Roadway inventory data that was collected in the field was compared with the model network to ensure the accuracy of the DeKalb County study area roadways within the model. Edits were made to roadway laneage, functional classification, and speeds along roadways within DeKalb County. Additionally, some of the County's collector and local roadways not previously in the model were added to the network for better representation of local traffic. Daily volumes produced as output from the travel demand model were compared with GDOT AADTs to ensure that the existing conditions model adequately represents actual current traffic conditions.

Figure 5-20 shows the existing 2010 Level-of-Service in the PM peak period (6-10 PM) along the roadways within the study network in DeKalb County. Roadways that are considered to be operating at a poor LOS (LOS E or LOS F) are shown in orange or red, respectively. It is important to note two things about the travel demand model maps. First, this is a peak period map (4 hours), so travel in the peak hour

may be even worse than the aggregate four hours. Second, the LOS depicted on this map represents the volume to capacity ratio along a link only. If the volume on the roadway exceeds the capacity (V/C > 1.0), the link is considered to be an LOS F. While also a contributing factor to congestion levels, delay associated with poorly operating intersections is not represented in this analysis. It is possible, therefore, for a road or corridor to operate at a lower LOS than shown in the map if the intersections along the corridor do not work efficiently.

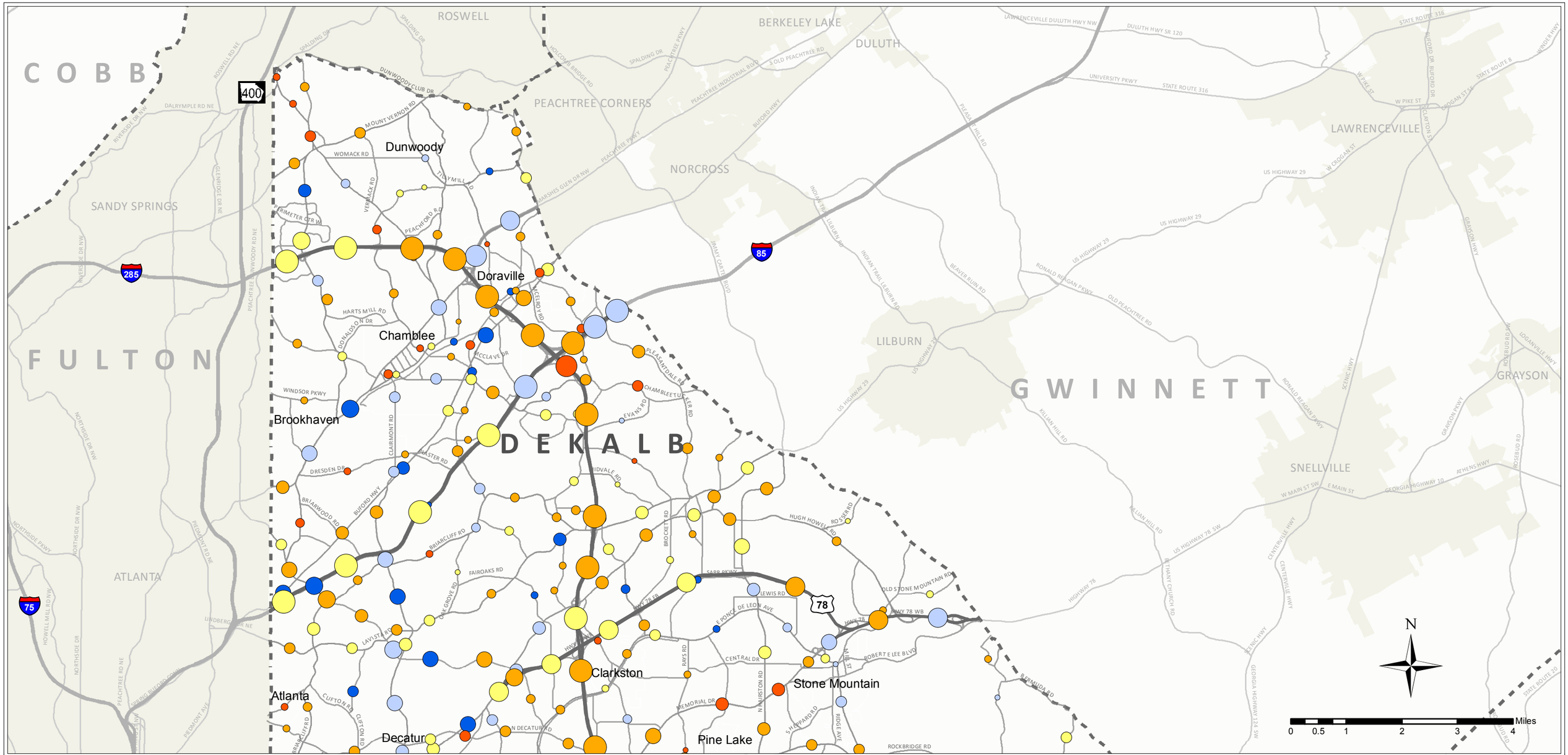
It is not surprising that many of the interstates operate at LOS E or F during the PM peak period, including I-285, and I-85 and I-20, particularly outside the perimeter. Numerous other arterial and collector facilities operate at substandard Levels-of-Service as well including Clairmont Road, North Druid Hills Road, Stone Mountain Freeway, Redan Road, Covington Highway, and North Decatur Road, among others.

2040 Roadway Level-of-Service

In addition to studying the 2010 Existing Levels-of-Service in the travel demand model, future conditions were calculated to understand how congestion will likely increase. The 2040 No-Build Travel Demand Model assumes the current roadway and transit network from 2010 (no additional infrastructure improvements) with the population and employment projections for 2040. This model provides an understanding of what vehicular congestion may look like if people and jobs continue to move to the region and no additional infrastructure improvements are made. Figure 5-21 shows the 2040 PM No-Build Level-of-Service for roadways within DeKalb County. The vast majority of roadways show as LOS E or F in 30 years, an extreme degradation in operations from the existing conditions. Improvements will be needed to maintain the current quality of service.

Vehicular Congestion Needs – High V/C Corridors

The 2040 No-Build Travel Demand Model was used to determine the corridors of highest projected need relative to vehicular congestion. The maximum V/C by direction was selected for each roadway link in the PM Peak period model. These were aggregated up to the overall corridor, and a percentage of miles of roadway over capacity was calculated (V/C greater than 1.0). Figure 5-22 shows all of the roadway segments that are either an LOS F with a V/C greater than 1.0 (red) or an LOS F with a V/C greater than 1.2 (burgundy). Shown in conjunction with these links are the corridors that had a high percentage of the overall corridor having a V/C of greater than 1.0. Level 3 Corridors are a minimum of two miles long with a V/C greater than 1.0 for 50% of the roadway or a minimum of one mile long with a V/C greater than 1 for 75% of the roadway. Level 2 Corridors are a minimum of five miles in length with a V/C greater than 1.0 for 50%-75% of the roadway. Finally, Level 1 Corridors are a minimum of two miles long with a V/C greater than 1.0 for 75% of the roadway. Table 5-9 shows the Level 1 Corridors from the map. Roadways with 100% of one direction of the roadway over capacity during the PM Peak period of the 2040 model include Snapfinger Road, Cleveland Road / Rock Springs Road, Brockett Road / Henderson Road, Pleasant Hill Road, Frazier Road / McClendon Drive, Shadow Rock Drive, McDonough Street / Allendale Drive / Spence Avenue, and Norris Lake Drive.



September 2013

AADT In 2011 (Symbol Size)

- AADT 15,000 - 20,000
- AADT 20,000 - 28,000
- AADT 29,000 - 39,000
- AADT 70,000 - 105,000
- AADT 110,000 - 150,000
- AADT > 150,000

Percent Change (Symbol Color)

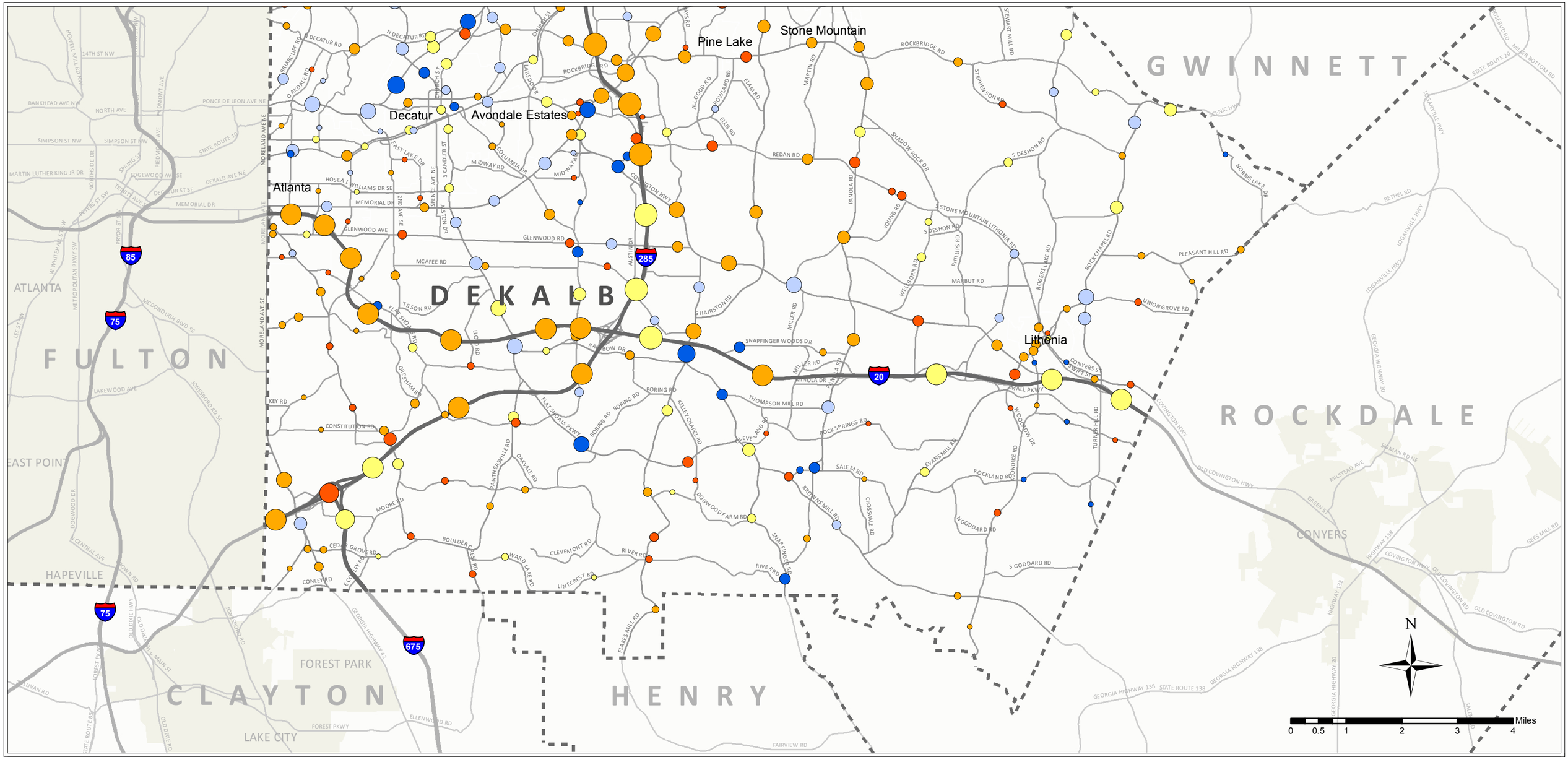
- < -25%
- -25% to -5%
- -5% to +5%
- +5% to +25%
- > +25%

- Roadway Study Network
- Major Roads Around DeKalb
- Expressways

Source: The Georgia Department of Transportation
Prepared by: Kimley-Horn and Associates, Inc.

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 5-19A
PERCENT CHANGE IN AADT FROM 2006 - 2011
NORTHERN DEKALB



September 2013

AADT In 2011 (Symbol Size)

- AADT 15,000 - 20,000
- AADT 20,000 - 28,000
- AADT 29,000 - 39,000
- AADT 70,000 - 105,000
- AADT 110,000 - 150,000
- AADT > 150,000

Percent Change (Symbol Color)

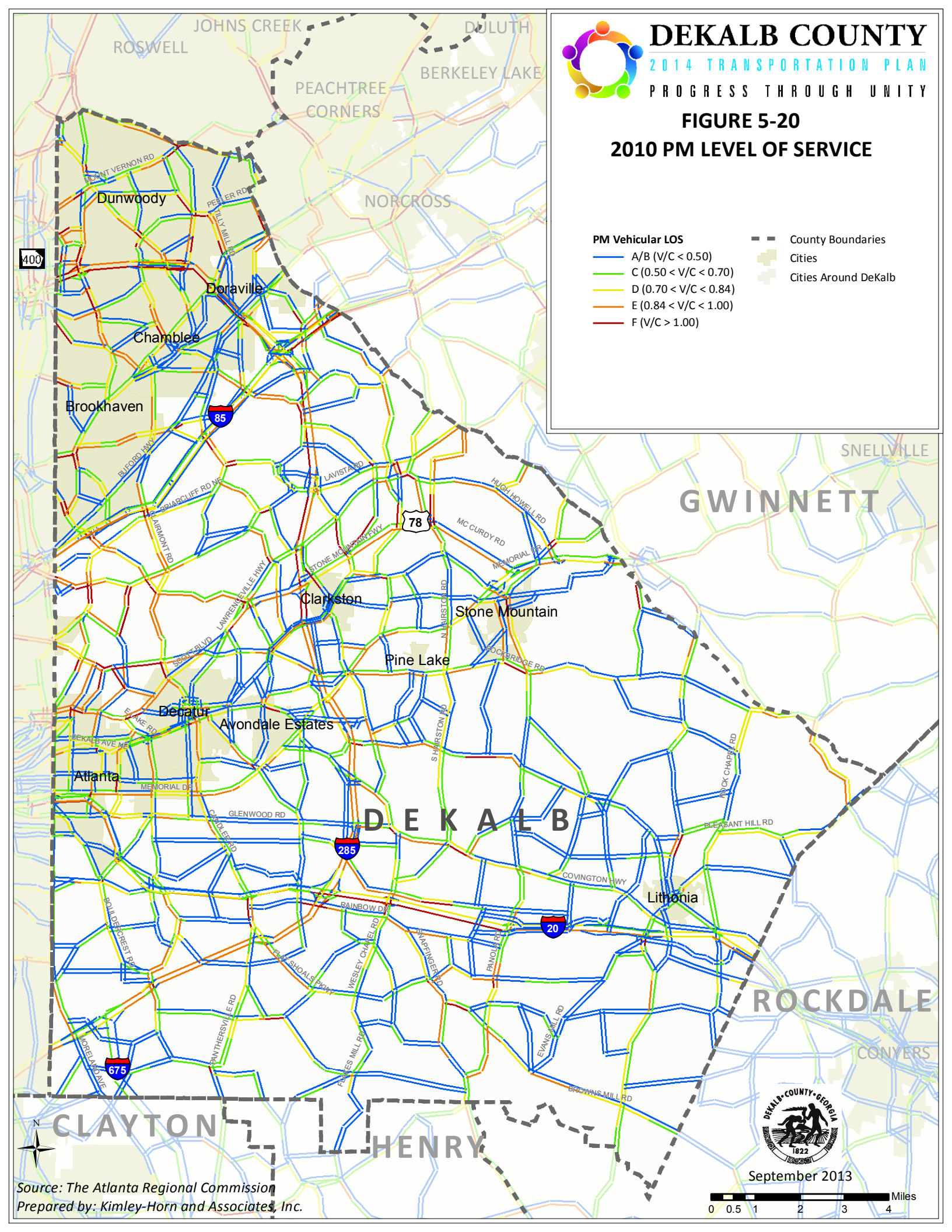
- < -25%
- -25% to -5%
- -5% to +5%
- +5% to +25%
- > +25%

- Roadway Study Network
- Major Roads Around DeKalb
- Expressways

Source: The Georgia Department of Transportation
Prepared by: Kimley-Horn and Associates, Inc.

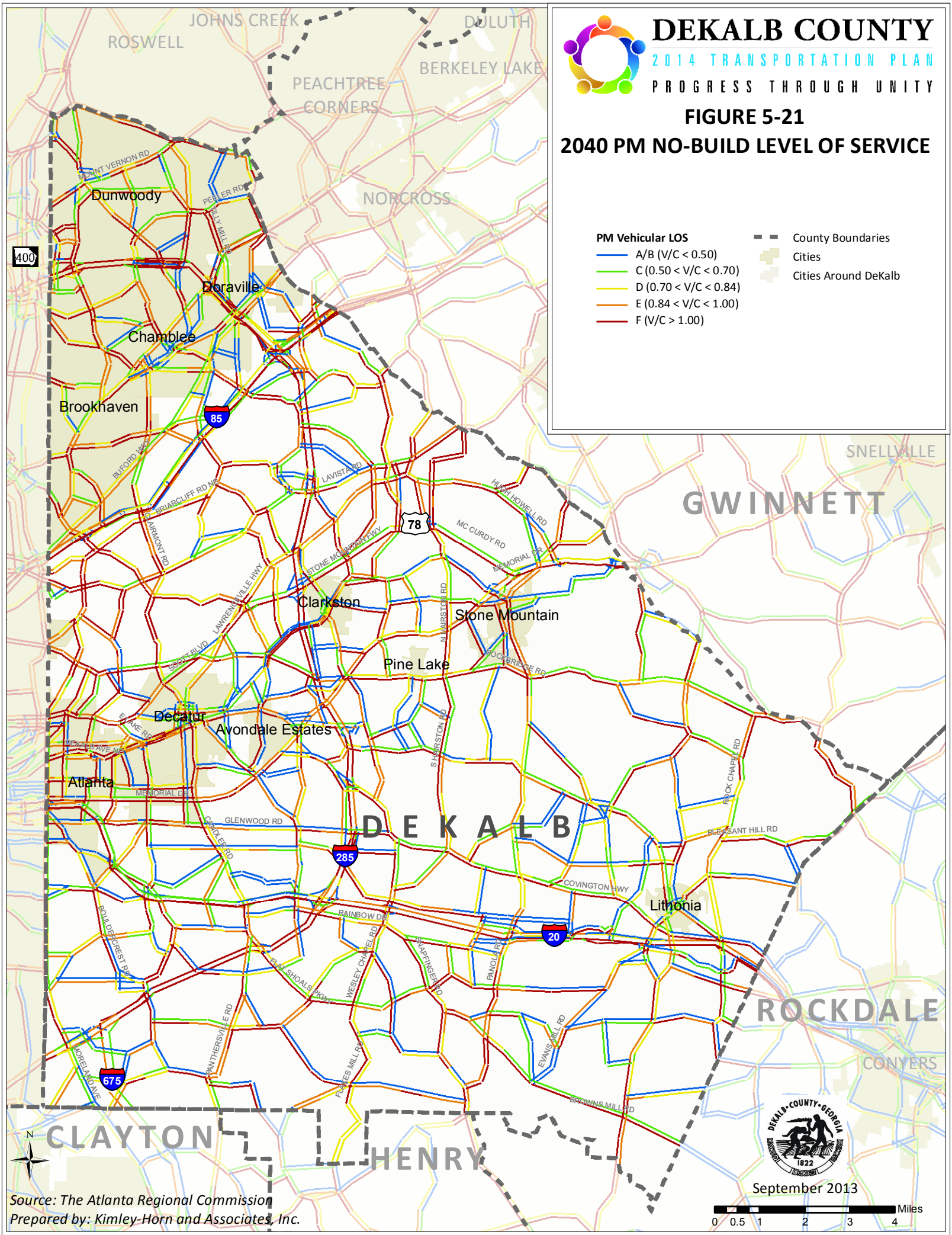
DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 5-19B
PERCENT CHANGE IN AADT FROM 2006 - 2011
SOUTHERN DEKALB


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 5-20
2010 PM LEVEL OF SERVICE
PM Vehicular LOS
A/B (V/C < 0.50)
C (0.50 < V/C < 0.70)
D (0.70 < V/C < 0.84)
E (0.84 < V/C < 1.00)
F (V/C > 1.00)
County Boundaries
Cities
Cities Around DeKalb
JOHNS CREEK
ROSWELL
DULUTH
BERKELEY LAKE
PEACHTREE CORNERS
NORCROSS
SNELLVILLE
GWINNETT
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
Lithonia
ROCKDALE
CONYERS
DEKALB
CLAYTON
HENRY
400
85
78
285
20
675
MOUNT VERNON RD
PEELER RD
TILLY MILL RD
BUFORD HWY
BRIARCLIFF RD NE
LAVISTA RD
HUGH HOWELL RD
MC CURDY RD
MEMORIAL DR
STONE MOUNTAIN HWY
LAWRENCEVILLE HWY
N HAIRSTON RD
S HAIRSTON RD
ROCKBRIDGE RD
SCOTT BLVD
E LAKE RD
DEKALB AVE NE
MEMORIAL DR
GLENWOOD RD
CANDLER RD
BOULDERCREST RD
RAINBOW DR
WESLEY CHAPEL RD
SNAPFINGER RD
PANOLA RD
COVINGTON HWY
PLEASANT HILL RD
ROCK CHAPEL RD
EVANS MILL RD
BROWNS MILL RD
PANTHERSVILLE RD
MORELAND AVE
FLAT SHOALS PKWY
FLAKES MILL RD
N
Source: The Atlanta Regional Commission
Prepared by: Kimley-Horn and Associates, Inc.
DEKALB COUNTY GEORGIA 1822
September 2013
0 0.5 1 2 3 4 Miles

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 5-21
2040 PM NO-BUILD LEVEL OF SERVICE



Source: The Atlanta Regional Commission
Prepared by: Kimley-Horn and Associates, Inc.

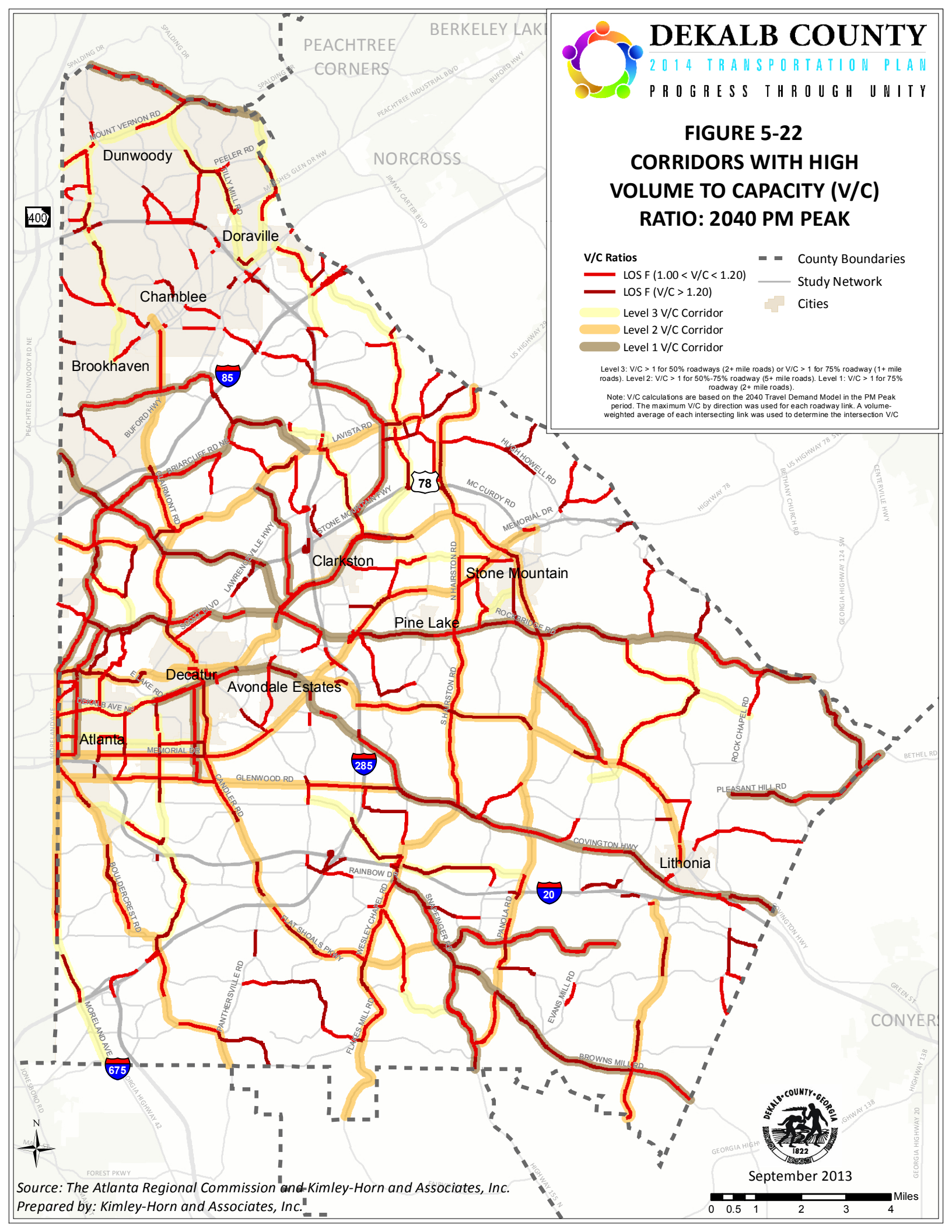

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 5-22
CORRIDORS WITH HIGH VOLUME TO CAPACITY (V/C) RATIO: 2040 PM PEAK
V/C Ratios
LOS F (1.00 < V/C < 1.20)
LOS F (V/C > 1.20)
Level 3 V/C Corridor
Level 2 V/C Corridor
Level 1 V/C Corridor
County Boundaries
Study Network
Cities
Level 3: V/C > 1 for 50% roadways (2+ mile roads) or V/C > 1 for 75% roadway (1+ mile roads). Level 2: V/C > 1 for 50%-75% roadway (5+ mile roads). Level 1: V/C > 1 for 75% roadway (2+ mile roads).
Note: V/C calculations are based on the 2040 Travel Demand Model in the PM Peak period. The maximum V/C by direction was used for each roadway link. A volume-weighted average of each intersecting link was used to determine the intersection V/C
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
Lithonia
PEACHTREE CORNERS
BERKELEY LAKE
NORCROSS
CONYERS
September 2013
Miles
0 0.5 1 2 3 4
Source: The Atlanta Regional Commission and Kimley-Horn and Associates, Inc.
Prepared by: Kimley-Horn and Associates, Inc.

Table 5-9: High V/C Corridors from the No-Build 2040 Model

Roadway		Miles Over Capacity	Total Miles	% Over Capacity
From	To			
Snapfinger Road		5.1	5.1	100%
Rainbow Drive / Wesley Chapel Road	DeKalb County Line (South)			
Cleveland Road / Rock Springs Road		4.7	4.7	100%
Snapfinger Road	Evans Mill Road			
Brockett Road / Henderson Road		4.4	4.4	100%
Henderson Mill Road	Cooledge Road			
Pleasant Hill Road		3.8	3.8	100%
Rock Chapel Road	DeKalb County Line (East)			
Frazier Road / McClendon Drive		2.8	2.8	100%
Lavista Road	Ponce de Leon Avenue			
Shadow Rock Drive		2.3	2.3	100%
S. Stone Mountain Lithonia Road	Redan Road			
McDonough Street / Allendale Drive / Spence Avenue		2.2	2.2	100%
E. College Avenue	Glenwood Avenue			
Norris Lake Drive		2.1	2.1	100%
Pleasant Hill Road	DeKalb County Line (East)			
Oakdale Road / Whiteford Avenue		3.0	3.0	98%
Memorial Drive	N. Decatur Road			
Dresden Drive		2.9	3.0	97%
Peachtree Road	Shallowford Road			
Browns Mill Road		5.8	6.4	91%
Snapfinger Road	DeKalb County Line (South)			
Dunwoody Club Drive		3.5	3.9	90%
DeKalb County Line (West)	DeKalb County Line (East)			
Church Street		3.3	3.7	88%
N. Clarendon Road	Ponce de Leon Avenue			
Briarcliff Road		8.4	9.7	87%
Lavista Road (North)	Ponce de Leon Avenue			
N. Decatur Road / Rockbridge Road		14.0	17.1	82%
Briarcliff Road	DeKalb County Line (East)			
Covington Highway / College Avenue		12.8	15.6	82%
E. Lake Drive	DeKalb County Line (East)			
North Druid Hills Road / E. Roxboro Road		5.2	6.6	79%
DeKalb County Line (West)	Ponce de Leon Avenue			

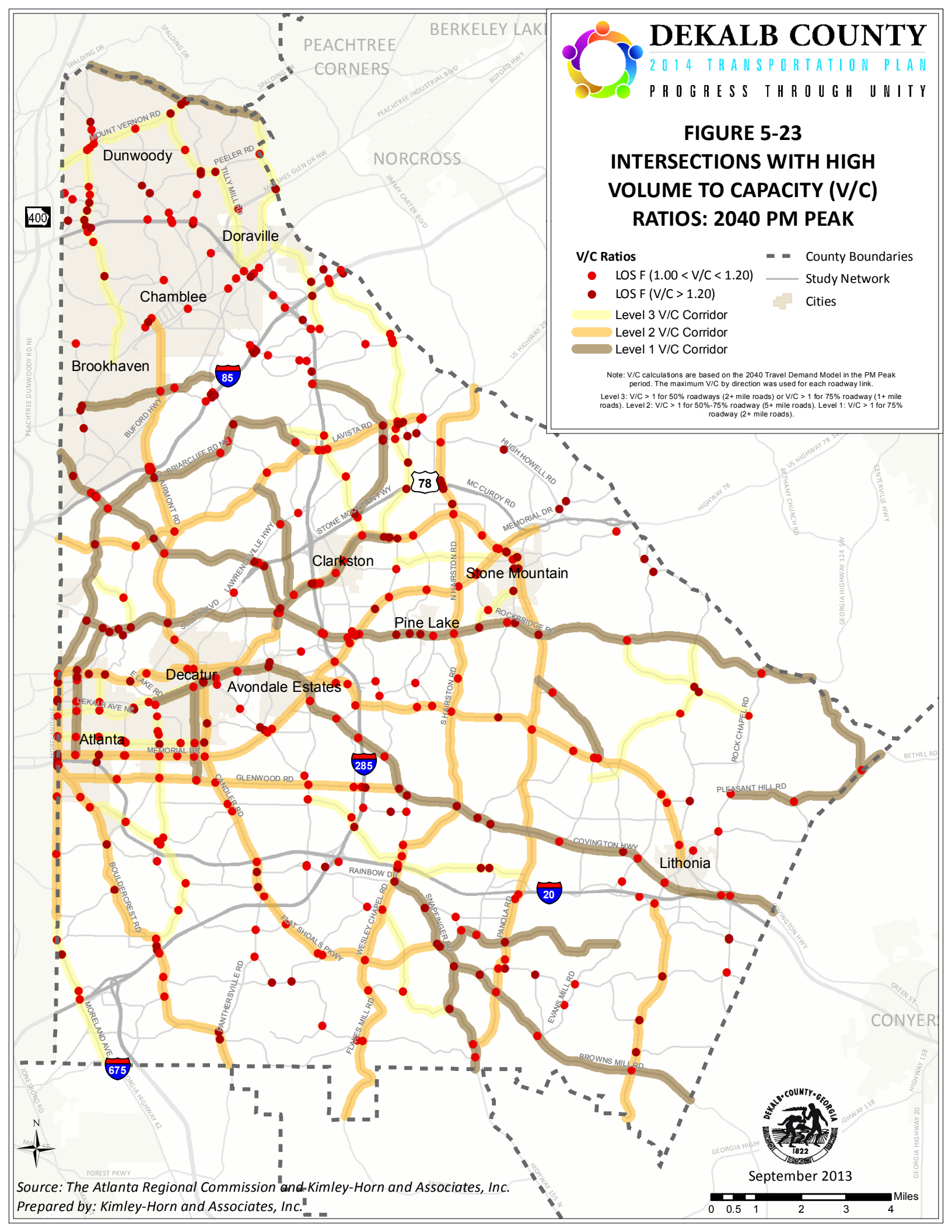

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 5-23
INTERSECTIONS WITH HIGH VOLUME TO CAPACITY (V/C) RATIOS: 2040 PM PEAK
V/C Ratios
LOS F (1.00 < V/C < 1.20)
LOS F (V/C > 1.20)
Level 3 V/C Corridor
Level 2 V/C Corridor
Level 1 V/C Corridor
County Boundaries
Study Network
Cities
Note: V/C calculations are based on the 2040 Travel Demand Model in the PM Peak period. The maximum V/C by direction was used for each roadway link.
Level 3: V/C > 1 for 50% roadways (2+ mile roads) or V/C > 1 for 75% roadway (1+ mile roads). Level 2: V/C > 1 for 50%-75% roadway (5+ mile roads). Level 1: V/C > 1 for 75% roadway (2+ mile roads).
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
Lithonia
PEACHTREE CORNERS
NORCROSS
BERKELEY LAKE
CONYERS
MOUNT VERNON RD
PEELER RD
TILLY MILL RD
BUFORD HWY
LAVISTA RD
BRIARCLIFF RD NE
CHAIRMONT RD
STONE MOUNTAIN HWY
LAWRENCEVILLE HWY
HIGH HOWELL RD
MC CURDY RD
MEMORIAL DR
N HAIRSTON RD
S HAIRSTON RD
ROCKBRIDGE RD
SCOTT BLVD
E LAKE RD
DEKALB AVE NE
GLENWOOD RD
CANDLER RD
ROCK CHAPEL RD
PLEASANT HILL RD
BETHEL RD
COVINGTON HWY
RAINBOW DR
BOULDERCREST RD
FLAT SHOALS PKWY
WESLEY CHAPEL RD
SNAPFINGER RD
PANOLA RD
EVANS MILL RD
BROWNS MILL RD
PANTHERSVILLE RD
FLAKES MILL RD
MORELAND AVE
JONESBORO RD
GEORGIA HIGHWAY 42
GEORGIA HIGHWAY 138
GEORGIA HIGHWAY 20
HIGHWAY 155 N
US HIGHWAY 78
HIGHWAY 78
BETHANY CHURCH RD
CENTERVILLE HWY
GEORGIA HIGHWAY 124 SW
PEACHTREE DUNWOODY RD NE
SPALDING DR
PEACHTREE INDUSTRIAL BLVD
MEADOW GLEN DR NW
JIMMY CARTER BLVD
US HIGHWAY 29
400
85
78
285
20
675
N
DEKALB COUNTY GEORGIA 1822
September 2013
0 0.5 1 2 3 4 Miles
Source: The Atlanta Regional Commission and Kimley-Horn and Associates, Inc.
Prepared by: Kimley-Horn and Associates, Inc.

Table 5-10: High V/C Intersections from the No-Build 2040 Model

Intersection	Volume-Weighted Average Intersection V/C
Highway 78 WB Ramp at Cooledge Road	2.5
Cooledge Road at Brockett Road	2.4
N. Main Street at E. Mountain Street	2.0
Bermuda Road at Parkview Boulevard	1.9
Covington Highway at Young Road	1.9
Mountain Industrial Boulevard at Tucker Industrial Road	1.9
I-20 WB Entry Ramp at Moreland Avenue	1.8
Redan Road at Martin Road	1.8
I-20 EB Ramp at Moreland Avenue	1.7
Glenwood Road at Glenfair Road	1.7
Mount Vernon Road at Dunwoody Club Drive	1.7
Ashford Dunwoody Road at Hammond Drive	1.6
N. Main Street at James B Rivers Memorial Drive	1.6
Highway 78 WB Ramp at Mountain Industrial Boulevard	1.6
Moreland Avenue at Memorial Drive	1.6
Rockbridge Road at Ridge Avenue	1.6
Rockbridge Road at N. Stone Mountain Lithonia Road	1.6
N. Decatur Road at Lullwater Road	1.6
Rockbridge Road at Hambrick Road	1.6
Peachtree Road at N. Druid Hills Road	1.6
Salem Road at Big Miller Grove Way	1.5
N. Peachtree Road at Tilly Mill Road	1.5
Lilburn Stone Mountain Road at Old Stone Mountain Road	1.5
Columbia Drive at Clarendon Avenue	1.5
N. Peachtree Road at Mount Vernon Road	1.5
Covington Highway at Miller Road	1.5
Lavista Road at Chamblee Tucker Road	1.5
Fairview Road at Oakdale Road	1.5
N. Decatur Road at Oakdale Road	1.5

5.11 Laborsheds

Transportation can be scrutinized through an economic lens by considering how many workers live within 15, 30, and 45 minutes of major employment centers. Many economic developers and employers consider talent pools when choosing whether or not to locate new offices and jobs in metropolitan areas, so congestion can be a major concern if it greatly affects the areas from which workers can reasonably commute, as well as the number of people and variety of talents. The more efficiently transportation systems work, the wider range of jobs are accessible to workers, and the broader talent pool is available for employers to recruit to a variety of jobs. The region's population is expected to grow significantly by 2040, which absolutely impact laborsheds in the future due to a larger number of people living, working, and traveling within the region. Because DeKalb is centrally located, travel patterns in the County will likely be impacted more greatly than counties located on the outskirts of the metro area.

Laborshed analyses were conducted for Emory, Mountain Industrial, Northlake, and Perimeter Center, the areas classified as "Regional Centers" by ARC's Unified Growth Policy Map in the County. The analyses considered the number of workers who currently are able to commute to these DeKalb employment centers within 15, 30, or 45 minutes. A similar analysis was done for 2040 to compare commutes and the numbers of workers in the future to those of today. Table 5-11 notes the number of workers within each laborshed considered within 15, 30, and 45 minute vehicular commutes from each employment center if no improvements are made to the transportation network. Travel times were calculated between each of the Traffic Analysis Zones and the middle of the employment center, which explains why some employment centers have few workers that can reach them in 2040 in less than 15 minutes.

Table 5-11: Workers within Vehicular Laborsheds

Workers within Laborsheds	2010	2040	Change
Emory			
< 15 Minutes	11,752	1,396	-88.1%
< 30 Minutes	195,749	37,461	-80.9%
< 45 Minutes	564,142	218,016	-61.3%
Mountain Industrial			
< 15 Minutes	38,195	20,559	-46.2%
< 30 Minutes	368,180	168,274	-54.3%
< 45 Minutes	802,090	455,540	-43.2%
Northlake			
< 15 Minutes	26,099	7,661	-70.6%
< 30 Minutes	331,009	173,737	-47.5%
< 45 Minutes	820,483	450,728	-45.1%
Perimeter Center			
< 15 Minutes	8,427	-	-100.0%
< 30 Minutes	163,169	69,410	-57.5%
< 45 Minutes	528,817	184,358	-65.1%

It is not surprising that the anticipated population growth and resulting congestion, without any infrastructure enhancements, causes the laborshed analysis to show greatly reduced laborsheds in 2040. Vehicular commutes to Emory will be greatly impacted by 2040, with the largest reduction in talent pools closest to the employment center as can be seen in Figure 5-24. Nearly 90 percent fewer workers will be able to reach Emory within 15 minutes, and just over 80 percent fewer will not be able to access the center within 30 minutes without any roadway infrastructure enhancements. Only 40 percent of 2010 available workers will still be able to access Emory within a 45-minute commute.

Figure 5-24: Emory Vehicular Laborsheds 2010 and 2040

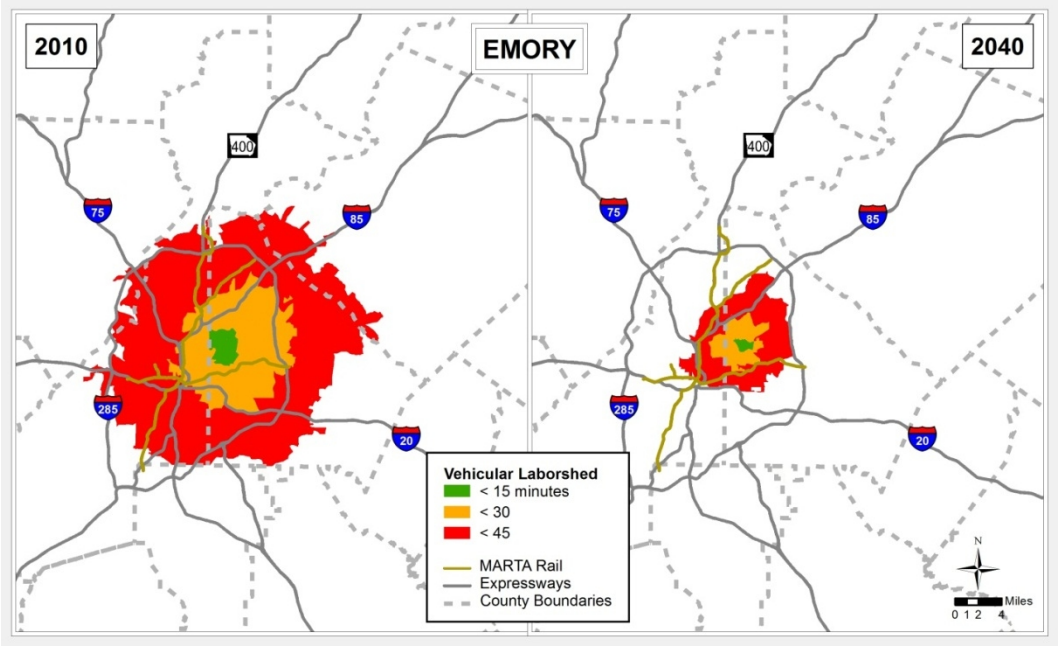
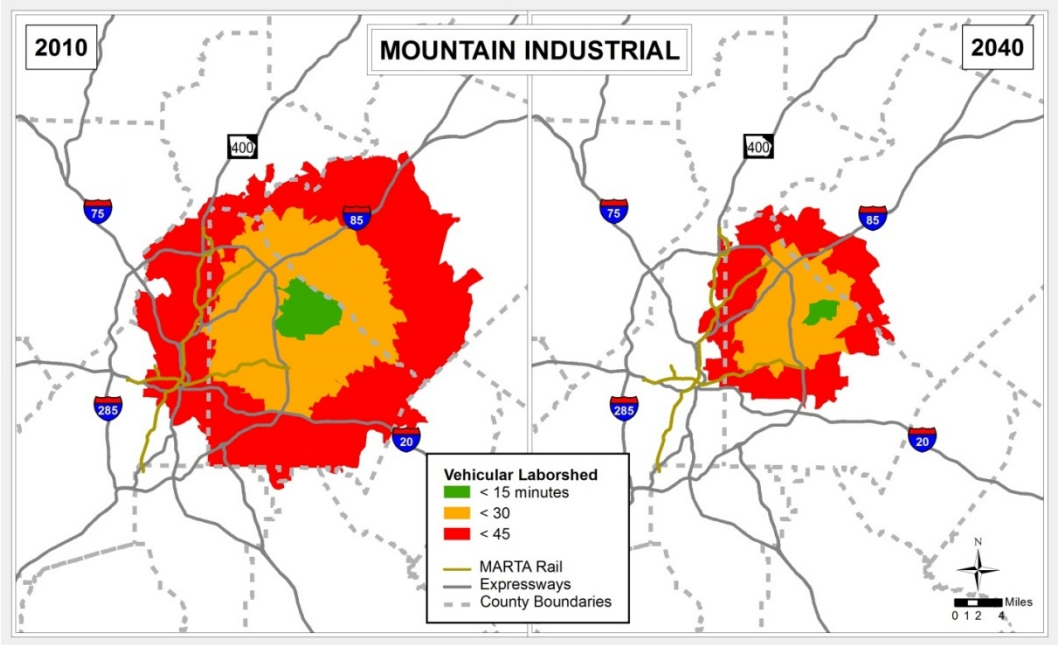
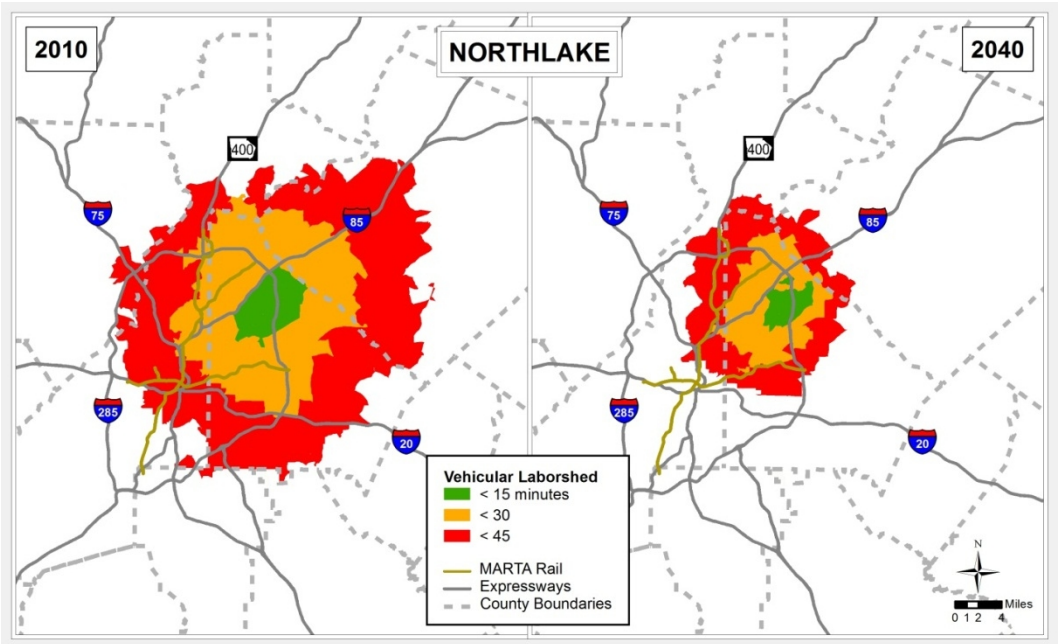


Figure 5-25: Mountain Industrial Vehicular Laborsheds 2010 and 2040



Mountain Industrial and Northlake are located farther out from the region's central core than Emory, making them slightly less vulnerable to the traffic and congestion challenges that the region, and particular the region's core, will continue to face. Still, within a 45 minute commute, each has nearly half as many accessible workers in 2040 as compared with 2010.

