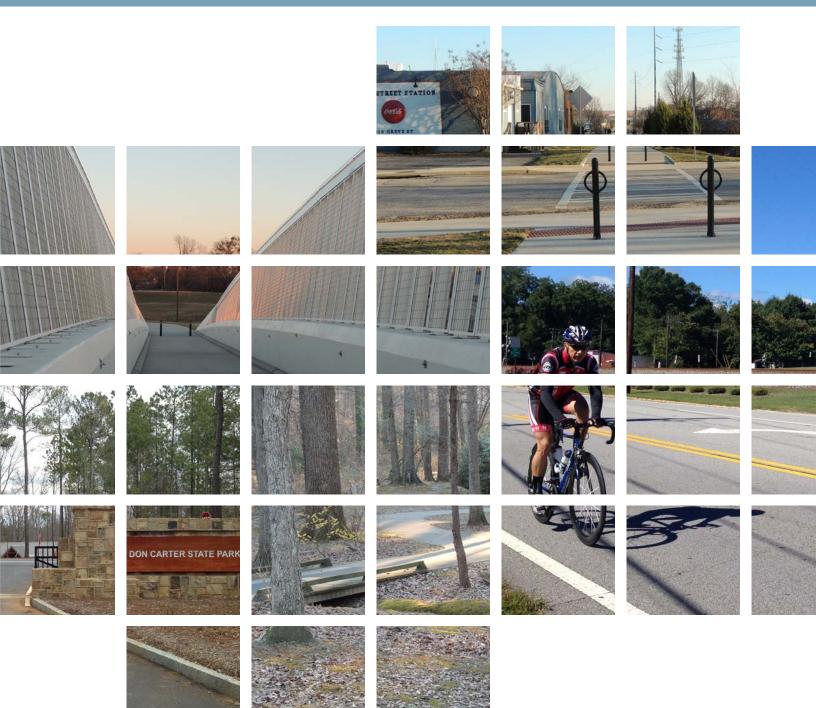


# **BICYCLE AND PEDESTRIAN PLAN UPDATE**

GAINESVILLE-HALL COUNTY METROPOLITAN PLANNING ORGANIZATION





# table of contents

| INTRODUCTION                          | 2  |
|---------------------------------------|----|
| EXISTING CONDITIONS                   | 4  |
| NEEDS & OPPORTUNITIES                 | 20 |
| RECOMMENDATIONS & IMPLEMENTATION PLAN | 24 |

### introduction

Hall County is a unique and richly diverse county in north Georgia. From the urban activity of Gainesville, to the natural beauty found in the rolling pastures of Hall County's horse farms, the region offers countless reasons for residents to take to the streets on foot or on bike. This document is the product of collaboration between Hall County and its cities, and is intended to document community needs, establish an improvement strategy with policy and project recommendations, and identify potential sources of funding in order to create and maintain a vibrant and well-connected walking and biking network.

### Background of the GHMPO Bicycle and Pedestrian Plan

In 2005, the Gainesville-Hall Metropolitan Planning Organization (GHMPO) began developing its first countywide bicycle and pedestrian plan in preparation for the forecasted growth that was identified in Hall County's 2004 Long Range Transportation Plan (LRTP). The MPO worked with county staff and the cities of Gainesville, Oakwood, Flowery Branch, Lula, Clermont and Gillsville to inventory the existing facilities, collect community input on needs and demand for walking and cycling facilities, and develop implementation strategies to achieve the vision and goals set forth by the plan's participants. In addition to working with several of Hall County's cities, the MPO coordinated efforts with the Georgia Department of Transportation (GDOT), and the Georgia Mountains Regional Development Center (GMRDC). The 2006 plan used the collected information to make recommendations for projects, supporting policies and programs, ways to increase public awareness, funding, design standards, and plan monitoring.

### **Purpose of the Partial Update**

An important recommendation that was made in the 2006 GHMPO Bicycle and Pedestrian Plan is the continued monitoring and updating of the plan as conditions change in Hall County. The estimated population growth in the county will bring transportation challenges and will require ever-evolving strategies to meet those challenges. Therefore, the relevance of the bicycle and pedestrian plan, along with its recommendations, is dependent on periodic updates.

This partial update to the 2006 GHMPO Bicycle and Pedestrian Plan focuses on the development of multiuse trails to provide off-road facilities for cyclists and pedestrians. One benefit to having wider trail sections in place is that they serve to maximize the potential for use among many different types of user groups. However, consideration was also given to other facility types such as sidewalks and bikeable shoulders, whenever applicable.

### **Scope of Study**

The scope of this study was a twofold approach including a technical analysis of current facilities and conditions, and discussion with a technical working group, designed to promote interaction and discussion amongst Hall County's cities.

The technical analysis consisted of an inventory of existing facilities and programmed projects in the county's Transportation Improvement Plan (TIP) and the 2040 Metropolitan Transportation Plan (MTP). Additionally, community destinations for walking and biking trips, such as parks and universities, were identified as being important locations for improved connectivity. Transit-dependent areas of the county were identified using socio-economic data, auto-ownership data, and population density figures from the 2010 U.S. Census.

The group interaction took place over four monthly Advisory Committee meetings. This committee was made up of MPO staff as well as GDOT District 1 engineers, city officials, city managers and county engineers. These meetings consisted of an interactive workshop designed to help identify specific needs for each city, thoughtful discussion of plan goals, objectives and strategies for implementation, and evaluation of project recommendations and implementation timeframe.

A draft of the plan was presented to the Hall County Technical Coordinating Committee (TCC), the Citizens Advisory Committee (CAC) and the Policy Committee (PC) for review prior to the upcoming update to the Long Range Transportation Plan.

### **Goals and Objectives**

The 2006 plan established a foundation for the direction the county wished to take regarding walking and biking facilities. Overall, county staff decided to broaden the network of trails, seek to educate citizens and to promote safe riding habits among them.

After reviewing the technical information and the input from the technical advisory committee that was collected as part of this plan update, several goals and objectives have been identified. The existing conditions section of this report provides detail on each of these goals, and why they have been included in the plan update.

### 2014 GHMPO Bike and Pedestrian Plan Update Goals and Objectives

- **Goal One:** Promote active lifestyles by providing access to recreational trails in Hall County.
  - o Objective 1A: Create destination trails connecting to and through major passive parks.
  - o Objective 2A: Develop community programs to support active living.
- **Goal Two**: Provide bicycle connections to high demand areas.
  - Objective 2A: Connect trails to colleges and universities.
  - Objective 2B: Connect trails to K-12 schools and parks.
  - o <u>Objective 2C</u>: Connect trails in areas of higher residential density with low auto ownership.
- **Goal Three**: Support city redevelopment plans through bicycle and pedestrian connections.
  - o Objective 3A: Support development of walkable and bikeable corridors as community focal points.
  - Objective 3B: Support city comprehensive plan objectives for redevelopment through increased accessibility.
- **Goal Four**: Improve long distance cycling through the county and region.
  - o Objective 4A: Provide signed, on-street bicycle routes for distance riders along lower volume roads.
  - o Objective 4B: Connect to key destinations in surrounding counties.

# existing conditions

### **Review of Existing Plans**

Since the original 2005-06 GHMPO Bicycle and Pedestrian Plan was drafted, several comprehensive plans, master plans, and redevelopment plans have been prepared. Each of these plans include several pedestrian components designed to improve accessibility within downtown areas, promote healthy living, and enhance connectivity around important destinations and transit routes. An extensive review of these plans was conducted to pinpoint community goals along with relevant projects to incorporate into this update. Additionally, to coordinate efforts with individual municipalities, the consulting team conducted site visits to each city and held meetings with city staff members and elected officials.

### **GHMPO Bicycle and Pedestrian Plan (2006)**

The original Bicycle and Pedestrian Plan set the framework for the county's vision for alternative modes of transportation. The plan envisioned a well-connected bicycle and sidewalk network with many on-street and street-adjacent facilities such as sidewalks, bicycle lanes, and wide curb lanes. The State Bike Route 55 was determined to be a suitable "trunk" for this bicycle network. Branching facilities from this on-street trunk were recommended to provide access to schools, parks and downtown areas. Facility type, such as wide curb lane or bike lane, was determined based on vehicle volumes, available right-of-way, and posted speed limits.

Sidewalks were recommended on most streets within the cities. Priority was given to roads that were shown to already be heavily traveled by pedestrians (as indicated by worn strips along the roadside) or to important destinations like employment centers.

These street-adjacent recommendations were made to reduce overall project costs by limiting the amount of new right-of-way needed while also providing access to key destinations. Multi-use trails, which can be adjacent to a road or off-road, were recommended when a connection between corridors was needed, but characteristics such as narrow right-of-way or heavy traffic volumes limited the use of an on-street facility. Trails were also recommended if the facility helped to enhance community initiatives, such as preserving open space. *Figure 1 illustrates the 2006 plan's recommendations.* 

Along with prioritized project recommendations, the plan suggested several policies and programs the county should consider to improve awareness of walking and biking benefits, to educate users on correct procedure and lawful behavior when using these facilities, and to begin building sufficient funding sources in the forms of grants, SPLOST monies, and other local sources. One important recommendation was the modification of the cities' current development ordinances to require pedestrian and bicycle facilities and amenities be constructed with new developments.

Safety was addressed by recommending the adoption of minimum design standards based on the American Association of State Highway and Transportation Officials (AASHTO), GDOT, and the Federal Highway Administration (FHWA) standards. These standards would need to be adopted by each jurisdiction individually. The plan also recommended that accident data involving pedestrians should be collected on a yearly basis to monitor safety trends and to identify areas in need of additional improvement.

Maintaining sidewalks, trails and bike facilities can be a costly endeavor; therefore, the 2006 plan recommended incorporating the construction of wide curb lanes and/or bike lanes into road resurfacing projects. The plan also suggested that a web-based system be implemented to allow the public to inform city and county staff about maintenance needs. This would provide the public with the means to be actively involved in improving their community, and would also reduce costs associated with monitoring pavement conditions.

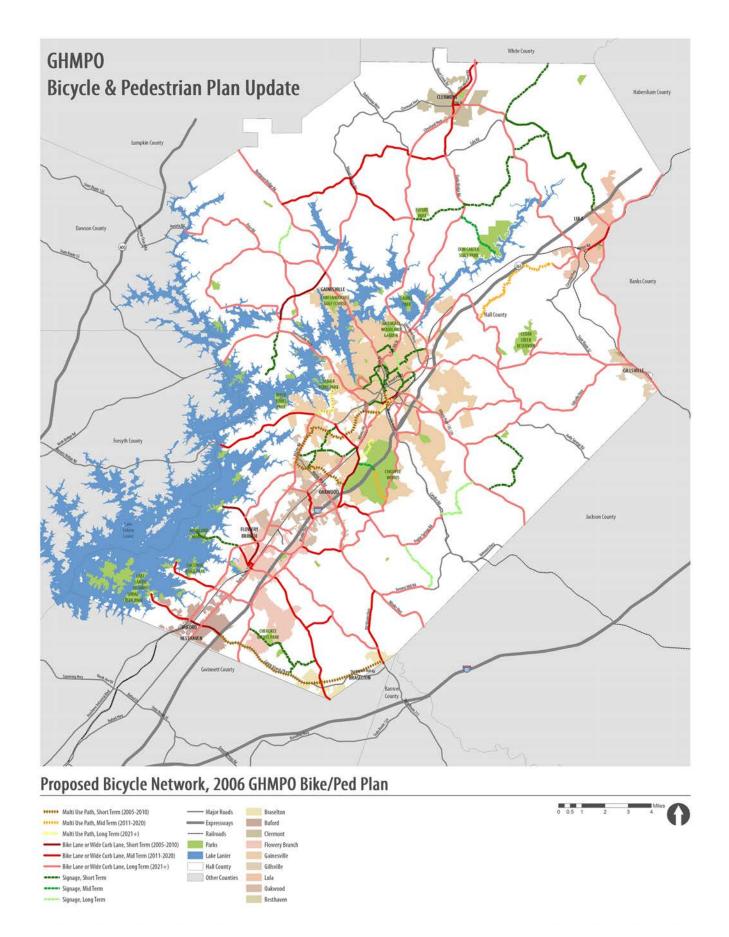


Figure 1. Proposed Bicycle Network, 2006 GHMPO Bike/Ped Plan

### **GHMPO 2040 Metropolitan Transportation Plan (2011)**

The GHMPO 2040 Metropolitan Transportation Plan (MTP) is a comprehensive planning document that sets forth the Gainesville-Hall metropolitan area's short-term and long-term vision for its multi-modal transportation system. This plan adheres to federal guidelines set forth in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). The 2040 MTP was drafted in 2011 to supplement findings from the previous 2030 Long Range Transportation Plan (LRTP), drafted in 2007. The 2040 MTP also serves as an update for funding allocation of short- and long-term projects within the MPO boundaries.

