



RECOMMENDATIONS REPORT

September 6, 2018

JACOBS[®]

FORSYTH
← TRANSPORTATION
PLAN ↓

This page intentionally left blank.

Table of Contents

1.	Introduction and Background	4
1.1.	Plan Overview	4
1.2.	Purpose of Recommendations Report.....	5
2.	Public Involvement Summary.....	5
2.1.	Overview	5
2.2.	Phase I: Inventory of Existing Conditions.....	5
2.2.1	Advisory Committee Engagement	5
2.2.2	Public Engagement.....	7
2.2.3	Online Engagement.....	8
2.2.4	Promotion & Outreach.....	8
2.3	Phase II: Assessment of Current & Future Needs	9
2.3.1	Key Stakeholder Interviews.....	9
2.3.2	Advisory Committee Engagement	9
2.4	Phase III: Recommendations.....	9
2.4.1	Advisory Committee Engagement	10
2.4.2	Public Engagement.....	10
2.4.3	Online Engagement.....	10
2.4.4	Promotion & Outreach.....	11
3.	Build Scenario Modeling	11
3.1.	Total Transportation Network Results.....	11
4.3	Corridor Specific Congestion Results	13
4.	Project Recommendations.....	16
4.1.	Roadway Projects.....	16
4.1.1.	Roadway Capacity	16
4.1.2.	Widening Watch List	20
4.1.3.	New Roadway Connections	22
4.1.4.	Intersection Improvements and Bridge Upgrades.....	24
4.1.5.	Roadway Reclamation Projects.....	27
4.1.6.	Operational Improvements.....	29

4.2.	Active Transportation Projects	31
4.2.1.	Sidewalks.....	31
4.2.2.	Multi-Use Trails	34
4.2.3.	Combined Multi-Use Trails and Sidewalks.....	37
4.2.4.	Bike Lanes.....	40
4.2.5.	Signed Shared Roadways	40
4.3.	Transit Projects	43
4.3.1.	Dial-A-Ride Service	43
4.3.2.	GRTA Xpress Bus Service.....	44
4.3.3.	New Regional Transit Projects	44
4.3.4.	ATL Transit Authority	45
5.	Policy Recommendations	46
5.1.	Sidewalks.....	46
6.1.2	Existing Sidewalk Regulations	46
6.2.2	Sidewalk Policy Recommendations.....	47
5.2.	Access Management	47
6.2.1	Existing Access Management Regulations.....	47
6.2.2	Access Management Policy Recommendations	49
5.3.	Golf Carts.....	51
5.4.	Bicycle Facilities	51
6.	Thoroughfare Plan Update.....	51
6.1.	Functional Classification	51
6.2.	Update Methodology.....	52
6.3.	Final Thoroughfare Plan.....	55
7.	Project Prioritization Methodology	67
8.	Implementation	70
9.1.1	5-Year Action Plan (Short-Range Recommendations 2018 - 2022)	70
9.1.2	Mid-Range Recommendations (2023 -2030).....	77
9.1.3	Long-Range Recommendations (2031 – 2040).....	82
Appendix A. Traffic Calming Policy Manual for Local Streets and Subdivisions		87
Introduction		88
Thresholds and Guidelines.....		90
Streetside Modifications.....		92

Vehicle-Activated Signs	92
Curb and Landscaping	93
Street Lights/Similar Vertical Elements	94
Physical Barriers	95
Speed Tables and Raised Crosswalks	95
Diverter.....	96
Center Medians/Traffic Islands	97
Roundabouts/Traffic Circles.....	98
Lane and Directional Changes.....	99
Curb Extensions.....	99
On-Street Parking.....	100
Chicanes	101
Road Diet.....	102

Table of Figures

Figure 1: The Planning Process	4
Figure 2: 2040 Build Scenario PM Peak LOS	15
Figure 3: recommended Roadway Widening Projects.....	17
Figure 4: Widening Watch List	21
Figure 5: Recommended New Alignments	23
Figure 6: Recommended Intersection Improvement and Bridge Projects	26
Figure 7: Roadway Reclamation Projects.....	28
Figure 8: Recommended Operational Improvements	30
Figure 9: Recommended Sidewalk Projects.....	33
Figure 10: Recommended Multi-Use Trail Projects	36
Figure 11: Recommended Sidewalk and Multi-Use Trail Projects.....	39
Figure 12: Recommended Bike Lane and Signed Shared Roadway Projects	42
Figure 13: Priority Access Management Corridors	50
Figure 14: Histogram of Road Segments' Daily Volume per Lane	53
Figure 15: Crossing of SR 20 and SR 400 create quadrants	53
Figure 16: Forsyth County Thoroughfare Plan	55
Figure 17: Prioritization Process	68
Figure 18: Short Range Projects (2018 -2022)	71
Figure 19: Mid-Range Recommendations (2023 – 2030)	77
Figure 20: Long-Range Recommendations (2031 – 2040).....	82

1. Introduction and Background

The Recommendations Report details project and policy recommendations developed as part of the Forsyth Transportation Plan. The Forsyth Transportation Plan is a Comprehensive Transportation Plan (CTP) update, funded with financial support from the Atlanta Regional Commission (ARC). The ARC administers this program to help counties and municipalities develop joint long-range transportation plans that complement local comprehensive plans. CTPs are updated every five years and provide local jurisdictions with guidance on project implementation and funding decisions. The ARC also uses CTPs to develop a regional vision for transportation investment. Projects identified in this process will be eligible for inclusion in the Regional Transportation Plan (RTP) and may be considered for federal and state funding.

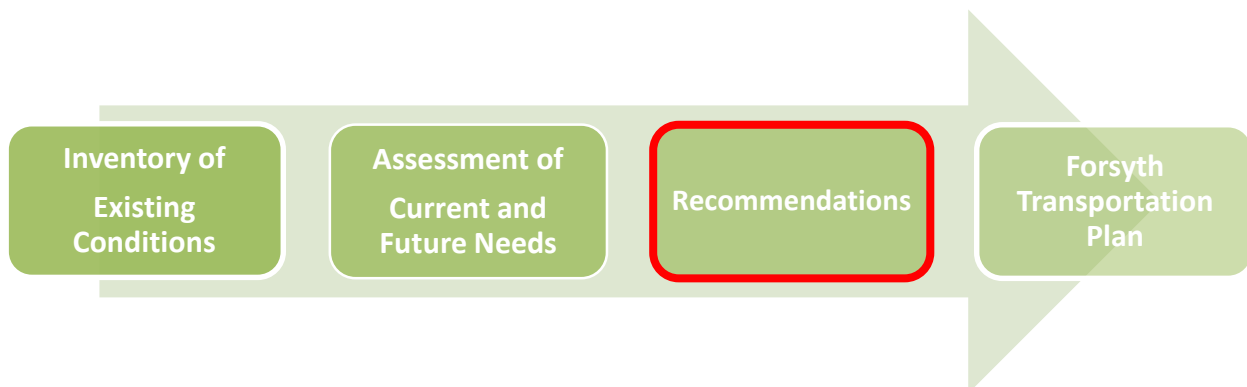
1.1. Plan Overview

The Forsyth Transportation Plan follows a four-step technical documentation process shown in **Figure 1**. These four steps include:

1. The first step is an inventory of the existing conditions. This includes a detailed examination of the transportation network in and around Forsyth County. This also includes factors that influence transportation, such as demographics, employment, land use, and development.
2. The second step is an assessment of transportation needs both today and through the year 2040. Needs were identified using technical methods, such as travel demand modeling, as well as input from community and stakeholders.
3. The third step is the development of policy and project recommendations designed to address the issues identified in the second step. This includes a financially constrained five-year action plan and a prioritized, but financially unconstrained set of additional projects.
4. The fourth and final step in the process is the final plan document, which summarizes the information from steps one through three in an executive summary format for easy consumption.

This document provides a summary of the third step in the planning process, the recommendations development phase.

Figure 1: The Planning Process



1.2. Purpose of Recommendations Report

The purpose of the Recommendations Report is to detail recommended projects and policies developed through the CTP process. It also includes background on the public involvement process that informed project and policy development. A description of the project prioritization methodology is also provided, which was used to help determine the appropriate time frame for the implementation of projects.

2. Public Involvement Summary

2.1. Overview

Public involvement was an essential component of the Forsyth Transportation Plan Update. Implementation of a comprehensive and far reaching approach to engaging the public using online and traditional outreach tools allowed broad public engagement opportunities and helped promote inclusion. By combining face-to-face outreach with an online presence, a significant number of stakeholders were engaged in a variety of ways.

Community stakeholders were engaged throughout four distinct phases of the project:

- Phase I: Inventory of Existing Conditions
- Phase II: Assessment of Current & Future Needs
- Phase III: Recommendations
- Phase IV: Final Documentation

During these project phases, the public was engaged in 10 public open house meetings. A series of key stakeholder interviews and advisory committee meetings were also hosted to consult with local leaders and both technical and community experts. Online engagement was made possible via a consultant-hosted webpage, through close coordination with the County Communications office, and two online surveys that collected more than 1100 responses.

2.2. Phase I: Inventory of Existing Conditions

After project initiation, the Inventory & Assessment of Existing Conditions phase began. During this phase, public engagement focused on informing and educating the public on the purpose and objectives of the planning process and included Advisory Committee engagement; public engagement; online engagement; and promotion and outreach.

2.2.1 Advisory Committee Engagement

Two committees were formed to help guide the process and provide input: a **Stakeholder Advisory Committee (SAC)** and **Technical Advisory Committee (TAC)**. The committees allowed the County to build partnerships and share information between County departments; state, regional and local staff; major stakeholders; and community representatives. The committees provided a continuing forum of education, exchange, understanding, questioning and clarification. By meeting at key project milestones, the committees also served as a check and balance on plan development in terms of support

and consensus and meeting the diverse needs of a broad-based constituency. The project team also utilized the expertise and knowledge of the Technical and Stakeholder Advisory Committees to identify the existence of low-income and minority populations and to assist in determining the most appropriate outreach techniques to be used for the communities.

The **Table 1** details the organizations that were represented as members of the Technical Advisory Committee.

Table 1: Technical Advisory Committee

Agency	Representative(s)
Atlanta Regional Commission	Patrick Bradshaw, David Haynes
City of Cumming - Various Departments	Gerald Blackburn, John Heard, Mayor H. Ford Gravitt, Phil Higgins, Scott Morgan
Forsyth County - Various Departments	Barry Lucas, Ben Finley, Eric T. Silveus, Jodi Gardner, Tim Perkins, Tom Brown, Tim Merritt
Forsyth County Schools	Tim Amerson
Georgia Department of Transportation	Brent Cook, Jay Roberts, Kaycee Mertz, Megan Weiss, AICP
Georgia Regional Transportation Authority	Gail Franklin

Table 2 details the organizations that were invited to participate as members of the Stakeholder Advisory Committee.

Table 2: Stakeholder Advisory Committee

Organization	Representative(s)	Organization	Representative(s)
Appointee - District 1	Carter Patterson	Reality Bikes	Todd Muller
Appointee - District 2	Sreeram Royyala	Rotary Club of Lanier Forsyth	Jason May
Appointee - District 3	Greg Dolezal	Rotary Club of South Forsyth	James Daniel
Appointee - District 4	Seth Thomas	Siemens Energy & Automation, Inc.	Jeff Neal

Organization	Representative(s)	Organization	Representative(s)
Appointee - District 5	Steve Dabbs	Smart Growth Forsyth	Pam Bowman
Creekside Neighborhood Association/Castleberry Road	Melton Bennett	United Way of Forsyth County	Ruth Goode
Cumming Civitan Club	Invited	Forsyth County Dial-A-Ride	Linda Fitzpatrick
Cumming-Forsyth Chamber of Commerce	James McCoy	Forsyth County HOA and Homeowners Coalition	Invited
Emergency Services	Danny Bowman	National Health Coalition of Georgia	Invited
Fix Forsyth Traffic	Invited	Post Road Committee for Proper Development	Robert Charles
Forsyth Citizens for Responsible Growth	Tony DeMaria		

The first meetings of the Technical and Stakeholder Advisory Committees were on March 27, 2017 and included similar content. A total of 10 individuals attended each meeting. At both meetings, Committee Members were presented with data gathered during Phase I and were engaged in discussions to review and comment on the plan goals and objectives. A review of Existing Conditions data included a series of maps depicting Level of Service during AM and PM peak flow, Bicycle and Pedestrian amenities, and High Crash Intersections. The Committees discussed issues and concerns, which were recorded directly on the maps. Finally, the Committee Members were asked for input on the tools and techniques that would be used to engage the public. They were also provided with a draft of the community survey questions and asked to return feedback to the Project Management Team via email within a specified timeframe.

2.2.2 Public Engagement

A total of five public open house sessions were hosted, one in each Commission District, for the first round of public engagement:

- Wednesday, April 12: Forsyth Conference Center, Lanier Technical College
- Monday, April 17: West Forsyth High School, Cafeteria
- Wednesday, April 19: Central Park Recreation Center, Banquet Room
- Monday, April 24: Lambert High School, Cafeteria

- Thursday, April 27: Hampton Park Library, Meeting Room

A total of 79 individuals were in attendance. This first round of public open houses was an opportunity to share information collected by the Consultant Team regarding existing conditions. It also helped to confirm the public's specific issues and ideas regarding AM peak congestion, PM peak congestion, high crash intersections, and the bicycle/pedestrian network. For each topic, the public was asked to use numbered dots to pinpoint specific areas where they had ideas or issues. Each comment was accompanied by a corresponding comment card where participants could provide further explanation. Feedback was also sought on the plan goals. Each participant was given four green dots to select the four plan goals most important to them. Lastly, the public was invited to tell others about remaining meetings, to submit a general comment form, and to participate in the online survey.

2.2.3 Online Engagement

A project website was developed to serve as a resource for information about the Transportation Plan and to provide a place where updates and future documents could be posted for the public. In addition to the project website, online outreach was complemented by the use of social media, increasing opportunities for greater community involvement. An online version of the open house sessions was posted on the project website and included the display boards and a feedback loop. Comments could also be submitted using the website's online comment form feature. A link to the survey was prominently displayed on the website to encourage participation, as well. In addition to a website, the project's online presence was complemented by the use of the County's Facebook page which is actively used to promote county-sponsored activities. Information such as the public open house session details and links to the project website were posted on a regular basis.

An online community survey was also launched that provided the public with an alternative way to engage from the comfort of their home or office. The purpose of the online survey was to collect input from stakeholders on their commuting behaviors, transportation challenges, transportation priorities, public transportation needs, and implementation resources. The survey included a combination of 20 open ended, multiple choice, and rating style questions. It was available online for a total of three weeks and was accessible directly from the project website (ForsythTransportationPlan.com). The survey was only available in the online format. While not a statistically valid survey which did not seek to capture a statistical sample size of respondents, the tool proved to be an effective way to reach the public. A total of 589 individuals completed the first online survey.

2.2.4 Promotion & Outreach

A series of press releases was drafted to officially kick off the project and to invite the public to participate in the first round of public open houses sessions. Press releases were distributed by Forsyth County Communications staff to local print and news outlets. Releases were timed two weeks in advance of the open houses to announce the series. Another release reminded the public about the meetings and announced the online survey for those who could not attend. County staff also distributed information about the meetings via its monthly electronic newsletter and Facebook. Flyers announcing the open house

sessions were available at all County Public Library branches. Lastly, members of the Stakeholder and Technical Advisory Committees were encouraged to share information with their networks.

The online survey was promoted through press releases distributed by the Forsyth County Department of Communications; posts to the County's official Facebook page; through flyer distribution at the public meetings; and via display boards positioned at all of the Forsyth County public library branches. Additionally, members of the Stakeholder and Technical Advisory Committees were encouraged to share information about the survey with their networks. Lastly, all public meeting attendees who provided an email address either at registration or on their comment forms were invited to participate in the survey via direct email.

2.3 Phase II: Assessment of Current & Future Needs

Public engagement during Phase II included key stakeholder interviews and Advisory Committee engagement.

2.3.1 Key Stakeholder Interviews

Key stakeholder interviews were utilized to gain insight on transportation needs as it relates to specific user groups. Interviews were one-on-one sessions, small groups meetings or were conducted by email and included a range of relevant discussion points. Key stakeholder interviews were completed with the following entities:

- Cherokee County Government
- Gwinnett County Government
- Hall County Government
- Scientific Games International, Inc.
- Siemens Energy & Automation, Inc.
- University of North Georgia

2.3.2 Advisory Committee Engagement

The second meetings of the Technical and Stakeholder Advisory Committees were on June 29, 2017 and included similar content. A total of 6 individuals attended the Technical Advisory Committee meeting and 13 individuals attended the Stakeholder Advisory Committee meeting. The purpose of these meetings was to bring the groups up to date on the latest project deliverables, including the completed Existing Conditions report; feedback collected from the public via the open house sessions and the online survey; other public engagement completed to date; and to get feedback on the goals and objectives. The draft prioritization structure was also reviewed in detail. The Committees were asked to review and offer comments on the 2017 CTP Goals and Objectives and the Prioritization Structure within a specified timeframe.

2.4 Phase III: Recommendations

Public engagement during Phase III included advisory committee engagement; public open house sessions; and the second community survey focused on recommendations.

2.4.1 Advisory Committee Engagement

The third and final meetings of the Technical and Stakeholder Advisory Committees were held on November 6, 2017 near the end of the draft Recommendations Phase and in advance of the second and final round of public open houses. Similar content was presented to each respective group. A total of nine individuals attended the TAC meeting and eight individuals attended the SAC meeting. The focus of the third and final Committee meetings was to present findings of the Needs Assessment and to talk about the projects that had been identified to address those needs. The Committees' input was needed to make sure the Consultant Team had not missed anything and to determine if some projects were not feasible or highly controversial. The Committees' assistance was also sought in promoting the final set of public open house sessions.

2.4.2 Public Engagement

Five public open house meetings were hosted, one in each Commission District, during the second and final round of public engagement:

- Tuesday, November 14: Forsyth Conference Center, Lanier Technical College
- Thursday, November 16: Central Park Recreation Center, Banquet Room
- Tuesday, November 28: Lambert High School, Cafeteria
- Thursday, November 30: West Forsyth High School, Cafeteria
- Thursday, December 7: Hampton Park Library, Meeting Room

This second round of public meetings was an opportunity to share draft recommendations and project ideas with the public. Display maps were presented showing projects for intersection improvements, roadway, and bicycle/pedestrian improvements. General comment forms were provided to collect input on specific projects. A total of 86 individuals attended the open house sessions. Attendees were also encouraged to participate in the online feedback survey and to share this opportunity with other neighbors and friends who could not attend and who may have an interest.

2.4.3 Online Engagement

Online engagement via the project webpage and Facebook continued during Phase III. A second online survey was also launched during the Recommendations Phase. The purpose of the online survey was to collect input from stakeholders on the draft transportation projects and recommendations, as well as to prioritize spending by project category. The survey was essentially an extension of the public open houses and was meant to provide an additional opportunity for the public to weigh in on the recommendations in the event that they were not able to attend in person. The survey included a combination of 10 open ended and rating style questions. It was available online for a total of six weeks and was accessible directly from the project website (ForsythTransportationPlan.com). The survey was only available in the online format. It was not a statistically valid survey and did not seek to capture a statistical sample size of respondents. A total of 514 individuals participated in the online survey.

2.4.4 Promotion & Outreach

The public open houses were promoted via press releases drafted and distributed by Forsyth County Communications staff to local print and news outlets. Releases were timed two weeks in advance of the open houses to announce the series. Another release reminded the public about the meetings and announced the online survey for those who could not attend. County staff also distributed information about the meetings via its monthly electronic newsletter and Facebook. Flyers announcing the meeting were available at all County Public Library branches and government buildings. Flyers were reproduced and made available to guests of the Christmas Festival at Lanier Technical College on December 1, 2018. Lastly, members of the Stakeholder and Technical Advisory Committees were encouraged to share information about the meetings and survey with their networks.

The online survey was promoted through a series of press releases distributed by the Forsyth County Department of Communications; posts to the County's official Facebook page; and through flyer distribution at the public meetings. Additionally, members of the Stakeholder and Technical Advisory Committees were encouraged to share information about the survey with their networks. Lastly, all public meeting attendees who provided an email address either at registration or on their comment forms at previous meetings were invited to participate in the survey via direct email.

3. Build Scenario Modeling

To assess the potential benefits of proposed capacity improvements these projects have been modeled within the Travel Demand Model for operation in 2040. These capacity projects, referred to as the 2040 Build Scenario, consist of proposed roadway widenings and new roadway alignments. This set of projects has been compared to the existing roadway network with the addition of committed projects (funded and likely to occur in the near-term) in future year 2040. This comparison shows major overall travel time savings countywide and corridor specific reductions in congestion. The results of the 2040 Build Scenario have been used to refine capacity projects to better address future needs. The results have also been used to identify new watch list projects, which are not recommended for widenings at this time but may be warranted in the future. New operational projects have also been identified to address congestion needs that future widenings do not.

3.1. Total Transportation Network Results

Table 3 below shows a comparison of the overall roadway network for the 2017 Base Year, 2040 Existing plus Committed, and 2040 Build Scenario roadway network. The comparison is based upon Vehicle Miles Traveled (VMT), Vehicle Hours Traveled (VHT), and Vehicle Hours of Delay (VHD) by roadway functional classification. The build scenario will increase VMT slightly by 4.94%, but reduce VHT by -3.23%, indicating more efficient travel throughout the county. The build scenario will also decrease VHD significantly within the county, by a reduction of -30.13%. VHD is a measure of how much extra time is spent traveling on the county's roads due to congestion.

Table 3: Comparison of VMT, VHT, and VHD for 2017, 2040 E+C, and 2040 Build Scenario

	2017 Base Year	2040 E+C	2040 Build	Percentage Change 2040 E+C to Build
Vehicle Miles Traveled (VMT)				
Principal Arterial	1,736,749	2,200,975	2,374,207	7.87%
Minor Arterial	1,138,380	1,646,629	1,826,591	10.93%
Major Collector	1,328,064	2,209,273	2,305,436	4.35%
Minor Collector	308,825	541,347	527,259	-2.60%
Local	1,379,644	2,555,472	2,572,399	0.66%
Total	5,891,662	9,153,696	9,605,892	4.94%
Vehicle Hours Traveled (VHT)				
Principal Arterial	32,628	48,775	47,992	-1.61%
Minor Arterial	39,386	71,230	68,952	-3.20%
Major Collector	41,412	82,188	77,115	-6.17%
Minor Collector	8,987	19,037	16,174	-15.04%
Local	72,777	143,613	142,830	-0.55%
Total	195,190	364,843	353,063	-3.23%
Vehicle Hours of Delay (VHD)				
Principal Arterial	4,504	12,710	9,191	-27.69%
Minor Arterial	8,629	24,182	16,960	-29.87%
Major Collector	5,957	20,439	13,294	-34.96%
Minor Collector	849	4,435	1,995	-55.02%
Local	2,717	9,592	8,415	-12.27%
Total	22,656	71,358	49,855	-30.13%

Source: Project Team, ARC - Travel Demand Model

Table 4 shows a comparison of Level of Service (LOS) within the entire network for the 2040 E+C and 2040 Build Scenario. LOS is a measure of traffic congestion with 'A' indicating excellent conditions and 'F' indicating failing conditions. The Build Scenario shows a significant reduction in congested conditions throughout the network. The largest reduction in LOS is within LOS F, where it is reduced by 3.8 percent in the AM period and 4.6 percent in the PM period. Significant improvements in LOS A/B are evident with increases of 10 percent in the AM period and 10.5 percent in the PM peak period.

Table 4: Comparison of Network LOS (Level of Service) for 2040 E+C and 2040 Build Scenarios

	Network	A/B	C	D	E	F	Total
AM Peak Period (6 AM to 10 AM)	2040 E +C	56.80%	16.50%	9.70%	8.30%	8.70%	100%
	2040 Build	66.9%	14.7%	7.5%	6.0%	4.9%	100%
	Change	10%	-1.8%	-2.2%	-2.3%	-3.8%	
PM Peak Period (3 PM to 7 PM)	2040 E +C	47.40%	19.50%	11.30%	10.40%	11.30%	100%
	2040 Build	57.90%	17.70%	9.90%	7.80%	6.70%	100%
	Change	10.5%	-1.8%	-1.4%	-2.6%	-4.6%	

Source: Project Team, ARC Travel Demand Model

4.3 Corridor Specific Congestion Results

The 2040 Build Scenario shows significant congestion reduction on major corridors throughout the county. The scenario also shows corridors with planned improvements that still exhibit congestion challenges, suggesting that additional improvements may be needed on these corridors. Reductions in congestion and remaining congestion needs are shown in **Figure 2**.

SR 369 (Matt Highway), west of SR 306 (Browns Bridge Road), shows significant improvements in congestion levels through the FTP-10 (SR 369 Passing Lanes), FTP-7 (SR 369 Matt Highway Widening), and FTP-35 (SR 369 Browns Bridge Widening) projects. SR 369 (Browns Bridge Road) east of SR 306 (Keith Bridge Road) still shows significant levels of congestion with a LOS of D, E, and F in 2040. This congestion is in spite of the planned FTP-6 widening from SR 306 to Hwy 53 in Hall County. This project was originally planned as a widening from 2 to 4 lanes, but in light of the projected congestion, this project has been updated to a widening from 2 to 6 lanes.

SR 306 (Keith Bridge Road) from SR 369 (Browns Bridge Road) to Highway 53 also exhibits LOS D, E, or F in 2040 even though a widening project (FTP-4) is planned for this segment. The widening project was planned to be from 2 to 4 lanes, but this has been changed to a 2 to 6 lane project.

Highway 53 from SR 306 (Keith Bridge Road) to Manor Ridge Road shows some improvement from the FTP-5 widening project from a LOS F to E, but still exhibits a failing LOS. This project may be more appropriate as a 2 to 6 lane widening to alleviate this issue.

The segment of SR 306 (Keith Bridge Road) from GA 400 to SR 369 (Browns Bridge Road) is anticipated to worsen from the E+C Scenario to the 2040 Build Scenario from a LOS C to a D and F, even though a widening project is planned for this segment (FTP-36). This widening has been changed from a 2 to 6 lane widening to address this congestion issue and tie into a potential six lane widening (FTP-4) to the northeast.

The widening of Dr. Bramblett Road does not show any congestion improvement on parallel north-south roads to the west of the Dr. Bramblett Road (Hurt Bridge Road and Heardsville Road). Since no improvements are shown, Hurt Bridge Road and Heardsville Road are recommended for operational improvement projects.

SR 371 (Post Road) is planned for a widening project from 2 to 4 lanes. The 2040 Build Scenario shows significant congestion with many segments of LOS F, E, and D. A widening watch list project is identified for this roadway from 4 to 6 lanes. Due to the projected congestion levels it is recommended that this project is kept on the watch list.

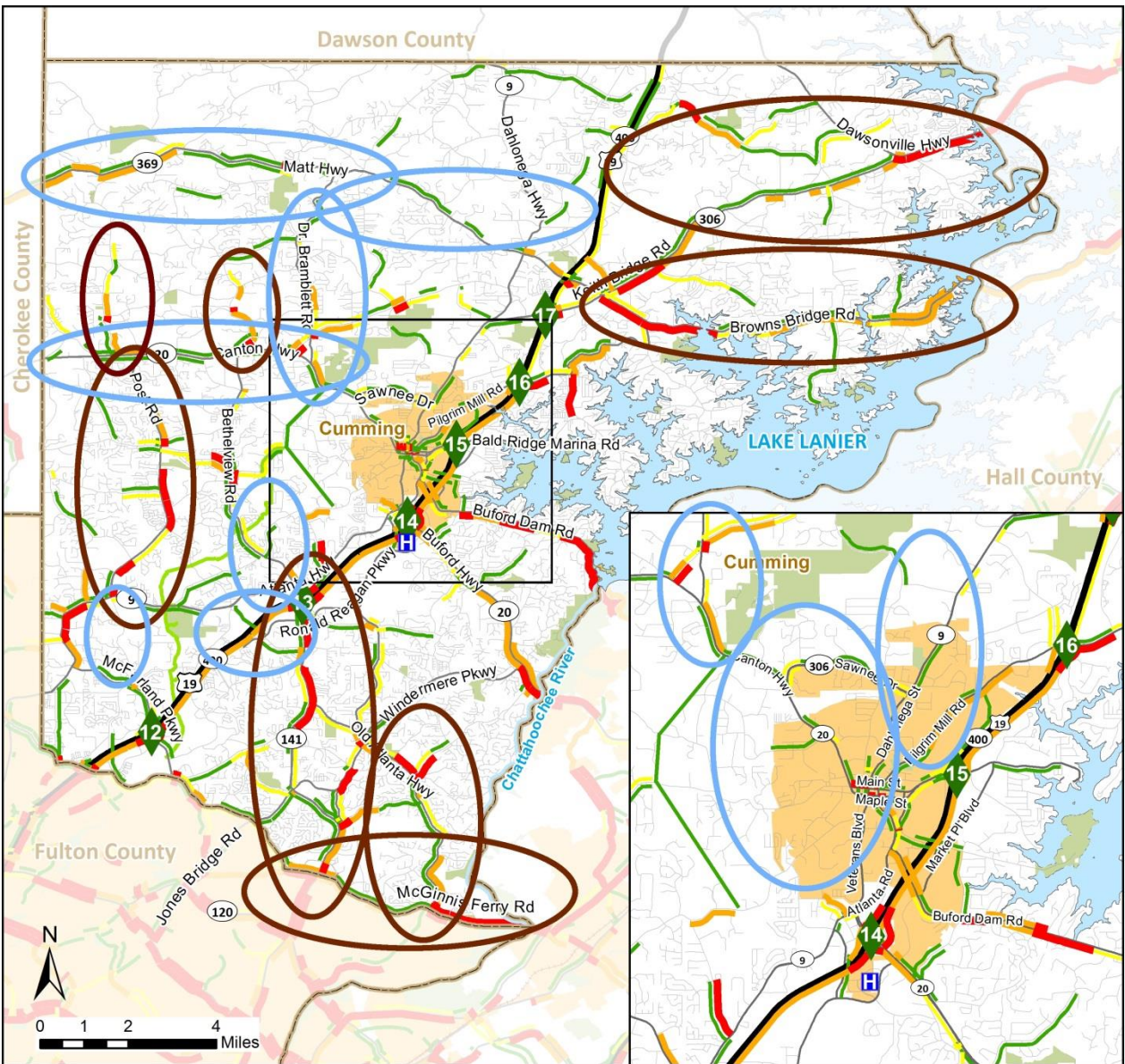
FTP-44 is a widening of SR 141 (Peachtree Parkway) from McGinnis Ferry Road to SR 9 (Atlanta Highway). This roadway is planned for widening from 4 to 6 lanes. In the 2040 Build Scenario some improvements in congestion are seen, but there are still sections of LOS F, D, and E. Widening to eight lanes may not be politically popular, creating a very wide major highway through the southern portion of the county. It may be necessary to alleviate congestion on this roadway through the widening of neighboring routes to disperse this traffic, this could include the W-5 watch list project (Mathis Airport

Parkway Widening). The W-5 project is shown as having a large portion in LOS F so this suggests another reason to move it from the watch list to the project list.

The section of McGinnis Ferry Road from Sargent Road to Peachtree Industrial Boulevard is shown as exhibiting significant traffic congestion, primarily LOS F and E in 2040. A widening project is identified for this segment on the watch list from 4 to 6 lanes. It is recommended that this project remains on the watch list since Gwinnett County does not currently have plans to widen this road to six lanes in the near future.

Old Atlanta Road from SR 141 (Peachtree Parkway) to McGinnis Ferry Road is projected to exhibit major congestion with a LOS of F, E, or D in the Build Scenario even though it is in the process of being widened. In light of this adding a watch list widening project from 4 to 6 lanes is recommended.

Figure 2: 2040 Build Scenario PM Peak LOS



2040 Build Scenario PM Peak LOS

Forsyth County Comprehensive Transportation Plan Update

Level of Service

— A/B

— C

— D

— E

— F



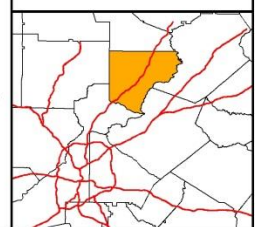
Congestion Reduction



Remaining Congestion Need

- Hospital
- Park/Recreation Area
- Cities
- Lake Lanier
- Counties
- GA 400
- Controlled Access Interchanges
- Major Roads
- Streets
- Railroads
- Big Creek Greenway

Sources: ARC, Forsyth County, Jacobs



4. Project Recommendations

This section includes final recommendations based on technical analysis from the Existing Conditions and Needs Assessment phases as well as public and stakeholder input. The project recommendations are broken down into roadway, active transportation, and transit categories. Each category includes multiple sub-types of project types (**Table 6**). Project categories and sub-types are explained in detail below. Each project has a unique ID beginning with FTP (**Forsyth Transportation Plan**) followed by a number. Project IDs do not correspond to priority level (i.e. FTP-1 is not necessarily higher in priority than FTP-100). Project are presented on maps and tables with additional description.