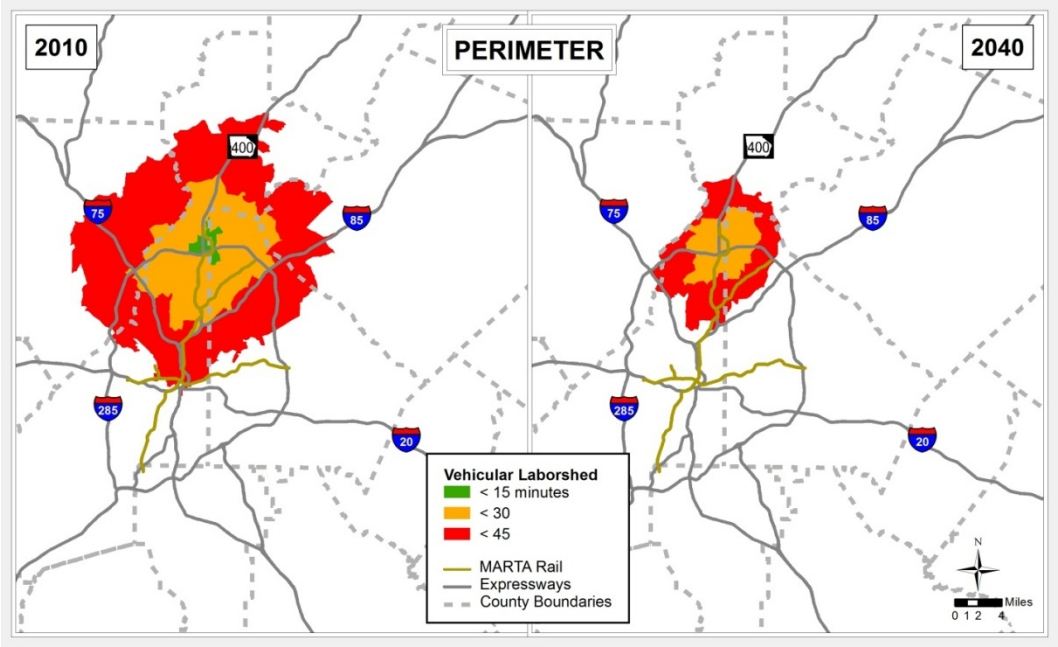
Figure 5-26: Northlake Vehicular Laborsheds 2010 and 2040



Perimeter Center is the most affected laborshed when considering the total number of commuters available within a 45-minute commute. In 2040, without any infrastructure improvements, not only is a 15-minute commute impossible for most workers to successfully complete, but a 45-minute commute is

only possible for about 35 percent of the workers who were able to make a similar duration commute in 2010, as can be seen in Figure 5-27.

Figure 5-27: Perimeter Center Vehicular Laborsheds 2010 and 2040



5.12 Crash History

Examining crash history and traffic patterns can suggest locations that could benefit from traffic safety improvements. Vehicular crashes are very costly when considering medical care, emergency services, victim work loss, employer cost, traffic delay, property damage, and a reduction in the quality of life due to longer travel times. Crash data for this study was collected for the years 2009 to 2011. Due to lack of location data for many of the crashes, only those with valid spatial coordinates and county codes were specifically considered in this analysis. There is a need for better crash reporting. Crashes without spatial location recorded, or with incorrect spatial location result in limited opportunity for truly diagnosing safety concerns among roadways across the County and other counties across the metropolitan region. Figure 5-28 shows the locations with more frequent crashes within DeKalb County along the study network, as well as the locations of all fatalities that occurred in the County during this time. Generally, the number of crashes at intersections corresponds with the road's functional classification and traffic volume. From 2009 to 2011, there were 31,381 crashes within the study network. There were 10,769 injuries in 7,779 separate crashes. Along the study network, 84 fatalities occurred due to the event of 76 separate crashes. 405 crashes included property damage. A summary of all crashes throughout DeKalb as well as those that occurred specifically along the study network is noted in Table 5-12. The table also breaks down crashes by type of collision (e.g. – collision with heavy vehicles, bicycle or pedestrian collision), as well as noting the number of resulting injuries and fatalities.

Table 5-12: Summary of DeKalb County and Study Network Crashes 2009 to 2011

Type of Crash	Crashes in DeKalb County			Crashes Along Study Network		
	Total Crashes	With Injuries (Total Injuries)	With Fatalities (Total Fatalities)	Total Crashes	With Injuries (Total Injuries)	With Fatalities (Total Fatalities)
All Crashes	**35,450**	8,587 (11,866)	85 (94)	**31,381**	7,779 (10,769)	76 (84)
Heavy Vehicle	**2,863**	587 (795)	4 (4)	**2,564**	544 (731)	3 (3)
Bicycle	**193**	147 (156)	none	**149**	114 (120)	none
Pedestrian	**625**	503 (529)	27 (27)	**540**	433 (453)	27 (27)

Areas with high crash frequency include:

- I-285 at I-85 Interchange (including I-285 over to Peachtree Industrial Boulevard)
- I-285 at Lavista Road
- I-285 at Memorial Drive
- I-20 at I-285 Interchange
- I-20 at Wesley Chapel Road
- I-20 at Panola Road
- I-85 between the west County line and Clairmont Road
- Buford Highway between the west County line and Clairmont Road
- Candler Road from the I-20 Interchange to the I-285 Interchange
- Perimeter Center
- City of Chamblee
- City of Atlanta
- City of Decatur

The areas where the highest density of crashes occurs generally correspond with the areas that are:

- High traffic volume areas – particularly areas that become heavily congested
- Interstate interchanges
- Activity centers with more dense roadway networks such as small downtowns

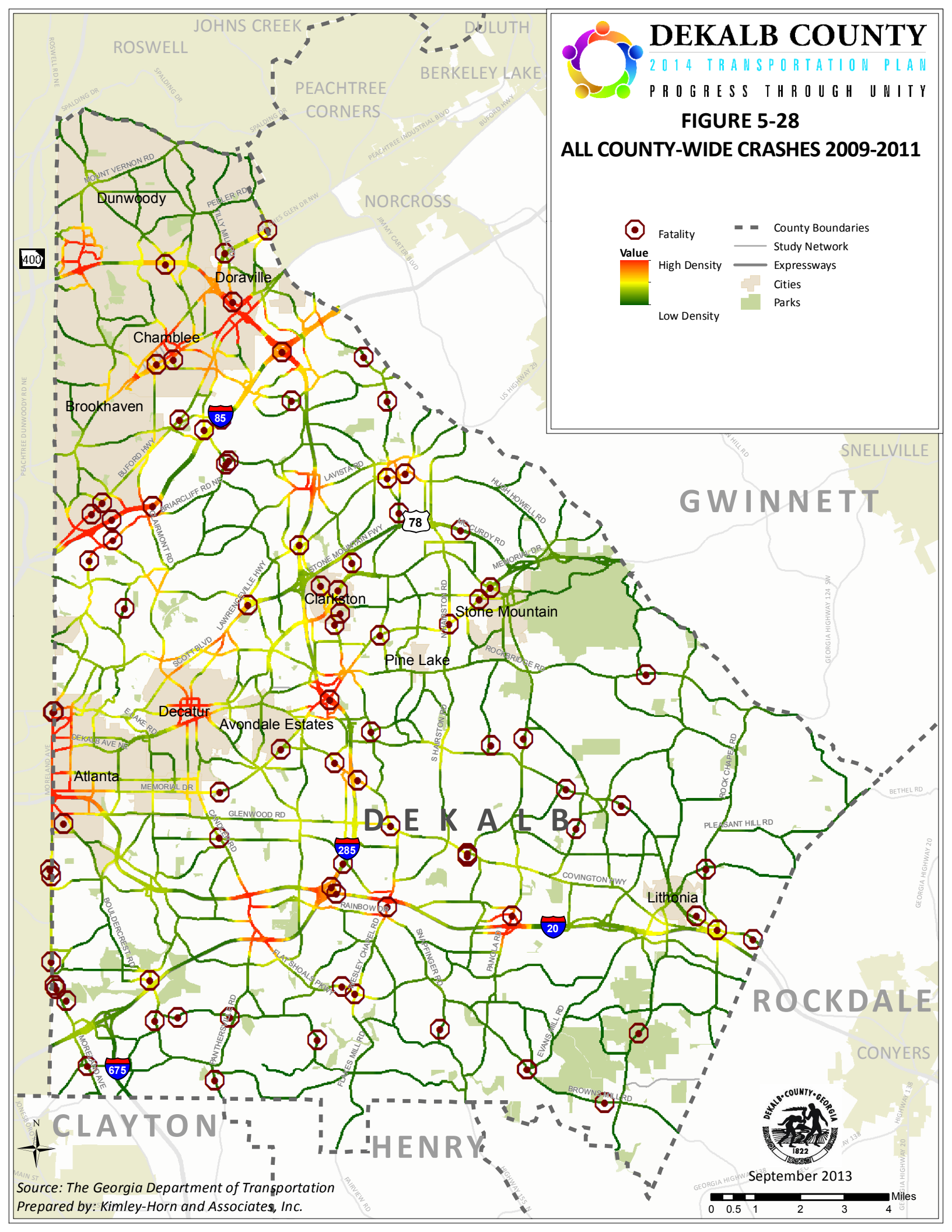
Those factors might be somewhat expected but they are not completely consistent across all locations. Some locations that meet those criteria but do not show up with high crash densities include:

- I-285 at Stone Mountain Freeway
- I-285 at I-675
- City of Stone Mountain
- I-20 at Turner Hill Road

For transportation projects that are proposed during this planning process, careful consideration should be given for those projects identified for high crash areas. Those projects should be discussed or modified in light of their planned or potential safety benefits.

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 5-28
ALL COUNTY-WIDE CRASHES 2009-2011



Source: The Georgia Department of Transportation
Prepared by: Kimley-Horn and Associates, Inc.

September 2013

0 0.5 1 2 3 4 Miles

5.13 Summary of Roadway Needs

When considering roadway needs within DeKalb County, many aspects must be taken into consideration. Congestion relief, often one of the key aspects, can occur through various solutions: widening of existing roadways, creation of new roadways/connections, and improvements to intersection geometry, signal timing, and corridor access management. Related to congestion relief is the ability of workers throughout the County and region to access employment centers by vehicle in less than 45 minutes. Safety is another important factor in determining roadway needs. Reducing collisions along the roadway reduces non-recurring delay and improves the well-being of the various users of the system. Finally, and extremely critical, is the management of assets owned by the state, County, and cities. Road and bridge deterioration is a costly and often overlooked aspect of roadway needs. Money is often dedicated to improving systems or building new ones; however, agencies need to focus on maintaining a state of good repair on existing systems in conjunction with, and even before, building new. A summary of the roadway needs within DeKalb County is provided below.

Congestion Relief and Providing New Options

DeKalb County has the highest population density and is one of the most built-out counties in Metro Atlanta. Because of the robust roadway network inside the perimeter, widening roadways and finding new roadway connections will be a challenge in many locations; however, key opportunities to provide vehicular congestion relief should be considered.

Change in AADTs show that volume on many of the interstates has slowed or even decreased, likely due to the congestion that persists on a daily basis. Many individuals are looking to principal and minor arterials for alternative routes on their daily commutes such as Peachtree Road, Clairmont Road, Candler Road, and Memorial Drive. Unfortunately, many of these roadways themselves are already congested. Results from the travel demand model show that many of the arterials in DeKalb County are already over capacity during the PM peak travel period (6-10 PM) with a substantial amount of new roadways projected to be over capacity by 2040, assuming no new roadway improvements. This model considers the volume on the road compared with its capacity and does not take into consideration other aspects like access management and signal timing.

Arterials in Metro Atlanta are often asked to do too much – provide access to interstates as well as local business and neighborhoods while providing a fast, safe, and efficient trip for those traveling through. It is difficult for one roadway to serve all of these purposes well. A review of arterial access management shows that some of DeKalb County's arterials through non-residential/non-greenspace areas are providing too much access to properties along the right-of-way. Some of the roadways that warrant further access study include Clairmont Road, Columbia Drive, Glenwood Road, Memorial Drive, Peachtree Road, North Druid Hills Road, Briarcliff Road, DeKalb Avenue/College Avenue, Chamblee Dunwoody Road, Stone Mountain/Lithonia Road, Covington Highway, Ponce de Leon Avenue, and Shallowford Road.

In addition to improving access management along certain arterials, opportunities also exist to improve signal timing throughout the County. Updates to the current Traffic Control Center, and possibly even the creation of a new TCC, is being considered by the County. A number of upgrades to the system are needed including conversion to new signal controllers, repair and upgrade of detection systems,

coordination between all key signals and the County's main control center, and CCTV installation and replacement. Some of these projects are being completed on state routes; however, a number of additional projects remain unfunded and unassigned.

Vehicular congestion, while frustrating to motorists, also has negative implications to economic vitality. The ability of workers to reach their jobs in a reasonable amount of time is important for DeKalb County to prosper. As projected through 2040, with no vehicular enhancements to the roadways, the 15-, 30-, and 45-minute laborsheds of the four main employment centers within DeKalb (Emory, Northlake, Mountain Industrial, and Perimeter) are all likely to decrease substantially from 2010. Transportation improvements to help workers reach employment centers more efficiently are important, but they should also be considered in conjunction with opportunities to provide more housing close to employment and activity centers to shorten the distance that many workers currently travel.

Safety

Improving safety along roadways is of national importance. Many federal funding programs focus solely on improving the safe transport of system users. The roadway section focuses specifically on all roadway crashes; however, other sections of the report focus on crashes involving heavy vehicles, pedestrians, and bicycles. In general, within DeKalb County, crashes seem to be concentrated in high traffic areas, along interstates (particularly at interchanges), and within activity centers where more (albeit often smaller) roadways are located. Areas with a history of high crash rates, particularly fatal, will be given close attention in the selection of projects.

Asset Management

The ability of an agency to maintain infrastructure is becoming an increasingly bigger concern across America. In the recent long range transportation plan completed by the Atlanta Regional Commission, PLAN 2040, a total of 70% of funding allocated in the plan is going to maintaining the current roadway and transit system. DeKalb County is one of many agencies struggling to keep up with deteriorating infrastructure. In recent years, over 300 miles of streets have been identified as needing resurfacing each year, but funding through both GDOT and the County, along with Bonds program funds when available, has been sufficient to fund only 10-20% of the miles that have needed repair.[42] Insufficient resources have allowed the allocation of funding to only structurally deficient streets. With the compilation of an electronic database of annual pavement ratings, it is possible that pavement deterioration can be tracked and anticipated in order to better predict resurfacing needs, and associated costs, for future years in order to be better prepared to petition for and address funding needs. In addition to deteriorating roadways, fourteen of the bridges within DeKalb County do not meet the minimum sufficiency rating of 50 and are therefore eligible for rehabilitation/reconstruction through federal funding sources.

[42] DeKalb County Public Works Roads & Drainage: Pavement Management System Description; Doc 1973, July 2011.

Transit

6 Our Transit Network

6.1 History

Transit service in Metro Atlanta has existed as far back as the 1860's with the Atlanta Street Railway. While modest in size, the railway – along with other private entities – ran private streetcar, trolley bus and bus systems in Atlanta until the creation of Metropolitan Atlanta Rapid Transit Authority (MARTA).

In the 1950s, planners and officials began to develop momentum for creating a public transportation system in the Atlanta region as whole. In the 1960's, a Metropolitan Atlanta Transit Study Commission report recommended a 66-mile, five-county rail system with feeder bus operation and park-and-ride facilities. By 1965, legislation authorizing a referendum on MARTA was passed by the state and subsequently approved in four counties and the City of Atlanta, creating MARTA. However, later on in 1972 voters in Gwinnett and Cobb counties voted against a sales tax increase to fund MARTA, and thus were left out of the system. (Even to this day, the lack of sales tax revenue from the two counties has limited MARTA's ability to provide service on a regional basis). Nevertheless, in 1972, after several years of required legislative and voter approvals, MARTA was in position to purchase the Atlanta Transit System, the area's primary existing bus transportation system to provide service to DeKalb and Fulton counties.

Twelve months after MARTA's purchase of the system, MARTA had an overall increase in ridership of 21% and carried more than 65 million passengers – 11.5 million more than the previous year. While the ridership was attributed in part to a significant reduced fare structure, the increase still showed the public's interest and need for public transit.

Through the 1970s, MARTA received grants of more than $800 million from the federal government for planning, design, land acquisition and construction of a rapid rail system. On June 30, 1979 when MARTA's first train, the East Line, began operating in DeKalb County between Avondale and Georgia State Station. It also marked the start of MARTA's combined bus and rail service.

The 1980s saw continued growth in the MARTA rail system with the construction of nine more miles of track and many more stations. As a result, rail ridership increased by 29 percent by the mid 1980's. By 1990, frequency of rail service also increased to achieve eight-minute headways throughout the system. Service to the airport and northward to Chamblee also began. The expansion continued through the 1990s with service extending beyond the I-285 perimeter with major projects including a new seven-mile North Line – a line segment that spanned the three funding jurisdictions of City of Atlanta, Fulton County, and DeKalb County.

In the late 1990s, MARTA began to focus more on transit's link to community development as an alternative to highway congestion with involvement in the Lindbergh Transit Oriented Development (TOD) – the largest multi-use development of its kind in the United States at the time. During the same time period, the Cobb County Transit (CCT) agency was founded to provide local bus service in Cobb County. Also, in 2000, the Gwinnett County Transit (GCT) was formed to offer local bus service in Gwinnett and express bus service connecting Gwinnett County with Lindbergh, Midtown and Downtown Atlanta.

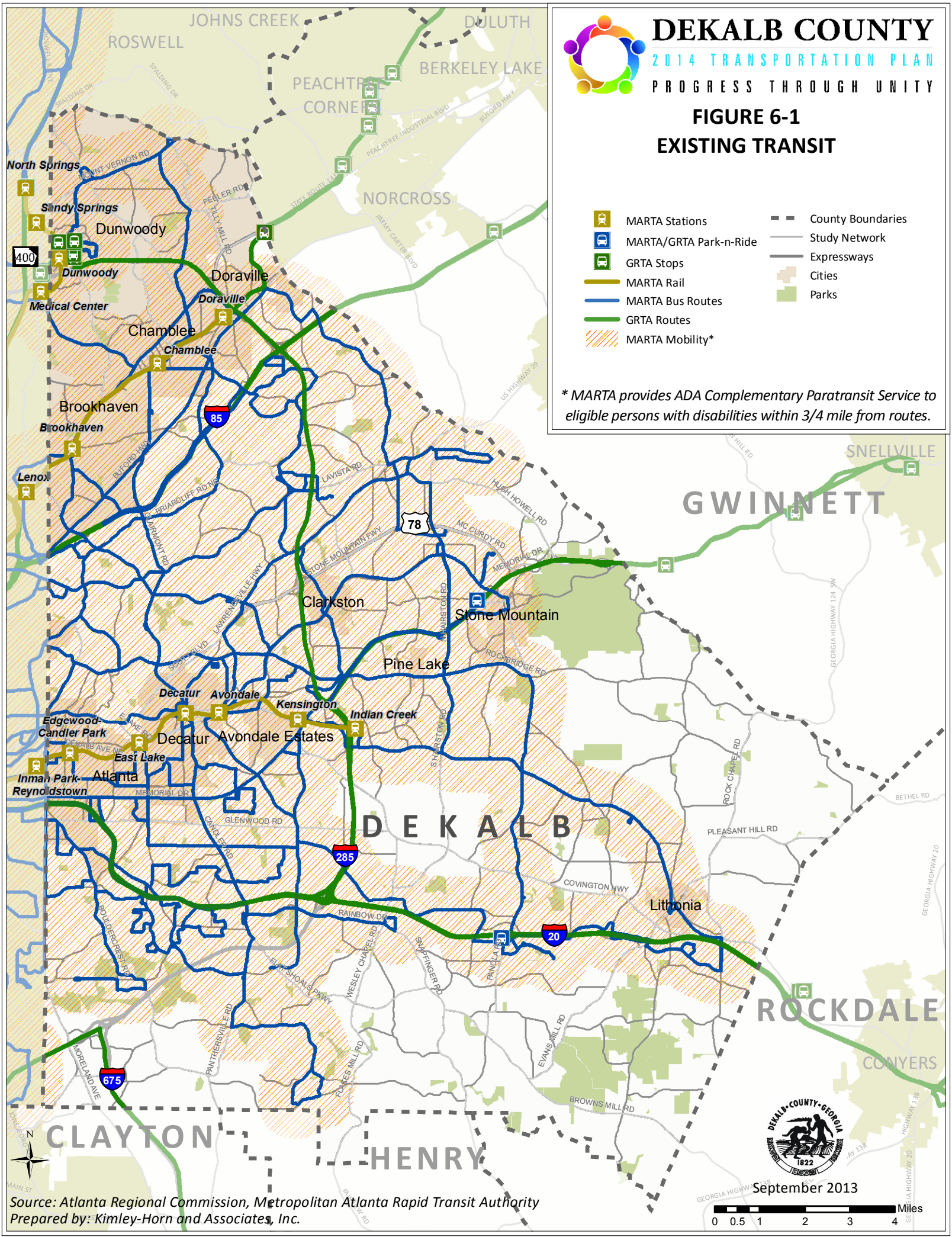
6.2 Transit Agencies

The Atlanta region is currently served by five public transportation providers: MARTA, Cherokee Area Transportation Services (CATS), CCT, GCT, and Georgia Regional Transportation Authority (GRTA). While each of the agencies are funded and operate as separate entities, agreements have been worked out where riders can transfer between systems with reciprocal fare agreements between the partner agencies.

DeKalb County's transit needs are met primarily by MARTA, now the ninth largest transit service in the United States carrying more than 470,000 riders to their destinations each weekday in Fulton and DeKalb counties. MARTA service connects riders with major business districts, Hartsfield-Jackson Atlanta International Airport, Centennial Olympic Park, the Georgia World Congress Center, the Georgia Dome and more. MARTA operates 118 bus routes and 48 miles of rail rapid transit that serves 38 stations in DeKalb and Fulton counties. MARTA's bus fleet numbers over 550 and serves almost 11,500 stops over a 500 square mile area. Additional transit service is operated by GRTA, which offers express bus service into downtown Atlanta.

GRTA, partnering with Cobb Community Transit (CCT) and Gwinnett County Transit (GCT), provides 39 express commuter coach routes for more than 32,000 daily express and local trips through the Xpress service and vanpools. The services are provided to 12 metropolitan Atlanta counties. The routes are aligned with and provide free transfers to and from MARTA rail and bus services for riders to complete connections throughout the region. In DeKalb County, park and rides are located at the Doraville MARTA Station and Panola Road at I-20.

Within DeKalb County, MARTA and GRTA, in total, operate 64 miles of bus routes, 365 days a year. Three of MARTA's four rail lines operate in DeKalb with a total of ten stations in the County. Nine of the ten stations offer parking on a daily or long-term basis. The Kensington station also offers a connection to the "Q: Express and Limited" bus rapid transit to points further in the County and east while the Dunwoody station offers a connection to CCT and Doraville a connection to GCT.


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 6-1
EXISTING TRANSIT
MARTA Stations
MARTA/GRTA Park-n-Ride
GRTA Stops
MARTA Rail
MARTA Bus Routes
GRTA Routes
MARTA Mobility*
County Boundaries
Study Network
Expressways
Cities
Parks
* MARTA provides ADA Complementary Paratransit Service to eligible persons with disabilities within 3/4 mile from routes.
JOHNS CREEK
ROSWELL
DULUTH
BERKELEY LAKE
PEACHTREE CORNERS
NORCROSS
SNELLVILLE
GWINNETT
North Springs
Sandy Springs
Dunwoody
Doraville
Chamblee
Brookhaven
Lenox
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale
Kensington
Indian Creek
Avondale Estates
Edgewood-Candler Park
East Lake
Atlanta
Inman Park-Reynoldstown
Lithonia
ROCKDALE
CONYERS
DEKALB
CLAYTON
HENRY
400
85
78
285
20
675
September 2013
Miles
0 0.5 1 2 3 4
Source: Atlanta Regional Commission, Metropolitan Atlanta Rapid Transit Authority
Prepared by: Kimley-Horn and Associates, Inc.

6.3 Ridership Data

Transit ridership data was obtained from MARTA for a period of December 2012 through April 2013. This data included average weekday boardings for train stations, overall bus routes, and individual stops. The data has been color coded by intensity and can be seen in Figure 6-2 and Figure 6-3.

The ridership data shows that some of the most heavily used station within DeKalb County are Doraville, Indian Creek, and Kensington Stations. This is likely due to their role as park and ride facilities for workers that live farther away from the region's core. Two of the stations with the lowest weekday ridership in DeKalb County as well as in the entire system are the East Lake and Edgewood Candler Park Stations. These two stations are close enough to downtown Atlanta to not be very useful for park and ride stations and they are also surrounded by relatively low density development. This combination of factors could explain their low ridership.

The bus route ridership data shows that the bus routes with the highest total weekday boardings include:

- 15: Candler Road/South DeKalb
- 39: Buford Highway
- 107: Glenwood Road
- 115: Covington Highway/South Hairston Road
- 120: East Ponce de Leon Ave/Tucker
- 121: Stone Mountain/Memorial Drive
- 125: Clarkston/Northlake

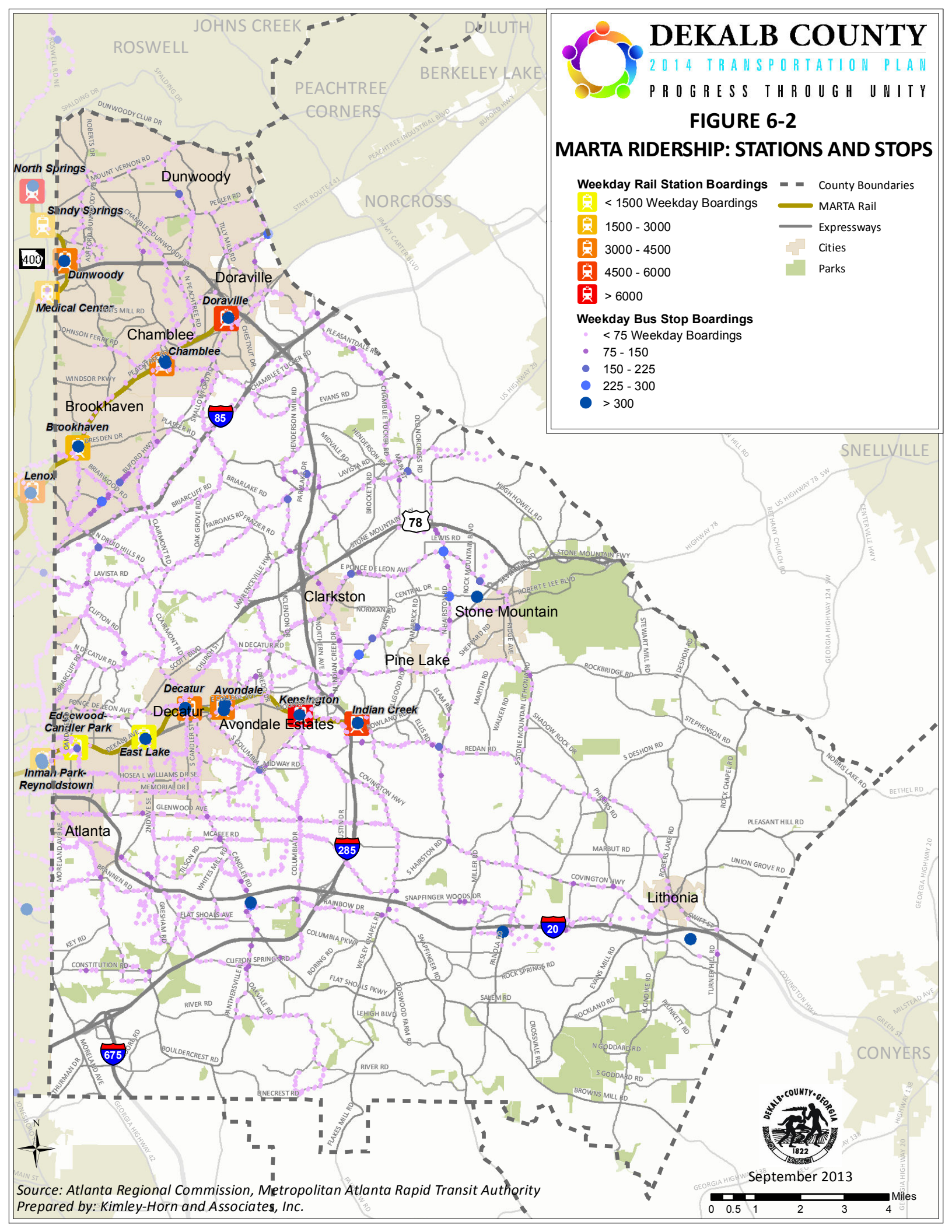
The routes with the lowest average weekday boardings include:

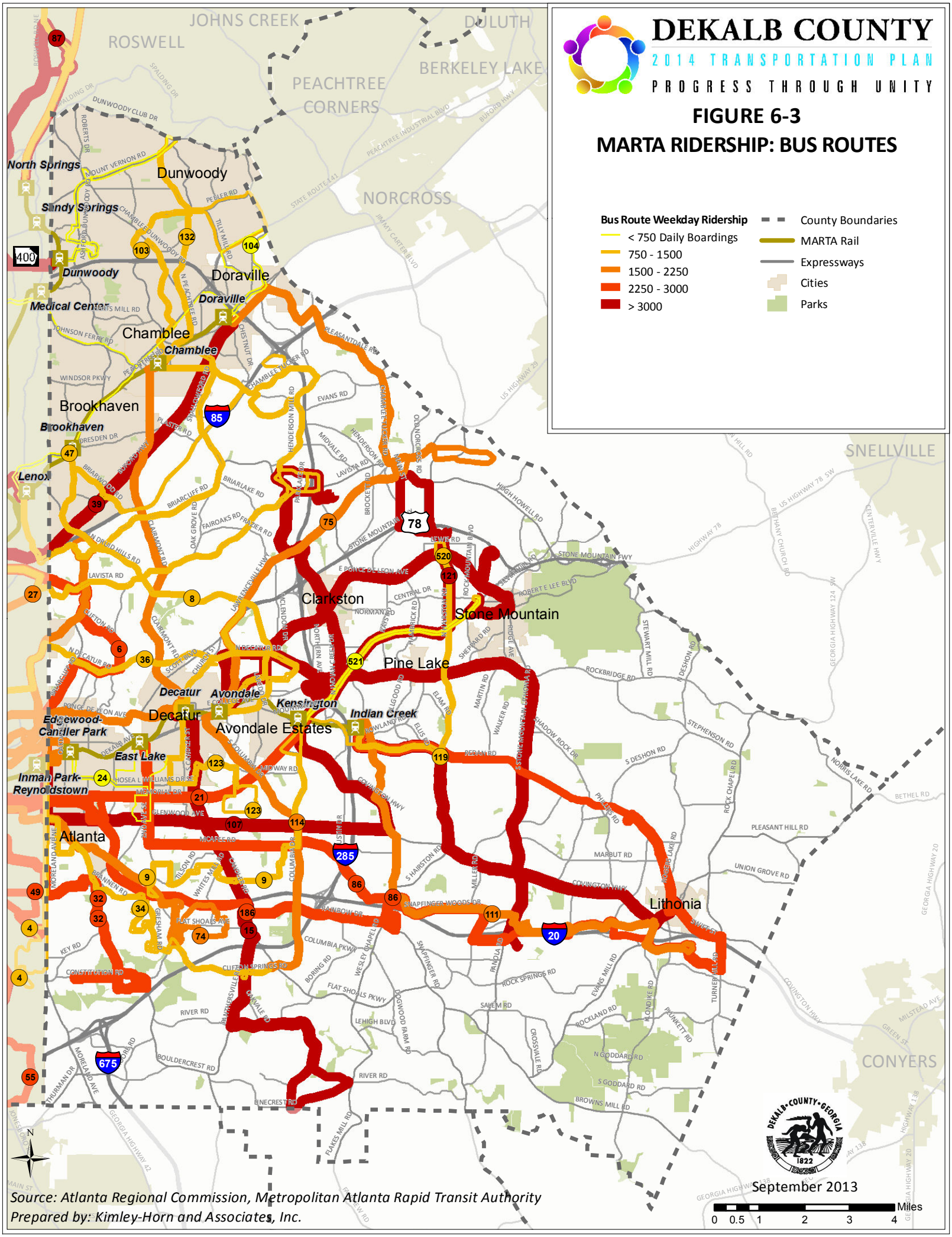
- 24: East Lake/Hosea Williams
- 104: Winters Chapel Road
- 150: Perimeter Center/Dunwoody Village
- 521: Memorial Drive BRT Express

Bus stops with the highest number of boardings include those at rail stations and park and ride lots. Roadways with some of the most heavily used stops include Buford Highway, North Hairston Road, and Memorial Drive.

In looking for ways to achieve higher levels of transit mobility, one challenge for transit buses occurs when those buses are mixed in with other dense vehicular traffic along highly congested corridors. If the bus route ridership data is compared to corridor congestion data, some of the higher ridership routes that are also traveling along some of the most congested roadways in DeKalb County include:

- 6: Emory (travels along congested segments of North Decatur Road and Moreland Avenue)
- 15: Candler Road/South DeKalb (travels along congested segments of Candler Road)
- 86: Fairington Road/McAfee Road (travels along congested segments of Snapfinger Road)
- 116: Redan Road/Stonecrest (travels along congested segments of Redan Road)
- 120: East Ponce de Leon Ave/Tucker (travels along congested segments of East Ponce de Leon Avenue, Mountain Industrial Boulevard, Sarr Parkway, and Idlewood Road)


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 6-2
MARTA RIDERSHIP: STATIONS AND STOPS
Weekday Rail Station Boardings
< 1500 Weekday Boardings
1500 - 3000
3000 - 4500
4500 - 6000
> 6000
Weekday Bus Stop Boardings
< 75 Weekday Boardings
75 - 150
150 - 225
225 - 300
> 300
County Boundaries
MARTA Rail
Expressways
Cities
Parks
JOHNS CREEK
DULUTH
ROSWELL
BERKELEY LAKE
PEACHTREE CORNERS
NORCROSS
SNELLVILLE
CONYERS
Lithonia
Atlanta
Decatur
Avondale Estates
Clarkston
Stone Mountain
Pine Lake
Brookhaven
Chamblee
Doraville
Dunwoody
Sandy Springs
North Springs
Medical Center
Lenox
Inman Park-Reynoldstown
Edgewood-Candler Park
East Lake
Kensington
Indian Creek
285
85
78
20
675
400
September 2013
Miles
0 0.5 1 2 3 4
Source: Atlanta Regional Commission, Metropolitan Atlanta Rapid Transit Authority
Prepared by: Kimley-Horn and Associates, Inc.


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 6-3
MARTA RIDERSHIP: BUS ROUTES
Bus Route Weekday Ridership
< 750 Daily Boardings
750 - 1500
1500 - 2250
2250 - 3000
> 3000
County Boundaries
MARTA Rail
Expressways
Cities
Parks
JOHNS CREEK
DULUTH
ROSWELL
BERKELEY LAKE
PEACHTREE CORNERS
NORCROSS
SNELLVILLE
CONYERS
North Springs
Sandy Springs
Dunwoody
Doraville
Medical Center
Chamblee
Brookhaven
Lenox
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale
Kensington
Indian Creek
Avondale Estates
Edgewood-Candler Park
East Lake
Inman Park-Reynoldstown
Atlanta
Lithonia
Source: Atlanta Regional Commission, Metropolitan Atlanta Rapid Transit Authority
Prepared by: Kimley-Horn and Associates, Inc.
September 2013
Miles
0 0.5 1 2 3 4

6.4 Demographic Considerations

Shifts in demographics and land use play an important role in developing the comprehensive transportation plan as well as understanding the specific needs of the County. The following section summarizes the population and employments trends in the region.

Following are numbers related to transit accessibility in DeKalb. Of the greater than 700,000 residents of the County:

- 29,000 residents live within 0.5 mile of a MARTA rail station
- 373,000 residents live within 0.25 mile of a MARTA bus stop
- 560,000 residents live within 0.75 mile of a MARTA bus stop
- 2,000 residents live within 0.5 mile of a GRTA park and ride lot

Transit Demographic Indicators

Several data characteristics can be used to indicate areas that would most benefit from transit service. Three data points that can be taken from US Census data are areas with the highest levels poverty, concentrations of adults age 65 and over, and concentrations of households without access to a vehicle. Each of these three characteristics have been mapped within DeKalb County and then overlaid with the existing transit network. Areas that are within ¼ mile of bus routes and within ½ mile of a train station are hatched.

Figure 6-4 shows concentrations of people living below poverty. Areas that are relatively higher in poverty include:

- The Buford Highway corridor
- The area around Clarkston and Pine Lake
- The area around Lithonia
- Areas following the I-20 corridor

Based on the map of poverty concentrations, approximately 40% of people living below the poverty threshold in DeKalb County do not have good access to transit.

Figure 6-5 shows concentrations of people that are of age 65 or older. Areas that have relatively higher concentrations of older adults are:

- Northern part of the City of Dunwoody
- The area surrounding Hugh Howell Road to the north and east of Stone Mountain
- The area around Briarcliff Road between Shallowford Road and Henderson Mill Road
- The area north of I-20 just inside of I-285

Based on the map of concentrations of older adults, approximately 45% of older adults do not have good access to transit.

Figure 6-6 shows concentrations of households that do not have access to a vehicle. Areas that contain relatively high concentrations of households without access to a vehicle include:

- Areas along both MARTA rail lines in DeKalb
- The Buford Highway corridor
- The area around Clarkston, Pine Lake, and just west of Stone Mountain
- The area around Lithonia
- The area around Panthersville and just south of Panthersville
- The area around South Hairston Drive between Wesley Chapel Road and Redan Road

Based on the map of concentrations households without access to a vehicle, approximately 22% of households without access to a vehicle also do not good access to transit.

6.5 Land Use and Density near MARTA Rail Stations

Existing Stations

There are ten MARTA stations located in DeKalb County, each with unique land use patterns. The existing rail stations are Avondale, Brookhaven, Chamblee, Decatur, Doraville, Dunwoody, East Lake, Edgewood Candler-Park, Indian Creek, and Kensington. Station sites and the surrounding areas were evaluated by the project team. A County-wide view highlighting existing land uses within ½-1 mile of existing MARTA stations is illustrated in Figure 6-7 using 2010 ARC Land Pro data. A zoomed-in view of land uses around each individual station can be seen in the Appendix.

Avondale

The land uses within a ½ mile radius of the station are Industrial/Commercial, medium density residential and multifamily residential. The station also includes two parking lots, north and south of the station. A site review assessment showed medium density residential housing on Sycamore Street and the surrounding areas. Riders who require access to areas south of the station are required to use the pedestrian overpass to cross Route 10. The area is comprised mostly of commercial and industrial uses bordering East College Avenue; however, medium density and multifamily residential housing areas are located beyond East College Avenue. Beyond the ½ mile radius, other land uses include medium and high density residential, intensive and extensive institutional, commercial, and industrial areas. Also located in close proximity to Avondale, is MARTA's Avondale Yard rail maintenance facility, categorized as Transportation, Communications, and Utilities (TCU).

Brookhaven

The land uses within a ½ mile radius of the station consist of multifamily and medium density residential, commercial parks, and other recreational areas. The station also includes two parking lots, east and west of the station. Located near the station on Peachtree Road are several commercial strip developments. Multifamily residential developments have also been constructed on the east and west side of the station. The area consists of detached single family homes as well as two golf courses. Beyond the ½ mile radius, other land uses include medium and high density residential, intensive and extensive institutional (Oglethorpe University), commercial, and industrial areas.

Chamblee

The primary land uses within a ½ mile radius of the station are commercial and TCU. The station also includes two adjacent parking lots. The commercial area also known as Mid-City includes local and national retailers, restaurants, and other commercial services. Located east of the station is the county-owned DeKalb Peachtree Airport. The 745 acre airport located on Chamblee-Tucker Road is categorized as TCU. North of the station, several multifamily residential developments have been constructed. Beyond the ½ mile radius, other land uses include medium density residential, institutional intensive areas, parks, golf courses, and undeveloped transitional areas.

Decatur

The land uses within a ½ mile radius of the station consists of commercial, institutional intensive, and multifamily residential areas. The City of Decatur is also the County seat of DeKalb County and the station is located within walking distance of County administrative offices, the County library, and Decatur High School. Beyond the ½ mile radius, other land uses include multifamily and medium density residential.

Doraville

The primary land uses within a ½ mile radius of the station are commercial and industrial. Located just north of the rail right of way is the former General Motors automobile factory. The vacant automobile factory is slated for redevelopment with plans calling for a mixed-use, transit oriented development. An active freight rail right of way is located on the site and is served by Norfolk Southern. In addition, the MARTA Doraville Yard rail maintenance facility is located nearby. Located south of the station on Park Avenue is Doraville City Hall, the police station, public library, and other city government buildings. A review of existing land use data indicate that the area (which includes Doraville City offices) is classified as commercial. A site review assessment showed areas that could be utilized for commercial build out near the station. Beyond the ½ mile radius, the area is primarily commercial with some areas designated as medium density residential.

Dunwoody

Commercial is the primary land use within a ½ mile radius of the station. This station also includes a parking deck. The commercial land use consists of retail, office, and restaurants. Dunwoody station is located at Perimeter Mall, a major activity center in the Atlanta region. Located directly across from the station at Hammond Drive and Perimeter Center Parkway, is an undeveloped parcel categorized as transitional. Beyond the ½ mile radius, other land uses include multifamily and medium density residential.

East Lake

The primary land uses within a ½ mile radius of the station are medium density residential and commercial. The areas north and south of the station consist of single family detached homes. Beyond the ½ mile radius, the predominant land use is medium density residential. Other land uses include parks and institutional intensive areas.

Edgewood Candler-Park

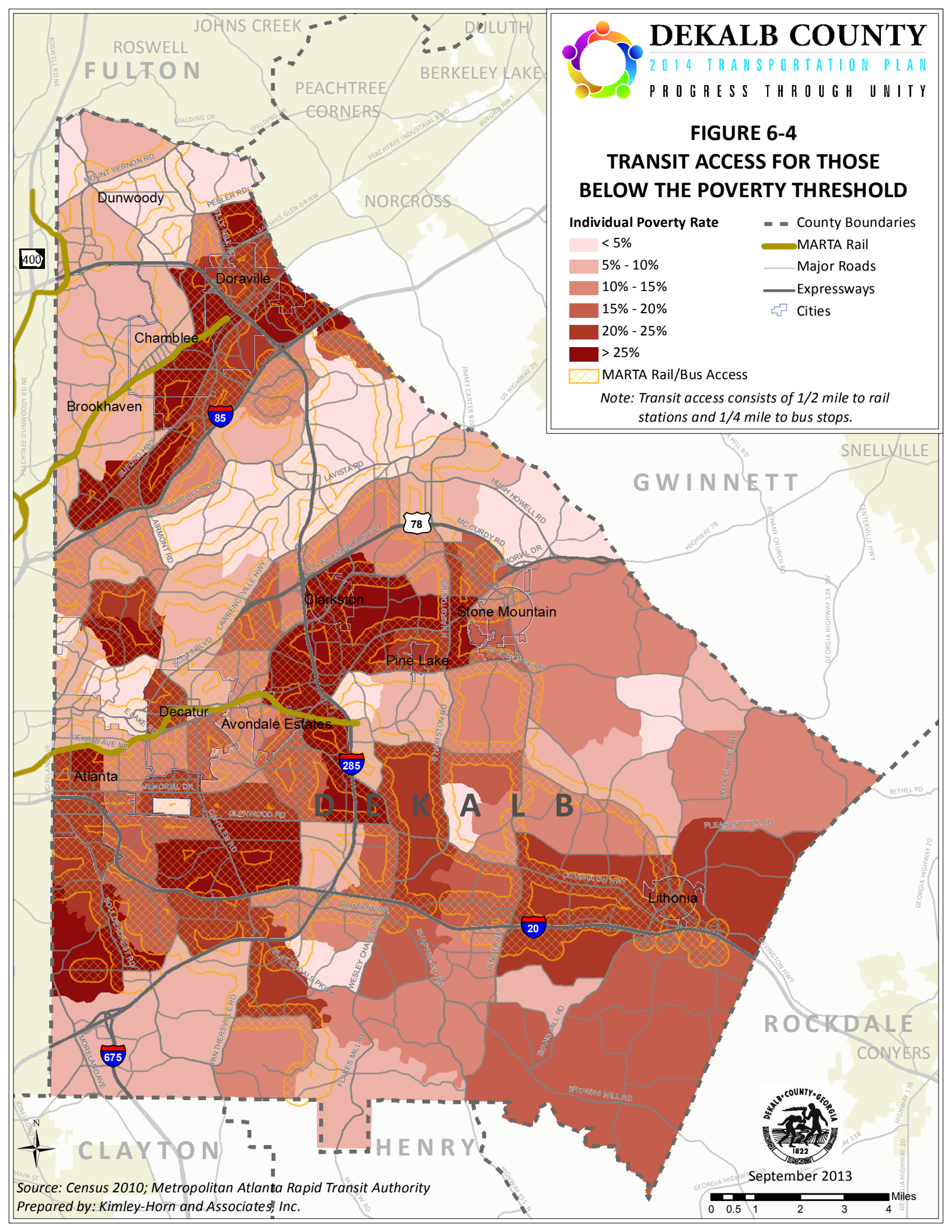
There are several land uses surrounding Edgewood Candler Park station. The predominant land use within a ½ mile radius is high density residential. Other land uses within a ½ mile radius include multifamily and medium density residential, commercial, industrial/commercial, and Institutional Intensive areas. A review of existing land use data indicate that areas south of the station are classified as high density residential. A site review assessment of the area concluded that the area was low density. Beyond the ½ mile radius, other land uses include high density residential, multifamily residential, commercial areas, and parks.

