

Transportation Master Plan

City of Gainesville, Georgia | October 2013





EXECUTIVE SUMMARY

In 2012, a consultant team consisting of Pond & Company and Arcadis, Inc. was selected to complete the *City of Gainesville Transportation Master Plan*. The goal of the Transportation Master Plan is to improve connectivity around the City for all types of users, making travel easier, safer, and more efficient for drivers, cyclists, transit users, and pedestrians. Pond conducted an extensive analysis of transportation data, received input from the public and the Plan's Focus Group, and worked with City of Gainesville, Hall County, and Gainesville-Hall Metropolitan Planning Organization (GHMPO) staff to develop a complete Transportation Master Plan for the City of Gainesville. This plan includes effective solutions that improve mobility for all users in a cost-effective manner.

The Transportation Master Plan builds on Gainesville's prior transportation and land use plans, including the *Gainesville 2030 Comprehensive Plan*, the *Gainesville-Hall County 2040 Metropolitan Transportation Plan (MTP)*, the *Hall County Crash Profile*, the *GHMPO Bicycle and Pedestrian Plan*, the *Hall Area Transit Development Plan*, and the *I-985 Park and Ride Lots Surveys*. The 2013 Transportation Master Plan draws on these previous studies and maximizes the impacts of future transportation investments.

PURPOSE AND GOALS

Mobility is an important quality of life issue, especially in economically expanding cities that face increasing congestion and funding challenges. A successful multimodal transportation system integrates all modes of transportation—roads, transit, sidewalks, and bicycle facilities—into a seamless, efficient system. The purpose of Gainesville's Transportation Master Plan is to explore existing transportation needs, opportunities for improvement and investment, and implementable solutions to the transportation challenges facing the City.

The Transportation Master Plan process consisted of identifying existing transportation conditions in the City, analyzing the City's transportation needs, and developing potential solutions. A specific methodology was followed to complete these steps. The public was involved throughout the study, and the planning process was driven by a prioritized list of transportation goals. These goals include the following:

- Goal 1: Manage congestion, focusing on operation of key intersections and critical road sections.
- Goal 2: Enhance safety for users of all travel modes, including automobile, private and commercial vehicle operators, pedestrians, bicyclists, and transit riders.
- Goal 3: Increase connectivity of the roadway network for local and regional trips.
- Goal 4: Support Economic Development and Redevelopment by providing transportation systems that serve existing residents and businesses as well as future potential redevelopment in support of the Comprehensive Plan.
- Goal 5: Increase pedestrian and bicycle mobility for travel along corridors and for access to transit.



METHODOLOGY

The project's methodology consisted of the following:

- A review and analysis of relevant existing transportation plans and other related plans was conducted. The *Gainesville 2030 Comprehensive Plan* provided land use assumptions and the link between land use and transportation planning. The *Gainesville-Hall County 2040 Metropolitan Transportation Plan* provided the primary transportation background for the master planning process.
- An inventory of existing conditions information, based on available data from previous studies, GIS data, traffic data from the City and GDOT was developed. Field reviews were conducted to provide additional context and details.
- The project team worked with staff and the public by holding several types of meetings—technical committee meetings, focus group meetings, and community meetings.
- In addition to meetings, public outreach was conducted using two surveys (available online and at meetings), preparing web materials, and producing a water bill mailing.
- Travel demand modeling was conducted using the GHMPO model as a starting point. This model was later used to prepare future volume forecasts, identify roadway capacity deficiencies, and test improvement alternatives.
- A Needs Assessment was conducted using information from the previous plans, the existing conditions inventory, travel demand model data, and other traffic and transportation analysis.
- The results of the needs assessment were examined along with community input regarding needs and potential solutions. This information was used to develop a list of potential improvements by travel mode and area of interest, including: roadway, bicycle, pedestrian, freight/trucking, and ITS.
- The project list was refined, prioritized, and documented using recommendations maps and a detailed project list.
- The Gainesville Transportation Master Plan was documented in this plan report, which is intended to provide a readable and accessible plan document for Gainesville and GHMPO.
- The completed Gainesville Transportation Master Plan will serve as an input to the GHMPO Long Range Transportation Plan (LRTP) update.

PLAN RECOMMENDATIONS

The central element of this plan is a list of recommended transportation projects. After the analysis phases of the study were complete, a preliminary transportation project list was developed. Input was then sought on the preliminary list from the public, the project focus group, and from transportation staff from the City of Gainesville and the GHMPO. The recommended projects were then incorporated into the GHMPO travel demand model and Build model runs were conducted.

After input was received and the model runs were completed, revisions were made to the preliminary project list. Additional input was then sought on the revised project list from the public, the project focus group, and from transportation staff from the City of Gainesville and the GHMPO. Input on prioritization was specifically sought to help direct the future actions of the City.



After these steps were complete, the prioritized transportation project list was finalized. This project list was split into three tiers, which generally correlate to short-term, mid-term, and long-term projects. Specific implementation years cannot be determined at this time. However, specific project types and a range of years are proposed for each of the three tiers, which include the following:

- Tier 1 Projects – Potential Target for Implementation (2013-2020): Emphasis on low-cost/high value operational improvements and pedestrian improvements in high use areas to address current needs.
- Tier 2 Projects – Potential Target for Implementation (2021-2030): Emphasis on additional connections to provide roadway capacity and pedestrian/bicycle connections in key areas to address current and future needs.
- Tier 3 Projects – Potential Target for Implementation (2031-2040): Emphasis on projects with longer implementation and projects to address future needs.

Implementation will depend on a variety of factors, including project cost, funding availability, impact to residents and businesses, environmental impacts, prioritization at the regional level, approval by external agencies, and other factors. Due to these factors, this prioritized project list is intended to provide the City with guidance for what transportation projects should be constructed and the general order in which they should be prioritized. It is not expected that all projects in a tier will be completed during a specific time frame. However, if funding is available and other factors allow it, the City should begin pursuing implementation during the time frames identified for each tier.

The final plan recommends improvements to transportation infrastructure and operations to enhance mobility in the City of Gainesville including:

- Traffic operations and Intelligent Transportation System (ITS) improvements to get the greatest capacity possible from critical intersections and signal systems.
- Roadway connectivity to provide connections that reduce the concentration of vehicles on congested streets and encourage greater utilization of underused streets.
- Roadway capacity to improve regional corridors through road widening.
- Pedestrian and bicycle improvements to reduce the number of people traveling by car and to encourage people to park once and walk to several destinations within downtown.

This final list of recommended transportation projects includes nearly all aspects of the transportation network in the City of Gainesville. The list provides the City with direction for the specific transportation projects that should be pursued in the short term as well as looking forward through the year 2040. This list will allow the City to compete at the regional and state level for existing transportation funding as well as for other funding sources that may become available in the future. The complete project list is shown in Table E-1, while the recommended projects are shown in Figures E-1, E-2, and E-3. Please note, the projects are shown in priority order within each implementation Tier, therefore, the project reference numbers are not sequential.

Table E-1, Recommended Transportation Projects

Project Number	Project Name	Type	Project Description
Tier I Projects Roadway and Intersection - Target for Implementation (2013-2020)			
48	Traffic Signal Equipment and Control Center	Signal Operations	Modify traffic signal field devices to operate on internet protocol, install monitoring and control equipment in traffic control center, connect to City Fiber optics network for communications with traffic control center.
49	Signal Timing	Signal Operations	Provide comprehensive signal retiming with consideration of traffic responsive plans along congested corridors (78 intersections).
50	Traffic Signal Coordination and Communications - Connect Existing System	Signal Operations	Install fiber optic communications, blue tooth travel time sensors, and camera monitoring along the following corridors: Jesse Jewell Pkwy east of downtown (via Gainesville IT Communications), downtown Gainesville, and John Morrow Pkwy. (2 miles plus use of IT Comm. System with 37 cameras)
51	Traffic Signal Coordination and Communications - Extend to Key Corridors	Signal Operations	Install fiber optic communications, blue tooth travel time sensors, and camera monitoring along the following corridors: Browns Bridge Road west of Pearl Nix Pkwy (via Gainesville IT Communications), EE Butler Pkwy, Athens Highway south of MLK Boulevard, and Green Street - Thompson Bridge Road north of Academy Street. (3.5 miles plus use of IT Comm. system with 16 cameras)
52	Traffic Signal Coordination and Communications - Secondary Corridors and Parallel TMC Communications	Signal Operations	Install fiber optic communications and camera monitoring along the following corridors: Atlanta Highway, Pearl Nix Pkwy, Aviation Blvd, Industrial Blvd, Queen City Pkwy, Downey Blvd, S. Enota Drive, Park Hill Dr, Limestone Pkwy, and MLK Jr. Blvd., as well as a connection down Main Street from MLK Jr. Blvd to the City Traffic Control Center. (12.5 miles with 25 cameras)
10	EE Butler Pkwy at MLK Jr Blvd; Athens Street at MLK Jr Blvd Operations	Intersection	At the intersection of EE Butler Pkwy at MLK Jr Blvd, on the northeast bound approach, extend the left-turn lane to provide more vehicular storage, add a second through lane, and add a short (less than 100 ft long) right-turn lane. On the northeast leg of the intersection, add a second receiving lane which will also be a right-turn lane onto Athens Street. On the southwest bound approach, extend the left-turn lane to approximately 250 ft in length. Remove the traffic signal at the intersection of MLK Jr Blvd at Athens Street and prohibit the westbound left-turn movement from Athens Street.
32	Green Street Short-Term	Roadway Operations	Green St from Academy St to Riverside Dr, TBD, Options do not affect the existing curbs and include - prohibiting left-turns along the corridor, prohibiting left-turns during peak hours, or restriping to provide two NB lanes, one left turn lane, and one SB lane.
33	Green Street Turning Lanes at Academy and Post Office	Roadway Operations	Add a southbound right-turn lane at the intersection of Green Street at Academy Street; Add a northbound right-turn lane and a southbound left-turn lane at the Post Office entrance.
5	Browns Bridge Rd at Pearl Nix Pkwy Operations	Intersection	At the intersection of Browns Bridge Rd at Pearl Nix Pkwy, add a second northbound left-turn lane approximately 300 ft in length and add a second southbound left-turn lane approximately 200 ft in length; add an eastbound right-turn lane approximately 250 ft in length and add a westbound right-turn lane approximately 125 ft in length.
13	Jesse Jewell Pkwy at John Morrow Pkwy/Queen City Pkwy Operations	Intersection	At the intersection of Jesse Jewell Pkwy at John Morrow Pkwy/Queen City Pkwy, add a right-turn lane on the eastbound and westbound approaches on Jesse Jewell Pkwy and on the northbound approach on Queen City Parkway. The right-turn lanes will each be approximately 300 ft long.
36	Enota Dr Re-alignment	Roadway Operations; Extended Roadway	Construct a new roadway segment behind Enota Elementary School, connecting Enota Drive near the intersection with Cumberland Dr to S Enota Dr near the intersection with Enota Cir; Add a two-way left-turn lane to Enota Dr from Thompson Br Rd to Park Hill Dr, including along the new roadway segment; Potentially combine construction with the intersection projects at Thompson Bridge Rd at Enota Ave and at Park Hill Dr at Enota Ave.
35	Oak Tree Dr Operations	Roadway Operations/ Intersection	Add a two way left-turn lane on Oak Tree Dr from Thompson Bridge Rd to Riverside Dr; Add a traffic signal to the intersection of Oak Tree Dr at Thompson Bridge Rd; Re-align the intersection of Oak Tree Dr at Riverside Dr so the through movement is between Oak Tree Dr and Riverside Dr northbound, with the south leg of Riverside Dr as the side street; Add a traffic signal or roundabout to the intersection of Oak Tree Dr at Riverside Dr.
2	Athens Hwy at Chestnut St Operations	Intersection	Shift the intersection of Athens Hwy at Chestnut St to the north, further from the intersection of Athens Hwy at Ridge Rd. Extend the southbound left-turn lane on Athens Hwy on the approach to Ridge Road to prevent left-turn traffic queues from extending into the through travel lanes.
4	Browns Bridge Rd at Auburn Ave Operations	Intersection	At the intersection of Browns Bridge Rd at Auburn Ave, add an eastbound right-turn lane.

Table E-1, Recommended Transportation Projects

Project Number	Project Name	Type	Project Description
6	Browns Bridge Rd at West End Ave Operations	Intersection	At the intersection of Browns Bridge Rd at West End Ave, add a westbound right-turn lane, approximately 125 ft in length.
7	Cleveland Hwy at Limestone Pkwy	Intersection	At the intersection of Cleveland Hwy at Limestone Pkwy, signalize the northbound right-turn movement on Limestone Pkwy to allow for the free flow movement of right-turning vehicles during appropriate signal phases.
8	Cleveland Hwy at Limestone Pkwy	Intersection	Realign the intersection of Cleveland Hwy at Limestone Pkwy so that the north leg, Cleveland Highway, lines up with the southeast leg, Limestone Pkwy. The south leg of the intersection, Cleveland Highway, becomes the side street.
9	Dawsonville Hwy/SR 53 at McEver Rd Operations	Intersection	At the intersection of Dawsonville Hwy/SR 53 at McEver Rd, Add a westbound right-turn lane and second through lane.
11	Jesse Jewell Pkwy at EE Butler Pkwy Operations	Intersection	At the intersection of Jesse Jewell Pkwy at EE Butler Pkwy, extend the eastbound right-turn lane to the pedestrian bridge across Jesse Jewell Pkwy.
16	Jesse Jewell Pkwy at Prior St Operations	Intersection	At the intersection of Jesse Jewell Pkwy at Prior St, add northbound and southbound left-turn lane2 approximately 100 ft in length.
17	John Morrow Pkwy at Washington St Operations	Intersection	At the intersection of John Morrow Pkwy at Washington St, realign southbound right-turn lane .
18	Park Hill Dr at Enota Ave Operations	Intersection	At the intersection of Park Hill Dr at Enota Ave, add a southbound right-turn lane approximately 175 ft in length and add an eastbound right-turn lane.
19	Park Hill Dr at Lakeview Dr Operations	Intersection	Reduce the slope on the Lakeview Dr approach.
20	Thompson Bridge Rd at Enota Ave Operations	Intersection	At the intersection of Thompson Bridge Rd at Enota Ave, add a northbound right-turn lane approximately 125 ft in length and add a southbound right-turn lane approximately 105 ft in length.
30	MLK Jr Blvd Corridor	Roadway Capacity	Widen MLK Jr Blvd to a 4-lane roadway with streetscapes and a landscaped median from Queen City Pkwy to EE Butler Parkway; Add a two-way left-turn lane and streetscapes from EE Butler Pkwy to Downey Blvd.
47	Patricia Dr Extension	New/Extended Roadway	Extend Patricia Dr west to MLK Jr Blvd. Project is intended to improve neighborhood connectivity using a connection between existing residences. This would be performed in conjunction with improvements to MLK Jr Blvd.
24	Industrial Blvd Extension	New/Extended Roadway	Extend Industrial Blvd north along the railroad tracks, under Athens Hwy, to the intersection of Jesse Jewell Pkwy at Branch Street. Include a multi-use trail as part of the roadway extension.
1	I-985 Interchange Operations Study	Interchange Operations Study	Conduct a study of I-985 interchange needs from Queen City Pkwy to Jesse Jewell Pkwy. The study shall analyze the potential need for an additional interchange north of Athens Street as part of an extension of Downey Blvd. It shall also focus on the preferred design at each interchange and consider the need for a collector-distributor system or other access changes along the corridor. The need and potential locations for park and ride lots at or near the interchanges shall also be a part of the study.
55	Freeway Signage Modifications	Roadway Operations	Modify freeway signage to encourage greater use of Jesse Jewell Pkwy for access to Gainesville and travel to the north. Consider removal of US 129 business designation so that US 129 traffic uses Jesse Jewell Parkway.
54	Travel Demand Management Plan	Travel Demand Management	Develop a travel demand management plan and strategy to increase ridesharing and use of alternative transportation modes. Prepare plan in coordination with Hall County as part of regional approach.
Tier I Projects Pedestrian and Bicycle - Target for Implementation (2013-2020)			
60	Washington St Complete Street and Sharrows	Complete Street/ Streetscape; Sharrows	Add Complete Street elements to Washington St from Academy St to Smithgall Ln, including; Add sharrows to Washington St from John Morrow Pkwy to Academy St.
65	Main St Complete Street	Complete Street/ Streetscape	Add Complete Street elements to Main St from MLK Jr Blvd to Jesse Jewell Pkwy.
67	Downtown Corridors Ped Crossings	Crossing Enhancements	Enhance existing pedestrian crossing locations by re-striping crosswalks or potentially adding stamped asphalt/concrete crosswalks, adding pedestrian countdown timers, and adding additional lighting (where needed). Implement these enhancements at intersections along the following corridors.

Table E-1, Recommended Transportation Projects

Project Number	Project Name	Type	Project Description
70	Green St at Riverside Dr Ped Crossing	Pedestrian Crossing Facilities	At the intersection of Green St at Riverside Dr, add pedestrian facilities including crosswalks, pedestrian signal phases, pedestrian countdown timers, and additional lighting .
71	Grove St Sharrows	Sharrows	Add sharrows on Grove St from Parker St to Industrial Blvd.
72	McDonald St Sharrows	Sharrows	Add sharrows on McDonald St from MLK Jr Blvd to the Industrial Blvd Extension.
73	Ridgewood Ave Sharrows	Sharrows	Add sharrows on Ridgewood Ave from Wilshire Dr to Green St.
74	Spring St Sharrows	Sharrows	Add sharrows on Spring St from Academy St to Prior St.
75	Summitt St Sharrows	Sharrows	Add sharrows on Summitt St from Grove St to Hunter St.
68	Pearl Nix Pkwy Trail East	Multiuse Trail	Construct a multiuse trail along Pearl Nix Pkwy/MLK Jr Blvd from Atlanta Hwy to the existing multiuse trail east of Pine St.
69	Pearl Nix Pkwy Trail West	Multiuse Trail	Construct a multiuse trail along Pearl Nix Pkwy from Wilshire Dr to Atlanta Hwy.
80	Jesse Jewell Pkwy Sidewalk East	Sidewalk: High Priority	Install sidewalk along Jesse Jewell Pkwy from Branch St to White Sulphur Rd.
81	Jesse Jewell Pkwy Sidewalk West	Sidewalk: High Priority	Install sidewalk along Jesse Jewell Pkwy from EE Butler Pkwy to Spring St.
82	Maple St Sidewalk	Sidewalk: High Priority	Install sidewalk along Maple St from Jesse Jewell Pkwy to Broad St.
86	Pearl Nix Pkwy Sidewalk	Sidewalk: High Priority	Install sidewalk along Pearl Nix Pkwy from Dawsonville Hwy/John Morrow Pkwy to Shallowford Rd.
Tier 2 Projects Roadway and Intersection - Target for Implementation (2021-2030)			
56	Signal Timing	Signal Operations	Provide comprehensive signal retiming with consideration of traffic responsive plans along congested corridors (78 intersections).
58	Upgrade TCC Systems and Equipment	Signal Operations	Upgrade computer systems, monitors and controll equipment in field and TCC to match current standards.
53	Driver Information via Changeable Message Signs	Signal Operations	Provide changeable message signs and operation along state routes in coordination with GDOT Navigator program along I-985. Implementation of 12 signs along three corridors is anticipated (EE Butler Pkwy, Jesse Jewell Pkwy, and Queen City Pkwy).
26	Thompson Bridge Rd - Dawsonville Hwy Connector	New/Extended Roadway	Construct a new bridge from Thompson Bridge Rd/SR 60 approximately 1 mile south of Thompson Bridge across Lake Lanier to Dawsonville Hwy. This connection includes new roadway segments and may also use segments of existing roadways, depending on the preferred route alternative.
22	Community Way Extension/ Re-Alignment	New/Extended Roadway	Extend Community Way northeast to Limestone Pkwy and continue to White Sulphur Rd; Re-align the intersection of Jesse Jewell Pkwy at Community Way to the intersection of Jesse Jewell Pkwy at the Industrial Blvd extension (existing Branch St).
31	Atlanta Highway Widening and Operations	Roadway Capacity/ Operations	Implement the following along Atlanta Highway: <ul style="list-style-type: none"> • Add a two-way left-turn lane from Hall Street to Industrial Blvd; • Widen to a 4-lane roadway with a landscaped median from Industrial Blvd to Memorial Park Dr; • Convert Atlanta Hwy to a Complete Street from Browns Bridge Rd to Memorial Park Dr; • Add a two-way left-turn lane and sidewalk from Memorial Park Dr to Tumbling Creek Rd; Continue the sidewalk to the existing sidewalk approximately 1,000 ft south of Tumbling Creek Rd.
40	I-985 at Athens Hwy Interchange	Interchange Capacity	At the I-985 at Athens Hwy interchange, implement capacity changes including widening or reconstruction of interchange bridges and reconstruction of ramps to increase capacity and add shoulders to bridges.

Table E-1, Recommended Transportation Projects

Project Number	Project Name	Type	Project Description
41	EE Butler Pkwy/Athens Hwy Capacity	Roadway Capacity	Widen EE Butler Pkwy to a 6-lane roadway, including 3 through lanes in each direction and a landscaped median, from Summit St to east of Monroe Dr.
29	Jesse Jewell Pkwy Capacity West	Roadway Capacity	Widen Jesse Jewell Pkwy to a 6-lane roadway, including 3 through lanes in each direction from John Morrow Pkwy/Queen City Pkwy to Academy Street. The westbound lane will become a right turn lane at John Morrow and the eastbound lane will become the left turn lane for Academy Street.
23	Dawsonville Hwy/SR 53 at McEver Rd - Local Roadway Connections	New/Extended Roadway	Additional local roadway connections near the intersection of Dawsonville Hwy/SR 53 at McEver Rd to provide parallel connections to Dawsonville Hwy/SR 53.
27	Downey Blvd Extension and Interchange	New/Extended Roadway; New Interchange	Extend Downey Blvd east to I-985. Construct a new interchange at I-985 at the Downey Blvd extension with interchange connecting to the EE Butler interchange to the south.
37	Gainesville Wayfinding Signage	Signage	Implement a system of wayfinding signage in downtown Gainesville and at key intersections near downtown and other activity areas. The signage should provide a consistent look that facilitates branding for the City. Develop strategy for way finding, then implementation.
38	I-985 at Queen City Pkwy Interchange	Interchange Operations	At the I-985 at Queen City Pkwy interchange, implement operations changes to the existing intersections at the I-985 on and off ramps. These will potentially include extending the existing turn lanes, adding new turn lanes, and/or changes to the ramp operations.
39	I-985 at Jesse Jewell Pkwy Interchange	Interchange Operations	At the I-985 at Jesse Jewell Pkwy interchange, implement operations changes to the existing intersections at the I-985 on and off ramps. These will potentially include extending the existing turn lanes, adding new turn lanes, and/or changes to the ramp operations.
Tier 2 Projects Pedestrian and Bicycle - Target for Implementation (2021-2030)			
63	College Ave Complete St	Complete Street/ Streetscape	Add Complete Street elements to College Ave from Main St to Fair St.
66	Prior St Complete Street	Complete Street/ Streetscape	Add Complete Street elements to Prior St from Hunter St to Riverside Dr.
61	Bradford St Complete Street - North	Complete Street/ Streetscape	Add Complete Street elements to Bradford St from Washington St to Dixon Dr.
62	Bradford St Complete Street - South	Complete Street/ Streetscape	Add Complete Street elements to Bradford St from Industrial Blvd to Jesse Jewell Pkwy.
76	Beverly Rd Sidewalk	Sidewalk: High Priority	Install sidewalk along Beverly Rd from Limestone Pkwy to White Sulphur Rd.
77	Browns Bridge Rd Sidewalk East	Sidewalk: High Priority	Install sidewalk along Browns Bridge Rd from Memorial Park Dr to Central Ave.
78	Dawsonville Hwy Sidewalk Central	Sidewalk: High Priority	Install sidewalk along Dawsonville Hwy from Beechwood Blvd to McEver Rd.
79	Dixon Dr Sidewalk	Sidewalk: High Priority	Install sidewalk along Dixon Dr from Chestatee Rd to Wessell Rd.
83	McEver Rd Sidewalk	Sidewalk: High Priority	Install sidewalk along McEver Rd from Browns Bridge Rd to existing sidewalk approximately 750 ft north of Browns Bridge Rd.
84	Memorial Park Dr Sidewalk South	Sidewalk: High Priority	Install sidewalk along Memorial Park Dr from Titshaw Dr to Atlanta Highway.
85	Park Hill Dr Sidewalk North	Sidewalk: High Priority	Install sidewalk along Riverside Dr/Morningside Dr/Park Hill Dr from Oak Tree Dr to Clarks Bridge Rd.
87	S Enota Dr Sidewalk South	Sidewalk: High Priority	Install sidewalk along S Enota Dr from Downey Blvd to Takeda Rd.
88	Shallowford Rd Sidewalk	Sidewalk: High Priority	Install sidewalk along Shallowford Rd from Dawsonville Hwy to Pearl Nix Pkwy.

Table E-1, Recommended Transportation Projects

Project Number	Project Name	Type	Project Description
Tier 3 Projects Roadway and Intersection - Target for Implementation (2031-2040)			
57	Signal Timing	Signal Operations	Provide comprehensive signal retiming with consideration of traffic responsive plans along congested corridors (78 intersections).
59	Upgrade TCC Systems and Equipment	Signal Operations	Upgrade computer systems, monitors and control equipment in field and TCC to match current standards.
43	Jesse Jewell Pkwy Capacity East	Roadway Capacity	Widen Jesse Jewell Pkwy to a 6-lane roadway, including 3 through lanes in each direction and a landscaped median, from Community Way/Industrial Blvd Extension to Oconee Cir/Miller Dr.
14	Jesse Jewell Pkwy at John Morrow Pkwy/Queen City Pkwy - Major Intersection Improvement	Intersection	At the intersection of Jesse Jewell Pkwy at John Morrow Pkwy/Queen City Pkwy, implement an intersection design with grade separated left-turn movements. This consists of converting the left-turn lanes to ramps that raise left-turn traffic higher than the rest of the intersection, creating a grade-separated intersection only for left-turn traffic.
12	Jesse Jewell Pkwy at EE Butler Pkwy - Major Intersection Improvement	Intersection	At the intersection of Jesse Jewell Pkwy at EE Butler Pkwy, implement a major intersection improvement. An example of a major improvement for this intersection is an intersection design with grade separated left-turn movements. This consists of converting the left-turn lanes to ramps that raise left-turn traffic higher than the rest of the intersection, creating a grade-separated intersection only for left-turn traffic.
28	Dawsonville Hwy/SR 53 Capacity	Roadway Capacity	Widen Dawsonville Hwy/SR 53 to a 6-lane roadway, including 3 through lanes in each direction and a landscaped median, from Shallowford Rd to Sportsman Club Rd.
42	Athens Street-McDonald Street Connector	New/Extended Roadway	Re-align Athens Street to the north so that it crosses Purina Dr and connects to McDonald Street. Shift the RR crossing north to serve the re-aligned roadway. This project may need to be constructed as re-development takes place in the area.
21	Academy Street Extension	New/Extended Roadway	Extend Academy Street southeast from its intersection with Jesse Jewell Pkwy to the intersection of Grove Street at Parker Street.
25	Ivey Terrace Extension	New/Extended Roadway	Extend Ivey Terrace east to Green Street. The roadway extension will intersect Bradford Street, use a portion of Sylvan Wood Ln, and extend through a parking lot to Green St.
44	Spring St Extension	New/Extended Roadway	Extend Spring St west to Washington St, approximately 600 ft west of Academy St. This will be a one-way roadway eastbound, with the adjacent section of Washington St as a one-way roadway westbound.
46	Multimodal Terminal	Travel Demand Management	Implement a Multimodal Terminal at or near the existing Amtrak station that brings together local bus routes, express bus and/or commuter rail, Amtrak rail, Greyhound bus, parking, and bike/ped access into one facility.
34	Green Street Boulevard	Roadway Operations	Convert Green Street from Academy Street to Riverside Dr to a boulevard with a 20 ft wide landscaped median; Add wide sidewalks with streetscape elements (pedestrian lighting, trees) on both sides of the road.
Tier 3 Projects Pedestrian and Bicycle - Target for Implementation (2031-2040)			
102	Academy St Streetscape	Streetscape	Add Streetscape to the west side of Academy St from Jesse Jewell Pkwy to Washington St.
89	Browns Bridge Rd Sidewalk West	Sidewalk	Install sidewalk along Browns Bridge Rd from McEver Rd to Memorial Park Dr.
90	Clarks Bridge Rd Sidewalk	Sidewalk	install sidewalk along Clarks Bridge Rd from Cleveland Hwy to Pine Valley Rd.
91	Dawsonville Hwy Sidewalk East	Sidewalk	Install sidewalk along Dawsonville Hwy/John Morrow Pkwy from McEver Rd to Washington St.
92	Dawsonville Hwy Sidewalk West	Sidewalk	Install sidewalk along Dawsonville Hwy from Sportsman Club Rd to Ahaluna Dr.
93	Downey Blvd Sidewalk	Sidewalk	Install sidewalk along Downey Blvd from Myrtle St to S Enota Dr.
94	Jesse Jewell Pkwy Sidewalk at I-985	Sidewalk	Install sidewalk along Jesse Jewell Pkwy/Old Cornelia Hwy from White Sulphur Rd to Shady Valley Rd.

Table E-1, Recommended Transportation Projects

Project Number	Project Name	Type	Project Description
95	Kids Way Sidewalk	Sidewalk	Install sidewalk along Kids Way from Clarks Bridge Rd to Gabriel Cir.
96	Memorial Park Dr Sidewalk South	Sidewalk	Install sidewalk along Memorial Park Dr from Browns Bridge Rd to Titshaw Dr.
97	Park Hill Dr Sidewalk South	Sidewalk	Install sidewalk along Park Hill Dr from Green St to Oak Tree Dr.
98	S Enota Dr Sidewalk North	Sidewalk	Install sidewalk along S Enota Dr from Takeda Rd to Park Hill Dr.
99	Thompson Bridge Rd Sidewalk	Sidewalk	Install sidewalk along Thompson Bridge Rd from Riverside Dr to Sandridge Ct.
100	W Ridge Rd Sidewalk	Sidewalk	Install sidewalk along W Ridge Rd from Interstate Ridge Dr to Athens St.
101	White Sulphur Rd Sidewalk	Sidewalk	Install sidewalk along White Sulphur Rd from Jesse Jewell Pkwy to Beverly Rd.

Gainesville Transportation Master Plan

Recommendations: Roadways

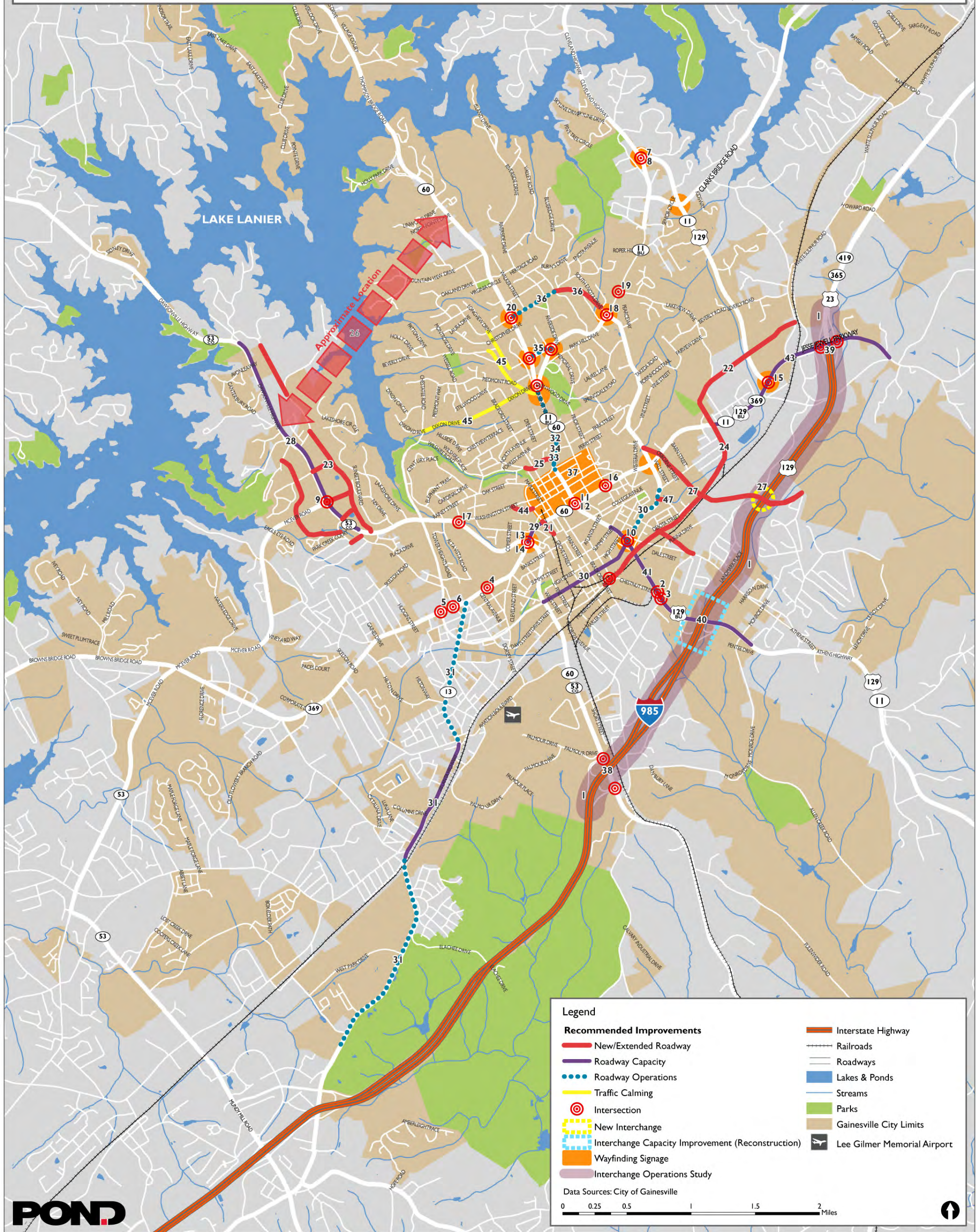


Figure E-1: Recommended Roadway and Intersection Projects

Gainesville Transportation Master Plan

Recommendations: Alternative Modes

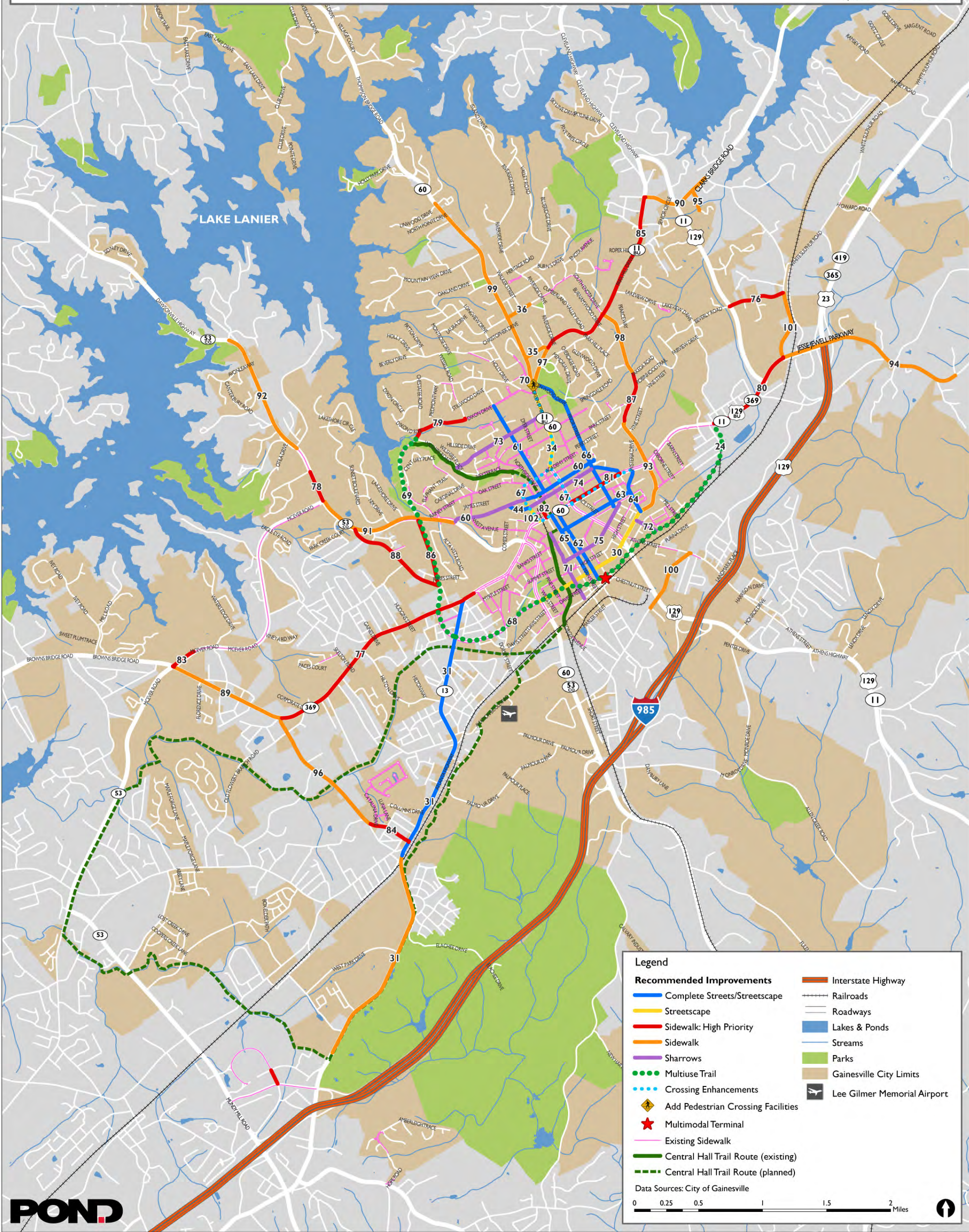


Figure E-2: Recommended Alternative Modes Projects

Gainesville Transportation Master Plan

Recommendations: Traffic Signal Systems

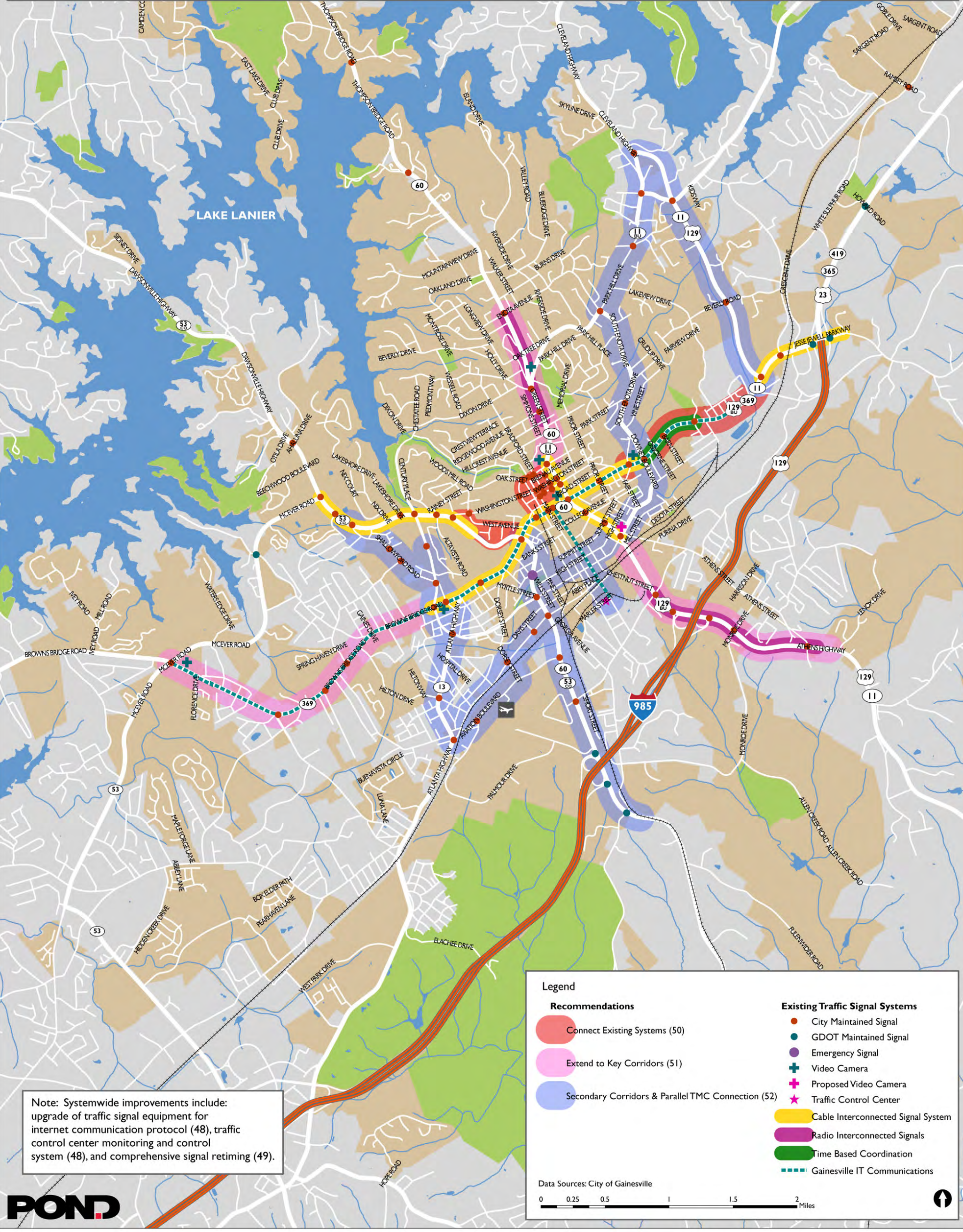


Figure E-3: Recommended Traffic Signal System Improvements



City of Gainesville Transportation Master Plan Plan Documentation



The majority of projects in Tier 1 are relatively low cost. As the project list shows, many of the projects focus primarily on intersection operational improvements, including the addition of turn lanes and changes to traffic signal operations. Other projects include changes to roadway operations, roadway extensions, and a study of I-985.

A number of the Tier 2 projects focus on providing additional roadway capacity or new roadways in key areas with congestion. Some of these projects will require more detailed planning and approval from outside agencies before they can move forward. Many of the Tier 2 projects have higher costs than the Tier 1 projects. These higher costs, as well as the additional planning and approval steps, mean that it would typically not be feasible to complete some of these projects any sooner than during the Tier 2 time frame.

Many of the projects in Tier 3 are planned for a longer time frame because they have significant impacts, need review and approval from outside agencies, and/or are expensive. Some projects are intended to address future transportation needs in areas where traffic congestion may not currently be a significant problem.

The project recommendations provided in Sections 7 and 8 of this report provide guidance regarding the improvements necessary to reduce traffic congestion, improve walkability and access to transit, and plan for the high anticipated growth in the City of Gainesville. Implementation of the plan will require funding of transportation improvements using federal, state, and local funding sources. The GHMPO is responsible for allocating federal funding for projects in the region based on their Long Range Transportation Plan. As indicated previously, the GHMPO receives guidance regarding the projects to be included in their long range plan from the *Gainesville-Hall County 2040 Metropolitan Transportation Plan*. The *City of Gainesville Transportation Master Plan* is intended to provide similar guidance related to projects within the City. The recommended projects will be evaluated and prioritized along with other regional projects to determine those eligible for federal funding.



TABLE OF CONTENTS

EXECUTIVE SUMMARY	I
PURPOSE AND GOALS	i
METHODOLOGY	ii
PLAN RECOMMENDATIONS	ii
1. INTRODUCTION	1
STUDY BACKGROUND	1
PURPOSE OF THE PLAN	1
2. STUDY APPROACH	4
METHODOLOGY	4
PUBLIC INVOLVEMENT PROCESS	4
PLANNING GOALS	9
3. EXISTING PLANS REVIEW	11
GAINESVILLE 2030 COMPREHENSIVE PLAN	11
GHMPO 2040 METROPOLITAN TRANSPORTATION PLAN	19
HALL COUNTY CRASH PROFILE	26
GHMPO BICYCLE AND PEDESTRIAN PLAN	26
TRANSIT DEVELOPMENT PLAN	28
I-985 PARK AND RIDE LOTS SURVEYS	31
FINAL INVESTMENT LIST REPORT TIA 2010	31
4. EXISTING CONDITIONS	33
ROADWAY AND TRAFFIC CONDITIONS	33
PEDESTRIAN AND BIKE FACILITIES	35
TRANSIT	35
5. NEEDS ASSESSMENT	42
TRAVEL DEMAND MODEL ANALYSIS	42
CONGESTION RELIEF AND ROADWAY CAPACITY NEEDS	45
TRAFFIC SIGNAL SYSTEM NEEDS ASSESSMENT	59



ALTERNATIVE MODE NEEDS	63
PUBLIC INPUT	69
6. TRAVEL DEMAND MODEL ANALYSIS.....	75
PROJECTS ADDED TO MODEL.....	75
REGIONAL METRICS.....	77
LEVEL OF SERVICE	78
7. RECOMMENDED TRANSPORTATION PROJECTS	81
TIER 1 PROJECTS	90
TIER 2 PROJECTS	102
TIER 3 PROJECTS	110
8. RECOMMENDED TRANSPORTATION POLICIES/PROGRAMS...	116
ACCESS MANAGEMENT.....	116
TRAVEL DEMAND MANAGEMENT	120
GAINESVILLE 2030 COMPREHENSIVE PLAN.....	121
9. IMPLEMENTATION PLAN.....	123
COST AND PRIORITIZATION	123
POTENTIAL FUNDING STRATEGIES	131

Appendix

- A. FOCUS GROUP MEETING NOTES
- B. PUBLIC COMMENTS
- C. SURVEY RESULTS



1. INTRODUCTION

In 2012, a consultant team consisting of Pond & Company and Arcadis, Inc. was selected to complete the *City of Gainesville Transportation Master Plan*. The goal of the Transportation Master Plan is to improve connectivity around the City for all types of users, making travel easier, safer, and more efficient for drivers, cyclists, transit users, and pedestrians. Pond conducted an extensive analysis of transportation data, received input from the public and the Plan's Focus Group, and worked with City of Gainesville, Hall County, and GHMPO staff to develop a complete Transportation Master Plan for the City of Gainesville.

STUDY BACKGROUND

The City of Gainesville is central to a growing metropolitan area in northeast Georgia. It is the County seat of Hall County and is located on the shore of Lake Lanier. As shown in Figure 1-1, it is approximately 50 miles from the City of Atlanta, which it is connected to via I-985 and I-85. The study area for the Transportation Master Plan includes the entire city, as shown in Figure 1-2.

The Transportation Master Plan builds on Gainesville's prior transportation and land use plans, including the *Gainesville 2030 Comprehensive Plan*, the *Gainesville-Hall County 2040 Metropolitan Transportation Plan* (MTP), the *Hall County Crash Profile*, the *GHMPO Bicycle and Pedestrian Plan*, the *Hall Area Transit Development Plan*, and the *I-985 Park and Ride Lots Surveys*. The *Gainesville 2030 Comprehensive Plan* addresses a number of planning issues for the City including population, housing, economic development, and others. It also provides a broad outline of transportation policy needs in the City without addressing detailed projects. Varying in scale and level of detail, each of the other studies addresses all of Hall County without special emphasis on Gainesville. However, all of the plans call for increased multi-modal transportation options, a greater sidewalk network, and more bicycle facilities throughout the City. The 2013 *City of Gainesville Transportation Master Plan* draws on these previous studies and maximizes the impacts of future transportation investments.

PURPOSE OF THE PLAN

Mobility is an important quality of life issue, especially in economically expanding cities that face increasing congestion and funding challenges. A successful multimodal transportation system integrates all modes of transportation—roads, transit, sidewalks, and bicycle facilities—into a seamless, efficient system. The purpose of Gainesville's Transportation Master Plan is to explore existing transportation needs, opportunities for improvement and investment, and implementable solutions to the transportation challenges facing the City. The resulting plan will recommend improvements to transportation infrastructure and operations to enhance mobility in the City of Gainesville:

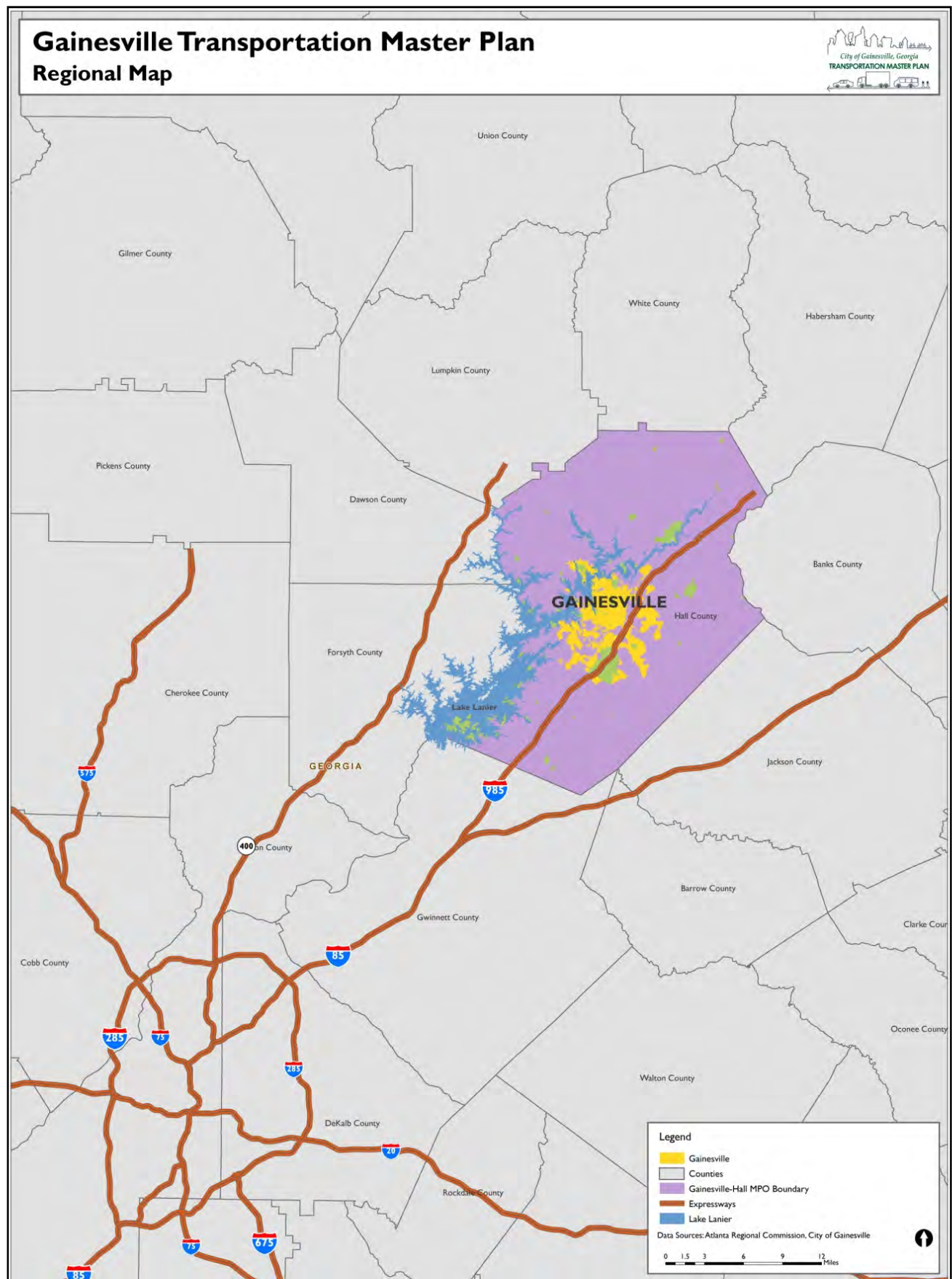
- Traffic operations and ITS improvements to get the greatest capacity possible from critical intersections and signal systems.
- Roadway connectivity to provide connections that reduce the concentration of vehicles on congested streets and encourage greater utilization of underused streets.
- Roadway capacity to improve regional corridors through road widening.
- Pedestrian and bicycle improvements to reduce the number of people traveling by car and to encourage people to park once and walk to several destinations within downtown.



City of Gainesville Transportation Master Plan Plan Documentation



Figure 1-1: Regional Map

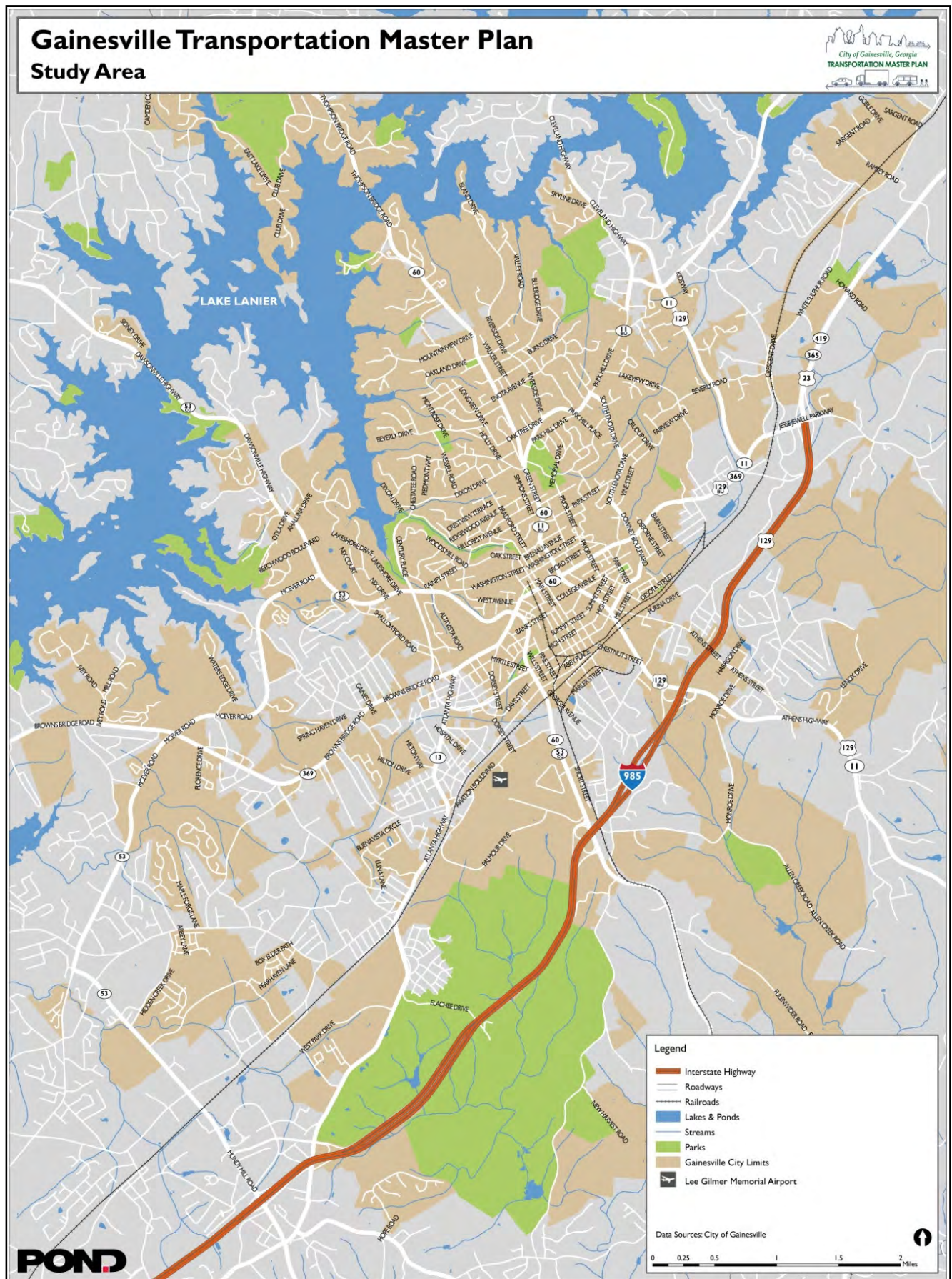




City of Gainesville Transportation Master Plan Plan Documentation



Figure 1-2: Study Area Map





2. STUDY APPROACH

The Transportation Master Plan process consisted of identifying existing transportation conditions in the City, analyzing the City's transportation needs, and developing potential solutions. A specific methodology was followed to complete these steps. The public was involved throughout the study, and the planning process was driven by a prioritized list of transportation goals.