The 2040 MTP recognized the need for the Gainesville-Hall MPO region to begin to consider alternative modes of transportation when planning future projects, especially in a cost-effective and logical manner. One major challenge to biking and walking projects that was identified in this plan is that a very large majority of residents rely heavily on automotive travel to reach places of employment and other daily living destinations. Therefore, a large portion of available funding was devoted to roadway enhancement projects, such as road widenings and new connections. Certain roadway projects such as the Lanier Islands Parkway/ SR 347 widening (Pl# 162430 – GH-007) and the Spout Springs Road widening (Pl# 0009679 – GH-023) do incorporate multi-use trails into design concepts. Several other roadway project concepts include sidewalks and/or bike lanes. Additionally, funding was set aside for construction of a new segment of the Central Hall Trail within the short-term Transportation Improvement Plan (TIP), and approximately \$6,900,000 was allocated as a lump sum for bicycle and pedestrian improvements in the mid- and long-range sections of the implementation guide. Figure 2 illustrates programmed projects from the 2040 MTP and indicates whether or not they contain a bicycle or pedestrian component.

Lastly, the 2040 MTP recommended that the region and its individual jurisdictions adopt a Complete Streets Policy that is in line with national and state guidelines. This policy would make sidewalks (or multi-use side paths) a requirement on most new roads, and would require that some form of alternative travel means be considered in road widening designs as well.

### City of Flowery Branch Downtown Transportation Study (2010)

The city of Flowery Branch conducted a 2010 study to determine needed transportation improvements within its downtown area. This study was based on city land use plans, previous comprehensive planning efforts, technical engineering analysis, and community input. One important multi-use trail/greenway which was identified in this study is the Alberta Banks Park to City Park trail. The trail first appeared in 2005 in the 2025 Flowery Branch Comprehensive Plan. Funding was not available for many of the projects identified in this plan, and ultimately, the trail was not included in the 2006 GHMPO Bicycle and Pedestrian Plan. The City of Flowery Branch Downtown Transportation Study reintroduced this trail as an important amenity, and recommended that right-of-way for the facility be preserved until a time when funding could be provided. The proposed alignment lies along mostly undeveloped parcels, and this study suggested that the city work with future developers to reserve, and possibly fund construction of this trail.

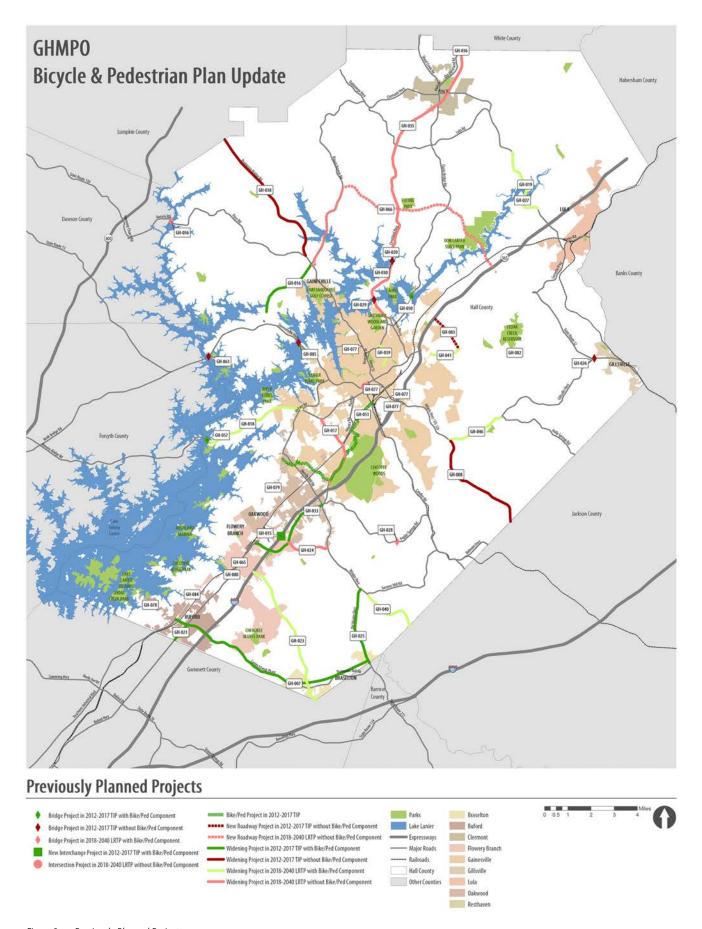
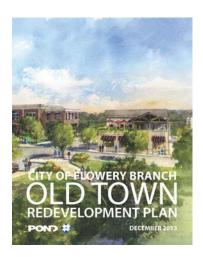


Figure 2. Previously Planned Projects

### Flowery Branch Old Town Redevelopment Plan (2013)

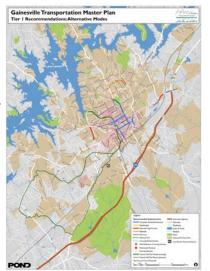
The previously mentioned 2025 Flowery Branch Comprehensive Plan recommended that the historic Old Town area of the city undergo substantial redevelopment to improve the sense of community and to revitalize the economic growth in the area. To support the redevelopment goals of the city, this plan recommended several roadway improvements along with five greenways and sidepaths. The recommended sidepaths include 10' wide facilities along Phil Niekro Boulevard into town, and along Lights Ferry Road to the Aqualand Marina located on Lake Lanier. Community park improvements recommended for the Flowery Branch City Park located along the waterfront include the addition of a short 10' wide path along the lakeshore. A short trail from Lights Ferry Road to Pine Street is proposed as part of the redevelopment of a parcel west of the Department of Public Works. Lastly, an implementation strategy for the City Park to Alberta Banks Park trail is outlined. The trail would require working with developers to construct the trail in segments, as various properties are developed in downtown Flowery Branch. This trail system is identified as being a key component to the overall redevelopment of the city, as it provides access to the Old Town area, the lakefront, and neighborhoods.



### City of Gainesville Transportation Master Plan (2013)

The city of Gainesville developed and adopted its Transportation Master Plan in 2013. In order to develop a recommended project list through 2040, the plan considered information from previous planning documents such as the *Gainesville 2030 Comprehensive Plan*, the *GHMPO 2040 Metropolitan Transportation Plan*, and the *GHMPO 2030 Long Range Transportation Plan*. Several pedestrian and cyclist projects were recommended as part of this plan, including expanding the multi-use trail network in downtown Gainesville by including a 10' wide trail along Pearl Nix Parkway from the existing Rock Creek Greenway to the existing Midtown Greenway at Martin Luther King Jr. Boulevard. A second 10' wide trail is proposed in the midtown area of Gainesville as part of a new roadway connection from Industrial Boulevard to Jesse Jewell Parkway, northeast of Downey Boulevard.

Additional pedestrian and cycling improvements were recommended in downtown Gainesville in the form of sidewalks, sharrows and complete street/streetscape projects. A complete street is one that accommodates not only vehicular traffic, but pedestrian and cyclist traffic as well. Often, elements such as landscaping and lighting are included to make the street more attractive to non-automotive travelers. Trip generators such as Brenau University, Gainesville Square, and places of employment drive the demand for these types of amenities. This plan recommends completing most of these projects in the short- to mid-term time frame.



### 2030 Oakwood Comprehensive Plan (2009)

The city of Oakwood has a 2030 comprehensive plan which outlines the community's vision for long-term growth. A large part of this vision involves preserving natural green space and providing residents with trails and parks for enjoyment and recreation. Within the city's proposed town center area lies nearly three miles of natural greenways that follow existing streambeds. The *City of Oakwood, Georgia Comprehensive Plan* proposes to develop this town center destination area with retail, mixed-use facilities, office parks, and community amenities. These natural greenways will serve as trail connections between the varying districts outlined in the city's plan.



### **Gwinnett, Jackson and White Counties**

The Gwinnett County Greenways & Open Space Master Plan Update, which was developed in 2013, includes several recommended projects along natural greenways. Gwinnett County's existing trails which are relevant to Hall County's plan are located at George Pierce Park in Suwanee, GA and between the Gwinnett Environmental & Heritage Center and the Mall of Georgia. Proposed projects would extend both of these trails north towards the Gwinnett/Hall County line along Suwanee Creek and Ivy Creek, respectively.

The Jackson County greenways plan, *Connect Jackson*, which was drafted in 2011 draws recommendations based on potential connections to Hall County. These recommendations were made based on the project list found in the 2006 *GHMPO Bicycle and Pedestrian Plan*. Connect Jackson proposes installation of a wide curb lane along SR 332 from the county line into Talmo, a wide curb lane on Gillsville Highway/SR 52 from Gillsville southeast toward Maysville, and a bike lane on Winder Highway/SR 53 from the county line into Braselton. Shared use paths are also proposed along the greenway corridors of Mulberry Creek, Walnut Creek, Allen Creek, Pond Fork, North Oconee River, and Candler Creek. These recommendations were preliminary, and a detailed implementation guide with project timeframes and costs were not provided as part of this study.

The White County Bicycle and Pedestrian Plan was drafted and adopted in 2011. Two relevant projects that are given mention in White County's plan are the Gainesville and Northwestern Historic Rail Bed trail and the Mossy Creek trail. The proposed Gainesville and Northwestern Historic Rail Bed trail would make use of an existing railroad alignment that, at one time, extended from Gainesville to just north of Helen. The alignment primarily follows the existing US Highway 129. The project vision is somewhat similar to the Silver Comet Trail, which follows an old railroad bed and extends from the Georgia/Alabama state line to the outskirts of Atlanta. The Mossy Creek trail is briefly mentioned and described as a 10.25 mile trail which begins in downtown Cleveland and extends southeast along the Mossy Creek bed to the Hall County line. The proposed trail would terminate at the Chattahoochee River in the Mossy Creek State Park. As with the Jackson County greenways plan, these project recommendations are preliminary and a detailed implementation guide with timeframes for design and construction are not provided.

### **Existing and Programmed Trails**

There are currently approximately 5 miles of paved and unpaved walking and biking trails in Hall County. The University of North Georgia also has approximately 3.5 miles of unpaved mountain bike trails, while the Chicopee Woods Park boasts a 21-mile system for off-road biking purposes. The ongoing project known as the Central Hall Trail will gain almost 3 more additional miles of multi-use trail in 2014-15 as another segment along Palmour Drive and Atlanta Highway/SR 13 reaches completion. Widening projects along Spout Springs Road and Lanier Islands Parkway which are currently under design and construction will have adjacent segments of 10' multi-use paths as well.

Comparatively, Cobb County, located in the metro-Atlanta area, has approximately 48 miles of paved multiuse trails and side paths, including the Silver Comet Trail and the Kennesaw Mountain to Chattahoochee River Trail. As another example, existing sections of the Atlanta BeltLine extend for approximately 10 miles as it makes its way around the city of Atlanta. The vision of the BeltLine is a continuous 33-mile multi-use trail loop connecting parks, neighborhoods, business and transit. Both of these cases are the realization of extensive planning efforts, dedication, and cooperation and are examples of what can be achieved within the rapidly growing Hall County.



Atlanta BeltLine

### <u>Gainesville – Midtown Greenway, Rock Creek</u> <u>Greenway</u>

Gainesville is the largest and most populous city in Hall County. Its downtown is characterized by a mixture of offices, higher education facilities, medical facilities, restaurants, and retail interspersed with small parks and a section of lakefront green space along Longwood Cove.

The Midtown Greenway is an existing section of the larger Central Hall Trail network, and is part of the city's redevelopment plan for its downtown and midtown areas. The 10' wide trail follows an old railroad bed from just north of Parker Street to Martin Luther King Jr. Boulevard in Gainesville's midtown area. A second phase of construction is scheduled to begin in 2014 which will extend this trail further south to the intersection of Pine St., Industrial Boulevard and Georgia Avenue. With the completion of this phase of construction, the trail will be approximately 2/3 of a mile long.