Table 5: Project Categories and Sub-Types

Project Category	Sub-Type	Project Category	Sub-Type
Roadway	Capacity (Widening)	Active Transportation	Sidewalks
	Capacity (New Location)		Multi-Use Trails
	Reclamation		Combined Multi-Use Trails & Sidewalks
	Operational		Bike Lanes
	Intersection		Signed Share the Road
	Watch List		
Transit	Dial-A-ride		
	GRTA Xpress		

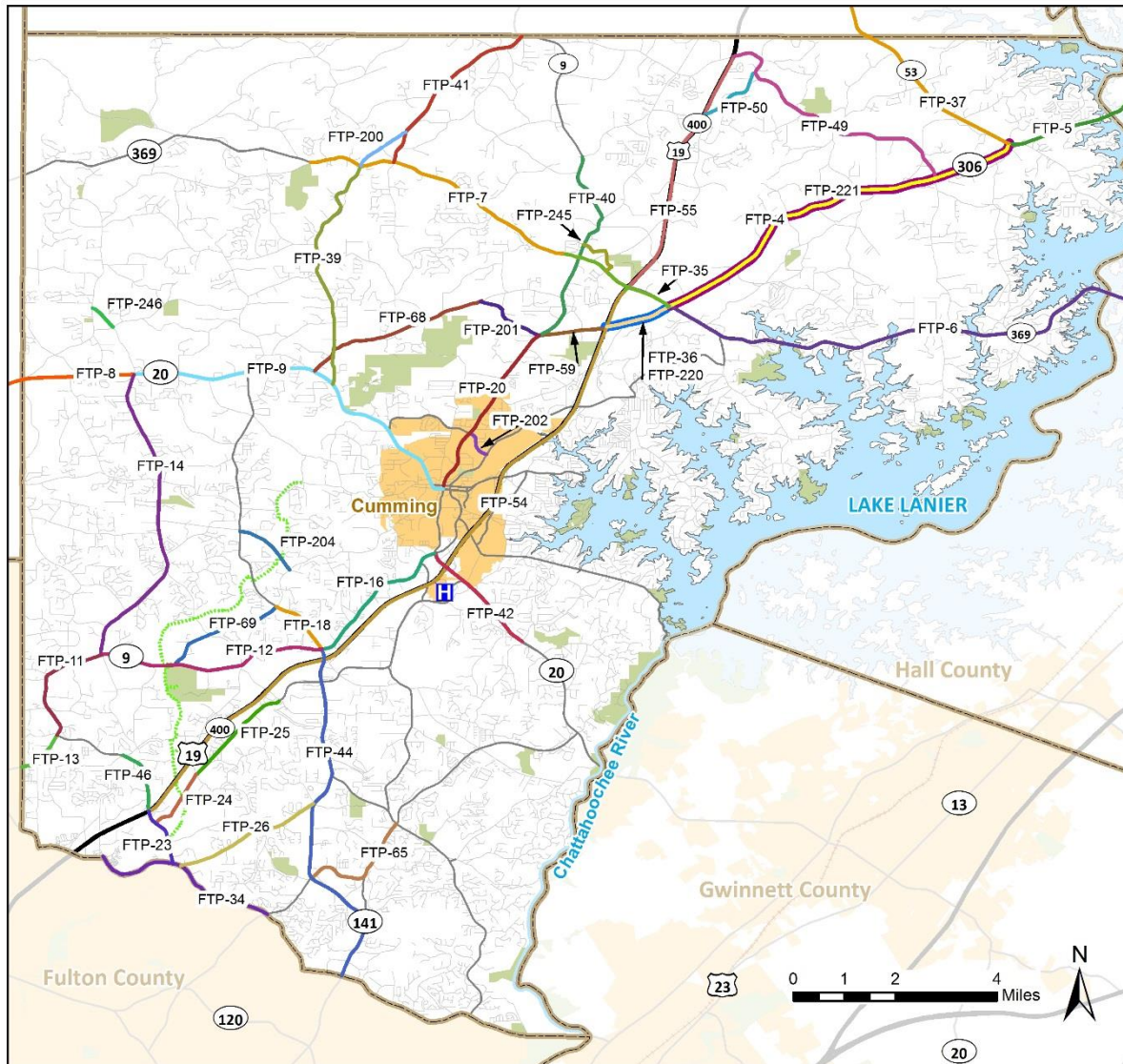
4.1. Roadway Projects

A variety of project types are recommended to improve the roadway network within the county to facilitate automobile movements. These include widenings, operational improvements, new roadways, intersection improvements, and roadway reclamation projects. Roadway projects have been grouped into these five sub-types and have been detailed in following sections.

4.1.1. Roadway Capacity

Capacity projects will add additional travel lanes to existing roadways. Roadway widenings are the most cost-prohibitive and high-impact means of increasing capacity on an existing roadway. Despite this, roadways with severe congestion may require additional through lanes in order to facilitate a level of service that is acceptable to users. Given the expense of such projects, widenings should be prioritized along the most critical roadways in a given area. Data inputs used to identify widening projects include previous studies, the regional travel demand model, INRIX speed data, public input, and stakeholder input. Roadway widenings must incorporate intersection and design standard improvements, where appropriate, to ensure that the added capacity is utilized to its full potential. Recommended road widening projects are shown in **Figure 3**. Project descriptions are detailed in **Table 6**.

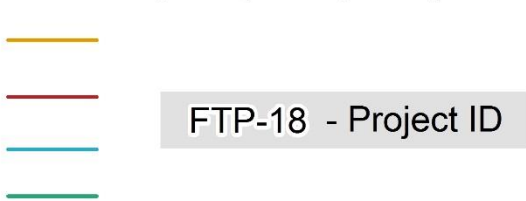
Figure 3: recommended Roadway Widening Projects



Recommended Roadway Capacity Projects

Forsyth County Comprehensive Transportation Plan Update

Roadway Capacity Projects



- Hospital
- Park/Recreation Area
- Cities
- Lake Lanier
- Counties
- GA 400
- Exits
- Major Roads
- Streets
- Railroads
- Big Creek Greenway

Sources: ARC, Forsyth County, Jacobs

FORSYTH
TRANSPORTATION
PLAN

Table 6: Recommended Road Widening Projects

ID	Project Name	From	To	Description
FTP-4	SR 306 (Keith Bridge Road) Widening	SR 369 (Browns Bridge Road)	Highway 53	Widening from 2 to 4 Lanes
FTP-5	SR 53 (Dawsonville Highway)	SR 306 (Keith Bridge Road)	Manor Ridge Road	Widening from 2 to 4 Lanes
FTP-6	SR 369 (Browns Bridge Road)	SR 306 (Keith Bridge Road)	Highway 53 in Hall County	Widening from 2 to 4 Lanes
FTP-7	SR 369 (Matt Highway)	Wallace Tatum Road	SR 9 (Dahlonega Highway)	Widening from 2 to 4 Lanes
FTP-8	SR 20 (Canton Highway) Widening	SR 371 (Post Road)	SR 369 (Hightower Road)	Widening from 2 to 6 Lanes
FTP-9	SR 20 (Canton Highway) Widening	SR 371 (Post Road)	GA 400	Widening from 2 to 6 Lanes
FTP-11	SR 9 (Atlanta Highway) Segment 2 Widening	McFarland Parkway	Mullinax Road	Widening from 2 to 4 Lanes
FTP-12	SR 9 (Atlanta Highway) Segment 3 Widening	Mullinax Road	SR 141 (Peachtree Parkway)	Widening from 2 to 4 Lanes
FTP-13	SR 9 (Atlanta Highway) Segment 1 Widening	Fulton County Line	McFarland Parkway	Widening from 2 to 4 Lanes
FTP-14	SR 371 (Post Road) Widening	SR 9 (Atlanta Highway)	SR 20 (Canton Highway)	Widening from 2 to 4 Lanes
FTP-16	SR 9 (Atlanta Highway) Segment 4 Widening	SR 141 (Peachtree Parkway)	SR 20 (Buford Highway)	Widening from 2 to 4 Lanes
FTP-18	Bethelview Road Widening	Castleberry Road	SR 9 (Atlanta Highway)	Widening from 4 to 6 Lanes
FTP-20	SR 9 (Dahlonega Highway) Segment 5 Widening	SR 20 (Buford Highway)	SR 306 (Keith Bridge Road)	Widening from 2 to 4 Lanes
FTP-23	McFarland Parkway Widening	McGinnis Ferry Road	GA 400	Widening from 4 to 6 Lanes
FTP-26	Old Alpharetta Road Widening	SR 141 (Peachtree Parkway)	McGinnis Ferry Road	Widening from 2 to 4 Lanes
FTP-34	McGinnis Ferry Road (Segment 1) Widening	Sargent Road	Union Hill Road	Widening from 2 to 4 Lanes
FTP-35	SR 369 (Browns Bridge Road) Widening	SR 9 (Dahlonega Highway)	SR 306 (Keith Bridge Road)	Widening from 2 to 4 Lanes
FTP-36	SR 306 (Keith Bridge Road) Segment 2 Widening	GA 400	SR 369 (Browns Bridge Road)	Widening from 2 to 4 Lanes
FTP-37	Highway 53 (Dawsonville Highway) Widening	SR 306 (Keith Bridge Road)	GA 400 in Dawson County	Widening from 2 to 4 Lanes

ID	Project Name	From	To	Description
FTP-39	Dr. Bramblett Road	SR 369 (Matt Highway)	SR 20 (Canton Highway)	Widening from 2 to 4 Lanes
FTP-40	SR 9 (Dahlonega Highway) Segment 6 Widening	SR 369 (Browns Bridge Road)	Burruss Road	Widening from 2 to 4 Lanes
FTP-41	Bannister Road Widening	SR 369 (Matt Highway)	SR 9	Widening from 2 to 4 Lanes
FTP-42	SR 20 (Buford Highway) Widening Segment 2	Samples Road	SR 9 (Atlanta Highway)	Widening from 4 to 6 Lanes
FTP-44	SR 141 (Peachtree Parkway) Widening Segment 2	McGinnis Ferry Road	SR 9 (Atlanta Highway)	Widening from 4 to 6 Lanes
FTP-46	McFarland Parkway Widening Segment 2	Union Hill Road	GA 400	Widening from 4 to 6 Lanes
FTP-49	Jot Em Down Road Widening	GA 400	SR 306 (Keith Bridge Road)	Widening from 2 to 4 Lanes
FTP-50	Crossroads Road Widening	Jot Em Down Road	GA 400	Widening from 2 to 4 Lanes
FTP-54	GA 400 Widening Segment 1	McFarland Parkway	SR 369 (Browns Bridge Road)	Widening from 6 to 8 Lanes
FTP-55	GA 400 Widening Segment 2	SR 369 (Browns Bridge Road)	Hubbard Town Road	Widening from 4 to 6 Lanes
FTP-59	SR 306 (Keith Bridge Road) Widening	SR 9 (Dahlonega Highway)	GA 400	Widening from 2 to 4 Lanes
FTP-65	Mathis Airport Parkway Widening	SR 141 (Peachtree Parkway)	Old Atlanta Road	Widening from 4 to 6 Lanes
FTP-68	Spot Road and Spot Road Connector Widening and Realignment	SR 20 (Canton Highway)	Spot Road Connector (306 Extension)	Widening from 2 to 4 lanes
FTP-69	Castleberry Rod Widening	SR 9	Bethelview Rd	Widening from 2 to 4 Lanes
FTP-220	SR 306 Widening	SR 369	SR 400	Widening from 4 to 6 Lanes
FTP-221	SR 306 Widening	SR 369	SR 53	Widening from 4 to 6 Lanes

4.1.2. Widening Watch List

A number of congestion issues were identified during the Needs Assessment process that are not being recommended for project solutions. Instead, these projects have been put on a “Watch List” and it is recommended that they are reassessed during the next five-year update.

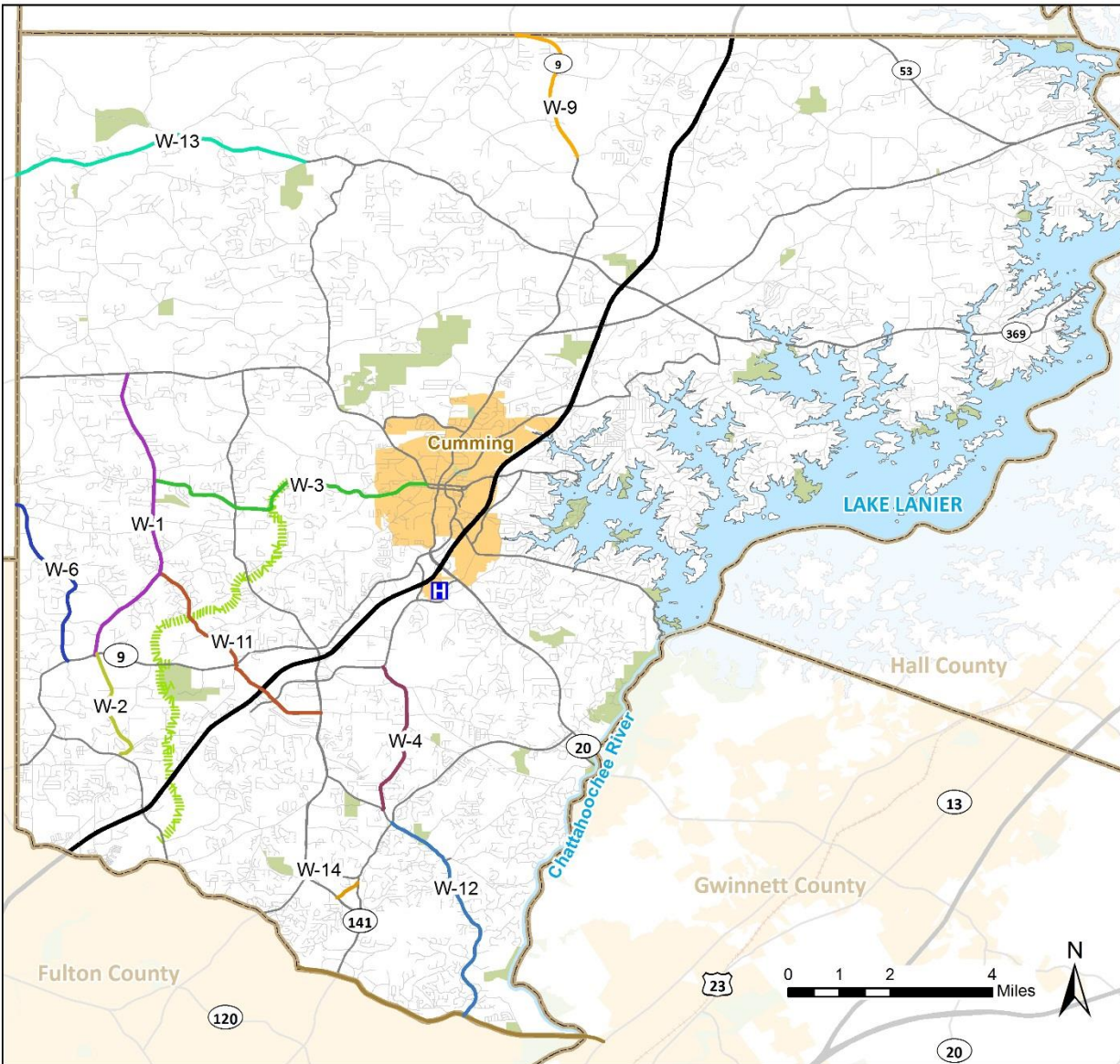
The reasons for placing a corridor on the watch list vary. W-11, for example, was initially recommended for widening. Due to extensive public reaction against the project received during the second round of community engagement, it was placed on the Watch List instead. Corridors W-1, W-3, and W-6 were placed on the watch list because the limited ROW in these corridors would make the project highly disruptive to property owners and potentially cost prohibitive. W-6 and W-9 were put on the watch list because the identified congestion issues were intermittent. W-7 was put on the watch list because of inter-jurisdictional coordination. This corridor continues east to Gwinnett County which has no plans for widening McGinnis Ferry Rd to six lanes. W-2 in on the watch list because this corridor was recently widened to 4 lanes.

Watch list projects are described in **Table 7** and displayed in **Figure 4**.

Table 7: Widening Watch List

ID	Project Name	From	To	Project Description
W-1	SR 371 (Post Road) Widening	Kelly Mill Road	SR 20 (Canton Highway)	Widening from 4 to 6 Lanes
W-2	Union Hill - Mullinax Road Widening	McFarland Parkway	SR 9 (Atlanta Highway)	Widening from 4 to 6 Lanes
W-3	Kelly Mill Road Widening	SR 20 (Canton Highway)	SR 371 (Post Road)	Widening from 2 to 4 Lanes
W-4	Old Atlanta Road Widening	Ronald Reagan Boulevard	Sharon Road	Widening from 2 to 4 Lanes
W-6	Campground Road Widening	SR 9 (Atlanta Highway)	Cherokee County Line	Widening from 2 to 4 Lanes
W-7	McGinnis Ferry Road (Segment 2) Widening	Peachtree Industrial Boulevard	Sargent Road	Widening from 4 to 6 Lanes
W-9	SR 9 (Dahlonega Highway) Widening (Segment 7)	Burruss Road	Dawson County Line	Widening from 2 to 4 Lanes
W-11	Majors Road Widening	SR 371 (Post Road)	SR 141 (Peachtree Parkway)	Widening from 2 to 4 Lanes
W-12	Old Atlanta Road Widening	McGinnis Ferry Road	SR 141 (Peachtree Parkway)	Widening from 4 to 6 Lanes
W-13	SR 369 (Matt Highway) Widening	Cherokee County Line	Wallace Tatum Road	Widening from 2 to 4 Lanes
W-14	Bagley Drive Roadway Widening	Mathis Airport Drive	SR 141 (Peachtree Parkway)	Widening from 2 to 4 Lanes

Figure 4: Widening Watch List



Watch List Projects

Forsyth County Comprehensive Transportation Plan Update

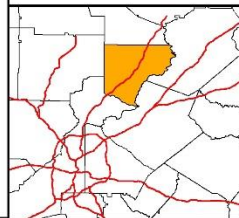
Watch List Projects



W-1 - Project ID

- Hospital
- Park/Recreation Area
- Cities
- Lake Lanier
- Counties
- GA 400
- Exits
- Major Roads
- Streets
- Railroads
- Big Creek Greenway

Sources: ARC, Forsyth County, Jacobs



4.1.3. New Roadway Connections

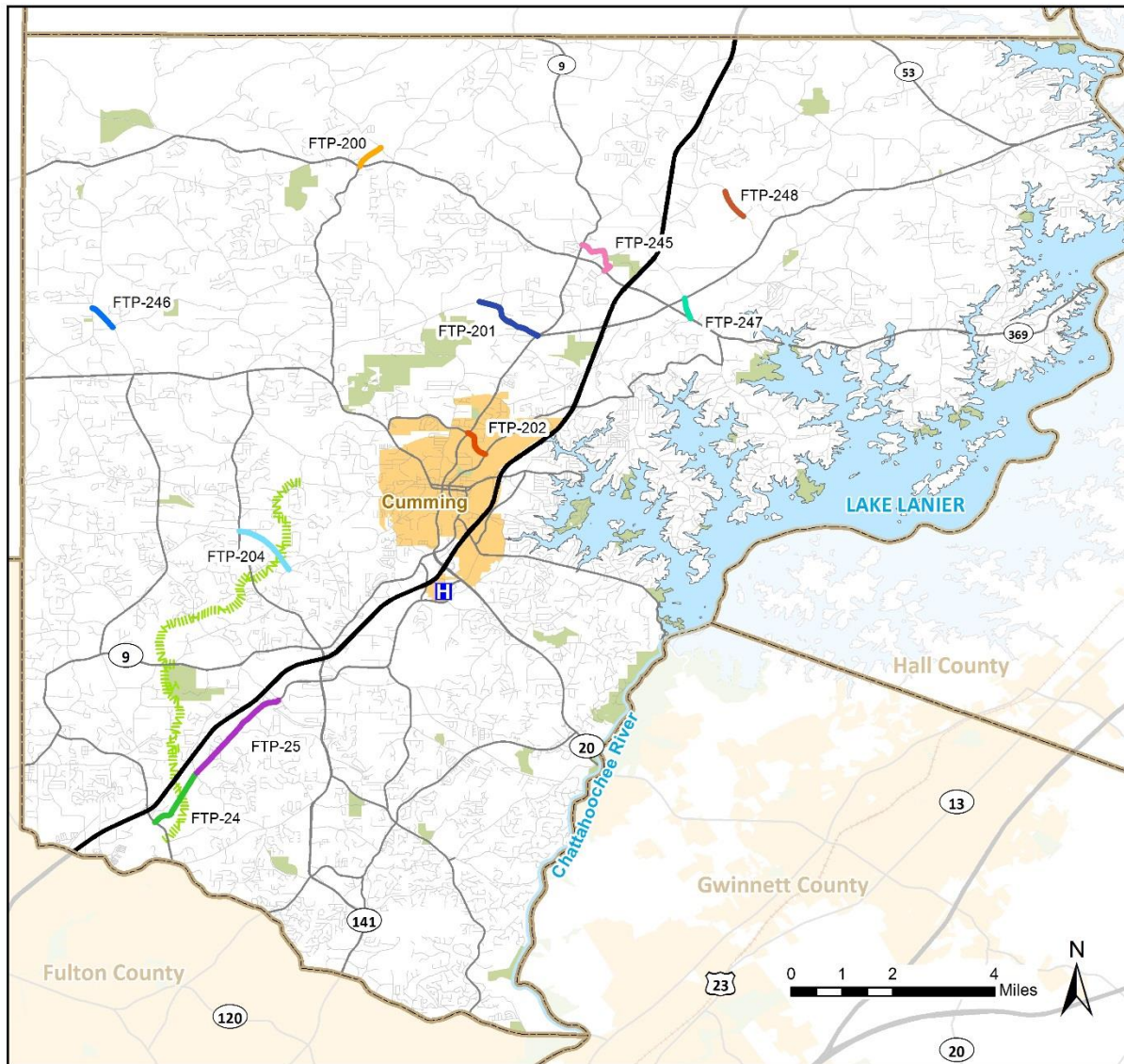
This project category includes new roadway alignments or extensions of existing roadways. New roadways provide critical missing connections within the county and can help alleviate congestion on overburdened existing routes. New roadway connections may also help correct existing roadway alignment problems.

New roadway alignments should incorporate Complete Streets treatments for bicyclists and pedestrians. This includes wide paved bicycle friendly shoulders, bike lanes, or parallel multi-use trails depending on roadway conditions. High-speed, high-volume, multi-lane roadways are more appropriate for an off-street bicycle facility, like a parallel multi-use trail. On-street facilities including bicycle lanes or wide paved shoulders are more appropriate for lower volume two-lane roadways.

Table 8: Recommended New Connections

ID	Project Name	From	To	Project Description
FTP-24	Ronald Reagan Extension (Segment 2) - New Alignment	McFarland Parkway	Shiloh Road	New Alignment 0 to 4 Lanes
FTP-25	Ronald Reagan Extension (Segment 3) - New Alignment	Shiloh Road	Majors Road	New Alignment 0 to 4 Lanes
FTP-200	Bannister Road Realignment	Bannister Road	Dr. Bramblett Road	New Alignment 0 to 4 Lanes
FTP-201	Spot Road Connector (306 Extension)	Spot Road	SR 9 (Dahlonega Highway)	New Alignment 0 to 2 Lanes
FTP-202	Sawnee Dr. Extension	SR 9 (Dahlonega Highway)	Pilgrim Mill Road	New Alignment 0 to 2 Lanes
FTP-204	Bethelview Road to Castleberry Road Connector	Bethelview Road	Castleberry Road	New Alignment 0 to 4 Lanes
FTP-245	Coal Mountain Connector	Bridgetowne Drive	SR 9 (Dahlonega Highway)	New Alignment 0 to 2 Lanes
FTP-246	Tribble Road-Heardsville Road Connector	Heardsville Road	Tribble Road	New Alignment 0 to 2 Lanes
FTP247	Holtzclaw Rd Extension	SR 369	SR 306 Via Rowe Lane	New Alignment 0 to 2 Lanes
FTP-248	Leland Drive Extension	Leland Drive	Smith Drive	New Alignment 0 to 2 Lanes

Figure 5: Recommended New Alignments



New Location Roadway Projects

Forsyth County Comprehensive Transportation Plan Update

New Roadways



FTP-25 - Project ID

- Hospital
- Park/Recreation Area
- Cities
- Lake Lanier
- Counties
- GA 400
- Exits
- Major Roads
- Streets
- Railroads
- Big Creek Greenway

Sources: ARC, Forsyth County, Jacobs

FORSYTH
TRANSPORTATION
PLAN

4.1.4. Intersection Improvements and Bridge Upgrades

This category includes a variety of project types that improve the operation and safety characteristics of intersections. These types include signalization, adding turn lanes, signal retiming and coordination, intersection realignments, roundabout retrofits, or grade separations. Bridge upgrades have also been included in this category, which include the rehabilitation of bridges to bring them up to current standards and pedestrian improvements. Recommended intersection improvement projects are described in **Tables 9 and 10** and displayed in **Figure 6**.

Table 9: Recommended Intersection Improvement Projects

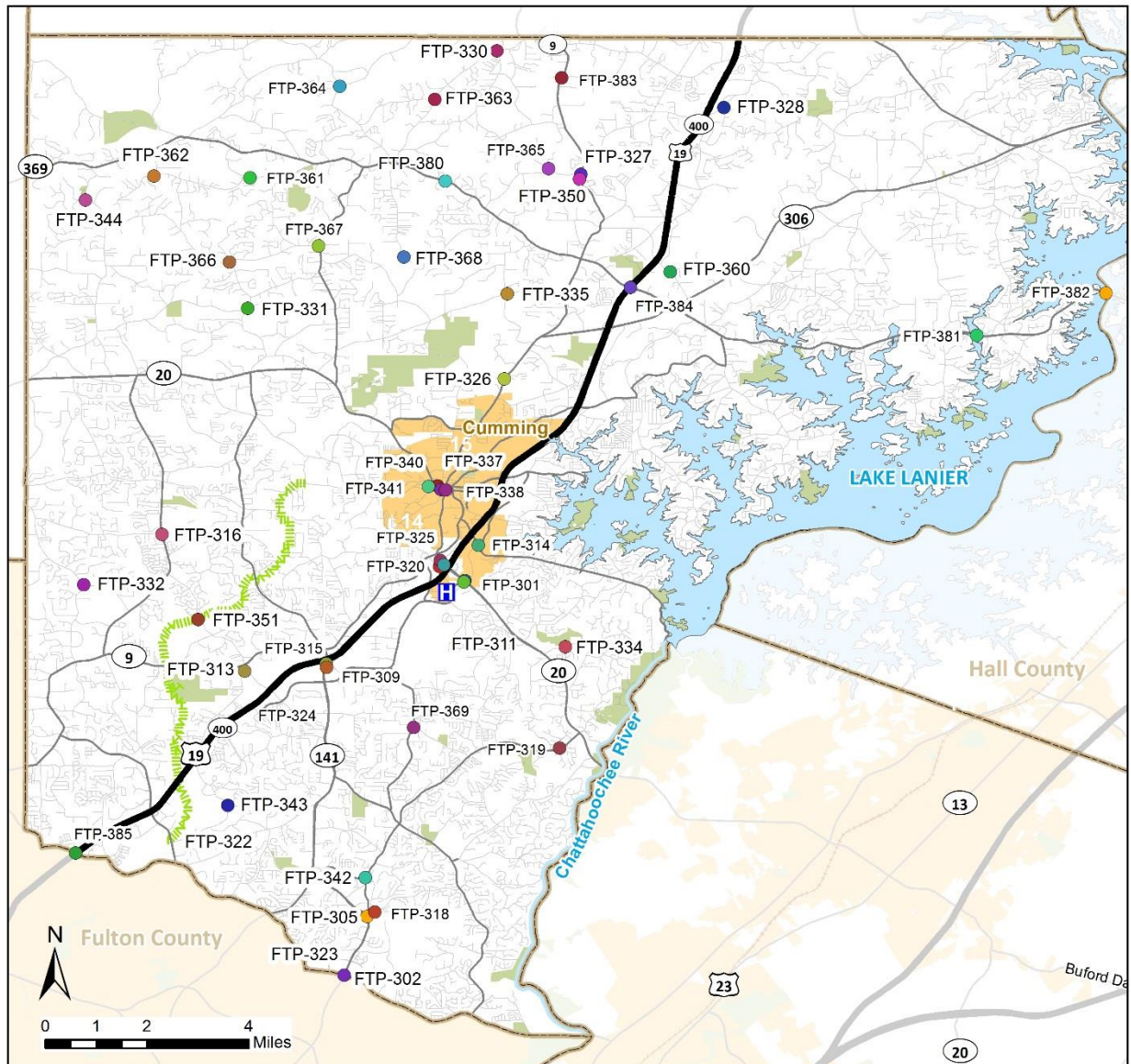
ID	Project Name	Project Description
County Intersection Projects		
FTP-301	SR 20 @ Ronald Reagan Boulevard	Add EB (250 ft) and WB (150 ft) Left on Ronald Reagan/Marketplace, NB Left (restripe)
FTP-302	SR 141 @ McGinnis Ferry Road	Signal timing
FTP-305	SR 141 @ Laurel Springs Parkway	Signal timing
FTP-309	SR 141 @ Brannon Road	Signal timing
FTP-313	Majors Road @ Shiloh Road	Relocation and Roundabout
FTP-314	Buford Dam Road Near Market Place Boulevard	Extend median to make driveways at MetroPCS Right in, Right out (RIRO)
FTP-315	SR 400 @ SR 141	Diverging Diamond
FTP-316	SR 371/Post Road @ Bentley Road	Signal (or roundabout)
FTP-318	Laurel Springs Parkway @ Mathis Airport Road	Add NB Left onto Mathis Airport Rd. Possibly add signal.
FTP-319	Windermere Parkway @ Suffolk Drive	Add signal
FTP-320	SR 400 Exit Ramp S @ SR 20	Add lighting, Add third SB Left Turn Lane
FTP-321	Interchange 14 @ South Exit Ramp	Add lighting, Add third SB Left Turn Lane
FTP-325	SR 20 @ Lakeland Plaza	Add NB Left Turn Lane
FTP-326	SR 9 @ Dr. Dunn Road	Roundabout
FTP-327	SR 9 @ Oak Grove Circle	Roundabout
FTP-328	Cross Roads Rd @ Bennett Rd	Roundabout
FTP-330	Bannister Rd @ Riley Rd/Govan Rd	Roundabout
FTP-331	Hurt Bridge Rd @ Watson Road	Roundabout
FTP-332	Campground Rd @ Dickerson Rd	Roundabout
FTP-334	Echols Road @ Haw Creek Park Entrance	Roundabout
FTP-335	Gravitt Road @ Mountain Road	Realignment
FTP-339	Marketplace Blvd. near Buford Hwy. (Milepost 10.45)	Add median on Market Place Blvd
FTP-342	Mathis Airport Parkway @ Mathis Airport Road	Signal
FTP-343	Shiloh Road @ Shiloh Crossing	Signal
FTP-344	Heardsville Circle @ Pooles Mill Road	Roundabout or realignment
FTP-360	Martin Road @ Shadburn Road	Signal or roundabout

FTP-361	Wallace Tatum Road @ McBrayer Road	Signal or roundabout
FTP-362	Wallace Tatum Road @ Seabolt Drive	Signal or roundabout
FTP-363	Bannister Road @ Mockingbird Road	Signal or roundabout
FTP-364	Mt. Tabor Road @ Westray Road	Signal or roundabout
FTP-365	Hubert Martin Road @ Oak Grove Circle	Signal or roundabout
FTP-366	Hurt Bridge Road @ Holbrook Road	Signal or roundabout
FTP-367	Dr. Bramblett Road @ Holbrook Road	Signal or roundabout
FTP-368	John Burruss Road @ Hendrix Road	Signal or roundabout
FTP-369	Old Atlanta Road @ Melody Mizner Road	New signal
City of Cumming Intersection Projects		
FTP-337	W Maple Street @ W Courthouse Square (Milepost 8.06)	Signal timing
FTP-338	W Maple Street @ Veterans Memorial Blvd. (Milepost 8.13)	Signal timing
FTP-340	West Main St. @ Hudson Street	Signal timing
FTP-341	Main Street @ West Courthouse Square	Signal timing

Table 10: Recommended Bridge and Interchange Upgrades

ID	Project Name	Project Description
FTP-350	Settingdown Creek at SR 9 (Dahlonega Highway) Bridge Rehabilitation	Bridge Maintenance
FTP-351	Majors Road at Big Creek Bridge Rehabilitation	Bridge Maintenance
FTP-380	SR 369 (Matt Highway) Bridge Replacement at Settingdown Creek	Bridge Replacement
FTP-381	SR 369 (Browns Bridge Road) Bridge Replacement at Two Mile Creek	Bridge Replacement
FTP-382	SR 369 (Browns Bridge Road) Bridge Replacement at Lake Lanier	Bridge Replacement
FTP-383	SR 9 (Dahlonega Highway) Intersection Improvements	Intersection Improvements
FTP-384	SR 369 (Browns Bridge Road) at GA 400 Interchange Improvement	Interchange Capacity
FTP-385	McGinnis Ferry at GA 400 Interchange Improvement	Interchange Capacity

Figure 6: Recommended Intersection Improvement and Bridge Projects



Recommended Intersection Improvement and Bridge Projects

Forsyth County Comprehensive Transportation Plan Update

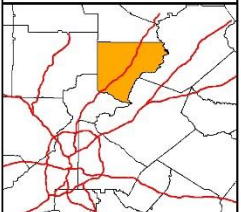
Intersection & Bridge Projects



FTP-18 - Project ID

- Hospital
- Park/Recreation Area
- Cities
- Lake Lanier
- Counties
- GA 400
- Controlled Access Interchanges
- Major Roads
- Streets
- Railroads
- Big Creek Greenway

Sources: ARC, Forsyth County, Jacobs



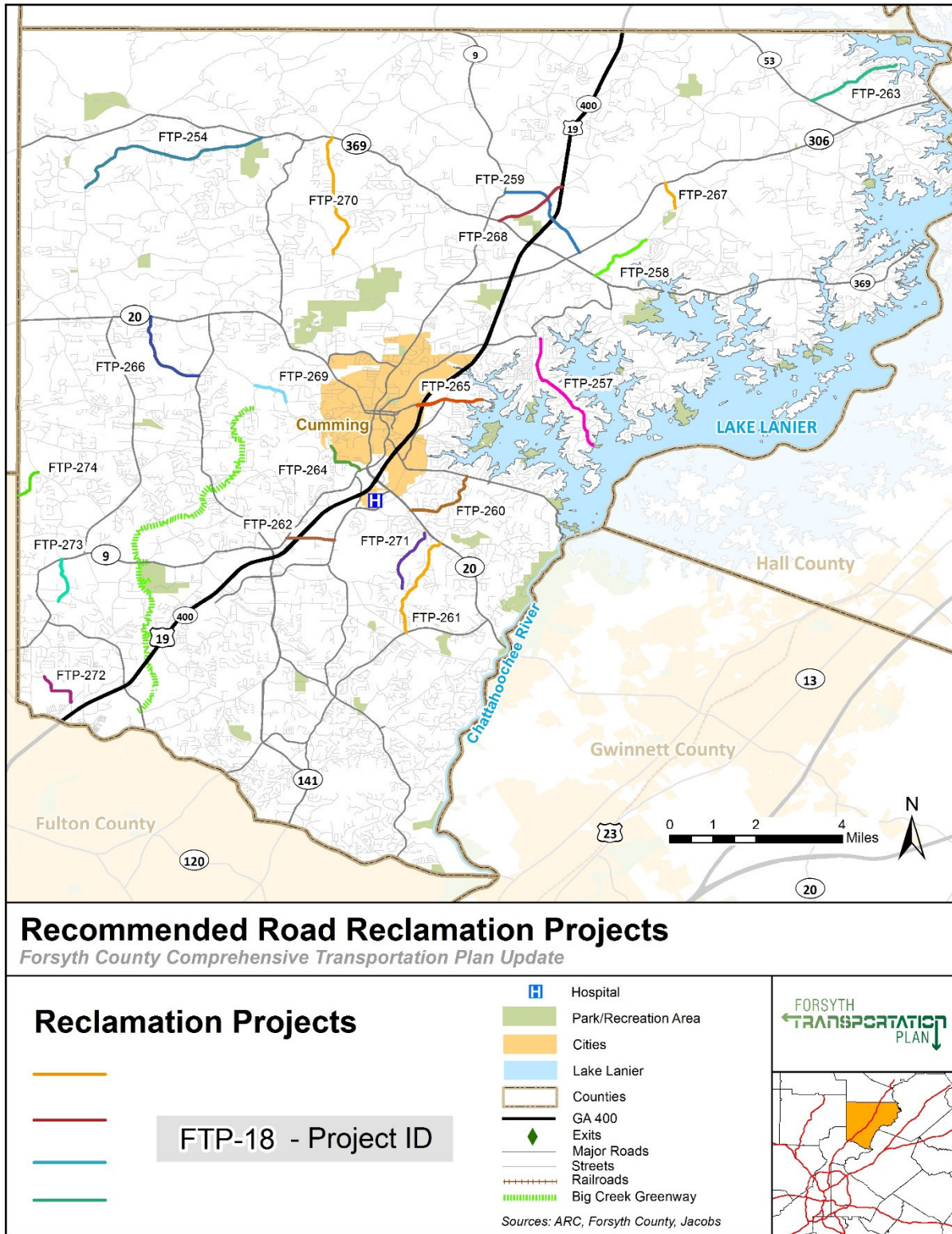
4.1.5. Roadway Reclamation Projects

Reclamation projects are a sub-category primarily focused on providing a safer roadway but upon completion also provide a consistent structure that will provide a much longer life. Crash rates above state averages were a primary source of identifying reclamation projects. These projects are concentrated on existing roadways with narrow lanes and shoulders. While the widening would not add additional lanes, it would consist of adding width to the existing travel lanes and shoulders. It can also include improvements to horizontal curves along some roads. **Table 11** describes each project. They are displayed in **Figure 7**.

