

DeKalb County TRANSIT MASTER PLAN

August 2019

DeKalb County Transit Master Plan

Final Plan Documentation



DeKalb County
GEORGIA



Prepared by:



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Preface

The DeKalb Transit Master Plan (TMP) is a 30-year vision for future transit investments in DeKalb County. This includes major new transit investments as well as enhancements to existing transit services. The mission of this plan is to address the county's mobility challenges, foster economic development and improve the quality of life for residents. The planning process began in the summer of 2018 and concluded in the summer of 2019.

The DeKalb TMP was developed through a transparent and collaborative partnership between the Atlanta Regional Commission (ARC), Metropolitan Atlanta Regional Transit Authority (MARTA), and DeKalb County Government. Additional study partners included the 12 municipalities within the county and regional agency partners including Georgia Department of Transportation (GDOT) and the Atlanta-region Transit Link Authority (ATL).

The Final Plan Documentation is organized in three major sections:

- 1.....Executive Summary
- 2.....Baseline Conditions Report
- 3.....Final Report

Study Partners



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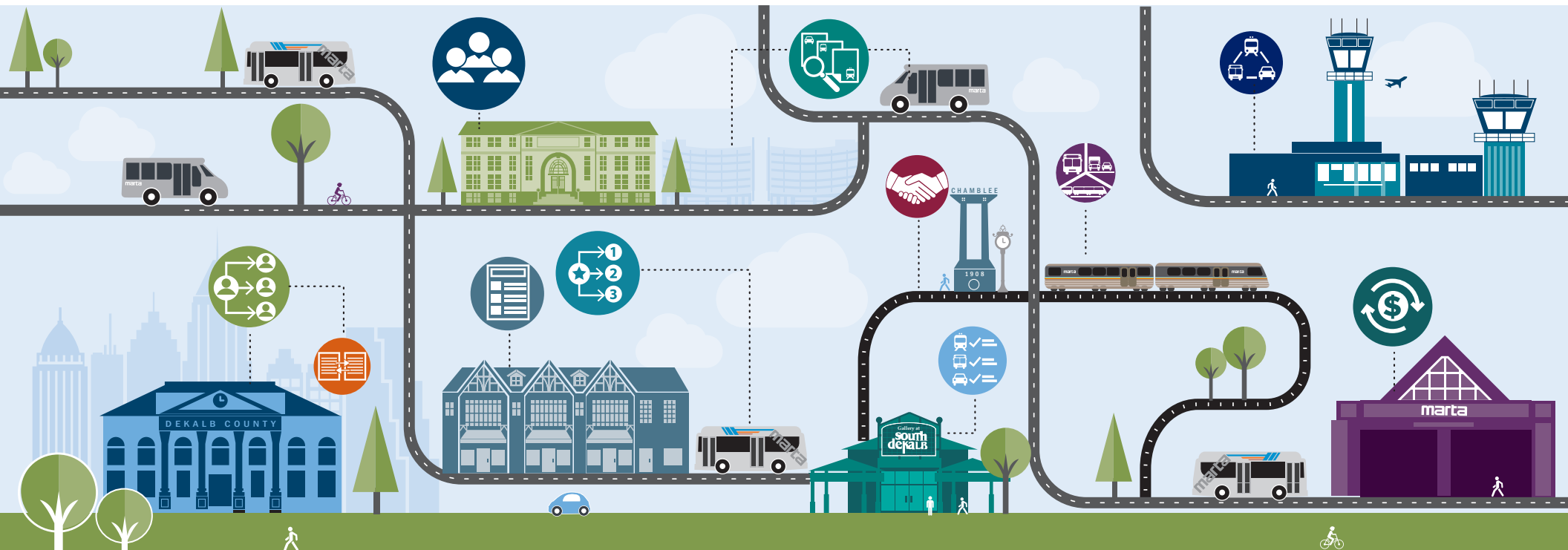
Executive Summary

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Executive Summary

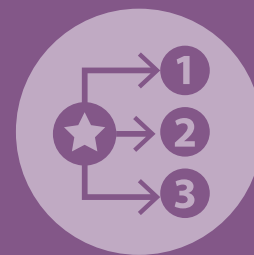
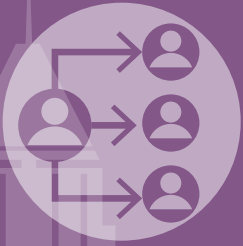


July 2019



Prepared by:





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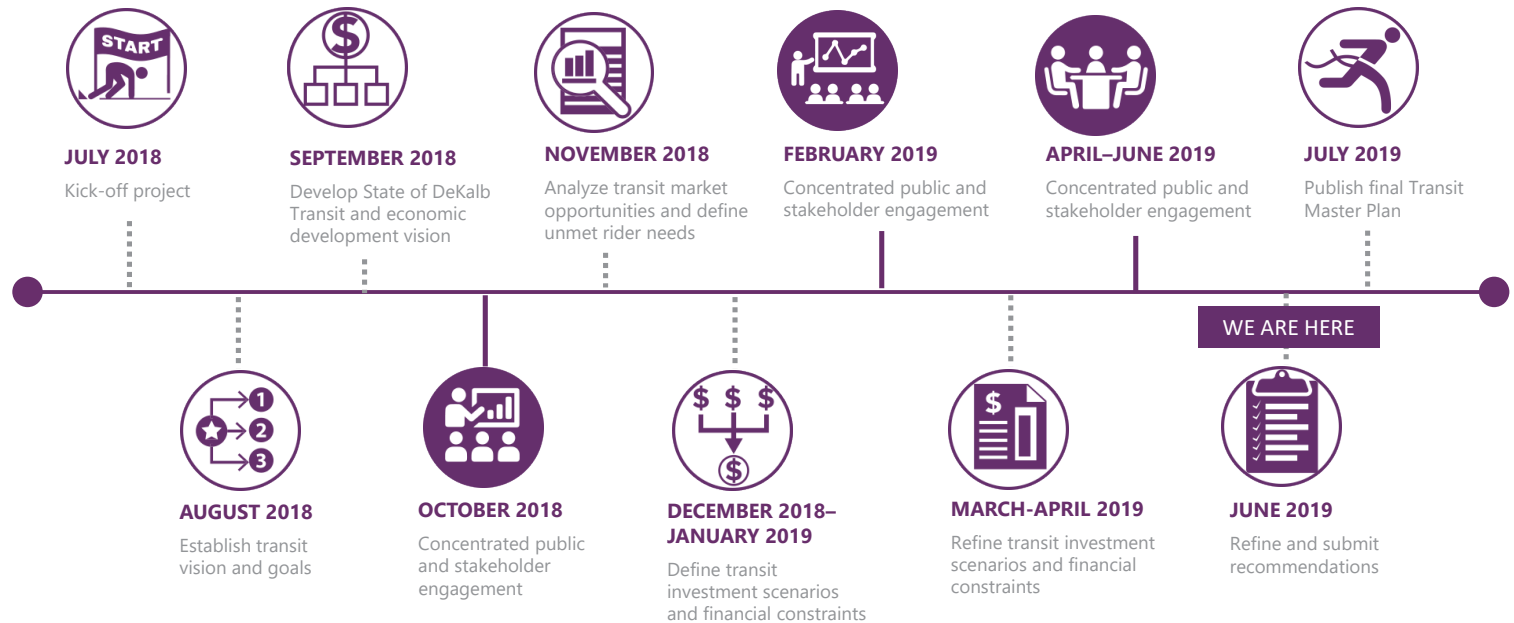
Study Partners

The DeKalb Transit Master Plan (TMP) was developed through a transparent and collaborative partnership between **the Atlanta Regional Commission (ARC), Metropolitan Atlanta Regional Transit Authority (MARTA), and DeKalb County Government**. Additional study partners include the 12 municipalities within the County, and regional transportation agency partners the Georgia Department of Transportation (GDOT) and the Atlanta-region Transit Link Authority (ATL).



Plan Development Schedule

The development of the DeKalb TMP was a 13-month process, which began in the summer of 2018 and concluded in the summer of 2019. Key project milestones have been identified in the timeline to the right.



What is DeKalb County's Transit Master Plan?

The Transit Master Plan will address DeKalb County's **mobility challenges**, help to **enhance future development opportunities**, and **improve the quality of life** within each of DeKalb's cities and unincorporated communities, both north and south. The plan will also seize opportunities in DeKalb County for service enhancements today and expansion opportunities tomorrow to create a 30-year vision and beyond for transit investments.

Project Goals



Live, Work, Play and Use Transit

Focused on creating an environment where transit is a seamless part of living, working and playing in DeKalb County. By creating a robust network of complementary modes that include **different types of transit solutions**, the plan will **improve residents' quality of life** and businesses' bottom lines.



Ensure that the Transit Vision is Affordable and Effective

Create an environment to **listen, educate, and collaborate** with residents, local businesses, cities, and DeKalb County, together we can develop a prioritized list of well-defined, realistic, and feasible transit improvements to guide us for the next few years and beyond.



Make Sure Thriving and Emerging Areas have Transit Service

Defined **fiscally sensible solutions**, the Master Plan will **bolster economic development** activities in currently prosperous areas and encourage investment in those areas identified for future growth so that all areas of the County will benefit from future transit improvements.



Make sure Transit is Available for Everyone

Provide mobility options for all DeKalb County residents. The recommendations will balance the needs of **discretionary riders** who could choose to commute via private automobile instead of transit with the needs of more **transit-dependent riders** such as seniors, individuals with low incomes, underserved residents, persons with disabilities, and youth.

State of the Transit System

Existing Transit Service in DeKalb County

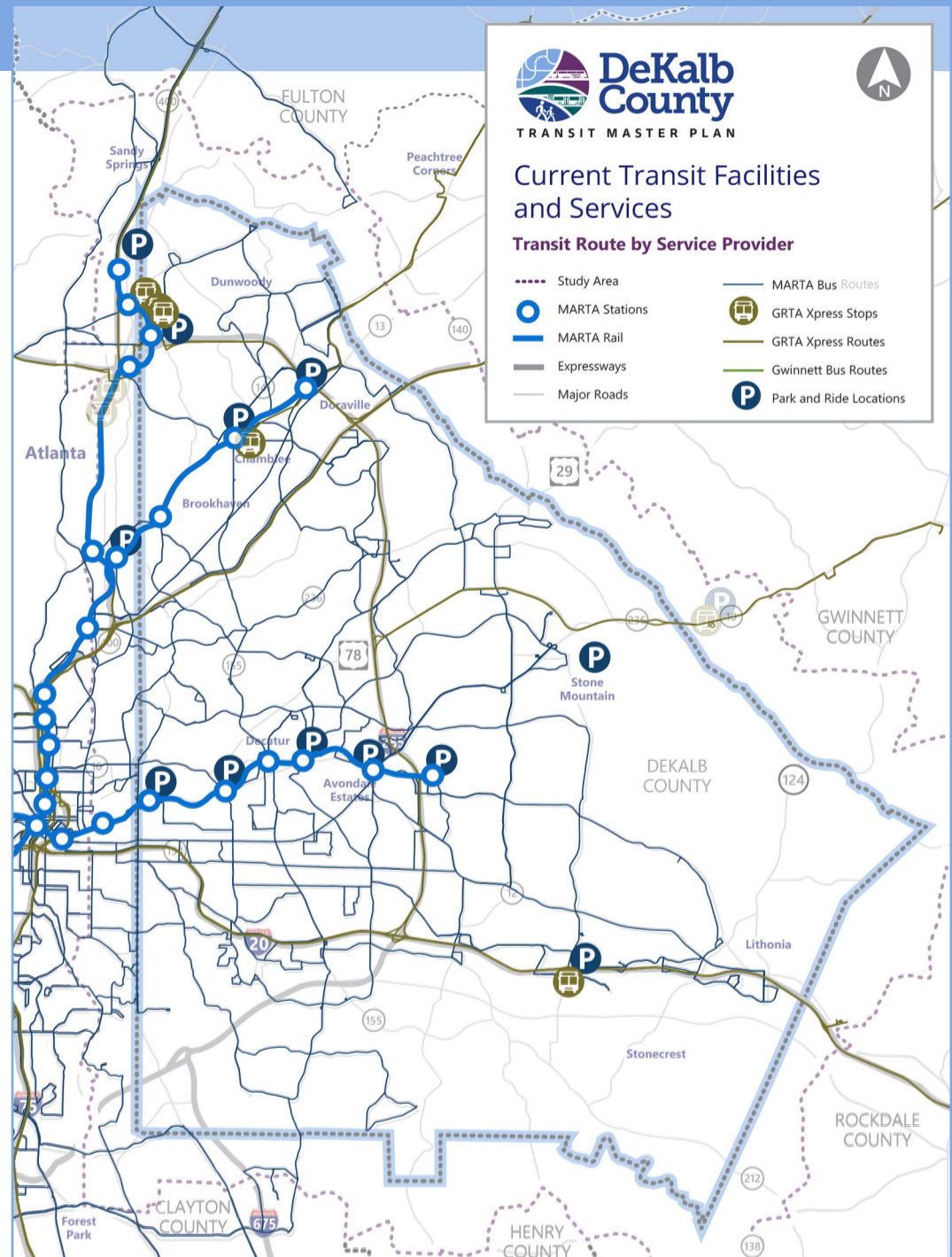
- 46 MARTA Bus Routes
 - SRTA Xpress Service
 - Gwinnett County Transit
- 10 Rail Stations
- 2 Park-n-Ride Locations

Highest Utilized Train Stations

- Indian Creek
- Kensington
- Doraville

Areas With High Bus Ridership

- Rail stations
- Park-and-ride lots
- Buford Highway
- Memorial Drive
- I-20 East
- Mall at Stonecrest
- Candler Road/South DeKalb Mall
- Emory/CDC

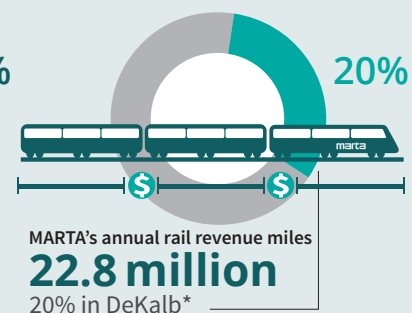
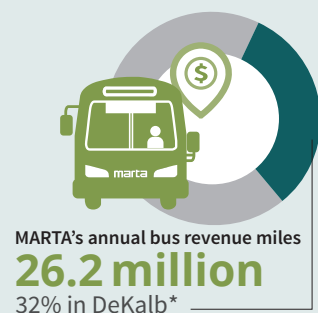
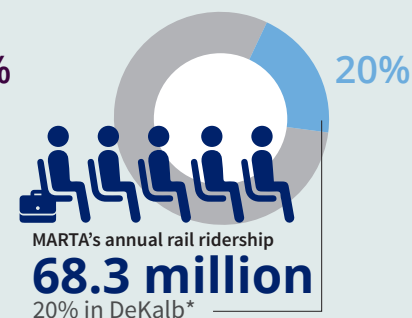
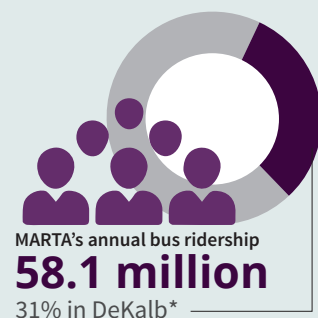


To build a better transit system...

DeKalb County first must understand how the current transit system is functioning. Transit services in DeKalb County are provided by the MARTA, the State Road and Tollway Authority (SRTA), and a few independently operated private service providers. The map on the previous page illustrates the current MARTA rail, bus routes, and facilities located in DeKalb County and key systems operating statistics are noted in the infographics to the right and below.

MARTA Bus and Rail Services

2017 Ridership and Service Statistics

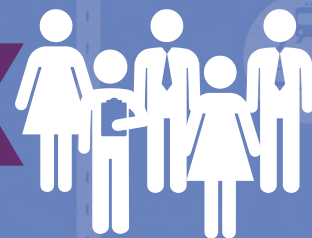


*Calculations exclude parts of DeKalb County within the City of Atlanta
Source: Data provided by MARTA.

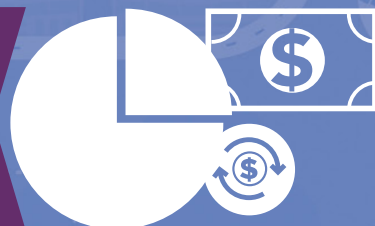
34% of the
marta
service area
is in DeKalb County



27% of employment
in the marta
service area
is in DeKalb County



In 2017, DeKalb County
contributed
25%
of the marta
sales tax revenue



36%
of population in the
marta service area
lives in DeKalb County



Public Engagement Process

The DeKalb Transit Master Plan was developed through a comprehensive and robust public involvement process. A variety of traditional and innovative techniques were used to gather input from the public, stakeholders, neighborhood leaders and elected officials to ensure the plan addressed a wide-variety of community concerns and needs. Major engagement techniques included:

- **Public Open Houses**
- **Stakeholder Advisory Committee**
- **Stakeholder Interviews**
- **Project Management Team**
- **Peer City Tour to Minneapolis**
- **Focus Groups**
- **Transit and Land Use Visioning Charette**
- **Project Share (Pecha Kucha-Style)**
- **Project Website/Online Surveys/Fact Sheet**
- **Pop-Up Events**
- **DeKalb City's Outreach and Input Presentations**



Examples of consensus and concerns heard through the public and stakeholder outreach process

Leverage GDOT express lane investments for BRT service.

Increase funding for transit.

Limited capital enhancements with existing MARTA penny

Lack of local bus and paratransit services in South and East DeKalb.

Develop mobility centers and mobility on-demand services.

Need for transit in the I-20 E corridor as a catalyst for the development.

Need for public-private-partnerships & innovative financing.

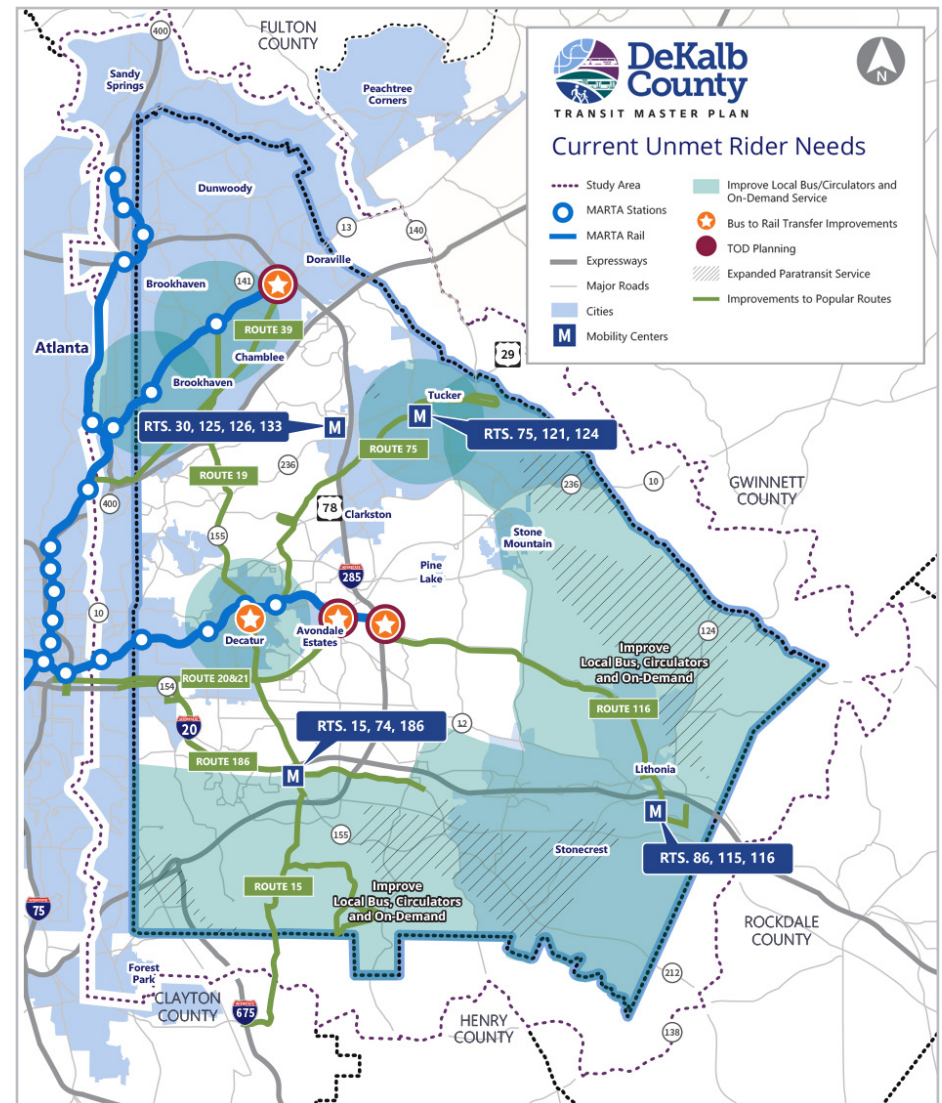
BRT investments on Buford Hw

Unmet Rider Needs

After listening to community input and completing a comprehensive review of the MARTA system, land use trends, and travel conditions in DeKalb County, the DeKalb TMP identified several unmet rider needs to be addressed:

- **Expansion of paratransit services**
- **Improvements to bus service in popular corridors**
- **Mobility centers to better accomodate bus-to-bus transfers**
- **Expand local bus services, circulators and on-demand service**
- **Bus to rail transfer improvements**
- **First mile/last mile infrastructure improvements**

For example, as indicated by the green shading on the map to the right, significant portions of South and East DeKalb are without local bus or paratransit services.



High Capacity Transit Modes

The DeKalb TMP considered a variety of transit modes and services to meet the needs of DeKalb's residents. **Four high capacity transit modes** were examined and included in the transit investment scenarios for DeKalb County. These modes include **Heavy Rail Transit (HRT), Light Rail Transit (LRT), Bus Rapid Transit (BRT), and Arterial Rapid Transit (ART)**. In addition, paratransit, mobility on-demand, and local bus modes were also included in the planning process.



Arterial Rapid Transit

Guideway: Mixed roadway

Frequency: 15 min

Payment: On-board

Land Use: Supports some density and intensity

Operating Cost: Approx. \$100-\$150 per vehicle hour

Capital Cost: Approx. \$2.5 million per mile



Bus Rapid Transit

Guideway: Seperate roadway

Frequency: 15 min

Payment: Off-board

Land Use: Supports some density and intensity

Operating Cost: Approx. \$100-\$150 per vehicle hour

Capital Cost: Approx. \$25 million per mile



Heavy Rail

Guideway: Seperate Tracks

Frequency: 10 min

Payment: Off-board

Land Use: Supports significant density and intensity

Operating Cost: Approx. \$250-\$300 per vehicle hour

Capital Cost: Approx. \$250 million per mile



Light Rail

Guideway: Seperate Tracks

Frequency: 10 min

Payment: Off-board

Land Use: Supports significant density and intensity

Operating Cost: Approx. \$250-\$350 per vehicle hour

Capital Cost: Approx. \$150 million per mile

Financial Modeling

Financial forecasts for the DeKalb TMP were developed based on two revenue sources. However, this does not preclude consideration of other financial sources such as public/private or innovative funding options.

Existing MARTA Sales Tax – Revenue projections based on the current 1-penny sales tax assessed under the MARTA Act in DeKalb County. This source is used to maintain the current system in a state of good repair and deliver sustaining capital projects. Expansion of the system is not possible under this source.

HB 930 Sales Tax – Under new legislation passed in 2018, it is possible for DeKalb County to levee up to 1-penny in new sales tax funding for transit over 30-years. A ballot referendum would have to pass a County vote. If implemented, this sales tax could be used to expand transit offerings in DeKalb County. For the Master Plan, 30-year projections of a ½- and 1-penny sales tax revenue were calculated.

Potential Sales Tax Revenue under HB 930 (over 30 years in 2019 dollars)

Full-Penny
(Maximum Allowed)



\$3.65 B

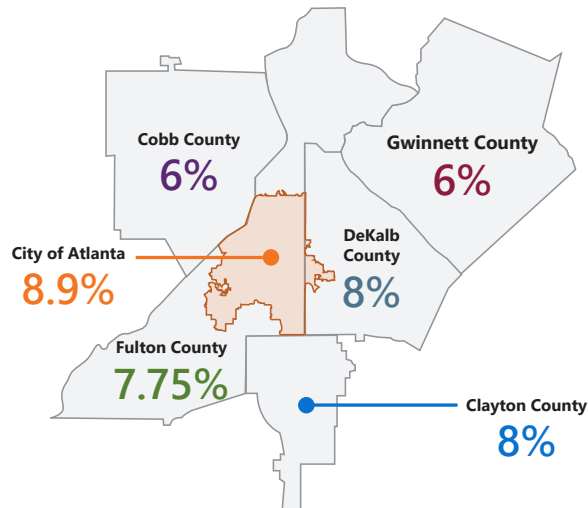
Half-Penny



\$1.85 B



Current Sales Tax Rates



All but 4 counties in Georgia
are at 7.0% or 8.0% sales tax



Financial Forecasting

DeKalb County Sales Tax

State of Georgia	4%
EHOST (<i>Equalization Homestead Option Sales Tax</i>)	1%
Education	1%
SPLOST	1%
MARTA	1%

Current Total 8%

Universe of Projects & Evaluation

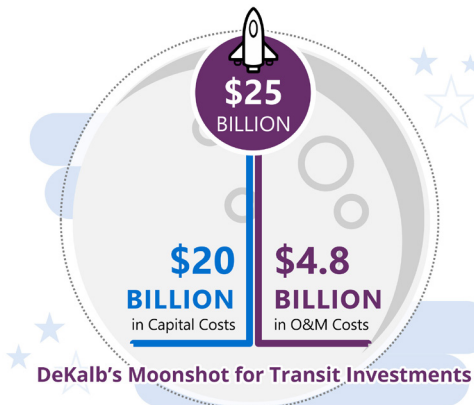
The DeKalb TMP process engaged the community and stakeholders to identify the universe of potential transit expansion options. Through this process, a total of 40 potential transit concepts totaling roughly \$25 Billion were advanced into an evaluation process.

Evaluation Process

Each concept in the universe of transit options was evaluated across four major goal areas:

- **Performance:** Comparison of ridership projections
- **Economic Development Potential:** How well a potential option serves the economic development vision for the County
- **Equity:** How well a potential option serves Equitable Target Areas (ETAs), high concentrations of low-income and minority populations
- **Land Use Compatibility:** How compatible a potential option is with land use densities and intensities

In addition to the four evaluation areas, cost estimates were developed to compare overall benefits against projected costs.



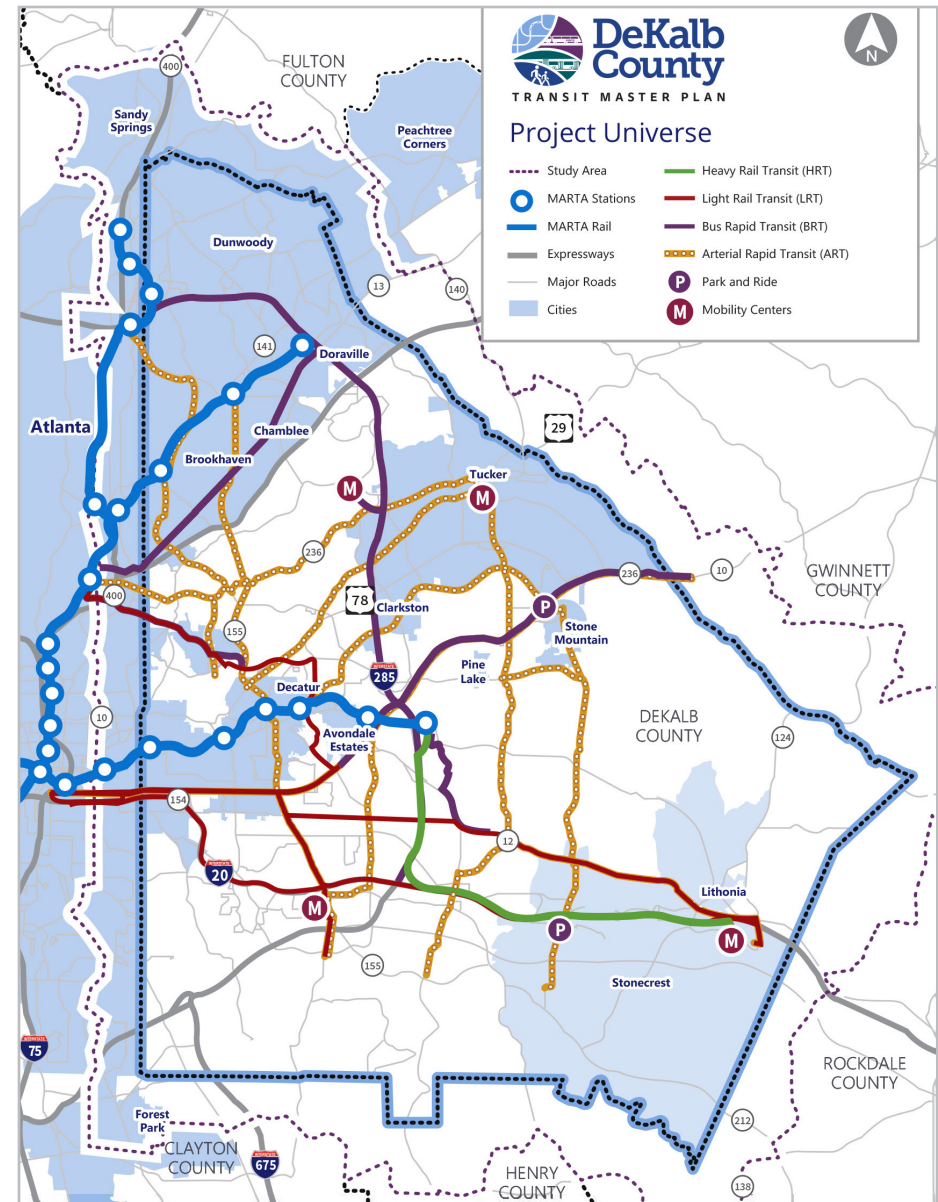
3 Heavy Rail, 9 Light Rail,
13 Bus Rapid Transit, &
15 Arterial Rapid Transit
Projects

\$20 B in Capital Costs

+ \$4.8 B in O&M Costs*

\$25 Billion

*Includes sustaining capital funding



Recommendation 1

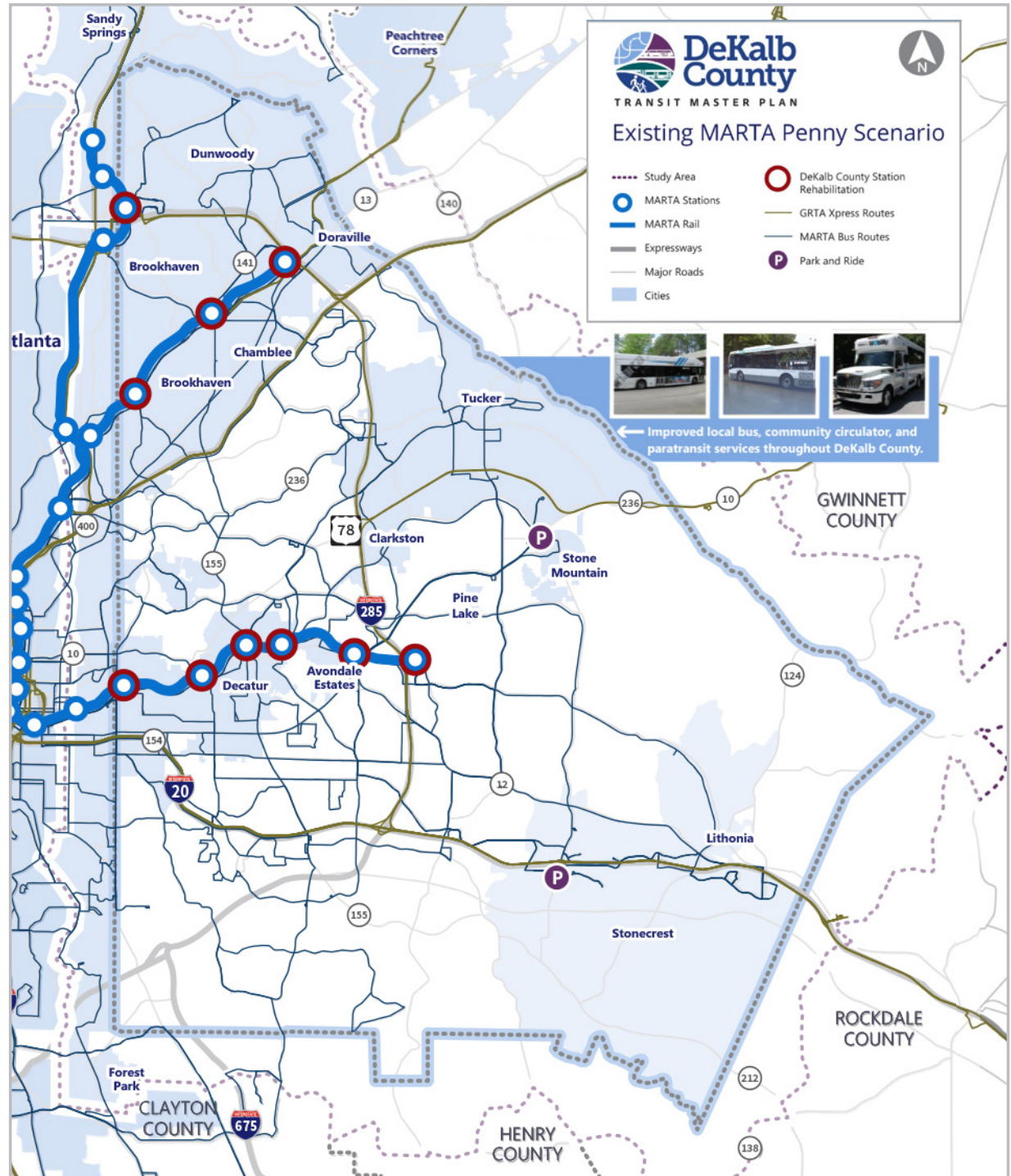
Advance Four Transit Scenarios for Further Consideration and Additional Public Input and Education

It is the recommendation of the DeKalb TMP that four potential transit scenarios be advanced forward for additional public and stakeholder input and education. These scenarios include the **Existing MARTA Penny Scenario, Half-Penny Scenario, Full-Penny Scenario, and Previously Adopted Scenario** as illustrated on the maps that follow. The public/stakeholder education and input process should be designed to increase the public's understanding on the travel benefits and impacts of the scenarios. Additionally, visualizations of how modes will integrate into the community such as 3D renderings, models and videos may be necessary. Education on future-proofing to address the impacts and opportunities of advancing technologies as part of the implementation of the DeKalb TMP is also recommended.

Existing MARTA Penny Scenario



Focuses on the maintenance, sustaining capital, and operations of existing system with no additional transit expansion projects.

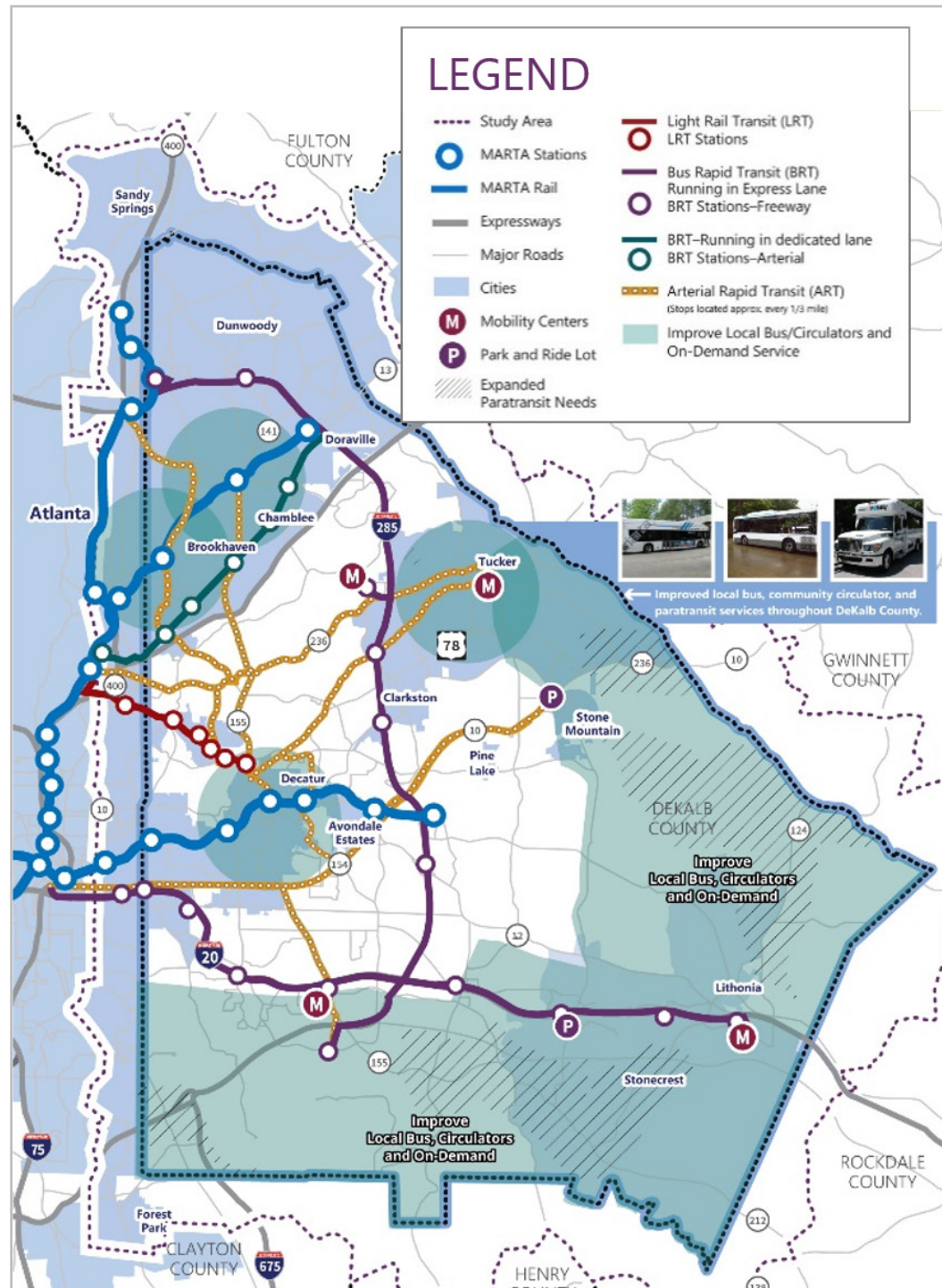


Half-Penny Scenario



Features 15 projects: 1 LRT, 5 BRT, 9 ART, and 139 project miles, which are affordable under a ½-penny sales tax increase.

This scenario seeks to leverage GDOT's investments in managed lanes for BRT on I-285 in DeKalb County.

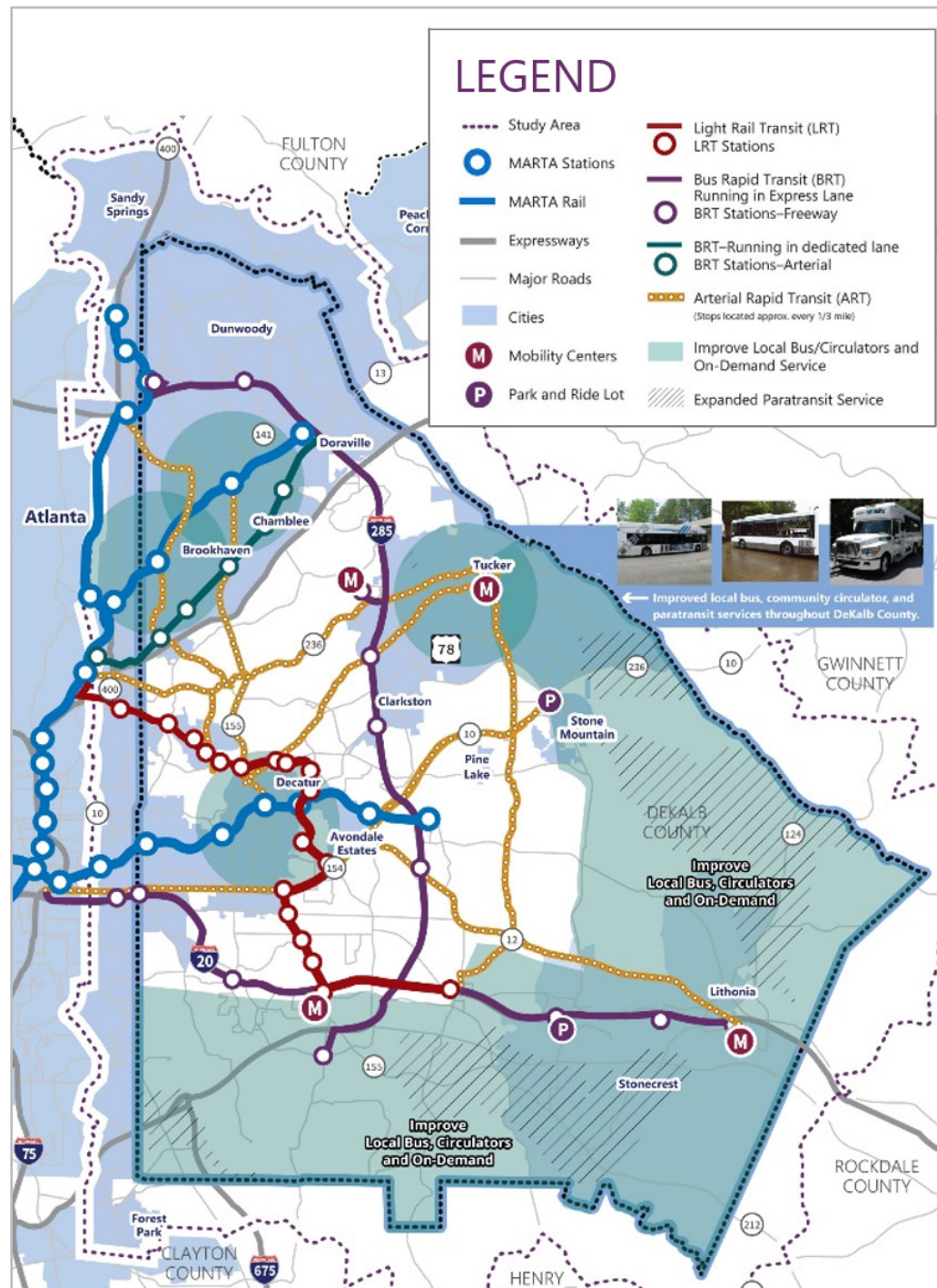


Full-Penny Scenario



Features 16 projects: 4 LRT, 4 BRT, and 8 ART and 180 project miles, which are affordable under a full-penny sales tax increase.

This scenario seeks to leverage GDOT's investments in managed lanes for BRT on I-285 in DeKalb County.

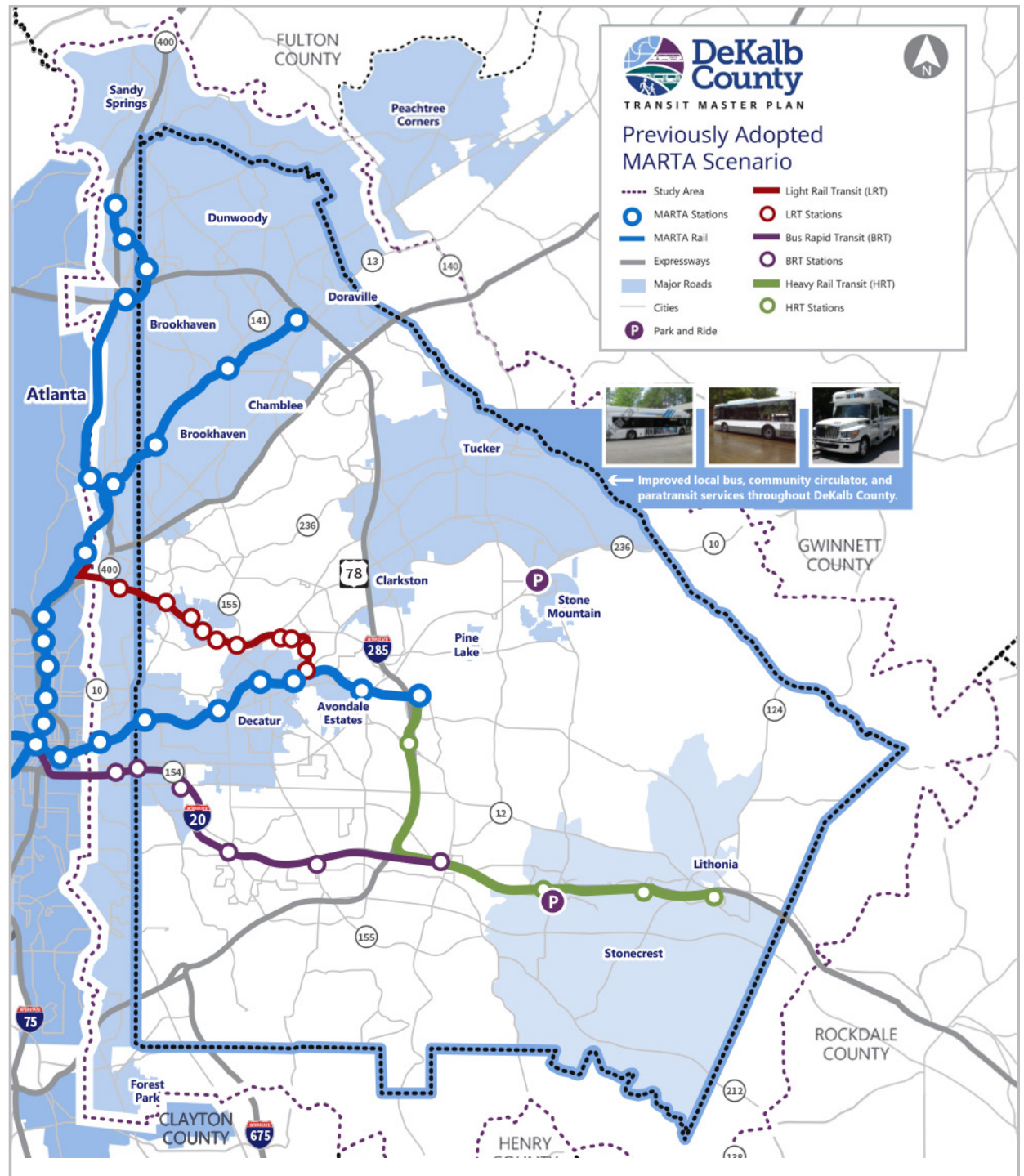


Previously Adopted Scenario



Features 3 projects: 1 HRT, 1 LRT, and 1 BRT and 37 project miles. Requires more than 1 penny sales tax.

Focuses on MARTA Board adopted plans for I-20 East and Clifton Corridor in 2012.



Recommendation 2

More Public/Stakeholder Education and Input on Project Delivery and Innovative Financing Opportunities

Throughout the DeKalb TMP process, the public, stakeholders and the DeKalb County leadership stressed the need for identifying transit funding opportunities beyond the HB 930 sales tax option. Thus, it is also recommended that DeKalb County and MARTA provide continued public education on the following three areas: **Public-Private-Partnerships (P3)**, **value capture financing**, and **the competitive nature of the Federal Transit Administration (FTA) capital investment grant process**.



Project Delivery and Innovative Financing Opportunities

Public-Private-Partnership (P3)

A **project delivery agreement** between a public owner and a private sector partner for the design, construction, financing, and operations & maintenance for the transit project

Value Capture

A type of **public financing** that recovers the value that transit projects generate for private landowners around stations

Competitive Federal Transit Administration Process

Capital investment grants for transit

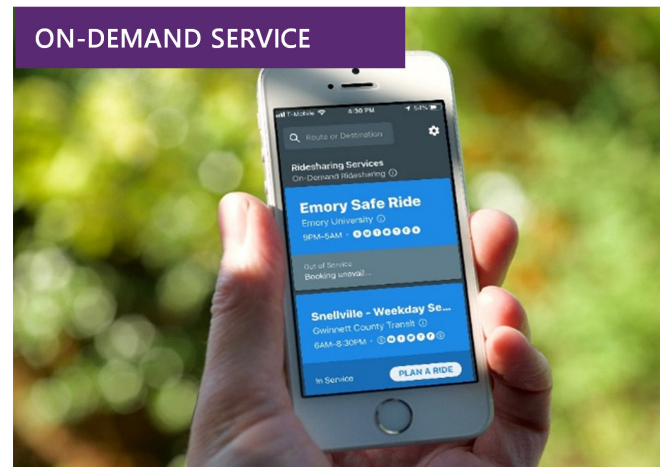


Recommendation 3

Collaborate with MARTA on Current Unmet Needs

Increase coordination between DeKalb County and MARTA is recommended to ensure that transit projects to address current unmet needs are delivered using funds from the existing MARTA sales tax. Improvements to be delivered by MARTA should include:

- **Paratransit expansion in south and east DeKalb**
- **Mobility centers**
- **Bus to rail transfer enhancement projects**
- **Last mile/first mile connectivity projects**
- **Improvements to bus routes that serve high ridership corridors**
- **Expanded local bus coverage, bus circulators, and mobility on-demand services**



Recommendation 4

Collaborate with MARTA and agency partners on the advancement of expansion projects consistent with the DeKalb TMP

DeKalb County should coordinate with MARTA, GDOT, the ATL and other agencies to advance the definition (i.e., planning and design concept) of key projects included in the DeKalb TMP scenarios. Because BRT in managed lanes on I-285 is a key project concept of the DeKalb TMP, and the fact that the current GDOT schedule for delivery of these lanes is within the next few years, it is extremely important that DeKalb County and MARTA immediately collaborate with GDOT to define BRT design solutions that effectively integrate into GDOT's managed lanes projects without impacting the delivery schedule. Advancing the expansion projects consistent with the DeKalb TMP include:

- **Re-evaluate I-20 East High Capacity Transit to Stonecrest**
(GDOT coordination)
- **Bus Rapid Transit in I-285 East Wall and Top End Express Lanes**
(GDOT coordination)
- **Bus Rapid Transit for Buford Highway**
(GDOT coordination)
- **Clifton Corridor Light Rail Transit**
- **Extension of Clifton Corridor–Central and South DeKalb Light Rail Transit**
- **Arterial Rapid Transit Network**

Recommendation 5

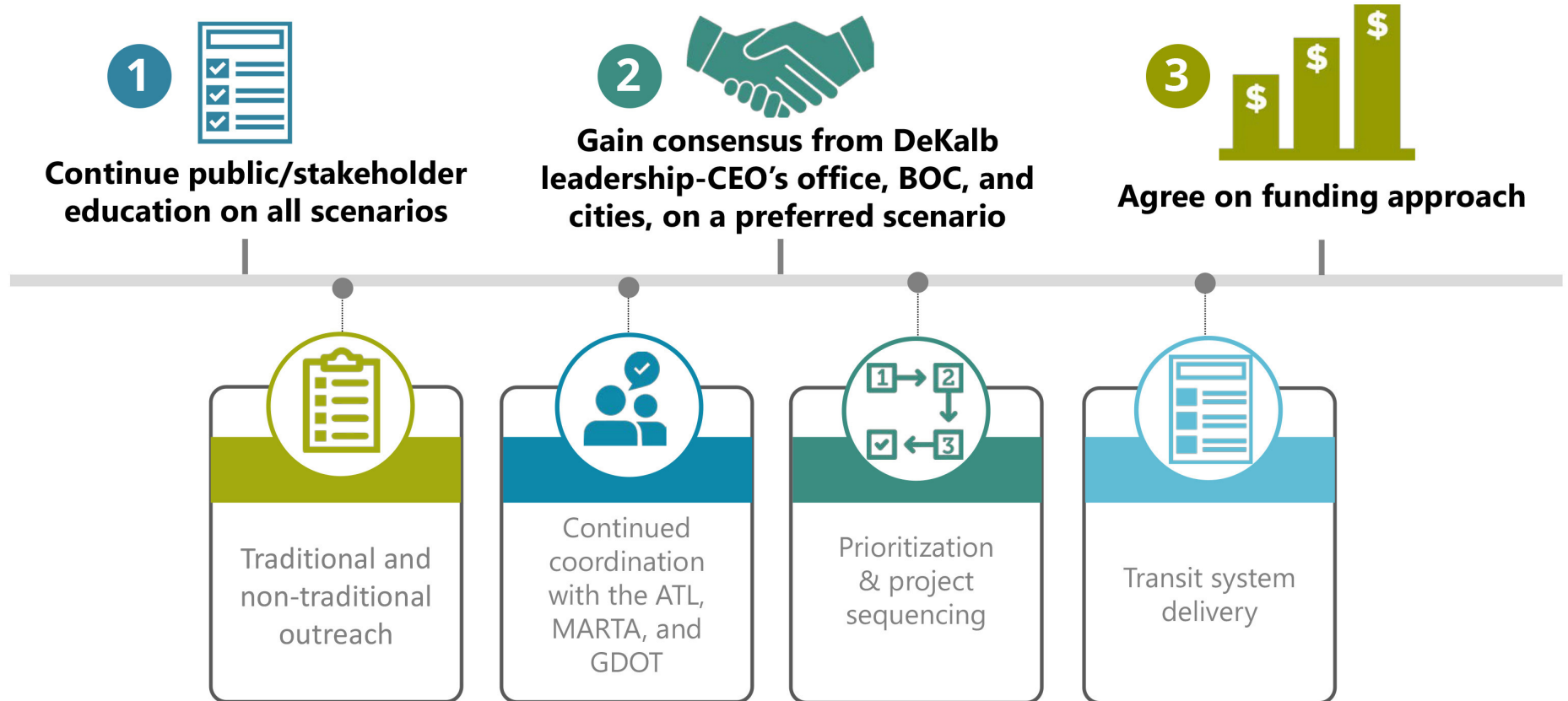
Align land use, development codes, and transit efforts

It is recommended that DeKalb County as well as the 12 cities within the County undertake efforts to better align land use and development policies to support transit investments. Transit supportive land use consists of land uses that support – economically and socially – the effective use of transit. Land use decisions and transit-oriented development investments promote transit usage, walkability and compact development forms and help to maximize exchange and activity within station areas and transit corridors. It is vitally important that the DeKalb County Comprehensive Plan is updated to include the DeKalb TMP high-capacity transit corridors, and direct growth in these areas. Land use codes also should be strengthened to incentivize private investment at station areas and enhance opportunities for securing FTA funds.



Steps to Implementation

The path forward includes three important steps necessary to achieve implementation of the DeKalb TMP. As mentioned, the County must continue public/stakeholder education on the transit scenarios. Additionally, the DeKalb County leadership including the CEO's office, the Board of County Commissioners, and the 12 cities must work collectively to select a list of transit expansion projects to implement. Finally, implementation will require agreement on a stable funding approach, which could include a combination of options such as a sales tax increase, state and federal funds, as well as private sector investments.











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Baseline Conditions Report

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TRANSIT MASTER PLAN

Baseline Condition: An Assessment of Transit Needs and Markets



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DeKalb County

TRANSIT MASTER PLAN

What is DeKalb County's Transit Master Plan?

The Transit Master Plan will address DeKalb County's mobility challenges, help to enhance future development opportunities, and improve the quality of life within each of DeKalb's cities and unincorporated communities, both north and south. The plan will identify transit service enhancements for today and expansion opportunities for tomorrow to create a 30-year cost-feasible vision for transit investments in DeKalb County.

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1 Introduction

Introduction

This Assessment of Transit Needs and Markets provides an overview of the present state of travel and transit in DeKalb County as well as insights into the current and future needs for transit. It is produced in support of the DeKalb County Transit Master Plan (DCTMP). These identified needs and markets will assist in the development of transit improvement scenarios.

Background

DeKalb County, through its Board of Commissioners and the cities within DeKalb County, requested the Atlanta Regional Commission (ARC) to fund a Transit Master Plan for transit expansion as a component of the Comprehensive Transportation Planning program. Ultimately, the plan will serve as the guiding document to support more detailed transit planning and expansion in DeKalb County. Additionally, it will serve to provide data to County officials as they consider funding sources for the future increased transit investment necessary to implement the plan. The plan considers the impacts of investment in high-capacity transit in terms of impacts to mobility and economic development within DeKalb County.

Approach

As shown in **Figure 1-1**, the technical analysis for this document is divided into four prongs:

- Travel trends: A review of overall travel demand within DeKalb County.
- State of the transit system: A review of current operations and future needs for transit in DeKalb County.
- Economic development: A review of the development trends in DeKalb County.
- Policy and decisions: A historical perspective of the evolution of transit in DeKalb County.

A chapter in this report is dedicated to each prong.

Figure 1-1: Four Prongs of Technical Analysis



Travel Trends

- Trip Desire
- Travel Time Reliability
- Mode Split
- Access to Transit



State of the System

- Service Availability
- System Operating Efficiency
- Ridership
- System Connectivity



Economic Development

- Access to Jobs
- Nodal Density/Intensity
- Development/Redevelopment



Policy & Decisions

- Past Investments
- Current Funding and Plans

The background of the top section features a blue gradient with various white and light blue icons related to transportation and urban planning. These include a bus, a train, a car, a person walking, a handshake, a magnifying glass over a document, a building, a group of people, and a road with a car. The large number '2' is prominently displayed in white on the left side of the header.

2 Travel Trends

Background

This section analyzes the existing and future travel trends for the DCTMP study area. Current and forecasted trip desires, travel time reliability, mode split, and access to transit were examined. From this analysis, a list of travel needs in the study area was developed and will be used to define transit investment scenarios in later phases of the DCTMP.

METHODOLOGY & DATA

The data and discussions in this section are based on real-time information from Google Maps and output from the ARC activity-based model (ABM) platform (often referred to as “the model”). The ARC’s new model outputs divide information on activity and travel behavior by market segments (e.g., income group, number of workers per household, vehicles available per household, etc.). By looking at each market segment individually, new insights can be developed into the mode, trip lengths, and trip frequency for the various market segments to, from, and within the study area.

The model is based on the principle that travel demand is derived from people’s daily activities and travel patterns. This model predicts which activities are conducted, when, where, for how long, for and with whom, and the travel mode choices they will make to complete them. Model runs for existing conditions are for 2015 and are run on the network as it existed in 2015. Model runs for future conditions are for 2040 and include the existing transportation network plus the improvements included in the ARC’s Regional Transportation Plan (RTP), for which funding has been identified.

The model offers much greater detail in demographic information which results in enhanced analysis of the different travel markets. At the core of the model is a technique that enables the model to predict the characteristics of each individual household in the region including family structure, ages, income, number of vehicles, and type of employment/school for each person. This demographic detail allows the analysis to include much more targeted groups of travelers and provides a better understanding of how different market segments of the population move within the study area.

Trip Desire

Determining existing and future trip desires for DeKalb County travelers is an important step in identifying needed transit connections. To develop an understanding of trip desires in DeKalb County, a technical process to identify origins and destinations, analyze key travel pairs, and review existing regional commute patterns was undertaken. Additionally, using the model, major travel corridors in DeKalb County were identified for further analysis. Finally, detailed information on transit market segments from the model was analyzed to provide further insight to potential transit needs.

Based on the analysis of trip desire, key findings are as follows:

- Travel patterns and regional commute data show a need for transit connections to employment centers in neighboring jurisdictions.
- Strong travel demand within DeKalb County indicates a need for enhanced transit services.
- Major travel corridors are distributed throughout DeKalb County, indicating a need for additional transit connections.
- Traditionally transit-dependent populations are projected to exhibit a higher level of reliance on transit service in the future. To keep up with expected demands, transit services should be expanded and improved to provide high-quality, reliable, and frequent service to these populations.
- With projected increases in the senior population, trips by retirees are expected to rise significantly in the future (by over 100 percent). Only one to two percent of these trips is anticipated to be by transit, however. Expanded transit services should be designed to target this market of potential transit riders.

ORIGINS AND DESTINATIONS

The travel demand model used for analyzing trip desire divides DeKalb County into approximately 650 travel analysis zones (TAZs). Within the model, the Atlanta region includes over 5,000 TAZs.

Definition of Travelsheds

To better understand the model outputs that track trips between each of the 650 TAZs within DeKalb County, TAZs are aggregated into larger units, referred to as *travelsheds*. Each travelshed is defined by a series of similar characteristics, such as land use, development density, and urban/suburban trip-making characteristics. A total of 14 distinct travelsheds were defined during this process, as listed in **Table 2-1** **Table 2-1: DeKalb County Travelsheds**. **Map 2-1** shows the travelsheds on a map.

Table 2-1: DeKalb County Travelsheds

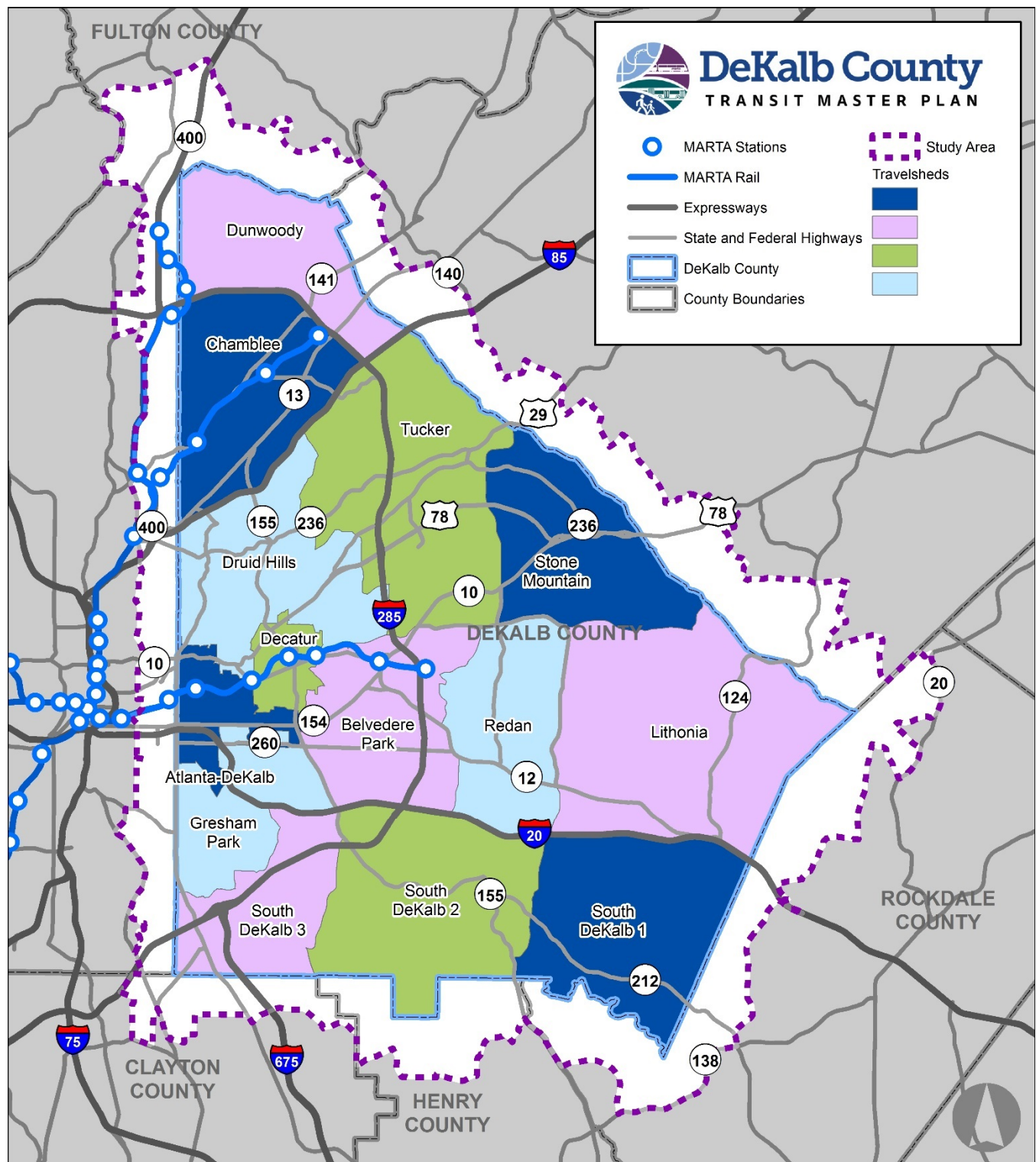
Travelshed Name	Cities or Places
South DeKalb 1	City of Stonecrest
South DeKalb 2	Panthersville, Snapfinger
South DeKalb 3	Panthersville
Lithonia	City of Lithonia, City of Stonecrest
Redan	City of Stonecrest
Belvedere Park	Avondale Estates
Gresham Park	Constitution, Gresham Park
Decatur	City of Decatur
Atlanta-DeKalb	City of Atlanta
Druid Hills	City of Atlanta
Tucker	City of Clarkston, City of Pine Lake, City of Tucker
Stone Mountain	City of Stone Mountain
Chamblee	City of Brookhaven, City of Chamblee
Dunwoody	City of Doraville, City of Dunwoody

Regional Destinations

After defining the travelsheds, the next step was to identify regional destinations. The ARC's regional activity centers were used to identify regional destinations to analyze trip desires. Regional activity centers are defined as traditional downtown areas as well as employment centers like the Cumberland/Galleria area or the Central Perimeter and were not constrained to the DeKalb County boundaries. For this analysis, a total of 57 regional destinations were identified. While DeKalb commuters travel to all 57 regional destinations, the following five were common to the top 10 travel pairs:

- Buckhead
- Downtown Atlanta
- Emory/Centers for Disease Control and Prevention (CDC)
- Perimeter Mall
- Sandy Springs

Map 2-1: DeKalb County Travelsheds



Source: Atlanta Regional Commission Prepared by: VHB Date: January 2019

0 2.5 5 10 Miles

ANALYSIS OF EXISTING AND FUTURE KEY TRAVEL PAIRS

Using the travelsheds previously defined for DeKalb County and the regional destinations, an analysis of key travel pairs was undertaken to identify origins and destinations with the highest trip demand between them. To accomplish this, the regional trip tables from the model, including all origin and destination vehicle trips, were consolidated into the travelsheds and regional destinations. The model was then used to identify the top travel pairs between the travelsheds and regional destinations in 2015, representing existing conditions, and the horizon year, 2040. Because commute trips place the highest demand on the transportation system, morning peak period trips were used for this analysis.

Existing Travel Pairs (2015)

Table 2-2 shows the top 10 existing travel pairs. Key findings regarding existing trip pairs include the following:

- Within DeKalb County, the highest number of trips are from the Druid Hills travelshed to Emory University and the CDC, showing a need for enhanced intra-county transit;
- Similarly, the second highest number of trips in DeKalb County is from the Dunwoody travelshed to Perimeter Mall;
- Downtown Atlanta attracts a significant number of trips from DeKalb County, indicating a key regional connection between DeKalb and Fulton Counties; and
- The travelsheds along I-20 in the southern part of DeKalb County all share Downtown Atlanta as a destination, showing a need for improved transit connections between south DeKalb County and Downtown Atlanta.

Table 2-2: Existing Top Travel Pairs (Morning Peak, 2015)

Origin Travelshed	Regional Destination	Number of Trips (AM Peak, 2015)
Druid Hills	Emory University/CDC	6,300
Dunwoody	Perimeter Mall	3,800
Chamblee	Buckhead	3,600
Tucker	Downtown Atlanta	3,200
Chamblee	Downtown Atlanta	3,100
Druid Hills	Downtown Atlanta	2,900
Belvedere Park	Downtown Atlanta	2,800
South DeKalb 3	Downtown Atlanta	2,400
Atlanta-DeKalb	Downtown Atlanta	2,200
Lithonia	Downtown Atlanta	1,000

Source: ARC Activity-Based Travel Demand Model, VHB

Future Travel Pairs (2040)

Table 2-3 shows the top 10 forecasted future travel pairs. Key findings regarding future trip pairs include the following:

- The model suggests little change in the travel patterns between 2015 and 2040 for DeKalb County.
- Within DeKalb County, the highest number of trips continue to be from the Druid Hills travelshed to Emory University and the CDC, showing a need for enhanced intra-county transit;
- Similarly, the second highest number of trips in DeKalb County is from the Dunwoody travelshed to Perimeter Mall;
- Downtown Atlanta attracts a significant number of trips from DeKalb County, indicating a key regional connection between DeKalb and Fulton Counties; and
- The travelsheds along I-20 in the southern part of DeKalb County all share Downtown Atlanta as a destination, showing a need for improved transit connections between south DeKalb County and Downtown Atlanta.