METHODOLOGY

The project's methodology consisted of the following:

- A review and analysis of relevant existing transportation plans and other related plans was conducted. The *Gainesville 2030 Comprehensive Plan* provided land use assumptions and the link between land use and transportation planning. The *Gainesville-Hall County 2040 Metropolitan Transportation Plan* provided the primary transportation background for the master planning process.
- An inventory of existing conditions information, based on available data from previous studies, GIS data, traffic data from the City and GDOT was developed. Field reviews were conducted to provide additional context and details.
- Travel demand modeling was conducted using the GHMPO model as a starting point. This model was later used to prepare future volume forecasts, identify roadway capacity deficiencies, and test improvement alternatives.
- A Needs Assessment was conducted using information from the previous plans, the existing conditions inventory, travel demand model data, and other traffic and transportation analysis.
- The results of the needs assessment were examined along with community input regarding needs and potential solutions. This information was used to develop a list of potential improvements by travel mode and area of interest, including: roadway, bicycle, pedestrian, freight/trucking, and ITS.
- The project list was refined, prioritized, and documented using recommendations maps and a detailed project list.
- The Gainesville Transportation Master Plan was documented in this plan report, which is intended to provide a readable and accessible plan document for Gainesville and GHMPO.
- The completed Gainesville Transportation Master Plan will serve as an input to the GHMPO LRTP update.

PUBLIC INVOLVEMENT PROCESS

Understanding transportation system needs in the City of Gainesville requires information and input from a variety of sources. Technical data and analysis are critical to understanding the multimodal transportation system, but they must be combined with input from the community. Community members who regularly use the various transportation networks add their own understanding and experience of transportation problems and potential solutions. Combining technical analysis with public input produces a more thorough assessment of transportation needs.



The Gainesville Transportation Master Plan relied on a variety of techniques and levels of involvement in order to gain a complete understanding of existing transportation needs. The project team held several types of meetings—technical committee meetings, focus group meetings, and community meetings—in addition to conducting a survey, preparing web materials, and producing a water bill mailing. Details of these activities are summarized below.

TECHNICAL COMMITTEE

The Technical Committee incorporates input from several representatives from the GHMPO, City staff in other departments including Public Works and Community Development, County staff from Public Works, and the consultant team with expertise in transportation, land use, public finance, infill and design controls. The Technical Committee serves to lead the project and implement inter-departmental coordination. Four Technical Committee meetings took place during the Needs Assessment phase.

- Technical Committee Meeting #1: December 19, 2012 – At the project kick-off meeting, the team discussed planning and coordination for the study. They reviewed desired outcomes, a work plan and schedule, community involvement strategies, and key issues to be addressed.
- Technical Committee Meeting #2: March 5, 2013 – At this meeting, the technical committee discussed forming the transportation focus group and other community involvement techniques. The group discussed study goals and objectives and began an initial identification of transportation needs.
- Technical Committee Meeting #3: April 18, 2013 – The technical committee met on April 18th to review the initial technical analysis of transportation needs; committee members identified high-priority areas of need.
- Technical Committee Meeting #4: May 2, 2013 – At this technical committee meeting, the team presented an overview of the transportation needs assessment and discussed the format for the community meeting.
- Technical Committee Meeting #5: May 15, 2013 – At this technical committee meeting, the team discussed additional details of the transportation needs assessment and discussed the format of the focus group meeting.
- Technical Committee Meeting #6: June 20, 2013 – At this technical committee meeting, the team discussed the draft recommendations list and potential benefits of the proposed projects. The team also discussed the format of the focus group meeting and the community meeting.
- Technical Committee Meeting #7: July 25, 2013 – At this technical committee meeting, the team discussed the revised recommendations list and project prioritization. The team also discussed the format of the focus group meeting and the community meeting, as well as the information for presentation to City Council.
- Technical Committee Meeting #7: September 5, 2013 – At this technical committee meeting, the team discussed the prioritized project list, input from the focus group on the prioritized project list, and the upcoming focus group meeting.



The following people participated in the Technical Committee:

- Dee Taylor, City of Gainesville
- David Dockery, City of Gainesville
- Chris Rotalsky, City of Gainesville
- David Fee, Gainesville Hall County MPO (GHMPO)
- Sam Baker, GHMPO
- Richard Fangmann, Pond & Company
- Michelle Alexander, Pond & Company
- Daniel Studdard, Pond & Company
- Graham Malone, Pond & Company

TRANSPORTATION FOCUS GROUP

A Transportation Focus Group helped guide the Needs Assessment phase of the Transportation Master Plan by serving as the project's primary sounding board for initial concepts and providing representation from various communities in Gainesville. They were tasked with reviewing project information and providing feedback, guidance, and recommendations based on the community input and the City's vision. A summary of all Transportation Focus Group meetings is provided in the appendix of this document.

- Transportation Focus Group Meeting #1: April 18, 2013 – At the focus group kick-off meeting, the team presented an overview of the study and discussed the overall study goals. Then, the focus group discussed transportation needs throughout the study area.
- Transportation Focus Group Meeting #2: May 2, 2013 – The focus group engaged in an in-depth discussion of high priority transportation needs, including areas of congestion, dangerous or difficult intersections, desired vehicular connectivity improvements, and areas of limited bicycle or pedestrian accessibility.
- Transportation Focus Group Meeting #3: May 15, 2013 – This meeting served as an extension of the previous meeting regarding transportation needs. The consulting team provided additional information regarding travel patterns associated with the Green Street and Jesse Jewell Parkway corridors. The focus group then participated in a facilitated work session to indicate problem areas and potential solutions on maps and aerial photography.
- Transportation Focus Group Meeting #4: June 20, 2013 – The focus group engaged in discussion of the draft recommendations list and potential benefits of the proposed projects. This discussion considered the overall recommendations and also looked in-depth at potential projects in four key areas.
- Transportation Focus Group Meeting #5: July 25, 2013 – The focus group discussed the revised recommendations list and project prioritization. This discussion provided input regarding factors to be considered in prioritization as well as primary areas for emphasis in the plan.
- Transportation Focus Group Meeting #6: September 5, 2013 – A draft prioritized project list and maps were provided to the focus group in advance of this meeting. The group members had the opportunity to review the prioritized project list, ask questions, and provide comments in

advance of the meeting as well as at the meeting. This input was used to help finalize the prioritized project list.

The following people were a part of the Transportation Focus Group:

- Ward 1, Faron Thompson
- Ward 1, Curtis Segars
- Ward 2, Appleton Stan
- Ward 2, Kris Nordholz
- Ward 3, Emory Turner
- Ward 3, Jerry Castleberry
- Ward 4, Amanda McClure
- Ward 4, John Snyder
- Ward 5, Jan Payne
- Ward 5, Harrison Bartlett
- Ex-Officio, Robert Hamrick



Focus Group Meeting #2

COMMUNITY MEETINGS

The study sought direct public input on transportation needs at three public meetings. The meetings utilized an open house format, with study team members available for one-on-one discussion. Comment forms were provided to obtain detailed feedback from the public. Study materials and comment forms were made available in both English and Spanish. In addition, there was a Spanish-speaking member of the Consultant Team at all public meetings.

All meetings were held in the Sidney Lanier Room at the Gainesville Civic Center, located at 830 Green Street, Gainesville, Georgia 30501. The open house format allowed attendees to stop by at a convenient time and stay for as long as they wish any time during the two-hour time frame. The meeting schedule and purpose of each meeting included the following:

- Community Meeting #1: Wednesday May 8, 2013, 5:30-7:30 pm.
 - The purpose of this meeting was to inform the public about the Transportation Master Plan, capture the community's vision for Gainesville's transportation network, and gain an understanding of existing issues and opportunities in the City.
 - The meeting presented the results of the needs assessment on display materials with the consulting team and City staff available to answer questions and discuss the needs assessment results.
- Community Meeting #2: Thursday June 27, 2013, 5:30-7:30 pm.
 - The purpose of this meeting was to present initial draft transportation recommendations and receive input from the public.
 - The meeting presented the draft recommendations on display materials with the consulting team and City staff available to answer questions and discuss the draft recommendations.

- Community Meeting #3: Thursday August 1, 2013, 5:30-7:30 pm.
 - The purpose of this meeting was to present the draft Transportation Master Plan including recommended prioritization.
 - The meeting presented the draft Transportation Master Plan Recommendations and Prioritization on display materials with the consulting team and City staff available to answer questions and discuss the draft plan.

A summary of comment form results is provided in the Appendix of this document.



Community Meeting #1

PUBLIC OUTREACH CAMPAIGN

Other public outreach during the planning process includes the following:

Online Survey

Additional input beyond the focus group and community meetings can help clarify the public's opinion on aspects of the transportation plan. The use of a survey allows the study team to receive input from a larger audience than is possible with public meetings alone. Two online surveys were developed for additional input: one during the needs assessment phase of the project and one when draft recommendations were prepared. Survey questions were available in both English and Spanish.

Website/Media

A web page was added to the City's website to post general project information, fact sheets, meeting notices, draft recommendations, and links to the online surveys.

Logo

The consultant team developed a project-specific logo to help the public easily identify project-related material. This logo was included on the website, in meeting materials, and on all electronic and print media distributed about the Transportation Master Plan.

Media/Press Releases

The City contacted the Gainesville Times newspaper to advertise meetings and status updates of the plan to the community. Newspaper staff attended public meetings and focus group meetings.



Water Bill Mailing

The City used its physical address mailing list to publicize the transportation plan by including information in a City water bill. The consultant team prepared information for inclusion in this mailing that included basic project information as well as public meeting dates and locations.

PLANNING GOALS

A list of transportation planning goals and associated objectives were developed to guide the planning process. These goals, shown in Table 2-1, were presented at Focus Group Meeting #2 on May 2, 2013 and at Community Meeting #1 on Wednesday May 8, 2013.

Table 2-1: Transportation Goals and Objectives

Transportation Goals	Objectives
Goal 1: Manage congestion , focusing on operation of key intersections and critical road sections.	Objective 1A: Address existing and future mobility needs of the corridor by improving capacity to support traffic flow in congested areas
	Objective 1B: Improve operation of signal system for movement of traffic and management of incidents
	Objective 1C: Identify solutions to alleviate congestion at the key intersections within the corridor, such as needed turn lanes, improved signalization, and roundabouts
Goal 2: Enhance safety for users of all travel modes, including automobile, private and commercial vehicle operators, pedestrians, bicyclists, and transit riders.	Objective 2A: Improve safety at high crash locations
	Objective 2B: Design improvements that enhance safety for all users
	Objective 2C: Improve pedestrian crossing safety and accessibility
Goal 3: Increase connectivity of the roadway network for local and regional trips.	Objective 3A: Seek opportunities for new local street connections to reduce travel on arterial streets and at key intersections
	Objective 3B: Improve existing minor through streets and intersections with major roads to be effective for moving local traffic
	Objective 3C: Provide wayfinding signage and consistent access strategies to enhance user understanding of access routes
Goal 4: Support Economic Development and Redevelopment by providing transportation systems that serve existing residents and businesses as well as future potential redevelopment in support of the Comprehensive Plan.	Objective 4A: Link strategic transportation improvements, including multimodal improvements, with land use policies to support redevelopment areas identified in the Comprehensive Plan
	Objective 4B: Improve freight mobility and truck access to industrial areas
	Objective 4C: Improve walkability for movement within activity centers and provide walkable connections across major roads and along key corridors within downtown
Goal 5: Increase pedestrian and bicycle mobility for travel along corridors and for access to transit.	Objective 5A: Provide walking and biking opportunities that reduce reliance on automobiles for travel during congested periods
	Objective 5B: Identify locations with existing pedestrian demand that lack adequate pedestrian facilities
	Objective 5C: Provide combined bus stop, sidewalk, and pedestrian crossings for safe and efficient connectivity of transit trips to final destinations



Meeting attendees at Focus Group Meeting #2 and at Community Meeting #1 were asked to prioritize these five goals. A board was present at each of these meetings showing the goals in a pie chart layout. The attendees were each given three stickers to place next to the goals that they considered to be the highest priority. They could place these stickers on three separate goals, or place on them all on one goal, or allocate any other way they chose.

Table 2-2 shows the percentage of stickers placed next to each goal by the attendees of the two meetings. As the table shows, “Increasing Connectivity” was selected as the highest priority, as it was chosen nearly 38% of the time. The goals of “Manage Congestion” and “Increase Pedestrian and Bicycle Connectivity” were also selected as having relatively high priority. The lower priority goals included “Support Economic Development and Redevelopment” and “Enhance Safety”.

Table 2-2: Transportation Goal Prioritization

Transportation Goal	Highest Priority Selection
Increase Connectivity	37.7%
Manage Congestion	28.3%
Increase Pedestrian and Bicycle Connectivity	20.8%
Support Economic Development and Redevelopment	7.5%
Enhance Safety	5.7%



3. EXISTING PLANS REVIEW

The Transportation Master Plan builds on a number of existing plans and other documents. The City of Gainesville and the GHMPO are the source of most of these plans.

The Gainesville-Hall Metropolitan Planning Organization (GHMPO) was designated to serve the Gainesville-Hall urbanized area in 2003. The GHMPO includes all of Hall County and the six cities located within it – Clermont, Flowery Branch, Gillsville, Lula, Oakwood, and Gainesville. It also includes the portions of the Cities of Buford and Braselton that are located within Hall County. A Metropolitan Planning Organization (MPO) is a federally mandated entity responsible for coordinating transportation planning, policies, and programming in urbanized areas with populations of 50,000 or more. MPOs are required to ensure that federally funded transportation projects and programs are based on a continuing, cooperative, and comprehensive (3-C) planning process.

GAINESVILLE 2030 COMPREHENSIVE PLAN

State law requires all local governments in the State of Georgia to submit a comprehensive plan to the Georgia Department of Community Affairs every 10 years. Updates to the plan take place within each 10 year period. A comprehensive plan includes eight primary elements: population, housing, economic development, natural & historic resources, community facilities, land use & zoning, transportation, and intergovernmental coordination. It also includes the future development map for the city as well as a short term work program. The current comprehensive plan for the city is the *Gainesville 2030 Comprehensive Plan*. Two primary documents from this plan include transportation information – the Community Assessment and the Community Agenda.

COMMUNITY ASSESSMENT

The Community Assessment document consists of an assessment of the City of Gainesville in each of the areas that are part of a comprehensive plan. The assessment notes how the transportation system in the City of Gainesville is defined largely by the locations of Lake Lanier and I-985. The lake serves as a barrier to traffic on the western and northern edges of the City, funneling traffic to one of the bridges across the lake. I-985 serves as the City's connection to Metro Atlanta and to the rest of North Georgia. The connectivity that I-985 provides results in significant amounts of traffic traveling to and from the highway each day. The Community Assessment also looked at how the City is changing, as it described in this paragraph:

“Gainesville is maturing from a mid-Twentieth Century regional industrial center into a modern multi-faceted metropolitan community center. The industrial fabric remains a critical element in shaping the transportation form and demands, including larger manufacturing sites and freight rail service that provides much of the employment for area. Of growing importance, however, is the role as a regional center for medical, convention and collegiate facilities. Even as the City grows in population it continues to receive more traffic from outside the area for such destinations as the North Georgia Medical Center and Brenau College.”



The assessment includes a basic inventory of transportation facilities in the City. It noted that the City has a traditional street grid in and near the downtown area, which transitions to more curvilinear streets outside of the downtown area. Traffic congestion is significant during the typical AM and PM peak hours as well as around noon, due to the variety of land uses and significant amount of jobs in the City. The assessment identified the most congested corridors in 2005 as Greene Street, Jesse Jewell Parkway, Washington Street, and Atlanta Road.

Downtown Gainesville and Brenau University were identified by the assessment as having thorough sidewalk networks. However, sidewalks throughout most of the rest of the City are sporadic. The assessment identified the need for expansion of the sidewalk network as well as improvements at crossings of arterials in the downtown area. Priority locations for expansion of the sidewalk network include critical areas for shopping, medical facilities, or government buildings, including the Shallowford Road commercial centers, Thompson Bridge Road, and deeper into the north Gainesville neighborhoods.

For bicycle infrastructure, the assessment identified Rock Creek Greenway, a series of paved trails roughly 1 mile in length that connects downtown with Longwood Park and Lake Lanier. It helps serve the north Gainesville neighborhoods and provides connectivity to three schools. Three other trails were identified in the assessment as proposed/developed, including:

- Midtown Greenway – This project features the conversion of the CSX rail line into a greenway and the building of a park. This greenway in Midtown will improve the aesthetics of the area and will provide an alternative mode of transportation, recreational opportunities, and pedestrian connections to the downtown square, the Elachee trail system, and the Rock Creek Greenway.
- Central Hall Multi-Use Trail – This project is a cooperative venture between Gainesville, Hall County and the City of Oakwood. It consists of several trails that would form a loop between Gainesville, the Elachee Nature Center, Gainesville State College and southwestern Gainesville. The corridor intersects other existing or proposed trails, including the Midtown Greenway, and would run along scenic Flat and Balus Creeks. Engineering for select portions is already underway.
- Gainesville-Midland Rails-to-Trails – This project proposes to convert a decommissioned rail line to a paved multi-use trail that runs from Gainesville to just south of Helen, Ga. This would be more a recreational route and add to the tourist amenities for the area. The conceptual development plan is underway and each of the communities along the route have signaled their support.

Hall Area Transit (HAT) is the public transportation provider in the City of Gainesville. HAT provides a fixed route system within the City of Gainesville, as well as a Dial-A-Ride service for other parts of Hall County.

The assessment also identified that the City is served by two freight rail lines, one operated by Norfolk Southern and one operated by CSX. The City has daily passenger rail service provided by AMTRAK. Gainesville is part of a commuter rail line proposed by the Georgia Rail Passenger Program (GRPP) that



would connect Gainesville to Atlanta and other cities along the rail line. The City operates Lee Gilmer Airport, located in an industrial area near I-985.

COMMUNITY AGENDA

The Community Agenda document looks at planning geographically within the City and for each of the eight primary elements. Figure 3-1 is a map from the Community Agenda document and shows downtown and the surrounding area. It indicates land use, locations of parks, and recommended locations for streetscape improvements and multi-use trails.

Figure 3-2 is the Future Development Map from the Community Agenda. This map identifies 13 character areas within the City. It also provides a future land use for all parcels of land in the City. Specific transportation implementation measures are in the Community Agenda for each of the 13 character areas. These implementation measures include the following:

Brenau Quarter

- Study congestion mitigation measures on Jesse Jewell and EE Butler parkways as part of a broader Downtown/Midtown plan
- Undertake phased streetscape improvements on Washington and Spring streets to link Downtown with the heart of the campus
- Improve pedestrian safety at crossings along EE Butler Parkway, possibly through the construction of a pedestrian bridge
- Work with the U.S. Postal Service to find a suitable relocation for the Green Street facility
- Work with GDOT to improve pedestrian safety crossing along EE Butler Parkway

Downtown/Midtown

- Study congestion mitigation measure on Jesse Jewell and EE Butler parkways as part of a broader Downtown/Midtown plan
- Upgrade MLK Jr. Boulevard to a “Complete Street” focused on pedestrian improvements, from Queen City Parkway to EE Butler Parkway
- Undertake phased streetscape improvements on Main and Bradford streets to link Downtown with a long-term future intermodal transit center at or near the Amtrak station
- Expand the Midtown Greenway along the disused CSX interchange track right-of-way to connect to Newtown and New Holland

Oak/Rainey/Washington Corridors

- Undertake phased streetscape improvements on Washington and Oak streets to enhance the pedestrian environment and provide a design context for future development
- Explore creating a greenway paralleling Longwood Creek and John Morrow Parkway, connecting at key points to West Avenue

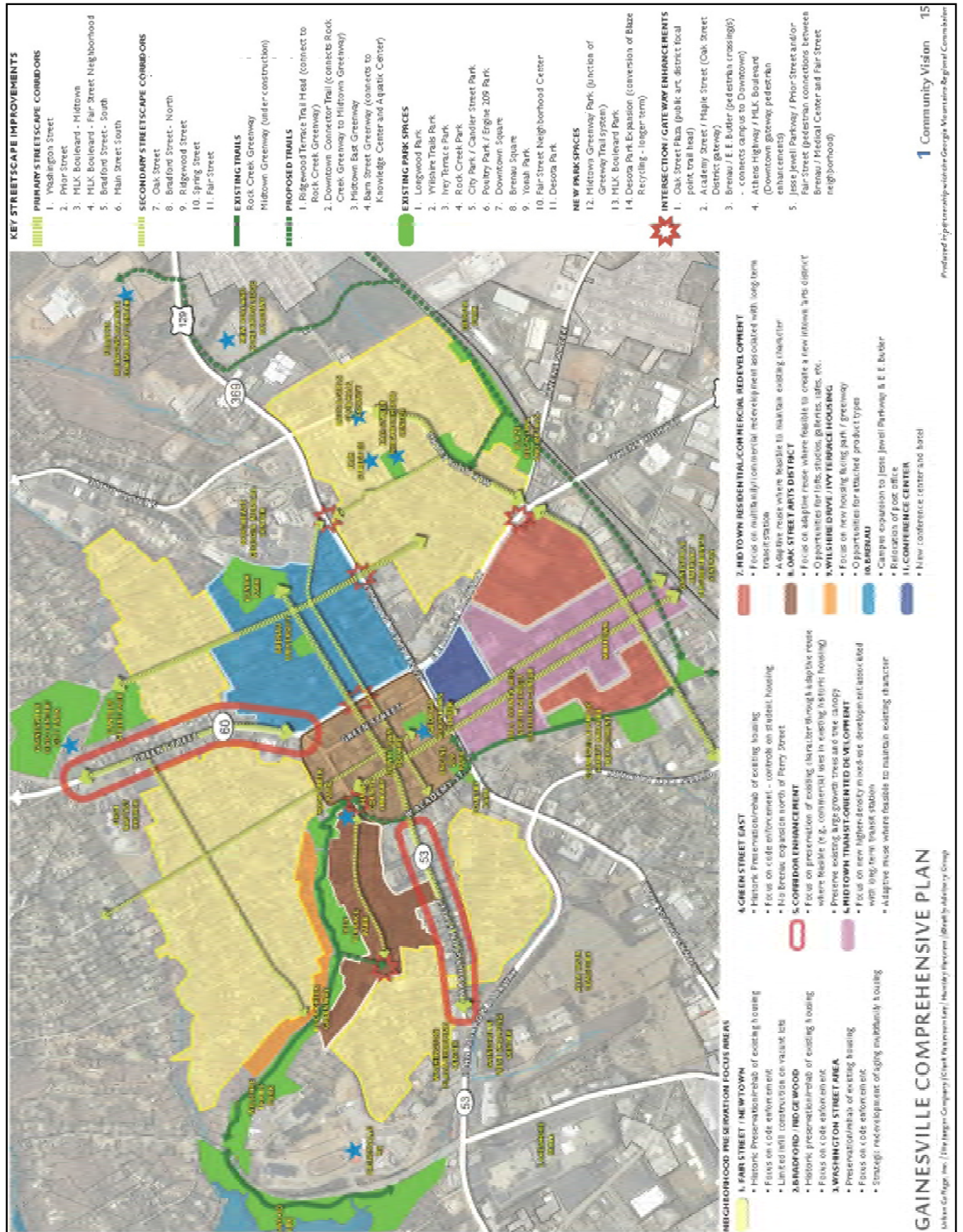


City of Gainesville Transportation Master Plan Plan Documentation



Figure 3-1: Central Core Vision

Source: Gainesville 2030 Comprehensive Plan



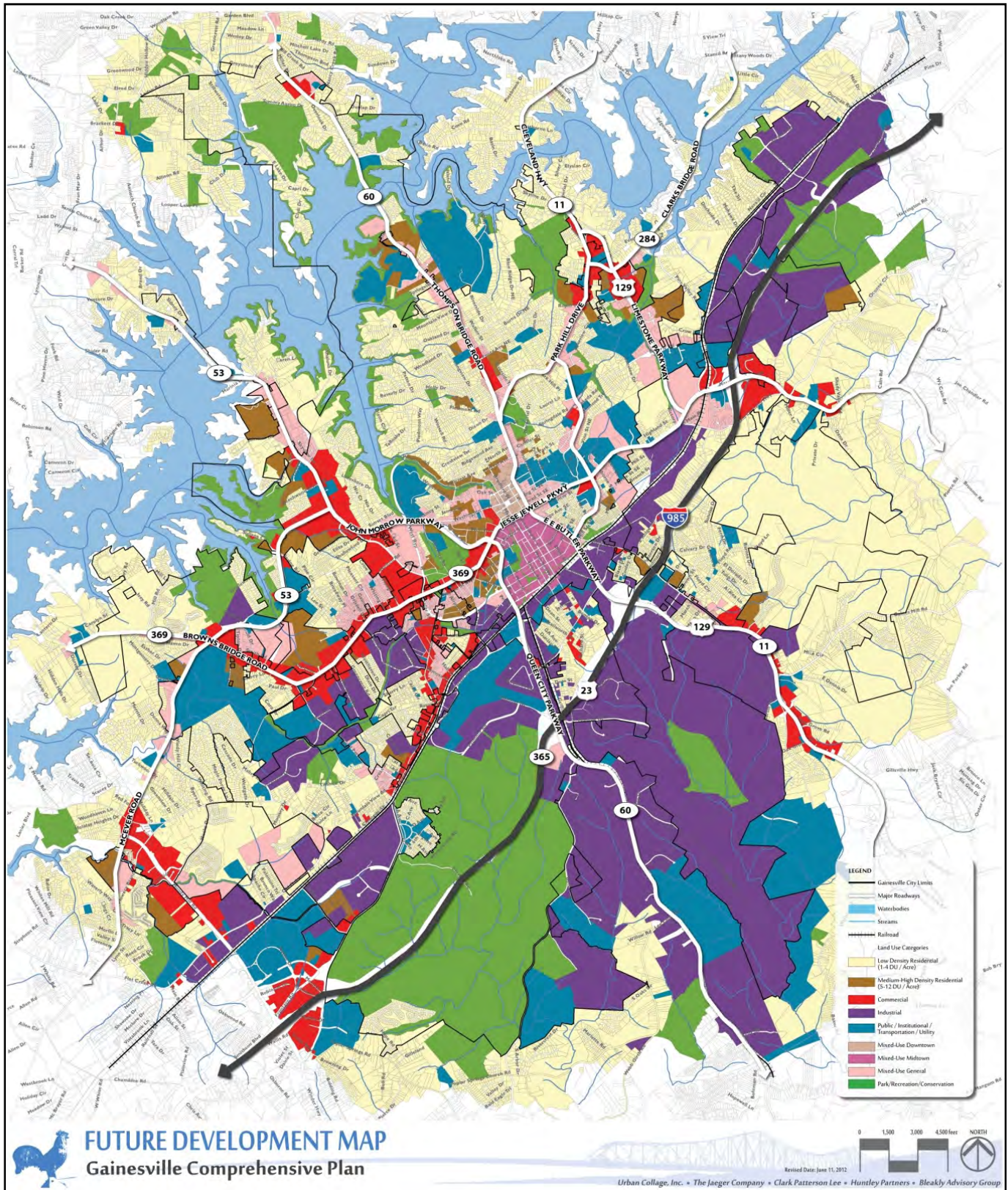


City of Gainesville Transportation Master Plan Plan Documentation



Figure 3-2: Future Development Map

Source: Gainesville 2030 Comprehensive Plan





Traditional Neighborhoods

- Conduct a traffic calming/congestion mitigation study for the two neighborhood planning units (NPUs) at a minimum
- Continue the program of sidewalk/streetscape improvements as specified in the city's Sidewalk System Improvement Program and the GHMPO's Pedestrian/Bike plan

City Park Neighborhood Center

- Expand mode options on Thompson Bridge Road to include sidewalks with landscaping, bike facilities, and transit shelters at a minimum
- Close the gaps in sidewalk continuity along Park Hill Drive, possibly as part of a streetscape program that "brands" the district
- Examine access management along Thompson Bridge Road and Park Hill Drive to determine if driveways could be consolidated in conjunction with streetscape improvements
- Expand the sidewalk network on all feeder streets to Thompson Bridge Road and Park Hill Drive
- Study traffic operations/signalization at the Enota Avenue and Virginia Avenue intersections to improve pedestrian safety
- Assess prior Green Street/Park Hill Drive intersection improvement concepts for future applicability

Lake District

- Expand mode options on Thompson Bridge Road to include sidewalks with landscaping, bike facilities, and transit shelters at a minimum
- Explore other boulevard treatments to Thompson Bridge Road such as median landscaping and access management
- Expand the sidewalk network on all feeder streets to Thompson Bridge Road
- Study traffic operations/signalization at intersections to improve pedestrian safety on Thompson Bridge Road

Longwood Cove

- Construct a multi-use trail along John Morrow Parkway to connect the West Avenue neighborhood to Longwood Park and Alta Vista Cemetery
- Install sidewalks and other pedestrian and bicycle improvements along Pearl Nix Parkway
- Provide for better and safer pedestrian connections across John Morrow Parkway, especially at the Pearl Nix Parkway intersection
- Explore continuing the parkway/median cross-section of John Morrow Parkway west to Shallowford Road as part of a larger urban redevelopment plan for the Lakeshore Mall area

Browns Bridge Corridor

- Provide better accessibility and safety along Browns Bridge Road through improved sidewalks/streetscapes, bike lanes, limited curb cuts, better lighting, street trees, and medians
- Work with Hall County to institute a sidewalk program in neighborhood areas



Westside

- Redesign/reconfigure the Atlanta Highway right-of-way to include sidewalks, planting strips and bike lanes
- Redesign key intersections along Atlanta Highway to improve pedestrian safety and create gateway opportunities
- Study the feasibility, impacts and cost implications of realigning SR 13 to Memorial Park Drive, and assuming responsibility for Atlanta Highway from GDOT
- Create an urban complement like to the Central Hall Trail as a part of the redesigned Atlanta Highway right-of-way
- Work with Hall County to advance the Flat Creek phase of the Central Hall Multi-use Trail
- Undertake a comprehensive sidewalk construction program for the Hazel Street neighborhood
- Expand the sidewalk network on primary feeder streets to Atlanta Highway

Limestone Medical Corridor

- Study the feasibility of intersection realignment at the Limestone Parkway/Cleveland Highway intersection to encourage an I-985 alternate access route, and to act as a northern gateway
- Work with Hall Area Transit to implement the transit extensions on Limestone Parkway (make sure it connects to Lanier Park and the Northeast Georgia Medical Center)
- Improve pedestrian and vehicular connections between the Northeast Georgia Medical Center and the Milliken campus

Historic Mill Villages

- Improve the street environment to enhance walkability at Jesse Jewell Parkway in New Holland
- Link New Holland to Midtown through new greenway trail construction
- Link the Chicopee mill village directly to the Central Hall Trail
- Link Gainesville Cotton Mill to Midtown Greenway via Phase III
- Work with the county to assess street and sidewalk conditions in the residential areas of all three mill villages, and undertake phased improvements
- Determine the feasibility of connecting the New Holland mill to the Fair Street neighborhood with sidewalks along Myrtle Street

Suburban Residential

- Expand transit service to more residential areas over time

Suburban Commercial

- Work toward making the area more accessible to pedestrians and cyclists



Economic Development Gateways

- Work with the Gainesville-Hall MPO to prioritize capacity improvements to SR 60 to support business/industrial park development
- Improve Fulenwider Road to provide suitable vehicular access to future commercial/industrial sites
- Work with Hall Area Transit to expand transit to underserved employment areas

Regional Recreation/Conservation

- Ensure that the Central Hall Trail connects to the Elachee Nature Science Center by a suitable multi-use trail or road
- Work with the Gainesville-Hall MPO to ensure that any future widening of SR 13 is done with appropriate design and controls to protect the adjacent conservation area
- Study the feasibility of creating a gateway/entry to the Smithgall Woodland Garden at or near the Limestone Parkway/Cleveland Highway intersection

The Community Agenda identified the following major trends, issues, and opportunities for transportation:

“Major Trends: A majority of the destinations (work, shopping and entertainment) within the City are accessible mostly by automobile and partially by public transit; almost 50% of the city residents currently commute 5-20 miles for employment or school on a regular basis.”

Issues

- Issues related to connectivity and walkability throughout the City.
- Alternatives should be explored for residents who commute to Atlanta.
- Peak-hour level-of-service issues along select arterials resulting from conflicts between through traffic and local traffic.
- Increasing congestion on major corridors, especially Jesse Jewell, EE Butler and Green Street.
- Lack of northern connector between Thompson Bridge Road and Dawsonville Highway.
- Truck loading and deliveries may be negatively impacting downtown parking.
- Limited (and possibly underutilized) Red Rabbit transit service.
- Need to consider future commuter / high-speed rail.
- Need better connection (i.e. dedicated park-and-ride lot) with Gwinnett Transit.

Opportunities

- Undertake a Comprehensive Transportation Plan to expand the *Gainesville-Hall County 2040 Metropolitan Transportation Plan* and factor in the community vision contained in the Comprehensive Plan, with special emphasis on congestion mitigation and pedestrian safety measures for the central core and neighborhood areas.
- Consider implementing “Safe Routes to Schools” programs.
- Continue to implement the priority recommendations noted in the adopted sidewalk plan to enhance pedestrian safety and connectivity.



- Continue the program of sidewalk/streetscape improvements as specified in the city's Sidewalk System Improvement Program and the GHMPO's Pedestrian/Bike plan.
- Implement any priority recommendations noted in the recent Hall Area Transit study, where possible.
- Add a regular Hall Area Transit – “Red Rabbit” route from Downtown Gainesville (or other more centralized location) to transport Atlanta commuters to one of the pick-up locations for the Gwinnett Transit express lines.
- Transportation Sales and Use tax can provide additional resources for investing in transportation.
- Conduct a traffic calming/congestion mitigation study for the two NPU's as part of the broader CTP.
- Explore the options for creating multimodal “Complete Streets” corridors on key arterial streets including, Thompson Bridge Road, Atlanta Highway, and Pearl Nix Parkway among others; and consider sidewalk improvements on primary feeder streets to these corridors.
- Redesign key intersections and create gateway opportunities near I-985.
- Work with Hall County and the Gainesville-Hall MPO to create a regional trail/bike network that connects major destinations within the city and the county.
- Work with the Gainesville-Hall MPO to prioritize capacity improvements to SR 60 to support business/industrial park development.
- Work with the Gainesville-Hall MPO to explore the possibility of using cutting-edge structural design for the Clark's Bridge replacement project to compliment the Olympic facility.
- Work with the Gainesville-Hall MPO to ensure that any future widening of SR 13 is done with appropriate design and controls to protect the adjacent conservation area.

GHMPO 2040 METROPOLITAN TRANSPORTATION PLAN

Federal law requires all MPOs to have a long-range transportation plan (LRTP). The *Gainesville-Hall County 2040 Metropolitan Transportation Plan (MTP)*, completed in 2011, is the most recent update to the long-range transportation plan for the GHMPO. The MTP looked at short-term and long-term transportation needs to develop appropriate projects, programs, and policies to meet future transportation demand and address transportation issues in the study area. The results of the City of Gainesville Transportation Master Plan will feed into the next update of the MTP by the GHMPO.

The MTP analyzes roadways, transit, bicycle, and pedestrian travel within the GHMPO study area. The MTP develops a financially constrained project list based on this analysis. Financially constrained means that the cost estimates for the projects in this list must not exceed the amount of reasonably expected revenues projected from identified funding sources. The transportation improvement program (TIP) is a short-term work program of projects for the years 2012 – 2017. These were considered Tier 1 projects in the MTP. Tier 2 projects are for the years 2018 – 2030, while Tier 3 projects are for the years 2031 – 2040.



MTP BASE DATA

The MTP considered existing and projected population and employment as a part of its planning process. The MTP's base year of 2008 showed a population in Hall County of 184,824, with projected growth to 561,812 people by the year 2040. For the City of Gainesville, it showed a base year population of 35,665, with projected growth to 173,831 people by the year 2040. The MTP showed 97,869 jobs in Hall County in the year 2008 and 306,493 jobs projected by the year 2040. It showed 50,046 jobs in the City of Gainesville in the year 2008 and 94,012 jobs projected by the year 2040.

The MTP included data regarding commute mode based on the most recent census data available at the time, the 2005 – 2008 American Community Survey (ACS). This data showed that about 93% of all working residents in Hall County commute using a personal vehicle. About 79% of residents drove alone, while about 14% commuted as part of a carpool. There may be the potential for increased use of carpools if additional carpool resources are made available.

The data showed that about 3% of residents work at home, about 1% of residents walk to work, and less than 1% of residents commute using transit. The relatively low density throughout most of Hall County, particularly outside of the cities, likely keeps walking and transit mode use low. However, as growth increases in the future, these commute modes may become more widely used.

MTP NEEDS ASSESSMENT

The GHMPO uses existing and projected population and employment data, as well as roadway and other transportation data, to analyze travel conditions in Hall County. This analysis is conducted using the GHMPO travel demand model. This model represents all of the trips that take place on major roadways and many minor roadways throughout the County.

The travel demand model analysis results in a Level of Service (LOS) for each roadway segment that is part of the model. LOS is a qualitative measure of traffic operating conditions along a roadway. LOS consists of a letter grade from A (best) to F (worst). In a travel demand model, the LOS is based on the V/C ratio, which is a comparison of the volume demand to the capacity of a roadway.

The 2008 Base Year analysis results were used by the GHMPO when developing recommendations for the LRTP. The 2008 Base Year model results are shown in Figure 3-3. As the figure shows, heavy traffic congestion is present along a number of roadway segments within the City of Gainesville. Some of the heaviest congestion on roadways in the 2008 model run includes:

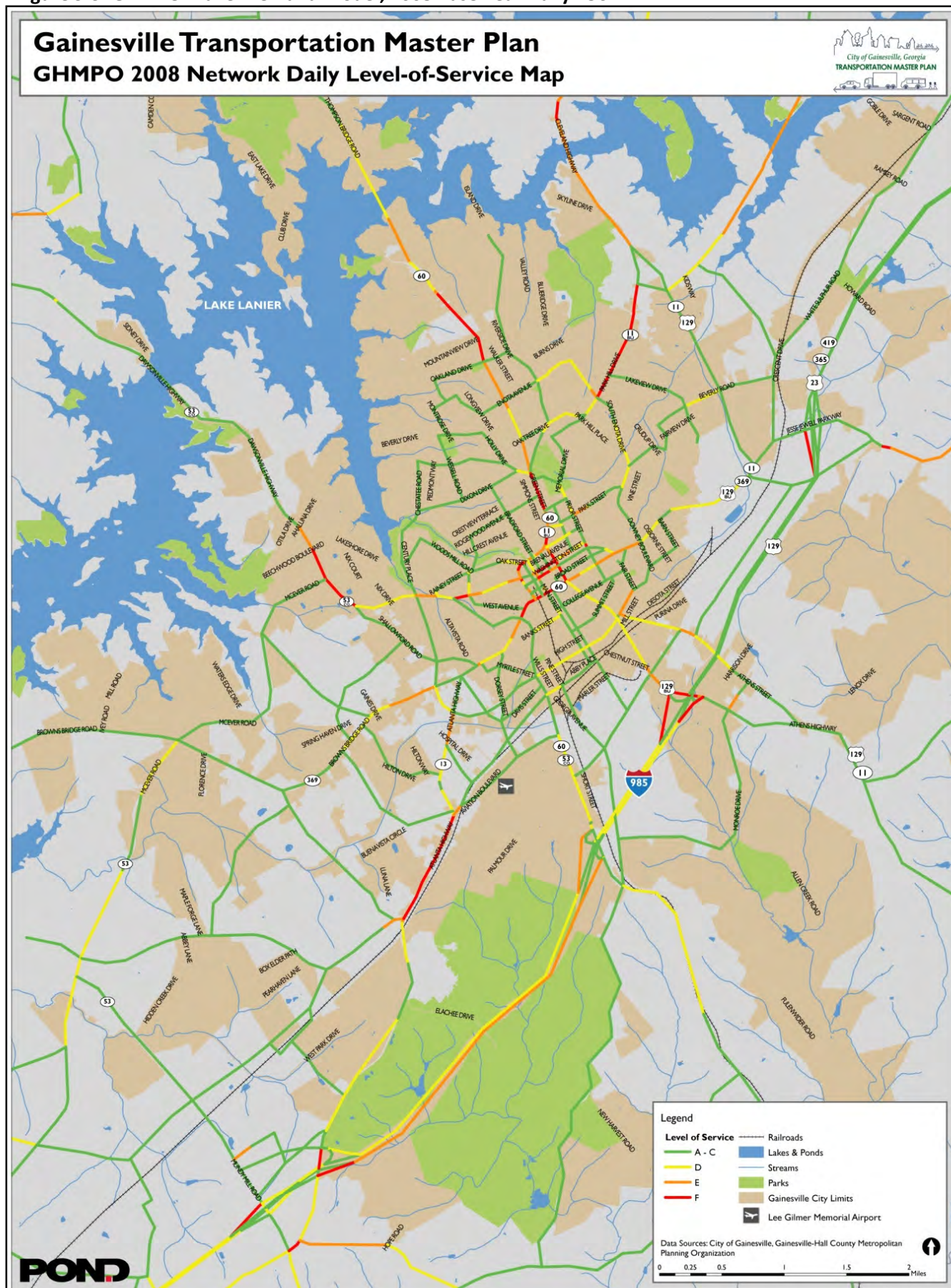
- Jesse Jewell Parkway in and near downtown
- Academy Street in downtown
- Green Street north of downtown
- Dawsonville Highway near McEver Road
- The I-985 at Athens Highway interchange
- Atlanta Highway south of Aviation Boulevard



City of Gainesville Transportation Master Plan Plan Documentation



Figure 3-3: GHMPO Travel Demand Model, 2008 Base Year Daily LOS





MTP RECOMMENDATIONS

The projects recommended as a part of the LRTP were added to the GHMPO travel demand model. The model was also updated with year 2040 socio-economic data. The model was then run for the year 2040 analysis. The results of the 2040 model analysis are shown in Figure 3-4.

As the figure shows, traffic congestion is projected to increase significantly by the year 2040. This increase in congestion shows that the planned projects that are a part of the 2040 LRTP will not adequately address traffic congestion caused by the projected future growth in Hall County and the City of Gainesville. Therefore additional investment in transportation will be needed prior to the year 2040.

Figure 3-5 shows the previously planned projects from the 2040 MTP that are located in the City of Gainesville. These projects, broken into the three tiers, include:

Tier 1:

- GH-051, Central Hall Recreation and Multi-Use Trail
- GH-077, Traffic signal retiming – SR 11/11 Business/SR 60 and SR 369 at 21 locations in Hall County (PI# 0008663)

Tier 2:

- GH-018, SR 369/Brown's Bridge Road – Widening from Forsyth Co. Line to SR 53/McEver Road
- GH-029, US 129/Cleveland Hwy at Chattahoochee River - Bridge
- GH-069, Intersection Improvement at Jesse Jewel Pkwy and John Morrow Parkway
- GH-085, SR 53/Dawsonville Hwy westbound at Chattahoochee River - Bridge

Tier 3:

- GH-017, SR 13/Atlanta Highway Widening & Memorial Park Drive Widening – Frontage Road to Browns Bridge Road
- GH-039, South Enota Drive – Widen from 2 To 4 Lanes from Park Hill Drive to Downey Blvd

There are a number of other projects located in Hall County near the Gainesville City Limits that may impact traffic operations within the City. Figure 3-6 shows these projects. The projects that may have the most impact on traffic operations in the City include:

Tier 1:

- GH-050, SR 284/Clarks Bridge Road at Chattahoochee River – Bridge

Tier 2:

- GH-016, Sardis Road Connector – SR 60/Thompson Bridge Road to Sardis/Chestatee Road
- GH-020, Widen US 129/Cleveland Hwy–Limestone Parkway to Nopone Road

Tier 3:

- GH-041, Widen Old Cornelia Hwy – From the end of the existing 4-lane section east of I-985 to Joe Chandler Road
- GH-066, Northern Connector - Connection Between SR 60/Thompson Bridge Road and SR 365
- GH-079, Widen McEver Road from Jim Crow Road to SR 53



City of Gainesville Transportation Master Plan Plan Documentation



Figure 3-4: GHMPO Travel Demand Model, 2040 Daily LOS

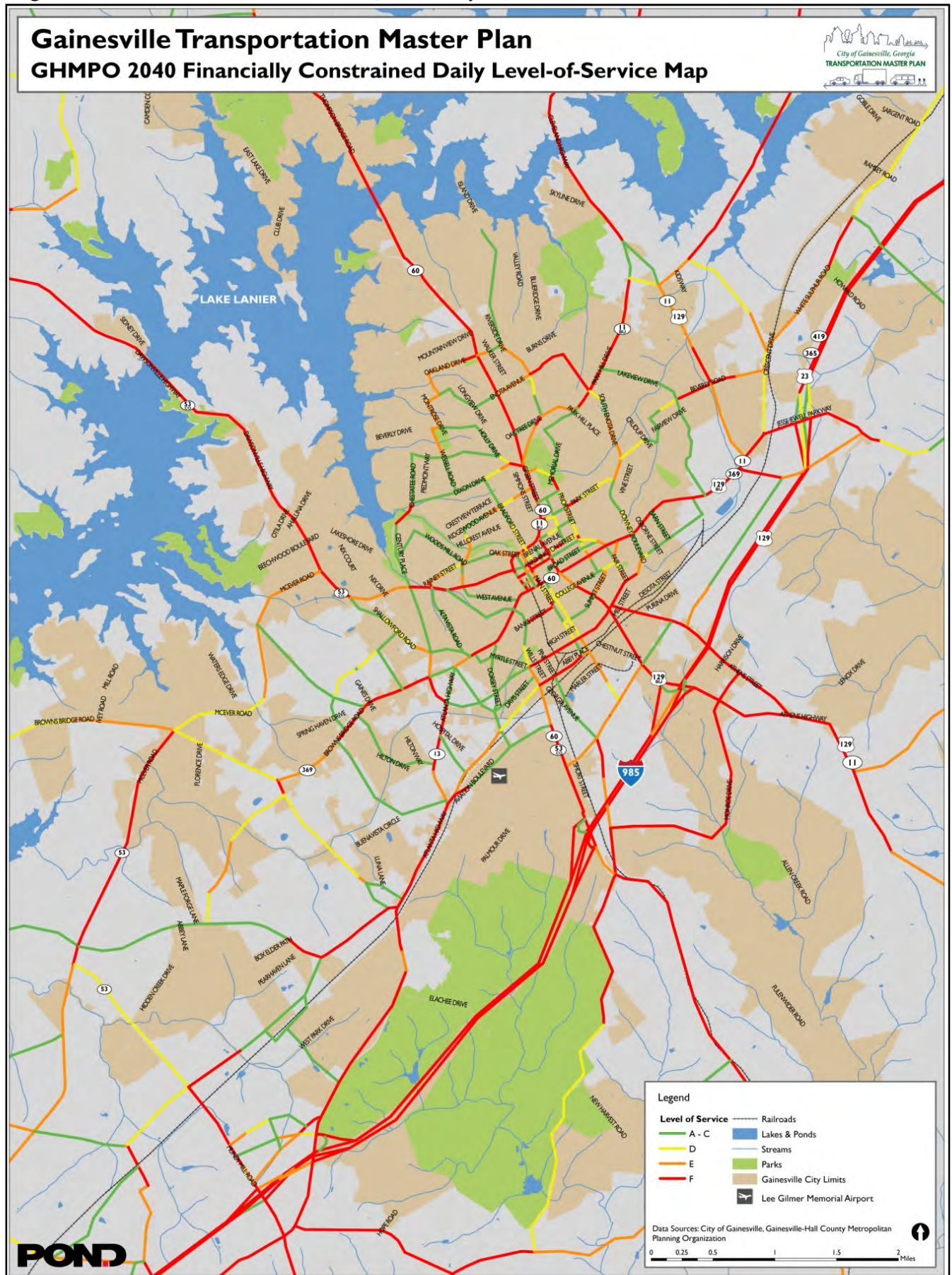




Figure 3-5: GHMPO LRTP, Previously Planned Projects In the City of Gainesville

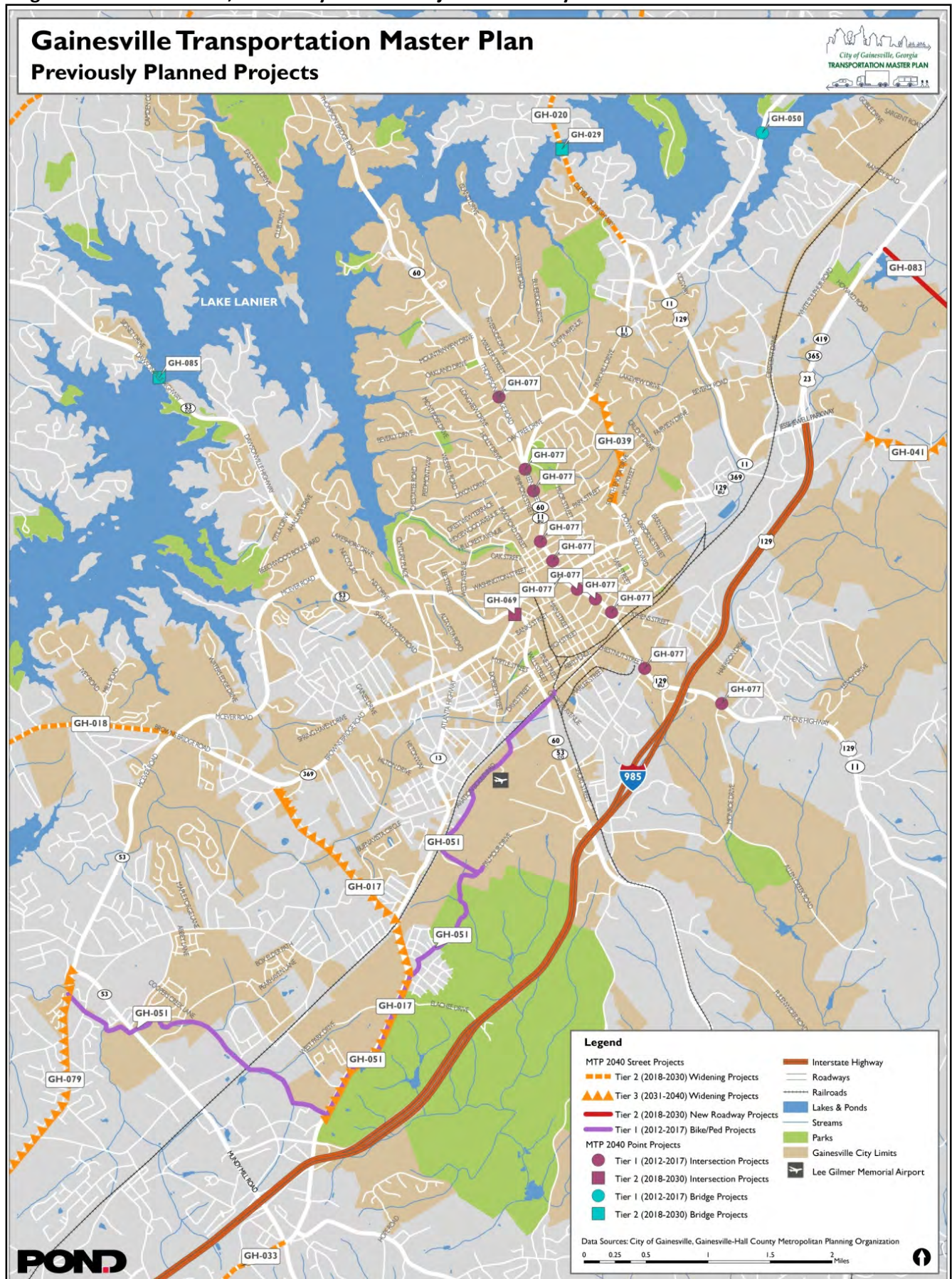
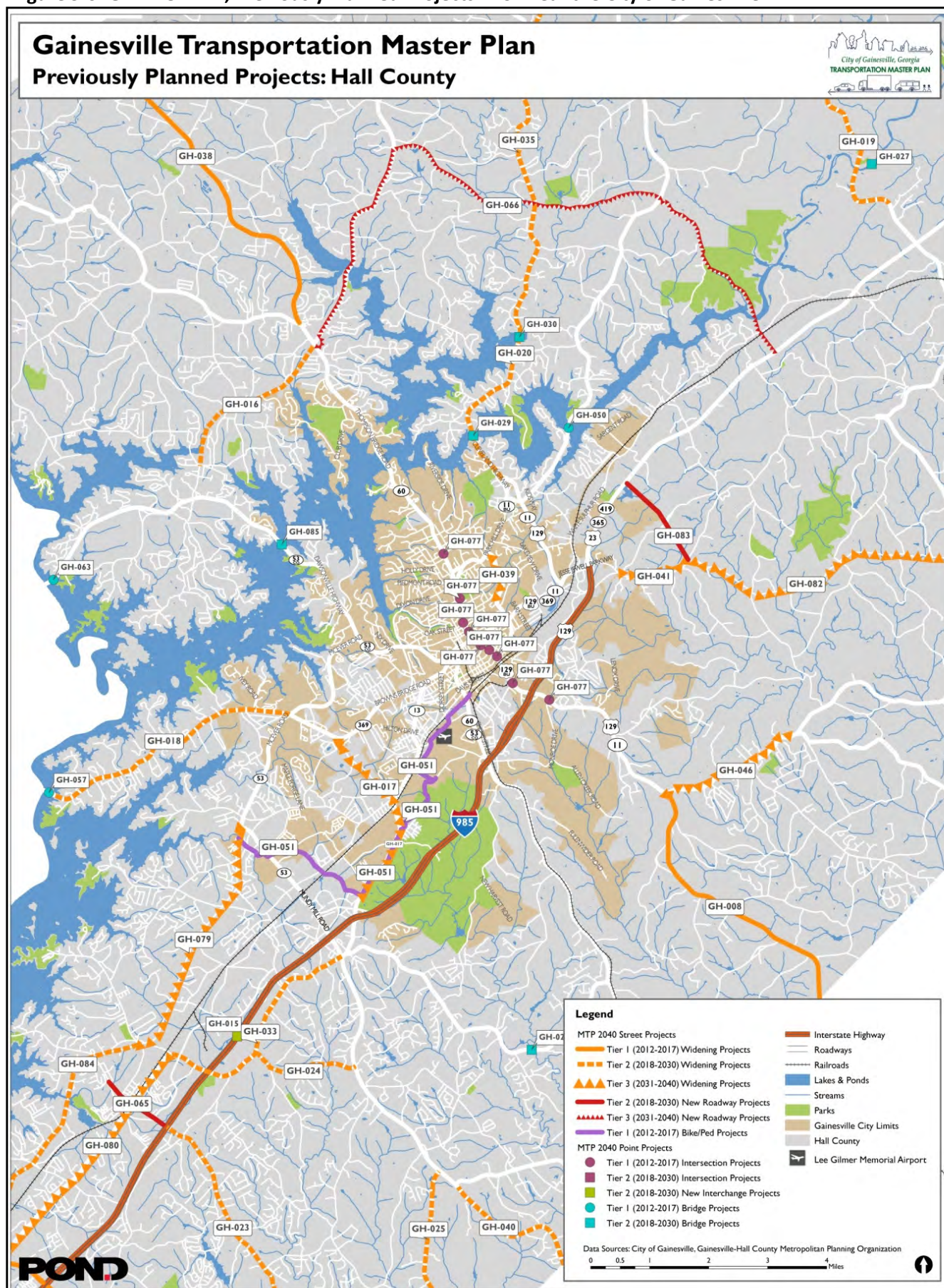


Figure 3-6: GHMPO LRTP, Previously Planned Projects In or Near the City of Gainesville





HALL COUNTY CRASH PROFILE

The *Hall County Crash Profile* was completed by the GHMPO in 2008. It provides detailed information regarding Hall County crash locations, crash rates, severity, hotspots, and other data. This data is from the Critical Analysis Reporting Environment (CARE) software and from GDOT and covers the eight-year period of 2000-2007 unless otherwise stated.

