

Oglethorpe County Long Range Transportation Study

Stakeholder Advisory Committee
Meeting #2

October 15, 2013



AGENDA

- Project Purpose and Overview
- Existing & Future Conditions
- Needs Assessment and Potential Improvements
- Stakeholder Input
- Next Steps

Project Purpose and Overview

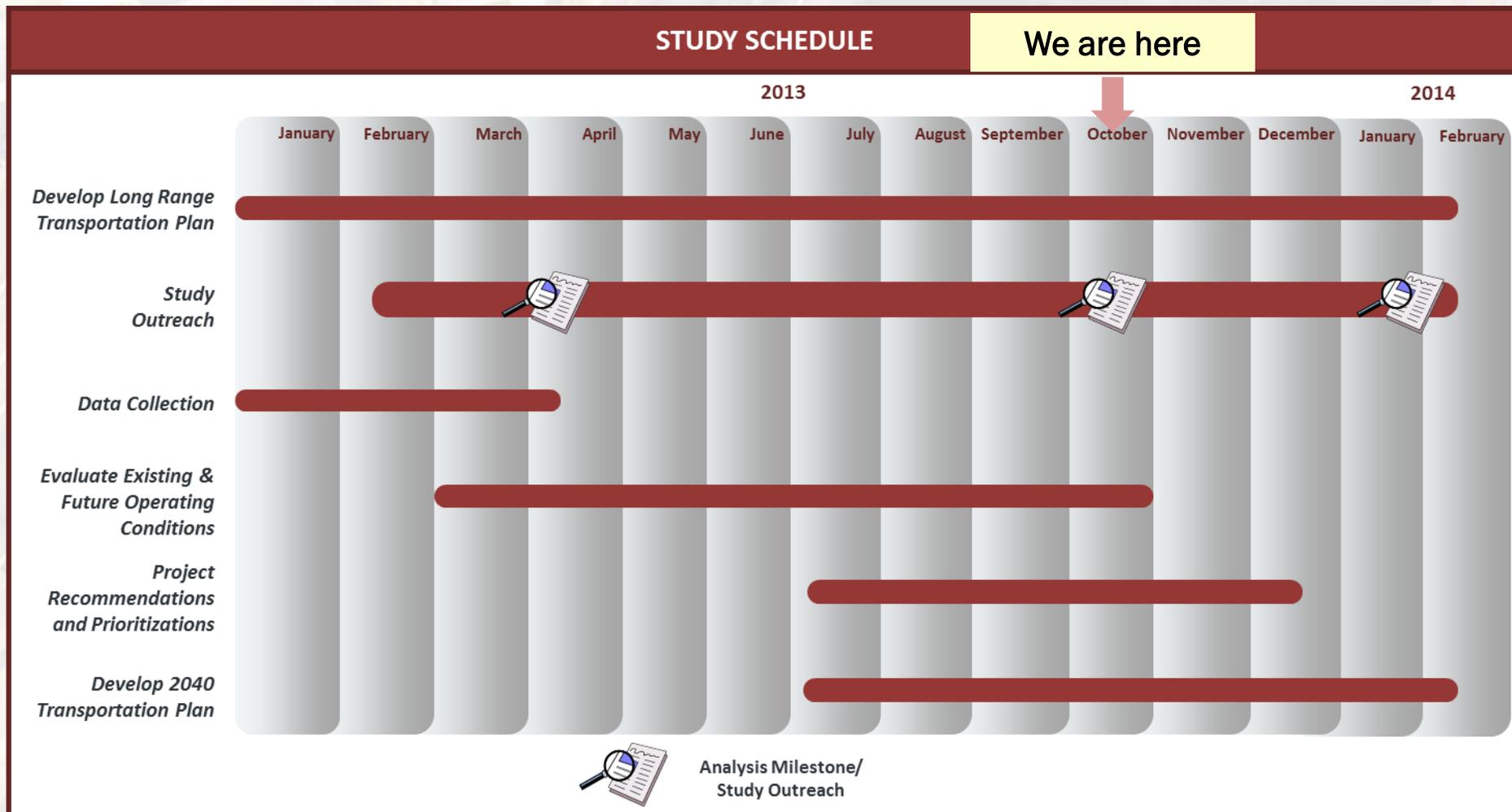


WHY DEVELOP A TRANSPORTATION PLAN?

- Ensure that Oglethorpe County and its municipalities are able to meet the current and future mobility needs of residents and businesses
- Ensure transportation priorities match community priorities
- Coordinate with other planning efforts
- Develop a listing of tiered transportation projects
- Early identification of funding issues and opportunities

SCHEDULE

Study Development: January 2013 – December 2013
 Final Documentation: December 2013 – February 2014



STUDY GOALS

- Goal 1:
 - Preserve the County's **rural, agricultural, natural, and environmental-sensitive** areas and enhance the character of the **historic and existing communities** in the County.
- Goal 2:
 - Optimize utilization of existing infrastructure and maintain a **safe, reliable and efficient** transportation network which will **sustain economic activity and promote economic development**.
- Goal 3:
 - Promote **environmental sustainability** through the coordination of **land use and transportation plans**.
- Goal 4:
 - Provide a range of **mobility options** and enhance **health and quality of life** for all residents.

STAKEHOLDER AND PUBLIC OUTREACH

- Stakeholder Advisory Group
- Fact Sheet
- Website
www.dot.ga.gov/oglethorpestudy
- Public Survey



Georgia Department of Transportation

FACT SHEET

OGLETHORPE COUNTY LONG RANGE TRANSPORTATION PLAN

FEBRUARY 2013

OGLETHORPE LRTP STUDY OVERVIEW

The Georgia Department of Transportation (GDOT) is developing a multimodal Long Range Transportation Plan (LRTP) for Oglethorpe County, Georgia. The purpose of this study is to determine the current and future transportation needs through the year 2040 for the county and to develop projects that address identified needs and promote economic vitality and quality of life.

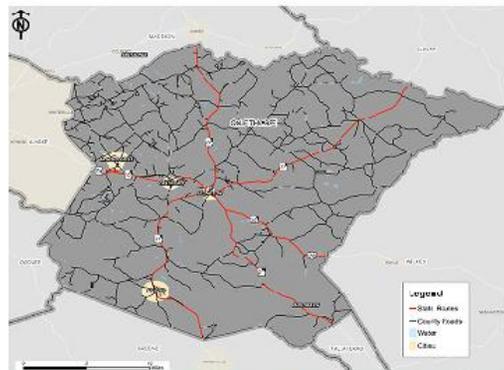
Much of Oglethorpe County is comprised of land that is characterized as rural, with low population and employment. Understanding this, the study will focus on small scale roadway improvements, such as passing lanes, intersection improvements, and paving projects as well as multimodal improvements (including public transportation, bicycle and pedestrian, rail and freight projects) that will serve the nature of the community while ensuring mobility into the future.