The Rock Creek Greenway, which opened in 2009, is an approximately 2-mile long trail of 10' and 8' wide sections that connect from Longwood Cove on Lake Lanier to downtown Gainesville. The greenway passes through Longwood Park, Wilshire Trails, Ivey Terrace Park and Rock Creek Park. It is a heavily used trail for residents in the area, and its southern termini at Rock Creek Park is only 0.5 miles from the Midtown Greenway. *Figure 3 shows these two trails, along with several planned connections that make up the larger Central Hall Trail network.* 



**Rock Creek Greenway** 



Figure 3. Gainesville: Multi-Use Trails

### Flowery Branch - Sterling on the Lake Side Path

One short segment of multi-use trail currently exists within the city limits of Flowery Branch. This section of trail is located within the Sterling on the Lake subdivision off Spout Springs Road. The trail begins at the development entrance and extends approximately 2,960' along Lake Sterling Boulevard. Expansion of this trail would make it an important link between paths proposed on Spout Springs Road and Lanier Islands Parkway/SR 347. The trail is also adjacent to the developing Cherokee Bluffs Park. Planned amenities in the park include mountain biking trails, hiking and walking trails, and a disc golf course.

### Braselton - Mulberry Creek Walk (unpaved)

The city of Braselton has built an unpaved walking trail along Mulberry Creek which extends from Thompson Mill Road in Barrow County to a northern termini east of Old Winder Highway/SR 211. The city plans additional phases for this trail to extend further south into Barrow County, as well as further west into Hall County along the creek. The current trail is approximately 2.5 miles long and has a compacted earth base.

# <u>Hall County –Lanier Islands Parkway Trail, Spout Springs Road Trail, Central Hall Trail</u>

Several planned trails have received or are expected to receive programmed funding within the next 10 years. These planned facilities are largely located in unincorporated Hall County. With the exception of a segment of the Central Hall Trail (PI# 0007639 – GH-051), these planned paths are incorporated into roadway reconstruction efforts. Designing for pedestrians and cyclists is required under the Georgia DOT Complete Streets policy, and this is a cost effective way to improve walkability while also improving vehicular conditions.



Lanier Islands Parkway/SR 347 is programmed for reconstruction in the 2012-2017 TIP and plans will incorporate a 10'multi-use side path along the road east of I-985, with bike lanes and sidewalks recommended along much of the road to the west of I-985. Construction has already begun on some segments of SR 347, and is expected to continue until 2016. The estimated length of the entire roadway project is 12.1 miles.

The widening of Spout Springs Road from Hog Mountain Road to the Gwinnett County line is expected to be a more long-term project. Sections of this road are currently being designed with either an adjacent 10′ multi-use path or 5′ sidewalks. The total project length is 6 miles and is currently expected to be completed in 2020.

The Central Hall Trail Loop is an ongoing project to create a connected, 16-mile circuit which would run between downtown Gainesville and Oakwood. The previously mentioned Midtown Greenway and Rock Creek Greenway in Gainesville are part of the trail. Construction of another segment of the trail is expected to begin in 2014, and is expected to open in late 2014 or early 2015. This section will run from Palmour Drive to the University of North Georgia, Gainesville Campus in Oakwood. Future off-road segments of the trail are proposed along Balus Creek and Flat Creek, while street-adjacent segments will lie along Aviation Boulevard, Palmour Drive and McEver Road. Each completed segment of this loop will be an exciting and important step towards a long-standing community goal. *Figure 4 illustrates these existing and planned trail segments.* 

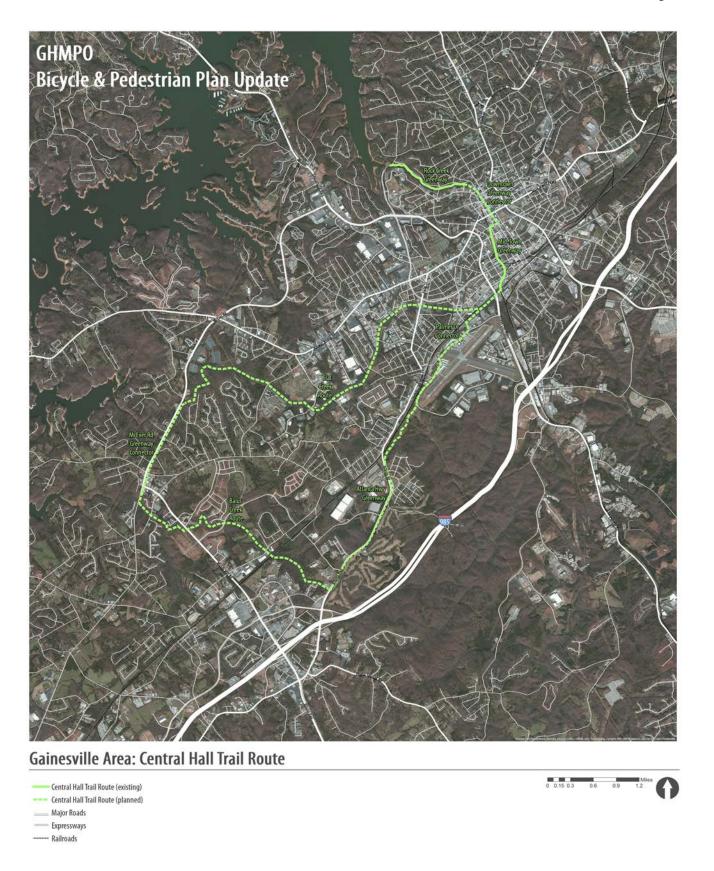


Figure 4. Gainesville Area: Central Hall Trail Route

### **High Demand Areas**

Pedestrian and bicycle traffic have been shown to be higher in areas that exhibit certain characteristics. Areas of higher population density tend to generate more walking and biking trips. Certain socio-economic conditions like an above average poverty level or a lower auto-ownership level can lead to neighborhoods and regions that rely heavily on transit and other alternative modes of travel. Schools and universities and the areas surrounding a campus are expected to promote higher volumes of foot and bike traffic as well. The following sections describe these high demand areas in greater detail.

### **Areas with high population density**

The 2010 U.S. Census recorded the current population of Hall County at 179,684 people. The 2000 Census recorded the county's population at 139,277, which indicates a total population increase over the last decade of 40,407, or 29%. The 2040 MTP estimated that the population would rise by approximately 32.7% by 2008, indicating that growth estimates in the plan were marginally lower than anticipated. The overall population increase does still indicate that strong growth is occurring within Hall County. The county is approximately 274,758 acres, or 429.3 square miles in size. The average population density in 2010, therefore, was 0.65 persons per acre.

Population density is a relative measurement, and for the purposes of this study, the following assumptions regarding density have been made:

- Less than or equal to 0.5 persons per acre ~ Low Density
- 0.51 1 person per acre ~ Medium Density
- 1.01 2 persons per acre ~ High Density
- Greater than 2 persons per acre ~ Very High Density

Figure 5 shows that the area within downtown Gainesville and southwest of Gainesville has a very high density, relative to the rest of the county. It is within these areas that demand for walking and biking facilities can be expected to be greater. Another important observation from this figure is that the population density along the I-985 corridor from Gwinnett County to Gainesville and Lake Lanier is considered to be high density. The rest of the county falls into the medium to low density range. It is of note that the area in south central Hall County between Winder Highway and Candler Road is at medium density, as well as portions of eastern Hall along Athens Highway/US 129 and in northwest Hall along Thompson Bridge Road/SR 60 and Dawsonville Highway/SR 53. While a high demand for multi-use paths, sidewalks and other biking facilities may not currently exist in these areas, this mid-level density characteristic may indicate a trend of development that could lead to a greater demand in the future.

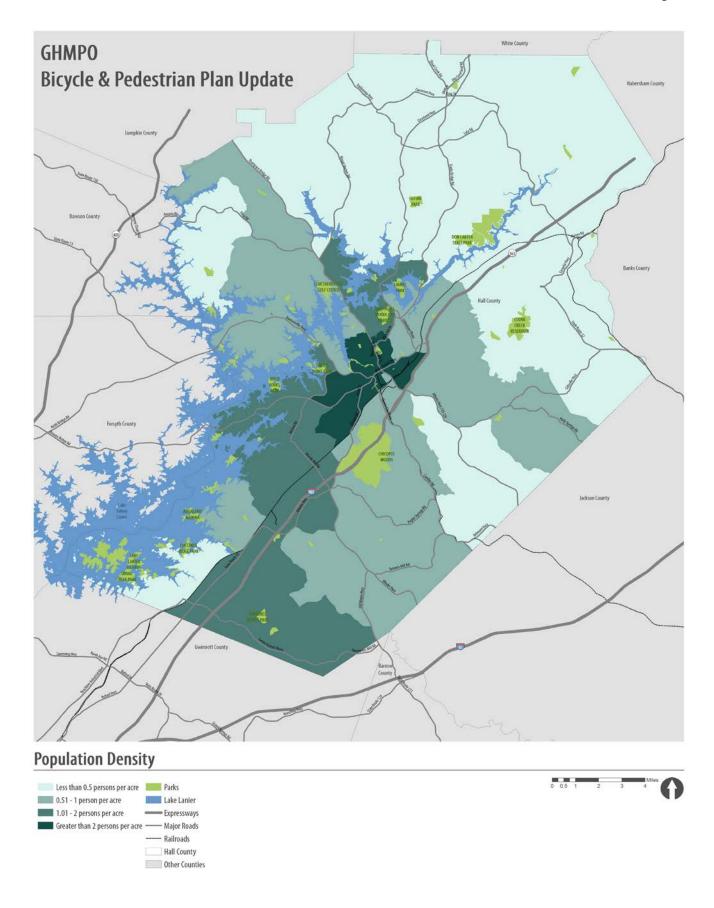


Figure 5. Population Density

### Areas with above average poverty levels and low auto-ownership levels

The U.S. Census Bureau estimates that as of 2012, the median household income in Hall County is \$52,174. The Bureau also estimates that 16.8% of the county's population lives below the poverty threshold, which is dependent on factors such as household size, and cost of living. For the purposes of this study, a census tract with an estimated poverty level greater than 14% was labeled as being more transit dependent. In addition to this, census data relating to auto ownership was used to identify areas in the county where there were a significant number of households which did not own a vehicle. This study considered census tracts with a no-auto ownership rate greater than 5% to be a target area with an elevated dependency on transit and other forms of transportation.

**Figure 6 illustrates areas of Hall County exhibiting one or both of these contributing factors.** Regions of note include much of Gainesville, the rural portions of the county east of Gainesville, the Athens Highway/US 129 corridor, and west Hall along Price Road and Cool Springs Road.

### **Universities**

Hall County is home to both Brenau University and the University of North Georgia's Gainesville campus. Brenau University is an all-female collegiate institution located in downtown Gainesville. The university was founded in 1878 and currently has a population of approximately 745 students. The University of North Georgia was recently formed through the consolidation of two important schools in the region. The former Gainesville State College campus became the new Gainesville Campus of the University of North Georgia in January 2013. Student body numbers for 2012 (prior to the consolidation) indicate that approximately 8,659 undergraduate and graduate students attended the school during that academic year.

These two campuses, and the area surrounding them, should be considered points of high demand for cyclists and pedestrians. Factors that contribute to this elevated demand include the age of the average college student, the amount of parking that is available on campus, the costs incurred to drive and park on campus, and the overall lifestyle choices of the average student. With all of this taken into consideration, universities become excellent locations to improve and encourage alternative transportation methods. By providing safe, well-lit, and aesthetically appealing facilities, students can be encouraged to opt for a bike instead of a personal vehicle as his or her primary mode of travel to and from school. This has an added benefit to the universities as it reduces the amount of parking spaces needed to accommodate growing campuses. Reducing the number of personal vehicles parked on campus is a challenge that many colleges and universities face across the country, regardless of the size of the institution. Lastly, by encouraging students to walk or bike rather than drive, the overall air quality is improved significantly.