Figure 3-7 brings together a number of types of crash data on one map. This figure includes the following:

- Top 10 Crash Hotspots – Crash hotspots are defined as half mile segments that have at least five total crashes between 2000 and 2007.
- Pedestrian Crash Hotspots – Pedestrian crash hotspots are defined as half mile road segments containing a minimum of five pedestrian crashes during 2000 to 2007.
- Bicycle Crash Hotspots – Bicycle crash hotspots are defined as one mile road segments that contain a minimum of three bike crashes between the years 2000 and 2007.
- Commercial Vehicle Crash Hotspots – Commercial Vehicle (CMV) crash hotspots are defined as half mile road segments that had at least five crashes involving CMV's between 2000 and 2007.

Fatal crash hotspot data is also a part of the *Hall County Crash Profile*. Fatal crash hotspots are defined as half mile segments that have a minimum of three fatal crashes between the years 2000 and 2007. Four roadway segments in Hall County meet these criteria. None of these segments are located in the City of Gainesville, so these locations are not shown in the figure.

GHMPO BICYCLE AND PEDESTRIAN PLAN

The GHMPO completed its first LRTP in 2004. During that planning process, study participants identified the need for walking and biking facilities in Hall County. To address these needs, the *GHMPO Bicycle and Pedestrian Plan* was initiated. This plan, which covers all of Hall County and the cities located within the County, was completed in 2006. The goals of this plan include the following:

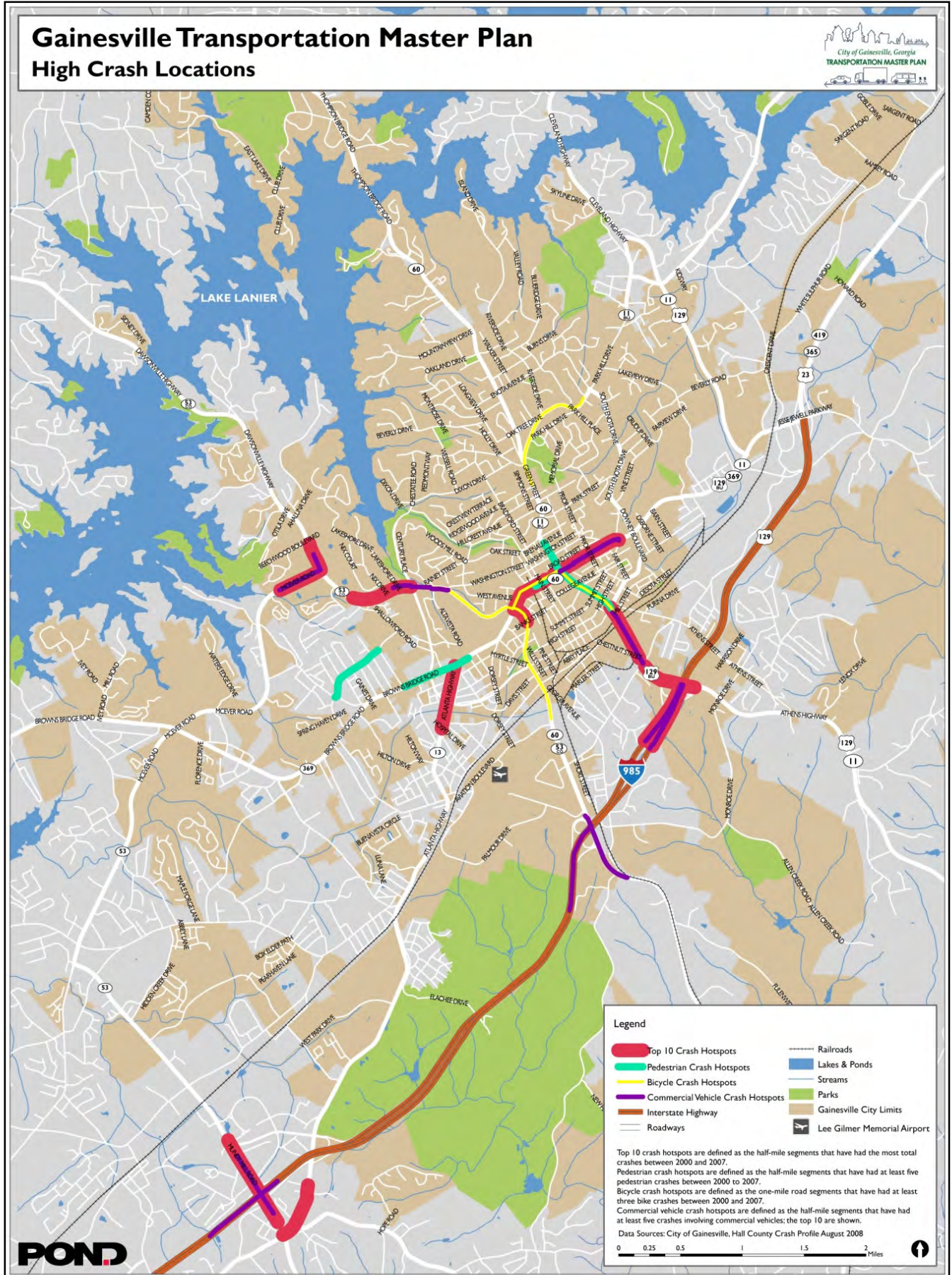
- Goal One: Implement an interconnected bicycle and pedestrian network that meets community needs in a cost-effective and coordinated manner.
- Goal Two: Create and maintain a safe, accessible, and convenient environment for bicycling and walking.
- Goal Three: Improve the quality of life through the provision of a bicycling and pedestrian network with supporting amenities.



City of Gainesville Transportation Master Plan Plan Documentation



Figure 3-7: GHMPO Hall County Crash Profile, High Crash Locations





The planning process included technical and non-technical analyses, including input from the public. The results of the plan consist of a detailed project list of bike and pedestrian facilities throughout the County. The plan's proposed pedestrian network in the City of Gainesville is shown in Figure 3-8. The proposed bicycle network from this plan is shown in Figure 3-9. As the two figures show, a significant number of bike and pedestrian projects were identified to comprise the proposed bike and pedestrian networks.

TRANSIT DEVELOPMENT PLAN

The transit service provider for Hall County and the City of Gainesville is Hall Area Transit (HAT). In 2008, the GHMPO and HAT completed the *Transit Development Plan*. This plan looked at the population of Hall County, socio-economic data about the County's residents and workforce, and existing and future land use in the County. An analysis of this data was used, along with information from previous transportation and transit studies and input from stakeholders and the public to develop transit recommendations.

The recommendations included implementation of new transit routes, relocating the HAT system transfer center to the new HAT headquarters on Main Street, expansion of paratransit service, and changes to marketing/promotion of the transit system. The plan discussed the potential future needs for transit signal priority or other potential ITS components as the system grows in the future. However, due to the increased cost of these components, specific recommendations of this type were not made.

The plan recommended future consideration of a multimodal facility in the area of the Amtrak rail station on Industrial Drive. This facility could include:

- HAT local bus service
- Amtrak rail service
- Greyhound intercity bus service
- Pedestrian facilities
- Bicycle facilities
- Parking

The plan also recognized the fact that some commuters from Hall County use the park and ride lots on I-985 in Oakwood and in Buford. The park and ride lot in Buford is served by the Gwinnett County Transit system and GRTA Xpress buses. The plan recommended future studies to determine how many commuters utilize these park and ride lots. It also identified the potential future need for commuter bus service from Hall County to the following destinations:

- I-985 Exit 4 Park and Ride (Gwinnett County)
- MARTA Doraville Station (DeKalb County)
- Midtown/Downtown Atlanta (Fulton County)
- Hartsfield-Jackson Atlanta International Airport (Clayton County)

Figure 3-8: GHMPO Proposed Pedestrian Network

Source: GHMPO Bicycle and Pedestrian Plan

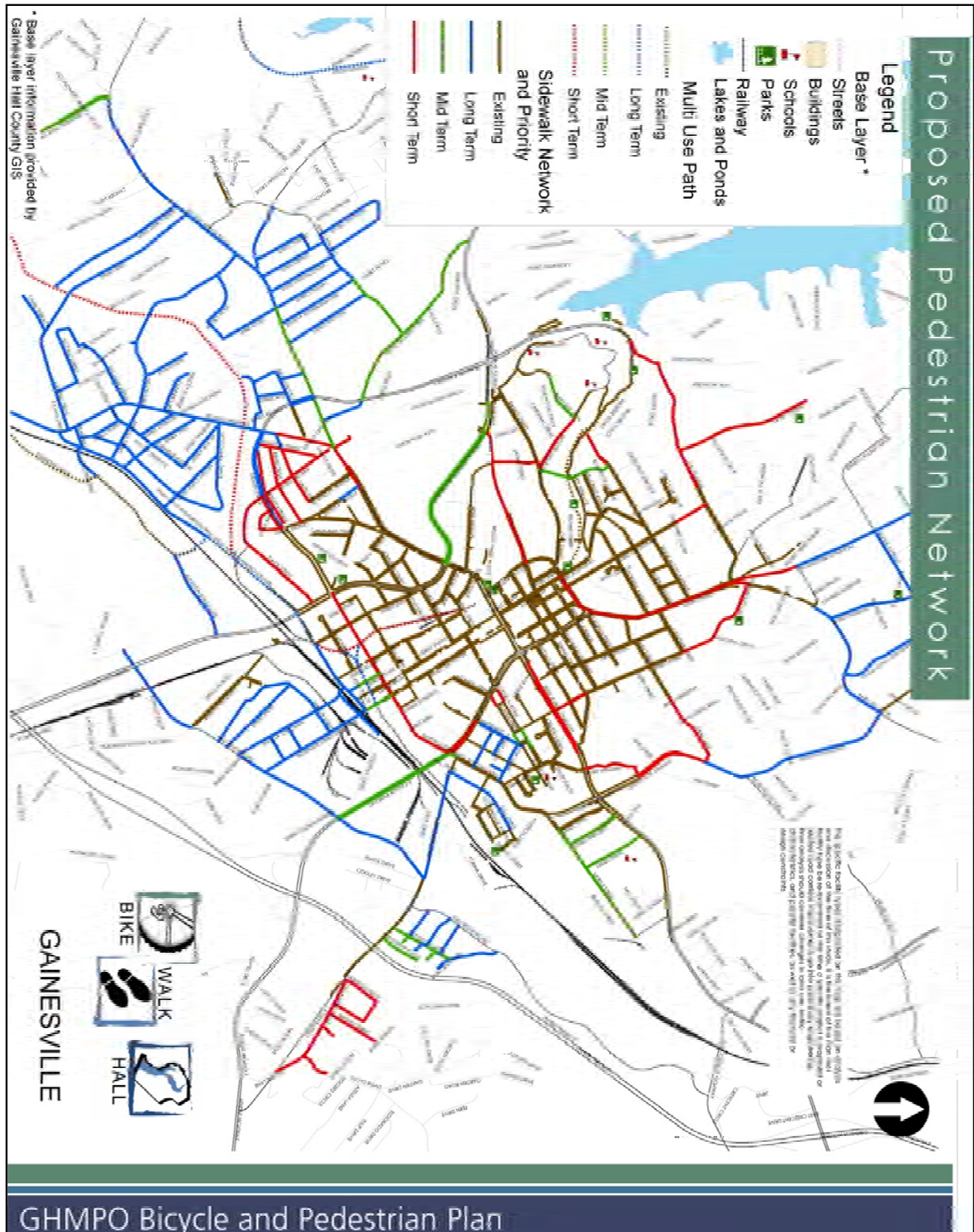
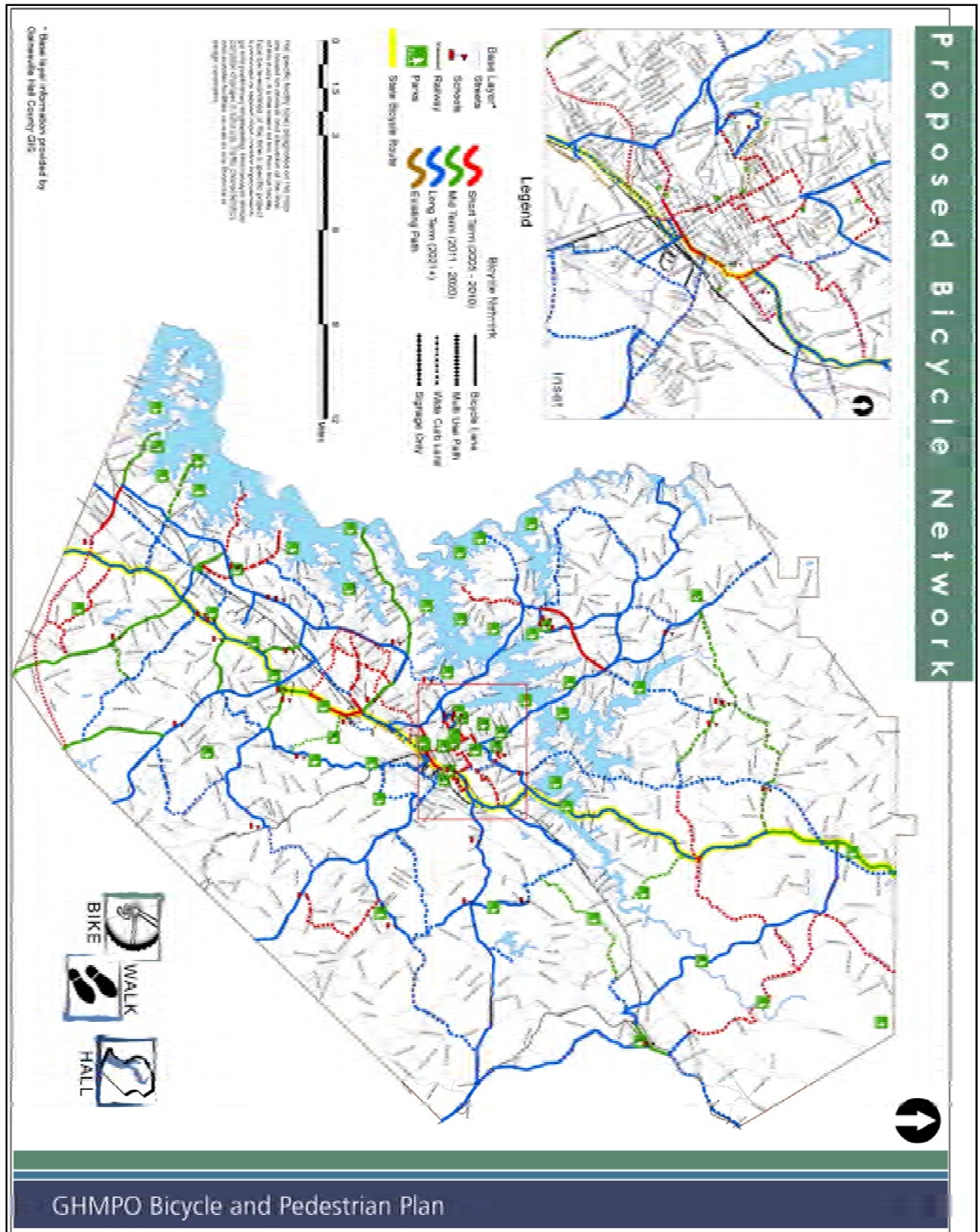


Figure 3-9: GHMPO Proposed Bicycle Network

Source: GHMPO Bicycle and Pedestrian Plan





I-985 PARK-AND-RIDE LOTS SURVEYS

In September 2009, the *I-985 Park and Ride Lots Surveys, Summaries of Ridership and License Plate Findings* document was completed. These surveys included a rider survey and a license plate survey at two park and ride lots on I-985 to determine usage by Hall County residents. The two locations of the surveys were:

- Exit 4 Park-and-Ride lot on I-985 in Buford, Georgia (served by Gwinnett Transit 101 Express Bus Service to Downtown Atlanta)
- Exit 17 Park-and-Ride lot on I-985 in Oakwood, Georgia

The surveys conducted at the exit 4 Park-and-Ride lot on I-985 in Buford yielded 150 usable rider surveys of an estimated 348 parked vehicles. Approximately 23% of the survey respondents had a trip origin in Hall County, including in the cities of Gainesville, Oakwood, Flowery Branch, and in unincorporated Hall County. Approximately 91% of the respondents that began their trip in Hall County had the City of Atlanta as their destination. Approximately 89% of the Hall County respondents were using Gwinnett Transit Route 101 to commute to Atlanta. All of the Hall County respondents indicated that the purpose of their trip was commuting to work.

The park and ride lot on Atlanta Highway/SR 13 at Exit 17 is a relatively new lot. It got minimal usage at the time of the survey due to ongoing construction of the I-985 at SR 53 interchange. Therefore, only five usable survey responses were gathered at that lot. It appeared that this lot was being used for purposes other than traditional commuting, including parking for construction workers and overflow parking for the nearby college. Another nearby park and ride lot at Exit 17 was closed during construction, but previous aerial photography showed that this lot got significant usage in the past.

It should be noted that the park and ride lot at Exit 4 was observed to be full or nearly full when the surveys were conducted, with some vehicles parking in locations that were not striped parking spaces. Some of this parking demand may be due to a shift of some parking from the Exit 17 lot to the Exit 4 lot due to the ongoing construction. Additionally, the surveys were conducted of people who were using these two lots. This means that latent demand within the City of Gainesville and Hall County for park and ride lots in other locations or for other transportation services (i.e. express bus, commuter rail, carpools/vanpools) is not reflected in the survey results.

FINAL INVESTMENT LIST REPORT TIA 2010

In 2010, the Georgia legislature passed the Transportation Investment Act of 2010 (TIA2010). This law established 12 transportation regions throughout the state, based on the existing Regional Commission (RC) boundaries. The law allows each region to pass a 1% sales tax to fund needed transportation projects in their region. A specific transportation list was developed for each of the 12 regions, based on input from local political leaders from throughout the region. The City of Gainesville and Hall County are a part of the Georgia Mountains Region. The *Final Investment List Report TIA 2010*, completed in October 2011, is the final project list for the Georgia Mountains Region.



The transportation lists were voted on by the residents of each region in July 2012. The tax did not pass in the Georgia Mountains Region in the 2012 election. However, the proposed projects that were considered a part of this list are considered high priorities for the City of Gainesville and Hall County. The proposed projects from the TIA2010 project list located in Hall County include:

- RC02-000088 I-985 New Interchange North of SR 13 near Martin Road
- RC02-000091 Jesse Jewel Pkwy and John Morrow Pkwy Intersection Improvements
- RC02-000095 McEver Road Intersection Improvements
- RC02-000096 Sardis Road Connector - SR 60 to Sardis Road near Chestatee Road
- RC02-000097 Spout Springs Road - Hog Mountain Road to Gwinnett County Line
- RC02-000101 SR 211/Old Winder Hwy - SR 53 Winder Hwy to Gwinnett County Line
- RC02-000106 US 129/SR 11/Athens Hwy Widening from SR 323 to SR 332
- RC02-000107 US 129/SR 11/Cleveland Hwy - Nopone Rd to White County Line
- RC02-000108 US 129/SR 11/Cleveland Hwy Widening from Limestone Rd to Nopone Rd

One of these projects, RC02-000091 – Jesse Jewel Pkwy and John Morrow Pkwy Intersection Improvements, is located in the City of Gainesville. The proposed intersection design for this project includes additional turn lanes and traffic signalization upgrade. This project is expected to help traffic flow more smoothly and safely through the downtown Gainesville area.

Another project, RC02-000096 – Sardis Road Connector - SR 60 to Sardis Road near Chestatee Road, is located in Hall County but outside of the City of Gainesville. The location of this project and additional connectivity it provides may reduce traffic volumes on Green Street and other roadways in the City of Gainesville. The project description in the project fact sheet includes the following:

“This project begins at the Sardis Road/Chestatee Road intersection and extends north to SR 60 in the vicinity of the intersection with Mt. Vernon Road. The alignment follows several existing local roads with some of the roadway on new location. The project is located west of Gainesville in west Hall County. The length of the proposed project is approximately 3.55 miles and will provide a connector roadway between SR 53 to the south and SR 60 to the north. The proposed roadway will consist of a four-lane curb and gutter divided roadway, 2 lanes in each direction separated with a 20-foot wide, 6 in high curb and gutter median. Sidewalks will be provided on both sides of the road. The design speed is 45 mph.”

Three of the other projects are located in Hall County and provide additional traffic capacity connecting to the City of Gainesville. These projects include the following:

- RC02-000106 US 129/SR 11/Athens Hwy Widening from SR 323 to SR 332
- RC02-000107 US 129/SR 11/Cleveland Hwy - Nopone Rd to White County Line
- RC02-000108 US 129/SR 11/Cleveland Hwy Widening from Limestone Rd to Nopone Rd

Project RC02-000106 widens US 129/SR 11/Athens Hwy to the southeast between Gainesville and the City of Pendergrass near I-85. Projects RC02-000107 and RC02-000108 are planned to widen US Hwy 129/SR 11/Cleveland Hwy from Limestone Parkway north to the White County line. Implementation of these projects will provide more traffic capacity connecting the surrounding area to the City, which may results in an increase of traffic volumes on roadways in the City.

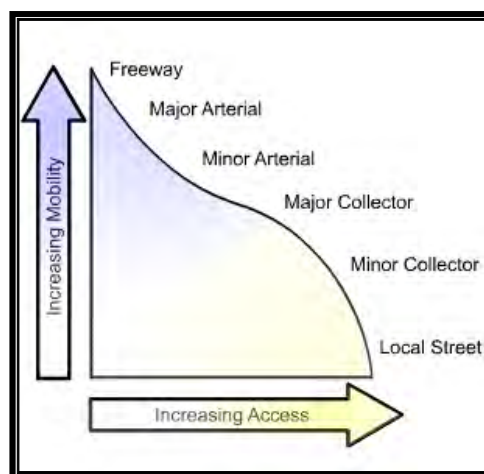
4. EXISTING CONDITIONS

The existing transportation conditions in the City were identified by conducting field reviews, analyzing existing infrastructure, and analyzing data provided by the City of Gainesville, the GHMPO, GDOT, and other sources.

ROADWAY AND TRAFFIC CONDITIONS

Roadways in the City of Gainesville are assigned a classification based on the roadway's function, accessibility, and mobility. On one end of the spectrum are expressways or interstates, which provide the greatest mobility but the least accessibility. On the other end are local roads which provide the greatest accessibility but the least mobility. Characteristics about each roadway by functional class are described below, and the GDOT functional classification of the roadway system in downtown and the surrounding area is shown in Figure 4-1.

- Urban interstate principal arterials and urban freeways/expressways provide the greatest mobility because they permit high-speed movement and access is generally limited to intersections with the network at defined interchanges. I-985/SR 365, which provides connectivity to Metro Atlanta and to the rest of northeast Georgia, is the only roadway in the City of Gainesville with this classification.
- Urban principal arterials serve as the backbone of the surface roadway network and typically connect major activity centers. Arterials carry large volumes of traffic at moderate speeds. In Gainesville, urban principal arterials include the EE Butler Parkway/Green Street/Thompson Bridge Road corridor, Jesse Jewell Parkway, Pearl Nix Parkway, and other similar roadways.
- Urban minor arterials within the City provide more local access than principal arterials while still connecting major activity centers. In Gainesville, urban minor arterials include MLK Jr. Boulevard, Enota Avenue, Morningside Drive, Dixon Drive, Academy Street, and a number of other roadways throughout the City.
- Urban collector streets connect activity centers and residential areas. Their purpose is to collect traffic from streets in residential and commercial areas and distribute it to the arterial system. Collector streets carry traffic at low to moderate speeds. Numerous urban collector roadways pass through the City, including Athens Street, Prior Street, Ridgewood Avenue, and others.
- Urban local streets offer the greatest access but the least mobility. Local streets feed the collector system from low volume residential and commercial areas at low speeds. Local streets are often found in residential neighborhoods, low density commercial areas, and near industrial developments. All roadways in the City that are not freeways, arterials, or collectors are local streets.



Roadway Classification by Function



City of Gainesville Transportation Master Plan Plan Documentation



Figure 4-1: GDOT Functional Classification

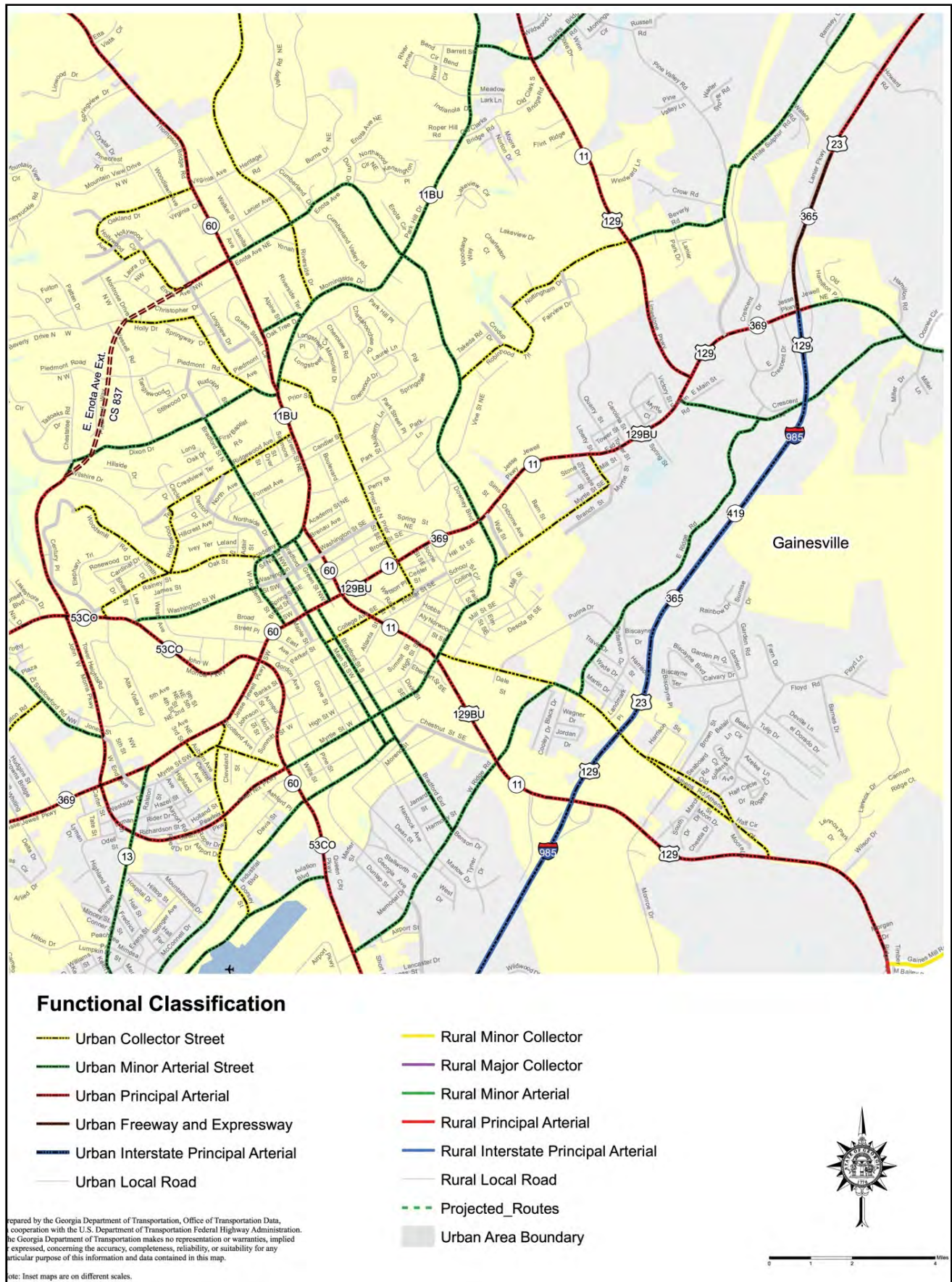




Figure 4-2 shows the number of lanes of the roadways in the City. As the figure shows, there are a number of 4-lane roadways in the City, but most roads are 2-lane roadways. The figure also shows the Annual Average Daily Traffic (AADT) volumes from GDOT for the year 2010. The highest traffic volumes are on I-985, at the interchanges with I-985, and along major roadways including Thompson Bridge Road, Dawsonville Highway, and Jesse Jewell Parkway/Browns Bridge Road. Figure 4-3 provides this same data and focuses on downtown and the surrounding area. This figure includes traffic volumes on additional roadways that are not included on the map of the entire city.

PEDESTRIAN AND BIKE FACILITIES

The existing pedestrian and bike facilities in the city are shown in Figure 4-4. As the figure shows, downtown Gainesville and Brenau University have an extensive sidewalk network. Streetscape elements such as landscaping and pedestrian scale lighting are also present on some blocks in these areas. Sidewalks are also present along many of the roadways near the downtown area. However, sidewalk coverage is sporadic throughout most of the rest of the city.

Two multi-use trails in the City serve pedestrians and bicyclists. The Rock Creek Greenway is a series of paved trails roughly 1 mile in length that connects downtown with Longwood Park and Lake Lanier. It helps serve the north Gainesville neighborhood and provides connectivity to three schools. The Midtown Greenway is the conversion of a portion of a rail line into a greenway in the midtown area. This greenway trail connects Jesse Jewell Parkway near Academy Street to MLK Jr. Boulevard near Pine Street.

There is also a pedestrian and bike bridge that connects the downtown and midtown area. It crosses Jesse Jewell Parkway between Bradford Street and Henry Ward Way/Green Street. The bridge is located next to the Georgia Mountains Center on the northwest side of Jesse Jewell Parkway. Vacant property with the potential for future development is located next to the bridge on the southeast side of the Jesse Jewell Parkway.

Figure 4-5 shows community facilities, schools, parks, and major retail nodes in the City. As the figure shows, many of these locations are clustered in or near the downtown area. Other major retail nodes outside of the downtown area are located along or near Dawsonville Highway and Shallowford Road and near the intersection of Jesse Jewell Parkway at Limestone Parkway. Most of the other destinations are located along or near major roadways in the City.

TRANSIT

Hall Area Transit (HAT) is the transit service provider for Hall County and the City of Gainesville. It operates a fixed route bus service, known as the Red Rabbit, in the City of Gainesville and portions of unincorporated Hall County. The Red Rabbit currently has seven bus routes as shown in Figure 4-6. HAT provides Mobility Plus for riders with disabilities that cannot safely navigate the streets to access Red Rabbit bus stops. HAT also provides Dial-A-Ride, where riders can reserve curb-side van service that takes them directly to where they want to go.



City of Gainesville Transportation Master Plan Plan Documentation



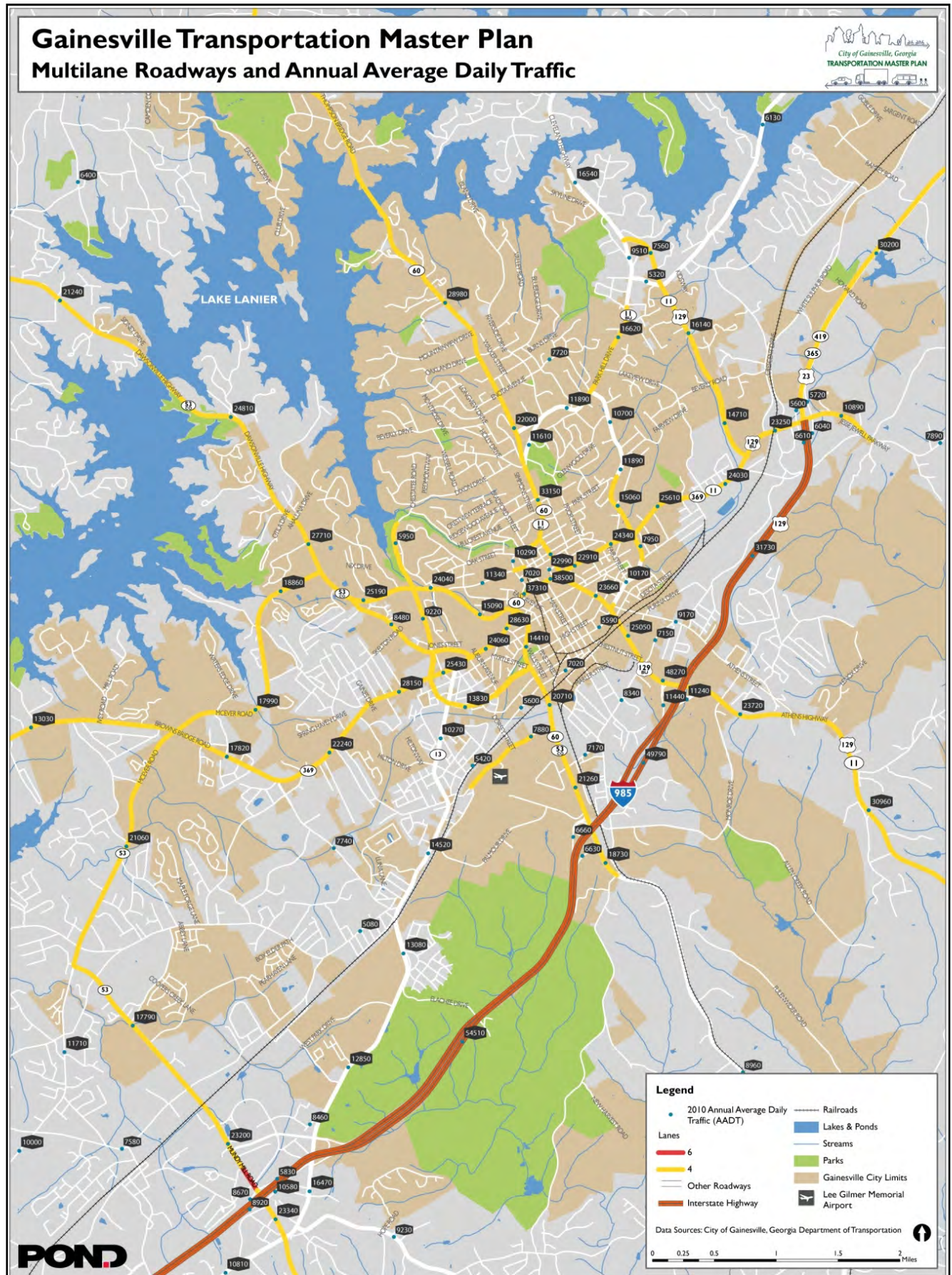
An Amtrak rail station is located in Midtown at 116 Industrial Blvd. This station provides passenger rail service on the Crescent Line, which connects New York, Atlanta, New Orleans, and other cities located along this route. A Greyhound station providing intercity bus travel is located a few blocks away at 1780 MLK Jr. Boulevard.



City of Gainesville Transportation Master Plan Plan Documentation



Figure 4-2: Roadway Lanes and AADT





City of Gainesville Transportation Master Plan Plan Documentation



Figure 4-3: Roadway Lanes and AADT, Downtown Area

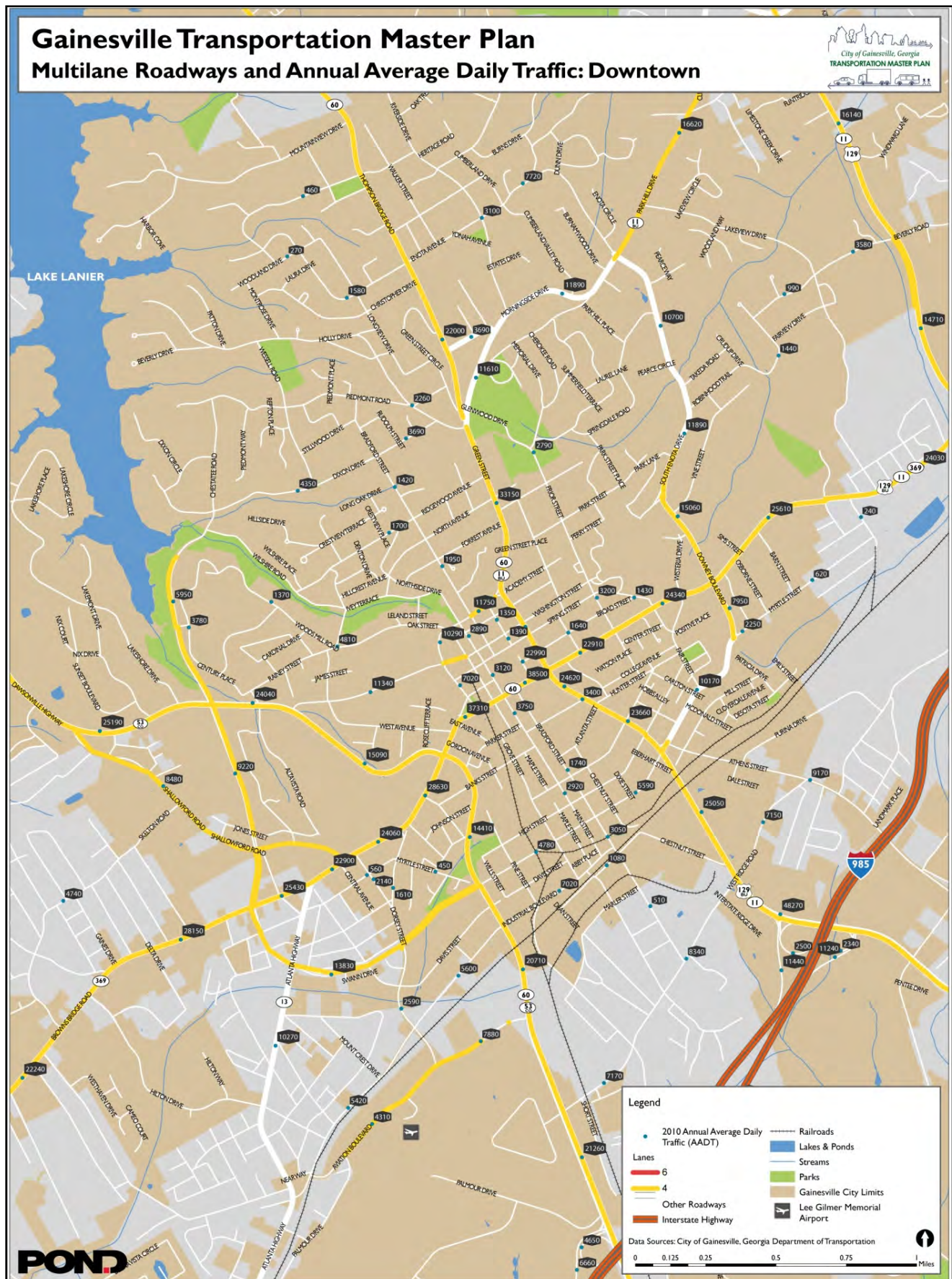
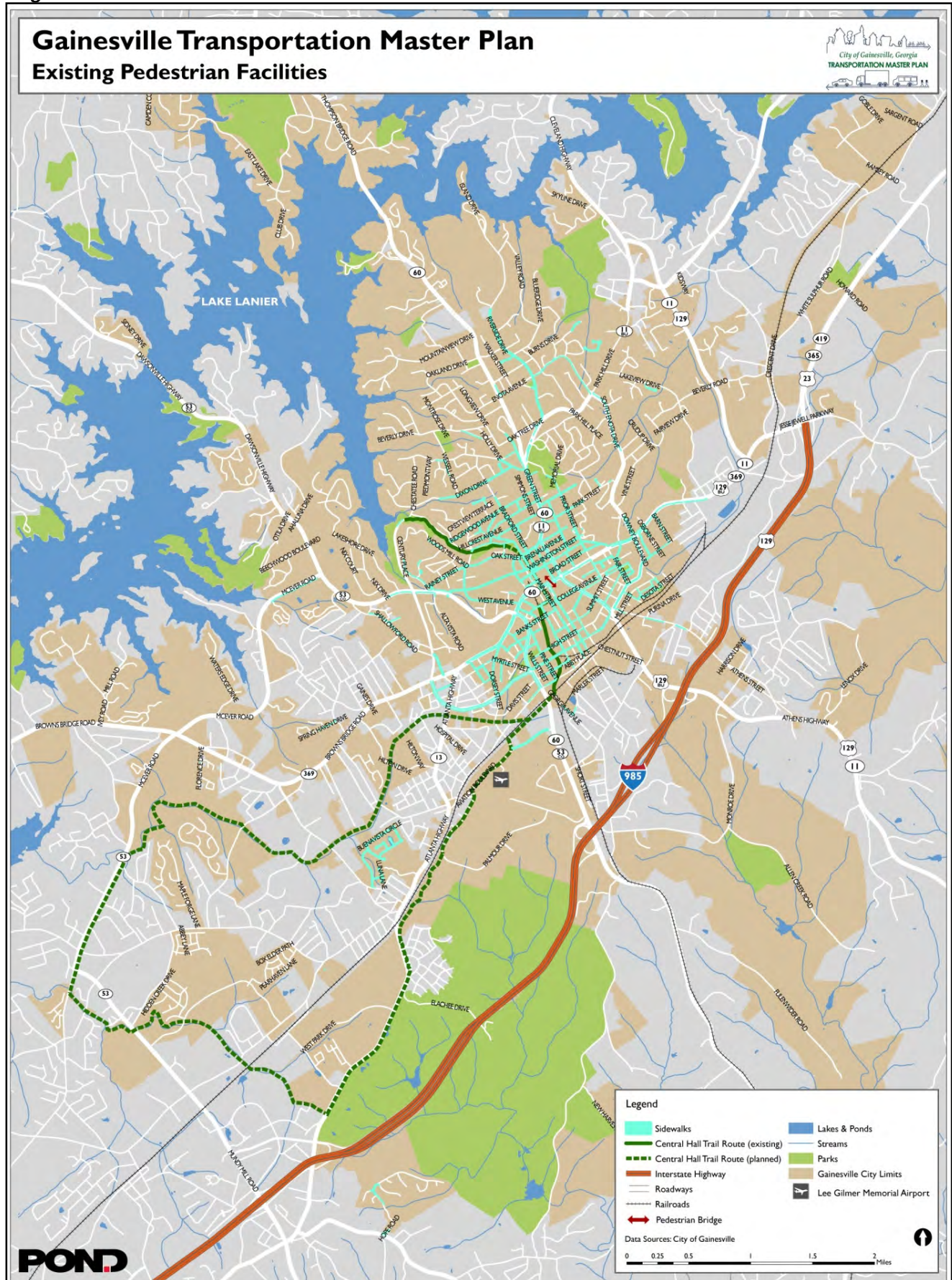




Figure 4-4: Pedestrian and Bike Facilities





City of Gainesville Transportation Master Plan Plan Documentation



Figure 4-5: Community Facilities and Retail Nodes

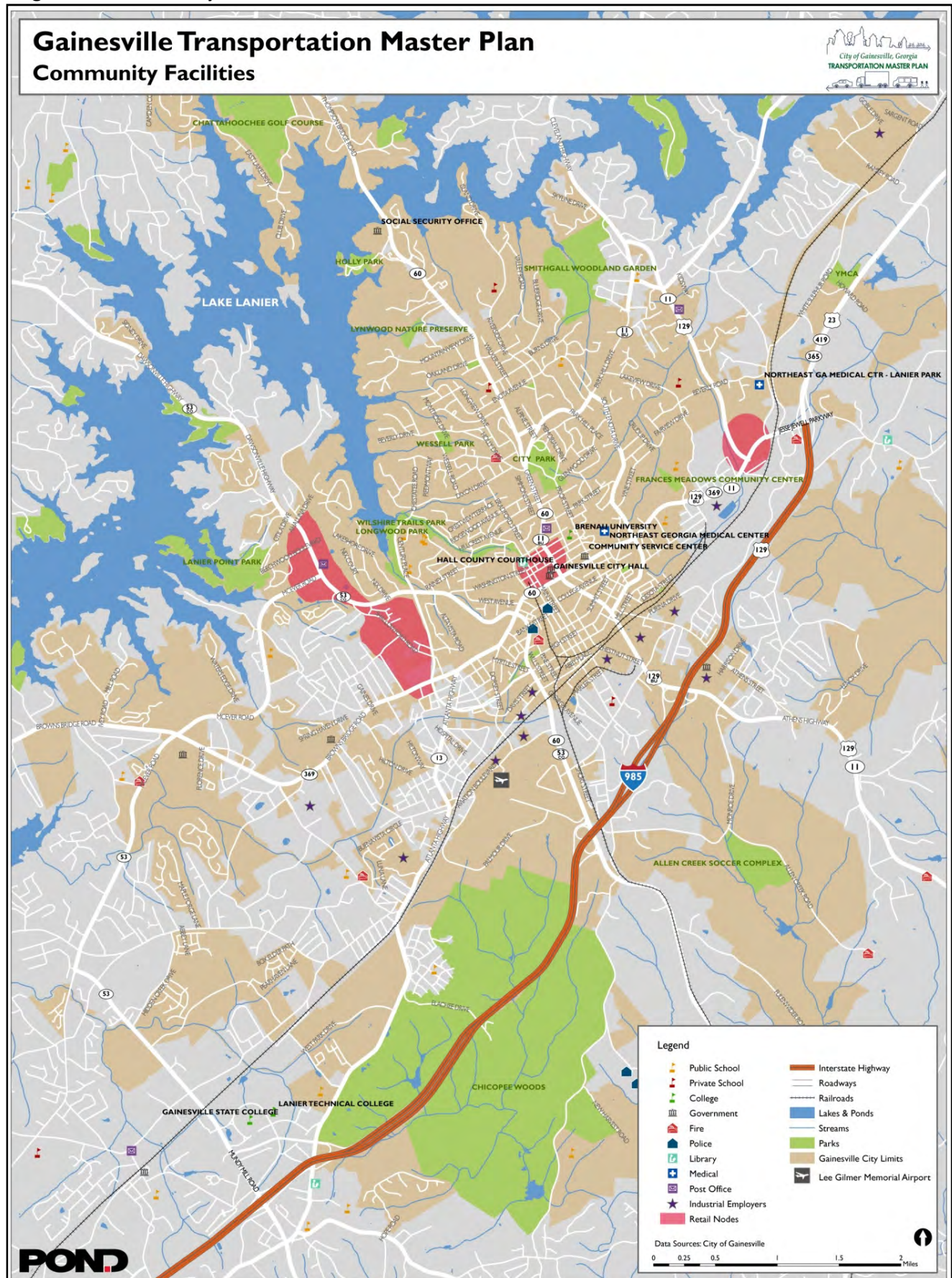
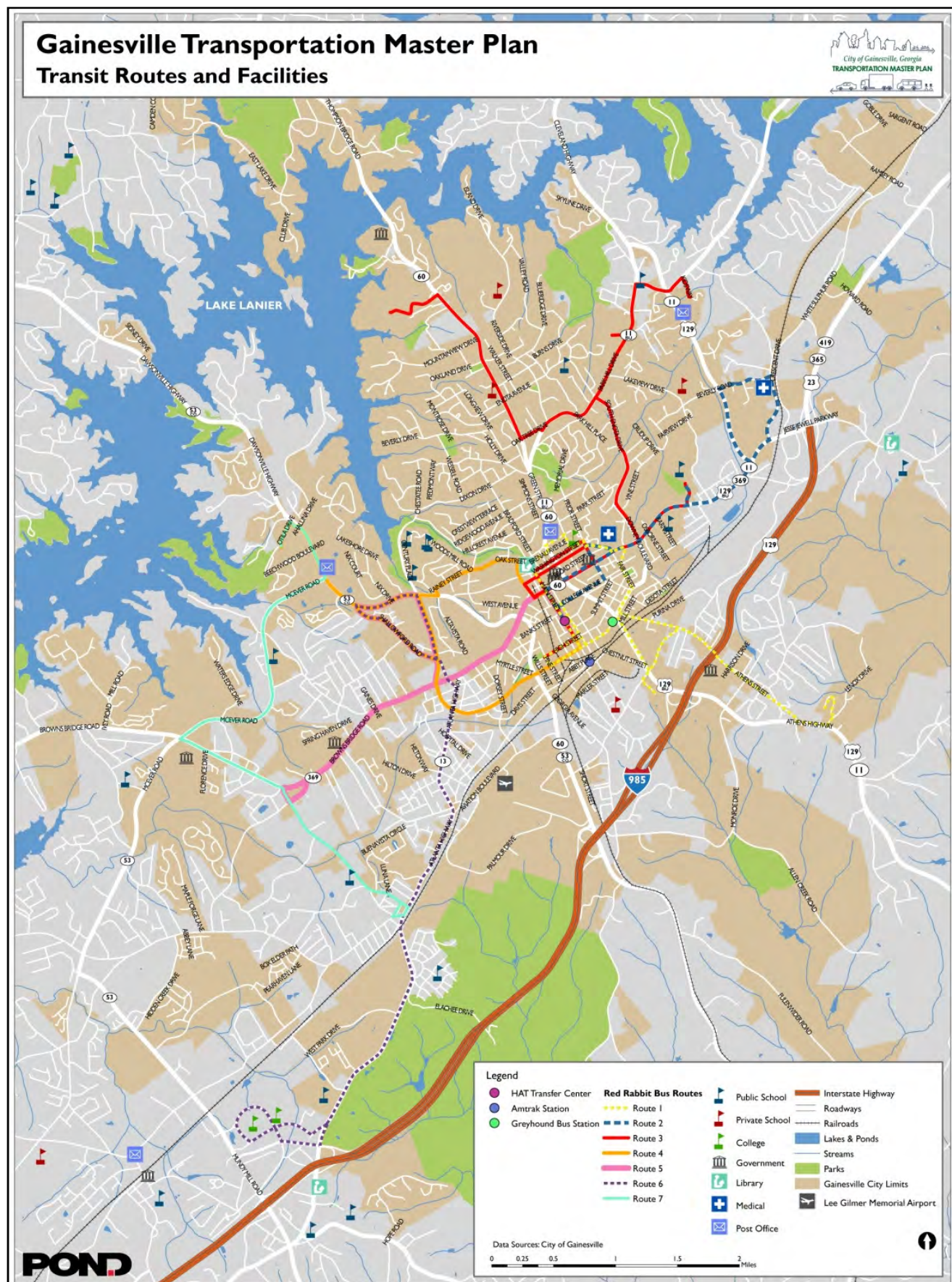


Figure 4-6: Existing Transit





5. NEEDS ASSESSMENT

The City of Gainesville's transportation needs were assessed to determine what existing deficiencies should be addressed in this plan as well as what the City's transportation needs are projected to be in the future. Previous planning efforts, existing transportation infrastructure, and data gathered in field reviews were analyzed as part of the needs assessment. Traffic volumes and travel patterns from the GHMPO travel demand model and GDOT were analyzed to identify needs for additional roadway capacity. Input was also gathered from focus group members and the public to identify what the residents of Gainesville experience while traveling in the City.

TRAVEL DEMAND MODEL ANALYSIS

As previously discussed, the GHMPO MTP developed recommendations based on data in the GHMPO travel demand model. Figures showing the LOS along roadways in the model network for the 2008 base year and projected LOS for the year 2040 were shown in Section 3 of this report. Additional analysis was conducted with the travel demand model to learn more about travel patterns and deficiencies in the roadway network.

Discussions with focus group members and City staff identified the fact that a significant amount of traffic in the City is actually through traffic, particularly in or near downtown. Through traffic consists of trips that do not have an origin or destination in an area but travel a route through that area because it provides the shortest route or shortest travel time. For example, a trip with an origin on Thompson Bridge Road/SR 60 north of Lake Lanier and a destination south of Gainesville (i.e. the City of Oakwood or Gwinnett County) might travel through downtown Gainesville because this is the shortest route to I-985. This trip does not have an origin or destination in downtown Gainesville, but contributes to the traffic volume demand on the roadway network in the downtown area.

Figure 5-1 is an analysis of through traffic using year 2040 travel demand model data. In this figure, downtown Gainesville and the surrounding area is called Central Gainesville and is located within a dashed line. The origins and destinations of trips were analyzed at 22 locations along the roadway network, as shown on the map. For locations in Central Gainesville, a small number of trips had both an origin and destination within Central Gainesville. Most trips in the travel demand model are trips to and from work. Since most residents drive a greater distance than this to work, the percentage of trips that are entirely within Central Gainesville is low.