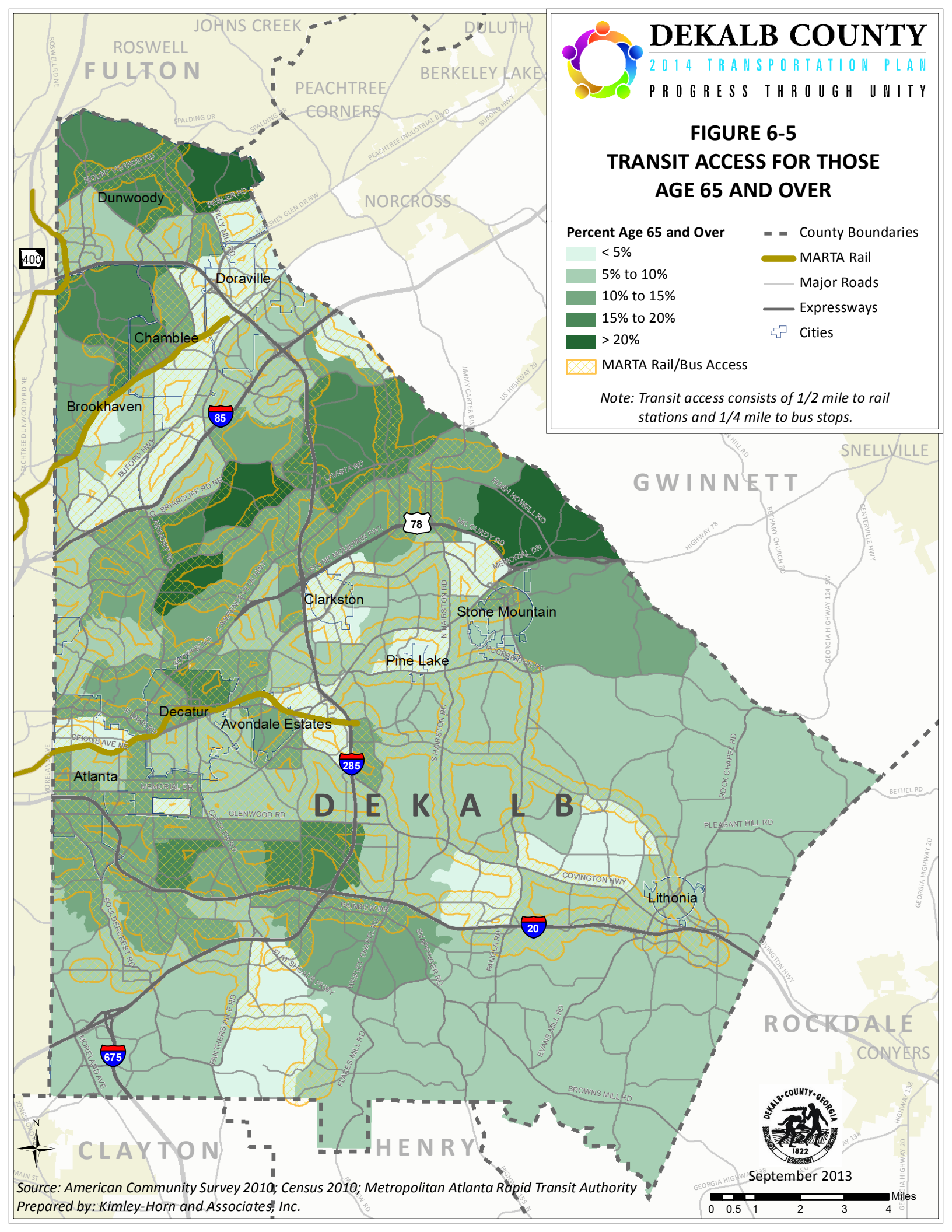
Indian Creek

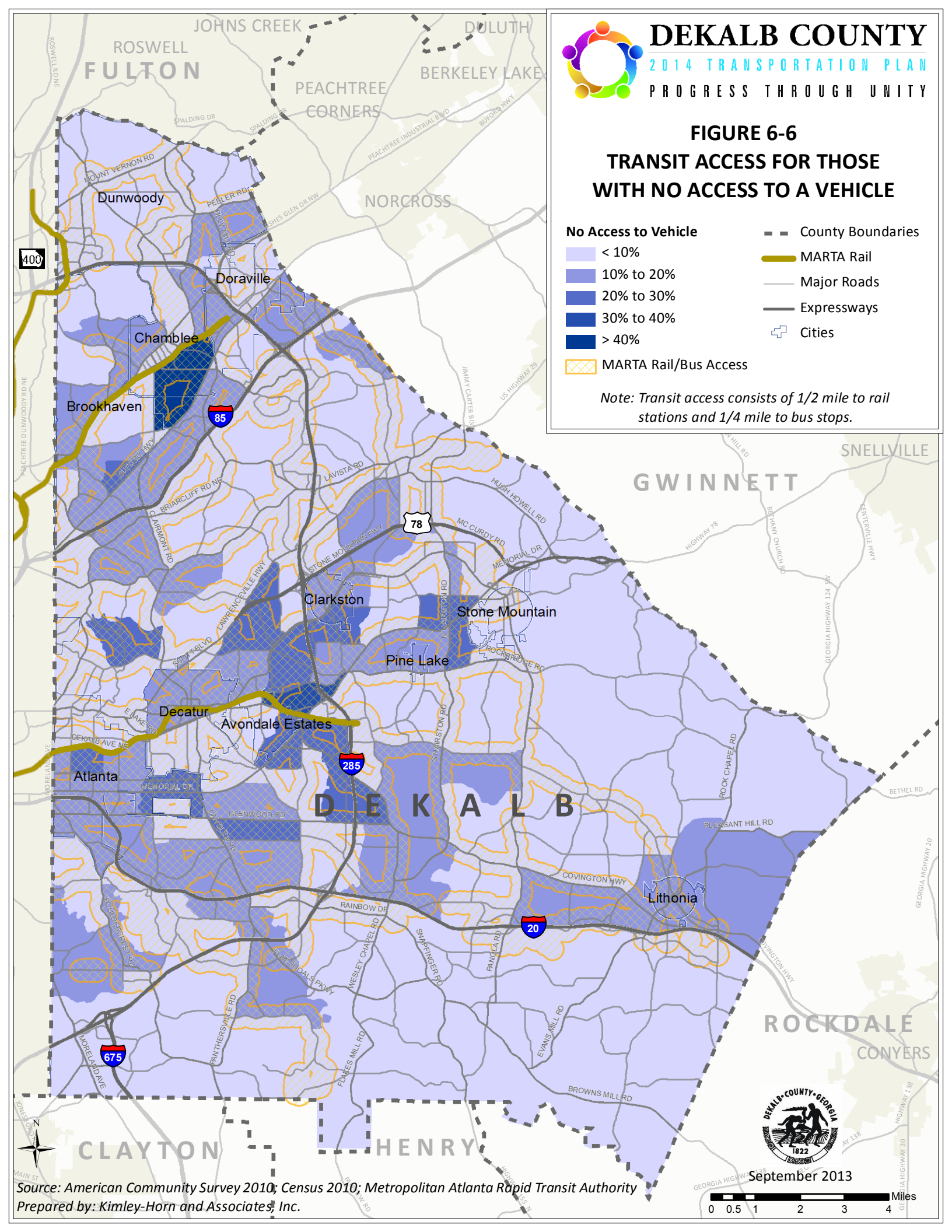
The primary land use within a ½ mile radius of the station is medium density residential. Immediately north and south of the station lay two undeveloped parcels which could be further developed for future mixed use. Beyond the ½ mile radius, other land uses include commercial, parks, institutional intensive and transitional areas.

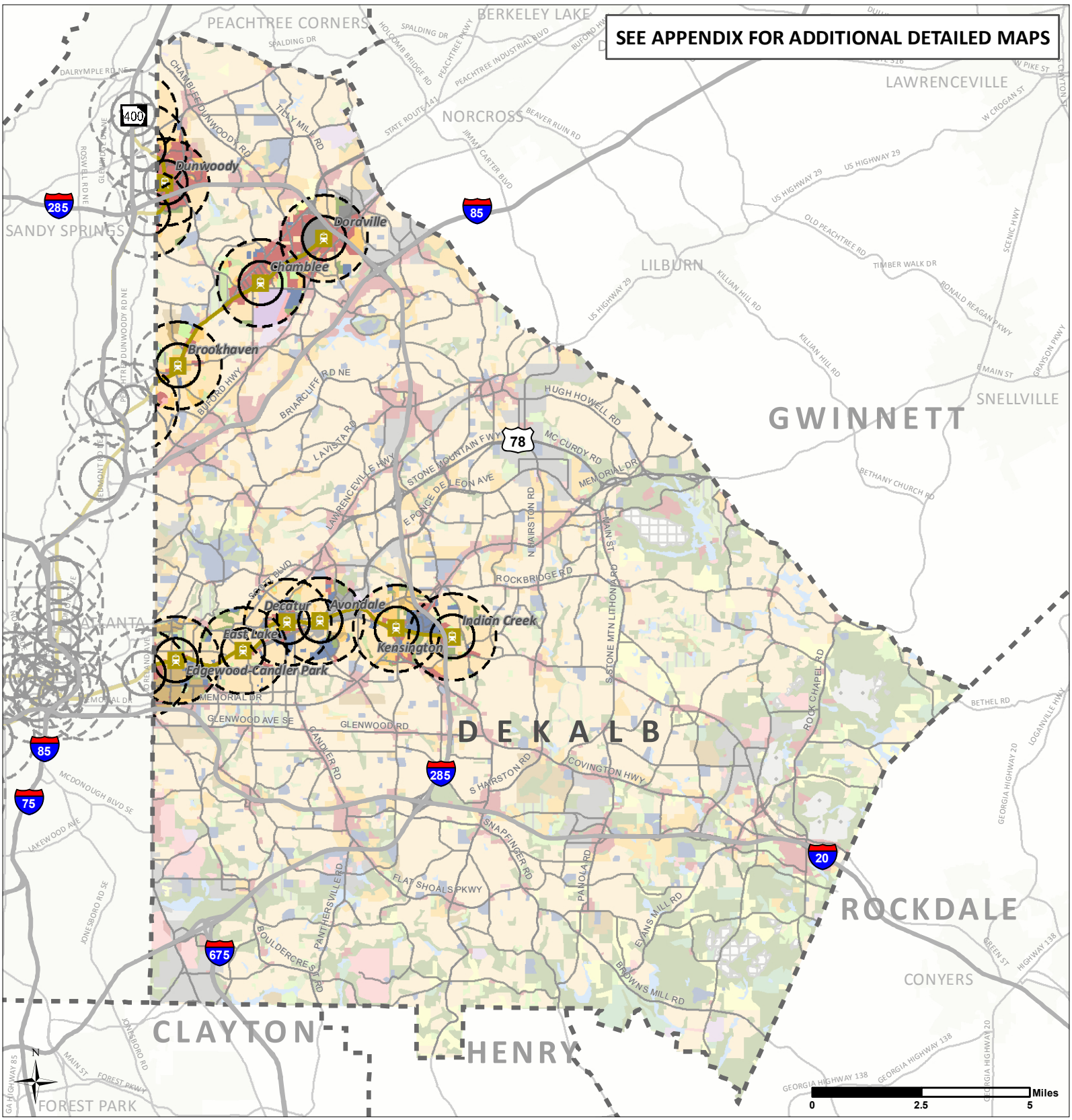
Kensington

There are several land uses surrounding the Kensington station. The predominant land use within a ½ mile radius of the station is medium density residential followed multifamily residential, commercial, institutional intensive, parks, and transitional areas. The institutional uses comprise DeKalb County government offices and some State of Georgia offices. Beyond the ½ mile radius, other land uses include multifamily and high density residential areas, commercial, institutional intensive, and parks.


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 6-4
TRANSIT ACCESS FOR THOSE BELOW THE POVERTY THRESHOLD
Individual Poverty Rate
< 5%
5% - 10%
10% - 15%
15% - 20%
20% - 25%
> 25%
MARTA Rail/Bus Access
County Boundaries
MARTA Rail
Major Roads
Expressways
Cities
Note: Transit access consists of 1/2 mile to rail stations and 1/4 mile to bus stops.
JOHNS CREEK
DULUTH
ROSWELL
FULTON
PEACHTREE CORNERS
BERKELEY LAKE
NORCROSS
SNELLVILLE
GWINNETT
ROCKDALE
CONYERS
CLAYTON
HENRY
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
Lithonia
DEKALB
400
85
78
285
20
675
Source: Census 2010; Metropolitan Atlanta Rapid Transit Authority
Prepared by: Kimley-Horn and Associates, Inc.
September 2013
Miles
0 0.5 1 2 3 4


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 6-5
TRANSIT ACCESS FOR THOSE AGE 65 AND OVER
Percent Age 65 and Over
< 5%
5% to 10%
10% to 15%
15% to 20%
> 20%
MARTA Rail/Bus Access
County Boundaries
MARTA Rail
Major Roads
Expressways
Cities
Note: Transit access consists of 1/2 mile to rail stations and 1/4 mile to bus stops.
JOHNS CREEK
DULUTH
ROSWELL
FULTON
PEACHTREE CORNERS
BERKELEY LAKE
NORCROSS
Dunwoody
Doraville
Chamblee
Brookhaven
SNELLVILLE
GWINNETT
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
DEKALB
Lithonia
ROCKDALE
CONYERS
CLAYTON
HENRY
400
85
78
285
20
675
September 2013
Miles
0 0.5 1 2 3 4
Source: American Community Survey 2010; Census 2010; Metropolitan Atlanta Rapid Transit Authority
Prepared by: Kimley-Horn and Associates, Inc.


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 6-6
TRANSIT ACCESS FOR THOSE WITH NO ACCESS TO A VEHICLE
No Access to Vehicle
< 10%
10% to 20%
20% to 30%
30% to 40%
> 40%
MARTA Rail/Bus Access
County Boundaries
MARTA Rail
Major Roads
Expressways
Cities
Note: Transit access consists of 1/2 mile to rail stations and 1/4 mile to bus stops.
JOHNS CREEK
DULUTH
ROSWELL
FULTON
PEACHTREE CORNERS
BERKELEY LAKE
NORCROSS
SNELLVILLE
GWINNETT
ROCKDALE
CONYERS
CLAYTON
HENRY
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
Lithonia
DEKALB
400
85
78
285
20
675
Source: American Community Survey 2010; Census 2010; Metropolitan Atlanta Rapid Transit Authority
Prepared by: Kimley-Horn and Associates, Inc.
September 2013
Miles
0 0.5 1 2 3 4



- MARTA Stations
- MARTA Rail
- 1 Mile Buffer
- 1/2 Mile Buffer
- Commercial and Services
- High Density Residential
- Multifamily Residential
- Med. Density Single Family Res.
- Low Density Single Family Res.
- Mobile Home Parks
- Other Urban
- Extensive Institutional
- Intensive Institutional
- Industrial
- Ind. & Comm. Complexes
- Limited Access Highways
- TCU
- Transitional Areas
- Agriculture
- Forest
- Parks
- Park lands
- Cemeteries
- Golf Course
- River
- Wetlands
- Reservoirs
- Exposed Rock
- Quarries

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 6-7
EXISTING LAND USE NEAR TRANSIT STATIONS

Source: DeKalb County
Prepared by: The Collaborative Firm; SYSTRA; Kimley-Horn and Associates, Inc.

September 2013

6.6 Laborshed Analysis – Transit

Similar to the vehicular laborshed analysis, transit laborsheds show how far people can travel within 15, 30, and 45 minutes via transit. Travel times in the transit laborshed analysis include time needed to walk to standard bus service or premium transit service (commuter bus or rail) or the time to drive to the same services. The minimum travel time for these options is used to create the laborshed maps below. Thus it is important to note that not all workers within the transit laborsheds have the ability to reach employment centers via transit within the designated times. Table 6-1 shows the number of workers within each of the transit laborsheds.

While it may be obvious, it is important to note that transit laborshed area, particularly for premium transit such as rail, is less affected by congestion increases because premium transit such as rail does not depend on the roadway network. Additionally, the magnitude of laborshed contraction from 2010 to 2040 is much less than that of the vehicular laborsheds, which are impacted much more by congestion. There is actually an increase in the number of workers within the most proximate laborshed for all employment centers from 2010 to 2040 (30-minute for all but Emory, which has workers within a 15-minute commute). This is likely due to minimal contraction of laborshed area, but also due to anticipated population growth within the region's core, which includes much of DeKalb County and its employment centers, as well as population growth that specifically is anticipated to happen around rail stations and other areas served by transit.

As reported in Table 6-1, 15-minute transit commutes are not possible either in 2010 or 2040 for Mountain Industrial, Northlake, or Perimeter Center; this is also notable in the maps for each employment center, respectively, which can be seen in Figure 6-9, Perimeter Center is an excellent example of this phenomenon, as can be seen in Figure 6-11, where Perimeter Center has two separate nuclei from which 30-minute commutes can be made.

Transit laborsheds also may not resemble a bull's-eye since transit service may not be available in all areas. The Emory transit laborshed has a centralized area as shown in Figure 6-8 that requires a much longer commute to the employment center than the surrounding transportation analysis zones. This is likely due to significant changes in transit service in that particular location as compared to the surrounding area.

Figure 6-10, and Figure 6-11.

Table 6-1: Workers within Transit Laborsheds

Workers within Laborsheds	2010	2040	Change
Emory			
< 15 Minutes	5,998	7,230	20.5%
< 30 Minutes	32,052	17,645	-44.9%
< 45 Minutes	186,993	130,105	-30.4%
Mountain Industrial			
< 15 Minutes	-	-	-
< 30 Minutes	9,740	11,865	21.8%

< 45 Minutes	38,192	32,694	-14.4%
Northlake			
< 15 Minutes	-	-	-
< 30 Minutes	10,698	13,832	29.3%
< 45 Minutes	44,492	41,130	-7.6%
Perimeter Center			
< 15 Minutes	-	-	-
< 30 Minutes	37,693	59,582	58.1%
< 45 Minutes	274,677	183,536	-33.2%

Transit laborsheds also differ from vehicular laborsheds because premium transit can cause polycentric laborsheds. Vehicular laborsheds radiate from the employment center, creating a bull's-eye effect. Fixed-guideway transit, typically rail, may have stations that are miles apart, but accessible within minutes due to the lack of impediment as compared with buses or other vehicles traveling along the roadway network.

Figure 6-8: Emory Transit Laborsheds 2010 and 2040

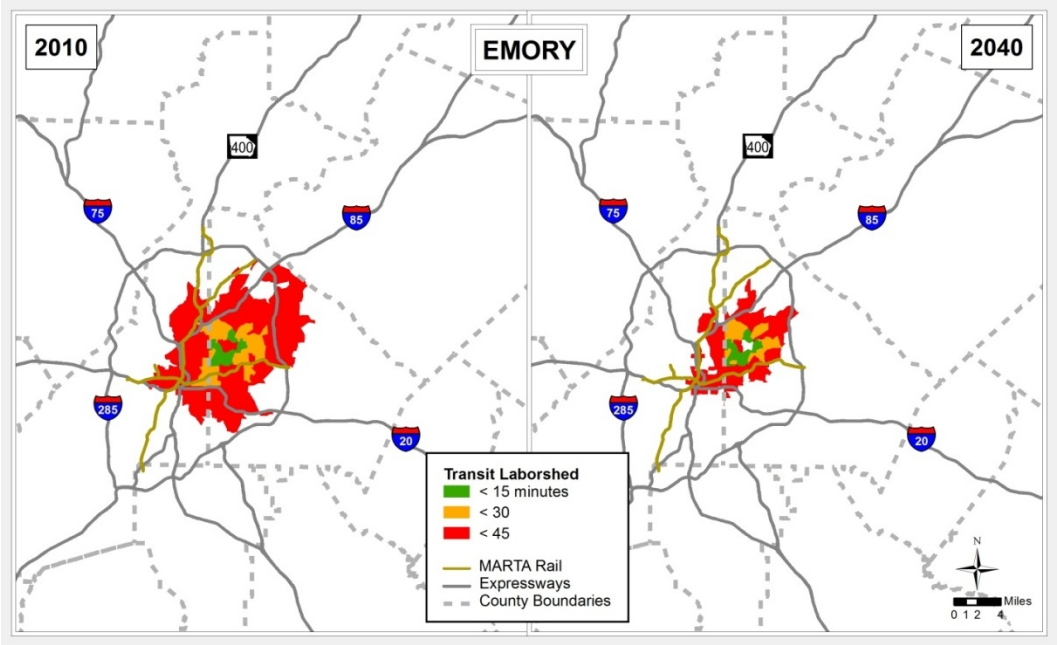
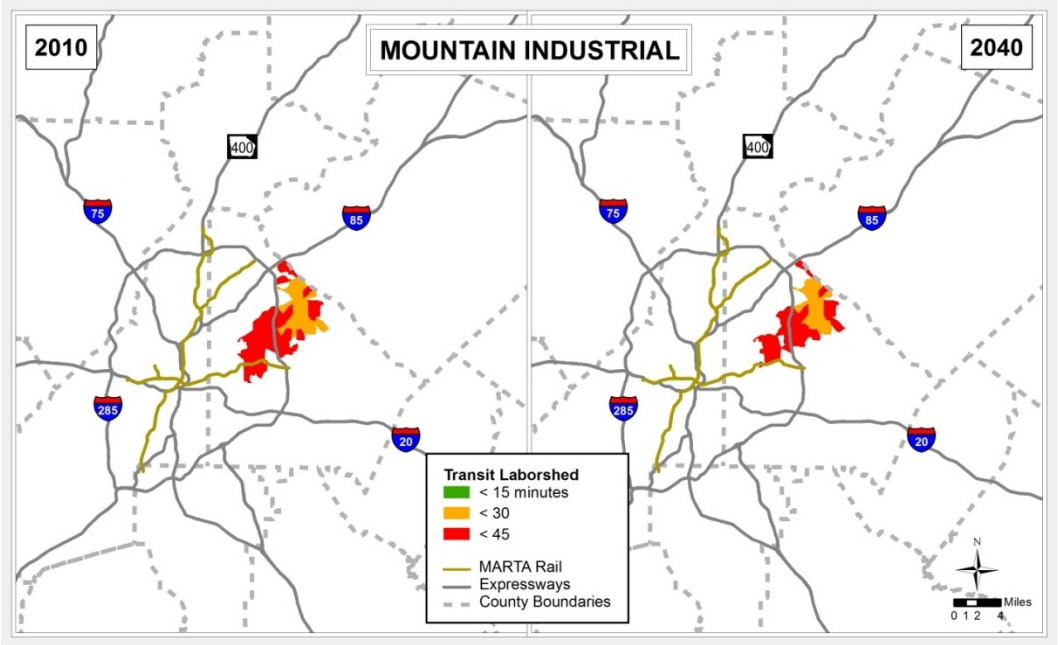


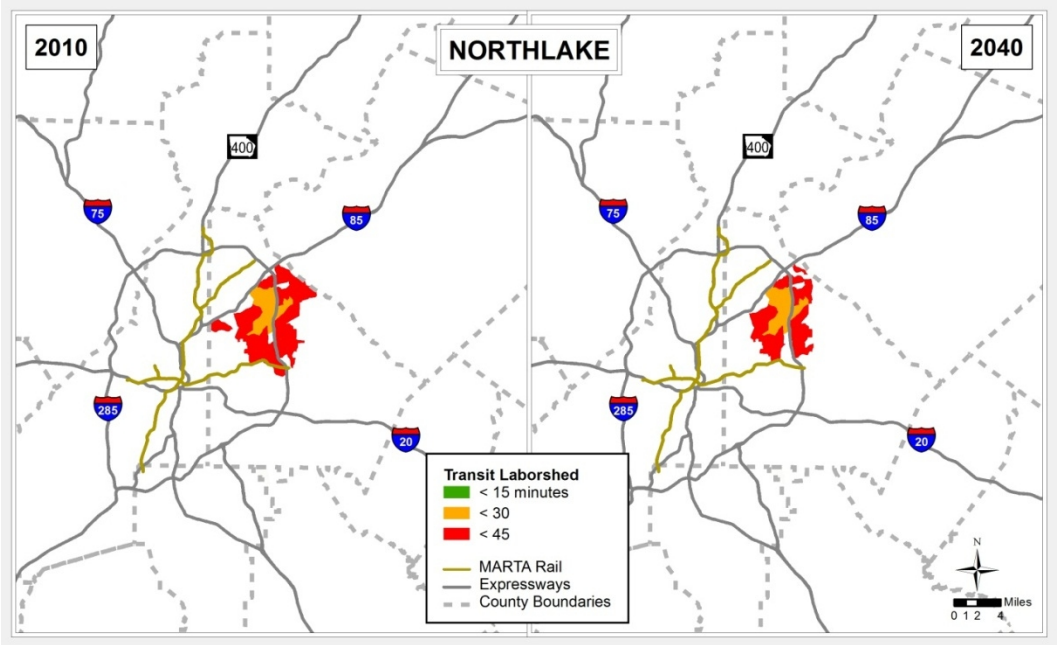
Figure 6-9: Mountain Industrial Transit Laborsheds 2010 and 2040



Perimeter Center is an excellent example of this phenomenon, as can be seen in Figure 6-11, where Perimeter Center has two separate nuclei from which 30-minute commutes can be made.

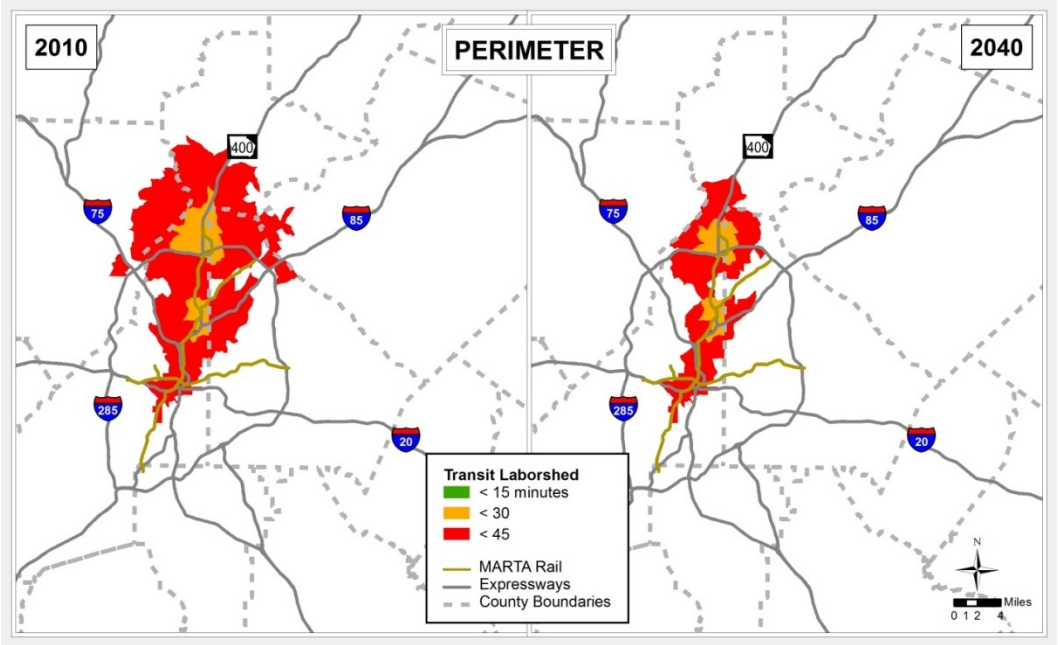
Transit laborsheds also may not resemble a bull's-eye since transit service may not be available in all areas. The Emory transit laborshed has a centralized area as shown in Figure 6-8 that requires a much longer commute to the employment center than the surrounding transportation analysis zones. This is likely due to significant changes in transit service in that particular location as compared to the surrounding area.

Figure 6-10: Northlake Transit Laborsheds 2010 and 2040



The increase in available workers within a 30-minute commute for Perimeter Center is particularly interesting. This is likely due to Perimeter Center's proximity to several MARTA rail stations, but also reflects the population density and anticipated growth in and around Perimeter Center itself, as well as surrounding the rail stations to the south.

Figure 6-11: Perimeter Transit Laborsheds 2010 and 2040



6.7 Funding for Transit

The region has experienced a significant decrease in its capacity to implement large-scale projects. Local sales tax receipts comprise the primary funding source for most transportation projects sponsored by MARTA and local governments. Given its impact on consumer spending, the economic recession has resulted in a significant decrease in funding. An assessment of Fulton and DeKalb County sales tax receipts showed that MARTA actually receives 16 percent less funding today than it did in 2000. Forecasts indicate that regional sales tax receipts will not return to pre-recession levels until at least 2014, while the region continues to see increased demands for transportation infrastructure associated with growth.

At the same time, transportation funding at the state level also decreased throughout the decade of the 2000s, in real terms (Year 2000 $), due primarily to the current economic recession and resulting unemployment. Total fuel tax revenue collected by the State has dropped 12.2 percent between fiscal years 2008 and 2009.

6.8 Transit Expansion in DeKalb County

Throughout the first phases of this process, a common message from the participating public and from stakeholder groups has been that more transit coverage is needed in many areas of DeKalb County. At a regional level, the Concept 3 transit plan was developed as a long range vision for transit service in the Atlanta region. The plan was adopted by a regional transit planning committee in 2008 and still serves today as the long range guide for making shorter term transit planning decisions. The plan is very long-range in nature and there are significantly more projects recommended than there is currently money available to fund them. Within DeKalb County, the plan recommends new transit projects ranging from express bus projects to heavy rail expansion projects (meaning MARTA rail expansion).

From the Concept 3 transit vision, two transit expansion projects are currently being advanced towards implementation:

- High capacity transit along the I-20 corridor expanding east away from downtown Atlanta
- High capacity transit along the Clifton corridor connecting Lindbergh Station to Avondale Station

Following an alternatives analysis for each of these projects, both of the projects were adjusted slightly from their original routing and concepts. The locally preferred alternative routes for each of these projects can be seen in Figure 6-12. Also, reviews of each of these expansion initiatives are included below.

I-20 East Corridor Transit Initiative

The I-20 East Corridor Transit Initiative seeks to identify transit investments that would improve east-west mobility and access to jobs and housing within the corridor. This project would accommodate the increase in future transit demand within the corridor as well support economic development efforts. The implementation of new transit service would provide service from downtown Atlanta to the Mall at Stonecrest in southeastern DeKalb County.

Following a Detailed Corridor Analysis, MARTA adopted a Locally Preferred Alternative (LPA), which proposes a new 12-mile heavy rail extension from the existing Indian Creek Station to the Mall at

Stonecrest with five new stations and 12.8 miles of Bus Rapid Transit (BRT) service from the existing Five Points station to Wesley Chapel Road. In late August 2012, a Notice of Intent (NOI) was issued and published in the Federal Register. This NOI stated that the Federal Transit Administration (FTA) and MARTA intended to prepare an Environmental Impact Statement (EIS) and an Environmental Assessment (EA) for the I-20 East Corridor Transit Initiative project. The EIS will focus on the heavy rail extension and the EA will focus on the new BRT service.

In late July 2012, residents of the 10-county Atlanta region voted down a referendum that would have funded transportation improvements throughout the region. Independent of the federal new starts process, the Transportation Investment Act of 2010 would have provided an initial $225 million investment in the I-20 East Corridor. Currently, the project does not have funding and must compete for FTA New Starts money. In addition to limited funding, the one-cent sales tax collected by MARTA from the City of Atlanta, Fulton and DeKalb Counties cannot fully support major transit expansion projects. Residents of South DeKalb have been frustrated with the one-cent sales tax that helps fund transit in the County. Over the past 30 years, residents of South DeKalb have seen bus service reduced and/or eliminated and promises for major transit expansion never come to fruition. South DeKalb County feels left out where a majority of the population is transit dependent and living at or below the poverty level and would greatly benefit from a major transit expansion project along the I-20 East Corridor. Local residents have fervently voiced support for rail expansion and do not view bus as a viable alternative. They see bus as adding to congestion along the corridor.

While the I-20 East Corridor project will be evaluated for funding in the FTA New Starts process based on its merits as a project separate from the Clifton Corridor Light Rail project, there is the perception that it would compete with it and other transportation projects in the region for funding. Crucial next steps in the project include identifying funding opportunities as well as educating the public on the benefits the I-20 East Corridor Transit Initiative and the Clifton Corridor project would provide to the DeKalb County community as a whole.

Clifton Corridor Transit Initiative

The Clifton Corridor Light Rail project seeks to provide high-capacity transit connections between the Lindbergh Center/Armour Yard area in north-central Atlanta to Clifton Road employment centers and the City of Decatur in west-central DeKalb County. The project would provide 8.8 miles of new light rail service with 10 stations (six initially) from Lindbergh Center MARTA Station to the Avondale MARTA Station running primarily alongside the CSX Railroad right-of-way. The project would also include in-street operations on the medians of Clifton Road (through the CDC/Emory area), Scott Boulevard, North Decatur Road, DeKalb Industrial Way and North Arcadia Avenue as well as tunnels and aerial structures above existing traffic.

The Clifton Corridor includes some of the largest activity centers in metro Atlanta that are lacking convenient access to the interstate system or MARTA rail connections. These conditions have created high levels of traffic congestion on a severely limited network of roadways. The corridor is home to a number of well-established residential communities and several major employers such as Emory

University, Emory Healthcare, the Centers for Disease Control and Prevention (CDC), the Veterans Administration Medical Center & Regional Offices, and the DeKalb Medical Center.

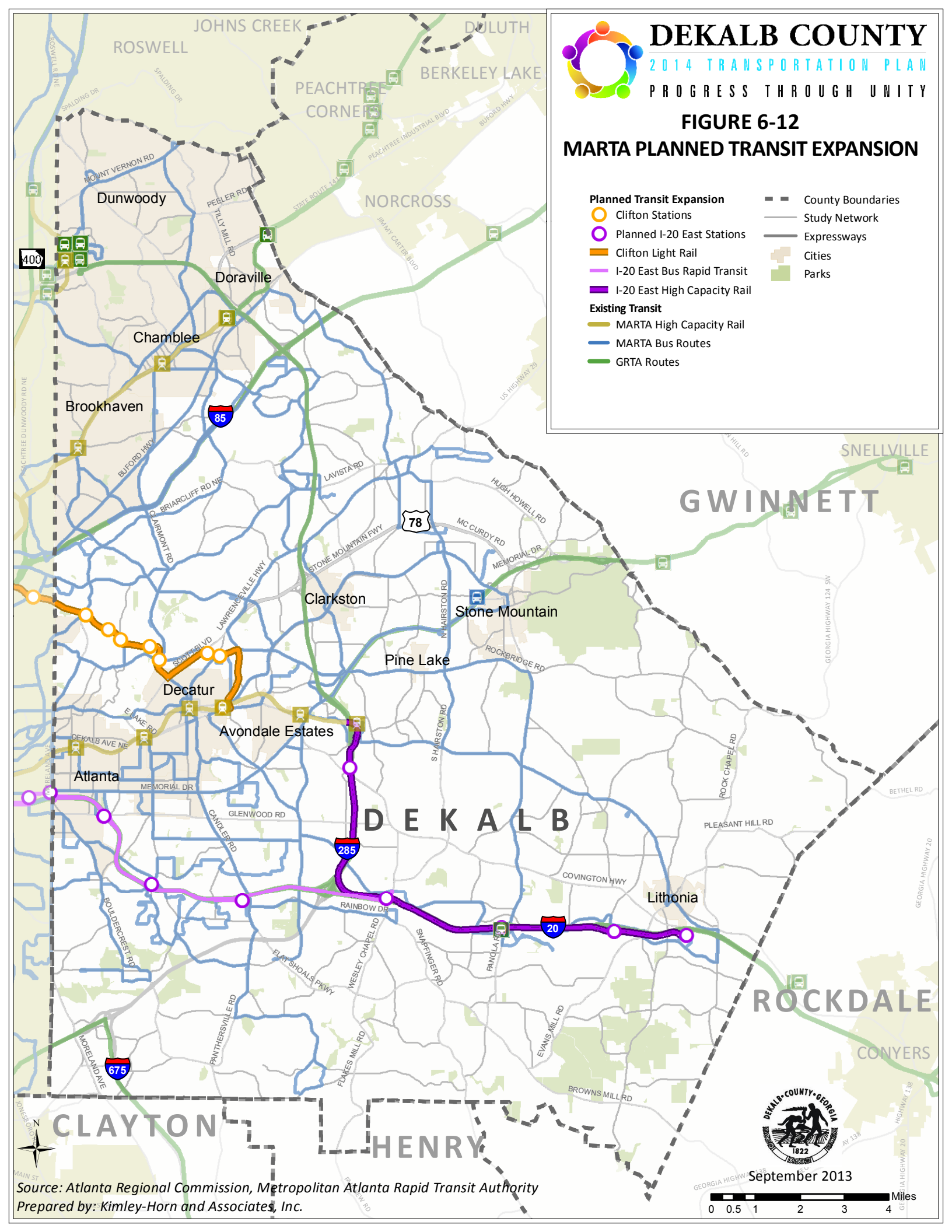
In late 2012, MARTA adopted the LPA for the Clifton Corridor Transit Initiative, the effort that identified the needs for the corridor and potential types of service (e.g., light rail, bus rapid transit, and heavy rail) and alignment. This identification of the LPA represents years of studies, including the Clifton Corridor Alternatives Analysis, conducted by MARTA and several different agencies. The Clifton Corridor population is anticipated to grow by 20% in the 2005-2030 period with job growth projected at 43% over the same period. In addition, job density within the corridor is anticipated to grow at about the same rate, further confirming more residents and jobs anticipated to be located within a corridor with the number of riders per bus that is among the highest in the County.

The project's specific benefits include: linking residents to jobs, improving connectivity with existing and proposed MARTA heavy rail lines, improving transit travel time within the corridor and access to transit service, relieving congestion in the corridor, and providing services to transit-dependent segments of the population (e.g., elderly, disabled, financially dependent). Other benefits include supporting and creating the County's land use goals and recent re-zoning actions supporting higher land use density and mixed use development in the corridor, thereby improving the quality of life and stimulating desirable economic development.

The project has received a high level of support from County residents, business groups and other stakeholders for a number of reasons by helping to resolve some of the more pressing transportation, land use, employment and quality of life issues facing County residents and businesses along the corridor and near the BeltLine.

Subsequent to the LPA selection, the project has been in the environmental review phase where environmental impacts and constraints, station locations and characteristics, preliminary engineering were studied; this phase is expected to continue through 2015. In addition, the comprehensive outreach effort that has accompanied the project to date will continue by offering different methods for interested parties to connect with the project.

The preliminary engineering and environmental impact assessment currently underway includes taking a close look at technical, financial and environmental issues to develop the Refined LPA (final route, station location, and ways to construct the light rail line). Design issues are anticipated to include: designing the interface with the future BeltLine; tunneling under streets and intersections; erecting structures and bridges; maintaining traffic circulation; and addressing safety issues. MARTA has developed a structure to ensure community residents' input, along with Technical Advisory Committee, and Stakeholder Advisory Committees' inputs are included and inform the environmental analysis results along with technical and cost factors that are being developed to result in a Refined LPA.



Source: Atlanta Regional Commission, Metropolitan Atlanta Rapid Transit Authority
Prepared by: Kimley-Horn and Associates, Inc.

6.9 Stakeholder Interviews

As part of the DeKalb Transportation Plan, stakeholder interviews were conducted. The interviews with key stakeholders provided an opportunity for the project team to share project information and gain in-depth insight into transportation and related issues for DeKalb County from a broad perspective. The stakeholders interviewed are a part of the Stakeholder Committee and play an integral role in shaping transportation policy in the region. In all, three interviews were conducted involving 10 participants; six participants from the Atlanta Regional Commission (ARC), two from the Georgia Regional Transportation Authority (GRTA), and two from MARTA. Interviews with each agency provided a unique perspective on the transportation system, the issues, and the opportunities to improve transportation in DeKalb County. Each interview lasted 1-2 hours covering a range of topics relevant to each agency and providing an opportunity for participants to express their views related to transportation in the County and what is needed to improve transportation over the next 30 years.

All stakeholders concluded that transportation is the primary issue. Improving perceptions, communicating the right facts, and limited financial funding were the common themes.

Improving Perceptions

All stakeholders expressed the need to improve customer perception of existing transit services and major expansion projects in the region. Interviews conducted with the Atlanta Regional Commission and MARTA provided insight into the *Clifton Corridor Transit Initiative* and the *I-20 East Transit Initiative*. These two expansion projects will improve access to job centers in the County, promote economic development, and enable transit-oriented development around future stations. Stakeholders expressed the need to frame conversations about the benefits and interaction between both projects and the need to educate the public on the positive benefits of Bus Rapid Transit.

Communicating the Right Facts

Providing the public with accurate information has been a challenge in both the *Clifton Corridor Transit Initiative* and the *I-20 East Transit Initiative*. Stakeholders expressed the need to continue close coordination efforts between key stakeholders, state and County officials, and the public to ensure that the correct information is being communicated. This would include information pertaining to the project description, estimated ridership and costs, the proposed mode for each project, and timing of implementation.

Funding

All stakeholders agreed that major expansion projects and future plans will require innovative funding strategies to compete for federal funding. In addition, political courage will be needed to secure funding at the state and County level.

Interview Summary

Key themes of outreach, education, and funding were consistent throughout the conversations with the stakeholders. Participants acknowledge the importance of transit improvements in DeKalb County and the need to find solutions to improve perceptions, facts, and funding surrounding these two major projects and future projects. Other key discussions highlighted the need to further examine the use of Xpress bus service (operated by GRTA) and Congestion Mitigation and Air Quality (CMAQ) funding opportunities.

Also discussed was land use and encouraging communities to adopt transit friendly land use policies desirable for improved transit services within DeKalb County.

6.10 Summary of Transit Needs

DeKalb County's high population density, the highest of any county in metro Atlanta, is conducive to successful transit ridership. Population densities vary greatly across the County, however, so transit investments need to collaborate with or be targeted and phased to match up with existing and planned development patterns.

Many stops and stations in the transit system need better connections with pedestrian and bicycle facilities. Improving sidewalk connections and bicycle infrastructure around bus stops and rail stations is expected to result in an increase in transit ridership.

Land near existing MARTA stations is underutilized and could support higher densities and a greater range of land uses given the direct access to high capacity rail. Encouraging transit-oriented development near rail stations will allow more people to effectively use transit as a primary mode of transportation.

Transit, in the form of buses that run on the general purpose roadway network, face the challenge of competing with other dense vehicular traffic along highly congested corridors. Throughout the system, there may be opportunities for signal preemption, bus only lanes, and other improvements that could give transit vehicles a slight advantage under highly congested conditions.

Areas such as the Buford Highway Corridor, Clarkston, Pine Lake, Lithonia, and the I-20 Corridor have populations that are especially dependent upon good access to transit. It will be important to maintain and improve pedestrian infrastructure such as sidewalks and crosswalks, as well as encourage pedestrian oriented development in areas with high concentrations of transit-dependent populations.

The aging population is a growing segment in the County. This population is more heavily dependent upon transit, particularly bus and paratransit.

MARTA's service reductions in 2010 resulted in significant effects upon ridership. The resulting decrease in ridership indicates an unmet service need in DeKalb County and throughout its operating system.

Two major transit expansion projects are being pursued by MARTA: the I-20 East initiative and the Clifton Corridor initiative. Both projects are in the environmental analysis phase and neither project is favored for implementation over the other. There could be distinct advantages in implementing the projects together. Although the projects are currently moving forward through the environmental phases, funding is not yet identified for the design, construction, and right-of-way for each of these projects.

Expansion of transit service in DeKalb County is stalled by the current limitations on funding. If transit service is to be significantly expanded in DeKalb County, additional dedicated funding needs to be identified for operations and for capital investment.

Plans for transit expansion and the details associated with major initiatives need to be well publicized so that public expectations and expansion plans are accurately aligned. The status of transit expansion projects and the complexities involved in implementing those projects is often misunderstood by the general public. The I-20 East initiative and the Clifton Corridor initiative will take a long time to implement even if funding is immediately identified. Due to the time associated with design, right-of-way acquisition, and construction, each of these projects would still take around a decade to complete. As is common with major public investments, clear information and consistent communication are needed in order to overcome misinformation that can be spread regarding these projects.

Bicycle

7 Our Bicycle Network

Bicycling needs can be conceptualized in a number of ways. People sometimes express a desire for a quality described as "bicycle friendliness." From an infrastructure perspective, bicycle friendliness can be achieved through the provision of bicycle facilities—either on-road or off-road—that allow bicyclists to move through an area in a manner that is acceptably comfortable and efficient. This section focuses on on-road facilities, while Section 7.6 discusses off-road facilities.

An important aspect of a bicycle friendly environment is the surrounding land use. If the area possesses a relatively even mix of trip origins (residences and places of employment, for example) and trip destinations (other shops, restaurants, recreational and social destinations, etc.) within a distance reasonable to a typical bicyclist (three to five miles), then it is likely that bicycling might be perceived as a practical mode of transportation within that environment. Land use considerations that may impact the practicality of bicycling in DeKalb are discussed in other sections of this plan. Land use alone does not determine the level at which people actually cycle. Considerations of user comfort also play an important role in getting people to actually experience biking as a desirable activity. Frequently, much of the built environment can be experienced as unpleasant for bicyclists.