Table 11: Recommended Reclamation Projects

ID	Project Name	From	To	Project Description
FTP-254	Wallace Tatum Road Roadway Reclamation	SR 369 (Matt Highway)	Heardsville Circle	Road Reclamation
FTP-257	Pilgrim Mill Road Roadway Reclamation	Holtzclaw Road	Tidwell Park Boat Ramp	Road Reclamation
FTP-258	Burruss Mill Road Roadway Reclamation	SR 369 (Browns Bridge Road)	Parks Road	Road Reclamation
FTP-259	Martin Road Roadway Reclamation	SR 9 (Dahlonega Highway)	SR 306 (Keith Bridge Road)	Road Reclamation
FTP-260	Nuckolls Road Roadway Reclamation	Buford Dam Road	SR 20 (Buford Highway)	Road Reclamation
FTP-261	Trammel Road Roadway Reclamation	Windermere Parkway	SR 20 (Buford Highway)	Road Reclamation
FTP-262	Pendley Road Roadway Reclamation	SR 9 (Atlanta Highway)	Ronald Reagan Boulevard	Road Reclamation
FTP-263	Julian Road Roadway Reclamation	Happy Hollow Trail	Highway 53 (Dawsonville Highway)	Road Reclamation
FTP-264	Hutchinson Road Roadway Reclamation	Castleberry Road	SR 9 (Atlanta Road)	Road Reclamation
FTP-265	Bald Ridge Marina Road Roadway Reclamation	Peachtree Road	GA 400	Road Reclamation
FTP-266	Aaron Sosebee Road Reclamation	SR 20	Bethelview Road	Road Reclamation
FTP-267	Burma Road Reclamation	SR 306	Burruss Mill Road	Road Reclamation
FTP-268	Settingdown Road Reclamation	SR 369	SR 400	Road Reclamation
FTP-269	Chamblee Gap Road Reclamation	North of Johnson Road	Hickory Trail	Road Reclamation
FTP-270	John Burruss Road Reclamation	Karr Road	SR 369	Road Reclamation
FTP-271	Daves Creek Road Reclamation	Daves Creek Drive	Haw Creek Circle E	Road Reclamation
FTP-272	Tidwell Road Reclamation	Tidwell Drive	Tidwell Circle	Road Reclamation
FTP-273	Francis Circle Road Reclamation	SR 9	Grassland Pkwy	Road Reclamation
FTP-274	Longstreet Church Road Reclamation	County Line	Campground Road	Road Reclamation

Figure 7: Roadway Reclamation Projects



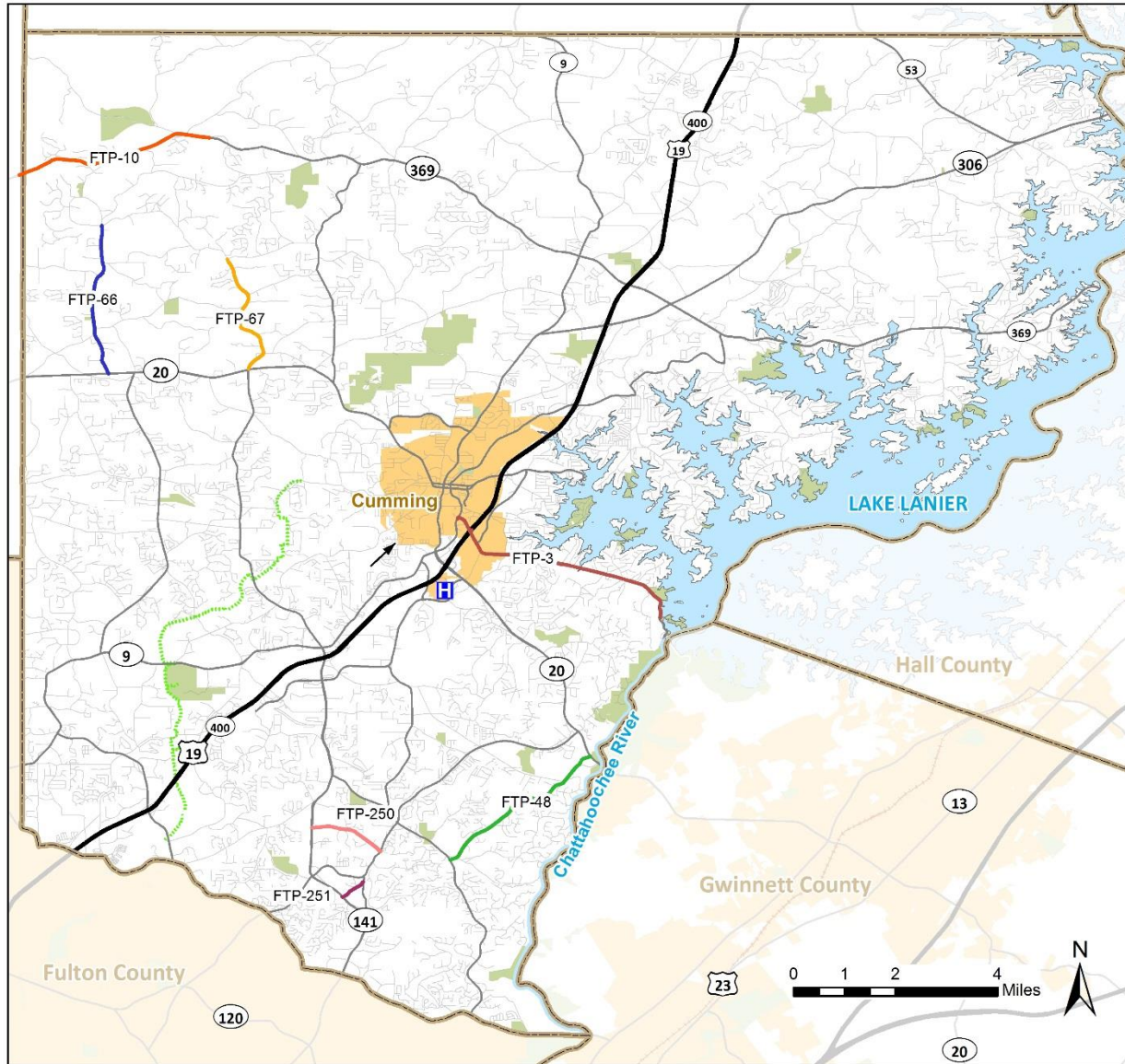
4.1.6. Operational Improvements

Operational improvement projects encompass a variety of projects that increase the efficiency and safety of the roadway network, without requiring major increases in capacity and the significant costs they require. These projects may include adding turning or passing lanes, signal retiming or making shoulder additions to improve roadways. These can be relatively low cost projects that have a major impact on improving roadway conditions with minimal negative impacts. Constrained corridors like Buford Dam Road are good candidates for operational improvements because widening such roads is not feasible. The identified operational projects are detailed in **Table 12** and displayed in **Figure 8**.

Table 12: Recommended Operational Improvement Projects

ID	Project Name	From	To	Project Description
FTP-3	Buford Dam Road Operations and Safety	Little Mill Road	SR 9 (Atlanta Road)	Operational Improvements
FTP-10	SR 369 (Matt Highway) Passing Lanes	Cherokee County Line	Wallace Tatum Road	Widening from 2 to 3 Lanes
FTP-48	James Burgess Road Operational Improvements	Old Atlanta Road	SR 20 (Buford Highway)	Add turn lanes
FTP-66	Heardsville Road Operational Improvements	SR 20 (Canton Highway)	Heardsville Circle	Operational Improvements
FTP-67	Hurt Bridge Road/Friendship Circle Operational Improvements	SR 20 (Canton Highway)	Holbrook Road	Operational Improvements
FTP-250	Bagley Road Operational Improvements	SR 141	Mathis Airport Parkway	Operational Improvements
FTP-251	Bagley Drive/Mathis Airport Road Operational Improvements	Mathis Airport Parkway	SR 141 (Peachtree Parkway)	Operational Improvements

Figure 8: Recommended Operational Improvements



Recommended Operations and Safety Projects

Forsyth County Comprehensive Transportation Plan Update

Operations Projects



FTP-18 - Project ID

- Hospital
- Park/Recreation Area
- Cities
- Lake Lanier
- Counties
- GA 400
- Exits
- Major Roads
- Streets
- Railroads
- Big Creek Greenway

Sources: ARC, Forsyth County, Jacobs



4.2. Active Transportation Projects

Active transportation encompasses modes of travel that require human energy, primarily walking and bicycling. The benefits of active transportation are numerous and include increased quality of life through improved health outcomes and increased recreational opportunities, reduced roadway congestion, and travel-time savings. A variety of active transportation projects have been proposed as part of this plan. These include sidewalks, bike lanes, multi-use trails, combined sidewalks and multi-use trails, and signed shared roadways. The basis for project recommendations came from the *Forsyth County Bicycle Transportation and Pedestrian Walkways 2025 Plan: 2015 Update*. Analysis from this current planning process identified the need for a small amount of additional projects.

4.2.1. Sidewalks

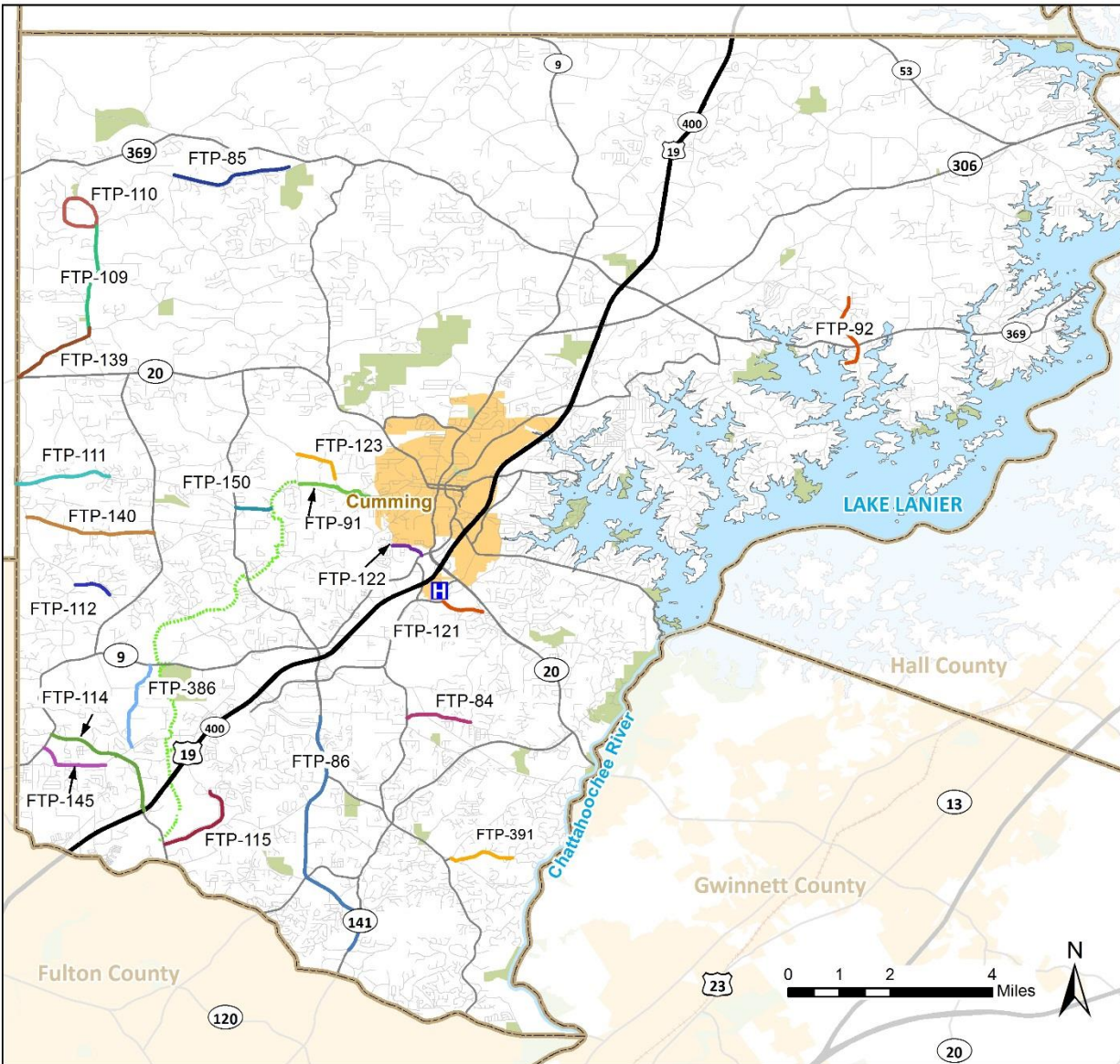
Sidewalk projects should follow design guidelines established within the *Forsyth County Bicycle Transportation and Pedestrian Walkways 2025 Plan: 2015 Update*. Within urban locations a minimum 6-foot sidewalk is recommended and in residential neighborhood areas a minimum 5-foot sidewalk is recommended. All sidewalk projects must also meet minimum Americans with Disabilities Act (ADA) requirements.

Table 13: Recommended Sidewalk Projects

ID	Project Name	From	To	Project Description
FTP-84	Gilbert Road Sidewalk	Old Atlanta Road	Trammel Road	Sidewalk
FTP-85	Wallace Tatum Road Sidewalk	Wright Bridge Road	Matt Park	Sidewalk
FTP-86	SR 141 (Peachtree Parkway) Sidewalk	Granite Lane	Majors Road	Sidewalk
FTP-91	Kelly Mill Road Sidewalk	Dalhia Drive	Hutchinson Road	Sidewalk
FTP-92	Little Mill Road Sidewalk	SR 369 (Browns Bridge Road)	Paddocks Mill Drive	Sidewalk
FTP-109	Heardsville Road Sidewalk	Watson Road	Heardsville Circle	Sidewalk
FTP-110	Heardsville Circle Sidewalk	Heardsville Road	Heardsville Road	Sidewalk
FTP-111	Drew Campground Road Sidewalk	Cherokee County Line	SR 371 (Post Road)	Sidewalk
FTP-112	Dickerson Road Sidewalk	Wynfield Way	Campground Road	Sidewalk
FTP-114	McFarland Parkway Sidewalk	McGinnis Ferry Road	SR 9 (Atlanta Highway)	Sidewalk
FTP-115	Shiloh Road Sidewalk	McFarland Parkway	Stoney Point Road	Sidewalk
FTP-121	Haw Creek Road Sidewalk	Haw Creek Circle	Ronald Reagan Boulevard	Sidewalk
FTP-122	Hutchinson Road Sidewalk	SR 9 (Atlanta Highway)	Hutchinson Road	Sidewalk

ID	Project Name	From	To	Project Description
FTP-123	Chamblee Gap Road Sidewalk	Kelly Mill Road	Bethleview Road	Sidewalk
FTP-139	Heardsville Road Sidewalk	SR 20 (Canton Highway)	Watson Road	Sidewalk
FTP-140	Bentley Road Sidewalk	Campground Road	SR 371 (Post Road)	Sidewalk
FTP-145	Martin Drive Sidewalk	SR 9 (Atlanta Highway)	James Road	Sidewalk
FTP-150	Kelly Mill Road Sidewalk	Big Creek Greenway	Bethelview Road	Sidewalk
FTP-151	Freedom Parkway Sidewalk (Segment 2)	Columns Drive	SR 306 (Keith Bridge Road)	Sidewalk
FTP-391	Settles Road Sidewalk	Grand Cascade Subdivision	Southers Circle at James Burges Road	Sidewalk

Figure 9: Recommended Sidewalk Projects



Recommended Sidewalk Projects

Forsyth County Comprehensive Transportation Plan Update

Sidewalk Projects

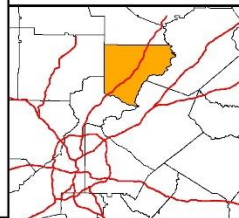


FTP-18 - Project ID

- Hospital
- Park/Recreation Area
- Cities
- Lake Lanier
- Counties
- GA 400
- Exits
- Major Roads
- Streets
- Railroads
- Big Creek Greenway

Sources: ARC, Forsyth County, Jacobs

FORSYTH
TRANSPORTATION
PLAN



4.2.2. Multi-Use Trails

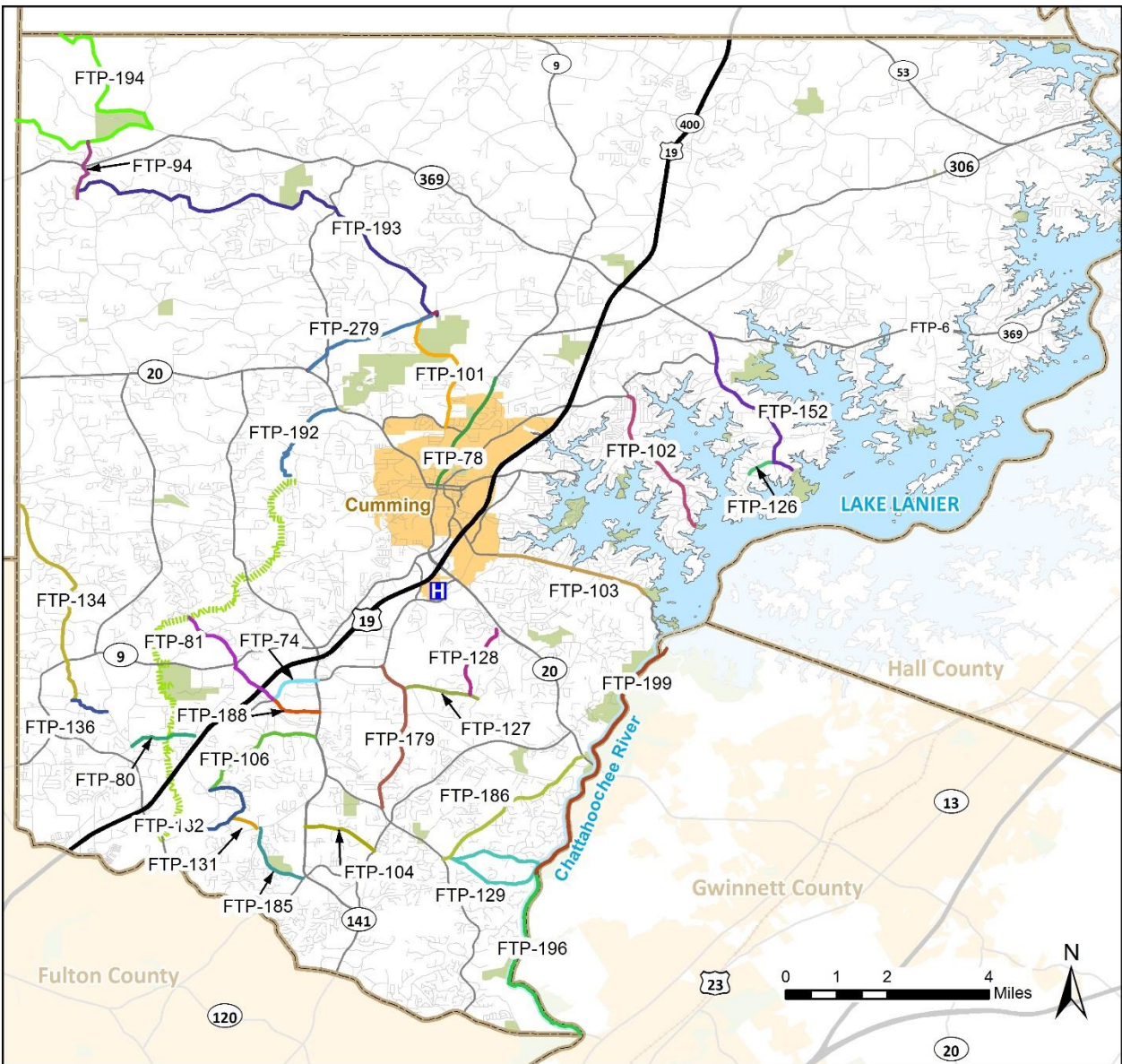
Multi-use trails are wide paved paths that may be used by bicyclists or pedestrians. These projects may include extensions to the county’s greenway system or separated multi-use trails alongside roadways. Typical sections of greenways are provided in the *Forsyth County Bicycle Transportation and Pedestrian Walkways 2025 Plan: 2015 Update*. These design standards specify a 10-15-foot multi-use trail with a 2-foot graded shoulder with a two percent maximum slope. These specifications should be followed in greenway extension design.

Table 14: All Recommended Multi-Use Trail Projects

ID	Project Name	From	To	Project Description
FTP-74	Ronald Reagan Boulevard Multi-Use Trail	SR 141 (Peachtree Parkway)	Wildbrooke Parkway	Multi-Use Trail
FTP-78	SR 9 (Dahlonega Highway) Multi-Use Trail	Main Street	Dunn Road	Multi-Use Trail
FTP-80	Union Hill Road Multi-Use Trail and Sidewalk	Mullinax Road	Shiloh Road	Multi-Use Trail
FTP-81	Majors Road Multi-Use Trail (Segment 2)	Ronald Reagan Boulevard	Big Creek Greenway	Multi-Use Trail
FTP-94	Pooles Mill Road/Saddle Trail Multi-Use Trail	Heardsville Circle	Saddle Trail	Multi-Use Trail
FTP-101	Bettis Tribble Gap Road Multi-Use Trail	SR 306 Extension (Sawnee Drive)	Spot Road	Multi-Use Trail
FTP-102	Pilgrim Mill Road Sidewalk and Multi-Use Trail	Holtzclaw Road	Tidwell Park Boat Ramp	Multi-Use Trail and Sidewalk
FTP-103	Buford Dam Road	Sawnee Campground	Sanders Road	Multi-Use Trail and Sidewalk
FTP-104	Bagley Road Sidewalk and Multi-Use Trail	SR 141 (Peachtree Parkway)	Mathis Airport Drive	Sidewalk & Multi-Use Trail
FTP-106	Stoney Point Road Sidewalk and Multi-Use Trail	SR 141 (Peachtree Parkway)	Shiloh Road East	Sidewalk & Multi-Use Trail
FTP-126	Lanier Drive Sidewalk and Multi-Use Trail	Bamby Road	Shadburn Ferry Road	Sidewalk & Multi-Use Trail
FTP-127	Daves Creek Drive Sidewalk and Multi-Use Trail	Old Atlanta Road	Trammel Road	Sidewalk & Multi-Use Trail
FTP-128	Daves Creek Road Sidewalk and Multi-Use Trail	Haw Creek Circle	Daves Creek Drive	Sidewalk & Multi-Use Trail

FTP-129	Southers Circle/Settles Road Sidewalk and Multi-Use Trail	James Burgess Road	James Burgess Road	Sidewalk & Multi-Use Trail
FTP-131	Pine Grove Road Sidewalk and Multi-Use Trail	Old Alpharetta Road	E Shiloh Road	Sidewalk & Multi-Use Trail
FTP-132	Shiloh Road East Sidewalk and Multi-Use Trail	Shiloh Road	Shiloh Road	Sidewalk & Multi-Use Trail
FTP-134	Campground Road/Francis Circle Sidewalk and Multi-Use Trail	Cherokee County Line	Grassland Parkway	Sidewalk & Multi-Use Trail
FTP-136	Windy Hill Drive Sidewalk and Multi-Use Trail	Francis Circle	Mullinax Road	Sidewalk & Multi-Use Trail
FTP-152	Shady Grove Rd / Shadburne Ferry Rd	Shady Grove Campground	SR 369 (Browns Bridge Road)	Sidewalk & Multi-Use Trail
FTP-179	Old Atlanta Road Multi-Use Trail	Ronald Reagan Boulevard	Sharon Road	Multi-Use Trail
FTP-185	Caney Road Multi-Use Trail	Brookwood Road	Old Alpharetta Road	Multi-Use Trail
FTP-186	James Burgess Road Multi-Use Trail	SR 20 (Buford Highway)	Old Atlanta Road	Multi-Use Trail
FTP-188	Majors Road Multi-Use Trail (Segment 3)	SR 141 (Peachtree Parkway)	Ronald Reagan Boulevard	Multi-Use Trail
FTP-192	Big Creek Greenway Phase 5a	Kelly Mill Road	SR 20	Multi-Use Trail
FTP-193	Sawnee Mountain Greenway	Spot Road	Pooles Mill Road	Multi-Use Trail
FTP-194	Etowah Greenway	Cherokee County Line	Dawson County Line	Multi-Use Trail
FTP-196	Chattahoochee River Trail - Phase 1	McGinnis Ferry Road	Southers Circle	Multi-Use Trail
FTP-199	Chattahoochee River Trail - Phase 2	Southers Circle	Lake Lanier	Multi-Use Trail
FTP-279	Big Creek Greenway Phase 5c	SR 20	Sawnee Mountain Visitor Center	Multi-Use Trail

Figure 10: Recommended Multi-Use Trail Projects



Recommended Multi-Use Trail Projects

Forsyth County Comprehensive Transportation Plan Update

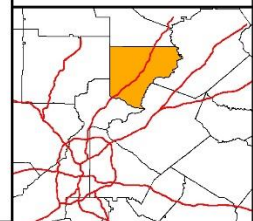
Multi-Use Trail Projects



FTP-18 - Project ID

- Hospital
- Park/Recreation Area
- Cities
- Lake Lanier
- Counties
- GA 400
- Exits
- Major Roads
- Streets
- Railroads
- Big Creek Greenway

Sources: ARC, Forsyth County, Jacobs



4.2.3. Combined Multi-Use Trails and Sidewalks

A subset of the multi-use trail projects include a sidewalk on the opposite side of the road. The County’s preferred bicycle and pedestrian treatment on recent roadway widenings (i.e. Mullinax Road) follows this template. This includes an 8 to 10-foot multi-use trail on one side and a 5-foot sidewalk on the other. It is noted that AASHTO discourages this design, but it may be desirable along high speed and high volume roadways to provide a safe and protected bicycle facility for inexperienced cyclists and children. Design standards for this treatment are provided in typical sections within the *Forsyth County Bicycle Transportation and Pedestrian Walkways 2025 Plan: 2015 Update*. These typical sections should be followed in the design of these projects. The sidewalk/trail projects are broken out in **Table 15** and **Figure 11** below.

Table 15: Recommended Sidewalk and Multi-Use Trail Projects

ID	Project Name	From	To	Project Description
FTP-102	Pilgrim Mill Road Sidewalk and Multi-Use Trail	Freedom Parkway	Tidwell Park Boat Ramp	Sidewalk & Multi-Use Trail
FTP-103	Buford Dam Road Sidewalk and Multi-Use Trail	Sawnee Campground	Sanders Road	Sidewalk & Multi-Use Trail
FTP-104	Bagley Road Sidewalk and Multi-Use Trail	SR 141 (Peachtree Parkway)	Mathis Airport Drive	Sidewalk & Multi-Use Trail
FTP-106	Stoney Point Road Sidewalk and Multi-Use Trail	SR 141 (Peachtree Parkway)	Shiloh Road East	Sidewalk & Multi-Use Trail
FTP-126	Lanier Drive Sidewalk and Multi-Use Trail	Bamby Road	Shadburn Ferry Road	Sidewalk & Multi-Use Trail
FTP-127	Daves Creek Drive Sidewalk and Multi-Use Trail	Old Atlanta Road	Trammel Road	Sidewalk & Multi-Use Trail
FTP-128	Daves Creek Road Sidewalk and Multi-Use Trail	Haw Creek Circle	Daves Creek Drive	Sidewalk & Multi-Use Trail
FTP-129	Southers Circle/Settles Road Sidewalk and Multi-Use Trail	James Burgess Road	James Burgess Road	Sidewalk & Multi-Use Trail
FTP-131	Pine Grove Road Sidewalk and Multi-Use Trail	Old Alpharetta Road	E Shiloh Road	Sidewalk & Multi-Use Trail
FTP-132	Shiloh Road East Sidewalk and Multi-Use Trail	Shiloh Road	Shiloh Road	Sidewalk & Multi-Use Trail
FTP-134	Campground Road/Francis Circle Sidewalk and Multi-Use Trail	Cherokee County Line	Grassland Parkway	Sidewalk & Multi-Use Trail

ID	Project Name	From	To	Project Description
FTP-136	Windy Hill Drive Sidewalk and Multi-Use Trail	Francis Circle	Mullinax Road	Sidewalk & Multi-Use Trail
FTP-152	Shady Grove Road Sidewalk and Multi-Use Trail	Shady Grove Campground	SR 369 (Browns Bridge Road)	Sidewalk & Multi-Use Trail
FTP-390	Heard Road Sidewalk and Multi-Use Trail	Young Deer Boat Ramp	Shady Grove Road	Sidewalk & Multi-Use Trail

4.2.4. Bike Lanes

Bike lanes should a minimum of four feet in width and follow design standards established in the typical sections provided within the *Forsyth County Bicycle Transportation and Pedestrian Walkways 2025 Plan: 2015 Update*. A 6-inch white line should separate the bike lane from the vehicular travel lane. A one-foot safety edge should be located between the bike lane and the edge of pavement. Minimum standards established in the American Association of State Highway and Transportation Officials (AASHTO) guidelines should also be followed for all facilities.