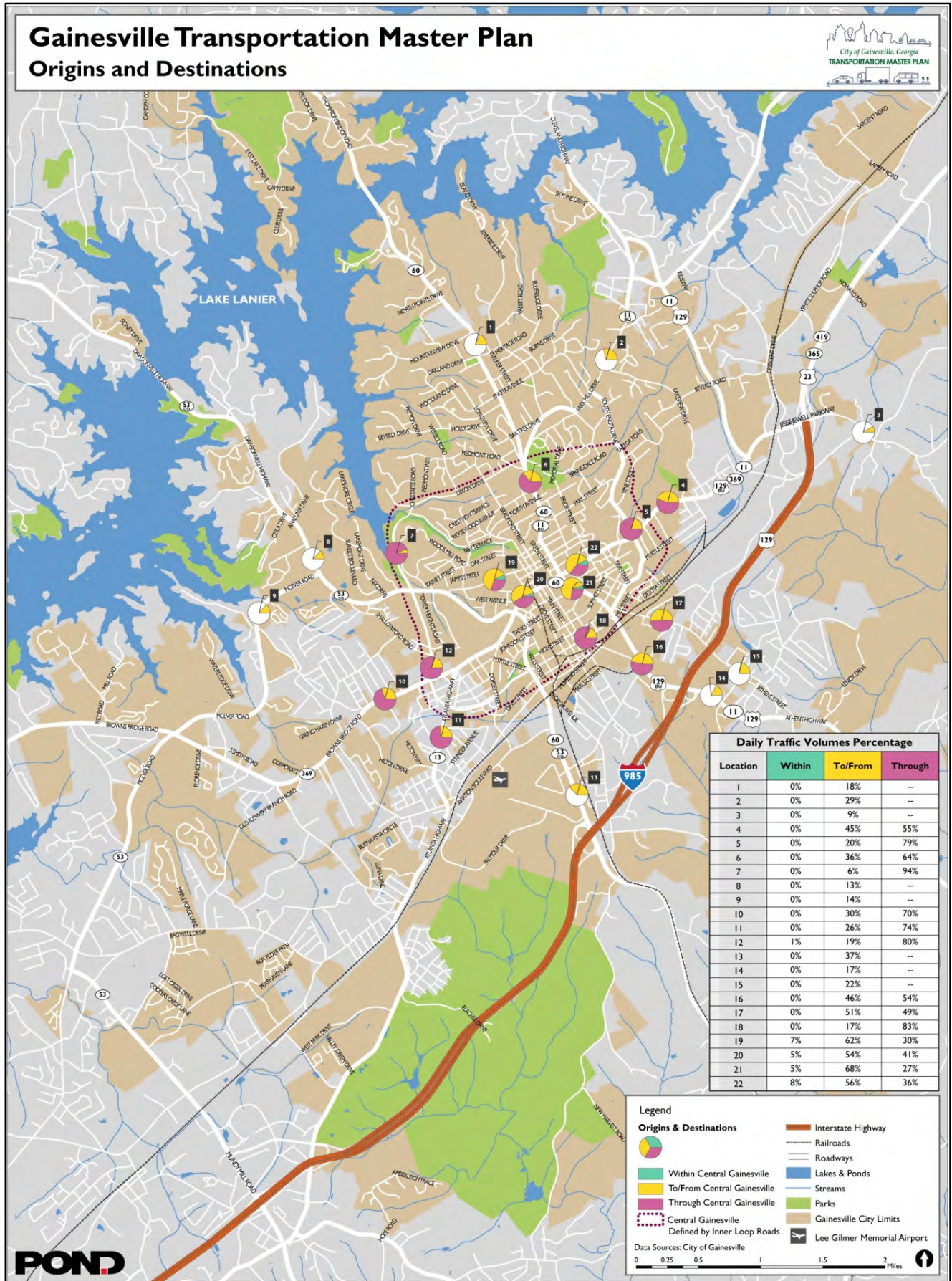
At the four locations in or closest to downtown Gainesville, points 19, 20, 21, and 22, the majority of trips either began or ended within Central Gainesville. For example, on EE Butler Parkway southeast of Jesse Jewell Parkway (point 21), 68% of trips had either an origin or destination within Central Gainesville. This 68% includes trips that began in Central Gainesville, potentially from a home just outside of downtown, and ends outside of Central Gainesville, possibly at a job in another part of the City or in Hall County. This 68% also includes trips that begin outside of the area and end in Central Gainesville.



City of Gainesville Transportation Master Plan Plan Documentation



Figure 5-1: Central Gainesville Trip Origins and Destinations





City of Gainesville Transportation Master Plan Plan Documentation



At the other five locations in Central Gainesville, points 5, 6, 7, 12, and 18, the majority of trips are through trips. The percentage of through trips at each of these five points is:

- 79% Through trips at Point 5, Downey Boulevard between Jesse Jewell Pkwy and Hamilton Place
- 64% Through trips at Point 6, Green Street between Ridgewood Avenue and Glenwood Drive
- 94% Through trips at Point 7, Pearl Nix Pkwy between Dawsonville Hwy and Wilshire Drive
- 80% Through trips at Point 12, Pearl Nix Pkwy between Browns Bridge Rd and Shallowford Rd
- 83% Through trips at Point 18, Martin Luther King Jr. Blvd between Bradford St and Chestnut St

It should be noted that while Green Street has the lowest percentage of through trips, it also has the highest overall projected traffic volume at these five locations. This means that Green Street is projected to have a higher number of through trips than the other locations within Central Gainesville. Table 5-1 shows the trips by origin/destination and the total number of trips at the nine roadway locations within Central Gainesville.

Table 5-1

Point Number	Roadway Segment Location	Projected 2040 Daily Trips in Central Gainesville			
		Within	To/From	Through	Total
5	Downey Boulevard between Jesse Jewell Parkway and Hamilton Place	99	4,153	16,148	20,400
6	Green Street between Ridgewood Avenue and Glenwood Drive	14	19,056	33,760	52,830
7	Pearl Nix Parkway between Dawsonville Highway and Wilshire Drive	3	517	7,790	8,310
12	Pearl Nix Parkway between Browns Bridge Road and Shallowford Road	211	6,324	26,015	32,550
18	Martin Luther King Jr. Boulevard between Bradford Street and Chestnut Street	93	3,852	19,195	23,140
19	Washington Street between West Academy Street and West Avenue	1,535	13,117	6,368	21,020
20	Jesse Jewell Parkway between West Academy Street and East Avenue	3,085	35,124	26,581	64,790
21	EE Butler Parkway between Jesse Jewell Parkway and College Avenue	1,532	21,422	8,596	31,550
22	Jesse Jewell Parkway between EE Butler Parkway and Prior Street	3,135	23,198	14,807	41,140



A select link analysis was also conducted using the 2040 travel demand model data. This analysis chooses a specific point on the roadway network and shows how trips that pass by this point are distributed on the surrounding roadway network. A select link analysis was conducted at five locations within the roadway network. The results of the select link analysis are shown in the following figures.

- Figure 5-2, Green Street South of Park Hill Drive
- Figure 5-3, Queen City Parkway North of I-985
- Figure 5-4, EE Butler Parkway North of I-985
- Figure 5-5, Martin Luther King Jr. Blvd East of Main Street
- Figure 5-6, Jesse Jewell Parkway West of Academy Street

The volumes for the 2040 travel demand model were also compared to the capacity of the roadways in the model network. This is shown as Figure 5-7. Roads shown in green are not projected to be over capacity in the year 2040. Roads shown as Moderate Deficiency are projected to be over capacity by the year 2040 but may not need a capacity project by then. These roadways may operate reasonably well with various operational improvements such as additional turn lanes at intersections, the addition of a two-way left-turn lane or median, and access management changes.

Roadways identified as having a significant deficiency are expected to need additional through traffic capacity. This can be accomplished with an additional through lane of traffic in each direction or similar traffic capacity expansion on a nearby, parallel roadway. These roadways may also need additional turn lanes at intersections and other potential operational improvements.

Roadways identified as having a severe deficiency are also expected to need additional through traffic capacity. These roadways may need an additional through lane of traffic in each direction and similar traffic capacity expansion on a nearby, parallel roadway. These roadways may also need additional turn lanes at intersections and other potential operational improvements.

CONGESTION RELIEF AND ROADWAY CAPACITY NEEDS

Traffic data, input from city staff and the public, and field observations identified a number of roadway segments and intersections that are currently congested. These congested locations in downtown and the surrounding area are shown in Figure 5-8.

CONGESTED ROADWAYS AND INTERSECTION NEEDS ASSESSMENT

This figure shows some of the major roadways in the area, such as Green Street and Jesse Jewell Parkway. It also identifies a number of intersections that have been identified as needing various operational upgrades. Some of these intersections operate with significant traffic congestion, such as the intersection of Jesse Jewell Parkway at John Morrow Parkway/Queen City Parkway. Other intersections have previously been identified as needing some specific operational improvements, such as the intersection of Browns Bridge Road at West End Avenue.



Figure 5-2: Green Street Select Link Analysis

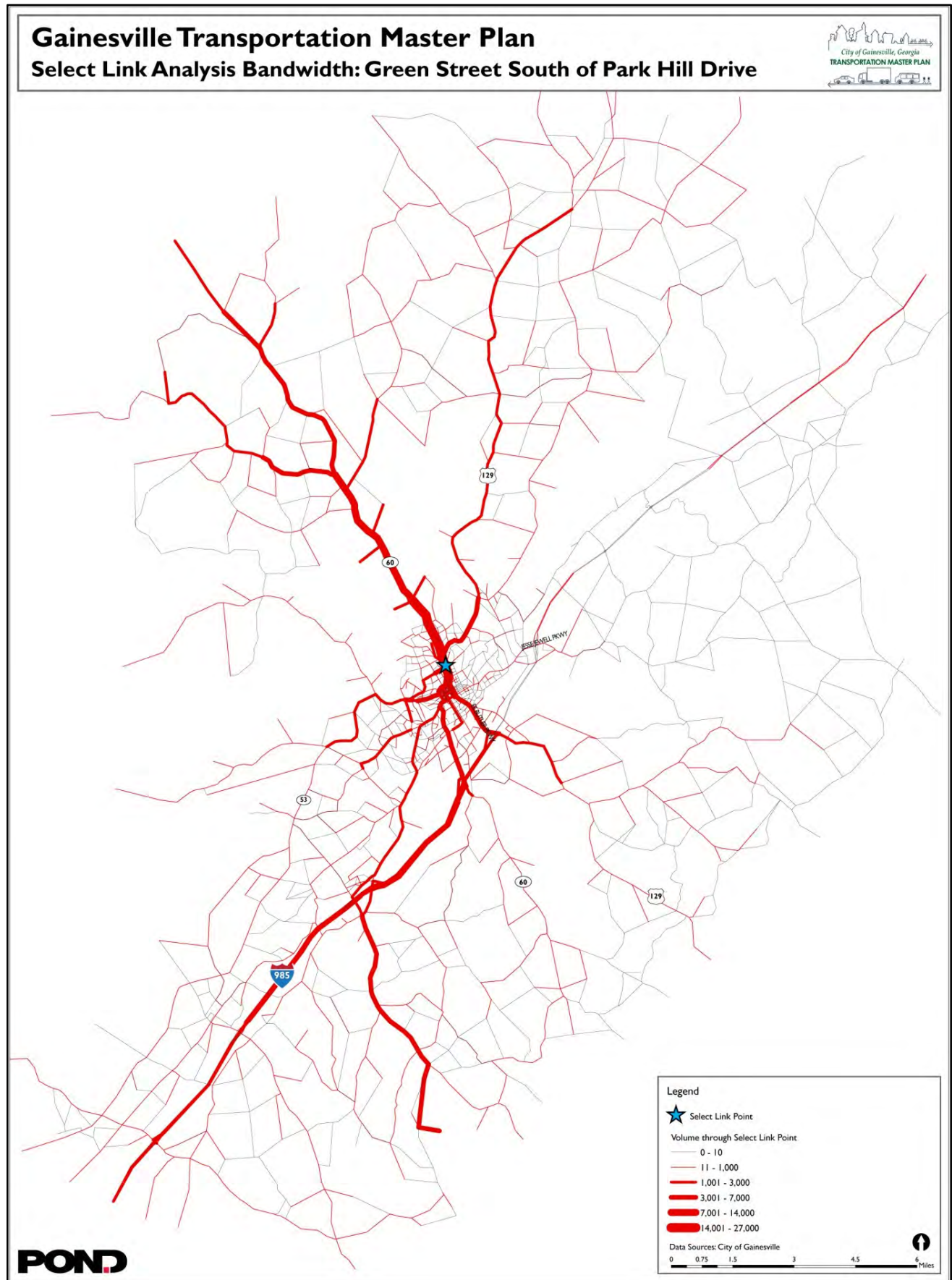




Figure 5-3: Queen City Parkway Select Link Analysis

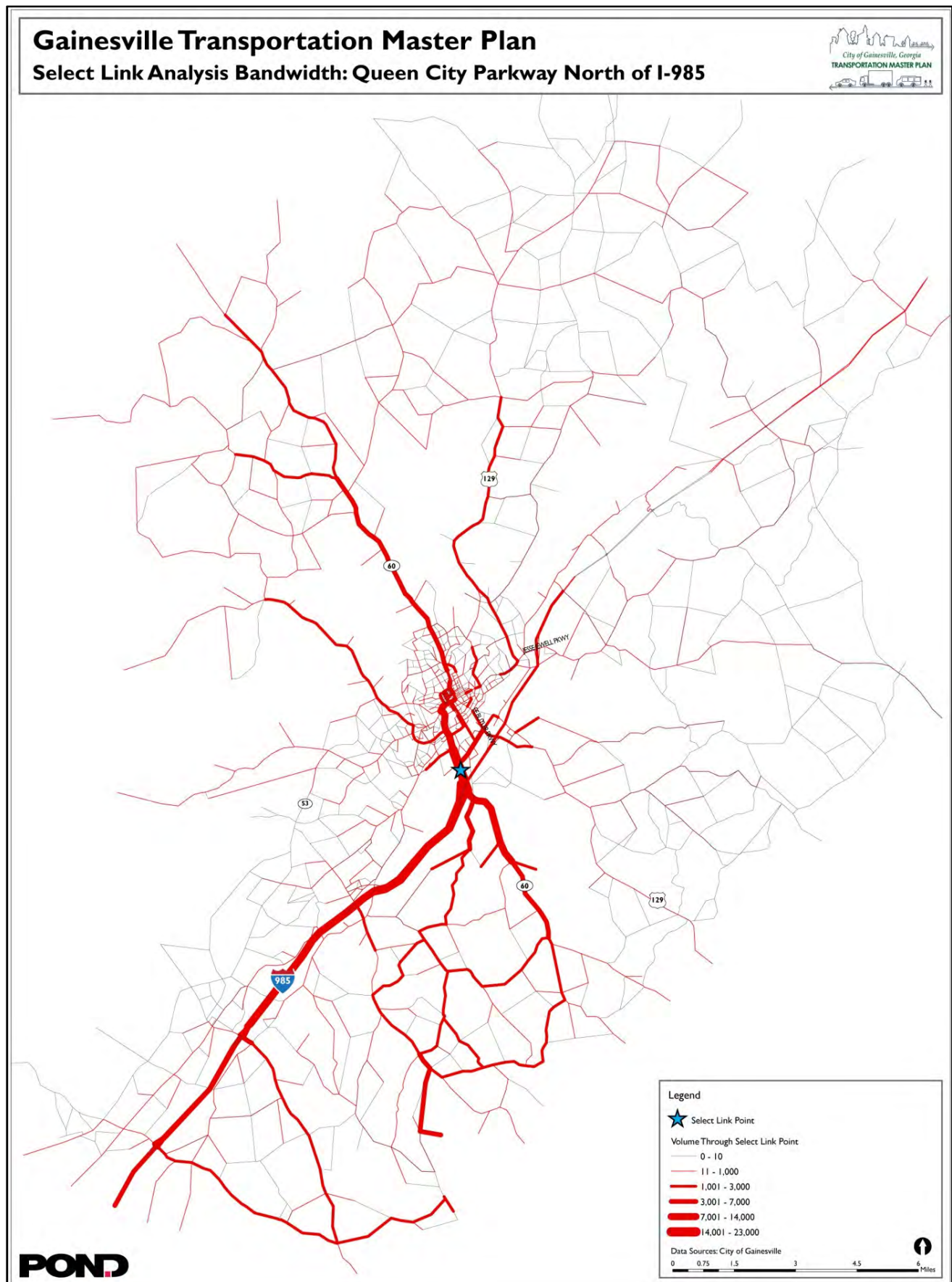




Figure 5-4: EE Butler Parkway Select Link Analysis

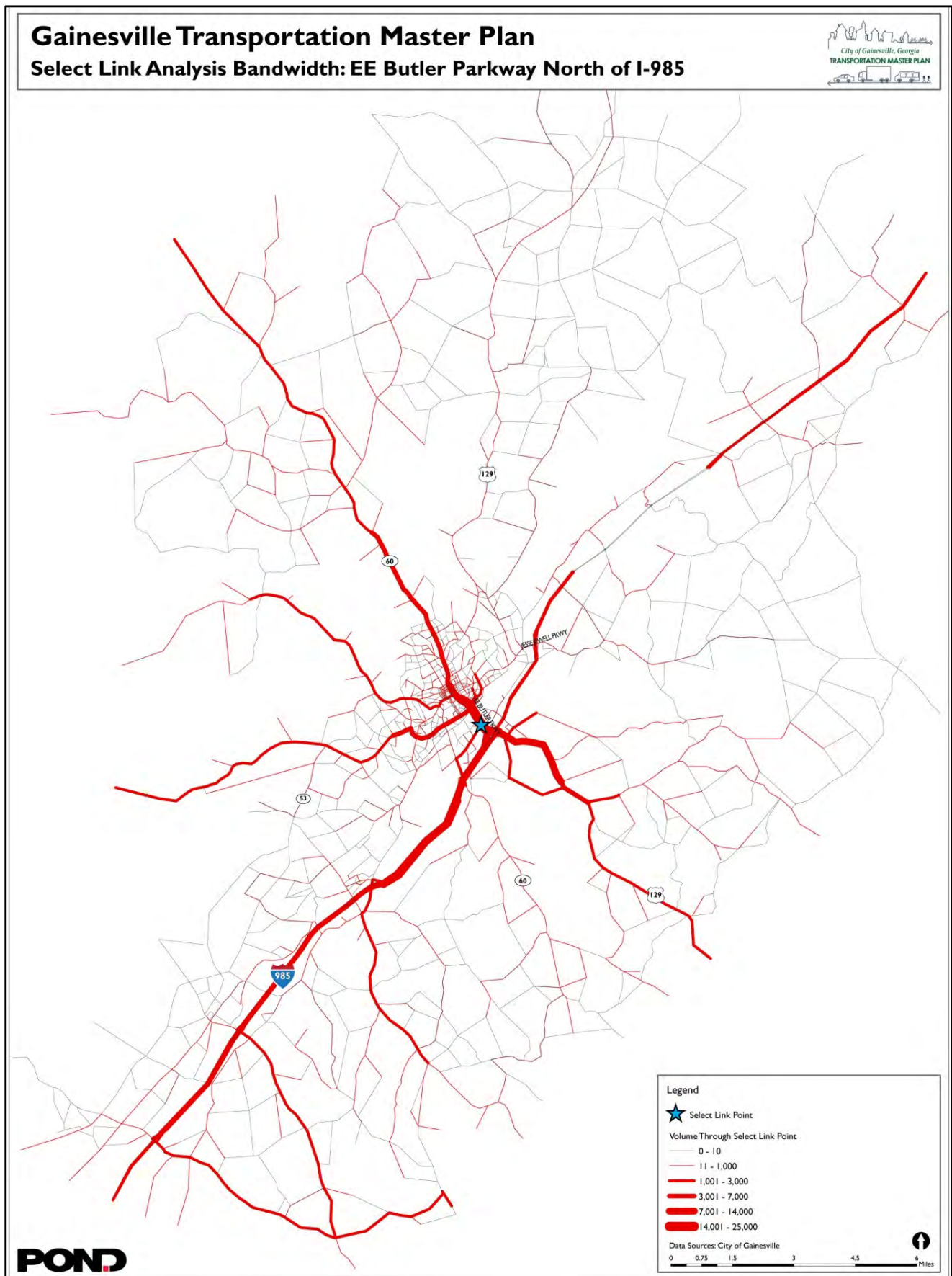




Figure 5-5: Martin Luther King Jr. Boulevard Select Link Analysis

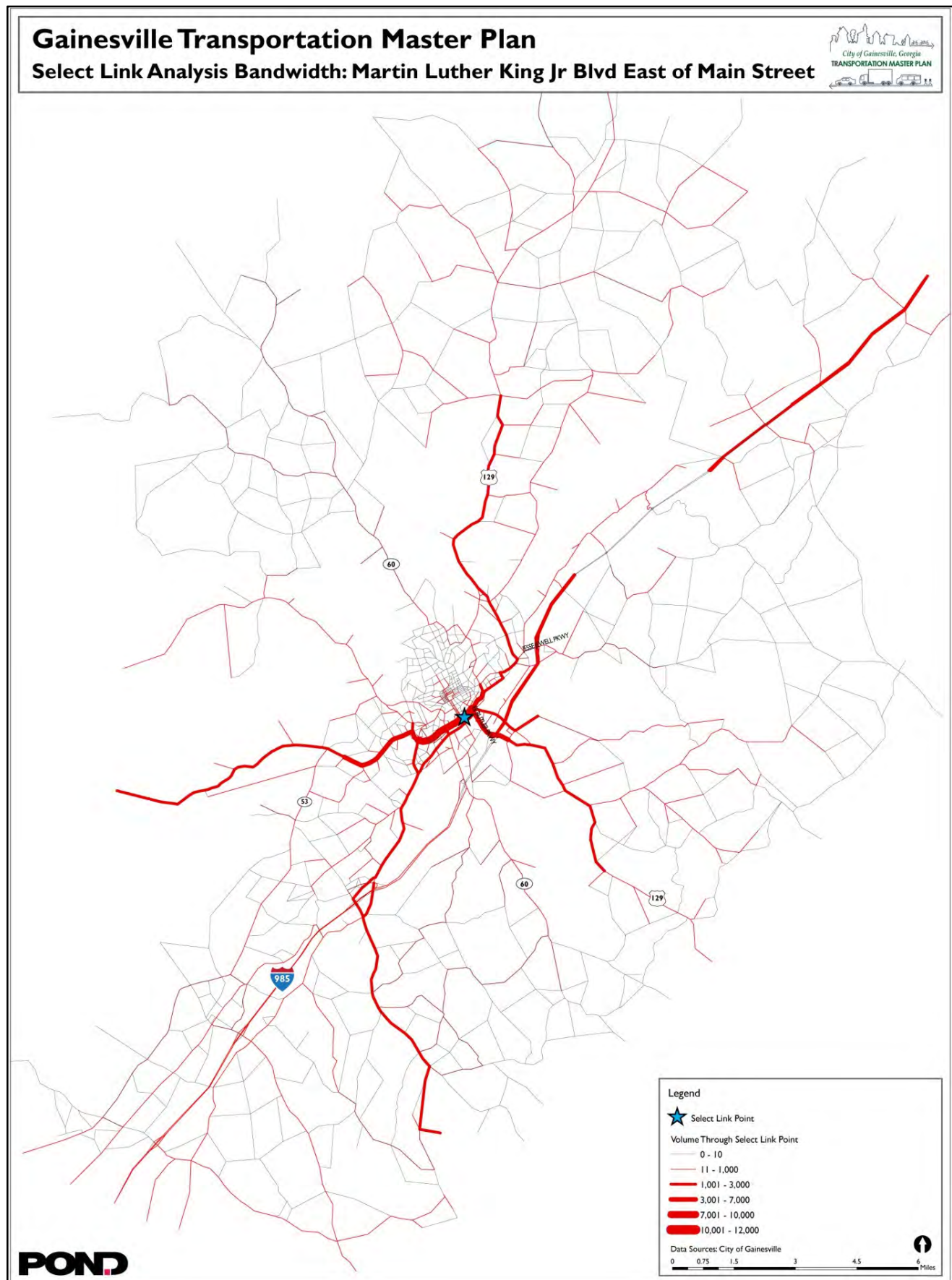
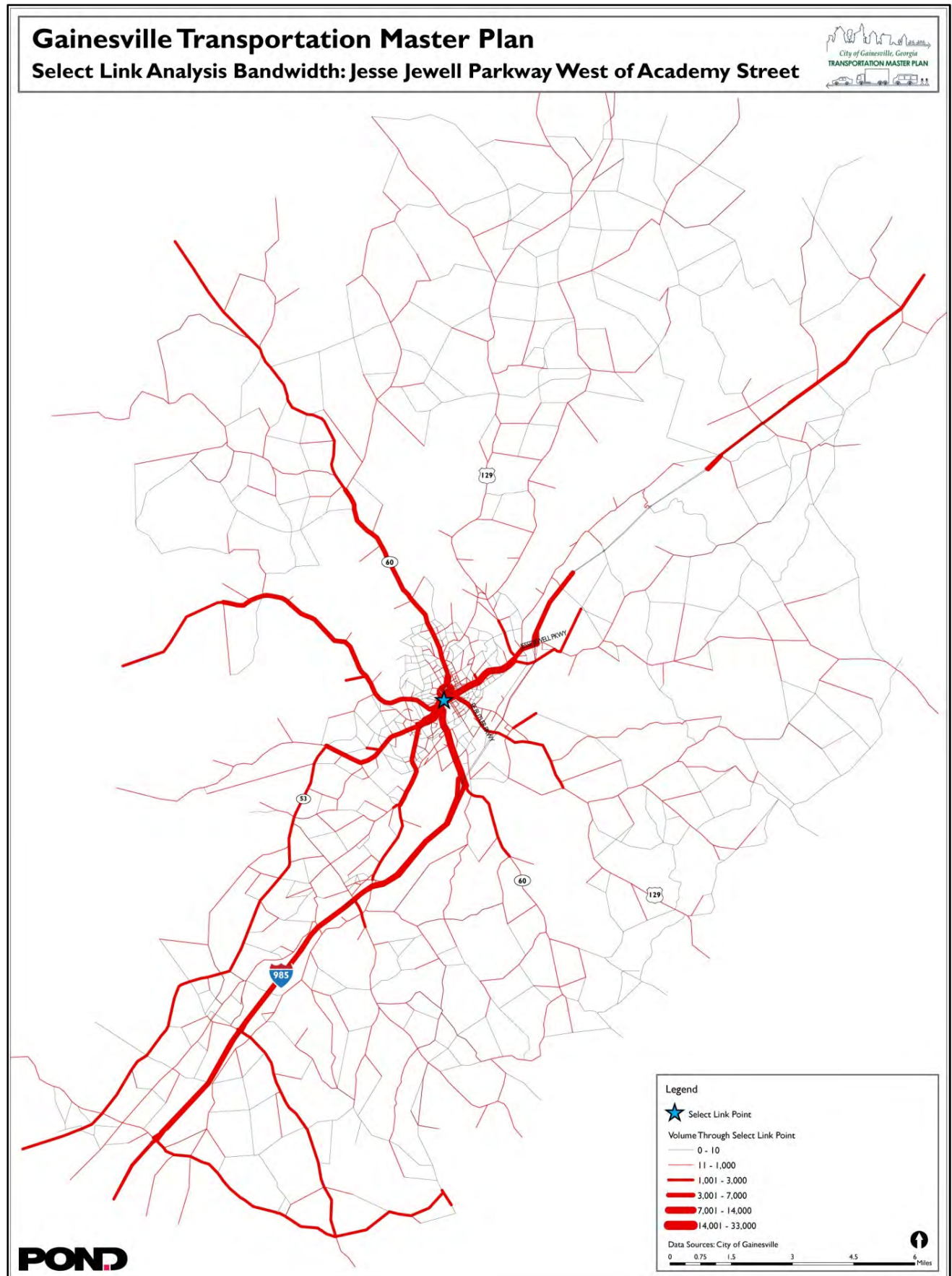




Figure 5-6: Jesse Jewell Parkway Select Link Analysis

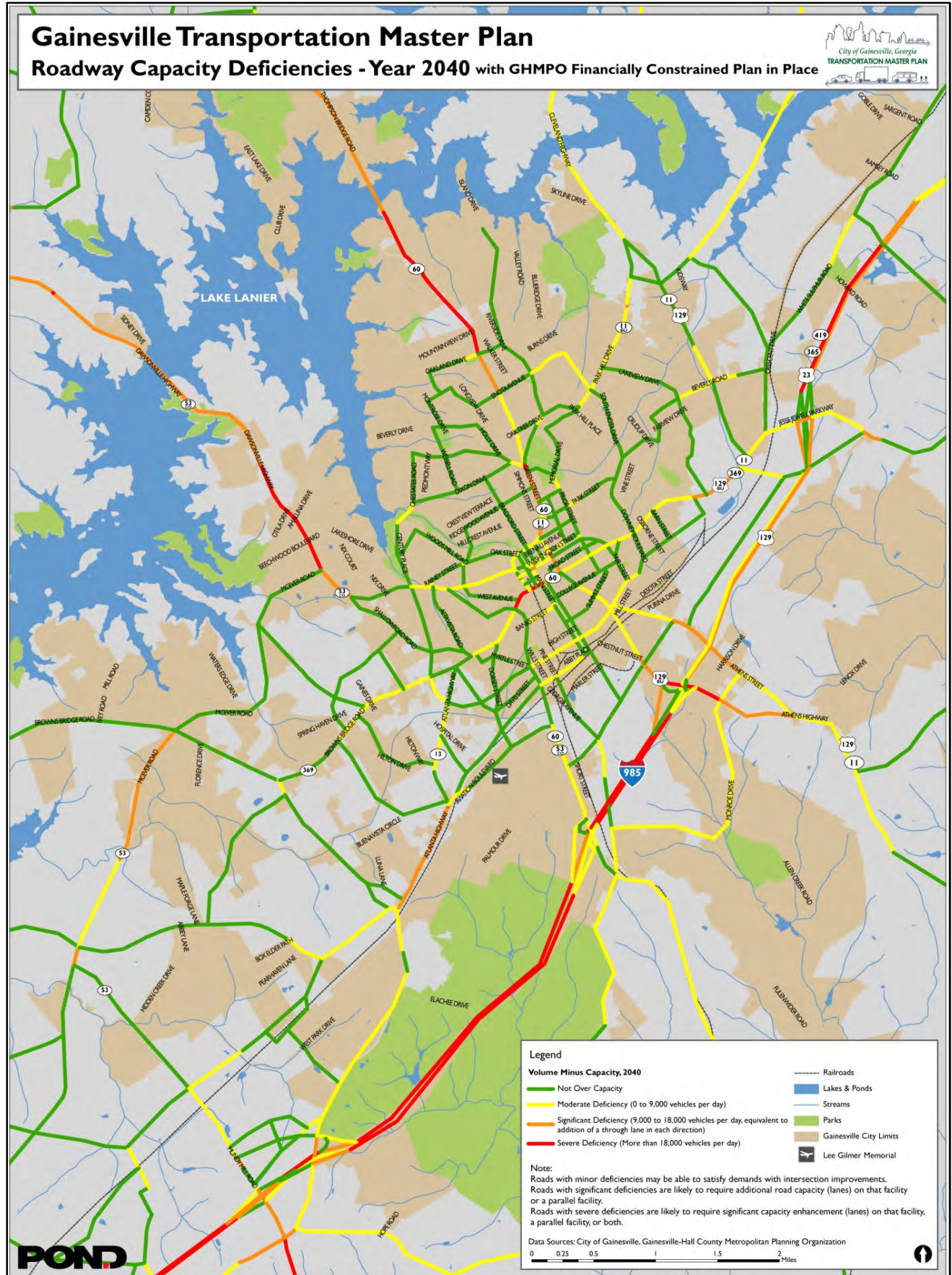




City of Gainesville Transportation Master Plan Plan Documentation



Figure 5-7: 2040 Travel Demand Model Roadway Capacity Deficiencies





City of Gainesville Transportation Master Plan Plan Documentation



Figure 5-8: Congested Roadways and Intersections





The existing traffic congestion mitigation needs and the projected future LOS from the GHMPO MTP travel demand model were used to identify basic needs for enhanced roadway connectivity. This is shown in Figure 5-9. There are three primary areas where additional roadway connectivity is needed. These areas that need better connectivity are:

- Thompson Bridge Road area to/from the Dawsonville Highway
- Thompson Bridge Road area to/from the Jesse Jewell Parkway at Limestone Parkway area
- Along and parallel to Jesse Jewell Parkway in and near downtown Gainesville.

The need to address through capacity was also identified on the following roadways:

- Green Street/EE Butler Pkwy corridor
- Jesse Jewell Parkway
- Dawsonville Hwy
- Atlanta Highway

The need for additional local circulation was identified at some areas within the City. These are areas where a lot of destinations, primarily commercial, government, or educational, are located in close proximity to each other. Additional local circulation can include new local roadways and interparcel connectivity. This local circulation can provide more direct access between parcels. This may allow some traffic to travel shorter distances and potentially avoid major roadways that are congested with high traffic volumes.

Freight traffic and “chicken trucks” were identified as problematic throughout the City. Trucks commonly travel from the surrounding area to industrial facilities in the City of Gainesville or to I-985 to continue to other destinations. Figure 5-10 shows the primary roadways that trucks use. Focus group participants identified an interest in keeping trucks out of the downtown area when possible. However, all state routes are considered truck routes, and a number of state routes connect the surrounding area to downtown Gainesville. A significant amount of truck traffic is also found on many non-state roadways near industrial development and at each of the City’s interchanges with I-985.

ROADWAY AND TRAFFIC NEEDS ALONG KEY CORRIDORS

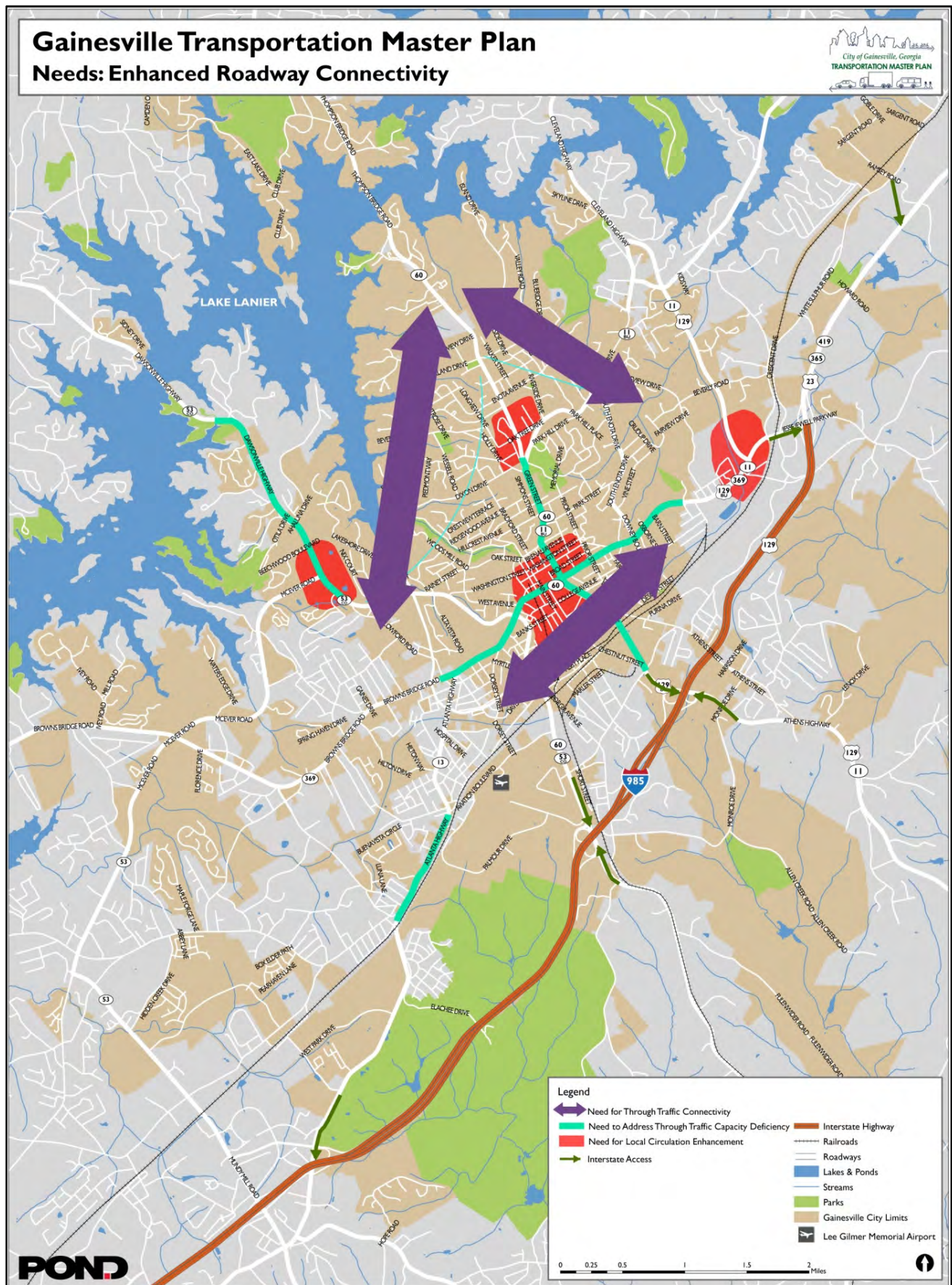
The Green Street and Jesse Jewell Parkway corridors are currently congested and are anticipated to receive significant additional traffic demand through the year 2040. In order to understand this traffic and develop short-term and long-term improvements, an analysis of existing and projected traffic volumes by roadway segment was conducted on three roadways in the study area. The roadways included in this analysis are Green Street, Jesse Jewell Parkway, and MLK Jr. Boulevard.



City of Gainesville Transportation Master Plan Plan Documentation



Figure 5-9: Roadway Connectivity Needs

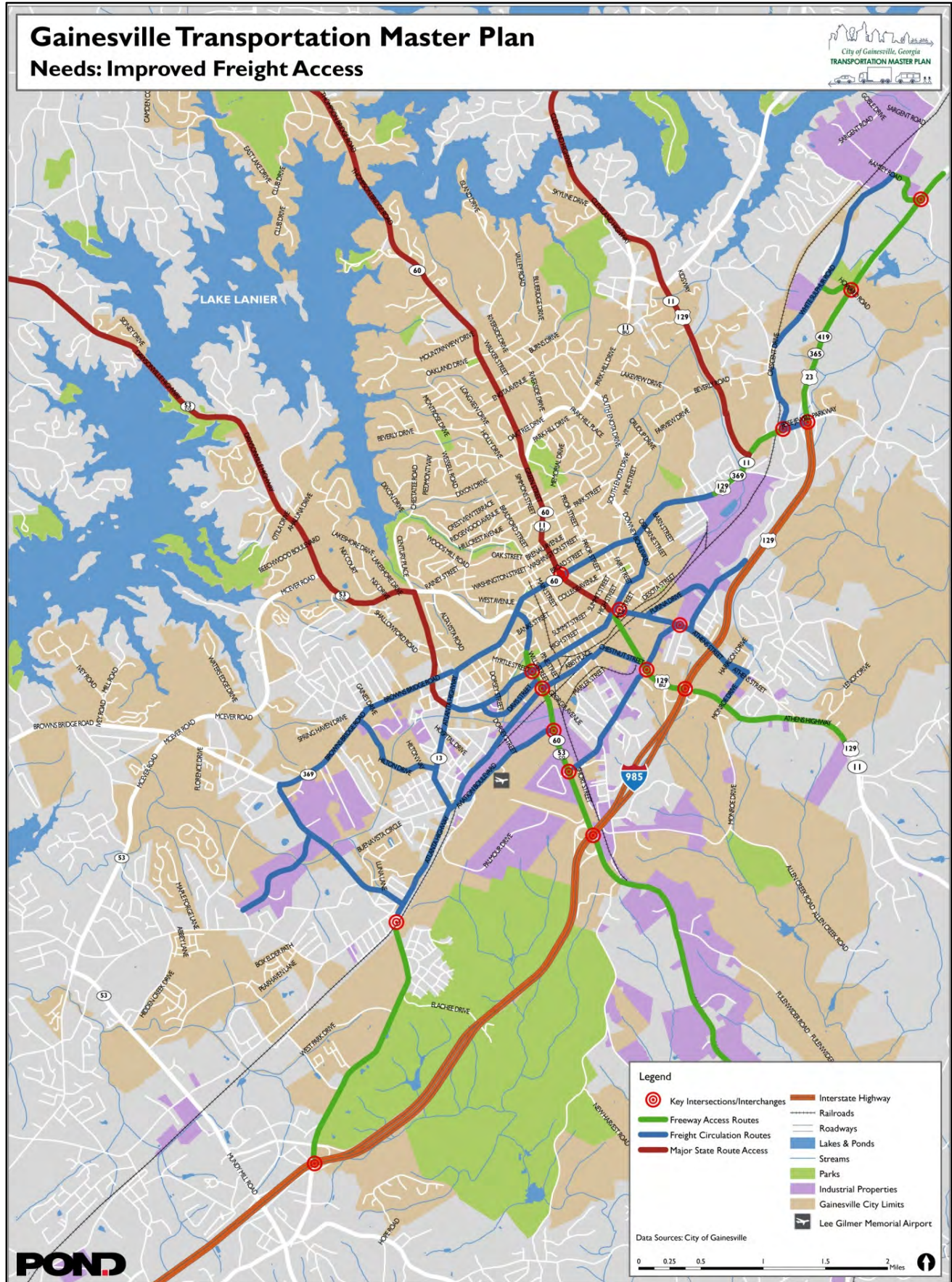




City of Gainesville Transportation Master Plan Plan Documentation



Figure 5-10: Freight Traffic Needs





Green Street Traffic Volume Evaluation

The Green Street corridor from Academy Street to Riverside Drive was identified through public input and data analysis as having significant traffic congestion problems. Green Street traffic congestion is typically worse during the PM peak hour and afternoon than during the AM peak hour. The signalized intersections along the corridor operate relatively well during the peak hours. The primary exception to this is the southbound approach to the Green Street at Academy Street intersection during the AM peak hour. Heavy traffic volumes are present for both the through movement and the right-turn movement on this approach, but there is no southbound right-turn lane.

The primary cause for congestion along Green Street, particularly during the PM peak hour, is left-turn movements from Green Street onto side streets or into driveways. This is a significant issue since there is no left-turn lane along this segment of the corridor. During the PM peak hour, the left-through lane, particularly for northbound traffic, operates as a de-facto left-turn lane. This means that one vehicle will stop to make a left-turn and block traffic behind it. Many drivers are accustomed to this and will choose to drive in the right-through lane to avoid the delay caused by stopped left-turn vehicles. This creates additional congestion in the right-through lane. Some vehicles do get stopped in a queue in the left-through lane caused by left-turn traffic. Some of these vehicles will attempt to change into the right-through lane to avoid the delay. Changing lanes can create additional delay in the right-through lane by causing other traffic in that lane to slow. This movement may also decrease safety along the corridor.

Since the traffic congestion on Green Street is caused by overall volume and left-turn movements along the corridor rather than at the intersections, a roadway segment analysis was conducted. Peak hour, peak direction traffic volumes for Green Street in 2013 were provided by the City of Gainesville. The GHMPO MTP travel demand model was used to identify 2040 traffic volumes. The model was also used to develop a growth rate for the corridor, which was then used to develop 2025 traffic volumes.

The *Quality/Level of Service Handbook, State of Florida Department of Transportation*, provides methodology for analyzing roadway segments. The methodology in this handbook is based on Highway Capacity Manual methodology. This analysis considers a roadway's characteristics and can be done using daily or peak hour traffic volumes. This methodology was used to conduct a peak hour, peak directional analysis for the Green Street corridor for the AM, midday, and PM peak hours. The existing traffic volumes for the year 2013 and the projected traffic volumes for the years 2025 and 2040 were compared to the LOS peak hour, peak directional volume capacity from the handbook. Table 5-2 shows the results of the analysis.

As the table shows, traffic is heavy in the peak direction during all three time periods in 2013. The northbound movement during the PM peak hour is operating with a traffic demand greater than the capacity at LOS D. This means this approach has a failing LOS with significant delay.



By the year 2025, peak direction volumes are exceeding the LOS D capacity during all three peak periods. However, the volumes show that traffic congestion would likely be heaviest during the PM peak hour. The traffic volumes significantly exceed LOS D capacity during the 2040 peak hours. Again, traffic congestion would likely be heaviest during the PM peak hour.

Table 5-2

Green Street Roadway Segment Analysis	Peak Hour and Peak Direction		
	AM	Midday	PM
	Southbound	Northbound	Northbound
Peak Hour Directional Traffic Capacity at LOS D: 1,284			
2013 Existing Hourly Volume	1,073	1,125	1,452
Volume (Over) Under LOS D Capacity	209	158	(170)
2025 Projected Hourly Volume	1,316	1,379	1,781
Volume (Over) Under LOS D Capacity	(34)	(97)	(498)
2040 Projected Hourly Volume	1,698	1,779	2,297
Volume (Over) Under LOS D Capacity	(416)	(497)	(1,015)

This analysis shows a need for a short-term improvement to improve operations along Green Street today. However, with the growth projected along the corridor, a more significant project providing additional north-south traffic capacity will be needed. New roadway connectivity in the Green Street area may also help address the congestion levels by removing some traffic from the corridor.

Jesse Jewell Parkway and MLK Jr. Boulevard Needs Assessment

The Jesse Jewell Parkway currently has heavy traffic congestion. This is due to heavy traffic volumes along Jesse Jewell Parkway as well as a number of congested intersections with other major roadways. The intersection of Jesse Jewell Pkwy at EE Butler Pkwy and the intersection of Jesse Jewell Pkwy at John Morrow Pkwy/Queen City are particularly congested. Traffic volumes are projected to grow in the future, and traffic congestion will also grow.

The same methodology used for Green Street was used to develop year 2025 and 2040 traffic volumes and conduct an analysis. However, daily traffic volumes were analyzed on Jesse Jewel Parkway rather than peak hour directional traffic volumes. This analysis was conducted on three segments of the corridor. Table 5-3 shows the results of the analysis.

As the table shows, Jesse Jewell Pkwy is currently over capacity for LOS D along two of the three segments. By the year 2025, all three segments are projected to be over capacity. Traffic volumes are projected to continue to grow through the year 2040, resulting in very heavy delay along the corridor.

Widening Jesse Jewell Parkway to provide additional traffic capacity would have significant impacts. Right-of-way (ROW) would need to be purchased from a number of properties that already have dense development. The pedestrian bridge downtown might also be impacted by a roadway expansion. Additionally, a 6-lane roadway in downtown Gainesville would detract from the walkability of the area



and would concentrate through vehicles in the heart of downtown. Therefore, examination of parallel roads to provide east-west connectivity is important.

Table 5-3

Jesse Jewell Pkwy Corridor Analysis	Jesse Jewel Pkwy Segments		
Annual Average Daily Traffic Capacity at LOS D: 28,900	West of Academy St	West of EE Butler Pkwy	East of EE Butler Pkwy
2013 Existing Daily Volume	37,240	35,620	26,250
Volume (Over) Under LOS D Capacity	(8,340)	(6,720)	2,650
2025 Projected Daily Volume	46,110	44,104	32,502
Volume (Over) Under LOS D Capacity	(17,210)	(15,204)	(3,602)
2040 Projected Daily Volume	66,000	56,280	38,000
Volume (Over) Under LOS D Capacity	(37,100)	(27,380)	(9,100)

MLK Jr. Boulevard is a parallel roadway located near Jesse Jewell Parkway. It is congested at its intersection with EE Butler Parkway. However, the roadway overall has relatively low traffic volumes and little congestion. If congestion is reduced at the intersection of MLK Jr. Boulevard at EE Butler Parkway, then MLK Jr. Boulevard could become a viable alternative to Jesse Jewell Parkway for east-west travel. An analysis of daily traffic volumes along MLK Jr. Boulevard was conducted, using the same methodology as the analysis for Jesse Jewell Parkway. Table 5-4 shows the results of the analysis.

Table 5-4

MLK Jr. Blvd/Downey Blvd Corridor Analysis	MLK Jr. Blvd Segments			Downey Blvd
	East of Queen City Pkwy	West of EE Butler Pkwy	East of EE Butler Pkwy	South of Jesse Jewel Pkwy
Annual Average Daily Traffic Capacity at LOS D:	14,600	14,600	15,400	32,700
2013 Existing Daily Volume	4,900	5,360	10,170	7,950
Volume (Over) Under LOS D Capacity	9,700	9,240	5,230	24,750
2025 Projected Daily Volume	7,566	8,277	11,614	9,079
Volume (Over) Under LOS D Capacity	7,034	6,323	3,786	23,621
2040 Projected Daily Volume	13,270	14,000	13,710	9,160
Volume (Over) Under LOS D Capacity	1,330	600	1,690	23,540

The table shows that MLK Jr. Boulevard currently has excess capacity along all of the analyzed segments. As the table shows, all segments of the corridor are projected to continue to have excess capacity through the year 2040.



MLK Jr. Boulevard becomes Downey Boulevard approximately one-half mile east of EE Butler Parkway. Downey Boulevard is a 4-lane roadway with a median. The segment of Downey Boulevard from MLK Jr. Boulevard to Jesse Jewell Parkway was included in this daily volume analysis for comparison. The analysis of this segment of Downey Boulevard shows how much capacity is projected to be available on a 4-lane roadway with a median along this corridor. Similar available capacity would be present for a 4-lane divided road along MLK Boulevard between Queen City Parkway and EE Butler Parkway (20,000 to 25,000 vehicles per day). This east-west capacity along a widened MLK Boulevard could be used to offset capacity deficiencies along Jesse Jewell Parkway (27,000 vehicles per day in the year 2040 as shown in Table 5-3).

TRAFFIC SIGNAL SYSTEM NEEDS ASSESSMENT

Efficient traffic movement along urban and suburban corridors requires coordination of traffic signals to allow drivers to move through a multiple intersections without stopping. Figure 5-11 shows the location of traffic signals in the City, the types of signal systems in place, and other traffic signal information. The City maintains most traffic signal within the City, while GDOT maintains some traffic signals near I-985. In order to maximize the use of existing roadway capacity along congested corridors, the traffic signal systems must operate efficiently, so that as many lanes are used at one time as possible at critical intersections and stops are minimized for traffic traveling along the road.

BASIC OPERATION OF TRAFFIC SIGNAL SYSTEMS

Traffic signals operate in groups, referred to as signal systems. The signals within a system operate on a common cycle length. This is the amount of time from the start of green on the main road to serve the main road through movements, side road left-turn movements, side road through movements, and main road left-turn movements to return to the main road green. Cycle lengths commonly used during peak travel period range from two to three minutes. The start of green for each signal in the signal system is coordinated with the others to create a wave of green lights for moving large groups of traffic.

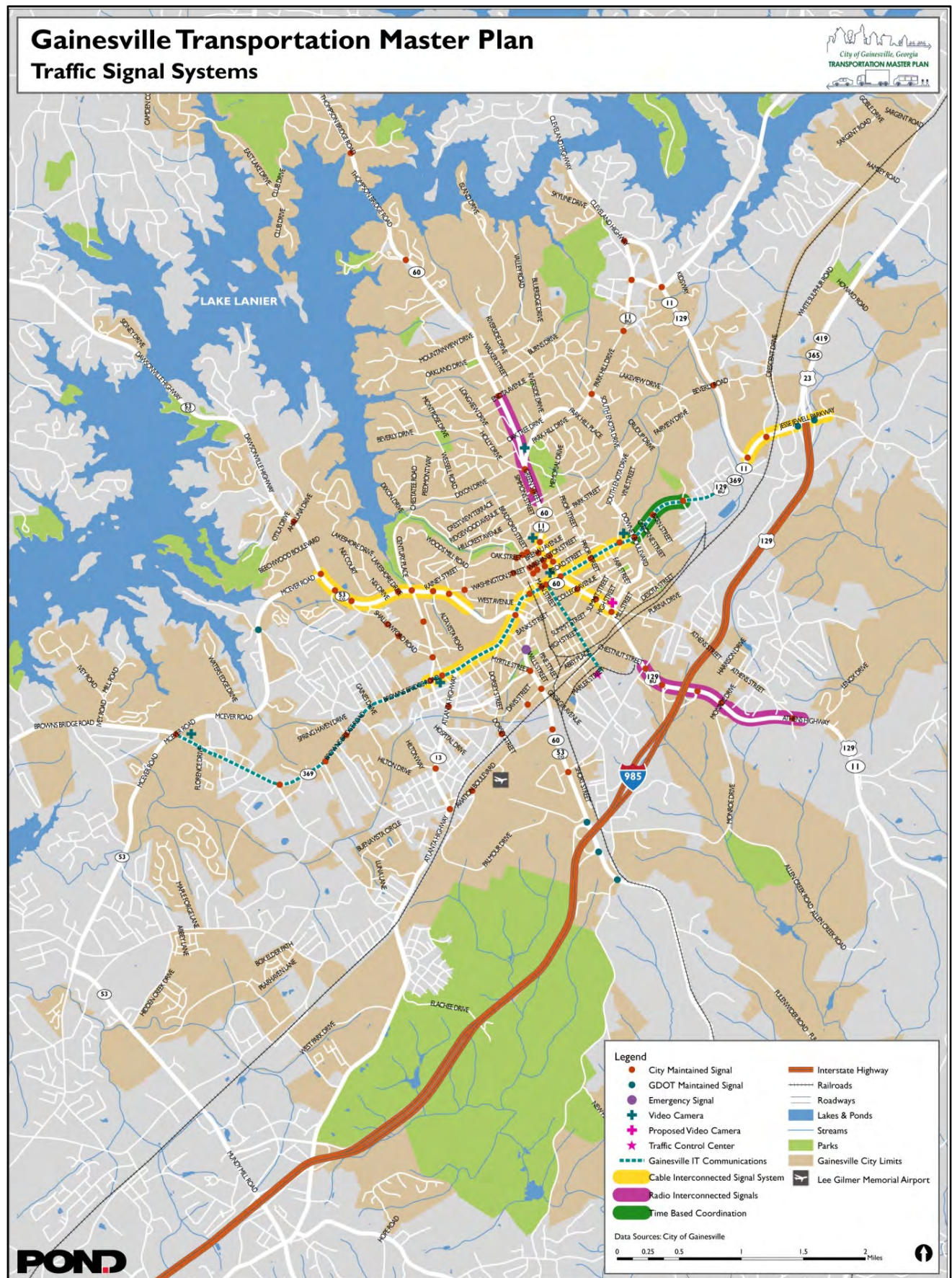
In areas where traffic flows primarily in one direction, coordination of traffic signals is relatively easy. The coordination of green lights occurs for the direction of heavy traffic, while the other direction may experience more stops. This directional traffic flow occurs along many of Gainesville's signal systems during the morning rush hour. During the afternoon and evening hours, commuter trips are combined with travel for many other purposes. As a result, Gainesville experiences heavy traffic flow in both directions along many arterials, such as Jesse Jewell Parkway. This requires the traffic signals to be coordinated in both travel directions, complicating the approach to signal coordination and resulting in additional stops for both travel directions. As Gainesville continues to grow, the traffic patterns during the peak travel hours will have even less directional bias, requiring complex and variable traffic control strategies throughout the day.



City of Gainesville Transportation Master Plan Plan Documentation



Figure 5-11: Traffic Signal Locations and Traffic Signal Systems





SUPPORTING INFRASTRUCTURE FOR TRAFFIC SIGNAL SYSTEMS

Drivers primarily see the traffic and pedestrian signals as they travel on the roadway network. However, significant supporting infrastructure is necessary to allow the signal system to function efficiently.

Signal Indications

Signal indications are placed to provide a clear view to the drivers with a consistent and easily understandable message. Pedestrian signal indications are important to facilitate pedestrian activity. Audible pedestrian signals and countdown displays are new features that greatly assist in providing an understandable message to the users.

Vehicle Detection

Providing detection of vehicles is important to efficient operation. It allows the signal system to tailor the amount of time given to each signal phase to match the number of vehicles waiting. The City currently uses inductive wire loops for detection of vehicles at intersections. Other systems, such as video and microwave detectors, are also available for special applications. In addition, pedestrian push buttons detect pedestrians and provide additional signal time to serve the walking phases.