University of North Georgia

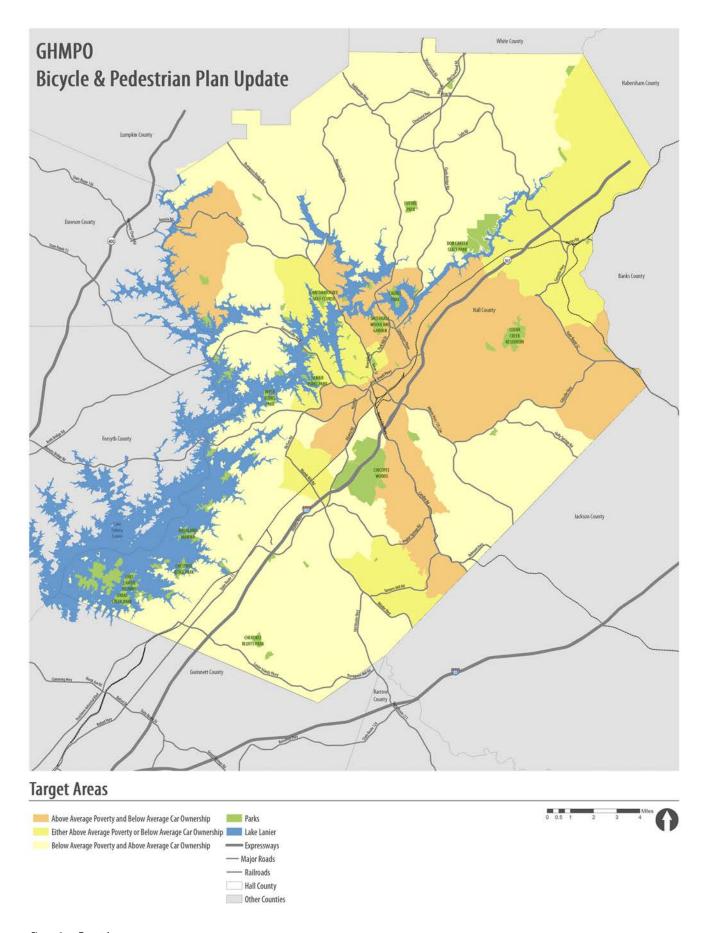


Figure 6. Target Areas

### **Hall Area Transit (HAT) routes and access**

**Figure 7 details the bus routes for Gainesville, Oakwood and Hall County.** HAT provides a weekday bus service along these routes known as the "Red Rabbit". HAT also provides dial-a-ride services for riders of all types, including an exclusive service for the disabled called "Mobility Plus." Transit service is limited in Hall County as there are currently no long distance routes to destinations like Flowery Branch, Braselton, Buford and Gwinnett County.

The hatched buffer in Figure 7 represents the area located within 0.5 miles of existing routes. This is roughly the distance that a person is willing to walk as part of a longer trip requiring transit and is sometimes referred to as the "last mile." Last-mile connectivity is a transit term that refers to the "last mile" that a person who has taken transit is required to travel to reach their destination. This "last mile" is an important step of a person's trip but it is often overlooked. Planned facilities for walking and biking should strive to improve connectivity within this buffered region.

### **Coordination with Cities**

Input regarding the existing conditions and areas of need for the county and its municipalities was collected through various methods. The consulting team made site visits to each of the eight cities within Hall County to inspect conditions of existing facilities, to investigate potential amenities and destinations, and to meet with city staff and elected officials if possible. Additionally, a technical advisory committee made up of city and county staff and elected officials was formed and asked to attend four discussion sessions scheduled throughout the planning process. The intent of this committee was to create a collaborative plan that involved all eight cities of Hall County. The committee participated in a workshop designed to identify important projects and destinations, and was also instrumental in the development of the plan's strategies and recommendations.

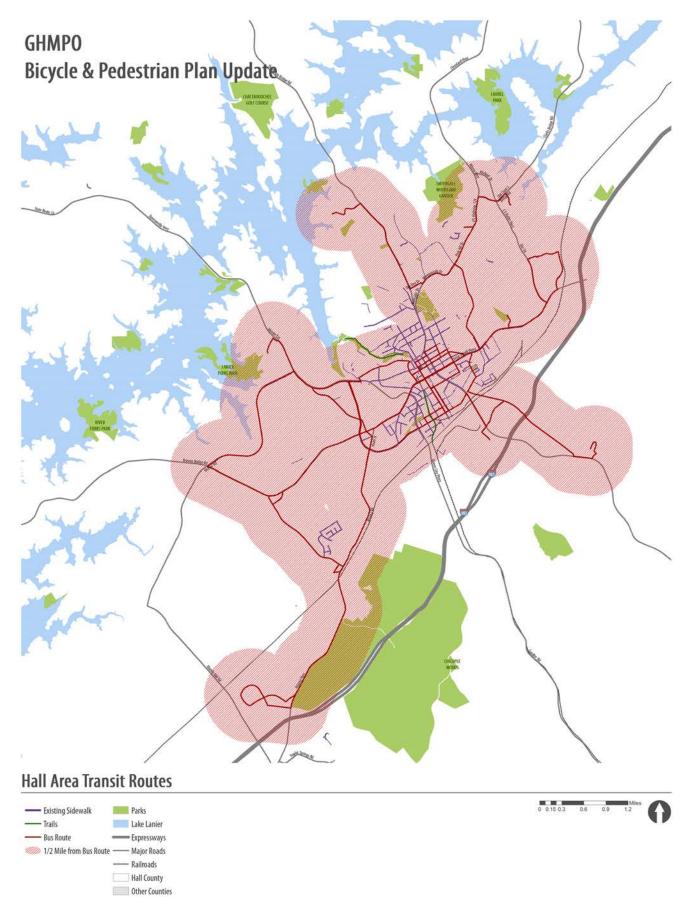


Figure 7. Hall Area Transit (HAT) Routes

# needs & opportunities

The input and data that was collected as part of the existing conditions inventory was then used to identify areas where the need for new facilities was greatest. Four main areas of need emerged from the technical advisory committee sessions:

- Complete the existing facilities in Hall County
- Create new destination trails for recreational purposes
- Develop a north-south linear spine trail
- Improve connections in high-demand areas

These needs became the basis for an implementation strategy and are described in greater detail in the following sections.

### **Complete Existing Facilities**

As previously mentioned, Hall County has plans to develop the 16-mile Central Hall Trail loop which would connect Gainesville and Oakwood along with both universities in the area and several parks. This trail is expected to primarily be a recreational feature but would also serve other trip purposes as well. The current alignment runs through some of the more populous areas in Hall County, and would be expected to receive significant use upon completion.

The existing segments of this planned trail are known as the Rock Creek Greenway and the Midtown Greenway. These two trails are not part of the loop itself, but are part of a large spur that is planned to connect with the circuit. Currently, the existing facilities offer short connections, but as future phases are completed, the loop would grow and serve a variety of purposes by connecting the cities of Gainesville and Oakwood.

The unofficial name of this loop is the Central Hall Trail, however in one of the advisory committee workshops, the idea of branding the trail was discussed. This could include a new name, a common logo which would appear on all portions of the trail, and even similar design standards. All of these features would serve to make the trail one cohesive loop rather than a patchwork of paths. Making these improvements would go a long way toward increasing awareness, generating public support, and prioritizing funding. Not only would naming this trail and prioritizing its completion be important steps to developing a county trail network, but it would also serve as an example of how careful planning and dedication can result in a very special and unique feature that county residents can use and be proud of.

### **Create Destination Trails**

The topic of a destination trail was brought up in several advisory committee meetings with the intention of generating renewed excitement at the public level for the future of Hall County's trail system. This type of trail would be primarily recreational in nature and would need to be extensive enough to draw visitors from around the county. Studies have shown that these types of recreational trails can improve property values on adjacent parcels, and can act as an economic stimulus for nearby businesses. The Big Creek Greenway in neighboring Forsyth County is an excellent example of a successful destination trail.

One example of a Hall County destination trail that should be prioritized in the county's long range plan is the previously mentioned Central Hall Trail. A second destination trail proposed in this plan is a multi-use, off-street facility which begins at Clarks Bridge Park, follows Clarks Bridge Road north to an undetermined point, and then turns east towards the Don Carter State Park. The trail in this section would be off-road and would wind through hilly terrain and largely undeveloped property. The trail could enter the state park via the main gate, or through a secondary access point on the park boundary. Coordination with the state park and the Department of Natural Resources would be required to determine access points and trail alignment through park property. An intriguing characteristic of the Don Carter State Park is the high volume of equestrian traffic that is generated from nearby horse farms. The opportunity exists to align this walking/biking path parallel to equestrian trails in some areas to truly capture the unique character of north Hall's horse farming history. The trail would leave the state park to the northeast, and continue along the Chattahoochee River, ending at SR 52/ Lula Highway. A programmed roadway project to widen SR 52 in this area is tentatively scheduled to open in 2021. Bike lanes are planned as part of this widening.

Other, shorter trails in and around downtown centers could serve as smaller destination trails as well. Trails connecting within town centers have been considered in various city plans for both Flowery Branch and Oakwood. The City Park to Alberta Banks Park in Flowery Branch has been proposed in the redevelopment plan for the city, which was drafted in 2013. The proposed implementation plan outlines working with private developers to construct most of the trail in conjunction with parcel development in the Old Town area of Flowery Branch. A similar situation exists in Oakwood, where the master plan for the town center and surrounding commercial and office parks includes many miles of trails and preserved green space. Developers would ideally be encouraged to construct trail sections as parcels are developed. Both of these trail systems should continue to be pursued and should be designed to connect to the linear spine trail.



Big Creek Greenway



Don Carter State Park

### **Develop a Linear Spine Trail**

As growth along the I-985 corridor in southern Hall County continues, connections between new and existing developments are needed to provide residents with multi-modal transportation options. Efforts should be made to connect residential neighborhoods, schools, parks, downtown areas, commercial developments, office parks and other community centers, much like the Atlanta BeltLine does for the city of Atlanta. A single, connected trail from Gainesville to Buford would serve the cities of Gainesville, Oakwood, Flowery Branch and Buford. A similar linear trunk trail was proposed in the original 2006 *GHMPO Bicycle and Pedestrian Plan* along the State Bike Route 55. This linear spine trail should also be incorporated into planned networks in Gwinnett County to provide a connection across county lines to the proposed Suwanee Creek Greenway or the Ivey Creek Greenway found in the *Gwinnett County Greenways & Open Space Master Plan*. Shorter, spur trails leading from this central spine would serve to connect to town centers, neighborhoods and other previously mentioned facilities. Ultimately, the trail could also extend north from Gainesville to Clermont and the White County line as development expands northward.

Opportunities exist to complete this linear spine trail by including sidepath components into MTP 2040 road widening projects along such major thoroughfares as Atlanta Highway/SR 13, Atlanta Highway/ Falcon Parkway, McEver Road and Cleveland Highway/US 129. Additional opportunities lie along the linear arterial roads of Thurmond Tanner Parkway, and Hog Mountain Road. While these roads are not currently programmed for widening, conditions such as available right-of-way, and proximity to the University of North Georgia and Lanier Technical College, neighborhoods and the town centers of Oakwood, Flowery Branch and Buford make each route a viable option for the addition of a multi-use trail.

If growth continues to move northward as it is expected to, additional demand for multi-modal transportation will rise. As a future goal, this linear trail/path should continue north of Gainesville and extend to the White County line. The ideal location for this facility would be along Cleveland Highway/US 129. The entire section of road is approximately 13.6 miles, which is a very long distance for the average cyclist. Therefore, the primary user of the facility would be the Class A (Advanced) rider. Class A riders typically prefer riding with traffic streams, either in bike lanes or on wide shoulders. As the area develops, the user demographic may change from these long distance cyclists to more casual riders or even pedestrians. Due to the long-term nature of this recommended project, facility type should be determined at a later date.



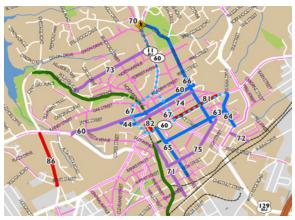
The Atlanta BeltLine is an example of a spine trail that links neighborhoods, schools, parks, commercial areas, and other community centers.

### **Connections in Areas of High Demand**

Zones of higher demand for cycling and pedestrian travel are described in greater detail in the Existing Conditions section of this document. These high demand zones are places of higher population density, areas in close proximity to the University of North Georgia and Brenau University, and areas with an elevated dependency on transit services. Users in these zones would access the facilities with the primary purpose of traveling to work, school, transit stops or other community facilities.

The City of Gainesville Transportation Master Plan recommends many improvements to streets in the downtown area. These recommendations range from installation of sharrows on Spring Street to complete streets and streetscapes along sections of Washington Street, College Avenue, Main Street and Bradford Street. These pedestrian improvements will enhance walkability and bikeability on streets in very close proximity to Brenau University.