LRTP STUDY MILESTONES

Project Initiation	1st Quarter 2013
Stakeholder Coordination	Throughout
Development of Goals	2nd Quarter 2013
Public Survey	2nd Quarter 2013
Existing Conditions	2nd Quarter 2013
Future Conditions	3rd Quarter 2013
Environmental Analysis	3rd Quarter 2013
Recommendations	4th Quarter 2013
Final Report	1st Quarter 2014

WE NEED YOUR INPUT

The success of the long range planning process depends on the involvement and input of local residents, employees, business owners, and community leaders. Public outreach activities will be scheduled at key milestones in the study process to gather feedback and input from the community. A project website is available to allow the public to obtain the latest study information, submit comments, and view project documents such as online surveys and presentations, as they are developed. Please visit the project website at:
www.dot.ga.gov/oglethorpestudy



Legend:
- State Routes
- County Routes
- Water
- Cities

Study Location Map

CONTACT US:

For more information about the Oglethorpe County LRTP, please visit the project website at:
www.dot.ga.gov/oglethorpestudy

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STAKEHOLDER AND PUBLIC OUTREACH

- PUBLIC SURVEY

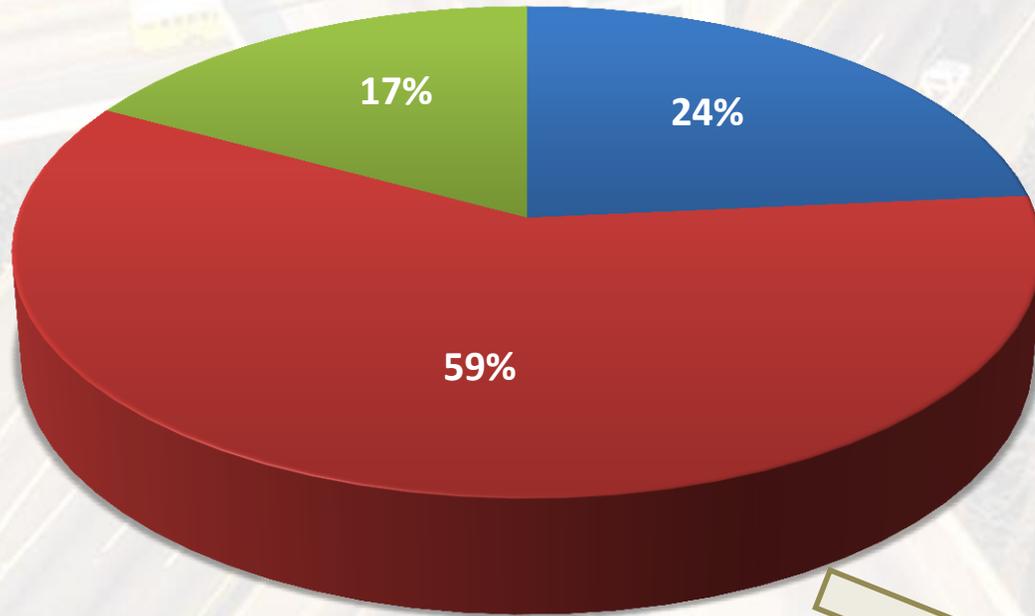
- 21 question survey developed covering
 - Commute patterns
 - Transportation improvement priorities
 - Issues on traffic operations, safety, trucks, road conditions, bridges, sidewalks and bicycle routes, and public transportation
- Distribution
 - Online Survey
 - County school system
- 188 surveys completed



The screenshot displays the Georgia Department of Transportation (GDOT) website. The header includes the GDOT logo and navigation links: Traveling in Georgia, Local Government, Doing Business, Projects, and Information Center. A prominent banner reads "SUGGEST A QUICK FIX" with a sub-link "Submit An Idea or Report An Operational Need" and a "LEARN MORE" button. A sidebar on the left lists "Projects" with sub-items: Featured Projects, Programs, Project Search TransPi, Public Outreach, and Studies. Under "Studies", several projects are listed, including "Atlanta to Athens", "Carroll County", "I-75 Study", "Interstate System Plan", "Managed Lanes", and "Metro Atlanta Operational Planning Study". The main content area features the "Oglethorpe County - Long Range Study" section, which includes a brief description of the study and a "Public Survey" link. A call-to-action box with a checkmark icon says "Give Us Your FEEDBACK!" and includes a "Complete Survey" button. A "Quick Links" sidebar on the right lists various resources: Consultants, Contact Directory, Contractors, Event Calendar, Express Lanes, Georgia Navigator/511, GeoTRAQS Online Mapping, Offices/Divisions, Permits, and State Transportation Board.

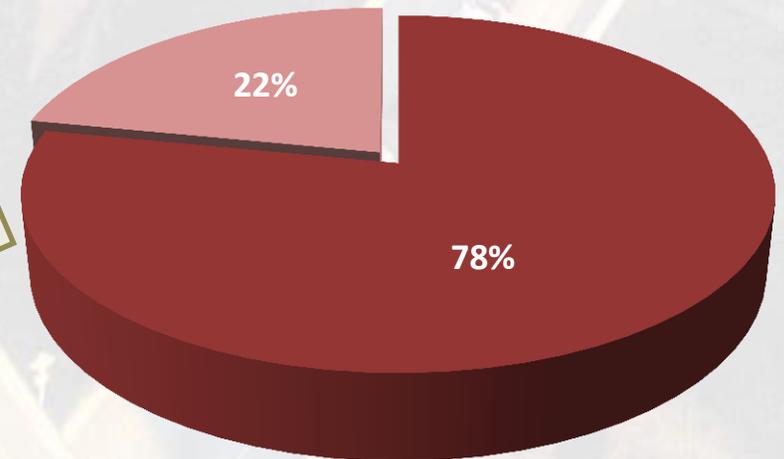
STAKEHOLDER AND PUBLIC OUTREACH - PUBLIC SURVEY

Commuter Patterns



- I commute to work within the County
- I commute outside of the County to work
- I do not commute to work outside of my home

- Athens-Clarke County
- Others



STAKEHOLDER AND PUBLIC OUTREACH - PUBLIC SURVEY

Transportation Improvement Priorities



PUBLIC SURVEY KEY OBSERVATIONS ON TRANSPORTATION NEEDS

- Improve traffic operations along US 78
 - US 78 @ Buddy Faust Road
 - US 78 @ Bunker Hill Road
 - US 78 @ SR 22
- Improve traffic operations and safety in the vicinity of the schools
- Improve roadway condition
- Some support for public transportation needs