Signal Controller

The input information from vehicle detectors and pedestrian push buttons is processed in a computer that controls the output power to the signal indications. The controller contains programs for the signal operation that vary by time of day and day of the week. These controllers also have the ability to adjust the signal program based on information regarding traffic volume and travel time, referred to as traffic responsive operation. This requires use of additional vehicle detection over that currently used in Gainesville.

Signal Interconnection

The information in the signal controller needs to be coordinated with the other signal controllers to allow simultaneous operation. A hard wire connection is needed to maintain a consistent time reference between intersections for coordinated operation. Where this is not provided, the clocks in the individual signal controllers must be reset regularly to maintain a synchronized operation. In addition to providing a common time reference, signal interconnection allows for communication with each signal controller in a system by accessing one portion of the system. This can be accomplished by connecting to the system via modem over phone lines or connecting a laptop computer to the signal cabinet manually in the field. Having a hard wired connection directly to the traffic control center provides the most reliable means of communication for transmitting data, as well as video monitoring.

Video Monitoring

A critical component of signal system operation along congested corridors is the ability to monitor traffic via video cameras. This allows the traffic engineer to view incidents, as well as recurring congestion and make appropriate changes to the signal system. Video monitoring allows the user to view many signals at once to define problems and identify solutions that are not apparent from the limited view afforded by visiting the intersection at ground level. The City currently has six video cameras and one proposed



camera location. This provides video coverage for key areas, but does not provide complete coverage of the signal systems that could increase the effectiveness of the signal operations. Along congested corridors, comprehensive video monitoring of the entire corridor is needed.

Travel Time Information

Another type of information that is helpful in tailoring traffic operational plans to traffic conditions is travel time information. Vehicle detectors can provide information on the volume and speed of traffic at a particular point along the road. Travel time data collection systems provide information on the travel time experienced from one end of the corridor to the other. These systems use devices that read the digital signature of blue tooth devices and track that signal as it passes other detectors. In so doing, the system provides accurate travel time information that can be used to adjust signal timing plans.

Signal System Control and Operation

Signal system control is a critical element to allow the traffic engineer to respond to traffic needs. In the current age of smart phones, it is easy to forget that individual electronic devices are not connected to each other or a central system unless we make it so. Just as a smart phone provides communication, email, and data to increase personal efficiency, the traffic engineer needs ready access to signal system information. The first step in providing access to signal system information is the interconnection of traffic signal and video cameras and the ability to bring that data to a central Traffic Control Center (TCC). The City's current TCC has communication to a few video cameras and a portion of the traffic signal controllers (approximately half). Expansion of this communications network to include all of the traffic signals is necessary for efficient system operation. A second aspect of signal system control and operation is the communications protocol for the interconnected devices. The current operation allows the traffic engineer to communicate directly with only a portion of the devices using a computer at the TCC or laptop. However, most devices today are made to be addressable using Internet Protocol (IP addressable). Modification to the signal controllers would be needed to allow use of this protocol. However, this would allow communication with many different individual devices which enhance remote trouble shooting, reducing the need for field service calls by the signal crew. This would also facilitate sharing of video feeds with other City agencies, such as public safety or sharing of video and traffic data with the public via website interface.

SUMMARY OF TRAFFIC SIGNAL SYSTEM NEEDS

The City of Gainesville provides effective signal system operations using the technology currently installed. The signal timing plans are well developed and have been refined regularly to maximize operations at the critical intersections and corridors. However, there are several areas that would need to be improved to bring the signal system to the current state of the practice regarding equipment and operations. Improving the signal system capabilities is important because the large growth planned in Gainesville and Hall County will result in increased levels of traffic congestion, even with implementation of the improvements indicated in this plan. The following is a summary of traffic signal system needs:

- **Signal Interconnection:** Expansion of interconnected signal systems to include key corridors first and then all traffic signals to allow remote monitoring and operation.



- **Video Monitoring:** Expansion of video monitoring to provide complete coverage first along congested corridors and then including all signalized corridors.
- **Signal Equipment and Connection to Traffic Control Center:** Providing signal equipment that uses IP addressing is important to facilitate remote monitoring and control of most devices. Connection of equipment to the traffic control center using high bandwidth communications is important to allow for monitoring of systems and real-time video. Installation of communications loops is desirable to allow communications to be maintained if a link is severed. In addition, connection to the TCC via two physically separated paths is also desirable.
- **Signal Timing and Control Strategies:** Regular updates to signal timing is necessary to maximize the efficiency of the congested corridors. Signal timing updates should consider traffic responsive signal control and use of travel time data for formulation of effective control strategies.

ALTERNATIVE MODE NEEDS

Personal vehicle is the primary travel mode in the City. However, there is also a need for additional pedestrian and bicycle facilities. These are primarily needed in the downtown/Brenau University area, near community facilities, along commercial corridors, and along transit routes.

COMMUNITY FACILITIES

Common destinations for people to walk or bike to are community facilities such as schools, government buildings, libraries, and post offices. Figure 5-12 shows the community facilities in the City of Gainesville along with a one quarter mile buffer around each location. The maximum walking distance that many people are willing to walk is approximately one quarter mile. However, people who do not own a car may be willing to walk greater distances to their destinations. Residential land use in the City is also shown on this figure, as most trips to community facilities will originate from people's homes.

As the figure shows, a significant amount of community facilities are located in and around the downtown area. Community facilities are spread out further from each other outside of the downtown area. Figure 5-13 is a map with the same content as Figure 5-12 but focused on downtown and the surrounding area. As the figure shows, a number of one-quarter mile buffers overlap in and around the downtown area. Pedestrian and bike infrastructure in these areas can serve more community facility destinations than infrastructure further out.

COMMERCIAL DEVELOPMENT

Another common destination for people to walk or bike to are commercial developments. These include restaurants, retail, offices, and other places of employment. Figure 5-14 shows commercial zoning districts within the City along with single family and multifamily zoning districts. The purple lines show the segments in the roadway network located within one-quarter mile of a parcel with commercial zoning. Parcels with residential zoning that are adjacent to purple lines are considered within a reasonable walking distance.



City of Gainesville Transportation Master Plan Plan Documentation



Figure 5-12: Walking Distance to Gainesville Community Facilities

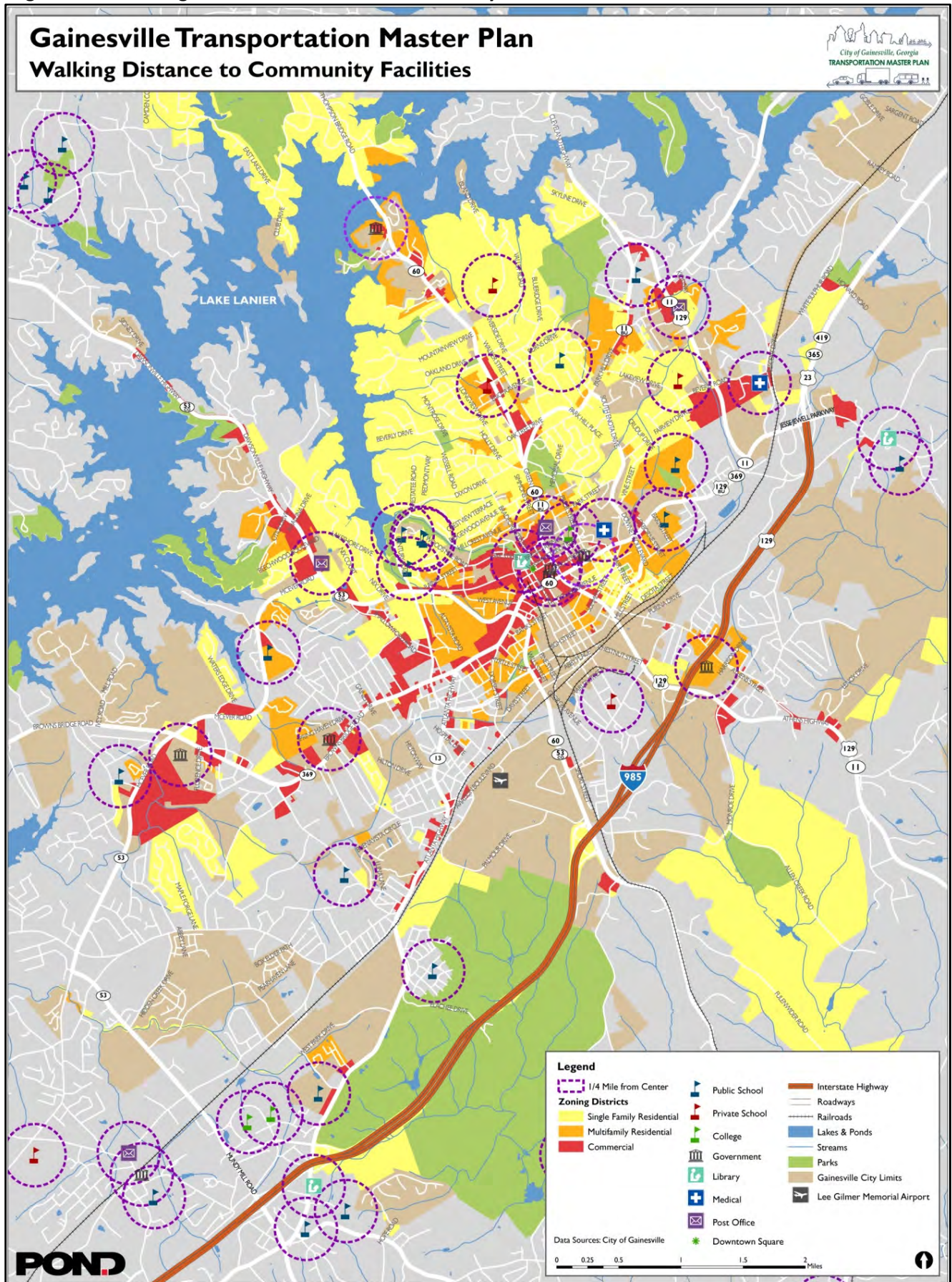
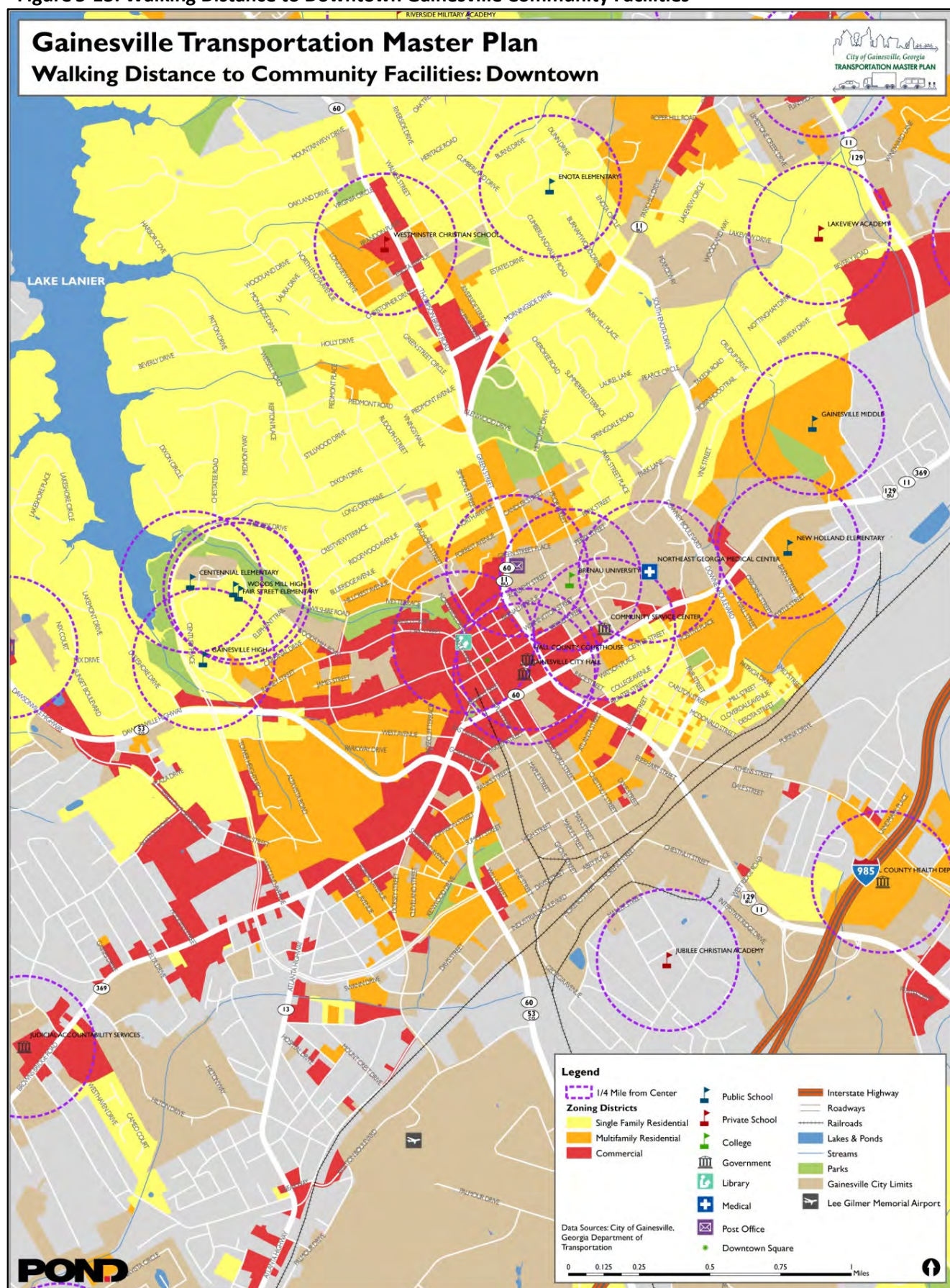


Figure 5-13: Walking Distance to Downtown Gainesville Community Facilities

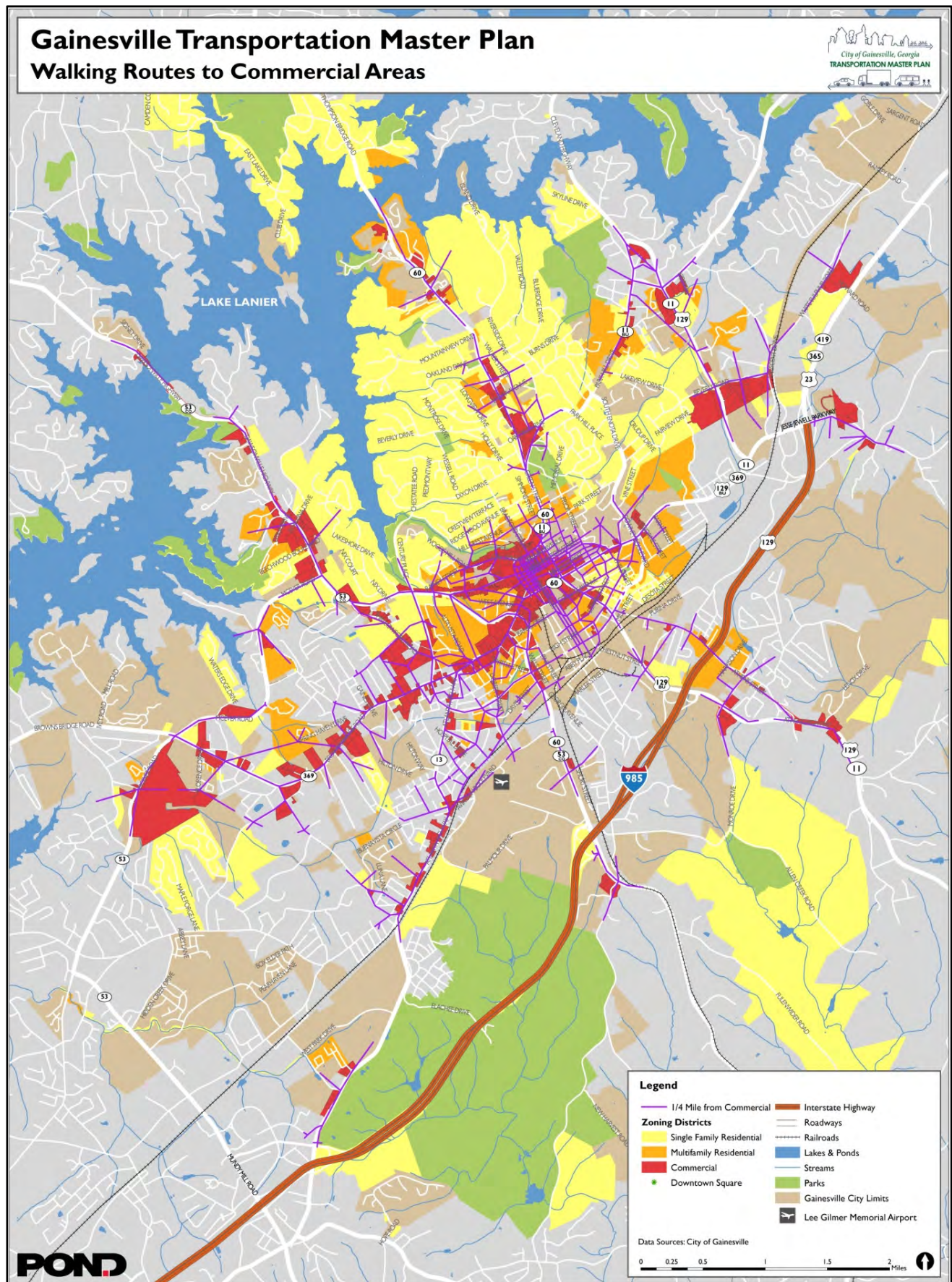




City of Gainesville Transportation Master Plan Plan Documentation



Figure 5-14: Walking Routes to Commercial Areas





As the figure shows, commercial zoning districts are located primarily in and around downtown, as well as along major roadway corridors such as Thompson Bridge Road, Dawsonville Highway, and Atlanta Highway. Areas with residential zoning that are within $\frac{1}{4}$ mile of these commercial districts are located primarily in and near downtown. Much of the single-family residential zoning in the City is located in the traditional neighborhoods north of downtown. Most of the residential parcels in these areas are located more than one-quarter mile from commercial parcels. Therefore, frequent walking trips from these areas to commercial parcels are not likely.

TRANSIT

Walking and/or biking are a part of most trips that include transit as a mode. Figure 5-15 shows Red Rabbit bus routes in the City and in Hall County. A buffer of one-quarter mile is shown around these transit routes. Pedestrian infrastructure is a priority in these areas as it helps to provide access to each of these transit routes.

PEDESTRIAN NEEDS

These figures show how pedestrian demand is driven by the location of community facilities, commercial developments, and transit routes. The figures show that pedestrian demand is greatest in and around downtown Gainesville. Pedestrian demand is also high along a number of major roadways including Thompson Bridge Road, EE Butler Parkway, Jesse Jewel Parkway, and John Morrow Parkway.

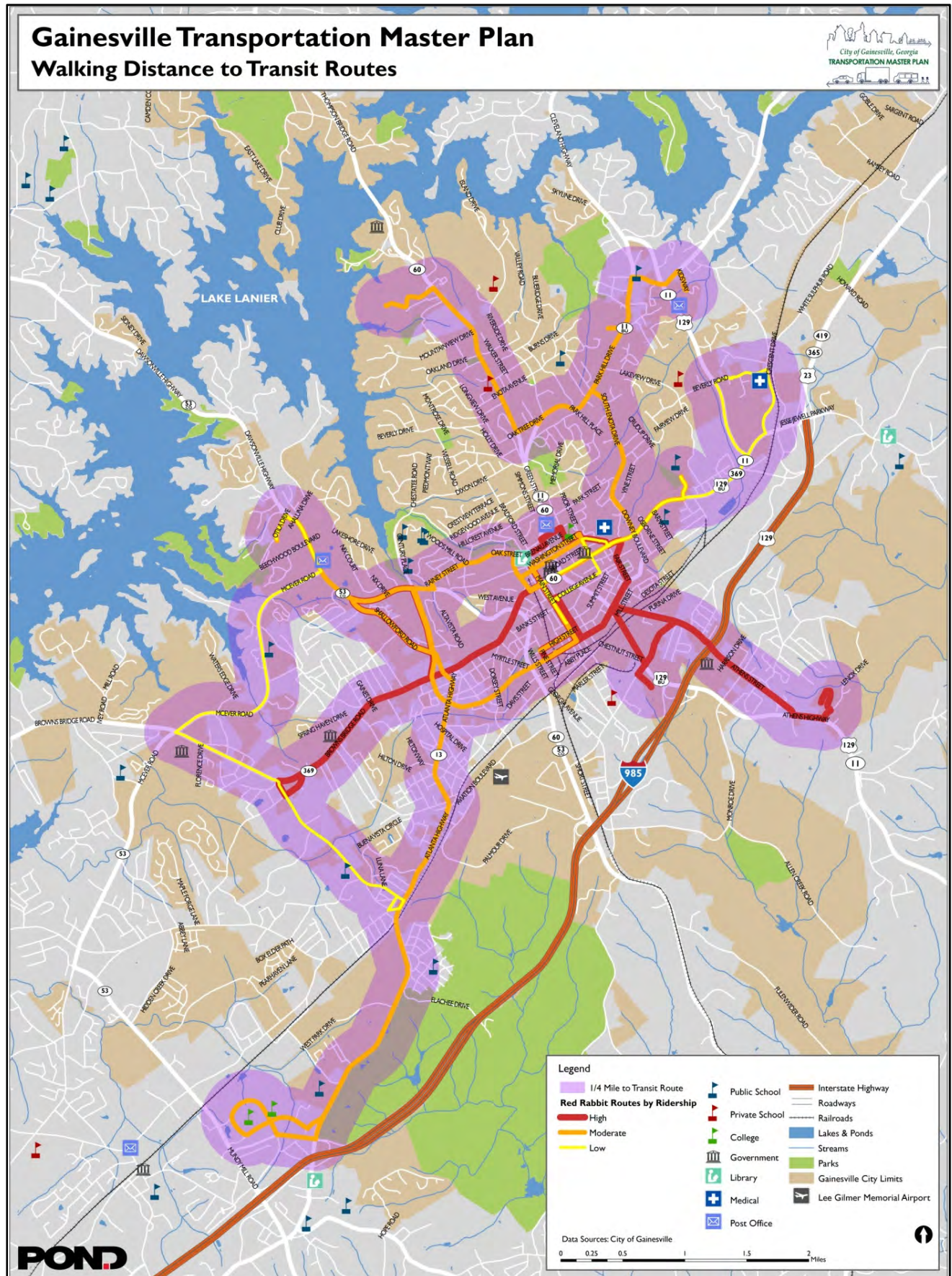
Pedestrian demand is generally less near I-985 than in the core of the City. Pedestrian demand along major roads drops as the roads get further from the City – Dawsonville Highway generally has less pedestrian demand than John Morrow Parkway, and Browns Bridge Road Highway generally has less pedestrian demand than Jesse Jewell Parkway.



City of Gainesville Transportation Master Plan Plan Documentation



Figure 5-15: Walking Distance to Red Rabbit Bus Routes





PUBLIC INPUT

Input on the transportation needs of the City came from focus group meetings, a public meeting, and an online survey.

FOCUS GROUP

Ten general areas of need were initially presented to the focus group to begin discussion. These include the following:

- Build alternative capacity through or around downtown Gainesville
- Provide pedestrian and bicycle connections to neighborhoods
- Increase use of alternative travel modes (transit, walking, and bicycling)
- Improve congested intersections and corridors
- Provide signal systems for active management of traffic
- Support comprehensive plan redevelopment areas
- Reduce automobile trips through travel demand management
- Improve wayfinding to and within Gainesville
- Connect alternative routes for local travel
- Enhance freight movement capabilities to interstates and through city

Specific feedback from the focus group is in the appendix of this document.

PUBLIC MEETING

A public meeting was held on May 8, 2013. Community members were asked to indicate the level of importance of various transportation needs, with 1 being the least important and 5 being the most important. Table 5-5 shows the results.

Table 5-5

Transportation Need	Total Score
Build Alternative Capacity Through or Around Downtown Gainesville	25
Provide Pedestrian and Bicycle Connections to Neighborhoods	19
Increase Use of Alternative Travel Modes (transit, walking, and bicycling)	18
Improve Congested Intersections and Corridors	16
Provide Signal Systems for Active Management of Traffic	16
Support Comprehensive Plan Redevelopment Areas	13
Reduce Automobile Trips Through Travel Demand Management	12
Improve Wayfinding to and Within Gainesville	10
Connect Alternative Routes for Local Travel	6
Enhance Freight Movement Capabilities to Interstates and Through City	4

The public was asked to share their comments regarding transportation needs and potential solutions in Gainesville, and the results are provided in the appendix of this document.



NEEDS ASSESSMENT SURVEY

Survey 1, which focused on transportation needs in the City, was available online as well as at public meeting 1. The survey consisted of 12 questions which covered basic data about respondents (i.e. where they live and work) as well as their opinions about the City's transportation needs. A total of 310 people completed the survey online. The following is a summary of some selected questions about the City's transportation needs and the responses that were given. Full details for all of the survey questions and answers are in the appendix of this document.

Question 5

The level of traffic congestion that respondents experience at specific locations was addressed in Question 5. The question and responses are summarized in Table 5-6.

Table 5-6

Question: Use the scale below to rate the traffic congestion you experience at each of the following locations during morning or afternoon rush hours.					
Answer Options:	1 – Little or no congestion	2 – Moderate congestion	3 – Somewhat heavy congestion	4 – Heavy congestion	5 – Very heavy congestion
Downtown – EE Butler Pkwy/Athens Hwy	6.3%	11.2%	25.3%	34.6%	22.7%
Downtown – Jesse Jewel Pkwy	4.6%	6.9%	22.9%	34.4%	31.3%
Green Street between Academy St. (downtown area) and Riverside Dr. (Civic Center area)	4.5%	10.6%	20.0%	31.7%	33.2%
Athens Hwy/US Hwy 129 at MLK Jr. Blvd	8.4%	22.9%	33.5%	26.4%	8.8%
Athens Hwy/US Hwy 129 at I-985	11.7%	23.9%	27.9%	26.6%	9.9%
Queen City Pkwy/SR 60 at I-985	7.8%	22.4%	32.8%	24.6%	12.5%
Dawsonville Hwy/SR 53 at McEver Rd	5.4%	13.8%	27.2%	31.4%	22.2%

As the table shows, nearly two-thirds of respondents said that they experience heavy or very heavy traffic congestion on Green Street between Academy St. and Riverside Dr. and along Jesse Jewell Parkway in the downtown area. The majority of respondents also said that they experience heavy or very heavy traffic congestion on EE Butler Pkwy in the downtown area and near the intersection of Dawsonville Hwy/SR 53 at McEver Rd. Less traffic congestion was identified by respondents at the other locations that were part of the question, which included:

- Athens Hwy/US Hwy 129 at MLK Jr. Blvd
- Athens Hwy/US Hwy 129 at I-985
- Queen City Pkwy/SR 60 at I-985

Question 7

Question 7 was an open ended question to allow respondents to identify the specific traffic congestion problems that they experience and how they would address that congestion. Question 7 was "What traffic congestion problems impact you the most? What are your recommendations for reducing traffic congestion at these locations?"



A variety of responses were given related to traffic congestion and potential solutions. However, the most frequent responses to question 7 were related to Green Street. Some of the specific responses related to Green Street include the following:

- Bottlenecks and congestion are major issues
- Left turns onto Green Street during PM commute should be prohibited
- Widen Green Street (no existing shoulder)
- Relocate the Post Office – inconvenient and unsafe to access because of traffic on Green Street; consider access from the rear
- Red light at Post Office
- Create a simple way for people to turn around at either end of Green Street (maybe a roundabout) which would keep businesses happier than if left turns were banned
- Drainage issues when heavy rains occur
- Large trucks on Green Street an issue
- Continue the streetscape further along Green Street
- Consider a bypass over or under Green Street
- Area of historic importance - do not widen road to ruin historic aspect

Comments related to Jesse Jewell Parkway were also very common. Some of the specific answers include the following:

- Jesse Jewell and EE Butler intersection
- Jesse Jewell between Queen City and EE Butler. Jesse Jewell Parkway around the mall has awkward intersections along with the area around Lowes and Wal-Mart.
- Jesse Jewell at Queen City
- Better timing of lights on Jesse Jewell
- Congestion at intersection of Jesse Jewell and Limestone Parkway going north in the evening
- Jesse Jewell between Queen City and the NGMC

Other comment responses were not as common as Green Street and Jesse Jewell Parkway. Some of these responses include the following:

- Build a road/bypass around the city of Gainesville instead of through it
- No new lanes or roads, just better signal timing/synchronization to improve flow of traffic
 - Backups at major intersections/through multiple light cycles
- Atlanta Hwy at Memorial Park needs a left turn lane and arrow
- Change traditional intersections to roundabouts
- School buses loading/unloading on main thoroughfares
- Bike lanes and sidewalks are needed all over
- Public Transportation
 - Bus system that stretches throughout Gainesville
 - Rail that connects to MARTA/transit connection to Atlanta
 - Do not like Red Rabbit



Question 8

Question 8 asked respondents where they would like to walk or bike to. The question and responses are summarized in Table 5-7.

Table 5-7

What destinations are you interested in walking or biking to (select all that apply)?		
Answer Options:	Response Percent	Response Count
Downtown Gainesville/ Brenau University	65.7%	140
Employment Centers	12.7%	27
Shopping/Dining	49.8%	106
Community Facilities (schools, libraries, etc.)	36.2%	77
Parks	69.0%	147
Other (please specify)		49

Some of the specific response to the “Other” option included the following:

- Neighborhoods
- Farmers Markets, Bakeries, Coffee Shops, Ice Cream Parlors (Lo Mejor de Michoacan on Atlanta Highway)
- Local elementary schools - need sidewalks on Cleveland Hwy. from the Enota Dr. intersection to Riverbend Elementary School (and eventually north to Longstreet Bridge)
- University of North Georgia Gainesville Campus/Lanier Technical College
- Lake Lanier, Clark's Bridge Park area & Olympic venue area
- None (due to safety concerns or places being too spread out to walk/bike to, prefer money to be spent on schools)
- Long distance greenways that connect Gainesville to surrounding cities
- Would love to have a nice center like the Gwinnett Environmental and Heritage Center downtown near Brenau, maybe where the old Green Street Pool is located

Question 11

Question 11 asked “What are the most important transportation issues that should be addressed in this plan? How can they be solved?” Some of the specific answers include the following:

- Jesse Jewell Parkway – Congestion at key intersections
- Green Street
 - Widen to relieve congestion
 - Restrict left turns
 - Unsynchronized traffic lights and signal patterns
- Green Street could benefit from traffic calming measures and a shoulder to improve the appearance/viability of downtown Gainesville as a safe and pedestrian-friendly community



- Build connector between Thompson Bridge Rd and Dawsonville Hwy and a connector from Thompson Bridge Rd to Rt 129 and 365
- Local congestion - need additional capacity or alternate routes
- The volume of traffic funneling through downtown – a bypass would be an alternative
- The timing of the lights limit smooth flow through the city
- Provide more convenient alternatives to automobiles
 - Bus & train service
 - Bike paths / bike lanes
 - Walking trails
 - More sidewalks, especially along highways
 - Integrate bike lanes and sidewalks on new construction and expansion
 - Coordinate with surrounding transportation systems to reach more places, including Downtown Atlanta and HJAIA
 - Promote park & ride or alternate work hours, especially for government and business employees who generate a lot of traffic for downtown and use parking
- Red Rabbit is not effective / waste of funding
- Buses stopping on major thoroughfare back up traffic
- Build roundabouts at major intersections.
- Consider truck restrictions through downtown

Question 12

Question 12 simply asked “Any additional comments?” Some responses repeated or were similar to responses to earlier questions. Green Street continued to be frequently identified as having traffic congestion problems. Some of the specific answers include the following:

- Green Street
 - Reduce Green Street to two lanes to make it safe for drivers, cyclists and pedestrians
 - Widen Green St to remove the bottleneck flow
 - Get rid of all left turns on Green Street
 - Move the Post Office
- Tractor trailers on Jesse Jewell are a problem
- Chicken trucks should have other routes than coming through downtown/Green Street
- Public transportation
 - Route from Gainesville to Atlanta during the weekdays
 - A direct commuter rail link between Gainesville and other places in metro Atlanta would be a huge economic boost
 - Cost for taxi service is expensive; convenient bus routes would be nice
 - Too many buses with no or few riders
- The lack of wide shoulders or bike lanes limit the places I'm willing to bike during rush hour.
- Very little of this survey is appropriate to retired people.



City of Gainesville Transportation Master Plan Plan Documentation



- Increase the length of the left turn lanes on 60 at the intersection of West Ridge Rd. They aren't long enough to accommodate the number of turning cars and it blocks 60 (mostly on the southbound side).
- Connect the greenway area by the municipal complex to the Wilshire park area (possibly via the new elevated bridge over Jesse Jewell Pkwy). To connect all of these wonderful features of Gainesville would draw new residents looking for more outdoor activity options (biking, walking, etc.).
- Consider overpasses.
- Plan not for today, but for a decade from now or farther.
- Land use and transportation planning must be coordinated. Major additions to hospitals, universities, govt., & retail should not be approved without concurrent additions to roadway capacity.



6. TRAVEL DEMAND MODEL ANALYSIS

As previously discussed, the GHMPO uses existing and projected population and employment data, as well as roadway and other transportation data, to analyze travel conditions in Hall County. This analysis is conducted using the GHMPO travel demand model. This model represents all of the trips that take place on major roadways and many minor roadways throughout the County.

The *Gainesville-Hall County 2040 Metropolitan Transportation Plan* (MTP) included model runs for the year 2040. The 2040 financially constrained model shows that even with implementation of the LRTP, significant traffic congestion is projected within the City of Gainesville.

The 2040 financially constrained model was used as a starting point for the *City of Gainesville Transportation Master Plan*. Changes were made to the model's roadway network to reflect some of the recommended projects from the master plan. The model was then run again to determine the impact the recommended projects are projected to have on the overall roadway network as well as to specific locations within the City.

PROJECTS ADDED TO MODEL

An extensive list of preliminary recommendations was created for the *City of Gainesville Transportation Master Plan*. These recommendations included a variety of different project types, including the following:

- Intersection operations
- Signal operations
- Roadway operations
- Roadway capacity
- New/extended roadways
- Signage
- Travel demand management
- Bike/pedestrian facilities

All of these projects are important for the City of Gainesville. Each project may contribute to reducing travel congestion in the City by either providing additional transportation capacity, removing bottlenecks, or reducing demand.

While each project may contribute to reducing travel congestion, many projects can't be included in the GHMPO travel demand model. The model focuses primarily on the roadway network, and does not consider specific intersection operations or alternative travel modes. Therefore, the projects that can be included in the analysis with the travel demand model are roadway operations, roadway capacity, and new/extended roadway projects. The projects that were added to the travel demand model are shown in Table 6-1.



City of Gainesville Transportation Master Plan Plan Documentation



Table 6-1: Projects Added to the Travel Demand Model

Project Number	Project Name	Type	Project Description
22	Community Way Extension/ Re-Alignment	New/Extended Roadway	Extend Community Way northeast to Limestone Pkwy and continue to White Sulphur Rd; Re-align the intersection of Jesse Jewell Pkwy at Community Way to the intersection of Jesse Jewell Pkwy at the Industrial Blvd extension (existing Branch St)
24	Industrial Blvd Extension	New/Extended Roadway	Extend Industrial Blvd north along the railroad tracks, under Athens Hwy, to the intersection of Jesse Jewell Pkwy at Branch Street
26	Thompson Bridge Rd - Dawsonville Hwy Connector	New/Extended Roadway	Construct a new bridge across Lake Lanier from Thompson Bridge Rd/SR 60 approximately 1 mile south of Thompson Bridge to Dawsonville Hwy near Ahaluna Dr. This connection includes new roadway segments and may also use segments of existing roadways, depending on the preferred route alternative.
27	Downey Blvd Extension and Interchange	New/Extended Roadway; New Interchange	Extend Downey Blvd east to I-985. Construct a new interchange at I-985 at the Downey Blvd extension.
28	Dawsonville Hwy/SR 53 Capacity	Roadway Capacity	Widen Dawsonville Hwy/SR 53 to a 6-lane roadway, including 3 through lanes in each direction and a landscaped median, from Shallowford Rd to Sportsman Club Rd
29	Jesse Jewell Pkwy Capacity West	Roadway Capacity	Widen Jesse Jewell Pkwy to a 6-lane roadway, including 3 through lanes in each direction and a landscaped median, from John Morrow Pkwy/Queen City Pkwy to Academy Street
30	MLK Jr Blvd Corridor	Roadway Capacity	Widen to MLK Jr Blvd to a 4-lane roadway with a landscaped median from Queen City Pkwy to Downey Blvd
31	Atlanta Highway Widening and Operations	Roadway Capacity/ Operations	Add a two-way left-turn lane to Atlanta Highway from Hall Street to Industrial Blvd; Widen Atlanta Highway to a 4-lane roadway with a landscaped median from Industrial Blvd to Memorial Park Dr; Add a two-way left-turn lane to Atlanta Highway from Memorial Park Dr to Tumbling Creek Rd
34	Green Street Mid/Long-Term	Roadway Operations	Convert Green Street from Academy Street to Riverside Dr to a boulevard with a 20 ft wide landscaped median; Add wide sidewalks with streetscape elements (pedestrian lighting, trees) on both sides of the road.
35	Oak Tree Dr Operations	Roadway Operations/ Intersection	Add a two way left-turn lane on Oak Tree Dr from Thompson Bridge Rd to Riverside Dr; Add a traffic signal to the intersection of Oak Tree Dr at Thompson Bridge Rd; Re-align the intersection of Oak Tree Dr at Riverside Dr so the through movement is between Oak Tree Dr and Riverside Dr northbound, with the south leg of Riverside Dr as the side street; Add a traffic signal or roundabout to the intersection of Oak Tree Dr at Riverside Dr
36	Enota Dr Operations	Roadway Operations; Extended Roadway	Construct a new roadway segment behind Enota Elementary School, connecting Enota Drive near the intersection with Cumberland Dr to S Enota Dr near the intersection with Enota Cir; Add a two-way left-turn lane to Enota Dr from Thompson Br Rd to Park Hill Dr, including along the new roadway segment; Potentially combine construction with the intersection projects at Thompson Bridge Rd at Enota Ave and at Park Hill Dr at Enota Ave
40	I-985 at Athens Hwy Interchange	Interchange Capacity	At the I-985 at Athens Hwy interchange, implement capacity and operations changes to the existing intersections at the I-985 on and off ramps. These will potentially include new ramps, extending the existing turn lanes, and/or adding new turn lanes.
41	EE Butler Pkwy/Athens Hwy Capacity	Roadway Capacity	Widen EE Butler Pkwy to a 6-lane roadway, including 3 through lanes in each direction and a landscaped median, from Summit St to east of Monroe Dr
43	Jesse Jewell Pkwy Capacity East	Roadway Capacity	Widen Jesse Jewell Pkwy to a 6-lane roadway, including 3 through lanes in each direction and a landscaped median, from Community Way/Industrial Blvd Extension to Oconee Cir/Miller Dr
44	Spring St Extension	New/Extended Roadway	Extend Spring St west to Washington St, approximately 600 ft west of Academy St. This will be a one-way roadway eastbound, with Washington St as a one-way roadway westbound.



REGIONAL METRICS

The travel demand model provides metrics showing the overall results of the year 2040 travel demand model runs. These metrics include the following:

- Vehicle Miles Travelled (VMT) – This is the total vehicle miles travelled within the region as a part of the model run. This is based on the total number of vehicles in the model and the distance they travelled to get from their origin to their destination.
- Vehicle Hours Travelled (VHT) – This is the total vehicle hours travelled within the region as a part of the model run. This is based on the total number of vehicles in the model and the time it took to travel from their origin to their destination.
- Vehicle Hours Delay – This is the total hours of delay within the region as a part of the model run. Delay is the difference between the ideal travel time and the actual travel time

These metrics are provided for the entire region in the model, which includes all of Hall County, the City of Gainesville, and all of the other cities within the County. Many trips within the City of Gainesville may be regional in nature. This means they do not have both an origin and destination in the City. Instead, they may have an origin or destination outside the City. Additionally, some trips may have both an origin and destination outside the City but may still pass through the City. All of these trips may be impacted by changes within the City, depending on the route of the trip. Therefore, metrics for the entire region are a useful measure of effectiveness for the travel demand model. The VMT, VHT, and vehicle hours of delay for the 2040 model runs are shown in Table 6-2.

Table 6-2

Travel Demand Model Scenario	Vehicle Miles Traveled	Vehicle Hours Traveled	Vehicle Hours Delay
2040 Gainesville-Hall MPO Base	8,860,000	993,000	758,000
2040 Master Plan Projects	8,880,000	917,000	682,000
Change with Master Plan in Place	20,000	-76,000	-76,000

Two scenarios are compared in this table. The first, 2040 Gainesville-Hall MPO Base, is the financially constrained model from the LRTP. No changes were made to this model. It is presented here as a comparison to the Transportation Master Plan Build model run.

The table shows that VMT increases in the Transportation Master Plan Build model run when compared to the 2040 Gainesville-Hall MPO Base. No changes were made to the population, employment, or other socio-economic data in the model as a part of the Build scenarios. This increase in VMT is likely due to unmet demand in the Base model. When transportation capacity is added in the Build scenarios, additional trips are added to use this extra capacity. In addition, new connections are providing improved LOS by routing traffic through downtown Gainesville.

While VMT increases in the Build scenarios, VHT decreases in the Build scenarios. This means that the Build scenarios allow trips to be made in shorter amounts of time. This is accomplished through an increase in capacity which decreases delay. The addition of new/extended roadways can provide



alternate routes for traffic, reducing the distance travelled and trip time for that traffic. Similarly, the projected vehicle hours of delay also decrease in the Build scenarios as compared to the 2040 Gainesville-Hall MPO Base scenario.

LEVEL OF SERVICE

Figure 6-1 shows the projected 2040 LOS from the 2040 Master Plan travel demand model run. As the figure shows, significant traffic congestion is projected to exist in the year 2040. It is not financially feasible to provide enough roadway capacity to solve all traffic congestion in a growing City such as Gainesville. However, the recommended projects seek to add capacity in key locations while also identifying other ways to manage the transportation system.

As previously discussed, many of the projects recommended as a part of the Transportation Master Plan are not included in the model analysis. However, the intersection operations projects and a number of other projects are intended to reduce traffic congestion. Additionally, some of the roadways that are projected to have a failing LOS in the year 2040 are located in unincorporated Hall County rather than the City of Gainesville. Residents of the City are commonly impacted by congestion on these roadways. Therefore, the City of Gainesville, Hall County, and the GHMPO should continue to work together to identify transportation solutions for the entire region.

Figure 6-2 shows how much the roadways in the City of Gainesville are projected to be over capacity by the year 2040. Like the previous figure, this map is based on the 2040 Master Plan travel demand model run. As the figure shows, most roadways are projected to either not be over capacity, or only be moderately over capacity. Traffic congestion will likely be present on these roadways, particularly during peak hours. But severe traffic congestion is not projected along these roadways.

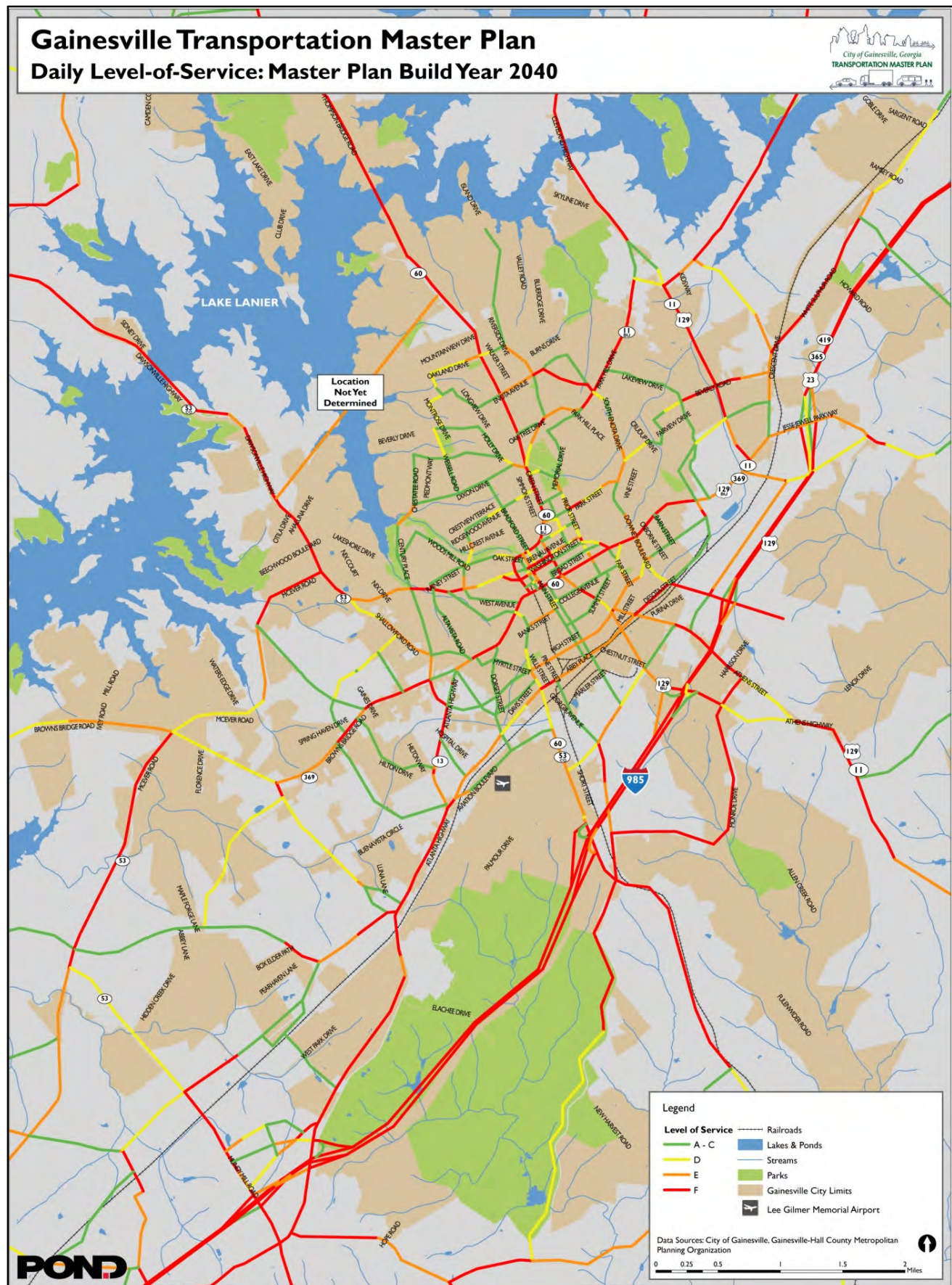
A few roadways within the City of Gainesville are projected to have significant or severe roadway capacity deficiencies, even with the recommended improvements in place. Some of these roadways include Green Street, Dawsonville Highway near McEver Road, and Jesse Jewell Parkway in and around downtown. Project recommendations address congestion on each of these corridors, on alternative routes, or both. Additional project specific details are included in the following section.



City of Gainesville Transportation Master Plan Plan Documentation



Figure 6-1: 2040 Transportation Master Plan Build Model Run Results

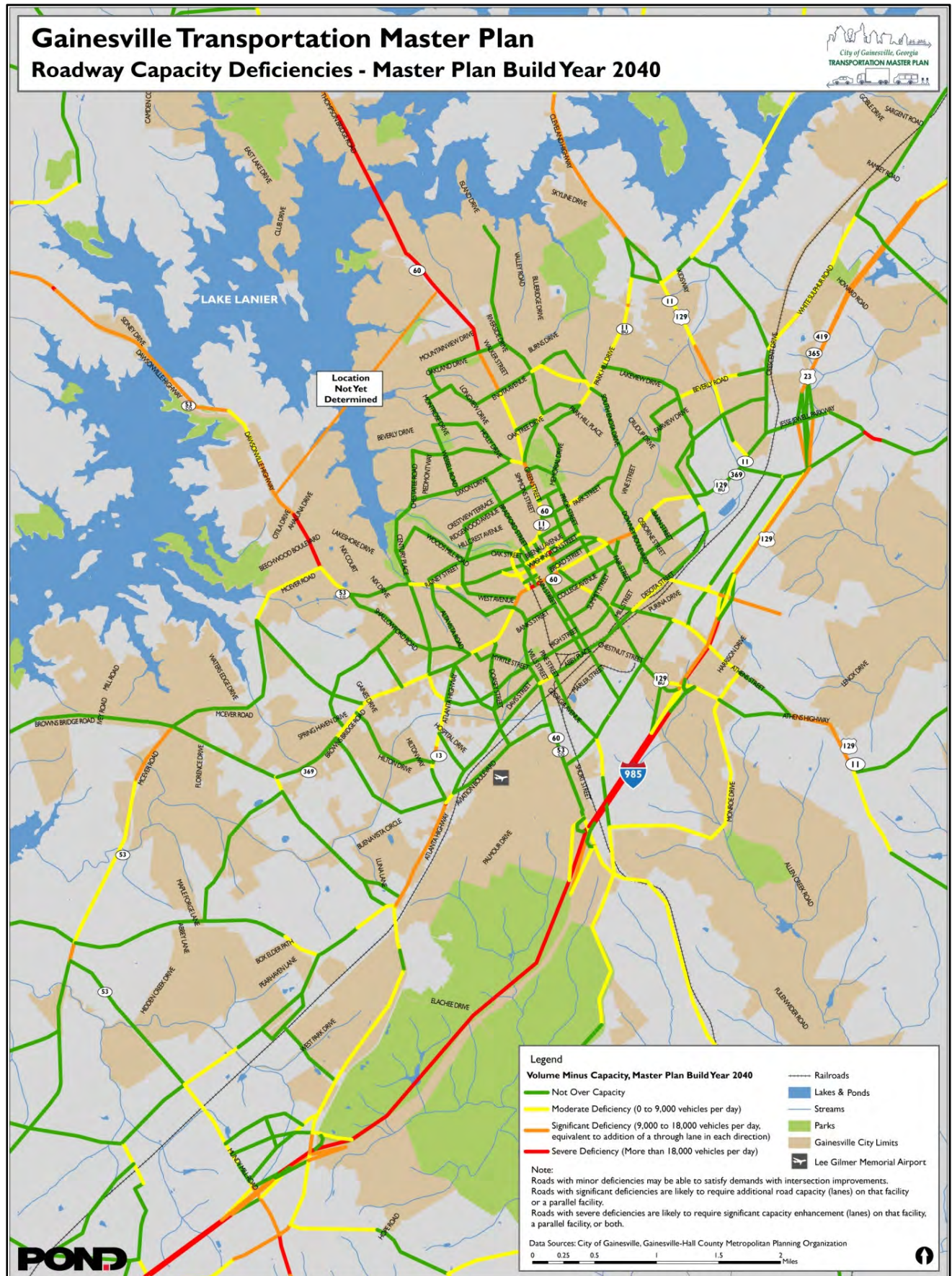




City of Gainesville Transportation Master Plan Plan Documentation



Figure 6-2: 2040 Transportation Master Plan Build Roadway Capacity Deficiencies





7. RECOMMENDED TRANSPORTATION PROJECTS

The central element of this plan is a list of recommended transportation projects. This list of projects includes nearly all aspects of the transportation network in the City of Gainesville. The list provides the City with direction for the specific transportation projects that should be pursued in the short term as well as looking forward through the year 2040. This list will allow the City to compete at the regional and state level for existing transportation funding as well as for other funding sources that may become available in the future. The complete project list is shown in Table 7-1, while the recommended projects are shown in Figure 7-1 and Figure 7-2. Please note, the projects are shown in priority order within each implementation Tier, therefore, the project reference numbers are not sequential.

A number of steps were taken to develop the recommended transportation project list. These steps include the following:

- Reviewing previous planning efforts in the City and in Hall County
- Gathering existing conditions data
- Conducting field reviews
- Conducting a Needs Assessment
- Gathering input from the public, the project focus group, and from transportation staff from the City of Gainesville and the GHMPO

Once these steps were completed, the preliminary transportation project list was developed. Input was then sought on the preliminary list from the public, the project focus group, and from transportation staff from the City of Gainesville and the GHMPO. The recommended projects were then incorporated into the GHMPO travel demand model and Build model runs were conducted.

After input was received and the model runs were completed, revisions were made to the preliminary project list. Additional input was then sought on the revised project list from the public, the project focus group, and from transportation staff from the City of Gainesville and the GHMPO. Input on prioritization was specifically sought to help direct the future actions of the City.

After these steps were complete, the prioritized transportation project list was finalized. This project list was split into three tiers, which generally correlate to short-term, mid-term, and long-term projects. Specific implementation years can't be determined at this time. However, specific project types and a range of years are proposed for each of the three tiers, which include the following:

- Tier 1 Projects – Potential Target for Implementation (2013-2020): Emphasis on low-cost/high value operational improvements and pedestrian improvements in high use areas to address current needs.
- Tier 2 Projects – Potential Target for Implementation (2021-2030): Emphasis on additional connections to provide roadway capacity and pedestrian/bicycle connections in key areas to address current and future needs.
- Tier 3 Projects – Potential Target for Implementation (2031-2040): Emphasis on projects with longer implementation and projects to address future needs.