Another desirable location for a multi-use side path is along Thurmond Tanner Parkway between Flowery Branch and Oakwood. This segment of trail would serve as an important connection between the two cities as part of the linear spine trail but would also serve the high demand area centralized around the University of North Georgia and Lanier Technical College. Students



Complete Streets shown in blue (from the *Gainesville Transportation Master Plan*)

living in the area could make use of a path on a daily basis to travel to school and back home. The trail will also be important to the city of Oakwood as its town center master plan is realized.

Target areas identified as having above average poverty levels and lower auto ownership levels can be found in both urban, higher-density areas and rural, lower-density areas. These target areas that lie in very high or high density areas should be considered for improvements that provide access to transit stops (if applicable) and important community facilities such as hospitals, schools and retail. These necessary destinations tend to be clustered together when located in urban settings, and therefore trip distances are expected to be relatively short. The 2006 *GHMPO Bicycle and Pedestrian Plan* states that a reasonable estimate for the distance a pedestrian is likely to walk is 0.25 miles. The same plan states that cyclists are likely to ride up to 5 miles one-way per trip. Therefore, appropriate facility types will consider both walkers and cyclists and could include sidewalks, bike lanes and multi-use paths, although wide curb lanes could be implemented if right-of-way conditions are limited. AASHTO standards in the 2012 Guide to Bicycle Facilities, 4<sup>th</sup> Edition, state that minimum bike lane widths in most urban settings is 5'. Posted speed limits, heavy bicycle traffic, and on-street parking are some of the factors that drive the recommended bike lane width, and should be considered on a case-by-case basis. Generally, the minimum required width for sidewalks is 5', but wider facilities are recommended when possible.

Target areas that have a lower density character should focus on providing long-distance facilities since important destinations tend to be further apart in these rural areas. Priority consideration should be given to cyclists, due to the longer distances between trip ends. Typical road sections in rural areas do not include curb and gutter, therefore, appropriate treatments are either wide shoulders/outside lanes or 10' multi-use paths. Wide shoulders are more generally more cost effective per linear mile than multi-use paths and can be completed with routine resurfacing projects. They also serve to reduce roadbed wearing over time, and provide refuge spaces for vehicles that need to park. AASHTO standards state that the minimum width to accommodate bicycle traffic on a paved shoulder is 4' when curb is not present, and 5' when curb, guardrail or other obstructions could impair the cyclist's movement. This minimum width would also provide reasonable walking space for pedestrians in rural areas, although sidewalks or wider shoulders should be considered if space permits.

Areas of note include eastern Hall County, and the area between Candler Road and Winder Highway in south central Hall County. Due to the more rural nature of the county in these areas, sidepaths may not be as feasible as in urban and suburban areas. The corridors are lengthy and destinations are more widely spread out, making construction of a path costly and less effective. In these areas, wide shoulders or wide outside lanes for biking are preferred, and can be included in road widening or resurfacing projects.

# recommendations & implementation plan

### Recommendations

To implement the following list of project and policy recommendations, three strategies were developed based on the technical analysis conducted by the consulting team, and on the discussion and input received from the plan's advisory committee. These strategies are shown on the following page. The order of each of these three strategies suggests their relative importance, however, this is designed merely to serve as a guideline for implementation. It may be that some strategies overlap, and in some instances it may make sense to complete a component of Strategy C before one from Strategy B. The needs of the community, available funding, or any other number of reasons may alter the order in which these strategies are implemented.

From these strategies, a list of recommended projects was developed and is found in Table 1 on page XX. The projects are ranked by the total number of plan objectives that each one meets. A detailed table with project descriptions and prioritization information can be found in the Appendix of this document. Projects highlighted in yellow have been identified as "high priority". These projects either benefit one of the recommended destination trails or they complete an important section of the trunk trail in areas of higher population density. *Figure 8 accompanies this list and shows the entire recommendations map with project numbers.* Small-scale city maps of these projects can be found in the Appendix of this document.

### **ADOPT** A PLAN FRAMEWORK

- A1. Brand the Trail Network or Key Trail Sections, such as the Central Hall Trail Loop.
- Provide a common name and brand for the primary trail.
- Seek corporate sponsorship for trail sections.
- Partner with local hospitals and the Health Department to promote the health benefits of walking and cycling.
- A2. Adopt a Plan for Implementation and Maintenance across Multiple Jurisdictions.
- Develop a project implementation committee (Involve representatives from the cities, county, and cyclist community).
- Identify cost sharing relationships and provide a unified approach for funding of major projects.
- Develop common policies for sidewalk and trail requirements for new development and consider application of fee-in-lieu to fund implementation of logical pieces of the network.

### **BUILD PRIMARY DESTINATION TRAILS**

- **B1.** Construct Initial Network of Multiuse Trails from Gainesville to Oakwood.
- Finish design and construction of the Central Hall Loop.
- Connect the Central Hall Loop to the Midtown Greenway and to the University of North Georgia.
- Connect the Midtown Greenway to Ivey Creek Trail through Downtown Gainesville.
- **B2.** Create a Destination Trail along the Chattahoochee River from Gainesville to North Hall County.
- Create a multi-use trail within the Don Carter Park.
- Extend the multi-use trail from the Don Carter State Park to Clarks Bridge Park and to Lula Park.
- Coordinate with Don Carter Park Master Plan and potential reservoir project.
- **B3.** Create Destination Trails in Oakwood and Flowery Branch.
- Construct the City Park to Alberta Banks Park Greenway in Flowery Branch.
- Implement planned projects from the Oakwood Town Center Master Plan.

### **CREATE** LINEAR TRAIL SYSTEM

- C1. Create a Linear Trail System Connecting Clermont to Buford along the I-985 corridor.
- Include a trail component in planned widening projects.
- Connect to city downtowns, parks, and universities.
- Connect to planned networks in Gwinnett, White, and Jackson Counties.
- **C2.** Expand Trail System by Providing Additional Connections and Destinations.
- Connect Cities of Gillsville, Lula and Clermont to one another and to the trunk trail.
- Provide additional connections to Cities and Parks.
- **C3.** Create Parallel Routes Along I-985 Corridor in South Hall County.
- Support preferred linear trail with additional alignments east and west of I-985.
- Primary connections should lie along McEver Road, Atlanta Highway, and Thurmon Tanner Parkway.

| Strategy | B Project | cts  |
|----------|-----------|------|
| Strategy | Proi #    | Name |

| Strategy | Project<br>Proj.# | Name   | Length (mi.) |
|----------|-------------------|--|--------------|
| B.1      | 1                 | Central Hall Trail: Downtown Greenway Connector  | 0.6          |
| B.1      | 2                 | Central Hall Trail Loop: Palmour Drive Connector   | 2.2          |
| B.1      | 3                 | Central Hall Trail Loop: Balus Creek Route   | 1.9          |
| B.1      | 4                 | Industrial Boulevard Extension *   | 1.9          |
| B.1      | 5                 | Pearl Nix Parkway Trail West *   | 1.7          |
| B.1      | 6                 | Pearl Nix Parkway Trail East *   | 1            |
| B.1      | 7                 | Central Hall Trail Loop: Flat Creek Route **   | 4.5          |
| B.1      | 8                 | Central Hall Trail Loop: McEver Road Greenway Connector  | 1.2          |
| B.2      | 9                 | Feasibility Study for Don Carter State Park Trail  | N/A          |
| B.2      | 10                | Don Carter State Park Trail  | 8.3          |
| B.3      | 11                | City Park to Alberta Banks Park Greenway ***   | 1.3          |
| B.3      | 12                | Oakwood Town Center Trail System   | 5            |
| Strategy | C Projec          | ts   |              |
| Strategy | ,                 | Name   | Length (mi.) |
| C.1      | 13                | GH-020 US 129 Bike Lanes - Limestone Pkwy to Nopone Rd ~   | 5.4          |
| C.1      | 14                | GH-036 US 129 Bike Lanes - Clarks Bridge Rd to White Co Line ~   | 2.7          |
| C.1      | 15                | SR 13/Atlanta Hwy Trail - Bike Lane Conversion   | 1.2          |
| C.1      | 16                | GH-033 SR 13/Atlanta Hwy Trail - Radford Road to SR 53/Winder Hwy ~                                      | 4.5          |
| C.1      | 37                | GH-080 SR 13/Atlanta Highway Trail - Lanier Islands Pkwy to Phil Niekro Boulevard ~                      | 3.3          |
| C.1      | 18                | GH-035 US 129 Bike Lanes - Nopone Rd to Clarks Bridge Rd ~   | 5.6          |
| C.1      | 19                | Study to determine connection to Gwinnett County Greenway System   | N/A          |
| C.2      | 20                | Gainesville Complete Streets-Washington St, Fair St, Prior St, Bradford St, Main Street, College Ave *   | N/A          |
| C.2      | 21                | GH-040 Winder Highway/SR 53 Trail -Tanners Mill Road to I-85 in Jackson County ~                         | 2.6          |
| C.2      | 22                | Cherokee Bluffs Park Trail   | 2.4          |
| C.2      | 23                | Lakeview Drive Sidepath  | 3.8          |
| C.2      | 24                | Agualand Marina Path ***   | 2.2          |
| C.2      | 25                | Limestone Creek Trail  | 1.7          |
| C.2      | 26                | County Line Road Trail   | 4.8          |
| C.2      | 38                | Gillsville - County Line Road Trail  | 0.9          |
| C.2      | 39                | Lula - County Line Road Trail  | 0.9          |
|          |                   | Corridor Study to determine route and facility type based on projected growth/demand northwest of        |              |
| C.2      | 27                | Gainesville  | N/A          |
| C.2      | 28                | GH-025 Old Winder Highway/SR 211 Trail - Winder Hwy to Gwinnett County Line ~                            | 3.3          |
| C.2      | 29                | Winder Highway/SR 53 Multi-use Trail - Atlanta Hwy/SR 13 to GH-040                                       | 4.7          |
| C.2      | 30                | Corridor Study to determine route and facility type based on projected growth/demand east of Gainesville | N/A          |
| C.2      | 31                | SR 52/Lula Hwy Bike Lanes - GH-019 to Clermont   | 4.8          |
| C.2      | 32                | Sidewalk and Sharrows in Clermont  | N/A          |
| C.2      | 33                | SR 52/Lula Hwy Bike Lanes - Lula to GH-019   | 3            |
| C.2      | 34                | Phil Niekro Path ***   | 1.1          |
| C.3      | 35                | Thurmon Tanner Blvd Trail  | 5.6          |
| C.3      | 36                | GH-084 & GH-079 McEver Road Trail ~  | 10           |
| C.3      | 17                | Hog Mountain Rd Trail  | 4.8          |

High Priority Project

Table 1. **Project Recommendations** 

<sup>\*</sup> source: Gainesville Transportation Master Plan

<sup>\*\*</sup> source: Gainesville 2030 Comprehensive Plan

<sup>\*\*\*</sup> source: Flowery Branch Redevelopment Plan

<sup>~</sup> Project lies along planned GDOT or MTP roadway project

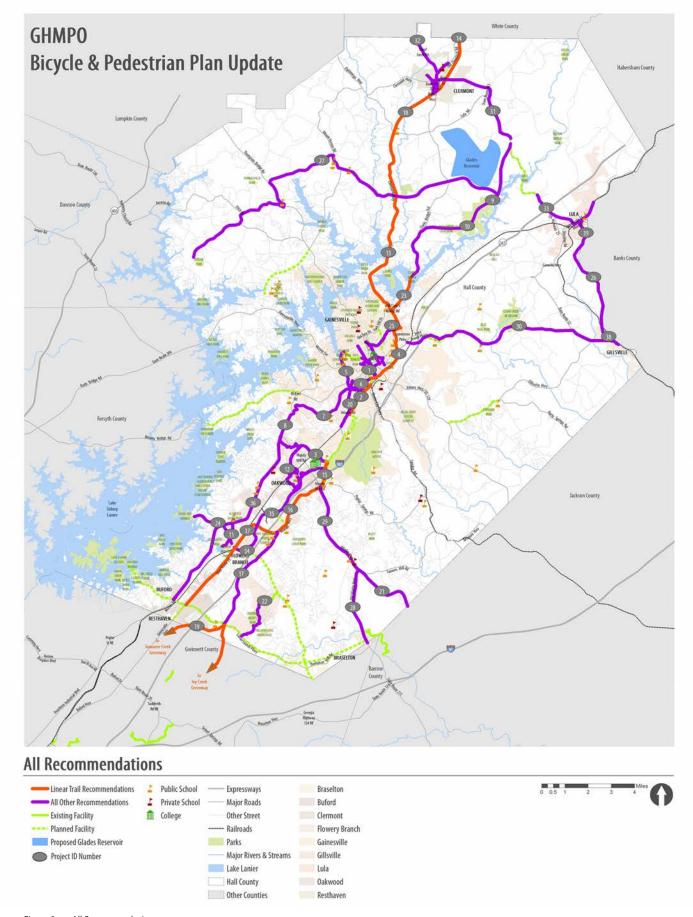


Figure 8. All Recommendations

### **Adopt a Plan Framework**

Strategy A serves as the foundation for the county's goal of expanding the trail system. Before any trail projects are designed and constructed, a well-established plan should be in place to facilitate coordination between jurisdictions. The county should adopt a complete streets policy and should encourage the cities to adopt policies of their own. This type of policy will require that alternative mode facilities be considered with future roadway construction projects. A sample complete streets policy can be found on page XX.

