

# CITY OF DECATUR COMMUNITY TRANSPORTATION PLAN UPDATE AUGUST 2018



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#### **Executive Summary**

Much has changed since Decatur's adoption of the original Community Transportation Plan (CTP) in 2007. Over the last decade, Decatur has moved forward implementing the active living vision first articulated in the CTP with new programs and new bicycle and pedestrian facilities coming on line almost every year. The purpose of this document, Decatur's Community Transportation Plan Update, is to take a fresh look at that 2007 plan and recommend appropriate updates. The Update is largely guided by the transportation vision outlined in the recent 2016 Decatur 360 Comprehensive Plan. That plan proposes a dynamic and well-rounded transportation network that enhances the environmental health of the city and increases the wellness of its residents. The Update is founded on the vision of creating a safe, efficient, and well-rounded transportation network, utilizing all forms of transportation – walking, biking, public transit, and vehicle mobility. Data was collected to inform decisions about the future of Decatur's transportation network. A thorough review of prior relevant planning documents laid the foundation for the Update. An on-line community survey and a community WikiMap included more than one thousand respondents and gathered information about the relevant transportation-related needs, opportunities and challenges currently facing the community. In addition, a series of community workshops and "Transportation Academy" lectures informed community members about the progress of the Update and provided opportunities for the participants to voice their opinions and concerns.

The City's existing population; current zoning; existing city facilities; and existing transit, pedestrian, bicycle, and parking facilities, were part of an existing conditions assessment which expanded the understanding of the City's transportation needs.

Beyond this existing condition assessment, to further understand the City's current transportation needs, several technical studies were conducted. This included an evaluation of the status of the 2007 Community Transportation Plan recommendations, a review of available GDOT traffic counts, an analysis of historical crash data, identification of priority intersections of concern, and an analysis of the level of traffic stress.

Following the data collection and technical studies phases, a series of recommendations were made to further enhance the City's transportation network and promote the City's goal of enhancing environmental health and the wellness of its residents. A key recommendation included in this report is the need to update the City's existing street typologies, as well as recommendations on how to align existing City policies to accommodate the recommended street typologies. Multiple options (typical sections) are provided for what a street could like within each typology. Other recommendations included the identification of priority capital corridors, priority intersection improvements, and priority traffic calming corridors. Routes for additional off-road multi-use trails and potential circulator routes are also recommended. Recommendations are also made regarding the City's Safe Routes to School and downtown parking options. Much has changed in recent years when it comes to advances in transportation-related technology. The Update recommends that the City focus on opportunities to implement a circulator or micro-transit service, electric vehicle infrastructure, intelligent transportation systems/adaptive traffic controls, and intelligent parking solutions.

Finally, the implementation plan outlines a series of specific action items, provides guidance on potential costs and recommends next steps. By providing an action plan with suggested time lines, opinions of probable costs, potential partners, and potential funding sources, the Update provides the City a road map for achieving their transportation goals.

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# Introduction & Overview

#### 1.1 Purpose

The Decatur Community Transportation Plan Update reflects progress since the 2007 Community Transportation Plan and is largely guided by the vision outlined in the 2016 Decatur 360 Comprehensive Plan. While the 2007 Community Transportation Plan is the basis for this Update, the 2016 Decatur 360 Comprehensive Plan's transportation section guides the purpose and vision of this Update.

The 2018 Community Transportation Plan Vision is:

"To establish a safe and efficient transportation system that maximizes and enhances Decatur's vehicular and non-vehicular resources – emphasizing 'complete streets,' a transportation network that provides safe and efficient mobility to all users through identification of pedestrian, bicyclist, public transit, and vehicle mobility improvements."

The City of Decatur is an Active Living Community and prides itself in providing opportunities for daily physical activity for people of all ages and abilities. One way the City achieves this is by offering a variety of transportation options, including walking, biking, and public transit by bus and rail. In addition to creating healthy lifestyle opportunities for residents, multiple transportation options also improve air quality. Thus, by improving all transportation options, the City of Decatur is able to enhance the environmental health and wellness of its residents. In 2007, Decatur adopted a Community Transportation Plan to address the city's transportation needs. In Spring 2017, the City of Decatur initiated a planning process to update the 2007 Community Transportation Plan. The Update provides a detailed assessment of current transportation plan projects, assessment of plan goals, review of existing plans and ordinances, meetings with stakeholders, innovative public engagement, plan development, and preparation of deliverables.

The purpose of the Update is to further enhance transportation opportunities for Decatur residents. This Update identifies and outlines current and potential pedestrian, bicyclist, public transit, and vehicular mobility improvements throughout the city, further

encouraging healthy lifestyles and active living through alternative forms of transportation and thoughtful transportation system planning.

#### 1.2 Community Planning Framework

Current relevant planning documents help inform the vision and goals of the Update. Related City of Decatur planning documents include the Community Transportation Plan (2007), Strategic Plan (2010), Better Together Community Action Plan (2015), Decatur 360 Comprehensive Plan - Comprehensive Plan Update (2016), and PATH Connectivity Implementation Plan (2016). Other pertinent planning documents include the Atlanta Regional Commission's Atlanta Region's Plan (2016) and Bike-Pedestrian Plan – Walk, Bike, Thrive!. These plans are briefly summarized below. The complete versions of the City's plans are available on the Decatur Next website: www.decaturnext.com.

#### **2007 Community Transportation Plan**

In 2007, the City of Decatur adopted the Community Transportation Plan to create a more balanced transportation network. The 2007 Plan had four guiding principles: health, mobility choice, community, and connectivity. With community input, the City adopted a complete streets policy. It became important to the community at large to rethink how its existing street space is shared among pedestrians, bicyclists, transit riders, and motorists. That vision is reflected in the improvements the City has been able to make on many of its streets, which now bring choices in how Decatur residents and visitors reach their destinations.

The 2007 Plan was also at the forefront of considering how transportation plays a role in the health of a community. At the time, very few transportation plans were considering physical activity, social interactions, mental health, and air quality. The 2007 Plan became Decatur's commitment to create a well-rounded transportation system that promoted health, safety, and mobility for all users.

The vision of the 2007 Community Transportation Plan is to create a safe and efficient transportation system that promotes the health and mobility of Decatur citizens and visitors, creating better access to businesses and neighborhoods. Goals include:

- Ensure safety for all modes and users of all ages and abilities
- Establish a high level of connectivity and efficient movement
- Promote increased levels of physical activity

The four guiding principles of health, mobility choice, community and connectivity form the framework to the update of the 2017 Community Transportation Plan.

#### 2010 Strategic Plan

An update to the 2000 Strategic Plan, the 2010 Strategic Plan is the primary guide for policy, funding, and programming decisions for the city. The vision of the 2010 Strategic Plan is to assure a high quality of life for residents, businesses, and visitors both today and in the future. The City will achieve this through four principles:

- Manage growth while retaining character
- Encourage a diverse and engaged community
- Serve as good stewards of the environment and community resources
- Support a safe, healthy, lifelong community

#### 2015 Better Together Community Action Plan

The Better Together initiative grew out of the City's 2010 Strategic Plan and focuses on the plan's Principle B to "encourage a diverse and engaged community." This principle encompasses four goals: to maintain and encourage diversity of race, ethnicity, income, culture, age, family type, and other kinds of diversity; strengthen communication and involvement in and among neighborhoods, city government, volunteer boards and commissions, institutions, community organizations, local businesses, and Decatur as a whole; support, expand, and develop programs, services, events, and opportunities that respond to diverse interests, encourage community interaction, and promote a stronger sense of community; and promote a culture of creative innovation and expression. Through a series of broad civic conversations, the Better Together Community Action Plan identified the following three focus areas:

 An Equitable and Inclusive City: Cultivating relationships across differences and creating conditions for all community members to thrive and participate fully in city life. This includes applying an equity lens in matters of leadership and decision-making and conducting community outreach in culturally relevant ways.

- Racially-Just Community Policing: Improving relationships between community members and law enforcement by addressing racism, bias and privilege to ensure all community members, especially people of color, are treated in a just way with equity and respect.
- Diverse and Affordable Housing: Preventing displacement of existing residents and supporting the development of a variety of housing types and prices.

## 2016 Decatur 360 Comprehensive Plan - Comprehensive Plan Update

The Decatur 360 Comprehensive Plan is a midterm review of the 2010 Strategic Plan. By checking in half way through the ten-year term of the Strategic Plan, the City is able to see how accurate the assumptions laid out in the plan actually were. While the Decatur 360 Comprehensive Plan looked at several facets of city planning, a large focus was dedicated to the City's transportation network. The transportation vision of the Decatur 360 Comprehensive Plan is to establish a safe and efficient multi-modal system that maximizes and enhances Decatur's vehicular and non-vehicular resources – emphasizing "complete streets," a multi-modal transportation network that provides safe and efficient mobility to all users through identification of pedestrian, bicyclist, public transit, and vehicle mobility improvements. The plan's transportation vision is supported by the following goals:

- By encouraging residents, commuters, and visitors to use alternative forms of transportation other than motor vehicles, the City of Decatur promotes activities that collectively contribute to improved air quality
- Increase transit use with the co-location of mixed use and higher density residential developments near transit facilities
- Study mobility and connectivity city-wide
- Create and maintain bicycle and pedestrian friendly community
- Design innovative parking options for the downtown and central business core
- Increase connectivity between the Oakhurst and Downtown business core districts
- Identify and prioritize improvements to pedestrian facilities through a citywide sidewalk assessment
- The vision and goals of the Decatur 360 Comprehensive Plan

directly influence the vision of this Community Transportation Plan Update.

#### **2016 PATH Connectivity Implementation Plan**

In an effort to improve bicycle and pedestrian connectivity throughout the City, a group of interested residents worked with the PATH Foundation to create a bicycle and multi-use trail connectivity and implementation plan. The plan serves as the blueprint for the city's multi-use trail development for the next ten years with an implementation goal of building approximately 9.2 miles of the Decatur PATH system by 2027.

#### 2016 Atlanta Region's Plan

The Atlanta Region's Plan is a long-range blueprint that details the investments that will be made over the next 20 years to ensure metro Atlanta's future success and improve the region's quality of life. The transportation component of the plan aims to: improve mobility by investing over \$93 billion in the region's transportation infrastructure; create more vibrant, walkable communities; meet the needs of the region's fast-growing population of older adults; and ensure a supply of clean, abundant water. Goals of the plan include:

- Ensuring a comprehensive transportation network, incorporating regional transit and twenty-first century technology.
- Developing additional walkable, vibrant centers that support people of all ages and abilities.

#### 2016 Bike-Pedestrian Plan - Walk, Bike, Thrive!

ARC's plan establishes ambitious goals in support of The Atlanta Region's Plan to help the region become "one of the most connected and safest regions in the United States for walking and bicycling":

- Create walking and bicycling options for everyone in every community
- Ensure safer and more accessible bicycling and walking in the region
- Tie walking and biking improvements to quality of life, economic competitiveness, and health
- Establish a vision for a Regional Trail Network
- Develop a strategy based on compounding growth and relentless incrementalism— i.e. where do we start and what do we do next?
- Use the region's pivoting growth and fresh momentum so that

in five years, Atlanta can market itself as one of the most walk-friendly and bike-friendly regions in the nation

#### 1.3 Community Involvement

Community outreach was a critical component of the Update process. The design team engaged the community in a variety of ways including stakeholder meetings, public workshops, an online survey, and an online mapping survey called WikiMap.

#### **Stakeholder Meetings**

Stakeholder meetings were intended to inform Decatur residents and members of city civic groups about the Update and in turn informed the planning team about key issues in the planning process. During stakeholder meetings, stakeholders were given a presentation about the project and asked to participate in an engagement exercise; this allowed stakeholders to indicate transportation problem areas, either at intersections or along corridors. Stakeholders were also encouraged to participate in discussion about current transportation issues within the city, as well as potential transportation-related opportunities and solutions. Stakeholders who attended the meetings included representatives from:

- Neighborhood Associations
- Decatur Business Association
- Lifelong Decatur Advisory Board
- Decatur Youth Council
- Environmental Sustainability Board
- Better Together Advisory Board
- Lifelong Community Advisory Board

#### **Community Workshops**

Over the course of the Update process, a series of three community workshops were held at the Decatur Recreation Center. These workshops were open to all Decatur residents. The results of the community participation activities can be found in the Technical Appendix.

**Community Kick-Off Workshop.** The first workshop, the Community Kick-Off Meeting, was held on **October 26, 2017**. During this meeting, the design team presented a review of previous relevant studies and plans, provided the purpose of the Update, and discussed

future trends in transportation. The design team also presented the audience with the first installment of the Transportation Academy called "The Capacity of a Street." Following the presentation, participants were asked to complete several engagement activities. On a large-scale map of Decatur, participants were asked to identify problematic vehicle, pedestrian, and bicycle areas. Participants were also encouraged to note gaps and/or barriers on the map and leave additional comments. On separate boards, participants were asked to vote on community transportation priorities such as reduced congestion, safe routes to school, and rideshare. Participants also voted on future transportation priorities, including autonomous vehicles, complete streets, and transit expansion. A third activity gave participants the chance to voice their opinions about the vision set forth in the Decatur 360 Comprehensive Plan (2016). A final display gave participants space to leave any additional comments.



**Figure 1.1:** Decatur residents participate in the first community meeting at the Decatur Recreation Center. (Gregory White, October 2017.)

**Second Community Workshop.** The second community workshop was held on **February 1**, **2018**. Similar to the first workshop, the design team gave a presentation related to progress on the Update, presented the second installment of the Transportation Academy called "Complete Streets – What's In It For Me?," and participants

were then asked to engage in several activities. The presentation focused on the findings of the community survey, the WikiMap survey, and the existing conditions and analysis maps. Key transportation issues were reviewed; these were based on information gathered during the first public workshop and the surveys. Potential transit circulator and off-road paths were introduced to the participants and there was a deeper discussion of future transportation technologies. The Transportation Academy presentation focused on complete streets and the importance of broad buy-in from community leaders, key decision-makers, and the public. The Transportation Academy presentation showcased the transportation, health, safety, livability, and economic benefits available to communities through the implementation of complete streets.

Engagement activities during the second community workshop were similar to the first workshop. Participants were asked to vote and/ or give their opinion on potential traffic calming corridors, proposed street typologies, key transportation issues, potential transit circulator routes, potential off-road multi-use trails, and the future of



**Figure 1.2:** Decatur residents listen as Addie Weber presents the second installment of the Transportation Academy "Complete Streets - What's In It for Me?" during the second community workshop on February 1, 2018.

transportation technology. There were also several maps showing existing conditions and analysis, which were open to public comment. Finally, the large scale map of Decatur was available as an open forum for participants to leave any kind of comments.

Final Community Workshop. The third and final public workshop was held on May 10, 2018. The primary purpose of this meeting was to review the draft recommendations of the Update and obtain community feedback. Similar to the first and second workshops, the design team gave a presentation related to progress on the Update, and presented the final installment of the Transportation Academy called "Traffic Calming: Making Safer Streets." Participants were then asked to engage in several activities. The presentation reviewed the findings presented during the second community meeting and focused on proposed recommendations. The Transportation Academy presentation focused on traffic calming, how traffic calming creates safer streets, and the benefits and limitations of traffic calming.

Following the format of the first two community workshops, the final community workshop ended with engagement activities. Participants were asked to prioritize streets for future investment by the City, as well as prioritize streets for traffic calming. Participants were also asked to vote on future transportation investments, such as multiuse paths, safe routes to school, electric vehicle infrastructure, and parking solutions. Participants were asked to share their comments about the proposed street typologies and what a typical road might look like within those typologies.

#### **Community Survey**

An online survey was launched on October 26, 2017, and at its close on December 17, 2017, 830 people had completed the survey. This response gives a 99% confidence level, with a  $\pm 4.5\%$  margin of error for the population size of Decatur, meaning that the city can be reasonably confident of the results.

The survey reveals a strong desire for better traffic flow, pedestrian safety and sidewalk construction and repairs. Funding should prioritize these items. When looking at specific areas, respondents are concerned with parking availability in Downtown Decatur. In Oakhurst, specifically, there are concerns with the condition of the streets. As mentioned, the demographics of the respondents do not



**Figure 1.3:** Voting results concerning future transportation investments.

completely align with the community's demographics. Notably, younger and older age groups were not fully represented in the survey and African Americans were slightly underrepresented. As priorities are determined, it will be critical to increase outreach to these groups. Based on the survey results it would appear that many residents of all age groups in Decatur would benefit from learning more about transportation options that are available to them, such as

biking, carpooling, vanpooling, and transit options. Changing individual habits, despite the effects of increasing congestion, will be difficult. Incentives such as providing free or discounted bus and/or train passes, showers and clothing lockers at work places and school could motivate more people to use alternative modes of transportation. See the Technical Appendix for the complete survey results.

#### **WikiMap**

As part of the public participation for the City of Decatur CTP Update, an online interactive map, or WikiMap, was created to collect public input about existing transportation conditions, perceived barriers, unsafe intersections, key destinations, desirable routes, and potential public transit infrastructure (see **Figure 1.4**). The map was open for input for three months from October 2017 through December 2017. The WikiMap was promoted to the community through a variety of means, including email blasts, links from websites, during stakeholder interviews, and as part of the October 2017 community meeting. WikiMap input was integrated into the broader public input and helped to develop recommendations for the CTP Update.

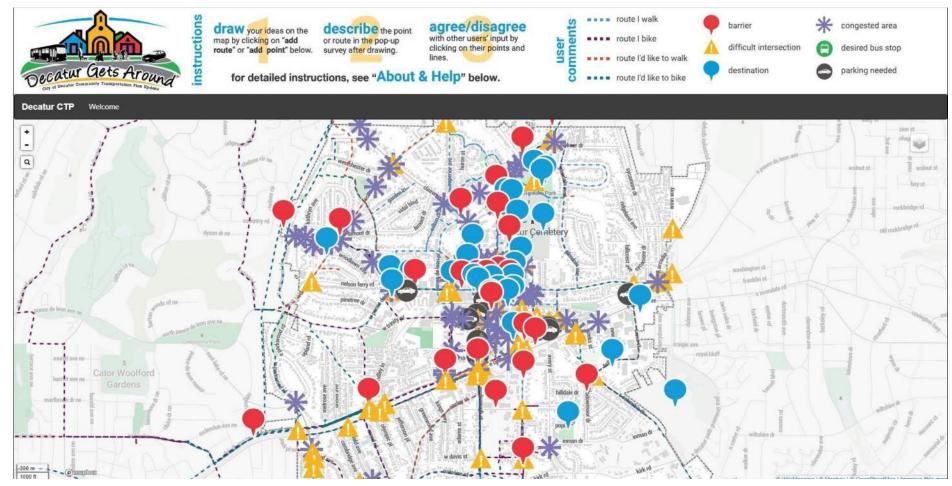


Figure 1.4: Comments and ideas collected by the WikiMap.

A total of 194 people participated in the WikiMap, contributing 550 individual comments. The participants of the WikiMap provided key information for developing recommendations along with demographic information of each participant. Key information collected through this online engagement tool is summarized below.

• Through all public comment mediums, difficult intersections and traffic congestion were mentioned often; the WikiMap proved no different, as these were the top two comment types. As shown in Figure 1.5, when only considering these two comment types, there was only a 10% gap between the two, with difficult intersections accounting for 55% of comments, while congested areas made up the remaining 45%.

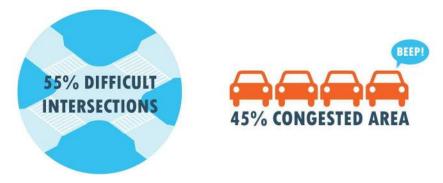
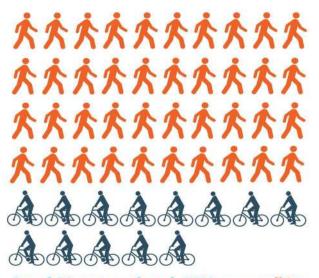


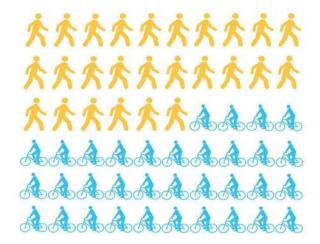
Figure 1.5: WikiMap Difficult Intersections as Compared to Congested Areas

- Users specified both routes that they currently walk and bike and routes that they would like to walk and bike but may not currently feel comfortable to do so. Existing walking routes made up three-quarters of all current routes, while desired biking routes accounted for nearly 60% of all desired routes. Figure 1.6 depicts this comparison. Walking and biking are certainly key modes within the transportation system in the City of Decatur, and the public would like to see more opportunities to use these active transportation modes.
- Eight locations were identified where more parking is perceived to be needed. Of these eight, six spoke to the need for more onstreet parking in downtown and residential areas, one expressed a desire for bike parking, and one lamented the lack of park-and-ride spaces at the MARTA Avondale Station.



Out of 53 routes selected, 75% were walking and 25% were biking.

### **CURRENT ROUTES**



Out of 60 routes selected, 43% were walking and 57% were biking.

#### **DESIRED ROUTES**

Figure 1.6: WikiMap Current Routes and Desired Routes

Respondents marked locations that are perceived barriers, indicating if they are a barrier to walking, biking, accessibility, and/or transit. As shown in **Figure 1.5**, walking barriers were the highest, with 79% of barrier points listed as a walking barrier followed by biking (53%), accessibility (35%), and transit (15%). Many responses were listed as a barrier in more than one way, so total percentages exceed 100%.