Table 2-3: Future Top Travel Pairs (Morning Peak, 2040)

Origin Travelshed	Regional Destination	Number of Trips (AM Peak, 2015)
Druid Hills	Emory University/CDC	5,600
Dunwoody	Perimeter Mall	4,500
Chamblee	Buckhead	4,000
Belvedere Park	Downtown Atlanta	3,300
Druid Hills	Downtown Atlanta	3,300
Chamblee	Downtown Atlanta	3,200
Tucker	Downtown Atlanta	3,100
South DeKalb 3	Downtown Atlanta	2,600
Atlanta-DeKalb	Downtown Atlanta	2,500
Dunwoody	Sandy Springs	2,400

Source: ARC Activity-Based Travel Demand Model, VHB

EXISTING REGIONAL COMMUTE PATTERNS (2015)

In addition to the analysis of key travel pairs, regional commute patterns were examined to provide an overview of all work trips entering and leaving the study area. To analyze commute patterns, Census OnTheMap, a tool created and maintained by the U.S. Census Bureau, was used. Census OnTheMap provides insight into worker flows between homes and employment centers as well as into and out of DeKalb County.

Commuter flows into and out of DeKalb County are balanced. Of all work trips originating or ending in the study area, 43 percent are DeKalb County residents commuting elsewhere in the Atlanta Region, 41 percent are commuting to jobs in DeKalb County from elsewhere in the region, and 16 percent live and work within DeKalb County. The number of commuters entering, leaving, and staying within the study area are as follows:

- 205,000 workers travelling into DeKalb County for work from other jurisdictions;
- 214,000 residents leaving DeKalb County for work; and
- 82,000 workers both live and work within DeKalb County.

Over 500,000 daily commute trips occurred in 2015, indicating a strong demand for transportation to and from work. Additionally, the high number of workers entering and leaving DeKalb County indicate the need for transit connections to neighboring jurisdictions.

Home Locations of Workers Commuting into DeKalb County

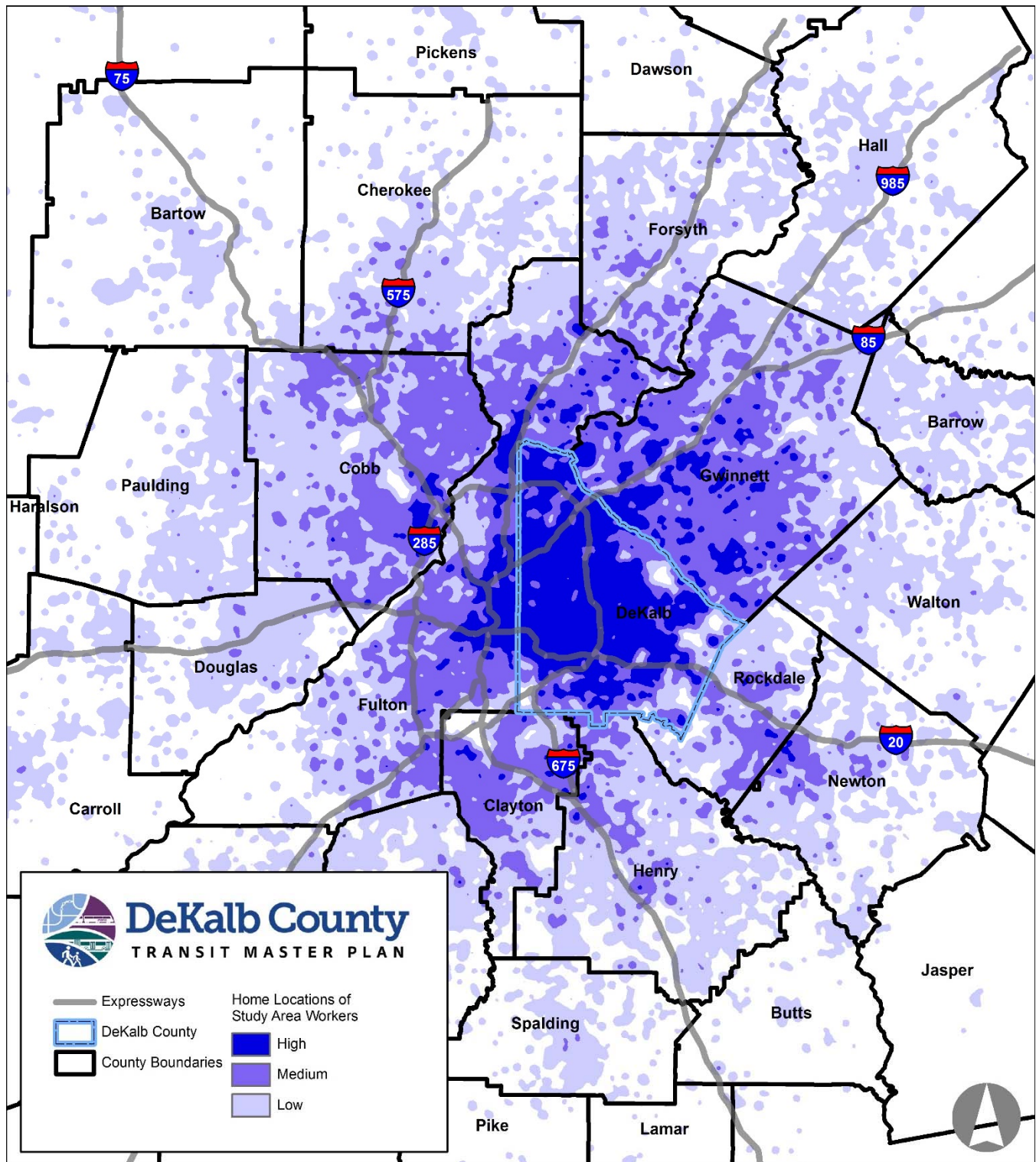
Workers commuting into DeKalb County are generally disbursed throughout the Atlanta Region; however, some key patterns emerge from the data. Workers that live outside DeKalb County tend to commute from the neighboring counties, including Gwinnett, Rockdale, Clayton, and Fulton.

For all workers in DeKalb County, the highest concentrations of home locations for workers are within DeKalb County and the cities of Atlanta and Sandy Springs adjacent to the county line. Additional areas with high concentrations of DeKalb County workers are located to the east along I-20 near the border of Rockdale and Newton counties as well as unincorporated Vinings in Cobb County. **Map 2-2** shows the home locations of DeKalb County commuters. Darker colors indicate a higher concentration of residents who work in DeKalb County.

Work Locations of DeKalb County Residents

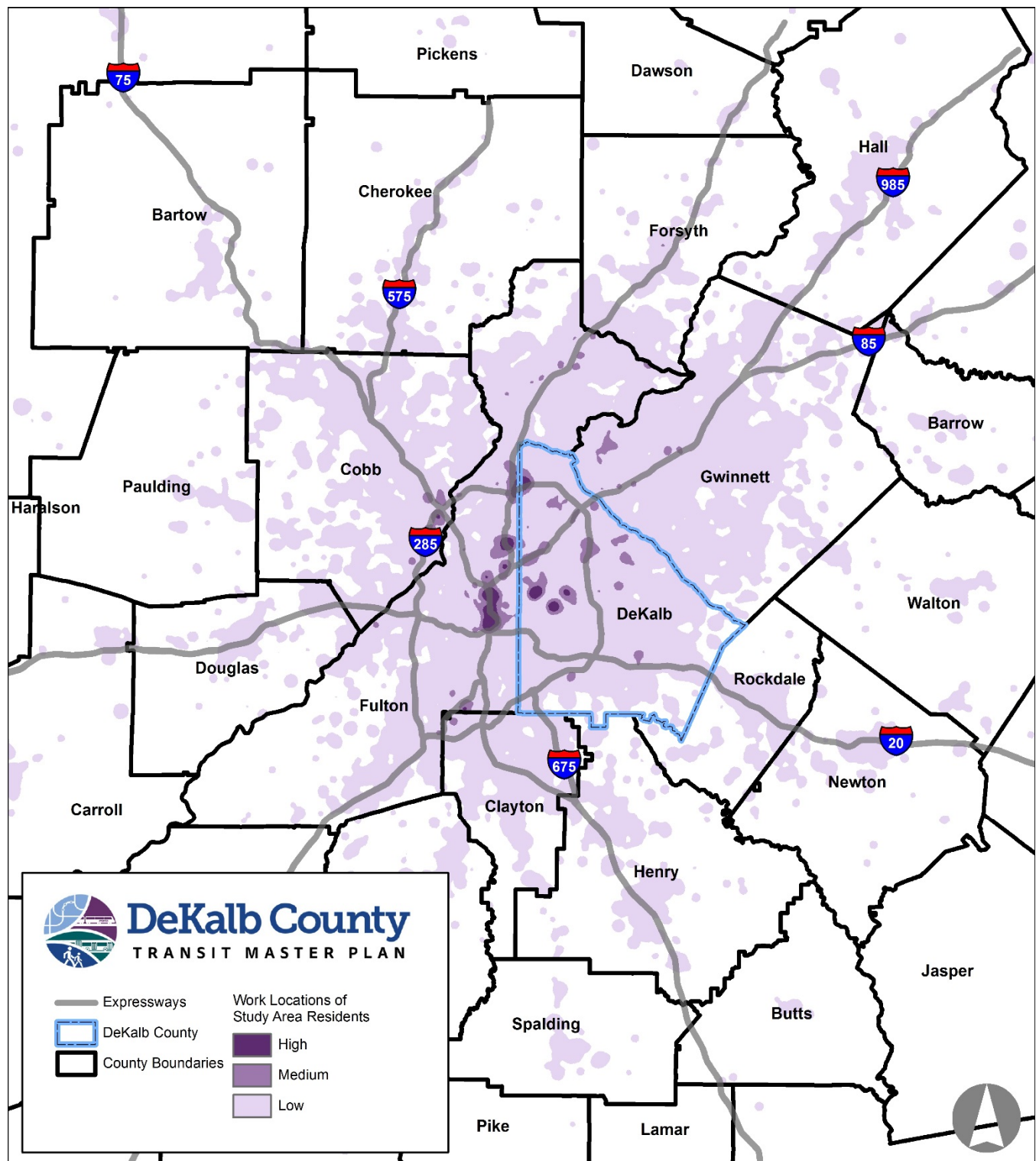
The highest concentrations of work locations for study area residents are around Hartsfield-Jackson Atlanta International Airport (HJIA), Downtown Atlanta, and Midtown Atlanta. Additional areas where high concentrations of residents work are the SR 54 corridor just south of I-75, on the south side of the I-75 and I-285 interchange, Buckhead, and Perimeter Center. **Map 2-3** is a heat map showing where DeKalb County residents commute in the Atlanta Region.

Map 2-2: Home Locations of DeKalb County Workers (2015)



Sources: U.S. Census, Atlanta Regional Commission
Prepared by: VHB Date: January 2019

Map 2-3: Work Locations of DeKalb County Residents (2015)



Sources: U.S. Census, Atlanta Regional Commission
Prepared by: VHB Date: January 2019

MAJOR TRAVEL CORRIDORS

After developing an understanding of the key origins and destinations of travelers, the next step is to determine the routes people are taking. The travel demand model was used to examine the major roadways and corridors within DeKalb County that carry the most trips. The trip patterns to, from, and within the County were developed based on the ARC activity-based model. Regional trip tables from the model, including all origin and destination vehicle trips, were consolidated into the travelsheds as described previously to summarize overall travel patterns in relation to DeKalb County. This analysis was divided into two sets of travelers: those that travel within DeKalb County, and those that are traveling to major activity centers outside the county (e.g., downtown Atlanta, HJIA, etc.). The **Map 2-4** identifies the major travel corridors serving both intra- and inter-county users.

Intra-County Corridors

There are several significant intra-county travel corridors within DeKalb County. These roadways carry the highest number of users beginning and ending their trips in the County. These major corridors include:

North-South Corridors

- Clifton Road
- Clairmont Road
- Hairston Road
- Shallowford Road/Briarcliff Road/Oak Grove Road
- Peachtree Industrial Boulevard
- Buford Highway
- Panola Road/Stone Mountain-Lithonia Road
- Candler Road
- Panthersville Road

East-West Corridors

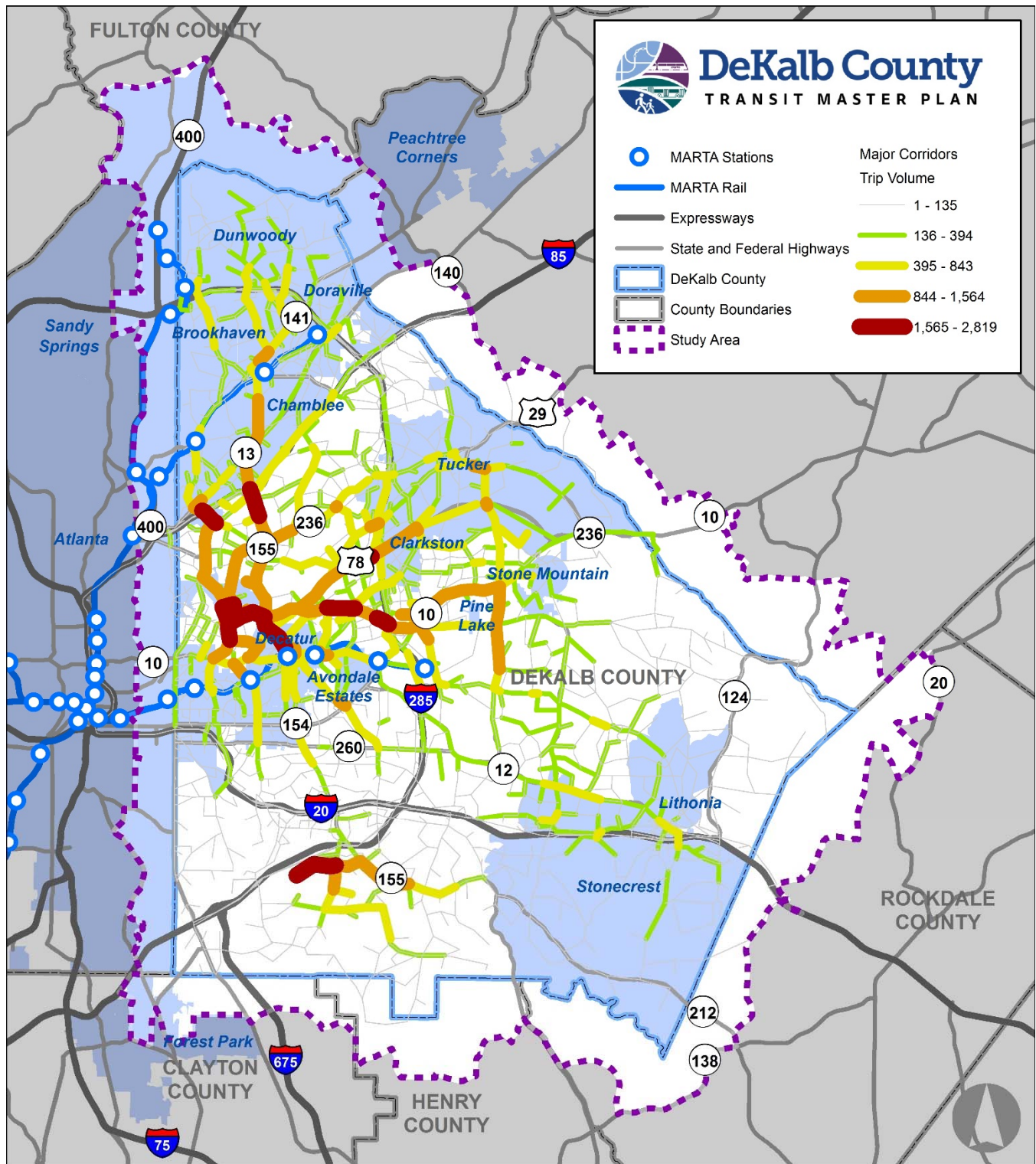
- Lawrenceville Highway
- Memorial Drive
- Lavista Road
- Stone Mountain Freeway
- Rockbridge Road
- Covington Highway
- Redan Road
- River Road/Flat Shoals Road

Inter-County Corridors

The significant travel corridors that carry the most users between DeKalb County and external activity centers, as well as through-county trips, are listed below. Not unexpectedly, these corridors represent the major freeways and principal arterials that traverse the County. These corridors include the following:

- I-285
- I-85
- I-20
- Stone Mountain Freeway/Lawrenceville Highway
- Memorial Drive
- Peachtree Industrial Boulevard/Peachtree Road

Map 2-4: Major Travel Corridors (AM Peak, 2015)



Source: Atlanta Regional Commission Prepared by: VHB Date: January 2019

0 2.5 5 10 Miles

Travel Time Reliability

Travel time reliability is a key measure of how well the transportation network is functioning. To identify existing conditions and forecast future conditions, the ARC ABM model was used. Travel time analyses were conducted for automobiles and transit separately.

KEY ORIGINS AND DESTINATIONS

Travel times for the top 10 existing and future travel pairs identified in the Trip Desire section were calculated. Due to forecasted changes in travel patterns, nine of the top 10 travel patterns were consistent between 2015 and 2040; Lithonia to Downtown Atlanta was no longer in the top 10 and Dunwoody to Sandy Springs entered the top 10. Therefore, comparisons between existing and future will exclude Lithonia to Downtown Atlanta and Dunwoody to Sandy Springs.

AUTOMOBILE TRAVEL TIMES

Existing and future automobile travel times were analyzed to identify both existing and forecasted future issues with travel time reliability. In the future, total travel times between the top nine trip pairs are forecasted to increase 16 percent. However, significant variation between trip pairs exists, with some trip pairs having a much higher forecasted increase in travel times and some predicting a decrease. The following sections provide a detailed analysis of existing and future travel times by trip pair.

Existing Automobile Travel Times (2018)

Archived travel time data from Google Maps was used to analyze existing travel times. (Note: Google maps was used for existing travel time estimates as the Project Management Team felt the travel times taken from the ARC's ABM were too low.) For each of the top 10 existing trip pairs, the travel time for the AM and PM peak periods was pulled from the data and is presented in **Table 2-4**. The AM peak travel times represent traditional commute trips from residences to employment centers, while the PM peak travel times represent the reverse commute movement. The AM peak period travel times range between a low of eight minutes for the Druid Hills to Emory/CDC trip pair to a high of 53 minutes for Lithonia to Downtown Atlanta movement.

Table 2-4: Existing Automobile Travel Times Between Top 10 Trip Pairs (2018)

From	To	2018 Automobile Travel Time (in Minutes)		
		AM Peak Period	PM Peak Period	% Change
Druid Hills	Emory/CDC	8	7	-13%
Dunwoody	Perimeter Mall	8	13	63%
Chamblee	Buckhead	30	31	3%
Tucker	Downtown Atlanta	48	48	0%
Chamblee	Downtown Atlanta	43	63	47%
Druid Hills	Downtown Atlanta	22	28	27%
Belvedere Park	Downtown Atlanta	32	25	-22%
South DeKalb	Downtown Atlanta	33	20	-39%
City of Atlanta (DeKalb County)	Downtown Atlanta	14	17	21%
Lithonia	Downtown Atlanta	53	31	-42%

Source: Google

Overall travel time for the top 10 trip pairs was three percent lower in the PM peak period than the AM peak period. However, the AM and PM travel times for individual trip pairs varied significantly. The following trip pairs saw the largest increases in travel time during the PM peak period in percentage terms:

- Travel times from Dunwoody to Perimeter Mall increased 63 percent in the PM peak compared to the AM peak period;
- An increase in travel time of 47 percent in the PM peak compared to the AM peak period was observed from Chamblee to Downtown Atlanta; and
- Travel times from Druid Hills to Downtown Atlanta increased 27 percent in the PM peak compared to the AM peak period.

The following trip pairs had the largest decreases in travel times during the PM peak period:

- A 42 percent decrease in travel times during the PM peak compared to the AM peak period was observed from Lithonia to Downtown Atlanta;
- Belvedere Park to Downtown Atlanta travel times decreased 22 percent in the PM peak compared to the AM peak period; and
- Travel times from South DeKalb to Downtown Atlanta decreased 9 percent during the PM peak compared to the AM peak period.

The trip pairs with the longest existing travel times (e.g. Lithonia, Tucker, and Chamblee to Downtown Atlanta) have a high potential to be served by transit.

Future Automobile Travel Times (2040)

The ARC ABM was used to forecast automobile travel times between the top 10 travel pairs in 2040. As noted previously, the increase in trips between Dunwoody to Sandy Springs forecasted

in 2040 pushed it into the top 10. **Table 2-5: Future Automobile Travel Times Between Top 10 Trip Pairs (2040)** shows the future travel times for the top 10 trip pairs. Forecasted travel times range from 16 to 44 minutes for the top 10 travel pairs.

Table 2-5: Future Automobile Travel Times Between Top 10 Trip Pairs (2040)

From	To	Travel Time (in Minutes)
Druid Hills	Emory/CDC	24
Dunwoody	Perimeter Mall	16
Chamblee	Buckhead	23
Belvedere Park	Downtown Atlanta	35
Druid Hills	Downtown Atlanta	32
Chamblee	Downtown Atlanta	38
Tucker	Downtown Atlanta	44
S DeKalb	Downtown Atlanta	41
City of Atlanta (DeKalb County)	Downtown Atlanta	23
Dunwoody	Sandy Springs	22

Source: Google

Consistent with forecasted growth in population and employment in the Atlanta Region, automobile trip times are forecasted to generally increase between 2018 and 2040. The highest increases in percentage terms were identified on the following trip pairs:

- Travel time from Druid Hills to Emory/CDC is projected to increase 200 percent between 2018 and 2040;
- Travel times are forecasted to increase 100 percent between 2018 and 2040 from Dunwoody to Perimeter Mall; and
- A 64 percent increase in travel times from City of Atlanta (DeKalb County) to Downtown Atlanta is forecasted between 2018 and 2040.

Three trip pairs showed a forecasted decrease in travel times; however, they were generally much smaller than the travel time increases.

- Travel times from Chamblee to Buckhead are forecasted to decrease 23 percent;
- Chamblee to Downtown Atlanta is projected to have a 12 percent decrease; and
- Tucker to Downtown Atlanta is projected to have an 8 percent decrease.

Travel pairs with higher increases in travel times have the most potential to be served by transit investments that provide reliable travel times.

TRANSIT TRAVEL TIMES

The ARC ABM was used to calculate existing (2015) and future (2040) transit travel times between the top 10 travel pairs. The ABM reports travel times for different modes of access to transit, which include riders getting dropped off at the station or stop (kiss and ride), riders driving to stations and parking (drive to transit), and riders walking to stations or stops (walk to transit).

Existing Transit Travel Times (2015)

Table 2-6 shows current travel times. Overall, accessing transit by kiss and ride has the shortest transit travel times, followed by drive to transit. Walk to transit has the longest travel times.

Table 2-6: Existing Transit Travel Time Between Top 10 Trip Pairs (2015)

From	To	2015 Transit Travel Time (in Minutes)		
		Kiss and Ride	Drive to Transit	Walk to Transit
Druid Hills	Emory/CDC	23	41	34
Dunwoody	Perimeter Mall	23	26	35
Chamblee	Buckhead	25	28	43
Tucker	Downtown Atlanta	42	44	66
Chamblee	Downtown Atlanta	34	36	46
Druid Hills	Downtown Atlanta	31	33	56
Belvedere Park	Downtown Atlanta	35	40	50
South DeKalb	Downtown Atlanta	47	52	59
City of Atlanta (DeKalb County)	Downtown Atlanta	19	24	36
Lithonia	Downtown Atlanta	55	55	84

Source: Google

Since kiss and ride access to transit travel times were generally better than walk to transit and drive to transit, it suggests that there is a need for improved first-mile/last-mile connectivity. For trip pairs with a large discrepancy between driving and walking to transit times, potential needs are additional feeder bus service, additional station locations and/or line extensions.

Future Transit Travel Times (2040)

Table 2-7 provides future transit travel times. In contrast to automobile travel times, future transit travel times only increased slightly at 3 percent overall. While there was some variation in individual trip pairs, it was not very significant.

- The largest increase in transit travel times between 2015 and 2040 was 13 percent from Druid Hills to Emory/CDC.
- Only one trip pair showed a decrease in transit travel times between 2015 and 2040, Dunwoody to Perimeter Mall, with a decrease of six percent.

Similar to existing conditions, future first-mile/last-mile connections need to be improved.

Table 2-7: Future Transit Travel Time Between Top 10 Trip Pairs (2040)

From	To	2040 Transit Travel Time (in Minutes)		
		Kiss and Ride	Drive to Transit	Walk to Transit
Druid Hills	Emory/CDC	24	29	38
Dunwoody	Perimeter Mall	22	26	33
Chamblee	Buckhead	26	30	43
Belvedere Park	Downtown Atlanta	38	41	51
Druid Hills	Downtown Atlanta	31	36	55
Chamblee	Downtown Atlanta	35	37	47
Tucker	Downtown Atlanta	44	47	68
S DeKalb	Downtown Atlanta	50	54	64
City of Atlanta (DeKalb County)	Downtown Atlanta	19	24	36
Dunwoody	Sandy Springs	28	26	34

Source: Google

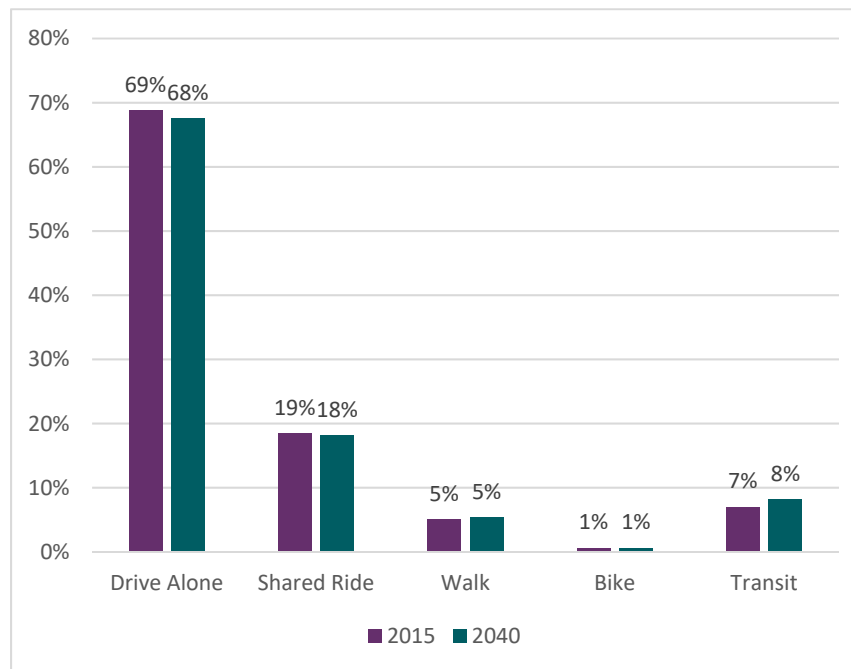
Mode Split

Figure 2-1 details the existing and projected mode share for all trips to, from, or within DeKalb County. This data has been sourced from the ARC's ABM. Trips have been categorized by major mode type, which include driving alone (single occupancy vehicle or SOV), shared ride (carpooling and ride-sharing services), walking, bicycling, and transit.

A comparison of the existing and projected mode split shows very little change between travel modes over time. Small declines of one percent are seen in driving alone and for shared rides. Trip share for walking and biking is expected to remain relatively flat. A small increase of one percent is seen for transit trips. The lack of substantial changes in mode split between 2015 and 2040 suggest significant investments in transit service and infrastructure are needed to promote higher levels of transit usage and achieve a more balanced mode split.

A more detailed discussion of mode split by transit market segments is provided in the following section.

Figure 2-1: Mode Share – All DeKalb County Trips (2015 and 2040)



Source: ARC Travel Demand Model, VHB

Transit Market Segments

In addition to examining the origins and destinations of travelers, an understanding of their demographic characteristics is important to identify potential needs. The ABM allows for the segmentation of various demographic groups, which permits the study of their unique travel patterns. Three key transit market segments have been analyzed to determine how these populations travel to, from, and within the county. These demographic segments include:

- Traditional Transit Users** – This category includes individuals with limited mobility options, such as people living in zero-car households, lower-income households (those earning less than \$25,000), and households with fewer cars than workers. Traditionally, individuals in these population segments have a higher propensity to use transit. These individuals are often transit dependent so it is important to understand their needs in the planning process.
- Commuters** – This market segment includes full-time and part-time workers. A thorough understanding of this market segment's travel patterns is critical to planning transit services that effectively connect workers to employment centers. Due to the consistency with which they use transit, this group is very important to the transit planning process.

- **Other Transit Markets** – This category includes university students and retirees. These market segments have unique transit needs that could be served through a variety of transit technologies and modes. The day-to-day travel patterns for members of this group typically vary more than the individuals in the commuter category.

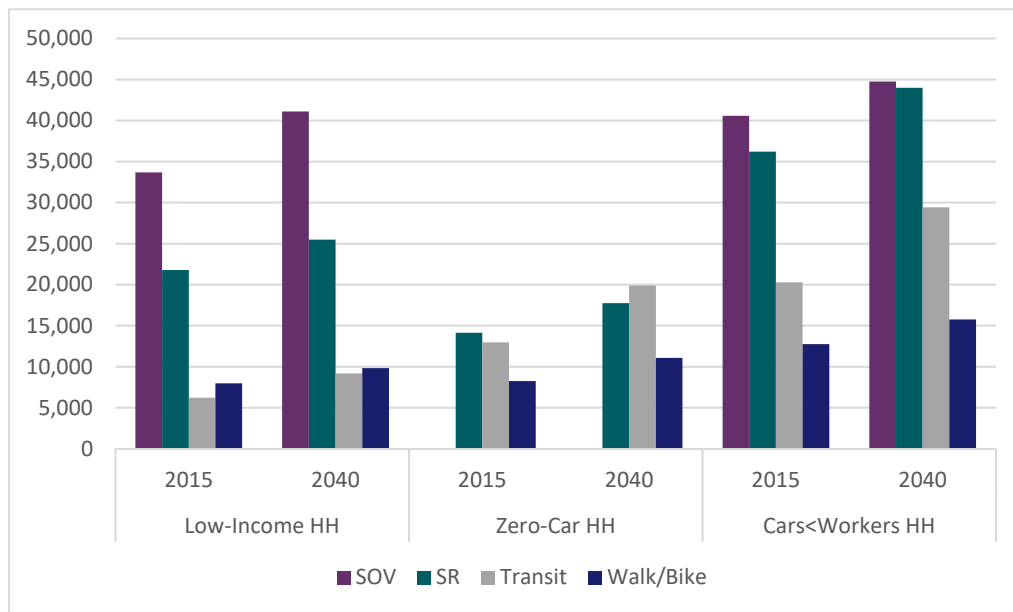
The analysis of transit markets shows how these groups travel within the county and throughout the region. For ease of understanding, DeKalb County has been split into North DeKalb and South DeKalb analysis areas. This split was based on the results of the travel desire analysis. This analysis showed a strong link between North DeKalb and the Emory/CDC, Buckhead, and Perimeter employment centers and South DeKalb with the Downtown Atlanta business district. The dividing line between North and South DeKalb is Rockbridge Road outside of the perimeter and the northern city limits of Decatur and Atlanta.

TRADITIONAL TRANSIT MARKET

Figure 2-2 illustrates the number of traditional transit market persons traveling to, from, or within North DeKalb and the mode of travel currently or predicted to be used as calculated by the ABM. For low-income households, projections show modest increases in trips between 2015 and 2040 for SOVs (22.1 percent), shared-rides (16.9 percent), and walking/biking (23.3 percent). More significant increases are projected for transit trips (47.6 percent) for this demographic group. This increase shifts the mode split for transit trips from 8.5 percent to 9.7 percent, between 2015 to 2040.

In zero-car households, between 2015 and 2040 trips via shared rides are projected to increase by 25.5 percent, walking/biking by 34.5 percent, and transit trips by 53.5 percent. The mode share also shifts to a higher percentage of transit trips from 34.8 to 37.4 percent in this time period.

In households where the number of cars is fewer than the number of workers, trips via SOVs are projected to increase by 10.3 percent, shared rides by 20.5 percent and walking/biking by 23.6 percent. Transit trips are expected to increase at a much higher rate of 45.3 percent. The mode share for SOVs, shared rides, and walking/biking is expected to decrease, while the mode share for transit is expected to increase modestly from 18.5 percent to 20.5 percent of all trips.

Figure 2-2: Traditional Market Segments – North DeKalb County Trips

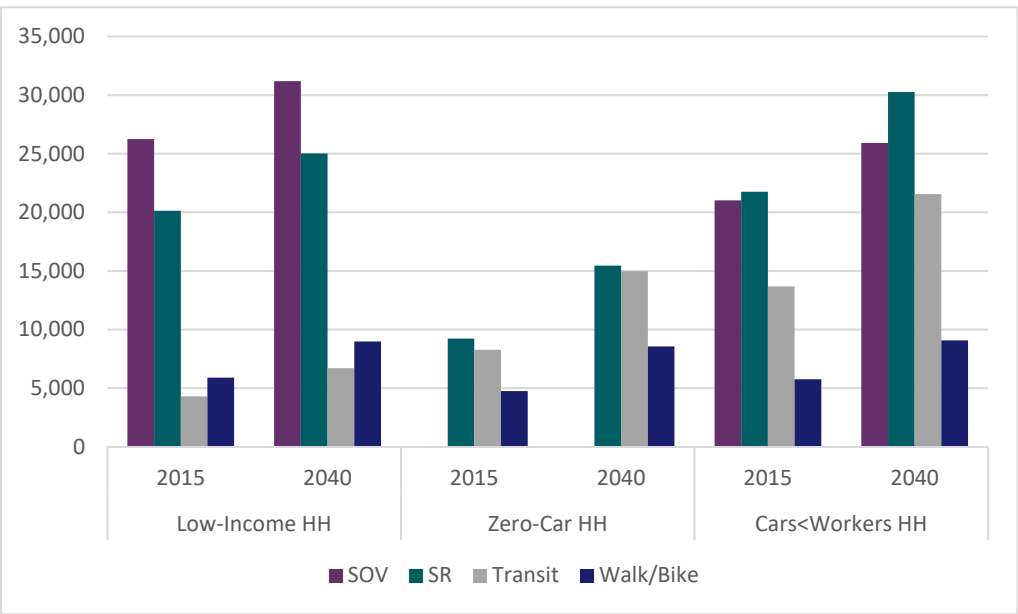
Source: ARC Travel Demand Model, VHB

Figure 2-3 details the trips to, from, and within South DeKalb for traditional transit market segments. For low-income households, trips via SOV are projected to increase by 18.8 percent, shared rides by 24.3 percent, and walking/biking by 52.4 percent. The largest increase is seen in transit trips at 55.9 percent. The mode share for SOVs and shared rides is projected to decrease slightly, while walking/biking is expected to increase from 10.4 percent to 12.4 percent and transit from 7.6 percent to 9.3 percent.

In zero-car households, trips via shared rides are projected to increase by 67.5 percent, walking/biking by 80.5 percent, and transit trips by 80.9 percent. The mode share declines slightly for shared rides and increases slightly for transit trips from 37.2 to 38.4 percent and walking/biking from 10.4 to 12.5 percent.

In households where the number of cars is fewer than the number of workers, trips via SOVs are projected to increase by 23.4 percent, shared rides by 39.0 percent and both walking/biking and transit by 57.6 percent. The mode share for SOVs is expected to decline from 33.8 to 29.9 percent and shared rides from 35.0 percent to 34.9 percent. The mode share for walking/biking is projected to increase from 9.2 to 10.4 percent and transit from 22.0 to 24.8 percent.

Figure 2-3: Traditional Market Segments – South DeKalb County Trips



Source: ARC Travel Demand Model, VHB

COMMUTER TRANSIT MARKET

Figure 2-4 details existing and projected trips to, from, and within North DeKalb for the commuter transit market segment. Full-Time Worker's trips via SOVs is anticipated to increase by 18.2 percent between 2015 and 2040. Trips via ride sharing are projected to increase by 16.4 percent and walking/biking by 21.9 percent. Transit trips are projected to increase at a higher rate of 38.1 percent over this time frame. The mode share is expected to stay relatively the same with a slight uptick in transit from 3.5 to 4.1 percent.

Between 2015 and 2040, part-time workers SOV trips increased by 33.2 percent, shared ride trips by 18.6 percent, and walking/biking by 28.6 percent. The largest percentage rise was seen in transit trips which increased 53.1 percent. The mode share change between 2015 to 2040 projects a small uptick in SOVs and transit trips, with a small decline in walking/biking and shared rides.

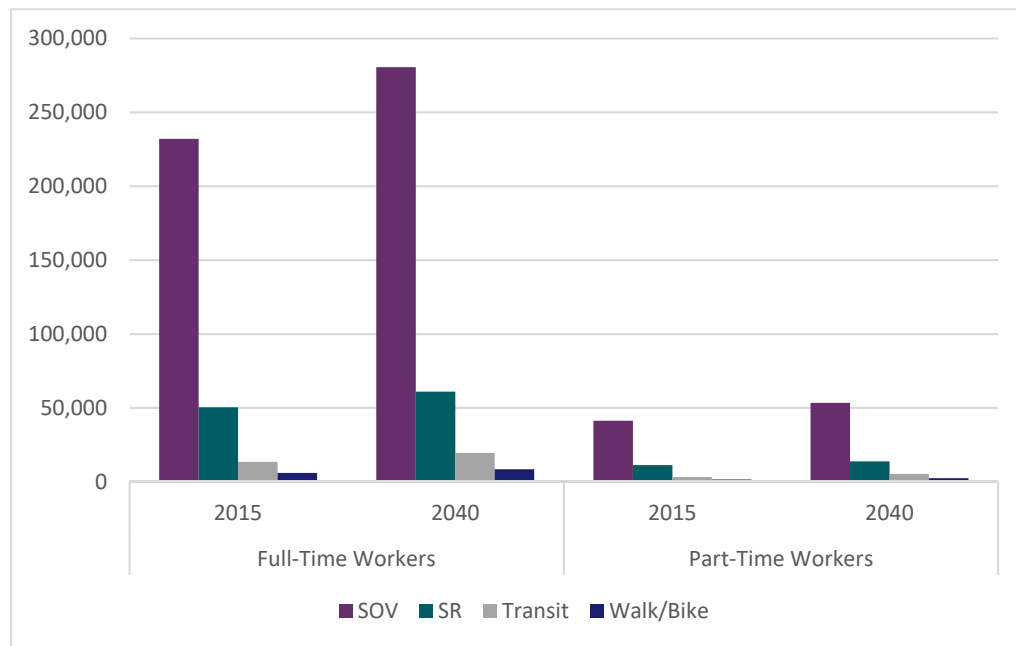
Figure 2-4: Commuter Market Segments – North DeKalb County Trips

Source: ARC Travel Demand Model, VHB

Figure 2-5 details existing and projected trips to, from, and within South DeKalb for the commuter transit market segment. This segment includes both full-time and part-time workers.

Full-time worker's trips via SOV are expected to increase by 20.9 percent and 21.1 percent for trips via shared ride between 2015 to 2040. Trips by transit and walking/biking are projected to increase at a higher rate of 45.4 percent and 40.6 percent, respectively. The mode share for full-time workers is expected to decline slightly for SOVs and shared rides and increase for transit trips (4.4 to 5.3 percent) and walking/biking (2.0 to 2.3 percent).

Part-time worker's trips via SOV are expected to increase 29.3 percent and shared rides by 21.8 percent. A much larger increase is predicted for transit trips and walking/biking trips at 67 percent and 53.8 percent, respectively. The mode share between 2015 and 2040 is expected to decline slightly for SOVs and shared rides slightly. Small increases in transit and walking/biking mode shares are expected from 5.6 to 7.1 percent and 2.7 to 3.2 percent, respectively.

Figure 2-5: Commuter Market Segments – South DeKalb County Trips

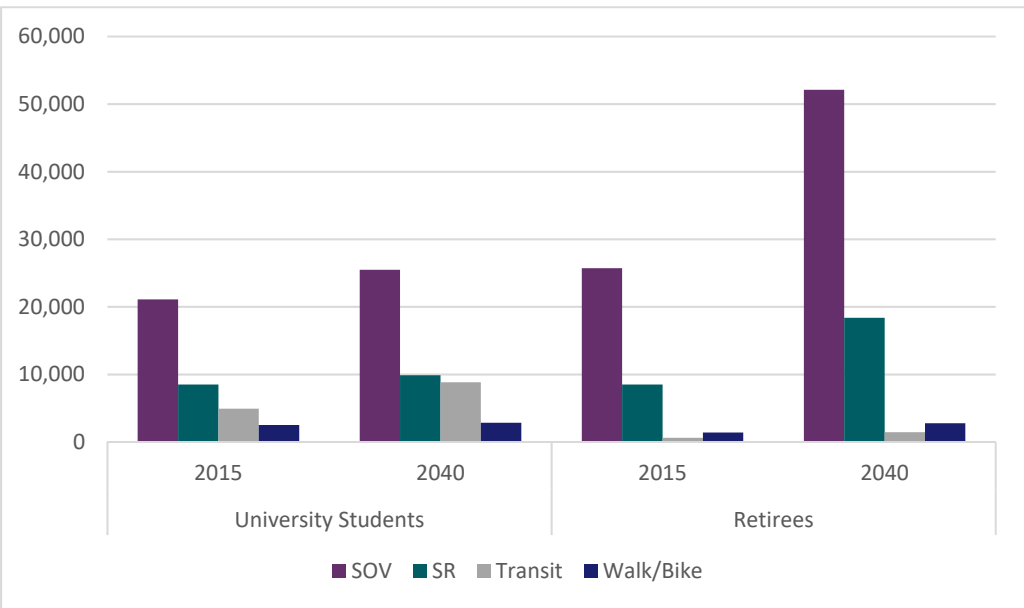
Source: ARC Travel Demand Model, VHB

OTHER TRANSIT MARKET

Figure 2-6 illustrates the number of existing and projected university students and retirees traveling to, from, or within North DeKalb. University student trips in North DeKalb are projected to increase by 27 percent. The ABM projects modest declines in the mode share of SOVs, shared rides, and walking/biking trips, while projecting modest increases in transit trips from 13.3 percent to 18.8 percent of all trips.

Retiree trips are projected to increase 106 percent between 2015 and 2040. This includes increases of 102.7 percent in SOV trips, 116 percent in shared rides, 131.5 percent in transit trips, and a 96.7 percent increase in walking/biking. The mode share changes very little between 2015 and 2040. The largest mode type decreases slightly from 70.9 to 69.7 percent of all trips. Transit trips remain a small portion of total trips increasing slightly from 1.7 to 1.9 percent.

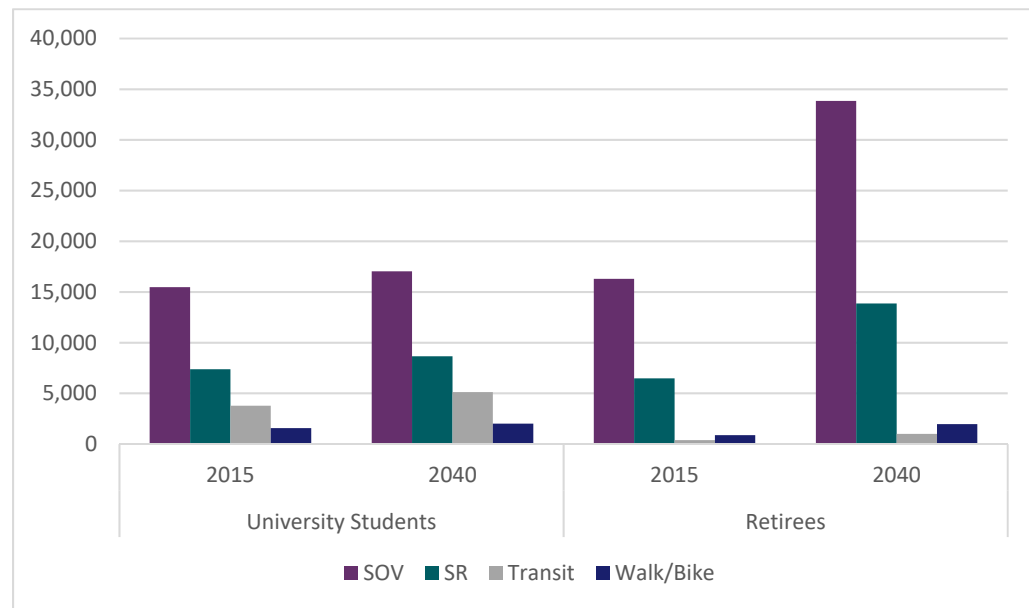
Figure 2-6: Other Market Segments – North DeKalb County Trips



Source: ARC Travel Demand Model, VHB

Figure 2-7 illustrates the number of existing and projected university students and retirees traveling to, from, or within South DeKalb. University trips in South DeKalb are projected to increase by 16.3 percent. The ABM projects a slight decrease in the mode share of SOVs and slight increase in shared rides and walking/biking trips. Transit trips are projected in increase from 13.4 to 15.6 percent.

Retiree trips are projected to increase 111 percent between 2015 and 2040. This includes increases of 107.7 percent in SOV trips, 114.3 percent in shared rides, 160.3 percent in transit trips, and a 126.3 percent increase in walking/biking. The mode share changes very little between 2015 and 2040. The largest mode type decreases slightly from 70.9 to 69.7 percent of all trips. Transit trips remain a small portion of total trips increasing slightly from 1.6 to 2.0 percent.

Figure 2-7: Other Market Segments – South DeKalb County Trips

Source: ARC Travel Demand Model, VHB

KEY FINDINGS FROM MARKET SEGMENT ANALYSIS

Through the analysis of demographic market segments several key insights pertinent to future transit planning have become apparent.

- For traditional transit market segments (i.e., low-income households, zero-car households, and car<worker households) transit trips are projected to increase at a higher rate than other modes in both North DeKalb and South DeKalb. These increases are expected to increase the mode share of transit trips slightly to moderately within these groups. These increases within the traditional market segment indicate a greater reliance on transit services within population groups that are already heavily dependent on these services. To keep up with expected demands, transit services should be expanded and improved to provide high-quality, reliable, and frequent service to these groups.
- Full-time worker trips via transit are expected to increase at a higher rate than other modes in both North DeKalb and South DeKalb. The mode share for transit trips is expected to increase slightly between 2015 and 2040. The transit mode share remains very low for this group (only 4 to 5 percent). Expanded and improved transit service to employment centers would help shift trips from SOVs (currently 78 and 77 percent of all trips in North DeKalb and South DeKalb, respectively) to result in a more balanced mode split.
- Part-time workers differ from full-time workers in that fewer trips are taken by SOV and more are taken via shared rides and transit. This difference is to be expected as part-time employees may be more likely to use transit and shared rides, as these jobs are more

commonly held by lower-income and transit-dependent populations. The transit mode share while higher than full-time workers remains relatively low at 5 to 7 percent. Expanded and improved transit service to employment centers would help shift trips from SOVs and shared ride trips for this group of workers as well and result in a more balanced mode split.

- Trips by retirees are expected to increase by a considerable 106 and 111 percent between 2015 and 2040 for North DeKalb and South Dekalb, respectively. These increases are in keeping with demographic trends that show an increase in senior populations. This market segment shows the lowest mode share for transit trips for any group with a share of only 1 to 2 percent. With large increases in retiree trips anticipated and a low transit share expected, there is the potential to plan services for this expanding market to encourage more transit use among retirees. A high-quality premium transit service accompanied by lower cost shuttle service and neighborhood circulators is an ideal improvement for serving retirees.
- University student trips are projected to increase by 27 percent in North DeKalb and 16.3 percent in South DeKalb between 2015 and 2040. Transit trips are expected to increase by 79.2 percent in North Dekalb and by 35.6 percent in South DeKalb. These increases suggest university student trips via transit could be an underserved market in South DeKalb. Transit improvements with the potential to serve this market should be examined further. Like retirees, student populations are well served by high-quality premium transit service as well as lower cost shuttle circulator systems.

Travel Needs

Based on the analysis of existing and future conditions regarding trip desires, travel patterns, travel time reliability, and mode split, the following needs were identified.

- Travel patterns and regional commute data show a high number of commuters travelling to and from DeKalb County indicating a need for transit connections to employment centers in neighboring jurisdictions;
- Strong travel demand and commuter flows within DeKalb County show a need for enhanced transit services;
- Major travel corridors are distributed throughout DeKalb County, indicating a need for additional transit connections;
- Within DeKalb County, the highest number of trips are from the Druid Hills travelshed to Emory University and the CDC, showing a need for enhanced intra-county transit;
- Similarly, the second-highest number of trips in DeKalb County is from the Dunwoody travelshed to Perimeter Mall;

- Downtown Atlanta attracts a significant number of trips from DeKalb County, indicating a key regional connection between DeKalb and Fulton counties;
- The travelsheds along I-20 in the southern part of DeKalb County all share Downtown Atlanta as a destination, showing a need for improved transit connections between south DeKalb County and Downtown Atlanta;
- Low mode share for transit among retirees and university students indicates an opportunity to capture more transit riders; and
- Disparate transit travel times between driving and walking to transit indicate a need for first-mile/last-mile connectivity improvements, additional feeder bus service, and/or new transit service.



3 State of the Transit System

To build a better transit system, DeKalb County first must understand how the current services are functioning.

The State of the System section describes the existing transit services in DeKalb County. By identifying the major elements of County's transit system, it can be used as the framework for identifying gaps during the needs assessment phase of the study.

Systemwide Overview

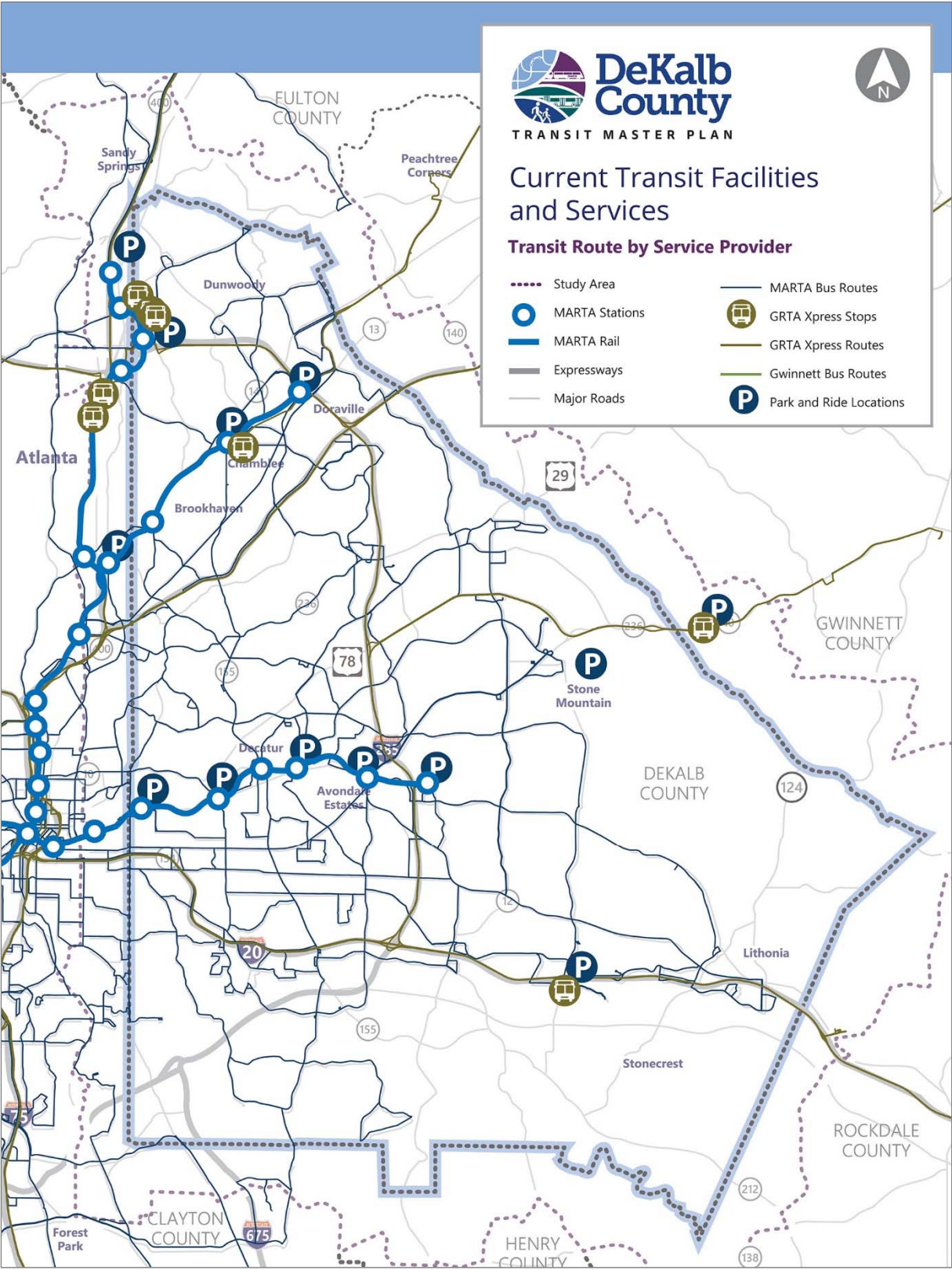
Transit services in DeKalb County are provided primarily by the Metropolitan Atlanta Rapid Transit Authority (MARTA), the State Road and Tollway Authority (SRTA), and a few independently operated private service providers. **Map 3-1** shows existing transit service in DeKalb County.

MARTA

MARTA serves DeKalb, Fulton, and Clayton counties, and the City of Atlanta. MARTA provides both bus and rail transit services, and total 2018 systemwide weekday daily ridership is more than 500,000. MARTA's rail lines provide connections to some of the major activity centers in the region such as Downtown Atlanta, Midtown Atlanta, Perimeter Center, Buckhead, Mercedes Benz Stadium, City of Decatur, and HJAI. The rail network also provides connections to educational institutions such as Georgia Institute of Technology and Georgia State University.

Local bus routes serve several functions. They act as the feeder system to MARTA rail stations, local circulators, connections to major activity centers, and express routes that serve the region's central business districts. MARTA completed a Comprehensive Operations Analysis (COA) for its bus routes in 2016 and has since adopted several changes in operations to optimize its transit service. Since 2014, the Atlanta region's transit network also includes a streetcar route in Downtown Atlanta, which connects attractions in the City with MARTA rail.

Map 3-1: Transit Services in DeKalb County



MARTA is the ninth largest transit agency and eighth largest heavy rail agency in the nation ranked by unlinked passenger trips (Source: 2017 *Public Transportation Fact Book*, American Public Transportation Association). MARTA's combined bus and rail service supports 24,864 jobs throughout Atlanta and the State of Georgia (Source: MARTA). MARTA is funded through a dedicated sales tax collected in DeKalb, Fulton and Clayton counties and the City of Atlanta, and supported with federal funds. The counties levy a one-cent sales tax for MARTA. The City of Atlanta voted in November 2016 to increase their contribution by an additional one-half cent for the More MARTA Atlanta program such that within the City of Atlanta contributes a 1.5-cent sales tax to MARTA.

STATE ROAD AND TOLLWAY AUTHORITY (SRTA)/GEORGIA REGIONAL TRANSPORTATION AUTHORITY (GRTA)

SRTA/GRTA operates regional commuter Xpress bus services during peak hours from 27 park-and-ride lots in population centers across the region to and from major employment centers in Downtown Atlanta, Midtown Atlanta, and Perimeter Center. Across the region, Xpress bus operates 27 routes in 12 metro Atlanta counties and carries more than 1.8 million passenger trips annually. The Xpress bus service connects 3.4 million residents to 375,000 jobs.

OTHER SERVICES

Beyond MARTA and SRTA, there are a few private and municipal services operating in DeKalb County.

Gwinnett County Transit

Gwinnett County Transit does provide some service within DeKalb County.

Cliff Shuttle

Emory University operates the Cliff Shuttle, which consists of nine routes on campus, four commuter routes, two hospital routes, and eight other routes connecting the campus to Georgia Tech, the Oxford campus, and shopping destinations.

Perimeter Connects

The Perimeter Community Improvement Districts (CIDs) provide shuttle services within the CIDs boundaries called Perimeter Connects. They provide regular shuttle services during peak commuting hours and during lunchtime to connect between key locations and employers. The CIDs also offer the "Perimeter Shuttles App" that can be used to check schedules and arrange a shuttle pickup in the area.

Human Service Transportation

Human services transportation is primarily provided by MARTA in DeKalb County through MARTA Mobility. MARTA Mobility provides paratransit access for eligible persons with disabilities who are unable to board, ride or disembark from MARTA's regular buses. Advance reservation is required to use MARTA Mobility service. MARTA Mobility operates during the same days and hours as regular bus and rail service. The service area for MARTA Mobility is three-quarter miles around existing local bus routes and rail stations. While MARTA Mobility's standard fare is four dollars,

MARTA provides Reduced Fare Breeze Cards to eligible senior citizens, people with disabilities, and Medicare cardholders.

DeKalb County offers a voucher program to encourage older adults to be more active. The DeKalb Reimbursement Vouchers for the Elderly (DRiVE) Program is designed for seniors living in DeKalb County who are 60 years of age and older.

Taxis and Transportation Network Companies

In addition to various ride-hailing taxi services, mobile application-based services such as Uber and Lyft operate in DeKalb County. Transportation network companies (TNCs) such as Uber and Lyft can potentially operate around the clock, depending on driver availability. TNCs can play a major role in providing last mile connectivity to transit riders and to areas not currently served by transit directly. In connecting a rider to a destination that is not on the extended transit system, TNCs can extend the de facto service footprint of transit.

Transit System Characteristics

This section provides a summary of bus and rail transit system characteristics in DeKalb County.

BUS SERVICE CHARACTERISTICS

MARTA is the primary operator of bus transit service within DeKalb County. SRTA/GRTA Xpress and Gwinnett County Transit provide additional services in the county. **Table 3-1** provides an overview of bus services currently operating in DeKalb County.

Table 3-1: Existing DeKalb County Bus Services (2018)

Service	Number of Routes	Span of Service	One-Way Fare (30-day Pass)
MARTA Local	46	All day, includes Saturday and Sunday	\$2.50 (\$95)
MARTA Mobility	N/A	Service period same as fixed route bus/rail service	\$4 (\$128)
SRTA/GRTA Xpress	7	Monday – Friday, AM and PM Commute Periods	Varies by zones
Gwinnett Express	1	Monday – Friday, AM and PM Commute Periods	\$5 (\$180)
Gwinnett Local	3	Monday – Friday, Saturday	\$2.50 (\$80)

MARTA Bus Service

Table 3-2 lists MARTA bus routes operating in DeKalb County and the destinations they serve. **Map 3-2** presents the MARTA routes that serve DeKalb County and its surrounding area, along with boardings by stop. It can be seen from this map that central DeKalb County is served by both rail and bus, but that in the eastern reaches of the county and areas south of I-20, there are neither rail stations nor bus stops.