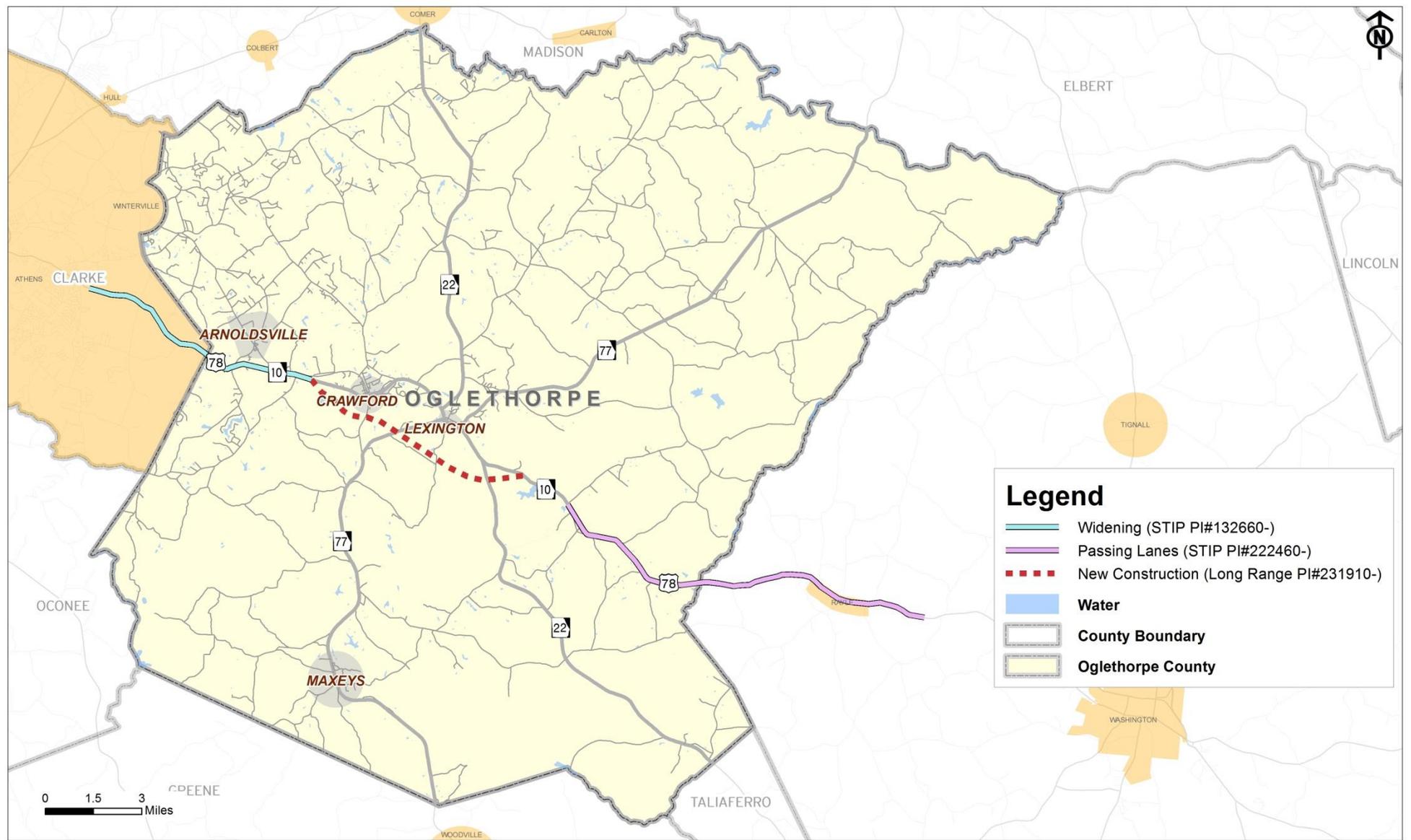
Existing & Future Conditions



DATA COLLECTION OVERVIEW

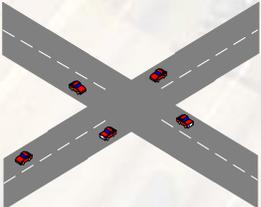
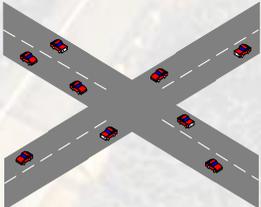
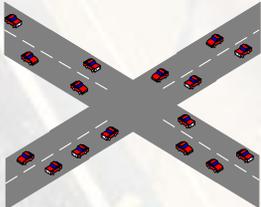
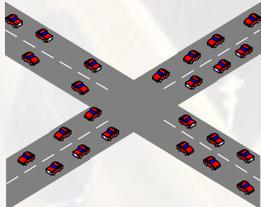
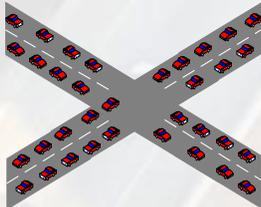
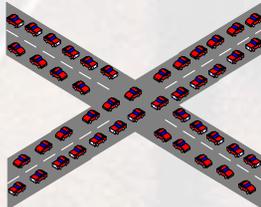
- Background Information and Studies
 - Transportation Documents
 - Land Use Planning Documents
- Multi-Modal
 - Roadway
 - Transit
 - Bicycle and Pedestrian
- Crash History
- Bridge Inventory
- Data to Support Travel Demand Model