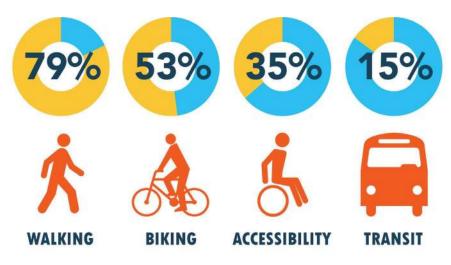


Figure 1.7: WikiMap Perceived Barriers

#### 1.4 Key Transportation Issues

Based on the information gathered from the community through stakeholder meetings, public workshops, the community survey, and the WikiMap survey, the following seven transportation issues were the most common:

- Congestion.
- Barriers.
  - Barriers include problem intersections and signalization.
- Behavior.
  - Behavior includes speed and safety.
- Community Circulator/Transit.
- Sustainable Infrastructure.
  - Primarily focuses on electric vehicle (EV) charging stations.
- Parking (Downtown).
- Bike/Pedestrian Connections.

# **2** Existing Conditions

#### 2.1 Community Characteristics

Great things have happened in the City of Decatur since the Community Transportation Plan. While still known for its vibrant neighborhoods, bustling downtown, and excellent school system, it has grown in size and population. Today's Decatur has just under 23,000¹ residents (up from 18,000 in 2010) within 4.54 square miles.

Decatur's population has grown due in large part to the City's desirable qualities – neighborhoods, shopping, restaurants, schools, parks, and access to transit. Access and mobility for all the City's residents is important, but particularly critical for school-aged children, the elderly, and those residents with limited resources. Providing a balanced transportation system that allows all users access to the City's amenities is critical to its health and economic wellbeing.

An Aging Population. The City of Decatur is dedicated to being a lifelong community.<sup>2</sup> Lifelong communities are devoted to creating and sustaining places for all ages and abilities. The City's population of those residents 65 years and older is 10% or approximately 2,200 people.<sup>3</sup> That is slightly up from the 2010 population of just over 2,000 residents.

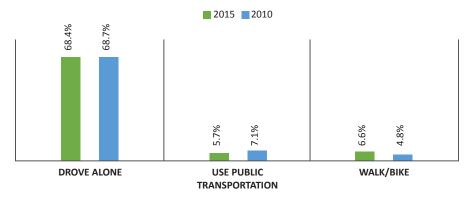
The City has also been instrumental in developing affordable senior housing. Oliver House, Christian Towers, The Holbrook of Decatur, and Clairmont Oaks are just a few of the housing choices located in Decatur that provide affordable senior housing with excellent access to transit and other amenities.

A New Generation. Stable neighborhoods and excellent schools have created a boom in those residents under 18 years of age. Since 2010, this population has almost doubled to 6,400 people. To encourage walking and bicycling to the area's schools, the City has actively promoted the Safe Routes to School program since 2005. Each school within the City has designated safe routes to their location to help improve fitness levels, reduce congestion around schools, and to improve air quality.

Access for those in greatest need. There is a strong correlation between low income populations and transit dependence due to a variety of factors including: job locations, sprawling land use patterns, and the rising cost of housing. Ensuring low income, disadvantaged populations have access to a well-balanced transportation system is important for job and educational access. The City of Decatur has several low-income communities and senior housing options that are located near MARTA heavy rail stations and along MARTA bus corridors.

Car Dependence. Zero-car households are becoming more and more common in the United States. Ride-sharing companies like Uber and Lyft, and a millennial generation that has shown little interest in car ownership, have shifted cities and the future of private automobile ownership. Autonomous vehicles will also have a great impact on how we plan and use our land and transportation system. Roughly, 10% of households in the City have no vehicle. That number increases to over 25% when looking at renter-occupied housing units.<sup>4</sup>

#### MEANS OF TRANSPORTATION TO WORK



**Figure 2.1:** Means of transportation to work. U.S. Census Bureau, 2006-2010 American Community Survey; 2011-2015 American Community Survey.

There has been a slight decrease in residents who used public transportation to travel to work. There has been a 2% increase in those residents who walk or bike to work.

<sup>1</sup> Annual Estimates of the Residential Population: April 1, 2010 to July 1, 2016; U.S. Census Bureau, Population Division.

<sup>2</sup> Atlanta Regional Commission, atlantaregiona.com/aging-resources/lifelong-communities.

<sup>3</sup> U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates.

<sup>4</sup> U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates.

#### Where We Go

Destinations abound within the City of Decatur. From centers of higher learning and community centers, to music venues and recreational activities, the City is fortunate to encompass a variety of attractions within its boundary. Enhancing and increasing access to these destinations for all users is a top priority for residents, businesses, and visitors alike.

Activity Centers. The City's primary activity centers are Downtown Decatur, Oakhurst Village, and the Avondale MARTA Station Area. These centers provide a mix of neighborhood and community-scale services. There has been considerable investment in streetscapes and bicycle and pedestrian facilities within Downtown and Oakhurst Village. College Avenue also is a primary activity corridor with numerous local restaurants and businesses.

MARTA has recently been pursuing Transit Oriented Development (TOD) at numerous heavy rail stations. The Avondale Station TOD is currently under construction and will provide 504 residential units, 41,500 square feet of retail uses and 25,000 square feet of institutional uses. The City of Decatur, MARTA, the City of Atlanta, and DeKalb County are currently working with neighboring communities to develop a master plan for a TOD at the East Lake MARTA Station.

Schools and Institutional Uses. The City Schools of Decatur are well known throughout Georgia for providing excellent public education, a factor that draws many families to the community. The school system consists of an early childhood learning center, five elementary schools, a 4th/5th grade academy, a middle school, and a high school. A new 3rd/4th/5th grade school is planned to open for the 2019/2020 school year. Several private schools and preschools are also located throughout the City. Decatur is also home to higher learning institutions, including Agnes Scott College, and Columbia Theological Seminary. Several local institutions are found within the core of the City. This is in large part due to the City serving as the county seat for DeKalb County. Other large institutional uses include City municipal buildings, Decatur High School, three MARTA stations, and the Community School.

**Greenspaces.** The City of Decatur strives to ensure that all residents are within a half mile of greenspace; they are always looking for opportunities to expand greenspace. Prior to 2017, the largest

greenspace within the City was the Decatur Cemetery, with 54 acres adjacent to downtown. Recently, the City acquired the 77-acre United Methodist Children's Home. While master planning is underway, 22 acres will be preserved as a natural conservation area.

#### 2.2 Land Use

#### **Current Zoning**

The City of Decatur is divided into four land use districts: Low Density Residential (RL), Medium Density Residential (RM), Institutional (I), and Commercial and High Density Residential (C) (see **Figure 2.2**, page 12). Commercial and High-Density Residential land uses are focused around the downtown core and the neighborhood center of Oakhurst Village. Traditional medium-density residential land use acts as a buffer between the downtown core areas and the surrounding lower-density residential areas.<sup>5</sup> Each land use district accommodates the zoning districts. Each zoning district regulates the type of development that can occur on a specific property, as well as how intensely that property can be developed. Land use and zoning are categorized in **Table 2.1**.<sup>6</sup>

RL (Low Density Residential)	RM (Medium Density Residential)	l (Institutional)	C (Commercial & High Density Residential)
R-85: Single Family Residential District	RS-17: Single Family Residential District	Institutional	PO: Professional Office District
R-60: Single Family Residential District	RM-18: Multiple Family Residential District		NMU: Neighborhood Mixed Use District
R-50: Single Family Residential District	RM-22: Multiple Family Residential District		C-1: Local Commercial District
	RM-43: Multiple Family Residential District		C-2: General Commercial District
			C-3: Heavy Commercial District
			MU: Mixed-Use District

Table 2.1: Decatur zoning codes.

**<sup>5</sup>** City of Decatur. Decatur 360 Comprehensive Plan. http://www.decaturnext.com/wp-content/uploads/2017/02/Decatur-360-FINAL-Sequential-WEB.pdf

**<sup>6</sup>** City of Decatur Land Use and Zoning. http://www.decaturga.com/city-government/city-departments/planning-and-zoning-redesign/permits-and-zoning/land-use-zoning

#### **City Facilities**

A rich civic life is important to the City of Decatur and its residents. Thus, it is not a surprise that Decatur has an abundance of excellent facilities available to their residents, including parks, recreation centers, and the City Schools of Decatur (see **Figure 2.3**, page). There is also a branch of the DeKalb County Public Library System in Downtown Decatur.

Parks. Although Decatur is small geographically, it features an impressive number of parks. The City has eleven parks that range in size from small neighborhood parks to larger community recreational parks. In addition to the listed parks (see side bar), the City also recently acquired a large tract of land on the eastern edge of the City. Formerly the United Methodist Children's Home property, the 77-acre site will be used, at least in part, as public greenspace in the future.

**Recreation Centers.** The City of Decatur has two recreation centers: Decatur Recreation

Center and Ebster Recreation Center. Both recreation centers are located in Downtown Decatur and easily accessible.

**Library.** The Decatur Library, the principal branch of the DeKalb County Public Library System, is located in Downtown Decatur and is also easily accessible.

Schools. Decatur public schools are considered excellent and have become a major draw for families with school-aged children. There are nine public schools within the city limits. The College Heights Early Childhood Learning Center provides education to Pre-K aged children. Clairemont Elementary, Glennwood Elementary, Oakhurst Elementary, and Winnona Park Elementary are all open to kindergarteners through third grade. Children then move on to the Academy – for fourth and fifth grades – followed by Renfroe Middle School. Finally, Decatur children attend Decatur High School. To assist with the growing population, City of Decatur will open a new 3-5 Upper Elementary School located at Talley Street for the 2019-2020 school year.

In addition to public schools, Decatur has several private schools, including Academe of the Oaks, Friends School, Lullwater School,

#### **City Parks**

Adair Park
Ebster Park
Glenn Creek Nature
Preserve
Glenlake Park & Pool
Hidden Cove Park
Mead Road Park
McKoy Park
Oakhurst Park
Sycamore Park
Scott Park
Waddell Park

St. Thomas More, and Waldorf School. There are also several private preschools located within the city limits.

Agnes Scott College and Columbia Theological Seminary are located within the City and have significant land holdings south of College Avenue. Although not within the City's boundary, Emory University is located immediately northwest of the City and many of its students, faculty, and staff contribute to the City's economy.

#### **2.3 Current Transportation Facilities**

#### **Street Network**

The City has an established, fully developed street network. The majority of these streets are operated and maintained by the City. The exceptions are the three U.S. and State Routes, which run through the City. These include: Scott Boulevard (US 78/29), Clairemont Avenue/Commerce Drive/S. Candler Street (GA 155), and College Avenue (US 278).

The Georgia Department of Transportation provides average annual daily traffic (AADT) count data for a number of Decatur streets. Streets with an AADT of over 10,000 are listed in **Table 2.2**.

STREET	GDOT COUNT (2016)	GDOT COUNT (2012)	GDOT COUNT (2007)
Scott Boulevard (near Lamont Dr)	35,500	45,430	30,610
Scott Boulevard (near Parkside Cir)	129 400 129 330		25,620
N. Decatur Road	23,800	24,010	23,130
Clairemont Avenue	20,500	19,550	18,090
Church Street	18,500	18,430	14,770
Commerce Drive	13,500	12,610	12,280
W. Howard Avenue	12,000	11,500	12,880
S. Candler Street	11,700	11,600	12,810
W. College Avenue	11,000	10,400	8,830
E. Ponce de Leon Avenue	10,800	8,690	11,200

**Table 2.2**: GDOT average annual daily traffic counts for major Decatur streets (source: GDOT Traffic Counts in Georgia – geocounts.com/gdot)

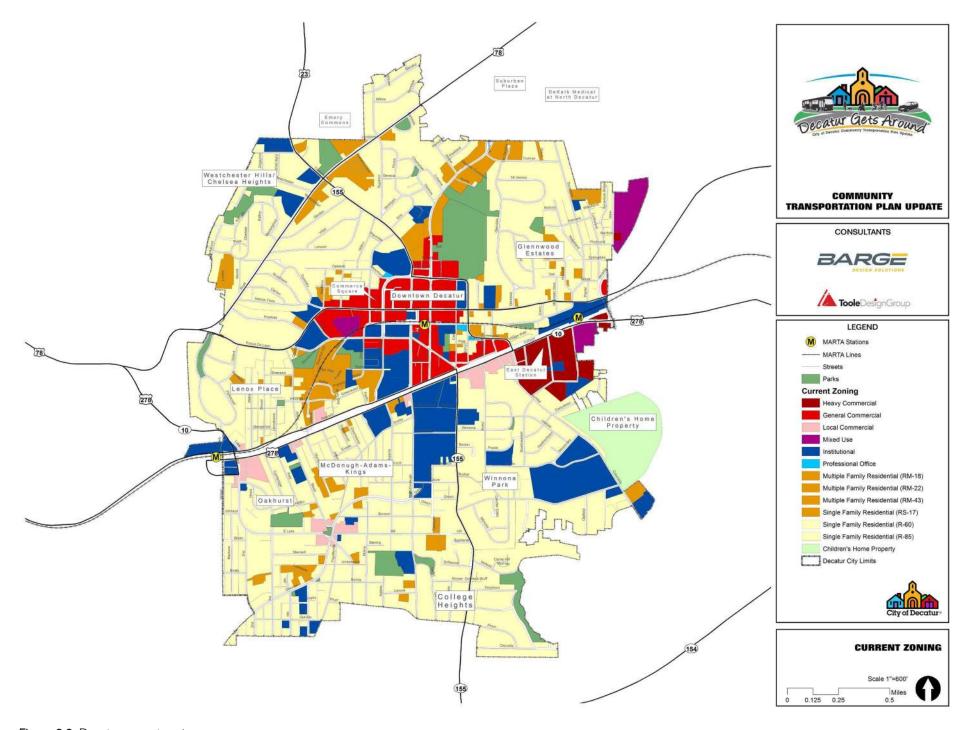


Figure 2.2: Decatur current zoning.

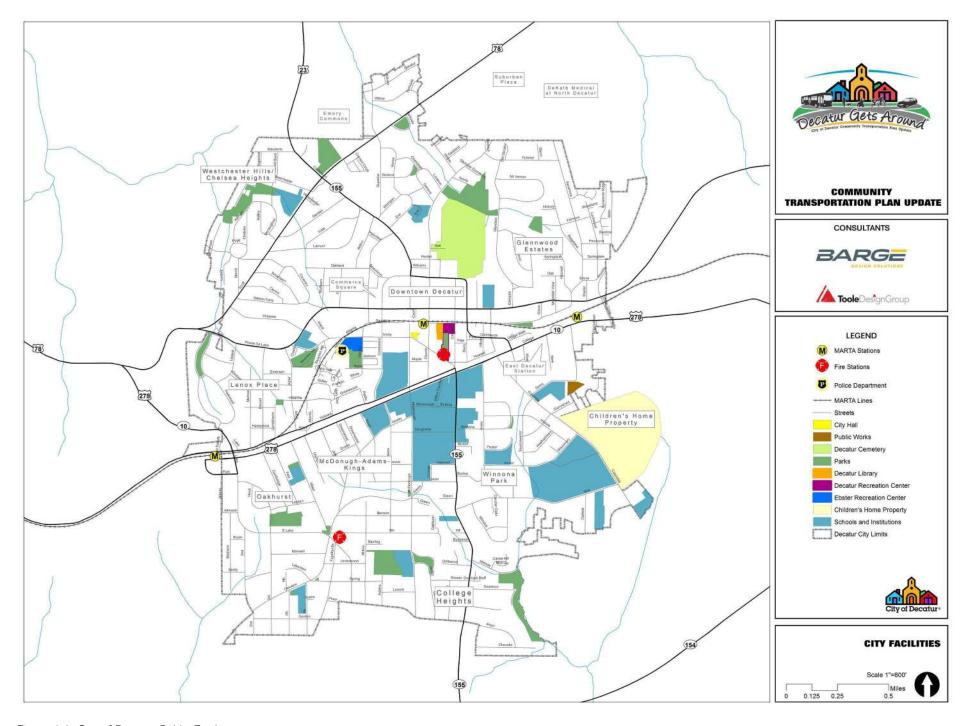


Figure 2.3: City of Decatur Public Facilities

#### **Traffic Signal Control System**

While the City of Decatur does not own or maintain signals within its boundaries (i.e., DeKalb County owns and maintains them), it is important to understand how they function, as this has a direct relationship to real and perceived traffic congestion. Traditional traffic signal systems assign green time to each approach based on the analysis of historical traffic data, with the assumption that future traffic will mimic previous traffic. Signal timings are typically updated every 3-5 years.

Adaptive signals are a newer technology that utilizes detection to "view" traffic on all approaches in real-time and "adapt" signal timings in a responsive manner; when more traffic is stacked at an intersection, more green time is allotted to clear the approach. An adaptive system typically starts with a few default timings for different times of day, but then adjusts on the fly based on current traffic patterns. GDOT has implemented adaptive signals throughout the Atlanta region as part of its "Smart Corridors" initiative.

Typically, three questions must be answered in the affirmative for adaptive signals to prove more effective than traditional timings:

- 1. Does the corridor have unpredictable traffic volumes? Adaptive signals have the most positive impact when volumes are unpredictable and traditional timings cannot account for variations in those volumes.
- 2. Do intersections along the corridor have some level of excess capacity? Adaptive signals do not significantly increase the capacity of an intersection; so, if an intersection is at or above capacity, their effects are less noticeable.
- 3. Are resources available to install, operate, and maintain an adaptive signal system? Adaptive signals are more complex and expensive to implement than traditional timings.

To answer the above questions, analysis of potential corridors, their associated intersections, and resource availability must be performed. For such an analysis, the following should be included:

 Consideration of the regularity/irregularity of existing volumes. If not already available, 24-hour volumes would need to be collected over an extended period.

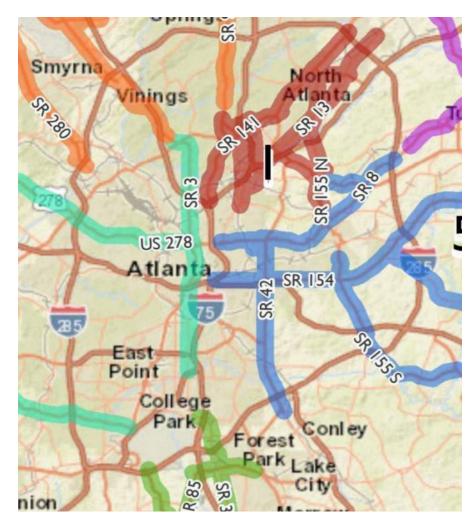


Figure 2.4: Map of GDOT RTOP corridors in the Atlanta Region (www.dot.ga.gov).

- Traffic analysis would need to be performed on each intersection to determine its volume-to-capacity (v/c) ratio. If the v/c ratio of an intersection is below 1.0, then it may be a good candidate for adaptive signal control. If the v/c ratio is at or exceeds 1.0, then capital improvements, such as additional turn lanes, may be needed to improve the capacity of the intersection.
- Coordination with GDOT and/or DeKalb County would be necessary to identify the number of signals that would need to be converted to adaptive control. Adaptive signal control functions best when a group of signals are incorporated into the system, not

just one or two. Most likely, all signals within a group would need to be converted together.

- Cost of conversion to adaptive control should be determined.
   Depending on the system selected, adaptive signal control costs \$35,000-\$65,000 per intersection. This does not include the installation of mast arms, should they be desired. Should costs be significant enough, it may be more cost effective to retime the existing signals every 1-2 years.
- Economies of scale may exist by incorporating more intersections in the system. Partnership with surrounding jurisdictions should be considered.
- Potential adverse impacts of implementing adaptive signal control should be given thoughtful evaluation. Adaptive signals can result in increased travel speeds and longer wait times on side streets. These impacts are not in keeping with the City's transportation vision and may not be acceptable tradeoffs for improved traffic flow.
- An understanding of who will operate and maintain the adaptive signals should be known. Depending upon the system type chosen, GDOT or DeKalb County may be willing to operate and maintain the signals or they may require the City of Decatur to take over such duties. In either case, there may be requirements for training staff on the use and maintenance of the system.
- Funding sources to pay for implementation of the signals should be evaluated. State and federal dollars may be available, depending on the goals and expected outcomes of the system.

#### **Bicycle Facilities**

Bicycle facilities in Decatur have been improving since the 2007 Community Transportation Plan as the City placed a strong emphasis on multi-modal movement. The 2016 PATH Connectivity Plan is strong evidence of the City's desire to create safer bike routes. There are a number of on- and off-road bike facilities within the community. The longest off-road facility is the Stone Mountain Trail, which bisects the city from east-to-west. Part of the PATH system, the Stone Mountain Trail is a multi-use path available to bicyclists and pedestrians alike. The PATH foundation also recently completed the East Decatur Greenway Trail, which runs along the eastern edge of the Children's

Home property. It is a 1.1-mile trail that connects the Avondale MARTA Station to a future trail head near the corner of South Columbia Drive and Thomas Road. In addition to off-road facilities, there are many on-road facilities, including on-road bike lanes, shared bike and vehicular lanes (sharrows), and protected bike lanes, including the new cycle track on North McDonough. See **Figure 2.5**.

#### **Pedestrian Facilities**

Through a strong emphasis on active living and creating a healthier environment for residents, Decatur has worked hard to create a pedestrian-friendly city. The City has focused on creating safe routes to school and is working to improve existing sidewalks and construct new sidewalk infrastructure. The City has roughly seventy-four miles of streets and sixty-one miles of sidewalks. Not only has Decatur focused on traditional on-road pedestrian facilities, the City is also working hard to create safe and enjoyable off-road facilities in conjunction with the PATH Foundation, as evident in the 2016 PATH Connectivity Implementation Plan. See **Figure 2.6** for existing pedestrian facilities.