Table 3-2: MARTA Local Bus Routes and Destinations Served

Route	Route Name	Area Served	Destinations
2	Ponce de Leon Avenue / Druid Hills	Serves DeKalb and Fulton Counties	North Avenue Station, East Lake Station, Ponce City Market, Fox Theater, AT&T
4	Moreland Avenue	Serves near DeKalb	Inman Park / Reynoldstown Station, Edgewood Retail District, Moreland Plaza, Thomasville Heights Elementary School, Thomasville Recreation Center, Atlanta Youth Academy
5	Piedmont Road / Sandy Springs	Serves DeKalb and Fulton Counties	Perimeter Mall, Dunwoody Station, Lindbergh Center Station, Shopping Centers such as - Sandy Springs Plaza, The Prado, Roswell Wieuca, Chastain Square, Powers Ferry Square, Lindbergh plaza
6	Clifton Road / Emory	Serves DeKalb and Fulton Counties	Lindbergh Center Station, Inman park / Reynoldstown Station, Emory/CDC, Children's Healthcare of Atlanta, Little Five Points
8	North Druid Hills Road	Within DeKalb	Brookhaven Station, Kensington Station, Cross Keys High School, Corporate Square, Toco Hills Shopping Center, North DeKalb Mall, Avondale Estates City Hall
9	Boulevard / Tilson Road	Serves DeKalb and Fulton Counties	Martin Luther King Jr Memorial Station, Zoo Atlanta, McNair Middle School, Nathaniel Herbert Scott III Park, The Gallery at South DeKalb
15	Candler Road	Within DeKalb	Decatur Station, DeKalb County Library, Agnes Scott College, The Gallery at South DeKalb, Georgia State University Perimeter College
19	Clairmont Road	Within DeKalb	Chamblee Station, Decatur Station, North DeKalb Health Center, VA Hospital, shopping centers such as Skyland Shopping Center, Plaza Fiesta, Williamsburg Village, Briarcliff Shopping Center
21	Memorial Drive	Serves DeKalb and Fulton Counties	Five Points Station, Kensington Station, Wesley international Academy, Oakland Cemetery, Habitat for Humanity, Alonzo Crim High School, Belvedere Plaza
24	McAfee / Hosea Williams	Within DeKalb	Edgewood / Candler Park Station, Indian Creek Station, Bessie Branham park, Kirkwood Library, Atlanta DeKalb Human Services Complex, Columbia High School
25	Peachtree Industrial Boulevard	Within DeKalb	Doraville Station, Brookhaven / Oglethorpe Station, BrandsMart, Town Brookhaven, Oglethorpe University
27	Cheshire Bridge Road	Serves near DeKalb	Lenox Station, Lenox Square Mall, Ansley mall, Botanical Gardens, Piedmont Park, Arta Center Station
30	Lavista Road	Serves DeKalb and Fulton Counties	Lindbergh Center Station, Lindbergh Plaza, Home Depot, Toco Hills Shopping Center, Briarlake Elementary School, Northlake Mall
32	Bouldercrest	Serves DeKalb and Clayton Counties	Inman Park / Reynoldstown Station, Edgewood Retail District, McNair High School
34	2nd Ave/Gresham Rd/Clifton Springs Rd	Within DeKalb	East Lake Station, Georgia State University Perimeter College, Clifton Springs Health Center, William Buck Godfrey Stadium, Gresham park, Barack H Obama Elementary Magnet School of Technology, McNair Discover Learning Academy, East Lake Golf Club, Charles R. Drew Charter School
36	N Decatur Road / Virginia Highland	Serves DeKalb and Fulton Counties	Midtown Station, Piedmont Park, Grady High School, Samuel Inman Middle School, Emory University, Druid Hills High School, DeKalb medical Center, Decatur Station

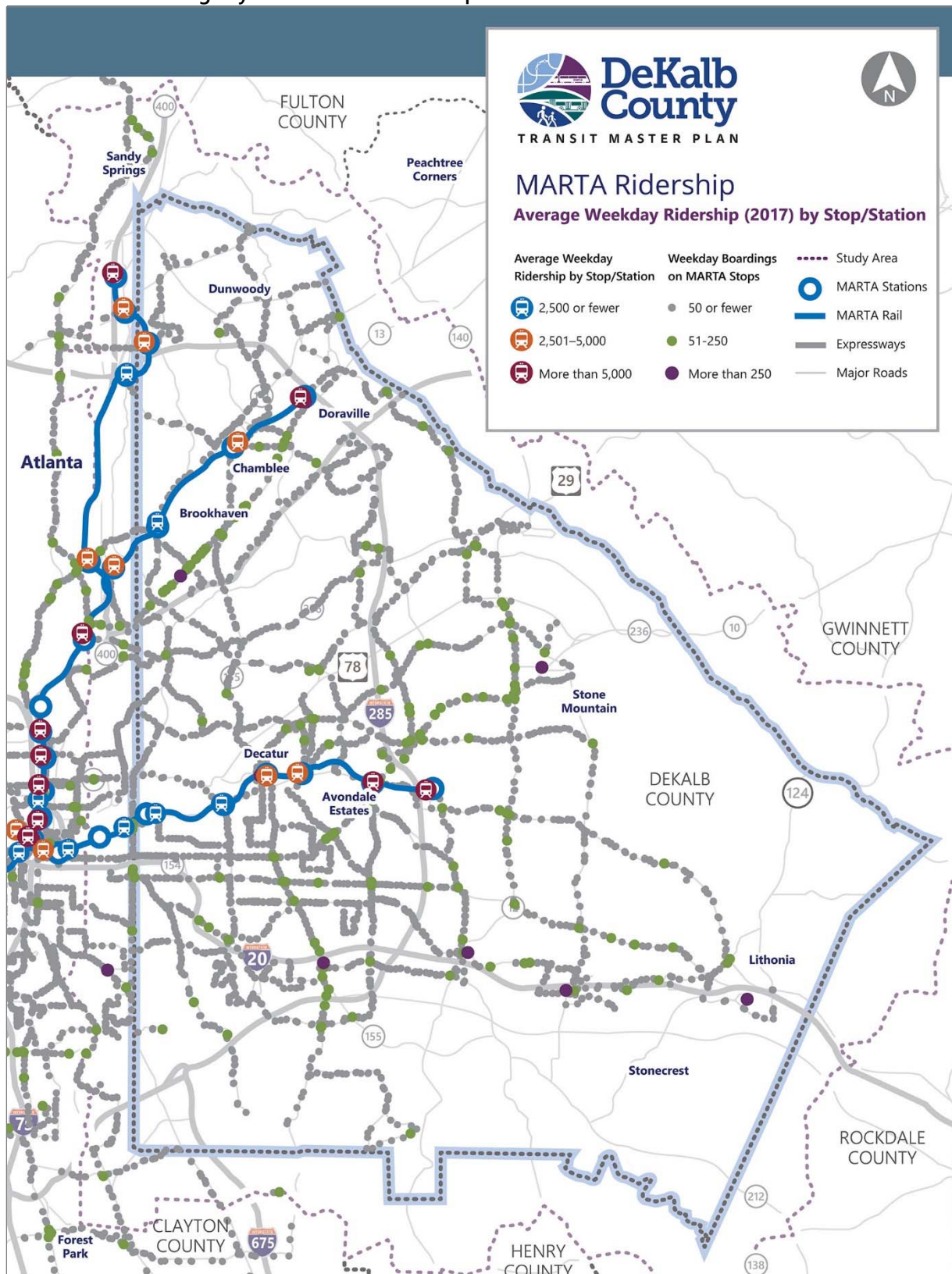
Route	Route Name	Area Served	Destinations
39	Buford Highway	Serves DeKalb and Fulton Counties	Doraville Station, Lindbergh Station, Lindbergh Plaza, Corporate Square, Northeast Plaza, Plaza Fiesta, DeKalb Peachtree Airport
47	I-85 Access Road / Briarwood Road	Within DeKalb	Chamblee Station, St. Pius High School, Shallowford Exchange, Century Center, Williamsburg Village, Brookhaven Station, Brookhaven Plaza, Cherokee Plaza
49	McDonough Boulevard	Serves DeKalb and Fulton Counties	Five Points Station, Rosa Burney Park, Georgia State Stadium, Thomasville Recreation Center, Metro Transitional Center
55	Jonesboro Road	Serves near DeKalb	Five Points Station, Georgia State Capitol, Turner Field, Southside Medical Center, The Schools at Carver, Dobbs Elementary School, Browns Mill Golf Course, South Atlanta High School
74	Flat Shoals Road	Serves DeKalb and Fulton Counties	Inman Park / Reynoldstown Station, Edgewood Retail District, DeKalb County Police Derwin Brown Memorial South Precinct, Allegre Point Senior Residences, Rainbow Village, Gallery at South DeKalb
75	Lawrenceville Highway	Within DeKalb	Avondale Station, Tucker High School, North DeKalb Mall
78	Cleveland Ave	Serves near DeKalb	East Point Station, Tri-Cities High School, Atlanta Medical Center South Campus, Hutchinson Elementary School, Rosel Fann Recreation Center, Browns Mill Golf Course
85	Roswell / Mansell Road	Serves near DeKalb	North Springs Station, Mansell park and Ride Lot, Roswell City Hall, Roswell Police Department, Atlanta Humane Society, Shopping centers such as - Roswell Plaza, Roswell Village, Roswell Town Center, Crossville Village
86	Fairington Road	Within DeKalb	Kensington Station, Mall at Stonecrest, Snapfinger Elementary School, Panola Road park and ride, DeKalb Medical Center
87	Roswell Road / Morgan Falls	Serves DeKalb and Fulton Counties	Dunwoody Station, North Springs Station, Sandy Springs City Hall, Police Department, North Fulton County Government Services Center, North Springs High School, Shopping Centers such as - Dunwoody Place, Abernathy Square, Sandy Springs North
102	North Avenue / Little Five Points	Serves DeKalb and Fulton Counties	North Avenue Station, Edgewood / Candler Park Station, Edgewood Retail District, Little Five Points, Ponce City Market, Fox Theater, AT&T, Midtown place, Briarcliff Plaza, Carter Center
103	Peeler Road / N Shallowford Road	Within DeKalb; DeKalb/Gwinnett Boundary	Chamblee Station, DeKalb County Water Works, The Liane Levetan Park at Brook Run, Chamblee Charter High School
104	Winters Chapel Road	Within DeKalb; DeKalb/Gwinnett Boundary	Doraville Station, Buford Highway Farmer's market, Home Depot, Consulado General De El Salvador
107	Glenwood	Serves DeKalb and Fulton Counties	Indian Creek Station, Georgia State Station, East Atlanta Village, Habitat for Humanity, Wesley international Academy
110	Church Street / North DeKalb Mall	Serves DeKalb and Fulton Counties	Brookhaven Oglethorpe Station, Lenox Square, Phipps Plaza, Buckhead Station, Tower Place, The Peach Shopping Center, Peachtree battle Shopping Center, Shepherd Center, Piedmont Hospital, Amtrak Station, Colony Square, Woodruff Arts Center, Arts Center Station
111	Snapfinger Woods	Within DeKalb	Indian Creek Station, Alice Williams Towers, DeKalb Medical Center, Mall at Stonecrest

Route	Route Name	Area Served	Destinations
114	Columbia Drive	Within DeKalb	Avondale Station, Snapfinger Elementary School, Columbia High School, Exchange Park, Columbia Middle School, Clifton Springs Health Center, Georgia State University Perimeter College
115	Covington Highway	Within DeKalb	Kensington Station, Hidden Hills Village Shopping Center, Miller Grove Middle School, Miller Grove High School, Mall at Stonecrest
116	Redan Road	Within DeKalb	Indian Creek Station, Crowe's crossing, Redan Village, Redan High School, Redan - Trotti Branch Public Library, East DeKalb Health Center, Mall at Stonecrest
117	Rockbridge Road / Panola Road	Within DeKalb	Avondale Station, DeKalb Medical Center, T.O. Vinson Health Center, Wade Walker Park, Lou Walker Senior Center, Panola Road GRTA Park and Ride
119	Hairston Road / Stone Mtn Village	Within DeKalb	Kensington Station, Goldsmith Park and Ride (Stone Mountain), Indian Creek Station, Hairston park, Shopping centers such as - Hairston Square, Crowe's crossing, Redan Village, Rockbridge Crossing, Spring Mill Village, Stonewood Village, Hairston Village
120	East Ponce De Leon Avenue	Within DeKalb	Avondale Station, Goldsmith Park and Ride (Stone Mountain), Your DeKalb Farmer's Market, Tahoe Village Shopping Center, Elizabeth Andrews High School
121	Memorial Drive / N Hairston Road	Within DeKalb	Kensington Station, Georgia Piedmont Technical College, Georgia State University Perimeter College (Clarkston Campus), DeKalb East Campus, Elizabeth Andrews High School, Stone Mountain Middle School
123	Church Street / North DeKalb Mall	Within DeKalb	East Lake Station, North DeKalb Mall, DeKalb Medical Center, Glenlake Park, Decatur Station
124	Pleasantdale Road	Within DeKalb	Doraville Station, Tucker Square, Livsey Elementary School, Kelley C Cofer park, Tucker High School, Cofer Crossing
125	Clarkston / Northlake	Within DeKalb	Kensington Station, Georgia Piedmont Technical College, Georgia State University Perimeter College (Clarkston Campus), Clarkston high School, Indian Creek Elementary School, Atlanta Area School for Deaf, Montreal park, Northlake Mall
126	Chamblee-Tucker Road	Within DeKalb	Chamblee Station, IRS, Mercer University, Northlake Mall, Georgia Vocational Rehabilitation Agency, Bank of America
132	Tilly Mill Road	Within DeKalb; DeKalb/Gwinnett Boundary	Chamblee Station, Chamblee City hall, Chestnut Charter Elementary, Peachtree Charter Middle School, Georgia Perimeter College (Dunwoody Campus), Orchard Park Shopping Center
133	Shallowford Road	Within DeKalb	Doraville Station, Northlake Mall, St Pius Catholic High School
140	North Point Parkway	Serves near DeKalb	North Springs Station, Mansell park and Ride Lot, North Point Mall, Windward park and ride lot
141	Haynes Bridge Road / Milton	Serves near DeKalb	North Springs Station, Mansell park and Ride Lot, Alpharetta City Hall, Cogburn Road Park, Windward park and ride lot
142	East Holcomb Bridge Road	Serves near DeKalb	Mansell park and Ride Lot, Holcomb Bridge Crossing, Holcomb Bridge Middle School, Rivermont Square, Goodwill of North Georgia, Spalding Corners
143	Windward Park & Ride	Serves near DeKalb	North Springs Station, Windward park and ride lot

Route	Route Name	Area Served	Destinations
148	Mount Vernon Highway	Serves near DeKalb	Sandy Springs Station, Atkins Building, Fulton County School Administration Building, Heard's Ferry Elementary School
150	Perimeter Center / Dunwoody Village	Within DeKalb	Dunwoody Station, Perimeter Mall, Dunwoody Village Shopping Center, Dunwoody high School
185	Alpharetta / Old Milton Parkway	Serves near DeKalb	North Springs Station, Roswell Shopping Center, North Fulton Hospital, Wills Park Recreation Center, Alpharetta City Hall, Avalon Shopping Center, Gwinnett technical College, Georgia State University Perimeter College Alpharetta Campus
186	Rainbow Drive / South DeKalb	Serves DeKalb and Fulton Counties	Five Points Station, Georgia State Station, The Gallery at South DeKalb, Wesley Chapel Road
194	Conley Road / Mt Zion	Serves near DeKalb	Lakewood / Fort McPherson Station, Fort Gillem, Clayton State University, Southlake Mall
195	Forest Parkway	Serves near DeKalb	College Park Station, Atlanta State Farmers market, Forest Park City Hall, Georgia International Convention Center
221	Memorial Drive Limited	Within DeKalb	Kensington Station, Georgia State University Perimeter College (Clarkston Campus), Georgia Perimeter Technical College, Memorial bend Shopping Center, Stonemont Village Shopping Center, DeKalb East Campus, Stonewood Village Shopping Center, Spring Mill Village Shopping Center, Walmart, Goldsmith park and ride
816	North Highland Avenue	Serves DeKalb and Fulton Counties	Emory University, Center for Disease Control, Five Points Station, Atlanta Civic Center, Georgia Power, WellStar Atlanta Medical Center, Carter Center, Briarcliff Plaza, Virginia Highland, Morningside Elementary, Sage Hill Shopping Center, Emory University Hospital, Children's Healthcare of Atlanta
823	Belvedere/Decatur	Within DeKalb	Decatur Station, Agnes Scott College, Belvedere Park
825	Johnson Ferry Road	Serves DeKalb and Fulton Counties	Medical Center Station, Northside Hospital, St Joseph Hospital, Children's Healthcare at Scottish Rite, Chamblee Station
832	Grant Park	Serves near DeKalb	West End Station, Turner Field/Summerhill, Zoo Atlanta, Moreland Shopping Center

Source: MARTA

Map 3-2: MARTA Boardings by Rail Station or Bus Stop



Xpress Commuter Bus Service

There are seven commuter Xpress bus routes operated by SRTA/GRTA that serve DeKalb County:

- 401: Perimeter Center - Cumming
- 408: Chamblee - Emory Hospital
- 417: Perimeter Center - Sugarloaf Mills
- 423: Midtown - Panola Rd, West Conyers, East Conyers
- 426: Downtown - Panola Rd, West Conyers, East Conyers
- 428: Perimeter Center - Panola Rd, West Conyers
- 482: Perimeter Center - Town Center – Big Shanty

The Xpress bus service is well used throughout DeKalb County to access major business centers. The Xpress Commuter Bus serves Perimeter Center, Midtown Atlanta, and Downtown Atlanta as shown in **Map 3-3**. Four of the seven routes serve Perimeter Center. **Table 3-3** shows the annual boardings by route. From 2016 to 2017, there has been a 43 percent increase in boardings for the routes serving DeKalb County.

Table 3-3: Xpress Ridership for Routes Serving DeKalb County

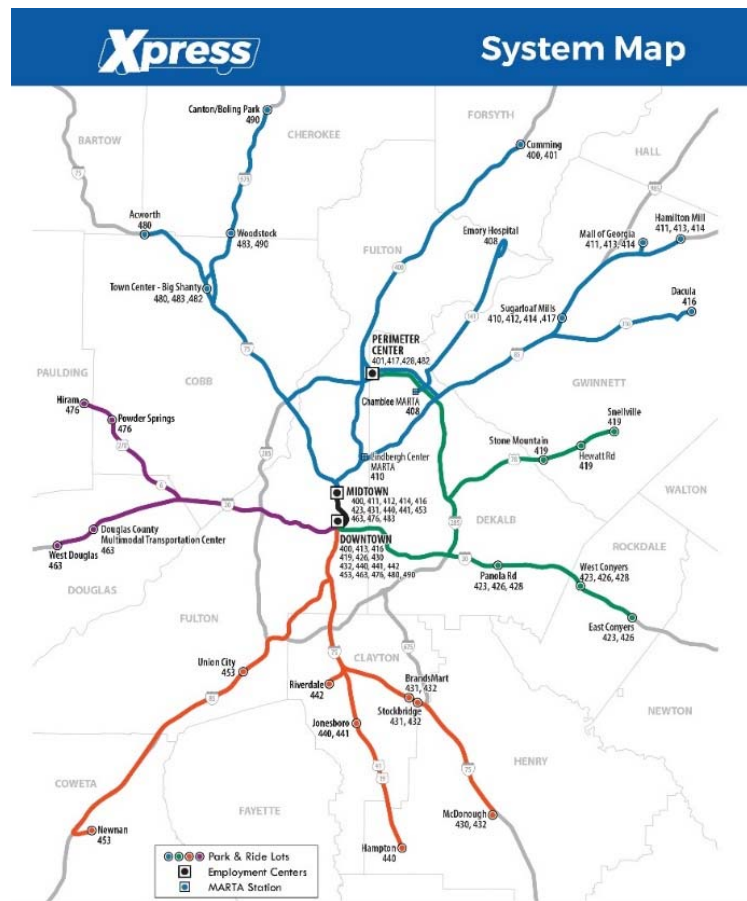
Route	2016 Boardings	2017 Boardings
400	64,870	42,386
408	19,541	21,455
417**	0	5,807
423	74,715	95,892
426*	54,355	186,989
428	31,928	32,816
482**	0	2,909

*Route started in September 2016

**Route started in August 2017

Significantly, there was a 244 percent increase in ridership on Xpress Route 246 from 54,355 in 2016 to 186,989 in 2017. The popularity of transit travel along I-20 East from Rockdale County and eastern DeKalb County to Downtown Atlanta may support the implementation of a high-capacity transit service in this corridor.

Map 3-3: Xpress System Map



RAIL SERVICE CHARACTERISTICS

MARTA operates two north-south lines connecting from the North Springs Station and the Doraville Station to Hartsfield-Jackson Atlanta International Airport and two east-west lines running from the Hamilton E. Holmes Station (or Bankhead Station) to the Indian Creek Station (or Edgewood/Candler Park). Most MARTA rail stations have a direct connection to bus routes. All four lines have at least one station in DeKalb County, as can be seen in **Map 3-1**. The following bullets describe the rail operations by line:

- Red line:** The Dunwoody station on MARTA's north-south Red line near Perimeter Center is in DeKalb County. Other stations such as Medical Center, Sandy Springs and North Springs are also near DeKalb County and likely serve county residents. MARTA's Red line connects DeKalb County with North Fulton County, City of Atlanta, Buckhead, Midtown, Downtown, and Hartsfield-Jackson Atlanta International Airport. The Red line runs between Lindbergh and North Springs after 9 PM.
- Gold line:** MARTA's north-south Gold line has three stations in DeKalb County: Brookhaven, Chamblee/Oglethorpe and Doraville. Lenox station near Lenox Square Mall is just over the

Fulton County line in the Buckhead community and likely serves County residents. The Gold line connects with Midtown, Downtown, and Hartsfield-Jackson Atlanta International Airport.

- **Blue line:** MARTA's east-west Blue line serves six stations in DeKalb County: Edgewood/Candler Park, East Lake, Decatur, Avondale, Kensington, and Indian Creek. The Blue line connects with Georgia State University, Downtown, Mercedes Benz Stadium/Phillips Arena in Fulton County.
- **Green line:** MARTA's Green line has its terminus in DeKalb County at Edgewood/Candler Park station, the only Green line station in DeKalb County. The Green line connects with Georgia State University, Downtown, and Mercedes Benz Stadium/Phillips Arena in Fulton County. The Green line does not serve DeKalb County directly after 9 PM, when it only runs between Bankhead and Vine City stations.

Transit Assets

To provide services in DeKalb County, MARTA has invested in a number of assets including vehicles, shelters, and maintenance facilities.

MARTA BUS TRANSIT ASSETS

MARTA operates buses on more than 100 routes in the system's three-county service area. In recent years, MARTA has purchased new vehicles that operate on compressed natural gas, converting the fleet to a clean-burning fuel chosen to support the region's effort to improve air quality. **Table 3-4** presents MARTA's systemwide bus assets and **Table 3-5** presents MARTA-owned bus shelters and bus stop benches. Vehicle assets are not assigned to any particular geographic area by MARTA. Approximately 44 percent of the bus shelters and 54 percent of the bus benches/seats owned by MARTA are located in DeKalb County. MARTA has plans to add shelters and benches to approximately 70 bus stops over the next five years.

Table 3-4: MARTA Bus and Paratransit System Assets

Vehicle Type	Total Fleet Vehicles	Total Active Fleet Vehicles	Total ADA Fleet Vehicles
Direct Response	211	211	211
Bus (Diesel)	93	93	93
Cutaway (Gasoline)	118	118	118
Local Bus	620	573	573
Articulated Bus (Compressed Natural Gas)	18	4	4
Bus	602	569	569
Compressed Natural Gas	436	420	420
Diesel	166	149	149
Grand Total	831	784	784

Source: MARTA

Table 3-5: MARTA Shelters and Benches/Seats

Asset Type	Clayton	DeKalb	Fulton	Atlanta	Total
Bus Shelters	16	320	156	233	725
Bus Benches/Seats	4	105	39	45	193

Source: MARTA

MARTA RAIL TRANSIT ASSETS

Table 3-6 through Table 3-8 provide details on MARTA's systemwide rail car and station inventory. MARTA operates 338 modern electrically powered rail cars capable of operating at speeds of up to seventy miles per hour on its 48 miles of heavy rail track. MARTA has 38 stations on its heavy rail system and 12 stations on its streetcar line.

Table 3-8 provides in-depth information on the ten rail stations in DeKalb County. Five of the MARTA stations in Dekalb County do not have restrooms available to passengers. Based on stakeholder and public input, this is a barrier to transit use.

Table 3-6: MARTA Rail Passenger Car Inventory (2016)

Passenger Car Type	Total Fleet Vehicles	Total Active Fleet Vehicles	Total ADA Fleet Vehicles
Heavy Rail (Electric Propulsion Power)	338	316	316
Streetcar (Electric Propulsion Power)	4	4	4
Grand Total	342	320	320

Source: MARTA

Table 3-7: MARTA Heavy Rail and Streetcar Station Overview

	Stations			Escalators	Elevators
	Systemwide	DeKalb County	ADA Accessible		
Heavy Rail	38	10	38	149	97
Streetcar	12	0	12	0	0

Source: MARTA

Table 3-8: MARTA's DeKalb County Rail Station Characteristics

Station	Parking Spaces	Parking Utilization	Overnight Parking	Restrooms	Zipcar	Connecting Bus Routes
Edgewood/ Candler Park	611 (currently 313 due to construction)	86.6%	No	No	Yes	MARTA 24, 102
East Lake	1,101 (498)	55.8%	No	No	Yes	MARTA 2, 34, 123
Decatur	0	N/A	No	Yes	Yes	MARTA 15, 19, 36, 123, 823; Emory Shuttle
Avondale	734 (251)	79.3%	No	Yes	Yes	MARTA 75, 114, 117, 120
Kensington	1,962 (Currently 1,841, lot 4 unavailable)	33.1%	No	Yes	No	MARTA 8, 21, 86, 115, 119, 121, 125, 221
Indian Creek	2,364 (2,352)	43.9%	No	Yes	No	MARTA 24, 107, 116, 119
Brookhaven – Oglethorpe University	1640	36.2%	Yes (\$5 per day)	No	No	MARTA 8, 25, 47, 110
Chamblee	1,149 (969, lot 1 closed, lot 2 employee parking, lot 5 unmarked)	78.6%	No	No	No	MARTA 19, 47, 103, 126, 132, 825; Xpress 408
Doraville	1,292	69.6%	Yes (\$8 per day)	Yes	Yes	MARTA 25, 39, 104, 124, 133. GCT 10A/10B, 20, 35
Dunwoody	1,091 (575)	78.3%	Yes (\$5 per day)	No	Yes	MARTA 5, 87, 150; Xpress 401, 417, 428, 482

Source: MARTA

MARTA OPERATIONS AND MAINTENANCE FACILITIES

MARTA has two maintenance facilities near Avondale station. Avondale Yard, the MARTA rail storage and maintenance facility near Avondale station, is used to service, clean, store, and test the fleet of rolling stock it services. MARTA maintains its bus fleet at the Laredo Maintenance Facility. In 2012, MARTA used an FTA grant to add 4,903 solar panels on the Laredo facility which produces approximately one-third of the agency's electrical demand.

Fares and Ticketing

To make the system easier to use, the region uses a simplified fare system and a ticketing system that works across agencies.

FARES

MARTA has a flat-rate fare system for both its rail and bus passengers. The standard MARTA one-way fare is \$2.50 with four free transfers allowed within a three-hour period. There is a discounted \$1.00 fare for senior citizens, riders with disabilities, and Medicare recipients. Children under 46 inches tall ride for free when accompanied by an adult (limit two free children per adult). MARTA also provides an option of day passes for unlimited rides ranging from one day through 30 days. MARTA offers a reduced fare version of each of its passes.

TICKETING

The MARTA system uses Breeze Cards as a primary ticketing method. Other transit systems such as the SRTA/GRTA Xpress, CobbLinc and GCT also accept Breeze Cards, which eases transfers and improves the rider experience. Breeze Cards can be purchased in the following ways:

- Online
- RideStores at MARTA Headquarters, Five Points Station and Airport Station
- Breeze vending machines at MARTA Stations
- Breeze vending machines at Streetcar stops
- Partner agencies

SPECIAL PROGRAMS

MARTA offers a number of special programs that target specific populations.

Student Program (K-12)

MARTA offers student Breeze Passes, valid during weekdays, for \$14.40 per 10-trip pass to students in grades K-12.

University Program

MARTA partners with colleges, universities, technical schools, and vocational schools from the Atlanta area to offer discounted MARTA Breeze Passes to students, faculty, and staff. Passes must be purchased directly through the university. A university pass costs \$68.50 per month for students and \$83.80 per month for faculty and staff.

MARTA Partnership Program

MARTA offers a program that not only provides significant savings to Atlanta area companies and their employees, but delivers a host of other benefits. Companies have the option to either go directly to MARTA or a Transportation Management Association (TMA). Members of the MARTA Partnership Program may participate in the Guaranteed Ride Home Program offered by Georgia Commute Options, which provides up to five free rides home each year to individuals using alternative modes on a regular basis.

Security

A recent article by the Atlanta Journal-Constitution (AJC) reports that MARTA is one of the safest transit systems in the country with a crime rate of about 30 incidents of violent crime per 100,000 average daily riders. The AJC compared 2015 crime data for four transit agencies and determined that MARTA was average in terms of security. The comparison showed that MARTA's rate of violent crimes is comparable to Washington DC's Metro and lower than that of San Francisco's Bay Area Transit System (BART). The Massachusetts Bay Transportation Authority (MBTA) has with a lower rate (23 incidents per 100,000 riders) by comparison. (Source: AJC article, www.ajc.com/news/local/after-recent-killings-how-safe-marta/KUtM1GmuvSiNsKF51Ln58L/, February 16, 2017)

MARTA tracks their Part I Crime Rate, which measures the number of four violent crime types (Homicide, Forcible Rape, Aggravated Assault, and Robbery) and four property crime types (Larceny/Theft, Motor Vehicle Theft, Burglary, and Arson) and reports them per one million unlinked passenger boardings. In February 2018, MARTA met its Part 1 Crime Rate target of no more than 4.00 crimes per one million unlinked passenger boardings. The overall number of Part I Crimes increased by 29% from 28 Part 1 crimes in January 2018 to 36 Part 1 crimes in February 2018.

State of Good Repair

State of Good Repair refers to maintaining public transportation assets in a condition at or above a target level in which performance and safety are not compromised. Systems with bus and rail assets in a State of Good Repair experience fewer breakdowns, and have greater opportunities to innovate/expand.¹ As systems age, State of Good Repair expenses tend to increase.

OPERATIONS

State of Good Repair refers to maintaining public transportation assets in a condition at or above a target level in which performance and safety are not compromised. According to APTA, systems with bus and rail assets in a State of Good Repair experience fewer breakdowns, and have greater opportunities to innovate/expand.

Facility Performance

Facility performance is reflected in elevator and escalator reliability at stations. For MARTA rail stations, the following information is available:

- The elevator availability rating measures the percentage of service hours during which elevators are available for customer use. In May 2018, MARTA elevators were available during 99.23 percent of service hours, which exceeded MARTA's target of 98.5 percent. Four elevator units were down at Civic Center, Lenox, and Peachtree Center stations, none of which are in DeKalb County.

¹ <https://www.apta.com/resources/reportsandpublications/Documents/Modernization-MARTA-Fact-Sheet.pdf>

- The escalator availability rating measures the percentage of service hours during which escalators are available for customer use. In May 2018, MARTA escalators were available during 97.15 percent of service hours, which exceeded MARTA's target of 97 percent. Four units were down at Five Points and Peachtree Center stations, neither of which is in DeKalb County.

Bus Performance

Bus service is rated on its timeliness, reliability, customer satisfaction, cost, and safety. In May 2018, MARTA systemwide bus service performance was as follows:

- Service is considered on-time if a bus departs a stop within five minutes of scheduled departure time. MARTA bus service was 80.18 percent on-time, beating its target of 78.50 percent.
- Bus reliability is measured by the mean distance traveled (vehicle miles) between mechanical failures. MARTA had a mean of 7,678 miles between mechanical failures, which beat its target of 4,500 miles between mechanical failures.
- MARTA failed to meet its target of 8.0 customer complaints per 100,000 bus passenger boardings; it received 9.44 customer complaints per 100,000 bus passenger boardings.
- MARTA's cost to provide each unlinked bus passenger trip was \$6.05.
- MARTA buses were involved in collisions 3.88 times per 100,000 miles of service, which is slightly worse than its target of 3.8 collisions per 100,000 miles of service.

Rail Performance

Rail service is rated on its timeliness, reliability, customer satisfaction, and cost. In May 2018, MARTA systemwide rail service was as follows:

- MARTA rail service was 97.2 percent on-time, beating its target of 95.0 percent.
- Due to door issues on some rail cars, MARTA rail reliability did not meet the service target. MARTA rail service went a mean 20,402 miles between mechanical failures, while the target was 23,000 miles. MARTA rail also travelled 562 train miles between lost and delayed trips, which outperformed the target of 500 miles.
- MARTA had 0.85 customer complaints per 100,000 rail passenger boardings, which beat the target of 1.0 complaints per 100,000 passenger boardings.
- MARTA's cost to provide each unlinked rail passenger trip was \$4.39.

Mobility Performance

MARTA Mobility service is rated on its timeliness, reliability, customer satisfaction, and cost. In May 2018, MARTA systemwide rail service was as follows:

- MARTA Mobility on-time performance ratings are based on the percentage of customers picked up within 30 minutes of their scheduled pickup time. MARTA picked up 89.34 percent of Mobility passengers within the pick-up window, just narrowly missing the target of 90 percent of passengers picked up within 30 minutes.
- MARTA Mobility went an average of 7,244 miles between mechanical failures, which did not meet the target of 15,000 average miles between mechanical failures.
- MARTA had 2.61 customer complaints per 1,000 Mobility passenger boardings, which beat its target of 4.0 complaints per 1,000 boardings.

- MARTA's cost to provide each unlinked rail passenger trip was \$69.48.
- MARTA Mobility vehicles were involved in 4.81 collisions per 100,000 service miles, which missed the target of 2.5 collisions per 100,000 service miles.
- MARTA Mobility missed 0.7 percent of trips, which was worse than the target of 0.5% trips missed.

Customer Service Performance

MARTA and MARTA Mobility are also rated on how well the reservations system handles calls. They are penalized for dropped calls, long wait times, and missed trips. Reservation performance in May 2018 was documented as follows:

- 3.1 percent of MARTA's customer service calls were dropped, which bested the target of 6 percent.
- MARTA's average call wait time was 31 seconds, which outperformed its target of 35 seconds.
- 3.58 percent of MARTA Mobility reservation calls were dropped, which bested the target of 5.5 percent.
- MARTA Mobility's average call wait was 90 seconds, which outperformed its target of 120 seconds.

CAPITAL

MARTA has a capital program to address State of Good Repair in DeKalb County of approximately \$485 million (as proposed in FY 2019 budget). **Table 3-9** lists the top ten projects being implemented with that funding.

Table 3-9: Top Ten MARTA State of Good Repair Projects in DeKalb County

Project Name	FY19 (in million \$)
CQ310 CQ 311 Rail Car Replacement Program	\$46.7
Rehab Tunnel Ventilation Fans	\$37.0
FY14 Bus Procurement	\$31.3
Future Radio Infrastructure	\$23.1
CNG Fuel Facility at Hamilton	\$21.0
Energy Services Company Performance (ESCO)	\$19.9
Train Control Systems Upgrade	\$19.9
Escalators Rehabilitation	\$9.1
Track Renovation – Phase IV	\$8.8
LCARE CQ312 84-Month Cycle	\$7.5

Source: MARTA

Transit Service Performance

DeKalb County is a major county in the Atlanta region, with 34 percent of MARTA service, 27 of percent of the employment in the MARTA service area, and 36 percent of population in the MARTA service area. DeKalb County contributes 25 percent of the collected sales tax to the

MARTA system. MARTA's performance in DeKalb County is presented in terms of miles, hours of service, riders, and costs in the following sections.

BUS PERFORMANCE INDICATORS

Table 3-10 shows key bus transit performance indicators for services in DeKalb County versus the entire MARTA service area. Bus operating costs in DeKalb County are lesser than for the system overall on a passenger and per mile basis. **Table 3-11** provides bus performance indicators by route.

Table 3-10: MARTA Bus: Systemwide Key Performance Indicators

Indicator	DeKalb County	DeKalb County Percent of System	Systemwide
Revenue miles	8,218,687	31.32%	26,238,748
Revenue hours	650,193	30.76%	2,113,732
Ridership	18,432,585	31.70%	58,146,957
Total operations expense	\$71,000,000		\$230,600,000
Operating cost per rider	\$3.90		\$4.00
Operating cost per revenue mile	\$8.60		\$8.80
Operating expense per revenue hour	\$109.20		\$109.10
Riders per revenue mile	2.2		2.2
Riders per revenue hour	28.3		27.5

Table 3-11: MARTA Bus: Key Performance Indicators by Route

Route Name	Annual Revenue Hours	Annual Revenue Miles	On-time Performance
MARTA 2 - Ponce de Leon Avenue / Druid Hills	141,595	17,532	80.1%
MARTA 4 - Moreland Avenue	181,633	13,841	77.0%
MARTA 5 - Piedmont Road / Sandy Springs	525,239	50,544	75.8%
MARTA 6 - Clifton Road / Emory	230,503	21,381	70.9%
MARTA 8 - North Druid Hills Road	179,620	15,277	81.2%
MARTA 9 - Boulevard / Tilson Road	198,201	17,768	78.3%
MARTA 15 - Candler Road	614,798	49,724	76.9%
MARTA 19 - Clairmont Road	226,409	21,569	76.0%
MARTA 21 - Memorial Drive	307,415	27,020	75.6%
MARTA 24 - McAfee / Hosea Williams	198,413	14,063	78.1%
MARTA 25 - Peachtree Industrial Boulevard	144,128	12,235	81.5%
MARTA 27 - Cheshire Bridge Road	169,392	20,071	77.8%
MARTA 30 - Lavista Road	146,398	11,617	77.2%
MARTA 32 - Bouldercrest	318,301	24,808	75.5%
MARTA 34 - 2nd Ave/Gresham Rd/Clifton Spgs Rd	176,878	15,571	83.6%
MARTA 36 - N Decatur Road / Virginia Highland	171,079	17,559	79.2%
MARTA 39 - Buford Highway	506,394	44,612	85.3%
MARTA 47 - I-85 Access Road / Briarwood Road	163,897	12,595	82.6%
MARTA 49 - McDonough Boulevard	209,664	19,992	80.9%

Route Name	Annual Revenue Hours	Annual Revenue Miles	On-time Performance
MARTA 55 - Jonesboro Road	441,698	32,625	73.9%
MARTA 74 - Flat Shoals Road	227,155	21,798	73.9%
MARTA 75 - Lawrenceville Highway	301,062	21,147	75.8%
MARTA 78 - Cleveland Ave	367,224	33,528	76.1%
MARTA 85 - Roswell / Mansell Road	247,506	18,407	80.9%
MARTA 86 - Fairington Road	388,576	25,229	79.2%
MARTA 87 - Roswell Road / Morgan Falls	336,715	25,596	79.7%
MARTA 102 - North Avenue / Little Five Points	126,124	17,548	75.3%
MARTA 103 - Peeler Road / N Shallowford Road	142,688	10,377	80.7%
MARTA 104 - Winters Chapel Road	68,121	5,136	92.3%
MARTA 107 - Glenwood	458,375	37,126	81.5%
MARTA 110 - Church Street / North DeKalb Mall	352,216	47,260	72.7%
MARTA 111 - Snapfinger Woods	378,672	27,462	74.7%
MARTA 114 - Columbia Drive	199,222	16,532	79.3%
MARTA 115 - Covington Highway	392,706	26,786	76.0%
MARTA 116 - Redan Road	425,344	26,757	82.6%
MARTA 117 - Rockbridge Road / Panola Road	558,621	41,432	72.4%
MARTA 119 - Hairston Road / Stone Mtn Village	173,006	13,000	71.2%
MARTA 120 - East Ponce De Leon Avenue	478,065	37,485	84.1%
MARTA 121 - Memorial Drive / N Hairston Road	437,880	38,202	73.1%
MARTA 123 - Church Street / North DeKalb Mall	123,005	12,735	86.0%
MARTA 124 - Pleasantdale Road	210,271	18,267	85.5%
MARTA 125 - Clarkston / Northlake	271,846	21,732	79.4%
MARTA 126 - Chamblee-Tucker Road	134,974	10,018	79.5%
MARTA 132 - Tilly Mill Road	113,903	8,765	77.4%
MARTA 133 - Shallowford Road	N/A	N/A	80.5%
MARTA 140 - North Point Parkway	286,594	14,664	83.9%
MARTA 141 - Haynes Bridge Road / Milton	391,904	23,088	78.5%
MARTA 142 - East Holcomb Bridge Road	N/A	N/A	75.6%
MARTA 143 - Woodward Park & Ride	286,902	13,312	73.5%
MARTA 148 - Mount Vernon Highway	33,143	2,353	73.8%
MARTA 150 - Perimeter Center / Dunwoody Village	75,637	8,094	81.0%
MARTA 185 - Alpharetta / Old Milton Parkway	344,471	22,307	72.5%
MARTA 186 - Rainbow Drive / South DeKalb	446,372	28,221	79.7%
MARTA 194 - Conley Road / Mt Zion	355,779	20,214	73.4%
MARTA 195 - Forest Parkway	232,823	13,965	75.1%
MARTA 221 - Memorial Drive Limited	127,006	9,610	80.1%
MARTA 816 - North Highland Avenue	N/A	N/A	70.1%
MARTA 823 - Belvedere/Decatur	76,401	6,771	75.9%
MARTA 825 - Johnson Ferry Road	N/A	N/A	85.7%
MARTA 832 - Grant Park	N/A	N/A	66.7%

Source: MARTA

RAIL PERFORMANCE INDICATORS

Table 3-12 summarizes ridership in FY 2017 for stations in DeKalb County. The top three stations by ridership in DeKalb County were Kensington, Indian Creek and Doraville stations, two of which, Indian Creek and Doraville, are termini for Blue and Gold lines, respectively.

Table 3-13 includes key performance indicators for rail service in DeKalb County. DeKalb County accounts for about a 20 percent share of MARTA rail's systemwide revenue miles as well as total ridership. Rail operating costs in DeKalb County are lesser than for the system overall on a passenger and per mile basis. All the same, DeKalb County has a greater number of revenue riders per hour (541 rider per hour for DeKalb, 445 per hour systemwide).

Table 3-12: MARTA Rail – Ridership at DeKalb County Stations (FY 2017)

Line	Station	Total Boardings	Average Daily Boardings
Blue/Green	Edgewood/Candler Park	363,835	1,155
Blue	East Lake	333,036	1,057
Blue	Decatur	1,052,574	3,342
Blue	Avondale	1,040,313	3,303
Blue	Kensington	1,756,662	5,577
Blue	Indian Creek	1,631,509	5,179
Gold	Brookhaven – Oglethorpe University	724,173	2,299
Gold	Chamblee	1,133,000	3,597
Gold	Doraville	1,693,803	5,377
Red	Dunwoody	1,231,287	3,909

Source: MARTA

Table 3-13: MARTA Rail - Key Performance Indicators

Indicator	DeKalb County	DeKalb County Percent of System	Systemwide
Revenue miles	4,414,297	19.8%	22,334,168
Revenue hours	24,635	16.4%	149,981
Ridership	13,338,410	19.5%	68,280,860
Total operations expense	\$41,700,000	18.5%	\$226,000,000
Operating cost per rider	\$3.10		\$3.32
Operating cost per revenue mile	\$9.40		\$10.14
Operating expense per revenue hour	\$1,692.70		\$1,510.39
Riders per revenue mile	3.0		3.1
Riders per revenue hour	541.4		455

Source: MARTA

Barriers to Transit

DeKalb County residents have a few barriers to accessing transit even if they have transit services near their homes including a lack of ticket vending machines and a lack of sidewalk connectivity.

TICKET VENDING MACHINES

DeKalb County residents can purchase Breeze Cards online at breezecard.com as well as at vending machines only at rail stations. Partner agencies and commuter programs also provide convenient access to Breeze Cards. While Breeze Cards cannot be purchased on busses, bus fare boxes provide a limited reload capability for existing breeze cards.

Map 3-4 shows the distance to the nearest Breeze Card vending machine. About 31,350 DeKalb County residents, most of whom live near the MARTA rail system, have a Breeze Card kiosk within one half-mile of their home. However, many residents in southern and eastern parts of DeKalb County would need to travel more than five miles to buy a new Breeze Card. Adding Breeze Card vending machines at existing facilities would improve access to transit for County residents. Some of the potential locations include The Gallery at South DeKalb, Panola Road park and ride, and Goldsmith park and ride. Additional Breeze vending machines at these locations would place a Breeze Card machine within a one-half mile of an additional 7,560 residents, an increase of 24 percent, of whom 6,990 are members of a racial minority group.

SIDEWALK CONNECTIVITY

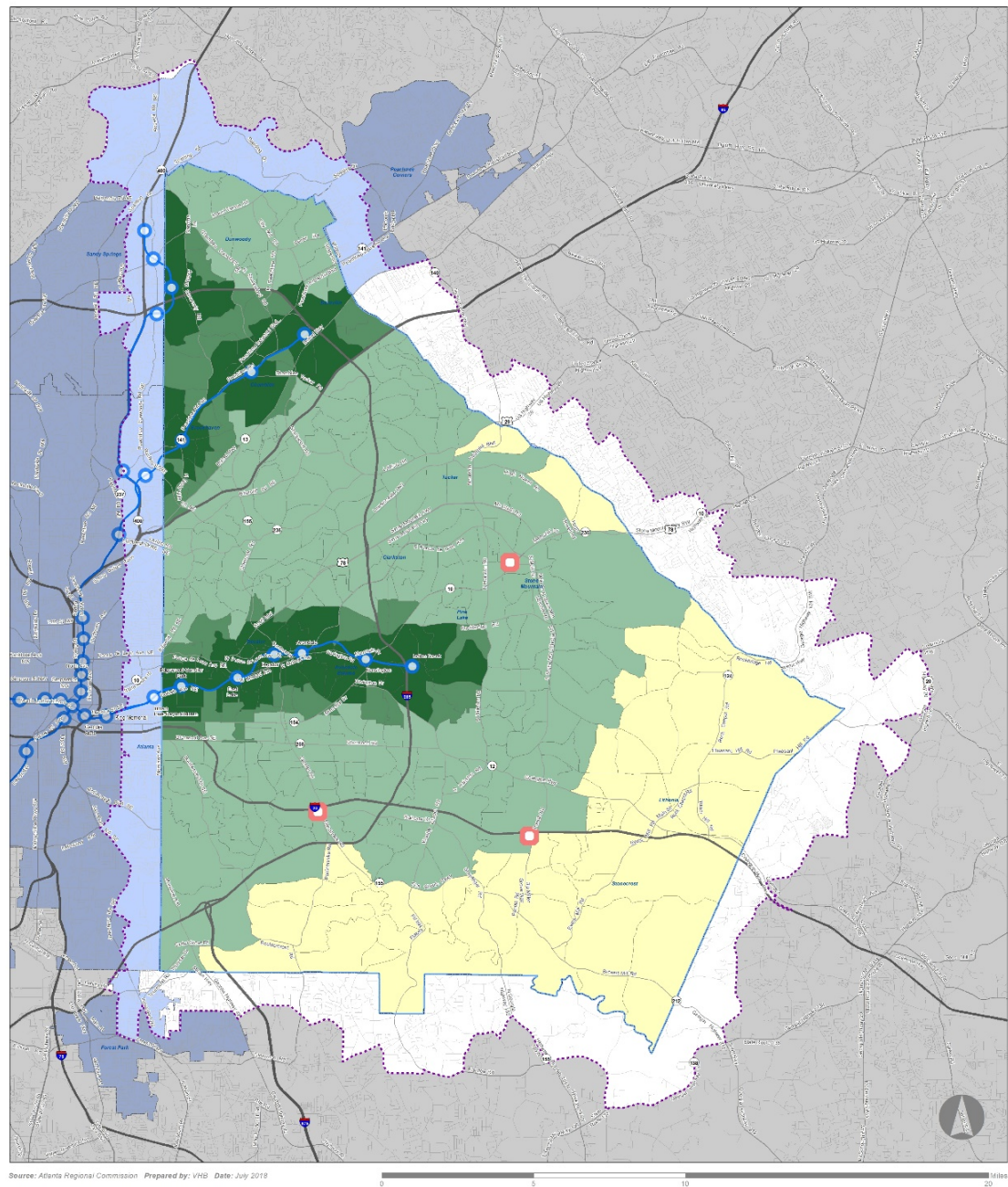
In addition to the lack of ticket vending machines, the lack of sidewalk connectivity may be a barrier to using nearby transit services in DeKalb County. Lack of sidewalks is particularly impactful for individuals with disabilities and older Americans.

Sidewalk Connectivity to Rail Services

The following provides an overview of sidewalk connectivity around each MARTA station in DeKalb County. Information was gathered through a review of recent satellite imagery.

- **Brookhaven Station** is bound by Peachtree Road on the west, Brookhaven Drive and Dresden Drive on the north and North Druid Hills Road on the south, all of which have sidewalk on both sides of the street in the immediate surroundings of the station. The station's larger parking lot lies to the east across the rail tracks and can be accessed via sidewalk on Dresden Road, as well as from the station via a pedestrian underpass. While streets connecting to commercial development have sidewalks at least on one side, some streets near residential areas do not have sidewalks.
- **Chamblee Station** can be accessed via Peachtree Road and New Peachtree Road, both of which have sidewalks near the station. While sidewalk continuity on Peachtree Road is good, New Peachtree Road has some patches without sidewalks on either side. With rail tracks running parallel to Peachtree Road and New Peachtree Road, there is limited east-west pedestrian connectivity. Many side streets near the station do not have sidewalks. MARTA is working on a transit-oriented development (TOD) plan near Chamblee Station, which is expected to further improve pedestrian access to the station.

Map 3-4: Ticket Vending Machine Access



Source: Atlanta Regional Commission Prepared by: VHB Date: July 2018



- Potential Breeze Card Machine Locations
 - MARTA Stations
 - MARTA Rail
 - Cities
 - Expressways
 - Major Roads
 - Streets
 - DeKalb County
 - Study Area
- Nearest breeze card machine**
- 1/2 mile or closer
 - 1/2 mile - 1 mile
 - 1 mile - 5 miles
 - Farther than 5 miles

- **Doraville Station** is bound by rail tracks on the west and can be accessed via an eastside entrance on New Peachtree Road. New Peachtree Road has sidewalks on both sides near the station. Buford Highway is a major destination nearby and can be accessed from the station via sidewalks on Central Avenue. Many other streets near the station have limited to no sidewalk access. As several destinations, such as Buford Highway Farmers Market, restaurants and businesses are spread between New Peachtree Road and Buford Highway, a shuttle in this area would help improve pedestrian access to Doraville Station.
- **Dunwoody Station** can be accessed via Peachtree Center Parkway and Hammond Drive, both of which have sidewalk connectivity near the station. Dunwoody station also provides pedestrian access to Perimeter Mall and other employment centers nearby. While roads near the station do not have any gaps in sidewalks, the large block sizes in this area can hinder pedestrian access to the station area. A shuttle connecting Dunwoody station with major destinations nearby would help improve access to the station.
- **Edgewood / Candler Park Station** can be accessed via DeKalb Avenue, Hutchison Street, and La France Street. The station area has good pedestrian connectivity. Smaller block sizes near the station also help in making the station area walkable. MARTA is working on a TOD plan near Edgewood / Candler Park Station, which is expected to further improve pedestrian access to the station.
- **East Lake Station** can be accessed via entrances on West Howard Avenue and West College Avenue, which have sidewalks on at least one side of the street. Many connecting streets have sidewalks on at least one side of the street as well. Stone Mountain Trail can also be accessed from the station area. However, there are some smaller residential streets which do not have sidewalks. MARTA is working on a TOD plan near East Lake Station, which is expected to further improve pedestrian access to the station.
- **Decatur Station** area is one of the earliest success stories for walkability. The area around Decatur Station is developed in a town square fashion. Decatur Station can be accessed via Church Street, East Ponce De Leon Avenue, Commerce Drive, and Swanton Way. The station area has excellent sidewalk connectivity with smaller block sizes and presence of sidewalks on most streets. Decatur station provides good pedestrian access to a variety of land uses.
- **Avondale Station** can be accessed via East Ponce De Leon Avenue, East College Avenue, and Sycamore Street. While many streets near the station provide decent sidewalk access on at least one side of the street, some of the smaller streets do not have sidewalks limiting pedestrian access to residences and businesses in the area. Additionally, Stone Mountain Trail can also be accessed from the station area. MARTA is working on a TOD plan near Avondale Station, which is expected to further improve pedestrian access to the station.
- **Kensington Station** is bound by Memorial Drive on the east, Mountain Drive on the north, Covington Highway on the west and Kensington Road on the south. Mountain Drive does not

have sidewalk on the side adjoining the north parking lot. Several connecting streets do not have sidewalks.

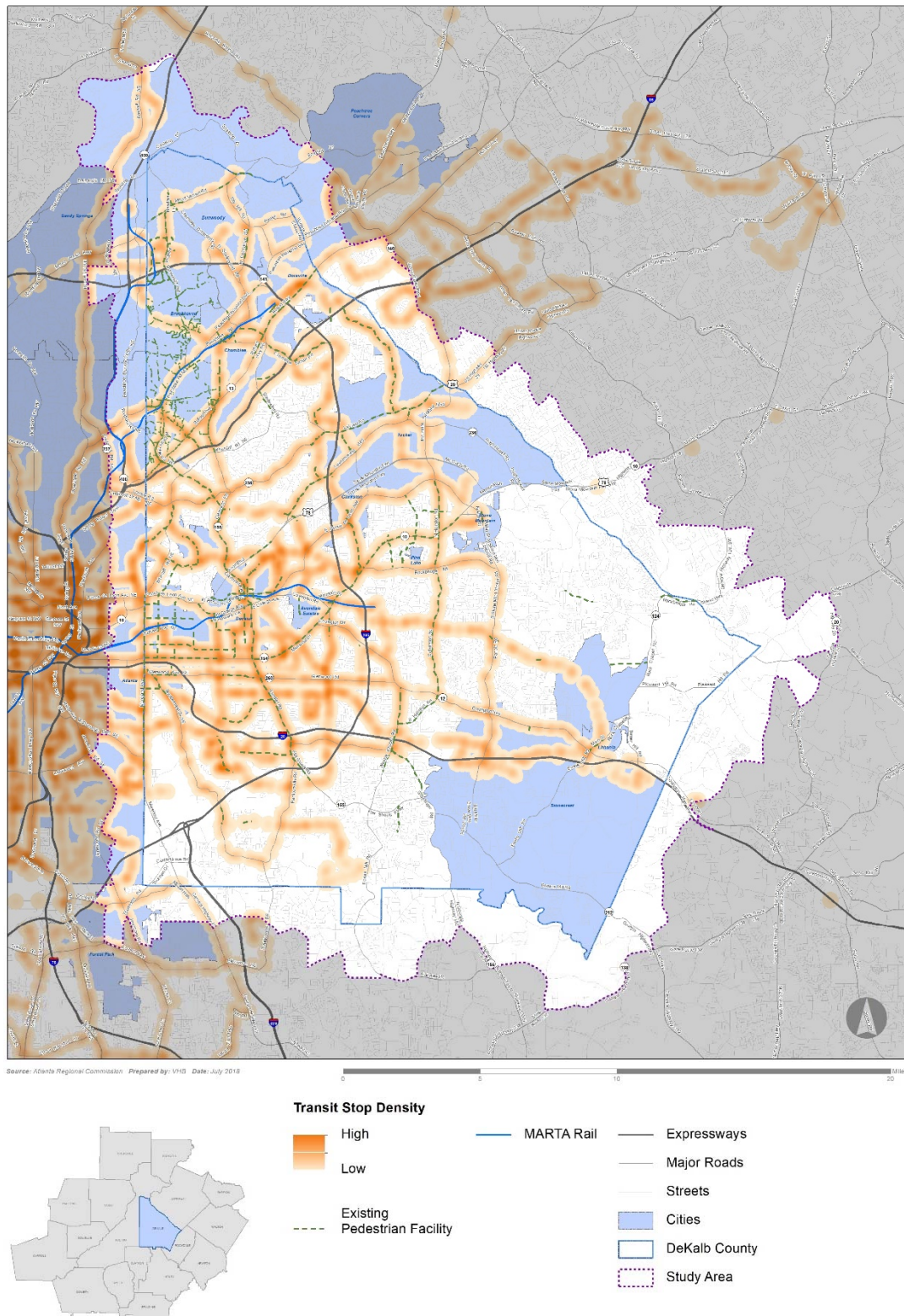
- **Indian Creek Station** can only be accessed by pedestrians via Elder Lane, which has a sidewalk on west side. Sparse and limited development near the station further limits the potential for pedestrian access to the station.

Sidewalk Connectivity to Bus Services

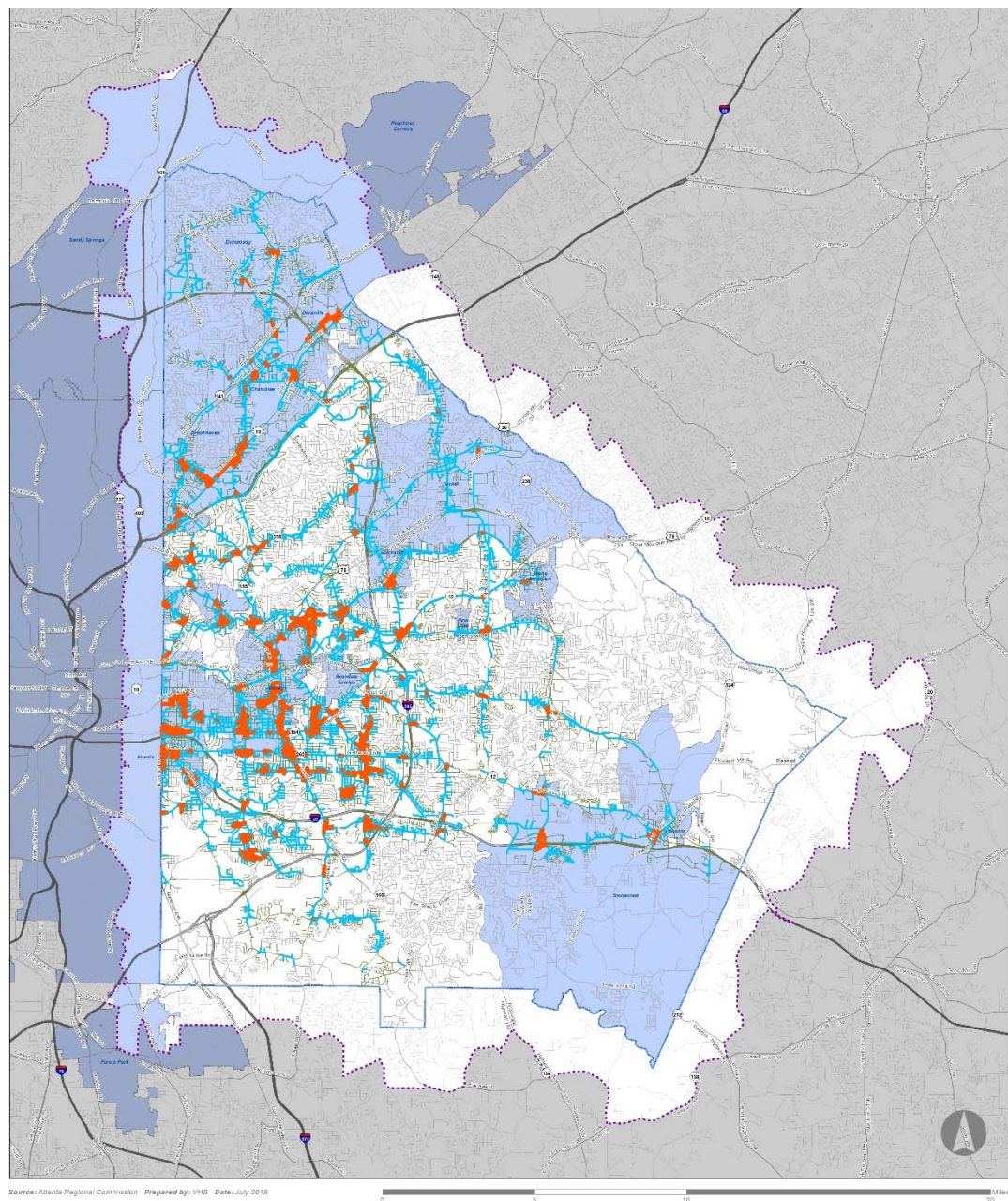
The following provides reviews sidewalk connectivity to bus services. Sidewalk connectivity information was provided by DeKalb County. The existing data about the location of pedestrian facilities does not include every sidewalk segment in the County; therefore, the data were mainly used to identify general areas with potential for improving pedestrian access to transit. The analysis identified areas with low pedestrian facilities but high transit service levels as these corridors were considered to be ripe for the pedestrian facility improvements.

Map 3-5 illustrates the density of transit stops in DeKalb County alongside existing pedestrian facilities. **Map 3-6** shows the number of transit stops within one half-mile of each street segment. While **Map 3-5** can help identify areas with a need for improved access to transit, **Map 3-6** provides further detail about streets that would need to be prioritized to maximize the return on investment.

Map 3-5: Sidewalk Connectivity as Compared to Transit Availability



Map 3-6: Corridors Needing Improved Pedestrian Access



Transit Stop Density

Streets - # stops within 1/4 mile

- None
- Less than 2
- 2 - 5
- More than 5

- Expressways
- Major Roads
- Streets
- Cities
- DeKalb County
- Study Area

Some of the areas with need for improved pedestrian access to transit are listed below:

- Areas near MARTA stations, especially Kensington, Indian Creek, Chamblee and Doraville stations
- Scottsdale, DeKalb Medical Center
- Lawrenceville Highway, Mountain Industrial Boulevard
- Panthersville
- Gresham park, Bouldercrest Drive, Eastland Drive, Flat Shoals Road
- Buford Highway
- Panola Road/ Covington Highway
- Rockbridge Road
- Snapfinger Road, Glenwood Road, Columbia Drive, McAfee Road
- Redan Road, Stone Mountain Lithonia Road

Perceptions of Transit

In support of the DCTMP, an online transit survey was published. While the collection methodology was not intended to be statistically significant, there is merit in reviewing the results. The following generalizations can be taken from the survey results.

- The overwhelming majority of all respondents (nearly 90%) indicated that existing transit service is not sufficient in DeKalb County.
- Respondents indicated that the three top priorities should be to expand transit to serve a greater number of destinations, to provide more frequent service, and to improve travel times on transit.
- About one-third of the respondents indicated that they would only be willing to walk for roughly one quarter-mile (5-minute walk) to transit, while an additional 43 percent indicated that they would be willing to walk to transit up to one half-mile (10-minute walk).
- The majority (53%) of respondents indicated 10 minutes as the minimum acceptable headway for transit service, while an additional 23 percent would accept a headway up to 20 minutes.

Transit Needs

Based on the analysis of the state of the current transit system, the following conclusions were drawn.

- While inside the I-285 Perimeter is covered relatively effectively by MARTA rail/bus and SRTA buses, south of I-20 and eastern sections of DeKalb are largely underserved or unserved by transit.
- Public transit service is not available in the eastern part of Stone Mountain and the northern part of Lithonia. South of the I-20 corridor outside of the I-285 Perimeter is scarcely served by public transit.

- Lithonia and Stonecrest are significantly underserved by MARTA and SRTA bus routes confined primarily to the I-20 corridor.
- Dunwoody, Doraville, Chamblee, and Brookhaven are served by MARTA rail, but bus routes are not sufficiently provided to meet citizen's travel needs.
- Tucker, Clarkston, Pine Lake, and Stone Mountain are only marginally served by MARTA buses.
- Public input suggested a need for a connector on Candler Road and a park and ride near the Gallery at South DeKalb near the Candler Road interchange for I-20 East.
- Northern parts of DeKalb County have limited east-west connections, thus travel times by transit in the area do not compete well with highway travel.
- The Druid Hills and Emory/CDC nodes have poor transit connections and travel times; therefore, these nodes do not compete well with highway.
- Decatur is relatively well served by public transit including both MARTA rail and bus routes.
- Existing routes with higher ridership need to be considered for improved headways, which is supported by the needs identified in the survey.
- Public transit opportunities which connect city center activity nodes are nonexistent.
- No regional connection is available from DeKalb County to adjacent counties such as Clayton and Henry counties.
- More than 50 percent of MARTA's bus routes did not meet MARTA's on-time performance standards. Addressing on-time performance issues would improve MARTA service to its passengers.
- MARTA has recently made a commitment to increase the number of bus stops in DeKalb County with shelters and seating.
- The lack of restrooms, sidewalk connectivity, and ticket vending machines are all barriers to using transit.
- "More police presence," "better lighting," "location of stops and shelters," and "more public spaces" were selected as some of the most important safety and security improvements needed.
- Respondents also suggested employing other strategies such as pedestrian infrastructure improvements and technology to improve experience of a rider.

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4 Economic Development

Background

Economic development is inextricably linked to transit and the linkage of people and places: homes, workplaces, and services.

Economic development is the set of policies, programs, and activities that seek to enhance the quality of life of a community by encouraging economic activity, expanding and retaining employment, and supporting a sustainable and stable tax base to fund public investment and government activity.

In recent years, the meaning and practice of economic development has expanded to consider the role of the larger community outside of the workplaces and jobs that lie at the center of economic development. While activities like marketing, recruitment, and supporting innovation are still fundamental to economic development, it is now recognized that a crucial part of economic development is attracting new companies by having an enhanced locality. Amenities such as quality-of-life, transportation, education, infrastructure, entertainment, housing, recreation, and public space are all increasingly important to employers and potential employees. At the micro level, employers are learning that the environment in which employees live, work, and play is nearly as big of a consideration as salary and benefits. Access to quality transit is one of the key elements of that environment.

Transit as an economic development incentive

In recent years, one of the most important national economic trends has been the embrace of transit and walkability by the corporate sector. In the Atlanta region alone, relocation initiatives by a number of large global employers have made it clear that access they prioritize high-capacity public transit and connectivity. Companies have identified access to transit as a necessary amenity to remain competitive and gain access to a quality workforce.

One key example of this is in DeKalb County: State Farm Insurance recently chose to build their new headquarters immediately adjacent to the Dunwoody Marta station, working with MARTA to provide direct access from the building lobby to the transit platform.

Figure 4-1: State Farm Dunwoody Hub

State Farm's Dunwoody hub will house up to 7,500 State Farm employees, or about 10 percent of State Farm's overall workforce. Photo: Atlanta Business Chronicle, BYRON E. SMALL

Employers want to locate in places where their employees have housing options and reasonable commute options.

Transit as an economic development necessity

Economic development and recruitment efforts often focus on companies and employees in high wage sectors. When successful these efforts typically create a second-wave of jobs, meaning that additional jobs will be created in fields that provide goods and services --both professional and personal-- to those new higher wage employees. The high wage jobs indirectly create another level of service jobs, such as construction workers, retail workers, restaurant workers, accountants, teachers, and firefighters.

These service jobs are fundamentally linked to job and housing growth at all wage and income levels. Furthermore, these services are generally required 7-days a week at the place of business. For most of these jobs, telecommuting is not a viable option.

While the wages of the initial new jobs may be high, the wages of the service-providers who support them tend to be significantly lower. DeKalb's service-sector salaries typically range from \$24,000 to \$40,000. Households in this income range are much more likely to depend on transit to access their jobs.

DeKalb County is forecast to add nearly 70,000 new jobs over the next 20 years. Based on today's wages, we can roughly forecast that 3 out of 4 of these new workers will earn less than \$40,000/year, a wage at which it is increasingly difficult to find an affordable combination of housing and transportation.

If DeKalb County wishes to remain economically competitive and create a home for this new employment growth, it is crucial that the County continue to expand access to quality transit in order to attract the best companies and employees, and to ensure that workers at all income levels have access to affordable transportation and housing options.

ECONOMIC DEVELOPMENT CYCLE

Around the edge of the economic development cycle are the fundamental functions that define our economies:

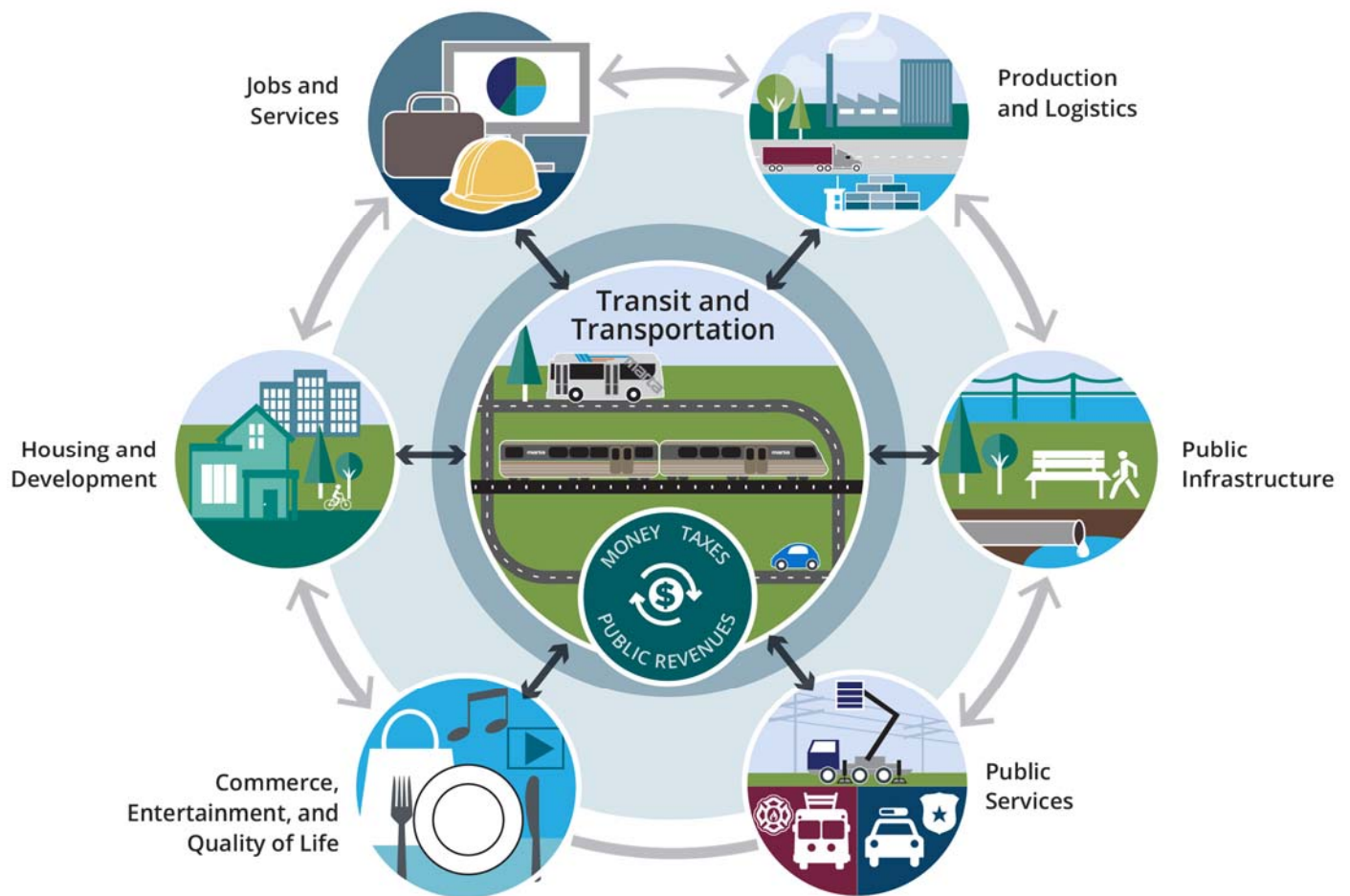
- Jobs and Services,
- Production and Logistics,
- Public Infrastructure,
- Public Services,
- Commerce, Entertainment and Quality of Life
- Housing and Development

These functions work together like parts of an engine to power the local economy. The gears and machinery at the heart of the engine that link all those functions together are:

- Transit and transportation
- Money, taxes and public revenues

Transit and transportation are the crucial element that connect people to institutions, both as employees and customers. Transit and transportation connect suppliers to businesses, residents and businesses to public services, and employees to housing. A robust and equitable transit system is crucial to ensure that a local economy is sustainable, and that economic opportunities are available to all.

Figure 4-2: Economic Development Cycle



Visioning

At 25 miles across, DeKalb County is very large, and home to 750,000 residents and 350,000 jobs. It is difficult to envision the shape of and scope of economic activity such a large and vibrant ecosystem.

Using publicly and privately available data sources, we can use mapping software to generate graphic maps that can help us visualize and understand some fundamental questions:

- How is economic activity distributed through the County right now?
- What are the already-simmering short-term economic trends that we will see over the next 1 to 5 years?
- What are the longer-term trends that will begin to emerge in the next five to 20 years?
- Are there places that have already demonstrated the willingness, desire and organization to capture a larger share of economic growth in the future?

The maps on the following pages illustrate how data can help us begin to visualize the answers to these questions.

These answers will help us envision how transit can support and respond to these economic trends by moving people -residents, workers, and customers, and visitors- between the places where they live, work, seek services, shop, eat and find entertainment. Transit can be the medium through which people, organizations, buildings, and places transform into economic activity.

This will also raise another important about who we choose to phase our future transit improvements. Since new transit service can take years, or even decades to fund, design and build (depending on the complexity), it is important to ask: Should our transit goals be designed

- To enhance connections to today's pobs, homes and places?
- To catalyze new and emerging jobs, homes and places? or
- To set the stage for the DeKalb County we expect to see twenty years from now?

CURRENT TRENDS

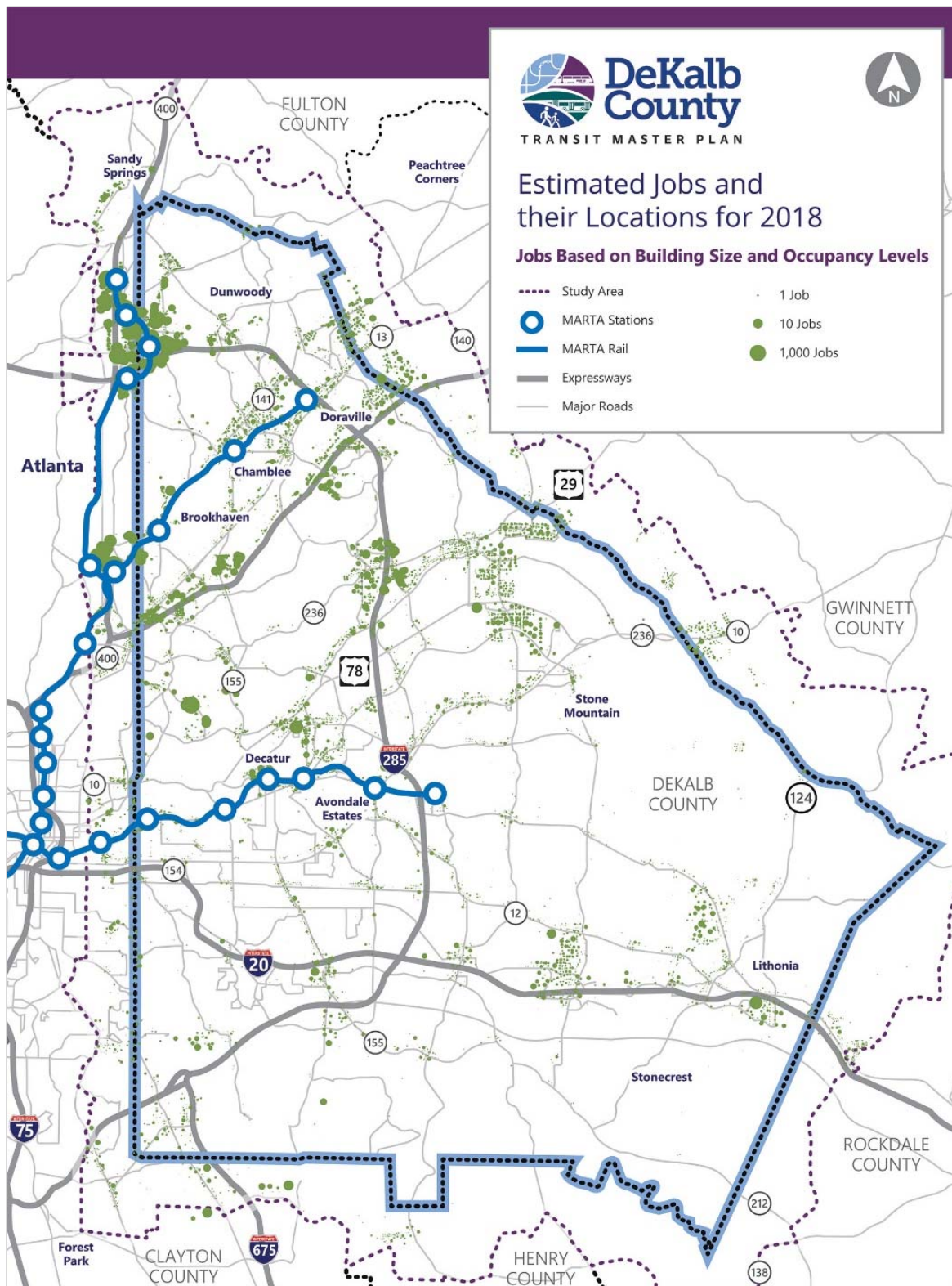
Where are the employment centers today?