Bike lanes frequently collect debris making them unsafe or unusable. These facilities should be regularly maintained by the County to keep them clear of debris. They should also be adequately marked to alert drivers of these facilities. In high bicycle traffic areas, the use of green high friction paint may be used to draw additional attention from motorists.

Table 16: Recommended Bike Lane Projects

ID	Project Name	From	To	Project Description
FTP-155	Waldrip Road Bike Lane	SR 306 (Keith Bridge Road)	SR 369 (Browns Bridge Road)	Bike Lane
FTP-156	Kelly Mill Road Bike Lane	Cumming City Limits	SR 371 (Post Road)	Bike Lane
FTP-158	Bentley Road Bike Lane	Campground Road	SR 371 (Post Road)	Bike Lane
FTP-159	Bethel Road Bike Lane	Two-Mile Park	SR 369 (Browns Bridge Road)	Bike Lane
FTP-162	Old Keith Bridge Road Bike Lane	SR 306 (Keith Bridge Road)	Keith Bridge Park	Bike Lane
FTP-168	Drew Campground Road Bike Lane	SR 371 (Post Road)	Cherokee County Line	Bike Lane

4.2.5. Signed Shared Roadways

Signed shared roadways feature signage alerting motorists to the presence of bicyclists. The County currently utilizes green rectangular ‘Bike Route’ signs with the graphic of a bicycle. They include text indicating ‘Begin’ or ‘End’ or directional arrows indicating the direction of the route. These roadways are currently found primarily in the northern portion of the county, north of SR 369 (Matt Highway), on rural roads with low traffic volumes.

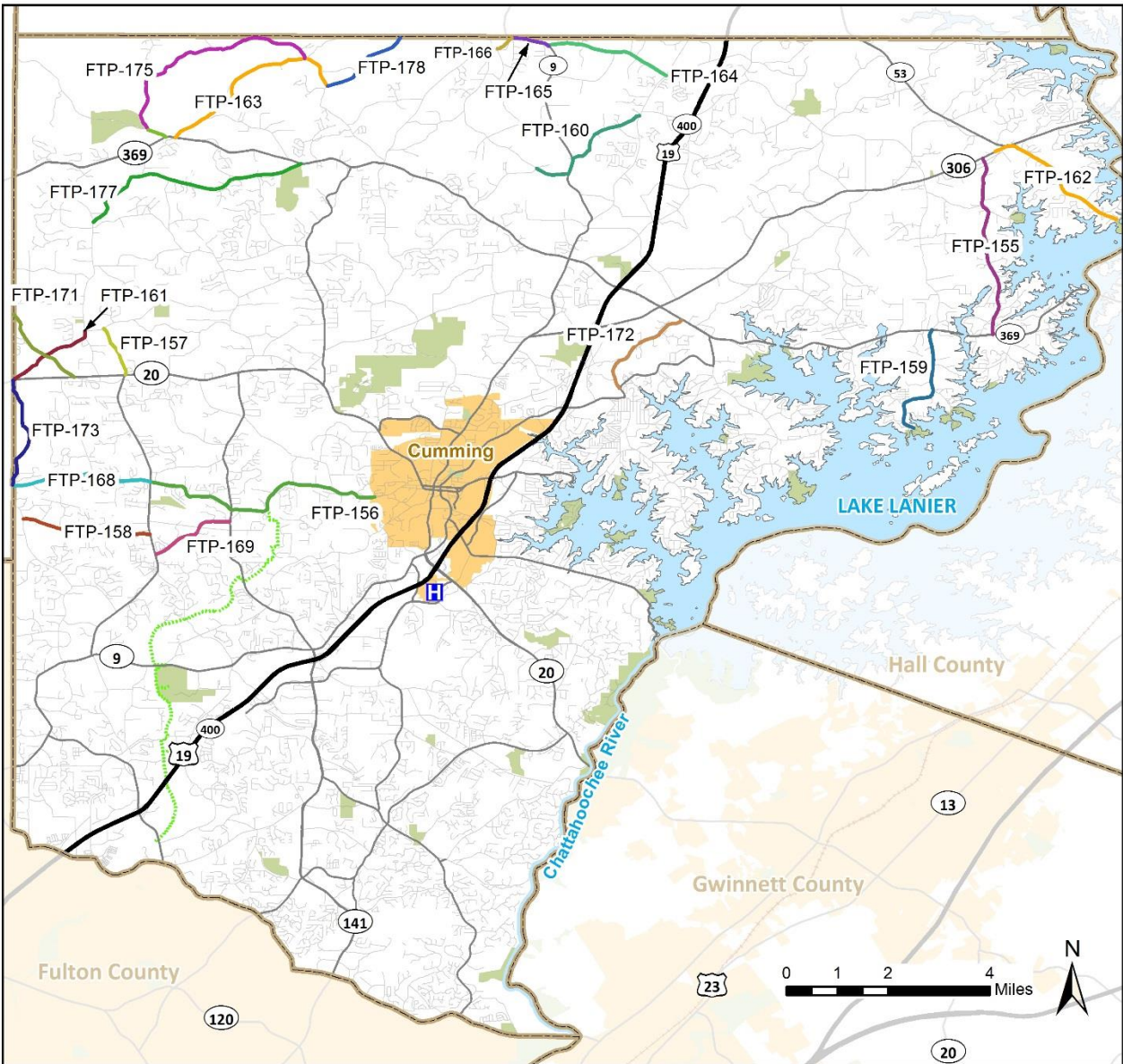
The placement of signage should follow standards in the Manual of Uniform Traffic Control Devices (MUTCD) for bicycle guide signs (Section 9B.20). Signage should be located in advance of all turns (at near side of the intersection) or decision points along the bicycle route. Directional signs should be located before any major turn with directional arrows as needed.

Recommended bike lane and signed shared roadway projects are shown in **Figure 12**.

Table 17: Recommended Signed Shared Roadway Projects

ID	Project Name	From	To	Project Description
FTP-157	Tribble Road Signed Shared Roadway	SR 20 (Canton Highway)	Watson Road	Signed Shared Roadway
FTP-160	Burruss Road, SR 9 and Oak Grove Circle Signed Shared Roadway	Hubert Martin Road	Hopewell Road	Signed Shared Roadway
FTP-161	Heardsville Road Signed Shared Roadway	SR 20 (Canton Highway)	Watson Road	Signed Shared Roadway
FTP-163	Mt. Tabor Road Shared Signed Roadway	SR 369 (Matt Highway)	Westray Ray	Signed Shared Roadway
FTP-164	AC Smith Road Shared Signed Roadway	SR 9 (Dahlonega Highway)	Hopewell Road	Signed Shared Roadway
FTP-165	SR 9 (Dahlonega Highway) Shared Signed Road	AC Smith Road	Bannister Road	Signed Shared Roadway
FTP-166	Bannister Road Shared Signed Roadway	Concord Road	SR 9 (Dahlonega Highway)	Signed Shared Roadway
FTP-169	Pittman Road Signed Shared Roadway	SR 371 (Post Road)	Bethelview Road	Signed Shared Roadway
FTP-171	Franklin Goldmine Road Signed Shared Roadway	Heardsville Road	Cherokee County Line	Signed Shared Roadway
FTP-172	Holtzclaw Road Signed Shared Roadway	Pilgrim Mill Road	SR 369 (Browns Bridge Road)	Signed Shared Roadway
FTP-173	Howard Road Signed Shared Roadway	SR 369 (Matt Highway)	Drew Campground Road	Signed Shared Roadway
FTP-175	Nicholson Road Signed Shared Roadway	Mt. Tabor Road	Old Federal Road	Signed Shared Roadway
FTP-176	Old Federal Road Signed Shared Roadway	Nicholson Road	SR 369 (Matt Highway)	Signed Shared Roadway
FTP-177	Wallace Tatum Road Signed Shared Roadway	Heardsville Road	SR 369 (Matt Highway)	Signed Shared Roadway
FTP-178	Westray Road Signed Shared Roadway	Mt. Tabor Road	Dawson County Line	Signed Shared Roadway

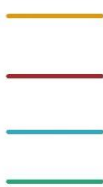
Figure 12: Recommended Bike Lane and Signed Shared Roadway Projects



Recommended Bicycle Projects

Forsyth County Comprehensive Transportation Plan Update

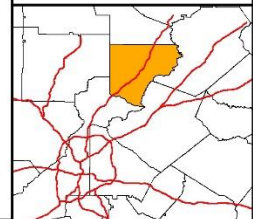
Bicycle Projects



FTP-18 - Project ID

- Hospital
- Park/Recreation Area
- Cities
- Lake Lanier
- Counties
- GA 400
- Exits
- Major Roads
- Streets
- Railroads
- Big Creek Greenway

Sources: ARC, Forsyth County, Jacobs



4.3. Transit Projects

This section provides recommendations concerning existing public transportation options within Forsyth County. Currently, transit service in Forsyth County is limited to dial-a-ride and GRTA Xpress regional bus service. No local fixed route bus or rail service is available.

4.3.1. Dial-A-Ride Service

The Forsyth County Dial-A-Ride service, operated by the Forsyth County Fleet Services Department, offers “on-call” transportation within Forsyth County and provided data on its 2015 and 2016 operating years, which can be found in **Table 18**. While the average daily trips have remained the same at 76, the total amount of trips has increased by 4 percent. The important aspect is that 3,493 requested trips during were not accommodated in 2016 due to capacity issues. This is an increase of 33 percent from 2015. In addition, 1,159 medical trips were also rejected in 2016.

Table 18: Dial-A-Ride 2016 Operating Statistics

Operating Statistics	Year 2016 Total (253 work days)	% Change vs. 2015 (251 work days)
Average Daily Trips	76	0%
Total Trips	19,166	4%
Trips Rejected (capacity)	3,493	33%
Medical Rejected	1,159	0%

Source: Forsyth County Department of Fleet Services

Recommended Dial-A-Ride policies are summarized in **Table 19**. These recommendations are focused on accommodating unmet demand for services. Also, individuals with disabilities who cannot drive often have difficulty finding transportation options. Ride hailing services like Lyft and Uber are not wheelchair accessible. Often the county Dial-A-Ride service is the only viable option. However, because operating hours end at 3:30PM this service does not accommodate traditional work hours.

In 2018, Dial-A-Ride received funding to expand the program to eight (8) full time vans. The first expansion van (7 total) became operational on April 9, 2018 and the second expansion van (8 total) will become operational May 14, 2018.

Forsyth Dial-A-Ride projects the following operational numbers with the expansion by two (2) Vans:

- 100 trips/day
 - 25,500 annual trips
- 1,200 miles/day
 - 302,000 annual miles
- \$49,000 annual passenger revenue

With the additional vans dial-A-Ride has set a goal to reduce the amount of trips rejected per day from 19 to 10 (of which 3 can be medical). This expansion is beneficial to Forsyth County citizens but there still remains unmet demand.

Table 19: Dial-A-Ride Policy Recommendations

Policy Name	Project Description
Forsyth Dial-A-Ride 1	Extend operating hours from (8:30AM – 3:30PM) to (8:00AM – 4:30PM)
Forsyth Dial-A-Ride 2	Purchase an extra van, equipped with wheelchair lifts

As the total population of Forsyth County is projected to increase, expanded Dial-A-Ride service will be an investment for the future, particularly since 35 percent (the majority) of total 2016 trips were medical trips. Funds to purchase an additional vehicle could be obtained by pursuing the Enhanced Mobility of Senior & Individuals with Disabilities Section 5310 program of the Federal Transit Administration, whose selection process can be formula-based, competitive or discretionary, and sub-recipients can include states or local government authorities, private non-profit organizations, and/or operators of public transportation.

4.3.2. GRTA Xpress Bus Service

Xpress is a regional bus transit service operated by the Georgia Regional Transportation Authority. Xpress focuses on long range commute trips from suburban counties to job centers in the core of the Atlanta region. An additional focus is providing connectivity to MARTA rail stations. There are three Xpress bus routes that provide connections to and from Forsyth County: routes 400, 401, and 408. The Cumming Park-and-Ride lot is located on Deputy Bill Cantrell Memorial Road in the City of Cumming.

Job density for those who live in Forsyth county is highest in North Fulton County. The configuration of Xpress routes is oriented more towards employment in Perimeter and Midtown Atlanta. To better service commute patterns, a stop in Alpharetta on the Cumming to Perimeter Center route (401) is suggested, as well as an increase in frequency on route 401.

Table 20: Recommended Xpress Policy

Policy Name	Project Description
Xpress Route 401	Add stop(s) in Alpharetta

4.3.3. New Regional Transit Projects

In January 2018 Fulton County Transit Master Plan was adopted which established priority for transit projects in the county. This priority includes two projects that could positively impact Forsyth County commuters. These projects include:

- Bus Rapid Transit (BRT) extending northward up GA 400 from North Springs MARTA station to Old Milton Parkway.
- Arterial Bus Rapid Transit northward up SR 141 to Emory Johns Creek Hospital/Johns Creek Town Center.

The GA 400 BRT project would bring premium transit service much closer to southern Forsyth County and could make such an option more enticing to commuters traveling south to jobs in Perimeter Center, Buckhead, Midtown, and Downtown Atlanta.

The SR 141 Arterial BRT project would serve to enhance existing GRTA Xpress service on the corridor. The could increase access to Doraville MARTA station and employment along the MARTA Yellow Line.

Further study may be needed to fully understand the impact of these projects on Forsyth County.

4.3.4. ATL Transit Authority

In May of 2018, Governor Nathan Deal signed House Bill 930 into law, creating a new regional transit authority that will coordinate transit planning and expansion within a 13-county area surrounding Atlanta. Member counties include Forsyth, in addition to Cherokee, Clayton, Coweta, Cobb, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry, Paulding, and Rockdale Counties. This law creates the Atlanta-region Transit Link Authority, known as the ATL, which will become active on January 1, 2019.

The ATL will serve as a toolbox giving local governments the ability to establish or expand public transit service in ways that best fit their communities. Each member county will have the option to hold 30-year T-SPLOST referendums to enable special sales taxes of up to 1 percent to fund transit projects in their county. These projects must be identified prior to a public vote and must be included in a regional transit plan. The new law also provides \$100 million in transit bonds from the state budget and grants the ATL the authority to issue its own bonds.

Developing a regional transit plan will be a major function of the ATL. This plan will coordinate existing and future transit service in the 13-county area. This will include coordination and potential unification between MARTA, GRTA Xpress, CobbLinc, Gwinnett County Transit, and Cherokee Area Transit Service. A consistent branding and unified logo across all agencies will be required by January 1, 2023. Discussions will be held to determine if this will involve ATL co-branding or if only the ATL logo will be used.

The ATL will be governed by a 16 person board. Ten of those people will be chosen by county commission chairmen and a caucus of local legislative delegations to represent 10 transit districts within the 13-county footprint. Forsyth County is split between two proposed districts (Districts 1 and 2), which divides the county into east and west along GA 400. District 1 includes northwest Fulton, all of Cherokee and west Forsyth Counties. District 2 includes northeast Fulton, northwest Gwinnett and east Forsyth Counties. The ATL board's Chairman will be appointed by the Governor. The Speaker of the House and Lieutenant Governor will each get two appointments. The board will select its Vice-Chairman each year. The Executive Director of the State Road and Tollway Authority (SRTA) and Georgia Regional Transportation Authority (GRTA) will serve as the ATL's interim director until appointments are made.

The legislation includes specific language that pertains to certain member counties (i.e. Gwinnett, Fulton and Cobb), but does not include any specific language pertaining to Forsyth County. At this point, the long-range implications of the ATL authority on transit planning within Forsyth County remain to be seen. If Forsyth County chooses to pursue transit expansion the ATL authority provides a great opportunity and mechanism to achieve this. The legislation is set-up to ensure member counties

maintain control over transit expansion and this cannot be mandated from the regional authority. Member counties must “opt-in” to any specific project or funding mechanisms and local sales tax cannot be raised without approval from residents via a referendum.

Due to the unforeseen impacts of the ATL authority on Forsyth County the effects cannot be adequately addressed within the 2018 CTP Update. If significant changes occur before the next scheduled plan update, either through the passage of a T-SPLOST referendum or through the receipt of additional state or regional transit funding, it is recommended that the 2018 CTP be updated to sufficiently account for these changes.

What is clear is that the ATL authority provides a mechanism to vastly improve transit coordination, integration and efficiency within the Atlanta region. Through a seamless and unified transit governance and funding structure, the benefits of coordination will be experienced by Forsyth County residents should they chose to ‘opt-in’ to the funding referendum or not. The legislation permits Forsyth County to remain in the driver’s seat to control its own destiny in regards to when and how they choose to pursue transit expansion.

As Forsyth County continues to grow it will be important to assess at regular intervals to potential benefits and drawbacks of opting into the ATL service area.

5. Policy Recommendations

The purpose of this section is to outline transportation policy changes recommended for Forsyth County. These policy recommendations have been identified during the planning process through a variety of sources including stakeholder input, public comment and technical analysis.

Policy recommendations have been made in the following areas:

- Sidewalks
- Access Management
- Golf Cart Transportation
- Bicycle Facilities

5.1. Sidewalks

To foster the development of a safe, extensive and well-connected sidewalk network within the county a set of policy recommendations have been made for inclusion within the Forsyth Transportation Plan. Before recommendations could be made a review of existing sidewalk regulations was conducted.

5.1.1. Existing Sidewalk Regulations

The Forsyth County Unified Development Code (amended in 2017) requires sidewalks in specific situations depending on land use type. Sidewalks are required internally within many development types, but sidewalks along public roadways are of greater importance to building a well-connected pedestrian network within the county. Within office and commercial districts 5-foot sidewalks are required along all public streets. Within activity centers sidewalks should be provided along all road

frontages to connect with existing or future sidewalks. Residential subdivisions are required to install sidewalks along all abutting public streets. Within master planned communities sidewalks should be present in all residential areas and should be present along both sides of all streets. Specific guidance on the placement of sidewalks is limited although there are requirements that it should run parallel to the roadway unless there are specific site conditions that prevent this.

5.1.2. Sidewalk Policy Recommendations

The Unified Development Code requires sidewalks in specific development types and within special areas of the county. This results in an incomplete sidewalk network, particularly along collector and arterial roadways. To expand and better connect the existing sidewalk network, several sidewalk policy recommendations have been identified. These are outlined below:

- The County should adopt a Complete Streets policy for new roadways and widening projects. Complete Streets provide for safe, comfortable, and convenient travel for all roadway users, including pedestrians, bicyclists, and those driving in automobiles. This policy should require new roadways and widened roadways to incorporate sidewalks and/or multi-use trails on both sides of the roadway into the project design.
- A sidewalk project prioritization exercise was conducted which prioritized previously identified sidewalk projects in the 2015 Forsyth County Bicycle and Pedestrian Plan. These missing sidewalk segments were prioritized based upon a pedestrian demand analysis and are listed in Appendix X. To facilitate the construction of these missing sidewalk segments along developed corridors it is recommended that the County allocate a portion of the local SPLOST/Bond revenues annually to a general sidewalk fund.
- Many of these missing sidewalk segments have been identified on roadways programmed or recommended for widening. Some of these include SR 141 (Peachtree Parkway), McFarland Parkway, and Majors Road. Sidewalk improvements should be incorporated in the design of these projects to facilitate cost efficiency and help meet pedestrian needs within these corridors.

5.2. Access Management

Access management is a term used to describe roadway and development design that limits and/or coordinates access to local land uses in an effort to preserve the flow of traffic on a roadway in regards to safety, capacity, and speed. Access management is most needed in commercial and industrial corridors where unmanaged access to local land uses can generate significant traffic congestion and safety concerns. A review of existing access management regulations was conducted to assess the need for additional policy recommendations.

5.2.1. Existing Access Management Regulations

The majority of corridor overlay districts in the county do not specifically address access management. They primarily focus on building design standards, landscaping, site-design and signage. These districts include the Buford Highway Overlay District, Campground-Castleberry-Kelly Mill-Pittman-Post-Shiloh Road Overlay District, Atlanta Highway-McFarland Parkway-Mullinax Road Overlay District, Castleberry-Bethelview Overlay District and Ronald Reagan/Union Hill Overlay District. Only one overlay district, The

Peachtree Parkway-Bethelview Road Overlay District, includes access management regulations, which requires inter-parcel access between adjacent commercial developments.

The Needs Assessment Report identified corridors which should be a priority for access management regulations based upon an assessment of existing land uses, crash rates, and traffic congestion levels. These corridors are mapped in **Figure 13** and listed below in **Table 21**.

Table 21: Priority Access Management Corridors

Corridor	From	To	Jurisdiction
SR 141 (Peachtree Parkway)	Fulton County Line	GA 400	GDOT
SR 20 (Buford Highway and Canton Highway)	Gwinnett County Line	Cherokee County Line	GDOT
SR 9 (Atlanta Highway and Dahlonega Highway)	Fulton County Line	SR 369 (Matt Hwy)	GDOT
SR 369 (Browns Bridge Road)	SR 9	Six Mile Creek	GDOT
SR 306 (Keith Bridge Road)	SR 9	Dawsonville Highway	GDOT
GA 400	SR 306 (Keith Bridge Road)	Dawson County Line	GDOT
Ronald Reagan Boulevard	SR 20 (Buford Hwy)	Shiloh Road	County
McFarland Parkway	Fulton County Line	SR 9 (Atlanta Hwy)	County
McGinnis Ferry Road	Bethany Bend	Gwinnett County Line	County
Shiloh Road	Union Hill Road	McFarland Parkway	County
Union Hill Road	Ronald Reagan Boulevard	McFarland Parkway	County
Marketplace Boulevard	SR 20 (Buford Highway)	Bald Ridge Marina Road	County

Source: Jacobs

Many of the priority access management corridors in the county are state routes and not county roads. GDOT manages access on state routes, which includes the spacing of driveways, driveway alignment, and median spacing. As a result the County has limited jurisdiction pertaining to access management along these corridors. Access management along state routes is dictated by regulations in GDOT’s guidance document Regulations for Driveway and Encroachment Control. The Forsyth County UDC stipulates that all vehicular access points to and from state routes require approval from both GDOT and Forsyth County’s Director of Engineering.

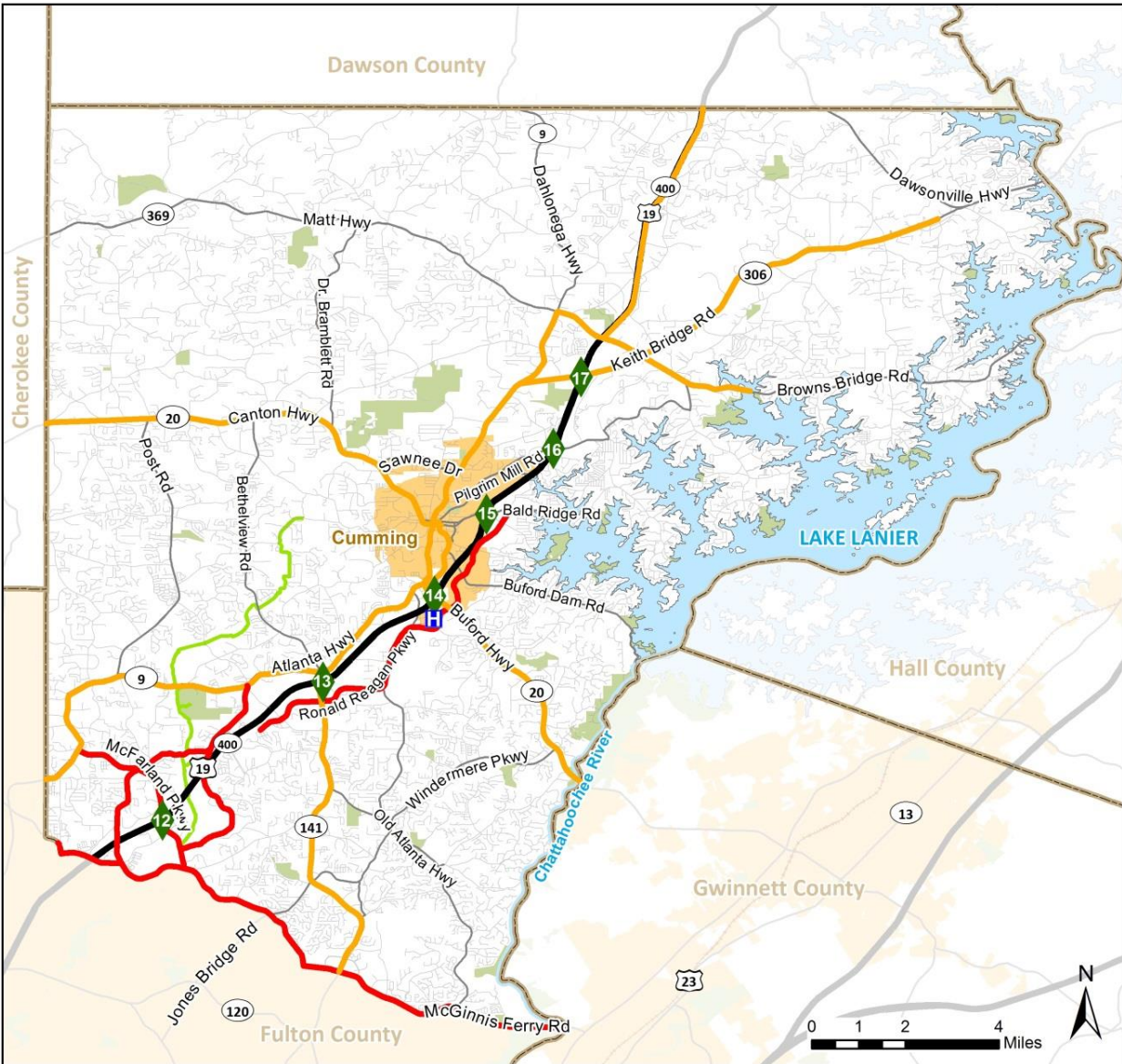
5.2.2. Access Management Policy Recommendations

The county currently has limited access management policies in place within existing overlay districts and the UDC. To adequately protect mobility along existing and planned commercial corridors additional regulations are needed along specific roadways, which include:

- Ronald Reagan Boulevard
- McFarland Parkway
- McGinnis Ferry Road
- Shiloh Road
- Union Hill Road
- Marketplace Boulevard
- Ronald Reagan Boulevard Extension
- Proposed Cumming Bypass

This could be achieved through amendments to the UDC or adding additional access management regulations to existing corridor overlay districts. It would be preferable however to develop an overlay district that specifically addresses access management and apply that to these identified corridors. This overlay district would address driveway spacing and placement, and require consolidated driveways, inter-parcel access, frontage/backage roads and raised center medians. On state routes where the County has limited jurisdiction the County should advocate for access management treatments in accordance with those in the proposed overlay district.

Figure 13: Priority Access Management Corridors



Priority Access Management Corridors

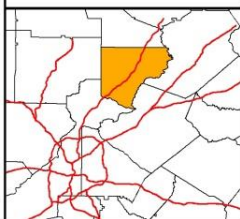
Forsyth County Comprehensive Transportation Plan Update

Priority Access Management Corridors

- County Roads
- State Roads

- Hospital
- Park/Recreation Area
- Cities
- Lake Lanier
- Counties
- GA 400
- Exits
- Major Roads
- Streets
- Railroads
- Big Creek Greenway

Sources: ARC, Forsyth County, Jacobs



5.3. Golf Carts

The use of golf carts as a significant mode of transportation was promoted by members of the Stakeholder Committee. The Forsyth County Unified Development Code does not address golf cart usage in the county, other than to stipulate that motorized vehicles are not permitted on 8-foot multi-use paths. If the County wanted to pursue this as a transportation option on multi-use trails it would have to amend the regulatory framework to allow these on trails and would likely need to develop a registration system similar to Peachtree City. Peachtree City requires that golf carts are registered with the city and the city issues annual permits. These permits cost \$15 dollars per year for residents and \$115 for non-residents who use the trail system. An extensive regulatory apparatus would need to be implemented by the County to properly oversee extensive golf cart transportation. A network of golf cart paths would need to be designated and grown before a significant number of trips could be made via this mode. It is recommended that the sentiment from Forsyth County residents should be gathered via public surveys before the County embarks on the pursuing this as a major transportation option.

5.4. Bicycle Facilities

The *Forsyth County Bicycle Transportation and Pedestrian Walkways 2025 Plan: 2015 Update* provides significant policy guidance for bicycle facilities within the county. This guidance reflects significant input from community stakeholders and detailed technical analysis. In light of this, it is recommended that the following policies are carried forward for inclusion within the CTP:

- Wide bicycle friendly shoulders are not considered ideal treatments along high speed and high volume roadways, but are considered adequate treatments in areas with lower volumes and less population.
- The multi-use trail and sidewalk combination should be the preferred bicycle treatment within heavily populated areas of the county.
- Bicycle lanes and bicycle friendly shoulders should be maintained frequently by the County and kept free of debris. In heavy use areas consideration should be given to using high friction green paint to help alert drivers to the facility.
- The plan provides typical sections for signed shared roadways, bicycle friendly shoulders, bike lanes, sidewalks, multi-use path/arterial sidewalks, and greenways. These have been thoroughly vetted by stakeholders and should be used as a guide for project design.

6. Thoroughfare Plan Update

This section updates official county roadway functional classification as outlined in the Forsyth County Thoroughfare Plan contained in the previous transportation plan. The Thoroughfare Plan was created in the 2011 Forsyth County CTP. This document is also referenced in the county Development Impact Fee ordinance.

6.1. Functional Classification

An important part of planning a transportation network comes in designating a purpose for various links and sections. Specifically considering roadways, planners use a 'Functional Classification' system to identify the purpose of a roadway. The Federal Highway Administration maintains broad criteria for local

and state authorities to create their own functional classes based on the dichotomy between ‘Access’ and ‘Mobility’. In this context, ‘Access’ refers to a road’s ability to interact with various land uses or destinations – i.e. deliver cars to a commercial parking lot or to a residential subdivision. Contrastingly, ‘Mobility’ refers to the road’s ability to move a person or vehicle from point A to point B in a timely, efficient manner.

Designating functional classification influences road design by tailoring roads for large volumes and high speeds or for low volumes and slower speeds. A road designed for good access, should allow users to enter and exit the road frequently and with low risk or stress. A two-lane, low speed neighborhood or subdivision street is a good example of a road designed to provide access. A road designed for good mobility should allow drivers to travel quickly with as few disruptions to the flow of traffic as possible. In Forsyth County, SR 400, and roads like SR 369, SR 20, and SR 9 are good examples of more mobility-oriented roads. These roads have multiple lanes, higher posted speed limits, and less direct access to adjacent land use.

6.2. Update Methodology

For the Forsyth County Comprehensive Transportation Plan update, the county functional classification system needs to be updated to reflect future traffic patterns and volumes as well as future land uses and development patterns. The methodology used incorporated four main factors: projected 2040 traffic volumes, number of lanes, connectivity, and land use.

To create base categories which could later be refined, the FHWA standards for road classification were applied to the 2040 travel demand model. **Table 22** displays the FHWA volume ranges.

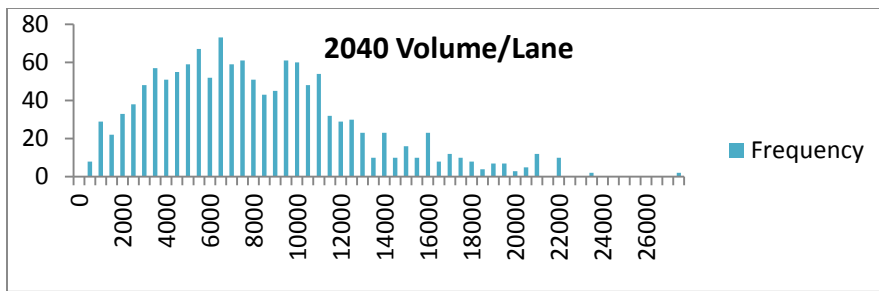
Table 22: FHWA Classifications by Daily Volume

FHWA Standards	Urban AADT
Local	80 - 700
Collector	1,100 – 6,300
Minor Arterial	3,000 – 14,000
Major Arterial	7,000 – 27,000

Source: FHWA

These values were then divided by the number of lanes for a measure of total road area usage and possible widening needs – wider roads are usually associated with higher functional classes focusing on mobility (**Figure 14**). The 2040 volumes were normalized by lanage because most roads in Forsyth classify as arterials under FHWA standards, the volume-per-lane metric removed roadways which had higher volumes than the national average but were not significant to Forsyth County.