The cities should also consider adopting "fee in lieu" ordinances that would require developers to construct sections of trail on developing property, or pay a fee to be used towards the design and construction of trail segments in other areas. This type of ordinance will facilitate the construction of new segments as undeveloped areas grow, and will also help to generate local funds.

Programs to increase awareness and to educate users on trail etiquette and safe habits should be considered, especially in schools and universities. Maintenance costs for trails can vary from trash collection to debris cleaning and resurfacing efforts. The county should investigate methods for maintaining existing facilities. This could be accomplished through coordination between jurisdictions and use of local funds, or from trail sponsor donations. More routine maintenance such as trash collection could be accomplished through an Adopt-A-Trail program that local groups can participate in.

Another program to consider that will generate awareness within the community is the branding and naming of the trail system. If the system has a comprehensive name with a recognizable logo, residents will be more apt to use the facilities. The system's name should be recognizable but broad, while individual trail segments should have more descriptive, memorable names. County staff and the advisory committee participated in a brainstorming exercise to produce trail name suggestions, and three of the committee's favorites for an overall system name are highlighted below.

It is recommended that Hall County create a "trail coordination committee" to manage the interjurisdictional coordination that will be necessary to enact the aforementioned policies and programs.

Hall Heritage Trail

Highlands to The Islands Trail

Hall County Greenway

Names suggested by the project Advisory Committee for branding the trail network

### **Sample Hall County Complete Streets Policy**

It is the policy of Hall County to incorporate bicycle and pedestrian facilities into transportation infrastructure projects in a routine manner to ensure all users are accommodated in areas of the county where a need for these alternative methods of travel has been identified. Hall County will work with the Georgia Department of Transportation (GDOT) to coordinate planning, design, construction and maintenance efforts and will strive to abide by the State of Georgia's Complete Streets Policy.

The goal of the Hall County Complete Streets Policy is to enhance safety and mobility for all modes of transportation through thoughtful planning and effective use of federal and local resources. The balance between vehicular and other modes of transportation will be accomplished in a context-sensitive manner and the GHMPO Bicycle and Pedestrian Plan (and subsequent updates) will serve as the primary source of information regarding areas of need for bicycle and pedestrian accommodations.

This policy is modeled around the U.S. Department of Transportation's policy statement on bicycle and pedestrian accommodation:

The DOT policy is to incorporate safe and convenient walking and bicycling facilities into transportation projects. Every transportation agency, including DOT, has the responsibility to improve conditions and opportunities for walking and bicycling and to integrate walking and bicycling into their transportation systems. Because of the numerous individual and community benefits that walking and bicycling provide — including health, safety, environmental, transportation, and quality of life — transportation agencies are encouraged to go beyond minimum standards to provide safe and convenient facilities for these modes.

The following guiding principles should be considered throughout all phases of transportation infrastructure design and construction:

- Accommodations for bicycles and pedestrians should be integrated into new roadway construction and reconstruction projects in a manner that is appropriate to the context of the planned roadway features, surrounding land use, and desires of the community.
- The design and construction of new facilities should anticipate likely demand for bicycling and pedestrian facilities within the design life of the facility.
- The design of intersections should accommodate bicyclists and pedestrians in a manner that allows for safe crossing.
- Routine maintenance projects such as resurfacing efforts, should be used, when applicable, as opportunities to create new facilities, such as bike lanes, or to improve existing facilities, such as reconditioning road shoulders.

### **Build Primary Destination Trails**

Strategy B is designed to promote the creation of destinations that active citizens can use. These destination trails will help jumpstart public interest in the creation of more of these types of facilities. This type of recreational trail will also promote healthy living, which can lead to an overall improved quality of life. Figure 9 illustrates the locations of these primary destination trails, and also shows which projects are recommended as a high priority task.

The Central Hall Trail: The Central Hall Trail has been a county vision for many years. The trail is still seeing support in TIP funding plans, and completing the facility should be a priority. Portions of the trail along Balus Creek (**Project #3**) and Flat Creek (**Project #7**) will be more costly than other sections, and would likely require coordination with the City of Gainesville to make use of existing utility easements along the creek beds. However, these sections of the loop would be the most scenic and would draw the most users seeking recreation and exercise. **Project #2** along Palmour Drive from the termini of TIP project GH-051 to the southern termini of the Midtown Greenway is labeled as a high priority because of its shorter distance of 2.2 miles and its ability to connect the University of North Georgia with downtown Gainesville. **Project #1** is a relatively short section (0.6 miles) through the dense downtown area of Gainesville and provides a vital link between the Midtown Greenway and the Rock Creek Greenway. Right-of-way constraints would likely limit this section of the trail to a sidewalk and on-street sharrows along most of the alignment. This project should make use of the existing pedestrian bridge to cross the busy Jesse Jewell Parkway. **Project #1** should also pass through the central square in the heart of downtown, and make use of planned streetscapes on Bradford Street to reach the Rock Creek Park at the corner of W. Academy Street and Northside Drive.

**Projects #4**, **#5** and **#6** are additional multi-use paths recommended in the City of Gainesville Transportation Master Plan and would improve connections along the east and west sides of Gainesville. **Project #4** is important as it is the link between the Central Hall Trail Loop and the more long-term section that runs north along Limestone Parkway and Cleveland Highway/US 129 towards Clermont and White County.

The Don Carter State Park Trail: Situated just north of Gainesville along the Chattahoochee River, the Don Carter State Park spans over 1,000 acres and offers activities such as camping, fishing, hiking and horseback riding. The park is currently developing its master plan and would welcome a paved walking and biking trail through the park. A trail such as this would be an ideal destination for weekend day hikes and would offer users a unique setting in which users might glimpse riders on horseback while also enjoying the natural beauty of the Chattahoochee riverfront. This trail could also be extended outside of the state park's boundary south to the Clarks Bridge Park and boat launch, and north to SR 52/Lula Highway. The purpose of this extended paved path would be to accommodate Class A long-distance cyclists, who would be the primary users of this long facility. This route would offer an alternative to the State Bike Route 55 which follows the narrow and busy Clarks Bridge Road. **Project #9** is a recommendation to conduct a more detailed feasibility study involving coordination with land owners, the Don Carter State Park and the Army Corps of Engineers.

Other City Projects: The cities of Flowery Branch and Oakwood both have long-range plans for development within their limits. Both cities' plans include several miles of trails, which will be important amenities to help spur the development outlined in these plans. These projects are mid- to long-term goals, however policies such as fee-in-lieu ordinances can help build local funding for a time when these projects are ready for construction.



Pedestrian bridge located near Brenau, part of Project #1



Clarks Bridge Park

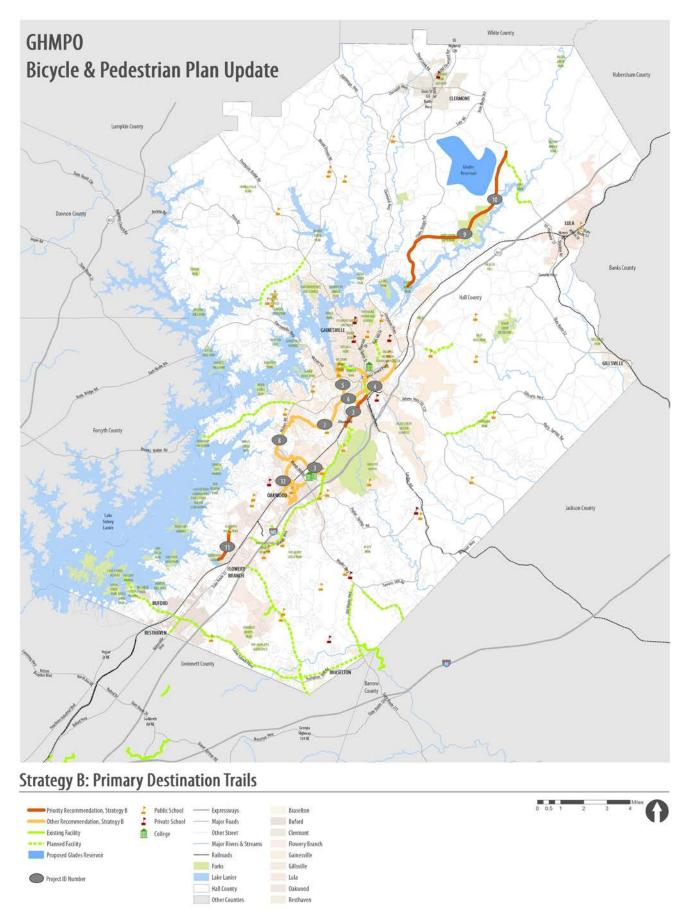


Figure 9. Strategy B: Primary Destination Trails

### **Create Linear Trail System**

Strategy C provides guidance on completion of the proposed linear trunk trail, which runs parallel to the I-985 corridor. This strategy also includes smaller, spur trails that lead to important destinations, such as the trails outlined in Strategy B. Other destinations include the Gwinnett County trail system and the cities of Buford, Gillsville, Lula, Clermont, and Braselton. Lastly, Strategy C outlines a long-term goal of creating parallel connections in the southern part of the county, particularly on the east and west sides of I-985 and along more populated roadway corridors.

One purpose of this spine trail is to improve connectivity for walkers and cyclists in the region to the south of Gainesville. The trails in this area are expected to be used for making daily trips to school, work, and other locations. A second, long-term purpose of this strategy is to complete the spine trail by extending it north from Gainesville along Cleveland Highway/US 129. This section of trail would primarily serve long-distance cyclists who desire to reach rural areas of the county on safer facilities.

The average length of projects in this strategy is 3.5 miles, with the longest project totaling 10 miles (**Project #36**). Design and construction costs can be very high for these longer routes, and therefore many of these projects have been recommended as part of a greater roadway widening effort. As sections of McEver Road, Falcon Parkway, Cleveland Highway and Atlanta Highway are widened and improved, the linear spine trail will be completed as well. **Figure 10 illustrates the recommendations that are part of the strategy subsection, C.1.** 

Atlanta Highway/SR 13: The entire length of Atlanta Highway from the Gwinnett County line to Memorial Park Drive in Gainesville is expected to be reconstructed in the next 5-10 years. Currently, the reconstruction of Atlanta Highway between Buford and SR 347 will have 8' sidewalk on the northwest side, and 5' sidewalk on the southeast side. This project is GH-021 and is underway at the time of this draft. **Project #16** should

be implemented in conjunction with GH-033 to ensure that a 10′ multi-use path is included in design. Funding for preliminary engineering of this phase of widening is scheduled for FY 2015. **Project #15** is a recommendation to convert the existing sidewalk and bike lanes on Atlanta Highway from SR 53 to Frontage Road into a 10′ multi-use path. No roadway projects are scheduled for this section of the highway, however it is believed that the lane conversion can be accomplished through moderate right-of-way acquisition and use of a 8′-9′ wide section along the I-985 overpass. **Project #37** is a long-range project due to the scheduling of roadway project GH-080 in the 2040 MTP.

<u>Cleveland Highway/US 129</u>: **Projects #13**, **#14** and **#18** are recommendations to include bike lanes or wide paved shoulders into the reconstruction efforts



SR 13 Overpass at I-985

along US 129. Facility type can be determined as the design progresses. It is expected that at the time of the construction, this area of the county will still be largely rural. Therefore, the population density will be lower, and the primary users of the facility can be assumed to be long-distance recreational cyclists. If development in this area grows as predicted, the shoulders could feasibly be reconstructed into a multi-use path to accommodate pedestrians.