Map 4-1 shows the distribution of jobs of all types in and around DeKalb County. It includes jobs that are based in one location such as retail, industrial, office, and hospitality positions. The bigger the dot, the more jobs there are at that location. Current employment opportunities tend to be focused in the northern part of DeKalb County.

What patterns emerge from Map 4-1?

- The County has several established significant employment centers:
 - Perimeter/Dunwoody area
 - Emory University, its Hospitals and the CDC
 - I-85 corridor
 - Northlake Mall area
 - Brookhaven & Buckhead
 - DeKalb Medical Center
 - Peachtree Industrial Blvd and Buford Highway Corridors in Chamblee and Doraville
 - Decatur
- The County has several emerging centers of employment and activity, particularly in the south portion of the County:
 - I-20 and Wesley Chapel
 - I-20 and Panola
 - Stonecrest
- While some of the County's employment centers are very well served by MARTA rail, several appear to be underserved:
 - Northlake
 - Stonecrest
 - Stone Mountain/Tucker Summit industrial area
 - Lithonia Industrial Area
 - Conley Industrial Area

Map 4-1: Current Trends: Today's Employment Centers



NEAR-TERM TRENDS

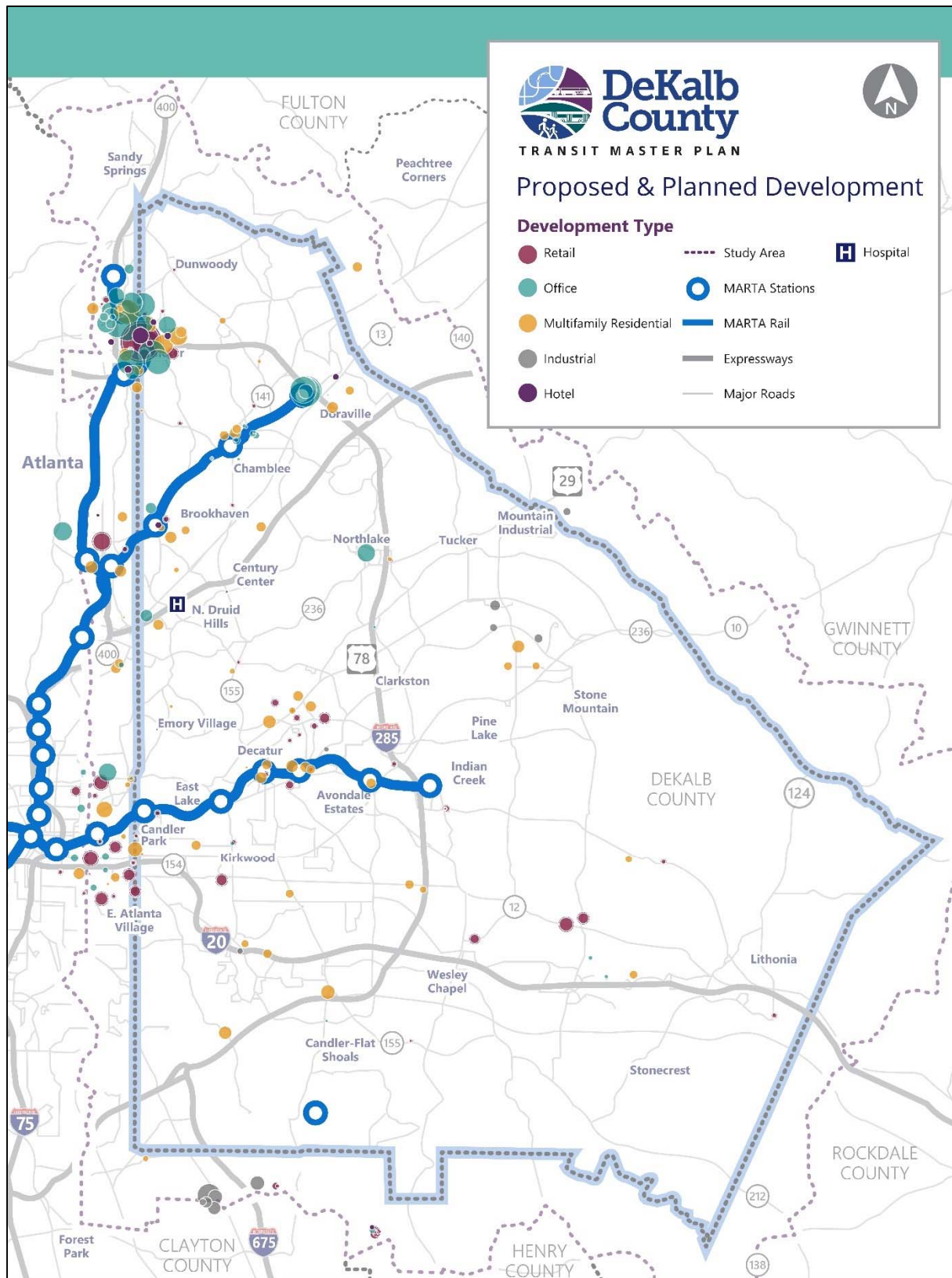
What are the short-term economic trends already beginning to take shape?

Map 4-2 shows the distribution of buildings that are currently proposed, planned, or under construction in DeKalb County. Five building types are identified: retail, office, multifamily residential, industrial and hotel. This map highlights the areas that are currently seeing development investment. Development investment is a strong indicator of where increased economic activity will occur over the next five years.

What patterns emerge from Map 4-2?

- Much of the development momentum is in areas that are already established job centers with existing MARTA rail stations:
 - Perimeter/Dunwoody area
 - East side of Atlanta in Fulton County along Ponce de Leon Avenue and Memorial Drive
 - DeKalb Medical Center
 - Northlake
 - Chamblee
- There is a strong correlation between current development trends and access to transit
 - The correlation is even stronger if the Atlanta BeltLine is considered to be a transit facility.
 - It is anticipated that this correlation will continue in the future.

Map 4-2: Near-Term Trends: Proposed and Planned Development



LONG-TERM TRENDS

What are the long-term trends that will begin to emerge in the next five to 20 years?

Map 4-3 shows the distribution of large properties and buildings that are likely to see redevelopment in next five to 20 years. While current opportunities are focused in the northern part of DeKalb County, future opportunity for development/redevelopment appears to be focused in the southern part of DeKalb County.

The map identifies parcels that meet one of the following criteria:

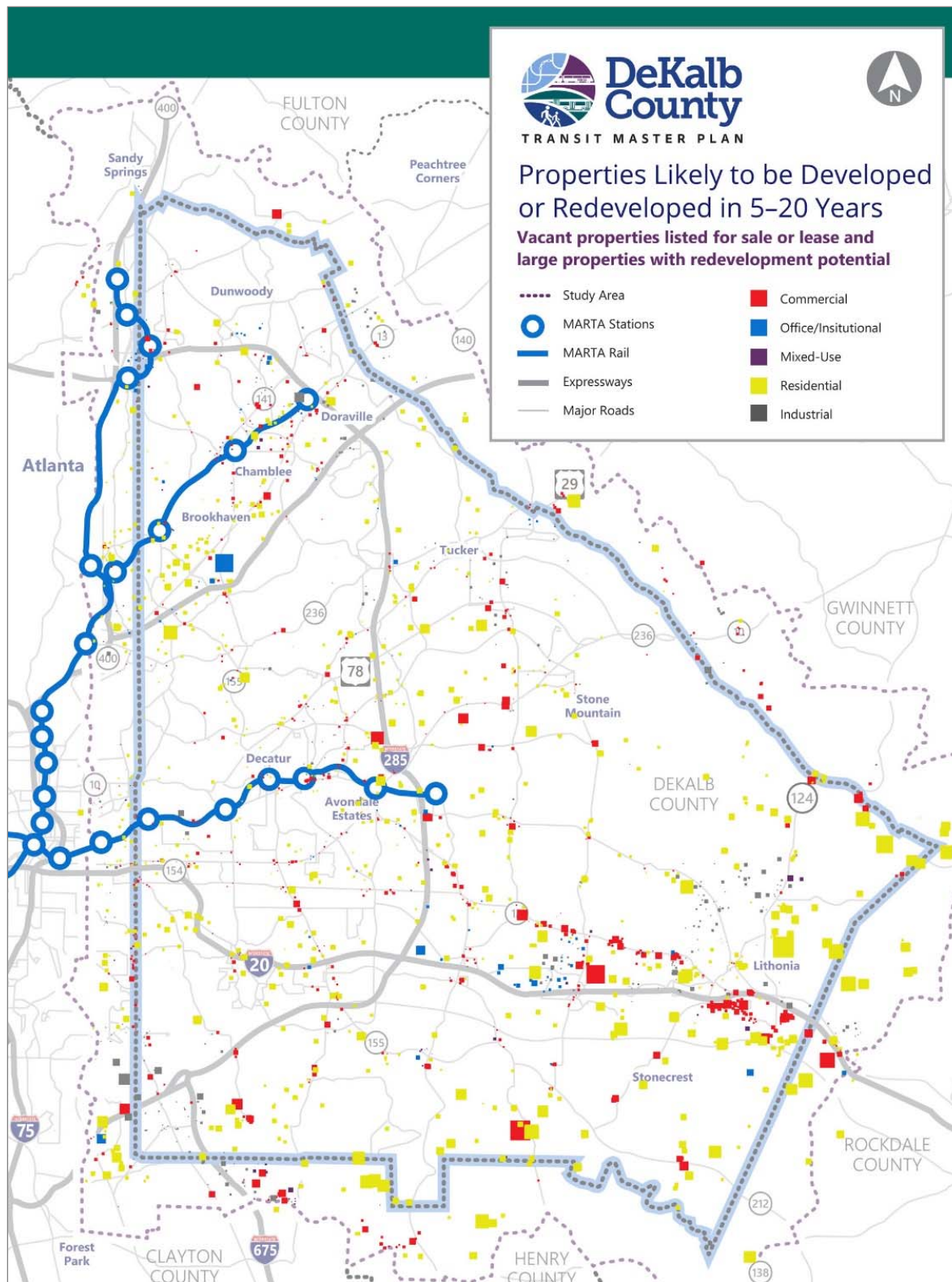
- Large parcel of vacant commercial land that is being marketed for sale or lease through real estate listing services;
- Large property (2+ acres) that is likely to be redeveloped due to age, high vacancy, or functional obsolescence; and
- The map identifies the predominant zoning underlying each parcel (it should be noted that land use may change with redevelopment).

In all of these cases, the property's owners may be seeking redevelopment opportunities; however, based on the time required for large-scale development, it is not likely that any of these sites would see redevelopment earlier than 2023.

What patterns emerge from Map 4-3?

- South DeKalb has very strong redevelopment potential. The following areas are particularly ripe with opportunity:
 - Covington Highway
 - Stonecrest
 - Panola Industrial Area
- Many of the opportunities are located along major commercial corridors:
 - Covington Highway
 - Mountain Industrial & Hairston Road
- Much of the County has concentrations of apartments that are nearing the end of their functional lifespans, which is creating opportunities for redevelopment:
 - Buford Highway
 - Dunwoody

Map 4-3: Long-Term Trends: Property Ripe for Development or Redevelopment



COMMUNITY PLANNING FOR GROWTH

Are there places that have already demonstrated the willingness, desire, and organization to capture a larger share of economic growth in the future?

The map on the facing page shows areas in the county that have established economic development programs, initiatives or incentives. These tend to correlate with an economic, political, and organizational environment that is supportive of economic growth, economic development and successful initiatives. These initiatives include:

- Enterprise, Empowerment and Opportunity Zone designations
- Livable Centers Initiative (LCI) and similar small-area studies
- Designated Regional Activity Centers (ARC)
- Designated Town Centers
- MARTA Transit station-area communities
- Community Improvement Districts

Why is this important?

- These designations show that these areas have already put thought, effort, and funding towards advancing economic development and economic growth.
- This demonstrates that these areas have Champions- individuals and organizations in both the private and public sphere who are willing to work collectively to advance the interests of the area.
- In many cases, these areas will have pre-existing plans, priorities and incentives that help catalyze, focus and shape growth, making them “pre-cleared” for economic development.

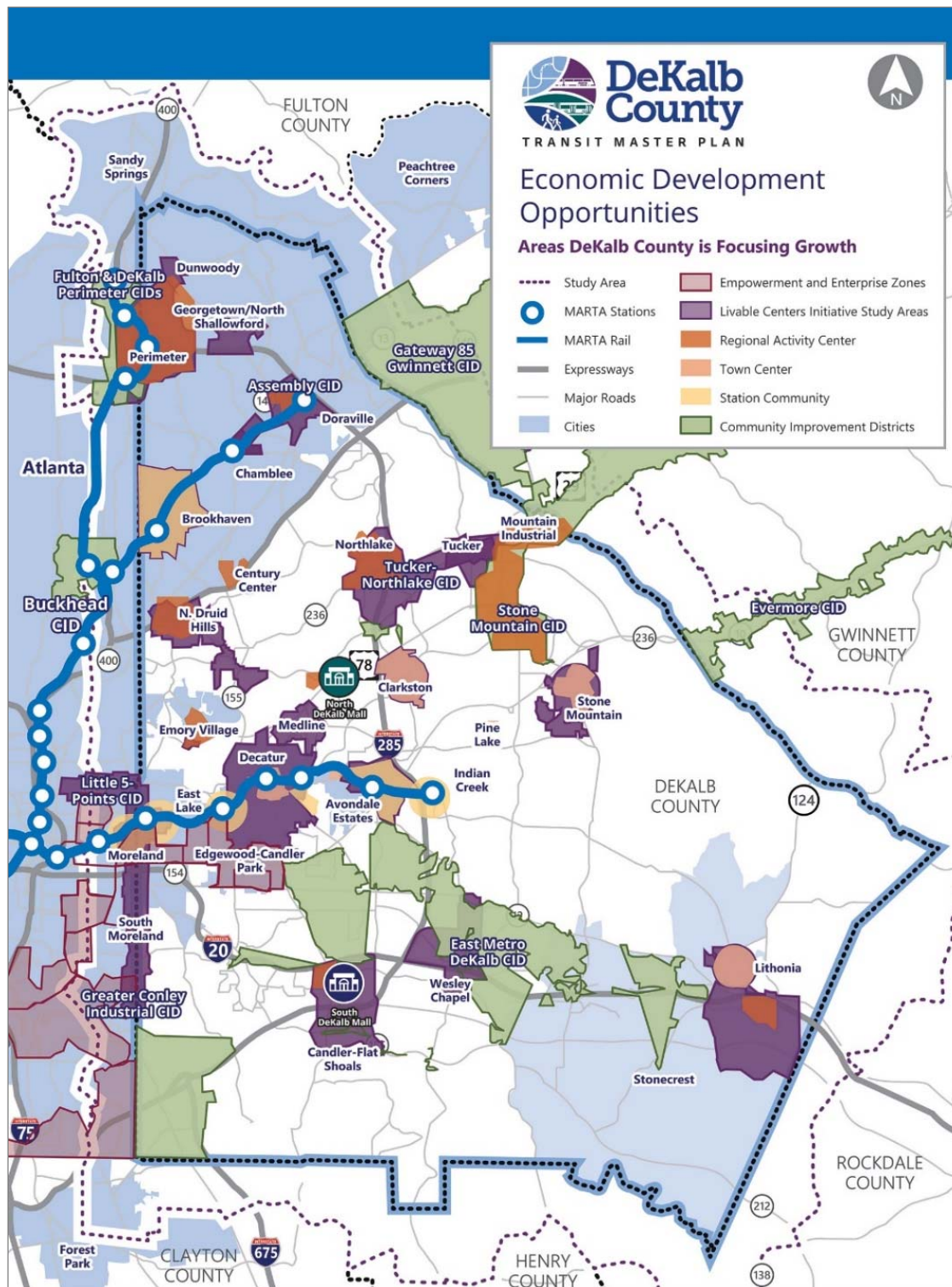
What we heard at public meetings.

- People noted that South DeKalb is full of Economic Development opportunities, but that has not yet resulted in additional jobs.
- How are these initiatives tied to transit and transit-oriented development?
- It is also important to see that there are wide areas of the county that have not engaged in these economic development activities, suggesting that perhaps these areas are largely residential in nature and would prefer to be protected from further economic development.

Today's Plans for Economic Development

The areas where growth is focused in DeKalb County are primarily along major transportation corridors, whether they are roadways or rail lines.

Map 4-4: Communities Planning for Growth



Review of Local Plans

DeKalb County already has a strong economic development vision based on a great deal of work completed over recent years by County planners and economic developers, regional planners, and the County’s 14 cities and five Community Improvement Districts, along with countless community members who contributed during numerous public outreach opportunities.

As part of the formation of the Transit Master Plan, it is crucial to review each of these plans and absorb the key priorities of each so that they can be merged into a larger, cohesive vision for the county

First, all of the most recent relevant comprehensive, transportation, and economic development plans created by every County agency, municipality, and Community Improvement district in DeKalb County were identified. After reviewing each plan, a series of interviews with economic development specialists at each of these organizations was undertaken to learn more about the community’s priorities and goals.

At the end of this process, key themes were identified. The extent to which each of themes is supported by the various local plans is provided in the table below. For more information on the plans mentioned in **Table 4-1**, see **Appendix A**.

Table 4-1: Themes from Local Plan Review

Plan	Connectivity	Walkability	Jobs/ Business	Access to Services	Public Spaces	Multi-modal	Transit	Redevelopment
2016 City of Avondale Estates' Comprehensive Plan		X						
2014 Avondale Estates Updated Downtown Master Plan	X	X						
Brookhaven Comprehensive Plan	X	X			X	X	X	X
Buford Highway Multimodal Corridor Study Final Report	X	X				X	X	
Chamblee Strategic Economic Development Plan	X		X					
Chamblee Comprehensive Plan	X	X				X	X	
Chamblee Downtown Renaissance Plan			X					
Clarkston 2040 Comprehensive Plan	X	X	X		X	X		
Decatur 360 Comprehensive Plan Update	X	X	X				X	
DeKalb County Strategic Recommendations: Comprehensive Economic Development Strategic Plan			X				X	X
DeKalb County 2035 Comprehensive Plan	X		X					
DeKalb 2014 Transportation Plan						X	X	
Doraville Comprehensive Plan 2017-2037	X		X			X		X
City of Dunwoody 2015-2035 Comprehensive Plan	X	X	X	X		X	X	
Greater Conley Industrial CID			X					

Plan	Connectivity	Walkability	Jobs/ Business	Access to Services	Public Spaces	Multi-modal	Transit	Redevelopment
A Master Plan for the City of Lithonia (A Livable Centers Initiative), 2003	X	X				X	X	
Perimeter CID Last Mile Connectivity Study	X	X	X	X			X	
City of Stone Mountain Livable Centers Initiative Plan 10-Year Update	X	X	X		X			
Stone Mountain CID Innovation Study (an LCI Study), 2012	X		X	X		X	X	
Tucker Tomorrow Comprehensive Plan	X	X	X	X				X
Tucker Northlake CID Master Plan Study	X	X	X			X		

5 Policy and Decisions

Introduction

In this final section of the report, the analysis explores the extent to which the historical context that created today's DeKalb County will influence the DeKalb County being designed for tomorrow. Decision makers can choose to continue to be influenced by past decisions or make determinations based on more current information.

This section is divided into two parts: past investment and current funding and plans. In the first part, a historical study of the investments made in transit in DeKalb County is presented. This study is followed by a review of two decades of planning studies and the extent to which they have been implemented.

Past Investment

From the first legislative act in 1965 through the 1990s, MARTA's rail system continued to evolve and grow, but in the last two decades no new rail stations have been added to the system. Growth has been stymied by a number of factors which will be reviewed in this Section.

SIXTIES AND SEVENTIES

In the early 1960s, the Metropolitan Atlanta Transit Study Commission recommended that a 5-county transit system be implemented to better serve the Greater Atlanta region. The study was in response to tremendous growth occurring in the City of Atlanta and the counties of DeKalb, Clayton, Cobb, Fulton, and Gwinnett. This recommendation led the Georgia Legislature to pass the Metropolitan Atlanta Rapid Transit Authority (MARTA) Act of 1965 on March 10 of that year. The original Board of Directors was determined to be 11 members: four City of Atlanta representatives, two DeKalb County representatives, two Fulton County representatives, one Cobb County representative, one Clayton County representative, and one Gwinnett County representative. The first meeting of the Board was held on January 3, 1966.

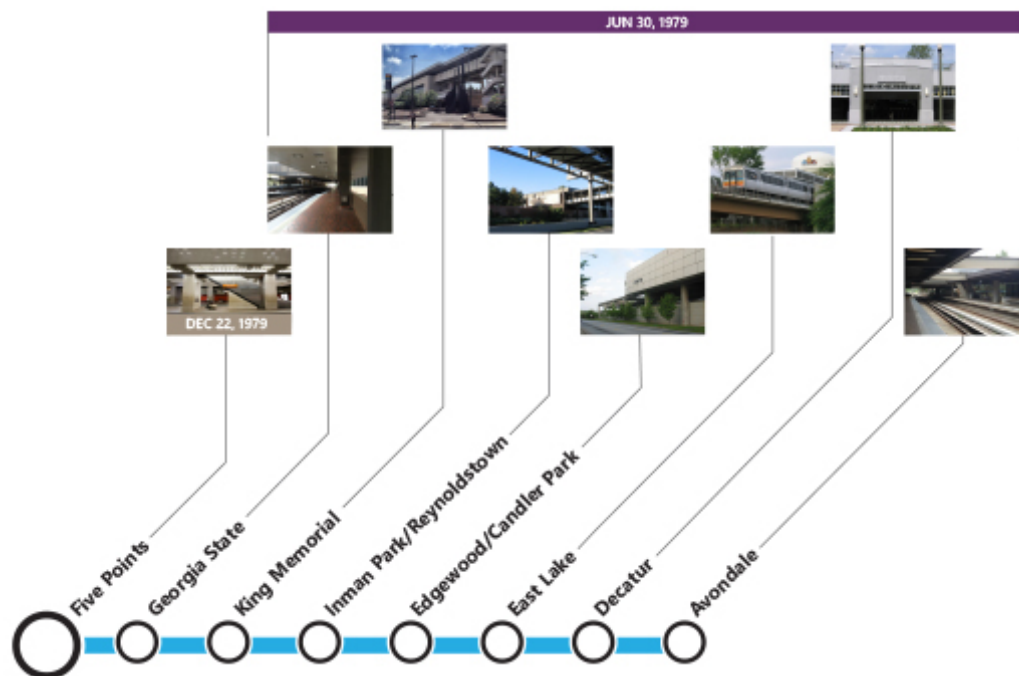
The Act indicates that MARTA "shall exist for the purposes of planning, designing, leasing (as lessee), purchasing, acquiring, holding, owning, constructing, improving, equipping, financing,

maintaining, and administering a rapid transit system within the metropolitan area, and operating same, or contracting therefor, or leasing (as lessor) same for operation by private parties.”

By 1971, only the City of Atlanta, DeKalb County, and Fulton County would pass referendum to fund MARTA. Clayton, Cobb and Gwinnett did not support it. Through a complicated set of twists and turns, a sales tax was ultimately passed by the City and each of the counties to support MARTA. The state legislature limited MARTA’s spending on operations from the sales tax revenue to fifty percent. DeKalb County leaders supported this requirement because they worried that capital investments might be limited to the City of Atlanta. The State of Georgia did not provide any funding for MARTA.

In 1972, MARTA purchase the Atlanta Transit System, a privately operating transit system, which was the largest operator in the area at the time. By purchasing this system, MARTA was quickly able to begin providing transit service. Years of effort went into getting the first MARTA rail line into operation. The first eight stations were brought online in 1979 as shown in **Figure 5-1**. Half of those stations were located in DeKalb County in addition to the railyard, which is located at Avondale.

Figure 5-1: DeKalb’s MARTA Rail Stations (1970s)

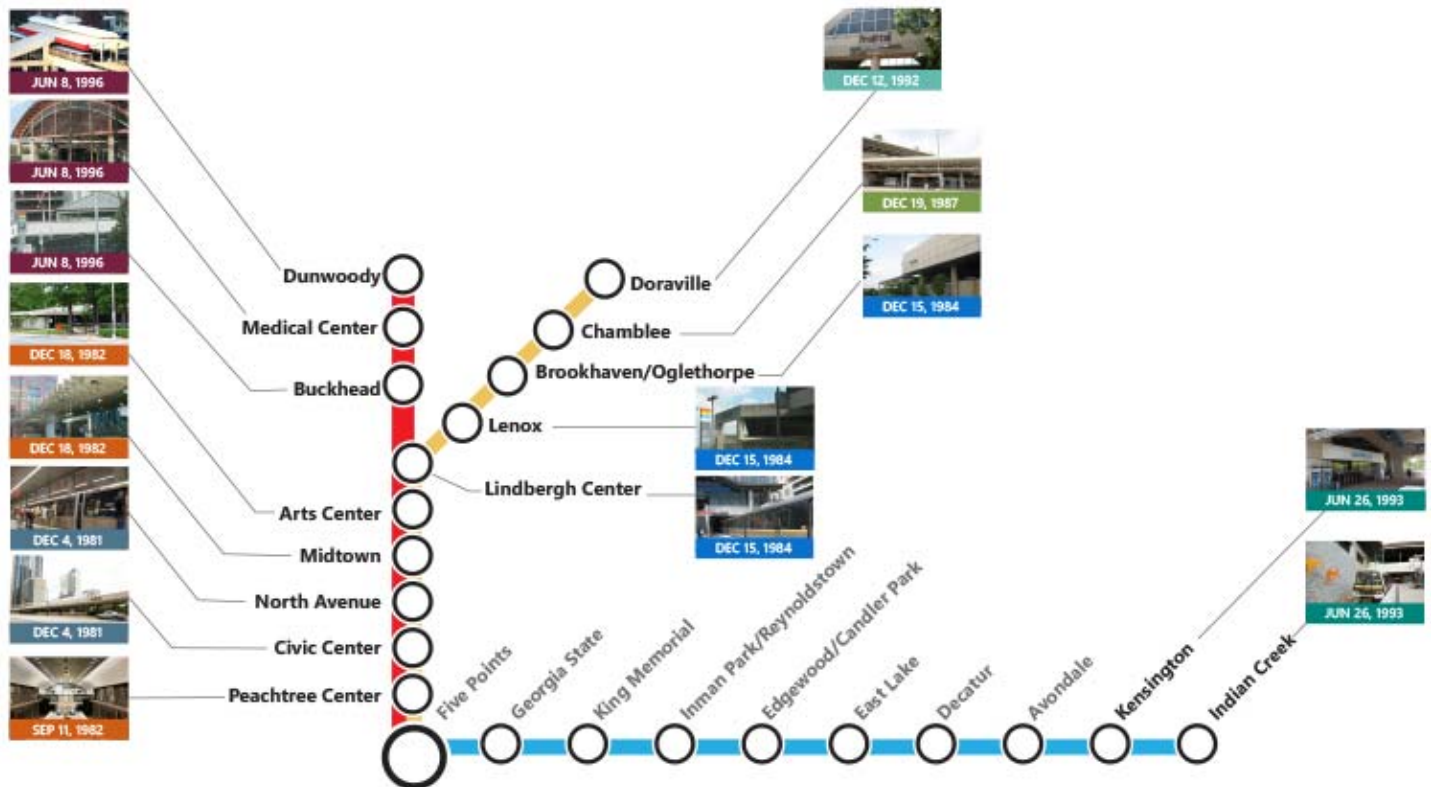


EIGHTIES AND NINETIES

In the eighties, MARTA continued its rail expansion with a steady stream of station openings. In DeKalb County, the following stations opened as shown in **Figure 5-2**. The Kensington and Indian Creek stations were intended to serve South DeKalb County (Note: Over the years, development has crept further and further south in DeKalb County, replacing the once plentiful dairy farms that

occupied the area. At the time these two stations were brought online, they were serving the southern extent of development in DeKalb County.) The final station, Dunwoody, was opened just prior to the 1996 Summer Olympics, hosted by Atlanta.

Figure 5-2: DeKalb's MARTA Rail Stations (1980s and 1990s)



SINCE 2000

The North Springs and Sandy Springs MARTA rail stations were the last MARTA stations to open and that was at the end of 2000. No MARTA rail stations have been added in DeKalb County since 1996.

While no new stations were being opened in DeKalb County, significant investment in the MARTA rail system was still occurring in the County during that timeframe. By 2000, the original four DeKalb stations were over 20 years old. By the writing of this report, they are almost 40 years old. Projects have included everything from roof replacement to tunnel ventilation upgrades to track replacement projects. In addition to upkeep of the existing facilities, MARTA has made improvements to the stations. These improvements included items such as the addition of "Next Train" electronic signage in the early 2000, which are currently being upgraded as they are out-dated at this point.

Investment in repairs, upkeep, and improvements along the MARTA rail lines and stations in DeKalb County have required significant funding. These funds keep the trains running, but they also siphon funding from new capital investments like the addition of MARTA rail stations. Having

the oldest stations in the system meant DeKalb residents were the first in the area to have rail service, but today it means that significant investment is required to keep the system operational.

Planning Activities

As noted previously, investment in new MARTA rail stations has been minimal since 2000 as funds were needed to repair and improve existing facilities. While building has not been occurring, planning activities have continued.

TRANSPORTATION PLANNING FRAMEWORK

The overarching transportation planning framework is set by the Federal government under 23 U.S. Code §134. Each urbanized area over 50,000 people must designate a Metropolitan Planning Organization (MPO) to complete a Regional Transportation Plan (RTP). In the Atlanta region, the Atlanta Regional Commission (ARC) operates as the local MPO. The RTP must cover a 20-year timeframe and be updated every five years. The plan must cover all transportation modes and be financially constrained. It cannot simply be a list of needed projects; the plan must contain an implementation plan for projects that can actually be funded over the 20-year timeframe.

While the ARC prepares the RTP, stakeholders such as MARTA and the Georgia Department of Transportation (GDOT) contribute to the plan and ultimately implement the projects that fall under their purview. Typically, MARTA would recommend projects for inclusion in the RTP and identify funding streams to cover those projects.

It should be noted that the newly created Atlanta-Region Transit Link Authority (The ATL) will be joining this process. The ATL will prepare the transit portion of future RTPs.

HISTORICAL PLANNING EFFORTS

Since 2000, four RTPs have been prepared and adopted. Due to the Great Recession, one more plan than legally required was developed during this timeframe. A brief review of the DeKalb County transit plans included in those RTPs is provided here. For the purposes of comparison, a few other key projects outside of DeKalb County are also reviewed.

Mobility 2030

Adopted in 2005, Mobility 2030 contained one transit project for DeKalb County. It listed a bus rapid transit (BRT) project to run in the I-20 east corridor from downtown Atlanta to the Stonecrest Mall. The project was slated to begin operations in 2025.

Beyond DeKalb County, the Northwest Corridor project in Cobb County was planned for operations in 2015. In other words, the Mobility 2030 plan called for the Northwest project to be operational by now, which it is not.

Envision6

Adopted just three years after Mobility 2040 in 2008, Envision6 slated the aforementioned I-20 East BRT project in the plan and indicated completion in 2030. The alignment was unaltered from the Mobility 2040 plan.

The Envision 6 plan pushed the Northwest Corridor project to 2020 and added the Beltline project for completion in 2030.

Plan 2040

Having been prepared during the Great Recession, Plan 2040, adopted in 2011, pushed the I-20 East BRT project out to 2040, but it also changed the mode for the project. The project now included BRT from downtown Atlanta to Wesley Chapel and heavy rail from Indian Creek to Stonecrest Mall. This plan added a new project for DeKalb County as well. The plan indicated a light rail line was to be built along the Clifton Corridor from Lindbergh Center to Avondale. This project was slated to open in 2040.

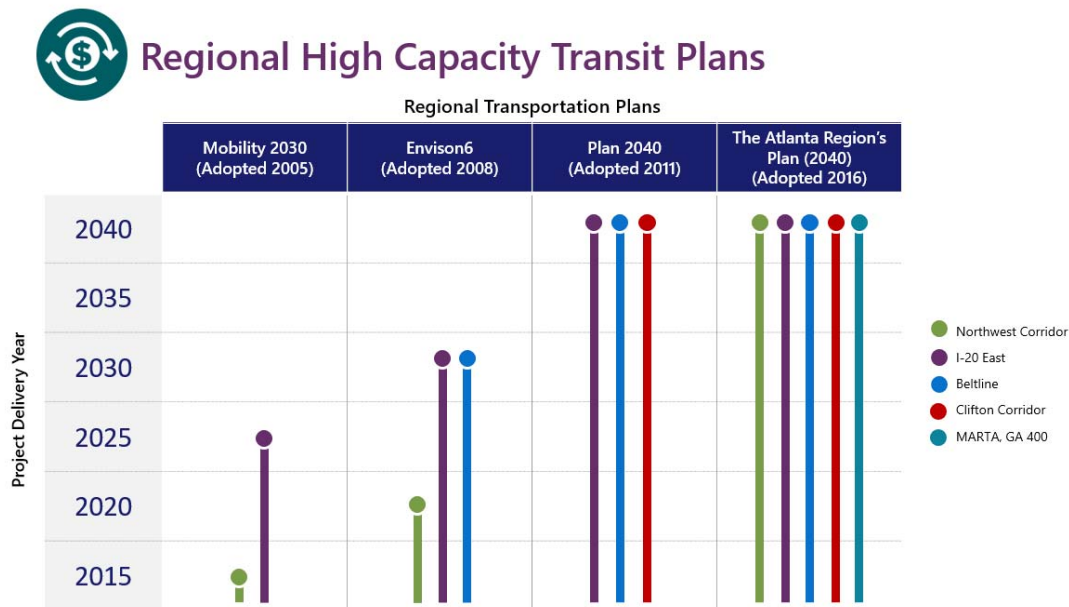
The Northwest Corridor project was removed from Plan 2040 due to the Great Recession. The Beltline project was pushed to 2040.

The Atlanta Region's Plan (2040)

The Atlanta Region's Plan had a planning horizon of 2040 and was adopted in 2016. It carried forward both DeKalb County projects from Plan 2040 without changes.

The Northwest Corridor project reappears in this plan. The Beltline projects continues to be planned for operations in 2040. The MARTA, GA 400 project is added to the list of projects for operations in 2040.

Figure 5-3: Regional Transportation Plan Project Evolution



IMPLEMENTATION DELAYS

As described in the prior section, many plans over the last two decades have not been implemented in the Atlanta region. There are a number of reasons these planning activities have remained on paper. The result of these delays is that stakeholders and the public have become frustrated and have lost confidence in local leadership’s ability to implement a regionally significant transit investment.

Funding

There are a number of reasons that these projects have failed to be implemented, but the most impactful is the lack of funding. First, the Great Recession extended from December 2007 to June 2009. Considered to be the most significant financial decline in U.S. history since the Great Depression, the Great Recession impacted the Atlanta regions ability to secure funding for many of its planned transportation capital improvement projects. This impact was not unique to Atlanta.

Federal funding also fell during this time period. The New Starts program, which provides Federal funding for transit capital projects, provides Federal funding up to 80 percent. The original MARTA investment in the seventies and eighties benefitted from this significant Federal investment level which required that the local governments only identify 20 percent of the needed funds from local sources. In 2002, Congress encouraged the Federal Transit Administration (FTA) not to enter into funding agreements which required more than a 60 percent Federal funding component. Today, it is not typical to secure a Federal funding agreement above a 50 percent Federal funding component. The changing amount of Federal funding available impacted the region’s ability to secure funding for planned projects within the planned timeframes.

Project Definitions

During the same timeframe, the locally preferred alternative as defined in the planning documents changed. In addition, the project prioritization changed. The changing project definitions impacted the Atlanta region's ability to compete for Federal funding. Federal funding is limited so local governments essentially are competing with each other for a piece of the funding allocation each year. The changing definitions and priorities made the Atlanta region less competitive with other localities as the Federal administrators were uncertain that local decision makers had indeed made a final decision on these projects.

Regional Priorities

As noted previously, local governments are competing for Federal funding for these large-scale capital transit projects. From the Federal perspective, the Atlanta region is one entity as opposed to the myriad of counties and municipalities that make up the region. In other words, Federal funding of one project in the Atlanta region meant that the Federal government would look to fund other projects beyond the Atlanta region in order to divvy up the funding across the country. The lack of regional consensus around which project was the highest priority in the region hurt the region's competitiveness in the Federal funding process. Other regions, like the Twin Cities region in Minnesota, were much more aligned around their regional priorities and therefore more successful in securing Federal funding.

Political Support

Project implementation was also impacted by changing local and regional politics. As the politics of the region shifted, priorities changed and therefore the Federal officials making funding decisions were less assured of the agreement on the region's priorities.

WHAT HAS CHANGED?

In recent couple years, there have been significant changes that, if capitalized upon, could shift planning activities into the implementation phase. It is apparent that these changes have created a shift in momentum across the regional toward increased local funding for projects.

House Bill 170

The first step in the changing tides in support of transit investment was the passage of House Bill 170 - Transportation Funding Act of 2015. While HB 170 did many things, it included a change the gasoline tax structure such that approximately \$1 billion more dollars annually would be generated for maintenance and modernization of the highway system. In particular, the funds could be used to support investments in managed lanes and major interchange improvements. While not specifically transit investments, these projects provide opportunity for piggybacking of transit projects during construction and reconstruction of major highway projects.

More MARTA

In 2016, the City of MARTA residents passed a referendum commonly called the More MARTA tax. The More MARTA tax adds another half penny sales tax to the one penny already collected to support MARTA within the City of Atlanta. The additional sales tax is projected to produce \$2.7

billion in revenue over its lifetime (i.e., 2017-2057). The money is set aside for funding rapid transit projects as defined in the MARTA Act of 1965 in the City of Atlanta.

The passage of the More MARTA tax within the City of Atlanta has led decision makers in other jurisdictions to consider increased funding for MARTA.

House Bill 930

In 2018, House Bill 930 - Georgia Regional Transportation Authority passed in the Georgia legislature. The statute created The Atlanta-region Transit Link Authority, also known as The ATL. The ATL provides a newly created regional transit governance structure for a 13-county region. It is hoped that this new regional structure will assist the region in setting clear regional priorities that will make it more competitive in Federal funding pursuits.

Uncertainty in Federal Funding

As noted previously, Federal funding as a percentage of project cost has been declining since 2000. The current political climate indicates that the current Federal funding levels are uncertain. It is possible that they could decline even further requiring a greater share of project costs from local funding sources.

CONCLUSION

While the last two decades of planning for capital investment in high-capacity transit has not led to any meaningful investment in DeKalb County, there are reasons to believe that there is a shift occurring in the funding landscape. If DeKalb County is prepared to take advantage of that shift, it could see future investment in high-capacity transit.

To take advantage of that shift, DeKalb County must have a concise, locally supported transit plan adopted by the County and supported by each of its municipalities. The plan must layout short-, mid-, and long-term transit investment strategies that address state-of-good repair requirements, expansion priorities, regional connectivity, equity, and economic development. These strategies must align with funding opportunities at the Federal, state, and local levels as well as entice and encourage private investment opportunities. The plan must also define an action plan for DeKalb County and each of its stakeholders: every DeKalb municipality, MARTA, The ATL and ARC.

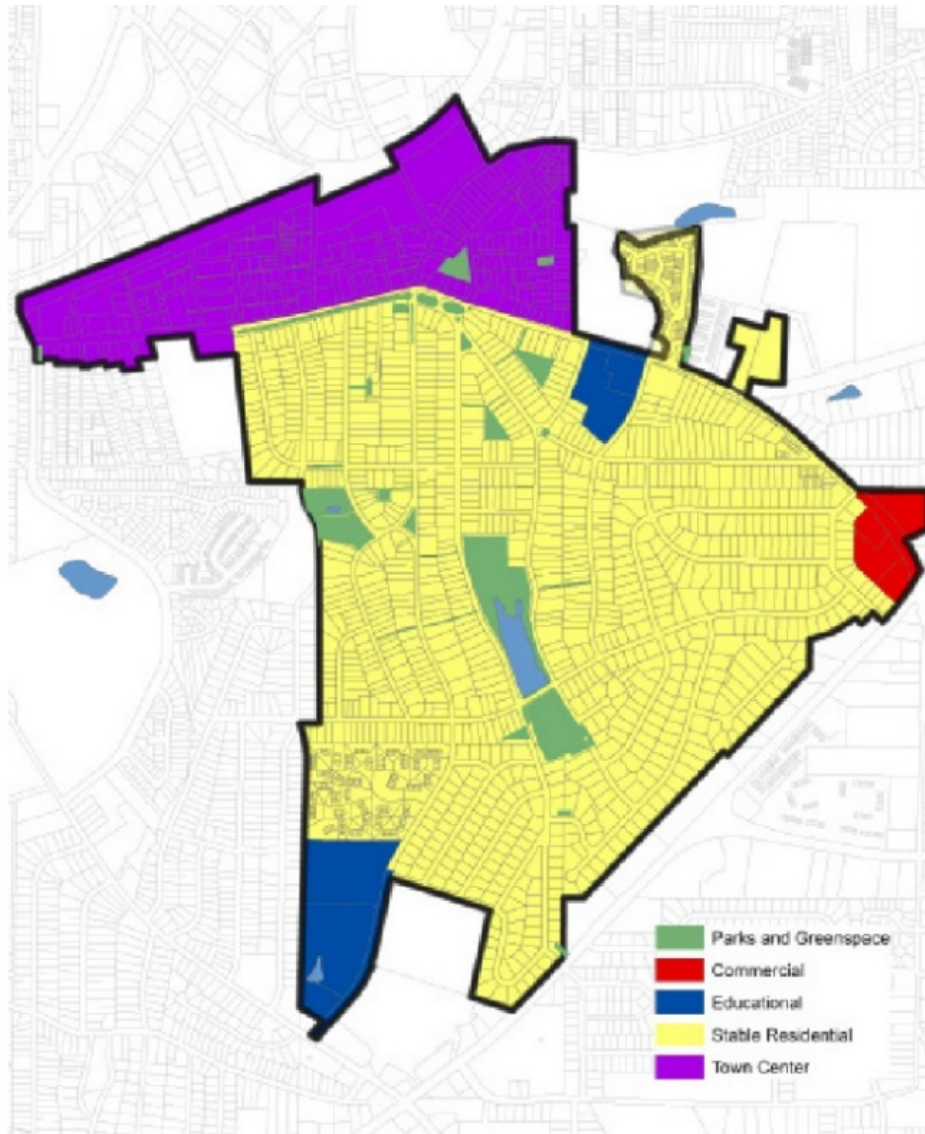
It is a tall order, but the DeKalb County Transit Master Plan is intended to be that plan.



Appendix A: Economic Development Plan Review

2016 City of Avondale Estates' Comprehensive Plan

The Avondale Estates Comprehensive Plan 2016 Update identified community goals and projects from past plans to focus on during the five years after the adoption of the plan. The projects related to transportation consist of adding new streets and prioritizing pedestrian accesses areas as identified in the 2014 Downtown Master Plan study, as well as investigating the potential for complete street amenities/road diet on the city's main corridor, US 278/E. College Ave, and adding parking at the vacant MARTA storage site near the northern city boundary. Other recommendations revolve around modifying zoning in certain areas of the city to allow for denser development, mostly in the industrial area on the northwest side of the city, in the Mill District and Western Gateway, and at the MARTA stations adjacent to the city.

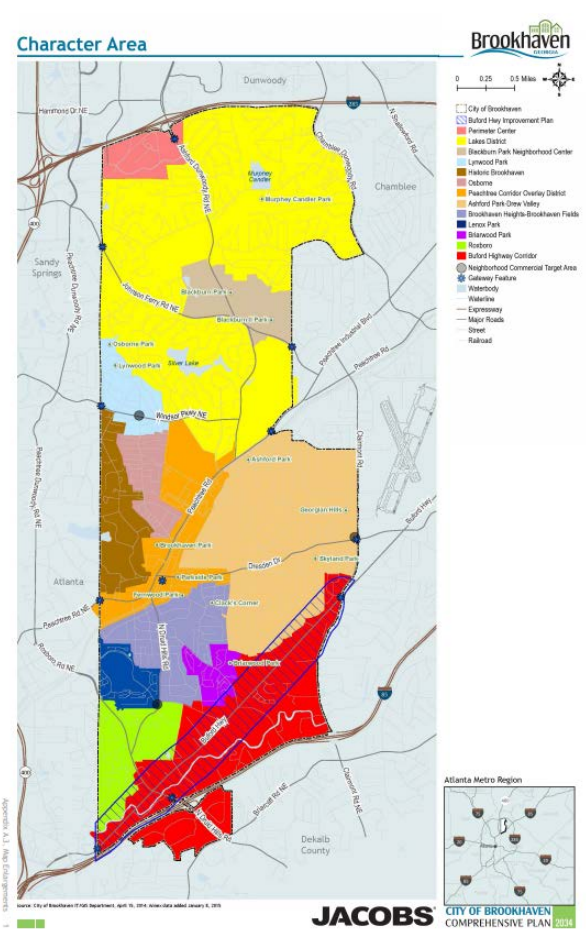
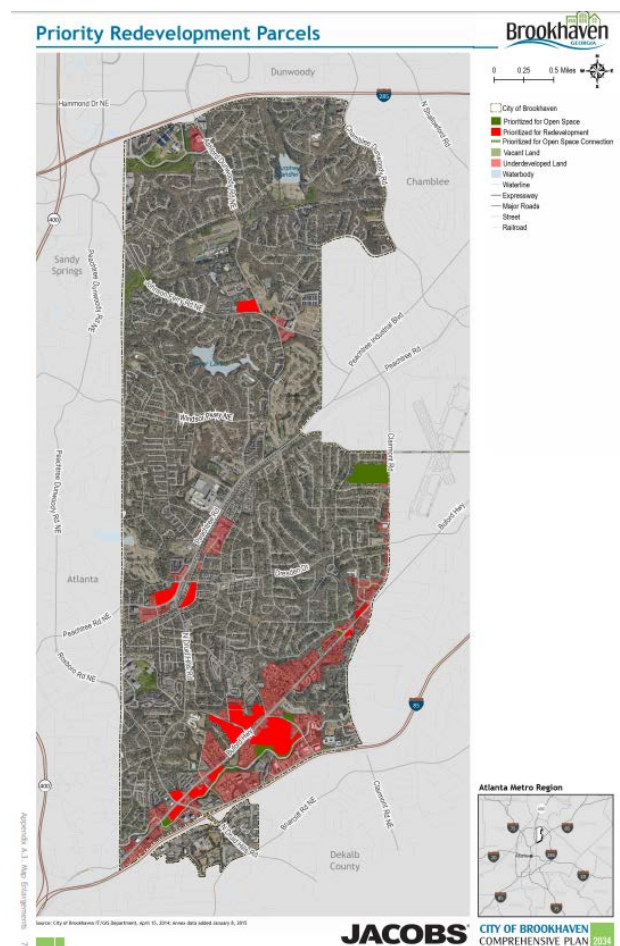


The 2014 Avondale Estates Updated Downtown Master Plan to the city's 2004 Master Plan was funded by a \$64,000 award from the Atlanta Regional Commission as part of the ARC's Livable Centers Initiative program and by the City of Avondale Estates. The most significant proposals for transportation projects in the city are a road diet on US 278/E. College Ave and the additional street grid resulting from redevelopment of the Mill and Rail Arts districts. The US 278 road diet would incorporate bike lanes on either side of the road and pedestrian crossings with refuge islands to improve the city's walkability and connectivity to the residential neighborhoods to the south. As a core component of the LCI program, designating areas for higher density and transit-oriented development was a key outcome of the updated master plan, with highest densities planned for the Rail Arts and Mill District areas of the Study Area. Other recommendations include installing roundabouts in the major intersections in the heart of the Tudor Village and managing access and curb cuts along US 278 to improve the city's urban fabric and pedestrian experience.



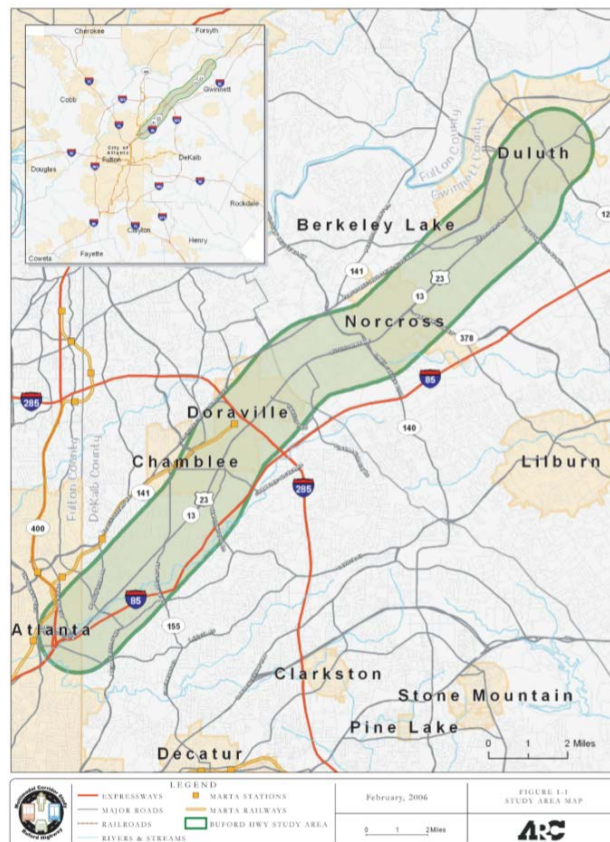
Brookhaven Comprehensive Plan

The City of Brookhaven 2034 Comprehensive Plan was developed with assistance from Jacobs and adopted by the City in June 2016. Its six key substantive elements include: Land Use, Community Facilities and Resources, Economic Development, Population, Housing and Transportation. Among its goals it seeks to "Achieve greater walkability, bikeability, and overall mobility for day-to-day activities through transportation and land use coordination." It seeks to promote Buford Highway as a key gateway corridor and pursue Transit Oriented Development (TOD) as a key strategy. It identifies the opportunity to build a bicycle and pedestrian bridge connection through the Brookhaven MARTA station across Peachtree Road, and encourages the City to work with MARTA, ARC and others for regional improvements. It also sees TOD as one way to provide more affordable housing.



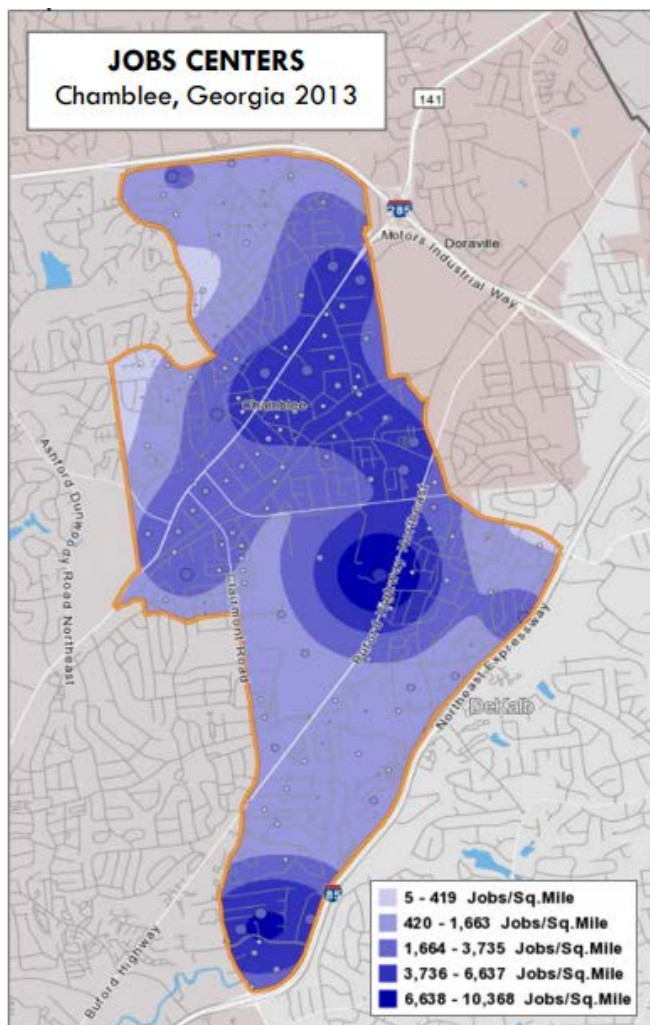
Buford Highway Multimodal Corridor Study Final Report

The Buford Highway Multimodal Corridor Study Final Report was conducted by a consultant team led by URS Corporation for the Atlanta Regional Commission and published on March 13th, 2007. This study focuses on an 18.4 mile stretch of Buford Highway with the objective of identifying deficiencies, assessing potential alternative strategies and their costs, and developing a preferred alternative program of policies and projects. The recommendations of this study to better connect Buford Highway and the communities along it include enhancing cross-corridor connections with I-85 and Peachtree Industrial Boulevard by improving various intersections, extending South Cemetery Street in Norcross, and widening Button Gwinnett Drive and Jimmy Carter Boulevard; dedicating bus lanes on Buford Highway inside I-285 to promote existing and future bus and BRT service; completing the network of sidewalks along Buford Highway; and developing a multi-use trail adjacent to the existing rail line north of I-285 as an alternative for pedestrian and bicycle traffic. Other recommendations included additional ITS applications, such as transit/traveler information signs, signal upgrades, changeable message signs, and more, as well as more low-tech solutions for safety issues along Buford Highway, such as cleaning of existing signage, adding more left turn only lanes, and refreshing pavement markings.



Chamblee Strategic Economic Development Plan

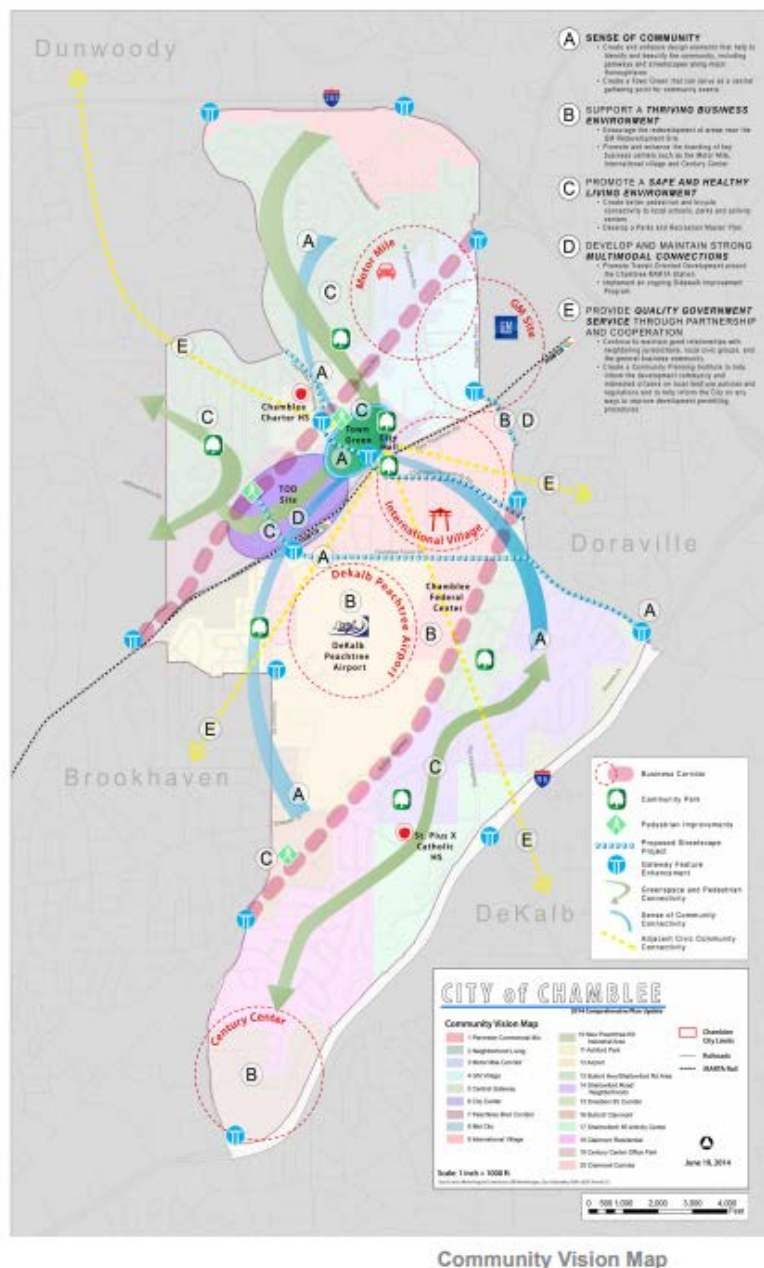
The City of Chamblee developed its first citywide Strategic Economic Development Plan in 2016-2017, which was adopted in April 2017. This plan was created with assistance from RKG Associates, working with City staff and a stakeholder committee. This plan includes detailed socio-economic analysis of the City, an economic base analysis, identification of target industries, a real estate analysis and an implementation strategy. This plan notes that, like DeKalb County in general, Chamblee is not recovering from the recent recession as quickly as are nearby Gwinnett and Cobb counties. Chamblee residents primarily commute to work in downtown Atlanta and to Emory University. Some notable numbers also commute to jobs in Perimeter Center and in Peachtree Corners. Key employment location within the City include the CDC, Century Center offices, and along Buford Highway. The City has a niche for development as an ideal location for young families, which is driving much of the current growth and development. Employment growth is being seen in Retail as well as professional scientific and technical services.



Source: U.S. Census Bureau, Center for Economic Studies
(OnTheMap), 2016

Chamblee Comprehensive Plan

The City of Chamblee Comprehensive Plan, adopted in 2014, was prepared following some large annexation initiatives. This Plan was prepared with assistance from Jacobs and later updated in September of 2016. One of its five stated goals is to “Develop and maintain strong multi-modal connections.” Specific to that goal, the plan notes the need for additional transportation funding, need to improve pedestrian and bicycle infrastructure, and the need to improve access to MARTA systems and services. Specific transportation related recommendations include new gateways and a streetscape plan and a sidewalk improvement program.



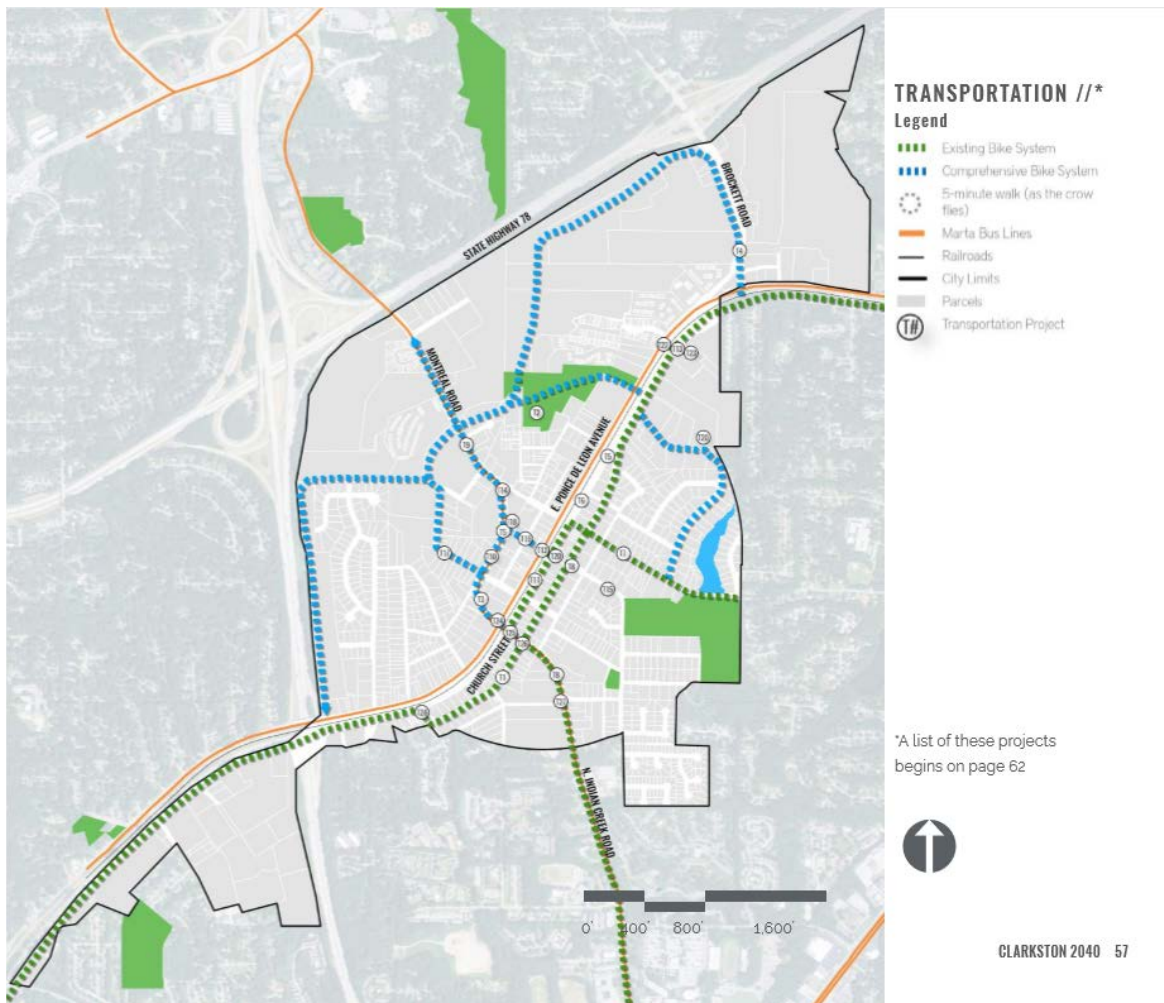
Chamblee Downtown Renaissance Plan

During the summer of 2015, this project allowed City staff, DDA and a senior UGA landscape architect student to create design options for the city's historic commercial business district along Peachtree Road. This plan envisioned incorporating a great deal of public art along this corridor. The City has just let to construction a streetscape project along Peachtree Road, which no doubt built on some of the ideas in this Plan.



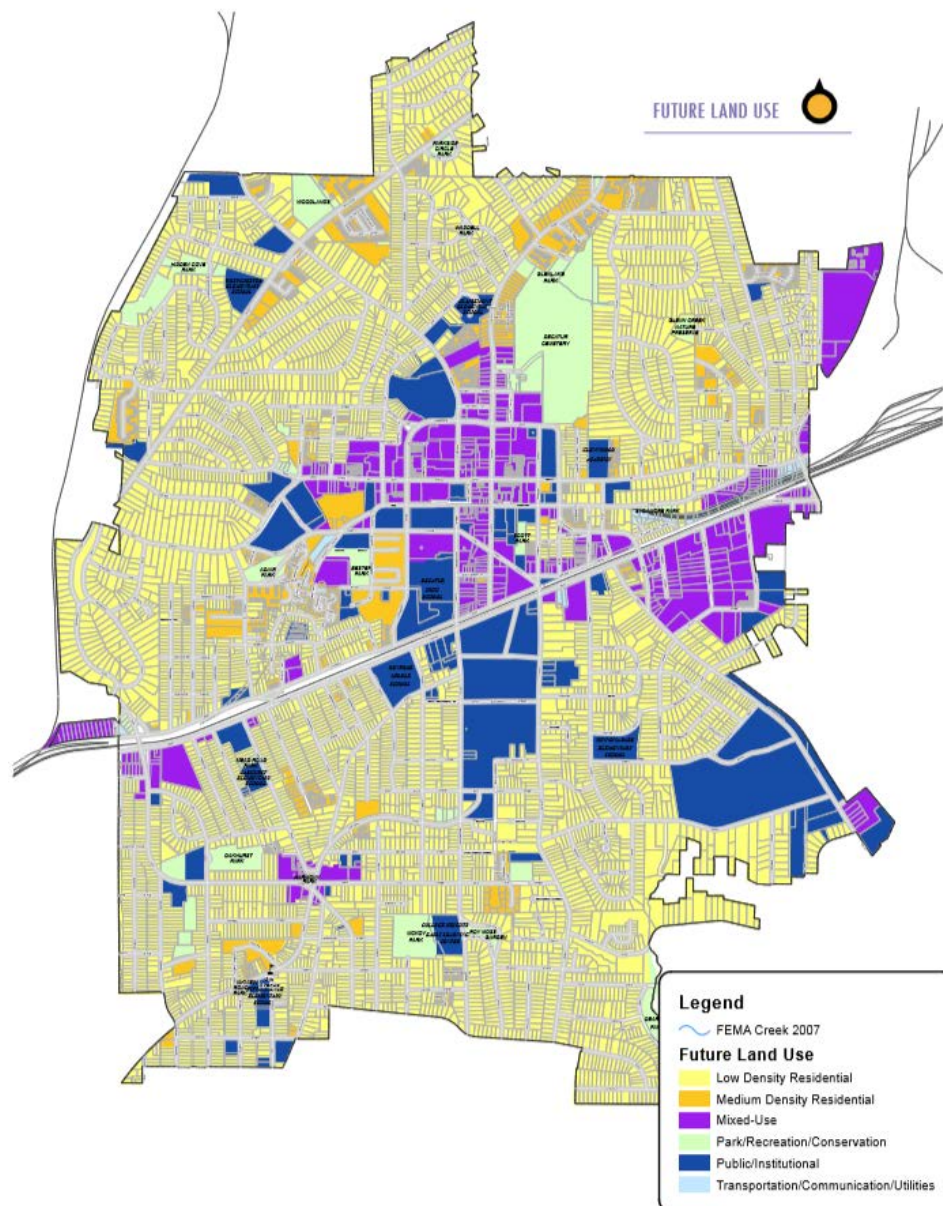
Clarkston 2040 Comprehensive Plan

The Clarkston 2040 Comprehensive Plan emphasizes revitalization in its historic downtown by increasing connectivity with more sidewalks, trails, and bike infrastructure; promoting mixed-use developments in the downtown core; developing more public space and parks to support civic and cultural activities; and encouraging businesses and residents to stay in town. The plan also calls for the creation of a circulator shuttle system to complement existing MARTA bus service in Clarkston, as well as extending sidewalks in residential neighborhoods and replacing sidewalks in disrepair.



Decatur 360 Comprehensive Plan Update

The Community Vision in the Decatur 360 Comprehensive Plan Update establishes policies and goals to promote alternative forms of transportation within the city and its neighborhoods. It recommends increasing transit ridership by allocating mixed-use and higher density adjacent to the city's three MARTA stations, as well as by increasing transit connectivity between the Oakhurst and Downtown Decatur business districts via a city-wide circulator shuttle bus. Other transportation recommendations include connecting the city's sidewalk networks, building additional bicycle lanes and cycle-tracks where possible, and designing innovative parking solutions for the downtown Decatur business district.