Safe Routes to School. Safe Routes to School (SRTS) is a national program that empowers communities to make walking and bicycling to school a safe and routine activity. Program goals are to have more students and adults active, help improve fitness levels, reduce vehicle congestion, and improve air quality around schools. Decatur has had an active SRTS program since 2005. Beginning with the 2008-2009 school year, the Decatur Active Living Division took on the management and development of Decatur's program. Decatur's priority of creating safe routes for school-aged children is evident on weekday mornings when many children can be seen walking or biking to school. See Figure 2.6 for Safe Routes to School overlayed with existing sidewalks and sidewalk gaps (page 17).

**Sidewalk Gaps.** Decatur still lacks sidewalks in some areas throughout the city. Sidewalk gaps primarily exist in low-density residential areas where walking in the streets is more common and there are fewer conflicts due to low volume and low vehicle speeds. There are also a few sidewalk gaps in Downtown Decatur and near Agnes Scott College and Columbia Theological Seminary. See **Figure 2.6**.

**<sup>7</sup>** 2007 Decatur Community Transportation Plan, http://www.decaturga.com/home/showdocument?id=1222

<sup>8</sup> http://www.decaturga.com/city-government/city-departments/active-living/safe-routes-to-school

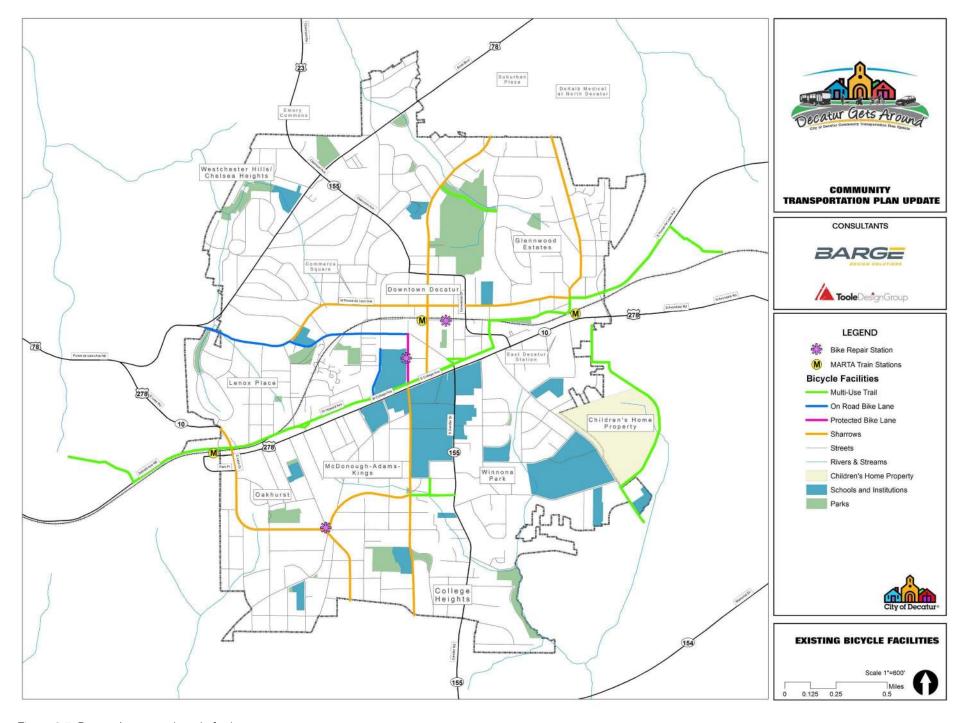


Figure 2.5: Decatur's existing bicycle facilities.

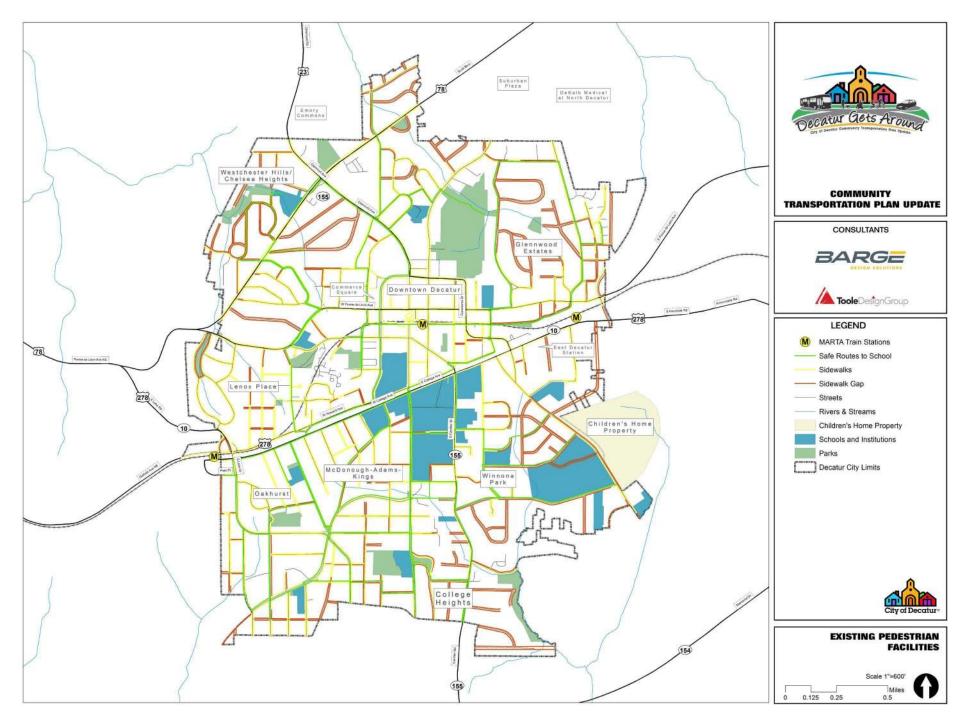


Figure 2.6: Decatur's existing pedestrian facilities.

**Sidewalk Gap Prioritization Plan.** To address the sidewalk gaps throughout the city, Decatur created a Sidewalk Gap Prioritization Plan in November 2017. Using a high/medium/low ranking, the City highlighted the sidewalk gaps that were most important to fill. The highest priority sidewalk gaps are generally located within a half mile radius of public school, especially on busier streets. Sidewalk Gao in neighborhoods, not within a half-mile radius of schools, were generally ranked as a lower priority. See **Figure 2.7**.

Sidewalk Gap Prioritization Decatur, GA November 2017 Low Priority Medium Priority Sidewalk gaps scored on SRTS route, existing sidewalk, speed limit, pedestrian - High Priority 0.125 0.25 activity generator (parks, schools, transit), City Schools and traffic generator.

Figure 2.7: City-wide sidewalk gap prioritization map (City of Decatur, November 2017)

**Sidewalk Maintenance Plan.** To address the sidewalk gaps through the city, Decatur created a Sidewalk Maintenance Map in February 2018. This map addresses sidewalk gaps and existing sidewalks in need of repair, as well as where new sidewalk construction. The highest priority sidewalks maintenance areas are generally located within a half-mile radius of public schools along SRTS routes Maintenance is scheduled from 2017 to 2022. See **Figure 2.8**.

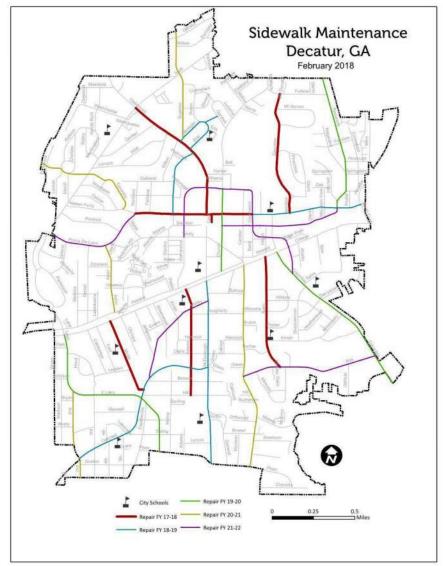


Figure 2.8: City-wide sidewalk maintenance map (City of Decatur, February 2018).

#### **Transit Facilities**

Although Decatur is a relatively small city at 4.54 square miles, it boasts excellent public transit facilities. There are three MARTA stations within the city limits: Avondale Station, Decatur Station, and East Lake Station. All the stations service multiple bus routes and the blue line train, which runs east-west through the Atlanta Metro area. Avondale Station is located on the central eastern edge of the city and is currently being modified to accommodate a new transit-oriented development (TOD) that will include commercial and residential uses. The Decatur Station is an underground facility, directly below the downtown Decatur Square. The East Lake Station is located on the western edge of the city and is currently in the planning stages of becoming a TOD.

	AVONDALE STATION	DECATUR STATION	EAST LAKE STATION
RAIL	Blue Line	Blue Line	Blue Line
BUS LINES	#75 Lawrenceville Hwy	#15 Candler Rd / South DeKalb	#34 2nd Ave / Gresham Rd / Clifton Springs Rd
	#114 Columbia Drive	#19 Clairmont Road	
	#120 E. Ponce de Leon Ave	#36 N. Decatur Rd / Virginia Highland	
	#125 Clarkston / Northlake	#123 Church St / North DeKalb Mall	
		#823 Belvedere	

Table 2.3: MARTA rail and bus lines through Decatur MARTA stations.

In addition to MARTA, the Cliff Shuttle CCTMA Route runs along Clairement Avenue and Commerce drive to the Decatur Station. Although the CLIFF Shuttle is operated by Emory University, it is open to the public.

The CCTMA Route serves stops along Clairmont Road/Clairemont Avenue, North Decatur Road, and Clifton Road between the Clifton Corridor and the MARTA Decatur Station. See **Figure 2.9** on page 20.

#### **Parking Facilities**

Since the adoption of the 2007 Community Transportation Plan (CTP), the City of Decatur has experienced growth in both parking supply and demand. Over the past decade, efforts have been undertaken to better understand and manage parking throughout the City, including

the installation of parking signage to identify public parking facilities and the institution of Parkmobile location and payment technology for on-street metered spaces and several off-street parking facilities. Emphasis has been in the downtown core where the perception of a lack of parking is particularly pronounced.

**2017 Parking Inventory Update.** In late 2017, through a Community In late 2017, through a Community Choices grant, the Atlanta Regional Commission (ARC) completed the City of Decatur Parking Inventory Update. This section summarizes information contained in the report for that inventory.<sup>9</sup>

Based on recommendations from the 2007 CTP, the City of Decatur contracted to have a parking inventory and survey conducted in 2009. That report, Parking Inventory and Policy Recommendations for the City of Decatur, expanded on recommendations made in the 2007 CTP and included additional strategies and policies for implementation, including:

- New meter technologies;
- Incentivizing on-street parking beyond the downtown core;
- Implementing a Transportation Management Association or Parking Brokerage;
- Improving parking conditions, including signage and lighting;
- Constructing a new public parking facility;
- Encouraging shared parking; and
- Separating the cost to rent a parking space(s) from the cost to rent housing (i.e., unbundling residential parking).

**Inventory.** ARC's effort included an inventory of public and private surface lots, structured decks, and on-street spaces. The 2017 effort was of a larger scale and geography than the 2009 one because:

- The downtown parking district boundary has been expanded;
- New lots and decks have been built, or are in the process of being built; and
- On-street parking spaces where not inventoried in 2009.

The inventory identified 17 parking decks and 131 surface lots. With new construction and the expanded study boundary, this is an increase of three parking decks and 75 surface lots since 2009. The total number of surface lot and parking deck spaces was 10,532.

9 Atlanta Regional Commission, City of Decatur Parking Inventory Update, 2017.

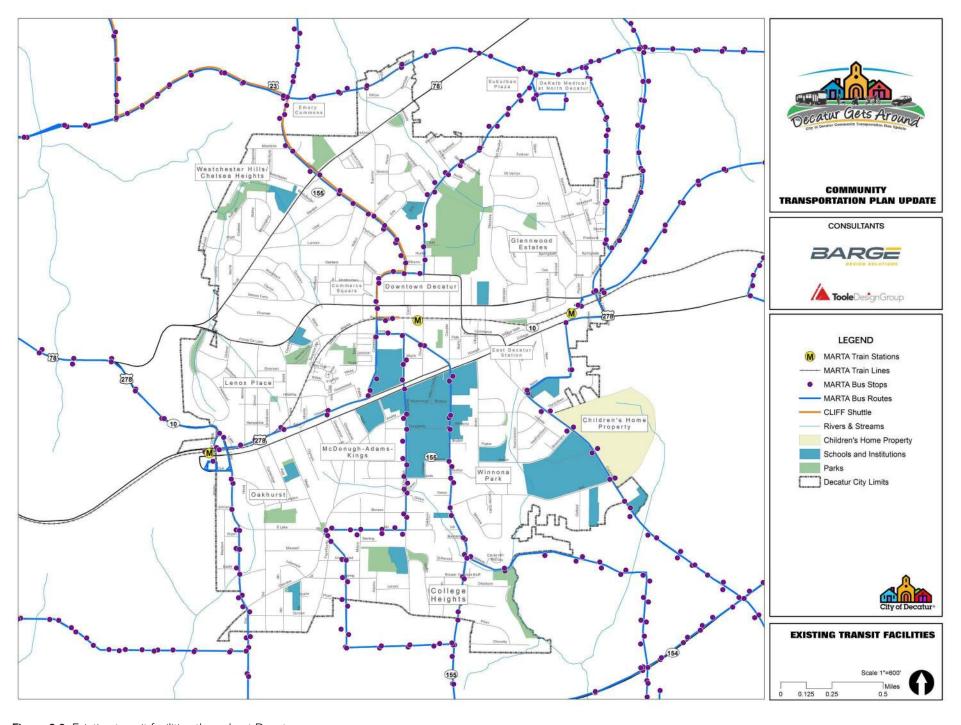


Figure 2.9: Existing transit facilities throughout Decatur.

On-street spaces totaled 679, with 428 unreserved and 175 reserved. **Table 2.4** summarizes the inventory.

	Parking Lots & Decl	On-Street Parking	
	# of lots & decks	# of spaces	# of spaces
Total 2017 Count	148	10,532*	679
2017 Count in 2009 Boundary	83	9,130*	339
Total 2009 Count	70	8,885^	300+ °

Table 2.4: Parking inventory summary.

- \* Does not include spaces in deck being constructed adjacent to Decatur High School.
- ^ Per 2009 survey.
- ° On-street spaces were not counted in the 2009 survey; however, the survey did mention that,
- "the City of Decatur operates and maintains over 300 on-street metered parking spaces in the downtown area

#### Occupancy

While ARC did not conduct a comprehensive occupancy survey of all parking in downtown, they did collect occupancy information from SP+ Parking Management, a company that manages four parking decks and two surface lots in the City. A summary of that information is presented in **Table 2.5**.

	Decks				Surface Lots	
	250 E. Ponce	Decatur Conference Center	One West Court Square	Alexan 1133	235 E. Ponce	320 Church Street
Total Number of Spaces	895	261	493	563	50	102
Peak Occupancy Weekdays	75%	65%	90%	65%	85%	94%
Peak Occupancy Weekends	65%	54%	60%	45%	74%	98%

**Table 2.5**: Occupancy of facilities managed by SP+ Parking Management.

#### **Smart Technology**

As part of the inventory, ARC also considered several case studies of parking programs from other cities that employ smart technology. Smart technology assists in making the most efficient use of parking supply by allowing users to conveniently learn where parking is

located and how many spaces are available. These technologies can also enable users to pay for parking from their smartphone. The following parking programs were profiled:

- Charlotte Parking Collaborative Charlotte, NC
- SF Park San Francisco, CA
- LA Express Park Los Angeles, CA

Through the above case studies, the ARC report identified the following four important aspects that should be considered by the City of Decatur:

- Public-Private Parking Coalitions As most parking facilities in the City of Decatur are privately owned, to implement a comprehensive and user-friendly technology system within the entire downtown, the City would need to establish a shared agreement between itself and private parking managers.
- Smart Parking Technology To accurately track occupancy and anticipate demand, as well as collect parking fees and issue citations, every space, lot, and deck would need to have electronic sensors.
- User App A smartphone app would help users to find and pay for spaces, similar to the Parkmobile app that is currently employed for a number of downtown parking locations.
- Data Collection Data collection, through both electronic means and fieldwork, is essential to making smart parking technology work well.

Parking Technology. The City of Decatur is currently using several technologies to aid residents and visitors with parking. There are several solar-powered pay stations and parking meters throughout Decatur, making it easy to pay for on-street parking in busy commercial districts. These pay stations and meters conveniently accept major credit and debit cards, as well as nickels, dimes, quarters, and dollar coins. The solar panels charge the pay stations' and meters' batteries, which last up to seven years. This is about seven times longer than non-solar-powered meters. Solar-powered pay stations and meters are more efficient, lowering the City's overall costs and environmental impact. These pay stations and meters also

work in conjunction with the Park Mobile smart phone app, which allows users to create accounts and pay for parking using their smart phone. This saves time and is more convenient for many users.

#### **Conclusions**

The City of Decatur Parking Inventory Update suggests that the City of Decatur update the GIS parking inventory database on a regular basis to inform future parking decisions. The City is encouraged to maintain positive relationships with private parking managers to assist in the gathering of occupancy data. Further, it was recommended that the City move toward identifying a framework for increasing the existing smart parking technology infrastructure.

# 3 Technical Studies

The 2007 Community Transportation Plan (CTP) included several detailed transportation-related analyses. These included: latent demand score (LDS) for bicycle and pedestrian facilities; level of service (LOS) for bicycle, pedestrian and vehicular modes; street typology; and a policy and regulatory audit. This current CTP Update did not include the collection of intersection turning movement or traffic count data and as a result no modeling analysis has been included in this Update. However, the consultant team has reviewed the status of the 2007 Plan recommendations, reviewed available 2016 GDOT traffic counts (see Section 2.3), analyzed historical crash data, identified intersections of concern, and completed a level of traffic stress analysis.

#### 3.1 Status of 2007 Recommendations

The 2007 plan recommended a series of improvement projects and significant progress has been made towards implementing those recommendations. Five out of the 18 projects identified in that Plan have been completed with more currently underway and/or in various stages of completion. Three of the original 2007 projects are no longer deemed necessary and/or have been partially or fully incorporated into other projects. See **Table 3.1**, page 24.

#### 3.2 MARTA's Clifton Corridor

It should be noted that MARTA is currently working on a long-range plan for a light rail project with an alignment that would pass through Decatur (see **Figure 3.1**). The Clifton Corridor Transit Initiative is a proposed light rail line linking the Lindbergh and Avondale Stations. The light rail line will provide service to one of the region's most congested areas – and biggest job centers – serving Emory University, Emory Hospital, the Centers for Disease Control, Children's Healthcare, and Veteran's Administration Hospital. See **Figure 3.1**.

There is currently no identified funding or timeline for this project.

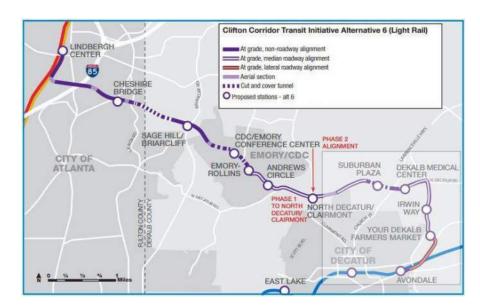


Figure 3.1: MARTA's Locally Preferred Option, 2018.

#### 3.3 Intersections of Concern

Intersections of concern were identified based on community meetings, the WikiMap survey, discussions with City staff, and historical crash data.

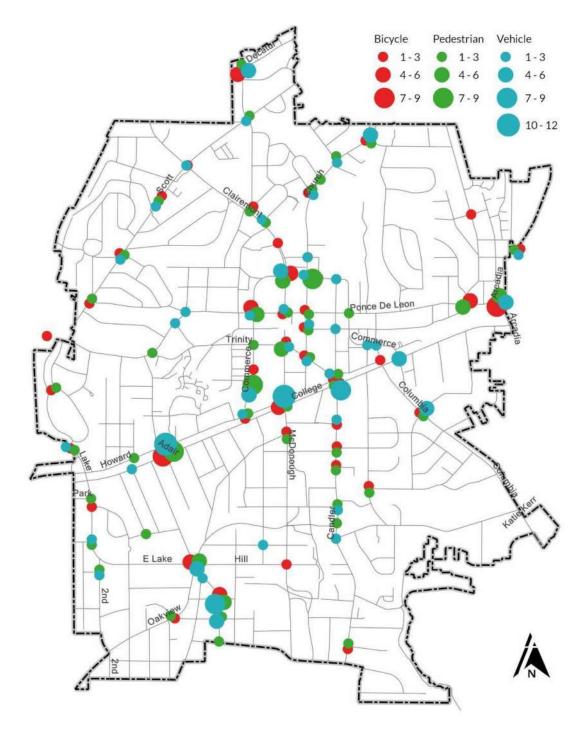
#### **Community-Derived Intersections of Concern**

Engagement with the community began during the October 2017 Community Kick-off meeting and over the course of several stakeholder meetings held during the Fall of 2017 and Winter of 2018. It also included the online WikiMap survey. During the October 2017 Kick-Off Meeting, community members were asked to identify perceived "hot spots," i.e., any location where there was traffic, congestion, or general issues, such as difficulty at pedestrian crossings. Hotspots could be located along corridors, but community members generally identified intersections. Stakeholders also participated in this exercise during their meetings. An interactive WikiMap page also allowed community members to identify intersections of concerns.