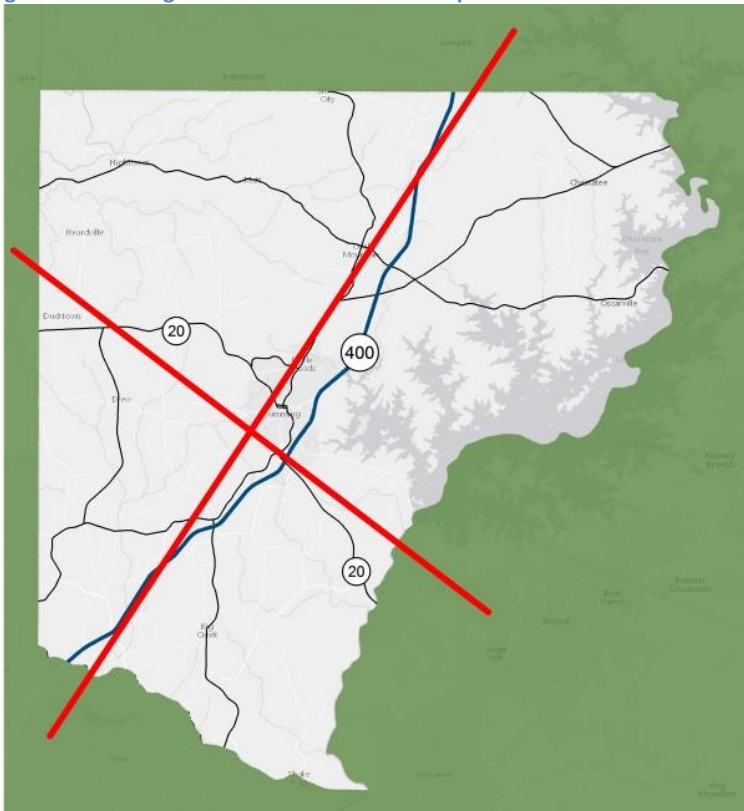
Figure 14: Histogram of Road Segments' Daily Volume per Lane



Source: Jacobs

The numbers produced in the first step were then mapped for spatial context. An aspect of connectivity was introduced by designating spatial criteria for both major and minor arterials. SR 400 and SR 20 were used to subdivide the county into four quadrants (**Figure 15**). Roads identified by the largest AADT values in the first step needed to cross either SR 400 or SR 20 and intersect the county border to be considered 'Major Arterials'. These two criteria effectively ensure that a Major Arterial acts as both a regional connector outside of Forsyth as well as an intra-county connector within Forsyth. The Major Arterials form a skeleton of mobility from one section of the county to the other as well as providing paths in and out of the county. The Major Arterials include SR 9, SR 20, SR 53, SR 141, SR 306, SR 369, SR 400, and Bethelview Road.

Figure 15: Crossing of SR 20 and SR 400 create quadrants



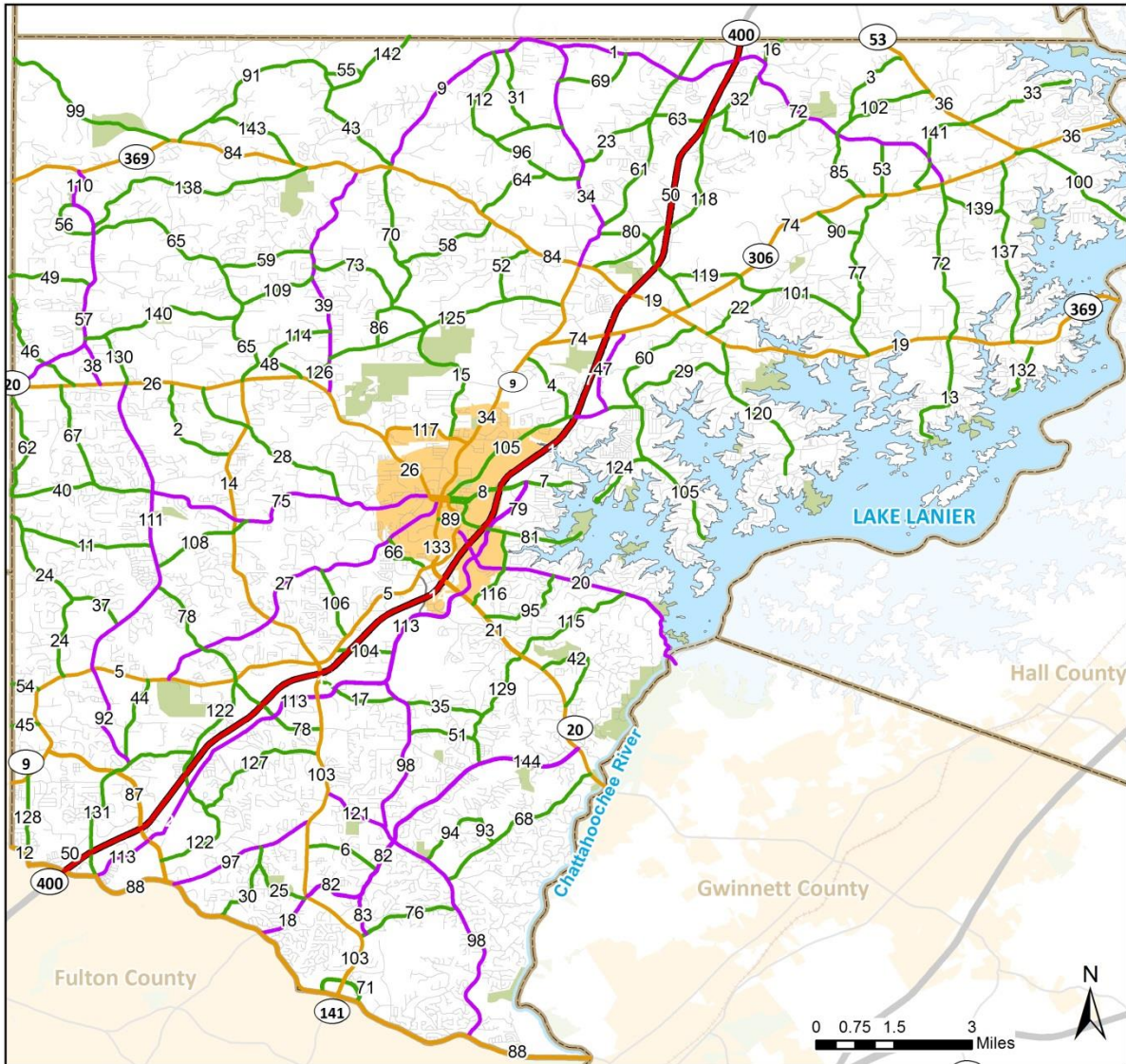
From this skeleton, it was possible to define Minor Arterials as being connections between the major arterials. Roads which were defined by FHWA standards and volume-per-lane standards as being major or minor arterials were considered for this step. Spatially, it was required that a Minor Arterial be a road which began and ended at a Major Arterial or county border and which intersected at least two Connector roads. Minor Arterials intersected each other more in the southern part of the county which is not surprising considering its denser population.

A second spatial consideration was made in regards to land use and pedestrian/cyclist safety. Using the pedestrian propensity analysis, roads passing through areas of 'high expected pedestrian volume' were downgraded. This step ensures high traffic volumes traveling at relatively higher speeds will not be planned through areas which are more likely to have pedestrians and cyclists. Though high traffic volumes can occur around areas of high-importance in the propensity analysis, these volumes are better handled through increase in access using several low-speed, short roads to create connections between shopping centers, parks, trails, schools, etc.

Finally, factors such as truck routes and community services like law enforcement, fire protection, and other emergency services were considered. All federal, state, and local truck routes fall along major or minor arterials as do all hospitals, police stations, and fire stations. All of these services require quick, efficient movement usually for long distances for which roads should be classified for mobility rather than access. Truck drivers similarly need routes which are continuous and streamlined to quickly move goods between locations both inside and outside of the county. **Figure 16** displays the analysis results. Each corridor is detailed in **Table 23**.

6.3.Final Thoroughfare Plan

Figure 16: Forsyth County Thoroughfare Plan



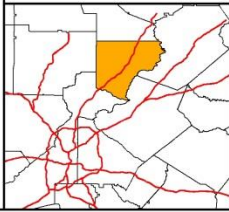
Forsyth County Thoroughfare Plan

Forsyth County Comprehensive Transportation Plan Update

Functional Classifications

- Collector
- Minor Arterial
- Major Arterial
- Freeway

42 - Segment ID



Sources: ARC, Forsyth County, Jacobs

Table 23: Forsyth County Thoroughfare Plan

Segment ID	Roadway Name	Termini	Functional Classification	ADT Counts	2040 Volume	Lanes	ROW	Volume Per Lane (2040)
1	A C Smith Rd	Dahlonega Hwy to Hopewell Rd	Minor Arterial	4998	12,767	2	80	6,384
2	Aaron Sosebee Rd	Canton Hwy to Bethelview Rd	Collector	1984	934	2	80	467
3	Anderson Lake Rd	Dawsonville Hwy to Pea Ridge Rd	Collector	-	2,484	2	60	1,242
4	Antioch Rd	Dahlonega Hwy to Pilgrim Mill Rd	Collector	-	21,881	2	80	10,941
5	Atlanta Hwy	Fulton County line to Bethelview Rd	Major Arterial	18400	40,668	4	-	10,167
5	Atlanta Hwy	W Maple St to Bethelview Rd	Major Arterial	16300	18,101	4	-	4,525
5	Atlanta Hwy	From W Maple St to Pirkle Ferry Rd	Major Arterial	-	18,101	4	-	4,525
6	Bagley Rd	Peachtree Pkwy to Mathis Airport Pkwy	Collector	3326	1,016	2	80	508
7	Bald Ridge Marina Rd	Lanier 400 Pkwy to Market Place Blvd	Collector	1410	18,280	4	120	4,570
8	Bald Ridge Rd	SR 400 Ramps to Marketplace Blvd	Collector	-	27,725	2	120	13,863
8	Bald Ridge Rd	From Denson Rd to Pirkle Ferry Rd	Collector	-	13,735	2	-	6,868
8	Bald Ridge Rd	From Meadow Dr W Maple St	Collector	-	9,470	2	-	4,735
9	Bannister Rd	Dahlonega Hwy to Matt Hwy	Minor Arterial	5710	19,670	2	100	9,835
10	Bennett Rd	Cross Roads Rd to Jot Em Down Rd	Collector	-	3,700	2	60	1,850
11	Bentley Rd	Campground Rd to Post Rd	Collector	4436	16,155	2	80	8,078
12	Bethany Bnd	Fulton County line to Strickland Rd	Major Arterial	6375	28,987	2	80	14,494

Recommendations Report

Segment ID	Roadway Name	Termini	Functional Classification	ADT Counts	2040 Volume	Lanes	ROW	Volume Per Lane (2040)
13	Bethel Rd	Browns Bridge Rd to Lake Lanier	Collector	3043	10,662	2	60	5,331
14	Bethelview Rd	Canton Hwy to Atlanta Hwy	Major Arterial	14933	49,079	4	120	12,270
15	Bettis Tribble Gap Rd	Spot Rd to Sawnee Dr	Collector	3925	8,688	2	80	4,344
16	Blue Ridge Ovlk	Dawson County line to Jot Em Down Rd	Collector	5022	4,306	2	80	2,153
113	Bluegrass Valley Pkwy	McFarland Pkwy to past Technology Dr	Minor Arterial	-	8,865	4	120	2,216
17	Brannon Rd	Peachtree Pkwy to Old Atlanta Rd	Collector	5800	20,281	2	80	10,141
18	Brookwood Rd	Peachtree Pkwy to McGinnis Ferry Rd	Minor Arterial	12900	25,089	4	100	6,272
19	Browns Bridge Rd	Keith Bridge Rd to Hall County line	Major Arterial	15500	40,997	2	120	20,499
19	Browns Bridge Rd	Cherokee Co. to Keith Bridge Rd	Major Arterial	14050	39,952	4	120	9,988
20	Buford Dam Rd	Atlanta Hwy to Sawnee Campground	Minor Arterial	12800	29,460	2	100	14,730
21	Buford Hwy	Atlanta Hwy to Chattahoochee River	Major Arterial	31600	61,139	4	150-200	15,285
21	Buford Hwy	Maple Street to Atlanta Hwy	Major Arterial	-	32,872	4	120	8,218
22	Burruss Mill Rd	Parks Rd to Browns Bridge Rd	Collector	426	6,500	2	80	3,250
23	Burruss Rd	Hopewell Rd to Dahlonega Hwy	Collector	-	6,371	2	80	3,186
24	Campground Rd	Cherokee County line to Atlanta Hwy	Collector	10110	16,016	2	80	8,008
25	Caney Rd	Christopher Robin Rd to Brookwood Rd	Collector	3900	14,569	2	80	7,285

Recommendations Report

Segment ID	Roadway Name	Termini	Functional Classification	ADT Counts	2040 Volume	Lanes	ROW	Volume Per Lane (2040)
25	Caney Rd	Old Alpharetta Rd to Christopher Robin Rd	Collector	3900	14,569	2	80	7,285
26	Canton Hwy	Cherokee County line to Dr. Bramblett Rd	Major Arterial	17200	50,264	4	120	12,566
26	Canton Hwy	Dr Bramblett Rd to Castleberry Rd	Major Arterial	23767	42,172	4	120	10,543
27	Castleberry Rd	W Maple St to Atlanta Hwy	Minor Arterial	7120	20,007	4	100	5,002
28	Chamblee Gap Rd	Canton Hwy to Kelly Mill Rd	Collector	1256	11,896	2	80	5,948
29	Chattahoochee Rd	Holtzclaw Rd to Shady Grove Rd	Collector	3690	19,575	2	100	9,788
30	Christopher Robin Rd	Caney Rd to McGinnis Ferry Rd	Collector	2702	5,000	2	80	2,500
31	Concord Rd	Bannister Rd to Oak Grove Cir	Collector	-	2,215	2	60	1,108
32	Cross Roads Rd	Jot Em Down Rd to Settingdown Rd	Collector	2780	22,766	2	80	11,383
33	Crystal Cove Trl	Dawsonville Hwy to Lake Lanier	Collector	1315	12,359	2	80	6,180
34	Dahlonega Hwy	Dawson Co. to Hopewell Rd	Minor Arterial	5185	18,511	2	120	9,256
34	Dahlonega Hwy	Keith Bridge Rd to Main St	Major Arterial	15200	22,094	2	120	11,047
34	Dahlonega Hwy	Browns Bridge Rd to Keith Bridge Rd	Major Arterial	8720	19,056	2	120	9,528
34	Dahlonega Hwy	Matt Hwy to Hopewell Rd	Minor Arterial	8720	16,901	2	120	8,451
35	Daves Creek Dr	Old Atlanta Rd to Trammel Rd	Collector	4714	10,122	2	60	5,061
36	Dawsonville Hwy	Dawson County line to Hall County line	Major Arterial	9890	34,210	2	120	17,105

Recommendations Report

Segment ID	Roadway Name	Termini	Functional Classification	ADT Counts	2040 Volume	Lanes	ROW	Volume Per Lane (2040)
37	Dickerson Rd	Campground Rd to Post Rd	Collector	3000	12,394	2	60	6,197
38	Doc Sams Rd	Canton Hwy to Heardsville Rd	Minor Arterial	3400	19,890	2	60	9,945
39	Dr Bramblett Rd	Matt Hwy to Canton Hwy	Minor Arterial	5545	22,543	2	100	11,272
40	Drew Campground Rd	Howard Rd to Post Rd	Collector	11458	14,445	2	80	7,223
41	East Courthouse Sq	Main St to E Maple St (one way)	Major Arterial	13600	16,124	4	60	4,031
42	Echols Rd	Buford Hwy to Buford Hwy	Collector	4400	8,006	2	60	4,003
43	Elmo Rd	Mount Tabor Rd to Bannister Rd	Collector	1882	5,452	2	80	2,726
44	Fowler Rd	Atlanta Hwy to Mullinax Rd	Collector	4300	7,000	2	80	3,500
45	Francis Rd	Atlanta Hwy to Forsyth County line	Collector	10844	17,046	2	80	8,523
46	Franklin Goldmine Rd	Canton Hwy to Forsyth County line	Collector	3200	12,861	2	60	6,431
47	Freedom Pkwy	Keith Bridge Rd to Pilgrim Mill Rd	Minor Arterial	5022	8,287	4	100	2,072
48	Friendship Cir	Canton Hwy to Canton Hwy	Collector	5300	20,764	2	80	10,382
49	Frix Rd	Cherokee County line to Heardsville Rd	Collector	2300	4,022	2	60	2,011
50	Georgia Highway 400	Browns Bridge Rd to McGinnis Ferry	Freeway	51290	139,011	6	300	23,169
50	Georgia Highway 400	Dawson County line to Browns Bridge Rd	Freeway	51290	81,306	6	300	13,551
51	Gilbert Rd	Old Atlanta to Trammel Rd	Collector	3200	981	2	60	491

Recommendations Report

Segment ID	Roadway Name	Termini	Functional Classification	ADT Counts	2040 Volume	Lanes	ROW	Volume Per Lane (2040)
52	Gravitt Rd	Matt Hwy to Spot Rd	Collector	2600	5,950	2	60	2,975
53	Grindle Rd	Jot Em Down Rd to Keith Bridge Rd	Collector	3100	1,025	2	60	513
54	Hamby Rd	Fulton County line to Atlanta Hwy	Collector	10470	21,554	2	80	10,777
55	Harris Dr	Mount Tabor Rd to Westray Rd	Collector	1380	4,200	2	60	2,100
56	Heardsville Cir	Heardsville Rd to Heardsville Rd	Minor Arterial	930	3,300	2	60	1,680
57	Heardsville Rd	Heardsville Cir to Canton Hwy	Minor Arterial	8200	20,004	2	100	10,002
58	Hendrix Rd	Matt Hwy to John Burruss Rd	Collector	3000	5,962	2	80	2,981
59	Holbrook Rd	Hurt Bridge Rd to Dr Bramblett Rd	Collector	2200	9,437	2	60	4,719
60	Holtzclaw Rd	Browns Bridge Rd to Pilgrim Mill Rd	Collector	8000	5,907	2	80	2,954
61	Hopewell Rd	Dawson County line to Dahlonega Hwy	Collector	8000	10,672	2	80	5,336
62	Howard Rd	Cherokee County line to Drew Campground Rd	Collector	4200	9,000	2	60	4,500
63	Hubbard Town Rd	Hopewell Rd to GA 400	Collector	5860	18,503	2	80	9,252
64	Hubert Martin Rd	Oak Grove Cir to Matt Hwy	Collector	4100	7,061	2	60	3,531
65	Hurt Bridge Rd	Heardsville Rd to Friendship Cir	Collector	6311	20,127	2	80	10,064
66	Hutchinson Rd	Castleberry Rd to Atlanta Hwy	Collector	8368	13,242	2	80	6,621
67	Hyde Rd	Canton Hwy to Drew Campground Rd	Collector	3300	12,179	2	80	6,090
68	James Burgess Rd	Buford Hwy to Old Atlanta Rd	Collector	7720	26,668	2	80	13,334

Recommendations Report

Segment ID	Roadway Name	Termini	Functional Classification	ADT Counts	2040 Volume	Lanes	ROW	Volume Per Lane (2040)
69	Jewell Bennett Rd	Dahlonega Hwy to A C Smith Rd	Collector	1400	1,388	2	60	694
70	John Burruss Rd	Matt Hwy to Karr Rd	Collector	2890	10,734	2	80	5,367
71	Johns Creek Pkwy	McGinnis Ferry Rd to McGinnis Ferry Rd	Collector	6500	20,871	4	60	5,218
72	Jot Em Down Rd	Hopewell Rd to Keith Bridge Rd	Minor Arterial	7000	36,732	2	100	18,366
72	Jot Em Down Rd	Keith Bridge Rd to Browns Bridge Rd	Collector	2835	15,352	2	100	7,676
73	Karr Rd	From John Burruss Rd to McCoy Cir	Collector	3000	4,335	2	80	2,168
73	Karr Rd	Dr Bramblett Rd to McCoy Cir	Collector	3000	4,335	2	80	2,168
74	Keith Bridge Rd	Browns Bridge Rd to Dawsonville Hwy	Major Arterial	11000	36,846	2	150	18,423
74	Keith Bridge Rd	Dahlonega Hwy to Browns Bridge Rd	Major Arterial	14860	33,596	4	150	8,399
75	Kelly Mill Rd	Post Rd to Canton Hwy	Minor Arterial	9900	18,127	2	100	9,064
76	Laurel Springs Pkwy	Peachtree Pkwy to Westminster Land	Collector	6140	12,445	2	80	6,223
77	Little Mill Rd	Keith Bridge Rd to Browns Bridge Rd	Collector	4200	7,703	2	80	3,852
78	Majors Rd	Post Rd to Peachtree Pkwy	Collector	11820	13,468	2	80	6,734
79	Market Place Blvd	Bald Ridge Marina Rd to Buford Hwy	Minor Arterial	11700	40,100	4	100	2,531
80	Martin Rd	Dahlonega Hwy to Keith Bridge Rd	Collector	5241	7,018	2	80	3,509
81	Mary Alice Park Rd	Atlanta Hwy to Lake Lanier	Collector	2130	10,553	2	80	5,277
82	Mathis Airport Pkwy	Old Atlanta Rd to Mathis Airport Rd	Minor Arterial	19500	25,086	2	120	12,543

Recommendations Report

Segment ID	Roadway Name	Termini	Functional Classification	ADT Counts	2040 Volume	Lanes	ROW	Volume Per Lane (2040)
82	Mathis Airport Pkwy	Old Atlanta Rd to Mathis Airport Rd	Minor Arterial	19500	25,086	2	120	12,543
82	Mathis Airport Pkwy	Peachtree Pkwy to Mathis Airport Rd	Collector	19500	25,086	4	100	3,256
83	Mathis Airport Rd	Mathis Airport Pkwy to Laurel Springs Pkwy	Minor Arterial	6492	16,098	2	100	8,049
84	Matt Hwy	Cherokee County line to Dr Bramblett Rd	Major Arterial	7827	25,201	2	120	12,601
84	Matt Hwy	Dahlonega Hwy to Dr Bramblett Rd	Major Arterial	13500	24,492	2	120	12,246
85	Mayfield Dr	Jot Em Down Rd to Keith Bridge Rd	Collector	4000	4,148	2	80	2,074
86	McCoy Cir	Spot Rd to Karr Rd	Collector	1600	7,472	2	80	3,736
86	McCoy Cir	Karr Rd to Spot Rd	Collector	3600	11,327	2	80	5,664
87	McFarland Pkwy	Atlanta Hwy to McGinnis Ferry Rd	Major Arterial	24450	48,941	4	150	12,235
88	McGinnis Ferry Rd	McFarland Pkwy to Peachtree Pkwy	Major Arterial	18900	52,279	4	120	13,070
88	McGinnis Ferry Rd	Peachtree Pkwy to Chattahoochee River	Major Arterial	33100	58,678	4	120	14,670
88	McGinnis Ferry Rd	McFarland Pkwy to Bethany Bend	Major Arterial	8640	28,611	4	120	7,153
89	Meadow Dr	From Veterans Memorial Blvd to Bald Ridge Rd	Collector	2100	6,206	2	80	3,103
90	Millwood Rd	Keith Bridge Rd to Little Mill Rd	Collector	1500	2,001	2	60	1,001
91	Mount Tabor Rd	Matt Hwy to Westray Rd	Collector	2600	5,199	2	80	2,600
92	Mullinax Rd	Atlanta Hwy to Union Hill Rd	Minor Arterial	12230	36,028	4	80	9,007
93	Nichols Dr	James Burgess Rd to Nichols Rd	Collector	2300	12,948	2	60	6,474

Recommendations Report

Segment ID	Roadway Name	Termini	Functional Classification	ADT Counts	2040 Volume	Lanes	ROW	Volume Per Lane (2040)
94	Nichols Rd	Old Atlanta Rd to Nichols Dr	Collector	2400	10,036	2	60	5,018
95	Nuckolls Rd	Buford Hwy to Buford Dam Rd	Collector	3106	3,311	2	80	1,656
96	Oak Grove Cir	Dahlonega Hwy to Dahlonega Hwy	Collector	4000	8,111	2	80	4,056
97	Old Alpharetta Rd	McGinnis Ferry Rd to Peachtree Pkwy	Minor Arterial	8360	26,054	4	100	6,514
98	Old Atlanta Rd	Ronald Reagan Blvd to Sharon Rd	Minor Arterial	13967	41,090	2	100	10,273
98	Old Atlanta Rd	Sharon Rd to McGinnis Ferry Rd	Minor Arterial	13967	41,090	4	120	
99	Old Federal Rd	Cherokee County line to Matt Hwy	Collector	5500	9,029	2	60	4,515
100	Old Keith Bridge Rd	Keith Bridge Rd to Keith Bridge Park	Collector	3000	6,249	2	80	3,125
101	Parks Rd	Keith Bridge Rd to Little Mill Rd	Collector	3764	12,454	2	80	6,227
102	Pea Ridge Rd	Jot Em Down Rd to Dawsonville Hwy	Collector	6100	16,838	2	80	8,419
103	Peachtree Pkwy	Sharon Rd to McGinnis Ferry Rd	Major Arterial	33900	75,413	4	150-200	18,853
103	Peachtree Pkwy	Atlanta Hwy to Sharon Rd	Major Arterial	33067	79,952	4	150-200	19,988
104	Pendley Rd	Atlanta Hwy to Ronald Reagan Blvd	Collector	5954	7,677	2	80	3,839
105	Pilgrim Mill Rd	City Limits to Freedom Pkwy	Collector	10290	12,980	2	80	6,490
105	Pilgrim Mill Rd	Holtzclaw Rd to Tidwell Park Boat Ramp	Collector	10290	21,340	2	80	10,670
105	Pilgrim Mill Rd	Freedom Pkwy to Holtzclaw Rd	Collector	10290	32,580	2	80	16,290

Recommendations Report

Segment ID	Roadway Name	Termini	Functional Classification	ADT Counts	2040 Volume	Lanes	ROW	Volume Per Lane (2040)
106	Piney Grove Rd	Castleberry Rd to Atlanta Hwy	Collector	4500	12,668	2	80	6,334
107	Pirkle Ferry Rd	From Allen St to Pilgrim Mill Rd	Collector	-	10,165	2	-	5,083
107	Pirkle Ferry Rd	From Eastern Cir to Allen St	Collector	-	10,165	2	-	5,083
107	Pirkle Ferry Rd	From Eastern Cir to Eastern Cir	Collector	-	10,165	2	-	5,083
107	Pirkle Ferry Rd	From Oakland St to Eastern Cir	Collector	-	10,165	2	-	5,083
107	Pirkle Ferry Rd	From Bald Ridge Rd to Oakland St	Collector	-	10,165	2	-	5,083
108	Pittman Rd	Post Rd to Kelly Mill Rd	Collector	3800	7,502	2	80	3,751
109	Pleasant Grove Rd	Hurt Bridge Rd to Dr Bramblett Rd	Collector	4600	6,006	2	80	3,003
110	Pooles Mill Rd	Matt Hwy to Heardsville Cir	Minor Arterial	4200	7,316	2	60	3,658
111	Post Rd	Canton Hwy to Atlanta Hwy	Minor Arterial	13700	43,546	4	120	10,887
112	Riley Rd	Bannister Rd to Oak Grove Cir	Collector	3000	4,359	2	80	2,180
113	Ronald Reagan Blvd	McGinnis Ferry Rd to McFarland Pkwy	Minor Arterial	8611	6,244	4	100-120	1,561
113	Ronald Reagan Blvd	Majors Rd to Old Atlanta Rd	Minor Arterial	23174	6,698	4	100-120	1,675
113	Ronald Reagan Blvd	Buford Hwy to Old Atlanta Rd	Minor Arterial	23174	16,694	4	100-120	4,174
113	Ronald Reagan Blvd	McFarland Pkwy to Majors Rd	Minor Arterial	-	8,865	4	100-120	2,216
114	Roper Rd	Friendship Cir to Dr Bramblett Rd	Collector	2300	9,138	2	60	4,569
115	Samples Rd	Buford Hwy to Buford Dam Rd	Collector	8142	9,689	2	80	4,845

Recommendations Report

Segment ID	Roadway Name	Termini	Functional Classification	ADT Counts	2040 Volume	Lanes	ROW	Volume Per Lane (2040)
116	Sanders Rd	Mary Alice Park Rd to Buford Hwy	Collector	3601	14,379	2	80	7,190
117	Sawnee Dr	Canton Hwy to Dahlonega Hwy	Major Arterial	7565	17,160	2	-	8,580
118	Settingdown Rd	Cross Roads Rd to Browns Bridge Rd	Collector	4600	11,071	2	80	5,536
119	Shadburn Rd	Martin Rd to Keith Bridge Rd	Collector	3700	9,223	2	80	4,612
120	Shady Grove Rd	Browns Bridge Rd to Shadburn Ferry Rd	Collector	5230	14,418	2	80	7,209
121	Sharon Rd	Peachtree Pkwy to Old Atlanta Rd	Minor Arterial	16200	30,745	4	120	7,686
122	Shiloh Rd	Atlanta Hwy to McFarland Pkwy	Collector	5100	12,200	2	80	625
123	Shiloh Road E	Shiloh Rd to Stoney Point	Collector	5300	12,191	2	60	6,096
124	Sinclair Shores Rd	Pilgrim Mill Rd to Lake Lanier	Collector	3100	3,212	2	60	1,606
125	Spot Rd	Dahlonega Hwy to Dr Bramblett Rd	Collector	6964	19,333	2	100	9,667
126	Spot Road Connector	Canton Hwy to Dr Bramblett Rd	Collector	5200	20,514	2	60	10,257
127	Stoney Point Rd	Shiloh Rd to Peachtree Pkwy	Collector	4600	33,223	2	80	16,612
128	Strickland Rd	Atlanta Hwy to McGinnis Ferry Rd	Collector	3900	14,916	2	80	7,458
129	Trammel Rd	Buford Hwy to Windermere Pkwy	Collector	6810	8,700	2	80	4,350
130	Tribble Rd	Watson Rd to Canton Hwy	Collector	4475	8,956	2	80	4,478
131	Union Hill Rd	Shiloh Rd to Mullinax Rd	Collector	4578	7,487	2	80	3,744
131	Union Hill Rd	Mullinax Rd to McGinnis Ferry Rd	Collector	8092	26,803	4	100	6,701

Recommendations Report

Segment ID	Roadway Name	Termini	Functional Classification	ADT Counts	2040 Volume	Lanes	ROW	Volume Per Lane (2040)
132	Vanns Tavern Rd	Waldrip Cir to Vanns Tavern Park	Collector	3300	5,012	2	80	2,506
133	Veterans Memorial Blvd	E Maple St to Atlanta Hwy	Major Arterial	16800	18,668	4	120	4,667
134	W Main St	Canton Hwy to Dahlonega Hwy	Major Arterial	-	27,609	2	-	13,805
134	W Main St	Canton Hwy to Dahlonega Hwy	Major Arterial	14700	23,728	2	-	11,864
134	W Main St	From Dahlonega Hwy to Mason St	Major Arterial	-	23,382	2	-	11,691
134	W Main St	From Mason St to Pilgrim Mill Rd	Major Arterial	-	23,382	2	-	11,691
136	W Maple St	Veterans Memorial Blvd to Atlanta Hwy	Major Arterial	-	23,382	2	-	11,691
136	W Maple St	Canton Hwy to Dahlonega Hwy	Major Arterial	-	23,382	2	-	11,691
136	W Maple St	From Oakland St to Allen St	Collector	-	23,382	2	-	11,691
136	W Maple St	From Bald Ridge Rd to Oakland St	Collector	-	11,943	2	-	5,972
136	W Maple St	From Allen St to SR 9/SR 20	Collector	-	23,382	2	-	11,691
137	Waldrip Rd	Keith Bridge Rd to Browns Bridge Rd	Collector	4200	12,712	2	80	6,356
138	Wallace Tatum Rd	Matt Hwy to Heardsville Cir	Collector	4100	13,085	2	80	6,543
139	Wallace Wood Rd	Jot Em Down Rd to Waldrip Rd	Collector	2000	4,855	2	60	2,428
140	Watson Rd	Heardsville Rd to Hurt Bridge Rd	Collector	2166	10,117	2	80	5,059
141	Westbrook Rd	Dawsonville Hwy to Keith Bridge Rd	Collector	1450	14,042	2	80	7,021

Segment ID	Roadway Name	Termini	Functional Classification	ADT Counts	2040 Volume	Lanes	ROW	Volume Per Lane (2040)
142	Westray Rd	Dawson County line to Elmo Rd	Collector	1600	5,064	2	60	2,532
143	Whitmire Rd	Matt Hwy to Mount Tabor Rd	Collector	356	4,761	2	80	2,381
144	Windermere Pkwy	Buford Hwy to Old Atlanta Rd	Minor Arterial	16224	16,715	4	140	4,179

Source: Jacobs

7. Project Prioritization Methodology

This sections describes how the projects and policies identified above were prioritized for implementation. Performance based Project Evaluation is an important part of the planning process. Rigorous evaluation methods support transparent decision-making in competitive funding environment. It also provides context for plan development and helps balance analysis across competing needs. Finally, performance based evaluation helps to ensure that investment decision align with long-term goals.