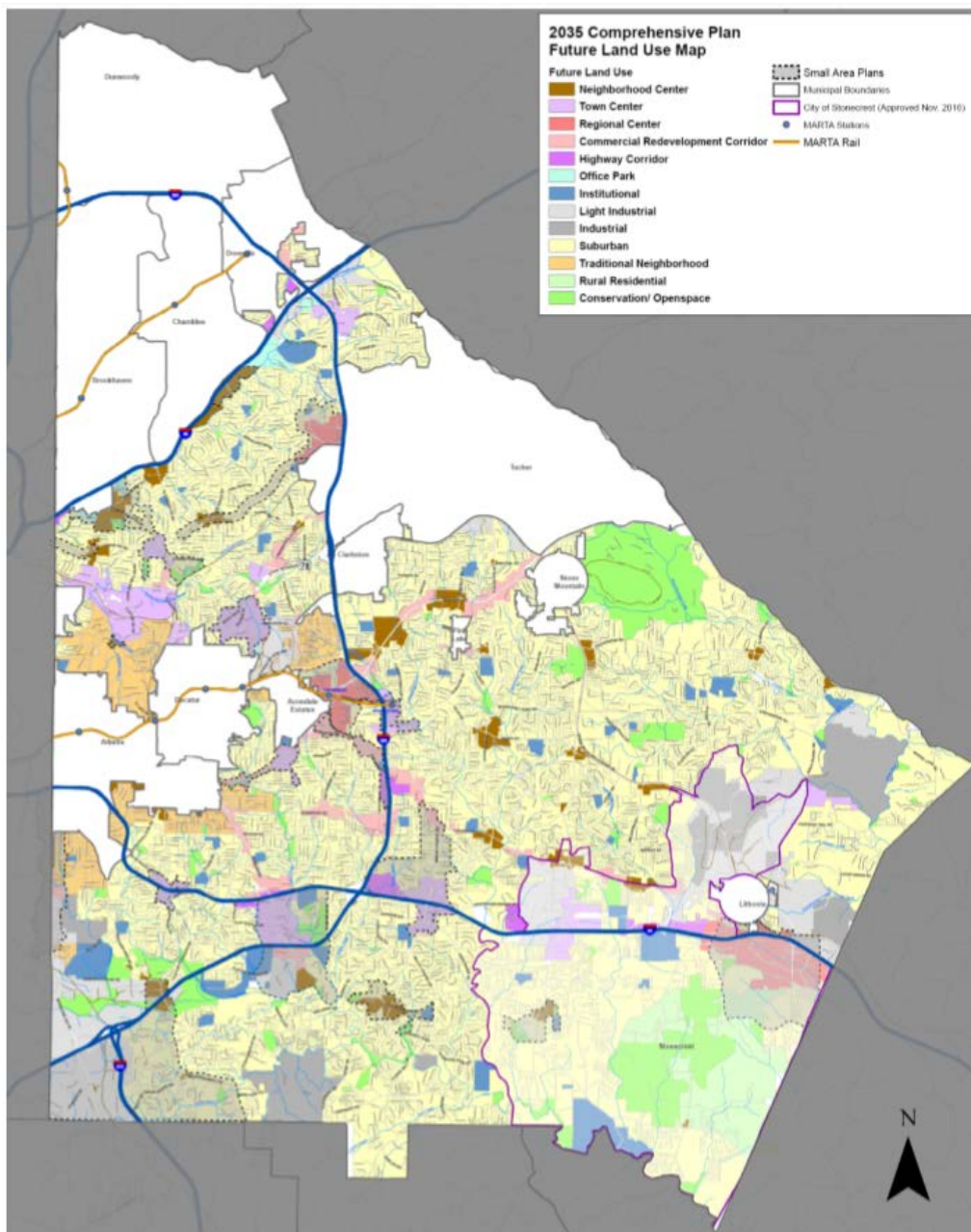
DeKalb County Strategic Recommendations: Comprehensive Economic Development Strategic Plan

With the aim of growing and diversifying DeKalb County's economy, this strategic plan examined the strengths and challenges for economic development in the county, identified target industries for attraction and retention, and emphasized clustering of businesses on strategic corridors and adapting zoning to allow for a greater mix of uses in these commercial hubs. The study puts a limited emphasis on transit expansion as a component of economic development but highlights the need to increase transit-oriented development in areas accessible by transit. It also proposed adopting zoning that would allow for redevelopment of the strip shopping centers typical across the county, as well as adapting residential neighborhood zoning near economic clusters for greater redevelopment potential. This plan addresses the needs of the county for diversified funding schemes for transportation projects, noting that the county cannot rely on CID's and TAD's alone, and outlines four options addressed by the county's 2014 transportation plan. The strategic plan was adopted on August 19th, 2014.

Strengths	Weaknesses
<ul style="list-style-type: none"> Proximity to downtown Atlanta, Atlanta airport Exceptional university/colleges Exceptional medical/healthcare corridor Centers for Disease Control High patent activity Highway/Air Transportation access MARTA Strong international corridor Existing industrial corridor & logistics cluster Growing, successful cities IGA with Development Authority of DeKalb County 	<ul style="list-style-type: none"> Declining county revenue North/South polarization Significant political fracture High levels of violent and property crime Current perception of public education system low Not business friendly county development processes Current perception of county governmental low Vast majority of county already developed Lack of adequate transportation in southern area Lack of private funding & county funds for infrastructure Inadequate support for entrepreneurs Few well-defined employment centers
Opportunities	Threats
<ul style="list-style-type: none"> Businesses willing to support economic development Residents strongly tied to neighborhood development Vacant industrial space High potential for redevelopment Possible MARTA expansion Strong potential for logistics development High potential for growth in business support services Significant tourism potential Untapped potential in healthcare corridor High potential of senior living centers Upcoming redevelopment of former GM plant 	<ul style="list-style-type: none"> Current political instability High foreclosure rate Decreased property values Racial division Limited business engagement Politics deeply embedded in county government Adjacent counties with modern industrial space Disenfranchised and adversarial media

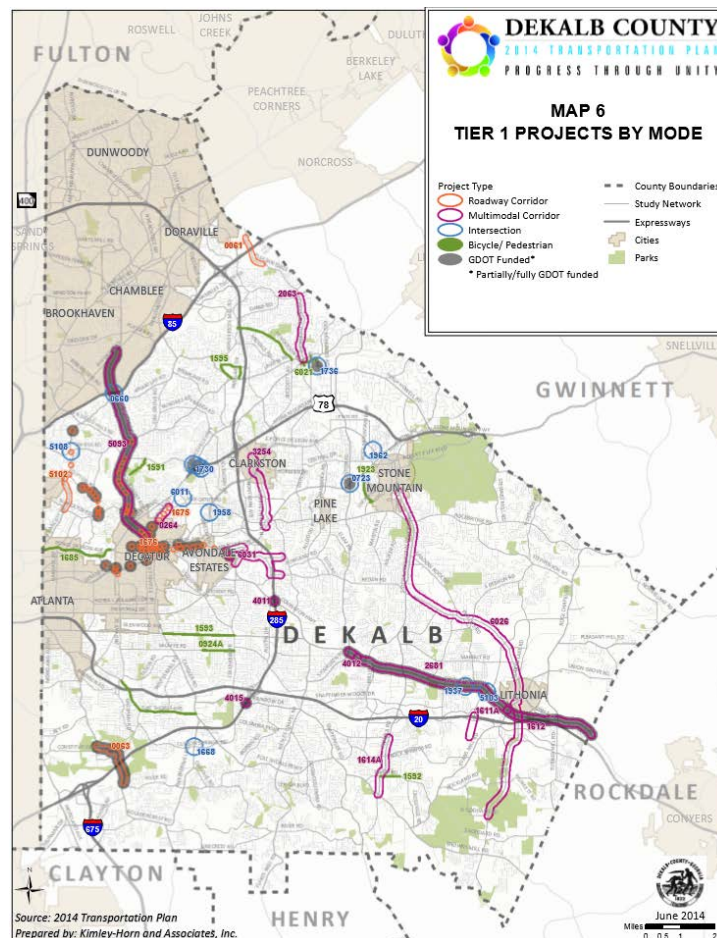
DeKalb County 2035 Comprehensive Plan

The DeKalb County 2035 Comprehensive Plan is an overarching plan for development in DeKalb County over 20 to 30 years. The vision of the 2035 Comprehensive Plan is based on DeKalb's 2025 Comprehensive Plan and contains the feedback from extensive public input, yielding a vision of the county that is much different from the "bedroom community" of the MSA it has historically been. Regarding transit, the plan acknowledged the need for greater connectivity and various transit demands across the county as listed in DeKalb's 2014 Transportation Plan but focused on increasing transit-oriented development as an opportunity outcome for the Comprehensive Plan. This plan also introduced the DeKalb County Future Land Use Map, which outlined character areas, activity centers, and anticipated areas of development opportunity (See below, from pg. 55 of the DeKalb County 2035 Comprehensive Plan).



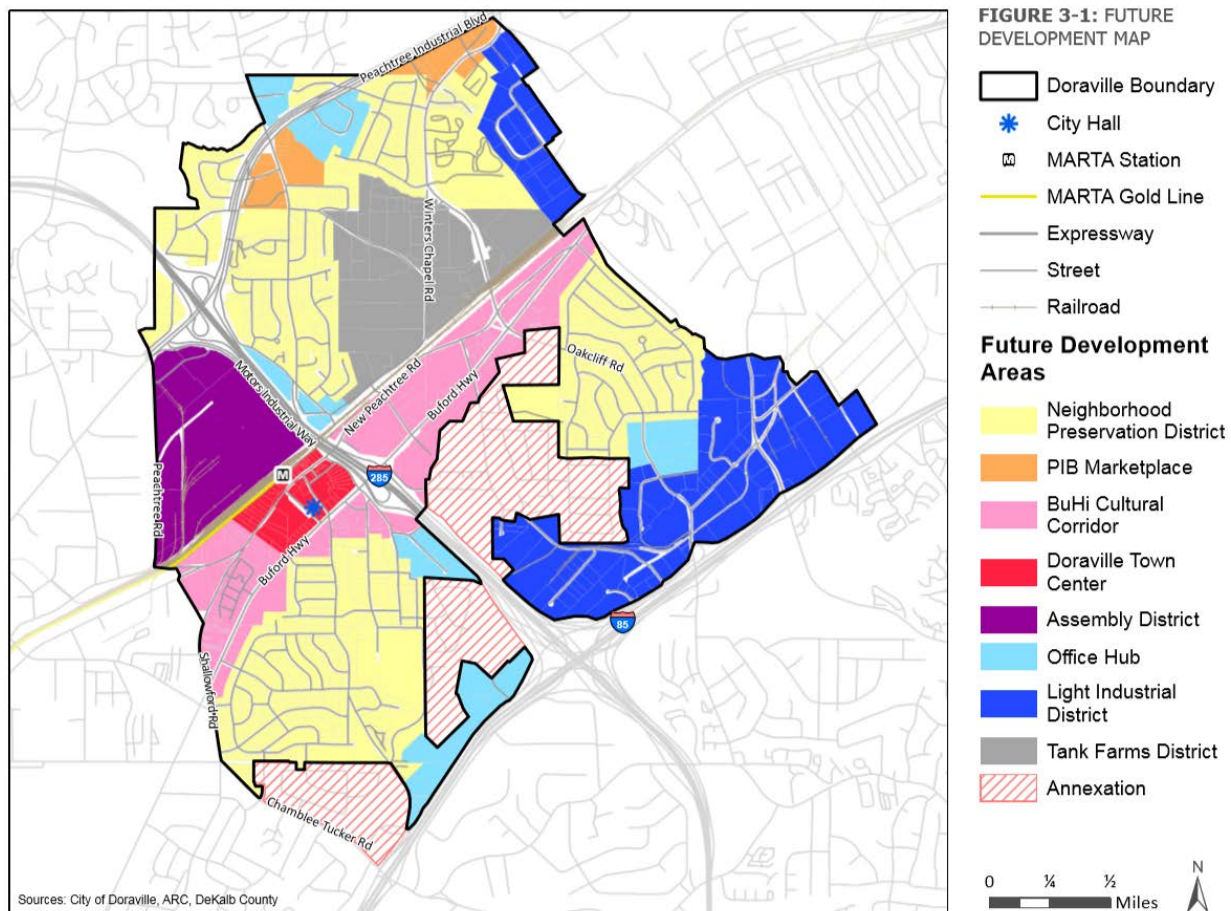
DeKalb 2014 Transportation Plan

Adopted in May 2014, the DeKalb County 2014 Transportation Plan compiled the many regionally significant projects that could be eligible for future funding in Transportation Improvement Program (TIP) and Regional Transportation Plan (RTP) cycle updates. The plan emphasizes the need for partnerships, funding, and public policy to promote positive changes to the county's transportation system. This plan also lists four main goals: To improve mobility for all people, to enhance quality of life, to improve economic vitality, and to focus on program implementation. The plan defines current and future potential transportation funding mechanisms and structures, with the acknowledgement that DeKalb County did not have adequate funding for its transportation priorities, including transit-specific funding. The plan also lays out a Complete Streets policy (pg. 38) that is independent from the overall plan but included in the report and appendix to add emphasis to the significance of multimodal accessibility. Special emphasis is given to transit expansion and transit-adjacent land uses in sections 18 and 19 of this plan. These sections address the need for the county to adapt land use and zoning regulations, and coordinate with MARTA in efforts to increase denser development around MARTA stations, and identifies TRIDs, or Transit Revitalization Investment Districts, as a potential mechanism for incentivizing development. Additionally, the plan identifies key demands of bus transit use and potential transit expansions (in section 21), such as the Clifton Corridor, I-20 East Corridor, and Moreland Avenue Bus Rapid Transit, and calls for further study of these projects.



Doraville Comprehensive Plan 2017-2037

The Doraville Comprehensive Plan uses the city's connections to I-285, I-85, and MARTA's Gold Line as the foundation for the planning direction for the next twenty years. The plan puts special emphasis on the need to update the city's land use and zoning to promote multi-use and transit-oriented development closer to the Doraville MARTA Station and the city's center, while also maintaining the community and diversity that has made Doraville what it is today. Specifically, the plan outlines current projects in the city, including the Historic Downtown Doraville Redevelopment Masterplan, Nexus, and Assembly, that will significantly increase street connectivity, developable land along Buford Highway, and transit-oriented development adjacent to the Doraville MARTA Station. Regarding transportation improvements, the plan calls for traffic calming in areas of future development and improvements to multi-modal connections and infrastructure, such as constructing a network of bike lanes and greenways, improving streetscapes with complete street components like wider sidewalks and street trees, and reducing driveway curb cuts along commercial corridors. Accessibility to the Doraville MARTA Station is also a core tenet of the city's economic development strategy and the plan leverages the transit connectivity as an asset for future employment attraction that separates Doraville from other suburban Atlanta areas.



City of Dunwoody 2015-2035 Comprehensive Plan

Dunwoody's Comprehensive Plan was completed in 2015 Jacobs and Market Street, working with City staff, officials and the public. Dunwoody's plan seeks to increase connectivity and transportation options, while preserving the community's current neighborhood feel. This plan recognizes that Dunwoody is situated at a cross roads, where convenience is one of their assets. However, the plan calls for improved connectivity and multi-modal interfaces.



INCREASE CONNECTIVITY AND ENHANCE TRANSPORTATION OPTIONS FOR ALL FORMS OF TRAVEL

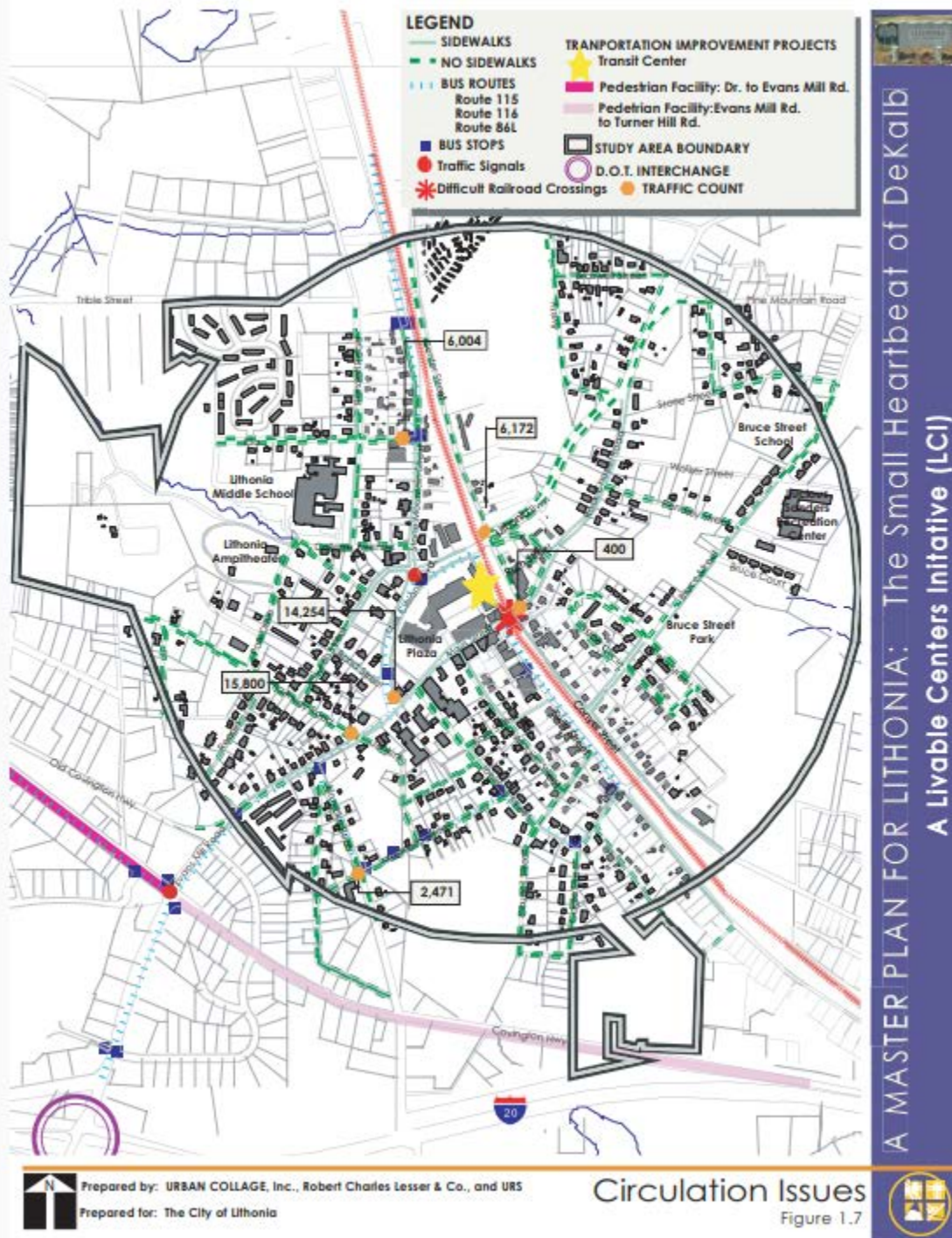
- **Promote walk- and bike-“ability”** to homes, schools, shopping, employment centers, civic uses, and open space.
- Implement the multi-modal transportation options in the City's Comprehensive Transportation Plan.
- Create a **community-wide pedestrian/bike path network**.
- Provide safe and secure parking to support **multi-modal transit services**.
- Increase **network connectivity** to accommodate demand between adjacent neighborhoods and developments without accessing the major thoroughfare system.
- Promote the use of zero-emission Low Speed Vehicles (LSV) and Neighborhood Electric Vehicles (NEVs) and consider other **emerging and innovative transportation technologies**.
- Promote **travel demand management (TDM)** strategies to reduce trips.
- Preserve current transportation investment through **effective maintenance** of transportation system.
- Work with Georgia Regional Transportation Authority (GRTA), Metropolitan Atlanta Rapid Transit Authority (MARTA), Atlanta Regional Commission (ARC) and Georgia Department of Transportation (GDOT) efforts related to express **transit service** and regional bus rapid transit (BRT) initiatives to connect Dunwoody to surrounding communities.

Greater Conley Industrial CID

The Greater Conley Industrial CID does not have an overarching plan but does have a list of proposed SPLOST project submittals and fact sheet detailing current transportation planning efforts. These include an assessment of the area's current infrastructure, transportation scoping and potential redesign of three intersections, resurfacing and widening of various roads, and radii improvements at key freight trucking intersections. The goal of this transportation planning, as stated in this document, is to increase the CID's potential to receive freight planning grant funds from the ARC in 2019 or 2020.

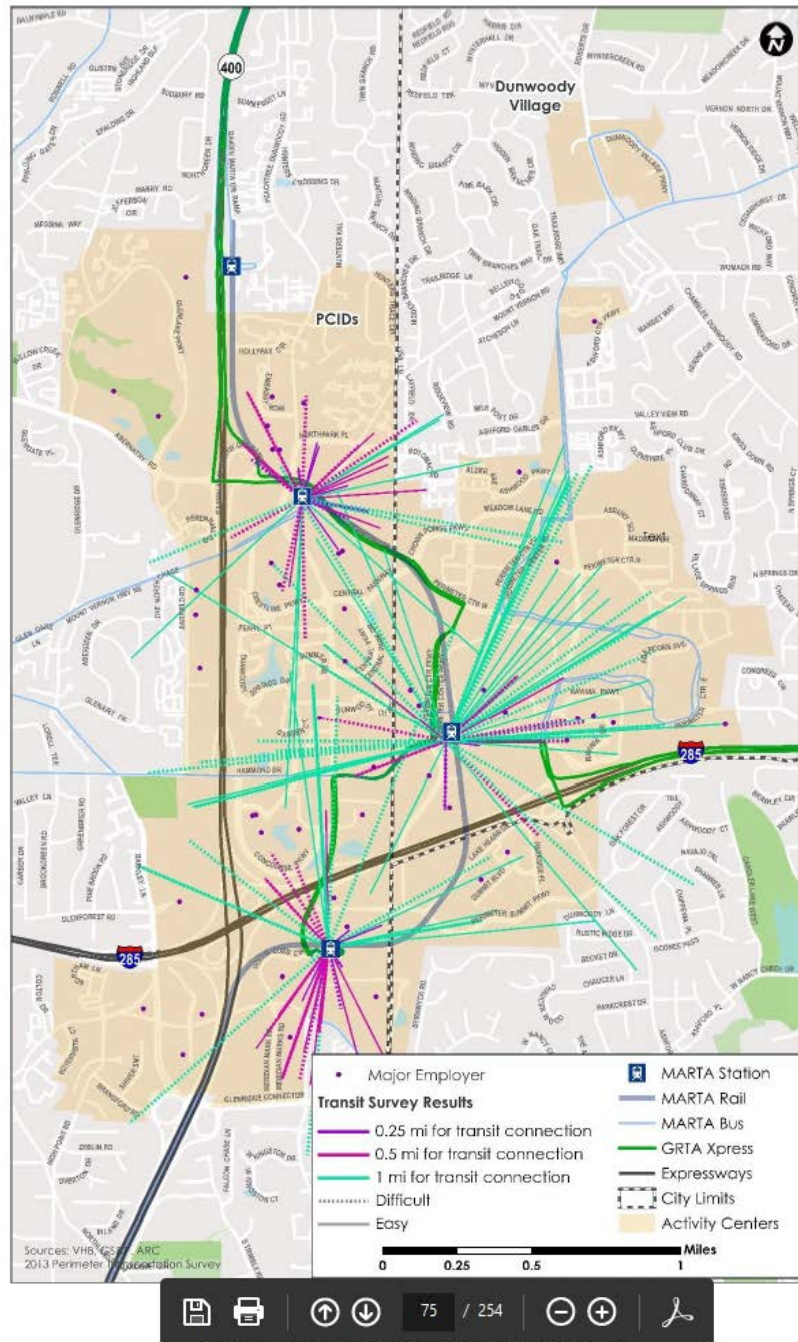
A Master Plan for the City of Lithonia (A Livable Centers Initiative), 2003

This LCI study shows the assets and opportunities for revitalization of this community located just off the I-20 corridor. Although at a walkable scale, the community needs completion of its sidewalks to be walkable. The priority transportation recommendation is for improving the pedestrian environment and infrastructure.



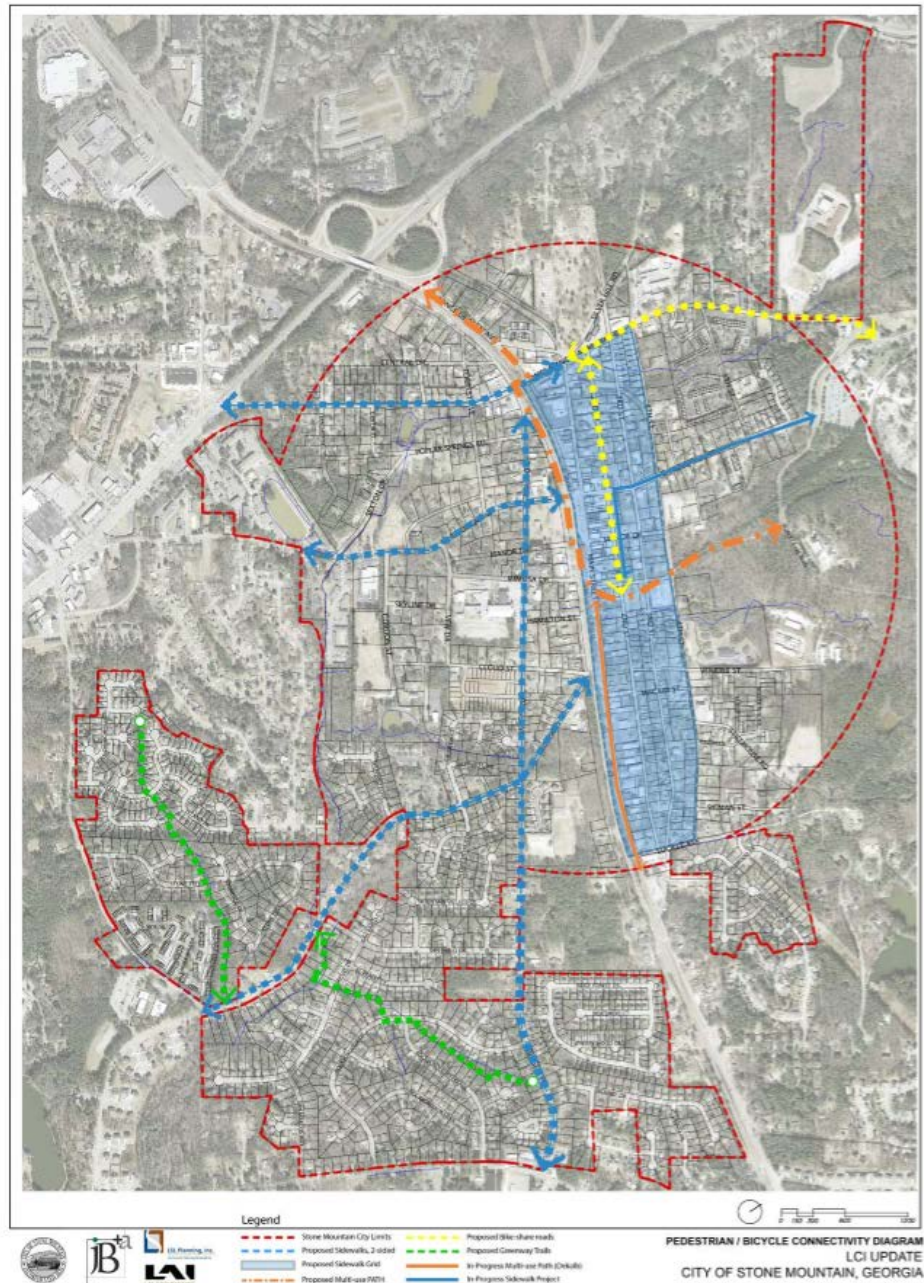
Perimeter CID Last Mile Connectivity Study

This 2017 study examined the needs and opportunities to improve the “last mile” of trips throughout the CID area. This area is well served by highway and high capacity transit service, but the final length of trips is challenging. This effort examined ways to improve walking, biking, shuttles and circulators to complete those trips.



City of Stone Mountain Livable Centers Initiative Plan 10-Year Update

The Stone Mountain Livable Centers Initiative Plan 10-Year Update focuses on improving the character of the village center by adding pedestrian design elements, shared green space like a village green, and additional parking to increase usage of the area. Transportation recommendations revolve around increasing transit connections with MARTA to employment centers and Stone Mountain Park, fostering pedestrian and cyclist connectivity throughout the city via multi-use paths and enhanced streetscapes, and improving traffic flow and pedestrian access along Main Street by reconfiguring the major five-way intersection.



Stone Mountain CID Innovation Study (a LCI Study), 2012

This study devotes much attention to the economic, employment and real estate characteristics of the Stone Mountain CID area. It also examines commuter patterns for people working in this district. It shows a strong commute pattern from Gwinnett County to the district. The study also identifies growth within the health care industry as a strong opportunity for the area. The study also identifies specific roadway capacity needs along most of Mountain Industrial Boulevard (including over 3,000 trucks per day) and Stone Mountain Freeway (over 4,000 trucks per day).

Roadway Characteristics

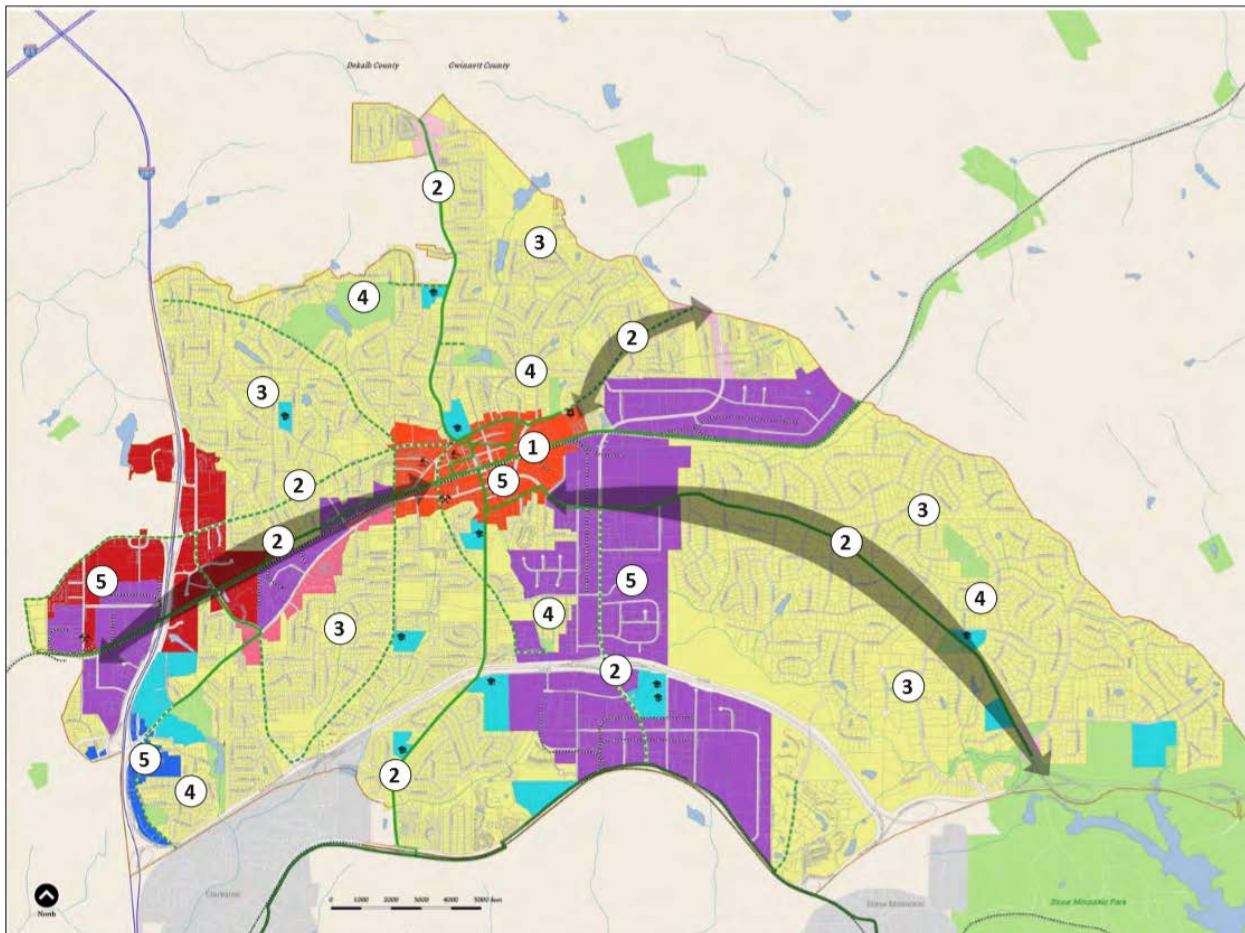
Roadway	Segment	Number of Lanes	Average Daily Traffic 2010	Average Daily Traffic 2040	Level of Service 2010	Level of Service 2040
Mountain Industrial Boulevard	Gwinnett Line	4	38,117	50,667	F	F
	S Royal Atlanta Dr	4	36,642	54,255	D	F
	S of Hugh Howell	4	45,040	56,257	E	F
	N of 78	4	62,072	75,531	F	F
	S of 78	4	50,480	66,628	F	F
Stone Mountain Freeway	Ponce de Leon	4	41,434	56,003	E	F
	E of Mt. Industrial	6	69,209	113,192	D	F
Hugh Howell Road	W of Mt. Industrial	6	87,001	122,140	D	F
	E of Mt. Industrial	4	10,506	19,112	B	C
E Ponce DeLeon Avenue	W of Mt. Industrial	4	21,660	31,516	D	F
	E of Mt. Industrial	2	6,014	8,780	B	C
	W of Mt. Industrial	2	5,642	10,016	C	C

Source: Atlanta Regional Commission, Georgia Department of Transportation (2011)


JACOBS
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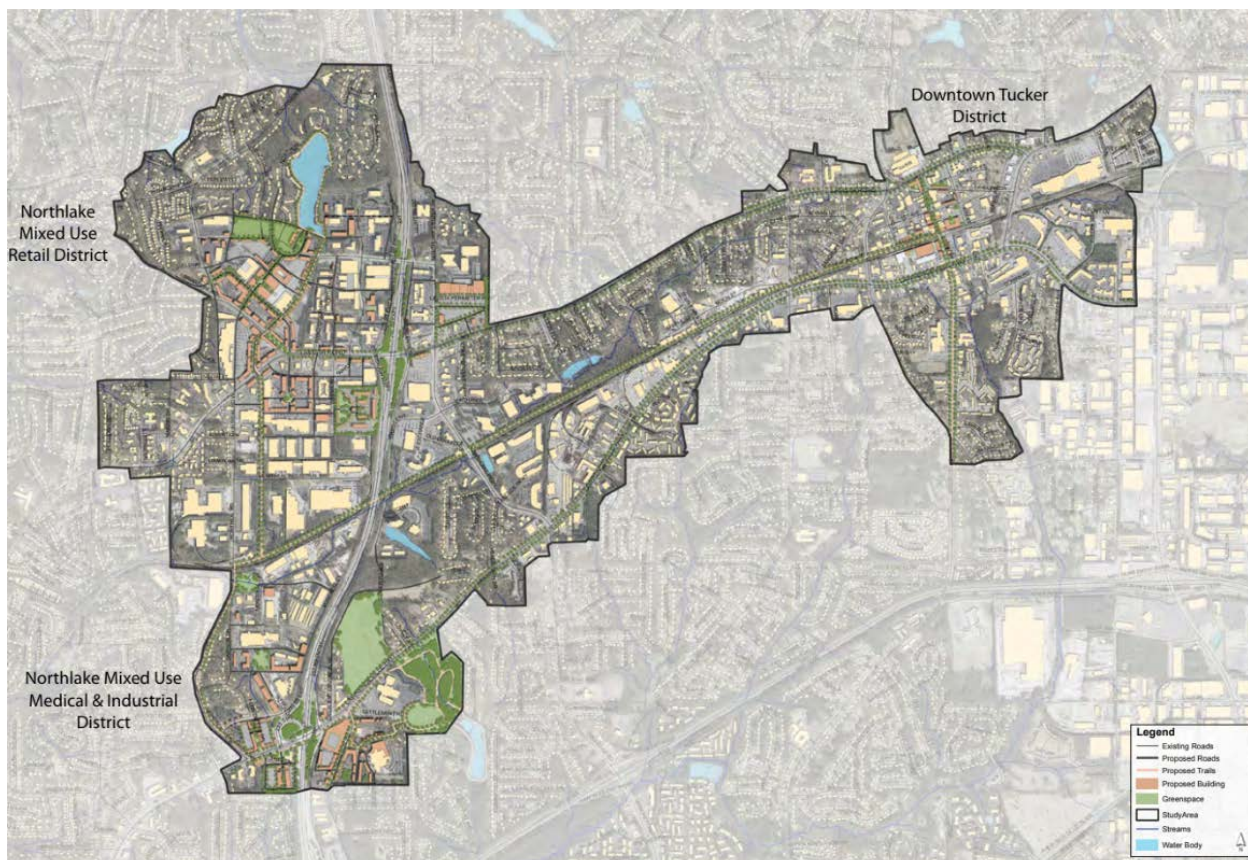
Tucker Tomorrow Comprehensive Plan

The Tucker Tomorrow Comprehensive Plan has five core goals: To enhance Downtown Tucker, improve transportation connections, preserve and improve neighborhoods, strengthen recreational and community resources, and bolster Tucker's economic base. These goals include several transportation recommendations, including a shared-parking strategy for Downtown Tucker, constructing a multi-use trail as the first phase of a citywide trail system, improving sidewalk and intersection infrastructure for greater pedestrian safety, adding street trees, and encouraging mixed-use and adaptive reuse development on underutilized or under-performing commercial, office, and industrial sites. The major theme outlined in the Tucker Tomorrow plan is promoting connectivity and acknowledges that while current demand for transit use is low, the need for connections to MARTA, Tucker government facilities, Northlake, and local medical facilities via a future city-wide shuttle service is crucial. Design recommendations for future development in the Northlake area focus on streetscapes oriented for pedestrians with improved MARTA routes, stops, and shelters.



Tucker Northlake CID Master Plan Study

Conducted in 2015, the master plan study evaluated the land use and transportation network of the combined Tucker-Northlake Mall area. The Tucker Northlake CID Master Plan Study proposed connecting the Northlake retail district and Downtown Tucker along Lawrenceville Hwy, Lavista Rd, and I-285 with redesigned streets and walkable, mixed-use destinations. The plan split the Tucker Northlake area into three focus areas and a separate “Transportation and Corridors” section with different recommendations for each. All of these focus area recommendations highlight the need for greater connectivity and pedestrian infrastructure improvements, improved signage and branding for businesses, and gateway beautification projects. The “Transportation and Corridors” section recommends adding bicycle lanes on LaVista Road, improving transit stops with bus shelters and signage, incorporating Complete Street guidelines in to the Overlays, and performing a feasibility study for a rail-to-trail between Northlake and Downtown Tucker.





3

Final Report

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DeKalb County

TRANSIT MASTER PLAN

DeKalb County Transit Master Plan

DRAFT Final Report - August 2019

Prepared for



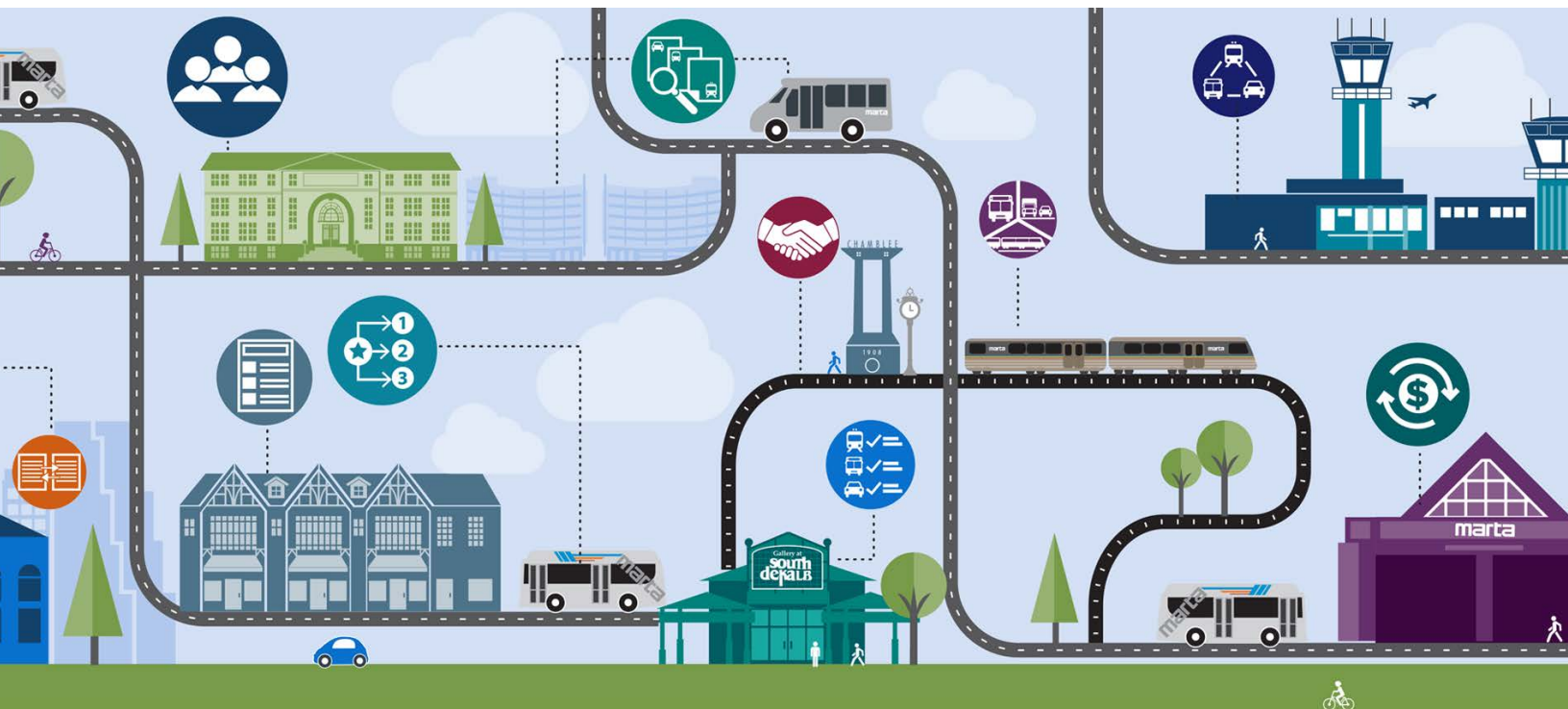
DeKalb County
GEORGIA



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DeKalb County

TRANSIT MASTER PLAN

What is DeKalb County's Transit Master Plan?

The Transit Master Plan's purpose is to address DeKalb County's mobility challenges, help to enhance future development opportunities, and improve the quality of life within each of DeKalb County's cities and unincorporated communities, both north and south. The plan identifies transit service enhancements for today and expansion opportunities for tomorrow to create a 30-year, cost-feasible vision for transit investments in DeKalb County

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1 Introduction

Background

This report represents the second and final report in the two-volume DeKalb County Transit Master Plan (TMP). The first report, entitled *Baseline Condition: An Assessment of Transit Needs and Markets*, was completed in November 2018. This report provided an overview of the state of travel and transit conditions in DeKalb County, as well as insights into the current and future needs for transit investments. The identified needs and markets set the foundation for developing the transit investment scenarios provided in detail as part of this final report.

DeKalb County, and the cities within DeKalb County, successfully requested the Atlanta Regional Commission (ARC) to fund a DeKalb TMP for transit expansion as a component of the DeKalb County Comprehensive Transportation Planning program. Ultimately, the plan will serve as the guiding document to support more detailed transit planning and expansion in DeKalb County. Additionally, it will serve to provide guidance to County officials and the Metropolitan Atlanta Rapid Transit Authority (MARTA) on the strategic direction for securing additional funding for future transit investments necessary to implement the plan. Its projects will feed into the Regional Transit Plan to be completed by the Atlanta-Region Transit Link Authority (The ATL).

- This final report documents the technical steps, as well as public/stakeholder outreach and education that led to the following key DeKalb TMP outcomes: Development of the universe of transit project concepts
- Evaluation of transit concepts to define four transit investment scenarios
- Financial planning and modeling to deliver each scenario
- Final plan recommendations and steps toward implementation

Project Goals

The identification of goals for the DeKalb TMP was fundamental and a critical step completed early in the plan development process. A key input to the development of these goals was the range of comments and policy issues identified during the TMP's initial round of public/stakeholder outreach. The goals developed and used throughout the TMP helped to define

the overall vision and facilitate the assessment of transit investments, as well as the scenarios considered in the DeKalb TMP. The goals are found in **Figure 1-1**.

Figure 1-1: DeKalb Transit Master Plan Goals



Live, work, play and use transit

Focused on creating an environment where transit is a seamless part of living, working and playing in DeKalb County. By creating a robust network of complementary modes that include **different types of transit** solutions, the plan will **improve residents' quality of life** and businesses' bottom lines.



Ensure that the transit vision is affordable and effective

Create an environment to **listen, educate, and collaborate** with residents, local businesses, cities, and DeKalb County, together we can develop a prioritized list of well-defined, realistic, and feasible transit improvements to guide us for the next few years and beyond.



Make sure thriving and emerging areas have transit service

Defined **fiscally sensible solutions**, the Master Plan will **bolster economic development** activities in currently prosperous areas and encourage investment in those areas identified for future growth so that all areas of the County will benefit from future transit improvements.



Make sure transit is available for everyone

Provide mobility options for all DeKalb County residents. The recommendations will balance the needs of **discretionary riders** who could choose to commute via private automobile instead of transit with the needs of more **transit-dependent riders** such as seniors, individuals with low incomes, underserved residents, persons with disabilities, and youth.

2 State of DeKalb Transit

History of DeKalb Transit

In the early 1960s, the Metropolitan Atlanta Transit Study Commission recommended that a five-county transit system be implemented to better serve the Greater Atlanta region. The study was in response to tremendous growth occurring in the City of Atlanta and the counties of DeKalb, Clayton, Cobb, Fulton, and Gwinnett. This recommendation led the Georgia Legislature to pass the MARTA Act of 1965 on March 10 of that year. The original Board of Directors was determined to be 11 members: four City of Atlanta representatives, two DeKalb County representatives, two Fulton County representatives, one Cobb County representative, one Clayton County representative, and one Gwinnett County representative. The first meeting of the Board was held on January 3, 1966.

The Act specified that MARTA “shall exist for the purposes of planning, designing, leasing (as lessee), purchasing, acquiring, holding, owning, constructing, improving, equipping, financing, maintaining, and administering a rapid transit system within the metropolitan area, and operating same, or contracting therefor, or leasing (as lessor) same for operation by private parties.” By 1971, only the City of Atlanta, DeKalb County, and Fulton County had passed referenda to fund MARTA. Clayton, Cobb and Gwinnett did not support it. A sales tax was ultimately passed by City of Atlanta, DeKalb County, and Fulton County to support MARTA. The state legislature limited MARTA’s spending on operations to fifty percent of the revenue from the sales tax. DeKalb County leaders supported this restriction because they were concerned that capital investments might be limited to the City of Atlanta. The State of Georgia did not provide any funding for MARTA.

DeKalb Transit Today

Today, MARTA serves DeKalb, Fulton, and Clayton counties, and the City of Atlanta. MARTA provides both bus and rail transit services, and total 2018 systemwide weekday daily ridership is more than 500,000 trips. MARTA's rail lines provide connections to some of the major activity centers in the region such as Downtown Atlanta, Midtown Atlanta, Perimeter Center, Buckhead, Mercedes Benz Stadium, City of Decatur, and Hartsfield-Jackson Atlanta International Airport (HJIA). The rail network also provides connections to educational institutions such as Georgia Institute of Technology and Georgia State University.

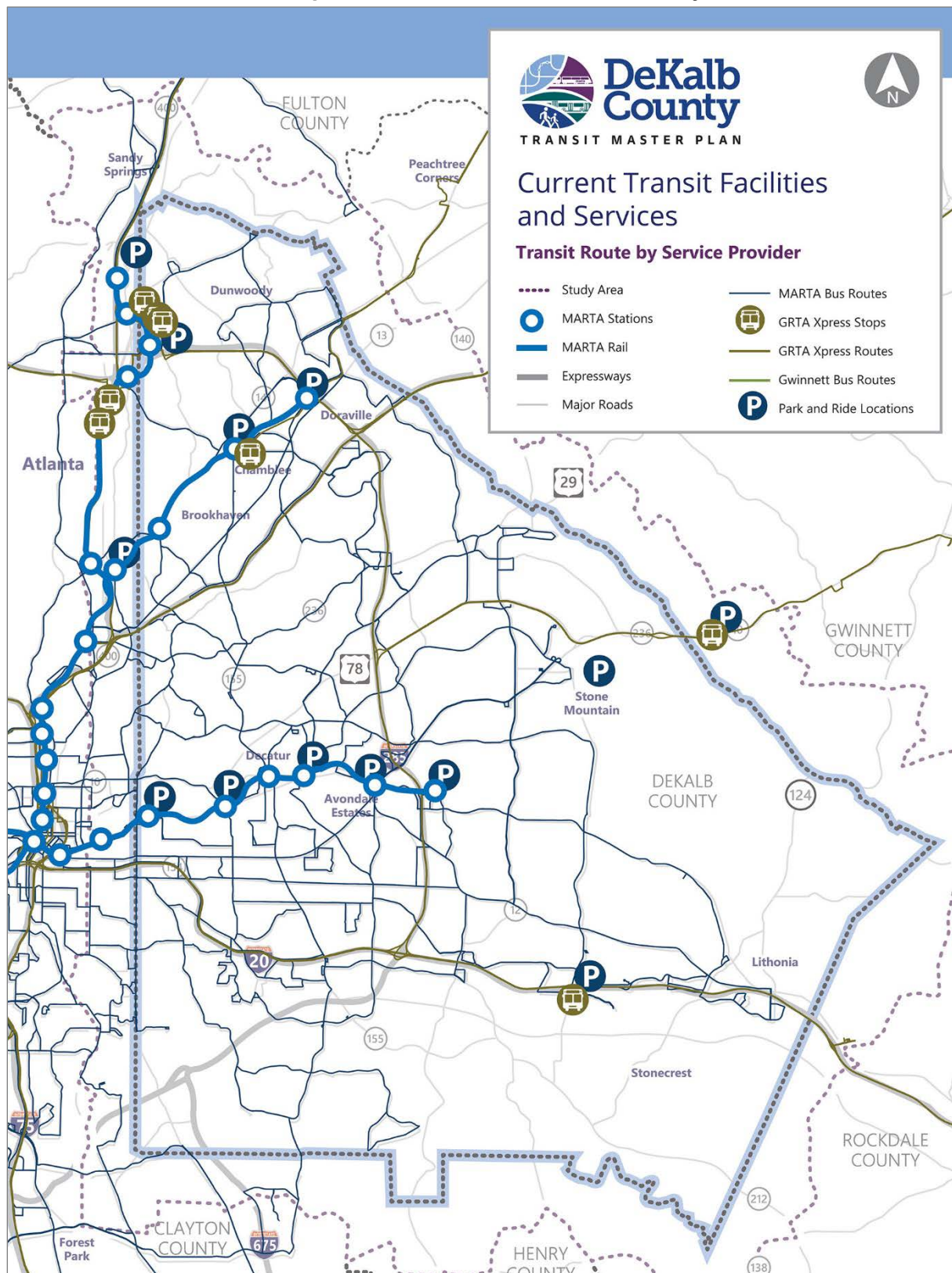
Local bus routes serve several functions. They act as the feeder system to MARTA rail stations, local circulators, connections to major activity centers, and express routes that serve the region's central business districts. MARTA completed a Comprehensive Operations Analysis (COA) for its bus routes in 2016 and has since adopted several changes in operations to optimize its transit service.

MARTA is the primary operator of transit service (bus and rail) within DeKalb County. However, the State Road and Tollway Authority (SRTA)/Georgia Regional Transportation Authority (GRTA) Xpress and Gwinnett County Transit provide additional commuter bus services in the county. **Map 2-1** provides an overview of the current transit network operating in DeKalb County. Additional details on the state of the transit system in DeKalb County can be referenced in the previous report entitled *Baseline Condition: An Assessment of Transit Needs and Markets*. The baseline assessment identified several unmet riders' needs to be addressed in DeKalb County including the following:

- Expansion of paratransit services
- Improvements to bus service in popular corridors
- Mobility centers to better accommodate bus-to-bus transfers
- Expanded local bus services, circulators and on-demand service
- Bus-to-rail transfer improvements
- First mile/last mile infrastructure improvements

The last two decades of planning for capital investment in high-capacity transit has not led to any major investments in DeKalb County; thus, the intent of the DeKalb TMP is to establish a concise, locally supported transit plan adopted by the County and supported by each of its municipalities. The DeKalb TMP defines transit investment strategies that address state-of-good repair requirements, expansion priorities, regional connectivity, equity, and economic development. These strategies consider potential funding opportunities at the federal, state, and local levels, as well as support private investment opportunities. The sections that follow detail the foundation for conducting the DeKalb TMP and the factors that collectively lend themselves to the final set of conclusions and key recommendations.

Map 2-1: Transit Services in DeKalb County

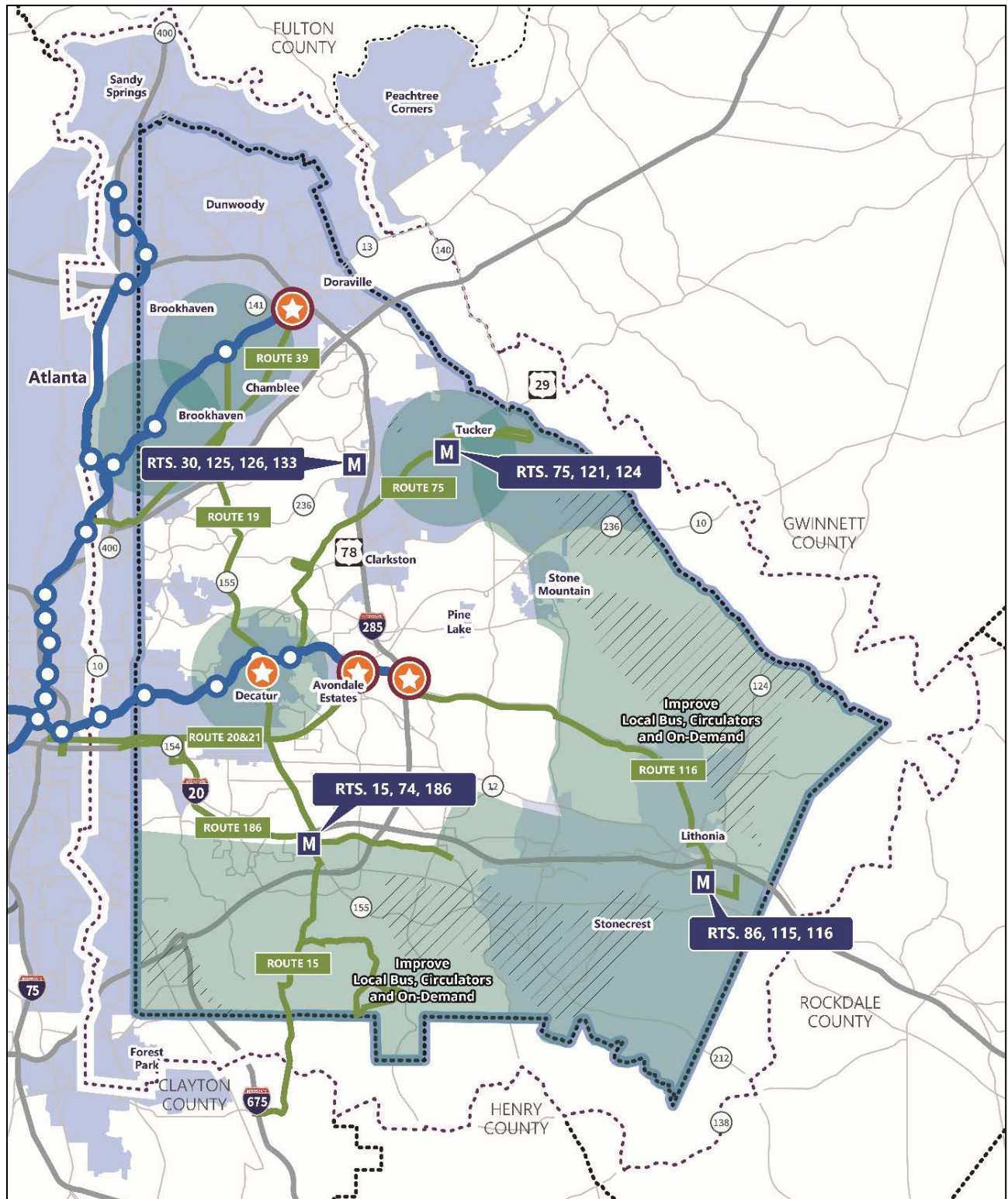


Current Unmet Rider Needs

After receiving public input and completing a comprehensive review of the existing MARTA system, land use trends and travel conditions, the DeKalb TMP has identified a series of unmet rider needs to be addressed. These needs are illustrated in **Map-2-2** and include the following:

- **Expansion of paratransit services** – This is needed in unserved areas in south and east DeKalb. This would serve significant aging-in-place and disabled populations and could be provided via MARTA Mobility and/or mobility-on-demand contracted services.
- **Improvements to bus service in popular corridors** – Enhanced service is particularly needed on Routes 39, 186, 21, 121, 15, 19, 75, and 116. Improvements may include increased frequency of service, higher capacity buses, extended hours of operation, improved shelters and more rider amenities.
- **Mobility centers** – Four locations have been identified for mobility centers: The Gallery at South DeKalb, Stonecrest, downtown Tucker, and Northlake Mall. These centers would facilitate bus-to-bus transfers, provide covered shelter, Breeze card kiosks, restrooms, vending, bike racks, and real-time bus arrival information. Multi-modal mobility connections to car-sharing and bike-sharing services would also be provided.
- **Expand local bus services, circulators and on-demand service** – Expanded services are particularly needed in underserved areas in south and east DeKalb. Mobility and circulation improvements are also needed in town centers such as Decatur, Chamblee, Stonecrest, Tucker, and Brookhaven.
- **Bus to rail transfer improvements** – These improvements may include improving real-time passenger information and wayfinding and better aligning bus and train arrivals to reduce transfer time. Station improvements may include increasing bus bay loading capacity and improving passenger amenities such as restroom access and vending.
- **First mile/last mile infrastructure improvements** – Improved pedestrian and bicycle connections are needed to transit stops and stations.

Map 2-2: Current Unmet Rider Needs

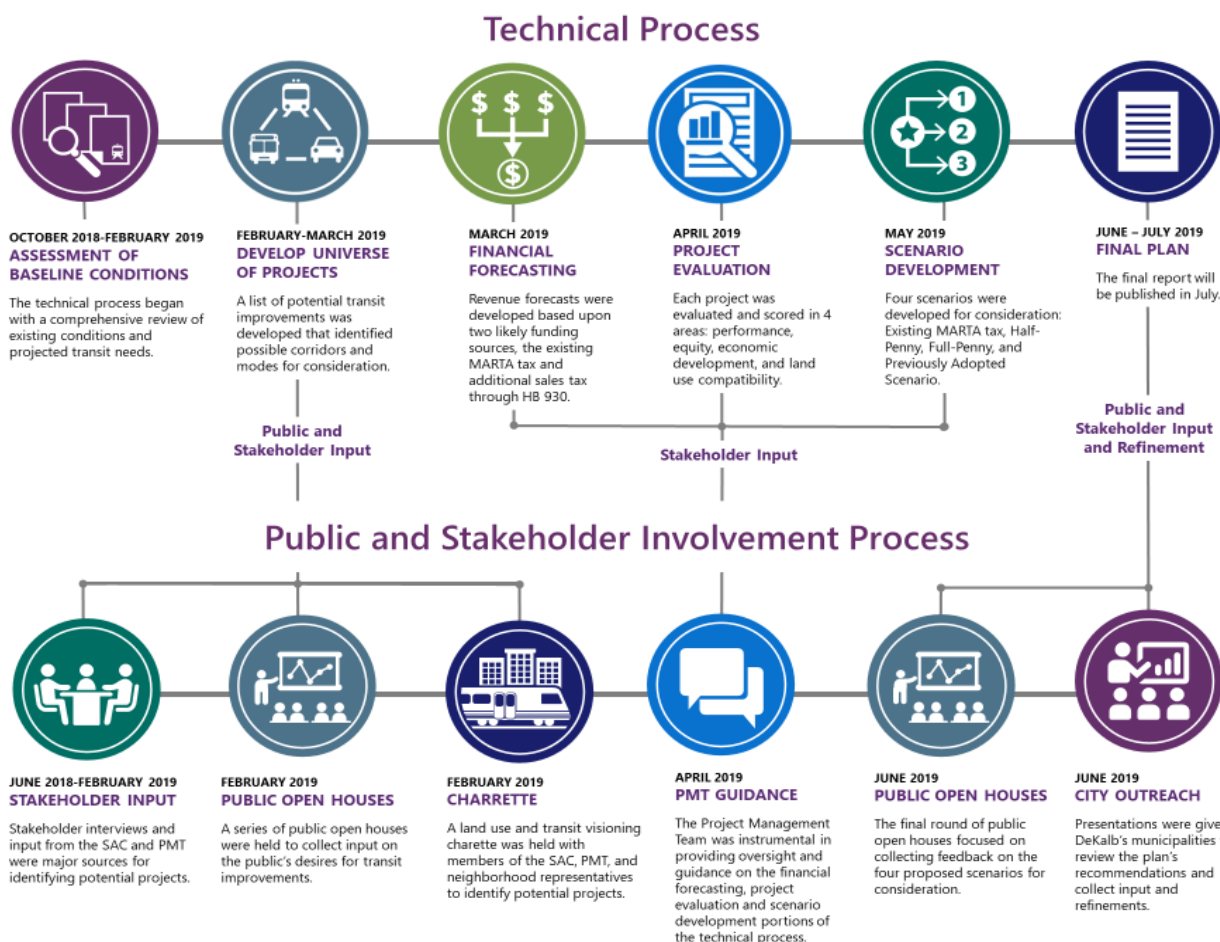


3 Approach

The DeKalb TMP used two concurrent processes to develop the plan: a technical process and a public involvement process.

These two processes converged and informed each other throughout the development of the TMP. At key points, public and stakeholder input was incorporated to help guide the technical process. The relationship between both processes is illustrated in **Figure 3-1** and highlights key connection points.

Figure 3-1: DeKalb TMP Technical and Public Involvement Processes



Technical Process

The technical process was divided into six main efforts, with each one building upon the previous steps. These efforts include:

- Assessment of baseline conditions
- Identifying the universe of projects
- Project evaluation
- Financial forecasting
- Scenario development
- Scenario evaluation

ASSESSMENT OF BASELINE CONDITIONS

The technical process began with a comprehensive evaluation of existing conditions and projected needs, which has been documented in a previous report entitled *Baseline Conditions: An Assessment of Transit Needs and Markets*. This was a major technical effort that focused on providing an overview of the present state of transit in DeKalb County, as well as insights into the current and future needs for transit. Identified needs in this report were used to help develop transit improvement scenarios.

This assessment was wide ranging and focused on travel trends, an overview of the existing transit system, economic development potential, and policy analysis, among other items. An analysis of transit market segments, transit needs, travel patterns, and major transportation corridors was also included in the assessment.

IDENTIFYING THE UNIVERSE OF PROJECTS

After assessing the baseline conditions, a universe of projects was identified for further evaluation. Projects were added to the universe through both technical or public involvement processes. The universe focused on high-capacity transit options.

PROJECT EVALUATION

Evaluation criteria were developed to reflect the values of the project goals (**Figure 1-1**). Each project in the universe of projects was evaluated against these measures to determine the project's potential benefits and estimated costs. These criteria measured performance (ridership), economic development potential, equity, and land use compatibility. Cost estimates were also developed for each project at this phase of the technical process. A variety of planning tools, models, and analysis techniques were employed to assess each project. A scoring system was developed to aid in project comparisons. The evaluation process is described in further detail in **Chapter 4** of this report.

FINANCIAL FORECASTING

Revenue forecasting was another major technical effort of the DeKalb TMP. Forecasts were developed based upon two potential funding sources: the existing MARTA Sales Tax and the House Bill (HB) 930 Sales Tax. These forecasts projected the revenues available for transit expansion if DeKalb County passed a half-penny or full-penny sales tax, along with reasonable

assumptions of funding from the Federal Transit Administration (FTA) Capital Investment Grants (CIG) program. Projected revenue levels were then used to fiscally constrain well-performing projects in the universe of projects into a set of financially feasible transit scenarios. Detailed information on this process is provided in **Chapter 5** of this report and in **Appendix B**.

SCENARIO DEVELOPMENT

The next step of the technical process involved developing potential transit system scenarios for DeKalb County. Through guidance provided by the Project Management Team (PMT), four scenarios were developed:

- **Existing MARTA Penny Scenario** (also known as Existing MARTA tax), which assumes a continuation of the one-penny MARTA tax with no additional sales tax funding for transit
- **Half-Penny Scenario**, which assumes a continuation of the one-penny MARTA tax and that the County passes an additional half-penny sales tax for transit under HB 930
- **Full-Penny Scenario**, which assumes a continuation of the one-penny MARTA tax and that the County passes an additional full-penny sales tax for transit under HB 930
- **Previously Adopted Scenario**, which assumes a continuation of the one-penny MARTA tax and an unidentified additional funding source capable of generating revenue well in excess of the revenue generated by the full-penny HB 930 sales tax

The development of these scenarios in most cases involved combining high-performing projects into transit networks that matched funding levels projected through financial forecasting. This process is described in greater detail in **Chapter 5**.

SCENARIO EVALUATION

The final phase of the technical process involved scenario evaluation. The four scenarios were compared against each other in terms of benefits and costs to aid the public and decision makers in understanding the trade-offs between them. The evaluation focused on transit access, mobility, economic development potential and ridership. These comparisons will be highlighted during a period of continued public and stakeholder education/outreach occurring after the formal DeKalb TMP process concludes. The results of the scenario evaluations are provided in **Chapter 6**.

Public Involvement Process

The public involvement process used to develop the DeKalb TMP ran concurrently with the technical process. It was a comprehensive and robust process that informed the technical work at critical points. This process was comprised of 13 major traditional and innovative engagement activities:

- Public open houses
- Stakeholder Advisory Committee (SAC) meetings
- Stakeholder interviews
- PMT meetings
- Peer city tour in Minneapolis
- Focus groups

- Transit and land use visioning charette
- Project share (Pecha-Kucha Style)
- Project website
- Online survey
- Fact sheets
- Pop-up events
- City outreach and input presentations

This section provides an overview of the major components of the public involvement process. A detailed report of the activities performed is provided in **Appendix A**.

PUBLIC OPEN HOUSES

Three rounds of public open houses were held during the DeKalb TMP planning process. Each round consisted of three identical meetings held in different parts of the county. The first round was held in October 2018 and focused on education. Information on the study purpose, goals, and potential transit modes was presented. Technical background data on existing transit conditions, economic development, transit needs, and travel patterns was also provided.

The second round of meetings, held in February 2019, focused on getting input from the public on desired transit projects and existing needs. At these meetings the interactive planning tool, SketchTransit, was used to record the desired transit projects noted by participants. A mode game and videos were also employed to educate attendees on the various transit modes being discussed. The third round of meetings was held in June 2019 and focused on presenting the four draft scenarios to the public for consideration and feedback.

Figure 3-2: Public Open House



Public open house attendee plays an educational transit mode matching game.

STAKEHOLDER ADVISORY COMMITTEE (SAC)

The project was guided by the SAC, which included representatives from local agencies, community groups and jurisdictions. A series of four SAC meetings were held throughout the planning process, which focused on providing education and receiving stakeholder feedback on project identification and scenario development.

STAKEHOLDER INTERVIEWS

A series of stakeholder interviews were held at the beginning of the project to gain insight into the background and history of transit planning efforts in the county. Interviews were held with elected officials from across the county, as well as the county's representatives on the MARTA Board of Directors. These interviews provided the study team with important information on critical transit needs and issues of concern.