The community engagement process identified a number of intersections of concern. See **Figure 3.2**, page 25.

	Corridor / Intersection	Section	Length (in Feet)	Recommended Actions	Status
1	S. Candler Street	Railroad to Pharr Road	6300	Restripe; add bike lanes	No longer applicable.
2	Church Street	Northern city limit to Ponce de Leon Avenue	4700	Road diet, streetscape, add bike lanes	Project is underway. Design is completed. Funding is has been identified and ROW is being acquired.
3	Clairemont Avenue	Northern city limit to Ponce de Leon Avenue	5500	Enhanced transit facilities	No longer applicable. (See reference below to MARTA's Clifton Corridor project.)
4	College Avenue	Western city limit to eastern city limit	9700	Sidewalk safety, signal modifications	Project is underway. Signals are in the process of being retimed and monthly signal maintenance is taking place.
5	S. Columbia Drive	Railroad to southern city limit	4600	Build multi-use path on west side	No longer applicable. The project was replaced by the East Decatur Greenway and will be extended along Katie Kerr Drive and South Columbia Street.
6	Commerce Drive	West Howard Avenue to South Columbia Drive	8600	Road diet, add bike lanes	Project is underway and partially complete; this has become part of a multi-phased cycle-track along Commerce Drive up to Church Street. The project cannot continue east of Church Street due to GDOT standards.
7	Howard Avenue	Western city limit to Trinity Place	7700	Road diet, streetscape, two-way conversion	Temporary improvements are underway along Howard Avenue from the western city limit to Trinity Place. Planning is complete, and the project is funded.
8	N. McDonough Street	Trinity Place to Howard Avenue	1400	Restripe with diagonal parking both sides	Complete. However, the project was upgraded from restriping with diagonal parking on both sides of the road to include a cycle track with parallel parking and stormwater infrastructure.
9	Ponce de Leon Avenue	Trinity Place to eastern city limit	8000	Create signature street	Complete. The creation of a signature street included a road diet, on-street parking, sharrows, and intersection improvements.
10	Scott Bouldevard	Within city limits	7500	Widen sidewalk on west side only	Complete. The sidewalk has been improved and the city has received approval for a pedestrian hybrid beacon, which should be funded in 2018.
11	W. Trinity Place	West Ponce de Leon to McDonough Street	3200	Restripe, add bike lanes	Project is complete.
12	E. Trinity Place	North McDonough Street to Railroad	1500	Streetscape enhancement	Project is complete.
13	Commerce Drive @ Clairemont Avenue	Not applicable	Not applicable	Widen sidewalks and crosswalks, countdown signals, signal timing and changes to traffic lanes	Project at the intersection of Commerce Drive and Clairemont Avenue is underway. Now part of a multi-phase project. Design is completed. Funding is has been identified and ROW is being acquired.
14	Commerce Drive @ Church St.	Not applicable	Not applicable	Widen sidewalks and crosswalks, countdown signals, signal timing and changes to traffic lanes	Project at the intersection of Commerce Drive and Church Street is underway. Now part of a multi-phase project. Design is completed. Funding is has been identified and ROW is being acquired.
15	S Candler Street @ College Avenue, Howard Avenue and CSX Railroad	Not applicable	Not applicable	Widen sidewalks and crosswalks, countdown signals, signal timing and changes to traffic lanes	A large project at the intersection of South Candler Street and College Avenue/Howard Avenue/CSX Railroad is underway and should be completed soon in 2018.
16	McDonough Street @ College Avenue, Howard Avenue and CSX Railroad	Not applicable	Not applicable	Widen sidewalks and crosswalks, countdown signals, signal timing and changes to traffic lanes	Project at the intersection of South Candler Street and College Avenue/Howard Avenue/CSX Railroad is underway and should be completed soon in 2018.
17	Atlanta Avenue @ College Avenue, Howard Avenue and CSX Railroad	Not applicable	Not applicable	Redesign intersection into two conventional intersections	The project at Atlanta Avenue and College Avenue/Howard Avenue/CSX Railroad has not been completed; however, it has been funded through a TSPLOST vote (11/07/2017).
18	Traffic Calming on Neighborhood Conservation Streets	Not applicable	Not applicable	Varies	The project is on-going.

 Table 3.1: 2007 Community Transportation Plan recommendations and status of recommendations.



**Figure 3.2**: Map of community-derived intersections of concern. Data was collected from the WikiMap, Community Workshops, and Stakeholder Meetings.

Based on the input received during the community engagement process combined with feedback and discussion with City staff, the intersections included in **Figure 3.2** have been identified as problematic intersections. A number of these intersections are already being addressed either in some type of study or are under design for improvement. Some of the intersections are recommended for improvement, which will be detailed in Section 4.

#### **Historical Crash Data**

Vehicular crash data was obtained from the Decatur Police Department for the years of 2012-2017. Trends and accident patterns were assessed and analyzed. Specific focus was paid to the last three years of data (2015-2017) and only crashes with injuries were utilized to help identify the five (5) intersections with the most crashes.

The data includes crashed involving bicycles; however, bicycles are considered vehicles and, therefore, are not specifically distinguished in the data. The data also includes vehicular accidents involving another vehicle; vehicular accidents involving stationary objects, such as trees and light poles; and vehicular accidents involving pedestrians. See **Figure 3.3**, page 26.

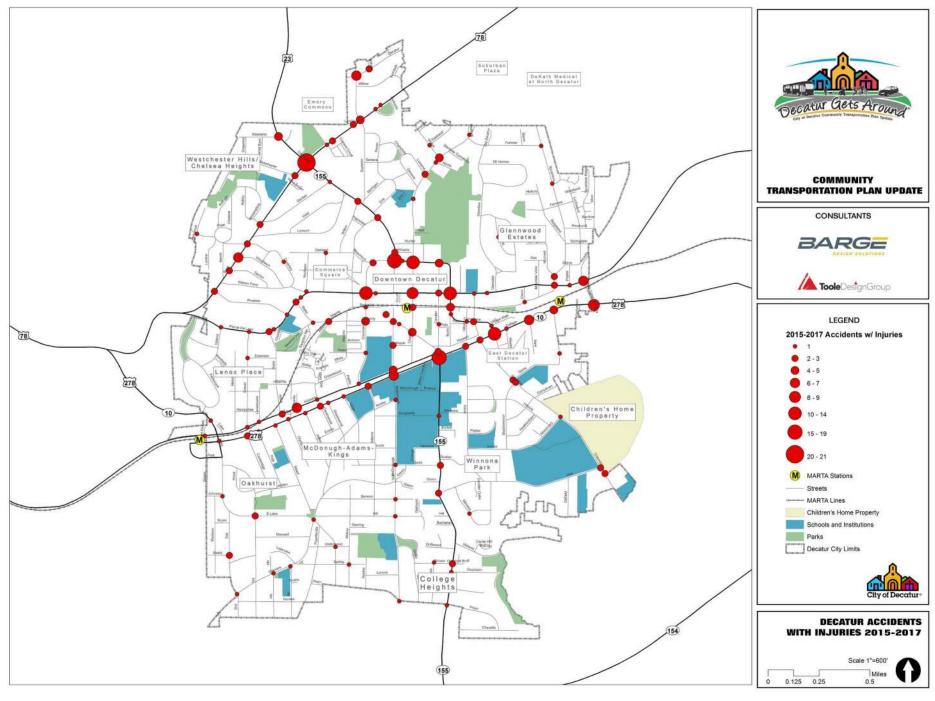


Figure 3.3: Accidents with injuries, 2015-2017.

	2017	2016	2015	2014	2013	2012
Total Accidents	1072	948	1023	890	904	864
Total Injured	204	200	198	164	168	173
Total Fatalities	0	1	4	1	1	1
Total Pedestrian Accidents	18	17	28	15	23	26

**Table 3.2**: Number of vehicular accidents in Decatur 2012-2017 (source: Decatur Police Department).

The accident data shows which intersections had the most accidents with injuries over a three-year period (2015-2017). They are below.

Ranking	Intersection	Number of Accidents w/ Injuries
1	Clairemont Avenue & Scott Boulevard	21
2	E. College Avenue & S. Candler Street	19
3	Commerce Drive & Clairemont Avenue	18
4	Commerce Drive & E. Ponce de Leon Avenue	14
5	Commerce Drive & Church Street	13

**Table 3.3**: Accidents by intersections (data derived from Decatur Police Department).

# **3.4 Traffic Stress and Its Effect on Non-Motorized Transportation**

#### **Understanding Users**

Throughout the United States, bicycle and pedestrian facilities have evolved from serving as "alternative transportation" facilities to filling a critical gap in communities' transportation networks; this is especially true in Decatur. For many years, bicycle facilities placed people riding bikes in or directly adjacent to vehicle travel lanes. While this approach meets the needs of confident cyclists, it does not attract new users or encourage a broader bike culture, which are aspirations of the City of Decatur. We now understand that a variety of bicyclists exist, each with different needs and stress tolerances.

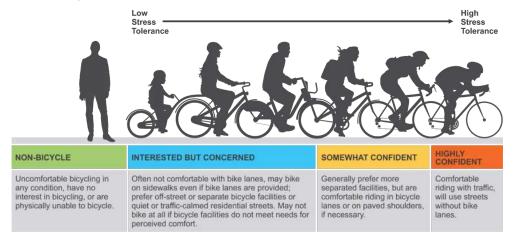


Figure 3.4: Bicycle riders' comfort levels.

Nationally, over 50% of people indicate that they are "Interested but Concerned" in bicycling and would like to ride more often. Over 50% say they are worried about being hit by a car, and nearly 50% say they would more likely ride a bike if physical separation were provided between motor vehicles and bicycles. The City of Decatur has a more confident bicycling public, with only 28% categorizing themselves as "Interested but Concerned." Anecdotally, this can be attributed to the strong biking culture the City has fostered; through public outreach, it has been seen that not only do longtime citizens

<sup>10</sup> Dill, J., McNeil, N. (2015). Revisiting the Four Types of Cyclists. Transportation Research Board.

<sup>11</sup> U.S. Bicycling Participation Benchmarking Study (2014).

<sup>12</sup> Community Transportation Plan Update Survey (2017).

feel more confident on Decatur's streets, but the City is attracting new residents that desire a more walkable, bikeable community. While the prescribed user types and cited research are specific to bicyclists, pedestrians also prefer to be placed further away from the curb and/or have a buffer between themselves and motor vehicle traffic. Lower stress environments result in increased numbers of people biking and walking because lower stress design typically accommodates both user types through the combination of sidewalks, separated bike lanes, and shared-use paths.

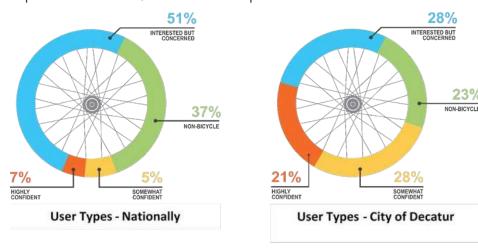


Figure 3.5: National bike users compared to Decatur bike users.

#### **Level of Traffic Stress Analysis**

As previously mentioned, bicyclists have varying levels of tolerance for the stress created by volume, speed, and proximity of adjacent traffic. Their tolerance may vary by time of day or trip purpose, and it may change over time and with bicycling experience. To quantify a cyclist's comfort on streets within the City of Decatur, a Level of Traffic Stress (LTS) analysis was performed. The LTS analysis is based on a concept developed by the Mineta Transportation Institute<sup>13</sup> that assigns a score to a given segment of street or bicycle infrastructure based on its characteristics, such as the level of separation from traffic, road speeds, traffic volumes, and safe crossings on major roadways.

This analysis was customized for the City of Decatur, and it is intended to inform the CTP Update as a baseline understanding of

existing roadway comfort. Streets were given an LTS score ranging from 1 to 4, with 1 being the least stressful and 4 being the most stressful. To further personalize these scores to cyclists, each has been associated with a user type:

- 1 = Most Ages and Abilities
- 2 = Interested but Concerned
- 3 = Somewhat Confident
- 4 = Highly Confident

To capture the widest number of potential cyclists, improvements to the City's transportation network should be planned to serve the "Interested but Concerned" rider. The LTS analysis recommends the type of infrastructure improvements needed to enhance comfort to attract these riders. Additionally, these LTS scores can be adapted to the pedestrian environment since pedestrians' stress level is affected by very similar factors.

The LTS analysis considered the following factors for each street:

- If a current bicycle facility exists on or adjacent to the street;
- Posted speed limit; and
- Number of vehicular travel lanes adjacent to a cyclist.

In addition to the above factors, allowance was provided for the experiences of City staff. As Decatur is a small city, staff are knowledgeable of where citizens prefer to ride their bikes and walk. A number of streets are designated Safe Routes to School corridors that are known for their lower stress environment. In cases where staff felt an LTS score was either too high or too low, a "local knowledge" factor was applied to adjust the score by one LTS classification in either direction, as appropriate.

While they may not reflect the experience of every individual bicyclist, the LTS scores reflect a conservative estimate, which is appropriate for infrastructure's long-term nature.

<sup>13</sup> Low-Stress Bicycling and Network Connectivity (2012). Mineta Transportation Institute.

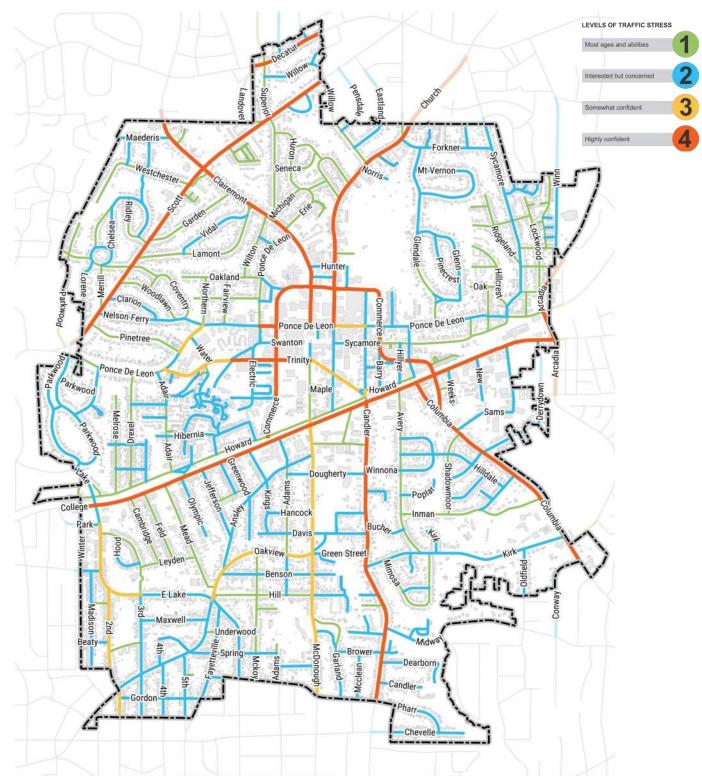


Figure 3.6: Level of traffic Stress.

# 4 Recommendations

### **4.1 2027 Community Transportation Plan Vision Statement**

The Decatur Community Transportation Plan Update reflects progress since the 2007 Community Transportation Plan and is largely guided by the vision outlined in the 2016 Decatur 360 Comprehensive Plan. While the 2007 Community Transportation Plan is the basis for this Update, the 2016 Decatur 360 Comprehensive Plan's transportation section guides the purpose and vision of this Update.

The 2018 Community Transportation Plan Vision is:

"To establish a safe and efficient transportation system that maximizes and enhances Decatur's vehicular and non-vehicular resources – emphasizing 'complete streets,' a transportation network that provides safe and efficient mobility to all users through identification of pedestrian, bicyclist, public transit, and vehicle mobility improvements."

#### 4.2 Context and Street Typologies

A community's character and vision are reflected in its streets. The City of Decatur desires that its streets be designed with people as priority. This means that people of every age, ability, and socioeconomic level should be considered when streets are designed. Whether people choose to drive a car, walk, ride a bike, or take

public transit, the City's streets should accommodate all modes of transportation while considering those who live, work, and play along each street. Far too often, streets are designed for only those who travel on them, while disregarding those who own property, homes, and businesses along them; these are the people that must interact with the street on a daily basis. This approach integrates the concepts of Complete Streets and Context Sensitive Solutions to produce streets that meet transportation demands while also being embraced by the community.

Over the past decade, the City of Decatur has successfully transformed many of its streets to meet the needs of all its citizens. To do this, the City installed new bicycle and pedestrian facilities, implemented Complete Streets principles, and encouraged context-sensitive development. The street typologies proposed here (**Figure 4.3**, page 31) illustrate the community's continued desire to balance all transportation modes.

The 2007 Community Transportation Plan identified four street typologies (see **Figure 4.2**, page 31). These street typologies served as a guide for decision-makers as existing major streets transformed or new streets were created. The street typologies identified today, build on those recommendations and align them with the forthcoming American Association of State Highway and Transportation Officials (AASHTO) Guide, which will also be utilized by the Georgia Department of Transportation (GDOT).

AASHTO's new street typologies supplement the traditional functional classification system. The new guide provides clearer streetscape



Figure 4.1: AASHTO's Land Use Transect

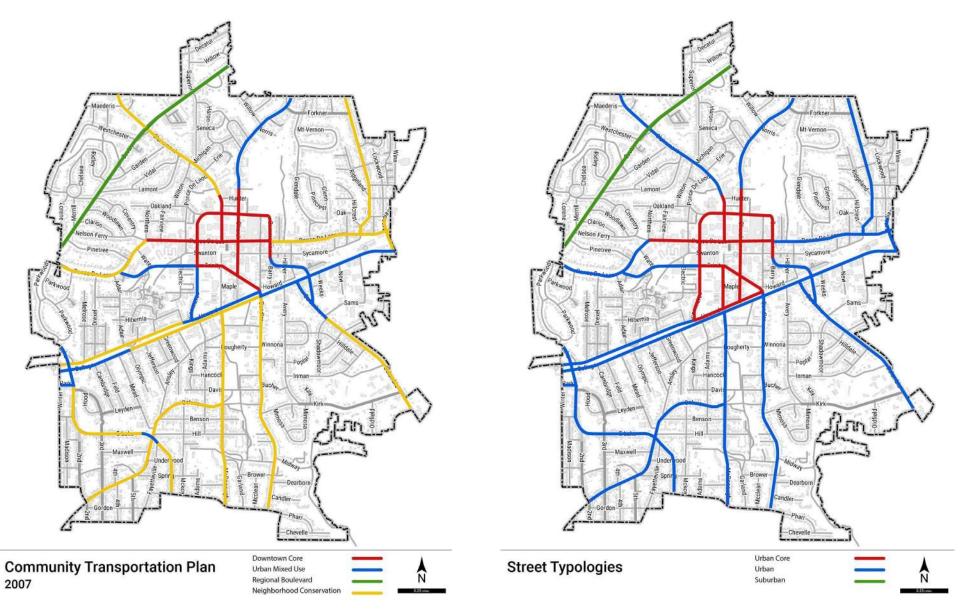


Figure 4.2: 2007 Street Typologies

Figure 4.3: 2018 Street Typologies

design strategies for the various land use contexts that transportation facilities transverse (see **Figure 4.1**, page 30). Of the five AASHTO Land Use Transects, three are applicable to the City of Decatur: Urban Core, Urban, and Suburban. These contexts have been applied to the major corridors within the City (see **Figure 4.3**, page 31).

The typologies illustrated within each transect have been designed for all modes of travel and will serve as a guide, as major streets are transformed and/or new streets are incorporated or developed. Multimodal treatments may also be appropriate for other roads within the City based on future development or community input.

#### **Urban Core**

Urban Core is the densest of contexts with a variety of land uses (e.g., retail, office, multi-family residential, etc.), defined city blocks, short distances between signalized intersections, and minimal setbacks or build-to requirements to frame the public space. This context offers a broad mix of amenities and destinations, including large employment centers. Additionally, a number of mobility choices are available, including biking, walking, transit, and driving personal vehicles. Walking and biking occur regularly, as compact development patterns lend themselves to a network of on-street and adjacent-to-street facilities (e.g., sidewalks, bike lanes, separated bike lanes, etc.). Short travel distances and limited parking options also encourage walking and biking.

Streets proposed as Urban Core include portions of Ponce de Leon Avenue, Church Street, McDonough Street, Howard Avenue, Commerce Drive, Clairemont Avenur, and Trinity Place.

#### Urban Core Two-lane with Sidewalk Level Bike Lanes

An Urban Core cross section with a sidewalk level bicycle facility is recommended within the downtown. Raised bike lanes provide a clearer sense of separation between the car and bicyclist and delineate easy to understand zones for each mode, making them safer for all users. **Figure 4.4** presents the proposed cross section, which includes the following features:

- Two travel lanes (i.e., one in each direction). It is recommended that lanes be 10 feet wide to encourage slower vehicular speeds, but lanes up to 12 feet wide are allowed.
- Parallel parking on both sides of the street that is 8 feet wide.
- A 5.5-foot sidewalk level one-way bicycle facility on both sides of the street.
- 12-foot sidewalks.
- A 3-foot door zone that allows space for door swings outside a bicycle's path of travel, as well as pedestrian scale decorative lighting, landscaping, and street furniture, as appropriate.