Providing a walkable, active street environment will encourage bicycling. Lower speed roadways with mixes of land uses and pedestrian/bicycle amenities (including bike parking) are natural attractors for bicyclists. However, providing sidewalks is not a substitute for providing roadway improvements. Bicyclists do not mix well with pedestrians on the sidewalks in an active street environment; they need on-street travel accommodations. In addition to it being illegal to ride a bike on the sidewalk as an adult in DeKalb County, studies have shown that riding in the road is generally safer than riding on the sidewalk (many cyclists on sidewalks get hit where cars turn onto driveways).

Another way to conceive of bicycle facility needs is to more quantitatively assess the performance of roadways in the study area according to some measure of performance and to select a value of that measure that represents an acceptable performance for the facilities under consideration. This chapter includes the inventory of on-road bicycle infrastructure and an assessment of the Level of Service associated with these facilities. In the following Pedestrian chapter, a combined Pedestrian and Bicycle Latent Demand assessment is included to better understand which areas within DeKalb County may have the highest demand for cycling and walking in the future.

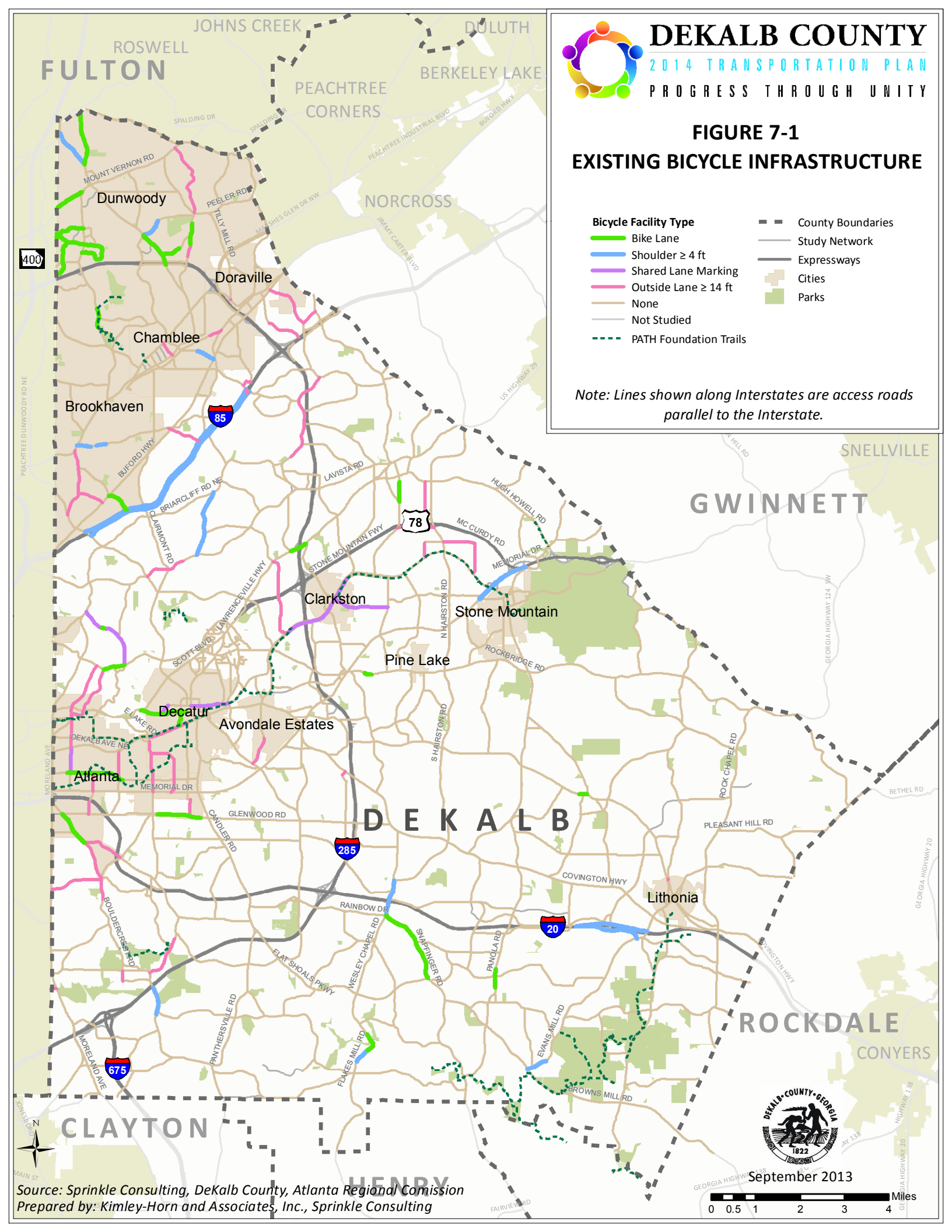
7.1 Existing On-Road Bicycle Infrastructure

For the County and its residents to understand the progress of this plan as it is implemented, it is important to have a clear understanding of the conditions for bicycling as they existed at the time the plan was developed. Any attempt to describe such conditions needs to be done in a manner that allows for continual monitoring, so that improvements recommended by the plan can be observed as they take effect. Subsequently, measurable progress towards the plan's objectives can be reported to elected officials and taxpayers alike. This section of the plan reports on conditions for bicycling observed on the study network segments between January and June 2013.

The bicycle study network consists of 636 centerline miles of roadways, comprised of arterial and collector roadways. The study network roadways do not typically feature shoulders or bike lanes which represent separate space in the roadway cross section which bicyclists can claim as their own operating space; only 15 miles of the study network feature designated bike lanes compliant with the minimum recommendations of the AASHTO *Guide for the Development of Bicycle Facilities*[43] on both sides of the road, while another 23 miles of roadway feature paved shoulders three feet wide or greater. (There are some additional isolated bike lanes and shoulders limited to the frontage of specific developments or parcels, but these do not represent the typical configuration of the roadway). Additionally there are approximately six miles of roadway which feature Shared Lane Markings to facilitate bicycle positioning within a shared lane, and another 30.6 miles of roadway with outside lanes of 14 feet or wider, the dimension recommended in the AASHTO *Guide for the Development of Bicycle Facilities* for a shared wide curb lane.

This leaves over 560 miles of roadway with no bicycle specific facility of enhancement. Given the traffic conditions (motor vehicle speed and volume) found on many of this study network's roadways, these characteristics describe an environment which can be very stressful for those who attempt to ride a bicycle along DeKalb County's roadways, limiting the viability of this mode to be experienced as a real transportation option in the area. Bicycle facilities inventoried on the study network are shown in Figure 7-1.

[43] Designated bike lanes adjacent to curbs should have a minimum of five feet clear to the face of curb from the bike lane stripe, bike lanes in open-shouldered cross section should be at least four feet wide.



Source: Sprinkle Consulting, DeKalb County, Atlanta Regional Comission
Prepared by: Kimley-Horn and Associates, Inc., Sprinkle Consulting

7.2 Level of Service

The method of evaluation is a statistical tool that assigns "grades" to roadway segments, using a pseudo-academic scale (A-F), based on how well each of those roadway segments accommodate the needs of bicyclists. This method, the Bicycle Level of Service model, has been used by counties and cities across the nation as well as regional, state and federal agencies, to evaluate in excess of 200,000 miles of roadway. This method is included as an official measure of bicycle accommodation in the 2010 edition of the *Highway Capacity Manual*. This method is the same used by the Atlanta Regional Commission in its 2007 *Bicycle Transportation and Pedestrian Walkways Plan*, which includes results of this method in its prioritization of member agency requests for funding assistance.

The Bicycle Level of Service model is described in detail in the Appendix of this plan. This section of the plan will discuss its results for the study network as well as the general conditions that contributed to those results. The findings of the section of the plan are descriptive; they make no attempt to determine an appropriate level of accommodation or facility treatments on a given roadway. These issues will be addressed in later sections of the plan. The stratification of Bicycle Level of Service Scores into letter grades is shown in Table 7-1.

In order to apply this model, various types of data were gathered for input to the model. These data were field-gathered by the consultant team, culled from existing records, or, in limited cases, estimated based on analogous observations. Field gathered data included geometric data, such as widths of lanes, roadways, gutters, buffers and sidewalks, as well as observed roadway characteristics including lane counts, configuration (undivided, divided, or use of a two-way left turn lane) posted speed limit, and pavement condition. Traffic volume (derived from modified ARC travel demand model used in this plan) and heavy vehicle percentage data were also included. Roadside profile and cross-section type (curbed or open shoulder) are noted, and will contribute to the development of facility recommendations for the study network corridors.

The study network totaled approximately 636 centerline miles. The average mile of DeKalb County roadway has a Bicycle Level of Service score of 3.73, equal to a grade of "D."

Table 7-1: Bicycle Level of Service Score Stratification

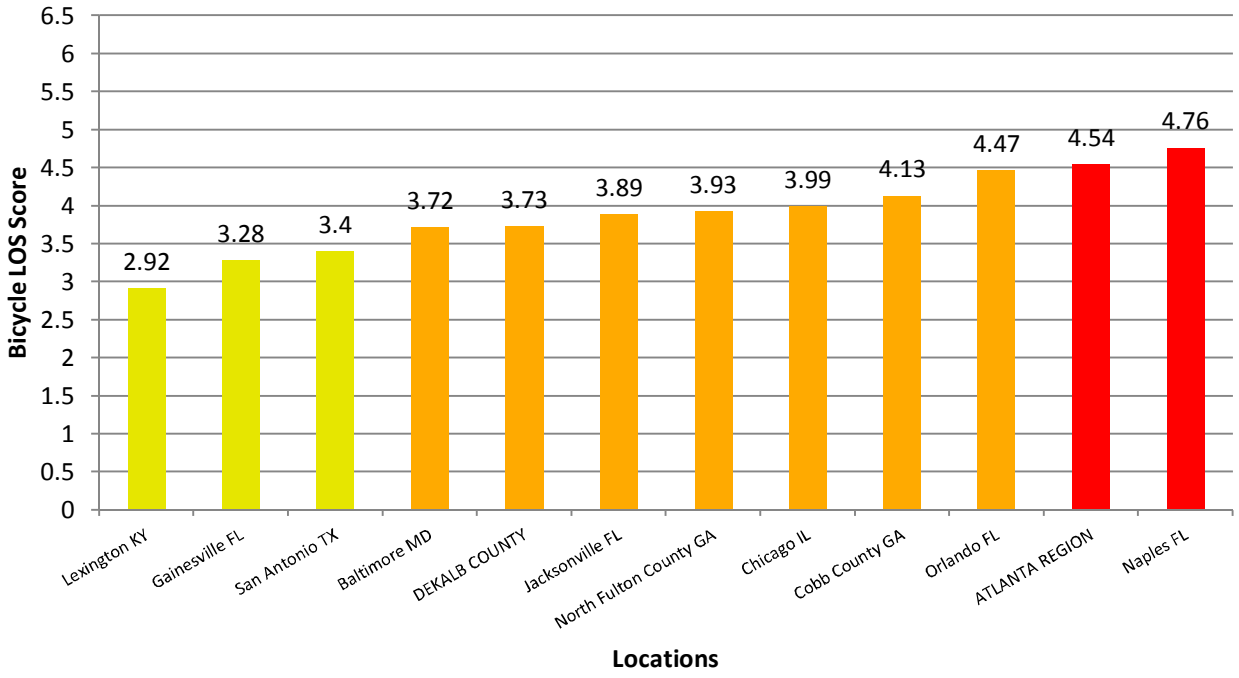
Level of Service	BLOS Score
A	≤ 1.5
B	> 1.5 and ≤ 2.5
C	> 2.5 and ≤ 3.5
D	> 3.5 and ≤ 4.5
E	> 4.5 and ≤ 5.5
F	> 5.5

While every community has different expectations regarding accommodations for biking, as a general observation these results describe a challenging situation for biking along a typical DeKalb County road. This is not an unusual result for urbanized areas in the United States, however. Similar evaluations of

roadway networks have been performed in metropolitan areas around the country. The full data and results for all of the segments of the Study Network are shown in the Appendix.

A sample of these results for bicycling conditions, including the result for DeKalb County, is shown in Figure 7-2. Communities whose networks earned a Bicycle Level of Service grade of "C" include Lexington, KY (1999); Philadelphia, PA (1996); Gainesville, FL (2000); and San Antonio, TX (2000). Communities whose networks scored a grade of "D" include Baltimore, MD (1998); Jacksonville, FL (2004); Chicago, IL (2001); and Orlando FL, (2001). The study network for the entire Atlanta region (comprised of roadways from the Atlanta Regional Commission's Regionally Strategic Transportation System) scored a grade of "E" in 2006, as did the roadways of Collier County, FL (Naples metropolitan area) in 2004.

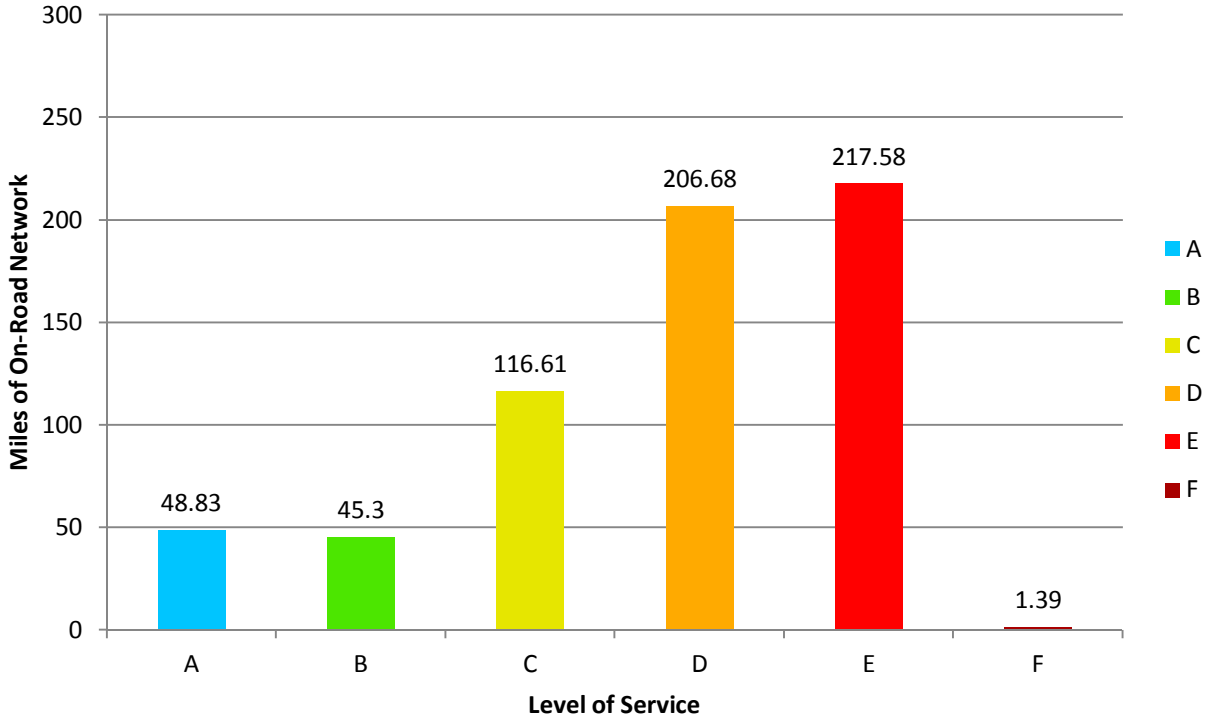
Figure 7-2: Distance Weighted Average Bicycle Level of Service[44]



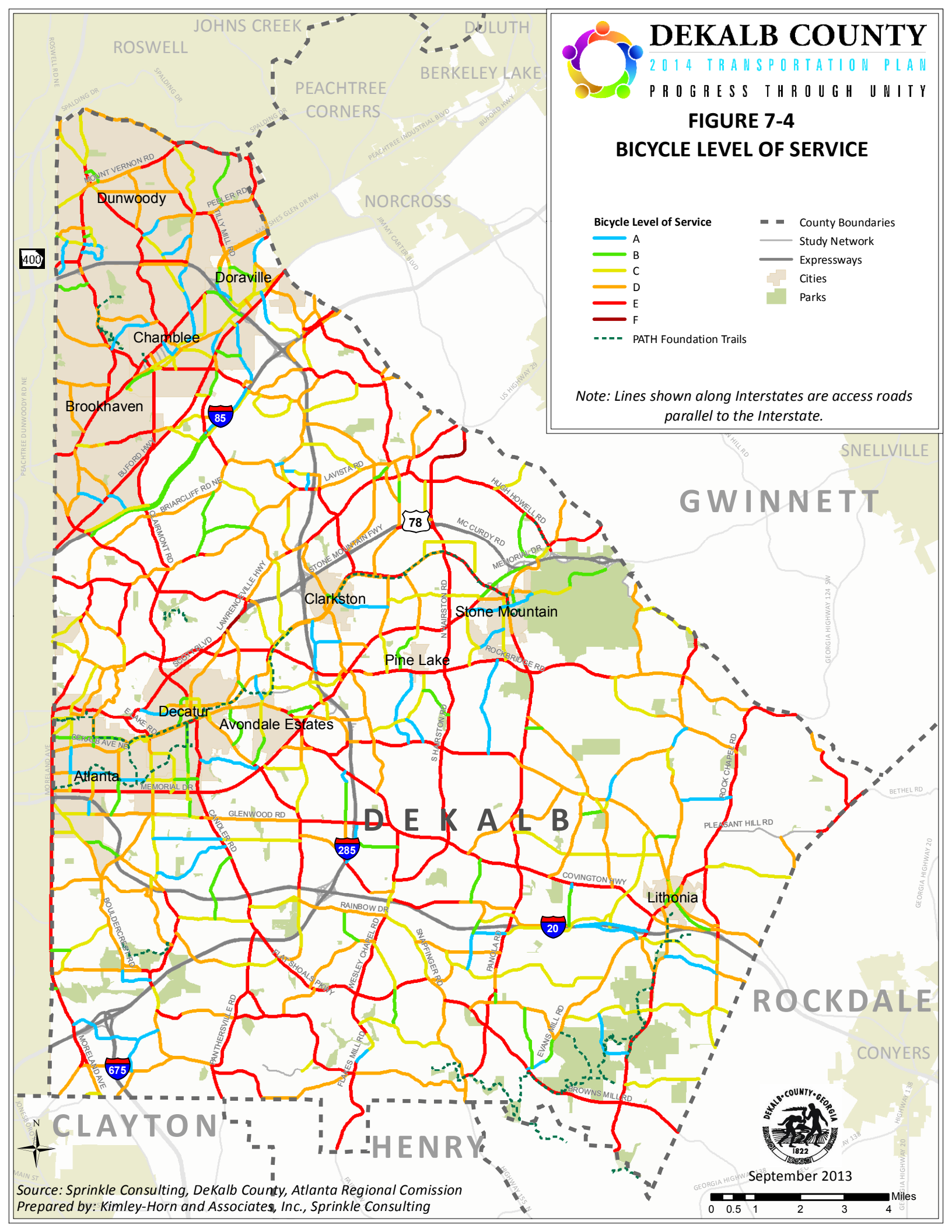
As might be inferred from the distance weighted averages reported above, the distribution of mileage also reflects challenging conditions for bicycling, with "D" being the grade for the greatest number of bicycle miles. The distribution of mileage for bicycling is shown in Figure 7-3. The results are mapped in Figure 7-4.

[44] Source: Sprinkle Consulting archives

Figure 7-3: Distribution of Study Network Miles by Bicycle Level of Service



Some general observations may be made about factors that contribute to the challenging character of bicycling conditions along DeKalb County's roadways. It is important to note, however, that the Bicycle Level of Service model considers a complex interplay of contributing factors as they model a bicyclist's perception of comfort and safety on a given roadway. No one factor is likely responsible for a segment's result, and later sections of this plan will make recommendations about how to counteract the existing conditions to improve accommodation where needed. But certain factors can be identified as contributing to the overall environment to provide some context beyond the numbers. Of the 636 centerline miles surveyed, 286 reported volumes in excess of 10,000 vehicles per day, a volume that can be translated into an experience for a bicyclist of being passed by a car approximately every seven seconds during the peak hour.


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 7-4
BICYCLE LEVEL OF SERVICE
Bicycle Level of Service
A
B
C
D
E
F
PATH Foundation Trails
County Boundaries
Study Network
Expressways
Cities
Parks
Note: Lines shown along Interstates are access roads parallel to the Interstate.
JOHNS CREEK
DULUTH
ROSWELL
BERKELEY LAKE
PEACHTREE CORNERS
NORCROSS
SNELLVILLE
GWINNETT
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
Lithonia
ROCKDALE
CONYERS
DEKALB
CLAYTON
HENRY
400
85
78
285
20
675
MOUNT VERNON RD
PEBLER RD
TILLY MILL RD
BUFORD HWY
LAVISTA RD
BRIARCLIFF RD NE
CLAIRMONT RD
LAWRENCEVILLE HWY
STONE MOUNTAIN FWY
HUGH HOWELL RD
MC CURDY RD
MEMORIAL DR
N HAIRSTON RD
S HAIRSTON RD
ROCKBRIDGE RD
SCOTT BLVD
E LAKE RD
DEKALB AVE NE
MEMORIAL DR
GLENWOOD RD
CANDLER RD
ROCK CHAPEL RD
PLEASANT HILL RD
BETHEL RD
COVINGTON HWY
RAINBOW DR
BOULDERCREST RD
FLAT SHOALS PKWY
WESLEY CHAPEL RD
SNAPFINGER RD
PANOLA RD
EVANS MILL RD
BROWNS MILL RD
PANTHERSVILLE RD
FURNESS MILL RD
MORELAND AVE
PEACHTREE INDUSTRIAL BLVD
JIMMY CARTER BLVD
US HIGHWAY 29
GEORGIA HIGHWAY 124 SW
GEORGIA HIGHWAY 20
HIGHWAY 138
DEKALB COUNTY GEORGIA 1822
N
Source: Sprinkle Consulting, DeKalb County, Atlanta Regional Comission
Prepared by: Kimley-Horn and Associates, Inc., Sprinkle Consulting
September 2013
0 0.5 1 2 3 4
Miles

7.3 Bicycle Needs Based on the Bicycle Level of Service Model

Bicycle accommodations along the roadways of DeKalb County's study network were evaluated using the technical performance measure known as the Bicycle Level of Service Model. This analysis revealed overall conditions that were challenging for bicycles. As discussed earlier in this report, the distance weighted average Bicycle Level of Service across DeKalb County is 3.73, which is equal to a Bicycle Level of Service grade of "D".

While the Level of Service performance measure used is a standard method for evaluating bicycle accommodations on roadways (it is a recommended method in the *Highway Capacity Manual*), it does not prescribe standard thresholds for that level of service which is acceptable for bicycles in all communities. Each agency which uses this method may set its own passing marks based on local aspirations and constraints. This method has been used in Metro Atlanta by the Atlanta Regional Commission (ARC) in its 2007 *Bicycle Transportation and Pedestrian Walkways Plan*. In that plan, ARC established that, across the Atlanta region for both walking and bicycling, Level of Service "B" would be the performance expectation within activity nodes, and Level of Service "C" would be the performance expectation on other roadways, outside of activity nodes. Regionally, ARC defined activity nodes as certain areas defined on its Uniform Growth Policy Map (UGPM), including City Centers, Town Centers, Regional Centers, and Station Communities, as well as Livable Centers Initiative (LCI) study sites.

This plan follows the example set by ARC by also setting performance thresholds of Bicycle Level of Service "B" within activity nodes, and Bicycle Level of Service "C" more generally. Activity nodes for DeKalb County are defined by multiple criteria, including the several area types defined by the current (2012) ARC UGPM:

- Town Centers,
- Regional Centers,
- Regional Town Centers,
- Regional Attractors,
- Community Activity Centers,
- Village Centers, and
- LCI Study Sites.

In addition to the UGPM-defined areas, this plan has several DeKalb County-specific criteria for activity nodes:

- Areas with one mile (on-the-street) of the following existing and future premium transit services;
  - MARTA heavy rail stations,
  - Atlanta Beltline stations,
  - Clifton Corridor and I-20 corridor stations, and
  - Other Existing BRT stations;
- Areas identified as "Neighborhood Centers", "Town Centers", and "Commercial Redevelopment Corridors" in the DeKalb County Comprehensive Plan;
- Study areas from the DeKalb County Master Active Living Plan (MALP); and
- Areas designated for the following land use/density attributes on the DeKalb County Future Land Use Map (FLUM);
  - Very High Density Residential,
  - High Density Residential,

- High Density Commercial,
- High Density Mixed Use, and
- Medium Density Mixed Use.

These areas are shown in Figure.

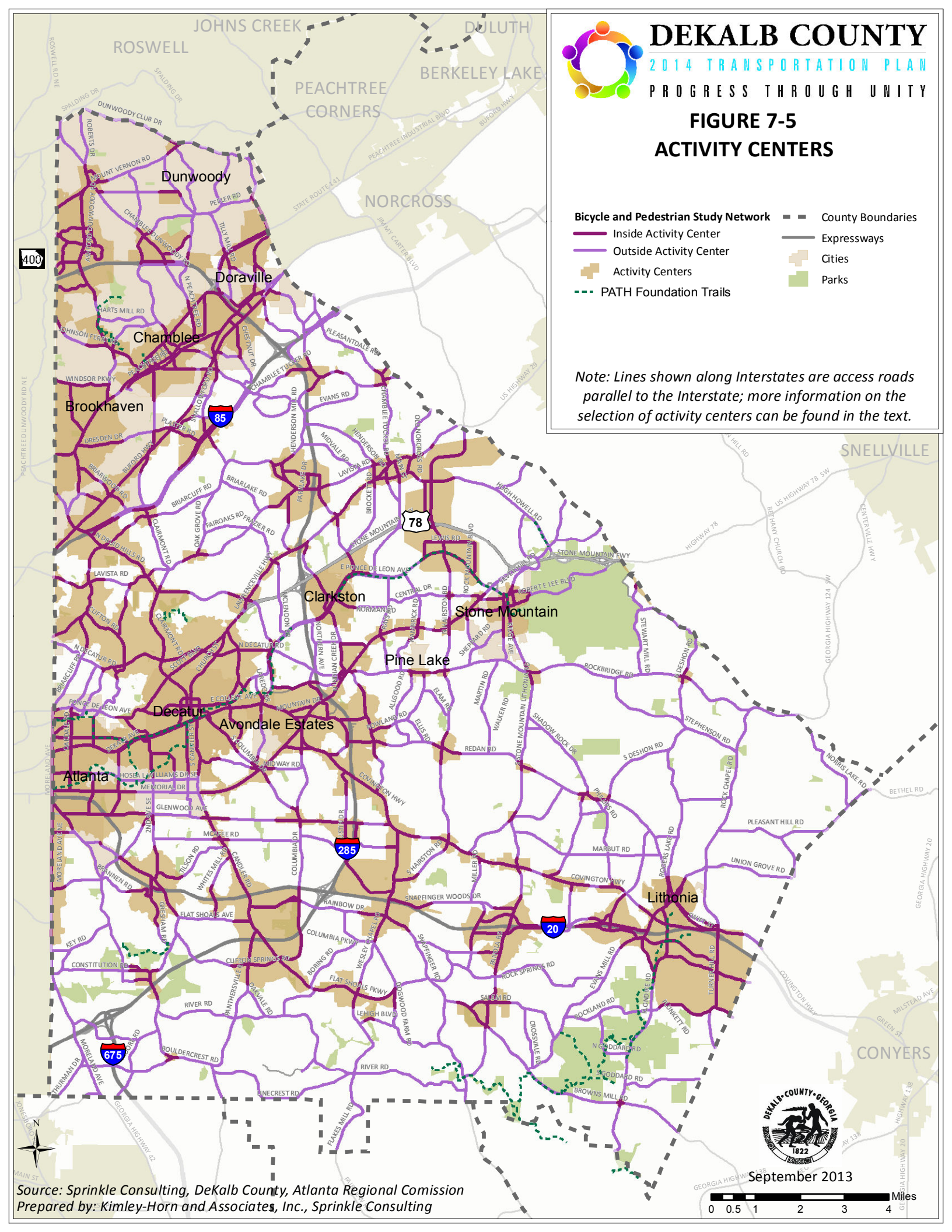
Of the 636 miles of roadway analyzed with the Bicycle Level of Service Models, just over 263 miles (41%) fall within the activity nodes defined by the above criteria.

Roadways that meet or exceed their appropriate performance threshold are understood to be currently operating in a satisfactory manner, while those which are performing below the appropriate threshold are determined to have needs for improvements. On the DeKalb County study network, approximately 163 miles (26%) of roadway currently meet their expected performance for bicycle accommodation. Of the roadways that do not meet the bicycle performance threshold, approximately 173 miles (27% of the total network) are within one letter grade of their designated performance threshold. All roadways needing improvement for bicycles total 473 miles. Figure 7-7 shows the mileage of roadways meeting their designated performance thresholds (or not), both for those roadways inside activity nodes (Bicycle Level of Service "B") and those outside those nodes (Bicycle Level of Service "C").

Table 7-2 shows roadways within activity centers with the lowest LOS ratings.

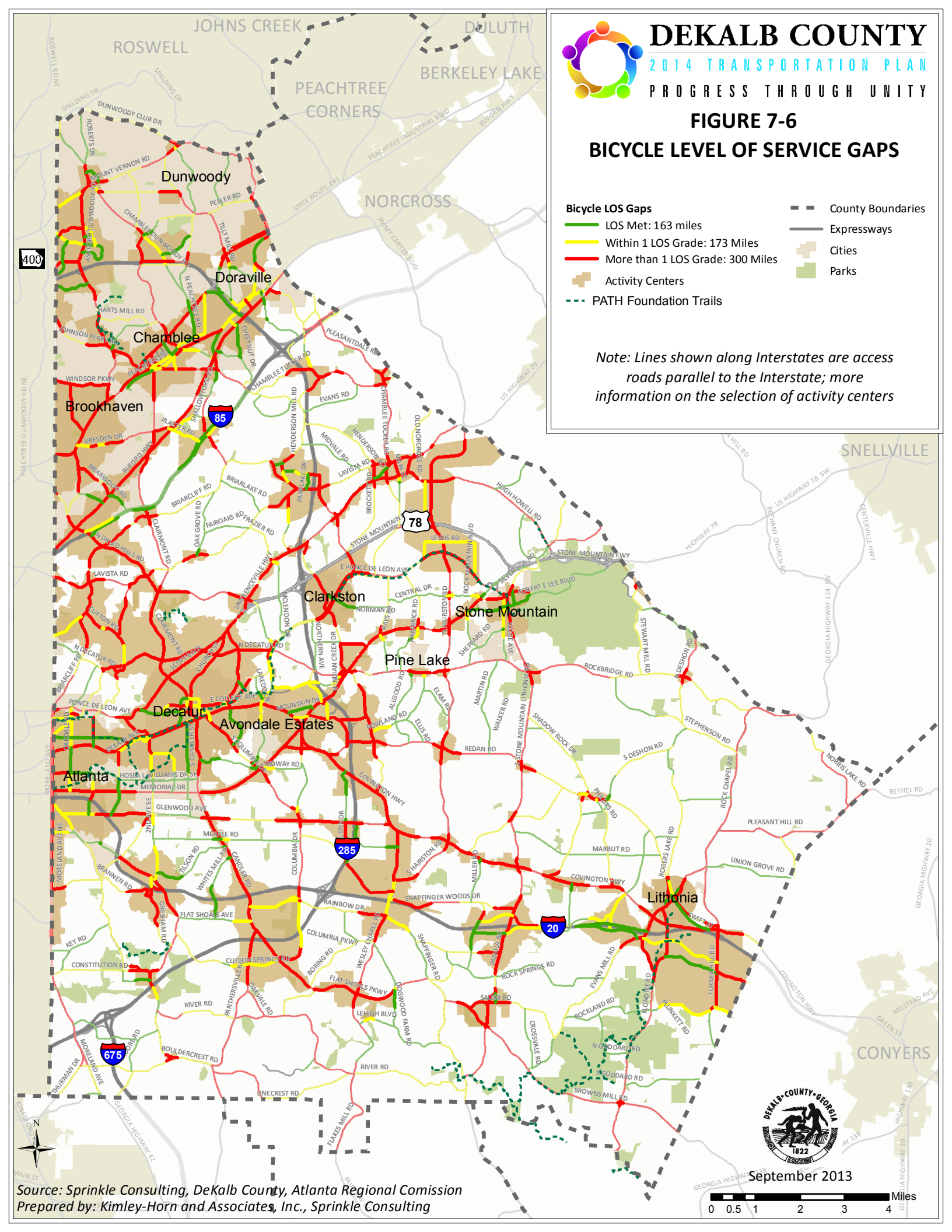
Table 7-2: Study Network Roadways within Activity Centers with Low LOS Ratings

Roadway Name	Bicycle LOS
Hugh Howell Road	E / F
Flakes Mill Road	E / F
Covington Highway	E
Clairmont Avenue	E
Panola Road	E
Rockbridge Road	E
Ashford Dunwoody Road	E
Highway 78 Bypass Eastbound	E
Moreland Avenue Southeast	E
Flat Shoals Parkway	E
Valley Brook Road	E
Chamblee Dunwoody Road	E
Buford Highway	E
East Ponce de Leon Avenue	E
Glenwood Road	E
Chamblee Tucker Road	E
Brockett Lane	E


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 7-5
ACTIVITY CENTERS
Bicycle and Pedestrian Study Network
Inside Activity Center
Outside Activity Center
Activity Centers
PATH Foundation Trails
County Boundaries
Expressways
Cities
Parks
Note: Lines shown along Interstates are access roads parallel to the Interstate; more information on the selection of activity centers can be found in the text.
JOHNS CREEK
DULUTH
ROSWELL
BERKELEY LAKE
PEACHTREE CORNERS
NORCROSS
SNELLVILLE
CONYERS
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
Lithonia
400
85
78
285
20
675
N
September 2013
0 0.5 1 2 3 4 Miles
Source: Sprinkle Consulting, DeKalb County, Atlanta Regional Comission
Prepared by: Kimley-Horn and Associates, Inc., Sprinkle Consulting

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

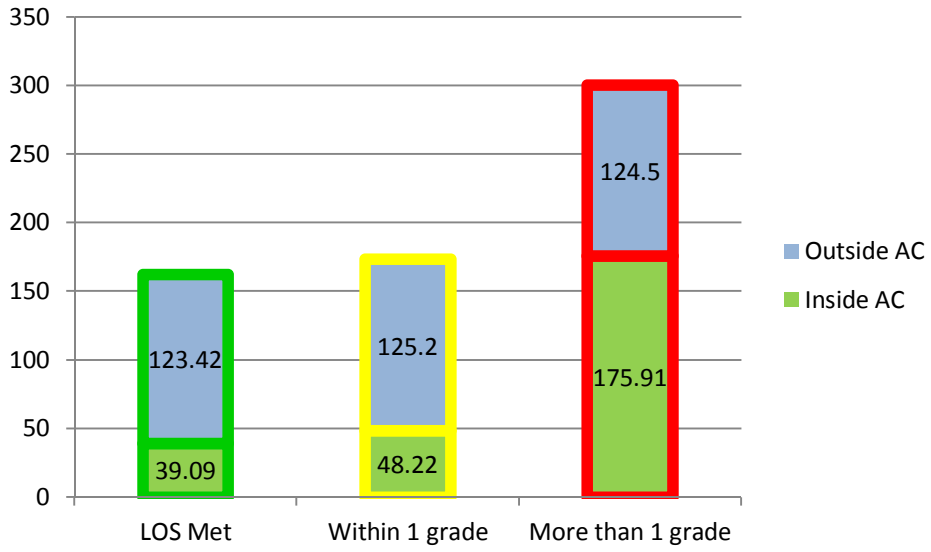
FIGURE 7-6
BICYCLE LEVEL OF SERVICE GAPS



September 2013

Source: Sprinkle Consulting, DeKalb County, Atlanta Regional Comission
Prepared by: Kimley-Horn and Associates, Inc., Sprinkle Consulting

Figure 7-7: Performance Threshold Bicycle Accommodations on DeKalb County Roadways



Strategies for meeting the needs for improvement identified by this analysis will be included in the Recommendations Report.

7.4 Bicycle Crash History

Crash data from the years 2009 to 2011 were analyzed for collisions involving bicyclists. Countywide, 31,574 collisions were studied; of those collisions, 193 involved a cyclist, with 150 those occurring along the study network. There were no reported bicyclist fatalities in DeKalb County from 2009 to 2011. Countywide, 147 of the 193 total bicycle collisions involved an injury, with 115 collisions with injuries that occurred along the study network. There were seven collisions between bicycles and heavy vehicles, of which six resulted in an injury. Three bicycle crashes included property damage.

Table 7-3: Bicycle Crash Summary 2009 to 2011

Geography	Total Bicycle Crashes	Collisions with Injuries	Collisions with Fatalities
All DeKalb County	193	147	0
Along Study Network	149	114	0

Figure 7-8 shows the locations with the highest densities of bicycle crashes within DeKalb County. The map is similar to the overall crash map shown in the Roadway section of this report. It is noteworthy that bicycle collisions have high concentrations in cities including Atlanta, Chamblee, Decatur, and to a lesser degree Stone Mountain and Tucker. Some additional areas with high concentrations of bicycle collisions include:

- Gresham Road at I-20
- Brannen Road at I-20
- Bouldercrest Road near Glen Emerald Park

- Candler Road near Candler Plaza Shopping Center
- N Indian Creek Drive near GA Perimeter College Clarkston, and GA Piedmont Technical College
- E Ponce de Leon Avenue near Rock Mountain Boulevard

Additional review of the location of the bicycle crashes was conducted to better understand the roadways being used and possible nearby destinations. This analysis is not meant to make a causal link between the crashes and the roads/destinations, but more to look for possible common themes. Almost one quarter of bicycle collisions along the study network (34 of 149) occurred with 75 feet of locations where the roadway changed its cross-section, either near intersections, or areas where the roadway widened or narrowed. Incidentally, the same number of bicycle collisions (34 of 149) occurred within 75 feet of median changes, for example, where a concrete raised median changed to no median. Generally bicycle collisions occurred along roadways where there was no median, with 118 (78.7%) reported collisions with bicycles in areas with no median at all. The next highest number of crashes occurred along roadways with two-way-left-turn-lane (TWLTL) medians. Just over 30% (46) of bicycle collisions occurred within 75 feet of a TWLTL; sixteen of these also occurred where TWLTLs changed to no median.

Approximately three quarters of all bicycle collisions along the study network occurred where the speed limit was between 35 and 45 miles per hour (116 of 150). In fact, 60% (90) occurred along roads or within 75 feet of a roadway with posted speeds of 35 mph.

Table 7-4: Bicycle Collisions within 1/2-Mile of Attractors

Bicycle Collisions within ½-Mile of Attractors		
County Total : 193	**Number**	**Percent of Total**
Higher Education	**33**	**17.1%**
Parks	**73**	**37.8%**
Schools	**165**	**85.5%**
Retail	**25**	**13.0%**
Bus Stop (within 75 ft)	**54**	**28.0%**
Rail Station	**35**	**18.1%**

Considering all crashes in the County (not only those that fall along the study network), just over 85% (165) of collisions with bicyclists occurred within ½ mile of a school, nearly 40% (73) occurred within ½ mile of a park, and over 15% (33) occurred near places of higher education. Nearly 30% (54) bicycle collisions occurred within 75 feet of a bus stop, and almost 20% (35) occurred within a half mile of a MARTA rail station. It is important to note that there are many more K-12 schools within the County than higher education facilities, so the higher percentages could be related only to the greater number of certain attractors. Further investigation of some of these connections may be warranted.

7.5 Bicycle Latent Demand Analysis

The demand for future biking trips was estimated along with walking trips. Refer to the next chapter (Our Pedestrian Network) for more information on bike and pedestrian latent demand.

7.6 Off-Road Trail Facility Gaps

The off-road trail network is an important part of the transportation system for both bicycles and pedestrians. A separate review of the trail system, particularly the PATH Foundation trail, was conducted to look for critical gaps in the system. Five locations were identified as key linkages that should be considered further. Most of these locations are currently a part of the planned PATH system as well.

Figure 7-9 shows these locations. It's important to note that these are purely locations where a gap exists in the off-road trail system – not where bicycle needs exist.

7.7 Summary of Bicycle Needs

While specific corridors and intersections throughout the County that are in need of bicycle improvements have been identified in the maps and descriptions within this chapter, several high level observations of bicycle needs are summarized here.

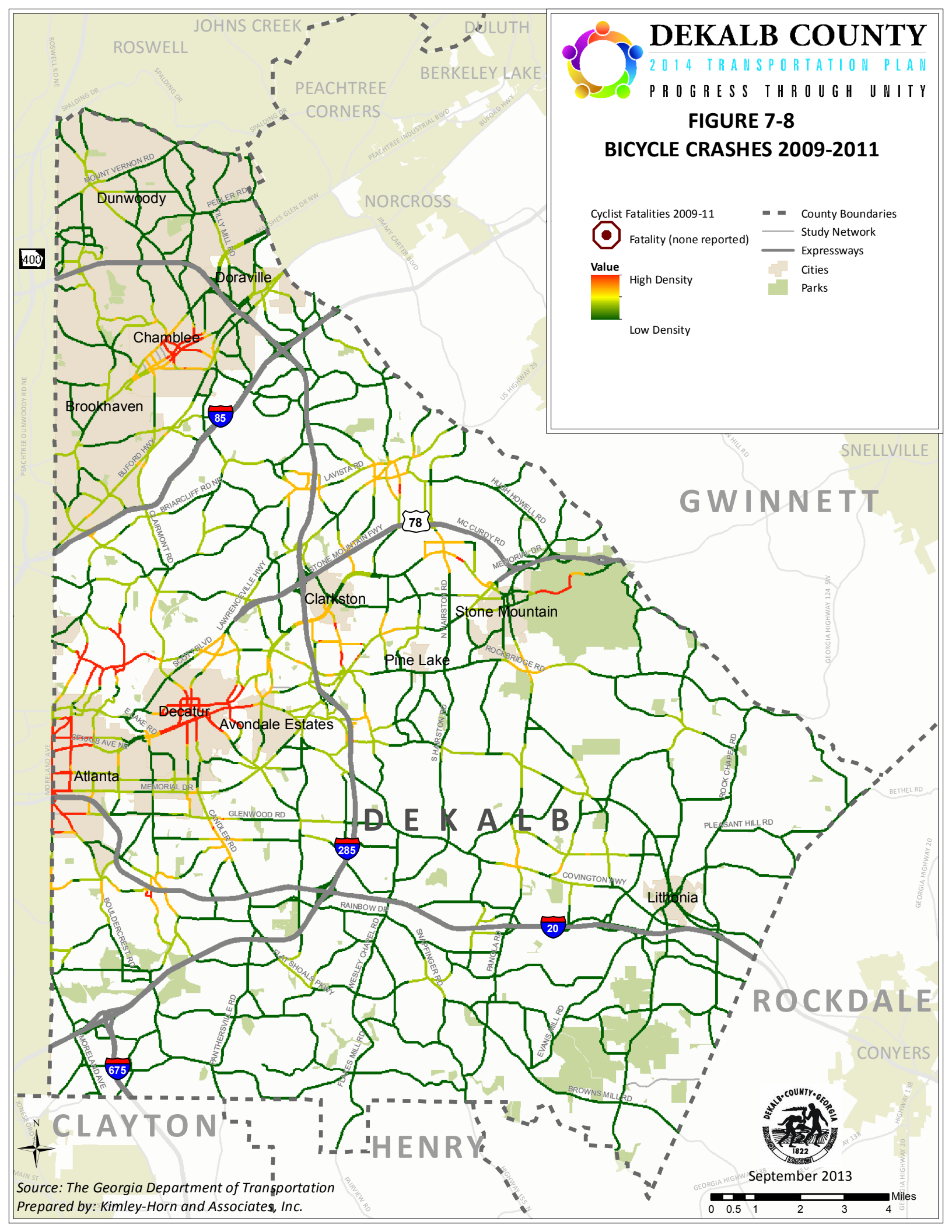
Aligning with planning practices at the regional level, bicycle accommodations on roadways within activity centers will be held to a higher standard than bicycle facilities elsewhere within the County. County staff has set a goal of achieving a Bicycle Level of Service of "B" within activity centers and "C" on the study network roadways outside of activity centers. Currently, the distance weighted average Bicycle Level of Service across DeKalb County is 3.73, which is equal to a Bicycle Level of Service grade of "D". This indicates that the current Bicycle Level of Service falls below the set goals. Roadways within activity centers that have the lowest Bicycle Level of Service Ratings are listed in Section 7.3.

The highest densities of automobile crashes involving bicyclists occurred in downtowns and around other activity centers. This trend reinforces the need to set a higher standard for bicycle facilities within activity centers. It is worth noting that 85% of crashes occurred within ½ mile of a school. This does not necessarily mean that those crashes involved students, but it does indicate that there is a safety need near schools for cyclists, particularly if bicycling to school is meant to be a safe option for students. It is also worth noting that 75% of crashes occurred along roadways with speed limits between 35 and 45 mph.

There is a growing network of off-road bicycle facilities within DeKalb County, although they are currently disconnected from one another. These trails are important for transportation, but also for encouraging new riders to become comfortable with cycling. Expanding and connecting these trail facilities will improve safety and grow cycling within the County.