PLANNED IMPROVEMENTS



ROADWAY OPERATING CONDITIONS

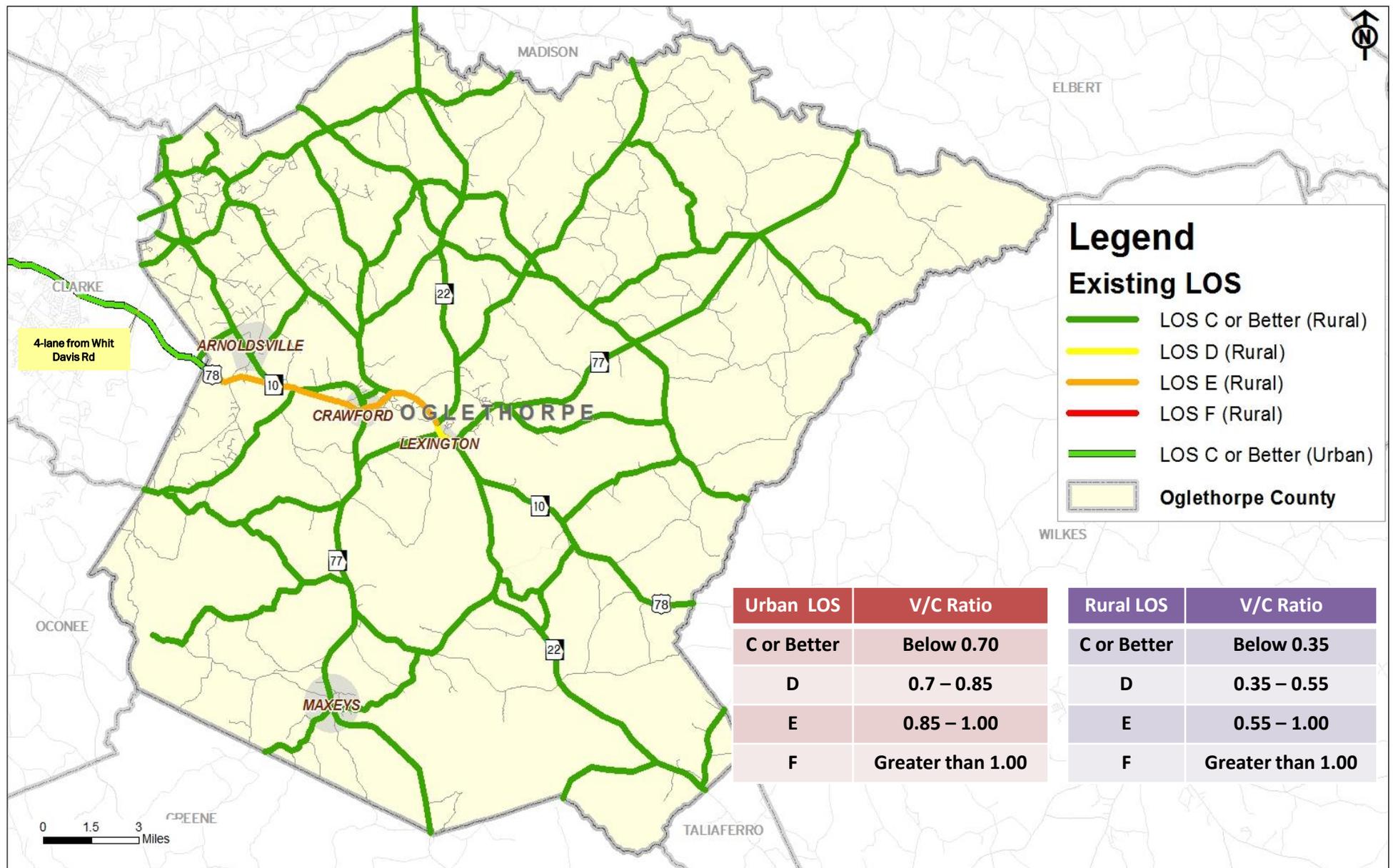
- Roadway operating conditions were evaluated using Level of Service (LOS)
- LOS compares volumes along the roadway to the capacity of that roadway
- LOS was derived using the Travel Demand Model
- Existing (2010) and Future (2040) Operating Conditions were Evaluated

LOS A	LOS B	LOS C	LOS D	LOS E	LOS F
					

TRAVEL DEMAND MODEL

- Expanded Athens MPO model to cover Oglethorpe County
- Model development is based on:
 - 2010 traffic counts
 - Census data
 - Employment information
 - School enrollment
 - Land use data
 - Socioeconomic forecasts
- Utilized results to identify potential improvements based on future needs

2010 LEVEL OF SERVICE



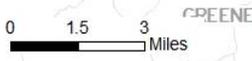
Legend

Existing LOS

- LOS C or Better (Rural)
- LOS D (Rural)
- LOS E (Rural)
- LOS F (Rural)
- LOS C or Better (Urban)
- Oglethorpe County

Urban LOS	V/C Ratio
C or Better	Below 0.70
D	0.7 – 0.85
E	0.85 – 1.00
F	Greater than 1.00

Rural LOS	V/C Ratio
C or Better	Below 0.35
D	0.35 – 0.55
E	0.55 – 1.00
F	Greater than 1.00