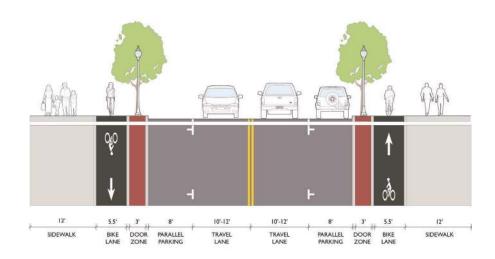


Figure 4.4: Urban core two-lane with sidewalk level bike lane

#### Urban Core Two-lane with Two-way Separated Bike Lane

The recent competition of N. McDonough Street's cycle track is an excellent example of a two-way bicycle facility in the Urban Core. **Figure 4.5** illustrates the proposed cross section, which includes the following features:

- Two travel lanes (i.e., one in each direction). It is recommended that lanes be 11 feet wide, but lanes of 10 and 12 feet are allowed.
- Parallel parking on both sides of the street that is 8 feet wide.
- A 10-foot two-way separated bicycle lane on one side of the street.
- An 5-foot pedestrian refuge zone between the parking and bike lane.
- A 5-foot sidewalk with a 4-foot landscape zone on one side of the street.
- A 5-foot sidewalk with a 5-foot landscape zone adjacent to the bike lane

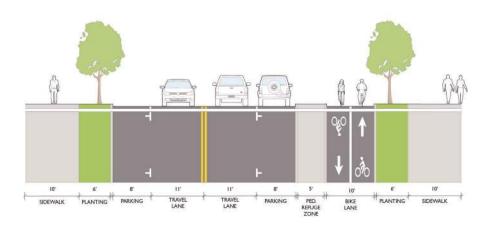


Figure 4.5: Urban core two-lane with two-way separated bike lane

#### Urban Core Two-lane with Bike Lanes

Where possible, areas with a constrained right-of-way should still provide dedicated bicycle facilities within the Urban Core. **Figure 4.6** illustrates the proposed cross section, which includes the following features:

- Two travel lanes (i.e., one in each direction). It is recommended that lanes be 10 feet wide to encourage slower vehicular speeds, but lanes up to 12 feet wide are allowed.
- A 5-foot designated bike lane on both sides of the street.
- A 10-foot sidewalk on both sides of the street.

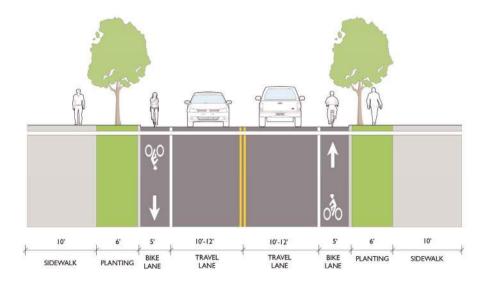


Figure 4.6: Urban core two-lane with bike lanes

#### Urban

Urban is a densely-developed context that provides a variety of land uses similar to the Urban Core context (e.g., retail, office, multifamily residential, etc.) but without the same scale of development. Minimal setbacks or build-to standards may be required in some areas. This context offers multiple amenities and destinations, as well as a variety of mobility choices (e.g., walking, biking, transit, and personal vehicles). Shorter travel distances between destinations and proximity of signalized crossings may encourage walking and biking. While parking is available, it is limited to on-street and surface lots and structures that may not be in close proximity to desired destinations; therefore, many find walking and biking to be preferable. The Urban context may exist adjacent to the Urban Core or as a node of compact development surrounded by the Suburban context.

Streets proposed as Urban include portions of Ponce de Leon Avenue, Church Street, Howard Avenue, College Avenue, Commerce Drive, Clairemont Avenue, Trinity Place, East Lake Drive, Oakview Road, S. Candler Street, S. McDonough Street, Park Place, S. Columbia Drive, and Sycamore Drive.

## **Urban Two-lane with On-street Parking**

**Figure 4.7** illustrates the proposed cross section, which includes the following features:

- Two travel lanes (i.e., one in each direction). It is recommended that lanes be 10 feet wide to encourage slower vehicular speeds, but lanes up to 12 feet wide are allowed.
- Parallel parking on both sides of the street to be 8 feet wide.
- A 5-foot buffer between the parking and sidewalk.
- A 5-foot sidewalk on both sides of the street.

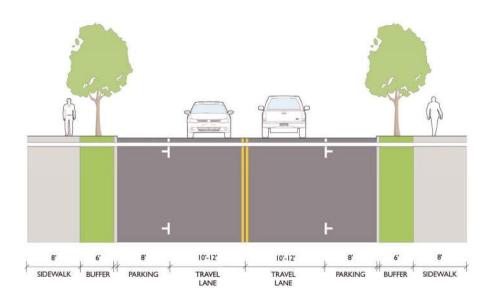


Figure 4.7: Urban two-lane with on-street parking

#### **Urban Two-Lane**

**Figure 4.8** illustrates the proposed cross section, which includes the following features:

- Two travel lanes (i.e., one in each direction). It is recommended that lanes be 10 feet wide to encourage slower vehicular speeds, but lanes up to 12 feet wide are allowed.
- A 5-foot buffer between the parking and sidewalk.
- A 5-foot sidewalk on both sides of the street.

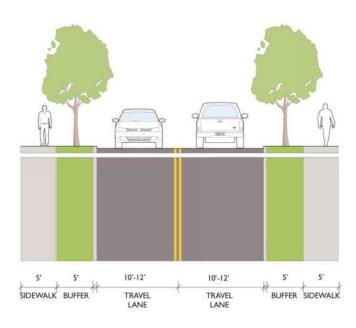


Figure 4.8: Urban two-lane

#### **Urban Three-lane with Bike Lanes**

The proposed cross section is most likely to be found within commercial areas of the Urban transect with moderate traffic volumes and high numbers of left turns. **Figure 4.9** illustrates the proposed cross section, which includes the following features:

- Two travel lanes (i.e., one in each direction). It is recommended that lanes be 10 feet wide to encourage slower vehicular speeds, but lanes up to 12 feet wide are allowed.
- A 12-foot left-turn lane or planted median, as appropriate.
- A 5.5-foot bike lane on both sides of the street.
- A 10-foot sidewalk on both sides of the street.

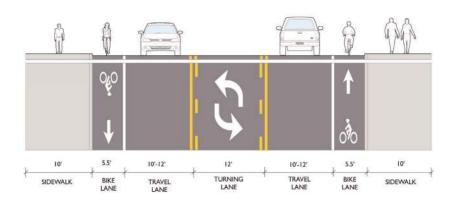


Figure 4.9: Urban three-lane with bike lanes

#### Urban Residential with One Side of On-street Parking

The proposed cross section is commonly found within residential areas of the Urban transect. **Figure 4.10** illustrates the proposed cross section, which includes the following features:

- Two travel lanes (i.e., one in each direction) that are 11 feet wide with no designated centerline.
- Parallel parking on one side of the street to be 8 feet wide.
- A 5-foot landscaped buffer on both sides of the street.
- A 5-foot sidewalk on both sides of the street.

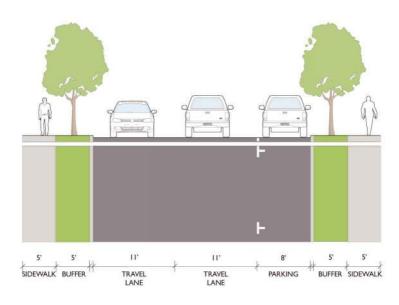


Figure 4.10: Urban residential with one side of on-street parking

#### Urban Residential with No On-street Parking

**Figure 4.11** shares a similar curb-to-curb dimension with Figure 4.10, which is a typical residential right-of-way. This proposed cross section includes the following features:

- Two travel lanes (i.e., one in each direction). It is recommended that lanes be 11 feet wide, but 12-foot lanes are allowed.
- A 4-foot to 5-foot striped shoulder than can be used for temporary on-street parking or provide a degree of refuge for bicyclists when cars are passing.
- A 5-foot landscaped buffer on both sides of the street.
- A 5-foot sidewalk on both sides of the street.

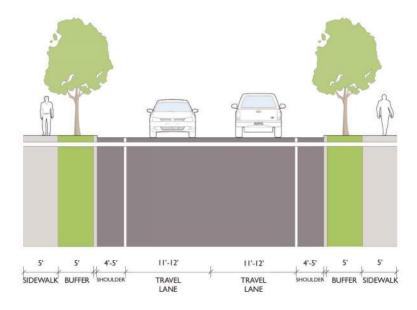


Figure 4.11: Urban residential with no on-street parking

#### **Urban Bike Boulevard**

Decatur's Path Connectivity and Implementation Plan, adopted in 2016, identified Bike Boulevards on several streets throughout the City. These streets include the following features:

- Two travel lanes (i.e., one in each direction). It is recommended that lanes be 10 feet wide to encourage slower vehicular speeds, but lanes up to 12 feet wide are allowed.
- A 4-foot landscaped buffer on both sides of the street.
- A 5-foot sidewalk on both sides of the street.
- High visibility sharrow pavement markings and bicycle signage.

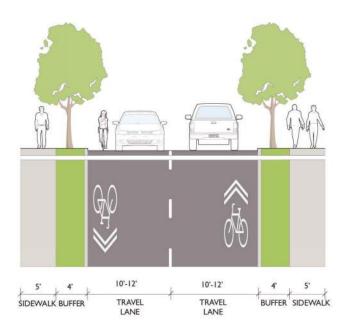


Figure 4.12: Urban bike boulevard

#### Suburban

Suburban provides a variety of land use types (e.g., residential, retail, office, etc.) that are rarely mixed with one another on a single site but are connected by a network of arterial and collector streets. Commercial and industrial development is spread out on medium to large parcels with greater minimum setbacks and large surface parking lots. Suburban transportation corridors increase vehicular mobility from the Suburban context into more dense contexts for employment, services, and/or entertainment. Biking and walking opportunities may be available through limited on-street and adjacent-to-street facilities (e.g., sidewalks, bike lanes, etc.) and the development of off-street trails; however, non-motorized connectivity may be challenging due to increased distances between signalized intersections along arterial and collector streets.

Today, Scott Boulevard is the only street designated as a Suburban street typology; however, as the City of Decatur develops and continues to grow, this typology may be applicable to other streets.

## Suburban Three-plus Lanes

**Figure 4.13** illustrates a proposed Suburban cross section that includes the following features:

- Three to four travel lanes (i.e., two in each direction for a four-lane or one in each direction with a designated left-turn lane for a three-lane). It is recommended that lanes be 11 to 12 feet wide.
- A 5-foot sidewalk on both sides of the street.
- A landscaped buffer, varying in width based on available right-ofway, to provide separation between vehicles and pedestrians.

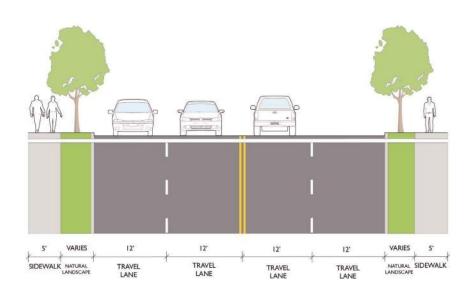


Figure 4.13: Suburban three-plus lanes

#### Suburban Four-lane with Shared Use Path

Whenever possible, areas with a constrained right-of-way should still provide dedicated bicycle facilities within the Suburban context. Additionally, with higher traffic volumes and vehicle speeds, it is important these facilities be physically separated from vehicular traffic to give greater comfort and safety to users. **Figure 4.14** illustrates the proposed cross section, which includes the following features:

- Four travel lanes (i.e., two in each direction). It is recommended that lanes be 11 to 12 feet wide.
- A 10-foot shared use path on one side with a landscaped buffer, varying in width, to provide separation between vehicles and pedestrians.
- A 5-foot sidewalk on one side.

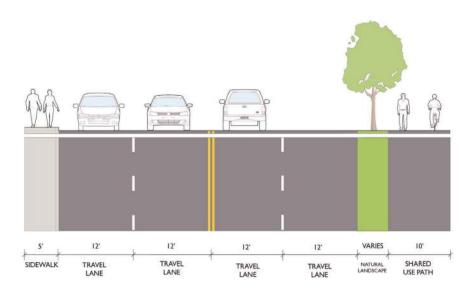


Figure 4.14: Suburban four-lane with shared use path

#### Suburban Five-lane with Shared Use Path

Similar to the previous cross section, it is important to provide dedicated, separated bicycle facilities on Suburban streets that have four travel lanes and a center turn lane. **Figure 4.15** illustrates the proposed cross section which includes the following features:

- Five travel lanes (i.e., two in each direction with a designated leftturn lane). It is recommended that lanes be 10 to 12 feet wide. The center turn lane should be 12 feet wide.
- A 10-foot shared use path on one side with a landscaped buffer, varying in width, to provide separation between vehicles and pedestrians.
- A 5-foot sidewalk on one side.

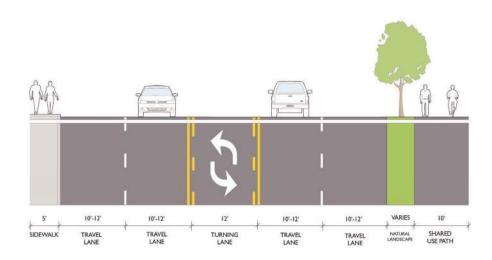


Figure 4.15: Suburban five-lane with shared use path

## **4.3 Street Typology Policy Alignment**

There are currently three documents outlining street typologies within the City of Decatur. The update to the 2007 Community Transportation Plan took these plans into consideration to develop a series of street typologies that are in-line with the forthcoming American Association of State Highway and Transportation Officials (AASHTO) Guide, which will be utilized by the Georgia Department of Transportation (GDOT). The new AASHTO Guide provides streetscape recommendations for various land use context verses the traditional functional classification system.

The following are the current documents utilized by the City in developing street cross-sections. **Figure 4.16** on page 37 outlines the existing policies, minus the PATH plan which was woven into each of the AASHTO street typologies.

**2007 Community Transportation Plan (CTP)** – The CTP identifies seven street typologies and are classified into two categories: arterials and non-arterials. This plan does not identify right-of-way maximums or minimums, but focuses on the number of travel lanes, lane widths, traffic calming measures, access to property, parking, and sidewalk and bicycle facilities.

**2015 Unified Development Ordinance (UDO)** – The UDO identifies eight street typologies that fall into the overarching categories of residential, urban mixed use, and alleys. The document outlines minimum right-of-way's, lane widths, parking facilities, sidewalk facilities and amenities, and landscape recommendations. There are no bicycle facilities outlined, only a general statement that allows them if the street meets the set standards.

**2016 Decatur PATH Connectivity and Implementation Plan (PATH Plan)** – The PATH plan focused on four types of bicycle/pedestrian facilities within the City to provide safe, fun, convenient and attractive trail connections.

The street typology recommendations for the update to the 2007 Community Transportation Plan pull the above plans into three categories within the AASHTO Land Use Transect: Urban Core, Urban, and Suburban. These three Land Use Transects are applicable within the City.

**Urban Core** – This is the densest of contexts within the Guide and is applicable to downtown Decatur. The street typologies identified for the Urban Core Transect include:

- Urban Core Two-lane with Sidewalk Level Bike Lanes
- Urban Core Two-lane with Two-way Separated Bike Lane
- Urban Core Two-lane with Bike Lanes

**Urban** – A variety of land uses in a densely-developed context are found in this transect. The street typologies identified for the Urban Transect include:

- Urban Two-lane with On-street Parking
- Urban Two-lane
- Urban Three-lane with Bike Lanes
- Urban Residential with One Side of On-street Parking
- Urban Residential with No On-street Parking
- Urban Bike Boulevard

**Suburban** – Arterial and collector streets that have a variety of land use types make up this transect. The street typologies identified for the Suburban Land Use Transect include:

- Suburban Three-plus Lanes
- Suburban Four-lane with Shared Use Path
- Suburban Five-lane with Shared Use Path

Moving forward, the City of Decatur should work to align their 2015 UDO with the recommended street typologies. The street typologies here should provide the flexibility needed as new streets are built and existing streets are enhanced to improve overall bicycle and pedestrian mobility.

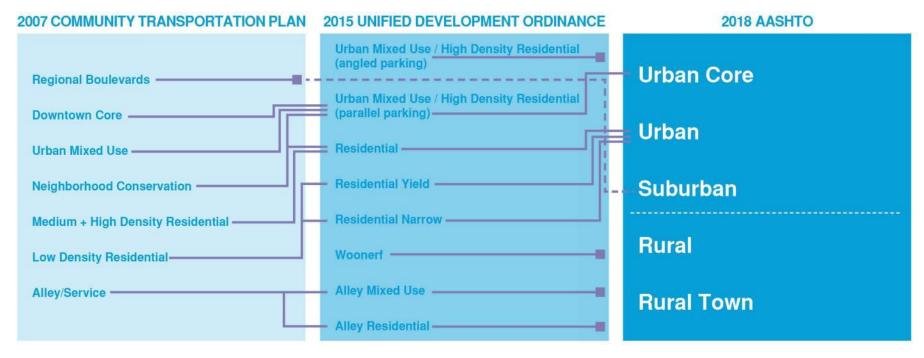


Figure 4.16: Policy Alignment of Existing Policy Documents, minus the PATH Plan, with the 2018 AASHTO Guide.

## **4.4 Priority Capital Corridors**

While the City of Decatur desires for all streets within the City to be designed to accommodate all people, regardless of age or ability, it is essential to understand that there is a finite amount of funding available to make major capital street improvements. Therefore, it is important for the City to prioritize the streets that should be first considered for such improvements moving forward.

Based on public input, staff institutional knowledge, and the consultant team's experience, a series of priority corridors were identified. A variety of factors went into identifying these corridors, including street improvements completed to date, locations of Safe Routes to School, historical crash data, the Level of Traffic Stress analysis, and logical termini. **Figure 4.17** depicts these corridors. Priority corridors have been classified as either City Streets or GDOT Streets.

#### City Streets

- 2nd Avenue (from East Lake Drive to Oakview Road)
- Church Street (from city limit to Ponce de Leon Avenue)
- S. Columbia Drive (from Commerce Drive to city limit)
- Commerce Drive (from Church Street to Howard Avenue)
- Commerce Drive (from E. College Avenue to S. Columbia Drive)
- East Lake Drive (from Howard Avenue to city limit)
- Howard Avenue (from city limit to N. McDonough Street)
- Oakview Road (from city limit to S. McDonough Street)

#### **GDOT Streets**

- S. Candler Street (from E. College Avenue to city limit)
- Clairemont Avenue (from Scott Boulevard to Commerce Drive)
- College Avenue (within city limits)
- Scott Boulevard (within city limits)

While the City does not have authority over the GDOT streets that are included as priority corridors, it is critical that the City acknowledge the significance of these GDOT roads that traverse through the City of Decatur. Should GDOT determine that improvements will be made to any of these streets in the future, the City of Decatur will have gone on record as designating them as priority corridors, and can then advocate for the most appropriate street typology cross section to be applied to that street. If the City did not designate these GDOT

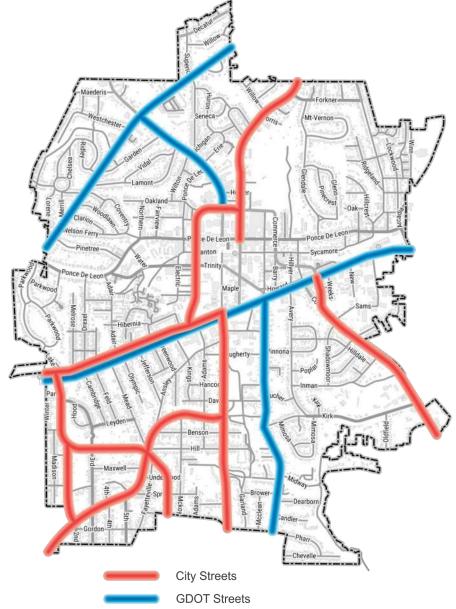


Figure 4.17: Priority capital corridors

streets as priority corridors, it is possible that GDOT could move forward with improvements without realizing that the City of Decatur places high importance on the character and design of these streets.

## **4.5 Priority Intersection Improvements**

Based on the intersections of concern that were identified through the public outreach process, staff knowledge of intersection issues, and historical crash data, a number of priority intersections were identified. It should be noted that the illustrated concepts presented in this section are preliminary and merely represent one possible solution for each intersection. Additionally, detailed engineering studies will be necessary for each of these intersection. The concepts are based on observed vehicular movements, grade of the street, surrounding topography, sight lines, and existing right-of-way widths and traffic control measures. The concepts are not the final design but, rather, a starting point for future traffic engineering and design analysis. The priority intersections are depicted in **Figure 4.18**, and are categorized as follows:

**In Process** – These are priority intersections, colored in yellow, that are already in some stage of improvement, including study, design, or implementation.

- Atlanta Avenue/Adair Street at W. College Avenue (under study by City of Decatur)
- Clairemont Avenue at Wilton Drive/Michigan Avenue (under consideration by GDOT)
- E. College Avenue at Commerce Drive (under study by City of Decatur)
- E. College Avenue at Sams Street (under study by City of Decatur)
- Commerce Drive at Clairemont Avenue (designed, moving to construction)
- Commerce Drive at Church Street (designed, moving to construction)
- Scott Boulevard at Clairemont Avenue (under study by GDOT)
- Talley Street/Shadowmoor Drive at S. Columbia Avenue (under study by City of Decatur)

**Recommended for Improvement –** These priority intersections, colored in blue, are not currently in any stage of development, but are recommended to be improved.