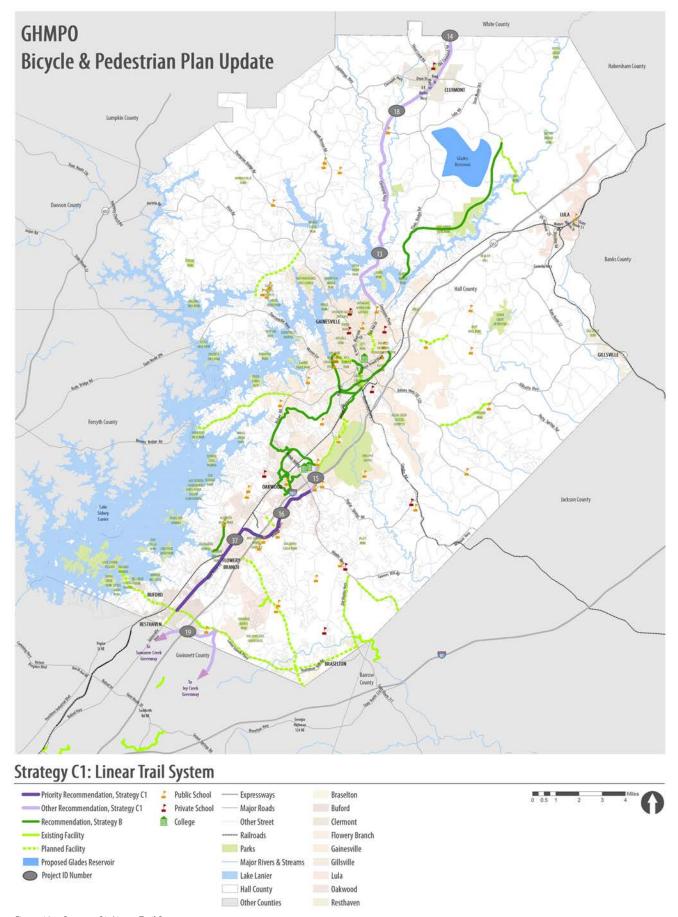


Figure 10. Strategy C1: Linear Trail System

The second subsection of Strategy C outlines smaller spur connections from the main trunk trail. Figure 11 illustrates the recommendations in subsection C.2.

Gillsville, Lula, and Clermont: The northeastern cities of Hall County lie off of the main trunk trail, so spur trails should be used to connect to them. Users in these areas have been shown to be either city residents making short trips to parks and downtowns, or long-distance cyclists. Roads are typically rural, without curb and gutter. The roads also have relatively low volumes, with SR 52, SR 323/Gillsville Highway and US 23/SR 365 being exceptions. **Projects #38** and **#39** provide improvements in Gillsville and Lula by connecting residents with destinations within city limits. Project #26 would connect the two previously mentioned projects with a 10' multi-use path along County Line Road. This segment is almost 5 miles in length, and may not see as much use as the shorter segments in town, therefore it is recommended Lula tunnel with children's artwork. that **Project #26** be implemented at a later date. The



cost of the project could likely push it into an "Aspirations" category of projects. Project #32 consists of improvements in Clermont such as additional sidewalk coverage in the city limits, and sharrows along Shoal Creek Road, and Main Street. Lastly, bike lanes or a wide paved shoulder are recommended between Lula and Clermont along Lula Highway/SR 52 in **Projects #31** and **#33** to accommodate high volumes of Class A riders.

Braselton: The MTP roadway projects to widen Winder Highway/SR 53 (GH-040) and Old Winder Highway/SR 211 (GH-025) should be designed as complete streets, preferably through the use of an adjacent 10' multiuse trail. Current recommendations for these projects are bike lanes on SR 211 and a mix of rural paved shoulder and 5' sidewalk along SR 53. **Projects #28** and **#21** make recommendations to revise the existing design concepts. Additionally, a short segment of new trail is recommended along SR 53 from Youngblood Road to the northern termini of GH-040 to provide an access point to the Trinity Day School and the World Language Academy.

Flowery Branch: Two short trail segments that are recommended in the Flowery Branch Old Town Redevelopment Plan are a section along Phil Niekro Boulevard from the I-985 interchange to Railroad Avenue (Project #34) and another section along Lights Ferry Road from downtown to the Aqualand Marina (Project #24). East of downtown along Spout Springs road is the residential development of Sterling on the Lake. Project #22 is a recommended path through the development, which serves to connect the Spout Springs Road facilities with the Lanier Islands Parkway trail. The path would also provide access to the Cherokee Bluffs Park in the area.

Gainesville: Project #20 is an important task for the city of Gainesville to complete. This project is the collective grouping of streetscapes and sharrow treatments for roads in downtown Gainesville which were recommended in The City of Gainesville Transportation Master Plan. Completion of this task will also help achieve the 0.6 mile connection between the Midtown Greenway and the Rock Creek Greenway (Project #1). Project #23 is considered to be a high priority project as it helps complete the linear trunk trail and also makes a connection between the midtown area of Gainesville and the Don Carter State Park trail (Project **#10**). This path would begin at the termini of the Industrial Boulevard extension, near Downey Boulevard, and extend north along Lakeview Drive, Beverly Road, and Limestone Parkway. The path would likely need to cross Limestone Parkway at Clarks Bridge Road, and then fork to follow both Clarks Bridge Road and Limestone Parkway. Termini for the trail would be the southern ends of both bridges over Lake Lanier on Clarks Bridge Road and Cleveland Highway. A final short spur trail, known as the Limestone Creek Trail, is recommended as Project #25. This would be an off-road, scenic route of 1.7 miles leading from the City Park in downtown to Limestone Parkway along the Limestone Creek. The trail would also serve as a trailhead to Project #23. Right-of-way costs could likely push this project into the "Aspirations" category.

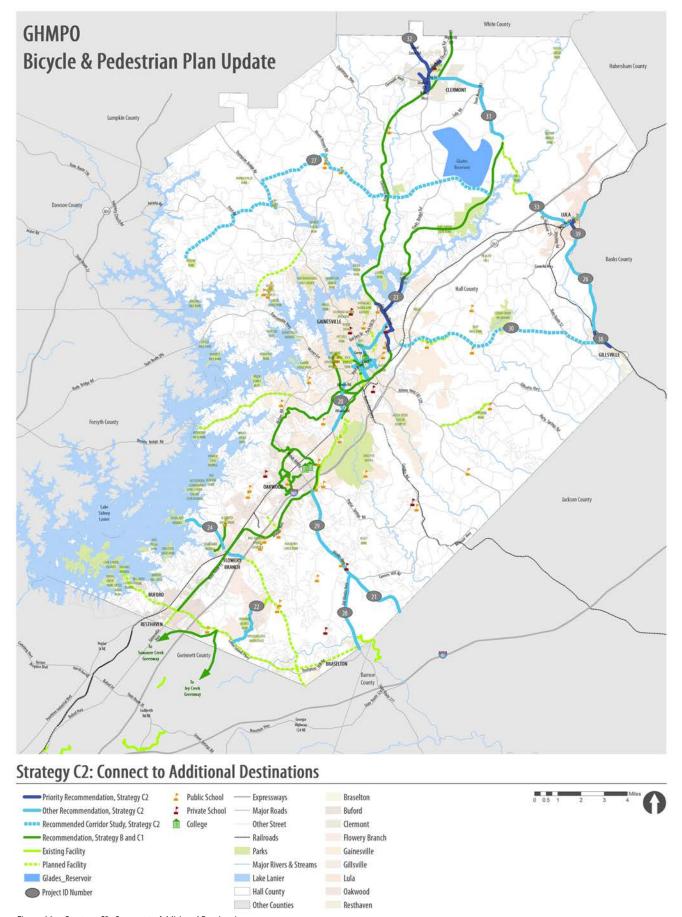


Figure 11. Strategy C2: Connect to Additional Destinations

<u>Corridor Studies</u>: **Projects #27** and **#30** are corridor studies to determine whether bike and pedestrian facilities are needed and feasible in areas that are expected to see growth by 2040. Current population density in these areas of the county are relatively low, but with time could see an increase. Both of these studies should be conducted 5-10 years in the future, when growth in the study areas is more predictable.

The final subsection of strategy C is to plan parallel connections in southern Hall County to expand the trail system's coverage area. Figure 12 illustrates the recommendations in subsection C.3.

Parallel Routes: The projects that make up the subsection C.3 are located in the highest population density areas along the I-985 corridor in South Hall County. These projects are considered to be either long-range goals or county aspirations with no foreseeable target date at the time of this plan's drafting. 10' sidepaths along McEver Road, Hog Mountain Road, and Thurmon Tanner Parkway would serve as secondary trunk trails through neighborhoods, office parks, and school campuses. **Project #36** is potentially feasible in a long-term plan, as current LRTP projects GH-084 and GH-079 are designed and constructed. **Projects #35** and **#17** are both approximately 5 miles long and do not lie along alignments with currently planned roadway projects in the LRTP. **Project #35** lies along the recently constructed Thurmon Tanner Parkway, and widening is not likely to be needed here by 2040, however, the trail could be largely completed as the Oakwood Town Center area develops. Fee in-lieu policies and careful coordination with developers could see large segments constructed concurrently with area businesses and neighborhoods. **Project #17** would likely need to be constructed with a road widening project on Hog Mountain Road. As the long range transportation plan goes through the process of being updated and revised, the need for a widening of Hog Mountain Road may become apparent. At that time, it is recommended that bicycle and pedestrian elements be included in designs.



Thurmon Turner Parkway



Hog Mountain Road

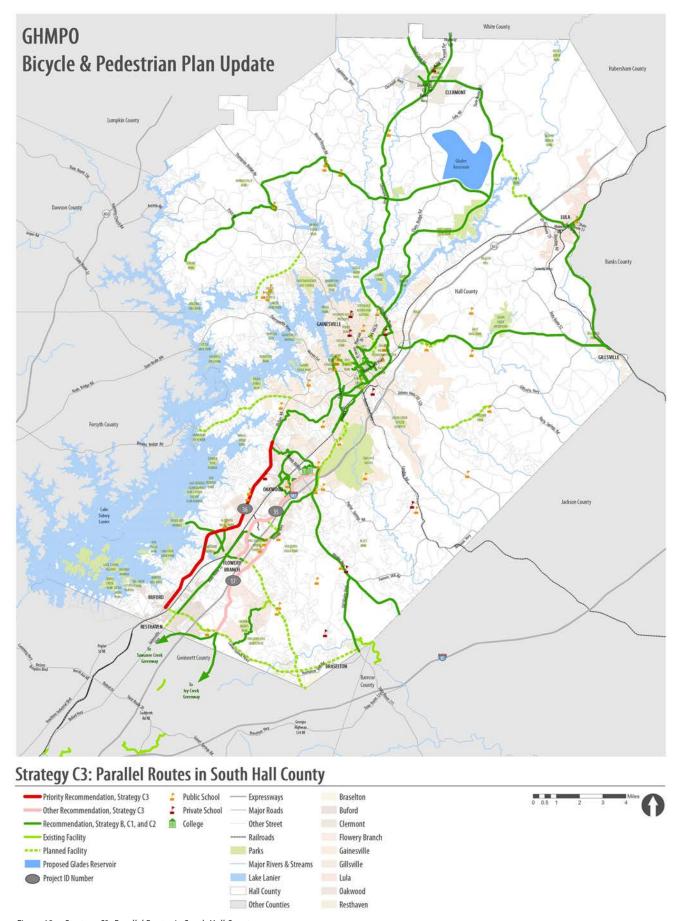


Figure 12. Strategy C3: Parallel Routes in South Hall County

### **Implementation**

Implementation of these projects will largely depend on the allocation of funding for bike and pedestrian projects in the upcoming GHMPO Long Range Transportation Plan. The parties involved in the long range planning process will decide how much funding will be dedicated to these types of projects and in what timeframe they will occur. To aid in this decision-making process, this plan presents projected schedules and cost estimates for each project, as seen in Table 2. Several projects have been included in previous plans, and those schedules and cost estimates were carried over into this update. The total estimated cost of all projects in this plan is \$146,493,000. Detailed tables of project schedules and project lists by city can be found in the Appendix of this document.

For bike and pedestrian projects along major roadway projects with federal funding, the cost estimate is based on the additional costs required to include these facilities into the design and construction phases. The timeframe for these trails coincides with expected dates of preliminary engineering and construction from GDOT concept documents and the GHMPO 2040 MTP. With this strategy of using roadway projects to help complete long segments of the proposed trail network, more funding is expected to be available for desired off-street connections such as the Don Carter State Park trail or the Balus Creek and Flat Creek segments of the Central Hall trail.