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

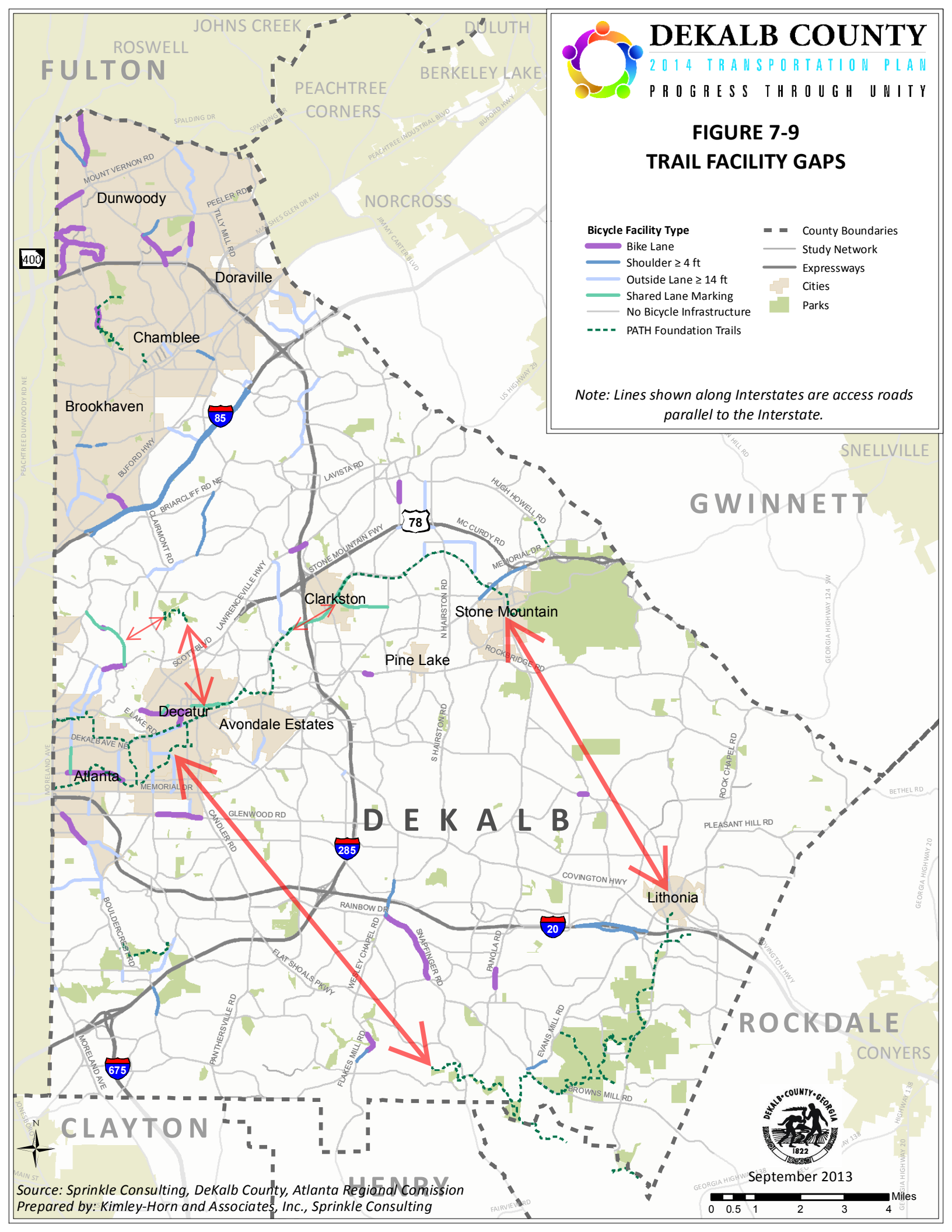
FIGURE 7-8
BICYCLE CRASHES 2009-2011



Source: The Georgia Department of Transportation
Prepared by: Kimley-Horn and Associates, Inc.

September 2013

0 0.5 1 2 3 4 Miles



Source: Sprinkle Consulting, DeKalb County, Atlanta Regional Comission
Prepared by: Kimley-Horn and Associates, Inc., Sprinkle Consulting

Pedestrian

8 Our Pedestrian Network

Pedestrian needs can be conceptualized in a number of ways. Many people express a desire for areas to possess a certain quality which they might describe as "walkability", or "pedestrian friendliness." One important aspect of the practicality of walking in a given environment is the land use pattern of the area. If the area possesses a relatively balanced mix of trip origins (residences and places of employment) and trip destinations (other shops, restaurants, recreational and social destinations, etc.) within a walkable distance, walking could be perceived as a practical mode of transportation within that environment. Land use considerations that may impact the practicality of walking in DeKalb are discussed in other sections of this plan, but land use alone does not determine the frequency of which people actually walk.

Another way to conceive of pedestrian facility needs is to more quantitatively assess the performance of roadways in the study area according to some measure and to select a value of that measure that represents an acceptable performance for the facilities under consideration. This chapter includes the inventory of sidewalks and an assessment of the Level of Service associated with these facilities. The presence and quality of sidewalks address the longitudinal aspects of pedestrian mobility, but crossings are also important. A midblock crossing analysis was completed, including a Crossing Level of Service to capture some of the most difficult roadways to cross within DeKalb County. Additionally, a combined Pedestrian and Bicycle Latent Demand assessment is included to better understand which areas within DeKalb County may have the highest demand for cycling and walking in the future.

The Role of Pedestrians in a Regional Plan

The needs of pedestrians should be considered when planning and designing any roadway. This does not mean that all roadways need to be designed as *active streetscapes*. Many of DeKalb's roadways are higher speed, suburban type collector and arterial roadways and are not conducive to the active street principles. However, all roadways within urban or transitional areas should be designed with sidewalks and pedestrian features at all signalized intersections. Sidewalks should be separated from the roadway by a buffer area, and if possible located outside the clear zone. Midblock crossings should be considered at high demand locations and be signed and marked accordingly.

Looking forward to the development of recommendations, policy decisions will need to be made about target Levels of Service (for both bicycles and pedestrians). It is important to realize that active streetscapes will not be necessary everywhere and having better pedestrian facilities in activity centers, near transit, and near other places people walk will be more important than some of the less active areas of the County. Some of the locations where pedestrian infrastructure will be critical are within the activity centers that ARC has designated throughout the region. Those activity centers can be seen in Figure 7-5.

8.2 Existing On-Road Pedestrian Infrastructure

For the County and their residents to understand the progress of this plan as it is implemented, it is important to have a clear understanding of the conditions for walking as they existed at the time the plan was developed. Any attempt to describe such conditions needs to be done in a manner that allows for continual monitoring, so that improvements recommended by the plan can be observed as they take effect. Subsequently, measurable progress towards the plan's objectives can be reported to elected

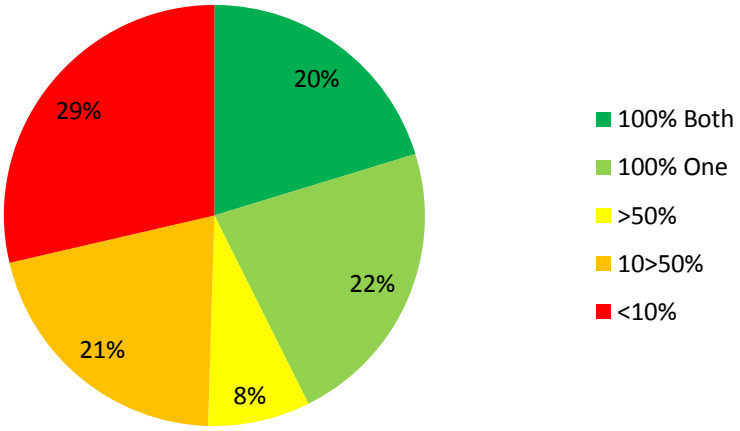
officials and taxpayers alike. This section of the plan reports on conditions for walking observed on the study network segments in January through June 2013.

The pedestrian study network consists of 636 centerline miles of roadways, comprised of arterial and collector roadways.

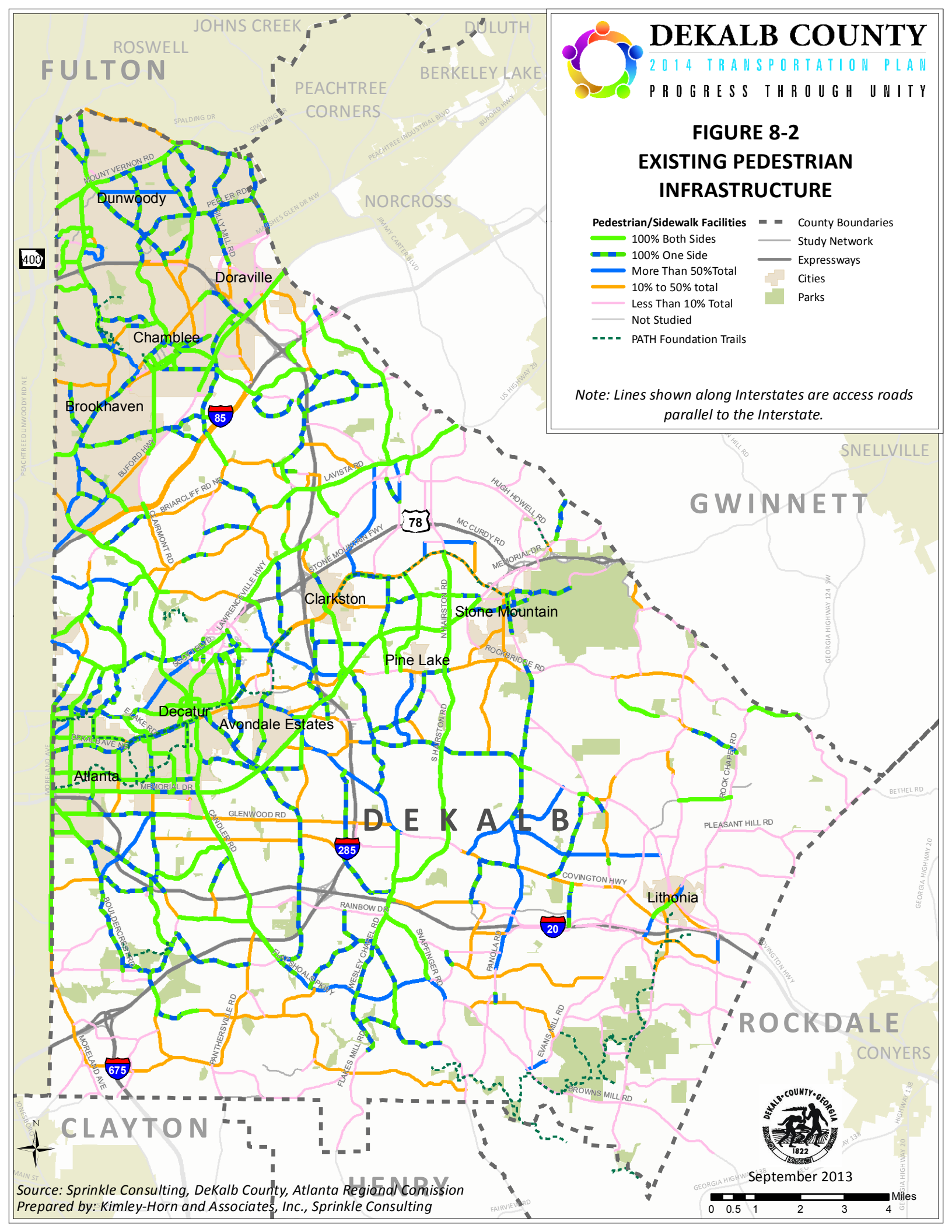
Twenty percent of the network miles surveyed have full sidewalk coverage along both sides of the roadway, while 22% have complete coverage on one side. Eight percent of the network miles have partial coverage of 50% or greater (on both sides combined), while 21% of miles have combined partial coverage of less than 50%. Twenty-nine percent of the roadways surveyed have less than 10% coverage—essentially no sidewalks at all. Of all the sidewalks surveyed the average buffer separating sidewalks from the roadway is 1.7 feet wide, leaving pedestrians to walk very close to busy arterial and collector roads. Pedestrian facilities inventoried on the study network are shown in Figure 8-2, and the distribution of sidewalks is shown in Figure 8-1.

The City of Doraville Comprehensive Plan 2005 to 2025 identifies the Doraville MARTA Station as being in need of better pedestrian connections. Nearby residents say the MARTA station would see more usage if better pedestrian facilities were in place.

Figure 8-1: Distribution of Sidewalk Coverage in DeKalb County



While demand for pedestrian and bicycling facilities will be addressed in a later section of this report, anecdotal evidence exists that people are walking along many of these roadways with significant gaps in sidewalk coverage, or none at all, as worn footpaths can be observed on the bare ground along many DeKalb County roadways. Alongside those roadways without sidewalks or shoulders, it is not uncommon for the roadsides to fall quickly into ditches, leaving little room for those who might choose to walk alongside them anyway, and no room to step off the roadway for those who choose to walk in sometimes narrow roadways. Taken all together, these characteristics describe an environment which can be very stressful for those who attempt to walk along DeKalb County's roadways, limiting the viability of this mode to be experienced as real transportation option in the area.


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 8-2
EXISTING PEDESTRIAN INFRASTRUCTURE
Pedestrian/Sidewalk Facilities
100% Both Sides
100% One Side
More Than 50%Total
10% to 50% total
Less Than 10% Total
Not Studied
PATH Foundation Trails
County Boundaries
Study Network
Expressways
Cities
Parks
Note: Lines shown along Interstates are access roads parallel to the Interstate.
JOHNS CREEK
DULUTH
ROSWELL
FULTON
BERKELEY LAKE
PEACHTREE CORNERS
NORCROSS
SNELLVILLE
GWINNETT
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
DEKALB
Lithonia
ROCKDALE
CONYERS
CLAYTON
HENRY
400
85
78
285
20
675
Source: Sprinkle Consulting, DeKalb County, Atlanta Regional Comission
Prepared by: Kimley-Horn and Associates, Inc., Sprinkle Consulting
September 2013
Miles
0 0.5 1 2 3 4

8.3 Level of Service

The method of evaluation is a statistical tool that assigns "grades" to roadway segments, using a pseudo-academic scale (A-F), based on how well each of those roadway segments accommodates the needs of pedestrians. This method, the Pedestrian Level of Service model, has been used by counties and cities across the nation as well as regional, state and federal agencies, to evaluate in excess of 200,000 miles of roadway. This method is included as an official measure of pedestrian accommodation in the 2010 edition of the *Highway Capacity Manual*. This method is the same used by the Atlanta Regional Commission in its 2007 *Bicycle Transportation and Pedestrian Walkways Plan*, which includes results of this method in its prioritization of member agency requests for funding assistance. (The ARC Plan did not include a full pedestrian conditions analysis for its study network, but rather a sampling of typical corridors; portions of Memorial Drive and Covington Highway were included among the sample corridors of the ARC plan). The method was also used by several of DeKalb County's neighbors, as it was used to assess pedestrian conditions in the Cobb County Bicycle and Pedestrian Improvement Plan and the North Fulton County Comprehensive Transportation Plan.

The Pedestrian Level of Service model is described in detail in the Appendix of this plan. This section of the plan will discuss its results for the study network as well as the general conditions that contributed to those results. The findings of the section of the plan are descriptive; they make no attempt to determine an appropriate level of accommodation or facility treatments on a given roadway. These issues will be addressed in later sections of the plan. The stratification of Pedestrian Level of Service Scores into letter grades is shown in Table 8-1.

In order to apply this model, various types of data were gathered for input to the model. These data were field-gathered by the consultant team, culled from existing records, or, in limited cases, estimated based on analogous observations. Field gathered data included geometric data, such as widths of lanes, roadways, gutters, buffers and sidewalks, as well as observed roadway characteristics including lane counts, configuration (undivided, divided, or use of a two-way left turn lane) posted speed limit, roadside profile, pavement condition, and cross-section type (curbed or open shoulder). Traffic volume and heavy vehicle percentage data were also included.

The study network totaled approximately 636 centerline miles. The average mile of DeKalb County roadway has a Pedestrian Level of Service Score of 3.98, equal to a grade of "D."

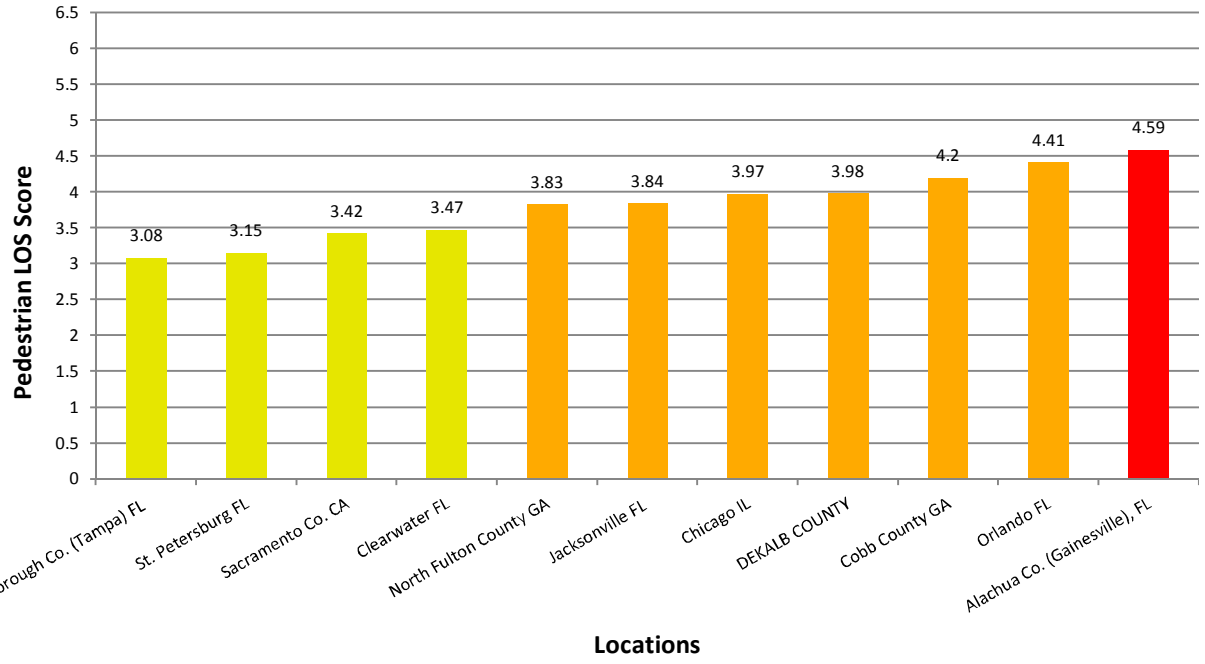
Table 8-1: Pedestrian Level of Service Score Stratification

Level of Service	PLOS Score
A	≤ 1.5
B	> 1.5 and ≤ 2.5
C	> 2.5 and ≤ 3.5
D	> 3.5 and ≤ 4.5
E	> 4.5 and ≤ 5.5
F	> 5.5

While every community has different expectations regarding accommodations for walking, as a general observation these results describe a challenging situation for walking along a typical DeKalb County road. This is not an unusual result for urbanized areas in the United States, however. Similar evaluations of roadway networks have been performed in metropolitan areas around the country. A 2008 study of walking conditions in nearby Cobb County found a distance weighted average of 4.20, which describes a more stressful environment for pedestrians, but is still stratified to be Pedestrian Level of Service "D." A 2009 Study of walking conditions in North Fulton County, including the cities of Sandy Springs and Roswell, found a distance weighted average of 3.83, slightly better than conditions in DeKalb County, but still scaled as a grade of "D." The full data and results all the segments of the Study Network are shown in the Appendix.

A comparison of DeKalb County's Pedestrian Level of Service results with other study areas is shown in Figure 8-3.

Figure 8-3: Distance Weighted Average Pedestrian Level of Service[45]

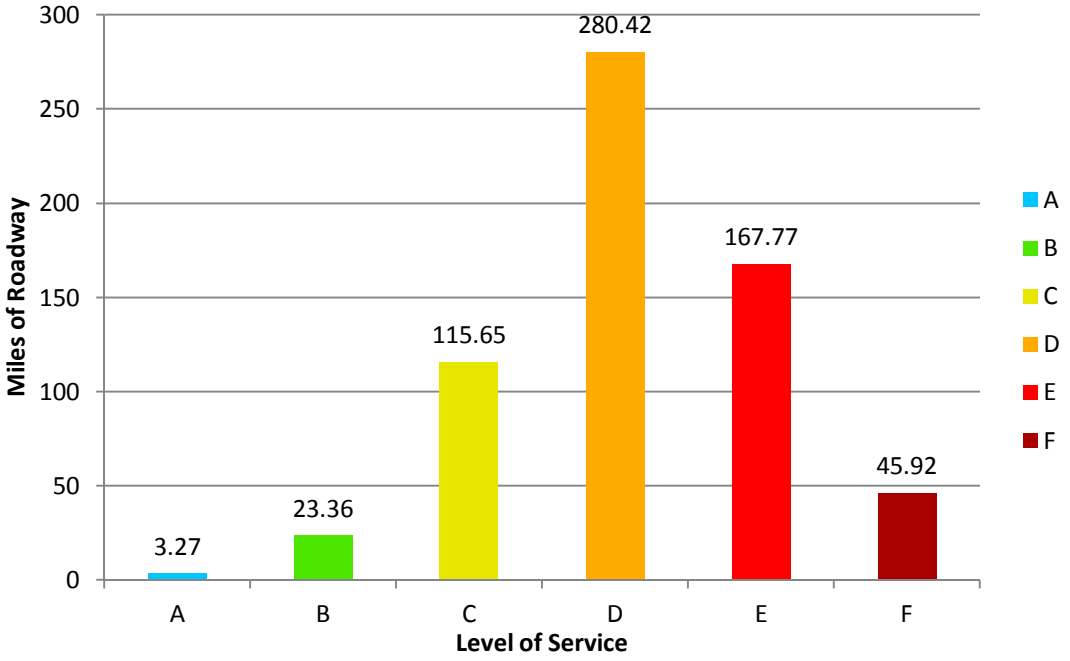


As might be inferred from the distance weighted averages reported above, the distribution of mileage also reflects challenging conditions for walking, with "D" being the grade for the greatest number of pedestrian miles. The distribution of mileage for walking is shown in Figure 8-4.[46]The results are mapped in Figure 8-5.

[45] Source: Sprinkle Consulting archives

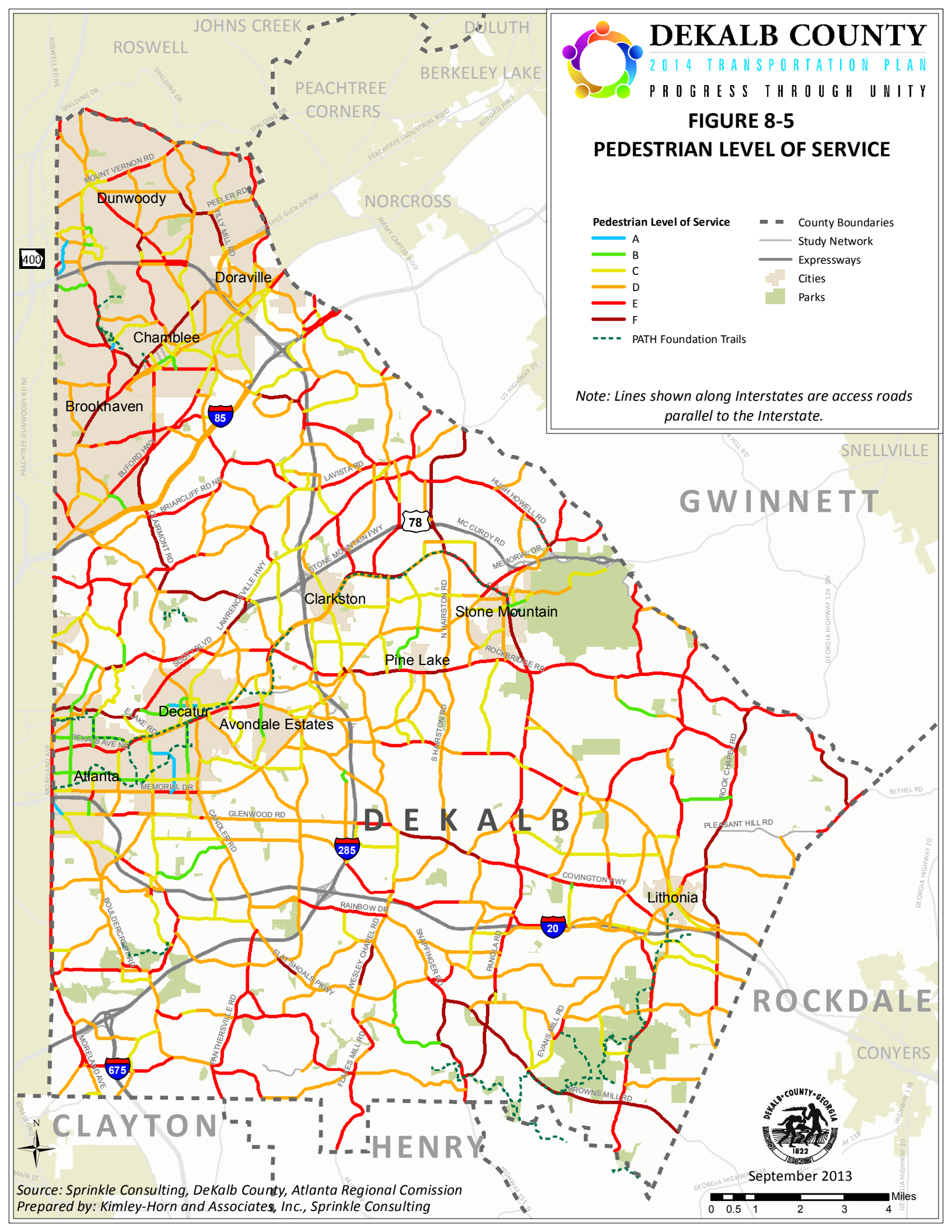
[46] The results depicted in Figure 2 display the worse directional result for all segments. There were segments which scored a grade of "A" on the Pedestrian Level of Service, for example, but this result was achieved on only one side of

Figure 8-4: Distribution of Study Network Miles by Pedestrian Level of Service



Some general observations may be made about factors that contribute to the challenging character of walking conditions along DeKalb County's roadways. It is important to note, however, that the Pedestrian Level of Service model considers a complex interplay of contributing factors as it models a pedestrian's perception of comfort and safety on a given roadway. No one factor is likely responsible for a segment's result, and later sections of this plan will make recommendations about how to counteract the existing conditions to improve accommodation where needed. But certain factors can be identified as contributing to the overall environment to provide some context beyond the numbers. First, traffic volumes on arterial and collector roadways can be very high. Of the 636 centerline miles surveyed, 286 reported volumes in excess of 10,000 vehicles per day, a volume that can be translated into an experience for a pedestrian of being passed by a car approximately every seven seconds during the peak hour. Second, the amount of sidewalk coverage is limited in many locations, with 50% of the network mileage having less than 50% coverage. Finally, where sidewalks are present, they are typically very close to the road, with the average buffer being just 1.7 feet wide. Each of these factors can induce stress in a pedestrian by themselves; it is not surprising that they in aggregate they contribute to a high-stress environment.

the road, so the worse side is what is represented in this summary distribution The distance-weighted average reported above is calculated using both directional results.


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 8-5
PEDESTRIAN LEVEL OF SERVICE
Pedestrian Level of Service
A
B
C
D
E
F
PATH Foundation Trails
County Boundaries
Study Network
Expressways
Cities
Parks
Note: Lines shown along Interstates are access roads parallel to the Interstate.
JOHNS CREEK
ROSWELL
DULUTH
BERKELEY LAKE
PEACHTREE CORNERS
NORCROSS
SNELLVILLE
GWINNETT
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
Lithonia
ROCKDALE
CONYERS
DEKALB
CLAYTON
HENRY
400
85
78
285
20
675
MOUNT VERNON RD
PEELER RD
TILLY MILL RD
BUFORD HWY
LAVISTA RD
BRIARCLIFF RD NE
CLAIRMONT RD
STONE MOUNTAIN FWY
LAWRENCEVILLE HWY
MC CURDY RD
MEMORIAL DR
HUGH HOWELL RD
N HAIRSTON RD
S HAIRSTON RD
ROCKBRIDGE RD
SCOTT BLVD
EVANS MILL RD
DEKALB AVE NE
MEMORIAL DR
GLENWOOD RD
CANDLER RD
BOULDERCREST RD
RAINBOW DR
FLAT SHOALS PKWY
WESLEY CHAPEL RD
SNAPFINGER RD
PANOLA RD
COVINGTON HWY
PLEASANT HILL RD
ROCK CHAPEL RD
BETHEL RD
PANTHERSVILLE RD
MORELAND AVE
FURNESS MILL RD
BROWNS MILL RD
SEPTEMBER 2013
0 0.5 1 2 3 4 Miles
Source: Sprinkle Consulting, DeKalb County, Atlanta Regional Comission
Prepared by: Kimley-Horn and Associates, Inc., Sprinkle Consulting

8.4 Pedestrian Needs Based on the Pedestrian Level of Service Model

Pedestrian accommodations along the roadways of DeKalb County's study network were evaluated using the technical performance measure known as the Pedestrian Level of Service Model. This analysis revealed overall conditions that were challenging for pedestrians. The distance weighted average Pedestrian Level of Service across DeKalb County is 3.98, which is equal to a Pedestrian Level of Service grade of "D".

While the Level of Service performance measure used is a standard method for evaluating pedestrian accommodations on roadways (it is a recommended method in the *Highway Capacity Manual*), it does not prescribe standard thresholds for that level of service which is acceptable for pedestrians in all communities. Each agency which uses this method may set its own passing marks based on local aspirations and constraints. This method has been used in Metro Atlanta by the Atlanta Regional Commission (ARC) in its 2007 *Bicycle Transportation and Pedestrian Walkways Plan*. In that plan, ARC established that, across the Atlanta region for both walking and bicycling, Level of Service "B" would be the performance expectation within activity nodes, and Level of Service "C" would be the performance expectation on other roadways, outside of activity nodes. Regionally, ARC defined activity nodes as certain areas defined on its Uniform Growth Policy Map (UGPM), including City Centers, Town Centers, Regional Centers, and Station Communities, as well as Livable Centers Initiative (LCI) study sites.

This plan follows the example set by ARC by also setting performance thresholds of Pedestrian Level of Service "B" within activity nodes, and Pedestrian Level of Service "C" more generally. Activity nodes for DeKalb County are defined by multiple criteria, including the several area types defined by the current (2012) ARC UGPM:

- Town Centers,
- Regional Centers,
- Regional Town Centers,
- Regional Attractors,
- Community Activity Centers,
- Village Centers, and
- LCI Study Sites.

In addition to the UGPM-defined areas, this plan has several County-specific criteria for activity nodes:

- Areas with one mile (on-the-street) of the following existing and future premium transit services;
  - MARTA heavy rail stations,
  - Atlanta Beltline stations,
  - Clifton Corridor and I-20 corridor stations, and
  - Other Existing BRT stations;
- Areas identified as "Neighborhood Centers", "Town Centers", and "Commercial Redevelopment Corridors" in the DeKalb County Comprehensive Plan;
- Study areas from the DeKalb County Master Active Living Plan (MALP); and
- Areas designated for the following land use/density attributes on the DeKalb County Future Land Use Map (FLUM);
  - Very High Density Residential,
  - High Density Residential,
  - High Density Commercial,

- High Density Mixed Use, and
- Medium Density Mixed Use.

These areas are the same as those used in the Bicycle Level of Service Analysis and are shown in the bicycle section of this report in Figure 7-5.

Of the 636 miles of roadway analyzed with the Pedestrian Level of Service Models, just over 263 miles (41%) fall within the activity nodes defined by the above criteria.

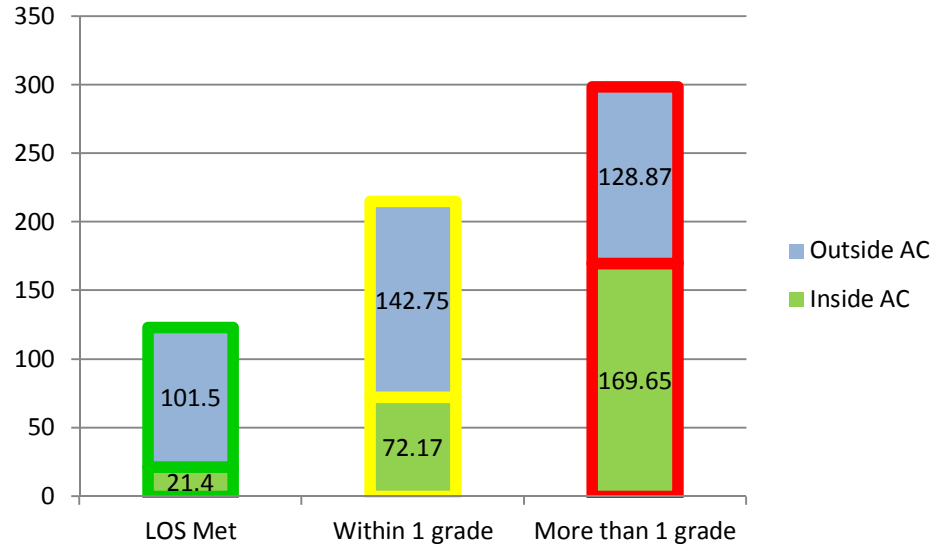
Roadways that meet or exceed their appropriate performance threshold are understood to be currently operating in a satisfactory manner, while those which are performing below the appropriate threshold are determined to have needs for improvements. On the DeKalb County study network, approximately 123 miles (19%) of roadway currently meet their expected performance for pedestrian accommodation. Of the roadways that do not meet the pedestrian performance threshold, approximately 215 miles (34% of the total network) are within one letter grade of their designated performance threshold. All roadways needing improvement for pedestrians total 513 miles. Figure 7-7 shows the mileage of roadways meeting their designated performance thresholds (or not), both for those roadways inside activity nodes (Pedestrian Level of Service "B") and those outside those nodes (Pedestrian Level of Service "C").

Table 7-2 shows roadways within activity centers with the lowest LOS ratings.

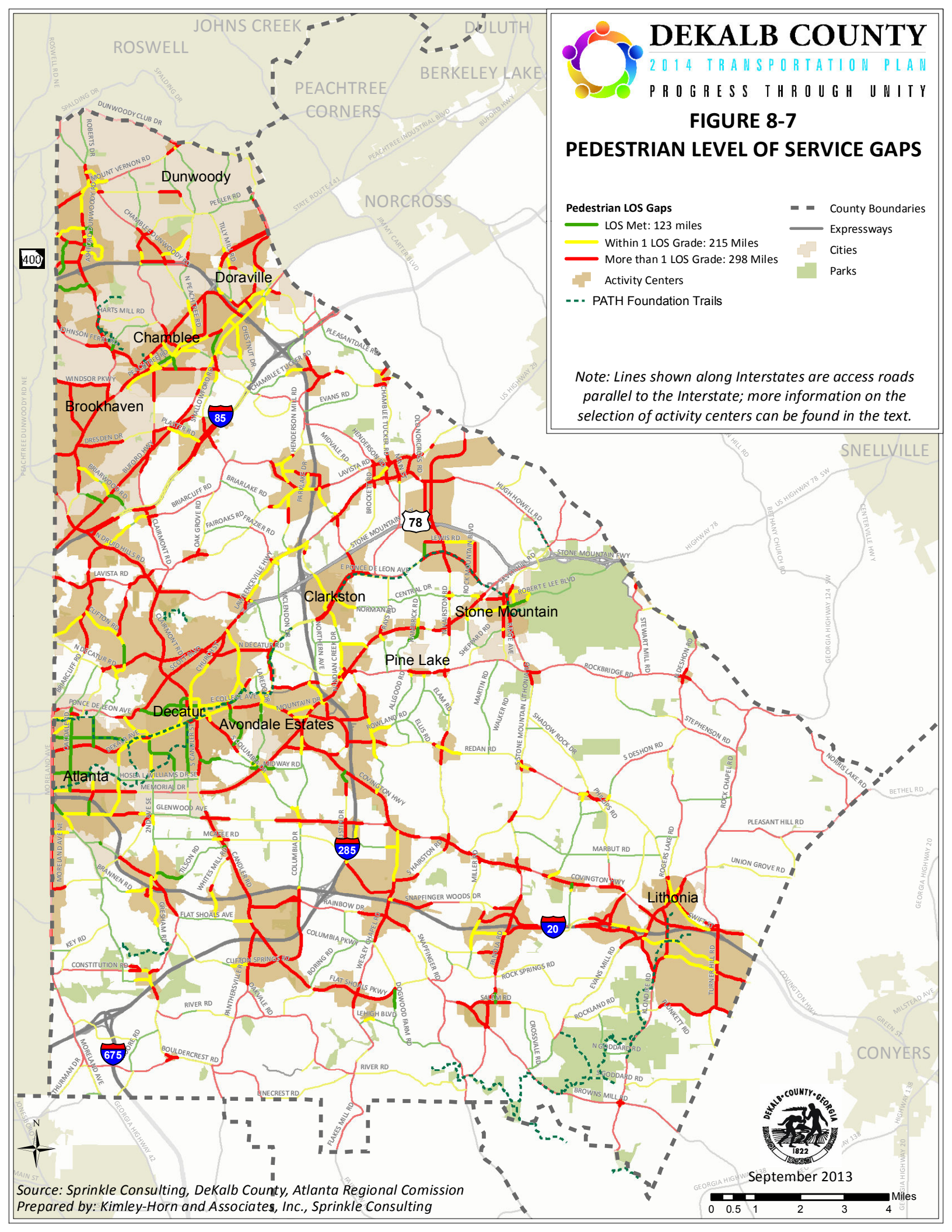
Table 8-2: Study Network Roadways within Activity Centers with Low LOS Ratings

Roadway Name	Pedestrian LOS
Chamblee Dunwoody Road	F
Winters Chapel Road	F
Ashford Dunwoody Road	F
Johnson Ferry Road	F
Peachtree Boulevard	F
Peachtree Road	F
Clairmont Road	F
Mountain Industrial Boulevard	F
North Main Street	F
Turner Hill Road	F
South Candler Street	F
Scott Boulevard	F
North Decatur Road	F
East Ponce de Leon Avenue	F
West College Avenue	F
Browns Mill Road	F
Sarr Parkway	F
North Indian Creek Drive	F

Figure 8-6: Performance Threshold Pedestrian Accommodation on DeKalb County Roadways



Strategies for meeting the needs for improvement identified by this analysis will be included in the Recommendations Report.


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 8-7
PEDESTRIAN LEVEL OF SERVICE GAPS
Pedestrian LOS Gaps
LOS Met: 123 miles
Within 1 LOS Grade: 215 Miles
More than 1 LOS Grade: 298 Miles
Activity Centers
PATH Foundation Trails
County Boundaries
Expressways
Cities
Parks
Note: Lines shown along Interstates are access roads parallel to the Interstate; more information on the selection of activity centers can be found in the text.
JOHNS CREEK
DULUTH
ROSWELL
BERKELEY LAKE
PEACHTREE CORNERS
NORCROSS
SNELLVILLE
CONYERS
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
Lithonia
400
85
78
285
20
675
September 2013
0 0.5 1 2 3 4 Miles
Source: Sprinkle Consulting, DeKalb County, Atlanta Regional Comission
Prepared by: Kimley-Horn and Associates, Inc., Sprinkle Consulting

8.5 Pedestrian Crash History

Crash data from the years 2009 to 2011 was analyzed for collisions involving pedestrians. Of the 31,381 collisions in DeKalb County studied; there were 625 crashes that involved pedestrians during this time period. Of the 625 collisions, 540 collisions occurred along the study network. All 27 fatalities in DeKalb County pedestrian crashes occurred along the study network during this time period. Of the 625 collisions, 503 crashes resulted in an injury. Of the 503 crashes resulting in injury, 433 occurred along the study network. All of the thirteen pedestrian crashes that involved heavy vehicles resulted in injury.

Table 8-3: Pedestrian Crash Summary 2009 to 2011

Geography	Total Pedestrian Crashes	Collisions with Injuries	Collisions with Fatalities
All DeKalb County	625	503	27
Along Study Network	540	433	27

Figure 8-8 shows the areas with dense pedestrian crashes and the locations of pedestrian fatalities within DeKalb County. It is noteworthy that collisions with pedestrians occurred in areas with high residential, and commercial density, such as cities and downtowns, but that there are several high-volume, high-speed roadways that have shown high densities of crashes. Some higher-volume, higher-speed roadways with high concentrations of pedestrian collisions and/or fatalities are:

- Buford Highway from the western County boundary to approximately Chamblee Tucker Road
- Candler Road near Candler Plaza Shopping Center
- Candler Road between I-20 and I-285
- N Indian Creek Drive near GA Perimeter College Clarkston, and GA Piedmont Technical College
- Pleasantdale Road between Pleasantdale Park and the Tucker Square Shopping Center

As with the bicycle crashes, additional review of the location of the pedestrian crashes was conducted to better understand the roadways being used and possible nearby destinations. This analysis is not meant to make a causal link between the crashes and the roads/destinations, but more to look for possible common themes. Of note, just over one third (185) of the 540 incidents that occurred along the study network were at locations where roadway laneage changed, such as intersections, or locations where the road widened or narrowed. Nearly three-quarters (401) of the pedestrian collisions occurred within 75 feet of a roadway with no medians at all; 70% (19) of fatalities also occurred in locations where there was no median. Forty percent (216) of overall collisions occurred within 75 feet of roadways with two-way-left-turn-lanes (TWLTL).

The majority, approximately 81% (438), of collisions along the study network occurred in areas where the speed limit was between 35 and 45 mph, and all but one fatality (26) occurred along routes and near intersections where the posted speed matched these limits. Over one third (192) of collisions that involved a pedestrian occurred within 75 feet of a change in speed, whether the corridor changed speed

along the route, or differing speeds met at an intersection. Approximately fifteen percent (80) occurred specifically where speed changed from 35 mph to 45 mph.

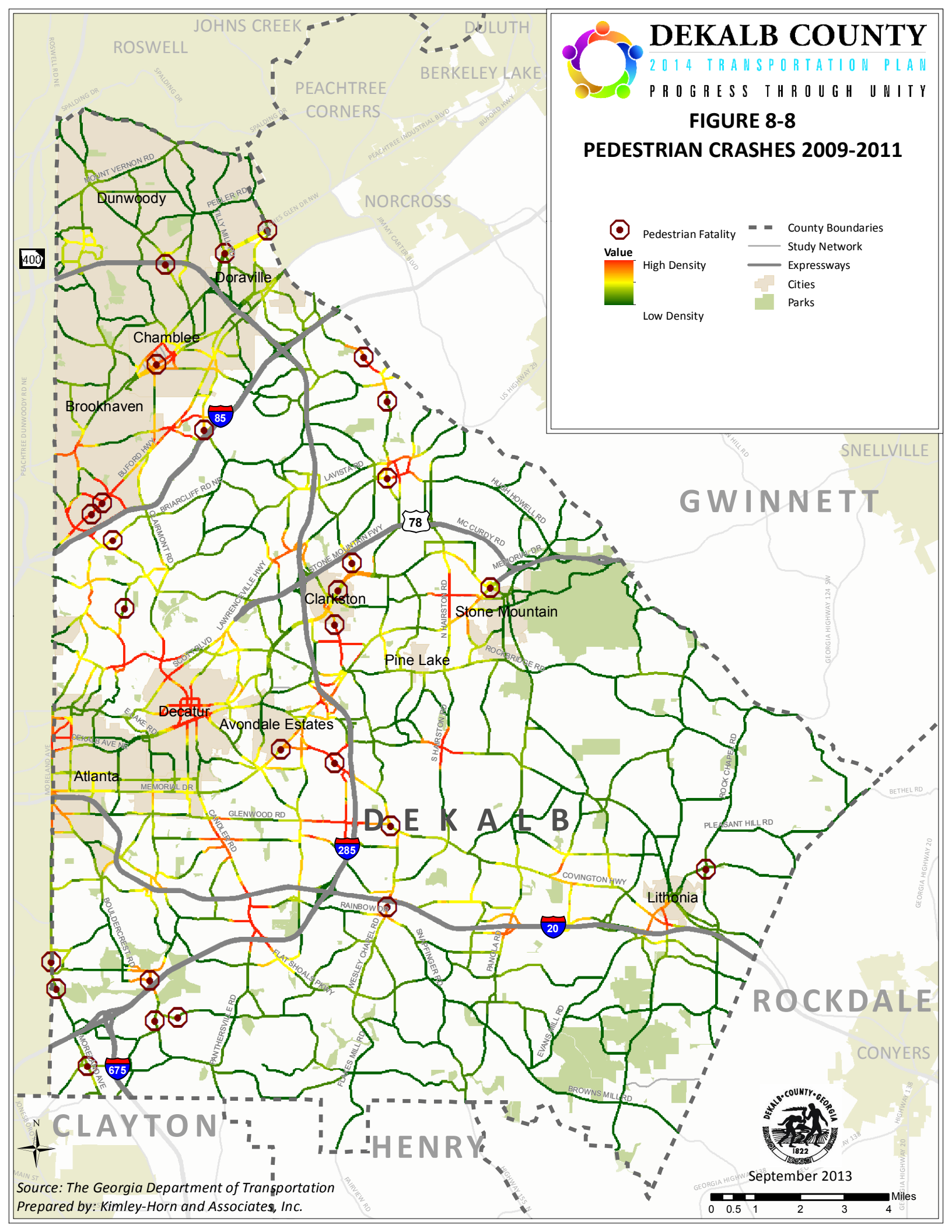
Considering all crashes in the County (not only those that fall along the study network), approximately 60% (376) of collisions with pedestrians occurred within ½ mile of a school, nearly 50% (302) of pedestrian collisions occurred within ½ mile of a park, almost 20% (120) occurred within ½ mile of a major retail location, and nearly 10% occurred within ½ mile of a higher education campus location. Schools, parks, and many places of higher education are often attractions where walking is a viable mode of transportation. Retail locations, particularly those considered for this analysis are less likely pedestrian attractors, which were generally stand-alone retail rather than ones located in mixed-use developments. Only 8.8% (55) of collisions involving a pedestrian occurred within ½ mile of MARTA rail stations, while 30.4% (190) occurred within 75 feet of MARTA bus stops.