Table 7-1, Recommended Transportation Projects

Project Number	Project Name	Type	Project Description
Tier I Projects Roadway and Intersection - Target for Implementation (2013-2020)			
48	Traffic Signal Equipment and Control Center	Signal Operations	Modify traffic signal field devices to operate on internet protocol, install monitoring and control equipment in traffic control center, connect to City Fiber optics network for communications with traffic control center.
49	Signal Timing	Signal Operations	Provide comprehensive signal retiming with consideration of traffic responsive plans along congested corridors (78 intersections).
50	Traffic Signal Coordination and Communications - Connect Existing System	Signal Operations	Install fiber optic communications, blue tooth travel time sensors, and camera monitoring along the following corridors: Jesse Jewell Pkwy east of downtown (via Gainesville IT Communications), downtown Gainesville, and John Morrow Pkwy. (2 miles plus use of IT Comm. System with 37 cameras)
51	Traffic Signal Coordination and Communications - Extend to Key Corridors	Signal Operations	Install fiber optic communications, blue tooth travel time sensors, and camera monitoring along the following corridors: Browns Bridge Road west of Pearl Nix Pkwy (via Gainesville IT Communications), EE Butler Pkwy, Athens Highway south of MLK Boulevard, and Green Street - Thompson Bridge Road north of Academy Street. (3.5 miles plus use of IT Comm. system with 16 cameras)
52	Traffic Signal Coordination and Communications - Secondary Corridors and Parallel TMC Communications	Signal Operations	Install fiber optic communications and camera monitoring along the following corridors: Atlanta Highway, Pearl Nix Pkwy, Aviation Blvd, Industrial Blvd, Queen City Pkwy, Downey Blvd, S. Enota Drive, Park Hill Dr, Limestone Pkwy, and MLK Jr. Blvd., as well as a connection down Main Street from MLK Jr. Blvd to the City Traffic Control Center. (12.5 miles with 25 cameras)
10	EE Butler Pkwy at MLK Jr Blvd; Athens Street at MLK Jr Blvd Operations	Intersection	At the intersection of EE Butler Pkwy at MLK Jr Blvd, on the northeast bound approach, extend the left-turn lane to provide more vehicular storage, add a second through lane, and add a short (less than 100 ft long) right-turn lane. On the northeast leg of the intersection, add a second receiving lane which will also be a right-turn lane onto Athens Street. On the southwest bound approach, extend the left-turn lane to approximately 250 ft in length. Remove the traffic signal at the intersection of MLK Jr Blvd at Athens Street and prohibit the westbound left-turn movement from Athens Street.
32	Green Street Short-Term	Roadway Operations	Green St from Academy St to Riverside Dr, TBD, Options do not affect the existing curbs and include - prohibiting left-turns along the corridor, prohibiting left-turns during peak hours, or restriping to provide two NB lanes, one left turn lane, and one SB lane.
33	Green Street Turning Lanes at Academy and Post Office	Roadway Operations	Add a southbound right-turn lane at the intersection of Green Street at Academy Street; Add a northbound right-turn lane and a southbound left-turn lane at the Post Office entrance.
5	Browns Bridge Rd at Pearl Nix Pkwy Operations	Intersection	At the intersection of Browns Bridge Rd at Pearl Nix Pkwy, add a second northbound left-turn lane approximately 300 ft in length and add a second southbound left-turn lane approximately 200 ft in length; add an eastbound right-turn lane approximately 250 ft in length and add a westbound right-turn lane approximately 125 ft in length.
13	Jesse Jewell Pkwy at John Morrow Pkwy/Queen City Pkwy Operations	Intersection	At the intersection of Jesse Jewell Pkwy at John Morrow Pkwy/Queen City Pkwy, add a right-turn lane on the eastbound and westbound approaches on Jesse Jewell Pkwy and on the northbound approach on Queen City Parkway. The right-turn lanes will each be approximately 300 ft long.
36	Enota Dr Re-alignment	Roadway Operations; Extended Roadway	Construct a new roadway segment behind Enota Elementary School, connecting Enota Drive near the intersection with Cumberland Dr to S Enota Dr near the intersection with Enota Cir; Add a two-way left-turn lane to Enota Dr from Thompson Br Rd to Park Hill Dr, including along the new roadway segment; Potentially combine construction with the intersection projects at Thompson Bridge Rd at Enota Ave and at Park Hill Dr at Enota Ave.
35	Oak Tree Dr Operations	Roadway Operations/ Intersection	Add a two way left-turn lane on Oak Tree Dr from Thompson Bridge Rd to Riverside Dr; Add a traffic signal to the intersection of Oak Tree Dr at Thompson Bridge Rd; Re-align the intersection of Oak Tree Dr at Riverside Dr so the through movement is between Oak Tree Dr and Riverside Dr northbound, with the south leg of Riverside Dr as the side street; Add a traffic signal or roundabout to the intersection of Oak Tree Dr at Riverside Dr.
2	Athens Hwy at Chestnut St Operations	Intersection	Shift the intersection of Athens Hwy at Chestnut St to the north, further from the intersection of Athens Hwy at Ridge Rd. Extend the southbound left-turn lane on Athens Hwy on the approach to Ridge Road to prevent left-turn traffic queues from extending into the through travel lanes.
4	Browns Bridge Rd at Auburn Ave Operations	Intersection	At the intersection of Browns Bridge Rd at Auburn Ave, add an eastbound right-turn lane.

Table 7-1, Recommended Transportation Projects

Project Number	Project Name	Type	Project Description
6	Browns Bridge Rd at West End Ave Operations	Intersection	At the intersection of Browns Bridge Rd at West End Ave, add a westbound right-turn lane, approximately 125 ft in length.
7	Cleveland Hwy at Limestone Pkwy	Intersection	At the intersection of Cleveland Hwy at Limestone Pkwy, signalize the northbound right-turn movement on Limestone Pkwy to allow for the free flow movement of right-turning vehicles during appropriate signal phases.
8	Cleveland Hwy at Limestone Pkwy	Intersection	Realign the intersection of Cleveland Hwy at Limestone Pkwy so that the north leg, Cleveland Highway, lines up with the southeast leg, Limestone Pkwy. The south leg of the intersection, Cleveland Highway, becomes the side street.
9	Dawsonville Hwy/SR 53 at McEver Rd Operations	Intersection	At the intersection of Dawsonville Hwy/SR 53 at McEver Rd, Add a westbound right-turn lane and second through lane.
11	Jesse Jewell Pkwy at EE Butler Pkwy Operations	Intersection	At the intersection of Jesse Jewell Pkwy at EE Butler Pkwy, extend the eastbound right-turn lane to the pedestrian bridge across Jesse Jewell Pkwy.
16	Jesse Jewell Pkwy at Prior St Operations	Intersection	At the intersection of Jesse Jewell Pkwy at Prior St, add northbound and southbound left-turn lane2 approximately 100 ft in length.
17	John Morrow Pkwy at Washington St Operations	Intersection	At the intersection of John Morrow Pkwy at Washington St, realign southbound right-turn lane .
18	Park Hill Dr at Enota Ave Operations	Intersection	At the intersection of Park Hill Dr at Enota Ave, add a southbound right-turn lane approximately 175 ft in length and add an eastbound right-turn lane.
19	Park Hill Dr at Lakeview Dr Operations	Intersection	Reduce the slope on the Lakeview Dr approach.
20	Thompson Bridge Rd at Enota Ave Operations	Intersection	At the intersection of Thompson Bridge Rd at Enota Ave, add a northbound right-turn lane approximately 125 ft in length and add a southbound right-turn lane approximately 105 ft in length.
30	MLK Jr Blvd Corridor	Roadway Capacity	Widen MLK Jr Blvd to a 4-lane roadway with streetscapes and a landscaped median from Queen City Pkwy to EE Butler Parkway; Add a two-way left-turn lane and streetscapes from EE Butler Pkwy to Downey Blvd.
47	Patricia Dr Extension	New/Extended Roadway	Extend Patricia Dr west to MLK Jr Blvd. Project is intended to improve neighborhood connectivity using a connection between existing residences. This would be performed in conjunction with improvements to MLK Jr Blvd.
24	Industrial Blvd Extension	New/Extended Roadway	Extend Industrial Blvd north along the railroad tracks, under Athens Hwy, to the intersection of Jesse Jewell Pkwy at Branch Street. Include a multi-use trail as part of the roadway extension.
1	I-985 Interchange Operations Study	Interchange Operations Study	Conduct a study of I-985 interchange needs from Queen City Pkwy to Jesse Jewell Pkwy. The study shall analyze the potential need for an additional interchange north of Athens Street as part of an extension of Downey Blvd. It shall also focus on the preferred design at each interchange and consider the need for a collector-distributor system or other access changes along the corridor. The need and potential locations for park and ride lots at or near the interchanges shall also be a part of the study.
55	Freeway Signage Modifications	Roadway Operations	Modify freeway signage to encourage greater use of Jesse Jewell Pkwy for access to Gainesville and travel to the north. Consider removal of US 129 business designation so that US 129 traffic uses Jesse Jewell Parkway.
54	Travel Demand Management Plan	Travel Demand Management	Develop a travel demand management plan and strategy to increase ridesharing and use of alternative transportation modes. Prepare plan in coordination with Hall County as part of regional approach.
Tier I Projects Pedestrian and Bicycle - Target for Implementation (2013-2020)			
60	Washington St Complete Street and Sharrows	Complete Street/ Streetscape; Sharrows	Add Complete Street elements to Washington St from Academy St to Smithgall Ln, including; Add sharrows to Washington St from John Morrow Pkwy to Academy St.
65	Main St Complete Street	Complete Street/ Streetscape	Add Complete Street elements to Main St from MLK Jr Blvd to Jesse Jewell Pkwy.
67	Downtown Corridors Ped Crossings	Crossing Enhancements	Enhance existing pedestrian crossing locations by re-striping crosswalks or potentially adding stamped asphalt/concrete crosswalks, adding pedestrian countdown timers, and adding additional lighting (where needed). Implement these enhancements at intersections along the following corridors.

Table 7-1, Recommended Transportation Projects

Project Number	Project Name	Type	Project Description
70	Green St at Riverside Dr Ped Crossing	Pedestrian Crossing Facilities	At the intersection of Green St at Riverside Dr, add pedestrian facilities including crosswalks, pedestrian signal phases, pedestrian countdown timers, and additional lighting .
71	Grove St Sharrows	Sharrows	Add sharrows on Grove St from Parker St to Industrial Blvd.
72	McDonald St Sharrows	Sharrows	Add sharrows on McDonald St from MLK Jr Blvd to the Industrial Blvd Extension.
73	Ridgewood Ave Sharrows	Sharrows	Add sharrows on Ridgewood Ave from Wilshire Dr to Green St.
74	Spring St Sharrows	Sharrows	Add sharrows on Spring St from Academy St to Prior St.
75	Summitt St Sharrows	Sharrows	Add sharrows on Summitt St from Grove St to Hunter St.
68	Pearl Nix Pkwy Trail East	Multiuse Trail	Construct a multiuse trail along Pearl Nix Pkwy/MLK Jr Blvd from Atlanta Hwy to the existing multiuse trail east of Pine St.
69	Pearl Nix Pkwy Trail West	Multiuse Trail	Construct a multiuse trail along Pearl Nix Pkwy from Wilshire Dr to Atlanta Hwy.
80	Jesse Jewell Pkwy Sidewalk East	Sidewalk: High Priority	Install sidewalk along Jesse Jewell Pkwy from Branch St to White Sulphur Rd.
81	Jesse Jewell Pkwy Sidewalk West	Sidewalk: High Priority	Install sidewalk along Jesse Jewell Pkwy from EE Butler Pkwy to Spring St.
82	Maple St Sidewalk	Sidewalk: High Priority	Install sidewalk along Maple St from Jesse Jewell Pkwy to Broad St.
86	Pearl Nix Pkwy Sidewalk	Sidewalk: High Priority	Install sidewalk along Pearl Nix Pkwy from Dawsonville Hwy/John Morrow Pkwy to Shallowford Rd.
Tier 2 Projects Roadway and Intersection - Target for Implementation (2021-2030)			
56	Signal Timing	Signal Operations	Provide comprehensive signal retiming with consideration of traffic responsive plans along congested corridors (78 intersections).
58	Upgrade TCC Systems and Equipment	Signal Operations	Upgrade computer systems, monitors and controll equipment in field and TCC to match current standards.
53	Driver Information via Changeable Message Signs	Signal Operations	Provide changeable message signs and operation along state routes in coordination with GDOT Navigator program along I-985. Implementation of 12 signs along three corridors is anticipated (EE Butler Pkwy, Jesse Jewell Pkwy, and Queen City Pkwy).
26	Thompson Bridge Rd - Dawsonville Hwy Connector	New/Extended Roadway	Construct a new bridge from Thompson Bridge Rd/SR 60 approximately 1 mile south of Thompson Bridge across Lake Lanier to Dawsonville Hwy. This connection includes new roadway segments and may also use segments of existing roadways, depending on the preferred route alternative.
22	Community Way Extension/ Re-Alignment	New/Extended Roadway	Extend Community Way northeast to Limestone Pkwy and continue to White Sulphur Rd; Re-align the intersection of Jesse Jewell Pkwy at Community Way to the intersection of Jesse Jewell Pkwy at the Industrial Blvd extension (existing Branch St).
31	Atlanta Highway Widening and Operations	Roadway Capacity/ Operations	Implement the following along Atlanta Highway: <ul style="list-style-type: none"> • Add a two-way left-turn lane from Hall Street to Industrial Blvd; • Widen to a 4-lane roadway with a landscaped median from Industrial Blvd to Memorial Park Dr; • Convert Atlanta Hwy to a Complete Street from Browns Bridge Rd to Memorial Park Dr; • Add a two-way left-turn lane and sidewalk from Memorial Park Dr to Tumbling Creek Rd; Continue the sidewalk to the existing sidewalk approximately 1,000 ft south of Tumbling Creek Rd.
40	I-985 at Athens Hwy Interchange	Interchange Capacity	At the I-985 at Athens Hwy interchange, implement capacity changes including widening or reconstruction of interchange bridges and reconstruction of ramps to increase capacity and add shoulders to bridges.

Table 7-1, Recommended Transportation Projects

Project Number	Project Name	Type	Project Description
41	EE Butler Pkwy/Athens Hwy Capacity	Roadway Capacity	Widen EE Butler Pkwy to a 6-lane roadway, including 3 through lanes in each direction and a landscaped median, from Summit St to east of Monroe Dr.
29	Jesse Jewell Pkwy Capacity West	Roadway Capacity	Widen Jesse Jewell Pkwy to a 6-lane roadway, including 3 through lanes in each direction from John Morrow Pkwy/Queen City Pkwy to Academy Street. The westbound lane will become a right turn lane at John Morrow and the eastbound lane will become the left turn lane for Academy Street.
23	Dawsonville Hwy/SR 53 at McEver Rd - Local Roadway Connections	New/Extended Roadway	Additional local roadway connections near the intersection of Dawsonville Hwy/SR 53 at McEver Rd to provide parallel connections to Dawsonville Hwy/SR 53.
27	Downey Blvd Extension and Interchange	New/Extended Roadway; New Interchange	Extend Downey Blvd east to I-985. Construct a new interchange at I-985 at the Downey Blvd extension with interchange connecting to the EE Butler interchange to the south.
37	Gainesville Wayfinding Signage	Signage	Implement a system of wayfinding signage in downtown Gainesville and at key intersections near downtown and other activity areas. The signage should provide a consistent look that facilitates branding for the City. Develop strategy for way finding, then implementation.
38	I-985 at Queen City Pkwy Interchange	Interchange Operations	At the I-985 at Queen City Pkwy interchange, implement operations changes to the existing intersections at the I-985 on and off ramps. These will potentially include extending the existing turn lanes, adding new turn lanes, and/or changes to the ramp operations.
39	I-985 at Jesse Jewell Pkwy Interchange	Interchange Operations	At the I-985 at Jesse Jewell Pkwy interchange, implement operations changes to the existing intersections at the I-985 on and off ramps. These will potentially include extending the existing turn lanes, adding new turn lanes, and/or changes to the ramp operations.
Tier 2 Projects Pedestrian and Bicycle - Target for Implementation (2021-2030)			
63	College Ave Complete St	Complete Street/ Streetscape	Add Complete Street elements to College Ave from Main St to Fair St.
66	Prior St Complete Street	Complete Street/ Streetscape	Add Complete Street elements to Prior St from Hunter St to Riverside Dr.
61	Bradford St Complete Street - North	Complete Street/ Streetscape	Add Complete Street elements to Bradford St from Washington St to Dixon Dr.
62	Bradford St Complete Street - South	Complete Street/ Streetscape	Add Complete Street elements to Bradford St from Industrial Blvd to Jesse Jewell Pkwy.
76	Beverly Rd Sidewalk	Sidewalk: High Priority	Install sidewalk along Beverly Rd from Limestone Pkwy to White Sulphur Rd.
77	Browns Bridge Rd Sidewalk East	Sidewalk: High Priority	Install sidewalk along Browns Bridge Rd from Memorial Park Dr to Central Ave.
78	Dawsonville Hwy Sidewalk Central	Sidewalk: High Priority	Install sidewalk along Dawsonville Hwy from Beechwood Blvd to McEver Rd.
79	Dixon Dr Sidewalk	Sidewalk: High Priority	Install sidewalk along Dixon Dr from Chestatee Rd to Wessell Rd.
83	McEver Rd Sidewalk	Sidewalk: High Priority	Install sidewalk along McEver Rd from Browns Bridge Rd to existing sidewalk approximately 750 ft north of Browns Bridge Rd.
84	Memorial Park Dr Sidewalk South	Sidewalk: High Priority	Install sidewalk along Memorial Park Dr from Titshaw Dr to Atlanta Highway.
85	Park Hill Dr Sidewalk North	Sidewalk: High Priority	Install sidewalk along Riverside Dr/Morningside Dr/Park Hill Dr from Oak Tree Dr to Clarks Bridge Rd.
87	S Enota Dr Sidewalk South	Sidewalk: High Priority	Install sidewalk along S Enota Dr from Downey Blvd to Takeda Rd.
88	Shallowford Rd Sidewalk	Sidewalk: High Priority	Install sidewalk along Shallowford Rd from Dawsonville Hwy to Pearl Nix Pkwy.

Table 7-1, Recommended Transportation Projects

Project Number	Project Name	Type	Project Description
Tier 3 Projects Roadway and Intersection - Target for Implementation (2031-2040)			
57	Signal Timing	Signal Operations	Provide comprehensive signal retiming with consideration of traffic responsive plans along congested corridors (78 intersections).
59	Upgrade TCC Systems and Equipment	Signal Operations	Upgrade computer systems, monitors and control equipment in field and TCC to match current standards.
43	Jesse Jewell Pkwy Capacity East	Roadway Capacity	Widen Jesse Jewell Pkwy to a 6-lane roadway, including 3 through lanes in each direction and a landscaped median, from Community Way/Industrial Blvd Extension to Oconee Cir/Miller Dr.
14	Jesse Jewell Pkwy at John Morrow Pkwy/Queen City Pkwy - Major Intersection Improvement	Intersection	At the intersection of Jesse Jewell Pkwy at John Morrow Pkwy/Queen City Pkwy, implement an intersection design with grade separated left-turn movements. This consists of converting the left-turn lanes to ramps that raise left-turn traffic higher than the rest of the intersection, creating a grade-separated intersection only for left-turn traffic.
12	Jesse Jewell Pkwy at EE Butler Pkwy - Major Intersection Improvement	Intersection	At the intersection of Jesse Jewell Pkwy at EE Butler Pkwy, implement a major intersection improvement. An example of a major improvement for this intersection is an intersection design with grade separated left-turn movements. This consists of converting the left-turn lanes to ramps that raise left-turn traffic higher than the rest of the intersection, creating a grade-separated intersection only for left-turn traffic.
28	Dawsonville Hwy/SR 53 Capacity	Roadway Capacity	Widen Dawsonville Hwy/SR 53 to a 6-lane roadway, including 3 through lanes in each direction and a landscaped median, from Shallowford Rd to Sportsman Club Rd.
42	Athens Street-McDonald Street Connector	New/Extended Roadway	Re-align Athens Street to the north so that it crosses Purina Dr and connects to McDonald Street. Shift the RR crossing north to serve the re-aligned roadway. This project may need to be constructed as re-development takes place in the area.
21	Academy Street Extension	New/Extended Roadway	Extend Academy Street southeast from its intersection with Jesse Jewell Pkwy to the intersection of Grove Street at Parker Street.
25	Ivey Terrace Extension	New/Extended Roadway	Extend Ivey Terrace east to Green Street. The roadway extension will intersect Bradford Street, use a portion of Sylvan Wood Ln, and extend through a parking lot to Green St.
44	Spring St Extension	New/Extended Roadway	Extend Spring St west to Washington St, approximately 600 ft west of Academy St. This will be a one-way roadway eastbound, with the adjacent section of Washington St as a one-way roadway westbound.
46	Multimodal Terminal	Travel Demand Management	Implement a Multimodal Terminal at or near the existing Amtrak station that brings together local bus routes, express bus and/or commuter rail, Amtrak rail, Greyhound bus, parking, and bike/ped access into one facility.
34	Green Street Boulevard	Roadway Operations	Convert Green Street from Academy Street to Riverside Dr to a boulevard with a 20 ft wide landscaped median; Add wide sidewalks with streetscape elements (pedestrian lighting, trees) on both sides of the road.
Tier 3 Projects Pedestrian and Bicycle - Target for Implementation (2031-2040)			
102	Academy St Streetscape	Streetscape	Add Streetscape to the west side of Academy St from Jesse Jewell Pkwy to Washington St.
89	Browns Bridge Rd Sidewalk West	Sidewalk	Install sidewalk along Browns Bridge Rd from McEver Rd to Memorial Park Dr.
90	Clarks Bridge Rd Sidewalk	Sidewalk	install sidewalk along Clarks Bridge Rd from Cleveland Hwy to Pine Valley Rd.
91	Dawsonville Hwy Sidewalk East	Sidewalk	Install sidewalk along Dawsonville Hwy/John Morrow Pkwy from McEver Rd to Washington St.
92	Dawsonville Hwy Sidewalk West	Sidewalk	Install sidewalk along Dawsonville Hwy from Sportsman Club Rd to Ahaluna Dr.
93	Downey Blvd Sidewalk	Sidewalk	Install sidewalk along Downey Blvd from Myrtle St to S Enota Dr.
94	Jesse Jewell Pkwy Sidewalk at I-985	Sidewalk	Install sidewalk along Jesse Jewell Pkwy/Old Cornelia Hwy from White Sulphur Rd to Shady Valley Rd.

Table 7-1, Recommended Transportation Projects

Project Number	Project Name	Type	Project Description
95	Kids Way Sidewalk	Sidewalk	Install sidewalk along Kids Way from Clarks Bridge Rd to Gabriel Cir.
96	Memorial Park Dr Sidewalk South	Sidewalk	Install sidewalk along Memorial Park Dr from Browns Bridge Rd to Titshaw Dr.
97	Park Hill Dr Sidewalk South	Sidewalk	Install sidewalk along Park Hill Dr from Green St to Oak Tree Dr.
98	S Enota Dr Sidewalk North	Sidewalk	Install sidewalk along S Enota Dr from Takeda Rd to Park Hill Dr.
99	Thompson Bridge Rd Sidewalk	Sidewalk	Install sidewalk along Thompson Bridge Rd from Riverside Dr to Sandridge Ct.
100	W Ridge Rd Sidewalk	Sidewalk	Install sidewalk along W Ridge Rd from Interstate Ridge Dr to Athens St.
101	White Sulphur Rd Sidewalk	Sidewalk	Install sidewalk along White Sulphur Rd from Jesse Jewell Pkwy to Beverly Rd.

Gainesville Transportation Master Plan

Recommendations: Roadways

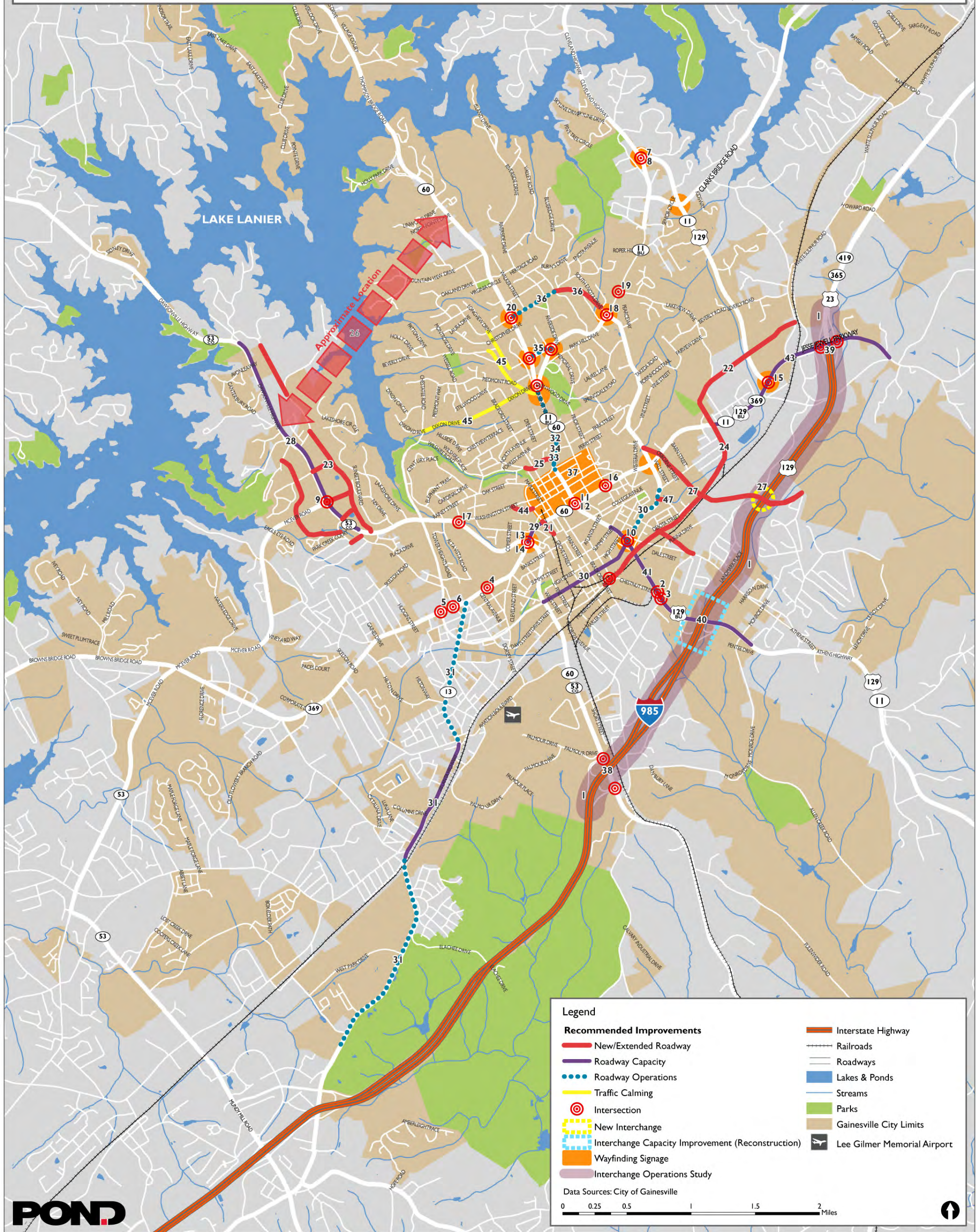


Figure 7-1: Recommended Roadway and Intersection Projects

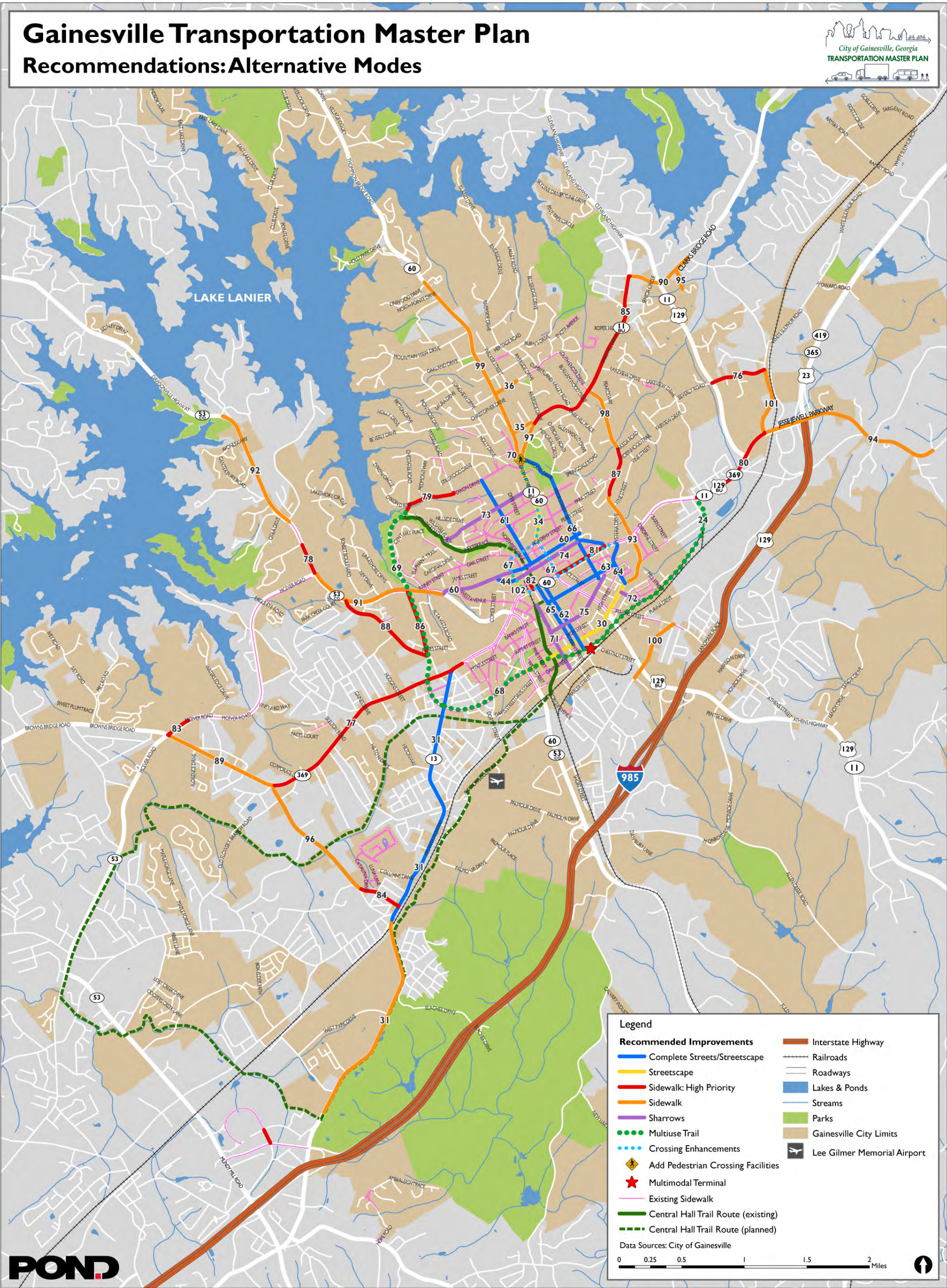


Figure 7-2: Recommended Alternative Modes Projects



Implementation will depend on a variety of factors, including project cost, funding availability, impact to residents and businesses, environmental impacts, prioritization at the regional level, approval by external agencies, and other factors. Due to these factors, this prioritized project list is intended to provide the City with guidance for what transportation projects should be constructed and the general order in which they should be prioritized. It is not expected that all projects in a tier will be completed during a specific time frame. However, if funding is available and other factors allow it, the City should begin pursuing implementation during the time frames identified for each tier.

TIER 1 PROJECTS

Projects identified for Tier 1 are shown in Figure 7-3 and Figure 7-4. The majority of projects in Tier 1 are relatively low cost. Many of the projects focus primarily on intersection operations improvements, including the addition of turn lanes and changes to traffic signal operations. Other projects include changes to roadway operations, roadway extensions, and a study of I-985.

INTERSECTION OPERATIONS IMPROVEMENTS

Several projects were identified in the master plan to address intersection operations and safety. Many of these projects were a result of previous work by the City to identify and address operational deficiencies. Improvements include addition of right and left-turn lanes and intersection realignment. Many of these projects can move forward quickly with relatively low cost in comparison to other recommendations in this plan. The Tier 1 recommendations include 17 intersection improvement projects, with an average cost of \$350,000 per project. These provide improvements that can make an impact on everyday travel and safety in the near term.

EE BUTLER PKWY AT MLK JR. BLVD, ATHENS STREET AT MLK JR. BLVD, OPERATIONS

Jesse Jewell Parkway provides the primary east-west connectivity in the core of the City of Gainesville, and it experiences significant traffic congestion during the peak hours. The MLK Jr. Boulevard corridor is an alternate east-west route in the area. However, a field review of this area showed heavy traffic congestion at the intersection of EE Butler Parkway at MLK Jr. Boulevard, particularly during the PM peak hour. This congestion was confirmed by peak hour traffic analyses. Reducing traffic congestion at this intersection can help overall east-west connectivity and may reduce traffic demand on the congested Jesse Jewell Parkway corridor.

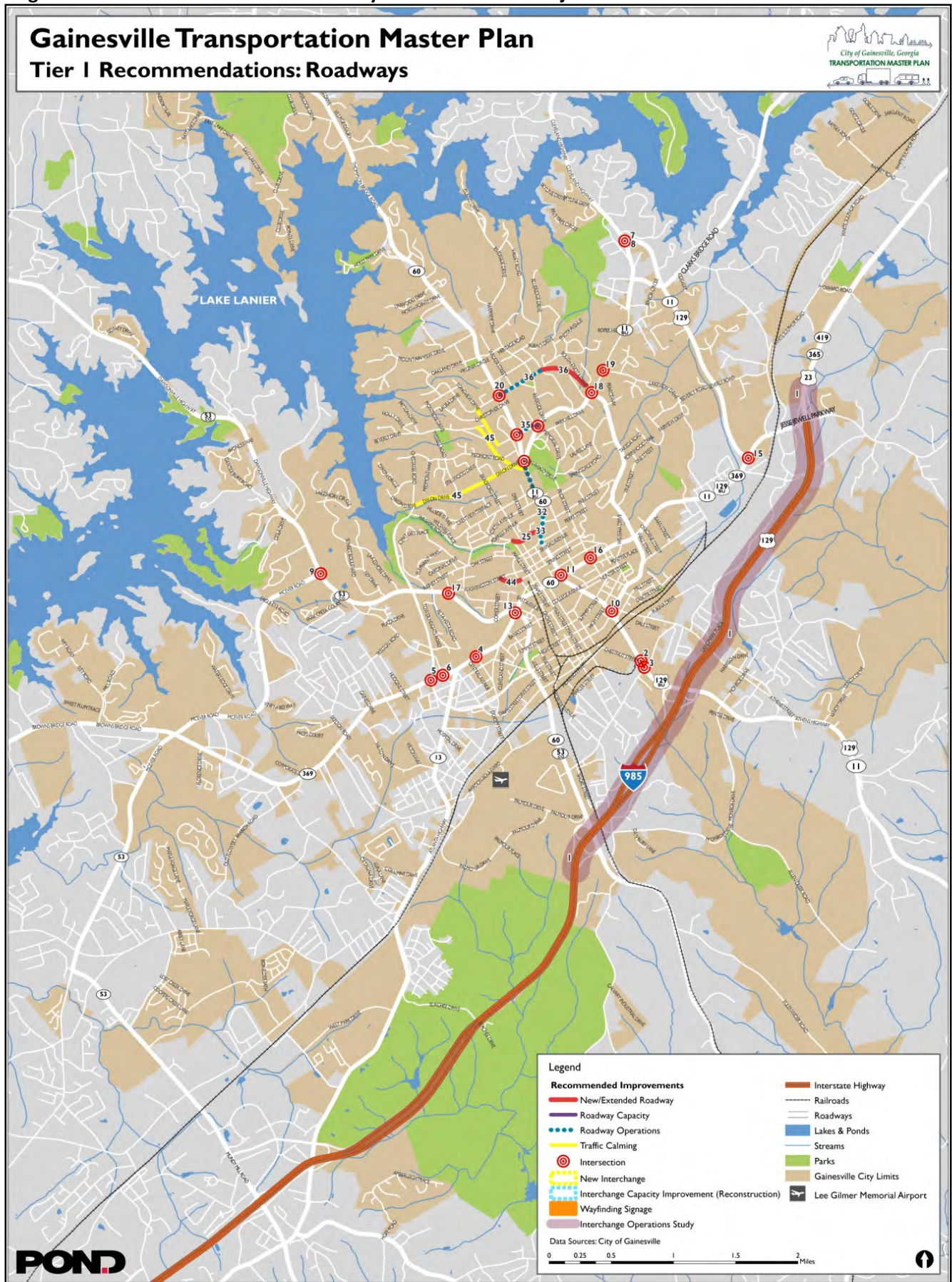
Traffic signals currently exist at the intersection of EE Butler Parkway at MLK Jr. Boulevard and at the intersection of MLK Jr. Boulevard at Athens Street. These two intersections are located approximately 50 feet from each other. This close proximity creates queuing and traffic congestion problems.



City of Gainesville Transportation Master Plan Plan Documentation



Figure 7-3: Tier 1 Recommended Roadway and Intersection Projects

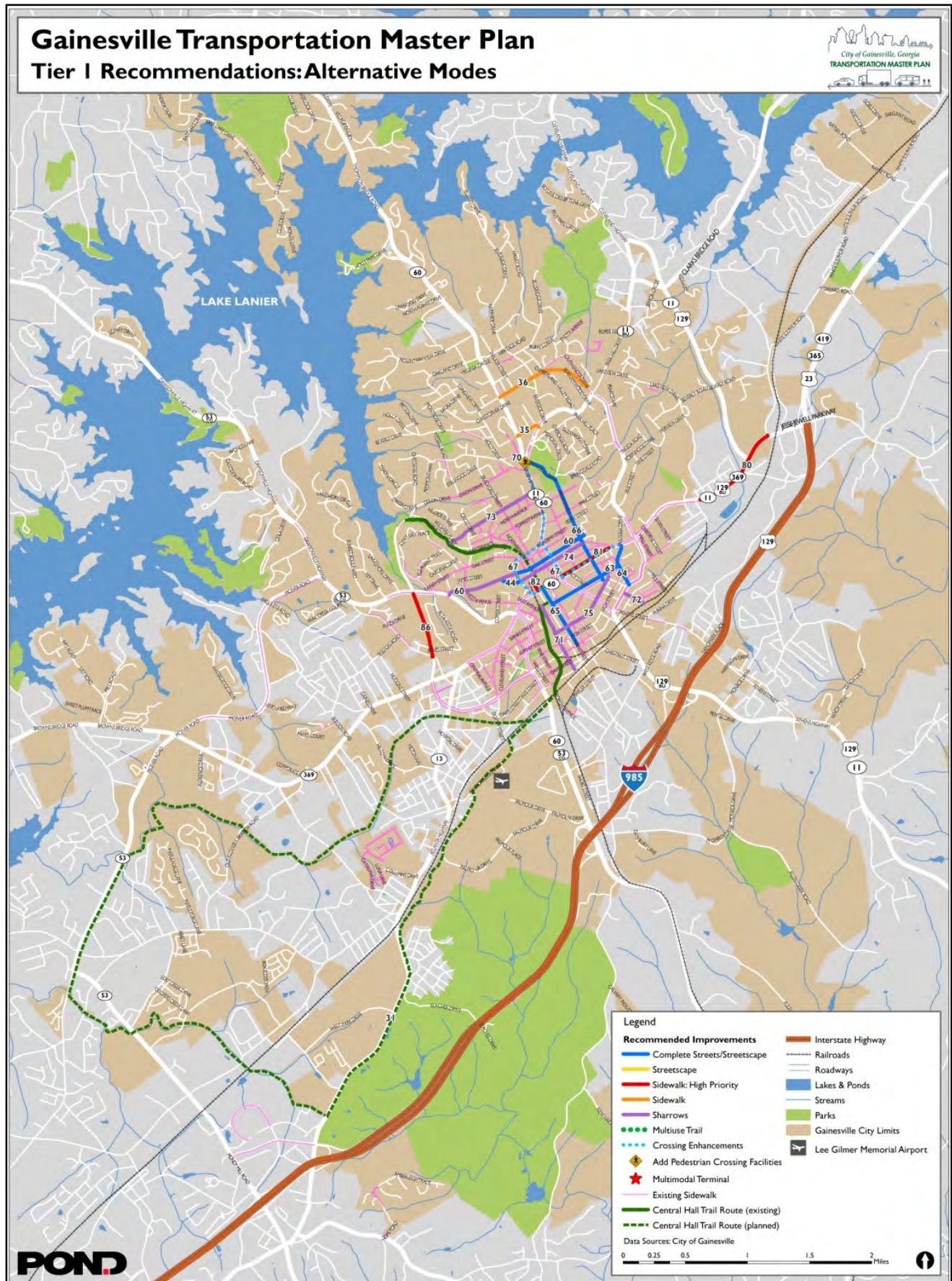




City of Gainesville Transportation Master Plan Plan Documentation



Figure 7-4: Tier 1 Recommended Alternative Modes Projects





The recommendation at this location is to remove the traffic signal at the intersection of MLK Jr. Boulevard at Athens Street and prohibit the westbound left-turn movement from Athens Street. Traffic from Athens Street that would normally make a left-turn at this intersection would likely re-route on other local roadways. A potential solution to traffic re-routing is to re-align Athens Street with McDonald Street to effectively shift Athens Street further from EE Butler Parkway. However, re-aligning Athens Street would have greater impacts and be more expensive than changing intersection operations. Therefore, re-aligning Athens Street is considered a Tier 3 project.

AM and PM peak hour traffic analyses were conducted at these intersections using Trafficware Synchro software, version 8, which is based on the methodology from the Transportation Research Board's *Highway Capacity Manual* (HCM). The analyses were conducted using 2013 traffic volume data as well as projected volume data for the years 2025 and 2040.

Removing the traffic signal at the intersection of MLK Jr. Blvd at Athens Street would reduce issues related to queuing between the two intersections. However, the peak hour traffic analyses showed that even if the signal is removed from the Athens Street approach, the intersection of EE Butler Parkway at MLK Jr. Boulevard is projected to continue to operate with a failing LOS during the PM peak hour. In the years 2025 and 2040, this intersection is projected to operate with a failing LOS during both the AM and PM peak hours. Due to the existing traffic congestion and projected future congestion, additional lane geometry changes were recommended at the intersection of EE Butler Pkwy at MLK Jr. Blvd, including:

- On the northeast bound approach
 - Extend the left-turn lane to provide more vehicular storage
 - Add a second through lane
 - Add a short (less than 100 ft long) right-turn lane
- On the northeast leg of the intersection, add a second receiving lane which will also be a right-turn lane onto Athens Street
- On the southwest bound approach, extend the left-turn lane to approximately 250 ft in length

Implementing the recommended changes at this location is projected to decrease traffic congestion at the intersection of EE Butler Parkway at MLK Jr. Boulevard. The EE Butler Parkway/Athens Highway corridor is a major roadway connecting downtown Gainesville, I-985, and the surrounding area. Reducing traffic congestion at this bottleneck will help overall traffic flow through the corridor.

GREEN STREET OPERATIONS

Two potential options were identified for possible short term implementation on Green Street from Academy Street to Riverside Drive. These options do not affect the existing curbs and would only change the corridor between the curbs. The options include:

- No Left-Turns – Prohibiting left-turns along the corridor using signing and striping
- Unbalanced Lanes – Restriping to provide two northbound through lanes, one two-way left-turn lane, and one southbound through lane



One of the primary causes of traffic congestion along Green Street is that there is no left-turn lane or median along the corridor. Left-turn traffic regularly blocks the left through lane in each direction, effectively reducing the through capacity of the roadway. Both of these proposed options are intended to remove the left-turn movements from the through lanes. They are also both considered to be low-cost projects that could be implemented relatively quickly. However, neither option is expected to solve the traffic congestion along the corridor, and both options are expected to have both pros and cons. The existing lane geometry, which would be unchanged if a left-turn prohibition was implemented, is shown in Figure 7-5. The proposed unbalanced lane geometry is shown in Figure 7-6.

Prohibiting left-turn movements along Green Street may have opposition from businesses along the corridor. It will also need regular enforcement to be effective. Implementing the Unbalanced Lane design will reduce traffic congestion for northbound traffic throughout the day. Southbound traffic will also benefit from the addition of a two-way left-turn lane. However, southbound traffic congestion is expected to increase due to the removal of one of the through lanes. This will have the greatest impact during the AM peak hour, when southbound traffic volumes are the heaviest.

A separate Green Street operations project is a part of Tier 1 and would add turn lanes at specific locations. Additional ROW would likely be needed for this project, so it likely would not be constructed at the same times as the short-term operations project. This project would:

- Add a southbound right-turn lane at the intersection of Green Street at Academy Street
- Add a northbound right-turn lane and a southbound left-turn lane at the entrance to the Post Office

The southbound approach to the intersection of Green Street at Academy Street experiences heavy traffic congestion during the AM peak hour. This is due to heavy southbound through and right-turn traffic. A traffic analysis of the AM peak hour shows that adding a southbound right-turn lane should reduce traffic congestion on this approach.

The US Post Office located at 364 Green Street was identified repeatedly by the public and the focus group as a source of traffic congestion along the Green Street corridor. The City has spoken with staff from the Post Office about either re-locating the Post Office or changing its site design. However, no changes have been accepted by the Post Office. The right-turn lane and left-turn lane into the Post Office should help to reduce traffic congestion on Green Street caused by access into and out of the Post Office.

Figure 7-5: Green Street Typical Section, Existing Design/Proposed No Left Turns

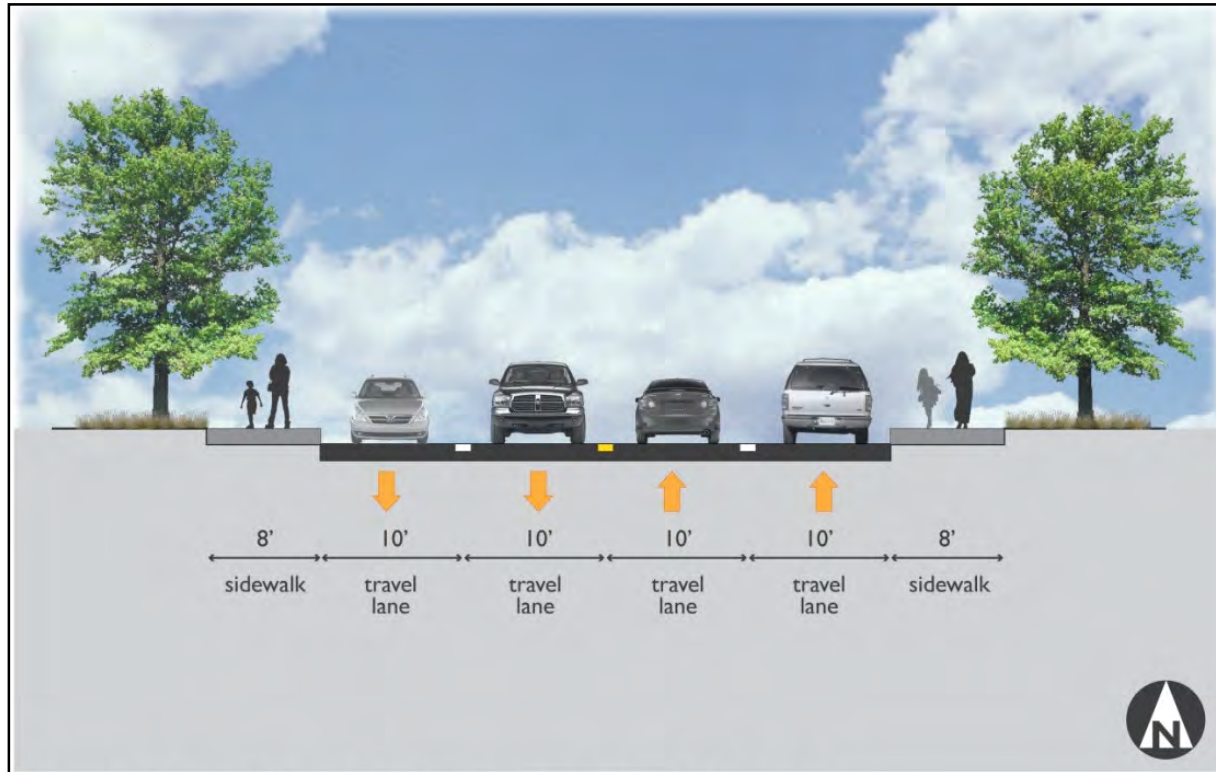
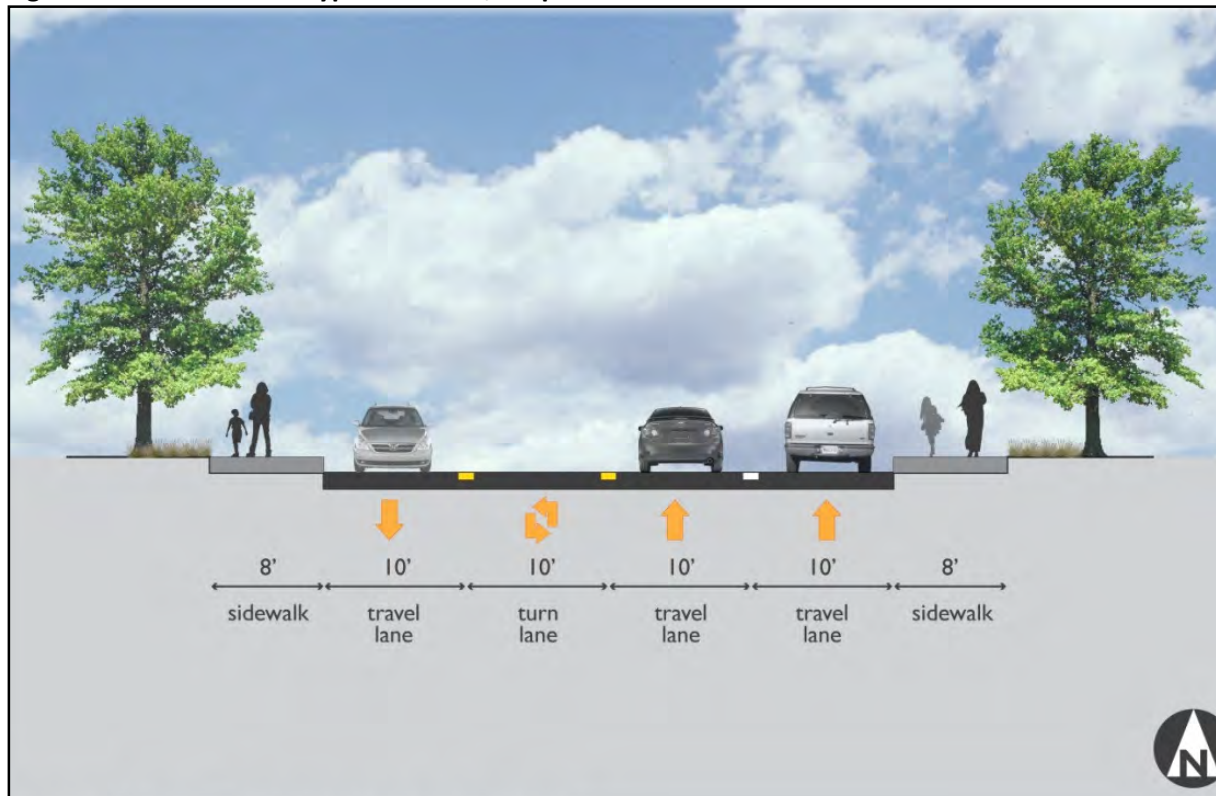


Figure 7-6: Green Street Typical Section, Proposed Unbalanced Lanes





Most of the Green Street corridor is part of a historic district. The district begins north of the Gainesville Post Office and extends north to the location of the closed intersection with Glenwood Drive, just south of the Gainesville Civic Center. The location of turn lanes would need to be coordinated with this boundary so that the footprint of the project does not impact the historic district.

ENOTA DRIVE RE-ALIGNMENT

The Enota Drive Re-alignment project is intended to help reduce traffic demand on Green Street. Some traffic would potentially shift from Green Street to Enota Drive and continue south to Downey Boulevard, avoiding the Green Street corridor and downtown Gainesville.

Most of Enota Drive from Thompson Bridge Road to Park Hill Drive is a three-lane roadway with one through lane in each direction and a two-way left-turn lane. Much of this segment of the Enota Drive corridor consists of single-family residential development. Commercial development is located near the intersection with Thompson Bridge Road, and Enota Elementary School is located near the intersection with Dunn Drive. The re-alignment project would help to move traffic between Thompson Bridge Road and Park Hill Drive with less delay. The project would also shift this traffic away from Enota Elementary School and much of the residential development along the corridor. The project includes the following:

- Construct a new 3-lane roadway segment behind Enota Elementary School, connecting Enota Drive near the intersection with Cumberland Dr to S Enota Dr near the intersection with Enota Cir
- Add a two-way left-turn lane to Enota Dr from Thompson Br Rd to Park Hill Dr, including along the new roadway segment
- Construction of this project could potentially be combined with construction of the intersection projects at Thompson Bridge Rd at Enota Ave and at Park Hill Dr at Enota Ave

The proposed typical section for the new roadway segment is shown in Figure 7-7, and the general route of the Enota Drive Re-alignment is shown in Figure 7-8. As this figure shows, the property needed for the Enota Drive Re-alignment is currently undeveloped.

A cross-sectional diagram of a four-lane road. From left to right, it shows a sidewalk/streetscape area (width varies from 5' to 10'), a travel lane (width varies from 2' to 4'), a 11' wide travel lane with a downward arrow, a 14' wide turn lane with two left-turn arrows, a 11' wide travel lane with an upward arrow, another 11' wide travel lane, another sidewalk/streetscape area (width varies from 2' to 4'), and a final sidewalk/streetscape area (width varies from 5' to 10'). Silhouettes of pedestrians are shown on the sidewalks, and cars are shown in the travel lanes. A north arrow is in the bottom right corner.

Component	Width / Dimension
Left Sidewalk / Streetscape	Varies 5'-10'
Left Travel Lane	Varies 2'-4'
Left Travel Lane (with arrow)	11'
Turn Lane	14'
Right Travel Lane (with arrow)	11'
Right Travel Lane	11'
Right Travel Lane	Varies 2'-4'
Right Sidewalk / Streetscape	Varies 5'-10'

This aerial map illustrates the proposed bus routes for the Burnsville area. The routes are color-coded: blue for primary routes and red dashed lines for potential connections or alternative paths. The map includes the following route details:

- Route 20:** A blue line running along Highway 100 on the left side of the map.
- Route 36:** A blue line starting from Highway 100, traveling east through the center of the map, and ending at Highway 153 on the right.
- Route 35:** A blue line running along Highway 100, with a red dashed loop around the University of Minnesota area.
- Route 18:** A blue line running along Highway 153 on the right side of the map.

Key streets and landmarks labeled on the map include Highway 100, Highway 153, Burnsville Road, and the University of Minnesota. The map also shows various residential and commercial areas, as well as green spaces.

ROADWAY EXTENSIONS

Two roadway extensions were included as Tier 1 projects. Neither of these two projects will directly address existing traffic congestion. However, both projects will expand the roadway network in the downtown area where some of the City's heaviest traffic congestion is located. Due to existing undeveloped property in the area of these roadway extensions, both projects can likely be implemented with less impact and for less cost in the short term rather than in the long term. However, high ROW costs could potentially make these projects cost prohibitive. These two projects are shown in Figure 7-9 and include:

- Ivey Terrace Extension (Project 25)
- Spring St Extension (Project 44)

The Ivey Terrace extension will use a portion of Sylvan Woods Lane. This is a relatively new roadway that does not have development on it. Additionally, this proposed extension will connect Northside Drive to Bradford Street. There is currently some vacant property between these roadways, which may reduce the cost of any ROW acquisition in this area. This roadway extension can serve as an alternate route for local traffic traveling between Green Street, Academy Street, and areas west of downtown.

Figure 7-9: Roadway Extensions



Spring Street and Washington Street are an east-west one-way pair in the downtown area. Washington continues west of Academy Street as a two-way street, Spring Street ends at Academy Street. All



eastbound traffic on the two-way portion of Washington must turn right on Academy Street. This traffic travels south for one block before turning east on Spring Street. The proposed Spring Street extension would extend the one-way pair to the west, preventing eastbound traffic from needing to travel on Academy Street. Much of the property that would be used by this Spring Street extension is currently undeveloped.