PROJECT MANAGEMENT TEAM

The PMT was heavily involved in guiding the development of the DeKalb County TMP. This group was comprised largely of elected officials and executive leadership from the County's municipalities and County government. This team of decision makers provided valuable input on the political realities and concerns affecting transit improvements. The PMT met on a bi-weekly basis throughout the planning process and was kept up-to-date and well informed on plan development activities. This group had a major impact on the technical approach, scenario development and final outcomes of the TMP.

PEER CITY TOUR

In September of 2018, a peer city tour was held in Minneapolis-St. Paul, Minnesota. Representatives from the county government, municipalities, Community Improvement Districts (CIDs) and regional planning agencies toured transit expansion efforts in the cities and met with local planners and elected officials to discuss lessons learned. This tour provided education and exposure to transit modes that do not currently exist in the Atlanta region, such as Bus Rapid Transit (BRT), Arterial Rapid Transit (ART), and Light Rail. This tour was helpful for stakeholders and elected officials to visualize how new transit technologies could operate in the County and serve the travel needs of residents.

FOCUS GROUPS

Focus group discussions were held to address the concerns of two groups: the small business community and individuals with disabilities. Participants were led through a facilitated discussion to understand how transit affects individuals within these groups. As an example, these meetings were helpful in

Figure 3-3: Minneapolis Peer City Tour



Peer city tour attendees meet with local transit planners in Minneapolis.

identifying the specific challenges and barriers that disabled persons encounter when trying to access transit services.

TRANSIT AND LAND USE VISIONING CHARRETTE

In February of 2019, the County hosted an ambitious interactive transit and land use visioning charrette. This workshop was attended by members of the SAC, PMT, transportation, land use and economic development professionals, as well as other community leaders. The meeting began with an informative presentation that explained the differences between transit modes and the principles of Transit-Oriented Development (TOD). A brief overview of transit-related economic development efforts was also provided. Facilitated break-out sessions were held where participants could plan their ideal transit systems and economic development vision using the SketchTransit tool and other base map data and resources. This exercise was used to identify potential projects and major transfer locations between projects.

Figure 3-4: Transit and Land Use Visioning Charrette



Charrette attendees work together to identify transit projects and plan a county-wide transit system.

PROJECT SHARE

In March of 2019, a project share meeting was held to facilitate the sharing of information between project teams working on related planning efforts in proximity to DeKalb County. In response to the large number of parallel planning efforts occurring simultaneously to the DeKalb TMP the need for an information-sharing workshop was recognized. Brief five-minute presentations (Pecha-Kucha style) were provided by each team and group discussions were held after. Presentations were given on the ATL Regional Transit Plan, DeKalb County Comprehensive Plan, I-20 East TOD Plan, Clifton Corridor, Fulton County Transit Master Plan, Connect Gwinnett Transit Plan, GDOT Major Mobility Investment Program, GDOT Statewide Transit Plan, and Atlanta's Transportation Plan.

PROJECT WEBSITE

The project website was a powerful interactive tool to facilitate public education and provide opportunities for public input. All materials presented at public open houses and SAC meetings were available on the website. The project website also included an interactive transit mode game, survey, and email comment portal. The website will continue to be available to the community well beyond the close of the formal TMP process.

ONLINE SURVEY

An online survey was administered and open from August 2018 to March 2019. The survey asked respondents about their experience with transit in DeKalb County, solicited input on how to improve services, and gauged support for an additional sales tax for transit. Responses were collected through the website, e-blasts, and at public open houses and pop-up meetings. The 877 responses were used to understand the public's desires for additional transit investments.

FACT SHEETS

Two fact sheets were developed at the beginning and near the conclusion of the planning process. The summer 2018 fact sheet provided an overview of the TMP process, major goals, MARTA service facts, and information about how to get involved. The summer 2019 fact sheet detailed the evaluation process and presented information on the four scenarios. Fact sheets were available at the public open houses, pop-up meetings, and workshops held throughout the planning process. These fact sheets were also made available on the project website for individuals who could not attend public meetings.

POP-UP EVENTS

The study team attended numerous community events throughout the planning process to promote the DeKalb TMP. A pop-up informational kiosk was set up at these events to educate the public about the plan and elicit public feedback from those who may not regularly attend public meetings. The intention of attending these events was to meet residents where they are in their everyday lives. Some of these pop-ups were held at the Central DeKalb Senior Center, Black History Celebration, and Waters Edge Home Owners Association to mention a few.

Figure 3-5: Display Booth at Community Event



CITY OUTREACH AND INPUT PRESENTATIONS

City outreach was key to the development of the TMP. The project engaged the cities through various means: four members of the DeKalb Municipal Association (DMA) served on the PMT, three presentations were made to the DMA, and a project presentation was made at each city's council meeting in the early summer 2019. These presentations provided an overview of the planning process, outcomes, draft recommendations, presented the four scenarios for consideration and solicited any questions. Resolutions of support were collected from each jurisdiction.



4 Project Evaluation

Overview

This chapter describes the process used to identify and evaluate potential transit projects. The first step in the process began with identifying the universe of projects for consideration. Project definition primarily included corridor and mode identification, but for the purposes of comparison project definitions also had to include planning-level detail such as a broad description, length, potential number of stations, and generalized operating plan. After definition, each project was evaluated across the DeKalb TMP's four major goal areas: land use compatibility, economic development potential, equity, and performance (ridership).

Universe of Projects

The development of the universe of projects involved amassing potential projects from a variety of sources including prior planning efforts, public involvement, stakeholder input, and technical analysis. Previous planning efforts included both MARTA corridor studies and projects identified in MARTA's COA.

A significant number of potential projects were identified through the public involvement process. Many projects were identified at the TMP's second series of public open houses held in February 2019. At these meetings, an interactive planning tool, SketchTransit, was used to record projects proposed by members of the public. There was a high level of consensus on proposed projects and major travel corridors in need of service. There were also numerous novel concepts identified during this process such as mobility on-demand and microtransit services for areas and corridors throughout DeKalb County.

In addition to public input, stakeholder input was another major source for potential projects. Projects were identified through stakeholder interviews, SAC meetings, focus groups, and municipal engagement. Input from stakeholders on the PMT was also factored into the project development process.

Technical analysis was used to identify additional projects. These projects were designed to address the transit needs identified in the *Baseline Conditions: An Assessment of Transit Needs and*

Markets report. Projects included improved transit service on major travel corridors identified as underserved and/or transit service that focused on travel patterns not currently being served by transit.

The universe of projects is displayed in **Map 4-1** and contains 40 individual transit projects: 3 heavy rail transit (HRT) projects, 9 light rail transit (LRT) projects, 13 bus rapid transit (BRT) projects, and 15 arterial rapid transit (ART) projects. Maps that display these projects by mode are provided in this chapter as well. As noted previously, project definition included corridor and mode. To ensure optimal results, multiple modes were proposed on the same corridor.

FATAL FLAW ANALYSIS

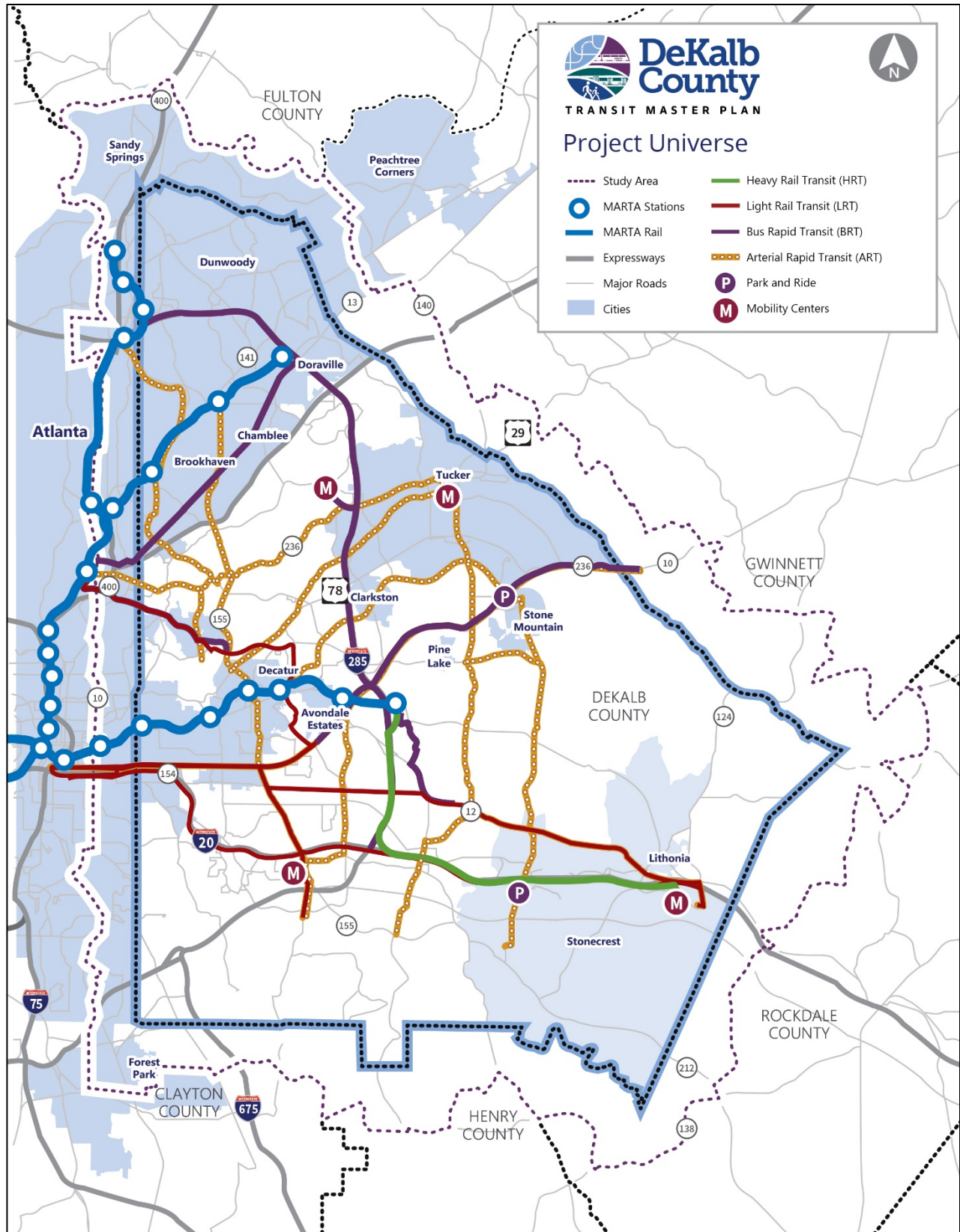
All potential projects were screened through a fatal flaw analysis to determine if they should proceed for additional evaluation. This screening was used to eliminate projects that were determined to be impractical. This analysis was necessary as many projects were identified by the general public and stakeholders, who understand their travel needs, but may not understand the limitations of various transit modes. It relied on a combination of planning judgement and technical analysis. Several projects identified by the public were not feasible due to potential for physical constraints (i.e., limited right-of-way and/or a high potential for numerous and significant property impacts). Other projects were screened out because they failed to connect origins to a significant number of destinations.

DEFINITION OF TRANSIT MODES

For the purposes of the DeKalb TMP, only modes that are proven and have received federal support through FTA funding were considered. High-capacity transit improvements in this plan focused on four modes: HRT, LRT, BRT, and ART. In addition, paratransit, mobility on-demand, express and local bus modes were also included as complementary to the network of high-capacity transit projects included in the transit system scenarios.

As technological advances in transportation occur, consideration of additional modes and services may be warranted. The TMP evaluated modes that could be implemented today, but scenarios did not preclude the incorporation of future technological advancements.

Map 4-1: Universe of Projects



Heavy Rail Transit (HRT)

HRT trains carry more people and travel at faster speeds than LRT trains, but they are more expensive to build. HRT trains operate on tracks in exclusive right-of-way, so they are not affected by automobile congestion.

Typically, trains are powered electrically from a third rail, which requires it to be separated from automobile traffic. HRT can operate at ground level, on an elevated structure, or below ground; however, the running-way must be contained and protected to avoid public access to the electrified third rail.

HRT frequency is typically 15 minutes or less. Passengers pay to enter stations (not the train itself) which speeds the boarding process. Passengers board from platforms that are level with the train's floor which helps people of all abilities to board more easily.

Stations are typically spaced at least a mile apart, but may be closer together in dense urban areas, such as Downtown or Midtown Atlanta. Stations in urban areas offer access for pedestrians, bicyclists and drop-off passengers. Stations in suburban areas typically offer all of those access options plus parking areas. Stations may offer amenities like ticket vending machines, customer service kiosks, directional signs, real-time train arrival information, restrooms, vending machines, etc.

Figure 4-1: Heavy Rail Transit



Light Rail Transit (LRT)

Light rail trains carry fewer people and travel at slower speeds than HRT, but LRT systems are less expensive to build. Because they are powered electrically from an overhead wire, LRT trains do not require grade separation from automobiles. LRT can operate in a designated right-of-way or in mixed traffic. If operated in mixed traffic, congestion may be a concern.

LRT is most often operated at ground level, but they can operate below ground. LRT frequency is typically 15 minutes or less.

Passengers may pay to enter stations (not the train itself) which speeds the boarding process. Passengers board from platforms that are level with the train's floor which helps people of all abilities to board more easily. Stations are typically spaced at least a mile apart but can be closer in urban areas. Stations may offer amenities like ticket vending machines, directional signs, real-time train arrival information, restrooms, etc.

Figure 4-2: Light Rail Transit



Bus Rapid Transit (BRT)

BRT is a bus mode that is designed to operate like a train. To reduce the impacts of congestion, BRT vehicles operate in a designated transit lane or in managed lanes within limited access facilities. BRT vehicles carry fewer people and travel at slower speeds than trains, but BRT infrastructure is much less expensive to build.

Buses can be fueled by gasoline, diesel, compressed natural gas, electricity, or a hybrid of fuel sources. BRT vehicles are often articulated, allowing for greater capacity, and more stylized than local buses. They are most often operated at ground level, but can operate below ground.

BRT frequency is typically 15 minutes or less. Passengers pay to enter stations (not the bus itself) which speeds the boarding process. Passengers board from platforms that are level with the bus's floor which helps people of all abilities to board more easily. Stations are typically spaced about 1/3-mile apart but can be closer in highly developed urban areas. Stations offer amenities like ticket vending machines, directional signs, and real-time bus arrival information.

Figure 4-3: Bus Rapid Transit



Arterial Rapid Transit (ART)

ART is a frequent bus service with strategic enhancements to improve its speed and reliability. ART vehicles operate on regular streets in mixed traffic such that they are affected by automobile congestion, but they incorporate short bus-only lanes adjacent to major intersections to reduce delays.

ART vehicles carry the same number of people as BRT vehicles, but they tend to travel at lower average speeds due to being in normal traffic lanes. ART infrastructure is less expensive to build than BRT because a dedicated travel lane is not needed.

Figure 4-4: Arterial Rapid Transit



ART frequency is typically 15 minutes or less. Buses are often articulated, and can be fueled by gasoline, diesel, compressed natural gas, electricity, or a hybrid of fuel sources. ART systems may also employ technology to reduce delay caused by traffic signals.

Passengers may pay at select stations, which speeds the boarding process. Passengers board from platforms that are level with the bus's floor which helps people of all abilities to board more

easily. Stations are typically spaced about 1/3-mile apart and offer amenities like ticket vending machines, real-time bus arrival information, etc.

Project Evaluation Measures

Each project in the universe of projects was assessed across four evaluation measures consistent with the goals of the DeKalb TMP. These measures focused on land use compatibility, economic development potential, equity, and performance (ridership). **Figure 4-5** illustrates how the TMP's goals were translated into project evaluation measures. This section includes a brief description of the measures applied under each evaluation followed by the project scoring and evaluation results.

Figure 4-5: Translating TMP Goals into Project Evaluation Measures



LAND USE COMPATIBILITY

Land use compatibility is an important consideration in assessing the feasibility of a transit project. By properly matching a corridor's land use density and intensity with the appropriate transit mode, a maximum ratio of benefits to costs can be achieved. For example, higher density corridors are more appropriate for high-capacity modes (HRT, LRT, BRT), while lower density corridors may be more appropriate for moderate capacity enhancements (ART) or local bus services.

Land use compatibility in the TMP is measured by using a mapping tool called SketchTransit. This GIS-based tool provides a land use compatibility score based on how transit supportive the underlying land uses are along a project corridor for a particular transit mode. The SketchTransit tool has been calibrated with appropriate land use density thresholds for each mode. The tool provides a score for each transit project, which indicates if land uses along a corridor are “very supportive,” “supportive,” or “less supportive” of the transit mode proposed in each project.

ECONOMIC DEVELOPMENT POTENTIAL

Each project was evaluated for its economic development potential, which assesses how well each project serves designated economic development zones. These zones are a collection of locations throughout the county where DeKalb County or its municipalities are focusing growth and redevelopment including empowerment zones, enterprise zones, emerging employment centers, Community Improvement Districts (CIDs), Livable Centers Initiatives (LCIs), and ARC-designated Activity Centers. These areas are displayed in **Map 4-2** and are consistent with the recently completed *Decide DeKalb 2023 Strategic Economic Development Plan Update*.

The evaluation measure used was an average economic development score. This score was developed by calculating the acreages of economic development zones served by each project. This was calculated through spatial analysis techniques in ArcGIS. Acreages were totaled for areas a half-mile around high-capacity transit stations and a quarter of a mile around moderate-capacity transit lines for each potential project.

Acreages were totaled for five different economic development zone categories: Emerging employment centers, ARC-designated activity centers, LCI areas, Empowerment Zones, and CIDs. Each project was scored on a scale of 0-2 contingent on the relative acreage of zones served. These scores were averaged to develop the evaluation measure used for economic development.

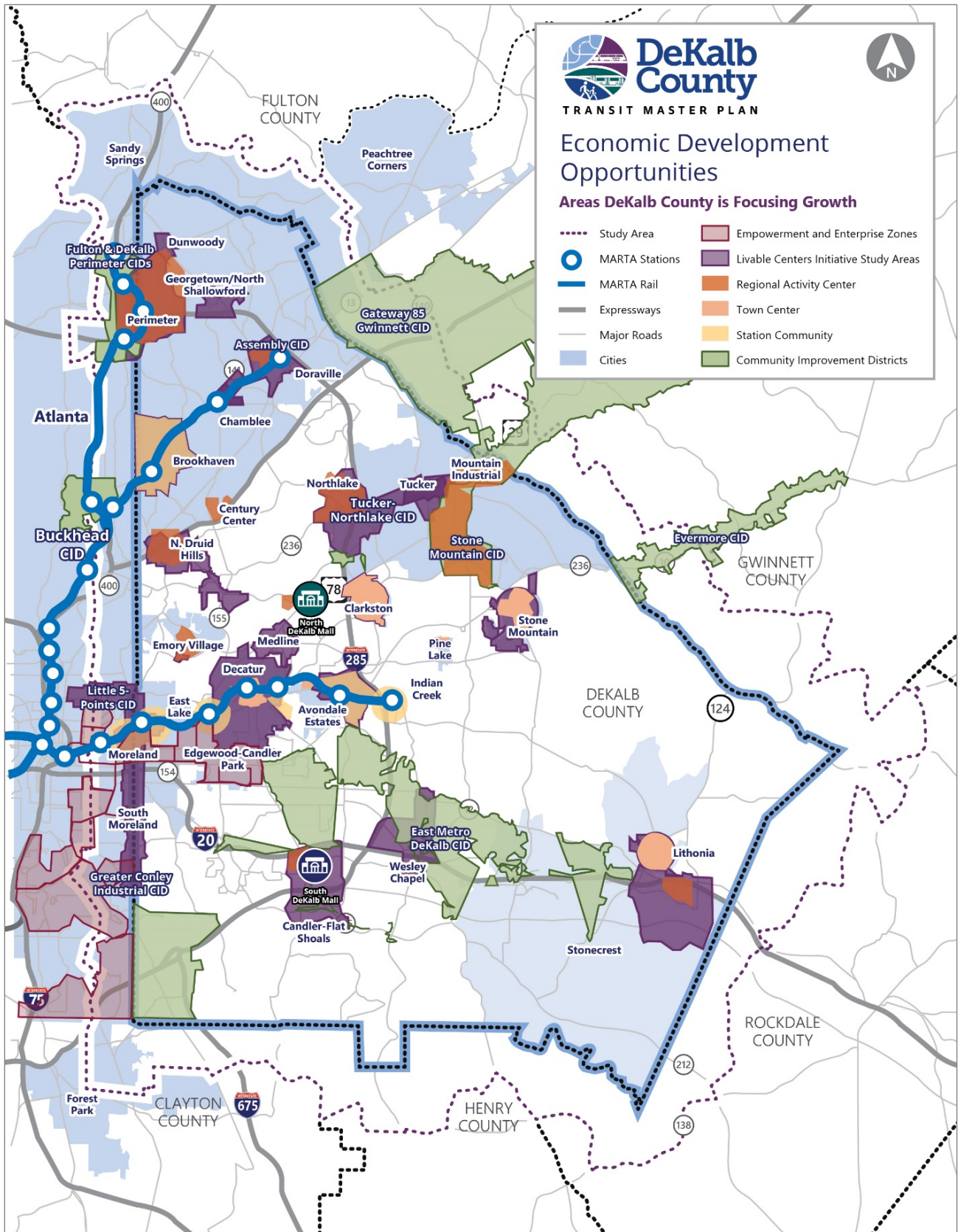
EQUITY

A major goal of the plan is to provide transit solutions that equitably serve the transit needs of all DeKalb County residents, particularly those in disadvantaged groups and in areas of the County that are currently underserved by transit. Equity was assessed by how well projects serve designated Equitable Target Areas (ETAs). The ARC defines ETAs as areas with high concentrations of low-income and minority populations. Mileage was calculated by measuring the length of the corridor bisecting an ETA or skirting its perimeter. Mileage for projects bisecting an ETA was doubled as those projects provided greater penetration into the ETAs. Mileage for projects skirting an ETA were measured. DeKalb County’s ETAs are shown on **Map 4-3**.

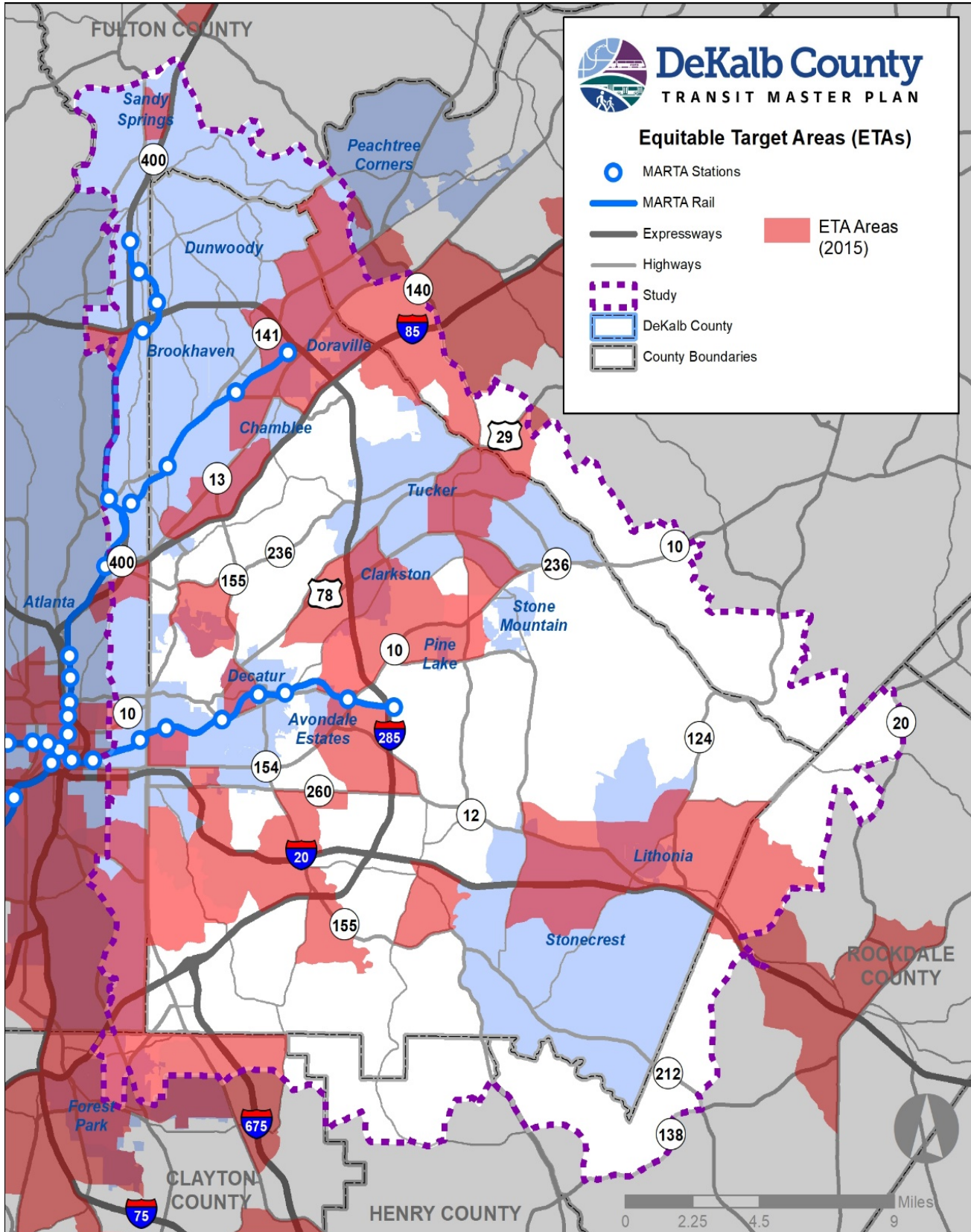
PERFORMANCE (RIDERSHIP)

Project performance was measured through ridership projections. These estimates were developed through a spreadsheet model that was calibrated for each transit mode. The model required a variety of project specific inputs: existing and projected population and employment within the project service area, project corridor miles, average travel speed, number of stations and anticipated headways.

Map 4-2: Economic Development Target Areas



Map 4-3: Equitable Target Areas



performance than total project ridership as it serves to highlight the projects with the highest levels of ridership density.

PROJECT SCORING










































This section provides detail on the methodology used to calculate an overall project score, which was based on the four individual evaluation measures. First, the modes were segregated so that moderate-capacity projects (i.e., ART) were compared only to other moderate-capacity projects. ART projects were evaluated separately because they vary from the other modes in important ways. By their very nature, they are designed to serve corridors that are less dense and, as a result, ridership projections are lower for these projects than BRT, LRT or HRT. If ART projects were compared directly with the high-capacity modes, it was highly probable that they would receive the lowest project scores.

The high-capacity modes (HRT, BRT and LRT) are all well suited to serve dense urban corridors or heavy commuter corridors as they have the capacity to carry large numbers of riders. These projects were evaluated together because they can provide a similar level of transit service within a given travel corridor. Because the universe of projects contains a number of corridors with multiple modes indicated, a direct comparison of all high-capacity transit projects will help identify the most appropriate mode for each corridor.

After dividing the projects by capacity type, the results for each evaluation measure were categorized. In most cases, the results from an evaluation measure are divided into three categories: high, medium, and low. The economic development measure is an exception with only two categories: high and low. Categories are indicated by shading levels. Darker colors represent higher scores.

The project scoring results are detailed in the following four tables and are organized by transit mode. These projects have been mapped in corresponding **Maps 4-4** through **4-7**.

Table 4-1: Arterial Rapid Transit (ART) Evaluation Matrix

Project Name	Transit Supportive Land Use	Economic Development Potential	Equity	Performance
Evaluation Measure	SketchTransit Land Use Compatibility Score	Economic Development Score Average	Project Miles that Serve ETAs	Projected Riders per Project Mile (rpm)
Score Ranges	 Very Supportive  Supportive  Less Supportive	 2.0-2.2  1.0-1.9	 11.1-13.5 Mi.  5.3-10.6 Mi.  0-4.4 Mi.	 260-740 rpm  140-180 rpm  60-120 rpm
Columbia Dr ART				
Memorial Dr ART (Seg. 1)				
Memorial Dr ART (Seg. 2)				
Memorial Dr ART (Seg. 3)				
Candler Road ART				
Clairmont Road ART				
Johnson Ferry Road ART				
North Druid Hills ART				
Ponce de Leon Avenue ART				
Panola Road ART				
Lawrenceville Hwy ART				
LaVista Road ART				
Hairston Road ART				
Covington Hwy ART				
Clifton Corridor ART				

Map 4-4: Arterial Rapid Transit Projects

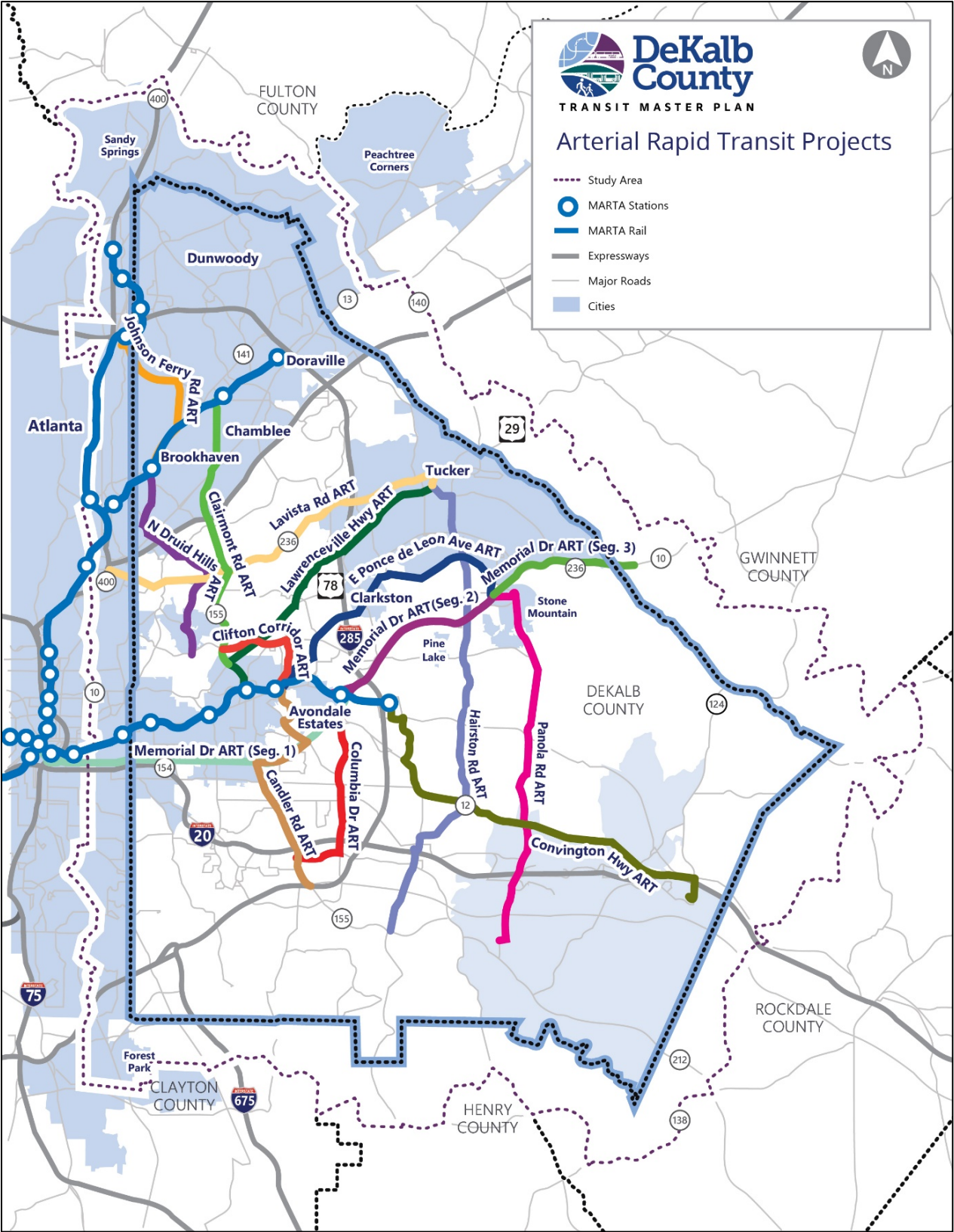

































































Table 4-2: Bus Rapid Transit (BRT) Evaluation Matrix

Project Name	Transit Supportive Land Use	Economic Development Potential	Equity	Performance
Evaluation Measure	SketchTransit Land Use Compatibility Score	Economic Development Score Average	Project Miles that Serve ETAs	Projected Riders per Project Mile (rpm)
Score Ranges	 Very Supportive  Supportive  Less Supportive	 2.0-2.8  1.0-1.9	 22.0-42.6 Mi.  10.1-18.2 Mi.  0.8-9.4 Mi.	 1,340-6,050 rpm  800-1,170 rpm  450-650 rpm
I-20 East BRT (Segment 1)				
I-20 East BRT (Segment 2)				
I-285 Top End BRT				
I-285 East Wall BRT				
I-285 BRT to Airport				
Memorial Dr BRT (Seg.1)				
Memorial Dr BRT (Seg. 2)				
Memorial Dr BRT (Seg. 3)				
Buford Highway BRT				
Clifton Corridor BRT (Segment 1)				
Clifton Corridor BRT (Segment 2)				
Candler Road BRT				
Covington Highway BRT				

Map 4-5: Bus Rapid Transit Projects

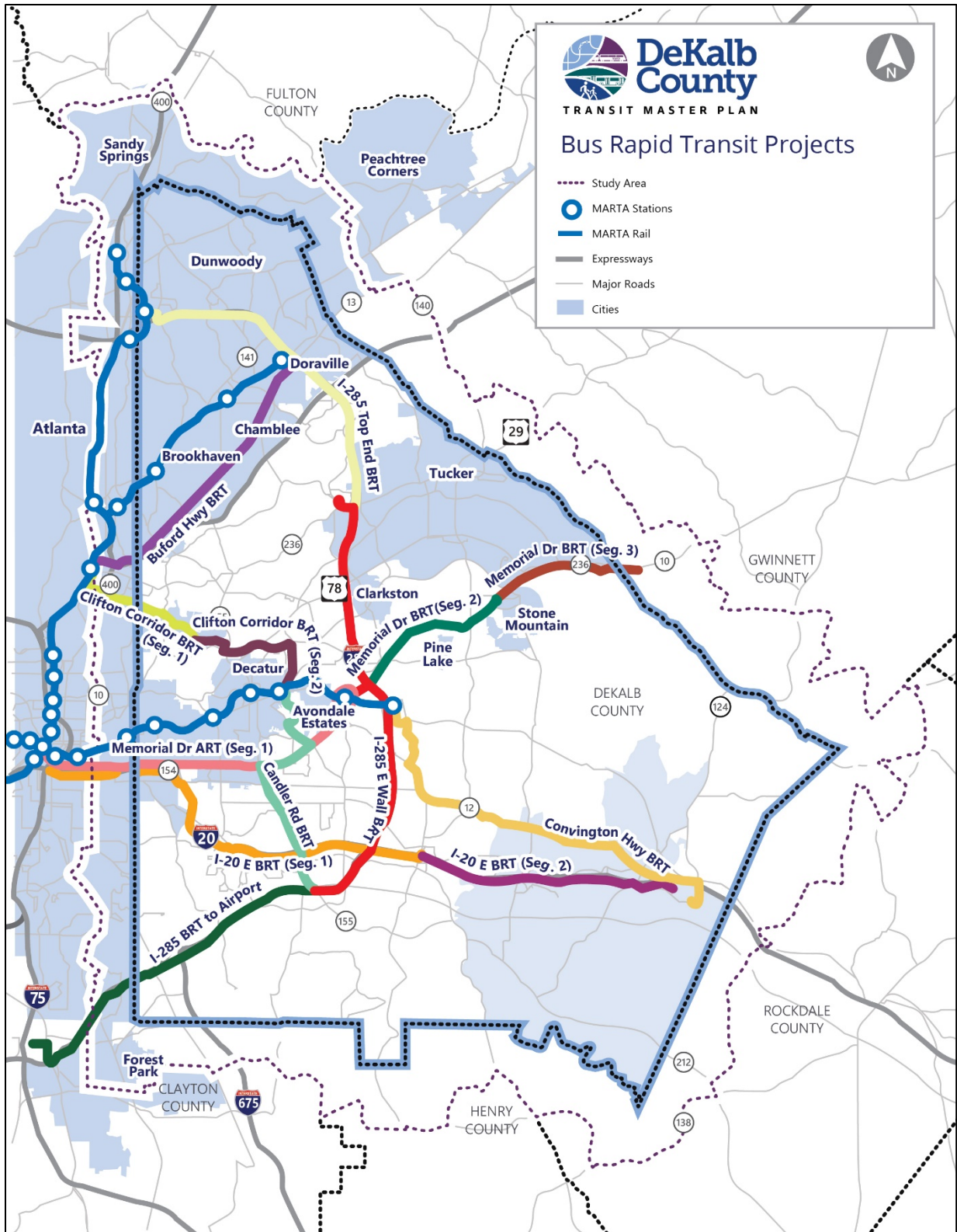

















































Table 4-3: Light Rail Transit (LRT) Evaluation Matrix

Project Name	Transit Supportive Land Use	Economic Development Potential	Equity	Performance
Evaluation Measure	SketchTransit Land Use Compatibility Score	Economic Development Score Average	Alignment Miles that Serve ETAs	Projected Riders per Project Mile (rpm)
Score Ranges	 Very Supportive  Supportive  Less Supportive	 2.0-2.8  1.0-1.9	 22.0-42.6 Mi.  10.1-18.2 Mi.  0.8-9.4 Mi.	 1,340-6,050 rpm  800-1,170 rpm  450-650 rpm
Clifton Corridor LRT (Segment 1b)				
Clifton Corridor LRT (Segment 2)				
Candler Road LRT				
I-20 East LRT (Segment 2)				
Downtown to Stonecrest LRT				
I-20 East LRT (Segment 1)				
Memorial Drive LRT				
Covington Hwy LRT				
LRT to Wesley Chapel Road				

Map 4-6: Light Rail Projects

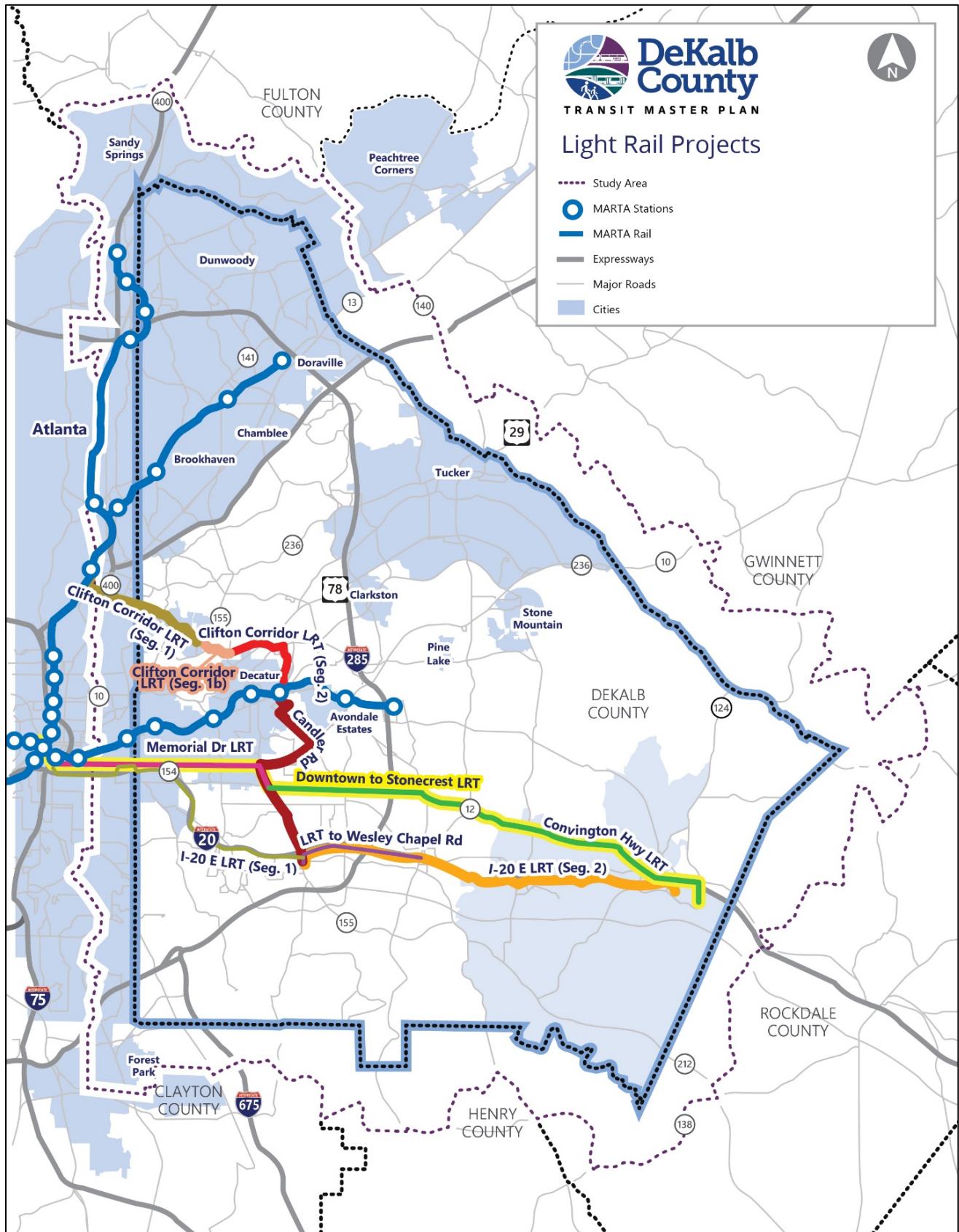























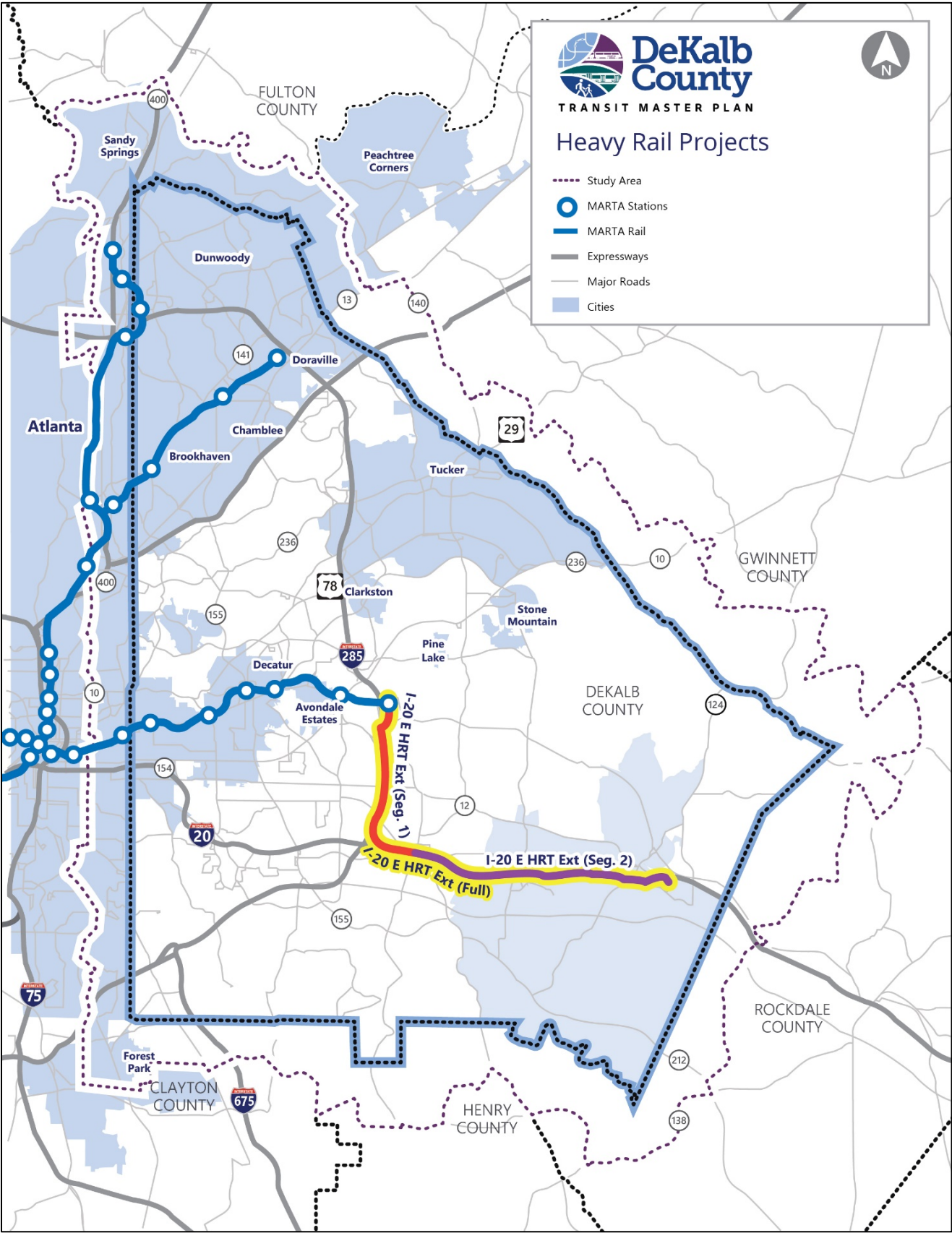


Table 4-4: Heavy Rail Transit (HRT) Evaluation Matrix

Project Name	Transit Supportive Land Use	Economic Development Potential	Equity	Performance
Evaluation Measure	SketchTransit Land Use Compatibility Score	Economic Development Score Average	Alignment Miles that Serve ETAs	Projected Riders per Project Mile (rpm)
Score Ranges	 Very Supportive  Supportive  Less Supportive	 2.0-2.8  1.0-1.9	 22.0-42.6 Mi.  10.1-18.2 Mi.  0.8-9.4 Mi.	 1,340-6,050 rpm  800-1,170 rpm  450-650 rpm
I-20 East HRT Extension (Full)				
I-20 East HRT Extension (Segment 1)				
I-20 East HRT Extension (Segment 2)				

Map 4-7: Heavy Rail Projects



5 Scenario Development

This section documents the technical process employed to develop the transit system scenarios for the DeKalb TMP. The process involved comprehensive financial forecasting and modeling along with interpretation of the results from the project evaluations discussed in Chapter 4.

Financial Forecasting

Federal, state, and local funding sources typically comprise the majority of funding for transit projects. The financial forecasting task analyzed the potential for DeKalb County to secure federal, state, and local funding. While discussion is provided for all three funding sources, the primary focus of the revenue analysis was to quantify the revenue potential of enacting an additional countywide sales tax for transit. The results of this analysis ultimately informed the scenario definition process.

FEDERAL

Securing federal funding for transit capital projects is a competitive process. At present, the federal government maximum funding level for capital is 50 percent, but projects are often funded with a smaller percentage of funding from the federal government. For the purpose of the DeKalb TMP, it was assumed an average federal contribution of 35 percent to capital costs and 0 percent to operations and maintenance (O&M) costs across the entire program of projects included in the four scenarios. This percentage was based on discussions with the PMT, MARTA and the ATL. It is possible that any given project could receive as much as 50 percent or as little as zero percent federal contribution to capital costs depending on the competitiveness of the project based on FTA rating criteria.

STATE

Historically, the State of Georgia has provided minimal funding for MARTA transit service. To be conservative, it is assumed that no future state contribution will be forthcoming for either capital or O&M costs of the program of projects. It is worth noting that the creation of the ATL may signal stronger state interest and support for transit funding in future years, but the level of that support is still largely unknown.

LOCAL

Historically, the main sources of local funding for the MARTA system were county-level sales taxes which were levied under the MARTA Act. Recently, another funding mechanism became available to fund transit: a sales tax under HB 930. These two funding mechanisms are explained further in the following sub-sections.

MARTA Act

Enacted in 1965, the MARTA Act enabled local counties to enact, via referendum, up to a one percent sales tax for transit funding. Currently, DeKalb County contributes the revenue from a one percent sales tax to the existing MARTA system (along with sales tax revenue from the City of Atlanta, Fulton County, and Clayton County), which supports debt service, O&M, and capital maintenance/rehabilitation/repair of the existing system.

Under the MARTA Act, MARTA collects the sales tax revenue and is responsible for issuing any debt backed by the sales tax. The current sales tax is authorized to continue through 2047 at the one percent level. In 2048, the sales tax is set to decrease to a half-penny level and then to cease entirely by 2058. While DeKalb County can vote via referendum to continue this funding stream, it cannot increase it. MARTA has indicated that the existing sales tax revenue from DeKalb County is needed for O&M, repair and rehabilitation of the current capital facilities, and debt service. There are no funds from the current sales tax to support major capital expansion improvements. **Table 5-1** provides a summary of the key MARTA Act sales tax characteristics.

Table 5-1: MARTA Act Sales Tax Characteristics

General Characteristics	
Enacted	1965
Rate	Up to 1 percent
Duration	Up to 30 years
Action Required	Referendum
Jurisdictions	DeKalb County, Fulton County, Clayton County, and City of Atlanta
DeKalb-Specific Characteristics	
Current Funding Level	1% through 2047, 0.5% 2048-2057
Use of Current Revenue	Committed to pay for O&M, capital rehab & repair, and debt service for the existing system
Sunset Date	2058

Amendment 15 to the Rapid Transit Contract and Assistance Agreement enables MARTA jurisdictions to approve a continuation of the MARTA tax for an additional 10 years, pushing the half-penny sales tax to begin in 2058 through 2067. For the purposes of scenario development, it is assumed that DeKalb County approves extend collections at the one percent level for the next 30 years.

House Bill 930

The Georgia State legislature passed HB 930 in 2018, which, in addition to creating the ATL, enables counties to levy an additional sales tax of up to one penny for transit service through a referendum. Under HB 930, either MARTA or DeKalb County can collect the tax and issue debt against it. **Table 5-2** provides the general characteristics related to HB 930.

Table 5-2: HB 930 Sales Tax Characteristics

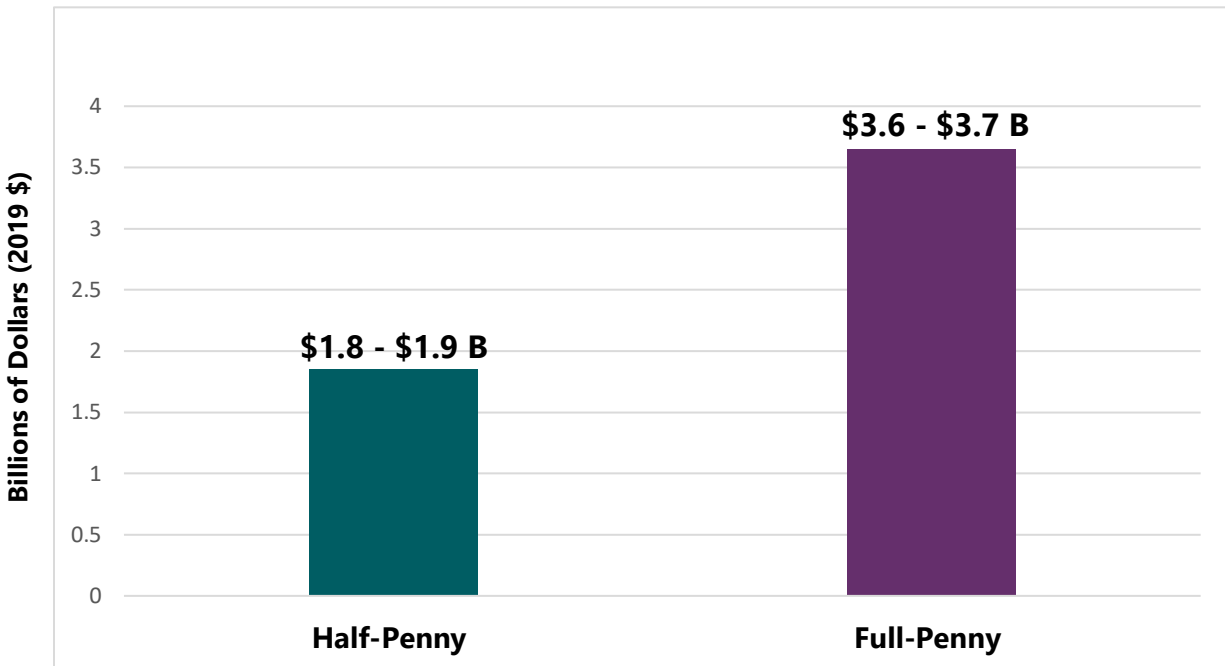
General Characteristics	
Enacted	2018
Rate	Up to 1 percent
Duration	Up to 30 years
Action Required	Referendum

Jurisdictions	DeKalb County, Fulton County, Clayton County, and City of Atlanta
---------------	---

Two of the scenarios developed for the TMP include assumptions about revenue generated under HB 930. The Half-Penny and Full-Penny Scenarios assume that DeKalb County passes a referendum to increase funding for transit beyond the current one percent collected under the MARTA Act.

Figure 5-1 provides a summary of the projected revenue from a half-penny sales tax and a full-penny sales tax for DeKalb County collected over a 30-year period. Revenues are displayed in 2019 dollars. The amounts presented in this graph reflect total projected sales tax revenue from FY 2021 – FY 2050, based on growth projections provided by Georgia State University (GSU) and modified by MARTA. See **Appendix B** for further detail on the methodology used to generate these projections.

Figure 5-1: Projected Sales Tax Revenue for the Half-Penny and Full-Penny under HB 930 (2019 \$)



The half-penny scenario and the full-penny scenario represent the lower cost program and the highest cost program, respectively. Considering DeKalb County is limited to levying no more than a full-penny sales tax, the previously adopted scenario is not achievable based on the revenue potential of the full-penny levy via HB 930.

OTHER FUNDING AND FINANCING OPTIONS

There are funding mechanisms beyond sales taxes that could possibly be used to fund transit in DeKalb County. The TMP focuses on increased funding from sales tax revenues for several reasons: (1) there is new state enabling legislation, (2) precedent has been set for DeKalb County

to use sales taxes to fund transit, and (3) the revenue projections for sales taxes are more definitive than some of the other options.

Other options that DeKalb County might consider include the following funding and financing mechanisms:

- **Value capture** refers to an approach that can be used to help pay for infrastructure project's capital or maintenance costs by recovering some of the financial benefits that an infrastructure project creates for the private sector and channeling them into a public fund. The most common revenue tools available for value capture tend to fall into three general categories: tax-increment financing (TIF), special tax assessments, and development-impact based fees.
- **Public-private partnership (P3)** is a contractual arrangement between a public agency and a private entity where the private entity provides funding or financing support for a service, asset, or facility for use by the general public, and the financial risk is shared between the two entities.
- **USDOT's Transportation Infrastructure Finance and Innovation Act (TIFIA)** program provides federal credit assistance in the form of direct loans, loan guarantees, and standby lines of credit to finance surface transportation projects of national and regional significance.

Appendix B provides additional detail regarding these funding and financing mechanisms.

Scenarios for Consideration

Four different transit scenarios were created based on four potential funding futures:

- **Existing MARTA Penny Scenario** (current state)
- **Half-Penny Scenario**
- **Full-Penny Scenario**
- **Previously Adopted Scenario**

Once the projected funding for each of these scenarios was calculated, four potential transit systems were assembled. These systems were based off a maximization of the best performing projects from the universe of projects that could be accommodated at each of the scenario funding levels. Project selection was refined by looking at those which best further the DeKalb TMP goals, facilitate regional system connectivity, address logical termini determinations, avoid cannibalization of existing transit lines and incorporate input received from stakeholders and the public.

It is important to note that costs are provided in base year dollars. Further analysis is required to determine the optimal delivery sequence for the scenarios. Once sequencing is finalized and the order in which projects are constructed is determined, project costs can then be escalated to year of expenditure (YOE) dollars to demonstrate the true costs to be incurred each year for both capital and O&M. Due to general inflation, escalation of the cost of construction materials, and other unforeseen growth related to cost factors, project costs will be higher the later the construction start date.

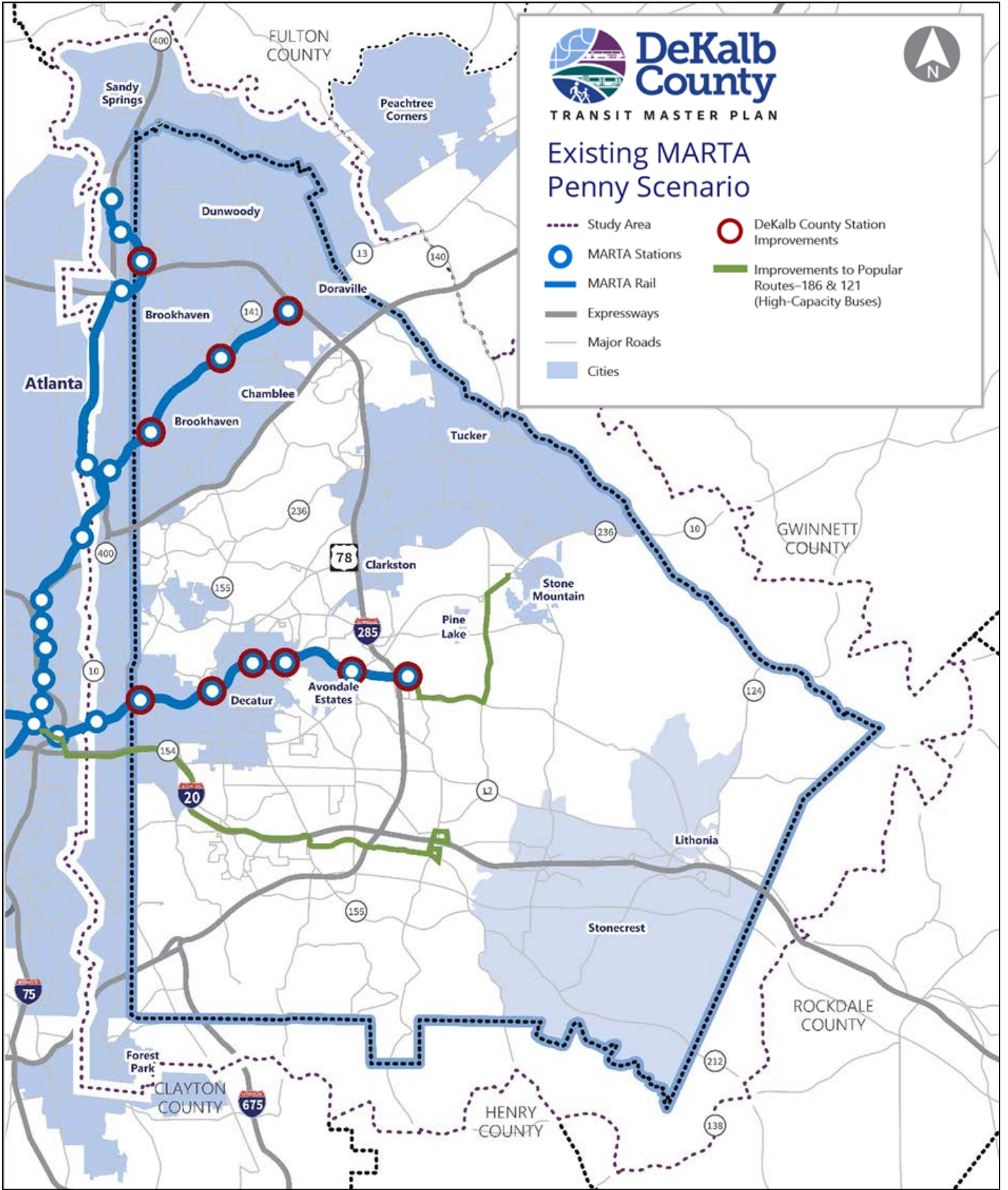
The following pages contain details on each of the four scenarios, their projects, and their estimated total capital and O&M costs.

EXISTING MARTA PENNY SCENARIO

The Existing MARTA Tax Scenario is illustrated in **Map 5-1**. This scenario focuses on maintenance, sustaining capital and operations of the existing system with no additional transit expansion projects.

The scenario is focused on maintaining a State of Good Repair within the existing system and does not contain available funding for additional moderate or high-capacity transit projects. This scenario will include rehabilitation to MARTA stations throughout DeKalb County. It also includes track and system rehabilitation, traction power/aux power rehabilitation, and railcar replacement. Improvements to the bus system would include high-capacity buses on I-20 East/Rainbow Drive (Route 186) and Memorial Drive (Route 121), bus replacements, upgraded bus shelters, benches, and potential funding for mobility centers.

Map 5-1: Existing MARTA Penny Scenario



HALF-PENNY SCENARIO

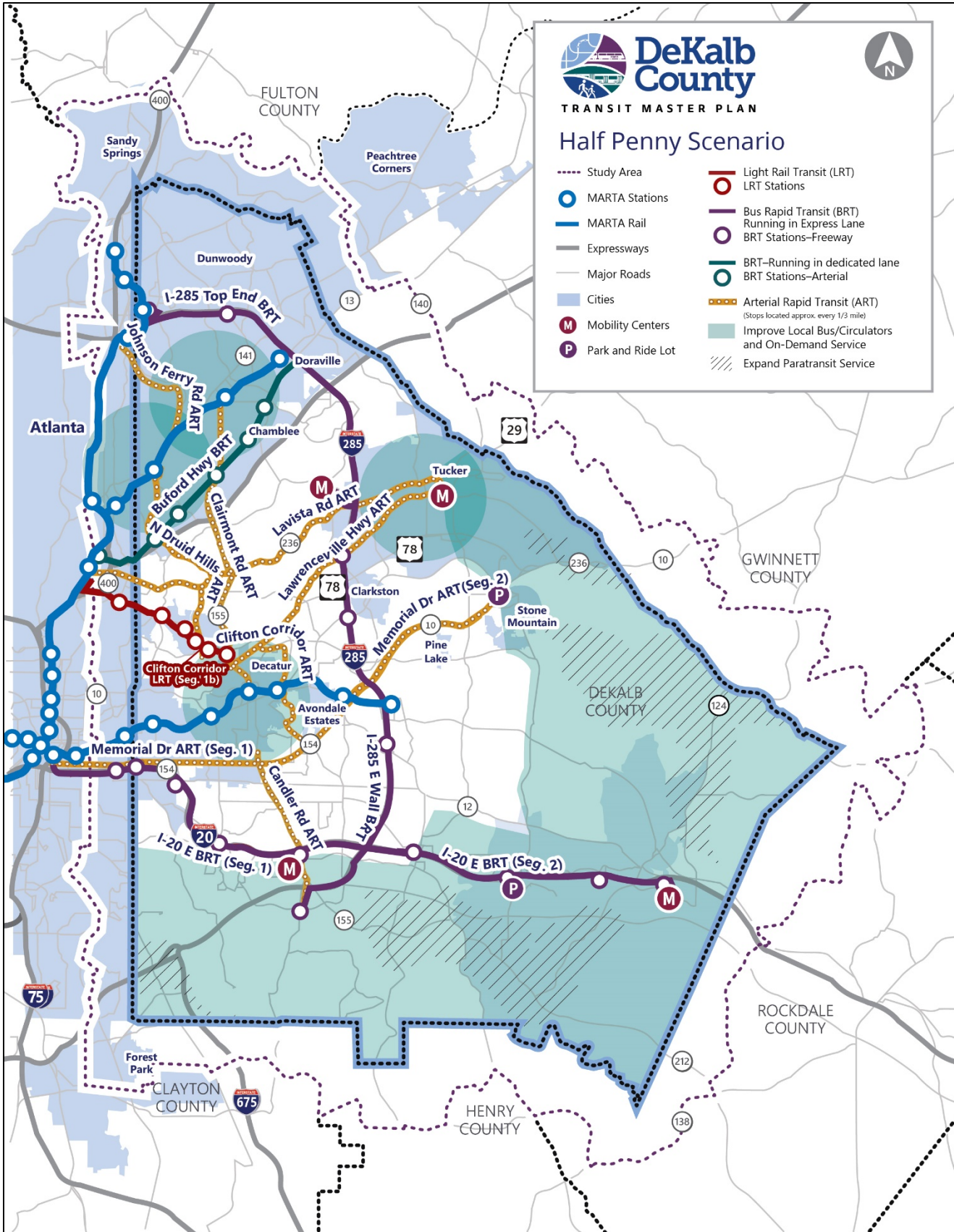
The Half-Penny Scenario is displayed in **Map 5-2**. This scenario features 15 projects: one LRT project, five BRT projects, and nine ART projects. This represents 139 total project miles. These projects are detailed in **Table 5-3**. The Half-Penny Scenario is funded through a half-penny sales tax increase. This scenario takes advantage of GDOT's investments in managed lanes along I-285 and I-20. This scenario focuses on building an interconnected network of BRT and ART projects.

In addition to the program of projects listed in **Table 5-3** this scenario includes a \$120 million set aside for discretionary transit funding. This funding category is intended to be used at the discretion of DeKalb County for a variety of transit improvements. These improvements may include expansions to local bus service, paratransit service and on-demand services. Enhancements to last-mile/first-mile connectivity through additional sidewalk and bicycle facilities may also be funded through this set aside.