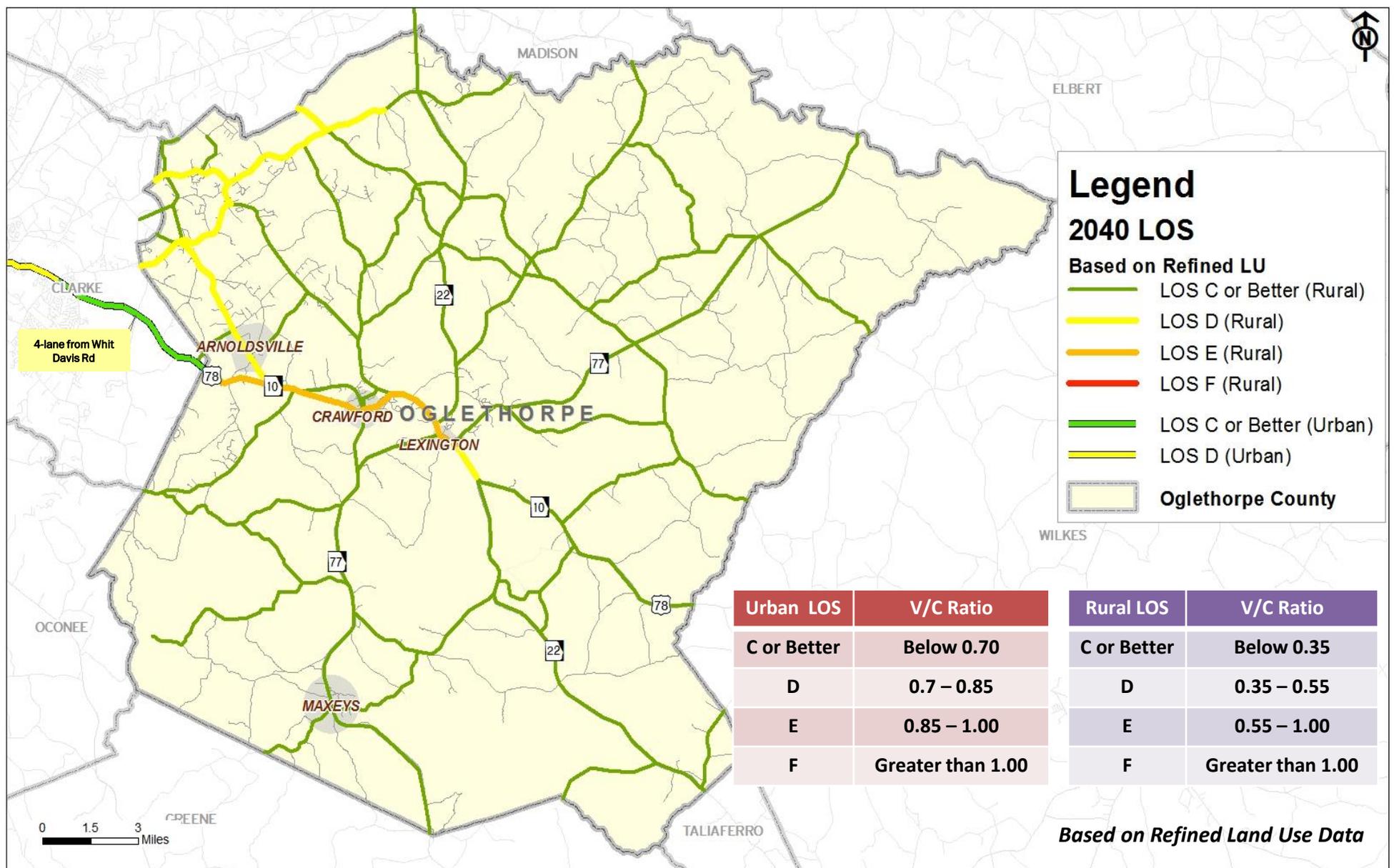
FUTURE SOCIO-ECONOMIC FORECASTS

- HIGHLIGHTS

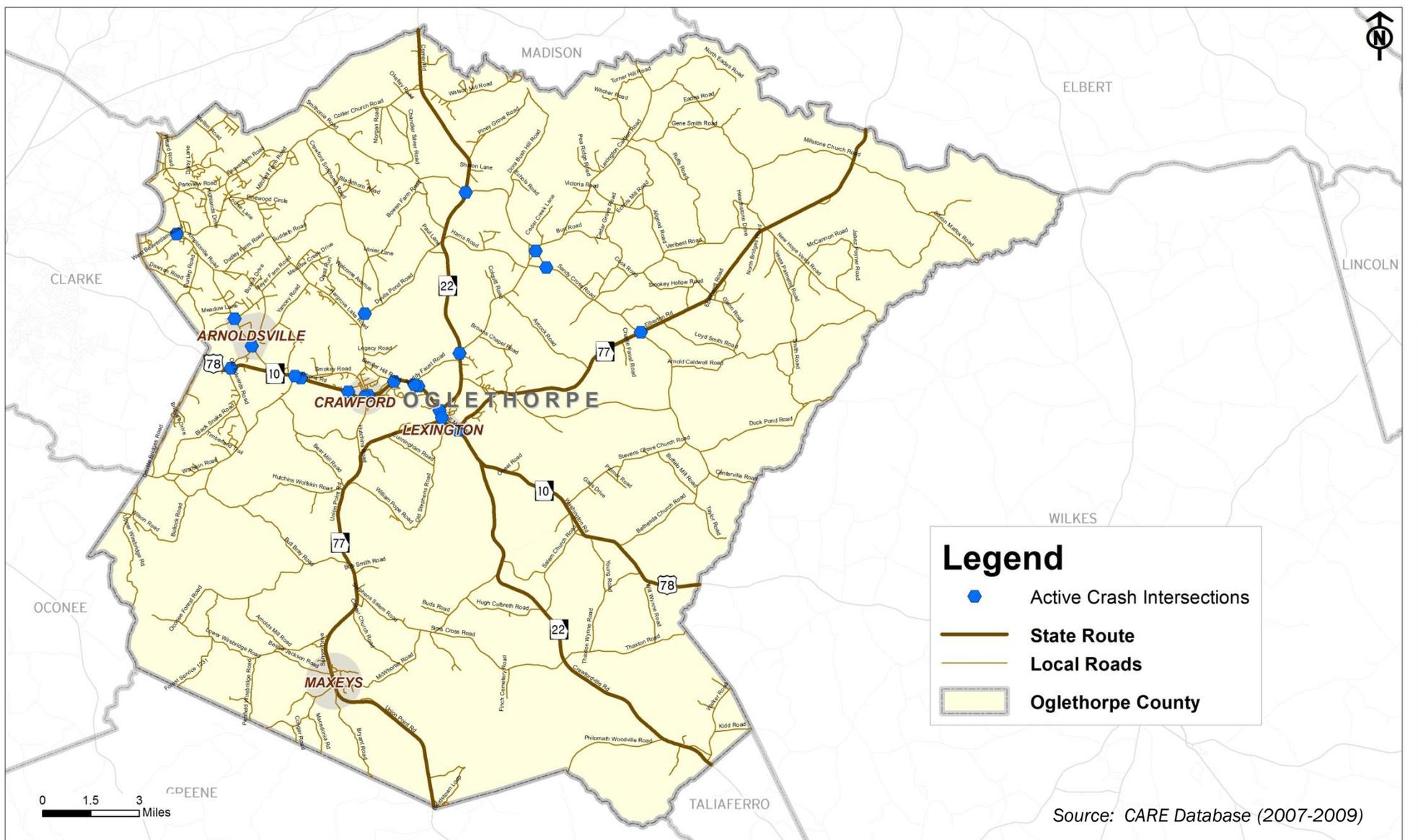
- 35% population increase between 2010 and 2040
- 43% employment increase between 2010 and 2040

Year	Population	Household	Employment
2010	14,899	6,484	1,537
2040	20,082	8,739	2,198
Change	5,183	2,255	661