- E. College Avenue at Sams Crossing\*
- S. Columbia Avenue at Katie Kerr Drive/Kirk Road
- N. Decatur Road at N. Superior Avenue\*
- East Lake Drive at 2nd Avenue\*
- Huron Street at Champlain Street\*
- E. Ponce de Leon Avenue at N. Arcadia Avenue\*
- W. Ponce de Leon Avenue at Nelson Ferry Road/Northern Avenue\*
- Scott Boulevard at Coventry Road

Conceptual designs for six of the above intersections, as designated by an asterisk (\*), are included in **Figure 4.19a** through **Figure 4.24b**. It is important to note that improvement recommendations are based solely on observation and anecdotal evidence; no traffic analysis was performed as part of the scope of the CTP update. Therefore, when these improvements move to design, it is recommended that traffic analysis be performed to validate and/or refine these recommendations.

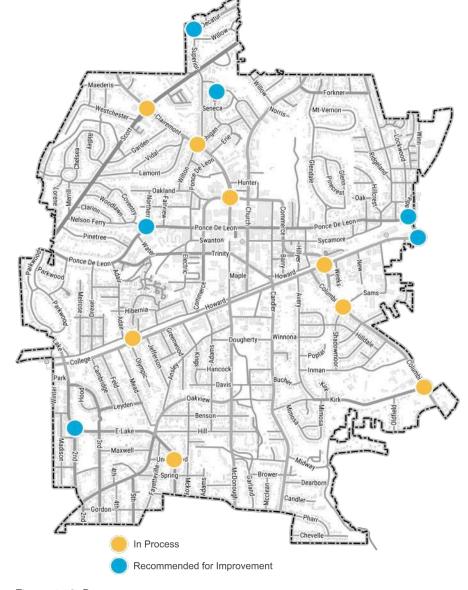


Figure 4.18: Priority intersection improvements

## E. College Avenue at Sams Crossing

#### **Existing Issues:**

- Southbound left-turn lane on Sams Crossing experiences long queues that often extend northward to the intersection of E. Ponce de Leon Avenue and N. Arcadia Avenue.
- Short distance between the two intersections does not allow for the left-turn lane to be lengthened.
- Southbound free-flow right-turn lane on Sams Crossing results in high-speed turns that do not stop, creating a dangerous condition for pedestrians.
- Overall complex pedestrian environment.

- Convert southbound free-flow right-turn lane on Sams Crossing to a right/through lane.
- Widen approximately five feet on southwest corner to allow receiving lane to align with right/through lane to the north.
- Convert southbound through lane on Sams Crossing to a second dedicated left-turn lane.
- Install high visibility, continental style crosswalks, perpendicular ADA ramps, and pedestrian countdown signals.
- Create pedestrian refuge in median on S. Arcadia Avenue.
- Slow vehicular speeds at corners by installing truck aprons to tighten turning radii.



Figure 4.19a: E. College Avenue at Sams Crossing existing conditions.



Figure 4.19b: E. College Avenue at Sams Crossing recommended improvements

#### N. Decatur Road at N. Superior Avenue

#### **Existing Issues:**

- Geometry of N. Decatur Road creates downhill blind curve, causing westbound drivers to not see the traffic signal until they are in close proximity to the intersection. This contributes to red light running and rear-end collisions when cars are stopped on westbound N. Decatur Road waiting to turn left onto southbound N. Superior Avenue.
- Four-lane cross section with moderate traffic volumes encourages high vehicular speeds.
- Overall complex pedestrian environment.

- Widen N. Decatur Road to the north to allow for the addition of a left-turn lane; this will require approximately 12 feet of right-of-way and relocation of the existing retaining wall on northeast corner.
- Place new advanced warning signal device and signage east of curve.
- Install high visibility, continental style crosswalks and perpendicular ADA ramps.
- Create pedestrian refuge in median on N. Decatur Road on west side of intersection.
- It is also recommended that the City of Decatur, DeKalb County, and Emory University partner to create a N. Decatur Road Corridor Plan to study future population growth, traffic impacts, and travel speeds. The corridor plan should also consider MARTA's light rail plans (see section 3.2).



Figure 4.20a: N. Decatur Road at N. Superior Avenue existing conditions



Figure 4.20b: N. Decatur Road at N. Superior Avenue recommended improvements

#### **East Lake Drive at 2nd Avenue**

### **Existing Issues:**

- Skewed intersection on blind curve with difficult sight lines.
- High vehicular speeds.
- Complex intersection for pedestrians and bicyclists.
- Three-way stop.

- Provide continuous flow protected bike lane on northbound East Lake Drive so that bicyclists do not have to stop on uphill climb.
- Organize vehicular movements on 2nd Avenue by channelizing right turns, but continue to require full stop before turning right.
- Create pedestrian refuge in new island on 2nd Avenue.
- Install high visibility, continental style crosswalks and perpendicular ADA ramps.
- Provide truck aprons to allow bus route to function properly while reducing turning radii for smaller vehicles.
- Consider as alternate route for PATH Plan recommended East Lake MARTA Connector Neighborhood Greenway.



Figure 4.21a: East Lake Drive at 2nd Avenue existing conditions

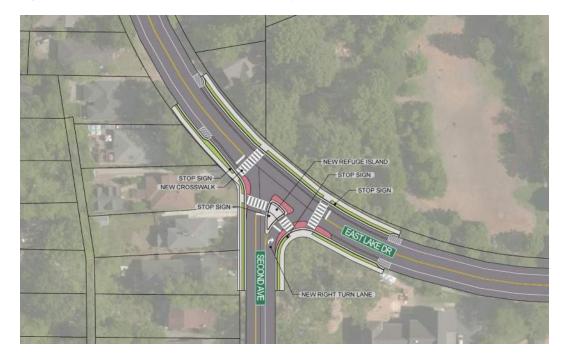


Figure 4.21b: East Lake Drive at 2nd Avenue recommended improvements

## **Huron Street at Champlain Street**

#### **Existing Issues:**

- Large mass of pavement.
- Large radius on southeast corner of intersection encourages right turns at high speeds.
- Southbound traffic on Huron Street cuts the corner when turning left onto Champlain Street infringing on westbound traffic.
- Difficult intersection for pedestrians.

- Narrow approach of Champlain Street and tighten radius on southeast corner.
- Install narrow raised concrete median on Champlain Street to encourage eastbound traffic to stay in lane.
- Install high visibility, continental style crosswalk and perpendicular ADA ramps.



Figure 4.22a: Huron Street at Champlain Street existing conditions



Figure 4.22b: Huron Street at Champlain Street recommended Improvements

#### E. Ponce de Leon Avenue at N. Arcadia Avenue

#### **Existing Issues:**

- Very large crossing distance across N. Arcadia for pedestrians and bicyclists using the Stone Mountain Trail.
- Large radius on northwest corner of intersection encourages right turns at high speeds onto E. Ponce de Leon Avenue.
- Difficult intersection for pedestrians and bicyclists.

- Reduce radii on all corners of intersection.
- Remove implied slip-lane on N. Arcadia to bring southbound right-turning traffic to a full stop before right-on-red.
- Consider leading pedestrian interval.
- Consider eliminating right-on-red for traffic northbound on N. Arcadia Avenue and eastbound on E. Ponce de Leon Avenue to protect pedestrians and bicyclists on Stone Mountain Trail.
- Install high visibility, continental crosswalks and perpendicular ADA ramps.



Figure 4.23a: E. Ponce de Leon Avenue at N. Arcadia Avenue existing conditions

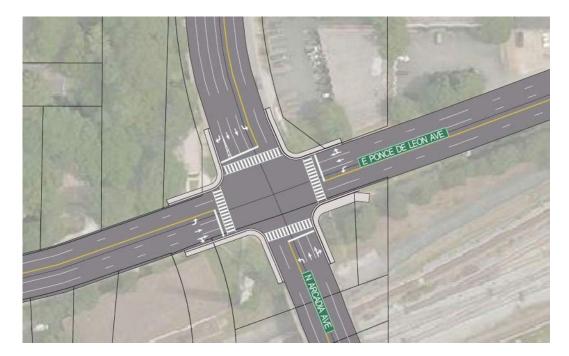


Figure 4.23b: E. Ponce de Leon Avenue at N. Arcadia Avenue recommended improvements

## W. Ponce de Leon Avenue at Nelson Ferry Road/ Northern Avenue

#### **Existing Issues:**

- Odd geometry of five-point intersection results in confusing vehicular patterns.
- Driveway to off-street parking lot within the intersection.
- Complex signal phasing.
- Key gateway from neighborhoods to downtown.
- Difficult intersection for pedestrians and bicyclists.

- Implement roundabout.
- Maintain westbound left-turn access from W. Ponce de Leon Avenue into post office.
- Utilize center of roundabout for gateway treatment.



Figure 4.24a: W. Ponce de Leon Avenue at Nelson Ferry Road/Northern Avenue existing conditions



Figure 4.24b: W. Ponce de Leon Avenue at Nelson Ferry Road/Northern Avenue recommended improvements

## 4.6 Off Road Multi-Use Path System

The City of Decatur continues to make progress in implementing a multi-use trail system for bikes and pedestrians; however, there are still gaps between the existing trails throughout the city. The purpose of the Off Road Multi-Use Path System is to connect the existing multi-use trails to each other, to parks, and to other points of interest. It is recommended that four additional multi-use trails are created throughout the city (see **Figure 4.26**, page 51). These trails should be ten to twelve feet wide, where feasible, and should be constructed of concrete.

- 1. A multi-use trail is proposed through the Westchester Elementary School property and Hidden Cove Park. It is recommended that the trail continue south along N. Parkwood Road to Scott Boulevard. The trail will then turn west and run along Ponce de Leon Avenue in the City of Atlanta and connect to Deepdene Park, a unit of the Olmsted Linear Park, as well as other regional paths.
- 2. A multi-use trail currently exists within Glenlake Park, running from Church Street to Glendale Avenue. It is recommended that this trail continue to the east to connect to Glenn Creek Nature Preserve.
- 3. A new multi-use trail is proposed to connect from woodlands Garden Park to Ira B. Melton Park, the Lullwater Preserve, and Emory University.
- 4. It is recommended that a multi-use trail be created along Shoal Creek from Shadowmoor Drive to the proposed multi-use trail near Midway Road. This trail would provide off-road access to and from Winonna Park Elementary School, Columbia Theological Seminary, and Dearborn Park.
- 5. It is also recommended that a multi-use trail originating from Harmony Park in Oakhurst Village be created. The recommended trail would connect Harmony Park to Oakhurst Park and Oakhurst Dog Park, then run south along Sugar Creek through the Wylde Center to Hawk Hollow. This recommended trail would connect two proposed multi-use paths.

#### 4.7 Safe Routes to School

What is the Safe Routes to School Program? Safe Routes to School (SRTS) is an international program that began in Denmark in the 1970s with the purpose of encouraging school-aged children to walk and bike to school, as well as to improve safety in areas surrounding schools. The SRTS program made its way to the United States in the 1990s, and in 2005 the federal government created a national SRTS program (SAFETEA-LU), which was designed to enable and encourage school-aged children (K-8 grades) to walk or bike to school, including children with disabilities, and to make walking and biking safe and more appealing.<sup>14</sup>

The Georgia SRTS program is funded by the Federal SRTS program. Funding is received by local governments to improve walking and biking conditions within a two-mile radius of primary and middle schools (K-8). Support is also available for school-based SRTS programs through partnerships with the Georgia SRTS Resource Center.

**Decatur and SRTS.** Decatur has actively participated in the Safe Routes to School program since 2005. Safe Routes currently exist for Decatur's six elementary schools (Clairemont Elementary, Glennwood

Elementary, Winonna Park Elementary, Oakhurst Elementary, and Westchester Elementary), College Heights Early Childhood Learning Center, 4/5 Academy at Fifth Avenue, Renfroe Middle, and St. Thomas More



Figure 4.25: Decatur Safe Routes to School

School. The primary way the City achieves a safe route to school is through sidewalks. The City has identified where sidewalks gaps currently exist and created a Sidewalk Maintenance map (see **Figure 2.7**, page 18).

<sup>14</sup> http://saferoutesga.org/content/about-georgia-safe-routes-school

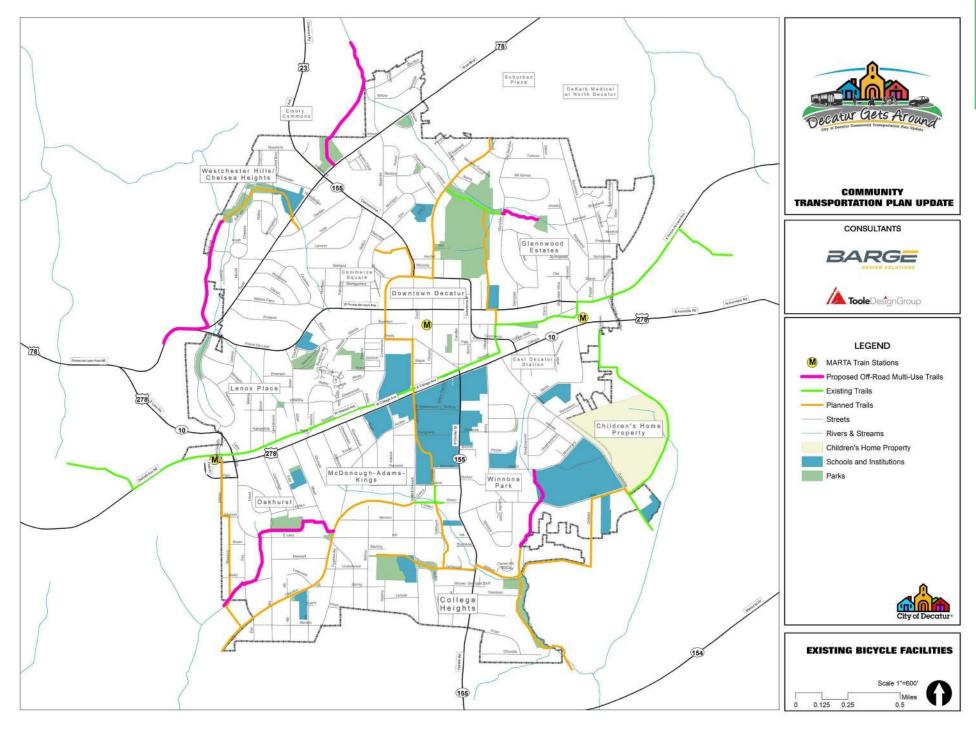


Figure 4.26: Potential off-road multi-use paths.

**Recommendations.** While all the existing schools in Decatur have identified safe routes to school, there are several areas that could be improved. Many of the noted recommendations below are listed on Decatur's sidewalk prioritization plan.

- Implement a Safe Routes sidewalk network around the planned Talley Street School (1-mile radius). Note that several residential areas around the school are currently lacking sidewalks. Sidewalks are recommended along: southside of Talley Street, eastside of South Columbia Drive, Derrydown Way, Shadowmoor Drive, Hilldale Drive, Heatherdown Road, and southside of Missionary Drive to accommodate children walking and biking to and from the Talley Street school. Addressing the sidewalk gaps around the new Talley Street school will also enhance the safe routes to Winnona Park Elementary School. Additionally, it is recommended the City consider realigning the Talley Street and Shadowmoor Drive intersection and explore upgraded signalization options to improve pedestrian safety.
- Implement a Safe Routes sidewalk network around Westchester Elementary School (1-mile radius), as several residential areas around the school are lacking sidewalks completely. Sidewalks are recommended along: Westchester Drive, Harold Byrd Drive, Dogwood Way, Garden Lane, Lamont Drive, Kathryn Avenue, Ridley Circle, Mockingbird Lane, and Chelsea Drive. Many of these gaps have been prioritized. It is recommended that sidewalks are constructed where high-priority sidewalk gaps exist to create more safe routes to Westchester Elementary.
- Implement a Safe Routes sidewalk network around Glennwood Elementary School (1-mile radius), as several residential areas around the school, particularly in Glennwood Estates, are lacking sidewalks completely. Sidewalks are recommended along: Mt. Vernon Drive, Glenn Circle, Pinecrest Avenue, east side of Glendale Avenue, Hickory Street, Fairview Street, and Ridgeland Avenue.

## 4.8 Traffic Calming

## What is Traffic Calming?

Traffic calming is a strategy that utilizes passive measures to give drivers cues to slow down. These measures induce drivers to travel slower, which in turn calms traffic. Traffic calming works either through direct means, by making it impossible to traverse at high speeds, or by indirect means in changing drivers' perception of a space and making them feel like they should be driving more slowly.

Traffic Calming measures can be educational or policy strategies, or they can be part of the built environment. Educational and policy strategies include informing drivers about speed policies through local avenues, such as newsletters/newspapers, community bulletin boards, or police outreach; or through national campaigns, such as Vision Zero or Keep Kids Alive Drive 25. Traffic calming measures that are part of the built environment can be visual elements, pavement elements, horizontal measures, and intersection modifications.

Traffic Calming Measure	What Does it Do?	How Is It Achieved?
Visual Elements	Streetscape elements that give drivers visual cues to slow down	Signage; gateway treatments; streetscape elements, such as trees and on-street parking
Pavement Elements (Vertical)	Physical pavement treatments that indicate to drivers to drive slower	Speed bumps, raised crosswalks, speed cushions, and rumble strips
Horizontal Measures	Visual or physical methods of narrowing a travel lane to encourage slower driving	Curb extensions, extended striping, on- street parking, traffic islands
Intersection Modifications	Modifying an existing intersection to help slow the speed of traffic	Realignment of stop- controlled intersections, roundabouts, mini- roundabouts *

Table 4.1: Traffic calming measures.

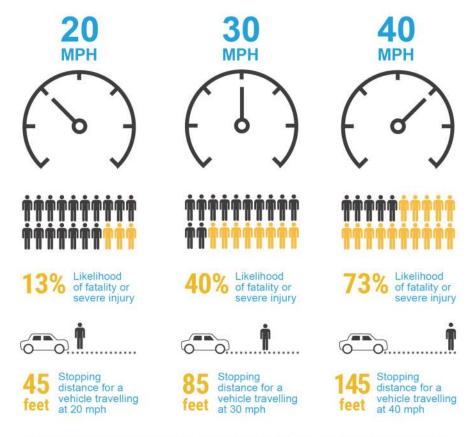
All these measures are primarily designed to lower speeds and improve safety, which also has the added benefit of making it less appealing to through-traffic. Implementing traffic calming to improve safety is important, but traffic calming for reducing volumes is not

<sup>\*</sup>These measures must still allow for emergency vehicle access.

always an appropriate approach. Restrictions may keep through-traffic off a neighborhood street, but it inconveniences the people living in that neighborhood every day. Additionally, keeping an open network gives you more options in your neighborhood and when traveling elsewhere. It is also important to mention that all traffic calming measures must still allow for emergency vehicle access at all times.

#### **Speed and Safety**

The speed at which motor vehicles travel through our communities directly correlates to the comfort and safety of all people, whether they choose to drive, walk, ride a bike, or use transit. Non-motorized users are more vulnerable in the transportation environment, and in the event of a crash suffer far greater injuries. As shown in **Figure 4.29**, the higher the vehicular speed, the greater the potential for injury and death.



Source: Tefft, Brian C. Impact speed and a pedestrian's risk of severe injury or death. Accident Analysis & Prevention. 50. 2013

Figure 4.27: Speed and injuries.

The design of a street is the most effective way to influence speed. If a street is designed appropriately, that design can actually limit the maximum speed at which drivers feel comfortable; this results in a balanced approach for all users. <sup>15</sup> Geometry, lane and roadway width, and traffic calming measures can all help to influence speed. Many of the suggested designs included with the street typologies presented in this CTP would encourage lower speeds, but these may be limited to applications on City owned and maintained streets.

One myth of speed is that lower speeds always increase travel times. In some instances, this may be true, but often other factors have a greater impact on travel times. Congestion at signalized intersections contributes greatly to increased travel times and driver frustration. Coordination of signalized intersections for speeds of 15-25 mph or implementing modern roundabouts can help to lower travel speeds while also reducing congestion and improving travel times.<sup>16</sup>

Often, communities adjust posted speed limits in the hope of reducing speeds. This can be effective, if the lower speed limit is enforced. Speed limits can be set using several methodologies. The traditional "engineering" method is to use the 85th percentile speed that is currently experienced on the street in question. This approach often results in excessive speeds, as it allows current behavior, good or bad, to influence future behavior. Another method is to factor in the amount of pedestrian and bicycle traffic on the street, which generally results in a speed limit close to the 50th percentile. The "safe systems approach" sets speed limits based on anticipated crash types, the impacts that will result, and the tolerance of the human body to withstand those impacts. This approach is in line with the principles of Vision Zero.<sup>17</sup>

As part of a broader Vision Zero initiative (see recommendation below), the City of Decatur should determine the most appropriate methods for reducing vehicle speeds within the city limits. Implementing a citywide speed limit, in conjunction with design changes, could be considered as an option to provide consistency and

<sup>15</sup> FHWA, "Relationship between Design Speed and Posted Speed," memorandum, October 7, 2015.

**<sup>16</sup>** FHWA, Achieving Multi-modal Networks: Applying Design Flexibility & Reducing Conflicts (p. 23), August 2016.

<sup>17</sup> FHWA, Achieving Multi-modal Networks: Applying Design Flexibility & Reducing Conflicts (p. 22), August 2016.

affect change on GDOT roads where the City of Decatur may be less able to influence design.

## **Traffic Calming Trade-Offs**

Convenience. Although traffic calming measures induce drivers to drive slower and help create a safer environment for all user groups, there are trade-offs. One trade-off is the loss of convenience. For example, if a neighborhood street is frequently used as a short cut, the neighbors might decide to ask the city to install speed bumps. While the speed bumps will likely discourage some drivers, they inconvenience the neighbors. Speed bumps also cause additional noise and pollution, which especially affects the neighbors closest to the speed bumps, as well as added stress to a vehicle's suspension system.