Table 8-4: Pedestrian Collisions within 1/2-Mile of Attractors

Pedestrian Collisions within ½-Mile of Attractors		
County Total : 625	**Number**	**Percent of Total**
Higher Education	60	9.6%
Parks	302	48.3%
Schools	376	60.2%
Retail	120	19.2%
Bus Stop (within 75 ft)	190	30.4%
Rail Station	55	8.8%

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 8-8
PEDESTRIAN CRASHES 2009-2011



September 2013

Source: The Georgia Department of Transportation
Prepared by: Kimley-Horn and Associates, Inc.

8.6 Roadway Crossing Difficulty Level of Service

Pedestrian Level of Service measures how safe and comfortable people perceive conditions while walking along a roadway. An additional measure of pedestrian accommodation is how easy the roadway is for pedestrians to access destinations on the opposite side of the roadway – a roadway crossing difficulty metric. This section describes this roadway crossing difficulty metric and summarizes the results for DeKalb County.

In theory, it would be desirable for all pedestrians to use designated pedestrian crossings or signalized intersections to cross roadways. However, using a designated crossing or traffic signal to cross a roadway is not always convenient for pedestrians. Consequently, pedestrians often cross midblock. Midblock crossings are not illegal; but pedestrians must yield the right-of-way to motorists when crossing. This requirement to yield results in pedestrians having to wait for a gap in traffic, which can result in significant delays to pedestrians wishing to cross the street.

NCHRP Report 616 Multimodal Level of Service Analysis for Urban Streets proposed a method for measuring the midblock crossing difficulty, which was later adopted into the Highway Capacity Manual. This method looks at two different potential routes for crossing the roadway – at a designated crossing and midblock. It then calculates the level of delay for each crossing location. More detail on the individual delay calculations is provided in the Appendix.

Controlled Crossing

The first calculation determines how much delay is associated with a pedestrian crossing at a controlled crossing like a signalized intersection. The delay is approximately how much time it takes the pedestrian to walk to the designated crossing, cross the street, and then walk back toward the destination. For this study, the crossing spacing for each segment was calculated based on the provided GIS locations of traffic signals and enhanced crosswalks—Pedestrian Hybrid Beacons (a.k.a. "HAWKs") and Rectangular Rapid Flashing Beacons (a.k.a. "RRFBs").

Midblock Crossing

The second calculation determines how much delay is associated with a pedestrian crossing at a midblock location while waiting for an adequate gap to occur. Where a roadway is divided, the delay is calculated based upon the delay required to begin the crossing. It is not doubled. This is based upon the assumption that for any crossing the delay to begin any stage controls a pedestrian's perception, not the sum of the delays. That is, two 10-second delays are better than one 20-second delay. For this study, data used to calculate midblock crossing delay for individual segments includes field-collected pavement width (either across the road or to a median, as appropriate), field observed posted speed limit, and model-derived traffic volumes.

Roadway Crossing Difficulty LOS (XLOS)

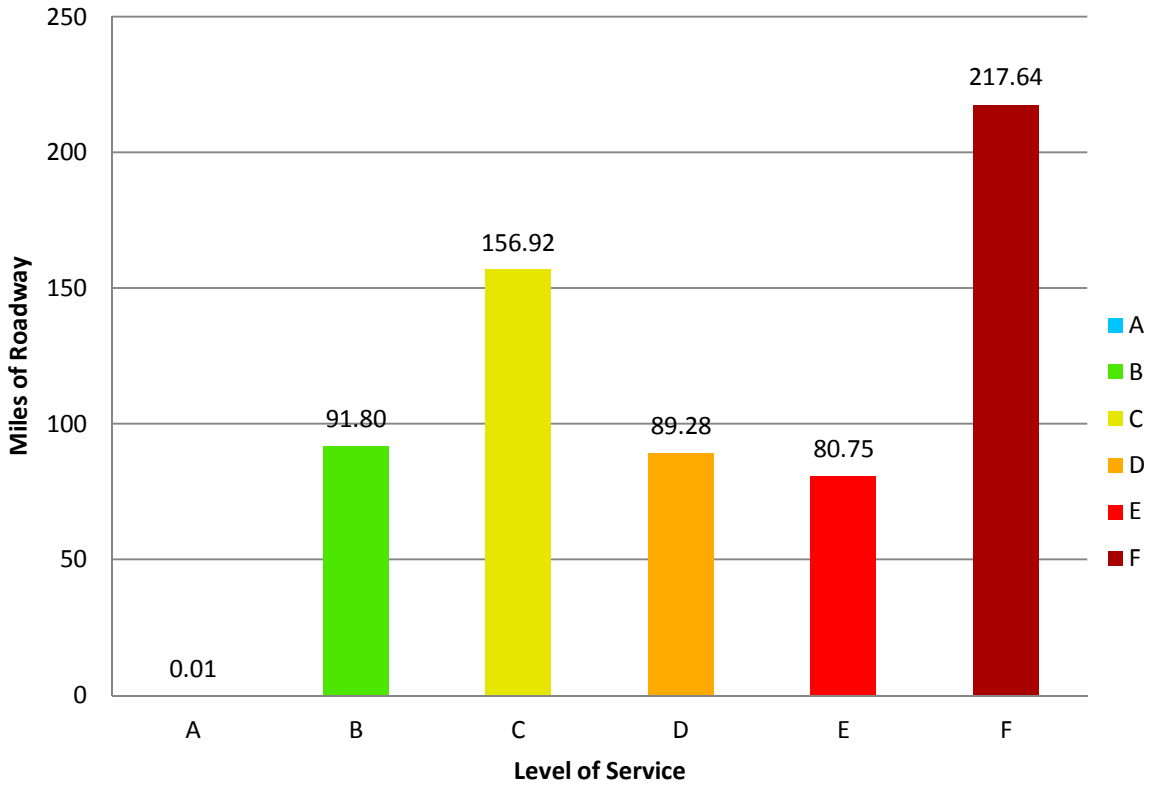
The XLOS is based upon the lesser of the two delay values calculated above. The lesser delay is compared to the values in the following table to identify the letter grade LOS.

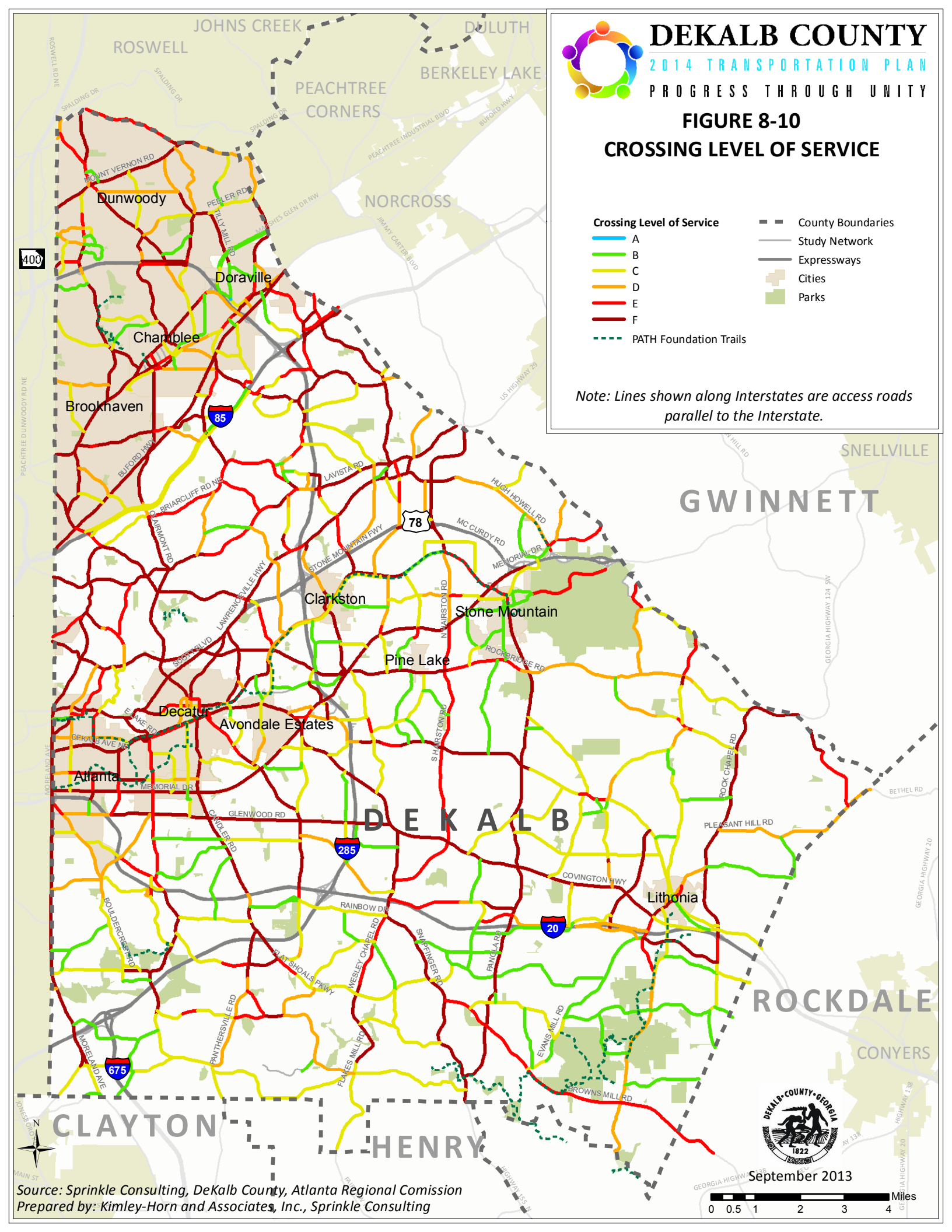
Table 8-5: Pedestrian Crossing Level of Service Delay

Maximum Delay (Seconds)	Crossing LOS
10	A
20	B
30	C
40	D
60	E
>60	F

The distribution of XLOS scores by roadway mileage on the study network is shown in Figure 8-9and the map showing each of the roadway XLOS results is included in Figure 8-10.

Figure 8-9: Pedestrian Crossing Difficulty Level of Service





Source: Sprinkle Consulting, DeKalb County, Atlanta Regional Comission
Prepared by: Kimley-Horn and Associates, Inc., Sprinkle Consulting

8.7 Bike and Pedestrian Latent Demand

The level of service results described above address the "supply" issue of non-motorized transportation. An additional measure is needed to examine the "demand" of bicycling and walking facilities and thereby evaluate the relative amount of potential bicycle and pedestrian travel along a roadway corridor. In other words, such a measure estimates the relative amount of bicycle and pedestrian activity that would occur along a corridor if facilities were constructed and conditions were excellent. The demand criterion and the level of service criterion are complementary. When coupled, they provide a balanced picture of user need and perceived safety. For example, a particular corridor segment may have relatively poor walking conditions but relatively high pedestrian activity potential, perhaps because it is adjacent to an employment center. Conversely, another segment may have relatively good cycling conditions but relatively low potential bicyclist activity levels because it is in an isolated location.

The process of identifying and quantifying potential bicycle and pedestrian trip activity is known as a travel demand analysis. To perform a travel demand analysis for the bicycle and pedestrian modes, a methodology must be employed that recognizes the unique impediments to that mode. Unlike automobile travel, bicycle and pedestrian travel often does not occur due to a number of impediments, one of which is the frequent poor accommodation of bicyclists and pedestrians within the existing transportation network. Consequently, existing bicycle and pedestrian counts generally do not indicate the level of potential bicycle trip activity within a roadway network. Therefore, alternative or surrogate measures of assessing bicycle and pedestrian trip activity are needed.

The specific demand analysis technique incorporated for this plan is a variation on the widely used Latent Demand Score method. The concept of latent demand analysis is to evaluate demand based on the proximity of study network segments to key trip attractors and generators. For this study, the potential for trip activity was evaluated based on the characteristics within the surrounding area (at the Traffic Analysis Zone, or TAZ, geographic level) of each segment for two trip attraction/generation variables: projected future population and projected future employment. The specific methodology steps, carried out using GIS software for each study network segment, are listed below:

- Create a 0.75-mile buffer around the segment to represent the bicycle and pedestrian travel shed (the propensity of non-motorized trips typically begins to decline dramatically as distances increase beyond this distance);
- Intersect the segment travel shed buffer with the TAZs from ARC's long range transportation plan;
- Calculate the proportion of the travel shed buffer that intersects the various TAZs;
- Multiply the intersect area proportions for each TAZ by the projected population and employment for those TAZs (this effectively calculates the TAZ data for the portion of the TAZ that coincides with the travel shed);
- And sum the data for each of the TAZs that intersects any portion of the travel shed buffer to estimate the total population and employment for the segment.

Those segments with the highest level of projected population and employment within 0.75 miles are those with the highest latent demand for bicycle and pedestrian activity. The results are shown in Figure 8-11. It is worth noting that these results are influenced by segment length to some degree, but this benefit to longer segments is counter-balanced when facility costs are considered in the prioritization calculations.

8.8 Consolidation of Pedestrian Need Indicators

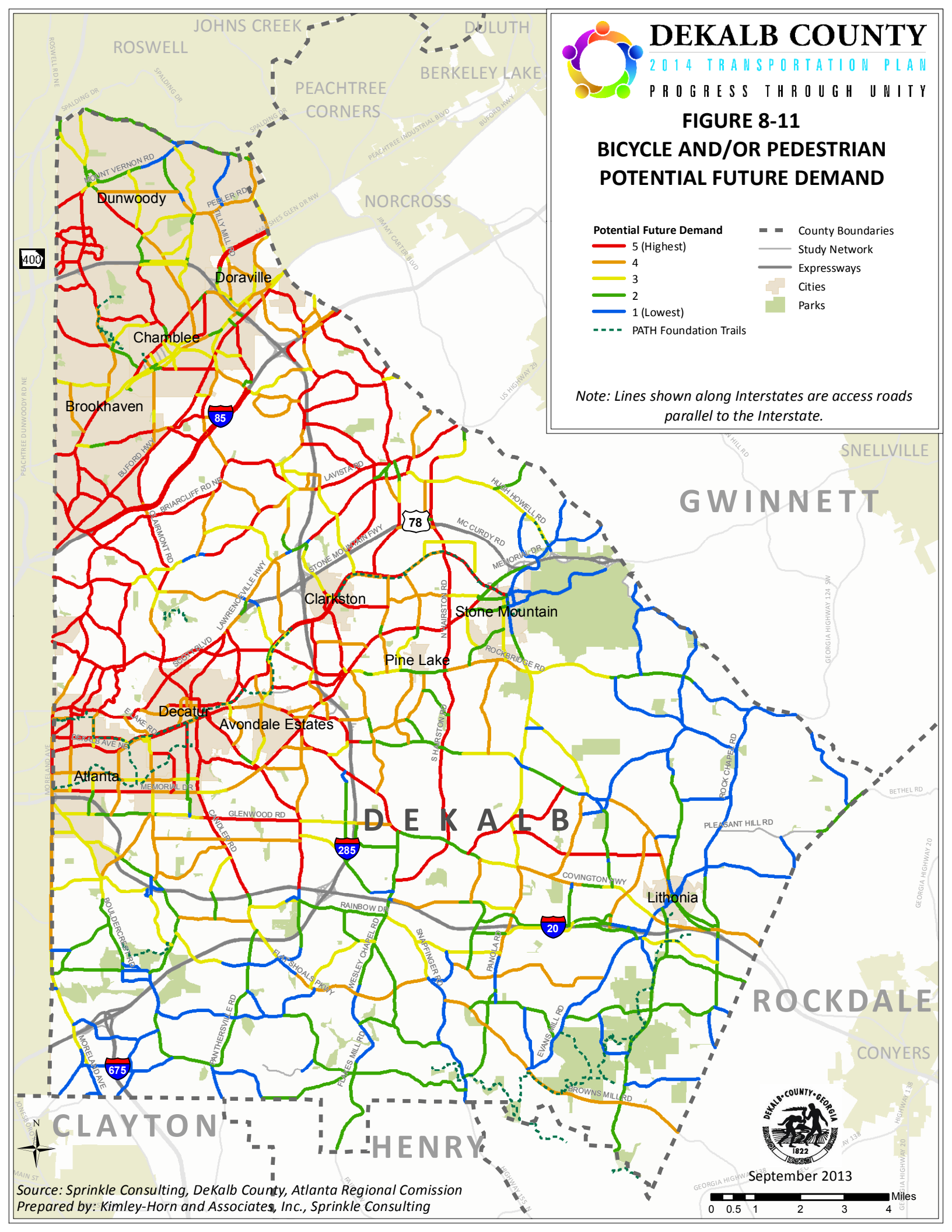
In a process that is unique to this study, many of the pedestrian need factors identified earlier in this section were consolidated into one summary indicator map. This was done by assigning values to each pedestrian need indicator and then summing each of those values into one overarching score. The indicators used for this analysis included:

- Transit ridership (based on bus stop and station boarding data)
- Latent Demand
- Crossing Level of Service
- Pedestrian-involved crashes
- Activity center locations

While specific project recommendations will not necessarily be identified for the specific areas that score the highest using this consolidated tool, the metrics used to create this consolidated tool will be used in the selection of projects. These resulting areas that appear in the consolidated map can be among the first areas considered should specific additional pedestrian funding become available. The resulting map in effect creates a snapshot of “hot spot” areas that have key pedestrian needs within the County.

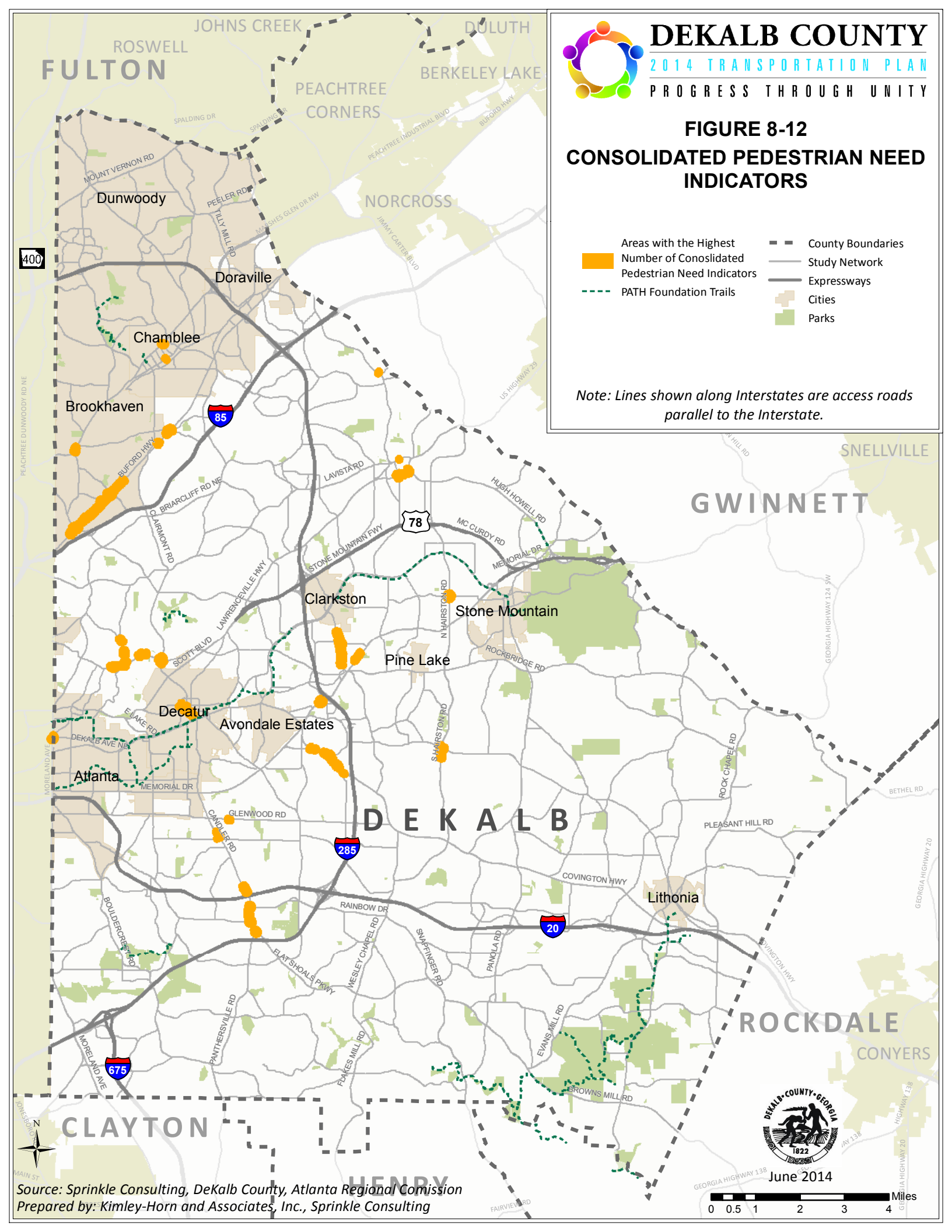
The map of consolidated pedestrian need indicators can be seen in Figure 8-12

Additional information about the methodology used to develop this figure can be found in the Appendix.


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 8-11
BICYCLE AND/OR PEDESTRIAN
POTENTIAL FUTURE DEMAND
Potential Future Demand
5 (Highest)
4
3
2
1 (Lowest)
PATH Foundation Trails
County Boundaries
Study Network
Expressways
Cities
Parks
Note: Lines shown along Interstates are access roads parallel to the Interstate.
JOHNS CREEK
ROSWELL
DULUTH
BERKELEY LAKE
PEACHTREE CORNERS
NORCROSS
SNELLVILLE
GWINNETT
ROCKDALE
CONYERS
CLAYTON
HENRY
DEKALB
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
Lithonia
400
85
78
285
20
675
MOUNT VERNON RD
PEELER RD
TILLY MILL RD
BUFORD HWY
LAVISTA RD
BRIARCLIFF RD NE
CLAIRMONT RD
LAWRENCEVILLE HWY
STONE MOUNTAIN FWY
HUGH HOWELL RD
MC CURDY RD
MEMORIAL DR
N HAIRSTON RD
S HAIRSTON RD
ROCKBRIDGE RD
SCOTT BLVD
E LAKE RD
DEKALB AVE NE
MEMORIAL DR
GLENWOOD RD
CANDLER RD
ROCK CHAPEL RD
PLEASANT HILL RD
BETHEL RD
COVINGTON HWY
RAINBOW DR
BOULDERCREST RD
FLAT SHOALS PKWY
WESLEY CHAPEL RD
SNAPFINGER RD
PANOLA RD
EVANS MILL RD
PANTHERSVILLE RD
FLOWERS MILL RD
MORELAND AVE
BROWNS MILL RD
Source: Sprinkle Consulting, DeKalb County, Atlanta Regional Comission
Prepared by: Kimley-Horn and Associates, Inc., Sprinkle Consulting
September 2013
Miles
0 0.5 1 2 3 4

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 8-12
CONSOLIDATED PEDESTRIAN NEED INDICATORS



8.9 Summary of Pedestrian Needs

While pedestrian improvements along specific corridors and at intersections throughout the County have been identified in the maps and descriptions within this chapter, there are several high-level observations of pedestrian needs summarized below.

Aligning with planning practices at the regional level, pedestrian accommodations on roadways within activity centers will be held to a higher standard than roadways elsewhere within the County. County staff has set a goal of achieving a Pedestrian Level of Service of "B" within activity centers and "C" on the study network roadways outside of activity centers. Currently, the distance weighted average Pedestrian Level of Service across DeKalb County is 3.98, which is equal to a Pedestrian Level of Service grade of "D". This indicates that the current Bicycle Level of Service falls below the set goals. Roadways within activity centers that have the lowest Pedestrian Level of Service Ratings are listed in Section 8.4.*Crashes involving pedestrians tend to occur in activity centers.* The highest densities of automobile crashes involving pedestrians occurred in area with high residential and commercial densities which are generally included in the activity centers within DeKalb County. This trend reinforces the need to set a higher standard for pedestrian facilities within activity centers. It is worth noting that 60% of crashes occurred within ½ mile of a school. As with bicycle crashes, this does not necessarily mean that those crashes involved students, but it does indicate that there is a safety need near schools for pedestrians if walking to school is going to be a safe option for students. It is also worth noting that 81% of crashes involving pedestrians occurred along roadways with speed limits between 35 and 45 mph. Also, 75% of crashes involving pedestrians occurred along roadways with no median.

It is not easy for pedestrians to cross the road. Analysis of roadway crossing difficulty shows that nearly half (47%) of the study network roadways have a Crossing Level of Service rating of "E" or "F." Many of these low scoring roadways are major thoroughfares that pass through activity centers such as Buford Highway and East Ponce de Leon Avenue.

Infrastructure around employment centers should include more pedestrian and bicycle facilities. The highest scoring roadways regarding latent demand for bicycles and pedestrians general occur near major *employment centers.* This further reinforces the need to set a higher standard for pedestrian facilities within activity centers.

Freight & Air

9 Our Freight and Air Transportation Systems

Metro Atlanta ranks fifth in the nation in transportation and logistics employment and is one of the strongest and fastest growing logistics clusters in the nation.[47] Accommodating increasing freight, goods, and services movement in the Atlanta area will be important to the region's economic vitality and quality of life. DeKalb County has a significant stake in the movement of freight. Several major industrial corridors exist within the County along with rail lines operated by two major Class I railroad companies. DeKalb County is home to 246 logistics providers who employ nearly 4,000 people and generate $750 million in annual sales.[48] For fiscal year 2011, the following are some statistics related to the movement of freight in DeKalb County:

- Inbound truck freight: 3.5 million tons valued at $14 billion
- Outbound truck freight: 3.9 million tons valued at $18.5 billion
- Inbound rail freight: 1 million tons valued at $1.5 billion
- Outbound rail freight: 0.3 million tons valued at $81 million

Figure 9-1 illustrates the DeKalb County truck freight network. Figure 9-4 shows the rail and air facilities that are also part of the County's freight network.

It is important to note that much of this freight is travelling to and from the Ports of Savannah and Brunswick. The Port of Savannah has been the nation's fastest-growing container port for nearly a decade and is currently the 2nd largest port on the east coast (4th largest in the nation). Plans are underway to deepen the Port of Savannah by six feet as part of the Savannah Harbor Expansion Project (SHEP). The added depth would expand access primarily to the larger vessels that are able to travel through the Panama Canal. As of April 2013, the State of Georgia has contributed $231 million in funding for the SHEP which has a total estimated cost of $650 million. The Georgia Port Authority is seeking federal funds for the remaining portion in order to go forward fully with the project. If deepened, the SHEP is expected to create a noticeable increase in freight movement throughout Georgia including within DeKalb County.

According to the Atlanta Regional Freight Mobility Plan, through truck traffic comprises the largest single truck market segment in the Atlanta region (approx. 40%). The other 60% of the trucked freight market is comprised of a mixture of trucks serving the larger southeastern regional market for which Atlanta acts a distribution hub. Regional truck market accounts for an estimated 33% of trucked freight in the region. Of that 10% is transported goods being produced in the region and exported to points outside the region. The remaining 23% is generated by manufacturing, distribution and warehouse transloading activity.

9.1 The Freight Network

Truck Routes

Figure 9-1 shows a map of the current approved truck routes in DeKalb County. The routes are specified in the DeKalb County Code of Ordinances (Section 17-361). Per the County's Code of Ordinances (Section 17-94), all oversized vehicles (more than 30 feet and weighing more than 36,000

[47] Source: "Atlanta Regional Freight Mobility Plan", Atlanta Regional Commission, February 2008.
[48] Georgia Center for Logistics Innovations, September 2012

pounds) are required to use the routing system designated by the County. Exceptions are only allowed with proof of destination. The same figure also illustrates truck routes recommended for inclusion in the DeKalb County system by the Atlanta Region Strategic Truck Route Master Plan (ASTRoMaP). The ASTRoMaP is a truck routing plan that was developed at a regional level in an effort to better accommodate the vast amount of freight that moves through the Atlanta region. Although the regional plan was developed and adopted by the ARC in coordination with participating cities and counties, the ASTRoMaP recommendations have not yet been formally incorporated into the County's official truck route system.

It should be noted that in addition to the County's adopted truck routes, the Surface Transportation Assistance Act of 1982 (STAA) also designates truck routes as part of a nationally recognized freight system. All of the highways designated in the STAA are by default included in the County's adopted freight plan.

Sanitation Routes

Figure 9-2 shows the sanitation routes used within the County. This includes transfer stations, fueling locations, and also the location of the Seminole Landfill located in southern DeKalb. Trash collection service is provided twice per week in DeKalb County. Recently, a round of public meetings was held to discuss the potential for either reducing the frequency of the trash service pickup to once per week or alternatively raising trash collection rates. Those trash collection vehicles operate on all roads throughout the County where trash collection is needed. The transfer stations shown in the figure are used primarily by commercial trash collection services (as opposed to public vehicles which generally deliver waste directly to the landfill). From those transfer stations, County vehicles deliver transferred waste to the Seminole Landfill using the routes shown in the figure. It is important to note that the routes shown in this figure are also designated as freight routes per the DeKalb County Code of Ordinances. The capacity of the Seminole Landfill in recent years underwent a major expansion such that the useful life of the landfill is currently projected to last until the year 2108.

Crashes Involving Heavy Vehicles

Crash data from the years 2009 to 2011 was analyzed for specific collisions involving heavy vehicles. Of the 31,381 crashes that occurred on the study network in DeKalb County during those years, 2,564 (8%) were crashes involving heavy vehicles. A summary of heavy vehicle crashes along the study network as well as through DeKalb County is noted in Table 9-1.

Table 9-1: Heavy Vehicle Crashes

Geography	Total Heavy Vehicle Crashes	Collisions with Injuries	Collisions with Fatalities
All DeKalb County	2,863	587	4
Along Study Network	2,564	544	3

Figure 9-3 is a color-coded map of the study network that shows where the highest densities of crashes occurred. The trends in this map are similar to those shown in the Roadway section of this report where

crashes involving all vehicle types were shown. A noteworthy difference for crashes involving heavy vehicles is that these crashes tend to be more concentrated around interstates and interchanges. Specifically, interchanges with high crash densities are:

- I-20 at Moreland Avenue
- I-20 at Flat Shoals Road / Candler Parkway
- I-20 at I-285
- I-20 at Panola Road
- I-285 at Bouldercrest Road
- I-285 at Memorial Drive
- I-285 at Lavista Road
- I-85 at North Druid Hills Road
- I-285 at I-85
- I-285 at Buford Highway
- I-285 at Peachtree Industrial Boulevard

Two exceptions that are not located at interchanges are:

- Buford Highway in proximity of North Druid Hills Road
- Briarcliff Road in proximity of North Druid Hills Road

There were three fatalities involving heavy vehicles during the years 2009 to 2011. Those included:

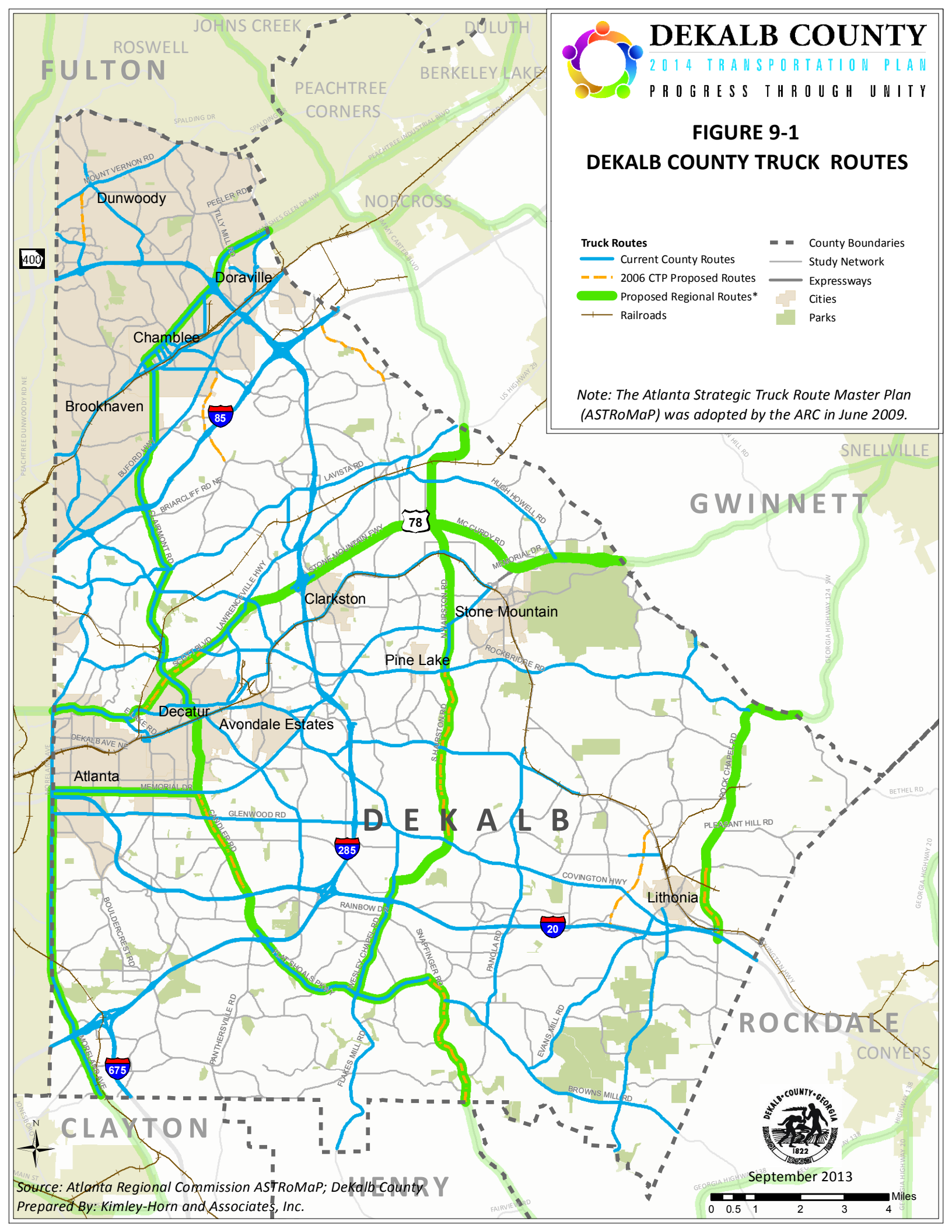
- Moreland Avenue at Fayetteville Road
- Turner Hill Road at Covington Highway
- South of Austin Drive on I-285

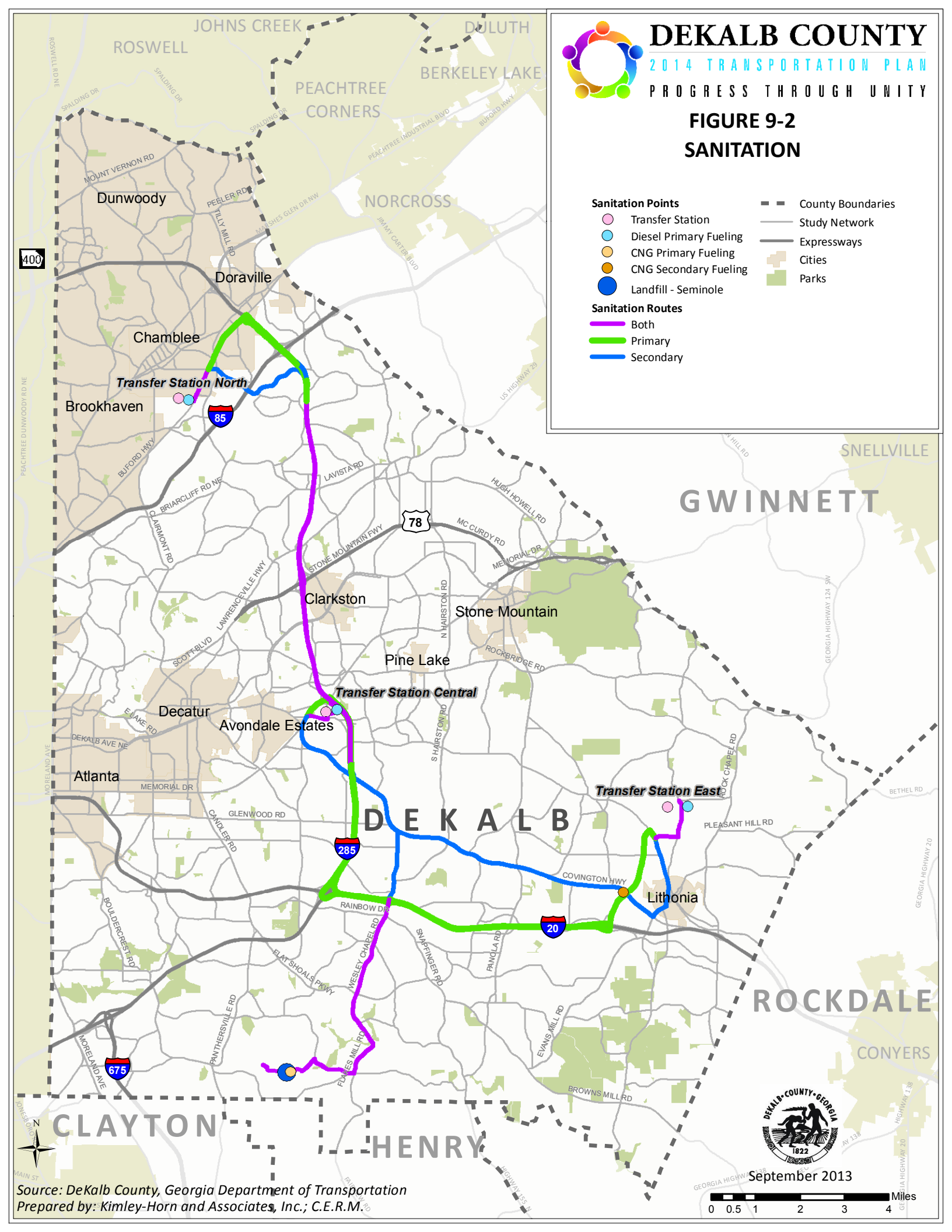
Rail Network

Figure 9-4 shows a map of railroad lines within DeKalb County. There are 400 miles of railroad operated by CSX and Norfolk Southern in DeKalb County. Several small spurs and connections points also exist that are operated by private companies along those lines. The CSX routes travel generally east-west through central DeKalb County while the Norfolk Southern routes travel across the northern and southern ends of the County. It should also be noted that Amtrak has track rights along the Norfolk Southern route through the northern part of the County. Based on information from the Federal Railroad Administration there are 159 railroad crossings within DeKalb County. Of those crossings, 113 are at grade crossings and 46 are grade separated crossings. Many of the at-grade crossings are located in and around downtowns and town centers throughout the County. Those areas – which have high levels of street activity – have the greatest potential to create conflicts between railroad operations and pedestrians, vehicles, and cyclists. At grade railroad crossings are commonly cited by residents of DeKalb County as a safety concern, particularly in many of the downtown areas throughout the County. Those locations are shown in Figure 9-5.

> The CSX rail line passes through the Tucker downtown area and is a section of the proposed Atlanta to Athens commuter rail system.
> - Downtown Tucker Area LCI

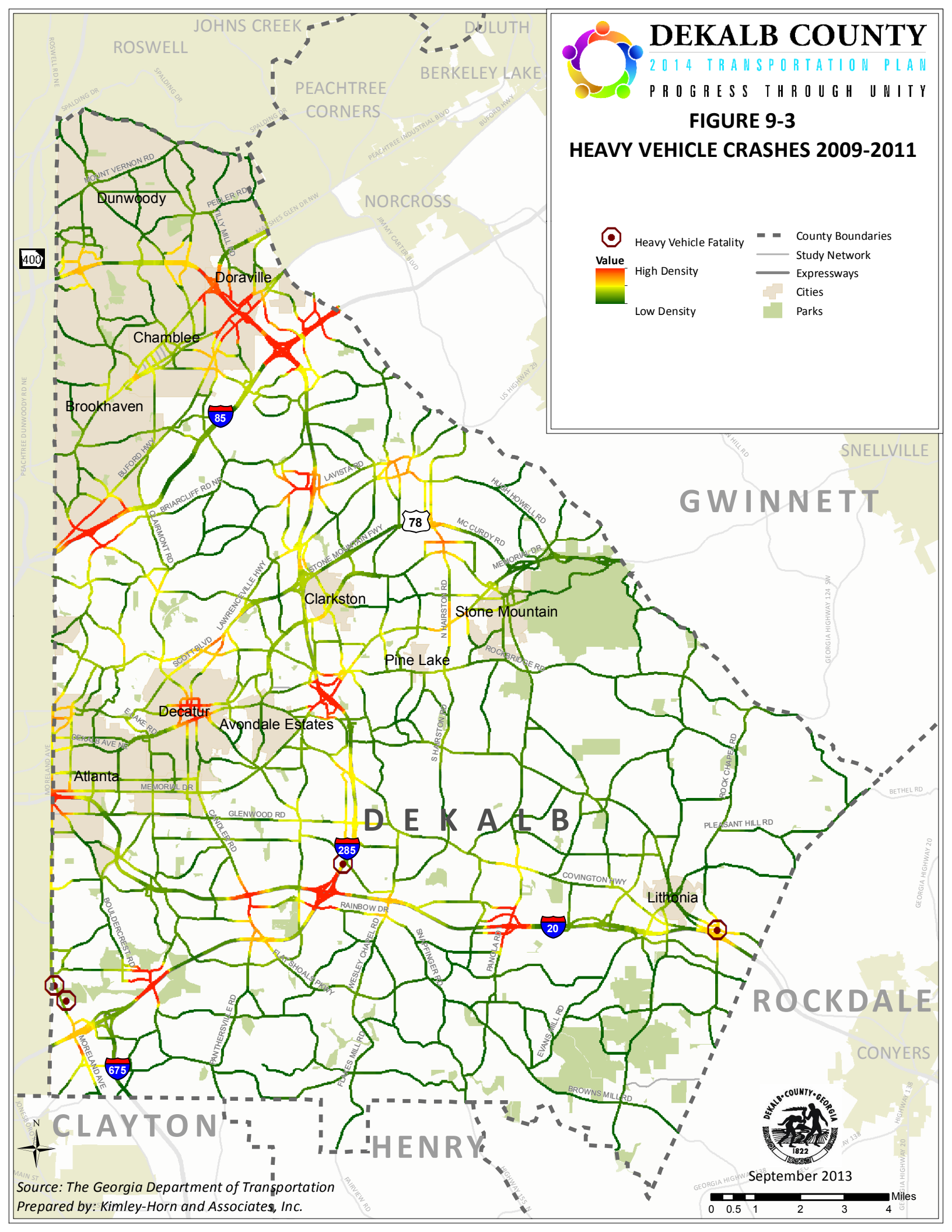
Both CSX and Norfolk Southern operate nearby intermodal yards that are located outside of DeKalb County. The facilities enable freight transfers between truck and rail. CSX uses the Inman Yard in the northwest portion of the City of Atlanta (Fulton County) and Norfolk Southern uses the Hulsey Yard along DeKalb Avenue (Fulton County). Inman Yard is Norfolk Southern's largest intermodal yard in the United States.


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 9-1
DEKALB COUNTY TRUCK ROUTES
Truck Routes
Current County Routes
2006 CTP Proposed Routes
Proposed Regional Routes*
Railroads
County Boundaries
Study Network
Expressways
Cities
Parks
Note: The Atlanta Strategic Truck Route Master Plan (ASTRoMaP) was adopted by the ARC in June 2009.
JOHNS CREEK
DULUTH
ROSWELL
FULTON
PEACHTREE CORNERS
BERKELEY LAKE
NORCROSS
SNELLVILLE
GWINNETT
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
DEKALB
Lithonia
ROCKDALE
CONYERS
CLAYTON
HENRY
400
85
78
285
20
675
MOUNT VERNON RD
PEELER RD
TILLY MILL RD
PEACHTREE INDUSTRIAL BLVD
MARY CARTER BLVD
US HIGHWAY 29
BUFORD HWY
BRIARCLIFF RD NE
CLAIRMONT RD
LAVISTA RD
HUGH HOWELL RD
MC CURDY RD
MEMORIAL DR
STONE MOUNTAIN HWY
LAWRENCEVILLE HWY
N HAIRSTON RD
ROCKBRIDGE RD
SCOTT BLVD
E COLLEGE AVE
DEKALB AVE NE
MEMORIAL DR
GLENWOOD RD
SANDLER RD
S HAIRSTON RD
ROCK CHAPEL RD
PLEASANT HILL RD
BETHEL RD
COVINGTON HWY
RAINBOW DR
WESLEY CHAPEL RD
SNAPFINGER RD
PANOLA RD
EVANS MILL RD
BROWNS MILL RD
FLAT SHOALS PKWY
BOULDERCREST RD
MORELAND AVE
PANTHERSVILLE RD
FLAKES MILL RD
GEORGIA HIGHWAY 124 SW
GEORGIA HIGHWAY 20
GEORGIA HIGHWAY 138
DEKALB COUNTY GEORGIA 1822
September 2013
Miles
0 0.5 1 2 3 4
Source: Atlanta Regional Commission ASTRoMaP; Dekalb County
Prepared By: Kimley-Horn and Associates, Inc.


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 9-2
SANITATION
Sanitation Points
Transfer Station
Diesel Primary Fueling
CNG Primary Fueling
CNG Secondary Fueling
Landfill - Seminole
Sanitation Routes
Both
Primary
Secondary
County Boundaries
Study Network
Expressways
Cities
Parks
Transfer Station North
Transfer Station Central
Transfer Station East
JOHNS CREEK
ROSWELL
DULUTH
BERKELEY LAKE
PEACHTREE CORNERS
NORCROSS
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
Lithonia
SNELLVILLE
GWINNETT
DEKALB
ROCKDALE
CONYERS
CLAYTON
HENRY
400
85
78
285
20
675
September 2013
Miles
0 0.5 1 2 3 4
Source: DeKalb County, Georgia Department of Transportation
Prepared by: Kimley-Horn and Associates, Inc.; C.E.R.M.