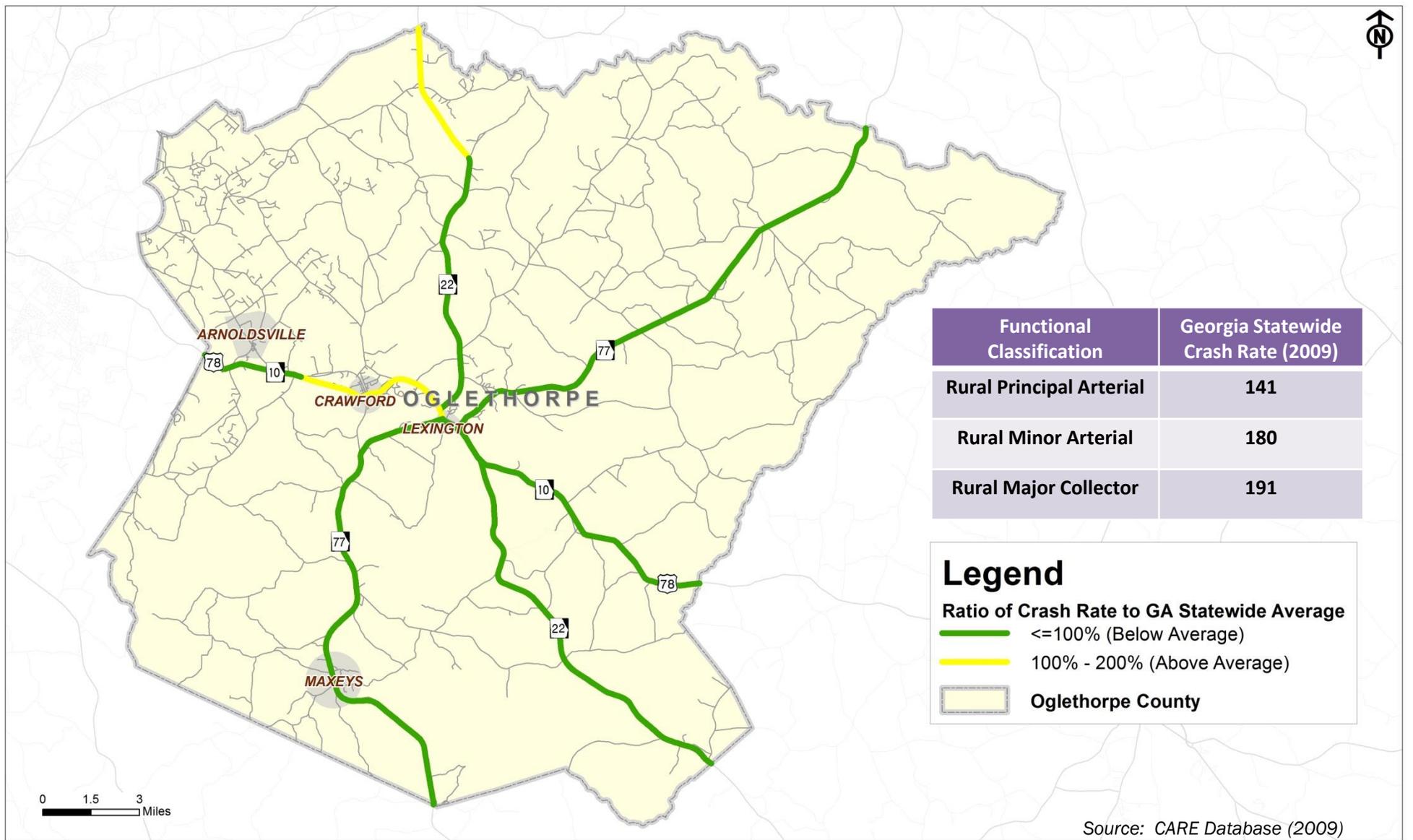
2040 LEVEL OF SERVICE (EXISTING NETWORK)



CRASH ANALYSIS



CRASH ANALYSIS



Functional Classification	Georgia Statewide Crash Rate (2009)
Rural Principal Arterial	141
Rural Minor Arterial	180
Rural Major Collector	191

Legend

Ratio of Crash Rate to GA Statewide Average

- <=100% (Below Average)
- 100% - 200% (Above Average)
- Oglethorpe County

Source: CARE Database (2009)

Needs Assessment and Potential Improvements



NEEDS ASSESSMENT AND POTENTIAL IMPROVEMENTS

- Roadway Needs and Improvements
- Intersection Needs and Improvements
- Bridge Upgrades Needs
- Bicycle and Pedestrian Facilities Assessment
- Public Transit Assessment

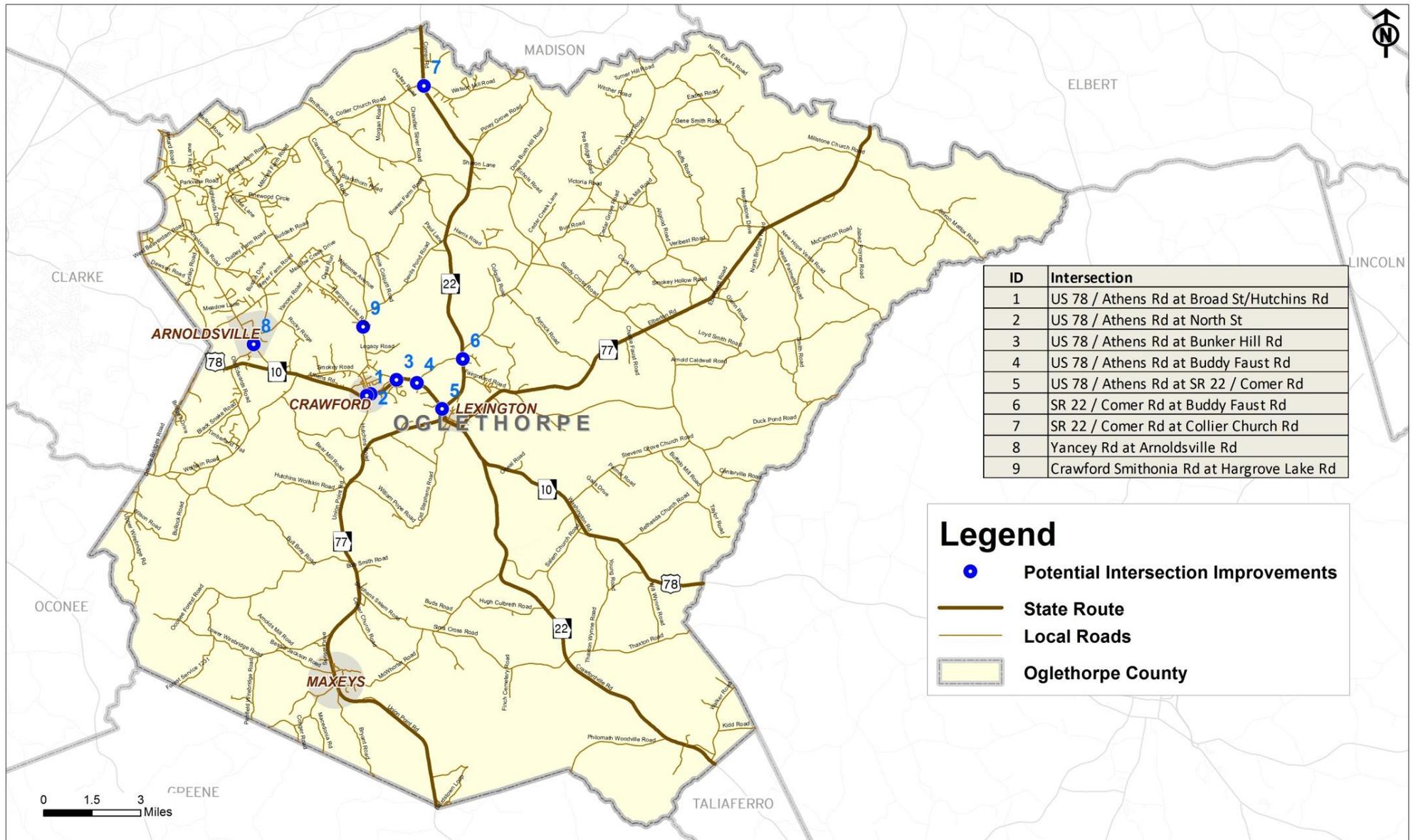
ROADWAY NEEDS AND POTENTIAL IMPROVEMENTS