TRAFFIC SIGNAL SYSTEMS

The transportation system in Gainesville relies on the movement of large numbers of vehicles along its multilane roadway network. This network is comprised primarily of state routes and also includes some local roads. This primary roadway network contains 78 City maintained traffic signals. Many of these signals are grouped into coordinated signal systems to facilitate movement along corridors through the synchronization of traffic signals. The City of Gainesville provides effective signal system operations using the technology currently installed. However, there are several areas that would need to be improved to bring the signal system to the current state of the practice regarding equipment and operation, allowing the signal systems to accommodate the large growth in traffic predicted through the year 2040.

The following areas of improvement are recommended:

- *Signal Equipment and Connection to Traffic Control Center (TCC):* Providing signal equipment that uses IP addressing is important to facilitate remote monitoring and control of most devices. This is recommended as a first step to implementation of an intelligent transportation system for more active management of the signal systems. In conjunction with these improvements, implementation of the necessary computer equipment and video monitors in a TCC is recommended.
- *Signal Timing and Control Strategies:* Comprehensive retiming of traffic signals is recommended with regular updates to signal timing to maximize the efficiency of the congested corridors. Signal timing updates should consider implementation of traffic responsive signal control and use of travel time data for formulation of effective control strategies.
- *Traffic Signal Interconnect and Video Monitoring:* Expansion of video monitoring is recommended to provide complete coverage first along congested corridors and then along all signalized corridors. Implementation of signal interconnection using high bandwidth communications is important to allow for monitoring of systems and real-time video. Installation of communication loops is desirable to allow communications to be maintained if a link is severed. In addition, connection to the TCC via two physically separated paths is also desirable. Three projects are defined to first, connect existing systems; second, extend to key corridors; and third, extend to secondary corridors and provide a parallel route to the TCC.

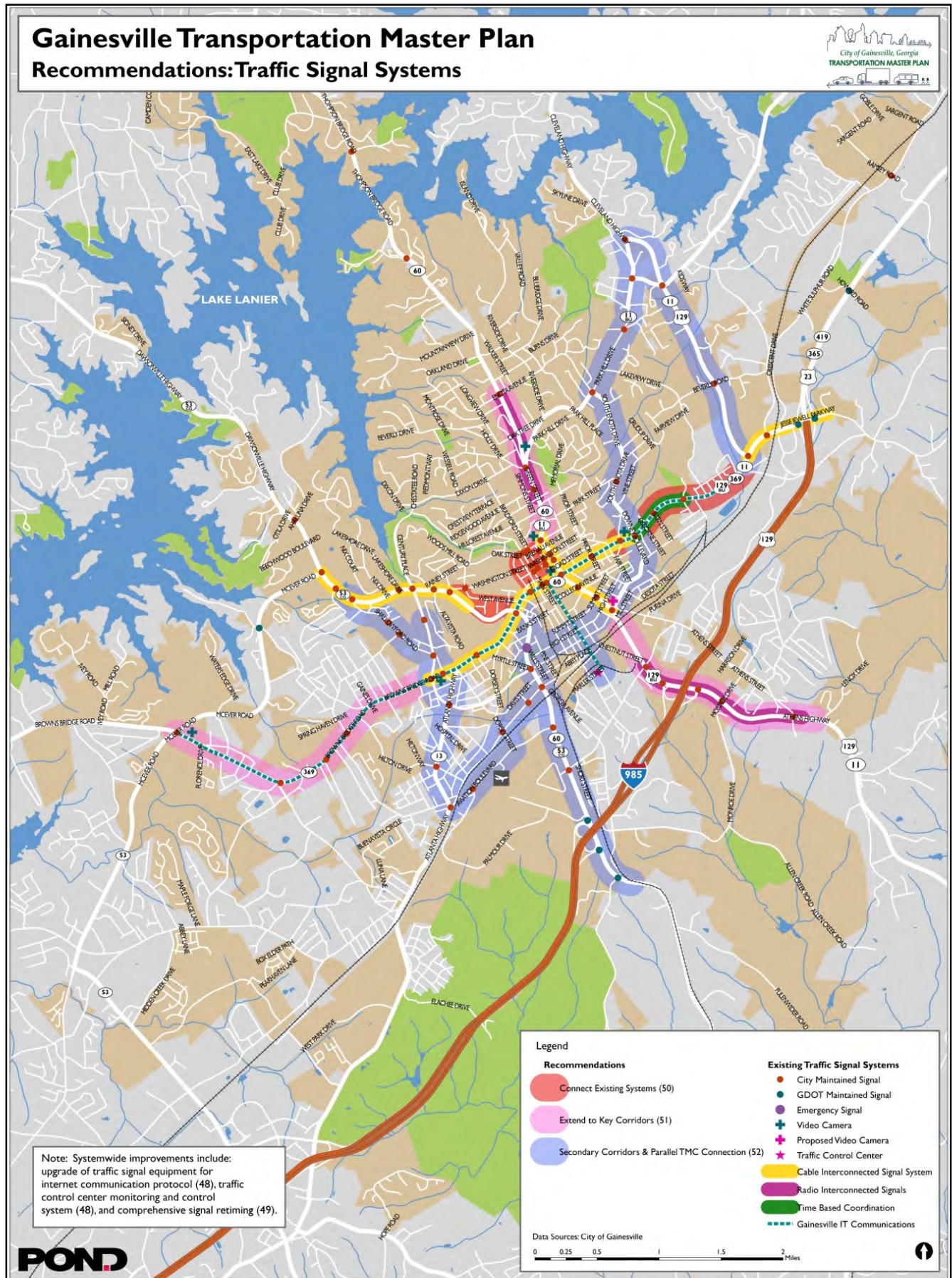
The recommended traffic signal systems projects are shown in Figure 7-10. Many of these improvements are recommended for implementation in Tier 1, with updates to signal system equipment and signal timing in Tiers 2 and 3.



City of Gainesville Transportation Master Plan Plan Documentation



Figure 7-10: Recommended Traffic Signal System Improvements





I-985 INTERCHANGE OPERATIONS STUDY

Access to the freeway is important for residents and businesses. The City of Gainesville is served primarily by three interchanges with I-985. Each of these interchanges experiences some peak hour congestion and all are expected to experience congestion by the year 2040. This study includes traffic capacity and operations on I-985 and all of its interchanges from the Queen City Parkway interchange to the Jesse Jewell Parkway interchange. This study shall include the following:

- Existing and future highway capacity and operations needs
- Existing and future interchange design and operations
- Examination of the purpose, need, and feasibility of a new interchange (likely from an extension of Downey Boulevard) between the existing interchanges with Athens Highway and Jesse Jewell Parkway
- Due to the proximity of the proposed interchange to the adjacent interchanges along I-985, consideration of a split diamond or collector-distributor system would be necessary
- An analysis of the potential need for managed lanes (i.e. HOV or HOT lanes) or additional corridor changes other than general purpose lanes
- Analysis of the potential need and location of Park and Ride lots at or near the I-985 interchanges
- Other issues that the City of Gainesville, Hall County, the GHMPO, or FHWA may deem necessary

Construction of additional lanes on I-985, a new interchange, or other significant changes to the corridor will be long-term projects. However, planning for these types of projects needs to start relatively soon to provide adequate time for project approval, design, and ROW acquisition prior to the beginning of construction.

TIER 1 BIKE AND PEDESTRIAN PROJECTS

The bike and pedestrian projects in Tier 1 include a number of projects in or near downtown Gainesville. These projects improve bike and pedestrian activity within and between downtown, midtown, Brenau University, the Fair Street area, and the Green Street corridor. This is the core of the City where much of the pedestrian activity takes place. These projects are consistent with the *Gainesville 2030 Comprehensive Plan* as they support existing development in these areas while also encouraging re-development where it is needed.

The projects in these areas include:

- Washington St Complete Street and Sharrows
- College Ave Complete St
- Fair St Complete Street
- Main St Complete Street
- Prior St Complete Street
- Downtown Corridors Ped Crossings
- Green St at Riverside Dr Ped Crossing

A number of high priority sidewalk projects are also recommended as a part of Tier 1. These sidewalks are also in or near downtown and help to close gaps in the existing sidewalk network.

Sharrows are recommended along a number of roadways as a part of Tier 1. Sharrows are proposed to identify bicycle routes along low-volume, low-speed roadways. Many of these roadways have residential development on them but connect to commercial jobs, retail, parks, and schools. Sharrows are relatively inexpensive to add to a roadway, as only markings and signage are needed. This makes short-term implementation feasible. Sharrows also provide connections to proposed multi-use trails and bicycle lanes as those projects are implemented.



Sharrow Marking

TIER 2 PROJECTS

Projects identified for Tier 2 are shown in Figure 7-11 and Figure 7-12. A number of the Tier 2 projects focus on providing additional roadway capacity or new roadways in key areas with congestion. Some of these projects will require more detailed planning and approval from outside agencies before they can move forward. Many of the Tier 2 projects have higher costs than the Tier 1 projects. These higher costs, as well as the additional planning and approval steps, mean that it would typically not be feasible to complete some of these projects any sooner than during the Tier 2 time frame.

INDUSTRIAL BOULEVARD EXTENSION

Industrial Boulevard connects Atlanta Highway in south Gainesville to Bradford Street in Midtown. It runs roughly parallel to freight rail lines that pass through Gainesville, and ends at Bradford Street near the Amtrak Station.

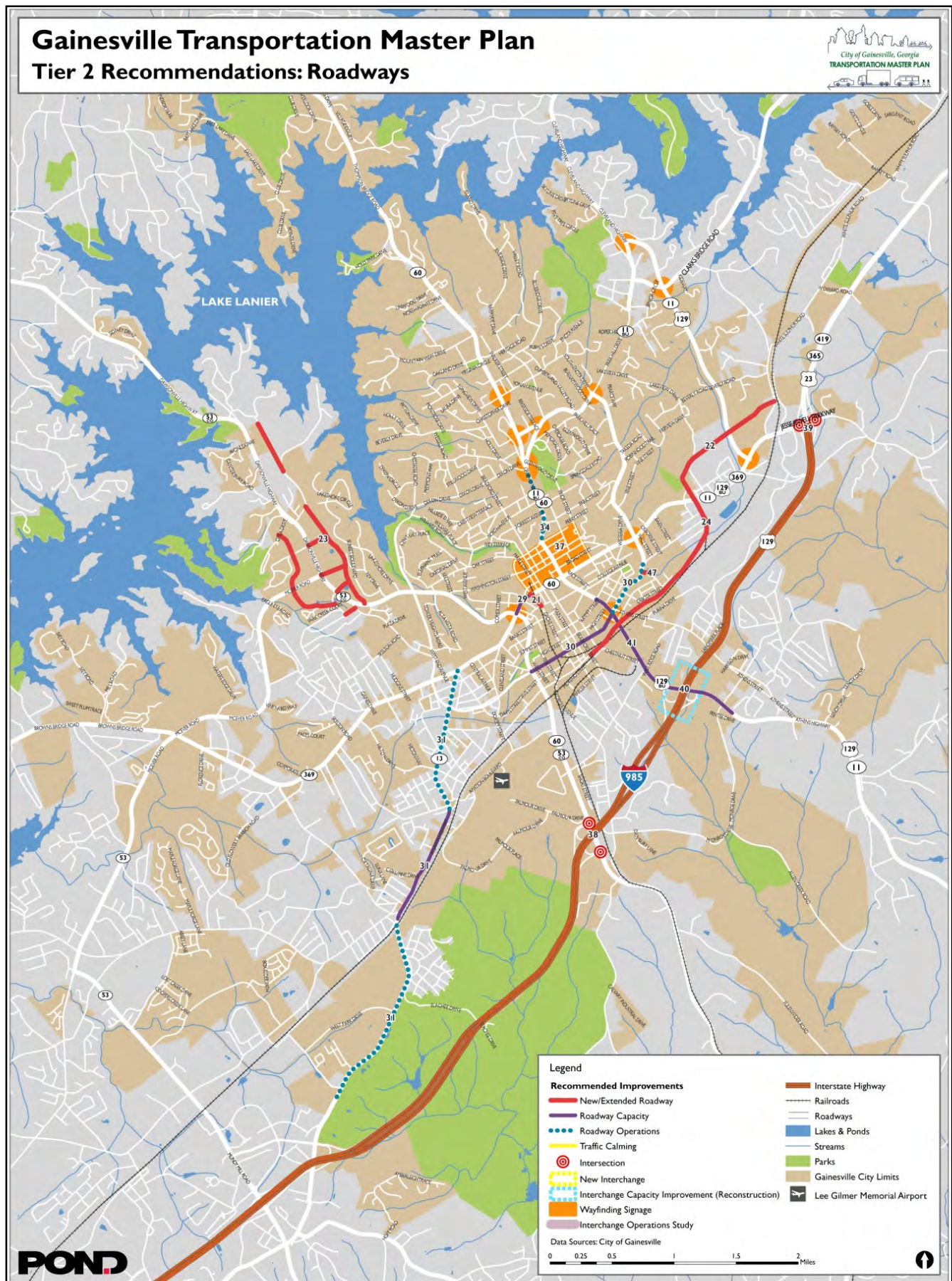
This project would extend Industrial Boulevard to the northeast using abandoned railroad ROW. The proposed route, shown as Project 24 in Figure 7-13, would continue roughly parallel to the existing freight lines. It would pass under the EE Butler Parkway/Athens Highway bridge and have an at grade intersection with Athens Street. The extension would continue through undeveloped property before turning northwest and using the existing alignment of Branch Street to reach Jesse Jewell Parkway. The existing signalized intersection of Jesse Jewell Parkway at Community Way would shift to the east to create a 4-leg intersection with the Industrial Blvd Extension.



City of Gainesville Transportation Master Plan Plan Documentation



Figure 7-11: Tier 2 Recommended Roadway and Intersection Projects





City of Gainesville Transportation Master Plan Plan Documentation



Figure 7-12: Tier 2 Recommended Alternative Modes Projects

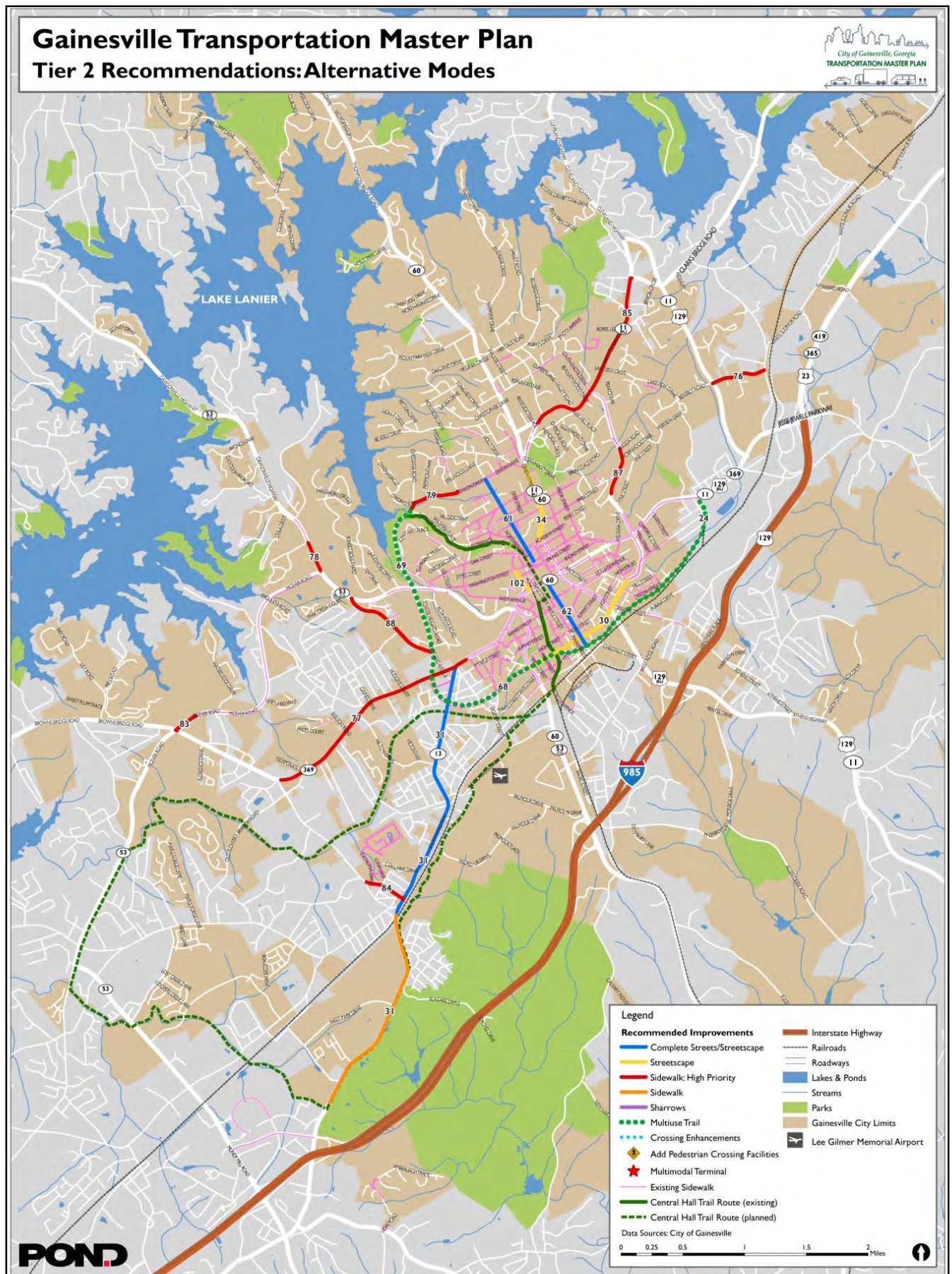
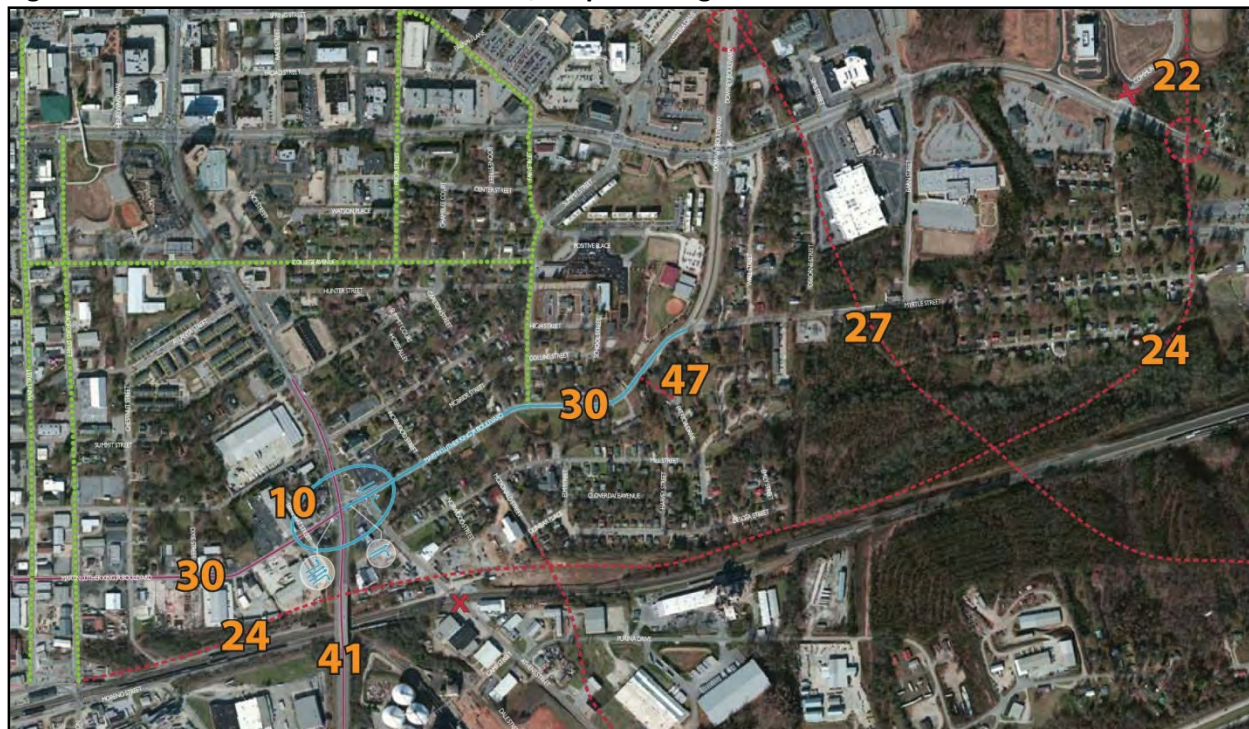


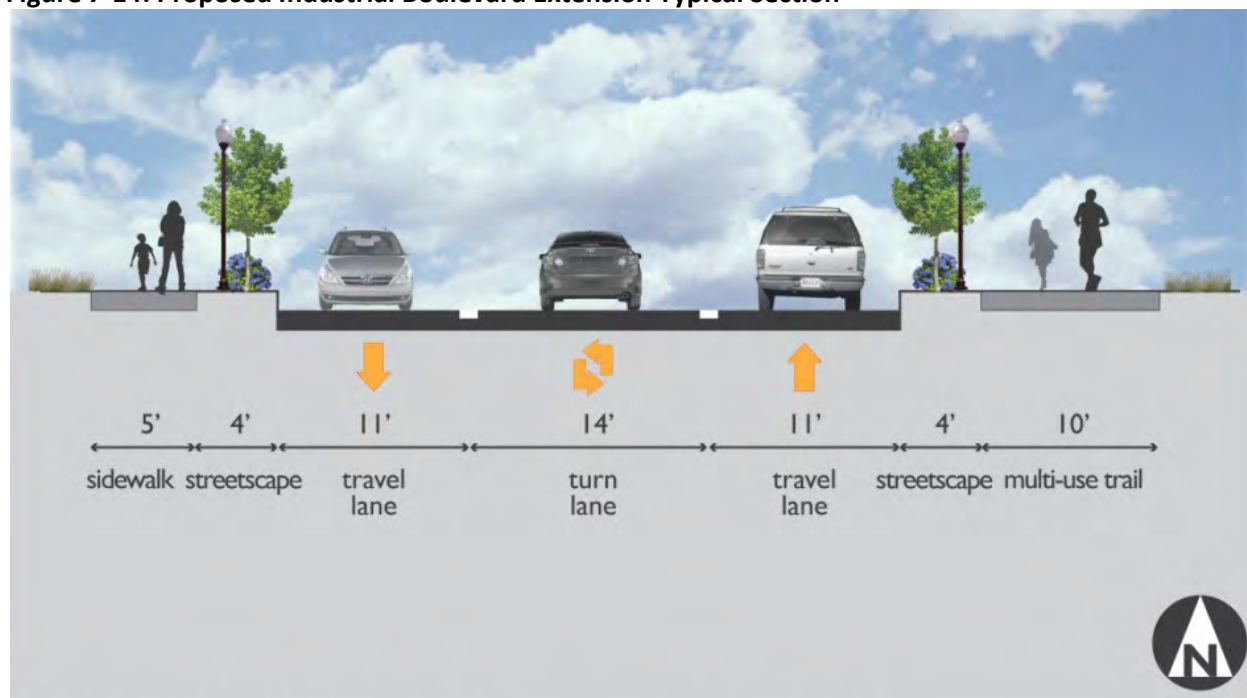
Figure 7-13: Industrial Boulevard Extension, Proposed Alignment



The proposed typical section for this project is shown in Figure 7-14. The proposed design would include one through lane in each direction, a two-way left-turn lane, streetscape elements, and a multi-use trail on one side of the road with a sidewalk on the other side. With the multi-use trail, streetscape elements, and sidewalk, the Industrial Blvd Extension is intended to serve pedestrians and bicyclists as well as vehicular traffic.

The purpose of this project is to provide an alternate route for east-west traffic in the City. Jesse Jewell Parkway is the primary east-west corridor through the City. It is a 4-lane roadway, but it currently has traffic congestion at a number of intersections during the peak hours. Traffic volumes are projected to grow in the future on Jesse Jewell Parkway, which will result in additional traffic congestion. Some intersection and capacity projects are planned along the Jesse Jewell Parkway corridor to help address this congestion. However, it is not feasible to widen most of the corridor, particularly in downtown Gainesville where the roadway is constrained by existing development. The Industrial Boulevard Extension will provide an alternative route through the City to help alleviate some of the congestion on Jesse Jewell Parkway.

Figure 7-14: Proposed Industrial Boulevard Extension Typical Section



JESSE JEWELL PARKWAY CAPACITY WEST

Downtown and Midtown Gainesville have a grid of streets, providing traffic with a number of different options to make short, local trips. However, on the west side of Downtown and Midtown, much of the street grid ends at Academy Street and Grove Street. Jesse Jewell Parkway and a few other smaller streets continue west to John Morrow Parkway/Queen City Parkway.

As previously discussed, widening the Jesse Jewell Parkway corridor is not feasible in many areas. However, some targeted capacity projects were identified. The Jesse Jewell Parkway Capacity West is one of the capacity projects along the corridor. This project would widen Jesse Jewell Pkwy to a 6-lane roadway with a median, including 3 through lanes in each direction, from John Morrow Pkwy/Queen City Pkwy to Academy Street. The additional westbound lane will become a right-turn lane at John Morrow Parkway and the additional eastbound lane will become a left-turn lane for Academy Street.

MLK JR. BOULEVARD CORRIDOR

The MLK Jr. Boulevard Corridor project is also intended to provide additional east-west traffic capacity in the City. MLK Jr. Boulevard connects to Pearl Nix Parkway south of downtown, and to Downey Boulevard east of downtown. Both Pearl Nix Parkway and Downey Boulevard are 4-lane roadways, while MLK Jr. Boulevard is a 2-lane roadway. Providing additional capacity on MLK Jr. Boulevard between these roadways would provide a continuous 4-lane roadway along much of the west, south, and east sides of the City.



This project was added to the travel demand model as a 4-lane roadway from Pearl Nix Parkway to Downey Boulevard. However, the model projected future traffic volumes to be much lower on the segment of MLK Jr. Boulevard from EE Butler Parkway to Downey Boulevard than on the segment from Pearl Nix Parkway to EE Butler Parkway. Additionally, land use along the segment from EE Butler Parkway to Downey Boulevard consists primarily of single-family homes.

Based on the results of the travel demand model and potential impacts to residential development, the project description was revised. The proposed project includes widening MLK Jr. Blvd to a 4-lane roadway with a landscaped median and streetscapes from Queen City Pkwy to EE Butler Parkway. The project also includes adding a two-way left-turn lane and streetscapes from EE Butler Pkwy to Downey Blvd. This would result in a 3-lane roadway that does not add additional through capacity to the residential segment, but would add a left-turn lane to remove left-turn traffic from the through lanes. The proposed 3-lane typical section would essentially be the same as the proposed design for the Enota Drive Re-alignment, shown previously in Figure 7-7. The exact typical section for each roadway will be determined during the design process. However, this figure is intended to give an idea of the type of roadway that is proposed for these corridors.

ATLANTA HIGHWAY WIDENING AND OPERATIONS

The needs assessment showed the need for additional traffic capacity along the Atlanta Highway corridor. There is also a need for better bike and pedestrian activity in the area. However, land use along the corridor includes many relatively small parcels. Purchasing large amounts of ROW from many of these parcels could have significant impacts to existing businesses and be very expensive.

Due to the needs and the constraints along the corridor, recommendations were made for specific segments of Atlanta Highway. The project recommends implementing the following along Atlanta Highway:

- Add a two-way left-turn lane from Hall Street to Industrial Boulevard;
- Widen to a 4-lane roadway with a landscaped median from Industrial Boulevard to Memorial Park Drive;
- Convert Atlanta Hwy to a Complete Street from Browns Bridge Road to Memorial Park Drive;
- Add a two-way left-turn lane and sidewalk from Memorial Park Drive to Tumbling Creek Road; continue the sidewalk to the existing sidewalk approximately 1,000 ft south of Tumbling Creek Road.

These improvements add capacity where it is most needed, in the middle of the corridor where traffic volumes are the heaviest.

GREEN STREET OPERATIONS

The needs assessment showed that the Green Street corridor from Academy Street to Riverside Drive is currently over capacity in the peak direction during the PM peak hour. By the year 2025, the peak direction of traffic on this segment is projected to be over capacity during the AM, Midday, and PM peak

hour. Traffic volumes are projected to continue to grow through the year 2040, and even greater delay is projected for the peak direction of traffic during the AM, Midday, and PM peak hour.

According to GDOT count data, the daily traffic volume along this segment of Green Street was 33,500 vehicles per day in 2011. The projected 2040 volume from the GHMPO travel demand model is 53,000 vehicles per day. The projected increase in traffic volumes shows the need for alternative routes in this area, such as the Enota Drive Re-Alignment, as well as the need to improve traffic operations along the Green Street corridor. The proposed Green Street Operations project from Academy Street to Riverside Drive includes the following:

- Convert Green St to a boulevard with a 20 ft wide landscaped median as shown in Figure 7-15
- Include left-turn lanes at intersections instead of the landscaped median as shown in Figure 7-16
- Add wide sidewalks with streetscape elements (ped lighting, trees) on both sides of the road.

The exact typical sections for the Green Street corridor will be determined during the design process. All proposed designs should be context sensitive and should consider the historic nature of the developments along the corridor. Most of the corridor is part of the Green Street Local Historic District, creating an additional level of review for any transportation projects that impact the adjacent parcels. It should also be noted that GDOT has previously considered widening Green Street. A lawsuit was filed at that time and resulted in an injunction preventing widening from going forward. These issues would need to be addressed before the proposed project could move forward.

Figure 7-15: Proposed Green Street Boulevard Typical Section

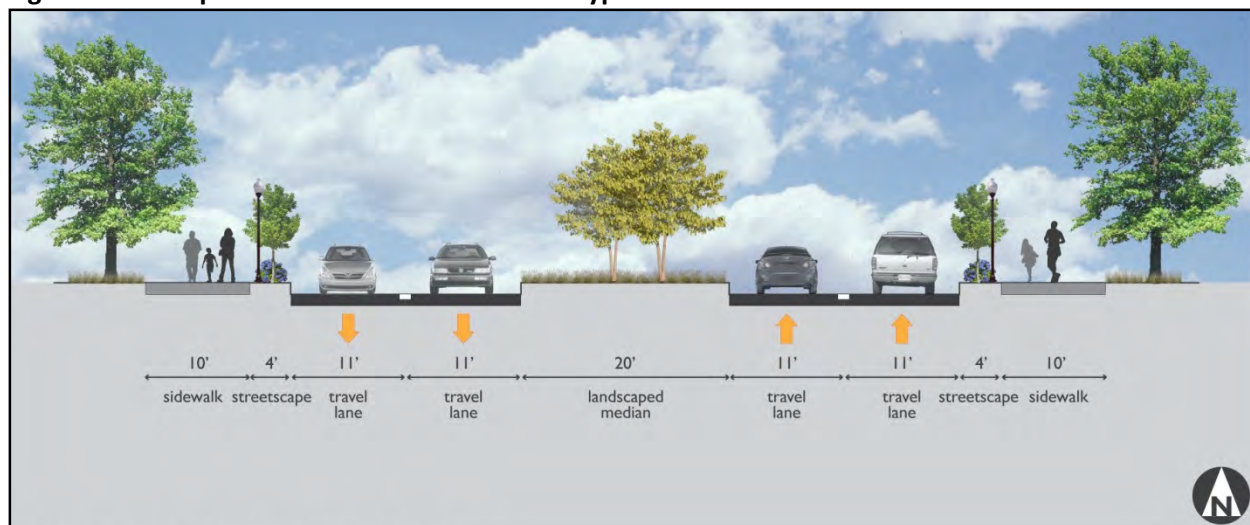
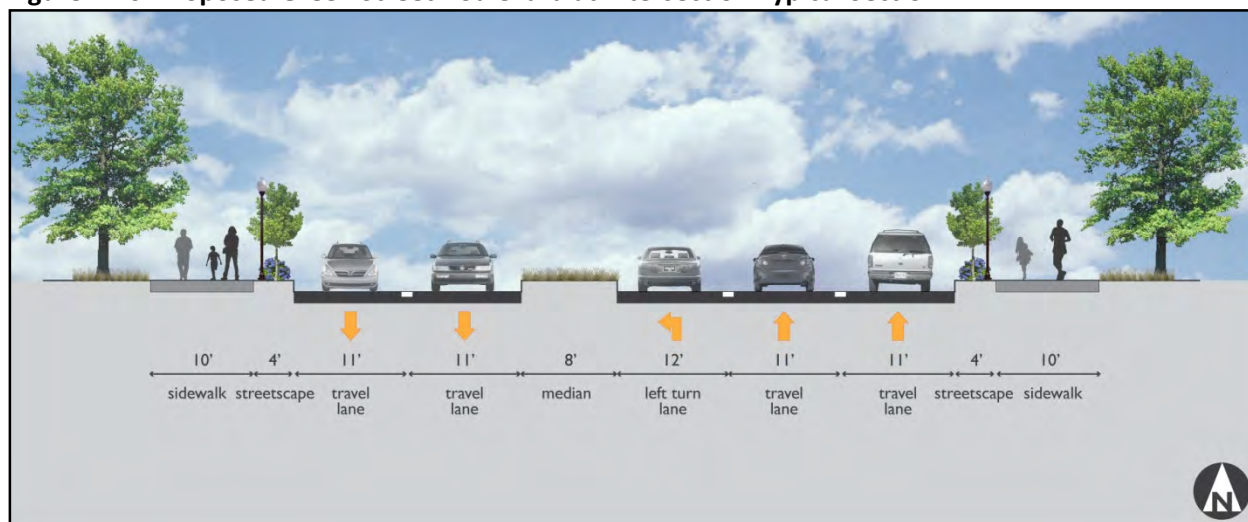


Figure 7-16: Proposed Green Street Boulevard at Intersection Typical Section



Input from the public and the project's focus group was mixed on this project. Some people were against this project or any changes to Green Street that would result in a loss to the tree cover along the corridor. They considered Green Street to be central to the identity of the City of Gainesville and did not want to see it change. Other people agreed that Green Street was important, but also saw the need to reduce traffic congestion along the corridor. They were in favor of a median and/or left-turn lane to remove left-turn traffic from the through lanes of traffic.

Other members of the public and focus group identified the need to improve the pedestrian environment along the corridor. While sidewalks exist on both sides of the roadway, there is no buffer between the sidewalk and the roadway. Significant amounts of truck traffic travel along Green Street, and walking near this truck traffic with no buffer is an unpleasant pedestrian experience. Additionally, there are no pedestrian crossing facilities at the intersection of Green Street at Riverside Drive, at any unsignalized intersections, or at any midblock locations. The only locations with pedestrian crossing facilities are the signalized intersection with Academy Street and the signalized intersection with Ridgewood Avenue.

TIER 2 BIKE AND PEDESTRIAN PROJECTS

The bike and pedestrian projects in Tier 2 focus on connections in key areas to address current and future needs. These recommended projects were identified because they complete gaps in the bike and pedestrian network and/or they connect to a large number of destinations including community facilities, jobs, retail, and transit routes.

The Complete Streets projects along Bradford Street provide a continuous multi-modal facility from the Amtrak Station on Industrial Boulevard in Midtown to Downtown. The facility then continues north out of downtown into the Bradford-Ridgewood Traditional Neighborhood. Along with projects in Tier 1, the Bradford Street Complete Streets projects will help to provide a network of bike and pedestrian facilities in the center of the City of Gainesville.



The Pearl Nix Pkwy Trail East project and the Pearl Nix Pkwy Trail West project each are planned to construct a multi-use trail along segments of Pearl Nix Parkway. The Pearl Nix Parkway corridor was chosen for a multi-use trail facility because the corridor has good access management and relatively few curb cuts. This reduces the number of locations where bicyclists and pedestrians may have conflicting movements with vehicular traffic. Both of the proposed trail segments will connect to the existing Central Hall Trail. This will create a multimodal loop along the west and south sides of the City that continues through Downtown and Midtown using the existing trail facilities. A connection to the trail that is planned as a part of the Industrial Boulevard Extension provides a link to the northeast part of the City.

TIER 3 PROJECTS

Projects identified for Tier 3 are shown in Figure 7-17 and Figure 7-18. Many of the projects in Tier 3 are planned for a longer time frame because they have significant impacts, need review and approval from outside agencies, or are expensive. Some projects are intended to address future transportation needs in areas where traffic congestion may not currently be a significant problem.

THOMPSON BRIDGE RD-DAWSONVILLE HWY CONNECTOR

The needs assessment identified a significant need for travel between Thompson Bridge Road and Dawsonville Highway. Much of the traffic that currently travels between these areas travels on Green Street and through downtown Gainesville. Green Street and the streets in Downtown Gainesville currently have traffic congestion problems, and more congestion is projected in the future.

A new bridge across Lake Lanier is proposed to address this need. The Thompson Bridge Rd-Dawsonville Hwy Connector would construct a new bridge from Thompson Bridge Rd/SR 60 approximately 1 mile south of Thompson Bridge across Lake Lanier to Dawsonville Hwy. This connection includes new roadway segments and may also use segments of existing roadways, depending on the preferred route alternative. No specific route has been chosen for this connection. Additional study of existing developments, environmental impacts, and other factors is needed before a preferred route can be chosen.

The travel demand model run for 2040 Master Plan Projects included this new bridge connection as a part of the model network. This model run showed a projected 2040 traffic volume of over 16,000 vehicles per day on the new bridge connection.



City of Gainesville Transportation Master Plan Plan Documentation



Figure 7-17: Tier 3 Recommended Roadway and Intersection Projects

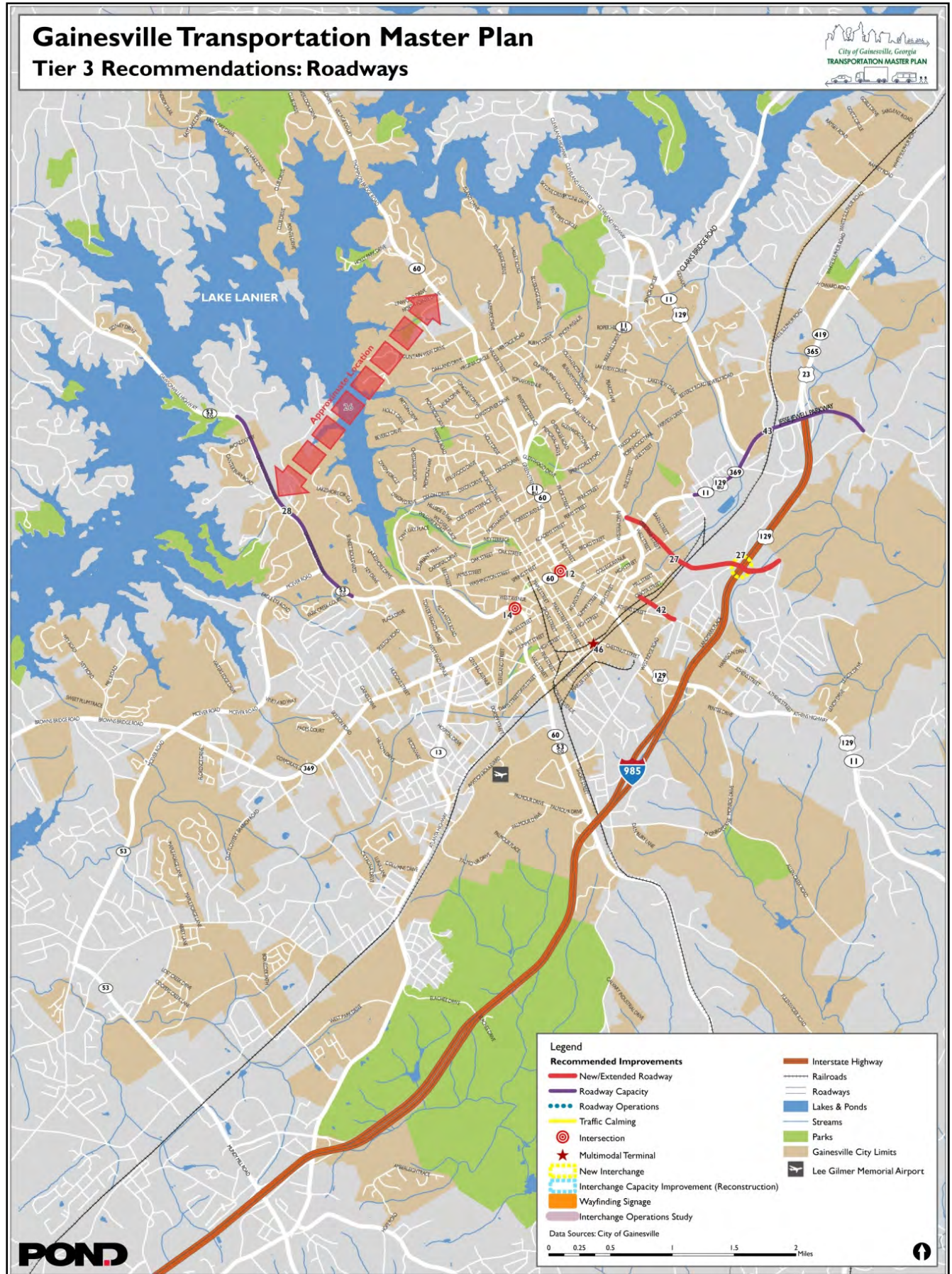
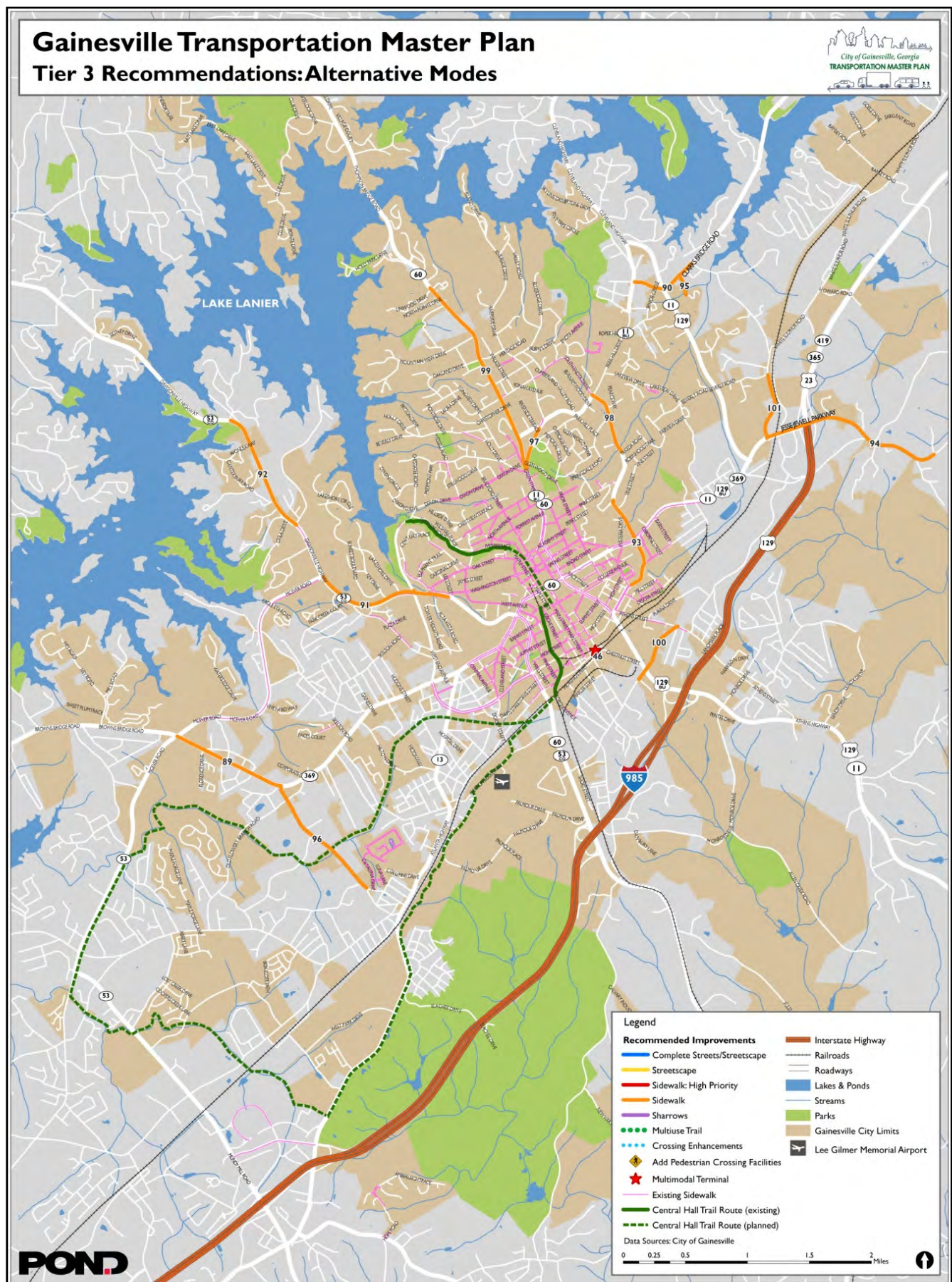


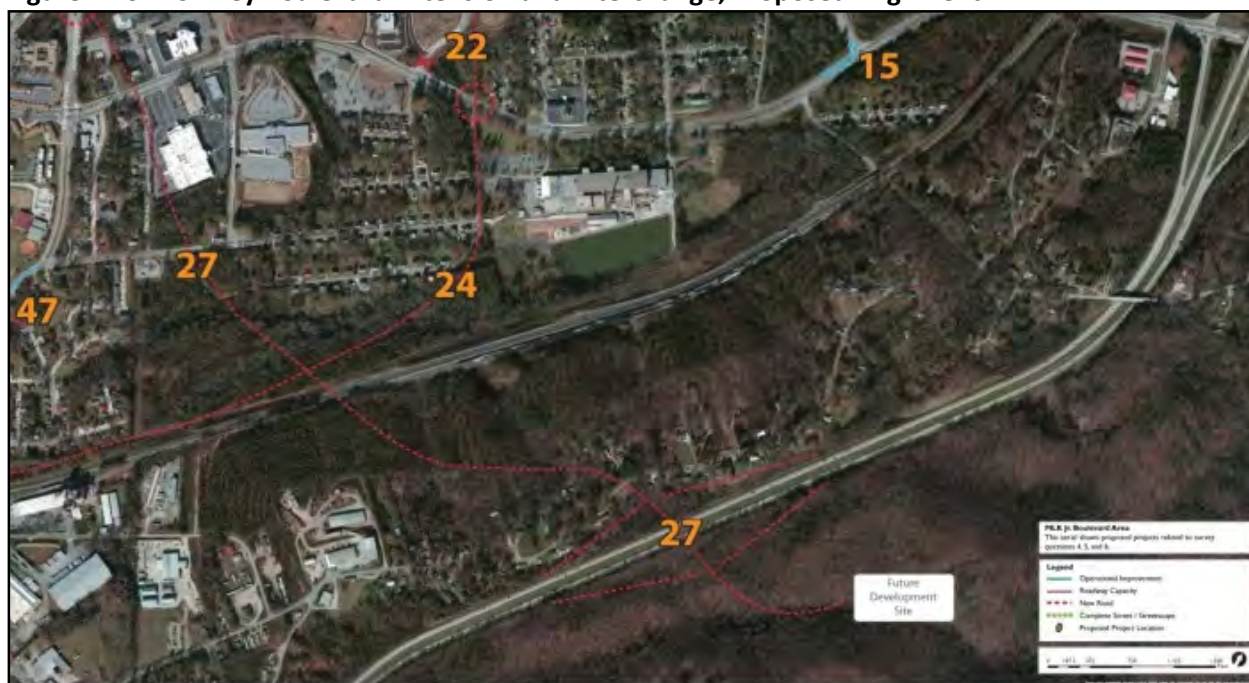
Figure 7-18: Tier 3 Recommended Alternative Modes Projects



DOWNEY BLVD EXTENSION AND INTERCHANGE

By the year 2040, I-985 and the interchanges that provide access to and from Gainesville are projected to be congested. This project proposes adding a new interchange between the existing interchanges on I-985 at Athens Highway and at Jesse Jewell Parkway. This interchange would include an extension of Downey Boulevard as well as a connection to currently undeveloped land east of I-985. The general route proposed for the Downey Boulevard extension and the area of the new interchange are shown as Project 27 in Figure 7-19.

Figure 7-19: Downey Boulevard Extension and Interchange, Proposed Alignment



As the figure shows, the roadway extension and new interchange would impact some existing development. However, much of the land is currently undeveloped. Constructing the roadway extension and new interchange would support planned growth in this area. Due to the proximity of the proposed interchange to the adjacent interchanges along I-985, consideration of a split diamond or collector-distributor system would be necessary. This would be examined in development of the Interchange Justification/Modification Report (IJR/IMR).

Extending Downey Boulevard to I-985 may also help to reduce traffic demand on Green Street/EE Butler Parkway/Athens Highway. Local traffic travels this corridor to reach I-985. Additionally, some traffic from outside of the City travels on Thompson Bridge Road, Cleveland Highway, and other routes to reach the Green Street/EE Butler Parkway/Athens Highway corridor and I-985. If the Downey Boulevard extension and new interchange is constructed, some of this traffic will shift to the new facilities and away from the existing interchanges. The travel demand model run showed a projected 2040 traffic volume of over 34,000 vehicles per day on the Downey Boulevard extension just west of I-985, indicating this new interchange would be fully utilized.



DAWSONVILLE HWY/SR 53 CAPACITY

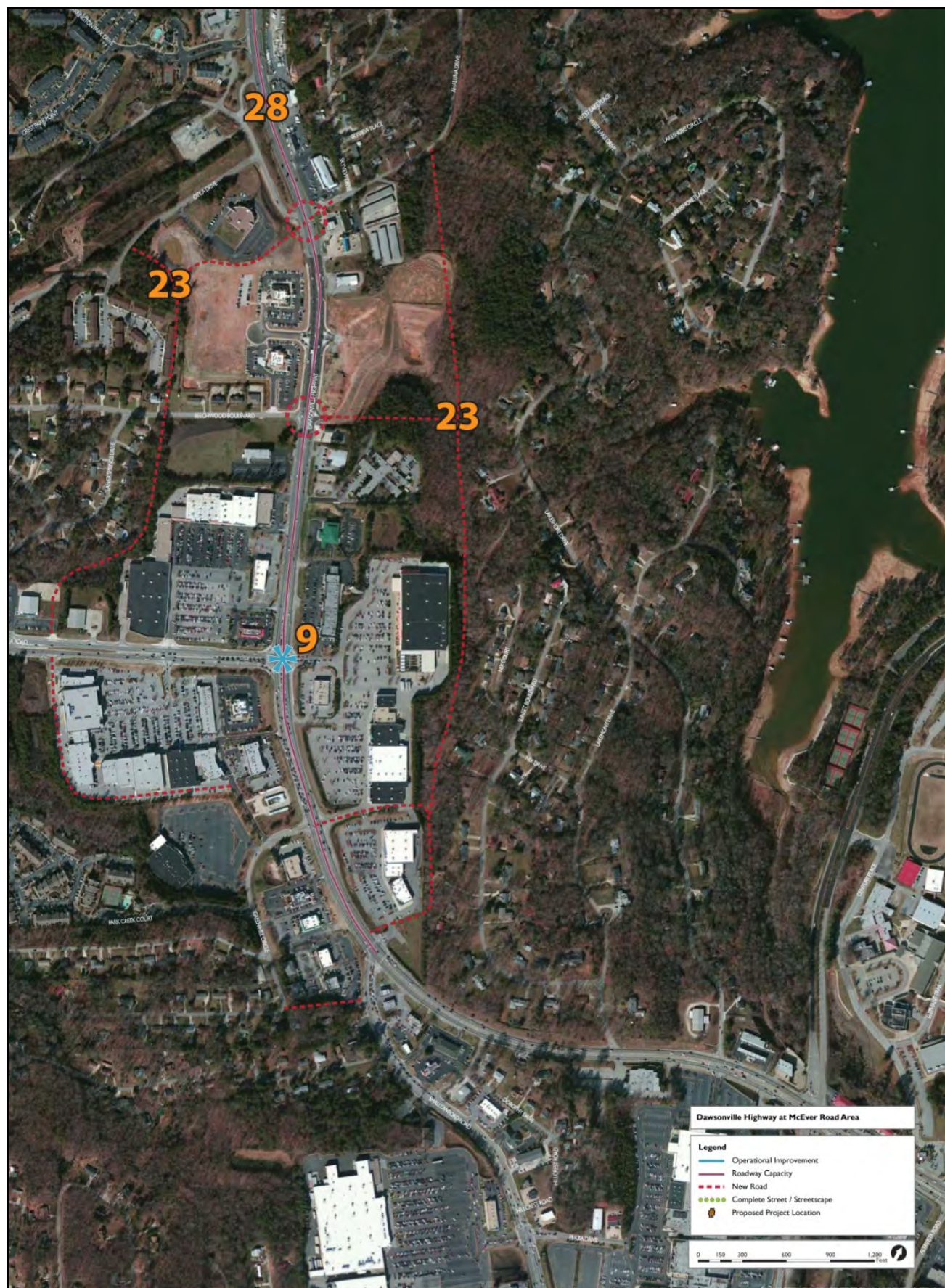
Traffic congestion currently exists on Dawsonville Highway/SR 53 near McEver Road, and this congestion is predicted to grow in the future. This congestion is caused partly by the concentration of big box retail at and near the intersection of Dawsonville Highway/SR 53 at McEver Road. The large amount of retail development generates a significant amount of traffic in addition to commuter traffic that is just passing through the area.

Traffic congestion is also caused by the minimal road network in the area. Dawsonville Highway/SR 53 north of McEver Road is surrounded on three sides by Lake Lanier. While other local roadways exist in this area, they do not provide connections to the surrounding area. Constructing new local roadways in this area is a Tier 2 project that is intended to provide better connectivity between the existing and future retail development. The purpose of these roadways is to reduce demand on Dawsonville Highway/SR 53 by allowing traffic to connect directly from one development to another without having to drive on Dawsonville Highway/SR 53.

Even with the new local roadway connections, traffic congestion is projected to grow on Dawsonville Highway/SR 53 near McEver Road. The Dawsonville Hwy/SR 53 Capacity project will widen Dawsonville Hwy/SR 53 to a 6-lane roadway with a landscaped median from Shallowford Rd to Sportsman Club Rd. Figure 7-20 shows the approximate location of the proposed local roadways as well as much of the area that would be a part of the Dawsonville Hwy/SR 53 Capacity project. This capacity project will provide additional through capacity for regional traffic as well as local traffic.

TIER 3 BIKE AND PEDESTRIAN PROJECTS

The Tier 3 bike and pedestrian projects consist of sidewalk projects that have not been a part of the earlier tiers of projects. These sidewalks are not in Downtown Gainesville, but many of them are along major roadways. Some of these sidewalks focus on completing gaps in the existing network, while other projects are in locations that simply don't have sidewalks. These sidewalks connect destinations that include community facilities, jobs, retail, and transit routes. However, these sidewalks do not connect as many destinations as the projects in Tier 1 and Tier 2, so they are a part of Tier 3.