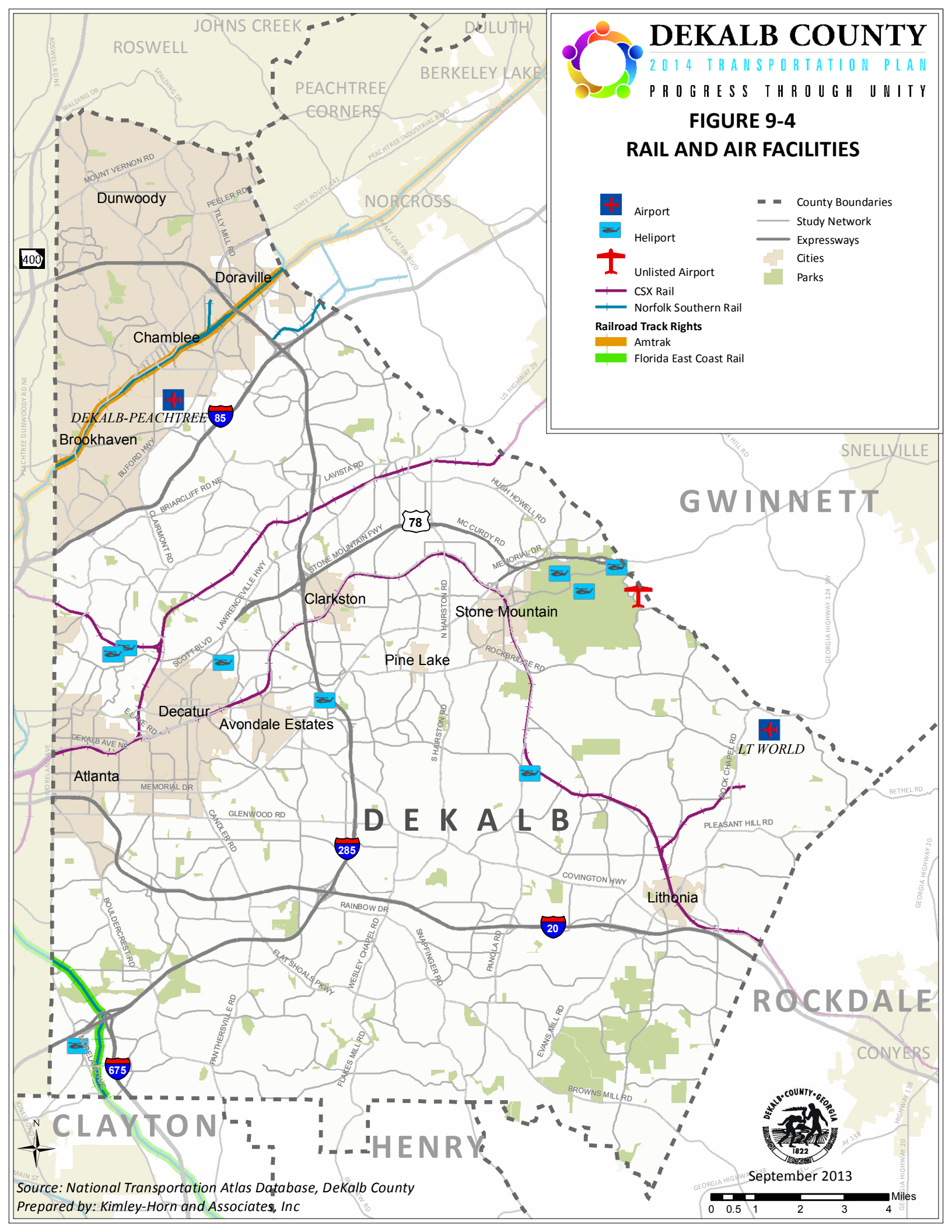
DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 9-3
HEAVY VEHICLE CRASHES 2009-2011

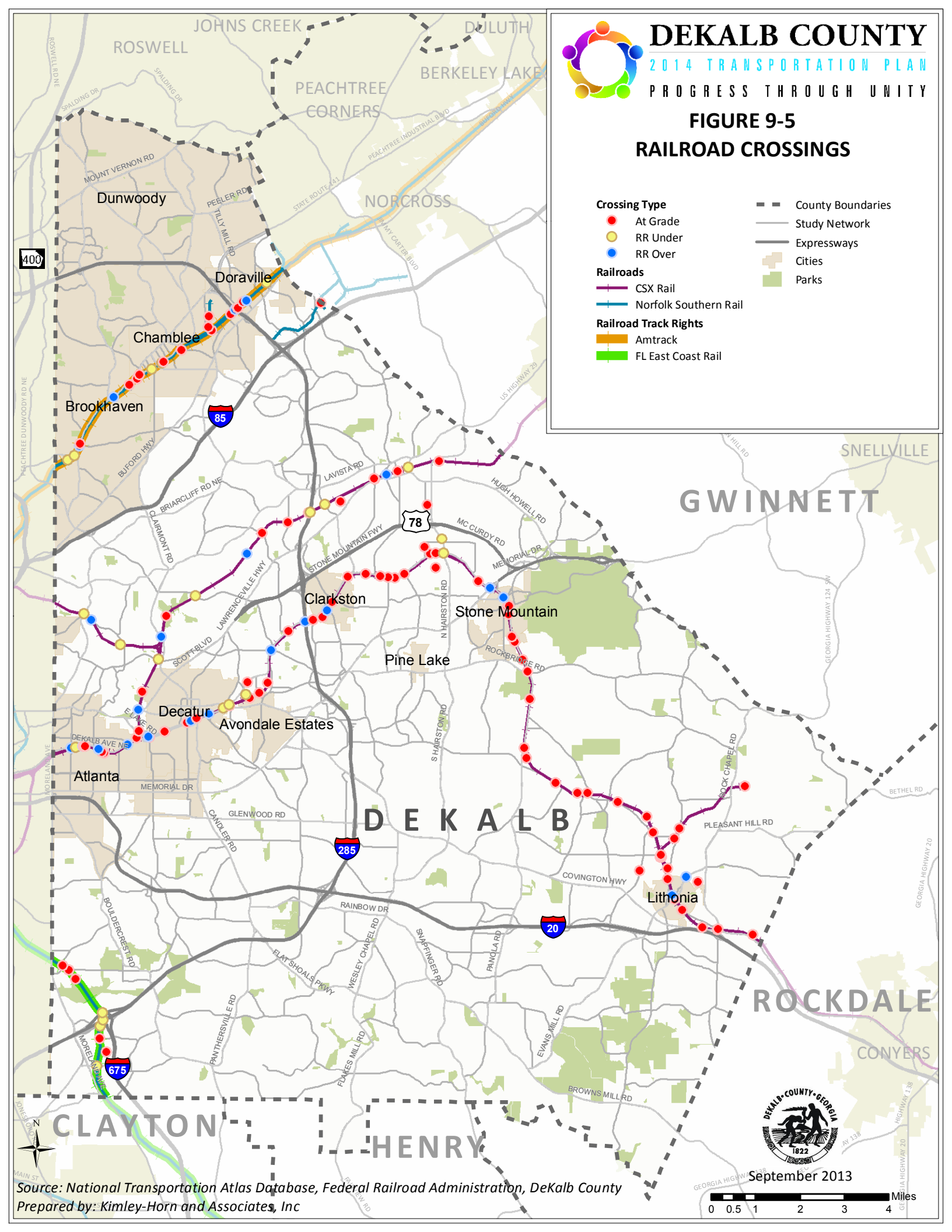


September 2013

Source: The Georgia Department of Transportation
Prepared by: Kimley-Horn and Associates, Inc.



Source: National Transportation Atlas Database, DeKalb County
Prepared by: Kimley-Horn and Associates, Inc



Source: National Transportation Atlas Database, Federal Railroad Administration, DeKalb County
Prepared by: Kimley-Horn and Associates, Inc

Crash records involving trains were obtained from the Federal Railroad Administration for January 2010 through March 2013. Details regarding those crashes are listed in Table 9-2.

Table 9-2: Highway-Rail Incidents, January 2010 – March 2013[49]

Co.	Date	Incident #	City	Crossing ID	Roadway	Vehicle	Crossing Protection	Injuries	Fatal-ities
CSX	1/16/2010	72042	Lithonia	279706W	Shadow Rock Road	Other Motor V.	Gates	3	-
CSX	2/21/2011	85762	Un-incorporated	279743Y	Glendale Road	Truck & Trailer	Gates	-	-
CSX	2/1/2012	100288	Lithonia	279704H	Coffee Road	Pickup Truck	Stop signs	-	-
CSX	2/17/2012	100878	Decatur	279952G	McDonough Ave	Car	Gates	2	-
CSX	7/13/2012	105918	Lithonia	279700F	Stone Mountain Lithonia Road	Car	Cross bucks	-	-

9.2 Previous Studies Related to Freight

DeKalb County Comprehensive Transportation Plan (August 2006)

The DeKalb County Comprehensive Transportation Plan (August 2006) was reviewed for contents relevant to freight. Some key notes from the 2006 study include:

- The plan recommended that all freight routes be upgraded to a more stringent design standard in order to more safely and more efficiently accommodate heavy vehicles
- Based on an examination of the land use, existing truck traffic, future truck traffic expectations, and roadway capability, additional truck routes were also proposed. Those proposed truck routes were never formally adopted yet can be seen in Figure 9-1.

Review of the Atlanta Regional Freight Mobility Plan

The Freight Mobility Plan was a comprehensive regional study of mobility needs related to freight, goods, and services. The main goal of the Freight Mobility Plan was: "To enhance regional economic competitiveness by providing efficient, reliable and safe freight transportation while maintaining the quality of life in the region's communities."

Future forecasts for freight projects include large increases in tonnage of freight flows between 2005 and 2030. The study projects that freight transported via truck, air, and rail are anticipated to increase in the region by 83%, 148% and 37% respectively during this period.

While many strategies are being advanced to increase freight mobility, the ARC Plan recognizes the following key points with regard to land use, community concerns and the need to conduct proactive freight mobility planning and projects in the region:

- Freight supportive land use planning is critical to sustaining Atlanta's economic vitality, mobility and quality of life.

[49] Source: Federal Railroad Administration Form FRA F6180-57

- The advancement of freight mobility planning and support for freight specific projects will hinge on the public's awareness and appreciation of the importance of freight mobility for regional competitiveness and quality of life.
- It must be recognized that residential and industrial conflicts are commonplace due to residential redevelopment and encroachment into industrial areas.
- Demographic analysis reveals that several well-established freight areas need to deal with mitigation of environmental justice issues and the prevention of new environmental justice communities.

The Atlanta Regional Freight Mobility Plan identified five leading multimodal deficiencies and challenges:

- Roadway congestion
- Bottlenecks at key interchanges and intersections
- Lack of comprehensive regional truck route system
- At-grade crossings
- Deficient rail capacity

While the Atlanta region is anticipated to see increased freight tonnage movement across different modes, perhaps it is truck traffic on the roadway system that results in the most "localized" impacts – impacts most readily and easily felt by County residents on a daily basis. The roadway system is severely congested along all major arteries in the region during the morning and evening rush periods. The top end of I-285 and extensions northward, and the west side of I-20 are at full capacity from 3 PM to 7 PM. While each of the issues affect DeKalb County in some manner, safety concerns and congestion for commercial vehicles at three key corridors, two interchanges and two intersections where bottlenecks occur have been identified:

- I-285 in DeKalb, Fulton and Clayton counties (corridor in general)
- I-85 in DeKalb, Fulton and Coweta counties (corridor in general)
- I-20 in DeKalb (corridor in general)
- I-85/I-285 Interchange
- I-285/I-20 Interchange
- I-285 and Peachtree Industrial Boulevard intersection
- I-85 Pleasantdale Road intersection

Atlanta Strategic Truck Route Master Plan

In response to the Freight Mobility Plan's recommendation, ARC developed and adopted the Atlanta Strategic Truck Route Master Plan (ASTRoMaP) in 2009.[50] ASTRoMaP is the result of an effort to further develop the existing Regional Freight Priority Highway Network (RFPHN) which is a set of roadways used by the private sector to service shippers of the region. ASTRoMaP's purpose is to identify

[50] Source: "Atlanta Strategic Truck Route Master Plan", Atlanta Regional Commission, June 2010.

preferred routes and develop strategies to support the efficient movement of truck traffic while balancing the needs of existing communities, minimizing impacts to the environment and transportation network. Specifically, ASTRoMaP focused on cross-town travel, the corridors within the Atlanta region that connect its economic centers with the truck origins or final destinations outside of the region.

Within DeKalb County, ASTRoMaP identified four areas/intersections in need of improvement:

- North of Intersection SR 13/ Dresden Drive
- Intersection SR 155/Browns Mill Road
- SR 8/I-285 Interchange
- I-20/Wesley Chapel Rd Interchange

DeKalb County Comprehensive Plan (2005-2025)

The DeKalb County Comprehensive Transportation Plan (2005-2025) was reviewed for content related to freight. The active Norfolk Southern rail lines are located in the northern and southwest areas of DeKalb County. The active CSX rail lines run through the center and southeast parts of the County. See Figure 9-4 for locations of rail lines in DeKalb County.

The DeKalb County Comprehensive Plan recommends two projects for improving freight movement and safety within the County:

- Create a 10 year Railroad Crossing Plan to implement signalization, crossing upgrades, signage, gates, lights, and bells, approaching paving, and to reduce the number of at-grade crossings.
- Revise the County freight routes to reduce cut-through traffic, especially through residential neighborhoods.

City Comprehensive Plans and LCI Studies

After examining the City Comprehensive Plans and LCI Studies, areas within DeKalb County were also reviewed for information related to freight. As in the DeKalb County Comprehensive Plan, two similar freight recommendations occurred in many of the city comprehensive plans and LCI's:

According to the City of Lithonia Comprehensive Plan 2010-2026, the City of Lithonia is one of the exchange points for the CSX rail line that crosses Main Street, leaving the crossing blocked by trains for hours at a time.

- Need to improve or remove at grade rail crossings through town centers. Some at-grade crossings create queues that spill back into adjacent intersections thereby hindering traffic flows. Some at-grade crossings need to be improved to facilitate safer crossing conditions for further vehicles, cyclists, and pedestrians. (As an example, according to the Clarkston LCI, approximately 30 trains per day run through Clarkston)
- Need to route the freight traffic away from the town centers and single family neighborhoods. This also negatively impacts vehicular circulation in the cities.

9.3 DeKalb Peachtree Airport

DeKalb Peachtree Airport is located in Chamblee, in DeKalb County surrounded by US 23, I-85 and I-285. DeKalb Peachtree Airport is designated as a general aviation reliever for the Atlanta metropolitan area which means it helps reduce congestion at other nearby airports. The DeKalb Peachtree Airport is also home to more than 25 on-airport businesses.

With an average of nearly 220,000 takeoffs and landings per year in 2007 before the economic downturn, DeKalb Peachtree Airport is the second busiest airport in Georgia. The longest runway, measures 6001 feet in length, is equipped with a precision approach landing system, and can accommodate 95% of general aviation aircraft. The airport supports flight training, aerial inspections and photography, law enforcement flights, military training, Civil Air Patrol, and emergency medical evacuation. The location of the DeKalb Peachtree Airport is illustrated Figure 9-4.

The DeKalb Peachtree Airport is a major employment center within DeKalb County with 1,834 jobs. The employees working at the airport depend on the surrounding major roads for their commutes. The airport is served by MARTA buses as well as shuttle services between the airport and the Chamblee MARTA Station.

The airport is served, in the event of an emergency, by Fire Station 15 which is located on airport property. Backup emergency service is provided from Fire Station 8 and 2 both of which can get to the airport without the use of the nearby major arteries (I-85, I 285, and US 23).

A major activity at the DeKalb Peachtree Airport is flight training. The airport has 13 flight schools operating on site. The level of training activity is expected to increase as the economy improves. At the present, all of these training activities use small aircraft that still use leaded gas for fuel. This activity does contribute to the area's air quality problems.

A perceived need for the airport is coordination with County officials and developers regarding the redevelopment of the former GM Plant in Doraville. The future redevelopment of this plant could conflict with operations of the airport if not well coordinated. The GM facility is located 6000 feet from the airport's main runway and is in its flight path. Land uses such as mixed use development would allow high rise structures that need to be planned according to height limitations associated with the airport. In addition, because this site is currently zoned industrial, noise created by airplanes is not a problem. If the site redevelops with a residential component, noise may become an important consideration.

9.4 Summary of Needs Related to Freight and the DeKalb Peachtree Airport

While there are some specific needs for freight and air transportation identified in the text of this chapter, some general observations are detailed below.

The County's truck route system needs to be reviewed to align with recently completed regional freight plans and also accommodate changes in development patterns. Truck routes proposed in the Atlanta Regional Commission's ASTRoMaP system have not yet been incorporated into the County's truck route system. Also, many residents and businesses today complain about the routing of trucks through town centers and through residential areas.

Major roadway projects along existing freight routes need to include design elements that can safely accommodate trucks. This primarily includes wider lane widths and wider turning radiuses.

Safety is a concern for at-grade rail crossings, particularly at those crossings where collisions have recently occurred. At-grade rail crossings are inherently dangerous and are a common freight-related safety concern within the communities. Particularly crossing in and around activity centers should be reviewed for possible safety improvements

The Avondale Estates LCI plan cited concerns from local residents that trucks passing through the intersection of US 278 and Clarendon Road create conflicts in the pedestrian oriented downtown area.

Analysis of crashes involving heavy vehicles shows high concentrations of crashes occurring around interstate interchanges. Interchanges in particular are areas where there is a high potential for conflicts between trucks and smaller automobiles. Interchanges located adjacent to residential and commercial areas also pose a risk for heavy vehicle collisions with bicyclists, and pedestrians.

Impacts between the DeKalb Peachtree Airport and surrounding new developments need to be considered as a part of community planning efforts. Specifically, the redevelopment of the GM Plant in Doraville has the potential to create conflicts with operations at the DeKalb Peachtree Airport due to building heights and noise concerns.

Policies & Programs

10 Policies and Programs Impacting Transportation

10.1 Transportation Demand Management

Transportation demand management (TDM) includes the application of strategies and policies to reduce travel demand, particularly during peak travel periods. TDM may include pedestrian/bicycle improvements, parking management, transit enhancements, tolling, technological/intelligent transportation system (ITS) tools, or incentives to foster alternative travel times and patterns. In places where improvements to transportation infrastructure are physically difficult or economically infeasible, TDM strategies may be employed to reduce congestion or foster better utilization of existing infrastructure. TDM is one possible alternative to infrastructure improvements along major corridors or within activity center and town center locations.

The Atlanta Regional Commission (ARC) is currently in the process of evaluating TDM at the regional level and preparing a plan for the Atlanta metro area. As a part of this project, ARC is considering TDM not only with its traditional definition that tends to focus more narrowly on commuter-based work trips, but also expanding upon it to make the connection between all trips. TDM+ considers demand management as it relates to livability, sustainability, transit, walking and biking, systems operations, transportation planning, economic development, climate change, healthy communities and active aging.[51] Current TDM services and infrastructure available within DeKalb County include MARTA[52] and GRTA[53] Xpress bus services along with MARTA rail transit, an extensive network of biking and walking trails, carpool and vanpool ridesharing/ridematching services through Georgia Commute Options. [54]

Considering TDM as the choice to travel or not, which mode to use, what time to take trips, the location where trips originate and end, and which routes can be used can have a powerful impact on transportation in the region, and particularly within DeKalb County. Making the connection between transportation systems and land use can be a powerful method to effectively allocate limited resources. Compact and well-connected communities are able to more efficiently use available resources and boost local economy while reducing environmental footprints, and promoting active living, and age friendly centers where the aging population can age in place.

Community Improvement Districts (CIDs), Employer Service Organizations (ESOs) and Transportation Management Associations (TMAs) assist with TDM efforts by working with employers and commercial property owners to address business and community concerns. CIDs are self-taxing districts that allow commercial property owners to raise revenue to address community improvement solutions, often aimed at improving transportation, and coordinating with ESOs or TMAs that work directly with employers to address mobility and accessibility concerns for workers. The Clean Air Campaign is a unique ESO that works with entire state of Georgia non-attainment areas, excluding local areas where a TMA already exists. In DeKalb, there are several CIDs, ESOs, and TMAs:

- Clifton Corridor TMA

[51] http://www.atlantaregional.com/transportation/commute-options/regional-tdm-plan
[52] http://www.itsmarta.com
[53] http://grta.org
[54] http://www.gacommuteoptions.com/

- DeKalb Perimeter CID and Perimeter Transportation & Sustainability Coalition
- Stone Mountain CID
- The Clean Air Campaign

Non-profit organizations in the region are also responsible for influence and encouragement of TDM-related activities. Within the Atlanta region, groups such as the Atlanta Bicycle Coalition (ABC), Citizens for Progressive Transit (CfPT), the Livable Communities Coalition, and Pedestrians Educating Drivers on Safety (PEDS) all advocate for a safer and more accessible metro area by increasing the quality and network of walking, biking, transit and their supportive infrastructure. Smart growth is a guiding concept for the Livable Communities Coalition, which supports greater density, mixed-use developments and a variety of housing choices in appropriate areas, as well as the integration of transportation investments with appropriate land uses. Smart growth principles have the potential to reduce traffic congestion, and enhance efficiency in the use of public infrastructure while saving green space and providing better choices for both businesses and citizens.

10.2 Redevelopment Initiatives

Significant redevelopment efforts can impact both the level and/or type of travel demand within an area. Redevelopment efforts may rekindle interest and growth in targeted areas generating additional travel demand. Depending on the type of land uses and development character demand may be greater for vehicles, trucks, transit, pedestrians or some combination thereof. This might be the case for the Stone Mountain Industrial Park and Stone Mountain CID Area where significant energy is being devoted to reinvigorating both underutilized industrial/warehouse properties and providing additional commercial (office and retail) facilities. Growth in the area would likely increase vehicular, freight and, to a lesser degree, pedestrian/bicycle and transit needs.

Some redevelopment efforts may focus on transformation from one land use to a mix of other land uses, significantly alternating the type of level of transportation demand. Such is the potential of the Doraville GM plant where a former industrial site generated freight, vehicular and limited transit demand. It is likely to shift to a transit oriented development with greater reliance on transit, pedestrian/bicycle facilities, and vehicular access to serve future residential, office, and retail facilities.

10.3 Targeted Incentives

Targeted areas may incentivize additional growth and development through incentive zoning regulations, overlay districts, transfer of development rights, density bonuses, or other financing and job creation credits including Opportunity Zones and Empowerment Zones. This variety of tools can encourage investment or reinvestment in designated areas, sometimes increasing or reshaping travel demand. Similar to redevelopment initiatives discussed above, these growth incentives can increase travel demand or reshape the balance and behavior of travel demand among nodes depending on the type, character, and mix of uses that area attracted.

DeKalb County recently approved the creation of Opportunity Zones in fifteen locations throughout the County including Bouldercrest, Stone Mountain, Panthersville, Royal Atlanta, Wesley Chapel, I-85, Snapfinger Woods, Kensington, Lithonia Industrial, Zonolite, Stonecrest, Montreal Industrial, Rock

Mountain, Ponce de Leon and Tilson. Within these zones, employers who create two or more jobs will receive a $3,500 tax credit per job per year for five years.

10.4 Tax Allocation and Community Improvement Districts

Tax Allocation and Community Improvement Districts provide local governments and area stakeholders with a financing mechanism to fund local infrastructure improvements. Tax Allocation Districts (TADs) utilize the increased tax revenue from growth and development areas to finance bonds. The bonds provide a funding source for the local government to complete infrastructure improvements including transportation improvements. TADs require the involvement of local government, property owners, and all taxing authorities (including school systems) within the district.

Community Improvement Districts (CID)are typically organized by and managed by a board of local commercial property owners in partnership with local communities. CIDs collect an additional tax increment (typically 3 to 5 mils) on commercial properties within a defined district. The funds are utilized by the CID to invest in local planning and infrastructure projects including transportation, park, stormwater and other related improvements. As of spring 2013 there are 16 CIDs in the metro Atlanta region. Three existing community improvement districts are located within DeKalb County: Perimeter CID, Stone Mountain CID, and Tucker CID

10.5 Livable Centers Initiatives

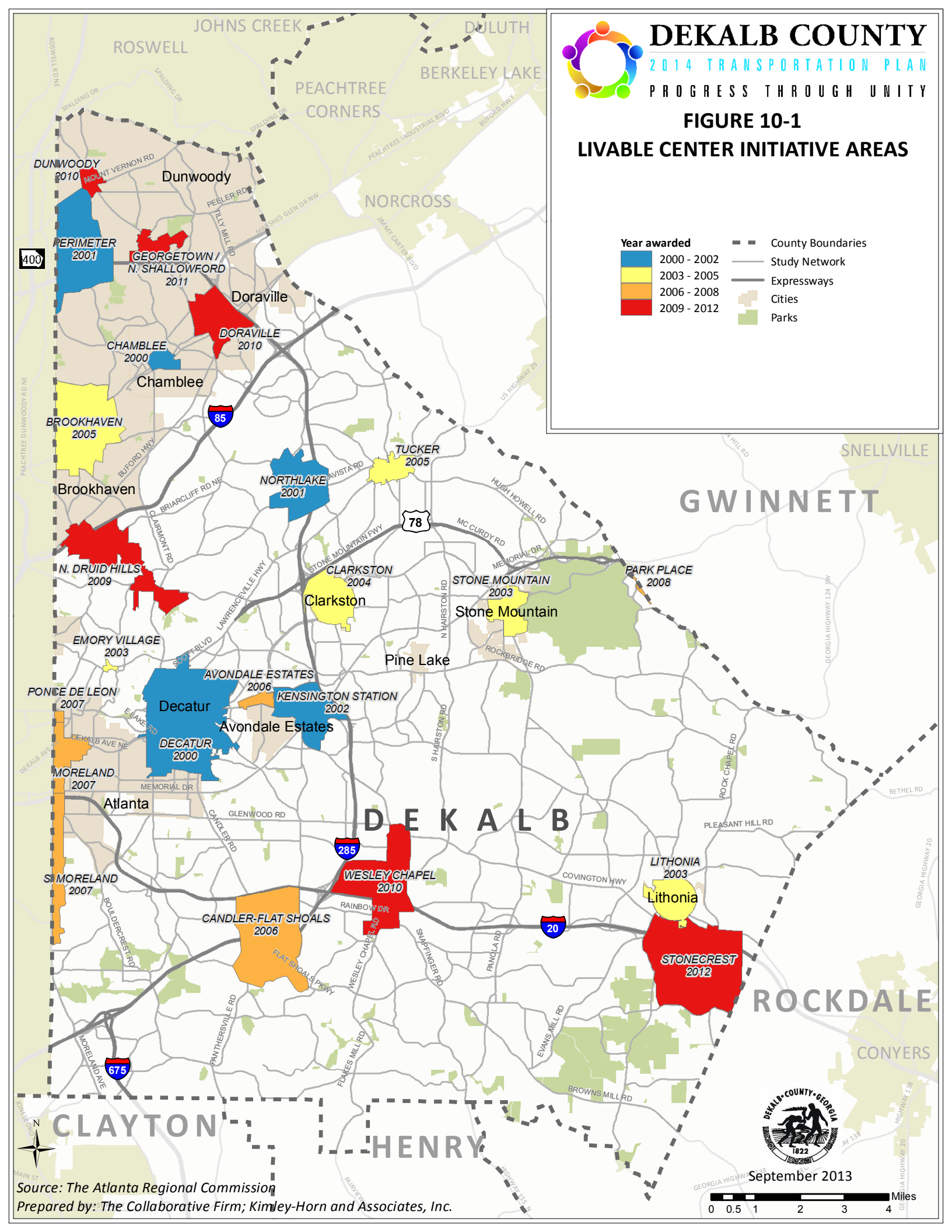
In 2000, the Atlanta Regional Commission created the Livable Centers Initiative (LCI) Program to encourage planning and transportation enhancements in existing and emerging activity centers and town centers. The program encourages a greater diversity of land uses and enhanced walkability and transit in key locations to accommodate future growth as an alternative to new infrastructure investments in less developed areas. Between 2000 and 2013, 24 areas within DeKalb County have received planning funds to develop LCI Master Plans or have created local plans that were “grandfathered” into the LCI program. These LCI areas are:

- Avondale Estates
- Brookhaven
- Candler-Flat Shoals
- Chamblee
- Clarkston
- Decatur
- Doraville GM Plant
- Dunwoody Village
- Emory Village
- Georgetown/ North Shallowford
- Kensington Station
- Lithonia
- Medline
- Moreland
- North Druid Hills
- Northlake
- Park Place
- Perimeter
- Ponce de Leon
- South Moreland
- Stone Mountain
- Stonecrest
- Tucker
- Wesley Chapel Activity Center

LCI plans typically outline a community-based future development vision and associated/needed transportation initiatives within the area. Areas that successfully complete and adopt LCI plans are eligible to compete for implementation funding up to $4 million to construct local transportation improvements. Figure 10-1 show the location of the LCIs.

DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY

FIGURE 10-1
LIVABLE CENTER INITIATIVE AREAS



Source: The Atlanta Regional Commission
Prepared by: The Collaborative Firm; Kimley-Horn and Associates, Inc.

10.6 Complete Streets

Streets that are designed as "complete" streets are intended to enable safe access for all users, and to be designed for the benefit of all users – not just those in automobiles. The concept of complete streets considers balancing the needs of each mode in a context sensitive manner appropriate for the type of roadway and the conditions within the project and surrounding areas in order to emphasize safety, mobility and accessibility for all modes of travel including pedestrians, bicyclists, transit riders and motorists.

At the state level, on September 20, 2012, the State Transportation Board (GDOT's governing body) voted unanimously in favor of a Complete Streets design policy for all transportation projects managed by the DOT. The primary strategy for implementing Complete Streets will be to incorporate bicycle, pedestrian, and transit accommodations into transportation infrastructure as a means for improving access, mobility, and safety for the traveling public. While the Georgia DOT Complete Streets program is new as an official state program, it follows complete streets concepts included in PLAN 2040 and in many local municipalities that had already adopted such design standards. The City of Decatur led the Atlanta region in adopting complete streets policies in 2007. The Cities of Roswell and Suwanee followed in 2009 along with Cobb County and Douglas County. More recently, the Cities of Dunwoody and Clarkston adopted policies in 2011, and the City of Atlanta currently has a pending complete streets policy.

Within DeKalb County, Complete Streets DeKalb is a coalition of groups that is committed to working with the DeKalb County Board of Commissioners to adopt a countywide complete streets policy. The coalition includes the following members and supporters:

- Atlanta Bicycle Coalition
- Bike Emory
- Charles R. Drew Charter School
- Healthy Belvedere
- Livable Communities Coalition[55]

The mission of Complete Streets DeKalb is:

> "… to rally support from county residents, neighborhoods, schools, organizations and businesses to pass and implement a complete streets policy in DeKalb that will enable safe access for all road users by requiring balanced investments in infrastructure for all DeKalb County roadway projects."[56]

[55] http://completestreetsdekalb.webs.com/
[56] http://completestreetsdekalb.webs.com/

Human Services Transportation

11 Human Services Transportation

11.1 Overview

Human Services Transportation (HST) provides non-emergency transportation service to meet the needs of transportation disadvantaged populations. These groups typically include older adults, persons with disabilities, persons with Limited English Proficiency (LEP), and persons with lower incomes. Individuals within these groups can often have unique transportation needs requiring a relatively wider range of transportation services. Many of these transportation needs could be met with better access to public transportation. However, public transportation is not available in all parts of the County and in many cases, such as with individuals with disabilities, general public transportation may not be a workable option. HST programs are intended to fill the gaps in existing infrastructure and services, and where public transportation is not feasible. This study of DeKalb County HST addresses the following:

- An assessment of transportation needs for transportation disadvantaged populations
- An inventory of existing services available to meet those needs
- Opportunities to coordinate and maximize service efficiency

11.2 Conditions that create the need for HST Programs

HST provides affordable, accessible, transportation for people that face challenges with regards to transportation. Because transportation is a central component of how we live our lives, providing affordable mobility to an individual means that person can also have an opportunity to live with independence and choice. Examples of HST trips that are needed include:

- Transportation for medical appointment
- Transportation for jobs/trainings
- Transportation for visiting friends & families
- Transportation for shopping
- Transportation for other quality of life trips
- Transportation to entertainment
- Transportation for visiting community centers/place of worship, etc.

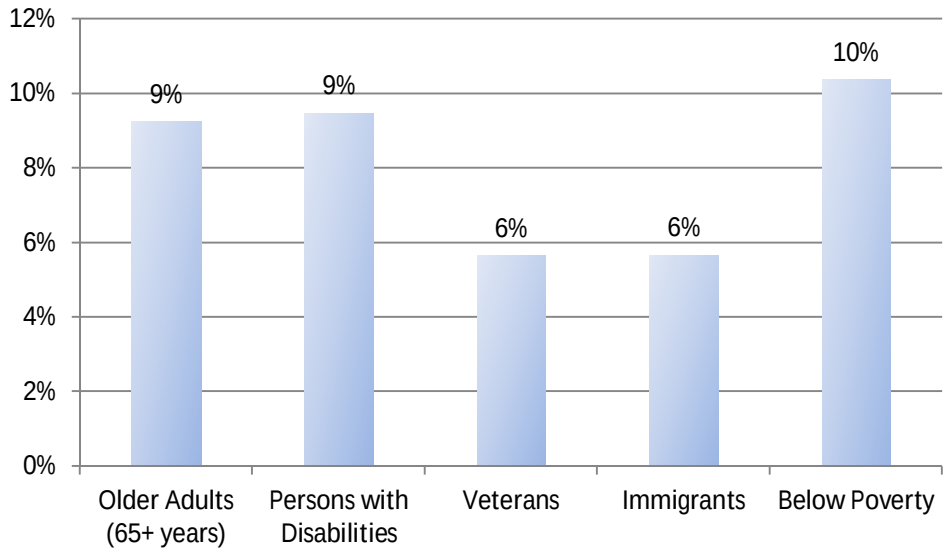
Although there are many reasons that a ride could be needed for an individual, the DeKalb County Human Development Department reports that approximately 95% of the trips that are requested through their department are for access to medical appointments.

According to U.S. Census Bureau, the total population of DeKalb County in 2011 was near 700,000 with 9% being older adults (65 years or more) means DeKalb County has the second largest senior population in the state. This population group within DeKalb increased by 26% between 2000 and 2011. The County is also home to the largest number of immigrants and refugees in Georgia, with many of them being elderly. Additionally, 9% of the County's

According the City of Clarkston LCI, approximately 11% of the City of Clarkston's population (which has a high number of international refugees) relies on public transportation as their primary mode of transportation.

population is disabled. Of that group, about 24% are 65 years old or older. Figure 11-1 illustrates DeKalb County's population of older adults, individuals with disabilities, immigrants & refugees, and individuals that live below the poverty level. Individuals in these population groups are more likely to be considered transportation disadvantaged.

Figure 11-1: Population Statistics for Groups Eligible for Human Services Transportation[57]



11.3 Available Services

Table 11-1 shows types of human services transportation that are available in DeKalb County. All of these services can be grouped into three categories:

1. **Fixed Route Transit:** MARTA rail lines, MARTA bus routes, GRTA bus routes
2. **Paratransit Services:** MARTA paratransit (MARTA Mobility)
3. **Others:** Transportation services provided by a wide range of public and private agencies in DeKalb County. These types of services are funded through one or more of the following sources:
    - Local Government
    - State Government
    - Federal Government
    - Non-Profit Organizations
        - Donation of Vehicles
        - Donation of Cash
    - Individuals
        - Cost-share
        - Fees

[57] Source: US Census Bureau 2011 ACS 1-year estimates

The existing programs are effective; however, in an ongoing effort to improve services for the transportation disadvantaged, the ARC is evaluating changes to better coordinate the requests for service. The ARC received a Federal Transit Administration's Veterans Community Living Grant Initiative in December 2011to help veterans, military families, and others connect to jobs and services in their communities by improving access to local transportation options. The grant was to allow ARC to develop software that lays the foundation for a regional one-click/one-call center. This system will make finding transportation services easier and will link older adults, persons with disabilities and persons of limited income with more transportation options in the region. The system will coordinate services to such groups as the Veterans Administration, hospitals, senior centers, agencies serving disabled persons and others, to a common database of transportation services in the 10-county Atlanta region and improve mobility options for the residents of the Atlanta region.

Table 11-1: Types of Human Services Transportation Available in DeKalb County

Population Profile	Service Available	Cost for Ridership	Area Covered
Older Adults	DCH-Georgia Department of Community Health Non-Emergency Transportation (NET)	No Cost	DeKalb County
	I Care, Inc.	No Cost	DeKalb County
	Wesley Woods Transitions Program	No Cost	DeKalb County
	MARTA Reduced Fare Program	One way trip $1.00	DeKalb County
	Lou Walker Senior Center Shuttle Bus	No Cost	Lou Walker Senior Center
	DRiVE	No Cost	DeKalb County
	DHS Coordinated Transportation Service	No Cost	DeKalb County
	JF&CS	No Cost	Zip codes 30306, 30307, 30324, 30329, 30345, 30030, 30033
	Center for Pan Asian Community Services, Inc. (CPACS)	No Cost	Self-selected service area (subject to change depending on need)
	Golden Shuttle	No Cost	Chamblee & surrounding area
People with Disabilities	MARTA Paratransit Services	One Trip $4.00, Twenty Trips $68.00, Thirty day pass $128.00	DeKalb County
	New Freedom Program	$30 cost share for voucher program	DeKalb County
	disABILITY LINK	$50.00 worth of voucher is provided, rest of cost is shared by rider	DeKalb County
Veterans	Atlanta VA Medical Center	No Cost	Circuit including Decatur MARTA Station, Decatur Clinic, and VA Hospital.
Ethnic Group, Refugees & Immigrants	Center for Pan Asian Community Services, Inc. (CPACS)	No Cost	Clarkston/Scottdale/Decatur area

Table 11-1: Types of Human Services Transportation Available in DeKalb County (cont.)

Population Profile	Service Available	Cost for Ridership	Area Covered
Children	Center for Pan Asian Community Services, Inc. (CPACS)	No Cost	Clarkston/Scottdale/Decatur area
Low Income/ All Population Group	MARTA E-bus (Charter service for Qualified Human Services Organizations)	$100.00 for the first 25 passengers and $4.00 for each additional passenger.	DeKalb County
	GRTA	$3.00 one way & $5.00 round trip. Half price fares for passengers 65 and over, Medicare care holders, and persons with disabilities.	Routes in DeKalb County on I-85, I-20, and I-285
	Georgia Bus Lines & Royal Bus Lines	One way trip $1.50	On Buford Hwy between MARTA Doraville Station and Lindberg Station
	DeKalb Community Service Board (CSB)	No Cost	DeKalb County
	Emory University Cliff Shuttles	No Cost	Route A- Between Wesley Woods & Emory University Hospital, CCTMA route-between Decatur MARTA Station and Emory University Campus, The Executive Park Route-between Executive Park & Emory University campus.
	Grady Memorial Hospital	No Cost	Metro Atlanta & farther

11.4 HST Summary of Needs

Current HST program managers indicate that the demand for service is far greater than there are resources available to meet those demands. Several potential strategies exist that could help meet those unmet needs. Many of the needs identified in this report were the result of focus group meetings held with individuals with disabilities, older adults, and immigrant groups. Summaries of those focus group meetings can be found in the Appendix.

There is a demand for expansion of MARTA coverage and frequencies. MARTA's fixed route transit services (trains and buses) do not provide access for the entire County. If more funding were available to expand MARTA's service to the County, much of the demand for additional programs could be met.

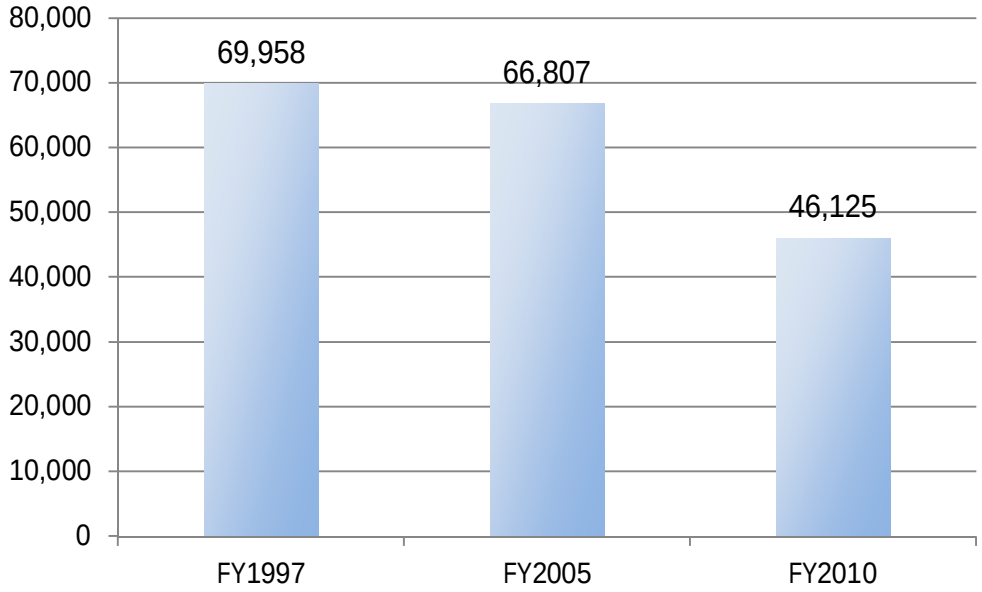
There is demand for better access to MARTA facilities. Many older adults and people with disabilities would be able to use MARTA buses and trains if better access to bus stops and train stations were in place. Transit supportive infrastructure such as sidewalks, crosswalks, and bus shelters would enable a larger portion of the population to use general mass transit.. Many older adults have never used the MARTA bus system and can often be intimidated by it. More information, possibly including training on how to use public transit could increase transit ridership

There is a need for better inventory and coordination of available services. There is currently not a system in place that accurately inventories and coordinates information between the many different services that classify as HST programs. This creates confusion for both agencies and users. This also creates scenarios where services unnecessarily overlap and are duplicated. It should be noted that the ARC has been collaborating with partners and stakeholders to develop a system to solve this problem at a regional scale. Upon the completion of their project, there may be a need for a more detailed inventory or service specific to DeKalb County.

There is a demand for more neighborhoods that fit the Lifelong Communities model. The ARC has developed a concept called Lifelong Communities that describes communities in which individuals can maintain a high quality of life at any age, despite changes in mobility needs. As communities around DeKalb continue to evolve, having more neighborhoods that provide a range of transportation options would help offset the need for HST programs. Although there are many characteristics that go into creating a Lifelong Community, these areas are generally walkable and provide easy access to transit.

Additional trips purchased through the state-run Coordinated Transportation System. DeKalb County does not operate or maintain its own vehicles for HST programs. DeKalb County purchases or subsidizes trips through the state-run Coordinated Transportation System, which is operated by the Georgia Department of Human Services (DHS). Much of the money that DeKalb County contributes into the system comes from the Federal New Freedom grant program, which was authorized under the previous transportation authorization bill, SAFETEA-LU and is now consolidated under MAP-21. Additional money to purchase more trips would go farther in meeting the unmet transportation needs throughout the County. Due to budget cuts, the number of trips purchased by DeKalb County has been declining over the last several years. Figure 11-2 illustrates that decline:

Figure 11-2: DHS Purchased Trips in DeKalb County from 1997 to 2010[58]



Many members of the community need assistance finding housing with more transportation choices. Many people that live in auto-dependent areas are open to relocating to other areas where more transportation choices exist yet they are unable to afford the costs associated with relocating (e.g. selling a house, moving expenses, down payments for rent, finding affordable options, etc.). Also, many individuals may need help finding affordable housing options that would meet their transportation needs. Publicly available information may assist with making people aware of their housing options.

Many vehicles that are used by providers to give HST rides are in need of increased maintenance. The cost of maintaining vehicles for HST programs is high relative to the need to provide additional trips. The Human Development Department reports that many of the vehicles in the state-run and privately run fleets need to be better maintained. Some issues include broken air conditioners, excessive wear, and mechanical problems. Condition issues in vehicles may not be significant when transporting healthy individuals but problems such as broken air conditioning can be more serious when transporting older adults or people with illnesses. Problems with vehicles may be difficult for DeKalb County to influence since those vehicles are operated by the State or by private organizations.

There is a demand for additional accessible vehicles that are available through private taxi companies. For individuals that are disabled, taxi services are an important part of their transportation options. Taxis are reliable, can be called on demand at any time, and can generally go anywhere that a person needs to go within DeKalb County. Unfortunately, there are very few wheelchair accessible vehicles (usually vans) in the private fleets that are registered within DeKalb County. Accessible vehicles can also be used for non-handicapped riders so it would be helpful if a larger percentage of the taxi fleet were made to be accessible.

[58] Source: DeKalb County Senior Transportation Services White Paper

The "scale" of the services provided is important for many HST populations. The Human Development Department has heard from many users that the perceived quality of a ride is closely related to the perceived size of the organizations and to the size of the vehicles as well. This may be because older adults and people with illnesses feel more vulnerable than the general public in unfamiliar situations. Riders tend to appreciate the more personal interaction that is associated with smaller organizations and smaller vehicles. Having customer service training become a part of a driver certification program could be beneficial for riders.