- Analyzed roadway characteristics and used the travel demand model to forecast future travel patterns
- Stakeholder input, future development, and future land use were also considered
- Potential improvements could include widening, passing lanes, and paving upgrades

INTERSECTION AND SAFETY NEEDS AND POTENTIAL IMPROVEMENTS

- Identified top nine (9) intersections based on safety analysis and stakeholder input
- Collected Turning Movement Counts and performed operational analysis
- Analyzed crash data in the last five years (2007-2011)
- Potential improvements include advanced warning signs, operational improvements and access management strategies

INTERSECTION AND POTENTIAL SAFETY IMPROVEMENTS



INTERSECTION AND POTENTIAL SAFETY IMPROVEMENTS

Intersection of US 78 / Athens Road at Bunker Hill Road

Existing Condition Analysis

Physical Condition

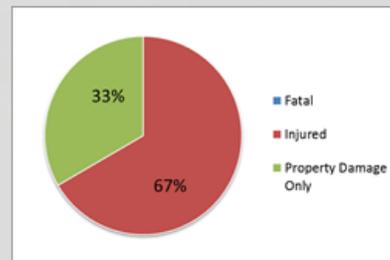
- Two-way stop-controlled intersection
- Two lanes on US 78 / Athens Road eastbound; one lane on all other approaches
- No exclusive turn lanes



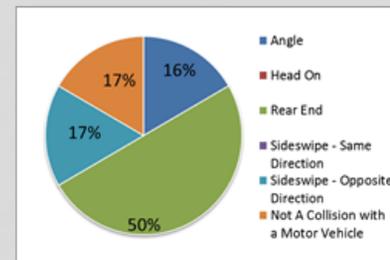
Safety Analysis

- 6 crashes in total during 2007 to 2011 with majority of them being rear end collisions
- Drivers' unawareness of the intersection and/or road curvature could be the main causes for crashes

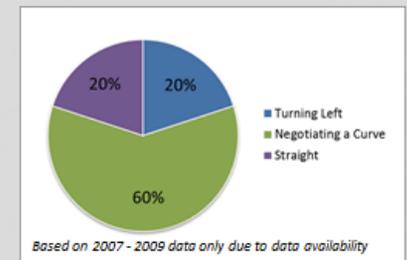
Percentage of Crashes by Severity and Cause



Crash Severity



Manner of Collision



Vehicle Maneuver

Based on 2007 - 2009 data only due to data availability

Traffic Characteristics

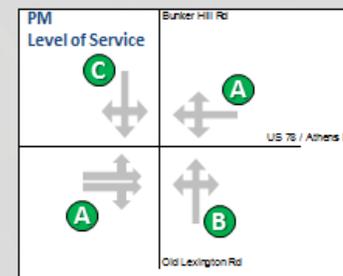
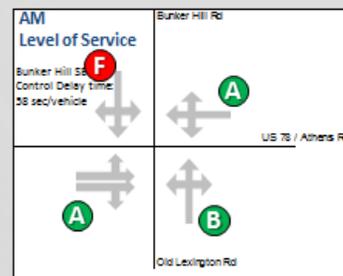
2013 Existing Peak Hour Turning Movement Counts

- AM Peak Hour: 7:15 am – 8:15 am
- PM Peak Hour: 3:30 pm – 4:30 pm

		Bunker Hill Rd		US 78 / Athens Rd		Old Lexington Rd	
		AM	PM	AM	PM	AM	PM
		AM Peak Hour (begins at 7:15 AM)					
		PM Peak Hour (begins at 3:30 PM)					
Bunker Hill Rd	Left	4	3	60	62	7	7
	Through	5	3	473	378	2	1
US 78 / Athens Rd	Left	7	4	2	1	15	0
	Through	373	425	0	3	7	0
Old Lexington Rd	Left	6	1	0	0	0	0
	Through	6	1	0	0	0	0

Peak Hour Level of Service Analysis

- AM Peak Hour: 7:15 am – 8:15 am
- PM Peak Hour: 3:30 pm – 4:30 pm



Stakeholder and Public Input

- There is a flow issue on the mainline on US 78 / Athens Road.
- During the AM and PM peak periods, drivers experienced long queues on Bunker Hill Road southbound.
- It is difficult to make left-turn movement on Bunker Hill Road due to limited sight distance and high speed on US 78.
- Public expressed safety concern over this intersection.
- Public suggested signaling this intersection or implementing four-way stop control and adding left turn lanes on US 78 and Bunker Hill Road southbound approach.

INTERSECTION AND POTENTIAL SAFETY IMPROVEMENTS

3 - Intersection of US 78 / Athens Road at Bunker Hill Road

Existing Condition Analysis

Potential Improvements for Further Evaluation

Next Steps and Potential Improvements		Crash Type Addressed	Benefits	Timeline for Implementation	Estimated Cost	Crash Reduction Factors (CRF)*
No. 1	Replace 30-inch with 36-inch stop signs on Bunker Hill Road southbound. 	Right angle and rear end crashes attributed to drivers unaware of the intersection or failing to stop at the stop sign	Could provide approaching motorists with additional information and help them make safer decisions as they approach the intersection			67%
No. 2	Consider providing "Chevron" signs for southbound Bunker Hill Road. 	Sideswipe crashes or crashes attributed to negotiating a curve	Could provide approaching motorists with additional information and help them make safer decisions as they approach the intersection			20%-64%
No. 3	Consider offsetting the intersection and cul-de-sacing the driveway to the church to improve operations and safety.	Crashes attributed to insufficient sight distance and awkward sight lines at a skewed intersection	Could address problems like vehicle alignment, long exposure in the intersection, and potential driver confusion			Varies * The CRF varies by the degree of skew
No. 4	Consider adding right turn lane from US 78 to Bunker Hill Road and converting the current passing lanes to two-way left-turn lane (TWLTL).	Crashes between (1) vehicles turning left and following vehicles and (2) vehicles turning left and opposing through vehicles	TWLTL can allow through vehicles to continue without stopping while turning vehicles can use left turn lanes.			23%-48%

Note: Roundabout was initially considered as a potential improvement. It was determined that geometry limits the feasibility for roundabout improvement at this intersection.