The process used for this planning process follows three guiding principles:

1. Define a **strategic set of goals/objectives** to guide investment across key performance areas
2. Focus on **“vital few” performance measures** that align with investment goals and are easily understood
 - a. Combination of qualitative and quantitative performance metrics is preferred
 - b. Support federal, state, and regional performance focus areas
 - c. Data to support evaluation
3. Yield **High/Medium/Low** project ranking to inform future funding opportunities

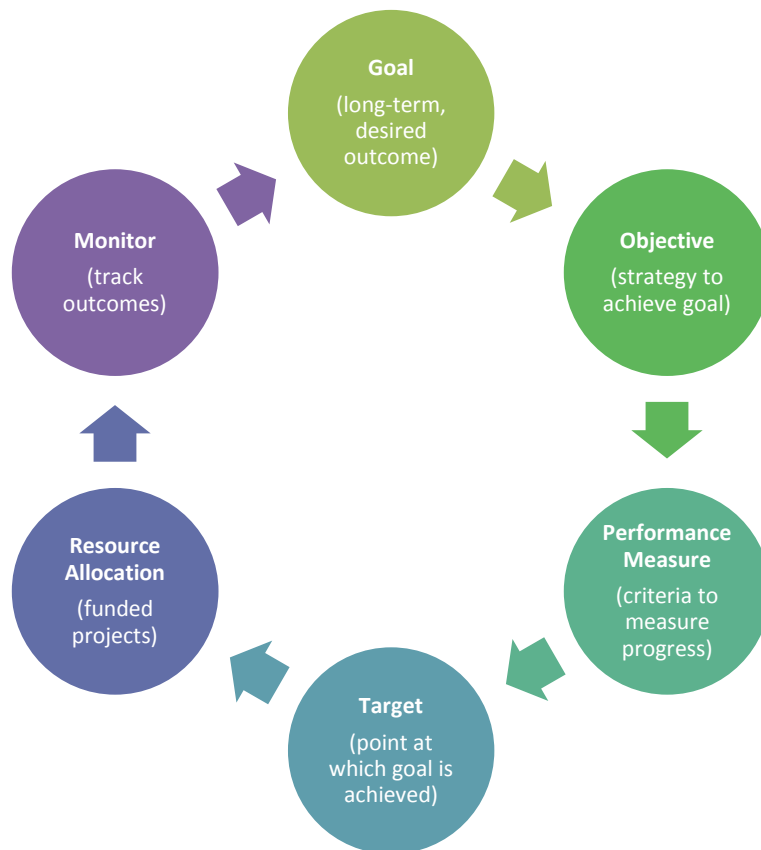
The process is illustrated in **Figure 17** below.

Plan level goals and objectives were initially developed for the previous Transportation Plan in 2011 and updated during previous phases of this planning process. The Forsyth Transportation Plan Goals are described in **Table 24**. From these 15 high level goals, five vital few goals were identified as easily understandable and measurable. They support federal, state, and regional focus areas. They also have readily available data.

Table 24: Forsyth Transportation Plan Goals

Goal	Description
1	Develop project and policy strategies to complement and implement the county’s Comprehensive Plan vision
2	Preserve and enhance the transportation system through appropriate strategies including transportation demand and access management techniques
3	Enhance safety and security for motorized and non-motorized travel
4	Ensure financial viability of transportation system
5	Manage congestion
6	Conserve natural and built resources
7	Promote appropriate economic development relevant to desired land use
8	Provide alternative solutions for transportation consistent with local, regional, and statewide jurisdictions
9	Develop mobility and connectivity within and between transportation modes
10	Encourage sustainable development
11	Accommodate growth within and immediately adjacent to county
12	Facilitate the movement of goods
13	Promote complete street concepts by ensuring balance for all users
14	Support reduction of greenhouse gases consistent with pending policies
15	Position infrastructure recommendations to take advantage of multiple funding sources.

Figure 17: Prioritization Process



The five goals used in the prioritization methodology are congestion reduction, safety and security, economic growth, non-motorized mobility, and environmental sustainability. Each goal area has multiple measures and evaluation criteria (see **Table 25**).

Table 25: Measures and Evaluation Criteria

Performance Measure Category	Project Level Measures	Evaluation Criteria
Congestion Reduction	Vehicle-Hours delay reduction	Delay reduction
	Does project addresses LOS E or F?	Yes/No?
	Travel Speed Increase	Speed Increase
Safety and Security	Project includes countermeasure to help reduce vehicle crashes or improve Bike/Ped safety?	Yes/No?
	Project Located at the 10 most dangerous and frequent crash locations?	Yes/No?
	Project promotes safe, non-motorized access to community resources	Yes/No?
Economic Growth/Freight Movement	Does project addresses congestion on designated freight network?	Yes/No?
	Truck vehicle-hours delay reduction	Yes/No?
Non-Motorized Mobility	Project addresses active-transportation demand?	Yes/No?
	Project provides access and connections to regional trails?	Yes/No?
Environmental Sustainability	Promote park and ride facilities, car sharing and bike sharing programs in the urbanized area	Yes/No?
	Project preserves the character of the historic and existing communities?	Land Use Consistency (y/n)
	Project reinforces the land use plans and development visions of the county and its cities?	Land Use Consistency (y/n)

The 14 performance measures are all given an equal weighting with a total possible score of 100 (7.14 points per measure). All values are assigned on a yes/no basis. That is, either the measure is present or not. If it is present 7.14 points are added to the project score. If the measure is not present zero points are added.

All identified projects were assigned an initial prioritization score which formed the basis for the draft prioritization tiers (short-term, mid-range, long-range). This initial tiering was then adjusted based on input from staff, stakeholders, and elected officials.

8. Implementation

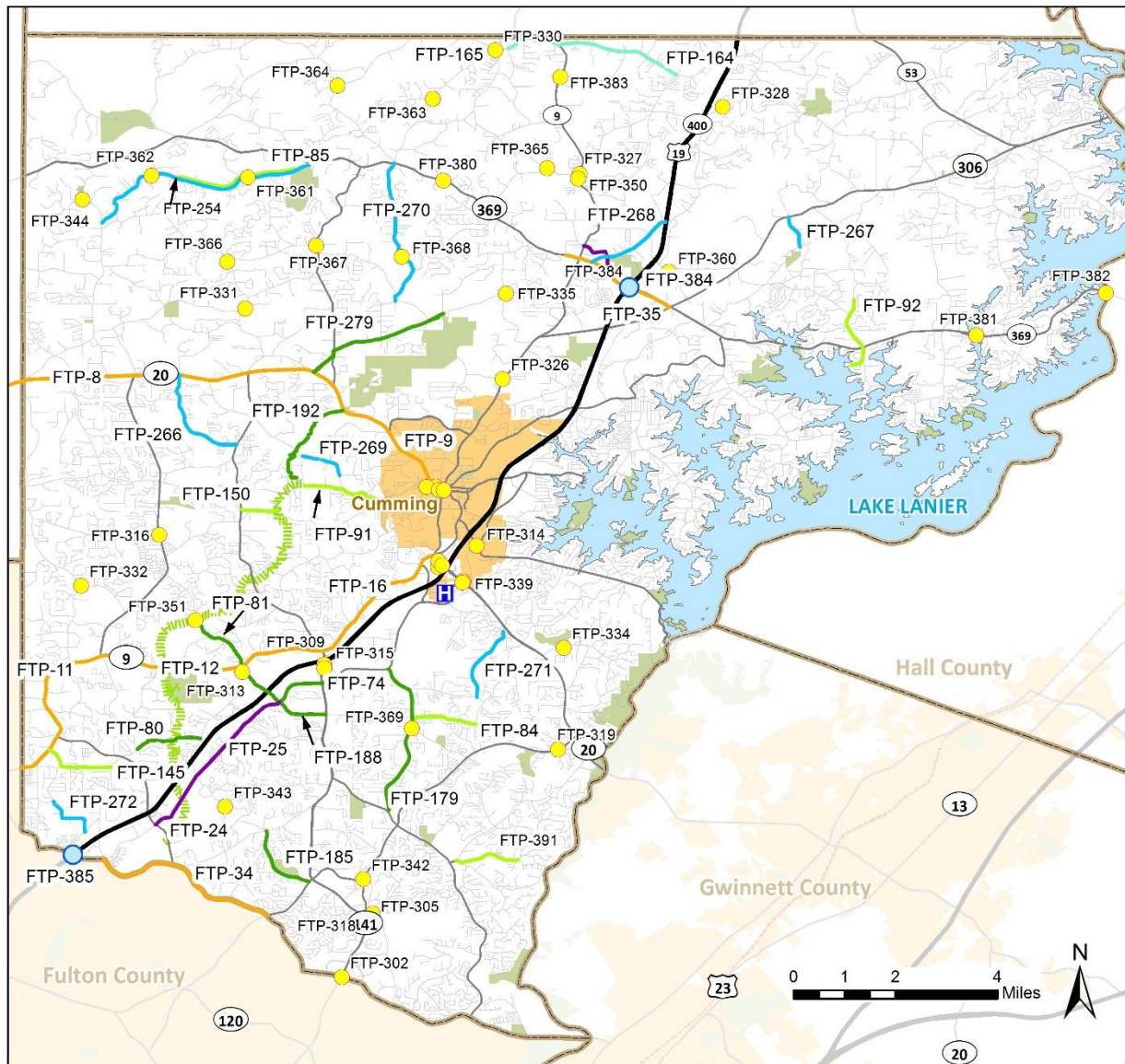
This sections presents all identified project recommendations by implementation phase. There are three implementation phases:

1. **5-Year Action Plan** (Short-Range) which includes the years 2018 - 2022
2. **Mid-Range** which includes the years 2023 – 2030
3. **Long-Range** which includes the years 2031 – 2040

9.1.1 5-Year Action Plan (Short-Range Recommendations 2018 - 2022)

The 5-Year Action Plan (2018-2022) is made up of the projects to be undertaken, in whole or in part, in Forsyth County over the next five years. These projects were deemed to be of the highest priority and/or are already under development (TIP, SPLOST, Bond). All of the new roadway and roadway widening projects included in the 5-Year Action Plan are currently listed in the ARC's TIP, and did not directly originate from this planning process (needs for these projects were confirmed in the Needs Assessment Document). Currently programmed projects have been joined in the 5-Year Action Plan by recommendations for active transportation projects, a roadway safety project, intersection operation projects.

Figure 18: Short Range Projects (2018 - 2022)



Short Range Project Recommendations (No Intersection Improvements)

Forsyth County Comprehensive Transportation Plan Update

<ul style="list-style-type: none"> ● Interchange Upgrade — Bicycle Treatment — Multi-Use Trail — Sidewalk — Roadway Widening — Roadway New Alignment — Road Reclamation 	<ul style="list-style-type: none"> ● Intersection Improvement <p>FTP-18 - Project ID</p>	<ul style="list-style-type: none"> H Hospital ■ Park/Recreation Area ■ Cities ■ Lake Lanier ▭ Counties — GA 400 ◆ Exits — Major Roads — Streets — Railroads — Big Creek Greenway 	<p>FORSYTH TRANSPORTATION PLAN</p>
--	---	---	--

Sources: ARC, Forsyth County, Jacobs

Table 26: Short-Range Project Recommendations (2018 -2022)

ID	Project Source	Source ID	Project Type	Project Name	From	TO	Cost	Status	Description
FTP-8	TIP	FT-061A	Roadway-General Purpose Capacity	SR 20 (Canton Highway) Widening	SR 371 (Post Road)	SR 369 (Hightower Road)	\$ 122,332,731	ROW	Widening from 2 to 6 Lanes
FTP-9	RTP	FT-313	Roadway-General Purpose Capacity	SR 20 (Canton Highway) Widening	SR 371 (Post Road)	GA 400	\$ 120,080,151	PE	Widening from 2 to 6 Lanes
FTP-11	TIP	FT-001B	Roadway-General Purpose Capacity	SR 9 (Atlanta Highway) Segment 2 Widening	McFarland Parkway	Mullinax Road	\$ 42,481,188	ROW	Widening from 2 to 4 Lanes
FTP-12	TIP	FT-001C	Roadway-General Purpose Capacity	SR 9 (Atlanta Highway) Segment 3 Widening	Mullinax Road	SR 141 (Peachtree Parkway)	\$ 49,646,170	ROW	Widening from 2 to 4 Lanes
FTP-13	TIP	FT-001A	Roadway-General Purpose Capacity	SR 9 (Atlanta Highway) Segment 1 Widening	Fulton County Line	McFarland Parkway	\$ 18,889,631	ROW	Widening from 2 to 4 Lanes
FTP-16	TIP	FT-001D	Roadway-General Purpose Capacity	SR 9 (Atlanta Highway) Segment 4 Widening	SR 141 (Peachtree Parkway)	SR 20 (Buford Highway)	\$ 63,673,096	ROW	Widening from 2 to 4 Lanes
FTP-24	TIP	FT-077B	Roadway-General Purpose Capacity(New)	Ronald Reagan Extension (Segment 2) - New Alignment	McFarland Parkway	Shiloh Road	\$ 18,750,000	ROW	New Alignment 0 to 4 Lanes
FTP-25	TIP	FT-077C	Roadway-General Purpose Capacity(New)	Ronald Reagan Extension (Segment 3) - New Alignment	Shiloh Road	Majors Road	\$ 24,680,000	ROW	New Alignment 0 to 4 Lanes
FTP-34	TIP	FN-233A	Roadway-General Purpose Capacity	McGinnis Ferry Road (Segment 1) Widening	Sargent Road	Union Hill Road	\$ 38,774,000	ROW	Widening from 2 to 4 Lanes
FTP-35	TIP	FT-062A	Roadway-General Purpose Capacity	SR 369 (Browns Bridge Road) Widening	Just west of SR 9 (Dahlonega Highway)	SR 306 (Keith Bridge Road)	\$ 12,989,000	CST	Widening from 2 to 4 Lanes
FTP-74	2015 Bike Ped Plan		Last Mile Connectivity/Joint Bike-Ped Facilities	Ronald Reagan Boulevard Multi-Use Trail	SR 141 (Peachtree Parkway)	Majors Road	\$ 1,407,000	Proposed	Multi-Use Trail
FTP-80	2015 Bike Ped Plan		Last Mile Connectivity/Joint Bike-Ped Facilities	Union Hill Road Multi-Use Trail and Sidewalk	Mullinax Road	Shiloh Road	\$ 2,844,000	Proposed	Multi-Use Trail
FTP-81	2015 Bike Ped Plan		Last Mile Connectivity/Joint Bike-Ped Facilities	Majors Road Multi-Use Trail (Segment 2)	Ronald Reagan Boulevard	Big Creek Greenway	\$ 2,159,000	Proposed	Multi-Use Trail
FTP-84	2015 Bike Ped Plan		Last Mile Connectivity/Pedestrian Facilities	Gilbert Road Sidewalk	Old Atlanta Road	Trammel Road	\$ 1,009,000	Proposed	Sidewalk
FTP-85	2015 Bike Ped Plan		Last Mile Connectivity/Pedestrian Facilities	Wallace Tatum Road Sidewalk	Wright Bridge Road	Matt Park	\$ 1,972,000	Proposed	Sidewalk Combined

ID	Project Source	Source ID	Project Type	Project Name	From	TO	Cost	Status	Description
FTP-91	2015 Bike Ped Plan		Last Mile Connectivity/Pedestrian Facilities	Kelly Mill Road Sidewalk	Dalhia Drive	Sienna Drive	\$ 1,404,000	Proposed	Sidewalk
FTP-92	2015 Bike Ped Plan		Last Mile Connectivity/Pedestrian Facilities	Little Mill Road Sidewalk	Lawson Drive	Paddocks Mill Drive	\$ 1,280,000	Proposed	Sidewalk
FTP-145	2017 FTP		Last Mile Connectivity/Pedestrian Facilities	James Road/Martin Drive Sidewalks	SR 9 (Atlanta Highway)	Union Hill Road	\$ 383,000	Proposed	Sidewalk
FTP-150	2017 FTP		Last Mile Connectivity/Pedestrian Facilities	Kelly Mill Road Sidewalk	Red Baron Court	Bethelview Road	\$ 643,000	Proposed	Sidewalk
FTP-164	2015 Bike Ped Plan		Last Mile Connectivity/Bicycle Facility	AC Smith Road Shared Signed Roadway	SR 9 (Dahlonega Highway)	Hopewell Road	\$ 71,000	Proposed	Signed Shared Roadway
FTP-165	2015 Bike Ped Plan		Last Mile Connectivity/Bicycle Facility	SR 9 (Dahlonega Highway) Shared Signed Road	AC Smith Road	Bannister Road	\$ 21,000	Proposed	Signed Shared Roadway
FTP-166	2015 Bike Ped Plan		Last Mile Connectivity/Bicycle Facility	Bannister Road Shared Signed Roadway	Concord Road	SR 9 (Dahlonega Highway)	\$ 11,000	Proposed	Signed Shared Roadway
FTP-179	2017 FTP		Last Mile Connectivity/Joint Bike-Ped Facilities	Old Atlanta Road Multi-Use Trail	Ronald Reagan Boulevard	Sharon Road	\$ 4,525,000	Proposed	Multi-Use Trail
FTP-185	2017 FTP		Last Mile Connectivity/Joint Bike-Ped Facilities	Caney Road Multi-Use Trail	Brookwood Road	Old Alpharetta Road	\$ 1,369,000	Proposed	Multi-Use Trail
FTP-188	2017 FTP		Last Mile Connectivity/Joint Bike-Ped Facilities	Majors Road Multi-Use Trail (Segment 3)	SR 141 (Peachtree Parkway)	Ronald Reagan Parkway	\$ 830,000	Proposed	Multi-Use Trail
FTP-192	2015 Bike Ped Plan		Last Mile Connectivity/Joint Bike-Ped Facilities	Big Creek Greenway Phase 5a	Kelly Mill Road	SR 20	\$ 6,311,000	Proposed	Multi-Use Trail
FTP-245	2017 FTP		Roadway-General Purpose Capacity(New)	Coal Mountain Connector	Bridgetowne Drive	Coal Mountain Drive	\$ 9,000,000	Proposed	New Alignment 0 to 2 Lanes
FTP-254	2017 FTP		Roadway-Reclamation	Wallace Tatum Road Roadway Reclamation	SR 369 (Matt Highway)	Heardsville Circle	\$ 1,592,200	Proposed	Road Reclamation
FTP-279	2016 Bike Ped Plan		Last Mile Connectivity/Joint Bike-Ped Facilities	Big Creek Greenway Phase 5c	SR 20	Sawnee Mountain Visitor Center	\$ 6,311,000	Proposed	Multi-Use Trail

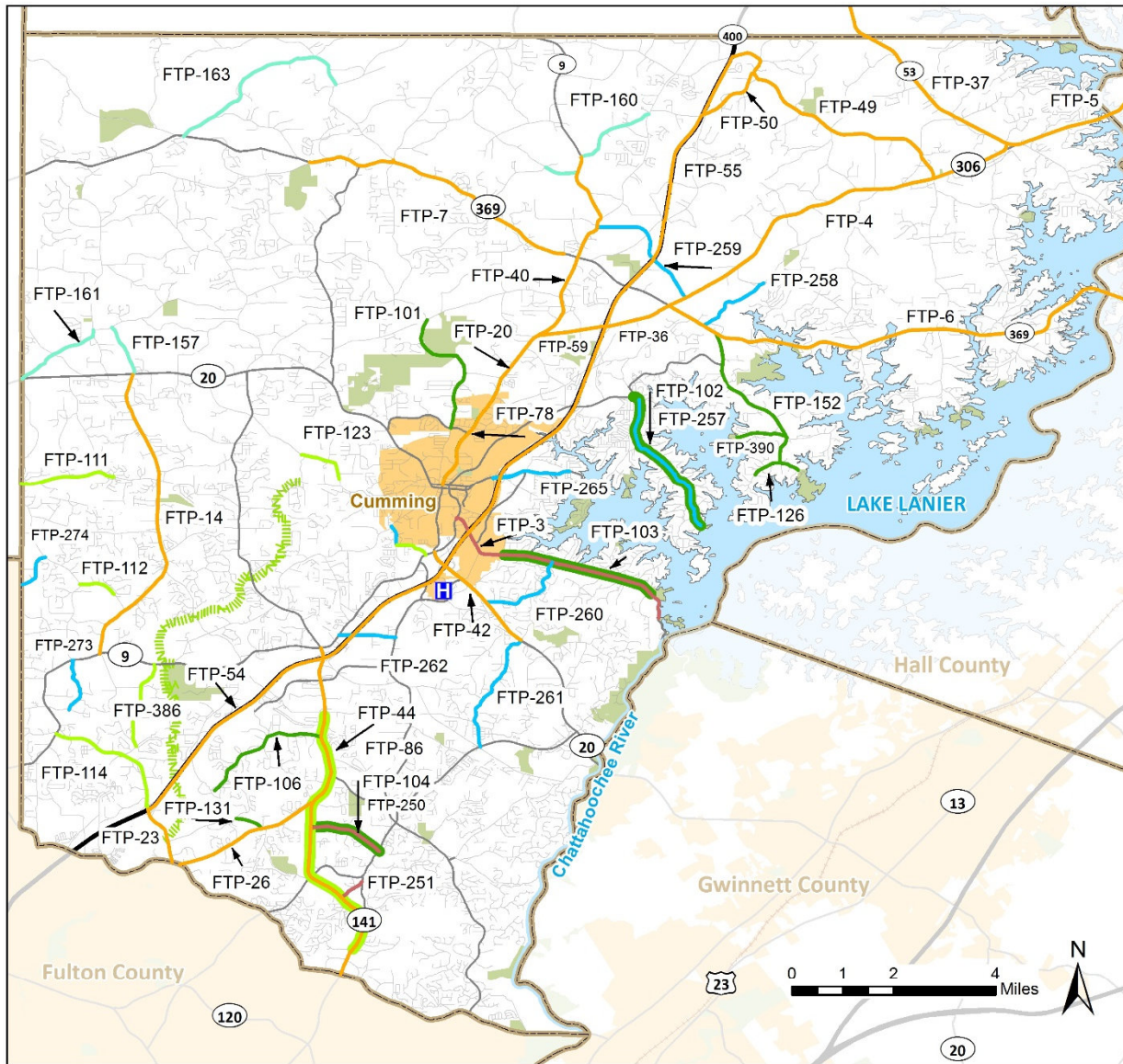
ID	Project Source	Source ID	Project Type	Project Name	From	TO	Cost	Status	Description
FTP-266	2017 FTP		Roadway-Reclamation	Aaron Sosebee Road Reclamation	SR 20	Bethelview Road	\$ 733,400	Proposed	Road Reclamation
FTP-267	2017 FTP		Roadway-Reclamation	Burma Road Reclamation	SR 306	Burruss Mill Road	\$ 239,400	Proposed	Road Reclamation
FTP-268	2017 FTP		Roadway-Reclamation	Settingdown Road Reclamation	SR 369	SR 400	\$ 581,400	Proposed	Road Reclamation
FTP-269	2017 FTP		Roadway-Reclamation	Chamblee Gap Road Reclamation	North of Johnson Road	Hickory Trail	\$ 330,600	Proposed	Road Reclamation
FTP-270	2017 FTP		Roadway-Reclamation	John Burruss Road Reclamation	McCoy Circle	SR 369	\$ 1,128,600	Proposed	Road Reclamation
FTP-271	2017 FTP		Roadway-Reclamation	Daves Creek Road Reclamation	Daves Creek Drive	Haw Creek Circle E	\$ 596,600	Proposed	Road Reclamation
FTP-272	2017 FTP		Roadway-Reclamation	Tidwell Road Rd Reclamation	Tidwell Drive	Tidwell Circle	\$ 395,200	Proposed	Road Reclamation
FTP-301	2017 FTP		Roadway-Operations (Intersection)	SR 20 @ Ronald Reagan Boulevard	SR 20	Ronald Reagan Boulevard	\$ 498,000	Proposed	EB & WB Left on Ronald Reagan / Marketplace, NB Left
FTP-302	2017 FTP		Roadway-Operations (Intersection)	SR 141 @ McGinnis Ferry Road	SR 141	McGinnis Ferry Road	\$ 3,900	Proposed	Needs further study. Signal timing?
FTP-305	2017 FTP		Roadway-Operations (Intersection)	SR 141 @ Laurel Springs Parkway	SR 141	Laurel Springs Parkway	\$ 3,900	Proposed	Needs further study. Signal timing?
FTP-309	2017 FTP		Roadway-Operations (Intersection)	SR 141 @ Brannon Road	SR 141	Brannon Road	\$ 3,900	Proposed	Needs further study. Signal timing?
FTP-313	2017 FTP		Roadway-Operations (Intersection)	Majors Road @ Shiloh Road	Majors Road	Shiloh Road	\$ 850,000	Proposed	Relocation and Roundabout
FTP-314	2017 FTP		Roadway-Operations (Intersection)	Buford Dam Road Near Market Place Boulevard	Buford Dam Road Near Market Place Boulevard	Near Market Place Boulevard	\$ 858,000	Proposed	Extend median to make driveways at MetroPCS RIRO (Price for 0.5 mile median)
FTP-315	2017 FTP		Roadway-Operations (Intersection)	SR 400 @ SR 141	SR 400	SR 141	\$ 7,250,000	Proposed	Diverging Diamond
FTP-316	2017 FTP		Roadway-Operations (Intersection)	SR 371/Post Road @ Bentley Road	SR 371/Post Road	Bentley Road	\$ 850,000	Proposed	Signal or Roundabout
FTP-318	2017 FTP		Roadway-Operations (Intersection)	Laurel Springs Parkway @ Mathis Airport Road	Laurel Springs Parkway	Mathis Airport Road	\$ 399,000	Proposed	Add Right Turn Lane on Mathis Airport w/ signal.
FTP-319	2017 FTP		Roadway-Operations (Intersection)	Windermere Parkway @ Farrington	Windermere Parkway	Suffolk Drive	\$ 850,000	Proposed	Add NB Left only median break

ID	Project Source	Source ID	Project Type	Project Name	From	TO	Cost	Status	Description
FTP-320	2017 FTP		Roadway-Operations (Intersection)	SR 400 Exit Ramp S @ SR 20	SR 400 Exit Ramp S	SR 20	\$ 558,000	Proposed	Add lighting, Add third SB Left Turn Lane
FTP-321	2017 FTP		Roadway-Operations (Intersection)	Interchange 14 @ South Exit Ramp	Interchange 14	South Exit Ramp	\$ 558,000	Proposed	Add lighting, Add third SB Left Turn Lane (Duplicate Project)
FTP-325	2017 FTP		Roadway-Operations (Intersection)	SR 20 @ Lakeland Plaza	SR 20	Lakeland Plaza	\$ 248,000	Proposed	Add NB Left Turn Lane
FTP-326	2017 FTP		Roadway-Operations (Intersection)	SR 9 @ Dr. Dunn Road	SR 9	Dr. Dunn Road	\$ 850,000	Proposed	Roundabout
FTP-327	2017 FTP		Roadway-Operations (Intersection)	SR 9 @ Oak Grove Circle	SR 9	Oak Grove Circle	\$ 850,000	Proposed	Roundabout
FTP-328	2017 FTP		Roadway-Operations (Intersection)	Cross Roads Rd @ Bennett Rd	Cross Roads Rd	Bennett Rd	\$ 850,000	Proposed	Roundabout
FTP-330	2017 FTP		Roadway-Operations (Intersection)	Bannister Rd @ Riley Rd/Govan Rd	Bannister Rd	Riley Rd/Govan Rd	\$ 850,000	Proposed	Roundabout
FTP-331	2017 FTP		Roadway-Operations (Intersection)	Hurt Bridge Rd @ Watson Road	Hurt Bridge Rd	Watson Road	\$ 850,000	Proposed	Roundabout
FTP-332	2017 FTP		Roadway-Operations (Intersection)	Campground Rd @ Dickerson Rd	Campground Rd	Dickerson Rd	\$ 850,000	Proposed	Roundabout
FTP-334	2017 FTP		Roadway-Operations (Intersection)	Echols Road @ Haw Creek Park Entrance	Echols Road	Haw Creek Park Entrance	\$ 850,000	Proposed	Roundabout
FTP-335	2017 FTP		Roadway-Operations (Intersection)	Gravit Road @ Mountain Road	Gravit Road	Mountain Road	\$ 5,909,000	Proposed	Realignment
FTP-337	2017 FTP		Roadway-Operations (Intersection)	W Maple Street @ W Courthouse Square (Milepost 8.06)	W Maple Street	W Courthouse Square (Milepost 8.06)	\$ 3,900	Proposed	Signal timing
FTP-338	2017 FTP		Roadway-Operations (Intersection)	W Maple Street @ Veterans Memorial Blvd. (Milepost 8.13)	W Maple Street	Veterans Memorial Blvd. (Milepost 8.13)	\$ 3,900	Proposed	Signal timing
FTP-339	2017 FTP		Roadway-Operations (Intersection)	Marketplace Blvd. near Buford Hwy. (Milepost 10.45)	Marketplace Blvd. near Buford Hwy. (Milepost 10.45)	Near Buford Hwy. (Milepost 10.45)	\$ 858,000	Proposed	Add median on Market Place Blvd (Price is for 0.5 miles of median)
FTP-340	2017 FTP		Roadway-Operations (Intersection)	West Main St. @ Hudson Street	West Main St.	Hudson Street	\$ 3,900	Proposed	Signal timing
FTP-341	2017 FTP		Roadway-Operations (Intersection)	Main Street @ West Courthouse Square	Main Street	West Courthouse Square	\$ 3,900	Proposed	Signal timing

ID	Project Source	Source ID	Project Type	Project Name	From	TO	Cost	Status	Description
FTP-342	2017 FTP		Roadway-Operations (Intersection)	Mathis Airport Parkway at Mathis Airport Road	Mathis Airport Parkway	Mathis Airport Road	\$ 850,000	Proposed	Signal
FTP-343	2017 FTP		Roadway-Operations (Intersection)	Shiloh Road @ Shiloh Crossing	Shiloh Road	Shiloh Crossing	\$ 850,000	Proposed	Signal
FTP-360	2017 FTP		Roadway-Operations (Intersection)	Martin Road @ Shadburn Road	Martin Road	Shadburn Road	\$ 850,000	Proposed	Signal or roundabout
FTP-361	2017 FTP		Roadway-Operations (Intersection)	Wallace Tatum Road @ McBrayer Road	Wallace Tatum Road	McBrayer Road	\$ 850,000	Proposed	Signal or roundabout
FTP-362	2017 FTP		Roadway-Operations (Intersection)	Wallace Tatum Road @ Seabolt Drive	Wallace Tatum Road	Seabolt	\$ 850,000	Proposed	Signal or roundabout
FTP-363	2017 FTP		Roadway-Operations (Intersection)	Bannister Road @ Mockingbird Road	Bannister Road	Mockingbird Road	\$ 850,000	Proposed	Signal or roundabout
FTP-364	2017 FTP		Roadway-Operations (Intersection)	Mt. Tabor Road @ Westray Road	Mt. Tabor Road	Westray Road	\$ 850,000	Proposed	Signal or roundabout
FTP-365	2017 FTP		Roadway-Operations (Intersection)	Hubert Martin Road @ Oak Grove Circle	Hubert Martin Road	Oak Grove Circle	\$ 850,000	Proposed	Signal or roundabout
FTP-366	2017 FTP		Roadway-Operations (Intersection)	Hurt Bridge Road @ Holbrook Road	Hurt Bridge Road	Holbrook Road	\$ 850,000	Proposed	Signal or roundabout
FTP-367	2017 FTP		Roadway-Operations (Intersection)	Dr. Bramblett Road @ Holbrook Road	Dr. Bramblett Road	Holbrook Road	\$ 850,000	Proposed	Signal or roundabout
FTP-368	2017 FTP		Roadway-Operations (Intersection)	John Burruss Road @ Hendrix Road	John Burruss Road	Hendrix Road	\$ 850,000	Proposed	Signal or roundabout
FTP-380	TIP	FT-060	Roadway-Bridge Replacement	SR 369 (Matt Highway) Bridge Replacement at Settingdown Creek			\$ 3,605,020	Proposed	Bridge Replacement
FTP-381	TIP	FT-062C	Roadway-Bridge Replacement	SR 369 (Browns Bridge Road) Bridge Replacement at Two Mile Creek			\$ 12,337,119	Proposed	Bridge Replacement
FTP-382	TIP	FT-322	Roadway-Bridge Replacement	SR 369 (Browns Bridge Road) Replacement at Lake Lanier			\$ 30,161,989	Proposed	Bridge Replacement
FTP-383	TIP	FT-335	Roadway-Operations (Intersection)	SR 9 (Dahlonega Highway) Intersection Improvements			\$ 1,600,000	Proposed	Intersection Improvements
FTP-384	TIP	FT-062D	Roadway-Interchange Improvement	SR 369 (Browns Bridge Road) at GA 400 Interchange Improvement			\$ 31,396,129	Proposed	Interchange Capacity
FTP-385	TIP	FT-324	Roadway-Interchange Improvement	McGinnis Ferry at GA 400 Interchange Improvement			\$ 46,172,161	Proposed	Interchange Capacity
FTP-391	2017 FTP		Last Mile Connectivity/Pedestrian Facilities	Settles Road Sidewalk	Grand Cascade Subdivision	Southers Circle at James Burgess Rd	\$ 1,500,000	Proposed	Sidewalk

9.1.2 Mid-Range Recommendations (2023 -2030)

Figure 19: Mid-Range Recommendations (2023 – 2030)



Mid Range Project Recommendations

Forsyth County Comprehensive Transportation Plan Update

<ul style="list-style-type: none"> — Operations & Safety — Bicycle Treatment — Multi-Use Trail — Sidewalk — Roadway Widening — Roadway New Alignment — Road Reclamation 	<div style="border: 1px solid gray; padding: 2px; display: inline-block;">FTP-18 - Project ID</div>	<ul style="list-style-type: none"> H Hospital ■ Park/Recreation Area ■ Cities ■ Lake Lanier Counties GA 400 ◆ Exits Major Roads Streets Railroads — Big Creek Greenway 	<div style="text-align: center;"> </div> <div style="text-align: center;"> </div>
--	---	--	---

Sources: ARC, Forsyth County, Jacobs

Table 27: Mid-Range Project Recommendations (2023 -2030)