Flexibility. Another trade-off is the loss of flexibility. If a neighborhood decides to have a street closed to prevent cut-through traffic, it limits choices for all users, including the neighbors themselves. However, closing a street completely is not always the best answer to traffic calming issues. There is a benefit to a connected street network. Cities are re-urbanizing and traffic is increasing, which creates a need to absorb growth as a city experiences infill development and the metro area expands. There is also a benefit to having a more balanced grid-like system that allows the network to absorb that growth. A grid-like system is more resilient. For example, if there is construction or a crash that closes one link, another street can bear the load. It is important to remember that streets are all public right-of-way, and all users have a right to be on them. While improving safety is paramount, blocking traffic entirely is not beneficial longterm.

#### **Benefits and Limitations**

While safety-focused installations have definite benefits and should be encouraged, it is important to be aware that when installing traffic calming, especially for the sake of reducing volumes, there are benefits, as well as limitations.

It is important to understand that perception does not always match reality. For example, while navigation systems like Waze are increasing traffic on local streets, a high percentage of the traffic is someone who lives in the neighborhood or an adjacent neighborhood. Similarly, limited instances of traffic or speeding contribute to a biased

perception. Even with traffic calming measures, it is inevitable that a driver can still speed down a neighborhood street. Designing streets for the worst-case scenario would render streets unusable. Therefore, it is important to collect data, such as crash reports and speed data, which gives City planners and designers an objective sense of conditions and helps them determine which, if any, traffic calming devices would be appropriate.

Community buy-in is a crucial factor in getting a city to prioritize applications for traffic calming measures. A super-majority of people directly impacted by the project is needed. It's also important that city staff and relevant stakeholders are supportive of the project. And, it is important to consider what traffic calming measures are appropriate for the context of the street. For instance, if volumes are too low, targeted education might be the best approach, as it would be a low-cost solution.

Finally, and perhaps most importantly, is ensuring the public will comply with installed traffic calming measures. Signs alone are not enough to change behavior, and without community support, sustained enforcement is not always possible. It is critical to ensure that the chosen measures are appropriate for the context of the street. For example, installing a stop sign where people aren't going to stop reduces safety. All-way stops increase safety in areas with limited visibility but installing them for speed control has an unreliable record of compliance. It is important to consider the potential rate of compliance when investing in traffic calming measures.

#### Recommendations

The City of Decatur receives numerous requests for traffic calming. Similar to capital improvement dollars, there is a limited amount of funding that can be spent on traffic calming. Therefore, the City must prioritize streets where traffic calming will be the most appropriate and effective.

It is important to keep in mind that the need for traffic calming is very dynamic. Streets that experience higher speeds and significant amounts of cut through traffic today, could quickly change based on access modifications, intersection improvements, new development coming online, and increased or decreased enforcement. So, it is critical to keep in mind that the priority traffic calming corridors have

been selected based on a period in time when the CTP was being updated. The City's traffic calming request process will continue to function, and new requests will be considered based on their merits within the process. It is certainly possible that future traffic calming could be implemented on a street that is not currently identified as a priority corridor.

**Figure 4.28** depicts the priority traffic calming corridors; many of these corridors are composed of more than one street. All priority traffic calming corridors are owned and maintained by the City of Decatur.

## Streets recommended for traffic calming:

- Superior Avenue
- Willow Lane
- Michigan Avenue
- Wilton Drive
- Plainview Street
- Ponce de Leon Place
- Garden Lane
- Coventry Road
- Nelson Ferry Road
- Adair Street
- East Parkwood Road
- East Lake Drive
- Second Avenue
- Garland Avenue
- Griffin Circle
- Brower Street
- East Davis Street
- Bucher Drive
- Inman Drive
- Derrydown Way

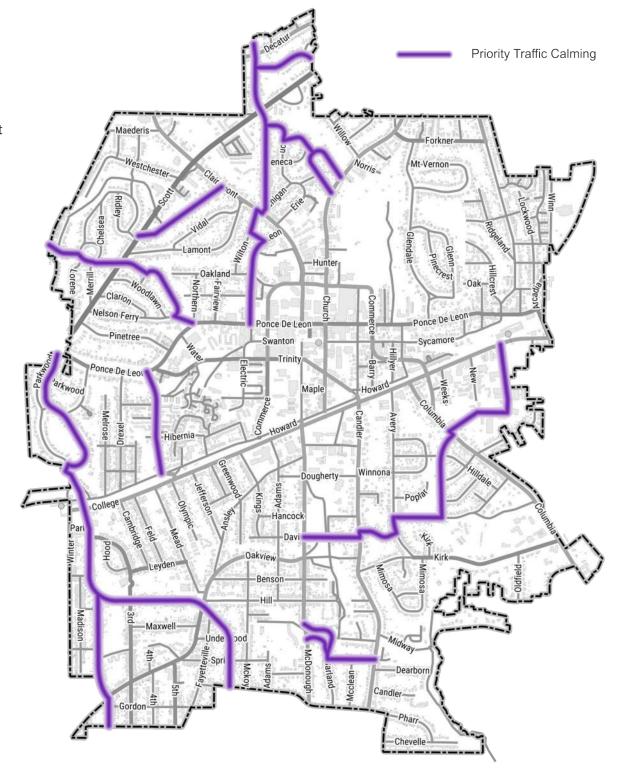


Figure 4.28: Priority traffic calming streets.

#### 4.9 Vision Zero

Vision Zero is an aggressive target of reducing traffic fatalities and serious injuries to zero. At first mention, a target of zero seems unrealistic. When we traditionally think of reducing traffic-related fatalities and serious injuries (or reducing any negative outcome, for that matter), we think abstractly about statistics; this allows us to consider marginal reductions as acceptable. However, when we personify it by asking, "How many traffic deaths are acceptable in my family?" then, a target of zero seems like the only acceptable answer.

Vision Zero is based on a "safe system" approach to traffic safety that is fundamentally different from business as usual. A safe system approach systematically eliminates the opportunity for people to crash in circumstances that are likely to cause death or serious injury. For example, the vulnerability of pedestrians to serious or fatal injuries in a collision with a motor vehicle rises dramatically with increased speed. A safe system approach seeks to eliminate any opportunity for a pedestrian to be hit by a car traveling in excess of 30 mph – either by reducing vehicle speeds to less than 30 mph where pedestrians are going to be crossing the street, or by physically separating crossing movements by time and/or space.

TRADITIONAL APPROACH	VISION ZERO APPROACH
Traffic deaths are INEVITABLE	Traffic deaths are PREVENTABLE
PERFECT human behavior	Integrate HUMAN FAILING in approach
Prevent COLLISIONS	Prevent FATAL AND SEVERE CRASHES
INDIVIDUAL responsibility	SYSTEMS approach
Saving lives is EXPENSIVE	Saving lives is NOT EXPENSIVE

**Table 4.2:** Traditional approach compared to Vision Zero approach. (Source: https://visionzeronetwork.org/about/what-is-vision-zero/)

The Vision Zero Network, a national network of cities committed to eliminating traffic fatalities by a set date, identifies six key elements that sets Vision Zero apart from traditional road safety efforts.<sup>18</sup>

1. Traffic deaths are preventable. Zero is upheld as the only acceptable number of traffic fatalities and the word "accident" is eliminated from the traffic safety vocabulary. Serious and fatal crashes

18 https://visionzeronetwork.org/

- are entirely preventable; they are not accidents and they are not inevitable.
- 2. System failure is the problem. In the Vision Zero framework, individuals are not the problem. It is flaws in the system from planning through design, construction and maintenance that allow roads to have no safe crossings or which set up conflicts between high-speed motor vehicles and pedestrians and bicyclists. Ticketing pedestrians for jaywalking where there are no crosswalks or sidewalks is not going to solve the issue or change people's behavior.
- 3. Road safety is a public health issue. While traditional approaches to transportation safety have prioritized reducing or preventing collisions, Vision Zero focuses on preventing injuries and fatalities. Engineers are challenged to eliminate the circumstances in which a human body may be exposed to crash forces it cannot survive.
- 4. The Safe System approach is holistic. Roadway design is a part of the issue, but so are land use and development decisions, school siting choices, housing policies, and a host of factors that affect our transportation options and choices.
- 5. Data drives decisions. Vision Zero demands a relentless focus on eliminating fatalities and serious injuries first; to do this, historical data is needed to determine causes and measure success.
- 6. Social equity is a key goal and component of Vision Zero. Traffic crashes disproportionately affect vulnerable populations, particularly among those who do not have access to a motor vehicle and who are more likely to be dependent on walking, biking, and transit. Communities of concern must be meaningfully engaged in addressing the safety, personal security, accessibility, and larger cultural and societal issues around road safety and community development.

#### Recommendations

It is recommended that the City of Decatur pursue a Vision Zero approach to traffic safety. This should begin with two critical elements:

1. Collect data in a manner that will inform decision-making. The City should evaluate the methods for which it currently collects traffic and crash data, and determine if it is being collected and cataloged

in a manner that is useful for determining causes of, and ultimately solutions to, crashes, serious injuries, and deaths. Data must be accessible, easy to understand and interpret, and able to be readily passed between databases and GIS platforms.

2. Craft a Vision Zero Action Plan for the City of Decatur. Nationally, municipalities are leading the way in advancing Vision Zero; a first step in this process is the creation of a locally adopted Vision Zero Action Plan. Such a plan would establish why Vision Zero is needed, document historical data in a user-friendly manner, identify target areas and hot spots, set goals for the community, and celebrate great work done to date.

## 4.10 City-Wide Circulator Concept

One way the City can increase mobility, and access to mobility, for its residents and visitors is by creating a city-wide circulator. A circulator is typically a short-distance, circular, fixed-route transit mode that takes riders around a specific area with major destinations. It might be a small van, rubber-tire trolley, electric bus, compressed natural gas bus or even an autonomous transit vehicle. The purpose of the circulator route is to connect residents, including residents living in senior housing, to MARTA stations, parks, and commercial zones throughout the city. To decrease the travel time on the initial pilot-project circulator, two routes should be considered: a northern loop and a southern loop.

The northern loop will primarily service the Downtown Decatur commercial district, connect to senior housing in the northwestern quadrant of the city and connect to the growing commercial area at Suburban Plaza, just outside of the city. The northern loop will also connect to the Avondale and Decatur MARTA stations. The southern loop will primarily service the residential areas south of the train track that bisects the city. This loop will run through Oakhurst, Agnes Scott College, Downtown Decatur, the Avondale MARTA Station area, the recently-acquired United Methodist Children's Home property, Columbia Theological Seminary, several parks, and a senior-living facility in the southwestern quadrant of the city.

The southern loop will connect to all three MARTA stations within the city limits. See **Table 4.3** for a list of points of interests along each route, as well as **Figure 4.29** on page 58 for the route locations.

NORTH LOOP	SOUTH LOOP
Decatur MARTA Station	East Lake MARTA Station
Decatur Post Office	Oakhurst Park
Downtown Commercial Areas	Oakhurst Village
Clairmont Oaks	Agnes Scott College
Sunrise of Decatur	Philips Tower
Suburban Plaza	Decatur MARTA Station
Glenlake Park / Decatur Cemetery	Decatur Post Office
Kroger	Downtown Commercial Areas
Avondale MARTA Station	Glennwood Elementary School
Decatur Recreation Center	Avondale MARTA Station
DeKalb County Library – Decatur Branch	East Decatur Station
Philips Tower	Children's Home Property
Decatur City Hall	Columbia Theological Seminary
Decatur High School	Dearborn Park
Ebster Recreation Center	McKoy Park
	East Lake Arbor

Table 4.3: City-wide circulator points of interest

## 4.11 Parking

As previously summarized, in late 2017, through a Community Choices grant, the Atlanta Regional Commission (ARC) completed the <u>City of Decatur Parking Inventory Update</u>. It suggested that the City of Decatur update the GIS parking inventory database on a regular basis to inform future parking decisions. Additionally, the City was encouraged to maintain positive relationships with private parking managers to assist in the gathering of occupancy data. Further, it was recommended that the City move toward identifying a framework for increasing the existing smart parking technology infrastructure.

In addition to the above items, it is recommended that an occupancy survey be completed for downtown public and private parking facilities. While the <u>City of Decatur Parking Inventory Update</u> conducted by ARC is valuable, without an occupancy survey, it is impossible to know whether or not existing facilities are being efficiently utilized, when and where parking demand is at its peak, and if there are opportunities for shared parking and partnerships. An occupancy survey would provide important information on demand

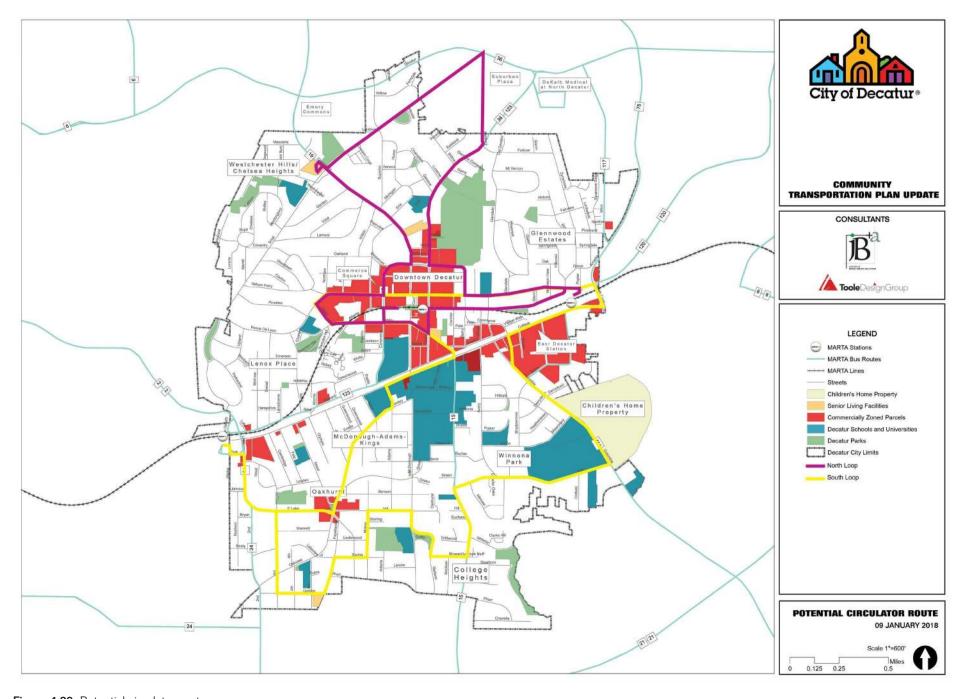


Figure 4.29: Potential circulator routes.

peaks, preferences for location and type of parking, and underutilized facilities. This would allow the City to begin to balance parking demand and investigate opportunities for flexibility and partnerships. With a minimal amount of training and direction, such a survey could be completed by City staff, or a consultant could be hired to complete it.

While the <u>City of Decatur Parking Inventory Update</u> recommended identifying a framework for increasing the existing smart parking technology infrastructure, it does not provide any real roadmap for how to achieve this. Therefore, once an occupancy survey and evaluation of its findings is complete, it is recommended that an assessment of the most appropriate smart parking technology for the City of Decatur be commissioned. This study should be done by an experienced parking consultant that can provide the City with an action plan for implementing a full smart parking technology system. Such an assessment should include determination of equipment, rollout phasing, cost estimates, partnership scenarios, financing strategies, and a return on investment prospectus.

## 4.12 Transportation Technology Investments

Like technology in all aspects of our lives, transportation-related technology has come a long way in a very brief period of time. Technology is enhancing many aspects of transportation and applies across the board to all modes of transportation. Some of these recent advances in technology are summarized below. Going forward, there will be many ways the City can incorporate these or other new technologies into the community's transportation infrastructure.

## **Current Technology**

The following are transportation-related technologies that have evolved in recent years and that many of us have come to know and use on a daily basis.

**Ridesharing.** Ride-sharing apps, such as Uber and Lyft, utilize three recent technologies to provide one-time shared rides on very short notice: GPS navigation devices, smartphones, and social networks. By filling otherwise empty seats in vehicles, ridesharing apps have the ability to provide a more flexible mode of transportation while helping to alleviate common transportation problems, such as traffic

congestion and pollution.<sup>19</sup> Ridesharing can easily be accommodated by designating areas for ridesharing pick-ups and drop-offs at major destinations.

**GPS Navigation Systems.** Google Maps, Waze, and other navigation systems have immensely changed vehicle travel in the last two decades. Navigation systems use Global Positioning System (GPS) satellite technology to help users locate routes and destinations almost anywhere in the world. Google Maps is a popular web mapping service that offers satellite imagery, street maps, 360-degree street views, real-time traffic conditions, and route planning for traveling not only by vehicle, but also by foot, bicycle, and public transportation.

Waze, formerly known as Free Map Israel, was sold to Google in 2013 and is a more "interactive" version of Google Maps that uses crowdsourcing to inform its maps. Users can report, in real time, traffic slow-downs, accidents, and other road hazards, such as potholes. Waze users' information, including users' speed and location, is anonymously sent to the Waze server, which helps improve the service. In 2014, Waze launched its Connected Citizens program, which gives governments free access to Waze's massive real-time data for planning purposes in exchange for contributing data that Waze can incorporate into the app.<sup>20</sup> While Waze can be an important planning tool for municipalities, the app has come under scrutiny for re-routing users through neighborhoods, which residents view as a nuisance. Increased traffic on their streets increases noise and pollution and decreases safety, especially in areas with children.

Apps for Visually-Impaired Pedestrians. As GPS technology continues to develop, it is being used in more applications. A relatively new use for GPS technology is as a guide for visually- and hearing-impaired pedestrians using smart phone apps. Several apps have been developed and they help different people in different ways. For example, some apps are talking maps that hold highly specific information about the shapes of intersections and locations of businesses <sup>21</sup>. This helps visually-impaired pedestrians find their way around a city without relying on passersby for help or directions. Another app uses GPS and Bluetooth technology to help visually-

 $<sup>{\</sup>bf 19}\ http://rideshare choices.scripts.mit.edu/home/wp-content/papers/GreenburgLevofsky-Organized Dynamic Ridesharing.pdf$ 

<sup>20</sup> https://www.fastcompany.com/3045080/waze-is-driving-into-city-hall

<sup>21</sup> http://fortune.com/2015/06/25/apps-for-blind-community/

impaired pedestrians "sense" when quiet electric vehicles are approaching.

Bike Share Programs. Bike-sharing programs entail a "distributed network of public bicycles used for short trips" generally in urban areas. Bike-sharing programs have a come a long way since 1965, when the first bike-share program was set up in Amsterdam. Fifty bikes were painted white and scattered throughout the city for anyone to use, free-of-charge. Copenhagen, Denmark, formalized the program in the 1990s with designated racks and coin deposits to check out bikes. Implementing bike-share programs is a way to enhance mobility, alleviate automotive congestion, reduce air pollution, and boost health, support local businesses, and attract more young people. The nearby City of Atlanta currently has a bike-share program through a company called Relay. Relay has placed numerous bike share stations around the city, including at MARTA stations. Decatur could implement a similar program, with bike share stations at any or all of Decatur's MARTA stations.

**Electronic Vehicles / Low Emissions Vehicles.** Electronic vehicles (EV) utilize one or more electric motors to work, which run by using energy stored in rechargeable batteries. It is necessary to charge

22 http://www.earth-policy.org/plan\_b\_updates/2013/update112



**Figure 4.30:** The rise of hybrid and battery electric vehicles (source: https://www.bloomberg.com/news/features/2017-12-19/the-near-future-of-electric-cars-many-models-few-buyers)

these vehicles by plugging them into an electricity source. <sup>23</sup> Low Emissions Vehicles (LEV) simply produces fewer emissions than a traditional vehicle. There are various categories of LEVs that regulate the amount of emissions a vehicle releases. Many states have begun regulating emissions, including Georgia. Both EVs and LEVs help reduce the amount of noxious gasses, such as unburned hydrocarbons and particulates, released into the atmosphere. <sup>24</sup>

Along with the Chinese government's commitment to improving air quality in their major urban centers comes an increased global demand for EV and LEV vehicles. Global automakers are responding by announcing their plans to develop and deliver numerous new EV and

LEV models in the coming years. The result will be increasing EV and LEV fleets of both personal, freight and transit vehicles in this country and around the globe.

**EV Infrastructure.** As increasing numbers of EVs need to be charged, municipalities, colleges and universities, utility companies, and private developers throughout the country have begun installing EV charging stations around cities, on campus, in shopping centers, and at office buildings. EV charging stations provide EV owners with safe, higher-voltage electricity to help charge vehicles more efficiently. Charging stations are usually equipped to charge multiple vehicles at once and have sensing mechanisms that disconnect the power once the EV is done charging.

Intelligent Transportation Systems (ITS) and Adaptive Signal Control Technology (ASCT). ITS is an advanced application that, over the past several decades, has improved safety and mobility, reduced environmental impact, promoted sustainable transportation development, and enhanced productivity. ITS combines technology and improvements in information systems, communication, sensors, controllers and advanced mathematical methods with the conventional world of transportation infrastructure.<sup>25</sup> The primary goals of ITS are to enable users to make more informed decisions and to make

<sup>23</sup> http://www.plugincars.com/electric-cars

<sup>24</sup> http://www.jdpower.com/cars/articles/tips-advice/understanding-low-emission-vehicles

<sup>25</sup> https://ieeexplore.ieee.org/document/7980336/

more coordinated, safer, and smart use of existing transportation networks.<sup>26</sup>

ASCT, one component of ITS, is an adaptive transportation technology that adjusts the timing of green, yellow, and red lights to accommodate changing traffic patterns and ease traffic congestion in real time. The main benefits of adaptive signal control technology over conventional signal systems are that it can:

- Continuously distribute green light time equitably for all traffic movements
- Improve travel time reliability by progressively moving vehicles through green lights
- Reduce congestion by creating smoother flow
- Prolong the effectiveness of traffic signal timing<sup>27</sup>

## **Future Technology**

Just as technology continues to evolve at a rapid rate in other aspects of our lives, so too is it evolving in the world of transportation.