System Expansion

12 Current Plans for Expansion of the Transportation System

12.1 Programmed and Long Range Projects

The Atlanta Regional Commission completed a comprehensive land use and transportation plan for the region, PLAN 2040. Contained within that plan is $61 billion worth of transportation projects across the 20-county metropolitan region, broken into Programmed projects (Transportation Improvement Program – 2012 to 2017), Long Range projects (fiscally constrained Regional Transportation Plan – 2017 to 2040), and Aspirations projects (those without identified funding sources through 2040).

Table 12-1 summarizes the PLAN 2040 projects that fall within DeKalb County including bike/pedestrian, transit, and roadway projects. "All Projects" include all projects that fall within DeKalb County. The "Regional" projects, including interstate, managed lanes, and transit projects, will not require a local match from DeKalb County or any of its cities.

Table 12-1: PLAN 2040 Project Breakdown

Mode	Funding*	Total Cost	Local/Private Match Required	Percent Local/ Private
		Programmed		
Bike/Pedestrian	Regional	$0	$0	0%
	DeKalb Sponsor	$32,770,459	$11,734,948	36%
	All Projects	**$32,770,459**	**$11,734,948**	**36%**
Transit	Regional	$21,600,000	$21,600,000	100%
	DeKalb Sponsor	$0	$0	0%
	All Projects	**$21,600,000**	**$21,600,000**	**100%**
Roadway	Regional	$107,864,890	$0	0%
	DeKalb Sponsor	$167,204,036	$53,302,450	32%
	All Projects	**$275,068,926**	**$53,302,450**	**19%**
		Long Range		
Transit	Regional	$1,843,000,000	$1,031,000,000	56%
	DeKalb Sponsor	$0	$0	0%
	All Projects	**$1,843,000,000**	**$1,031,000,000**	**56%**
Roadway	Regional	$2,426,000,000	$1,497,000,000	62%
	DeKalb Sponsor	$117,969,009	$31,312,000	27%
	All Projects	**$2,543,969,009**	**$1,528,312,000**	**60%**
		Total		
	Regional	$4,398,464,890	$2,549,600,000	58%
	DeKalb Sponsor	$317,943,504	$96,349,398	30%
	All Projects	**$4,716,408,394**	**$2,645,949,398**	**56%**

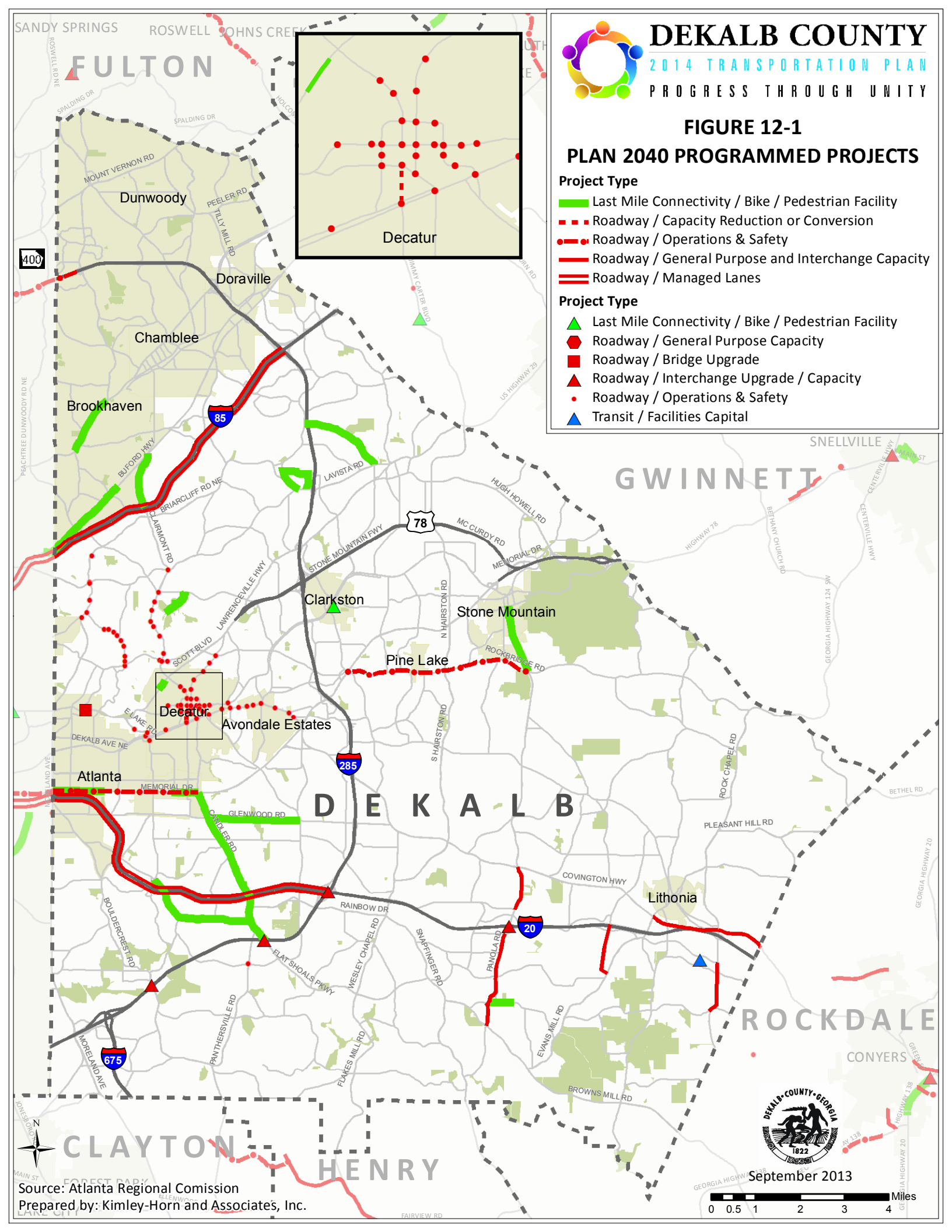
** All/Regional projects include all projects that are located within DeKalb County including interstates, managed lanes, and major transit projects. DeKalb Only projects include those projects having a local match provided by DeKalb County or one its jurisdictions.*

The projects that will require a local match from the County or cities are listed as "DeKalb Sponsor." Two types of regional projects require a local/private match: 1) transit projects in which the match comes from MARTA or 2) managed lanes/toll projects where the project could be funded by a public/private partnership or other financing structure.

In the current version of PLAN 2040, nearly $5 billion worth of projects fall within DeKalb County, the majority of which are regional roadway and transit projects. Approximately $318 million worth of projects are county/city projects that will require nearly $100 million in local match.

Figure 12-1 shows the Programmed projects that are slated for DeKalb County (including the regional roadway and transit projects). A number of bike and pedestrian projects are programmed as well as roadway operations and safety projects.

ARC is in the process of updating PLAN 2040, and projects may change when the update is complete in early 2014.


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 12-1
PLAN 2040 PROGRAMMED PROJECTS
Project Type
Last Mile Connectivity / Bike / Pedestrian Facility
Roadway / Capacity Reduction or Conversion
Roadway / Operations & Safety
Roadway / General Purpose and Interchange Capacity
Roadway / Managed Lanes
Project Type
Last Mile Connectivity / Bike / Pedestrian Facility
Roadway / General Purpose Capacity
Roadway / Bridge Upgrade
Roadway / Interchange Upgrade / Capacity
Roadway / Operations & Safety
Transit / Facilities Capital
SANDY SPRINGS
ROSWELL
JOHNS CREEK
FULTON
Decatur
Dunwoody
Doraville
Chamblee
Brookhaven
GWINNETT
SNELLVILLE
Clarkston
Stone Mountain
Pine Lake
Decatur
Avondale Estates
Atlanta
DEKALB
Lithonia
ROCKDALE
CONYERS
CLAYTON
HENRY
MOUNT VERNON RD
PEELER RD
TILLY MILL RD
BUFORD HWY
BRIARCLIFF RD NE
CLAIRMONT RD
LAVISTA RD
HUGH HOWELL RD
MC CURDY RD
MEMORIAL DR
STONE MOUNTAIN FWY
LAWRENCEVILLE HWY
N HAIRSTON RD
S HAIRSTON RD
ROCKBRIDGE RD
SCOTT BLVD
E LAKE RD
DEKALB AVE NE
MEMORIAL DR
GLENWOOD RD
CANDLER RD
BOULDERCREST RD
FLAT SHOALS PKWY
WESLEY CHAPEL RD
SNAPFINGER RD
PANOLA RD
RAINBOW DR
COVINGTON HWY
PLEASANT HILL RD
ROCK CHAPEL RD
BETHEL RD
EVANS MILL RD
BROWNS MILL RD
FLAKES MILL RD
PANTHERSVILLE RD
MORELAND AVE
400
85
78
285
20
675
DEKALB COUNTY GEORGIA 1822
September 2013
Miles
0 0.5 1 2 3 4
Source: Atlanta Regional Comission
Prepared by: Kimley-Horn and Associates, Inc.

Funding

13 How we are Funding our Transportation System

One of the most critical aspects of this transportation plan is the ability to implement the projects within it. As automobiles are becoming more fuel efficient (including more hybrids and electric cars), the federal gas tax becomes more unreliable as a funding source for the Highway Trust Fund. It is incumbent upon local governments to find creative ways to fund (partially or completely) the transportation projects necessary to meet the needs of their constituents. The following sections provide an overview of various federal and state funding sources as well as the source of DeKalb County transportation funds. More detail will be presented in the Recommendations phase with total funding amounts, possible federal and state match opportunities for DeKalb, and a matrix of project types that apply to each of the funding categories.

13.1 Federal Funding and MAP-21

On July 6, 2012, President Obama signed into law the Moving Ahead for Progress in the 21st Century Act (MAP-21). This was the first federal transportation legislation enacted since 2005 when President Bush signed into law the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). MAP-21 is a two year bill (2013 and 2014) that refines the federal funding and approval process in the following ways:

- Expands the National Highway System (NHS) to include some principal arterials. The NHS are the most critical roads in the national highway network.
- Institutes a more performance-based evaluation system for project selection
- Supports economic vitality with the creation of transportation infrastructure building jobs and encourages innovative, often private, financing options
- Intensifies the focus on safety of all modal systems
- Streamlines federal funding programs
- Expedites project delivery through reduced review time

Most of the money allocated in MAP-21 comes from the Highway Trust Fund, which includes the Highway Account (highway and intermodal programs) and the Mass Transit Account (public transit programs). The monies funding the Highway Trust Fund primarily come from the federal motor fuels tax.

Programs under both the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA) have been revamped. Because MARTA is the designated recipient for all federal transit monies, and DeKalb will not be competing for any of this money, no specific review is included of FTA sources. Information will be provided on the FHWA programs since DeKalb County will have the opportunity to compete more directly for those funds.

Federal Highway Administration

Six core formula programs have been established for FHWA under MAP-21: The National Highway Performance Program (NHPP), the Surface Transportation Program (STP), the Congestion Mitigation and Air Quality Improvement Program (CMAQ), the Highway Safety Improvement Program (HSIP), Railway-Highway Crossings (set-aside from HSIP), and Metropolitan Planning. Two new formula

programs were also established including Construction of Ferry Boats and Ferry Terminal Facilities and Transportation Alternatives (TA). Neither the Metropolitan Planning nor the Construction of Ferry Boats and Ferry Terminal Facilities programs have implications for DeKalb, so only the remaining programs will be discussed in more detail.

National Highway Performance Program (NHPP)

The National Highway Performance Program focuses on building and maintaining the most important 220,000 miles of roadways across the nation – those on the National Highway System. Approximately $21.8 billion will be invested federally per year through this program. Projects located on the NHS could be eligible for federal funding from this program.

Surface Transportation Program (STP)

Approximately $10 billion per year will be allocated nationally for the Surface Transportation Program. Each state suballocates 50% of the funds to areas based on population, while the remaining funds are flexible (Statewide Flexible category). Other STP funds include Rail Hazard Elimination, Rail Protective Devices, Safety, and Urban. The STP-Urban category is especially important to DeKalb because of some of the set aside amounts allotted to the Atlanta Regional Commission for regional funding programs. Under this umbrella are General Roadway Operations and Safety, Freight Operations and Safety, Last Mile Connectivity, and the Livable Centers Initiative (LCI).

For the next two years of MAP-21, and for any additional years that the program is extended, the Last Mile Connectivity Program will be funded at approximately $12 million per year. Last Mile Connectivity projects are smaller and are focused on bike and pedestrian accessibility to transit. The LCI program funds subarea studies across Metro Atlanta focused on enhancing existing centers and corridors to be consistent with regional development policies. Projects that result from these studies can apply for implementation grants from ARC. Approximately $20 million annually is allocated to the LCI implementation program.

In addition to the programs listed above, funding is set aside from the STP to partially fund the new Transportation Alternatives program (TA). More information on that program will be provided below.

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

The CMAQ program, continuing at approximately $3.3 billion federally per year from the previous transportation authorization, is used to meet the goals of the Clean Air Act. CMAQ monies can be used for new transit projects, transportation demand management, and traffic flow/Intelligent Transportation Systems, among others. Locally, CMAQ monies have been used to fund new GRTA Xpress bus routes and other circulators and fund programs like the Clean Air Campaign.

Highway Safety Improvement Program (HSIP)

The HSIP is focused on the DOT's top priority of safety. This program is funded at $2.4 billion per year nationally with a set aside of $220 million for Rail-Highway Crossings. Each state is required to develop a Strategic Highway Safety Plan (SHSP) that identifies the most important safety issues and determines ways to address them. Critical areas of transportation safety can possibly be funded through this federal

program, including at-grade rail crossing locations in need of attention. Funds get allocated by mode depending on the previous year's serious injury crashes. For example, pedestrian crashes tend to range from 10-12% of the total serious injury crashes each year, so pedestrian safety projects receive approximately 10-12% of the funding each year.

Transportation Alternatives (TA)

The Transportation Alternatives program is one of the new formula funding programs that now encompasses the former programs of Transportation Enhancement (TE), Safe Routes to School (SRTS), and Recreational Trails. The program is funded at 2% of all the MAP-21 apportionments, currently a total of $814 million nationally per year. Half of the money is suballocated based on population, similar to the STP funds. Locally, approximately $7.5 to $8 million per year has allocated to the Atlanta Regional Commission for awarding. Many of the highest priority and most regional bike and pedestrian projects are considered for this funding program.

13.2 State Funding

State Transportation Funding Sources

In addition to the various federal funding programs, the state is able to administer transportation funding due to the collection of the state motor fuel tax.

Motor Fuel Tax

Revenue from the State's motor fuel taxes is the primary funding mechanism for transportation at the State level—contributing to well over 90 percent of total revenues from State sources in GDOT's budget. However the State Constitution prohibits the use of motor fuel tax revenues for transportation infrastructure other than roads and bridges— meaning that use of motor fuel funds on public transportation is prohibited. In 2012, these taxes generated just under $1 billion. These use restrictions limit the ability of the state to act in a flexible manner to address transportation needs. The State of Georgia collects two types of taxes on motor fuels to help fund transportation investments:

- Motor Fuel Excise Tax: This is a tax based on the volume (gallons) of fuel purchased. The amount of the excise tax on gasoline is 7.5 cents per gallon, which has been used since 1971 and is not indexed for inflation. Since this tax is based solely on the volume of gasoline sold, revenues are strongly correlated with vehicle-miles traveled and the fuel economy of motor vehicles traveling on roads in the state. However improved engine technology and higher fuel efficiency of vehicles has counteracted the efficacy of this tax.
- Prepaid Motor Fuel Sales Tax: Georgia also collects a 4-percent sales tax on the average retail price of fuel, known as the Prepaid Motor Fuel Sales Tax. Three percent is dedicated to transportation and the remaining one percent is allocated to the State General Fund. Revenues from this tax rise and fall with the price of gasoline. However, frequent fluctuations in the revenue stream are minimized by the method that the State collects the sales tax. The Prepaid Motor Fuel Sales Tax is collected on a cent-per-gallon rate that is set using a weighted average indexed retail sales price for each type of fuel. The weighted indexed retail sales price is

determined and published in the months of November and May in order that they are enacted at the beginning and mid-point of each fiscal year.

State Transportation Funding Programs

Local Maintenance and Improvement Grant (LMIG)

One of the largest funding programs of the state motor fuel tax is the Local Maintenance and Improvement Grant (LMIG) program. Each local government receives a certain amount of money from the state annually based on its population (1/3) and mileage (2/3). As a result of the TIA not passing in July 2012, local governments in Metro Atlanta are now required to pay a 30% match to receive the LMIG dollars while regions that did pass the TIA only need to pay 10%. LMIG monies can be used for paving/resurfacing, intersection improvements, bridge repair and replacement, signal improvements, and sidewalk projects as long as they are within the road right-of-way. In 2013, the LMIG program provided $4.3 million in state funding for DeKalb and its cities, requiring a local match of $1.3 million.

Georgia Transportation Infrastructure Bank (GTIB)

In addition to its financing and tolling functions, SRTA also provides grants (maximum of $2.5 million with a local match) for bridge and roadway projects to local municipalities and Community Improvement Districts (CIDs) through the Georgia Transportation Infrastructure Bank (GTIB), created in April 2008. This program gives States the capacity to increase the efficiency of their transportation investment and significantly leverage Federal resources by attracting non-Federal public and private investment.

13.3 Local Funding

MARTA

MARTA Sales and Use Tax

MARTA receives proceeds from the collections of a sales and use tax under the Rapid Transit Contract and Assistance Agreement with the City of Atlanta and the Counties of Fulton and DeKalb. The sales tax is levied at a rate of one percent.

Under the law authorizing the levy of the sales and use tax, MARTA is restricted as to its use of the tax proceeds. No more than 50 percent of the annual sales and use tax proceeds can be used to subsidize the net operating costs of the system, exclusive of depreciation and amortization, including other costs and charges as defined in Section 25(I) of the MARTA Act.

The restrictions placed on the use of revenues have severely impacted MARTA's Operating Budget recently. In FY 2009, MARTA made a public declaration that its Operating Budget shortfall has deteriorated to crisis proportions and subsequently proposed drastic cuts in service—including suspending all operations for one day per week. In response to this crisis, the ARC Board voted to allocate $26 million in Federal ARRA funds to MARTA in April 2009 to fulfill the transit agency's operations funding gap. In return, MARTA agreed to use its capital funds for infrastructure improvements that complement local transportation infrastructure in its service area. MARTA still faces financial hardship,

despite a fare increase of 25 cents, due to the current economic downturn—which has affected the volume of retail sales— as well the weakening dollar.

Further aggravating MARTA's financial woes is the State Constitution's prohibition of using State motor fuel tax revenue for public transportation—thus MARTA is the only major public transportation agency in the nation that does not receive state funding.

The money collected as a part of the MARTA one-cent sales tax is used specifically by MARTA for transit projects in Fulton and DeKalb Counties. DeKalb does not otherwise have access to this money.

DeKalb County

Homestead Option Sales Tax (HOST)

DeKalb County has one primary source for funding transportation projects locally – the Homestead Option Sales Tax (HOST). In 1997, residents of DeKalb passed the HOST in which 80% of the monies raised through the sales tax go to homeowner tax relief and the remaining 20% is left to the Commissioners to direct. As much as 100% can go to homeowner tax relief; however, Commissioners have traditionally chosen to put the 20% toward transportation projects throughout the County. During some of the years of the recession, the Commissioners did choose to flex more or all of the money back to the homeowners. In 2008, the cities in DeKalb sued the County for their portion of the HOST funding and won. Previously, DeKalb County used to complete projects throughout the County (unincorporated and incorporated); however, now that cities get their own HOST money, the County will no longer fund these projects.

Table 13-1: Homestead Option Sales Tax Funds from 2003 to 2013

Year	Total HOST Monies for Transportation	Amount for Resurfacing	Amount for Transportation Capital
2003	$ 15,234,497.00	-	$ 15,234,497.00
2004	$13,715,193.68	-	$13,715,193.68
2005	$16,981,909.13	-	$16,981,909.13
2006	$11,3883794.48	-	$11,3883794.48
2007	$17,709,337.35	-	$17,709,337.35
2008	$18,234,749.00	-	$18,234,749.00
2009	$2,927,774.00	-	$2,927,774.00
2010	-	-	-
2011	$8,225,000.00	$3,500,000.00	$4,725,000.00
2012	$8,000,000.00	$3,750,000.00	$4,250,000.00
2013	$5,000,000.00	$3,500,000.00	$1,500,000.00

In 2012, a total of $108 million was collected in sales tax revenue in DeKalb County. Of that, nearly $87 million went back to property tax relief and the remaining $21.6 million was used for capital. Of that money, approximately $12.5 million went to the cities per the law suit (including the current payments as well as payments for previous equalization), leaving DeKalb County with only $8 million for transportation capital. With the conclusion of the bond program, monies previously used for resurfacing also needed additional funding and were taken from the HOST taxes as well. These issues prove that the biggest issue DeKalb County faces is the lack of local funding.

13.4 Possible Future Sources of Funding

Recognizing that DeKalb County has limited funding for transportation projects, it is important to consider some other possible funding sources that have been used by other municipalities, counties, and regions across the country.

Special Purpose Local Option Sales Tax (SPLOST)

Special Purpose Local Option Sales Taxes (SPLOSTs) have proved to be popular among local governments in Georgia as a vehicle for raising capital funds dedicated to infrastructure and facilities construction and improvements. Both Cobb County and Gwinnett County have transportation SPLOSTs that fund a substantial amount of their county projects. While the Regional TSPLOST of 2012 failed in metro Atlanta, this remains an option for a countywide vote for DeKalb County.

One critical consideration for DeKalb, however, is that existing State law does not allow sales tax within any county to exceed seven percent. Because of the HOST and MARTA one cent, DeKalb is currently at that threshold. Enabling legislation for a TSPLOST would have to include a provision that increases this "ceiling." Some of the County Commissioners have begun to work with the State Legislature on a possible bill.

Value Capture Districts

Value Capture Districts are primarily areas designated near public investments in transportation networks. They are a type of public financing that recovers some or all of the value that public infrastructure generates for private land owners. VCDs occur in many different forms. Among those are Tax-Increment Financing (TIF) or Tax Allocation Districts (TAD) in the state of Georgia, Special Assessment Districts or Community Improvement Districts (CID) in the state of Georgia, Infrastructure Impact Fees (such as traffic or utility fees that go toward an Infrastructure Fund), Joint Development, Air Rights, and Exactions, Public Easements, or other nonpossessory interests. Three CIDs currently exist in DeKalb County – DeKalb Perimeter CID, Stone Mountain CID, and Tucker CID.

Public-Private Partnerships (P3)

Generally, public-private partnerships can take one of four forms:

- Developer financing
- Negotiated investments
- Private ownership
- Private donation

Developer financing involves the payment of capital transportation improvement costs by private developers in return for dedicated land, construction of specific facilities, traffic control measures, changes in existing zoning and building regulations, or subsidized facilities. Such financing can be voluntary or required by law. It can also result in the reduction of public expenditures but can be inequitable to developers. The developer is directly responsible for assisting in providing roadway improvements for at least part of the traffic from the development. Furthermore, the developer may have some voice concerning the improvements that are selected.

Negotiated investments involve contributions by private developers to the cost of public transportation improvements in return for changes in existing zoning and building regulations. The revenue potential may be limited by growth, construction rate, mobility requirements, and location desirability.

Private ownership includes the sharing of ownership costs between transportation agencies and private entrepreneurs, employer subsidies for transportation, or development of a private consortium with authority to finance, construct, and charge fees to provide transportation. Such ownership is eligible for specific depreciation, investment tax credit or tax deductions. Private donations involve land or capital contributions by business and private citizens for improvements that have strong private interests. It provides a means to complete infrastructure improvements on a timely basis and is eligible for specific depreciation, investment tax credit or tax deductions.

Despite the potential for public-private partnerships, total ownership and operation of transportation facilities by the private sector will continue to be a small part of the solution to the funding issue. Donations and joint development can be greatly enhanced by overcoming the governmental and institutional barriers through such concepts as nonprofit transportation corporations. Federal legislative proposals to allow private contributions to count as the state or local match on Federal-aid highway projects could make this revenue option more desirable to local officials.

Parking Fees

Parking in public spaces and facilities is an activity undertaken by the vast majority of motorists in the Atlanta Region—whether parking in their office's parking deck or using a parking lot in front of the supermarket. Proponents of using parking fees as a source for transportation revenue argue that due to this behavior, parking facilities would make a logical point-of collection for fees from users of the Region's transportation infrastructure. Additionally, Atlanta has one of the lowest costs of parking in an urban center in the nation—averaging $90 per month.

The two most prominent, yet basic, collection options are the following:

Transactional Tax

This is the most commonly used collection technique in the United States and involves a scenario where a fee would be collected at every transaction made for parking as a percentage of the overall parking cost. This bears a resemblance to a sales tax on parking. However a major drawback to this method is that there are a number of free parking spaces offered to motorists and commuters in Atlanta, such as parking at workplaces and at private residences—thus mitigating the incentives that a motorist would have for utilizing another mode of transportation. The City of Atlanta has estimated that if a $1 daily surcharge

was levied on transactions for 200,000 parking spaces inside of the city (including an indexing the charge to an inflation rate of 1 percent annually), it would generate $75.9 million in its first year of implementation— eventually increasing to $181.1 million annually by 2030.

Ownership Tax

This collection option refers to taxing an owner of a parking space through yearly billing on a per-space basis. Most likely, the owner of the space would pass on the cost to the user thus generating revenue for the owner to pay the tax. The City of Atlanta has estimated that instituting a 10-percent tax rate on 50,000 spaces in the city that average $90 per month, $5.4 million in revenue would be generated in its first year—subsequently increasing to $13.4 million annually by 2030.

Overall parking fees would be the most useful at the major regional activity centers in the Atlanta Region and would be most likely collected by local governments rather than a regional entity. The advantage for this form of generating revenue is that the burden of maintenance and operation is dispersed amongst all users of the local transportation network rather than solely being placed on local residents. Additionally parking fees are more of a user-fee based mechanism which may be less controversial to enact than a more conventional tax increase.

Impact Fees

Developer impact fees and system development charges provide a funding option for communities looking to fund collector streets and associated infrastructure. They most commonly are used for water and wastewater system connections or police and fire protection services, but recently they have been used to fund school systems and pay for the impacts of increased traffic on existing roads. Impact fees place the costs of new development directly on developers and indirectly on those who buy property in the new developments. Impact fees free other taxpayers from the obligation to fund costly new public services that do not directly benefit them. Cities and counties in Georgia may enact development impact fees by securing special legislative authorization.

Transportation Bonds

Transportation bonds have been instrumental in the strategic implementation of local roadways and non-motorized travel throughout many states, including within DeKalb County. Voters in communities both large and small regularly approve the use of bonds to improve their transportation system. Projects that historically have been funded through transportation bonds include sidewalks, road extensions, new road construction, and streetscape enhancements.

Health

14 Health Considerations

14.1 Health and Transportation

Public health has become a nationwide concern over the past decade and transportation can play a key role in improving overall health in a community. Beyond basic safety concerns, such as vehicle collisions, there are many factors that link transportation with health such as air quality impacts from automobiles and increased physical activity through walking and cycling. Additional pedestrian and bicycle facilities as well as better access to public transit can reduce negative air quality impacts and can encourage physical activity while also increasing mobility for all users. The Centers for Disease Control and Prevention (CDC) suggests that creating places for people to be physically active can result in a 25% increase in the percentage of people who exercise three times a week.

14.2 Air Quality and Respiratory Illness

Currently, the Atlanta region does not meet the federal standards for ozone and fine particulate matter. The Atlanta region is in nonattainment for ground level ozone and fine particulate matter, two of the six pollutants regulated under the Clean Air Act. If an area is in nonattainment, the transportation plans developed by that region's Metropolitan Planning Organization must be approved by the US DOT and the US EPA in order to be eligible for federal funding. If these agencies determine that a transportation plan, if implemented, will significantly worsen air quality in a region in nonattainment, then those agencies can withhold federal funding for projects. That determination is primarily based on results from the regional transportation demand model that is used to predict vehicular travel through the transportation system. PLAN 2040, which was developed and submitted by the Atlanta Regional Commission, received approval and is in conformity with the requirements of the Clean Air Act. New project recommendations from the DeKalb County Transportation Plan will need to be modeled before they can be incorporated in the regional transportation plan.

Aside from qualification for federal funding, air quality is important because of its impact on human health. According to the CDC, transportation pollutants are one of the largest contributors to unhealthy air quality. Negative impacts of poor air quality can include lung cancer and asthma. The CDC reports that in the last decade, the proportion of people with asthma in the United States grew by nearly 15%. In 2010 the number of children in the Unites States that had asthma is 7 million (or 1 in 11). Particulate matter is also a risk factor for cardiovascular disease. [59]

14.3 Obesity Rates

In 2010, approximately 36% of Americans could be considered clinically obese. Among children and adolescents, 17% were considered to be obese. About 28% of Americans are classified as clinically obese, while another 36% are considered overweight.[60] A study in the American Journal of Preventive Medicine suggested that car commuters, even those who exercised in their free time, gained more weight in a four-year span than those who walk, bicycle, or take public transit.[61]

[59] http://www.cdc.gov/asthma/impacts_nation/AsthmaFactSheet.pdf
[60] http://www.cdc.gov/nchs/data/databriefs/db82.pdf
[61] http://www.ajpmonline.org/article/S0749-3797(12)00776-3/abstract

In order to maintain good personal health, the Centers for Disease Control and Prevention (CDC) recommends that adults engage in approximately 2 hours and 30 minutes of moderate aerobic activity every week. Brisk walking or cycling to nearby destinations on a daily basis can fulfill that weekly need. It should also be noted that the CDC recommends that children engage in at least 60 minutes of physical activity daily.

Environment

15 Environmental Considerations

The DeKalb County Transportation Plan has considered environmental impacts relating to the recommendation of specific projects. Environmental considerations are multifaceted.

15.1 Water Resources

Watersheds, stream corridors, and wetlands comprise the vital water resources of DeKalb County. They provide for a variety of ecological values and functions, including wildlife habitat, flood control, water quality preservation, drinking water supply, fisheries, and recreation. Figure 15-1 illustrates the locations of water resources within DeKalb County, GA.

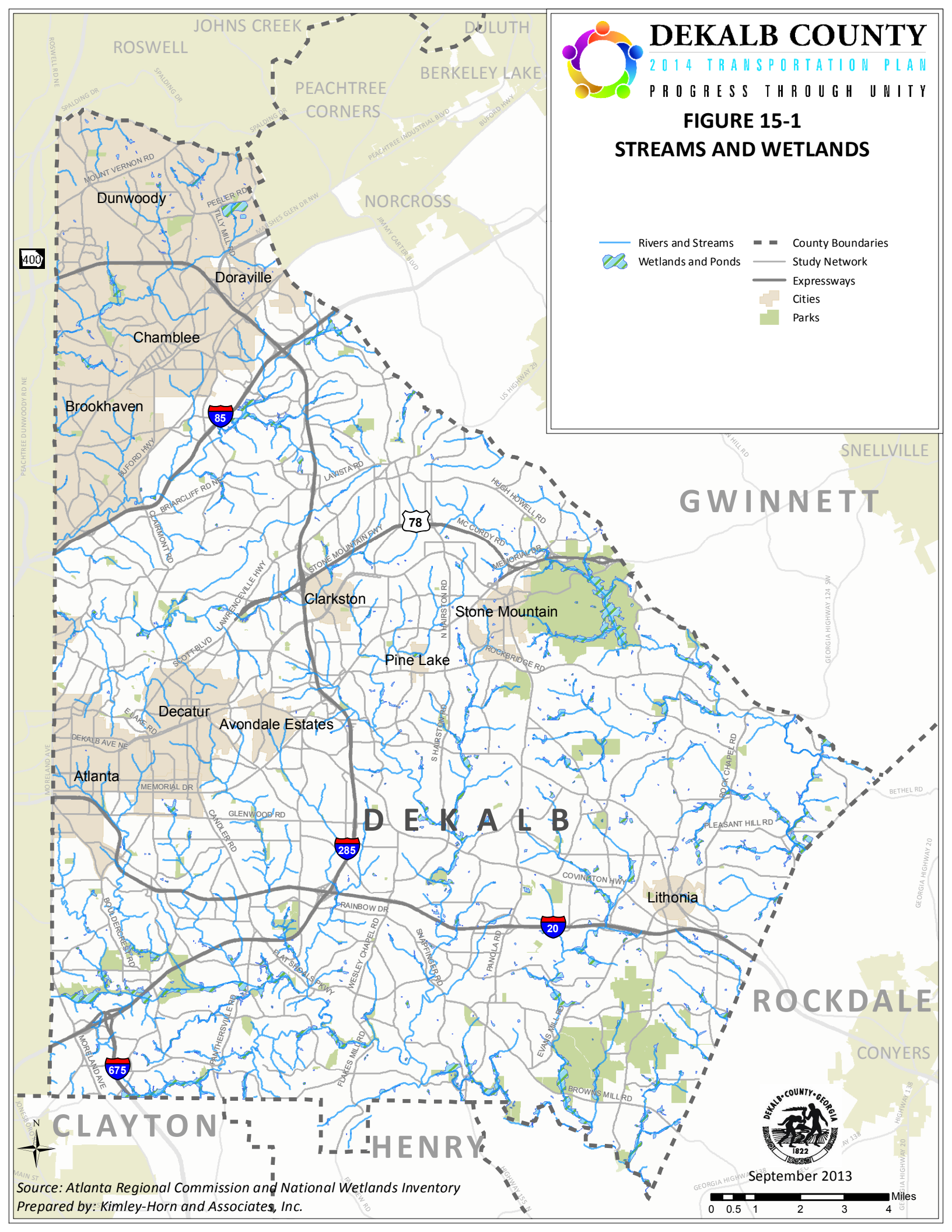
DeKalb County's drinking water comes from a raw water pumping station in north Fulton County along the Chattahoochee River. The Chattahoochee River begins in northeast Georgia and flows generally southwest until it becomes the Alabama-Georgia border which then flows south to the Gulf of Mexico in Apalachicola, Florida. The Georgia Department of Natural Resources (DNR) regulates the amount of water that communities can withdraw from the Chattahoochee River and currently, the Georgia DNR allows DeKalb County to withdraw up to 140 million gallons daily.

15.2 Watershed

Watersheds are areas that share a common water drainage pattern. DeKalb County has three watershed management plans; the South Fork Peachtree Creek Basin, the South River, and Isis. A buffer must be maintained between any roadway and a stream in order to maintain the water quality within the watershed.

15.3 Wetlands

Wetlands are among the most productive ecosystems in the world, playing an integral part in the ecology of the watershed, and contributing to atmospheric maintenance; therefore, it is important to protect these delicate resources. A wetland is defined as land where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. The locations of wetlands within DeKalb County are indicated in Figure 15-2. Wetlands are regulated resources and permits from the U.S. Army Corps of Engineers and the State of Georgia are required with potential impacts.



Source: Atlanta Regional Commission and National Wetlands Inventory
Prepared by: Kimley-Horn and Associates, Inc.

15.4 Parks

Approximately 47 parks are located in DeKalb County, many of them owned and managed by municipal governments. Stone Mountain Park, which is owned by the State of Georgia, is the largest park in DeKalb County.

One project identified in the Downtown Tucker Area LCI is a linear park between Railroad Avenue and the CSX tracks.

15.5 Regionally Important Resources

The Department of Community Affairs (DCA) requires Regional Commissions, such as the ARC to involve regional stakeholders in a comprehensive effort to identify important natural and cultural resources throughout the region. The intent of the designation for Regional Important Resources (RIR) is to enhance the focus on protection and management of important natural and cultural resources, as well as to provide careful planning for and consideration of the impacts of new development on these important resources. It also prepares local, regional, and state-level organizations with a framework for better coordination in order to protect and manage these resources. There are three categories of resources:

- Areas of conservation and/or recreational value
- Areas of scenic and/or agricultural value
- Historic and cultural resources

The DCA requires ARC to seek nominations from regional stakeholders. Recommended resources are evaluated for the *Value and Vulnerability* within the context of the region, as well as considered for *Guidance for Appropriate Development Practices* and *General Policies and Protection Measures* in order to promote the stewardship of these resources. The ARC provides six additional criteria for evaluating resources in addition to the DCA's Rules for Regional Important Resources. The six additional ARC criteria are that the resource nominated:

1. Preserves water quality and quantity by protecting drainage, flood control, recharge areas, watersheds, buffers, etc.
2. Creates or preserves active or passive greenspaces including trails, gardens and informal places of natural enjoyment in areas currently underserved by greenspace
3. Protects wildlife habitat by creating, buffering, preserving habitat areas and corridors
4. Preserves areas that have historical or cultural value by virtue of history, place or time period represented
5. Preserves significant working agricultural or forest resources and/or creates opportunities for local food production activities
6. Areas that contribute to region-wide connections between existing and proposed regional resources[62]

In DeKalb County, there are 32 Regionally Important Resources. These include several types of RIRs, as shown in Figure 15-2.

[62] The Atlanta Regional Commission: *Atlanta Region Plan 2040 Regional Resource Plan*

There are 15 Historic Districts designated by DeKalb County, with three Fulton County Historic Districts that fall within DeKalb boundaries. Soapstone Ridge is considered an Archaeological Site, the Decatur Cemetery is a Nationally Registered Cemetery, Stone Mountain is a state park, and the Arabia Mountain Heritage Areas is a part of the National Park Service. Community gardens, designed landscapes, and river corridors along with watersheds make up the additional DeKalb RIRs. The definitions for each of these RIRs types, as described in ARC's *Plan 2040 Regional Resource Plan*, are noted below:

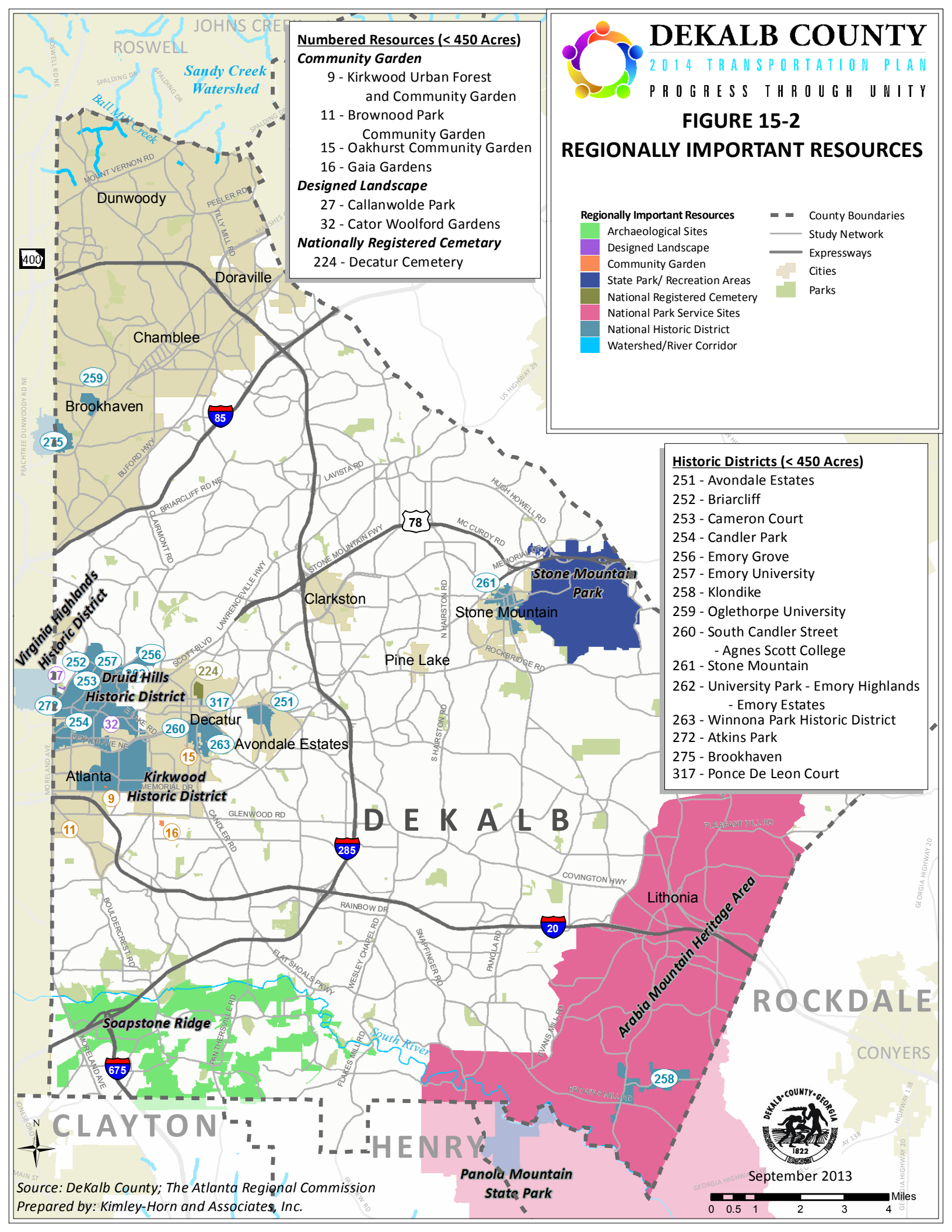
- **Archaeological Sites** contain physical remains from the past that have yielded or may yield information on history or prehistory, particularly those that have the potential to yield new and significant information.
- **Cemeteries** are areas set apart for graves, or areas containing graves, tombs or funeral urns.
- **Community Gardens** are greenspace areas used for limited production of food and/ or ornamental plants that are gardened and managed collectively by a limited group of individuals.
- **Designed Landscapes** are areas containing both plant materials and hardscape elements placed in an intentional design – formal or informal – including areas of institutional land uses, such as universities, churches and public buildings, which generally exclude food production and recreation.
- **National Historic Register Districts** are designated by the federal government and include buildings, structures, sites and objects that are, by definition, worthy of preservation.
- **National Park Service Sites** are formally designated by the federal government and encompass several classifications for park sites, including National Parks, National Heritage Areas, National Landmarks, and National Natural Landmarks.
- **State Parks**, including State Wildlife Management Areas, are formally designated by state government.
- **Water Supply Watersheds** are defined within the context of regional river basins and protect community drinking water sources.[63]

15.6 A Note on Climate Change

In regards to the relationship between transportation and the environment, climate change is often cited as a negative impact that results in part from excessive vehicular emissions. Climate change refers to a significant change in the climate lasting for an extended period of time. It can include changes in temperature, precipitation, or wind patterns that occur over at least several decades. According to the US Environmental Protection Agency, the Earth's average temperature has risen by 1.4°F over the past century, and is projected to rise another 2 to 11.5°F over the next hundred years.[64]

Transportation investments can impact the amount of vehicle miles traveled within DeKalb County. In general, heavier investments in walkability, cycling infrastructure, and public transportation can enable more people to choose alternative modes of travel, thereby reducing the amount of travel that is done in automobiles. Any investments in infrastructure supporting alternative modes should also be paired with a land use discussion to ensure those investments will make sense within a given context.

[63] The Atlanta Regional Commission: *Atlanta Region Plan 2040 Regional Resource Plan*
[64] http://www.epa.gov/climatechange/basics/


DEKALB COUNTY
2014 TRANSPORTATION PLAN
PROGRESS THROUGH UNITY
FIGURE 15-2
REGIONALLY IMPORTANT RESOURCES
Numbered Resources (< 450 Acres)
Community Garden
9 - Kirkwood Urban Forest and Community Garden
11 - Brownood Park Community Garden
15 - Oakhurst Community Garden
16 - Gaia Gardens
Designed Landscape
27 - Callanwolde Park
32 - Cator Woolford Gardens
Nationally Registered Cemetary
224 - Decatur Cemetery
Regionally Important Resources
Archaeological Sites
Designed Landscape
Community Garden
State Park/ Recreation Areas
National Registered Cemetery
National Park Service Sites
National Historic District
Watershed/River Corridor
County Boundaries
Study Network
Expressways
Cities
Parks
Historic Districts (< 450 Acres)
251 - Avondale Estates
252 - Briarcliff
253 - Cameron Court
254 - Candler Park
256 - Emory Grove
257 - Emory University
258 - Klondike
259 - Oglethorpe University
260 - South Candler Street - Agnes Scott College
261 - Stone Mountain
262 - University Park - Emory Highlands - Emory Estates
263 - Winnona Park Historic District
272 - Atkins Park
275 - Brookhaven
317 - Ponce De Leon Court
ROSWELL
JOHNS CREEK
Sandy Creek Watershed
Ball Mill Creek
Dunwoody
Doraville
Chamblee
Brookhaven
Clarkston
Stone Mountain
Stone Mountain Park
Pine Lake
Decatur
Avondale Estates
Atlanta
Kirkwood Historic District
Druid Hills Historic District
Virginia Highlands Historic District
Lithonia
Arabia Mountain Heritage Area
Soapstone Ridge
Panola Mountain State Park
South River
DEKALB
ROCKDALE
CONYERS
CLAYTON
HENRY
Source: DeKalb County; The Atlanta Regional Commission
Prepared by: Kimley-Horn and Associates, Inc.
September 2013
Miles
0 0.5 1 2 3 4

Next Steps

16 Next Steps

This Existing Conditions and Needs Assessment Report provides information regarding the operation and efficiency of the existing transportation infrastructure and services. Following the completion of this report, a multimodal list of all potential projects will be compiled. This list is intended to be exhaustive and will be significantly larger than the final resulting list of recommended projects. Following the development of the initial exhaustive list, those projects will be subjected to an evaluation process that considers both quantitative and qualitative factors. The process is intended to organize the list using a scoring system so that the highest priority projects can be identified. The factors that will be used to influence the scoring will include cost estimates, technical analysis results, the ARC travel demand model, conformity with project goals, public opinion, and availability of funding. The evaluation process is expected to take several months and will involve input from many different groups including the County Commission and CEO, County staff, the Project Management Team, the project stakeholder teams, and the general public. Once the final list of recommended projects is developed, the last step will be to obtain formal approval from the County Commission and CEO. This project is scheduled to be completed in the Spring of 2014.