BRIDGE POTENTIAL IMPROVEMENTS

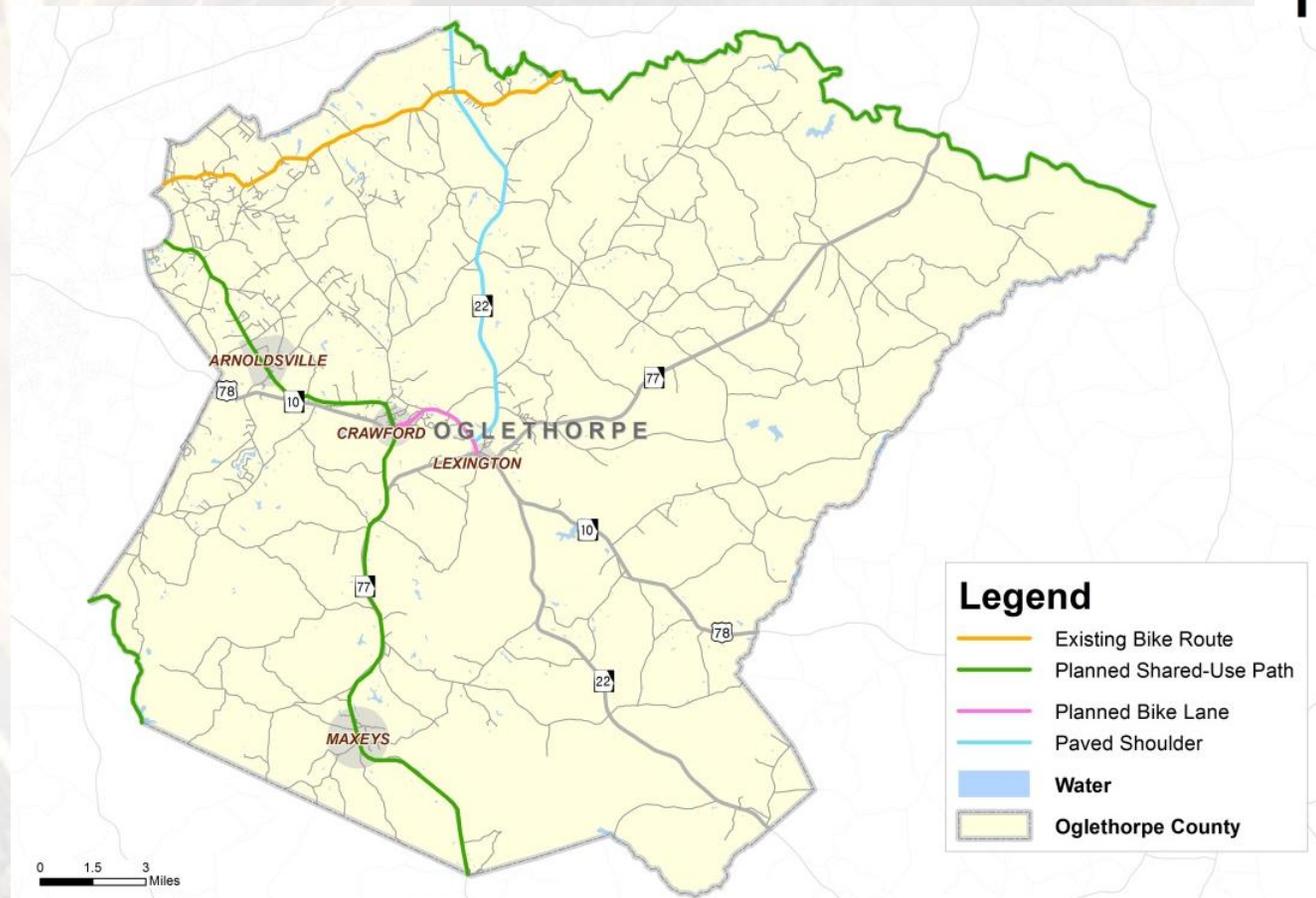
- Analysis based on GDOT Bridge sufficiency ratings
- Bridges will be recommended for near-term or mid-term improvements
- Bridges that have the highest traffic volumes or provide key connections will have highest priority
- Potential improvements can include maintenance, upgrades or replacement

BICYCLE & PEDESTRIAN ASSESSMENT

- Northeast Georgia RC Bicycle & Pedestrian Plan
- Public / Stakeholder Input and Field Observation
- Opportunity Areas for Consideration
 - Crawford / Lexington
 - Schools
 - Parks
 - Library
 - Public Facilities

BICYCLE & PEDESTRIAN IMPROVEMENTS

- SR 22 Paved Shoulder
- US 78 Bike Lane
- Firefly Trail
- Broad River Greenway
- Oconee River Greenway



Source: NEGRG – Northeast Georgia Plan for Bicycling and Walking, 2010.

BICYCLE & PEDESTRIAN POTENTIAL IMPROVEMENTS

Crawford:

- Add a sidewalk on the both sides of US 78 from Oglethorpe Builders Supply to East Elbert (.5 mi)
- Add a sidewalk on the east side of North Street from US 78 to Bryan Park including a pedestrian signal at US 78/North Street intersection (.5 mi.)
- Restripe the pedestrian crosswalk at the Depot

Lexington:

- Add sidewalk on north side of US 78 connecting library, senior center, medical center, high school, Bell's Grocery, and Fred's (.6 mi.)

TRANSIT ASSESSMENT

- Provides transportation services for low-income and disabled population via the Human Services Transit program
- Senior citizen center located in Crawford provides daily transportation for its members
 - Two-hour morning and afternoon routes
 - Funded by the County and the Georgia Division on Aging Services
- No connectivity to the Athens Transit



The Senior Center in Crawford

TRANSIT RECOMMENDATIONS FOR CONSIDERATION

- Park-and-Ride/Carpool Lots in Crawford and/or Lexington
- Rideshare Programs to Match Commuters Interested in Carpooling
- Commuter Shuttle to Athens
- On-Demand Human Services Transportation

POLICY GUIDANCE

- Access Management
- Development Reviews
- Intersection Operation and Maintenance
- Corridor Strategy Guidance



Stakeholder Input



STAKEHOLDER DISCUSSION

- Needs Assessment and Potential Improvements
 - What's missing?
 - What are your questions?

Next Steps



NEXT STEPS

- Develop and Finalize Potential Improvements
- Develop Costs and Benefits
- Conduct Project Prioritization
- Develop Long Range Transportation Plan
- Develop Policy Guidance

CONTACT INFORMATION

Georgia Department of Transportation

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