**Autonomous Vehicles / Transit.** Although driverless cars may still seem like a science-fiction fantasy, they are rapidly becoming a reality. Many of the large car manufacturers around the world, including Tesla, GM, Mercedes, BMW, and Toyota/Lexus, are in the advanced testing stages of fully-driverless technology. Tech companies, like Google and Uber, are also creating driverless technology. Big car manufacturers have been testing their autonomous cars in Arizona for several years now. Uber has been testing in Pittsburgh and Waymo (Google' autonomous car division) has announced plans to test here in Atlanta. Ready or not, the autonomous vehicle is coming our way soon.

Autonomous vehicles have the ability to significantly alter future transportation and associated land uses. For example, once a city becomes completely driverless, it is likely that parking will be moved to the outskirts of the city. This means that the existing parking infrastructure will need to be completely re-thought. Parking garages

can be adaptively reused for businesses and housing. Freeing up space that was once used for parking will allow for more development and public places.<sup>30</sup> However, before autonomous vehicles can exist, policy and planning for their use on City streets must be addressed first.

Autonomous vehicles have the ability to change public transit as well. Driverless technology offers multiple potential benefits for transit agencies, such as increased safety and mobility, while also enhancing mobility throughout an agency's region and providing greater access to transportation for everyone.<sup>31</sup>

**Micro-Transit.** Micro-transit is a for-profit bus service that caters to commuters willing to pay more for a ride that is more direct and comfortable than those offered by existing public transportation. Since 2014, micro-transit companies have been using sophisticated algorithms to plan fixed routes, based on demand, in San Francisco, Boston, and New York. The model has been hailed – and particularly by CityLab – as having the potential to change urban mobility.

Intelligent Parking Solutions. Intelligent Parking Solutions, a technology developed by Siemens, helps drivers find available parking spaces more efficiently. Approximately one-third of city center traffic is due to drivers looking for parking. Siemens' technology utilizes a sensor-controlled parking management system that helps optimize the use of urban parking facilities and substantially reduce congestion caused by motorists in search of a parking space. This technology works by using radar sensors, usually on or in street lights, to monitor parking spaces. The sensors then use radar technology to determine if parking spaces are available within pre-defined areas, which provides a transparent overview of occupancy and parking duration for the monitored parking facilities.

#### **Recommendations**

While there are a multitude of technologies the City of Decatur could employ going forward, based on community interest and feedback, it is recommended that the City focus on ways to implement the following transportation-related technology investments:

<sup>26</sup> https://curlie.org/Science/Technology/Transportation/Intelligent\_Systems/

<sup>27</sup> https://www.fhwa.dot.gov/innovation/everydaycounts/edc-1/asct.cfm

<sup>28</sup> http://www.alphr.com/cars/1001329/driverless-cars-of-the-future-how-far-away-are-we-from-autonomous-cars

<sup>29</sup> https://www.wired.com/2016/10/heres-self-driving-cars-will-transform-city/

<sup>30</sup> https://www.wired.com/2016/10/heres-self-driving-cars-will-transform-city/

 $<sup>{\</sup>bf 31} \ {\rm http://www.metro\text{-}magazine.com/technology/article/724770/driverless-vehicles-and-the-future-of-public-transit}$ 

- 1. **Micro-Transit / Circulator:** identify a potential service provider, if not MARTA, and work with that provider to conduct a pilot project feasibility study.
- 2. **EV Infrastructure:** City to officially codify requirements for the installation of EV charging stations for new developments, and City to commit to providing one or two EV charging stations at all city facilities within the next five years.
- 3. Intelligent Transportation Systems / Adaptive Traffic Control: City to explore feasible application of ITS/ATC technology along existing major corridors, including Clairemont, Candler, Commerce, Ponce, Church, College, etc. and, in partnership with GDOT, improvements to the RTOP program on Scott Boulevard (GA-8).
- 4. **Intelligent Parking Solutions:** City to research alternative intelligent parking solutions, similar to the Siemens technology, and potential application in the downtown core area.

# 5 Implementation Plan

## **5.1 Implementation**

The Community Transportation Plan (CTP) update is a critical step in continuing to advance a more connected, safe, and efficient multi-modal transportation network throughout the City of Decatur. However, the process which crafted this document is only the beginning; as the City has done so well in the past, the conversation must continue and lead to real projects being implemented. The CTP is the blueprint for future transportation decisions and investments.

While completing the CTP update was important and necessary, implementation of recommendations identified in this document is the real desired outcome of the CTP. To this end, a framework for implementation has been devised and is presented on the pages that follow.

#### 5.2 Action Plan

**Table 5.3** located at the end of this section presents the Action Plan for implementation of recommended improvements presented in the CTP. The Action Plan summarizes recommendations, anticipated implementation period, order-of-magnitude opinions of probable cost, potential partners, and key considerations regarding implementation.

## **5.3 Opinions of Probable Cost**

Where applicable, an estimated order-of-magnitude opinion of probable cost is presented for each recommendation in the Action Plan. For policy, planning, and technology actions, cost is estimated based on professional experience with similar efforts. For capital projects, costs were developed by identifying pay items and establishing rough quantities; these costs include a planning-level contingency. Unit costs are based on 2018 dollars and were assigned based on historical cost data from GDOT and other sources. Lump sum costs have been assigned to some general categories such as utility relocations, engineering, and right-of-way acquisition, however these costs can vary widely depending on the exact details and nature of the work. The overall estimates are intended to be general and used for planning purposes. Construction costs will vary based on the ultimate project scope (i.e., potential combination of projects) and economic conditions at the time of construction.

With specific regard to street typologies, costs were developed on a linear-foot basis as shown in **Table 5.1**. The purpose of the street typologies and associated priority corridors is to provide a transportation vision for how each of these roads should develop over time if improvements are made, not to suggest that all of these roads must be improved. The Action Plan includes lump sum budgets in each implementation period for improving priority corridors. As opportunities arise for improvements, the City and/or GDOT should follow the recommended typology for that specific road, and can utilize the linear-foot costs presented below as a planning tool for estimating costs as street improvements become a reality.

Street Typology	Basic Assumptions	Cost Per Linear- Foot
Urban Core Two-lane with Sidewalk Level Bike Lanes	Resurface existing roadway Addition of sidewalk level bike lane (both sides) Addition of sidewalk (both sides)	\$1,200.00
Urban Core Two-lane with Two-way Separated Bike Lane	Resurface existing roadway Addition of two-way bike lane with raised concrete buffer Addition of sidewalk (both sides)	\$950.00
Urban Core Two-lane with Bike Lanes	Resurface existing roadway Stripe on-street bike lane (both sides) Addition of sidewalk (both sides)	\$850.00
Urban Two-lane with On- Street Parking	Resurface existing roadway Stripe on-street parking (both sides) Addition of sidewalk (both sides)	\$700.00
Urban Two-lane	Resurface existing roadway Addition of sidewalk (both sides)	\$500.00
Urban Three-lane with Bike Lanes	Widen existing road by 12 feet and resurface Stripe on-street bike lane (both sides) Addition of sidewalk (both sides)	\$1,300.00
Urban Residential with One Side of On-street Parking	Resurface existing roadway Stripe on-street parking (one side) Addition of sidewalk (both sides)	\$600.00
Urban Residential with No On-street Parking	Resurface existing roadway Stripe shoulders (both sides) Addition of sidewalk (both sides)	\$650.00
Urban Bike Boulevard	Resurface existing roadway Addition of sharrows Addition of sidewalk (both sides)	\$500.00

Table 5.1: Cost per linear-foot by street typology (continued on next page).

Suburban Three-plus Lanes	Resurface existing roadway Addition of sidewalk (both sides)	\$800.00
Suburban Four-lane with Shared Use Path	Resurface existing roadway Addition of shared use path (one side) Addition of sidewalk (one side)	\$850.00
Suburban Five-lane with Shared Use Path	Resurface existing roadway Addition of shared use path (one side) Addition of sidewalk (one side)	\$1,000.00

Table 5.1: Cost per linear-foot by street typology (continued from previous page).

## **5.4 Implementation Periods**

Actions have been categorized by the following implementation periods. It is important to note that funding has not been identified for any of the recommendations included in the Plan.

- Near-term These are actions that should be advanced as soon as possible. They are critical to establishing early momentum, resolving urgent issues, and setting the foundation for the success of future improvements.
- Short-term Although not as urgent as near-term recommendations, these improvements are considered highly important and/or are tied to other initiatives with shorter time frames. They can be implemented through a variety of means and are not singularly dependent on one source of funding or agency.
- Mid-term While valuable, these improvements an be dveloped over a longer period of time. Planning, establishment of support, and identification of funding sources should begin now for these projects so they are on track for implementation within this period.

• Long-term – Long-term projects are outside the 10-year horizon of the CTP. These improvements will require a level of planning and funding that must be formulated over a number of years, and may be reevaluated when the CTP is once again updated.

Although implementation periods have been established, these designations are for planning purposes only; actions should be implemented as soon as opportunities arise. For example, if circumstances provide an opportunity to complete a mid-term project two years after the CTP is adopted, the improvement should be made, regardless of its designation as "mid-term."

#### 5.5 Cost Estimates

A breakdown of cost by project type and implementation period is presented in **Table 5.2**.

Cost by Implementation Period									
Project Type	ct Type Near-term Short-term Mid-term Long-term Total Costs								
Policy	\$20,000	\$0	\$0	\$0	\$20,000				
Planning	\$350,000	\$110,000	\$0	\$0	\$460,000				
Technology	\$0	\$500,000	\$3,000,000	\$0	\$3,500,000				
Capital Improvement	\$1,800,000	\$16,440,000	\$28,090,000	\$32,120,000	\$78,450,000				
TOTAL	\$2,170,000	\$17,050,000	\$31,090,000	\$32,120,000	\$82,430,000				

**Table 5.2:** Capital cost by implementation period and project type.

RECOMMENDATION	PROJECT TYPE	IMPLEMENTATION PERIOD	OPINION OF PROBABLE COST	POTENTIAL PARTNERS	POTENTIAL FUNDING SOURCES	KEY CONSIDERATIONS/NOTES
Crash Data Collection Upgrades	Policy	Near-term	\$20,000	GDOT; DeKalb County Sheriff; Georgia Department of Public Safety	City of Decatur	- Critical to understanding crash causes, identifying solutions, and benchmarking success - Funding may be required to modernize data collection
Vision Zero Action Plan	Planning	Near-term	\$100,000	GDOT; Atlanta Regional Commission; City Schools of Decatur; DeKalb County Sheriff; Georgia Department of Public Safety	City of Decatur; Atlanta Regional Commission	- Key to advancing ""safe system"" approach to transportation - Critical to determining best methodology for overall speed reduction - Positions Decatur as a state and national leader
N. Decatur Road Corridor Plan	Planning	Near-term	\$150,000	DeKalb County; Emory University; MARTA	City of Decatur; DeKalb County; Emory University; MARTA; Atlanta Regional Commission	- Key to determining a land use and transportation vision for this multijurisdictional corridor - Develop corridor vision that addresses projected population growth, traffic impacts, travel speeds, non-motorized transportation, and MARTA's light rail plans - Must be coordinated closely with improvements to the N. Decatur Road/Superior Avenue intersection
E. College Avenue at Sams Crossing Intersection Improvement	Capital Improvement	Short-term	\$1,200,000	GDOT; City of Avondale Estates	GDOT; City of Decatur; City of Avondale Estates	Improves pedestrian and bicycle safety along Stone Mountain Trail     Slows traffic and decreases crash potential     Traffic analysis should be performed prior to design
N. Decatur Road at N. Superior Avenue Intersection Improvement	Capital Improvement	Near-term	\$1,400,000	DeKalb County; MARTA	City of Decatur; DeKalb County	- Number one intersection of public concern - Additional right-of-way will be needed - Improvements will signficantly improve safety - Traffic analysis should be performed prior to design - Must be coordinated closely with recommended N. Decatur Road Corridor Plan

 Table 5.3: Recommendation Implementation Matrix.

RECOMMENDATION	PROJECT TYPE	IMPLEMENTATION PERIOD	OPINION OF PROBABLE COST	POTENTIAL PARTNERS	POTENTIAL FUNDING SOURCES	KEY CONSIDERATIONS/NOTES
East Lake Drive at 2nd Avenue Intersection Improvements	Capital Improvement	Short-term	\$1,100,000	MARTA	City of Decatur	- Slows traffic and decreases crash potential - Improves bicycle and pedestrian travel - Possible alternative route for East Lake MARTA Connector Neighborhood Greenway
Huron Street at Champlain Street Intersection Improvement	Capital Improvement	Near-term	\$400,000	-	City of Decatur	- Slows traffic and decreases crash potential - Improves pedestrian safety"
E. Ponce de Leon Avenue at N. Arcadia Avenue Intersection Improvement	Capital Improvement	Long-term	\$1,400,000	DeKalb County; PATH Foundation	City of Decatur; Atlanta Regional Commission; PATH Foundation	<ul> <li>Improves traffic flow and reduces congestion</li> <li>Additional right-of-way will be needed</li> <li>Traffic analysis should be performed prior to design</li> </ul>
W. Ponce de Leon Avenue at Nelson Ferry Road/Northern Avenue Intersection Improvement	Capital Improvement	Mid-term	\$1,700,000	-	City of Decatur; Atlanta Regional Commission	<ul> <li>Roundabout will improve safety and resolve conflicts</li> <li>Potential for gateway treatment in center of roundabout</li> <li>Traffic analysis should be performed prior to design</li> </ul>
Priority Capital Corridors Program (Short-term)	Capital Improvement	Short-term	\$9,000,000	GDOT; MARTA	City of Decatur; Atlanta Regional Commission; GDOT; MARTA	- Establish ongoing annual program for corridor improvements - Utilize street typology linear-foot costs to determine budget needs - Prioritize corridors identified in the CTP - Lower level of effort projects should be programmed in short-term - Cost assumes \$3 million annually for 3-year implementation period
Priority Capital Corridors Program (Mid-term)	Capital Improvement	Mid-term	\$18,750,000	GDOT; MARTA	City of Decatur; Atlanta Regional Commission; GDOT; MARTA	- Establish ongoing annual program for corridor improvements - Utilize street typology linear-foot costs to determine budget needs - Prioritize corridors identified in the CTP - Moderate level of effort projects should be programmed in the mid-term - Cost assumes \$3.75 million annually for 5-year implementation period

 Table 5.3: Recommendation Implementation Matrix, continued.

RECOMMENDATION	PROJECT TYPE	IMPLEMENTATION PERIOD	OPINION OF PROBABLE COST	POTENTIAL PARTNERS	POTENTIAL FUNDING SOURCES	KEY CONSIDERATIONS/NOTES
Priority Traffic Calming Corridors Program (Mid-term)	Capital Improvement	Mid-term	\$2,500,000	Neighbor- hoods; MARTA	City of Decatur	- Continue traffic calming with ongoing annual program - Prioritize corridors identified in the CTP - Determine number of projects each year based on available budget - Cost assumes \$500,000 annually for 5-year implementation period
Priority Capital Corridors Program (Long-term)	Capital Improvement	Long-term	\$23,500,000	GDOT; MARTA	City of Decatur; Atlanta Regional Commission; GDOT; MARTA	- Establish ongoing annual program for corridor improvements - Utilize street typology linear-foot costs to determine budget needs - Prioritize corridors identified in the CTP - Higher level of effort projects should be programmed in the long-term - Cost assumes \$4.7 million annually for 5-year implementation period
Priority Traffic Calming Corridors Program (Long-term)	Capital Improvement	Long-term	\$2,500,000	Neighbor- hoods; MARTA	City of Decatur	- Continue traffic calming with ongoing annual program - Prioritize corridors identified in the CTP - Determine number of projects each year based on available budget - Cost assumes \$500,000 annually for 5-year implementation period
Parking Occupancy Survey	Planning	Near-term	\$50,000	Atlanta Regional Commission	City of Decatur; Atlanta Regional Commission	- Critical to balancing parking demand - Assists in identifying opportunities for flexibility and parternships - Makes smart parking technology more effective
Smart Parking Technology Assessment	Planning	Short-term	\$50,000	Atlanta Regional Commission	City of Decatur; Atlanta Regional Commission	- Provides roadmap to identify smart parking technology framework - Includes action plan for implementing smart parking technology system - Determines equipment, phasing, costs, partnerships, financing, and return on investment

 Table 5.3: Recommendation Implementation Matrix, continued.

RECOMMENDATION	PROJECT TYPE	IMPLEMENTATION PERIOD	OPINION OF PROBABLE COST	POTENTIAL PARTNERS	POTENTIAL FUNDING SOURCES	KEY CONSIDERATIONS/NOTES
Smart Parking Technology Phase 1 Implementation	Technology	Short-term	\$500,000	-	City of Decatur; Atlanta Regional Commission	- Assessment will determine components of Phase 1 Implementation - Assumes an initial expenditure of \$500,000; assessment will deterimine actual budget needed
Align UDO with CTP	Policy	Near-term	\$0	-	-	- Align CTP street typologies with UDO typologies - Staff time required, but no direct expenditure of funds
Westchester Elementary School/ Hidden Cove Park Trail	Capital Improvement	Short-term	\$1,260,000	PATH Foundation; City Schools of Decatur	GDOT; PATH Foundation; Atlanta Regional Commission	- 10 to 12-foot wide concrete trail - Approximately 4,200 linear feet - Cost estimate based on \$300 per linear foot
Glenlake Park Trail Extension	Capital Improvement	Mid-term	\$2,760,000	PATH Foundation	GDOT; PATH Foundation; Atlanta Regional Commission	- 10 to 12-foot wide concrete trail - Approximately 9,200 linear feet - Cost estimate based on \$300 per linear foot
Shoal Creek Trail	Capital Improvement	Long-term	\$660,000	PATH Foundation	GDOT; PATH Foundation; Atlanta Regional Commission	- 10 to 12-foot wide concrete trail - Approximately 2,200 linear feet - Cost estimate based on \$300 per linear foot
Harmony Park Trail	Capital Improvement	Long-term	\$1,680,000	PATH Foundation	GDOT; PATH Foundation; Atlanta Regional Commission	- 10 to 12-foot wide concrete trail - Approximately 5,600 linear feet - Cost estimate based on \$300 per linear foot
Micro-Transit/ Circulator Feasibility Study	Planning	Short-term	\$60,000	Atlanta Regional Commission	Atlanta Regional Commission; City of Decatur	- Identifies potential service providers and structure - Determines pilot project and/or phasing
Micro-Transit/ Circulator Phase 1 Implementation	Technology	Mid-term	\$3,000,000	Atlanta Regional Commission; MARTA	Atlanta Regional Commission; MARTA; City of Decatur	- Based on recommendations from feasibility study - Assumes \$3 million initial expenditure; feasibility study will determine actual budget needed
EV Infrastructure Policy	Policy	Short-term	\$0	-	-	- Codify requirements for installation of EV charging stations for new developments - Staff time required, but no direct expenditure of funds

 Table 5.3: Recommendation Implementation Matrix, continued.

RECOMMENDATION	PROJECT TYPE	IMPLEMENTATION PERIOD	OPINION OF PROBABLE COST	POTENTIAL PARTNERS	POTENTIAL FUNDING SOURCES	KEY CONSIDERATIONS/NOTES
Intelligent Transportation Systems(ITS)/ Adaptive Traffic Control (ATC) Study	Planning	Near-term	\$50,000	GDOT; DeKalb County	GDOT; City of Decatur; DeKalb County	- Explores feasible application of ITS/ATC technology along major corridors - Requires partnerships with GDOT and/ or DeKalb County - Cost of \$50,000 is per corridor studied; may be higher or lower depending on length of corridor
Talley Street School SRTS Sidewalk Network	Capital Improvement	Long-term	\$2,380,000	GDOT; City Schools of Decatur	City of Decatur; GDOT	- 5-foot sidewalks - Assumes 3 miles of sidewalk - Cost estimate based on \$150 per linear foot - While this is programmed as long-term, some elements may be accomplished as part of school construction
Westchester Elementary School SRTS Sidewalk Network	Capital Improvement	Short-term	\$2,380,000	GDOT; City Schools of Decatur	City of Decatur; GDOT	- 5-foot sidewalks - Assumes 3 miles of sidewalk - Cost estimate based on \$150 per linear foot
Glenwood Elementary School SRTS Sidewalk Network	Capital Improvement	Mid-term	\$2,380,000	GDOT; City Schools of Decatur	City of Decatur; GDOT	- 5-foot sidewalks - Assumes 3 miles of sidewalk - Cost estimate based on \$150 per linear foot

 Table 5.3: Recommendation Implementation Matrix, continued.

## **Footnotes**

- 1. Annual Estimates of the Residential Population: April 1, 2010 to July 1, 2016; U.S. Census Bureau, Population Division.
- 2. Atlanta Regional Commission, atlantaregiona.com/aging-resources/lifelong-communities.
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- 16. FHWA, Achieving Multi-modal Networks: Applying Design Flexibility & Reducing Conflicts (p. 23), August 2016.
- 17. FHWA, Achieving Multi-modal Networks: Applying Design Flexibility & Reducing Conflicts (p. 22), August 2016.
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