8. RECOMMENDED TRANSPORTATION POLICIES/PROGRAMS

Most of the transportation recommendations are related to specific projects that should be implemented. These typically involve intersection operations improvements, additional roadway lanes, new/extended roadways, bike/pedestrian facilities, and other infrastructure improvements. In addition to these infrastructure projects, changes in transportation policies and programs can have a significant impact on the City's transportation network and operations. Some areas the City may want to focus on include the following:

- Access Management
- Transportation Demand Management
- *Gainesville 2030 Comprehensive Plan*

ACCESS MANAGEMENT

Access management is the systematic control of the location, spacing, design, and operation of driveways, median openings, interchanges, and street connections to a roadway. The purpose of access management is to provide vehicular access to land development in a manner that preserves the safety and efficiency of the transportation network.

The City should regularly review its access management policies and adopt current best practices. Additional refinement of access management policies may reduce traffic congestion and may make the walking and biking environment safer and more appealing. Some potential ways that more stringent access management can be implemented include the following:

- Allowing fewer driveways in new developments
- Closing existing driveways
- Stricter requirements for interparcel access
- Improved driveway design requirements
- Additional usage of non-traversable medians
- Revised residential access and connectivity requirements
- Targeted corridor studies

DEVELOPMENT REQUIREMENTS

Access management requirements are typically implemented when new development takes place. However, much of the City of Gainesville is already built-out. Therefore, access management regulations may deal largely with redevelopment rather than new development. In areas where there are an excessive number of curb cuts, the City should require redevelopment to reduce the number of driveways, share driveways for multiple parcels, and provide interparcel access. However, small lots and existing site designs can create challenges to implementing this reduction in driveways. The City should require a site to conform to access management regulations when a change in use or intensity occurs on a site.



Specifically, sites should have to conform to the City's access management requirements when any of the following conditions are met:

- Requests for new driveway permits
- Significant increase in trip generation
- Requirement for review of the site plan
- Substantial enlargements or improvements (usually the same definition as that for nonconforming uses in the zoning ordinance)
- As changes to the roadway design allow

Specific requirements for the criteria of "Significant increase in trip generation" must be adopted by the City if these requirements are implemented. When any of the conditions listed above are met, the property owner must meet the access requirements adopted by the City. Depending on a site's location relative to nearby roadways and other existing driveways, a site may be required to reduce the existing number of driveways if more than one exist or may be required to shift access to a different roadway.

There are multiple ways to address the spacing of driveways in local ordinances. One method requires access from side streets rather than on the main roadway whenever possible. For parcels that have frontage on more than one roadway, the driveway is required to be placed on the roadway with the lower classification. So a development on a parcel with frontage on an arterial and on a collector or local roadway would be required to place their driveway on the collector or local roadway. Shifting driveways to side or rear streets makes access available on the roadway with the lower classification, preserving mobility on the main roadway.

While shifting access to side or rear streets is preferable, it is not always feasible. In these instances, it is recommended that the minimum standards for driveway spacing be enhanced to consider specific factors of a given segment of roadway. It is also possible to establish requirements for the creation of new roads that consider appropriate block lengths and establish grid systems to provide connectivity. This essentially requires large developments to include one or more new roadways as part of the development. This requirement helps to further create a grid roadway system and provide alternative routes for local trips. These new roadways are particularly important for connecting large retail, office, multi-family residential, or mixed-use developments, as trips between these developments can use the new roadways rather than major congested roadways.

TWO-WAY LEFT-TURN LANES (TWLTL) AND MEDIANS

All roadways, regardless of the number of through lanes, typically follow one of the following median designs:

- Undivided (No Median)
- Continuous Two-Way Left-Turn Lane (TWLTL)
- Non-Traversable Median



An undivided roadway is simply a roadway that has no median in the center of the roadway. This design is appropriate primarily for 2-lane local roads that operate at low speeds and do not have an excessive number of driveways.

A continuous two-way left-turn lane (TWLTL) is a left turn lane in the middle of the roadway that serves traffic travelling in both directions. A TWLTL is not designed for individual intersections. Instead, it is continuous on the roadway and provides a safe queuing location for traffic turning at driveways and unsignalized intersections.

A non-traversable median is any median that is not designed for vehicular traffic to cross. These include medians with a raised curb as well as depressed grass medians. Medians can be concrete or landscaped, and may include a wall or other physical barrier to prevent high-speed traffic from crossing the roadway. Non-traversable medians typically have openings and storage bays for left-turning traffic at signalized intersections and at major driveways or unsignalized intersections.

Both a TWLTL and a non-traversable median are generally considered to be safer than an undivided roadway and typically reduce traffic congestion. By removing left-turning traffic from the through lanes of traffic, a conflict point is removed from the through lanes, preventing through traffic from having a rear-end crash with left-turn traffic waiting for an acceptable gap to turn. Also, on multi-lane roadways with no TWLTL or non-traversable median, left-turn traffic waiting for an acceptable gap to turn blocks the inside through lane. Some traffic that is queuing behind the left-turn traffic may change lanes into the outside through lane, creating an additional conflict point with the through traffic already in this lane. Both a TWLTL and a non-traversable median prevent this conflict. Additionally, removing the left-turn traffic from the through lanes allows through traffic to keep moving without having to stop for left-turn traffic, and therefore traffic congestion is reduced.

The *TRB Access Management Manual, 2003*, shows that average crash rates on roadways with a TWLTL are about 35% lower than crash rates on undivided roadways. However, the manual shows that roadways with a non-traversable median provide additional benefits and have average crash rates about 30% lower than roadways with a TWLTL. It should be noted that these reductions are an average based on crash research of numerous roadways. Numerous factors impact crash rates, and changing an individual design feature such as median design will not necessarily result in an exact reduction in crashes.

A non-traversable median physically separates traffic moving in opposite directions, reducing the potential for head-on crashes. Left-turn movements are only permitted at specific locations, reducing the locations for conflicts between left-turn traffic and through traffic, bicyclists, and pedestrians. A non-traversable median also provides a pedestrian refuge in the center of the roadway, both at signalized intersections and at mid-block crossings.

The *TRB Access Management Manual, 2003*, recommends converting a TWLTL to a non-traversable median when daily traffic volumes are in the range of 24,000 to 28,000 vehicles per day or higher. This



conversion policy has been adopted by Gwinnett County. However, a non-traversable median may also be appropriate on all new multi-lane urban arterials, roadways with significant safety problems, and roadways with large amounts of bicycle and/or pedestrian traffic.

The *AASHTO Green Book* provides guidance on median widths. Generally, a minimum width of 20 feet is recommended for medians that will provide a single left-turn lane at intersections. A minimum width of 28 feet is recommended for medians that will provide dual left-turn lanes at intersections. Roadways can be designed with wider medians, particularly if they will be landscaped for aesthetic purposes. However, ROW and construction costs generally prevent median widths significantly greater than the minimum guidelines.

CORRIDOR STUDIES

The access management strategies presented here can be applied throughout the City. However, at times, a more detailed analysis of individual corridors is needed. Individual corridor studies can focus in greater detail on the following:

- Conducting public outreach to identify the purpose of the study and the potential benefits of changes to the corridor
- Working with the public to get input regarding existing problems and potential solutions
- Identifying locations to create new connections – new roadways, extending/connecting existing roadways, interparcel access, etc.
- Identifying locations for frontage or backage roads
- Establishing appropriate driveway spacing standards for the corridor
- Identifying driveways that the City may potentially close
- Determining if a TWLTL or non-traversable median is needed
- If a non-traversable median is needed or if one already exists:
 - Determining appropriate spacing/design of median openings
 - Identifying existing full median openings that could be closed or converted to directional median openings
 - Conducting peak hour traffic analyses to determine the impact of the addition of a median and/or the spacing/design of median openings
 - Determining the appropriate type of median design – depressed grass, raised curb with landscaping, or concrete
- Determining potential locations for new traffic signals and conducting signal warrant analyses at appropriate locations
- Recommending changes to local ordinances to impact the design of future development

Individual corridor studies provide the City with actions that they can coordinate to improve access management in the existing built environment while also providing guidance to improve access management in future development.



TRAVEL DEMAND MANAGEMENT

Transportation Demand Management (TDM) refers to strategies intended increase the overall transportation system efficiency by encouraging a shift from single-occupant vehicle (SOV) trips to non-SOV modes, or by shifting vehicular trips out of peak traffic periods. TDM focuses on moving people rather than moving vehicles. TDM strategies can include carpool, vanpool, transit, compressed work weeks, flextime, telework (work from home), bicycle/pedestrian programs, and other strategies.

TDM programs can be implemented by public agencies, employers, or through public/private partnerships. The TDM programs may include the infrastructure for programs to work, such as a database of carpool or vanpool participants. Or they may include incentive programs to carpool, vanpool, ride transit, bike, or walk to work. The programs also typically include some advertising to the public and/or outreach to employers to help implement the programs.

TRAVEL DEMAND MANAGEMENT PLAN

A Tier 1 recommendation of the Gainesville Transportation Master Plan is to develop a Travel Demand Management Plan. This will include identifying specific strategies to increase ridesharing and use of alternative transportation modes. This plan should be prepared in coordination with Hall County and the GHMPO as part of a regional approach.

In the short-term, the City and Hall County should consider working with major employers in the area to identify potential ways to increase carpooling and vanpooling. Employers that commonly have shift work, such as hospitals, government agencies, and industrial facilities, are good candidates for rideshare programs. Employees with these types of organizations commonly start and end their shifts at specific times each day. Support services such as a rideshare database or a Guaranteed Ride Home Program may also be appropriate to help implement these programs. Incentive programs, particularly those that reward users of the programs financially, may be helpful in getting new users to take part in the program.

The Travel Demand Management Plan should consider local TDM within Gainesville and Hall County. However, regional rideshare to Metro Atlanta and other parts of northeast Georgia will become increasingly important between now and the year 2040. The *I-985 Park and Ride Lots Surveys, Summaries of Ridership and License Plate Findings* document was completed in 2009. These surveys showed that residents of Hall County are using park-and-ride lots off of I-985 in Buford and Oakwood. To serve these commuters and other commuters in the future, the City should assess the need for additional park-and-ride lots in the City of Gainesville, primarily at or near the interchanges with Queen City Parkway and Jesse Jewell Parkway.

The City, Hall County, and the GHMPO may also consider partnering with the Clean Air Campaign to identify specific TDM programs and how to implement them. The Clean Air Campaign is a nonprofit organization that works with GDOT to implement TDM programs and services to Georgia employers, commuters, and schools. The Clean Air Campaign currently operates in Metro Atlanta, Athens, Augusta,



Columbus, Macon, and Rome. When developing the region's Travel Demand Management Plan, the City, Hall County, and the GHMPO can decide which services should be offered and what government agencies and other organizations should be involved as service providers.

TRANSIT

Hall Area Transit (HAT) provides local bus service for the City of Gainesville and Hall County. As the City and County continue to grow, additional transit service in the form of express bus service to Metro Atlanta or other parts of Northeast Georgia may also become a way to help manage travel demand. These buses may serve riders from the existing park-and-ride lots along I-985, from potential new lots along I-985 in Gainesville, or from other locations.

Commuter rail is another potential future transit mode that could serve residents of Gainesville and Hall County. The existing freight rail lines that serve the City would likely be used for this rail service, meaning that a commuter rail station would be needed to serve riders.

In 2008, the GHMPO and HAT completed their *Transit Development Plan*. The plan recommended future consideration of a multimodal facility in the area of the Amtrak rail station on Industrial Drive. This facility could include:

- HAT local bus service
- Commuter rail service
- Amtrak rail service
- Greyhound intercity bus service
- Pedestrian facilities
- Bicycle facilities
- Parking

A Tier 3 project, Multimodal Terminal, identifies the need to construct this facility between the years 2031 and 2040. This project recommends implementing a Multimodal Terminal at or near the existing Amtrak station that brings together local bus routes, express bus and/or commuter rail, Amtrak rail, Greyhound bus, parking, and bike/ped access into one facility. Currently, there is not a great need for this type of facility, which results in placement in Tier 3. However, the need for a Multimodal Terminal and additional transit services should be re-evaluated periodically as the needs of the residents of Gainesville and Hall County change.

GAINESVILLE 2030 COMPREHENSIVE PLAN

The Community Agenda document of the *Gainesville 2030 Comprehensive Plan* includes implementation measures for each of the 13 character areas within the City. These were considered as the recommendations for the Transportation Master Plan were being developed. Some of the recommended projects that are related to implementation measures include:

- Projects that address traffic congestion on Jesse Jewell Parkway and EE Butler Parkway
- Recommended bike and pedestrian facilities in the following areas
 - Downtown and at Brenau University to better link the two areas



City of Gainesville Transportation Master Plan Plan Documentation



- On Main and Bradford streets to link Downtown with a long-term future intermodal transit center at or near the Amtrak station
- Along the MLK Jr. Boulevard, Pearl Nix Parkway, and Atlanta Highway
- Along suburban commercial corridors such as Dawsonville Highway, Jesse Jewell Parkway/Browns Bridge Road, and Thompson Bridge Road

The *Gainesville 2030 Comprehensive Plan* also identified a number of issues and opportunities related to transportation. Many of these were addressed by recommendations in the Transportation Master Plan, including the following:

Issues

- Issues related to connectivity and walkability throughout the City.
- Alternatives should be explored for residents who commute to Atlanta.
- Peak-hour level-of-service issues along select arterials resulting from conflicts between through traffic and local traffic.
- Increasing congestion on major corridors, especially Jesse Jewell, EE Butler and Green Street.
- Lack of northern connector between Thompson Bridge Road and Dawsonville Highway.
- Truck loading and deliveries may be negatively impacting downtown parking.
- Need to consider future commuter/high-speed rail.
- Need better connection (i.e. dedicated park-and-ride lot) with Gwinnett Transit.

Opportunities

- Undertake a Comprehensive Transportation Plan to expand the *Gainesville-Hall County 2040 Metropolitan Transportation Plan* (MTP) and factor in the community vision contained in the *Gainesville 2030 Comprehensive Plan*, with special emphasis on congestion mitigation and pedestrian safety measures for the central core and neighborhood areas.
- Continue to implement the priority recommendations noted in the adopted sidewalk plan to enhance pedestrian safety and connectivity.
- Continue the program of sidewalk / streetscape improvements as specified in the city's Sidewalk System Improvement Program and the GHMPO's Pedestrian / Bike plan.
- Explore the options for creating multimodal "Complete Streets" corridors on key arterial streets including, Thompson Bridge Road, Atlanta Highway, and Pearl Nix Parkway among others; and consider sidewalk improvements on primary feeder streets to these corridors.
- Redesign key intersections and create gateway opportunities near I-985.
- Work with Hall County and the Gainesville-Hall MPO to create a regional trail / bike network that connects major destinations within the city and the county.
- Work with the Gainesville-Hall MPO to ensure that any future widening of SR13 is done with appropriate design and controls to protect the adjacent conservation area.

State law requires all local governments in the State of Georgia to submit a comprehensive plan to the Georgia Department of Community Affairs every 10 years. Updates to the plan take place within each 10 year period. The recommendations from the Gainesville Transportation Master Plan should be considered during the planning process for future comprehensive plan updates.



9. IMPLEMENTATION PLAN

The project recommendations provided in sections 7 and 8 of this report provide guidance regarding the improvements necessary to reduce traffic congestion, improve walkability and access to transit, and plan for the high anticipated growth in the City of Gainesville. Implementation of the plan will require funding of transportation improvements using federal, state, and local funding sources. The Gainesville-Hall Metropolitan Planning Organization (GHMPO) is responsible for allocating federal funding for projects in the region based on their Long Range Transportation Plan. As indicated previously, the GHMPO receives guidance regarding the projects to be included in their long range plan from the *Gainesville-Hall County 2040 Metropolitan Transportation Plan*. The *City of Gainesville Transportation Master Plan* is intended to provide similar guidance related to projects within the City. The recommended projects will be evaluated and prioritized along with other regional projects to determine those eligible for federal funding. The sections below provide information on costs and prioritization of projects performed as part of the plan development, as well as potential funding sources.

COST AND PRIORITIZATION

The recommended projects were examined in detail to provide estimates of total project costs and information regarding project priority. The results of the cost estimation and prioritization are provided in Table 9-1 showing project description, cost, and considerations for prioritization. Please note, the projects are shown in priority order within each implementation Tier, therefore, the project reference numbers are not sequential.

PRIORITIZATION FACTORS

The projects recommended in the Gainesville Transportation Master Plan cannot all be accomplished with current levels of funding. Therefore, it is important to determine which projects should occur first and which are less important.

In order to assist in developing project priorities, each project was evaluated to determine whether or not it satisfied each of a series of prioritization factors. Roadway/Intersection projects and alternative mode projects (pedestrian, bicycle, and transit access) used slightly different criteria as other considerations to illustrate relative priority of the recommendations.

All projects were evaluated to determine whether or not they substantially met the following Transportation Goals:

- Manage Congestion
- Enhance Safety
- Increase Connectivity
- Support Economic Development
- Increase/Enhance Pedestrian and Bicycle Mobility

In addition, project costs were estimated for all projects based on data from GDOT mean item summaries, information on past projects, and consulting team experience. The resulting cost estimates are intended as planning level estimates, providing order of magnitude costs. Detailed cost estimation is needed for each project as the improvement concept is refined and design plans are prepared.

Table 9-1, Recommended Roadway and Signal System Projects with Planning Level Costs by Implementation Tier

Project Number	Project Name	Type	Project Description	Costs		Goals Achieved					Other Considerations				
				Total Project Costs	Project Cost Range \$ <\$300k \$\$ - 300k to 2M \$\$\$ - 2M to 10M \$\$\$\$ - >10M	Manage Congestion	Enhance Safety	Increase Connectivity	Support Economic Development	Increase/ Enhance Pedestrian and Bicycle Mobility	Low Cost Operational Improvement	Addresses Existing Congestion	Significant Increase in Functional Capacity of Road Network	Removes Current Geometric Deficiency	Ease of Construction + Easier Difficult
Tier I Projects - Target for Implementation (2013-2020)															
48	Traffic Signal Equipment and Control Center	Signal Operations	Modify traffic signal field devices to operate on internet protocol, install monitoring and control equipment in traffic control center, connect to City Fiber optics network for communications with traffic control center.	\$500,000	\$\$	✓	✓					✓	✓		+
49	Signal Timing	Signal Operations	Provide comprehensive signal retiming with consideration of traffic responsive plans along congested corridors (78 intersections).	\$250,000	\$	✓	✓				✓	✓	✓		+
50	Traffic Signal Coordination and Communications - Connect Existing System	Signal Operations	Install fiber optic communications, blue tooth travel time sensors, and camera monitoring along the following corridors: Jesse Jewell Pkwy east of downtown (via Gainesville IT Communications), downtown Gainesville, and John Morrow Pkwy. (2 miles plus us of IT Comm. System with 37 cameras)	\$2,720,000	\$\$	✓	✓					✓	✓		+
51	Traffic Signal Coordination and Communications - Extend to Key Corridors	Signal Operations	Install fiber optic communications, blue tooth travel time sensors, and camera monitoring along the following corridors: Browns Bridge Road west of Pearl Nix Pkwy (via Gainesville IT Communications), EE Butler Pkwy, Athens Highway south of MLK Boulevard, and Green Street - Thompson Bridge Road north of Academy Street. (3.5 miles plus use of IT Comm. system with 16 cameras)	\$1,990,000	\$\$	✓	✓					✓	✓		+
52	Traffic Signal Coordination and Communications - Secondary Corridors and Parallel TMC Communications	Signal Operations	Install fiber optic communications and camera monitoring along the following corridors: Atlanta Highway, Pearl Nix Pkwy, Aviation Blvd, Industrial Blvd, Queen City Pkwy, Downey Blvd, S. Enota Drive, Park Hill Dr, Limestone Pkwy, and MLK Jr. Blvd., as well as a connection down Main Street from MLK Jr. Blvd to the City Traffic Control Center. (12.5 miles with 25 cameras)	\$4,500,000	\$\$\$	✓	✓					✓	✓		+
10	EE Butler Pkwy at MLK Jr Blvd; Athens Street at MLK Jr Blvd Operations	Intersection	At the intersection of EE Butler Pkwy at MLK Jr Blvd, on the northeast bound approach, extend the left-turn lane to provide more vehicular storage, add a second through lane, and add a short (less than 100 ft long) right-turn lane. On the northeast leg of the intersection, add a second receiving lane which will also be a right-turn lane onto Athens Street. On the southwest bound approach, extend the left-turn lane to approximately 250 ft in length. Remove the traffic signal at the intersection of MLK Jr Blvd at Athens Street and prohibit the westbound left-turn movement from Athens Street.	\$1,220,000	\$\$	✓	✓		✓			✓	✓	✓	
32	Green Street Short-Term	Roadway Operations	Green St from Academy St to Riverside Dr, TBD, Options do not affect the existing curbs and include - prohibiting left-turns along the corridor, prohibiting left-turns during peak hours, or restriping to provide two NB lanes, one left turn lane, and one SB lane.	\$240,000	\$	✓	✓		✓		✓	✓			+
33	Green Street Turning Lanes at Academy and Post Office	Roadway Operations	Add a southbound right-turn lane at the intersection of Green Street at Academy Street; Add a northbound right-turn lane and a southbound left-turn lane at the Post Office entrance.	\$1,120,000	\$\$	✓	✓		✓			✓	✓	✓	+
5	Browns Bridge Rd at Pearl Nix Pkwy Operations	Intersection	At the intersection of Browns Bridge Rd at Pearl Nix Pkwy, add a second northbound left-turn lane approximately 300 ft in length and add a second southbound left-turn lane approximately 200 ft in length; add an eastbound right-turn lane approximately 250 ft in length and add a westbound right-turn lane approximately 125 ft in length.	\$1,800,000	\$\$	✓	✓		✓			✓	✓		
13	Jesse Jewell Pkwy at John Morrow Pkwy/Queen City Pkwy Operations	Intersection	At the intersection of Jesse Jewell Pkwy at John Morrow Pkwy/Queen City Pkwy, add a right-turn lane on the eastbound and westbound approaches on Jesse Jewell Pkwy and on the northbound approach on Queen City Parkway. The right-turn lanes will each be approximately 300 ft long.	\$1,800,000	\$\$	✓	✓		✓			✓	✓		+
36	Enota Dr Re-alignment	Roadway Operations; Extended Roadway	Construct a new roadway segment behind Enota Elementary School, connecting Enota Drive near the intersection with Cumberland Dr to S Enota Dr near the intersection with Enota Cir; Add a two-way left-turn lane to Enota Dr from Thompson Br Rd to Park Hill Dr, including along the new roadway segment; Potentially combine construction with the intersection projects at Thompson Bridge Rd at Enota Ave and at Park Hill Dr at Enota Ave.	\$3,010,000	\$\$\$	✓	✓	✓		✓		✓	✓	✓	
35	Oak Tree Dr Operations	Roadway Operations/ Intersection	Add a two way left-turn lane on Oak Tree Dr from Thompson Bridge Rd to Riverside Dr; Add a traffic signal to the intersection of Oak Tree Dr at Thompson Bridge Rd; Re-align the intersection of Oak Tree Dr at Riverside Dr so the through movement is between Oak Tree Dr and Riverside Dr northbound, with the south leg of Riverside Dr as the side street; Add a traffic signal or roundabout to the intersection of Oak Tree Dr at Riverside Dr.	\$1,940,000	\$\$	✓	✓	✓	✓			✓	✓		
2	Athens Hwy at Chestnut St Operations	Intersection	Shift the intersection of Athens Hwy at Chestnut St to the north, further from the intersection of Athens Hwy at Ridge Rd. Extend the southbound left-turn lane on Athens Hwy on the approach to Ridge Road to prevent left-turn traffic queues from extending into the through travel lanes.	\$500,000	\$\$	✓	✓		✓			✓		✓	
4	Browns Bridge Rd at Auburn Ave Operations	Intersection	At the intersection of Browns Bridge Rd at Auburn Ave, add an eastbound right-turn lane.	\$170,000	\$	✓	✓		✓		✓	✓			+
6	Browns Bridge Rd at West End Ave Operations	Intersection	At the intersection of Browns Bridge Rd at West End Ave, add a westbound right-turn lane, approximately 125 ft in length.	\$540,000	\$\$	✓	✓		✓		✓	✓			+
7	Cleveland Hwy at Limestone Pkwy	Intersection	At the intersection of Cleveland Hwy at Limestone Pkwy, signalize the northbound right-turn movement on Limestone Pkwy to allow for the free flow movement of right-turning vehicles during appropriate signal phases.	\$140,000	\$	✓	✓		✓		✓	✓			+

Table 9-1, Recommended Roadway and Signal System Projects with Planning Level Costs by Implementation Tier

Project Number	Project Name	Type	Project Description	Costs		Goals Achieved					Other Considerations				
				Total Project Costs	Project Cost Range \$ <\$300k \$\$ - 300k to 2M \$\$\$ - 2M to 10M \$\$\$\$ - >10M	Manage Congestion	Enhance Safety	Increase Connectivity	Support Economic Development	Increase/ Enhance Pedestrian and Bicycle Mobility	Low Cost Operational Improvement	Addresses Existing Congestion	Significant Increase in Functional Capacity of Road Network	Removes Current Geometric Deficiency	Ease of Construction + Easier Difficult -
8	Cleveland Hwy at Limestone Pkwy	Intersection	Realign the intersection of Cleveland Hwy at Limestone Pkwy so that the north leg, Cleveland Highway, lines up with the southeast leg, Limestone Pkwy. The south leg of the intersection, Cleveland Highway, becomes the side street.	\$1,280,000	\$\$	✓	✓		✓			✓	✓		+
9	Dawsonville Hwy/SR 53 at McEver Rd Operations	Intersection	At the intersection of Dawsonville Hwy/SR 53 at McEver Rd, Add a westbound right-turn lane and second through lane.	\$380,000	\$\$	✓	✓		✓			✓	✓		+
11	Jesse Jewell Pkwy at EE Butler Pkwy Operations	Intersection	At the intersection of Jesse Jewell Pkwy at EE Butler Pkwy, extend the eastbound right-turn lane to the pedestrian bridge across Jesse Jewell Pkwy.	\$340,000	\$\$	✓	✓		✓		✓	✓			+
16	Jesse Jewell Pkwy at Prior St Operations	Intersection	At the intersection of Jesse Jewell Pkwy at Prior St, add northbound and southbound left-turn lane2 approximately 100 ft in length.	\$280,000	\$	✓	✓		✓		✓	✓			+
17	John Morrow Pkwy at Washington St Operations	Intersection	At the intersection of John Morrow Pkwy at Washington St, realign southbound right-turn lane .	\$50,000	\$	✓	✓		✓		✓	✓			+
18	Park Hill Dr at Enota Ave Operations	Intersection	At the intersection of Park Hill Dr at Enota Ave, add a southbound right-turn lane approximately 175 ft in length and add an eastbound right-turn lane.	\$90,000	\$	✓	✓		✓		✓	✓			+
19	Park Hill Dr at Lakeview Dr Operations	Intersection	Reduce the slope on the Lakeview Dr approach.	\$300,000	\$	✓	✓				✓			✓	+
20	Thompson Bridge Rd at Enota Ave Operations	Intersection	At the intersection of Thompson Bridge Rd at Enota Ave, add a northbound right-turn lane approximately 125 ft in length and add a southbound right-turn lane approximately 105 ft in length.	\$280,000	\$	✓	✓		✓		✓	✓			+
30	MLK Jr Blvd Corridor	Roadway Capacity	Widen MLK Jr Blvd to a 4-lane roadway with streetscapes and a landscaped median from Queen City Pkwy to EE Butler Parkway; Add a two-way left-turn lane and streetscapes from EE Butler Pkwy to Downey Blvd.	\$11,760,000	\$\$\$\$	✓	✓		✓	✓			✓	✓	-
47	Patricia Dr Extension	New/Extended Roadway	Extend Patricia Dr west to MLK Jr Blvd. Project is intended to improve neighborhood connectivity using a connection between existing residences. This would be performed in conjunction with improvements to MLK Jr Blvd.	\$340,000	\$\$			✓		✓					+
24	Industrial Blvd Extension	New/Extended Roadway	Extend Industrial Blvd north along the railroad tracks, under Athens Hwy, to the intersection of Jesse Jewell Pkwy at Branch Street. Include a multi-use trail as part of the roadway extension.	\$10,870,000	\$\$\$\$	✓		✓	✓	✓		✓	✓		-
1	I-985 Interchange Operations Study	Interchange Operations Study	Conduct a study of I-985 interchange needs from Queen City Pkwy to Jesse Jewell Pkwy. The study shall analyze the potential need for an additional interchange north of Athens Street as part of an extension of Downey Blvd. It shall also focus on the preferred design at each interchange and consider the need for a collector-distributor system or other access changes along the corridor. The need and potential locations for park and ride lots at or near the interchanges shall also be a part of the study.	\$200,000	\$	✓	✓	✓	✓				✓	✓	
55	Freeway Signage Modifications	Roadway Operations	Modify freeway signage to encourage greater use of Jesse Jewell Pkwy for access to Gainesville and travel to the north. Consider removal of US 129 business designation so that US 129 traffic uses Jesse Jewell Parkway.	\$250,000	\$	✓			✓		✓	✓			+
54	Travel Demand Management Plan	Travel Demand Management	Develop a travel demand management plan and strategy to increase ridesharing and use of alternative transportation modes. Prepare plan in coordination with Hall County as part of regional approach.	\$150,000	\$	✓			✓		✓	✓			+
Tier 2 Projects - Target for Implementation (2021-2030)															
56	Signal Timing	Signal Operations	Provide comprehensive signal retiming with consideration of traffic responsive plans along congested corridors (78 intersections).	\$300,000	\$	✓	✓				✓	✓	✓		+
58	Upgrade TCC Systems and Equipment	Signal Operations	Upgrade computer systems, monitors and controll equipment in field and TCC to match current standards.	\$700,000	\$\$	✓	✓					✓	✓		+
53	Driver Information via Changeable Message Signs	Signal Operations	Provide changeable message signs and operation along state routes in coordination with GDOT Navigator program along I-985. Implementation of 12 signs along three corridors is anticipated (EE Butler Pkwy, Jesse Jewell Pkwy, and Queen City Pkwy).	\$450,000	\$\$	✓	✓					✓	✓		+
26	Thompson Bridge Rd - Dawsonville Hwy Connector	New/Extended Roadway	Construct a new bridge from Thompson Bridge Rd/SR 60 approximately 1 mile south of Thompson Bridge across Lake Lanier to Dawsonville Hwy. This connection includes new roadway segments and may also use segments of existing roadways, depending on the preferred route alternative.	\$25,000,000	\$\$\$\$	✓		✓	✓	✓		✓	✓		-
22	Community Way Extension/ Re-Alignment	New/Extended Roadway	Extend Community Way northeast to Limestone Pkwy and continue to White Sulphur Rd; Re-align the intersection of Jesse Jewell Pkwy at Community Way to the intersection of Jesse Jewell Pkwy at the Industrial Blvd extension (existing Branch St).	\$5,670,000	\$\$\$	✓		✓	✓	✓					

Table 9-1, Recommended Roadway and Signal System Projects with Planning Level Costs by Implementation Tier

Project Number	Project Name	Type	Project Description	Costs		Goals Achieved					Other Considerations				
				Total Project Costs	Project Cost Range \$ <\$300k \$\$ - 300k to 2M \$\$\$ - 2M to 10M \$\$\$\$ - >10M	Manage Congestion	Enhance Safety	Increase Connectivity	Support Economic Development	Increase/ Enhance Pedestrian and Bicycle Mobility	Low Cost Operational Improvement	Addresses Existing Congestion	Significant Increase in Functional Capacity of Road Network	Removes Current Geometric Deficiency	Ease of Construction + Easier Difficult
31	Atlanta Highway Widening and Operations	Roadway Capacity/ Operations	Implement the following along Atlanta Highway: • Add a two-way left-turn lane from Hall Street to Industrial Blvd; • Widen to a 4-lane roadway with a landscaped median from Industrial Blvd to Memorial Park Dr; • Convert Atlanta Hwy to a Complete Street from Browns Bridge Rd to Memorial Park Dr; • Add a two-way left-turn lane and sidewalk from Memorial Park Dr to Tumbling Creek Rd; Continue the sidewalk to the existing sidewalk approximately 1,000 ft south of Tumbling Creek Rd.	\$19,620,000	\$\$\$\$	✓	✓		✓	✓			✓		
40	I-985 at Athens Hwy Interchange	Interchange Capacity	At the I-985 at Athens Hwy interchange, implement capacity changes including widening or reconstruction of interchange bridges and reconstruction of ramps to increase capacity and add shoulders to bridges.	\$15,000,000	\$\$\$\$	✓	✓		✓				✓	✓	
41	EE Butler Pkwy/Athens Hwy Capacity	Roadway Capacity	Widen EE Butler Pkwy to a 6-lane roadway, including 3 through lanes in each direction and a landscaped median, from Summit St to east of Monroe Dr.	\$16,060,000	\$\$\$\$	✓			✓	✓		✓	✓		-
29	Jesse Jewell Pkwy Capacity West	Roadway Capacity	Widen Jesse Jewell Pkwy to a 6-lane roadway, including 3 through lanes in each direction from John Morrow Pkwy/Queen City Pkwy to Academy Street. The westbound lane will become a right turn lane at John Morrow and the eastbound lane will become the left turn lane for Academy Street.	\$3,500,000	\$\$\$	✓			✓			✓	✓		
23	Dawsonville Hwy/SR 53 at McEver Rd - Local Roadway Connections	New/Extended Roadway	Additional local roadway connections near the intersection of Dawsonville Hwy/SR 53 at McEver Rd to provide parallel connections to Dawsonville Hwy/SR 53.	\$10,160,000	\$\$\$\$	✓	✓	✓	✓	✓		✓			-
27	Downey Blvd Extension and Interchange	New/Extended Roadway; New Interchange	Extend Downey Blvd east to I-985. Construct a new interchange at I-985 at the Downey Blvd extension with interchange connecting to the EE Butler interchange to the south.	\$20,000,000	\$\$\$\$	✓		✓	✓	✓		✓	✓		-
37	Gainesville Wayfinding Signage	Signage	Implement a system of wayfinding signage in downtown Gainesville and at key intersections near downtown and other activity areas. The signage should provide a consistent look that facilitates branding for the City. Develop strategy for way finding, then implementation.	\$370,000	\$			✓	✓	✓					+
38	I-985 at Queen City Pkwy Interchange	Interchange Operations	At the I-985 at Queen City Pkwy interchange, implement operations changes to the existing intersections at the I-985 on and off ramps. These will potentially include extending the existing turn lanes, adding new turn lanes, and/or changes to the ramp operations.	\$3,000,000	\$\$\$	✓	✓		✓				✓		
39	I-985 at Jesse Jewell Pkwy Interchange	Interchange Operations	At the I-985 at Jesse Jewell Pkwy interchange, implement operations changes to the existing intersections at the I-985 on and off ramps. These will potentially include extending the existing turn lanes, adding new turn lanes, and/or changes to the ramp operations.	\$3,000,000	\$\$\$	✓	✓		✓				✓		
Tier 3 Projects - Target for Implementation (2031-2040)															
57	Signal Timing	Signal Operations	Provide comprehensive signal retiming with consideration of traffic responsive plans along congested corridors (78 intersections).	\$400,000	\$	✓	✓				✓	✓	✓		+
59	Upgrade TCC Systems and Equipment	Signal Operations	Upgrade computer systems, monitors and controll equipment in field and TCC to match current standards.	\$1,500,000	\$	✓	✓					✓	✓		+
43	Jesse Jewell Pkwy Capacity East	Roadway Capacity	Widen Jesse Jewell Pkwy to a 6-lane roadway, including 3 through lanes in each direction and a landscaped median, from Community Way/Industrial Blvd Extension to Oconee Cir/Miller Dr.	\$10,450,000	\$\$\$	✓			✓	✓			✓		
14	Jesse Jewell Pkwy at John Morrow Pkwy/Queen City Pkwy - Major Intersection Improvement	Intersection	At the intersection of Jesse Jewell Pkwy at John Morrow Pkwy/Queen City Pkwy, implement an intersection design with grade separated left-turn movements. This consists of converting the left-turn lanes to ramps that raise left-turn traffic higher than the rest of the intersection, creating a grade-separated intersection only for left-turn traffic.	\$12,000,000	\$\$\$\$	✓	✓					✓	✓		-
12	Jesse Jewell Pkwy at EE Butler Pkwy - Major Intersection Improvement	Intersection	At the intersection of Jesse Jewell Pkwy at EE Butler Pkwy, implement a major intersection improvement. An example of a major improvement for this intersection is an intersection design with grade separated left-turn movements. This consists of converting the left-turn lanes to ramps that raise left-turn traffic higher than the rest of the intersection, creating a grade-separated intersection only for left-turn traffic.	\$12,000,000	\$\$\$\$	✓	✓					✓	✓		-
28	Dawsonville Hwy/SR 53 Capacity	Roadway Capacity	Widen Dawsonville Hwy/SR 53 to a 6-lane roadway, including 3 through lanes in each direction and a landscaped median, from Shallowford Rd to Sportsman Club Rd.	\$9,620,000	\$\$\$	✓			✓			✓	✓		
42	Athens Street-McDonald Street Connector	New/Extended Roadway	Re-align Athens Street to the north so that it crosses Purina Dr and connects to McDonald Street. Shift the RR crossing north to serve the re-aligned roadway. This project may need to be constructed as re-development takes place in the area.	\$1,700,000	\$	✓		✓						✓	-
21	Academy Street Extension	New/Extended Roadway	Extend Academy Street southeast from its intersection with Jesse Jewell Pkwy to the intersection of Grove Street at Parker Street.	\$1,140,000	\$	✓		✓	✓	✓					
25	Ivey Terrace Extension	New/Extended Roadway	Extend Ivey Terrace east to Green Street. The roadway extension will intersect Bradford Street, use a portion of Sylvan Wood Ln, and extend through a parking lot to Green St.	\$960,000	\$	✓		✓		✓		✓			+

Table 9-1, Recommended Roadway and Signal System Projects with Planning Level Costs by Implementation Tier

Project Number	Project Name	Type	Project Description	Costs		Goals Achieved					Other Considerations				
				Total Project Costs	Project Cost Range \$ <\$300k \$\$ - 300k to 2M \$\$\$ - 2M to 10M \$\$\$\$ - >10M	Manage Congestion	Enhance Safety	Increase Connectivity	Support Economic Development	Increase/ Enhance Pedestrian and Bicycle Mobility	Low Cost Operational Improvement	Addresses Existing Congestion	Significant Increase in Functional Capacity of Road Network	Removes Current Geometric Deficiency	Ease of Construction + Easier Difficult -
44	Spring St Extension	New/Extended Roadway	Extend Spring St west to Washington St, approximately 600 ft west of Academy St. This will be a one-way roadway eastbound, with the adjacent section of Washington St as a one-way roadway westbound.	\$960,000	\$\$	✓		✓	✓	✓		✓			
46	Multimodal Terminal	Travel Demand Management	Implement a Multimodal Terminal at or near the existing Amtrak station that brings together local bus routes, express bus and/or commuter rail, Amtrak rail, Greyhound bus, parking, and bike/ped access into one facility.	\$800,000	\$\$	✓			✓	✓					
34	Green Street Boulevard	Roadway Operations	Convert Green Street from Academy Street to Riverside Dr to a boulevard with a 20 ft wide landscaped median; Add wide sidewalks with streetscape elements (pedestrian lighting, trees) on both sides of the road.	\$12,000,000	\$\$\$	✓	✓		✓	✓		✓	✓	✓	-
TIER 1 SUBTOTAL COST				\$49,010,000											
TIER 2 SUBTOTAL COST				\$122,830,000											
TIER 3 SUBTOTAL COST				\$63,530,000											
TOTAL COST				\$235,370,000											

Table 9-2, Recommended Pedestrian and Bicycle Projects with Planning Level Costs by Implementation Tier

Project Number	Project Name	Type	Project Description	Costs		Goals Achieved					Other Considerations					
				Total Project Costs	Project Cost Range \$ <\$300k \$\$ - 300k to 2M \$\$\$ - 2M to 10M \$\$\$\$ - >10M	Manage Congestion	Enhance Safety	Increase Connectivity	Support Economic Development	Increase/ Enhance Pedestrian and Bicycle Mobility	Low Cost Improvement (signing and striping only)	Provides Access to Transit	Provides Access to Multiple Community Facilities	Provides Key Community Connection or Fills Existing Gap	Part of Comprehensive Plan Ped/Bike Network	Ease of Construction
Tier I Projects - Target for Implementation (2013-2020)																
60	Washington St Complete Street and Sharrows	Complete Street/ Streetscape; Sharrows	Add Complete Street elements to Washington St from Academy St to Smithgall Ln, including; Add sharrows to Washington St from John Morrow Pkwy to Academy St.	\$1,670,000	\$\$				✓	✓		✓		✓	✓	
65	Main St Complete Street	Complete Street/ Streetscape	Add Complete Street elements to Main St from MLK Jr Blvd to Jesse Jewell Pkwy.	\$1,270,000	\$\$				✓	✓		✓		✓	✓	
67	Downtown Corridors Ped Crossings	Crossing Enhancements	Enhance existing pedestrian crossing locations by re-striping crosswalks or potentially adding stamped asphalt/concrete crosswalks, adding pedestrian countdown timers, and adding additional lighting (where needed). Implement these enhancements at intersections along the following corridors. • EE Butler Pkwy/Green St from Jesse Jewell Pkwy to Riverside Dr • Jesse Jewell Pkwy from Academy St to Summitt St/Wisteria Dr • Academy St from Green St/EE Butler Pkwy to Jesse Jewell Pkwy.	\$430,000	\$		✓		✓	✓		✓			✓	✓
70	Green St at Riverside Dr Ped Crossing	Pedestrian Crossing Facilities	At the intersection of Green St at Riverside Dr, add pedestrian facilities including crosswalks, pedestrian signal phases, pedestrian countdown timers, and additional lighting .	\$60,000	\$		✓		✓	✓				✓	✓	✓
71	Grove St Sharrows	Sharrows	Add sharrows on Grove St from Parker St to Industrial Blvd.	\$10,000	\$				✓	✓	✓	✓			✓	✓
72	McDonald St Sharrows	Sharrows	Add sharrows on McDonald St from MLK Jr Blvd to the Industrial Blvd Extension.	\$3,000	\$				✓	✓	✓	✓			✓	✓
73	Ridgewood Ave Sharrows	Sharrows	Add sharrows on Ridgewood Ave from Wilshire Dr to Green St.	\$15,000	\$				✓	✓	✓				✓	✓
74	Spring St Sharrows	Sharrows	Add sharrows on Spring St from Academy St to Prior St.	\$10,000	\$				✓	✓	✓	✓			✓	✓
75	Summitt St Sharrows	Sharrows	Add sharrows on Summitt St from Grove St to Hunter St.	\$12,000	\$				✓	✓	✓	✓			✓	✓
68	Pearl Nix Pkwy Trail East	Multiuse Trail	Construct a multiuse trail along Pearl Nix Pkwy/MLK Jr Blvd from Atlanta Hwy to the existing multiuse trail east of Pine St.	\$2,460,000	\$\$\$					✓		✓		✓		✓
69	Pearl Nix Pkwy Trail West	Multiuse Trail	Construct a multiuse trail along Pearl Nix Pkwy from Wilshire Dr to Atlanta Hwy.	\$4,210,000	\$\$\$					✓		✓		✓		
80	Jesse Jewell Pkwy Sidewalk East	Sidewalk: High Priority	Install sidewalk along Jesse Jewell Pkwy from Branch St to White Sulphur Rd.	\$840,000	\$\$					✓		✓	✓	✓		
81	Jesse Jewell Pkwy Sidewalk West	Sidewalk: High Priority	Install sidewalk along Jesse Jewell Pkwy from EE Butler Pkwy to Spring St.	\$310,000	\$\$					✓		✓	✓	✓		
82	Maple St Sidewalk	Sidewalk: High Priority	Install sidewalk along Maple St from Jesse Jewell Pkwy to Broad St.	\$70,000	\$					✓		✓	✓	✓		
86	Pearl Nix Pkwy Sidewalk	Sidewalk: High Priority	Install sidewalk along Pearl Nix Pkwy from Dawsonville Hwy/John Morrow Pkwy to Shallowford Rd.	\$390,000	\$\$					✓		✓	✓	✓		
Tier 2 Projects - Target for Implementation (2021-2030)																
63	College Ave Complete St	Complete Street/ Streetscape	Add Complete Street elements to College Ave from Main St to Fair St.	\$1,620,000	\$\$				✓	✓		✓		✓	✓	
66	Prior St Complete Street	Complete Street/ Streetscape	Add Complete Street elements to Prior St from Hunter St to Riverside Dr.	\$2,790,000	\$\$\$				✓	✓		✓		✓	✓	
61	Bradford St Complete Street - North	Complete Street/ Streetscape	Add Complete Street elements to Bradford St from Washington St to Dixon Dr.	\$2,050,000	\$\$\$				✓	✓		✓			✓	
62	Bradford St Complete Street - South	Complete Street/ Streetscape	Add Complete Street elements to Bradford St from Industrial Blvd to Jesse Jewell Pkwy.	\$1,750,000	\$\$				✓	✓		✓			✓	

Table 9-2, Recommended Pedestrian and Bicycle Projects with Planning Level Costs by Implementation Tier

Project Number	Project Name	Type	Project Description	Costs		Goals Achieved					Other Considerations					
				Total Project Costs	Project Cost Range \$ <\$300k \$\$ - 300k to 2M \$\$\$ - 2M to 10M \$\$\$\$ - >10M	Manage Congestion	Enhance Safety	Increase Connectivity	Support Economic Development	Increase/ Enhance Pedestrian and Bicycle Mobility	Low Cost Improvement (signing and striping only)	Provides Access to Transit	Provides Access to Multiple Community Facilities	Provides Key Community Connection or Fills Existing Gap	Part of Comprehensive Plan Ped/Bike Network	Ease of Construction
76	Beverly Rd Sidewalk	Sidewalk: High Priority	Install sidewalk along Beverly Rd from Limestone Pkwy to White Sulpher Rd.	\$680,000	\$\$					✓		✓	✓			
77	Browns Bridge Rd Sidewalk East	Sidewalk: High Priority	Install sidewalk along Browns Bridge Rd from Memorial Park Dr to Central Ave.	\$2,550,000	\$\$\$					✓		✓	✓			
78	Dawsonville Hwy Sidewalk Central	Sidewalk: High Priority	Install sidewalk along Dawsonville Hwy from Beechwood Blvd to McEver Rd.	\$350,000	\$\$					✓		✓	✓			
79	Dixon Dr Sidewalk	Sidewalk: High Priority	Install sidewalk along Dixon Dr from Chestatee Rd to Wessell Rd.	\$320,000	\$\$					✓			✓	✓		
83	McEver Rd Sidewalk	Sidewalk: High Priority	Install sidewalk along McEver Rd from Browns Bridge Rd to existing sidewalk approximately 750 ft north of Browns Bridge Rd.	\$150,000	\$					✓			✓	✓		
84	Memorial Park Dr Sidewalk South	Sidewalk: High Priority	Install sidewalk along Memorial Park Dr from Titshaw Dr to Atlanta Highway.	\$390,000	\$\$					✓		✓	✓			
85	Park Hill Dr Sidewalk North	Sidewalk: High Priority	Install sidewalk along Riverside Dr/Morningside Dr/Park Hill Dr from Oak Tree Dr to Clarks Bridge Rd.	\$1,780,000	\$\$\$					✓		✓	✓	✓		
87	S Enota Dr Sidewalk South	Sidewalk: High Priority	Install sidewalk along S Enota Dr from Downey Blvd to Takeda Rd.	\$440,000	\$\$					✓		✓	✓			
88	Shallowford Rd Sidewalk	Sidewalk: High Priority	Install sidewalk along Shallowford Rd from Dawsonville Hwy to Pearl Nix Pkwy.	\$810,000	\$\$					✓		✓	✓			
Tier 3 Projects - Target for Implementation (2031-2040)																
102	Academy St Streetscape	Streetscape	Add Streetscape to the west side of Academy St from Jesse Jewell Pkwy to Washington St.	\$1,470,000	\$\$				✓	✓		✓		✓	✓	
89	Browns Bridge Rd Sidewalk West	Sidewalk	Install sidewalk along Browns Bridge Rd from McEver Rd to Memorial Park Dr.	\$1,000,000	\$\$					✓		✓				
90	Clarks Bridge Rd Sidewalk	Sidewalk	install sidewalk along Clarks Bridge Rd from Cleveland Hwy to Pine Valley Rd.	\$780,000	\$\$					✓		✓				
91	Dawsonville Hwy Sidewalk East	Sidewalk	Install sidewalk along Dawsonville Hwy/John Morrow Pkwy from McEver Rd to Washington St.	\$1,150,000	\$\$					✓		✓				
92	Dawsonville Hwy Sidewalk West	Sidewalk	Install sidewalk along Dawsonville Hwy from Sportsman Club Rd to Ahaluna Dr.	\$1,460,000	\$\$					✓						
93	Downey Blvd Sidewalk	Sidewalk	Install sidewalk along Downey Blvd from Myrtle St to S Enota Dr.	\$460,000	\$\$					✓		✓				
94	Jesse Jewell Pkwy Sidewalk at I-985	Sidewalk	Install sidewalk along Jesse Jewell Pkwy/Old Cornelia Hwy from White Sulphur Rd to Shady Valley Rd.	\$2,130,000	\$\$\$					✓						
95	Kids Way Sidewalk	Sidewalk	Install sidewalk along Kids Way from Clarks Bridge Rd to Gabriel Cir.	\$180,000	\$					✓		✓				
96	Memorial Park Dr Sidewalk South	Sidewalk	Install sidewalk along Memorial Park Dr from Browns Bridge Rd to Titshaw Dr.	\$1,260,000	\$\$					✓		✓				
97	Park Hill Dr Sidewalk South	Sidewalk	Install sidewalk along Park Hill Dr from Green St to Oak Tree Dr.	\$240,000	\$					✓		✓		✓		
98	S Enota Dr Sidewalk North	Sidewalk	Install sidewalk along S Enota Dr from Takeda Rd to Park Hill Dr.	\$370,000	\$\$					✓		✓				
99	Thompson Bridge Rd Sidewalk	Sidewalk	Install sidewalk along Thompson Bridge Rd from Riverside Dr to Sandridge Ct.	\$1,930,000	\$\$					✓		✓		✓		

Table 9-2, Recommended Pedestrian and Bicycle Projects with Planning Level Costs by Implementation Tier

Project Number	Project Name	Type	Project Description	Costs		Goals Achieved					Other Considerations					
				Total Project Costs	Project Cost Range \$ <\$300k \$\$ - 300k to 2M \$\$\$ - 2M to 10M \$\$\$\$ - >10M	Manage Congestion	Enhance Safety	Increase Connectivity	Support Economic Development	Increase/ Enhance Pedestrian and Bicycle Mobility	Low Cost Improvement (signing and striping only)	Provides Access to Transit	Provides Access to Multiple Community Facilities	Provides Key Community Connection or Fills Existing Gap	Part of Comprehensive Plan Ped/Bike Network	Ease of Construction
100	W Ridge Rd Sidewalk	Sidewalk	Install sidewalk along W Ridge Rd from Interstate Ridge Dr to Athens St.	\$790,000	\$\$					✓		✓				
101	White Sulphur Rd Sidewalk	Sidewalk	Install sidewalk along White Sulphur Rd from Jesse Jewell Pkwy to Beverly Rd.	\$770,000	\$\$					✓		✓				
TIER 1 SUBTOTAL COST				\$11,760,000												
TIER 2 SUBTOTAL COST				\$15,680,000												
TIER 3 SUBTOTAL COST				\$13,990,000												
TOTAL COST				\$41,430,000												



In the case of roadway/intersection projects, other considerations for implementation priority included:

- Low Cost Operational Improvement – Less than \$250,000
- Directly Addresses Existing Congestion – Improvements that address the congestion where it occurs. The City wants tangible results that can be directly related to problem areas.
- Ease of Construction – Receives a 1 if no ROW or special permitting is required. Receives a 0 if it is a typical level of effort for the type of project. Receives a -1 if it has specific issues. An example is the Green Street Operations (boulevard design) which would affect a historic district.
- Removes Existing Geometric Deficiency – This responds to the Map-21 emphasis on system preservation versus expansion. This is for improvements that address current areas with geometric problems. An example of this type of project is the Green Street Operations (boulevard design) project, which addresses narrow lanes and drainage problems along the corridor. Another example is the Athens Highway interchange at I-985 which has a bridge without shoulders.

In the case of alternative modes projects, other considerations for implementation priority included:

- Low Cost Improvement – signing and striping only
- Provides Access to Transit
- Part of *Gainesville 2030 Comprehensive Plan* Ped/Bike Network
- Ease of Construction – receives a 1 if no ROW or special permitting is required. Receives a 0 if it is a typical level of effort for the type of project. Receives a -1 if it has specific issues.

PUBLIC INPUT

The public and focus group provided input regarding the project recommendations and priorities in a series of meetings held from June through September. In the June meetings, participants provided comments regarding the draft improvement recommendations. Recommendations were then refined, finalized, and presented to the public and focus group in July and August to receive comments regarding the relative priority of projects for implementation. This information was used to prepare the three tier implementation plan presented here along with the recommendations. The focus group reviewed the implementation plan and recommendations and provided comments related to the prioritized projects in September. The input received from the public and stakeholders is reflected in the comments and survey results provided in the Appendix.

POTENTIAL FUNDING STRATEGIES

Funding of transportation improvements is at a critical stage. With potential depletion of the Highway Trust Fund in the coming years, it will become increasingly difficult to identify project funding for implementation of transportation projects.

On July 6, 2012, the Moving Ahead for Progress in the 21st Century Act (MAP-21) was signed into law. Funding surface transportation programs at over \$105 billion for fiscal years (FY) 2013 and 2014, MAP-



21 is the first long-term highway authorization enacted since 2005. MAP-21 creates a performance-based, multimodal program to address the challenges of improving safety, maintaining infrastructure condition, reducing traffic congestion, improving efficiency of the system and freight movement, protecting the environment, and reducing delays in project delivery.

MAP-21 builds on and refines many of the highway, transit, bike, and pedestrian programs and policies established with the previous transportation bill, the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991. This summary below indicates the funding programs administered by the Federal Highway Administration.

- *The Surface Transportation Program (STP)* provides flexible funding that may be used by states and localities for projects to preserve and improve the conditions and performance on any federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals.
- *The National Highway Performance Program (NHPP)* provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments of federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a state's asset management plan for the NHS.
- *Transportation Alternatives Program (TAP)* – MAP-21 established a new program to provide for a variety of alternative transportation projects, including many that were previously eligible activities under separately funded programs. The TAP replaces the funding from pre-MAP-21 programs including Transportation Enhancement, Recreational Trails, Safe Routes to School, and several other discretionary programs, wrapping them into a single funding source.
- *The CMAQ program* is continued in MAP-21 to provide a flexible funding source to state and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas).

In addition to federal funding, it is possible to receive funding from the State of Georgia for improvement of safety and traffic operations along state routes. In addition to funding of improvements through state and federal sources, funding of improvements through local sources, such as the special purpose local option sales tax (SPLOST), has allowed local government agencies to provide significant funding for transportation improvements through locally funded projects or by applying local funding to leverage federal funds.