ID	Project Source	Source ID	Project Type	Project Name	From	TO	Cost	Status	Description
FTP-3	2017 FTP		Roadway-Operations and Safety	Buford Dam Road Operations and Safety	W. Bank Park	SR 9 (Atlanta Road)	\$ 3,277,000	Proposed	Operational Improvements
FTP-4	2017 FTP		Roadway-General Purpose Capacity	SR 306 (Keith Bridge Road) Widening	SR 369 (Browns Bridge Road)	Highway 53	\$ 54,032,000	Proposed	Widening from 2 to 4 Lanes
FTP-5	2017 FTP		Roadway-General Purpose Capacity	Highway 53 (Dawsonville Highway)	SR 306 (Keith Bridge Road)	Manor Ridge Road	\$ 58,296,000	Proposed	Widening from 2 to 6 Lanes
FTP-6	2017 FTP		Roadway-General Purpose Capacity	SR 369 (Browns Bridge Road)	SR 306 (Keith Bridge Road)	Highway 53 in Hall County	\$ 205,726,000	Proposed	Widening from 2 to 4 Lanes
FTP-7	2017 FTP		Roadway-General Purpose Capacity	SR 369 (Matt Highway)	Wallace Tatum Road	Coal Mountain Drive	\$ 26,524,000	Proposed	Widening from 2 to 4 Lanes
FTP-14	RTP	FT-030	Roadway-General Purpose Capacity	SR 371 (Post Road) Widening	SR 9 (Atlanta Highway)	SR 20 (Canton Highway)	\$ 74,717,000	PE	Widening from 2 to 4 Lanes
FTP-20	RTP	FT-001E	Roadway-General Purpose Capacity	SR 9 (Dahlonega Highway) Segment 5 Widening	SR 20 (Buford Highway)	SR 306 (Keith Bridge Road)	\$ 24,112,000	PE	Widening from 2 to 4 Lanes
FTP-23	RTP	FT-065A	Roadway-General Purpose Capacity	McFarland Parkway Widening	McGinnis Ferry Road	GA 400	\$ 13,211,000	ALLRTP	Widening from 4 to 6 Lanes
FTP-26	RTP	FT-081	Roadway-General Purpose Capacity	Old Alpharetta Road Widening	SR 141 (Peachtree Parkway)	McGinnis Ferry Road	\$ 19,759,000	ALLRTP	Widening from 2 to 4 Lanes
FTP-36	RTP	FT-306B	Roadway-General Purpose Capacity	SR 306 (Keith Bridge Road) Segment 2 Widening	GA 400	SR 369 (Browns Bridge Road)	\$ 10,280,000	PE	Widening from 2 to 4 Lanes
FTP-37	2017 FTP		Roadway-General Purpose Capacity	Highway 53 (Dawsonville Highway) Widening	SR 306 (Keith Bridge Road)	GA 400 in Dawson County	\$ 27,126,000	Proposed	Widening from 2 to 4 Lanes
FTP-40	2017 FTP		Roadway-General Purpose Capacity	SR 9 (Dahlonega Highway) Segment 6 Widening	SR 306 (Keith Bridge Road)	Burruss Road	\$ 27,767,000	Proposed	Widening from 2 to 4 Lanes
FTP-42	2017 FTP		Roadway-General Purpose Capacity	SR 20 (Buford Highway) Widening Segment 2	Samples Road	SR 9 (Atlanta Highway)	\$ 25,207,000	Proposed	Widening from 4 to 6 Lanes
FTP-44	2017 FTP		Roadway-General Purpose Capacity	SR 141 (Peachtree Parkway) Widening	McGinnis Ferry Road	SR 9 (Atlanta Highway)	\$ 75,216,000	Proposed	Widening from 4 to 6 Lanes
FTP-49	2017 FTP		Roadway-General Purpose Capacity	Jot Em Down Road Widening	GA 400	SR 306 (Keith Bridge Road)	\$ 21,435,000	Proposed	Widening from 2 to 4 Lanes
FTP-50	2017 FTP		Roadway-General Purpose Capacity	Crossroads Road Widening	Jot Em Down Road	GA 400	\$ 5,807,000	Proposed	Widening from 2 to 4 Lanes
FTP-54	2017 FTP		Roadway-General Purpose Capacity	GA 400 Widening Segment 1	McFarland Parkway	SR 369 (Browns Bridge Road)	\$ 304,742,000	Proposed	Widening from 6 to 8 Lanes
FTP-55	2017 FTP		Roadway-General Purpose Capacity	GA 400 Widening Segment 2	SR 369 (Browns Bridge Road)	Jot-Em-Down Road	\$ 18,935,000	Proposed	Widening from 4 to 6 Lanes

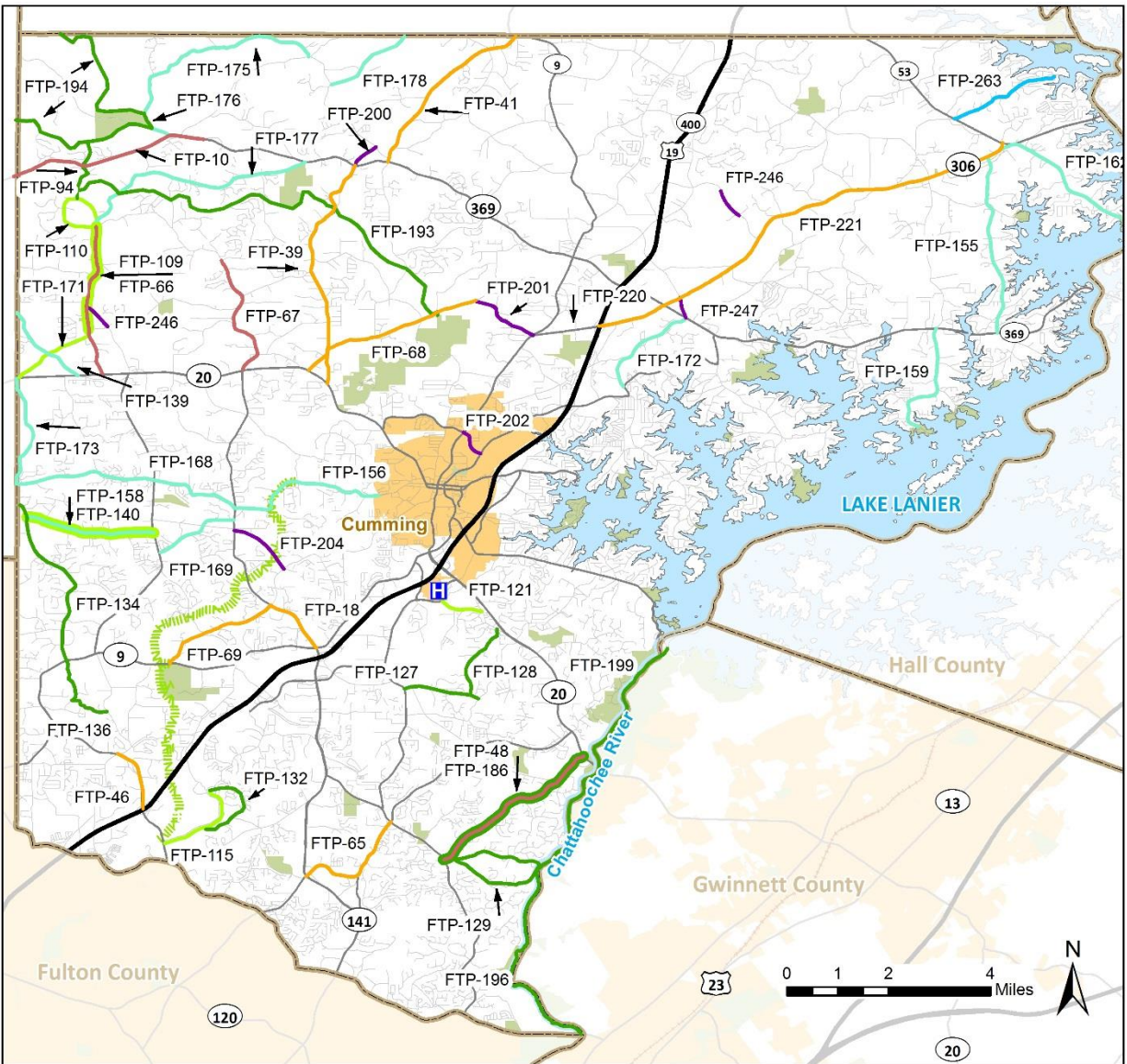
ID	Project Source	Source ID	Project Type	Project Name	From	TO	Cost	Status	Description
FTP-59	2011 FTP		Roadway-General Purpose Capacity	SR 306 (Keith Bridge Road) Widening	SR 9 (Dahlonega Highway)	GA 400	\$ 5,171,000	Proposed	Widening from 2 to 4 Lanes
FTP-78	2015 Bike Ped Plan		Last Mile Connectivity//Joint Bike-Ped Facilities	SR 9 (Dahlonega Highway) Multi-Use Trail	Main Street	Dr. Dunn Road	\$ 4,828,000	Proposed	Multi-Use Trail
FTP-86	2015 Bike Ped Plan		Last Mile Connectivity//Pedestrian Facilities	SR 141 (Peachtree Parkway) Sidewalk	Granite Lane	Majors Road	\$ 4,858,000	Proposed	Sidewalk
FTP-101	2015 Bike Ped Plan		Last Mile Connectivity//Joint Bike-Ped Facilities	Bettis Tribble Gap Road Multi-Use Trail	SR 306 Extension (Sawnee Drive)	Spot Road	\$ 3,752,000	Proposed	Multi-Use Trail
FTP-102	2015 Bike Ped Plan		Last Mile Connectivity//Joint Bike-Ped Facilities	Pilgrim Mill Road Sidewalk and Multi-Use Trail	Holtzclaw Road	Tidwell Park Boat Ramp	\$ 8,972,000	Proposed	Multi-Use Trail and Sidewalk Combined
FTP-103	2015 Bike Ped Plan		Last Mile Connectivity//Joint Bike-Ped Facilities	Buford Dam Road Sidewalk and Multi-Use Trail	Sawnee Campground	Sanders Road	\$ 6,335,000	Proposed	Multi-Use Trail and Sidewalk
FTP-104	2015 Bike Ped Plan		Last Mile Connectivity//Joint Bike-Ped Facilities	Bagley Road Sidewalk and Multi-Use Trail	SR 141 (Peachtree Parkway)	Mathis Airport Drive	\$ 3,196,000	Proposed	Multi-Use Trail and Sidewalk/Traffic Calming
FTP-106	2015 Bike Ped Plan		Last Mile Connectivity//Joint Bike-Ped Facilities	Stoney Point Road Sidewalk and Multi-Use Trail	SR 141 (Peachtree Parkway)	Shiloh Road East	\$ 5,713,000	Proposed	Multi-Use Trail and Sidewalk/Traffic Calming
FTP-111	2015 Bike Ped Plan		Last Mile Connectivity//Pedestrian Facilities	Drew Campground Road Sidewalk	Cherokee County Line	Preserve Crossing	\$ 1,700,000	Proposed	Sidewalk
FTP-112	2015 Bike Ped Plan		Last Mile Connectivity//Pedestrian Facilities	Dickerson Road Sidewalk	Wynfield Way	Campground Road	\$ 598,000	Proposed	Sidewalk
FTP-114	2015 Bike Ped Plan		Last Mile Connectivity//Pedestrian Facilities	McFarland Parkway Sidewalk	SR 400	SR 9 (Atlanta Highway)	\$ 3,364,000	Proposed	Sidewalk
FTP-122	2015 Bike Ped Plan		Last Mile Connectivity//Pedestrian Facilities	Hutchinson Road Sidewalk	SR 9 (Atlanta Highway)	Hutchinson Road	\$ 532,000	Proposed	Sidewalk
FTP-123	2015 Bike Ped Plan		Last Mile Connectivity//Pedestrian Facilities	Chamblee Gap Road Sidewalk	Elementary School Drive	300' North Johnson Road	\$ 2,102,000	Proposed	Sidewalk

ID	Project Source	Source ID	Project Type	Project Name	From	TO	Cost	Status	Description
FTP-126	2015 Bike Ped Plan		Last Mile Connectivity/Joint Bike-Ped Facilities	Lanier Drive Sidewalk and Multi-Use Trail	Bamby Road	Shadburn Ferry Road	\$ 1,230,000	Proposed	Multi-Use Trail and Sidewalk
FTP-131	2015 Bike Ped Plan		Last Mile Connectivity/Joint Bike-Ped Facilities	Pine Grove Road Sidewalk and Multi-Use Trail	Old Alpharetta Road	E Shiloh Road	\$ 2,028,000	Proposed	Multi-Use Trail and Sidewalk
FTP-152	2015 Bike Ped Plan		Last Mile Connectivity/Joint Bike-Ped Facilities	Shady Grove Road Sidewalk and Multi-Use Trail	Shady Grove Campground	SR 369 (Browns Bridge Road)	\$ 7,558,000	Proposed	Multi-Use Trail and Sidewalk
FTP-157	2015 Bike Ped Plan		Last Mile Connectivity/Bicycle Facility	Tribble Road Signed Shared Roadway	SR 20 (Canton Highway)	Watson Road	\$ 34,000	Proposed	Signed Shared Roadway
FTP-160	2015 Bike Ped Plan		Last Mile Connectivity/Bicycle Facility	Burruss Road, SR 9 and Oak Grove Circle Signed Shared Roadway	Hubert Martin Road	Hopewell Road	\$ 77,000	Proposed	Signed Shared Roadway
FTP-161	2015 Bike Ped Plan		Last Mile Connectivity/Bicycle Facility	Heardsville Road Signed Shared Roadway	SR 20 (Canton Highway)	Watson Road	\$ 52,000	Proposed	Signed Shared Roadway
FTP-163	2015 Bike Ped Plan		Last Mile Connectivity/Bicycle Facility	Mt. Tabor Road Shared Signed Roadway	SR 369 (Matt Highway)	Westray Ray	\$ 120,000	Proposed	Signed Shared Roadway
FTP-250	2017 FTP		Roadway-Reclamation	Bagley Road Roadway Reclamation	Mathis Airport Parkway	SR 141 (Peachtree Parkway)	\$ 490,200	Proposed	Road Reclamation
FTP-251	2017 FTP		Roadway-Reclamation	Bagley Drive Roadway Reclamation	Mathis Airport Parkway	SR 141 (Peachtree Parkway)	\$ 171,000	Proposed	Road Reclamation
FTP-254	2017 FTP		Roadway-Reclamation	Wallace Tatum Road Roadway Reclamation	SR 369 (Matt Highway)	Heardsville Circle	\$ 1,592,200	Proposed	Road Reclamation
FTP-257	2017 FTP		Roadway-Reclamation	Pilgrim Mill Road Roadway Reclamation	Magnolia Avenue	Tidwell Park Boat Ramp	\$ 1,117,200	Proposed	Road Reclamation
FTP-258	2017 FTP		Roadway-Reclamation	Burruss Mill Road Roadway Reclamation	SR 369 (Browns Bridge Road)	Parks Road	\$ 539,600	Proposed	Road Reclamation
FTP-259	2017 FTP		Roadway-Reclamation	Martin Road Roadway Reclamation	SR 9 (Dahlonega Highway)	SR 306 (Keith Bridge Road)	\$ 893,000	Proposed	Road Reclamation
FTP-260	2017 FTP		Roadway-Reclamation	Nuckolls Road Roadway Reclamation	Buford Dam Road	SR 20 (Buford Highway)	\$ 562,400	Proposed	Road Reclamation
FTP-261	2017 FTP		Roadway-Reclamation	Trammel Road Roadway Reclamation	Windermere Parkway	SR 20 (Buford Highway)	\$ 919,600	Proposed	Operational Improvements
FTP-262	2017 FTP		Roadway-Reclamation	Pendley Road Roadway Reclamation	SR 9 (Atlanta Highway)	Ronald Reagan Boulevard	\$ 372,400	Proposed	Road Reclamation

ID	Project Source	Source ID	Project Type	Project Name	From	TO	Cost	Status	Description
FTP-264	2017 FTP		Roadway-Reclamation	Hutchinson Road Roadway Reclamation	Larry Mulkey Memorial Road	Atlanta Road	\$ 361,000	Proposed	Road Reclamation
FTP-265	2017 FTP		Roadway-Reclamation	Bald Ridge Marina Road Roadway Reclamation	Peachtree Road	Bald Ridge Access Drive	\$ 520,600	Proposed	Road Reclamation
FTP-273	2017 FTP		Roadway-Reclamation	Francis Circle Road Reclamation	SR 9	Grassland Parkway	\$ 400,000	Proposed	Road Reclamation
FTP-274	2017 FTP		Roadway-Reclamation	Longstreet Church Road Reclamation	County Line	Campground Road	\$ 350,000	Proposed	Road Reclamation
FTP-350	2017 FTP		Roadway-Bridge Upgrade	Settingdown Creek at SR 9 (Dahlonega Highway) Bridge Rehabilitation	SR 9 (Dahlonega Highway)	Settingdown Creek	\$ 422,000	Proposed	Widening of existing bridge with deck rehabilitation or replacement
FTP-351	2017 FTP		Roadway-Bridge Upgrade	Majors Road at Big Creek Bridge Rehabilitation	Majors Road	Big Creek	\$ 586,000	Proposed	Add pedestrian facilities to bridge
FTP-386	2017 FTP		Last Mile Connectivity/Pedestrian Facilities	Fowler Road Sidewalk	Mullinax Road	SR 9	\$ 1,594,000	Proposed	Sidewalk
FTP-390	2017 FTP		Last Mile Connectivity/Joint Bike-Ped Facilities	Heard Road Sidewalk and Multi-Use Trail	Young Deer Boat Ramp	Shady Grove Road	\$ 246,000	Proposed	Sidewalk & Multi-Use Trail

9.1.3 Long-Range Recommendations (2031 - 2040)

Figure 20: Long-Range Recommendations (2031 - 2040)



Long Range Project Recommendations

Forsyth County Comprehensive Transportation Plan Update

<ul style="list-style-type: none"> — Operations & Safety — Bicycle Treatment — Multi-Use Trail — Sidewalk — Roadway Widening — Roadway New Alignment — Road Reclamation 	<div style="border: 1px solid gray; padding: 2px; display: inline-block;">FTP-18 - Project ID</div>	<ul style="list-style-type: none"> H Hospital ■ Park/Recreation Area ■ Cities ■ Lake Lanier Counties — GA 400 — Exits — Major Roads — Streets — Railroads — Big Creek Greenway 	<div style="text-align: center;"> </div> <div style="text-align: center;"> </div>
--	---	--	---

Sources: ARC, Forsyth County, Jacobs

Table 28: Long-Range Project Recommendations (2031 – 2040)

ID	Project Source	Source ID	Project Type	Project Name	From	TO	Cost	Status	Description
FTP-10	RTP	FT-086	Roadway-Operations and Safety	SR 369 Passing Lanes	Cherokee County Line	Wallace Tatum Road	\$ 9,948,362	ROW	Widening from 2 to 3 Lanes
FTP-18	2017 FTP		Roadway-General Purpose Capacity	Bethelview Road Widening	Castleberry Road	SR 9 (Atlanta Highway)	\$ 11,738,000	Proposed	Widening from 4 to 6 Lanes
FTP-39	2017 FTP		Roadway-General Purpose Capacity	Dr. Bramblett Road	SR 369 (Matt Highway)	SR 20 (Canton Highway)	\$ 22,309,000	Proposed	Widening from 2 to 4 Lanes
FTP-41	2017 FTP		Roadway-General Purpose Capacity	Bannister Road Widening	SR 369 (Matt Highway)	SR 9 (Dahlonega Highway)	\$ 9,435,000	Proposed	Widening from 2 to 4 Lanes
FTP-46	2017 FTP		Roadway-General Purpose Capacity	McFarland Parkway Widening Segment 2	Union Hill Road	GA 400	\$ 12,984,000	Proposed	Widening from 4 to 6 Lanes
FTP-48	2017 FTP		Roadway-Operations and Safety	James Burgess Road Operational Improvements	Old Atlanta Road	SR 20 (Buford Highway)	\$ 31,473,000	Proposed	Add turn lanes
FTP-65	2017 FTP		Roadway-General Purpose Capacity	Mathis Airport Parkway Widening	SR 141 (Peachtree Parkway)	Old Atlanta Road	\$ 21,943,000	Proposed	Widening from 4 to 6 Lanes
FTP-66	2017 FTP		Roadway-Operations and Safety	Heardsville Road Operational Improvements	SR 20 (Canton Highway)	Heardsville Circle	\$ 1,966,000	Proposed	Operational Improvements
FTP-67	2017 FTP		Roadway-Operations and Safety	Hurt Bridge Road/Friendship Circle Operational Improvements	SR 20 (Canton Highway)	Holbrook Road	\$ 983,000	Proposed	Operational Improvements
FTP-68	2017 FTP		Roadway-General Purpose Capacity	Spot Road and Spot Road Connector Widening and Realignment	SR 20 (Canton Highway)	Spot Road Connector (306 Extension)	\$ 23,903,000	Proposed	Widening from 2 to 4 Lanes
FTP-94	2015 Bike Ped Plan		Last Mile Connectivity/Joint Bike-Ped Facilities	Pooles Mill Road/Multi-Use to Etowah River	Heardsville Circle	Etowah River	\$ 1,816,000	Proposed	Multi-Use Trail
FTP-109	2015 Bike Ped Plan		Last Mile Connectivity/Pedestrian Facilities	Heardsville Road Sidewalk	Watson Road	Heardsville Circle	\$ 1,943,000	Proposed	Sidewalk
FTP-110	2015 Bike Ped Plan		Last Mile Connectivity/Pedestrian Facilities	Heardsville Circle Sidewalk	Heardsville Road	Heardsville Road	\$ 1,700,000	Proposed	Sidewalk
FTP-115	2015 Bike Ped Plan		Last Mile Connectivity/Pedestrian Facilities	Shiloh Road Sidewalk	McFarland Parkway	Stoney Point Road	\$ 1,691,000	Proposed	Sidewalk

ID	Project Source	Source ID	Project Type	Project Name	From	TO	Cost	Status	Description
FTP-121	2015 Bike Ped Plan		Last Mile Connectivity//Pedestrian Facilities	Haw Creek Road Sidewalk	Haw Creek Circle	Ronald Reagan Boulevard	\$ 663,000	Proposed	Sidewalk
FTP-127	2015 Bike Ped Plan		Last Mile Connectivity//Joint Bike-Ped Facilities	Daves Creek Drive Sidewalk and Multi-Use Trail	Old Atlanta Road	Trammel Road	\$ 3,177,000	Proposed	Multi-Use Trail and Sidewalk
FTP-128	2015 Bike Ped Plan		Last Mile Connectivity//Joint Bike-Ped Facilities	Daves Creek Road Sidewalk and Multi-Use Trail	Haw Creek Circle	Daves Creek Drive	\$ 3,786,000	Proposed	Multi-Use Trail and Sidewalk
FTP-129	2015 Bike Ped Plan		Last Mile Connectivity//Joint Bike-Ped Facilities	Southers Circle/Settles Road Sidewalk and Multi-Use Trail	James Burgess Road	James Burgess Road	\$ 8,516,000	Proposed	Multi-Use Trail and Sidewalk
FTP-132	2015 Bike Ped Plan		Last Mile Connectivity//Joint Bike-Ped Facilities	Shiloh Road East Sidewalk and Multi-Use Trail	Shiloh Road	Shiloh Road	\$ 7,111,000	Proposed	Multi-Use Trail and Sidewalk
FTP-134	2015 Bike Ped Plan		Last Mile Connectivity//Joint Bike-Ped Facilities	Campground Road/Francis Circle Sidewalk and Multi-Use Trail	Cherokee County Line	Windy Hill Road	\$ 12,556,000	Proposed	Multi-Use Trail and Sidewalk
FTP-136	2015 Bike Ped Plan		Last Mile Connectivity//Joint Bike-Ped Facilities	Windy Hill Drive Sidewalk and Multi-Use Trail	Francis Circle	Mullinax Road	\$ 2,414,000	Proposed	Multi-Use Trail and Sidewalk
FTP-139	2015 Bike Ped Plan		Last Mile Connectivity//Pedestrian Facilities	Heardsville Road Sidewalk	SR 20 (Canton Highway)	Watson Road	\$ 1,438,000	Proposed	Sidewalk
FTP-140	2015 Bike Ped Plan		Last Mile Connectivity//Pedestrian Facilities	Bentley Road Sidewalk	Campground Road	SR 371 (Post Road)	\$ 1,990,000	Proposed	Sidewalk
FTP-155	2015 Bike Ped Plan		Last Mile Connectivity//Bicycle Facility	Waldrip Road Bike Lane	SR 306 (Keith Bridge Road)	SR 369 (Browns Bridge Road)	\$ 6,516,000	Proposed	Bike Lane
FTP-156	2015 Bike Ped Plan		Last Mile Connectivity//Bicycle Facility	Kelly Mill Road Bike Lane	Cumming City Limits	SR 371 (Post Road)	\$ 7,635,000	Proposed	Bike Lane
FTP-158	2015 Bike Ped Plan		Last Mile Connectivity//Bicycle Facility	Bentley Road Bike Lane	Campground Road	SR 371 (Post Road)	\$ 3,844,000	Proposed	Bike Lane
FTP-159	2015 Bike Ped Plan		Last Mile Connectivity//Bicycle Facility	Bethel Road Bike Lane	Two-Mile Park	SR 369 (Browns Bridge Road)	\$ 4,332,000	Proposed	Bike Lane
FTP-162	2015 Bike Ped Plan		Last Mile Connectivity//Bicycle Facility	Old Keith Bridge Road Bike Lane	SR 306 (Keith Bridge Road)	Keith Bridge Park	\$ 4,694,000	Proposed	Bike Lane

ID	Project Source	Source ID	Project Type	Project Name	From	TO	Cost	Status	Description
FTP-168	2015 Bike Ped Plan		Last Mile Connectivity/ Bicycle Facility	Drew Campground Road Bike Lane	SR 371 (Post Road)	Cherokee County Line	\$ 4,151,000	Proposed	Bike Lane
FTP-169	2015 Bike Ped Plan		Last Mile Connectivity/ Bicycle Facility	Pittman Road Signed Shared Roadway	SR 371 (Post Road)	Bethelview Road	\$ 50,000	Proposed	Signed Shared Roadway
FTP-171	2015 Bike Ped Plan		Last Mile Connectivity/ Bicycle Facility	Franklin Goldmine Road Signed Shared Roadway	Heardsville Road	Cherokee County Line	\$ 52,000	Proposed	Signed Shared Roadway
FTP-172	2015 Bike Ped Plan		Last Mile Connectivity/ Bicycle Facility	Holtzclaw Road Signed Shared Road way	Pilgrim Mill Road	SR 369 (Browns Bridge Road)	\$ 73,000	Proposed	Signed Shared Roadway
FTP-173	2015 Bike Ped Plan		Last Mile Connectivity/ Bicycle Facility	Howard Road Signed Shared Roadway	Drew Campground Road	County Line Road	\$ 69,000	Proposed	Signed Shared Roadway
FTP-175	2015 Bike Ped Plan		Last Mile Connectivity/ Bicycle Facility	Nicholson Road Signed Shared Roadway	Mt. Tabor Road	Old Federal Road	\$ 139,000	Proposed	Signed Shared Roadway
FTP-176	2015 Bike Ped Plan		Last Mile Connectivity/ Bicycle Facility	Old Federal Road Signed Shared Roadway	Nicholson Road	SR 369 (Matt Highway)	\$ 11,000	Proposed	Signed Shared Roadway
FTP-177	2015 Bike Ped Plan		Last Mile Connectivity/ Bicycle Facility	Wallace Tatum Road Signed Shared Roadway	Heardsville Road	SR 369 (Matt Highway)	\$ 142,000	Proposed	Signed Shared Roadway
FTP-178	2015 Bike Ped Plan		Last Mile Connectivity/ Bicycle Facility	Westray Road Signed Shared Roadway	Mt. Tabor Road	Dawson County Line	\$ 57,000	Proposed	Signed Shared Roadway
FTP-186	2017 FTP		Last Mile Connectivity/Joint Bike-Ped Facilities	James Burgess Road Multi-Use Trail	SR 20 (Buford Highway)	Old Atlanta Road	\$ 3,095,000	Proposed	Multi-Use Trail
FTP-193	2015 Bike Ped Plan		Last Mile Connectivity/Joint Bike-Ped Facilities	Sawnee Mountain Greenway	Spot Road	Pooles Mill Road	\$ 10,676,000	Proposed	Multi-Use Trail
FTP-194	2015 Bike Ped Plan		Last Mile Connectivity/Joint Bike-Ped Facilities	Etowah Greenway	Cherokee County Line	Dawson County Line	\$ 6,522,000	Proposed	Multi-Use Trail
FTP-196	2015 Bike Ped Plan		Last Mile Connectivity/Joint Bike-Ped Facilities	Chattahoochee River Trail - Phase 1	McGinnis Ferry Road	Southers Circle	\$ 3,943,000	Proposed	Multi-Use Trail
FTP-199	2015 Bike Ped Plan		Last Mile Connectivity/Joint Bike-Ped Facilities	Chattahoochee River Trail - Phase 2	Southers Circle	Lake Lanier	\$ 5,062,000	Proposed	Multi-Use Trail
FTP-200	2017 FTP		Roadway-General Purpose Capacity(New)	Bannister Road Realignment	Bannister Road	Dr. Bramblett Road	\$ 9,465,000	Proposed	New Alignment 0 to 4 Lanes
FTP-201	2017 FTP		Roadway-General Purpose Capacity(New)	Spot Road Connector (306 Extension)	Spot Road	SR 306 (Keith Bridge Road)	\$ 10,567,000	Proposed	New Alignment 0 to 4 Lanes

ID	Project Source	Source ID	Project Type	Project Name	From	TO	Cost	Status	Description
FTP-202	2017 FTP		Roadway-General Purpose Capacity(New)	Sawnee Drive Extension	SR 9 (Dahlonega Highway)	Pilgrim Mill Road	\$ 2,407,000	Proposed	New Alignment 0 to 2 Lanes
FTP-204	2017 FTP		Roadway-General Purpose Capacity(New)	Bethelview Road to Castleberry Road Connector	Bethelview Road	Castleberry Road	\$ 15,544,000	Proposed	New Alignment 0 to 4 Lanes
FTP-220	2017 FTP		Roadway-General Purpose Capacity	SR 306 (Keith Bridge Road) Widening	SR 369 (Browns Bridge Road)	GA 400	\$ 10,280,000	Proposed	Widening from 4 to 6 Lanes
FTP-221	2017 FTP		Roadway-General Purpose Capacity	SR 306 (Keith Bridge Road) Widening	SR 369 (Browns Bridge Road)	SR 53 (Dawsonville Highway)	\$ 54,032,000	Proposed	Widening from 4 to 6 Lanes
FTP-246	2017 FTP		Roadway-General Purpose Capacity(New)	Tribble Road-Heardsville Road Connector	Heardsville Road	Tribble Road	\$ 2,407,000	Proposed	New Alignment 0 to 2 Lanes
FTP-247	2017 FTP		Roadway-General Purpose Capacity(New)	Holtzclaw Road Extension	SR 369	SR 306 via Rowe Lane	\$ 2,250,000	Proposed	New Alignment from 0 to 2 Lanes
FTP-248	2017 FTP		Roadway-General Purpose Capacity(New)	Leland Drive Extension	Leland Drive	Smith Drive	\$ 2,500,000	Proposed	New Alignment from 0 to 2 Lanes
FTP-263	2017 FTP		Roadway-Reclamation	Julian Road Roadway Reclamation	Happy Hollow Trail	Highway 53 (Dawsonville Highway)	\$ 744,800	Proposed	Road Reclamation
FTP-344	2017 FTP		Roadway-Operations (Intersection)	Heardsville Circle @ Pooles Mill Road	Heardsville Circle	Pooles Mill Road	\$ 850,000	Proposed	Roundabout or realignment
FTP-69	2017 FTP		Roadway-General Purpose Capacity	Castleberry Road Widening	SR 9	Bethelview Road	\$ 31,346,000	Proposed	Widening from 2 to 4 Lanes

Appendix A. Traffic Calming Policy Manual for Local Streets and Subdivisions

Introduction

This *Traffic Calming Policy Manual for Local Streets and Subdivisions* was created as a companion to the Forsyth County Comprehensive Transportation Plan of 2017. This manual is designed to inform both county officials and community members when considering traffic calming measures along existing 2-lane local, residential, and/or subdivision street. The traffic calming treatments listed in this appendix have been vetted through a value analysis and are considered appropriate for local and subdivision streets in Forsyth County.

New streets should follow Forsyth County Engineering standards, consider the needs of people driving, biking and walking, and consider traffic calming elements as part of installation. Measures outlined within are offered for consideration when retrofitting existing streets and fall into three broad categories:

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. STREETSIDE MODIFICATIONS <ol style="list-style-type: none"> 1A. Vehicle Activated Signs 1B. Curb and Landscaping 1C. Street Lights/Vertical Elements
 3. LANE AND DIRECTIONAL CHANGES <ol style="list-style-type: none"> 3A. Curb Extensions 3B. On-Street Parking 3C. Chicanes 3D. Road Diet | <ol style="list-style-type: none"> 2. PHYSICAL BARRIERS <ol style="list-style-type: none"> 2A. Speed Humps/Speed Tables 2B. Diverters 2C. Center Medians/Traffic Islands 2D. Roundabouts/Traffic Circles |
|---|---|

Recognizing that not every traffic calming modification works in every situation, this manual includes a summary and thresholds matrix to help community members and county officials determine which measures are most appropriate for targeted street segments. The value analysis evaluates six conditions and answers key questions:

Overall Effectiveness

- How effective is the measure at calming traffic/slowing speeds?