Short-term recommendations are projects that can be accomplished for a relatively low cost, or meet a critical need. The total cost of these recommendations is \$33,434,000. It is recommended in this study that these short-term projects be completed between 2014 and 2020.

Mid-term recommendations are largely determined by the timing of the roadway projects that they accompany. Additionally, the need for certain projects, such as the corridor studies, are not immediate, but will emerge in the future. The total estimated cost of the mid-term recommendations is \$68,195,000. The recommended timeframe for these projects is between 2021 and 2030.

The long-term recommendations are based on roadway project timing, relative cost, and estimated development dates of the Oakwood Town Center. These recommendations total \$22,018,000 and are estimated to be designed and completed between 2031 and 2040.

Projects in the aspirations category are considered to be very far-reaching goals and are largely part of the strategy to complete parallel routes in south Hall. These projects do not lie along currently planned roadway projects, and would be costly to independently design and construct due to their overall length. If, at some point in the future, County Line Road, Thurmon Tanner Parkway or Hog Mountain Road are widened, then multi-use path elements should be considered. The Limestone Creek Trail makes use of a natural creekbed, and would require easements through private land. Estimated project costs in this category total \$22,846,000.

#### Short Term Recommendations

| Strategy                 |                |   | Length (mi.) | Cost                                   |
|--------------------------|----------------|---|--------------|--|
| 3.1                      | 1              | Central Hall Trail: Downtown Greenway Connector   | 0.6          | \$836,000                              |
| B.1                      | 2              | Central Hall Trail Loop: Palmour Drive Connector  | 2.2          | \$2,412,000                            |
| B.2                      | 9              | Feasibility Study for Don Carter State Park Trail   | N/A          | \$150,000                              |
| C.1                      | 15             | SR 13/Atlanta Hwy Trail - Bike Lane Conversion  | 1.2          | \$1,634,000                            |
| C.1                      | 19             | Study to determine connection to Gwinnett County Greenway System  | N/A          | \$100,000                              |
|                          |                | Gainesville Complete Streets-Washington St, Fair St, Prior St, Bradford St, Main  |              |  |
| C.2                      | 20             | Street, College Ave *   | N/A          | \$12,060,000                           |
| C.2                      | 22             | Cherokee Bluffs Park Trail  | 2.4          | \$4,171,000                            |
| C.2                      | 38             | Gillsville - County Line Road Trail   | 0.9          | \$1,487,000                            |
| C.2                      | 39             | Lula - County Line Road Trail   | 0.9          | \$1,432,000                            |
| C.2                      | 29             | Winder Highway/SR 53 Multi-use Trail - Atlanta Hwy/SR 13 to GH-040  | 4.7          | \$4,608,000                            |
| C.2                      | 32             | Sidewalk and Sharrows in Clermont   | N/A          | \$4,544,000                            |
|                          |                |   |              | \$33,434,000                           |
| Mid-Terr                 | m Recor        | mmendations   |              |  |
| Strategy                 | Proj.#         | Name  | Length (mi.) | Cost                                   |
| B.1                      | 3              | Central Hall Trail Loop: Balus Creek Route  | 1.9          | \$2,974,000                            |
| B.1                      | 4              | Industrial Boulevard Extension *  | 1.9          | \$10,870,000                           |
| B.1                      | 5              | Pearl Nix Parkway Trail West *  | 1.7          | \$4,210,000                            |
| B.1                      | 6              | Pearl Nix Parkway Trail East *  | 1            | \$2,460,000                            |
| B.1                      | 7              | Central Hall Trail Loop: Flat Creek Route **  | 4.5          | \$1,073,000                            |
| B.1                      | 8              | Central Hall Trail Loop: McEver Road Greenway Connector   | 1.2          | \$1,384,000                            |
| B.3                      | 11             | City Park to Alberta Banks Park Greenway ***  | 1.3          | \$850,000                              |
| C.1                      | 13             | GH-020 US 129 Bike Lanes - Limestone Pkwy to Nopone Rd ~  | 5.4          | \$5,313,000                            |
| C.1                      | 14             | GH-036 US 129 Bike Lanes - Clarks Bridge Rd to White Co Line ~  | 2.7          | \$2,688,000                            |
| C.1                      | 16             | GH-033 SR 13/Atlanta Hwy Trail - Radford Road to SR 53/Winder Hwy ~   | 4.5          | \$1,617,000                            |
| C.1                      | 18             | GH-035 US 129 Bike Lanes - Nopone Rd to Clarks Bridge Rd ~<br>GH-040 Winder Highway/SR 53 Trail -Tanners Mill Road to I-85 in Jackson | 5.6          | \$2,786,000                            |
| C.2                      | 21             | County ~  | 2.6          | \$907,000                              |
| C.2                      | 23             | Lakeview Drive Sidepath   | 3.8          | \$6,576,000                            |
| C.2                      | 24             | Agualand Marina Path ***  | 2.2          | \$2,100,000                            |
|                          |                | Corridor Study to determine route and facility type based on projected  | -            | +=, : = =                              |
| C.2                      | 27             | growth/demand northwest of Gainesville  | N/A          | \$150,000                              |
|                          |                | GH-025 Old Winder Highway/SR 211 Trail - Winder Hwy to Gwinnett County  |              |  |
| C.2                      | 28             | Line ~  | 3.3          | \$4,750,000                            |
| 0.0                      | 20             | Corridor Study to determine route and facility type based on projected  | N1/A         | <b>#400 000</b>                        |
| C.2                      | 30             | growth/demand east of Gainesville   | N/A          | \$100,000                              |
| 0.0                      | 31             | SR 52/Lula Hwy Bike Lanes - GH-019 to Clermont  | 4.8          | \$1,172,000                            |
|                          |                |   |              | ₹71∩ ∩∩∩                               |
| C.2                      | 33             | SR 52/Lula Hwy Bike Lanes - Lula to GH-019  | 3            | \$710,000                              |
| C.2<br>C.2<br>C.2<br>C.3 | 33<br>34<br>36 | SR 52/Lula Hwy Bike Lanes - Lula to GH-019 Phil Niekro Path *** GH-084 & GH-079 McEver Road Trail ~                                   | 1.1<br>10    | \$710,000<br>\$700,000<br>\$14,805,000 |

### Long Range Recommendations

| Strategy | Proj.# | Name  | Length (mi.) | Cost         |
|----------|--------|---|--------------|--------------|
| B.2      | 10     | Don Carter State Park Trail   | 8.3          | \$10,363,000 |
| B.3      | 12     | Oakwood Town Center Trail System  | 5            | \$6,429,000  |
|          |        | GH-080 SR 13/Atlanta Highway Trail - Lanier Islands Pkwy to Phil Niekro |              |              |
| C.1      | 37     | Boulevard ~   | 3.3          | \$5,226,000  |
|          |        |   |              | \$22,018,000 |

### Aspirations Recommendations

| Strategy | Proj.# | Name                      | Length (mi.) | Cost                        |
|----------|--------|---------------------------|--------------|-----------------------------|
| C.2      | 25     | Limestone Creek Trail     | 1.7          | \$2,327,000                 |
| C.2      | 26     | County Line Road Trail    | 4.8          | \$7,620,000                 |
| C.3      | 35     | Thurmon Tanner Pkwy Trail | 5.6          | \$5,845,000                 |
| C.3      | 17     | Hog Mountain Rd Trail     | 4.8          | \$7,054,000<br>\$22,846,000 |
|          |        |                           |              |                             |

High Priority Project

Total Costs: \$146,493,000 \* source: Gainesville Transportation Master Plan - timeframe based on Transportation Master Plan recommendations

Table 2. Recommended Implementation Schedule

<sup>\*\*</sup> source: Gainesville 2030 Comprehensive Plan - timeframe based on 2030 Comp Plan recommendations
\*\*\* source: Flowery Branch Redevelopment Plan - timeframe based on Redevelopment Plan recommendations

 $<sup>\</sup>sim Project\ lies\ along\ programmed\ roadway\ project\ -\ time frame\ based\ on\ programmed\ funding\ for\ ROW/CST\ in\ 2040\ MTP$ 

### **Funding Sources**

Funding these projects will require use of monies from several sources, including federal aid, local taxes and policies, grants, and even corporate sponsorship. Federal contributions account for 80% of total eligible project costs, while the project sponsor is responsible for providing the remaining 20% match.

### **Surface Transportation Program (STP)**

The majority of funding will come in the form of federal aid from the Surface Transportation Program. Trail projects included in major road construction efforts will be eligible for this type of federal aid. Currently in Hall County, control of this funding is managed by the Georgia Department of Transportation through coordination with the MPO. The Federal Highway Administration legislation states that urbanized areas with population greater than 200,000 will receive a portion of these STP funds to be used on projects identified by presiding MPO(s). Therefore, it is expected that as the population of Hall County grows and continues to urbanize in the vicinity of the I-985 corridor, the MPO region will surpass this threshold, allowing more direct control over project funding.

### Congestion Mitigation and Air Quality Improvement Program (CMAQ)

CMAQ funding is also federal aid with the intent of improving congestion and air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide and particulate matter (nonattainment areas). Hall County is currently within a non-attainment area and is eligible to receive CMAQ funds for roadway projects that improve traffic flow, reduce congestion duration, and otherwise reduce total vehicular demand. This will be important in the future as CMAQ monies become available for corridor improvements in Hall County, especially in heavily-traveled areas of south Hall. Projects that receive this funding must compete with other planned improvements throughout the Atlanta non-attainment zone, however through coordination with GDOT, the Atlanta Regional Commission (ARC) and the local jurisdictions, important projects can be targeted as CMAQ recipients.

### <u>Transportation Alternatives Program (TAP)</u>

With the recent MAP-21 legislation, which was passed in 2012, previous independent funding sources such as Safe Routes to School (SRTS) and Transportation Enhancement (TE) have been rolled up into one source known as the Transportation Alternatives Program. This money is to be used by states to fund recreational trail facilities, infrastructure that promotes safe routes for all users, and other alternative mode projects. Funding of projects is done on a competitive basis, and projects must appear on the MPO's Transportation Improvement Plan (TIP) to be eligible. One recommended use of this funding would be to allocate it to off-road facilities or other street-adjacent trail projects that are not expected to receive STP monies for improvements.

#### **Local Funds**

Local transportation improvement funds are collected through a one cent sales tax known as the Special Purpose-Local Option Sales Tax (SPLOST). Decision-makers will need to consider the relative importance of these bicycle and pedestrian projects compared to other capital improvement projects to determine the percent of funds allocated towards projects of each type in future SPLOST programs. Varying public works projects make this type of local funding highly competitive. Previous transportation projects which have received funding through the SPLOST are the Palmour Drive segment of the Central Hall Trail, the Sardis Road Connector and the Spout Springs Road widening.

Additionally, county and city ordinances should be examined to include direction when developing parcels along trail alignments set forth in this plan. Developers could be required to construct these planned trail facilities as part of lot development, or pay a fee in lieu of construction. The collected fees would be available by municipalities for use in developing complete sections of the trail network. It is recommended that the county and its jurisdictions should develop a consistent policy and ordinances to include requirements for implementation of sidewalks and trails, along with a provision for collection of "in lieu" fees.

#### **Grants and Other Sources**

Hall County is located within the Appalachian Regional Commission's jurisdiction and as such, is eligible to apply for grant monies for projects that address one or more of the four goals identified in their strategic plan.

- Increase job opportunities and per capita income in Appalachia to reach parity with the nation.
- Strengthen the capacity of the people of Appalachia to compete in the global economy.
- Develop and improve Appalachia's infrastructure to make the Region economically competitive.
- Build the Appalachian Development Highway System to reduce Appalachia's isolation.

The Appalachian Regional Commission offers some guidance on meeting these goals by promoting improvements to basic public infrastructure that supports public health, improves energy efficiency, and protects the natural environment. Grant applications can be requested from Georgia's Appalachian Regional Commission program manager.

Another innovative way to generate funding, particularly for maintenance costs, is through corporate sponsorship of trail segments. Corporate sponsorship, paired with successful trail system branding, would present businesses with the opportunity to help fund a special community amenity. Businesses could provide assistance with trail maintenance by organizing cleanup events or by making monetary donations for routine care. Corporate logos would be displayed clearly at trailheads and along trails to promote the sponsors.