Table 5-3: Half-Penny Scenario Project List

Project	Extents	Total Capital Costs (2018 \$)	Annual O&M Costs (2018 \$)
Memorial Drive ART (Seg.1)	Five Points to Kensington Station	\$28,000,000	\$2,550,000
Memorial Drive ART (Seg. 2)	Kensington Station to Goldsmith P&R	\$15,500,000	\$1,450,000
Candler Road ART	Avondale Station to South DeKalb Mall	\$18,200,000	\$1,600,000
Clairmont Road ART	Decatur Station to Chamblee Station	\$24,500,000	\$2,200,000
North Druid Hills ART	Emory-CDC to Brookhaven Station	\$18,000,000	\$1,650,000
Lawrenceville Hwy ART	Decatur Station to downtown Tucker	\$23,000,000	\$2,000,000
LaVista Road ART	Lindbergh Station to downtown Tucker	\$30,500,000	\$2,700,000
Clifton Corridor ART	Avondale Station to Clairmont Road	\$13,300,000	\$780,000
Johnson Ferry Road ART	Brookhaven Station to Medical Center Station	\$14,500,000	\$1,300,000
I-20 East BRT (Segment 1)	Downtown Atlanta to Wesley Chapel Road	\$84,400,000	\$4,400,000
I-20 East BRT (Segment 2)	Wesley Chapel Road to Stonecrest Mall	\$205,000,000	\$2,700,000
I-285 Top End BRT	Dunwoody Station to Northlake Mall	\$130,000,000	\$3,100,000
I-285 East Wall BRT	Northlake Mall to GSU-Perimeter College	\$180,000,000	\$4,200,000
Buford Highway BRT	Doraville Station to Lindbergh Station	\$220,000,000	\$2,450,000
Clifton Corridor LRT (Seg. 1b)	Emory-CDC to Clairmont Rd at N Decatur Rd	\$108,000,000	\$1,150,000

Map 5-2: Half-Penny Scenario



FULL-PENNY SCENARIO

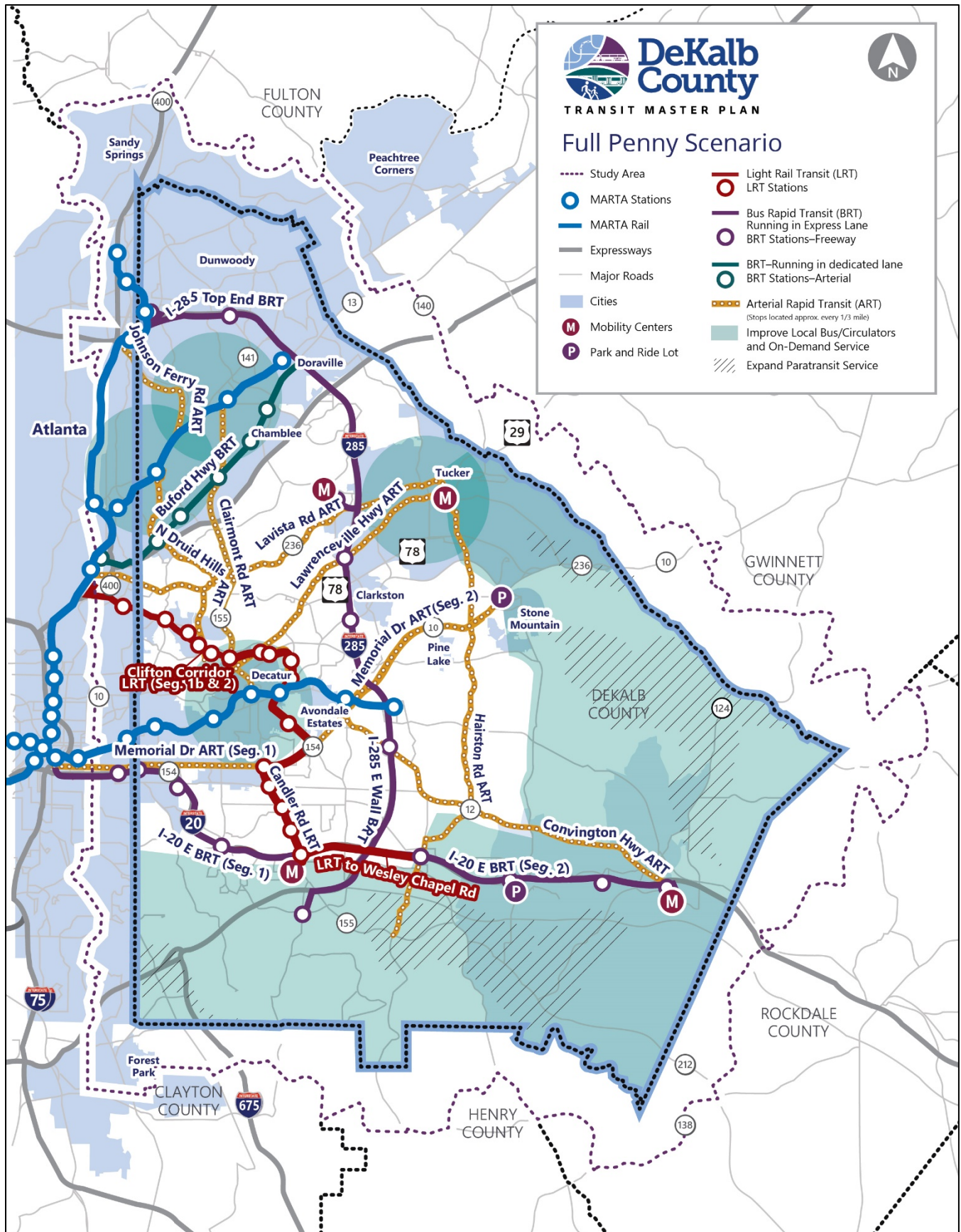
The Full-Penny Scenario is shown in **Map 5-3**. It features 16 projects in total: four LRT projects, four BRT projects, and eight ART projects. Overall this represents a total of 180 project miles. Individual projects in this scenario are detailed in **Table 5-4**.

The Full-Penny Scenario is affordable under an additional one-penny sales tax increase. This scenario seeks to leverage GDOT's investments in managed lanes for BRT on I-285 in DeKalb County. The Full-Penny also places an emphasis on building a light rail network that connects north and south DeKalb County. This scenario also includes a \$220 million set aside for discretionary transit funding to be spent on projects at the discretion of DeKalb County.

Table 5-4: Full-Penny Scenario Project List

Project	Extents	Total Capital Costs (2018 \$)	Annual O&M Costs (2018 \$)
Memorial Drive ART (Seg. 1)	Five Points Station to Kensington Station	\$28,000,000	\$2,550,000
Memorial Drive ART (Seg.2)	Kensington Station to Goldsmith P&R	\$15,500,000	\$1,450,000
Johnson Ferry Road ART	Brookhaven Station to Medical Center Station	\$14,500,000	\$1,300,000
Clairmont Road ART	Decatur Station to Chamblee Station	\$24,500,000	\$2,200,000
North Druid Hills ART	Emory-CDC to Brookhaven Station	\$18,000,000	\$1,650,000
Lawrenceville Hwy ART	Decatur Station to downtown Tucker	\$23,000,000	\$2,000,000
LaVista Road ART	Lindbergh Station to downtown Tucker	\$30,500,000	\$2,700,000
Hairston Road ART	SR 155 (Flat Shoals Pkwy) to downtown Tucker	\$36,000,000	\$2,700,000
Covington Highway ART	Stonecrest Mall to Kensington Station	\$29,500,000	\$2,700,000
I-20 East BRT (Segment 1)	Downtown Atlanta to Wesley Chapel Road	\$84,400,000	\$4,400,000
I-20 East BRT (Segment 2)	Wesley Chapel Road to Stonecrest Mall	\$205,000,000	\$2,700,000
Clifton Corridor LRT (Seg. 1b)	Emory-CDC to Clairmont Rd at N Decatur Rd	\$108,000,000	\$1,150,000
Clifton Corridor LRT (Seg. 2)	Clairmont Rd at N Decatur Rd to Avondale Station	\$950,000,000	\$3,550,000
Candler Road LRT	Avondale Station to South DeKalb Mall	\$906,000,000	\$5,700,000
LRT to Wesley Chapel Road	South DeKalb Mall to Wesley Chapel Road	\$470,000,000	\$2,950,000

Map 5-3: Full-Penny Scenario



PREVIOUSLY ADOPTED SCENARIO

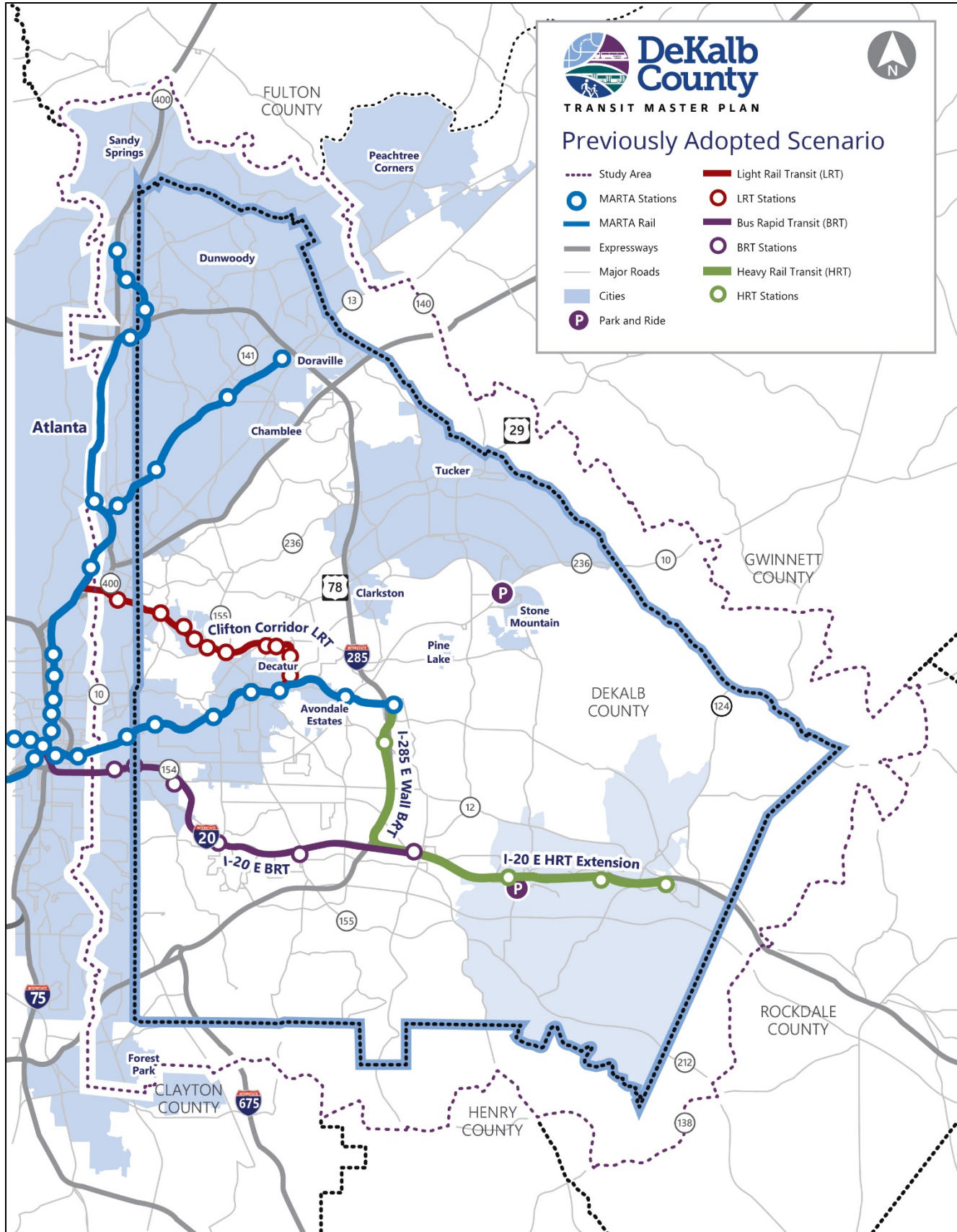
The Previously Adopted Scenario features three projects: one HRT, one LRT, and one BRT project. These projects comprise 37 total project miles. Individual projects are detailed in **Table 5-5** and these are displayed in **Map 5-4**.

This scenario incorporates projects adopted by the MARTA Board for I-20 East and the Clifton Corridor in 2012. This scenario is not affordable under an additional full-penny sales tax and would require additional funding to implement.

Table 5-5. Previously Adopted Scenario Project List

Project	Extents	Total Capital Cost (2018 \$)	Annual O&M Costs (2018 \$)
I-20 East HRT Extension	Indian Creek Station to Stonecrest Mall	\$3,300,000,000	\$35,200,000
I-20 East BRT in Exclusive ROW	Wesley Chapel Road to Five Points Station	\$2,110,000,000	\$6,400,000
Clifton Corridor LRT	Emory/CDC to Avondale Station	\$1,058,000,000	\$4,700,000

Map 5-4: Previously Adopted Scenario



6 Scenario Evaluation

Introduction

The DeKalb TMP defined four potential transit scenarios. To assist the community and elected officials in making informed choices between the scenarios an evaluation of each system was performed. This evaluation focused on two major goals; providing access and mobility to jobs and promoting economic development.

Although project evaluation was important to considering the individual merits of a project, no transit project operates in isolation. Transit projects function in a connected system and build upon the benefits provided by other proposed projects and those provided through existing transit services. Considering this, a system evaluation was necessary to measure benefits of each scenario.

Access to Jobs

An assessment of employment access provided by each scenario was conducted via Conveyal analysis. Conveyal is a software data tool that is used for evaluating the access benefits of transit projects or systems of projects. This data tool builds upon the access benefits provided through the existing transit system. Conveyal can evaluate transit access to a variety of destinations, some of which may include jobs, hospitals, colleges, community facilities, and grocery stores. The Conveyal analysis within the DeKalb TMP focused on access to jobs.

The Conveyal tool allows jobs access to be measured from specific locations within the county and/or region to be aggregated to a county-wide measure. Six locations were chosen throughout the county to determine access benefits from different parts of the county.

While providing access to jobs is a critical factor in the assessment of a transit system, mobility or the ability to access these jobs quickly is of particular importance. Reasonable travel times on

transit are required to entice riders who have a choice on which mode they choose to commute. For transit-dependent populations providing access to the greatest number of jobs in a timely and efficient manner should be a major policy consideration. This would expand employment opportunities, improve quality of life, and promote economic mobility for low income households.

The threshold of 60 minutes of travel via transit and walking was chosen as a reasonable comparison point for contrasting scenarios. Thresholds of less than 60 minutes failed to capture the full regional access benefits of some scenarios and differences between them were not as pronounced. A threshold of 45 minutes was examined, but with anticipated transfers the ability to reach regional job centers outside of the county is limited. A prime example of this is the current 35-minute MARTA rail travel time between the Indian Creek and Five Points MARTA stations. A travel threshold of 45 minutes from the Indian Creek station would provide access to only two major employment centers, Downtown and Midtown Atlanta. The difference between 45 and 60 minutes is considerable, as it relates to regional jobs access. At the 60-minute mark the entire region opens up significantly.

Six geographically-dispersed locations throughout the county were selected to evaluate jobs access from different parts of the county. These locations include the Gallery at South DeKalb, Tucker, Northlake Mall, Brookhaven, Mall at Stonecrest and Dunwoody. Locations adjacent to the MARTA heavy rail system were not included for comparison. These locations do not show pronounced differences in access to jobs benefits since they are already served by high-capacity transit.

Graphics have been developed to illustrate jobs access from these six locations within the county. These graphics show major employment centers that are reachable within 60 minutes of via transit and walking during the AM peak commuting period. They also show the total number of jobs reachable within this timeframe. Both are important metrics. Access to employment centers is particularly important to potential transit riders who have travel choices. The total number of jobs metric captures all jobs outside of these primarily white-collar employment centers. This is an important consideration as many transit-dependent riders utilize transit to access employment opportunities outside of these centers.

Figure 6-1 illustrates the jobs access benefits of the four scenarios from the Gallery at South DeKalb. This shows that the Existing MARTA Tax Scenario provides significantly fewer jobs access benefits than the other scenarios. Within 60 minutes via transit and walking only two major employment centers are reachable from the Gallery at South DeKalb. The other scenarios provide access to seven major employment centers.

Figure 6-1: Access to Jobs from the Gallery at South DeKalb (in 60 Minutes via Transit)

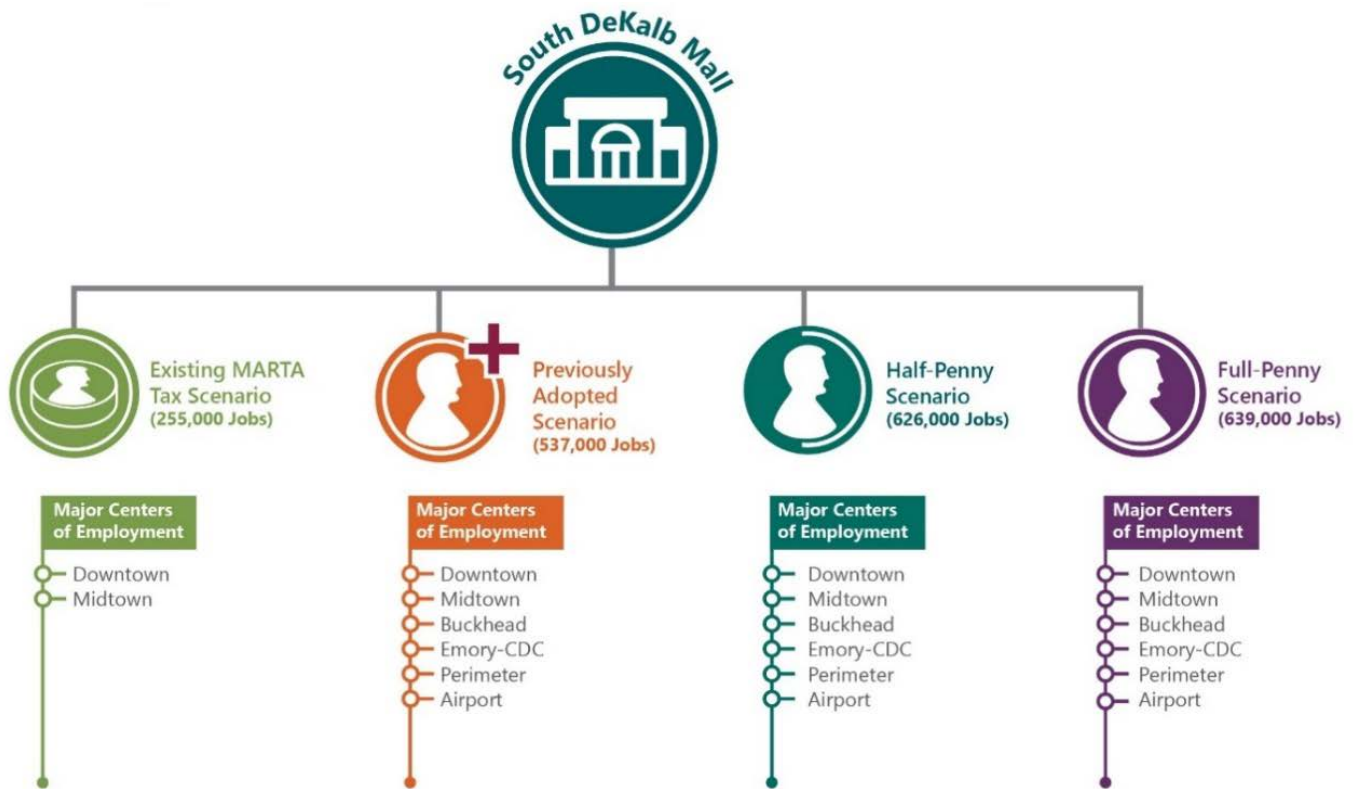


Figure 6-2 displays jobs access benefits from the Mall at Stonecrest. This shows that under the Existing MARTA Tax Scenario no major employment centers are reachable in 60 minutes. The Previously Adopted Scenario provides access to two employment centers and the Half-Penny and Full-Penny Scenario provide access to six employment centers.

Figure 6-2: Access to Jobs from the Mall at Stonecrest (in 60 Minutes via Transit)

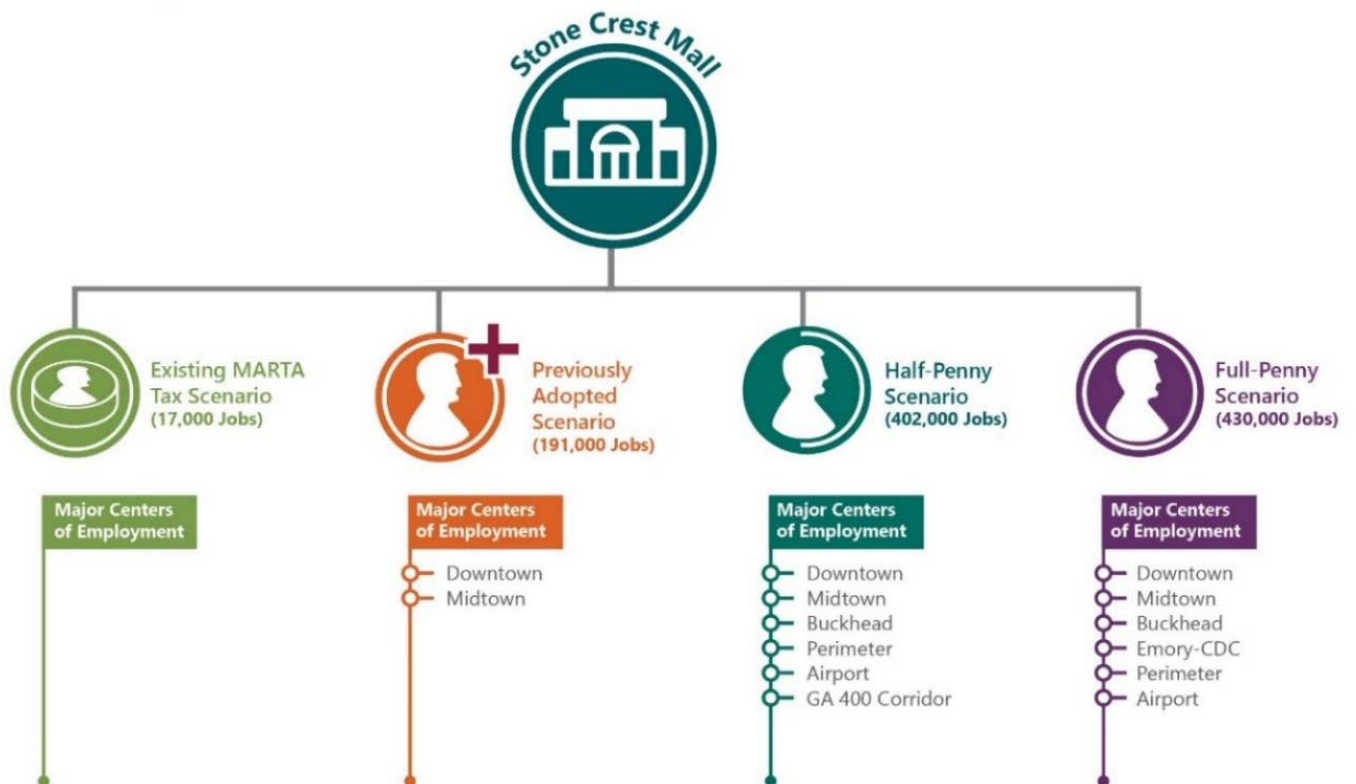


Figure 6-3 displays jobs access from Brookhaven (Clairmont Road at Buford Highway). This shows that under the Existing MARTA Tax Scenario and Previously Adopted Scenario five major employment centers are reachable in 60 minutes. The Half-Penny and Full-Penny Scenario provide access to seven major employment centers.

Figure 6-3: Access to Jobs from Brookhaven (in 60 Minutes via Transit)

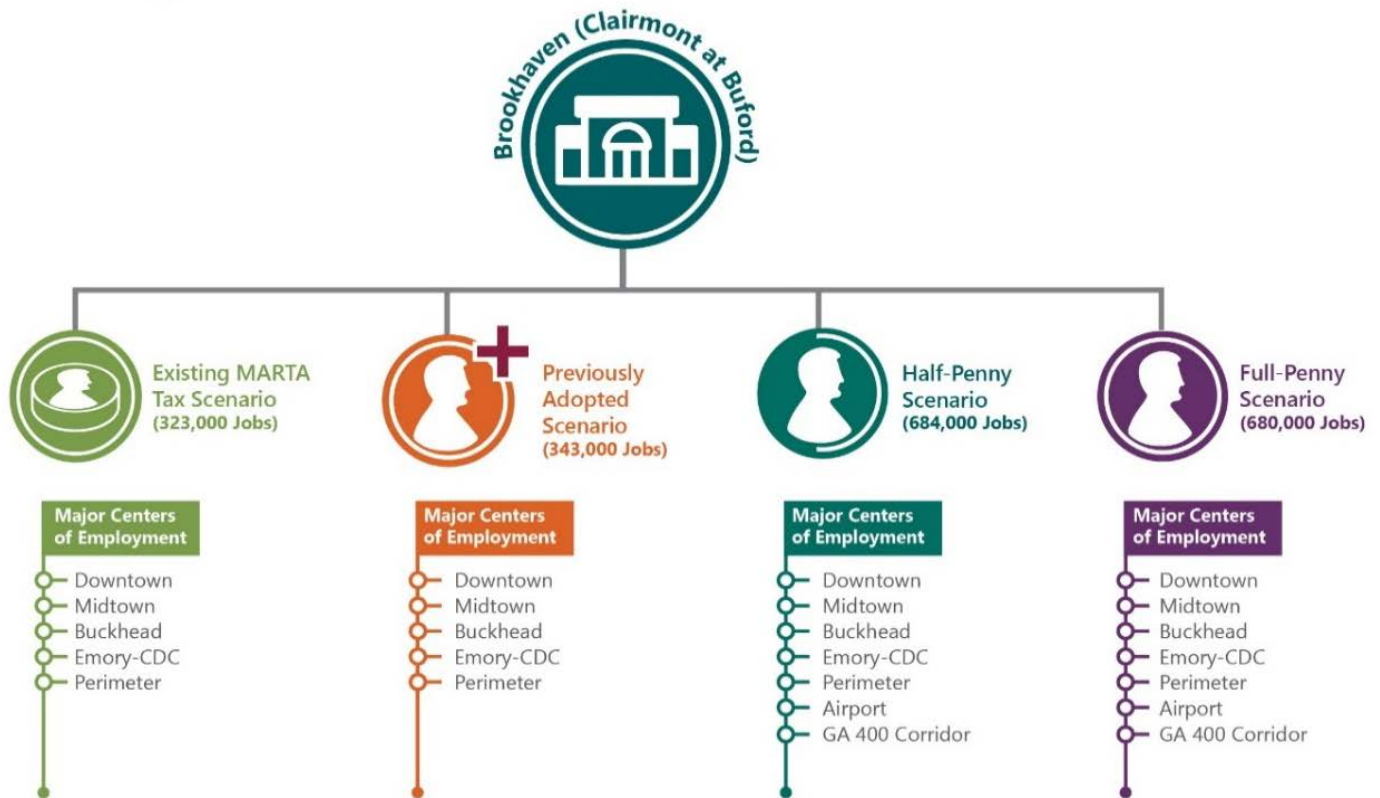


Figure 6-4 illustrates jobs access from Northlake Mall. This shows that under the Existing MARTA Tax Scenario and Previously Adopted Scenario no major employment centers are reachable in 60 minutes. The Half-Penny and Full-Penny Scenario provide access to six employment centers.

Figure 6-4: Access to Jobs from Northlake Mall (in 60 Minutes via Transit)

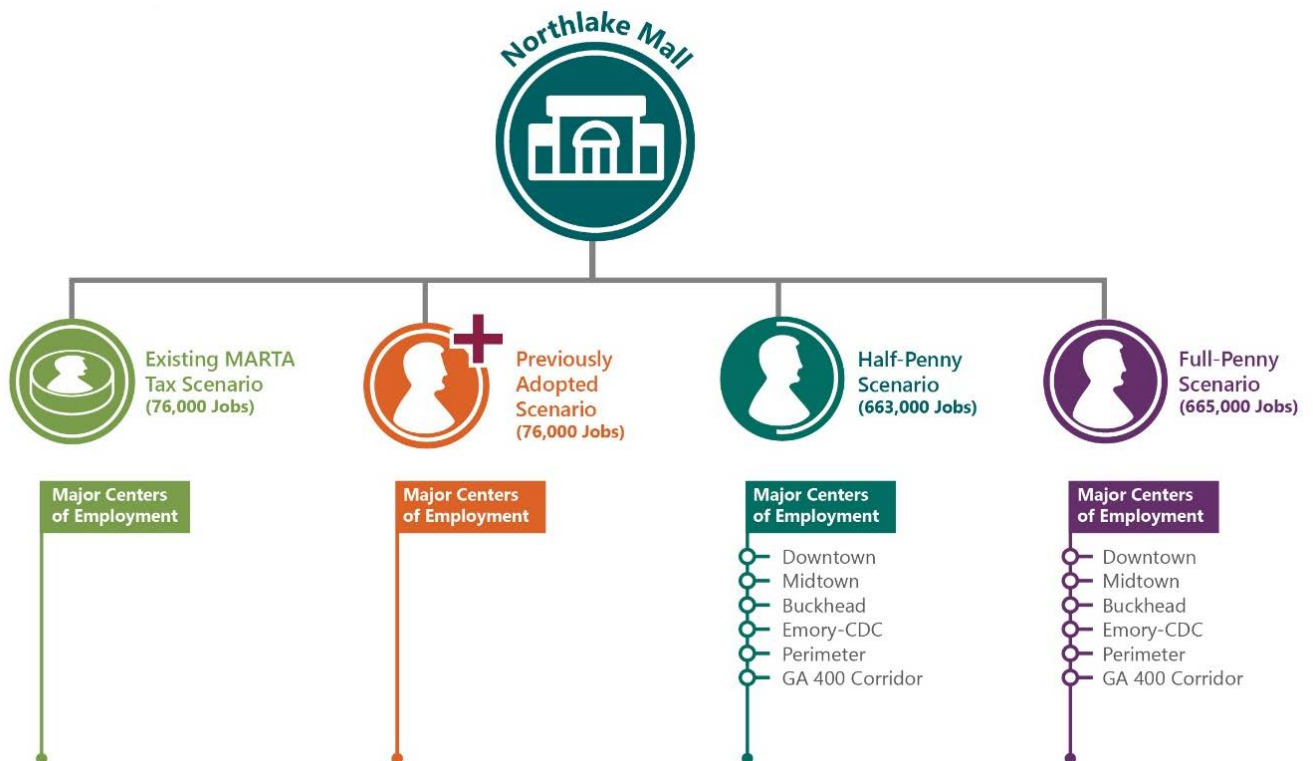


Figure 6-5 provides detail on jobs access from Downtown Tucker. This shows that under the Existing MARTA Tax Scenario and Previously Adopted Scenario no major employment centers are reachable in 60 minutes. The Half-Penny and Full-Penny Scenario provide access to five major employment centers.

Figure 6-5: Access to Jobs from Downtown Tucker (in 60 Minutes via Transit)

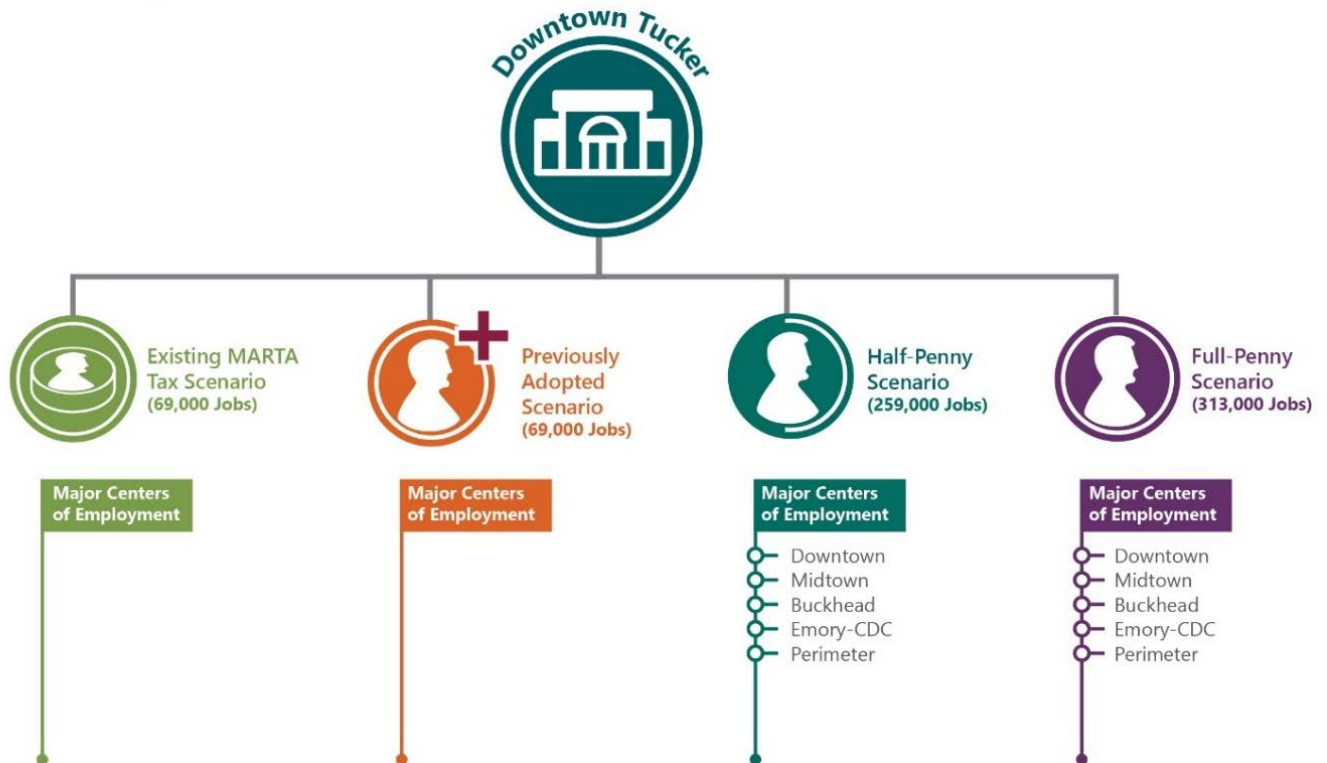
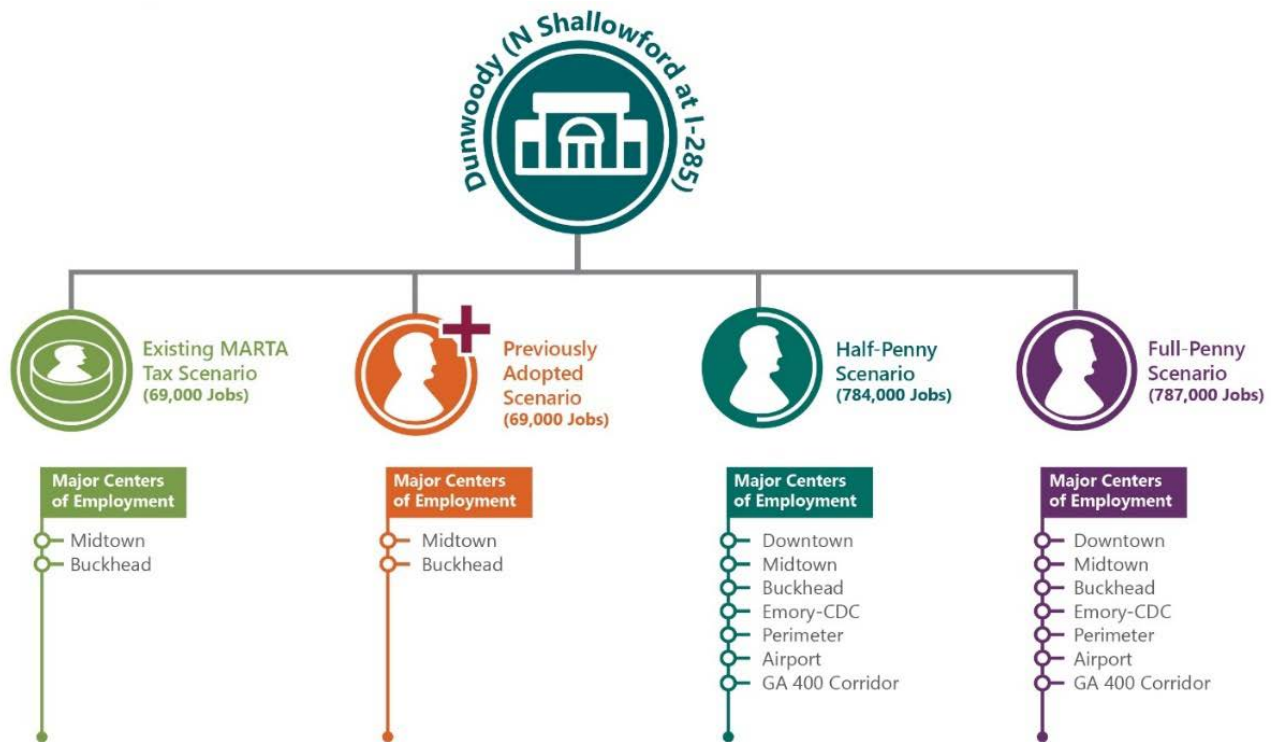


Figure 6-6 illustrates jobs access from Dunwoody. This illustrates that under the Existing MARTA Tax Scenario and Previously Adopted Scenario two major employment centers are reachable in 60 minutes. The Half-Penny and Full-Penny Scenario provide access to seven major employment centers.

Figure 6-6: Access to Jobs from Dunwoody (in 60 Minutes via Transit)



CONCLUSIONS

The Conveyal analysis demonstrates a significant difference between the four scenarios in relation to jobs access. The Existing MARTA Tax Scenario provides the least access to total jobs and major employment centers. This is followed by the Previously Adopted Scenario. While it varies by location these two scenarios provide similar access benefits overall. The Half-Penny and Full-Penny Scenarios provide major improvements to jobs access over the other two scenarios. There is a notable improvement in job access between the Half-Penny and Full-Penny Scenarios of approximately ten percent overall.

Economic Development Potential

Since promoting economic development is a primary goal of the TMP each scenario has been evaluated relative to its potential to generate economic activity. To measure economic development potential each scenario has been evaluated by how well they provide access to likely redevelopment parcels. It is assumed that major transit investments in these areas will help catalyze development by providing improved access, mobility and enhanced quality of life. While economic development potential can be notoriously difficult to predict and quantify, this analysis was undertaken to clarify the order of magnitude differences between the scenarios.

Likely redevelopment parcels are shown in **Map 6-1**. These parcels were defined as vacant commercial land that is being marketed for sale or lease through real estate listing services and/or large parcels (2+ acres) that are likely to be redeveloped due to age, high vacancy, or functional obsolescence.

Map 6-2 illustrates that likely redevelopment areas are dispersed throughout the county, with large clusters found in south and east DeKalb County. Areas with particularly high concentrations of redevelopment parcels are found along Covington Highway, Hairston Road, and Mountain Industrial Boulevard.

To quantify a project's redevelopment potential, access to likely redevelopment parcels was measured. A threshold of ¼ mile around ART lines and ½ mile around stations for BRT, LRT, and HRT was used. It was assumed that premium transit modes (HRT, LRT, BRT) would generate economic benefits across a wider geographic area than enhanced local bus or ART. Parcels within these buffer distances were totaled for each scenario and care was taken to ensure redevelopment parcels were not double counted. Acreage of redevelopment parcels was totaled in ArcGIS using spatial analysis techniques. Acres of likely redevelopment areas served by each scenario are totaled in **Table 6-1** below.

Table 6-1. Economic Development Potential by Scenario

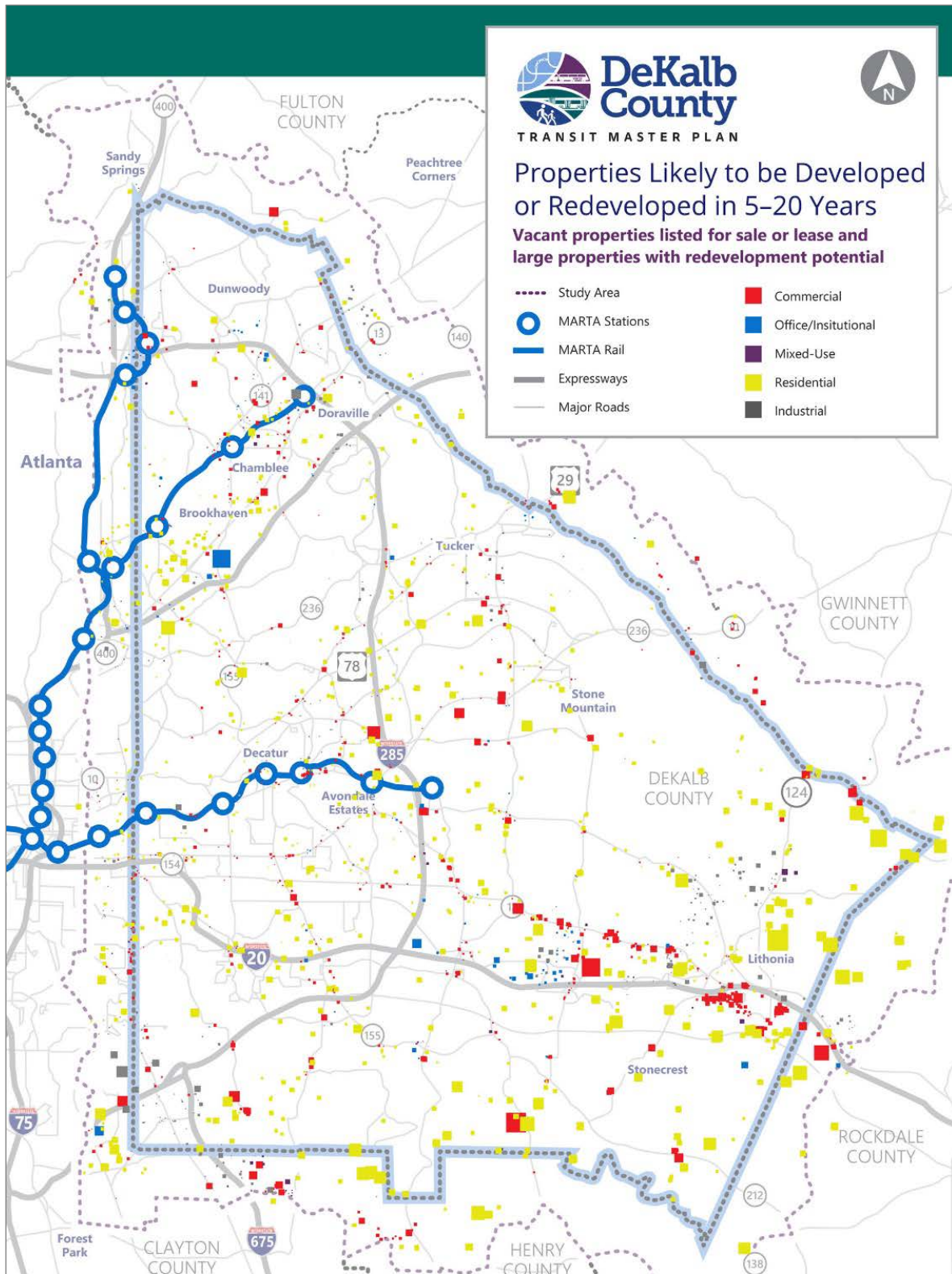
Scenario	Acres of Likely Redevelopment Areas Served
Existing MARTA Penny Scenario	394.3
Previously Adopted Scenario	808.6
Half-Penny Scenario	1,669.9
Full-Penny Scenario	2,762.1

The Existing MARTA Penny Scenario provides the least access to likely redevelopment parcels. This consists of parcels within a ½ mile of existing MARTA stations. This scenario is likely to generate the least amount of economic development benefits for the county, due to the lack of major new transit investment.

The Previously Adopted Scenario provides about twice the degree of access to likely redevelopment parcels as the existing MARTA penny scenario. This is primarily through parcels adjacent to I-20 East. While this is a noted improvement over the Existing MARTA Penny Scenario, it pales in comparison to the economic development potential of the Half-Penny and Full-Penny Scenario.

The Half-Penny and Full-Penny Scenarios provide considerably more access to likely redevelopment areas than the Previously Adopted Scenario. There is also a marked 60% difference between the Half-Penny and Full-Penny Scenarios, which is over 1,000 acres. This is largely the result of additional service provided in the Full-Penny Scenario along corridors such as Covington Highway, Hairston Road and Mountain Industrial Boulevard. The Full-Penny Scenario provides by far the greatest potential for economic development of the four considered.

Map 6-1: Properties Likely to be Developed or Redeveloped in 5-20 Years



Ridership Forecast

Forecast of ridership is one of the most important measures in characterizing the efficiency and utility of a transit system. A transit project that attracts more riders would have a dual benefit as it would yield high total ridership in addition to help reduce roadway congestion.

HRT, BRT AND LRT FORECAST

The FTA Simplified Trips on Projects Software (STOPS) was used to estimate ridership on high capacity transit projects (HRT, BRT, and LRT) that make up the transit system scenarios discussed earlier in this section. STOPS is a modeling framework developed by the FTA to efficiently evaluate ridership potential and patterns for transit projects. The model provides ridership information including total system-wide boardings, linked trips, and trips on the projects for transit planning analysis. The FTA STOPS Version 2.50 was utilized for the analysis presented in the section that follows.

STOPS can be run in two different configurations: synthetic and incremental. The synthetic approach uses the 2006-2010 ACS American Community Survey (ACS), Census Transportation Planning Products Program (CTPP) as the foundation for ridership estimates. The incremental approach relies on a local on-board travel survey as its starting point. In most instances, the incremental approach is the preferred implementation especially when a recent on-board survey exists. Implementation of STOPS for the DeKalb TMP was completed using the “incremental” approach in the model.

The STOPS model was calibrated based on transit routes and ridership data from 2015. Socio-economic data and trip tables from ARC’s regional activity-based model were used in the implementation of the STOPS model. Most recent valid Generalized Transit Feed System (GTFS) data from MARTA, CobbLinc, Gwinnett County Transit and SRTA Xpress, for years 2018-2019, were used to create the existing transit system network in the region. GTFS files were also created for each system scenario described in the previous section. **Table 6-2** illustrates the key modeling assumptions used in the scenarios for the ridership assessment.

Table 6-2: Modeling Assumptions in Scenarios

Scenario	Socio-economic Data	Transit System
Existing Regional Transit System	2015	Existing Transit System – MARTA, CobbLinc, Gwinnett Transit, SRTA
Existing MARTA Penny Scenario	2040	Existing Transit System
Half-Penny Scenario	2040	Existing Transit System & MoreMARTA Projects & Projects in Half-Penny Scenario
Full-Penny Scenario	2040	Existing Transit System & MoreMARTA Projects & Projects in Full-Penny Scenario
Previously Adopted Scenario	2040	Existing Transit System & MoreMARTA Projects & Projects in Previously Adopted Scenario

The forecast ridership developed utilizing the STOPS model for LRT, BRT and HRT is a count of each time a rider boards the proposed projects; **Table 6-3** provides a summary of this ridership forecast.

HRT was only considered in the Previously Adopted Scenario, where MARTA’s Blue Line service was extended further east from Indian Creek Station to Mall at Stonecrest. This extension is estimated to add nearly 15,800 riders on the Blue line.

In the Half-Penny Scenario, LRT serves between Lindbergh Station and Clairmont Road at North Decatur; in the Previously Adopted Scenario LRT extends further east to Avondale station; and in the Full-Penny Scenario LRT extends further south to the Gallery at South DeKalb and further east along I-20 to Wesley Chapel Road. LRT in the Half-Penny Scenario is expected to have nearly 5,500 riders per day in 2040. LRT in the Full-Penny Scenario is expected to have just under 14,200 riders per day in 2040.

BRT on I-285 from Dunwoody Station and SR 155 (Flat Shoals Parkway) performs similarly in the half-penny and full-penny scenarios with estimated ridership of about 10,000 riders per day. This includes the I-285 Top End BRT and the I-285 East Wall BRT projects combined. The Previously Adopted Scenario includes BRT on I-20 East from downtown Atlanta to Wesley Chapel Road. Ridership on this route was estimated to be nearly 7,000 in 2040. The Half-Penny and Full-Penny Scenarios extend the BRT services further east to the Mall at Stonecrest. Ridership on this combination of I-20 East BRT to Wesley Chapel Road and Stonecrest Mall was estimated to be just under 10,000 in the Full-Penny Scenario. This decrease in ridership for the BRT along I-20 East is likely due to cannibalization effect of the LRT from South DeKalb Mall to Wesley Chapel Road. BRT on Buford Highway had an estimates ridership of about 4,600 in both the Half-Penny and

Full-Penny Scenarios. While the existing local route on Buford Highway is one of the highest performing routes in the MARTA system, ridership estimates in the model are based on station spacing and travel time on the route. Thus, ridership on Buford Highway may be higher based on a more optimal operating plan and station plan.

Table 6-3: Estimated 2040 Ridership on Major Projects

Major Projects	Existing MARTA Penny	Half-Penny	Full-Penny	Previously Adopted
I-20 East BRT (Seg. 1)				6,989
I-20 East BRT (Seg.1 and Seg. 2)		9,949	8,737	
Buford Highway BRT		4,576	4,580	
I-285 Top End BRT and I-285 East Wall BRT		10,203	9,881	
Clifton Corridor LRT (Seg. 1b)		5,536		
Clifton Corridor LRT (Seg. 1b and Seg. 2)				9,949
Clifton Corridor LRT (Seg. 1b and Seg. 2), Candler Road LRT, and LRT to Wesley Chapel Road			14,160	
MARTA Blue Line	87,447	84,747	84,729	103,221

ART FORECAST

In light of the high number of ART projects included in the system scenarios, a spreadsheet-based model was used to estimate ridership on proposed ART routes instead of the STOPS model. **Table 6-4** includes variables such as daily vehicle miles, population, total employment, service employment and fare. MARTA's 2016 data was used to calculate factors for daily vehicle miles and fare, while ARC's 2015 socio-economic data was used to calculate factors for population and employment. Daily number of passengers on the MARTA system was used to calculate these factors.

Table 6-4: ART Spreadsheet Ridership Model Variables and Factors

Scenario	Ridership Factor	Weight
Daily Vehicle Miles	0.23	35%
Existing MARTA Penny Scenario	0.104304	15%
Half-Penny Scenario	0.147806	20%
Full-Penny Scenario	0.358885	25%
Previously Adopted Scenario	0.000012	5%

Table 6-5 illustrates a summary of estimated ridership on proposed ART routes in 2040. ART-6 on Memorial Drive performs the best with nearly 11,500 riders per day. ART-10 on North Druid Hill Road also performs well with nearly 7,000 riders per day in 2040. As the ridership model depends on socio-economic data in proximity of the route, proposed routes in suburban lower density areas do not perform as well as routes in higher density areas. For example, while ART-6 has the highest ridership, its extension from Kensington Station, ART-17, has significantly lower ridership.

Table 6-5: Estimated 2040 Ridership on Arterial Rapid Transit Routes

Project Name	Extent To	Extent From	Total Ridership	Scenario
Memorial Drive ART (Seg. 1)	Kensington Station	Five Points	11,540	Half-Penny, Full-Penny
Memorial Drive ART (Seg. 2)	Kensington Station	Goldsmith P&R	1,960	Half-Penny, Full-Penny
Candler Road ART	Decatur Station	South DeKalb Mall	2,330	Half-Penny
Clairmont Road ART	Decatur Station	Chamblee Station	4,780	Half-Penny, Full-Penny
North Druid Hills ART	Brookhaven Station	Emory-CDC	7,070	Half-Penny, Full-Penny
Panola Road ART	Tucker Mobility Center	SR 212 (Browns Mill Rd)	2,670	Full-Penny
Lawrenceville Hwy ART	Decatur Station	Tucker Mobility Center	4,240	Half-Penny, Full-Penny
LaVista Road ART	Tucker Mobility Center	Lindbergh Station	3,920	Half-Penny, Full-Penny
Covington Highway ART	Stonecrest Mall	Indian Creek Station	1,790	Full-Penny

Table 6-6 provides a summary of system-wide ridership for the four scenarios. The Full-Penny Scenario is expected to have the highest ridership. The Previously Adopted Scenario out performs the Half-Penny Scenario. However, the Half-Penny Scenario has higher system-wide ridership than the Previously Adopted Scenario, mainly due to the inclusion of ART routes. The Full-Penny Scenario out performs Half-Penny with about 25 percent higher ridership on the proposed projects.

Table 6-6: 2040 Ridership Estimates for Build Scenarios

Scenarios	Existing MARTA Penny	Half-Penny	Full-Penny	Previously Adopted
Build Projects – BRT, LRT	N/A	30,264	37,358	16,935
MARTA Blue Line	87,447	84,747	84,729	103,221
Total Ridership on Build Projects (BRT, LRT, HRT)	N/A	27,564	34,640	32,709
Existing / No-Build excluding MARTA Blue Line	570,553	543,451	537,782	546,481
More MARTA / GA 400	N/A	45,014	45,020	44,893
Total Ridership excluding ART	658,000	703,476	704,889	711,530
Proposed ART Routes in DeKalb County	N/A	35,840	37,970	N/A
Total Ridership	658,000	739,316	742,859	711,530
Difference from No-Build	N/A	81,316	83,639	53,530

Due to the systemwide nature and cursory-level ridership assessment completed in the DeKalb TMP, it will be necessary to refine project ridership forecasts for the scenarios based on more detailed information such as modified station locations, service frequencies, conceptual engineering and alignment variations to be undertaken in subsequent transit planning and project development studies.

7 Factors for Success

Through the development of the TMP, five key recommendations were identified. These recommendations are needed to ensure that this study does not wind up on a shelf never to be heard from again. These recommendations are designed to build momentum, build trust, continue study, identify funding, and foster continued coordination.

Building Momentum

The “We” Mentality: The first step to building momentum is to create a “we” mentality within DeKalb County. Building an effective transit system is not a fast endeavor. It can, and will, take a community decades to achieve a transit vision. It is important that residents see all steps toward the implementation of a transit network as a victory for them. An investment of this nature cannot succeed if residents only see investments within a quarter or a half mile of their home as a success. Residents have to be able to perceive investments on the opposite side of the county as an improvement for them as well.

To build a “we” mentality, it may be necessary to launch a public relations campaign with a “One DeKalb” or similar message. The campaign should highlight the fact that any removal of cars from the road network is helpful to reducing congestion. It should also highlight the nature of the transit network where an investment in the southern part of the county may not directly benefit a resident in the northern part of the county today, but when the network is complete that same investment may enable a resident to seamlessly navigate from an origin in the northern part of the county to a destination in the southern part of the county.

The “we” mentality has to run between community members who live in different parts of the county, are from different generations, are differently abled, and who have access to different financial resources. Longer tenured members of the community must be comfortable apportioning benefits to newer members of the community.

Building Trust

It is clear from public involvement activities that DeKalb County residents harbor a high level of distrust for government agencies. Whether it is residents who distrust MARTA or municipal leaders who distrust county leaders, transparency is needed to fight the perception of mismanagement, whether legitimate or not.

For example, county leadership must be transparent in the prioritization and investment processes related to transit and other matters in order to build trust with municipal partners. MARTA leadership needs to be transparent about historical spending, deficiencies of prior plans and its ability to deliver on plans. If residents do not feel that they can rely on leadership to be transparent, they will be unlikely to support additional investment in transit.

One proactive step in building trusts among residents may be to create a transit oversight committee to oversee the fair distribution of benefits among county residents. Understanding that fair is not the same as equal, transit investments may differ among areas of the county, but the goal is to be fair to all residents. An oversight committee could help work toward a system where investments were fair even if they were not equal.

Given the rapid rate of advancements in the field of transportation, a study such as this one with a 30-year horizon cannot be static. While it is imperative to continue to plan for future investments and improvements, efforts must be made to allow for the evolution of modes and propulsion systems so as to not preclude future advancements. Great care was taken in the Master Plan to provide enough detail for decisions to be made, but not so much detail as to preclude future technology. For example, while a corridor may be identified in a scenario for BRT, it does not indicate if the vehicle has a driver or is autonomous. Neither option is precluded. (Note: While no recommendation was made with regard to fuel or driver, assumptions had to be made for the cost projections. For these purposes, current technologies and fuel were assumed to be employed.)

This perspective of building momentum and trust leads to the first two recommendations of the DeKalb TMP. These recommendations underpin the need for additional public/stakeholder education and discussion around transit investments and priorities in DeKalb County.

Key Recommendations

RECOMMENDATION 1: ADVANCE FOUR TRANSIT SCENARIOS FOR FURTHER CONSIDERATION AND ADDITIONAL PUBLIC INPUT AND EDUCATION

It is the recommendation of the DeKalb TMP that the four transit scenarios be advanced forward for additional public and stakeholder input and education. These scenarios include the existing MARTA penny scenario, half-penny scenario, full-penny scenario, and previously adopted scenario. The public/stakeholder education and input process should be designed to increase the public's understanding on the travel benefits and impacts of the scenarios. Additionally, visualizations of how modes will integrate into the community such as 3D renderings, models and videos may be necessary. Education on future-proofing to address the impacts and opportunities

of advancing technologies as part of the implementation of the DeKalb TMP is also recommended.

RECOMMENDATION 2: MORE PUBLIC/STAKEHOLDER EDUCATION AND INPUT ON PROJECT DELIVERY AND INNOVATIVE FINANCING OPPORTUNITIES

Throughout the DeKalb TMP process, the public, stakeholders and the DeKalb County leadership stressed the need for identifying transit funding opportunities beyond the HB 930 sales tax option. Thus, it is also recommended that DeKalb County and MARTA provide continued public education on the following three areas:

- Public-Private-Partnerships (P3)
- Value capture financing
- Competitive nature of the FTA capital investment grant process

These additional funding opportunities are illustrated in **Figure 7-1**.

Figure 7-1: Potential Funding Options beyond HB 930 Sales Tax



To shift the DeKalb TMP from study to action, DeKalb County and MARTA must secure an early “win” by implementing a project very quickly that can demonstrate to the public how transit can work. Leaders in other regions that have moved from analysis-paralysis to creating a forward-thinking transit system have indicated that it is important to prioritize a project for immediate implementation. By delivering a project early, it allows residents to see the impacts a transit investment can have on a community and activate a thirst in community members for more transit investment.

It should be highlighted that this project needs to be the easiest to implement, but not necessarily the “best” transit project. Often communities attempt to identify that transit project that will generate the most ridership, leverage the most funding from outside of local sources, or will serve the greatest number of people. Operating on the same psychological principle that

suggests that someone in debt should pay off the loan with the smallest principle (as opposed to the one with the highest interest rate), a community should prioritize the transit project with the fewest barriers to completion. By identifying the project that can be implemented the fastest, the community can move forward with a demonstration project that will awaken an appetite for more transit investment.

If DeKalb County and MARTA can identify a quick-turnaround project that can be funded immediately and move to implementation quickly, it could be the catalyst needed to drive a referendum as opposed to completed after the referendum. Often times funding is the biggest hurdle to implementation, such that a project that can be funded entirely with local funding can be implemented very quickly. Thus, the third and fourth recommendations of the TMP focus on addressing current unmet needs and advancement of expansion projects.

RECOMMENDATION 3: COLLABORATE WITH MARTA ON CURRENT UNMET NEEDS

Increasing coordination between DeKalb County and MARTA is recommended to ensure that transit projects to address current unmet needs are **delivered** using funds from the existing MARTA sales tax. Improvements to be delivered by MARTA should include:

- Paratransit expansion in south and east DeKalb
- Mobility centers
- Bus to rail transfer enhancement projects
- Last mile/first mile connectivity projects
- Improvements to bus routes that serve high ridership corridors
- Expanded local bus coverage, bus circulators, and mobility on-demand

RECOMMENDATION 4: COLLABORATE WITH MARTA AND AGENCY PARTNERS ON THE ADVANCEMENT OF EXPANSION PROJECTS CONSISTENT WITH THE DEKALB TMP

DeKalb County should coordinate with MARTA, GDOT, the ATL and other agencies to advance the definition (i.e., planning and design concept) of key projects included in the DeKalb TMP scenarios. Because BRT in managed lanes on I-285 is a key project concept of the DeKalb TMP, and the fact that the current GDOT schedule for delivery of these lanes is within the next few years, it is extremely important that DeKalb County and MARTA immediately collaborate with GDOT to define BRT design solutions that effectively integrate into GDOT's managed lanes projects without impacting the delivery schedule.

Advancing the expansion projects consistent with the DeKalb TMP include:

- Re-evaluate I-20 East High Capacity Transit to Stonecrest
- Bus Rapid Transit in I-285 East Wall and Top End Express Lanes

Figure 7-2: Current Unmet Needs



- Bus Rapid Transit for Buford Highway
- Clifton Corridor Light Rail Transit
- Extension of Clifton Corridor–Central and South DeKalb Light Rail Transit
- Arterial Rapid Transit Network

Moreover, to implement future transit investment, zoning codes and land development regulations in DeKalb County and municipalities need to be aligned to support the investment. For example, a community may support an investment in light rail transit to spur economic development, but if the local zoning code will not allow higher density development the investment in transit may not be able to spur development. Additionally, compact, transit-oriented development (TOD) can also result in increased sales tax revenue. Effective TOD should be delivered as part of a complete transportation system that incorporates multi-modal access including pedestrian and bike infrastructure. These kinds of compact developments have traditionally increased retail activity and the overall tax base of the TOD area. The fifth recommendation of the TMP fosters these principles of aligning transit investment with land use policies.

RECOMMENDATION 5: ALIGN LAND USE, DEVELOPMENT CODES, AND TRANSIT EFFORTS

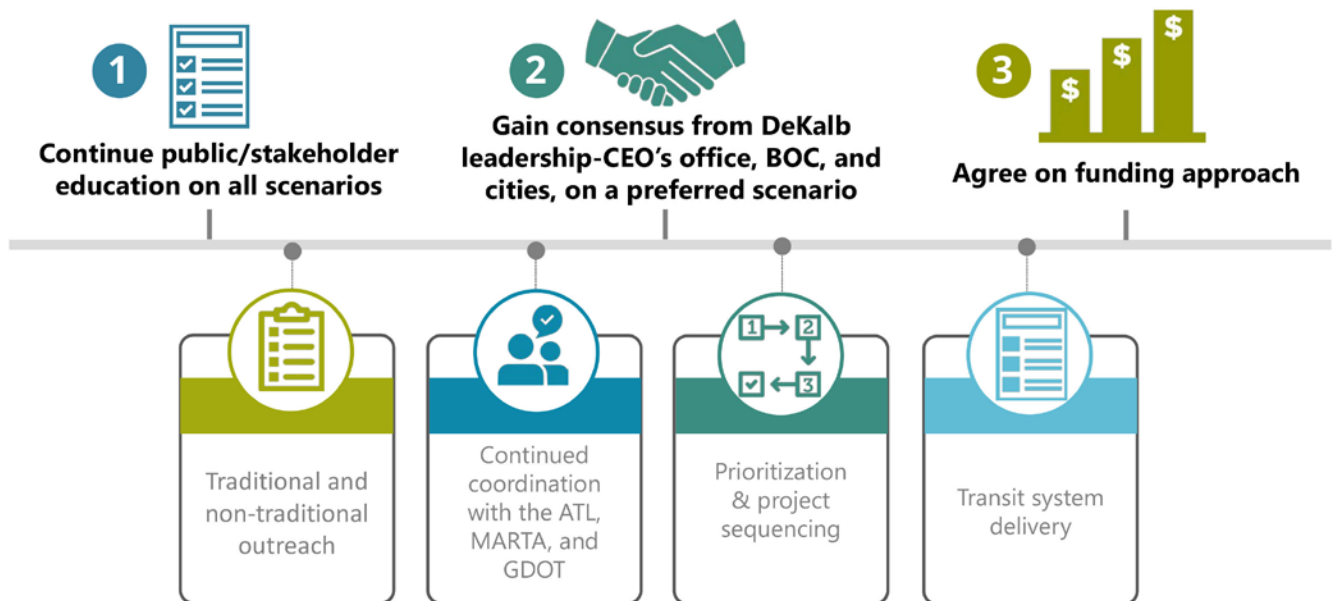
It is recommended that DeKalb County as well as the 12 cities within the county undertake efforts to better align land use and development policies to support transit investments. Transit supportive land use consists of land uses that support – economically and socially – the effective use of transit. Land use decisions and transit-oriented development investments promote transit usage, walkability and compact development forms and help to maximize exchange and activity within station areas and transit corridors. It is vitally important that the DeKalb County Comprehensive Plan is updated to include the DeKalb TMP high-capacity transit corridors, and direct growth in these areas. Zoning and land development codes also should be strengthened to incentivize private investment at station areas and enhance opportunities for securing FTA funds.

Steps to Implementation

The path forward includes three important steps necessary to achieve implementation of the DeKalb TMP. These steps are illustrated in **Figure 7-3**. As discussed, the County and MARTA should continue public/stakeholder education on the transit scenarios. Additionally, the DeKalb County leadership including the CEO's office, the Board of County Commissioners, and the 12 cities must work collectively to select a list of transit expansion projects to implement. Finally, implementation will require agreement on a stable funding approach, which could include a combination of options such as a sales tax increase, state and federal funds, as well as private sector investments.

Each project requires a more detailed, in-depth analysis of the corridor and environmental impacts prior to advancing into engineering and construction. A funding plan has to be identified for each project. Station area plans must be developed for each station.

Figure 7-3: Steps to Implementation



As projects are defined further, more detailed cost estimates will be needed. The cost estimates will be used in developing funding plans. These funding plans should consider all possible options for transit funding. Traditional sources such as sales and use taxes and federal grants should be explored as well as more innovative sources like P3, tax increment finance (TIF) districts, and value capture initiatives.

While the TMP expansion scenarios do not assume that every project receives federal funding, they are predicated on the fact that many projects do receive federal funding. It is imperative that DeKalb County and MARTA secure federal funding in order to move forward with any of the expansion scenarios. Over the 30-year timeframe, the federal guidelines for securing funding may shift, but DeKalb County must continue to evolve to stay competitive.

To be successful, a transit expansion needs to engage a spectrum of community leaders who can serve as champions of the program. Political leaders are needed to move the political process forward, but beyond that leaders from the business, non-profit, and education segments of the community are also needed. Business leaders can assist with coordination to minimize impacts during construction. Non-profits are needed to work on ancillary projects like workforce housing. Leaders in education can ensure that student needs are met.

Finally, transportation needs do not end at geopolitical boundaries. DeKalb County and MARTA must work with its neighbors to identify transit solutions that work for DeKalb residents and neighboring county residents across the Atlanta region. Finding ways to jointly fund investments when they serve multiple jurisdictions will be paramount.



Appendix A: Public Outreach Documentation

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Appendix A: Public Involvement Documentation

Overview

The DeKalb County Transit Master Plan (DCTMP) will address significant questions, set priorities for future decision-making, and identify transformative changes in response to local and regional needs, both current and future. VHB’s project tagline, “No Boundaries—Today’s Preparation, Tomorrow’s Achievement” speaks to a TMP that clearly addresses mobility challenges, enhances future development opportunities, and improves the quality of life within each of DeKalb’s cities and unincorporated communities, both north and south.

A particularly relevant portion of the activities initiated in support of the DCTMP included stakeholder engagement, outreach, and visioning services that were conducted by The Collaborative Firm. These services engaged a diverse group of internal and external stakeholders with an emphasis on environmental justice, senior, and disabled communities. This initiative required extensive and cohesive outreach efforts to ensure that DeKalb’s transit vision aligns with regional and local transportation plans. The enclosed is a summary of engagement activities from the onset to the conclusion of the plan: July 2018 – June 2019. Major public involvement activities have been detailed in **Table A-1**.