Pedestrian Benefit

- Can the measure increase pedestrian safety and comfort?

Multiple Locations

- How location specific is this measure and can it be used along any street?

Impact to Vehicles

- Does the measure have adverse effects on vehicles?

Cost to Install

- Does the measure have a higher upfront cost than other measures?

Maintenance Over Time

- Will the county or community have to maintain the installation?

Table 29: Value Analysis Matrix

	Overall Effectiveness	Pedestrian Benefit	Multiple Locations	Impact to Vehicles	Cost to Install	Maintenance Over Time
1. Streetside Modifications						
1A. Vehicle Activated Signs	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●
1B. Curb and Landscaping	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●
1C. Street Lights/Vertical Elements	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●
2. Physical Barriers						
2A. Speed Humps/Speed Tables	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●
2B. Diverters	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●
2C. Center Medians/Traffic Islands	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●
2D. Roundabouts/Traffic Circles	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●
3. Lane/Directional Changes						
3A. Curb Extensions	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●
3B. On-Street Parking	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●
3C. Chicanes	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●
3D. Road Diet	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●

● Desirable Impacts ● Undesirable Impacts

Thresholds and Guidelines

Minimum Requirements

In order for installation of traffic calming measures to be considered, the following criteria must be met:

1. Only streets classified as Local or Residential (also known as local roads or subdivision streets) with posted speeds of 35 mph or less should be eligible for Traffic Calming Measures outlined within.
2. Traffic Calming Measures should not divert traffic to nearby local roads and/or subdivision streets.
3. Emergency vehicle access must be preserved and consideration given to school bus, sanitation vehicle, and future transit access.
4. Pedestrian and bicycle access must be preserved, considered, and/or accommodated when possible.

Forsyth County will not paint centerline or other street striping for local and subdivision roads. The effect of this type of road marking will often increase speeds to levels not appropriate for local and subdivision roads.

Table 30: Traffic Calming Treatment Thresholds

1. STREETSIDE MODIFICATIONS			
1A. Vehicle Activated Signs	Type of Streets:	Appropriate for all local roads/subdivision streets	
	Speed Limits:	Appropriate for all speed limits, no limitation	
	Design Vehicles:	Appropriate for all vehicles, no limitation	
	Street Grades:	Appropriate for all street grades, no limitation	
	Existing Policy:	Forsyth County Speed Zone Ordinance, 2015	
1B. Curb and Landscaping	Types of Streets:	Appropriate for all local roads/subdivision streets	
	Speed Limits:	Appropriate for all speed limits, no limitation	
	Design Vehicles:	Appropriate for all vehicles, no limitation	
	Street Grades:	Appropriate for all street grades, no limitation	
	Existing Policy:	Ordinance 101	
1C. Street Lights/Vertical Elements	Types of Streets:	Appropriate for all local roads/subdivision streets	
	Speed Limits:	Appropriate for all speed limits, no limitation	
	Design Vehicles:	Appropriate for all vehicles, no limitation	
	Street Grades:	Appropriate for all street grades, no limitation	
	Existing Policy:	Ordinance 101	
2. PHYSICAL BARRIERS			
2A. Speed Humps/Speed Tables	Types of Streets:	Appropriate for local roads/subdivision streets with traffic volumes less than 3,000 vehicles per day	
	Speed Limits:	30 mph or less	
	Design Vehicles:	Appropriate for all vehicles avoid placement along emergency vehicle routes	
	Street Grades:	Speed Humps:	Not recommended on streets in excess of 8%
		Speed Tables:	Not recommended on streets in excess of 6%
	Existing Policy:	Forsyth County Speed Hump Policy, 1996	

2B. Diverters	Types of Streets:	Appropriate for all local roads/subdivision streets
	Speed Limits:	30 mph or less
	Design Vehicles:	Same design vehicles used in the original street design, provided full lane width throughout the diversion
	Street Grades:	Not recommended on streets in excess of 6%
	Existing Policy:	No existing adopted County policy
2C. Center Medians/Traffic Islands	Types of Streets:	Appropriate for all local roads/subdivision streets
	Speed Limits:	35 mph or less
	Design Vehicles:	Same design vehicles used in the original street design appropriate for emergency vehicle routes
	Street Grades:	Not recommended on streets in excess of 8%
	Existing Policy:	No existing adopted County policy
2D. Roundabouts/Traffic Circles	Types of Streets:	Appropriate for all local roads/subdivision streets
	Speed Limits:	40 mph or less
	Design Vehicles:	Predominately passenger vehicles
	Street Grades:	Not recommended on streets in excess of 6%
	Existing Policy:	No existing adopted County policy
3. Lane/Directional Changes		
3A. Curb Extensions	Types of Streets:	Appropriate for local roads/subdivision streets, including two-lane, two way streets or one lane, one-way streets
	Speed Limits:	35 mph or less
	Design Vehicles:	Primarily the same design vehicles used in the original street design
	Street Grades:	Not recommended on streets in excess of 6%
	Existing Policy:	No existing adopted County policy
3B. On-Street Parking	Types of Streets:	Appropriate for local roads/subdivision streets Parking lanes should be 7-10 ft wide from face of curb
	Speed Limits:	35 mph or less
	Design Vehicles:	Predominately passenger vehicles rather than trucks
	Street Grades:	Not recommended on streets in excess of 6%
	Existing Policy:	No existing adopted County policy
3C. Chicanes	Types of Streets:	Appropriate for local roads/subdivision streets/ Streets may be, two-way or one-way streets
	Speed Limits:	25 mph or less
	Design Vehicles:	Same design vehicles used in the original street design, provided full lane width throughout the chicane
	Street Grades:	Effective in both level and steep topography
	Existing Policy:	No existing adopted County policy
3D. Road Diet	Types of Streets:	Appropriate for local roads/subdivision streets
	Speed Limits:	Appropriate for all speed limits, no limitation
	Design Vehicles:	Same design vehicles used in original street design
	Street Grades:	Appropriate for all street grades, no limitation
	Existing Policy:	No existing adopted County policy

Streetside Modifications

Vehicle-Activated Signs

DESCRIPTION:

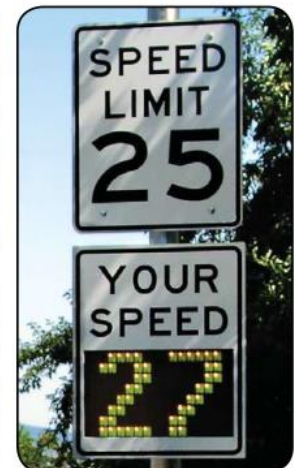
Vehicle-Activated Signs react dynamically to the speed of individual vehicles traveling along streets. These signs display illuminated messages, typically an approaching vehicle's speed, in real time. These signs are most often paired with a posted speed limit sign.

Vehicle-Activated Signs can be either permanently installed (affixed to a pole) similar to standard traffic signs, temporary installations (often as part of a movable trailer system), or a combination of both.

These signs are most effective when paired with speed enforcement via law enforcement officers, cameras, and license plate readers. Forsyth Sheriff's Office has speed trailers that can be used for temporary setup.

A system of Vehicle-Activated Signs can also record speeds and inform traffic studies and decisions associated with longer term traffic mitigation and calming measures.

Vehicle-Activated Signs can be used along any street but are most effective where speeding is a major concern and funds, conditions, or other circumstances prohibit the use of other traffic calming measures outlined within.



VALUE ANALYSIS:

OVERALL EFFECTIVENESS



PEDESTRIAN BENEFIT



MULTIPLE LOCATIONS



IMPACT TO VEHICLES



COST TO INSTALL



MAINTENANCE OVER TIME



PROS

- MOST AFFORDABLE OPTION
- CAN BE TEMPORARY AND/OR PORTABLE
- NO REQUIRED INFRASTRUCTURE OR ROADWAY CHANGES

CONS

- LEAST EFFECTIVE WHEN NOT PAIRED WITH ENFORCEMENT
- DOES NOT STRONGLY BENEFIT PEDESTRIANS

Curb and Landscaping

DESCRIPTION:

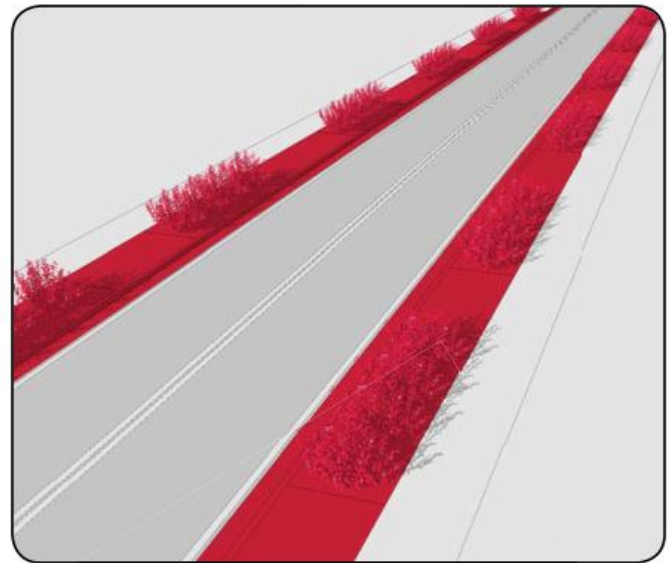
Street sections including a hard curb, combined with narrowed travel lanes, and vertical landscaping and ground cover located in proximity to the curb can be used to effectively calm traffic. The addition of a landscaped planting strip between the road edge/curb and sidewalk creates a feeling a safety for pedestrians and helps slow traveling vehicles.

Vertical elements, such as low grasses and bushes within the planting strip, are the most effective landscaping elements to calm speeds.

When appropriately designed, landscaped sections can also help manage stormwater runoff. Rain gardens are effective in proximity to the curb.

LOCATIONS:

Curb and landscaping can be used along any street, but often within a more urban area. Must conform to clear zone offset requirements. Trees should be planted in back section of right-of-way.



VALUE ANALYSIS:

OVERALL EFFECTIVENESS



IMPACT TO VEHICLES



PEDESTRIAN BENEFIT



COST TO INSTALL



MULTIPLE LOCATIONS



MAINTENANCE OVER TIME



PROS

- HELPS WITH STORMWATER MANAGEMENT
- SUPPORTS PEDESTRIANS BY CREATING A PROTECTED/BUFFERED STREET EDGE

CONS

- UPFRONT COSTS
- OFTEN USED IN MORE URBAN AREAS

Street Lights/Similar Vertical Elements

DESCRIPTION:

Vertical Elements used to calm traffic are mostly provided in the form of properly located and spaced street lights. Other vertical objects, including transit shelters, public art, and building facades built to the street edge can be utilized to calm vehicle speeds along adjacent street.

Street lights and other vertical elements create a sense of enclosure that can subconsciously slow people driving. When used in a pattern these objects can calm speeds, improve aesthetics, and enhance public safety without major impact on the street itself.

LOCATIONS:

While Streetside Vertical Elements are most often deployed in urban settings, they can be utilized almost anywhere that has need for reduced speeds and traffic calming that cannot be accomplished through modifications to the roadway.

VALUE ANALYSIS:

OVERALL EFFECTIVENESS



IMPACT TO VEHICLES



PEDESTRIAN BENEFIT



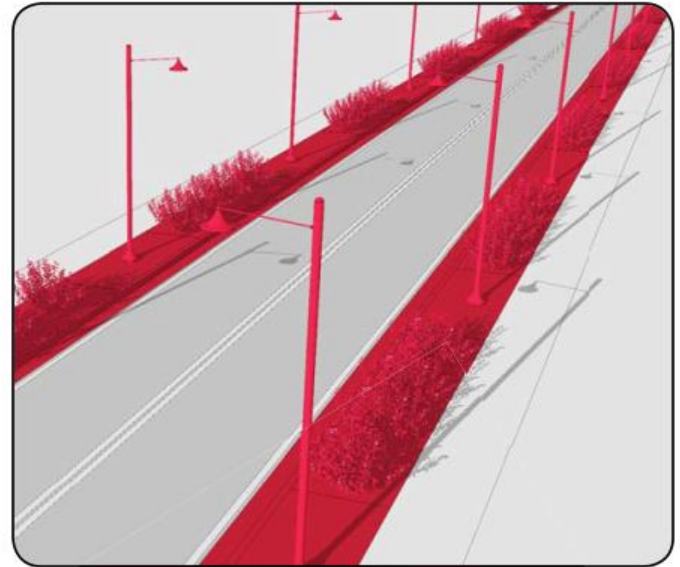
COST TO INSTALL



MULTIPLE LOCATIONS



MAINTENANCE OVER TIME



PROS

- LIGHTING CAN IMPROVE PUBLIC SAFETY
- ADDED VISUAL APPEAL
- PEDESTRIAN ENVIRONMENT/SENSE OF PLACE

CONS

- MULTIPLE FACTORS TO CONSIDER INCLUDE: LOCATION, SPACING, AND LIGHT QUALITY
- LIGHTING CAN IMPACT ADJACENT PROPERTIES
- Possible R.O.W ACQUISITION

Physical Barriers

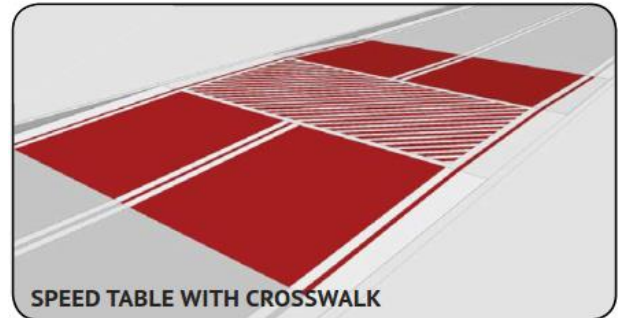
Speed Tables and Raised Crosswalks

DESCRIPTION:

Speed Tables are raised roadway features that compel drivers to slow down when approaching. These devices are most effective when deployed in evenly spaced sets instead of individually.

Speed Tables utilize a flat top with ramps leading up and down to the peak. Speed tables are often paired with pedestrian crossings and/or curb extensions (3A). Speed tables can also include “Raised Intersections” which include the central portion of an intersection and its approach ramps. Speed Tables cause less damage to vehicles.

Consideration should be given to the design of Speed Tables to accommodate people driving, walking and biking. This includes both pedestrian crosswalks and vehicular stop bars. Stormwater should be considered prior to installation.



VALUE ANALYSIS:

OVERALL EFFECTIVENESS



PEDESTRIAN BENEFIT



MULTIPLE LOCATIONS



IMPACT TO VEHICLES



COST TO INSTALL



MAINTENANCE OVER TIME



PROS

- AN EFFECTIVE AND AFFORDABLE OPTION
- LITTLE INFRASTRUCTURE CHANGE REQUIRED AT INSTALLATION
- TEMPORARY OR PERMANENT OPTIONS

CONS

- CAN CAUSE VEHICULAR DAMAGE
- SLOWS EMERGENCY VEHICLES
- CAN IMPEDE BICYCLISTS
- REQUIRES MAINTENANCE OVER TIME

Diverter

DESCRIPTION:

A diverter is a raised median/island built at or in an intersection. Diverter are most often used to restrict left-hand turning movements at busy intersections.

A traffic calming diverter is usually used along two-lane streets with multi-directional traffic and can be placed either across both lanes of traffic or a single lane depending on the desired result.

The three common traffic calming diverters include:

- Right-Turn Diverters
- Split (or Diagonal) Diverters
- Central Diverters

LOCATIONS:

Diverters can be placed in a variety of intersections depending on the desired outcome. Right-Turn Diverters are often utilized at major intersections to create a right turn lane. These diverters are also utilized in some multi-directional applications to prevent crossing traffic or making left-hand turning movements at certain intersections.

Split and Central Diverters are most often used in residential neighborhoods with preexisting intersections as a way to prevent or mitigate cut-through traffic.

Diverters can also be installed in a temporary manner using bollards or planters to determine the long-term feasibility of the measure.

VALUE ANALYSIS:

OVERALL EFFECTIVENESS



PEDESTRIAN BENEFIT



MULTIPLE LOCATIONS



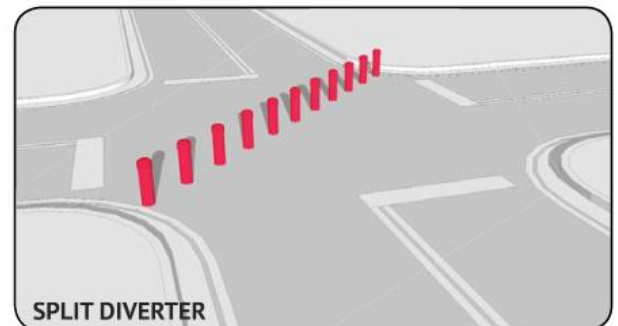
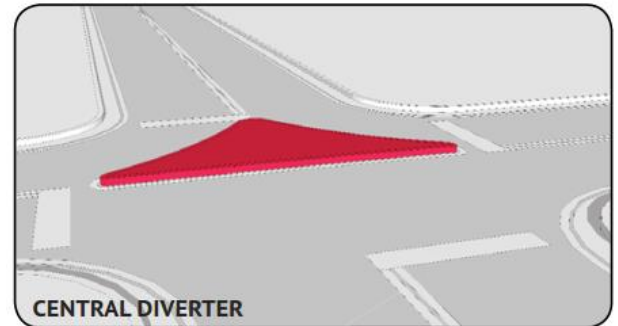
IMPACT TO VEHICLES



COST TO INSTALL



MAINTENANCE OVER TIME



PROS

- WORKS WITHIN EXISTING INFRASTRUCTURE
- TRAFFIC GOES IN A CONSISTENT DIRECTION
- AFFORDABLE APPLICATION
- TEMPORARY OR PERMANENT OPTIONS

CONS

- CAN BE LESS INTUITIVE
- DISRUPTS STREET NETWORK
- DRIVERS CAN IGNORE/NAVIGATE AROUND
- CAN APPEAR TO BE AN AFTERTHOUGHT (VISUALLY)

Center Medians/Traffic Islands

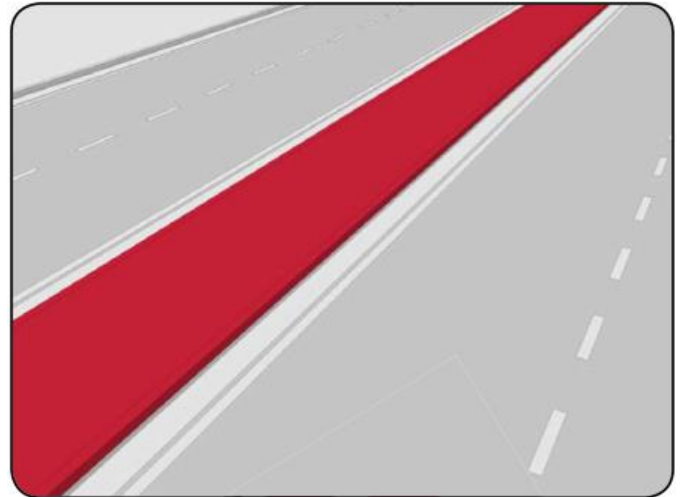
DESCRIPTION:

A median or island is an area that divides traffic traveling in opposite directions along a roadway and restricts the turning movements of cross-traffic. Medians can be either raised or recessed into the grade and most often include a mix of decorative hardscape or landscape elements. Medians can create an area of refuge for people crossing wide roadways and local streets.

Landscaped medians can provide stormwater benefits by slowing down and/or treating stormwater runoff as well as traffic calming by reducing the lane width (3D) and creating visual enclosure when combined with vertical elements (1C).

LOCATIONS:

Center medians and traffic islands are used almost exclusively on multi-directional roadways with higher traffic counts as their cost effectiveness rarely benefit smaller scaled sections.



VALUE ANALYSIS:

OVERALL EFFECTIVENESS



IMPACT TO VEHICLES



PEDESTRIAN BENEFIT



COST TO INSTALL



MULTIPLE LOCATIONS



MAINTENANCE OVER TIME



PROS

- CREATES A BETTER ENVIRONMENT FOR PEDESTRIANS CROSSING MULTI-LANE ROADS
- INCREASES LANDSCAPING
- LIMITS CROSS-TRAFFIC TURNING MOVEMENTS

CONS

- EXPENSIVE TO BUILD
- LIMITED APPLICATION
- MAINTENANCE

Roundabouts/Traffic Circles

DESCRIPTION:

Roundabouts are circular intersections used to reduce conflicts and calm traffic and are often placed along highways in lieu of traffic signals or stop signs. Roundabouts minimize the likelihood of collisions by reducing traffic speed and “t-bone” or head-on collisions.

Neighborhood traffic circles are typically much smaller than roundabouts and often replace stop signs at local four-way intersections. They are often installed within residential areas to slow traffic and reduce accidents. Traffic Circles typically limit vehicle size and are designed to prevent access/cut-through traffic by larger vehicles.

Traffic direction and slower speeds make roundabouts and traffic circles safer for pedestrians and bicyclists.

LOCATIONS:

Traffic circles can be used at a variety of intersections, however their use is often limited by their scale and the amount of right of way available.

Traffic calming roundabouts are typically recommended for two lane multi-directional streets as there are other more cost effective measures to use on larger street systems. Roundabouts on large street sections should only be proposed to help with traffic flow efficiency.

VALUE ANALYSIS:

OVERALL EFFECTIVENESS



PEDESTRIAN BENEFIT



MULTIPLE LOCATIONS



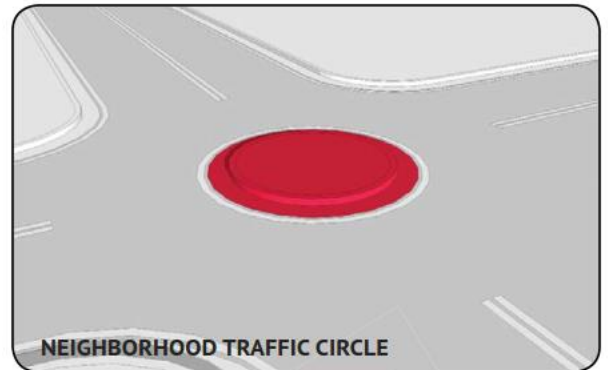
IMPACT TO VEHICLES



COST TO INSTALL



MAINTENANCE OVER TIME



PROS

- INCREASES AREA LANDSCAPING
- MORE EFFICIENT VEHICLE MOVEMENT
- OFTEN REDUCES VEHICULAR ACCIDENTS
- CAN CREATE A GATEWAY OR SENSE OF PLACE

CONS

- EXPENSIVE
- CAN BE LESS INTUITIVE TO NAVIGATE
- REQUIRES RIGHT OF WAY ACQUISITION

Lane and Directional Changes

Curb Extensions

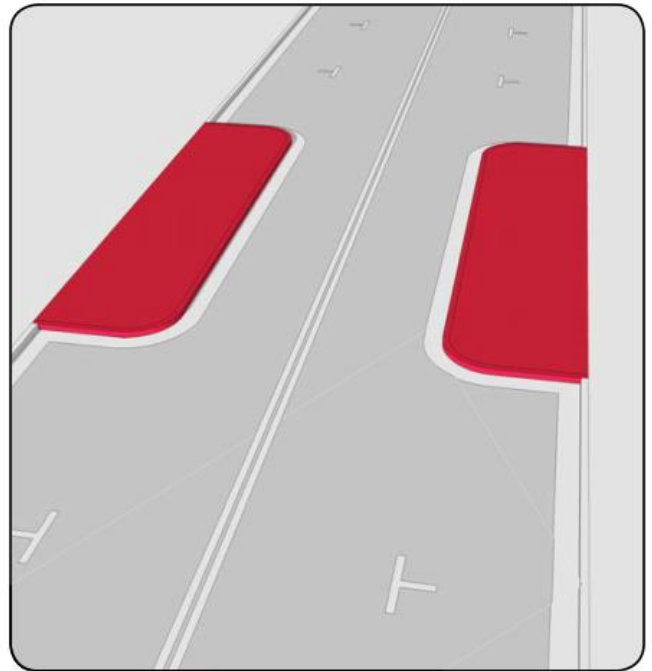
DESCRIPTION:

Curb Extensions (also known as “choakers” or “bulb-outs”) are a reduction in the number of the lanes at a point along a street. Curb extensions are often used along urban street sections and most effective when paired with vertical elements (1C) and on-street parking (3B).

Curb extensions are utilized to create a narrower pinch-point where drivers subconsciously slow down to navigate through the restrictive area.

LOCATIONS:

Curb extensions are often utilized along one lane or two lane multi-directional streets with on-street parking, curbs, and landscaping.



VALUE ANALYSIS:

OVERALL EFFECTIVENESS



PEDESTRIAN BENEFIT



MULTIPLE LOCATIONS



IMPACT TO VEHICLES



COST TO INSTALL



MAINTENANCE OVER TIME



PROS

- WORKS WITH EXISTING INFRASTRUCTURE
- HIGHLIGHTS AND PRIORITIZES PEDESTRIANS
- INCREASES AREA LANDSCAPING

CONS

- EXPENSIVE DUE TO IMPLICATIONS TO STORMWATER INFRASTRUCTURE
- LIMITED APPLICATION

On-Street Parking

DESCRIPTION:

Vehicular speeds fall noticeably with the presence of parked vehicles along a street (whether continuous or intermittent) which can narrow the perceived available width of the travel lanes. The presence of parked vehicles provides additional benefits by creating a safety barrier between pedestrians and traveling vehicles.

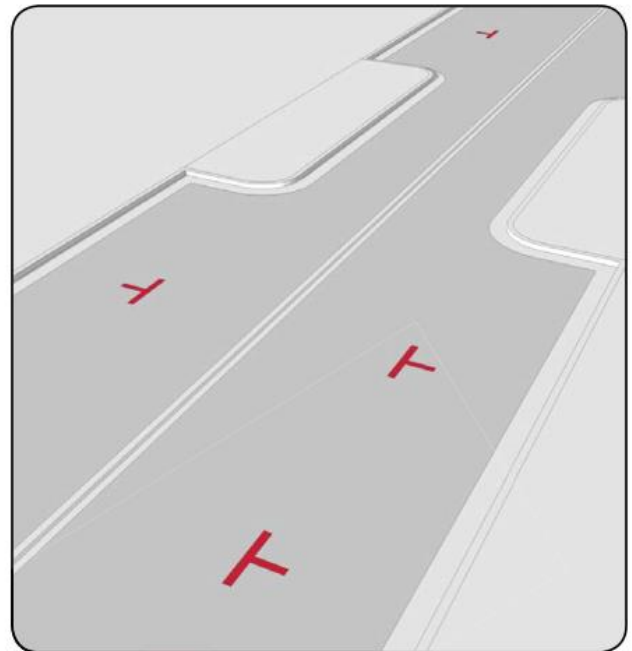
On-street parking helps reduce speeds as drivers navigate more cautiously when forced to be aware of drivers entering and exiting the roadway.

On-street parking is typically configured in parallel spaces but can also be provided in angled or perpendicular configurations. The measure should be used in tandem with curb extensions (3A) to maximize its potential to calm traffic.

LOCATIONS:

On-street parking as a traffic calming measure is most often seen in street sections that have excess width and can accommodate a road diet (3D).

This measure should only be considered if there is a parking generator nearby. Without a generator, added on-street parking will sit vacant and not contribute to calming of the street.



VALUE ANALYSIS:

OVERALL EFFECTIVENESS



IMPACT TO VEHICLES



PEDESTRIAN BENEFIT



COST TO INSTALL



MULTIPLE LOCATIONS



MAINTENANCE OVER TIME



PROS

- CREATES PEDESTRIAN SAFETY BARRIER
- UTILIZES EXISTING EXCESS R.O.W
- CAN POTENTIALLY GENERATE REVENUE

CONS

- LIMITED APPLICATION
- EXPENSIVE IF ACQUIRING R.O.W IS REQUIRED
- NEEDS NEARBY PARKING GENERATOR(S)

Chicanes

DESCRIPTION:

A chicane is a change, or forced serpentine, in a street to create a “horizontal deflection.” Drivers must reduce speed to accommodate for the change in the vehicular path.

Chicanes are primarily used along single lane or two lane streets.

- Single Lane Chicanes consist of alternating curb extensions (3A) that work to narrow the road and force vehicles to adjust to a varying path.
- Two Lane Chicanes are primarily used on streets with multi-directional traffic. These chicanes require the use of a central island that acts as a diverter that keep vehicles in their lane of travel.

LOCATIONS:

Chicanes are primarily used along lower traffic count neighborhood streets or to lower the traffic counts along busy local roads and within residential districts. Streets suited for this treatment tend to have speeding problems due to non-local traffic “cutting through” a neighborhood. Streets and roads with significant grade changes are often appropriate for chicanes, as the downward slope tends to have higher rates of speeds.

Chicanes should not be utilized in high traffic areas where back-ups could create conflicts at intersections.

VALUE ANALYSIS:

OVERALL EFFECTIVENESS



PEDESTRIAN BENEFIT



MULTIPLE LOCATIONS



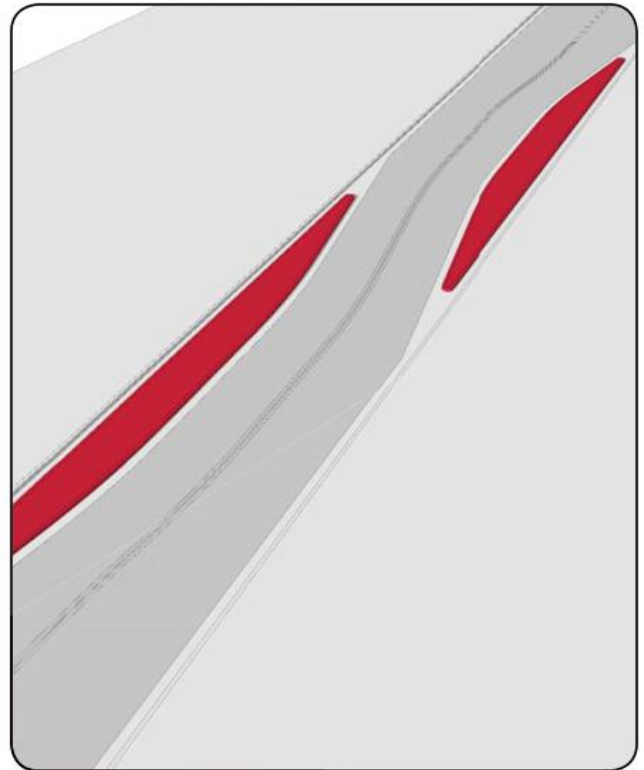
IMPACT TO VEHICLES



COST TO INSTALL



MAINTENANCE OVER TIME



PROS

- SIGNIFICANTLY REDUCES SPEED
- INCREASES AREA LANDSCAPING
- DISSUADES USE BY NON-LOCAL TRAFFIC
- REDUCES ACCIDENT COUNTS DUE TO SPEED

CONS

- COSTLY TO INSTALL
- CAN CAUSE BACK-UP IN TRAFFIC
- LIMITED TO CERTAIN APPLICATION AREAS

Road Diet

DESCRIPTION:

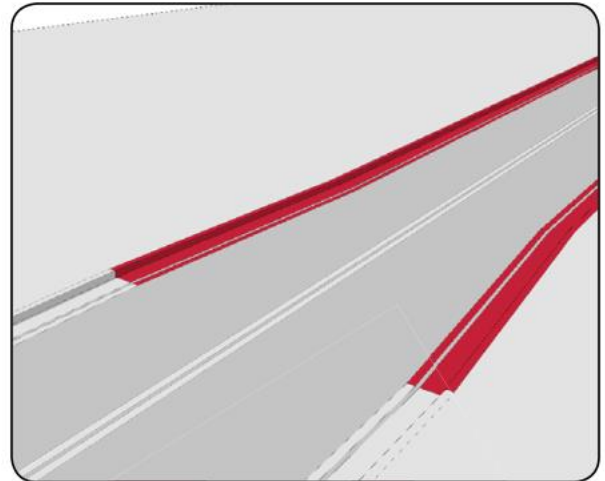
Road Diets take the existing curb to curb (or edge to edge) of a street and reduce its' width to create narrower travel lanes for vehicular traffic.

By reducing the widths of travel lanes, excess width can be converted into medians (2C) or curbside elements such as on-street parking (3B), sidewalks, bike lanes, or additional landscaping (1C).

One approach to establishing a road diet is by using temporary paint and movable barriers to create a pilot or test case. This allows for the results to be studied before investing in a permanent measure.

LOCATIONS:

Only streets with excess pavement (typically within the actual lanes) should be utilized for road diets. The amount of excess pavement paired with surrounding development determines what features will be created with the additional space generated from the road diet.



VALUE ANALYSIS:

OVERALL EFFECTIVENESS



IMPACT TO VEHICLES



PEDESTRIAN BENEFIT



COST TO INSTALL



MULTIPLE LOCATIONS



MAINTENANCE OVER TIME



PROS

- WORKS WITHIN EXISTING INFRASTRUCTURE
- ACCOMMODATES PEDESTRIAN AND BICYCLISTS
- AFFORDABLE
- TEMPORARY OR PERMANENT

CONS

- LIMITED APPLICATION
- CAN BE MET WITH COMMUNITY PUSH BACK

This page intentionally left blank



FORSYTH
← TRANSPORTATION →
PLAN ↓



JACOBS®