Table A-1: Public Engagement & Activity Schedule

Date	Activity	Purpose/Task
July 2018		
July 17	Stakeholder Interview: Robert Dallas	Stakeholder/Visioning
July 19	Stakeholder Interview: Jim Durrett	Stakeholder/Visioning
July 20	Stakeholder Interview: Bill Floyd	Stakeholder/Visioning
July 24	Stakeholder Interview: Mayor John Ernst	Stakeholder/Visioning
July 25	Stakeholder Interview: Mayor Jason Lary	Stakeholder/Visioning
July 26	Stakeholder Interview: Mayor Patti Garrett	Stakeholder/Visioning
July 26	DeKalb Municipal Association Meeting/Presentation #1	Stakeholder/Visioning/Cities
July 31	Stakeholder Interview: Commissioner Nancy Jester	Stakeholder/Visioning
August 2018		
August 2	Stakeholder Interview: Commissioner Steve Bradshaw	Stakeholder/Visioning
August 3	Stakeholder Interview: Katerina Taylor	Stakeholder/Visioning
August 6	Stakeholder Interview: Fred Daniels	Stakeholder/Visioning
August 7	Stakeholder Interview: Commissioner Larry Johnson	Stakeholder/Visioning
August 9	Stakeholder Interview: Commissioner Jeff Rader	Stakeholder/Visioning
August 13	Press Release: DeKalb County Transit Master Plan Announcement	Outreach/Communications
August 14	Stakeholder Interview: Commissioner Mereda Johnson	Stakeholder/Visioning
August 15	Stakeholder Interview: Doug Hooker	Stakeholder/Visioning
August 21	Stakeholder Interview: (former) Commissioner Gregory Adams	Stakeholder/Visioning
August 21	Stakeholder Interview: Commissioner Kathie Gannon	Stakeholder/Visioning
August 21	Decide DeKalb Economic Development Event	Outreach/Pop-up
August 23	Approved DeKalb County SAC invitation letter sent to SAC prospective members	Stakeholder Engagement

August 28	I-20 East Transit-Oriented Development Strategic Plan Open House: Stonecrest Library	Outreach/Pop-up
August 28	I-20 East Transit-Oriented Development Strategic Plan Open House: Porter Sanford II Performing Arts	Outreach/Pop-up
August 30	Stakeholder Interview: Chris Tomlinson	Stakeholder/Visioning

September 2018

September 6	Stakeholder Advisory Committee Meeting #1	Stakeholder Engagement
September 12-14	Minneapolis-St. Paul Transit Trip	Stakeholder Engagement
September 29	Heart of South DeKalb	Outreach/Pop-up

October 2018

October 4	Open House #1 Media Advisory	Outreach/Communications
October 6	Stonecrest Fest	Outreach/Pop-up
October 6	Taste of Tucker	Outreach/Pop-up
October 6	Taste of Chamblee	Outreach/Pop-up
October 16	Public Open House Round #1: Lou Walker Senior Center	Public Engagement
October 23	Public Open House Round #1: Holy Cross Catholic Church	Public Engagement
October 25	Public Open House Round #1: Maloof Auditorium	Public Engagement
October 27	(former) Commissioner Gregory Adams Fall Festival	Outreach/Pop-up

November 2018

November 8	DeKalb County World Planning Day	Outreach/Pop-up
November 8	Stakeholder Advisory Committee Meeting #2	Stakeholder Engagement
November 9	Spanish translation DCTMP Fact Sheets produced for circulation and website	Outreach/Communications

December 2018

December 4	MARTA I-20 East Transit-Oriented Development/DCTMP Joint Outreach Presentation: Communications Workers of America	Outreach/Pop-up
December 6	DeKalb Municipal Association Meeting/Presentation #2	Stakeholder/Visioning/Cities

February 2019

February 4	Open House #2 Media Advisory	Outreach/Communications
February 6	Transit Charrette	Public Engagement
February 19	Focus Group #1: Small Business (CERM)	Public Engagement
February 20	Focus group #2: Communities with Disabilities (CERM)	Public Engagement
February 23	House of Hope: Stop the Violence Rally	Outreach/Pop-up
February 24	House of Hope: Congregation Outreach	Outreach/Pop-up
February 24	Rainbow Creek Homeowners Association Meeting	Outreach/Pop-up
February 26	Public Open House Round #2: Flat Shoals Library	Public Engagement
February 27	Public Open House Round #2: Covington Library	Public Engagement
February 28	Public Open House Round #2: Central DeKalb Senior Center	Public Engagement

March 2019

March 12	Commissioner Larry Johnson Black Heritage Celebration	Outreach/Pop-up
March 12	Central DeKalb Senior Center	Outreach/Pop-up
March 12	Commissioner L. Johnson Black History Celebration	Outreach/Pop-up
March 19	Waters Edge Homeowners Association Meeting	Outreach/Pop-up
March 21	Commissioner M. Johnson & Commissioner Cochran-Johnson Joint Townhall	Outreach/Pop-up
March 28	Pecha Kucha/Project Share	Public Engagement

May 2019

May 21	DeKalb County Committee of the Whole Presentation	Stakeholder/Visioning/County
May 21	DeKalb County Municipalities Letter approved with distribution to each City	Outreach/Communications
May 29	Stakeholder Advisory Committee Meeting #3	Stakeholder Engagement
May 31	Open House #3 Media Advisory	Outreach/Communications

June 2019

June 3	City of Lithonia Council Presentation	Stakeholder/Visioning/Cities
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June 4	Public Open House Round #3: Toco Hills Library	Public Engagement
June 5	Public Open House Round #3: Stonecrest Library	Public Engagement
June 6	Public Open House Round #3: Exchange Recreation Center	Public Engagement
June 6	DeKalb Municipal Association Meeting/Presentation #3	Stakeholder/Visioning/Cities
June 10	City of Stonecrest Council Presentation	Stakeholder/Visioning/Cities
June 10	City of Dunwoody Presentation	Stakeholder/Visioning/Cities
June 11	City of Brookhaven Council Presentation	Stakeholder/Visioning/Cities
June 13	City of Chamblee Council Presentation	Stakeholder/Visioning/Cities
June 17	City of Doraville Council Presentation	Stakeholder/Visioning/Cities
June 17	City of Decatur Council Presentation	Stakeholder/Visioning/Cities
June 18	City of Stone Mountain Council Presentation	Stakeholder/Visioning/Cities
June 20	City of Avondale Estates Council Presentation	Stakeholder/Visioning/Cities
June 25	City of Clarkston Council Presentation	Stakeholder/Visioning/Cities
June 25	City of Pine Lake Council Presentation	Stakeholder/Visioning/Cities
June 26	City of Tucker Council Presentation	Stakeholder/Visioning/Cities
June 27	DeKalb County Committee of the Whole Presentation	Stakeholder/Visioning/County

Stakeholder Engagement: Interviews

Stakeholder interviews were conducted during the onset of the project to assist in establishing DCTMP vision and goals. The aim of these interviews was to gather input to assist in tailoring project-related messaging and materials. An auxiliary benefit was that these interviews facilitated a clearer understanding of the intended outcomes for the project's overall communications efforts. They typically were limited to 15-20 minutes; conducted by phone for the sake of efficiency; and identified as solely one measure that was used to enhance the community engagement process for the DCTMP.

Example Questions:

- Have you used MARTA or GRTA services? Which ones? How often?
- What are the major transportation issues facing DeKalb County?
- Are you familiar with the DeKalb County Master Transit Plan, its objectives, and potential outcomes?
- What communication resources are available to the project team in getting the word out?
- What message, if any, would you like for residents to grasp from this planning project?

ACTIVITIES

- Conducted seventeen (17) stakeholder interviews from July 2018 – August 2018. There are detailed in **Table A-2**.
- Documented interviews into themes and incorporated feedback into messaging for public collateral.

Table A-2: Stakeholder Interviews

Stakeholder Name	Date of Interview	Representing
Robert Dallas	July 17, 2018	Buckley King
Jim Durrett	July 19, 2018	Buckhead CID
Bill Floyd	July 20, 2018	Pendleton Group/MARTA Board
Mayor John Ernst	July 24, 2018	City of Brookhaven
Mayor Jason Lary	July 25, 2018	City of Stonecrest

Mayor Patti Garrett	July 26, 2018	City of Decatur
Nancy Jester	July 31, 2018	DeKalb Commissioner
Steve Bradshaw	August 2, 2018	DeKalb Commissioner
Katerina Taylor	August 3, 2018	DeKalb Commissioner
Fred Daniels	August 6, 2018	Executive VP-Citizens Trust Bank/MARTA Board
Larry Johnson	August 7, 2018	DeKalb Commissioner
Jeff Rader	August 7, 2018	DeKalb Commissioner
Mereda Davis Johnson	August 14, 2018	DeKalb Commissioner
Doug Hooker	August 15, 2018	Atlanta Regional Commission
Gregory Adams	August 21, 2018	DeKalb Commissioner
Kathie Gannon	August 21, 2018	DeKalb Commissioner
Chris Tomlinson	August 30, 2018	SRTA/GRTA/The ATL

Feedback

- Expectations for this study:
 - Build consensus around transit priorities
 - Determine more equitable distribution of resources (N. DeKalb/S. DeKalb)
 - Transportation needs to drive commerce/development (consider offering tax abatements and other incentives)
 - Plan must be realistic/timely/fundable
 - Transit must provide competitive travel times relative to auto
 - Consider options for funding beyond sales tax (such as value capture at stations or Special Improvement Districts)
- Corridors/connectivity considerations:
 - I-20 to downtown Atlanta
 - I-285/North Perimeter Arc Top End (potentially extend from Cumberland to Doraville, Northlake/Tucker) BRT east-west connections integrated with managed lanes that could be extended to Indian Creek and Stonecrest
 - Should transit be in the I-285 corridor? If so, what type?
 - Intercity connections (e.g., Brookhaven to Decatur, Atlanta to Emory)
 - Connectivity to hospitals
 - Better connections between bus and rail
 - Memorial Drive
 - Candler Road
 - Clairmont

- Highway 78
- Scott Boulevard
- Look at how South DeKalb ties into Hartsfield-Jackson Airport
- Plan should address connectivity to population centers
- Plan should foster better local connectivity with DeKalb cities
- Plan should connect better with Rockdale and Henry Counties
- Stonecrest Mall
- Wesley Chapel Road
- Panola Road
- Panthersville Road
- Indian Creek MARTA Station connection to Stonecrest area
- Outreach:
 - Talk with many stakeholders and influencers
 - Engage cities and elected officials
 - Focus on disabled community, Millennials, families with young children
 - Townhall meetings for each County Commission District
 - Be creative beyond traditional meetings
 - Millennial Outreach is critical
 - Utilize local press
 - Coordinate with different municipal public information officers
- Other Key Takeaways:
 - “Last mile of connectivity” is lacking and needs attention through improved sidewalks, trails, and shuttles
 - Need clear/reasonable expectations about potential economic impact of transit re: development
 - Transit can create new jobs/provide access to existing
 - Accuracy of technology needs improvement (schedules not up to date)
 - Buses need to be made more attractive as an option
 - How do you “sell” the need for an additional penny? Emphasize successes
 - Stigma/safety re: MARTA
 - Lack of accessible stations (i.e., geographical proximity)
 - Public needs to be educated about transit – types of transit, the “real” cost of transit investment, etc.
 - Better amenities are needed at MARTA bus stops: benches, shelters, trash cans, better lighting, etc.
 - Better accessibility to DeKalb County “jewels”, such as hospitals, black historic districts, senior centers
 - Economic development needs transportation support
 - Define financial investment, need results from projects like SPLOST, etc.
 - Citizens want some “short term” value for their current financial investments in MARTA & SPLOST
 - MARTA must be realistic and a convenient option for many citizens. It is not convenient
 - Short-term success could include more bus stops, shelters, etc.
 - MARTA must be aware of needs of ridership (safety, convenience, etc.)
 - Explore Rideshare strategic alliances with MARTA

- Develop short-term wins
- First and last stop connections must be reviewed
- Equity is an important element regarding DeKalb County's past, current and future transportation plans

Stakeholder Engagement: Stakeholder Advisory Committee (SAC)

The Stakeholder Advisory Committee (SAC) was established as a voluntary advisory group to advise County officials and DCTMP project consultants throughout the planning process and to assist in guiding the development of transit recommendations for project planning purposes.

SAC Member Tasks:

1. Review draft documents and plans (both printed and digital) and provide feedback
2. Communicate DCTMP transit updates within their respective organizations/communities

SAC ACTIVITIES

- Created SAC and Co-Convener roles and descriptions
- Created SAC invitee list with input from Stakeholder interviews, County/City officials, project team members
- Confirmed SAC member list of approximately 50 members within 9 categories: Government, Community development, Business, Non-profits, Faith-based, Education, Health, Engaged citizen, Other
- Ongoing communication, calls, emails, SAC member request fulfillment
- Conducted 3 SAC Meetings

Table B-3: SAC Meetings

Table A-2: Stakeholder Interviews Date	Location	Approximate Attendees
Thursday, September 6, 2018	Central Library Processing Center 3560 Kensington Rd, Decatur, GA 30032	40
Thursday, November 8, 2018	Maloof Auditorium 1300 Commerce Dr Decatur, GA 30030	25
Wednesday, May 29, 2019	Maloof Auditorium 1300 Commerce Dr Decatur, GA 30030	29

Table B-4: SAC Feedback

Meeting	Action	Feedback/Questions
#1 September 6, 2018	<ul style="list-style-type: none"> Opening remarks from CEO DeKalb County – Michael Thurmond; Project Manager ATL/formerly ARC – Lori Sand; GM/CEO MARTA – Jeffrey Parker Attendees updated on TMP purpose Baseline findings shared Transit mode “clicker” exercise 	<ul style="list-style-type: none"> Best to meet with SAC group first prior to public Group enthusiastic about participating and sharing upcoming information Group enjoyed the interactive transit mode exercise
#2 November 8, 2018	<ul style="list-style-type: none"> Opening remarks from Executive Director SRTA/GRTA/The ATL – Chris Tomlinson Attendees updated on Stakeholder Minnesota trip, TMP travel trends/state of the transit system/economic development/policy Attendees were given a questionnaire to complete 	<ul style="list-style-type: none"> What can be started now to be implemented on the ground less in than 15 years? What is considered North vs. South DeKalb? Time intervals aren’t fast enough between all the studies and action. Counties want more tax money and we are lacking even shelters but all that is offered is more busses. The plan needs to market a sense of purpose and vision. The blind community was brought to the original MARTA plan late. Recommendation to communicate with the disabled community early.
#3 May 29, 2019	<ul style="list-style-type: none"> Opening remarks from DCTMP Program Manager, Grady Smith Attendees were updated on project evaluations and scenario developments, financial modeling Four transit scenarios were presented: Existing MARTA Penny, Half-Penny, Full Penny, Previously Approved Attendees were given a scenario questionnaire to complete 	<ul style="list-style-type: none"> The fact that we now have four options is amazing. We can go to our communities with valuable information. We are grossly behind in the terms of transit. I would be in support of 2 pennies or whatever is to move the ball forward Majority of attendee stated the Existing Penny



Figure A-1 SAC Meeting #1 – MARTA CEO, Jeffrey Parker



Figure A-2 SAC Meeting #2 – Executive Director, the ATL



Figure A-3 SAC Meeting #3

Stakeholder Engagement: Government

The Collaborative Firm alongside project leadership assisted to provide project briefings and updates to DeKalb County Board of Commissioners/Committee of the Whole (COW), the DeKalb Municipal Association (DMA), its project partners, and key internal and external stakeholders as needed.

ACTIVITIES

- July 26, 2018: DMA meeting presentation
- December 6, 2018: DMA meeting presentation
- Letter drafted to all DeKalb Municipalities with support of DeKalb County's CEO office
- Scenario Presentations: 12 City Council, 2 COW, 1 DMA from June 3, 2019 – June 26, 2019

Table B-5: Presentation Schedule

City/Organization	Address	Date
DeKalb COW	Manuel J. Maloof Annex 1300 Commerce Dr. Decatur, GA 30030	5/21/2019
Lithonia	City Hall 6920 Main St. Lithonia, GA 30058	6/3/2019

DeKalb Municipal Assoc	Century Center Marriott 2000 Century Blvd NE Atlanta, GA 30345	6/6/2019
Stonecrest	3120 Stonecrest Blvd. Stonecrest, GA 30038	6/10/2019
Dunwoody	4800 Ashford Dunwoody Rd. Dunwoody, GA 30388	06/10/2019
Brookhaven	Brookhaven City Hall 4362 Peachtree Rd. Brookhaven, GA 30319	6/11/2019
Chamblee	Civic Center 3540 Broad St. Chamblee, GA 30341	6/13/2019
Doraville	City Hall Council Chambers 3725 Park Ave. Doraville, GA 30340	6/17/2019
City of Decatur	City Hall 509 N. McDonough St. Decatur, Georgia 30030	6/17/2019
Stone Mountain	875 Main St. Stone Mountain, GA 30083	6/18/2019
Avondale Estates	City Hall 21 N. Avondale Plaza Avondale Estates, GA 30002	6/20/2019
Clarkston	3921 Church St. Clarkston, GA 30021	6/25/2019
Pine Lake	459 Pine Dr. Pine Lake, GA 30072	6/25/2019
Tucker	City Hall Annex	6/26/2019

	4228 1st Ave, Suite 2-4 Tucker, GA 30084	
DeKalb COW	Manuel J. Maloof Annex 1300 Commerce Dr. Decatur, GA 30030	6/27/2019

FEEDBACK

- Resolutions of support from: DeKalb Municipal Association, City of Tucker, City of Pine Lake, City of Stone Mountain, City of Doraville
- Unanimous agreement of support with the process used to develop the Transit Master Plan.
- General agreement with the list of transit projects generated for recommendation.
- Request that the cities work closely with the County on timing and communications for any public vote on plan funding.
- Request that the cities within DeKalb County have a formal role in determining project priorities.

Stakeholder Engagement: Events

The project management team understands the importance of public engagement from internal and external project stakeholders. Several events were created to support two-way interactive engagement and to also leverage stakeholder feedback to assist in project visioning and future scenario recommendations.

ACTIVITIES

- September 12 – 14, 2018: Minneapolis – St. Paul Transit Trip
- February 6, 2019: Transit Charrette
- March 28, 2019: Pecha Kucha/Project Share

FEEDBACK

Table B-6: Presentation Schedule

Event	Action	Feedback/Questions
September 12 – 14, 2018: Minneapolis – St. Paul Transit Trip	<ul style="list-style-type: none"> 41 DeKalb County stakeholders attended a 3-day transit trip to explore transit options within the Twin Cities while focusing on ART, BRT, LRT. Attendees included: CEO Michael Thurmond, MARTA Staff and Board Members, State Senator Elena Parent, The ATL, CID Directors, GDOT Board Member, DMA, 6 Mayors, NAACP, Georgia Power, AJC 	<ul style="list-style-type: none"> Must prioritize projects as a region. Prioritize projects that can be completed first. Define strategies for equitable distribution. Neighborhood-based planning to support transit. Different leaders need to step up at different times.
February 6, 2019: Transit Charrette	<ul style="list-style-type: none"> Over 35 DeKalb County planners, economic developers, and stakeholders gathered for the purpose to begin to define transit investment opportunities/scenarios, create a vision to guide land use and economic investment to support transit those investments. Attendees participated within four (4) interactive stations. First time SketchTransit application was introduced that displays: capital and operating costs for transit alignment and modes; implications on land use and economic development. 	<ul style="list-style-type: none"> Heavy need to educate on high-capacity transit modes (especially those without an operating example in the area) Equity is still a big issue Group seemed to approve of initial four performance evaluation criteria for projects: Performance, Cost, Equity, Ability to support land use and economic development While some groups limited themselves due to their perception of limited financial resources, the stakeholders did not seem opposed to increased taxation on themselves Mobility seemed to be a higher concern than economic development Last mile connectivity is a real issue that needs to be addressed On-demand services for paratransit are needed

		<ul style="list-style-type: none"> • While I-20 mode began with rail, it did transition away based on costs • There was support for leveraging the investment in managed lanes
March 28, 2019: Pecha Kucha/Project Share	<ul style="list-style-type: none"> • Over 25 project staff for DeKalb County projects, stakeholders and DCTMP team members gathered for the purpose of information exchange and partnership building. • Projects shared included: DeKalb County 2035 Comp Plan, I-20 East TOD Strategic Plan, Clifton Corridor Transit Initiative, Fulton County Transit master Plan, Connect Gwinnett Transit Plan, ARC Regional Transportation Plan/ATL Regional Transit Plan/ATL Work Plan, SRTA Bus Rapid Transit Concept Development, GDOT MMIP, GDOT Statewide Rail Plan and Statewide Transit Plan 	<ul style="list-style-type: none"> • Good to hear and collaborate with other area projects • The opportunity allowed strengthening of specialists (land use and economic development) • Allowed a better understanding of area projects • Allowed partnership and continued dialogue of area projects



Figure A-4: Land Use and Transit Planning Charrette (02.06.19)



Figure A-4: Pecha Kucha/Project Share (03.28.19)

Public Engagement: Open Houses

Three rounds of public open houses were conducted to educate, inform, and gather feedback regarding mobility within DeKalb County, area cities and neighborhoods. Each public open house allowed attendees inactive engagement activities with opportunities to pose questions to project specialists.

ACTIVITIES

- Nine (9) open house dates scheduled within each district of DeKalb County
- Collected comments, feedback and facilitated any attendee follow-up requests
- Provided collateral material to attendees with additional education on DCTMP and transit modes
- Solicited feedback through digital and written survey
- Questionnaire of transit scenarios introduced in June

Table B-7: Public Open House Schedule

Date	District	Location
Tuesday, October 16, 2018	1/7	Lou Walker Senior Center 2538 Panola Rd. Stonecrest, GA 30058
Tuesday, October 23, 2018	5/7	Holy Cross Catholic Church 3773 Chamblee Tucker Rd. Atlanta, GA 30341
Thursday, October 25, 2019	2/6	Maloof Center 1300 Commerce Dr. Decatur, GA 30030
February 26, 2019	3/7	Flat Shoals Library 4022 Flat Shoals Pkwy Decatur, GA 30034
February 27, 2019	4/6	Covington Library 3500 Covington Hwy Decatur, GA 30032
February 28, 2019	2/6	Central DeKalb Senior Center 1346 McConnell Dr. Decatur, GA 30033
Tuesday, June 4, 2019	2/6	Toco Hills - Avis G. Williams Library 1282 McConnell Drive Decatur, GA 30033
Wednesday, June 5	5/7	Stonecrest Library 3123 Klondike Rd. Lithonia, GA 30038
Thursday, June 6	3/7	Exchange Recreation Center 2771 Columbia Dr. Decatur, GA 30034

FEEDBACK

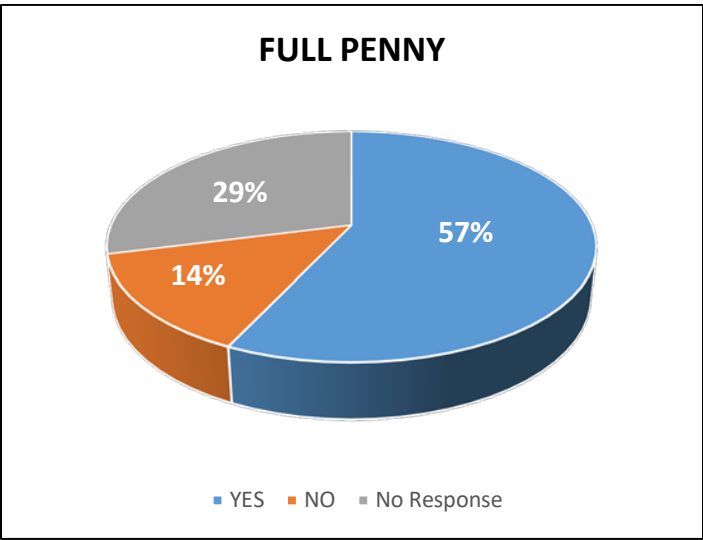
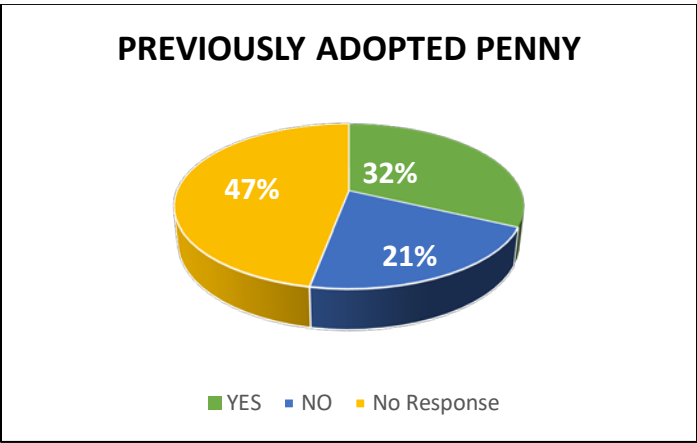
- Overall support for transit improvements
- Continued concerns about rail on I-20
- Do not want to travel “backwards” to current MARTA rail stations to then catch train into City of Atlanta
- Concerned that decisions have already been made
- Constituents should determine what they can afford
- Lots of interest in SketchTransit tool introduced in the February Open House
- Mode videos were helpful to people

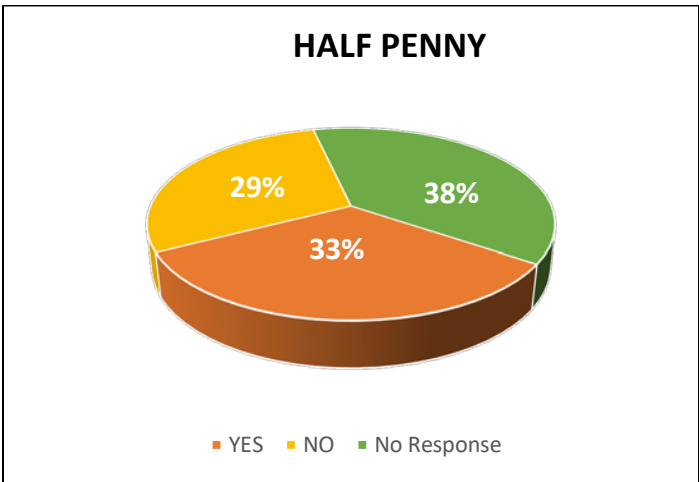
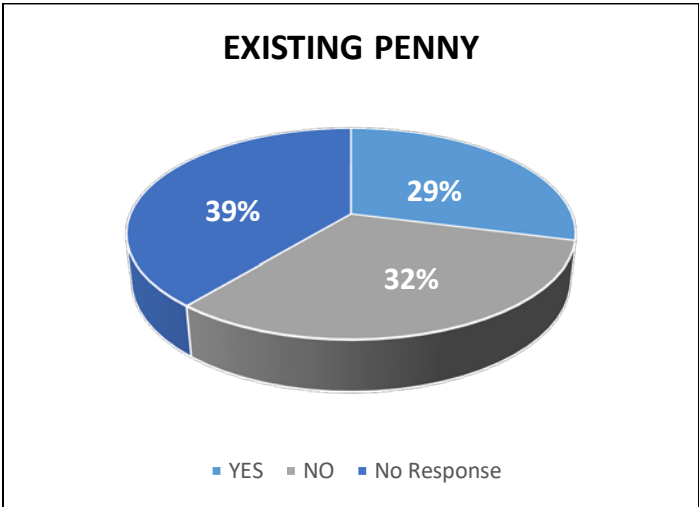
Table B-8: Public Open House Feedback from June 2019 Meetings

Meeting	Previously Adopted Scenario	Existing Penny	Half-Penny Scenario	Full-Penny Scenario	Questions & Comments
Toco Hills Library June 4, 2019 (Districts 2/6)	Good idea, but useless if left unfunded	<ul style="list-style-type: none"> -Confusing having this option with the same questions -Not enough 	<ul style="list-style-type: none"> -Missing service to the City of Atlanta -Add more busses -Good compromise, expansion is better than nothing. Unsure on economic development. -Not enough 	<ul style="list-style-type: none"> -Torn between half and full penny scenarios; there is value in the full penny but may be too much to pass. -The heavier the rail the better/ Encouraging denser development can only help DeKalb grow. 	<ul style="list-style-type: none"> -Convert more ART to BRT -Need marquees for bus arrival times -Take a look at building gondolas; they are 50% less than LRT. Gondolaproject.com
Stonecrest Library June 5, 2019 (Districts 5/7)	Interested in rail down I-20			This is the best option	<ul style="list-style-type: none"> -What are counties are paying into the MARTA system and for how long? -What are other funding options for the transit plan? -Where are the capital projects located? -What projects are in jeopardy in S. DeKalb if a referendum is voted down? -What is the process of getting any projects started? Next steps after July?
Exchange Rec Center June 6, 2019 (District 3/7)	-This scenario gives more options when travelling outside of DeKalb. This	More attention on the senior population; transportation is a major need for		<p>DeKalb already has higher taxes than neighboring counties.</p> <p>Rail will bring more businesses and job opportunities. Let's</p>	

	will draw more businesses to the area.	seniors. Quality of life for seniors is not present in this scenario.		use the land on the Southside.	
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RESPONSES FROM THE JUNE OPEN HOUSES





Public Engagement: Pop-Ups/Events/Focus Groups

Several public activities were conducted as a part of the study to directly engage and inform residents about study updates and to provide opportunities for them to share their opinions and provide input.

ACTIVITIES

- Two (2) focus groups: Small Business - February 19, 2019; Citizens with Disabilities February 20, 2019
- Eighteen (18) pop-up community engagement events

Feedback

Small Business Focus Group: February 19, 2019 - Summary of Input:

- Asked questions about gondolas
- Expressed concerns about the stigma related to individuals using MARTA services such as labeling them criminals
- Employees express concerns with MARTA's lack of on-time performance and therefore prefer on-demand services like Uber or Lyft
- Bus stops are too far from people; developers could be encouraged to include bus stops within developments
- People who need MARTA will take MARTA, but would like a system that people choose to use
- Double tracking would be helpful in having express trains and avoiding delays due to one inoperable train
- More signage and lighting are needed at stations
- Circulators are needed

Citizens with Disabilities Focus Group: February 20, 2019 - Summary of Input:

- First mile/last mile solutions are needed
- Every vehicle should have a wheelchair lift
- Bus stops are often too far for Older Americans to walk to them
- Bus shelters are very important
- There should be an application that would notify passengers when the transit vehicle is approaching its stop (i.e., real-time information)
- Expressed concerns that MARTA is not coordinating enough with the local jurisdictions
- MARTA Mobility is unreliable
- Security measures such as improved lighting and security personnel should be prioritized
- Service after 10 pm is unreliable but needed

The background is a solid green color. Overlaid on this is a faint, stylized illustration of a town. On the left, there's a house with a chimney. In the center, a road with a dashed line runs horizontally. A car is on the road. To the right of the car is a bus. Further right is a building with a sign that says "South depot". Above the road, there are several circular icons: one with a document, one with a star and arrows pointing to numbers 2 and 3, and one with a train and checkmarks. The text "Appendix B: Financial Planning Documentation" is written in white, bold, sans-serif font, centered in the upper half of the image.

Appendix B: Financial Planning Documentation

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Appendix B: Financial Planning Documentation

Sales Tax Revenue Projections

The purpose of this section is to describe the key assumptions and methodology supporting the sales tax revenue projections. It is important to note that these projections were computed based on the best information available at the time of analysis; however, key assumptions are subject to change in the future.

ASSUMPTIONS

Table B-1 provides a summary of key assumptions for the sale tax revenue projections.

Table B-1: Sales Tax Assumptions

	Assumption	Source
Sales Tax Term	30 years	HB 930
Sales Tax Start Year	2021	Subject to change
Contribution to State General Fund	1%	HB 930

METHODOLOGY

The methodology supporting the sales tax revenue projections comprised of two main steps:

1. Determine the current taxable sales revenue in DeKalb County.
2. Determine suitable growth rates to apply to the current taxable sales revenue through the end of the analysis period.

The following sections describe the methodology the team used to achieve these steps.

Sales Revenue Base

The team achieved the first step through conversations with MARTA’s finance department. MARTA was not able to provide the actual sales revenue for DeKalb county in FY 2018, because the City of Atlanta’s “More MARTA” initiative went into effect part-way through the

year. In the last quarter of the fiscal year, residents within the city limits began to pay an additional half penny towards MARTA improvements, in addition to the full penny established in the MARTA Act, for a total of 1.5 pennies toward MARTA. However, residents outside the city limits in DeKalb county continued to pay just the original full penny sales tax towards MARTA.

In order to determine the total sales revenue in DeKalb county in FY 2018, the team was advised by MARTA's finance staff to back out this value based on the total sales tax revenue collected through the education local option sales tax (ELOST), which is a full penny for all residents of DeKalb regardless of whether they are inside or outside the city. ELOST monthly receipts for DeKalb county were available online through the Georgia Department of Revenue's website.

Table B-2 summarizes the monthly receipts of the DeKalb county ELOST in FY 2018.

Table B-2: FY 2018 Monthly Receipts in ELOST

Date	County Name	Jurisdiction	Amount
31-Jul-17	DeKalb	DEKALB COUNTY BOARD OF EDUCATION (ELOST)	8,896,972
31-Aug-17	DeKalb	DEKALB COUNTY BOARD OF EDUCATION (ELOST)	9,286,732
30-Sep-17	DeKalb	DEKALB COUNTY BOARD OF EDUCATION (ELOST)	8,690,749
31-Oct-17	DeKalb	DEKALB COUNTY BOARD OF EDUCATION (ELOST)	8,902,656
30-Nov-17	DeKalb	DEKALB COUNTY BOARD OF EDUCATION (ELOST)	8,296,360
16-Dec-17	DeKalb	(Pro Rata) DEKALB COUNTY BOARD OF EDUCATION (ELOST)	13,901
31-Dec-17	DeKalb	DEKALB COUNTY BOARD OF EDUCATION (ELOST)	8,943,829
31-Jan-18	DeKalb	DEKALB COUNTY BOARD OF EDUCATION (ELOST)	10,843,299
28-Feb-18	DeKalb	DEKALB COUNTY BOARD OF EDUCATION (ELOST)	8,864,257
31-Mar-18	DeKalb	DEKALB COUNTY BOARD OF EDUCATION (ELOST)	7,659,738
30-Apr-18	DeKalb	DEKALB COUNTY BOARD OF EDUCATION (ELOST)	9,775,864
31-May-18	DeKalb	DEKALB COUNTY BOARD OF EDUCATION (ELOST)	8,877,449
16-Jun-18	DeKalb	(Pro Rata) DEKALB COUNTY BOARD OF EDUCATION (ELOST)	36,754
30-Jun-18	DeKalb	DEKALB COUNTY BOARD OF EDUCATION (ELOST)	9,055,259
FY Total	DeKalb	DEKALB COUNTY BOARD OF EDUCATION (ELOST)	108,143,818

Based on total ELOST receipts of \$108 million in FY 2018 at an ELOST rate of one penny (or one percent), the team determined the sales revenue base in FY 2018 (the last year complete year of data at the time of the analysis) to be \$10.8 billion.

The analysis assumes a referendum would occur in FY 2020 and the sales tax would go into effect in FY 2021. The \$10.8 billion sales revenue (2018 dollars) was escalated to FY 2021 dollars using growth assumptions provided by MARTA's finance department (discussed in the next section).

Sales Revenue Growth

GSU provides an annual update of MARTA sales tax revenue projections. MARTA modifies the sales tax projections so that annual growth is limited to 3.5 percent. The analysis assumes that the growth in the taxable sales revenue in DeKalb County is equal to the growth in MARTA sales tax receipts for FY 2020 – FY 2049. Note that the sales revenue forecast provided by GSU/MARTA include growth due to inflation as well as economic factors (e.g. population growth, etc.).

The growth rates derived from the GSU/MARTA sales tax forecast were not applicable to escalate from FY 2018 to FY 2019 because the forecast includes revenue from the More MARTA half penny. More MARTA went in effect end of FY 2018, but was in effect for all of FY 2019. To use the growth rate derived from the GSU/MARTA sales tax revenue forecast for FY 2018 to FY 2019 would have overstated the sales tax growth, as the effective sales tax rate would have been lower for most of FY 2018 than for FY 2019. To be conservative, the analysis assumes that the sales tax revenue grows with inflation from FY 2018 to FY 2019. Additionally, the GSU/MARTA sales tax forecast does not extend to FY 2050, so the analysis assumes a 3.5 percent growth year from FY 2049 to FY 2050 to be consistent with the latter years of the forecast.

Annual Sales Revenue Projections

Figure B-2 (YOE\$) and **Figure B-3** (2019\$) provide the projected annual sales tax revenues for a full penny sales tax in DeKalb County, based on the latest available information.

Figure B-2: Sales Tax Revenue Projections, Half Penny, FY 2021 – FY 2050, YOE\$

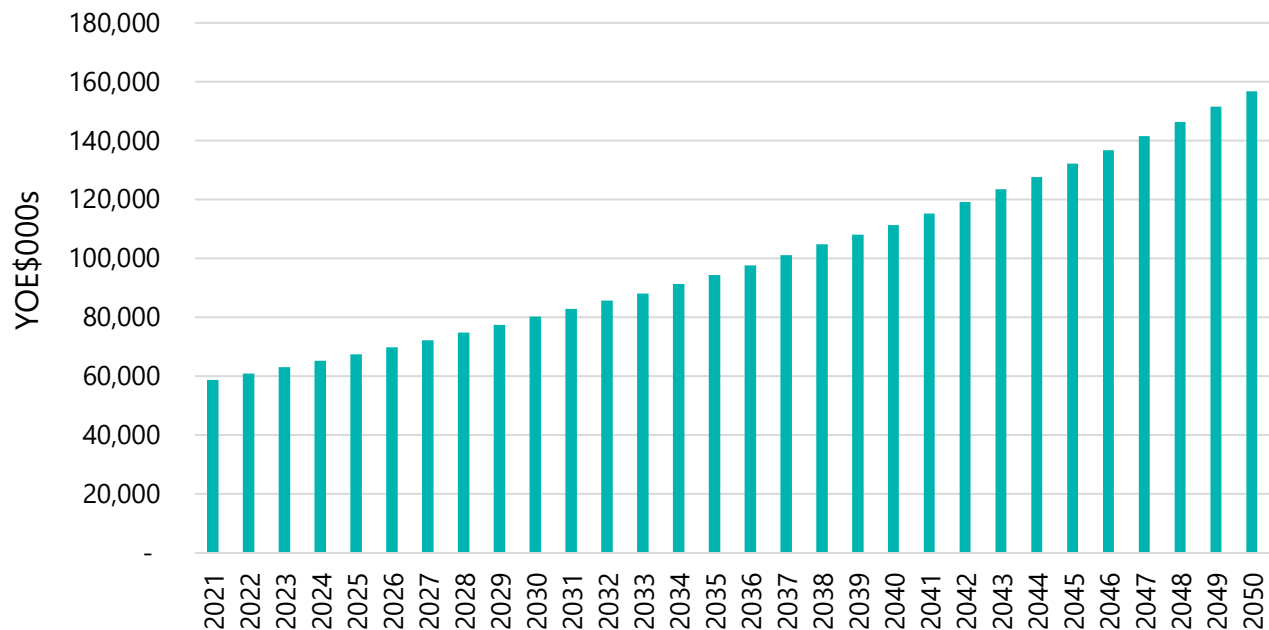


Figure B-3: Sales Tax Revenue Projections, Half Penny, FY 2021 – FY 2050, 2019\$

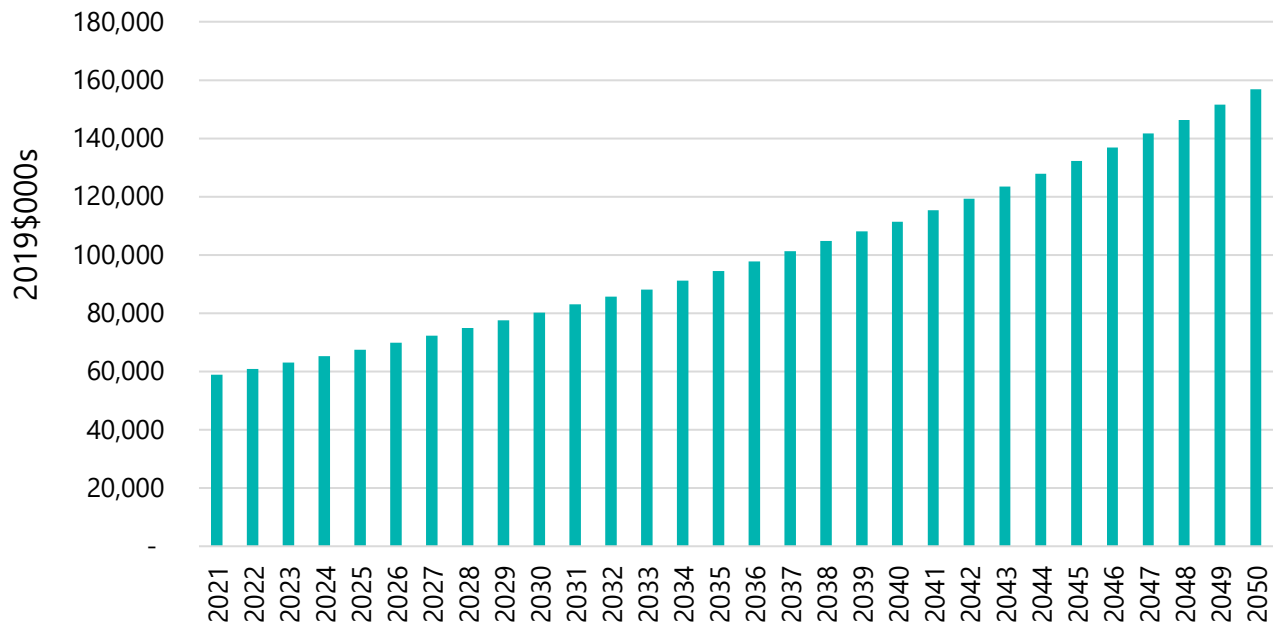


Figure B-4 (YOE\$) and **Figure B-5** (2019\$) provide the projected annual sales tax revenues for a full penny sales tax in DeKalb County, based on the latest available information.

Figure B-4: Sales Tax Revenue Projections, Full Penny, FY 2021 – FY 2050, YOE\$

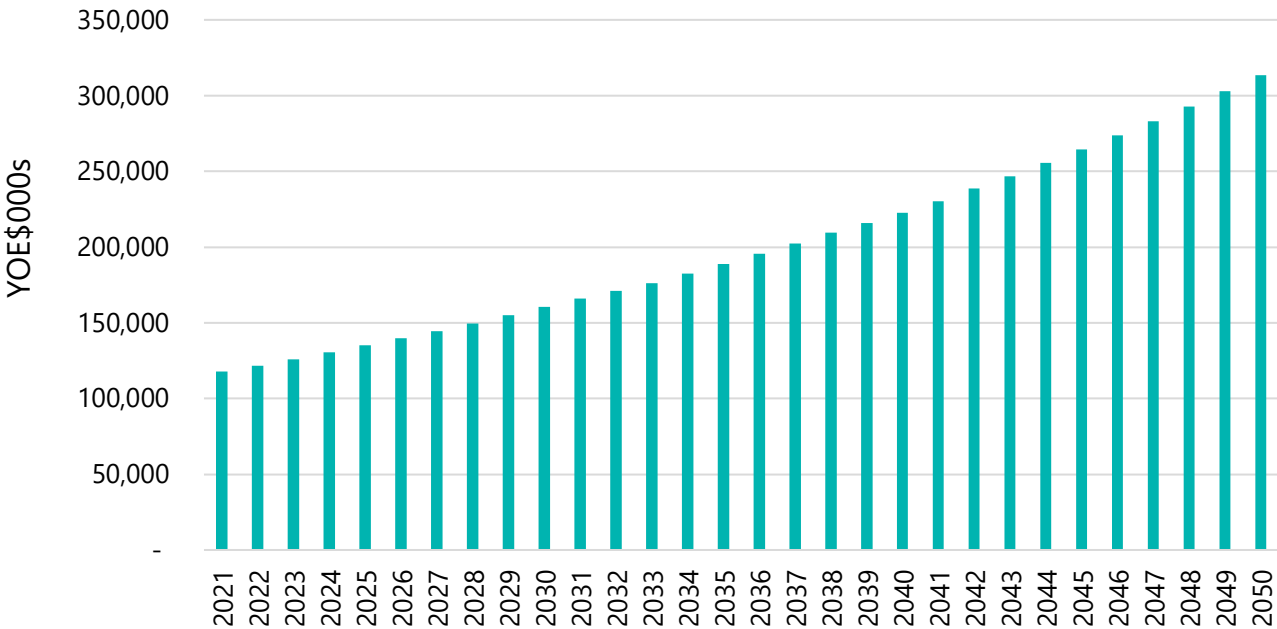
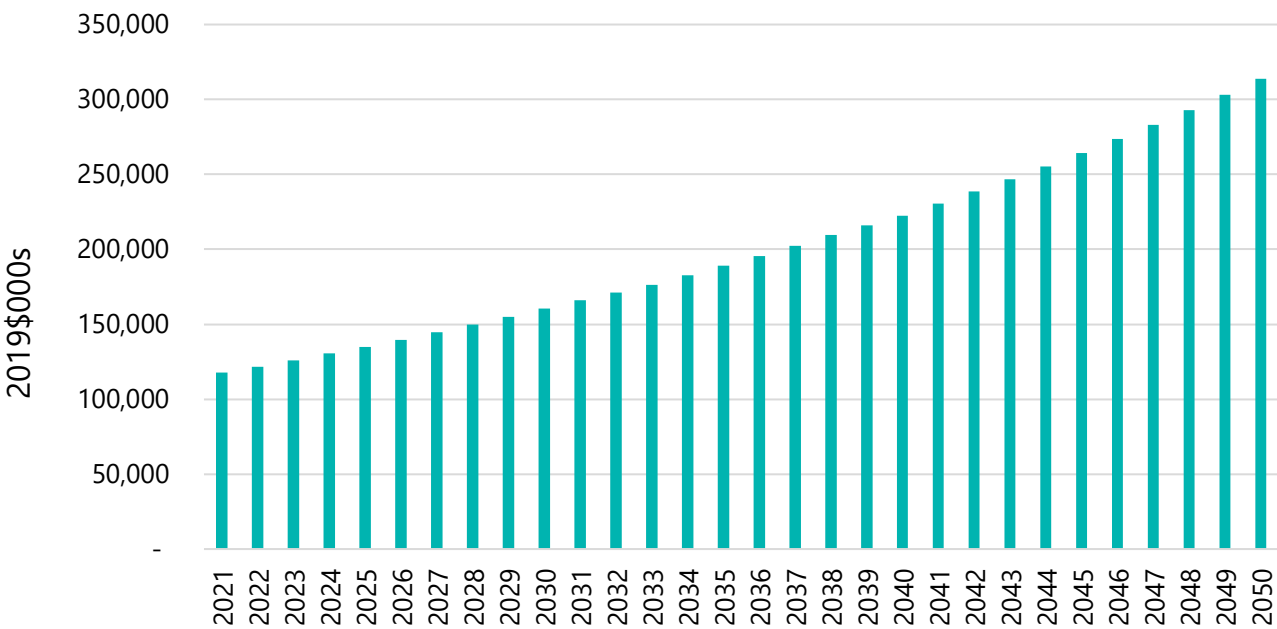


Figure B-5: Sales Tax Revenue Projections, Full Penny, FY 2021 – FY 2050, 2019\$



Project Costs

This section of the appendix provides additional detail regarding the key assumptions used to determine the annual project costs for each scenario (Half Penny, Full Penny, and Previously Adopted).

PHASING

The program of projects for each of the scenarios described in this study are comprised of four modes: arterial rapid transit (ART), bus rapid transit (BRT), light rail transit (LRT), and heavy rail transit (HRT). The analysis assumes that the total capital costs are incurred over three phases: preliminary engineering (PE), right-of-way (ROW) acquisition, and construction. The default length of each phase is dependent on the mode of the project.

Table A-3 provides the assumed default length of each phase by mode.

Table B-3: Length of Each Phase by Mode, years

Phase	Mode			
	ART	BRT	LRT	HRT
PE	2	2	3	3
ROW	1	2	2	2
Construction	2	3	6	6

Table B-4 provides the assumed default distribution of capital costs by project phase.

Table B-4: Distribution of Capital Costs by Phase

Phase	% of Total Capital Costs
PE	10%
ROW	20%
Construction	70%

Note that the phasing assumptions described in this section should be considered the default assumptions. However, each individual project may or may not face project-specific challenges which may impact the project scope, schedule, and/or budget. Should the scope, schedule, and/or budget change at any point during the life of the project, the project phasing assumptions and costs will need to be updated.

ANNUAL CAPITAL COSTS

Table B-5: Half-Penny Scenario, Annual Capital Costs, 2018 \$000s

Project	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Total
Candler Road ART	700	700	2,800	4,900	4,900	-	-	-	-	-	-	14,000
I-20 East BRT (Segment 2)	10,250	10,250	20,500	20,500	47,833	47,833	47,833	-	-	-	-	205,000
North Druid Hills ART	900	900	3,600	6,300	6,300	-	-	-	-	-	-	18,000
Lawrenceville Hwy ART	1,150	1,150	4,600	8,050	8,050	-	-	-	-	-	-	23,000
Memorial Drive ART (Segment 2)	775	775	3,100	5,425	5,425	-	-	-	-	-	-	15,500
Buford Highway BRT	11,000	11,000	22,000	22,000	51,333	51,333	51,333	-	-	-	-	220,000
Clifton Corridor ART	5,725	5,725	22,900	40,075	40,075	-	-	-	-	-	-	114,500
Memorial Drive ART (Segment 1)	1,400	1,400	5,600	9,800	9,800	-	-	-	-	-	-	28,000
I-285 Top End BRT	6,500	6,500	13,000	13,000	30,333	30,333	30,333	-	-	-	-	130,000
I-20 East BRT (Segment 1)	4,220	4,220	8,440	8,440	19,693	19,693	19,693	-	-	-	-	84,400
Clifton Corridor LRT (Segment 1b)	3,600	3,600	3,600	10,800	10,800	12,600	12,600	12,600	12,600	12,600	12,600	108,000
I-285 East Wall BRT	9,000	9,000	18,000	18,000	42,000	42,000	42,000	-	-	-	-	180,000
Clairmont Road ART	1,225	1,225	4,900	8,575	8,575	-	-	-	-	-	-	24,500
LaVista Road ART	1,525	1,525	6,100	10,675	10,675	-	-	-	-	-	-	30,500
Johnson Ferry Road ART	725	725	2,900	5,075	5,075	-	-	-	-	-	-	14,500

Table B-6: Full-Penny Scenario, Annual Capital Costs, 2018 \$000s

Project	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Total
LRT to Panola Road (Final version is to Wesley Chapel)	24,833	24,833	24,833	74,500	74,500	86,917	86,917	86,917	86,917	86,917	86,917	745,000
North Druid Hills ART	900	900	3,600	6,300	6,300	-	-	-	-	-	-	18,000
Clairmont Road ART	1,225	1,225	4,900	8,575	8,575	-	-	-	-	-	-	24,500
LaVista Road ART	1,525	1,525	6,100	10,675	10,675	-	-	-	-	-	-	30,500
Lawrenceville Hwy ART	1,150	1,150	4,600	8,050	8,050	-	-	-	-	-	-	23,000
Memorial Drive ART (Segment 2)	775	775	3,100	5,425	5,425	-	-	-	-	-	-	15,500
Buford Highway BRT	11,000	11,000	22,000	22,000	51,333	51,333	51,333	-	-	-	-	220,000
Memorial Drive ART (Segment 1)	1,400	1,400	5,600	9,800	9,800	-	-	-	-	-	-	28,000
I-285 Top End BRT	6,500	6,500	13,000	13,000	30,333	30,333	30,333	-	-	-	-	130,000
I-20 East BRT (Segment 1)	4,220	4,220	8,440	8,440	19,693	19,693	19,693	-	-	-	-	84,400
Clifton Corridor LRT (Segment 1b)	3,600	3,600	3,600	10,800	10,800	12,600	12,600	12,600	12,600	12,600	12,600	108,000
I-285 BRT (Segment 2)	9,000	9,000	18,000	18,000	42,000	42,000	42,000	-	-	-	-	180,000
Clifton Corridor LRT (Segment 2)	31,667	31,667	31,667	95,000	95,000	110,833	110,833	110,833	110,833	110,833	110,833	950,000
Candler Road LRT	30,200	30,200	30,200	90,600	90,600	105,700	105,700	105,700	105,700	105,700	105,700	906,000
Hairston Road ART	1,800	1,800	7,200	12,600	12,600	-	-	-	-	-	-	36,000
Covington Highway ART	1,475	1,475	5,900	10,325	10,325	-	-	-	-	-	-	29,500

Table B-7: Full Penny Scenario, Annual Capital Costs, 2018 \$000s

Project	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Total
I-20 East HRT Extension	110,000	110,000	110,000	330,000	330,000	385,000	385,000	385,000	385,000	385,000	385,000	3,300,000
I-20 East BRT in Exclusive ROW	105,500	105,500	211,000	211,000	492,333	492,333	492,333	-	-	-	-	2,110,000
Clifton Corridor LRT from Emory to Clairmont	3,600	3,600	3,600	10,800	10,800	12,600	12,600	12,600	12,600	12,600	12,600	108,000
Clifton Corridor LRT from Clairmont to Avondale	31,667	31,667	31,667	95,000	95,000	110,833	110,833	110,833	110,833	110,833	110,833	950,000

DISCRETIONARY PROJECTS

In addition to the program of capital projects, each scenario also includes a discretionary fund to cover routine upkeep and maintenance of the facilities affiliated with the transit improvements in the short term (e.g., sidewalk improvements). The analysis assumes the following is true for the discretionary fund:

- Expended evenly over the first 15 years of the project O&M period
- 60% dedicated to capital discretionary projects
- 40% dedicated to O&M discretionary projects

Long Term Bonds

Common practice for MARTA is to issue long term bonds backed by sales tax revenue to cover capital funding shortfalls. For this analysis, the team assumed that capital funding shortfalls would be alleviated by issuing long term bonds backed by the proposed additional sales tax, as needed. In addition to long term bonds, the next section provides an overview of other funding and financing options to fill funding shortfalls in support of additional transit development.

HB 930 requires that if sales tax revenue is used to back bond issuances, the bonds are repaid in 25 years or less. Note that HB 930 does not specify a required debt service coverage ratio, however, the MARTA Act stipulates that debt service payments in a given year cannot exceed 45 percent of sales tax receipts in that year, which typically is satisfied by a debt service coverage ratio (DSCR) of 2.0. DeKalb is not required to adhere to this rule since it would levy the additional sales tax under HB 930. However, it is important to recognize that the County's credit rating, which determines the interest rate on the bonds, is heavily influenced by the DSCR. Therefore, in order to minimize financing costs due to interest, it is advisable that the County only issues bonds if it can satisfy a DSCR of at least 2.0.

Other Funding and Financing Options

This section provides an overview of other funding and financing options to fill funding shortfalls in support of additional transit development. The purpose of this section is to provide a menu of potential funding and financing options in addition to a local sales tax; however, this section does not provide a detailed strategy for how to apply these mechanisms in DeKalb County.

VALUE CAPTURE

Value capture refers to an approach that can be used to help pay for infrastructure project's capital or maintenance costs by monetizing the development benefits that the infrastructure project creates and channeling them into a project fund. The most common revenue tools available for value capture tend to fall into three general categories: tax-increment financing

(TIF), special tax assessments, and development-impact based fees. Each of these general categories has a different type of tax/fee structure, each resulting in a unique financial profile in terms revenue stream stability, predictability, growth over time, and overall risk and return.

Tax-Increment Financing

In general terms, TIF is a mechanism for capturing all or part of the increased property tax paid by properties within a designated area. TIF is not an additional tax, nor does it deprive governments of existing property tax revenues up to a set base within the TIF district. Instead, part of or all of future property taxes (above the set base level) resulting from increased property values or new development are dedicated to paying for the public improvement that caused the value increases and additional development.

TIF is most commonly used by local governments to promote housing, economic development, and urban redevelopment in established neighborhoods, but in some cases has been used to finance transportation projects, mainly public transit. TIF revenues can be used as they accrue on a pay-as-you-go basis or can be bonded against. A public agency may also issue a general obligation (GO) bond to finance improvements and use future TIF district revenue to replenish the general fund. This GO approach usually provides better debt terms than if the TIF revenue is the only stream dedicated to repay the bonds, though it usually has undesirable impacts on the credit of the parent entity making the GO pledge by increasing its overall debt levels.

The typically stable growth and minimal long-term volatility of property values makes TIF a reliable stream of revenues to bond against.

Special Tax Assessment Districts

Special tax assessments are additional taxes paid within defined geographic areas where parcels receive a direct and unique benefit from a public improvement. Generally, the cost of the improvement is allocated to property owners within the defined benefit zone and collected in conjunction with property or sales taxes over a predetermined number of years. Once the annual assessment collections cover the cost of the improvement (or debt issued to pay for the improvement), the assessment is removed.

Implementation of special tax districts can be challenging relative to other value capture mechanisms, as increases in taxes are politically sensitive and highly visible to affected property owners, businesses, and local consumers. Before this mechanism becomes politically feasible, it will require additional effort to convince local landowners and businesses that the tax is worth the value of the infrastructure improvement. Once in place; however, they are relatively easy to administer, and the additional taxes are collected along with current property tax. Special tax districts are one of the most common forms of value capture for transit projects, in both the US and Canada.

Because special taxes represent additional taxes on existing property, the revenue stream tends to begin at a higher level compared to TIF. However, because it is typically limited to a certain maximum percentage, the upside growth potential of special tax is more limited relative to TIF revenues.

Development Impact Fees

Development impact fees and excise taxes are one-time charges collected from developers and/or property owners to fund public infrastructure and services made necessary by new development. Impact programs are most successfully implemented in areas poised for significant growth with little or no existing development. Generally, fees are based on a formula taking into consideration the number of new dwelling units or square feet of non-residential space and the relative benefit the infrastructure provides the property. For transportation projects, relative benefit is usually determined by the distance a development is located from the improvement.

Politically, the mechanism is generally less opposed than special assessments, as fees are levied against new development rather than existing residents and business owners. Similar to TIF, the perception that imposing impact fees on new development allows improvements to “pay their own way” may increase public acceptance. However, in some instances, fees have become too onerous and have reduced the competitiveness of certain areas. Fees that are higher than one or two percent of the cost of a property could impact that property’s competitiveness relative to a similar property with no fee, as fees are usually passed through from developers to buyers in the form of higher home prices or commercial rents.

Revenue streams from impact fees tend to be much more volatile and unpredictable relative to TIF and special assessments. This is because the revenue is contingent entirely upon new real estate development, which can be heavily cyclical and extremely sensitive to regional and national economic conditions. To create a district in which development fees can be enforced, the local government must approve this district and related project plans.

PUBLIC-PRIVATE PARTNERSHIPS

The National Council for Public Private Partnerships (NCP3P) defines Public-Private Partnerships (P3) as “a contractual arrangement between a public agency (federal, state or local) and a private sector entity. Through this agreement, the skills and assets of each sector (public and private) are shared in delivering a service or facility for the use of the general public.”

Some common features of P3s include:

- Private sector involvement ranging from project delivery, financing and funding, on-going operation, to ongoing maintenance;
- Risk-sharing; and
- Payment to private sector linked to performance.

P3s have the potential to support a significant share of project costs and could facilitate lower project costs as part of a comprehensive program delivery strategy. However, P3s includes a transfer of associated risk to the private sector, meaning program sponsors will have less direct control of the program.

There are two major types of P3 financing:

- P3 equity is an ownership stake in an enterprise with an aim of making a profitable return. This may include investment from commercial developers, financial

investors, pension funds, sovereign wealth funds, insurance companies, and private equity funds. A P3 equity stake is just one component of an overall project delivery strategy.

- P3 debt can be coupled with equity to finance the initial investment and may include Private Activity Bonds (PABs), taxable bonds, bank loans, and other debt instruments.

TRANSPORTATION INFRASTRUCTURE FINANCE AND INNOVATION ACT

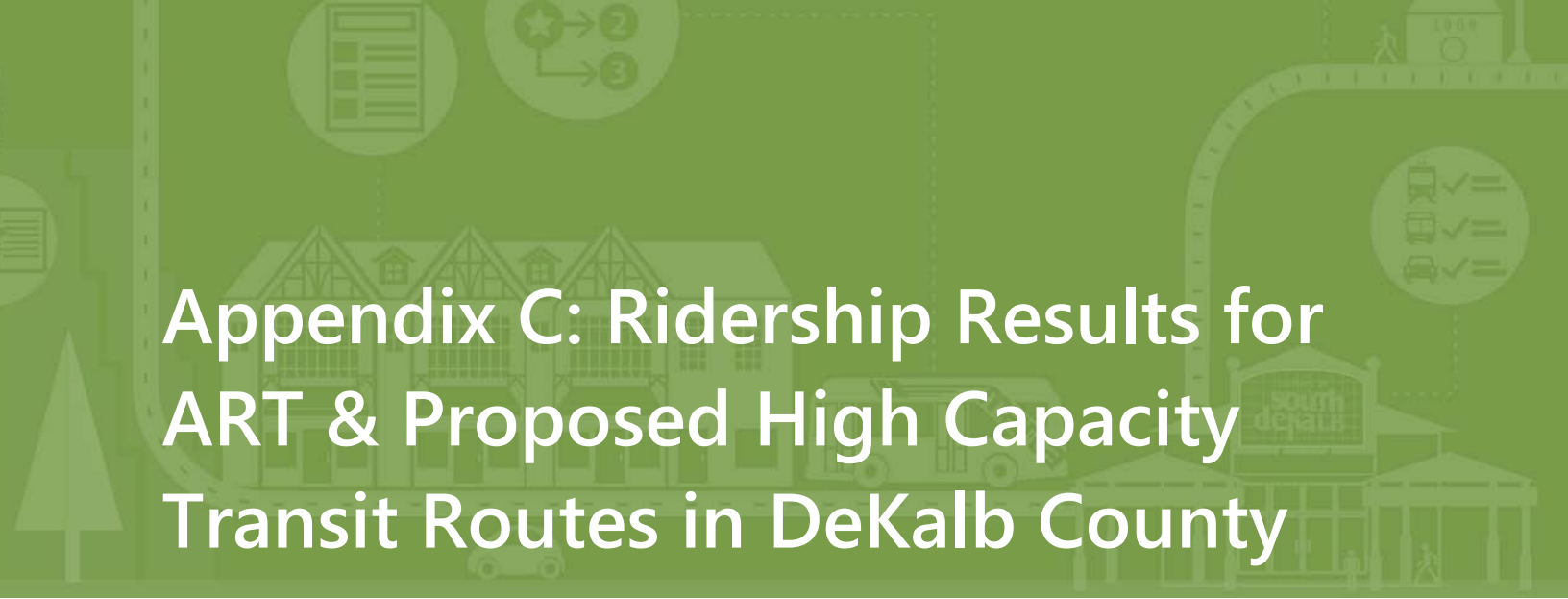
The United State Department of Transportation's (USDOT) Transportation Infrastructure Finance and Innovation Act (TIFIA) program provides federal credit assistance in the form of direct loans, loan guarantees, and standby lines of credit to finance surface transportation projects of national and regional significance. TIFIA leverages federal funds by attracting private and non-federal investment to projects that critically improve the nation's surface transportation program. TIFIA credit assistance provides improved access to capital markets, flexible repayment terms, and potentially more favorable interest rates than can be found in private capital markets for similar instruments. TIFIA financing enables the applicant to receive more favorable interest rates for the project's share of non-federal borrowing due to lowered investment risk.

Many surface transportation projects (i.e., highway, transit, railroad, intermodal freight, and port access) are eligible for assistance. Each dollar of federal funding applied to TIFIA (as the subsidy amount) can provide approximately \$10 in credit assistance and leverages approximately \$30 in transportation infrastructure investment.

Up to 50 percent of the capital cost of an eligible project may be financed through TIFIA, although in practice USDOT lends no more than 33 percent of costs to a single project. The combined share of TIFIA proceeds and other federal funding for a given project may not exceed 80 percent of the total project cost. To date, TIFIA has financed 16 transit projects totaling \$2.650 billion. Several of these projects have combined TIFIA financing and funding from FTA's New Starts program making project financing more manageable by providing up-front grant funding to cover a share of project costs, and low-cost federal loans to leverage each project's local match.

TIFIA extends loan rates effectively equivalent to the prevailing 30-year U.S. Treasury Bond rate at financial close plus one basis point. The program permits repayment over a term of up to 35 years after a project's substantial completion and gives borrowers the flexibility to defer principal and capitalize interest payments for up to 5 years. Principal payments may be structured to ramp up with projected growth in revenues pledged to service TIFIA debt. Projects must meet all federal funding eligibility requirements (including NEPA, Buy America, Davis-Bacon, and others). Loans may be prepaid in whole or in part at any time without penalty.

TIFIA is flexible and cost-effective. The limited pool of financial capacity and the cap on the percentage of TIFIA financing by project are the program's biggest disadvantages.

The background is a green-tinted illustration of a transit system. It features a winding road, a bus, a train, and a station with a sign that says "South dekalb". There are also circular icons showing a checklist, a star with arrows, and a train with checkmarks.

Appendix C: Ridership Results for ART & Proposed High Capacity Transit Routes in DeKalb County

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2015 Ridership									
		Daily Vehicle Miles	Population Within 1/2 Mile of Route	Total Employment Within 1/2 Mile of Route	Service Employment Within 1/2 Mile of Route	Fare	Total Ridership	Low Estimate	High Estimate
Project Name	Factor Weight	0.23 35%	0.104304 15%	0.147806 20%	0.358885 25%	0.000012 5%			
Columbia Drive ART	ART-1	571	22,867	7,873	2,457	\$2.5	860	700	1,000
North Druid Hills ART	ART-10	563	32,633	60,128	41,011	\$2.5	6,020	5,400	6,700
E Ponce de Leon Avenue ART	ART-11	832	42,113	18,445	6,251	\$2.5	1,840	1,600	2,100
North Druid Hills ART	ART-13	822	26,200	37,362	18,680	\$2.5	3,260	2,900	3,600
LaVista Rd ART	ART-15	1117	38,280	37,126	12,134	\$2.5	2,880	2,500	3,200
Hairston Rd ART	ART-16	1369	51,837	18,791	5,962	\$2.5	2,020	1,800	2,300
Memorial Dr ART (Seg. 3)	ART-5	941	29,839	17,642	7,748	\$2.5	1,760	1,500	2,000
Memorial Dr ART (Seg. 1)	ART-6	958	39,015	115,632	53,907	\$2.5	8,950	8,000	9,900
Memorial Dr ART (Seg. 2)	ART-17	622	27,457	13,023	5,758	\$2.5	1,390	1,200	1,600
Covington Hwy ART	ART-18	1176	37,959	12,856	3,029	\$3.5	1,340	1,200	1,500
Candler Road ART	ART-7	647	26,015	17,351	8,162	\$2.5	1,710	1,500	1,900
Clairmont Road ART	ART-8	874	37,233	42,429	21,337	\$2.5	3,830	3,400	4,300
Johnson Ferry ART	ART-9	470	16,618	41,288	29,531	\$2.5	4,170	3,700	4,600
Panola Road ART	ART-12Alt	1452	47,762	20,461	5,996	\$2.5	2,010	1,800	2,300

2040 Ridership									
		Daily Vehicle Miles	Population Within 1/2 Mile of Route	Total Employment Within 1/2 Mile of Route	Service Employment Within 1/2 Mile of Route	Fare	Total Ridership	Low Estimate	High Estimate
Project Name									
Columbia Drive ART	ART-1	571	29,733	10,686	3,668	\$2.5	1,160	1,000	1,300
North Druid Hills ART	ART-10	563	38,832	69,721	48,495	\$2.5	7,070	6,300	7,800
E Ponce de Leon Avenue ART	ART-11	832	48,206	25,523	9,363	\$2.5	2,420	2,100	2,700
North Druid Hills ART	ART-13	822	31,748	47,848	25,201	\$2.5	4,240	3,800	4,700
LaVista Rd ART	ART-15	1117	54,085	48,021	17,347	\$2.5	3,920	3,500	4,400
Hairston Rd ART	ART-16	1369	63,422	25,316	8,869	\$2.5	2,650	2,300	3,000
Memorial Dr ART (Seg. 3)	ART-5	941	36,927	24,827	11,612	\$2.5	2,430	2,100	2,700
Memorial Dr ART (Seg. 1)	ART-6	958	59,825	141,540	70,641	\$2.5	11,540	10,300	12,700
Memorial Dr ART (Seg. 2)	ART-17	622	34,011	18,652	9,201	\$2.5	1,960	1,700	2,200
Covington Hwy ART	ART-18	1176	46,805	17,467	4,898	\$3.5	1,790	1,600	2,000
Candler Road ART	ART-7	647	34,170	22,697	11,887	\$2.5	2,330	2,000	2,600
Clairmont Road ART	ART-8	874	45,032	50,717	27,859	\$2.5	4,780	4,300	5,300
Johnson Ferry ART	ART-9	470	20,404	54,670	40,059	\$2.5	5,570	5,000	6,200
Panola Road ART	ART-12Alt	1452	57,486	27,554	9,262	\$3.5	2,670	2,400	3,000

Scenarios	Build Projects - BRT / LRT	MARTA Blue Line	Existing / No- Build	More MARTA / GA 400	Total Ridership excluding ART	Difference from No-Build (excluding ART)	Proposed ART Routes in DeKalb County	Total Ridership	Difference from No-Build
No-Build		87,447	570,553		658,000	0		658,000	0
Half Penny	30,264	84,747	543,451	45,014	703,476	45,476	35,840	739,316	81,316
Full Penny	37,358	84,729	537,782	45,020	704,889	46,889	36,750	741,639	83,639
Previously Adopted	16,935	103,221	546,481	44,893	711,530	53,530	0	711,530	53,530

Major Projects	No-Build / Existing	Half Penny	Full Penny	Previously Adopted Scenario
I-20 East BRT (Seg. 1 & 2)		9,949	8,737	6,986
Buford Highway BRT		4,576	4,580	
I-285 Top End BRT & I-285 East Wall BRT		10,203	9,881	
Clifton Corridor LRT (Seg. 1b)		5,536		
Clifton Corridor LRT (Seg. 1b & 2)				9,949
Clifton Corridor LRT (Seg. 1b & 2) Candler Road LRT, & LRT to Wesley Chapel Road			14,160	
MARTA Blue Line	87,447	84,747	84,729	103,221
Total	87,447	115,011	122,087	120,156
Difference from No-Build		27,564	34,640	32,709



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