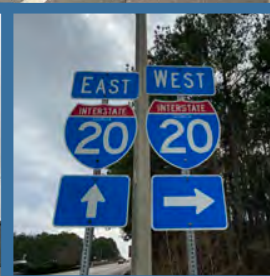


# FORWARD VILLA RICA

Transportation Master Plan



**POND**

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# INTRODUCTION

## HISTORY OF THE CITY

Villa Rica was formally incorporated in 1881, having existed as Hixtown in the 1820s and changing names in 1832 after gold was found in the area. The small gold rush that followed left behind a community of a few hundred people that continued to grow on the border between Douglas and Carroll Counties in northwest Georgia. Over one hundred years after this gold rush, suburban expansion from Atlanta – thirty miles to the east on Interstate 20 – reached Villa Rica, which has added live art and family-friendly events to their vibrant, historic downtown. These amenities and ongoing development radiating out from Atlanta has caused substantial growth in Villa Rica in its most recent decades.

## PURPOSE OF THE PLAN

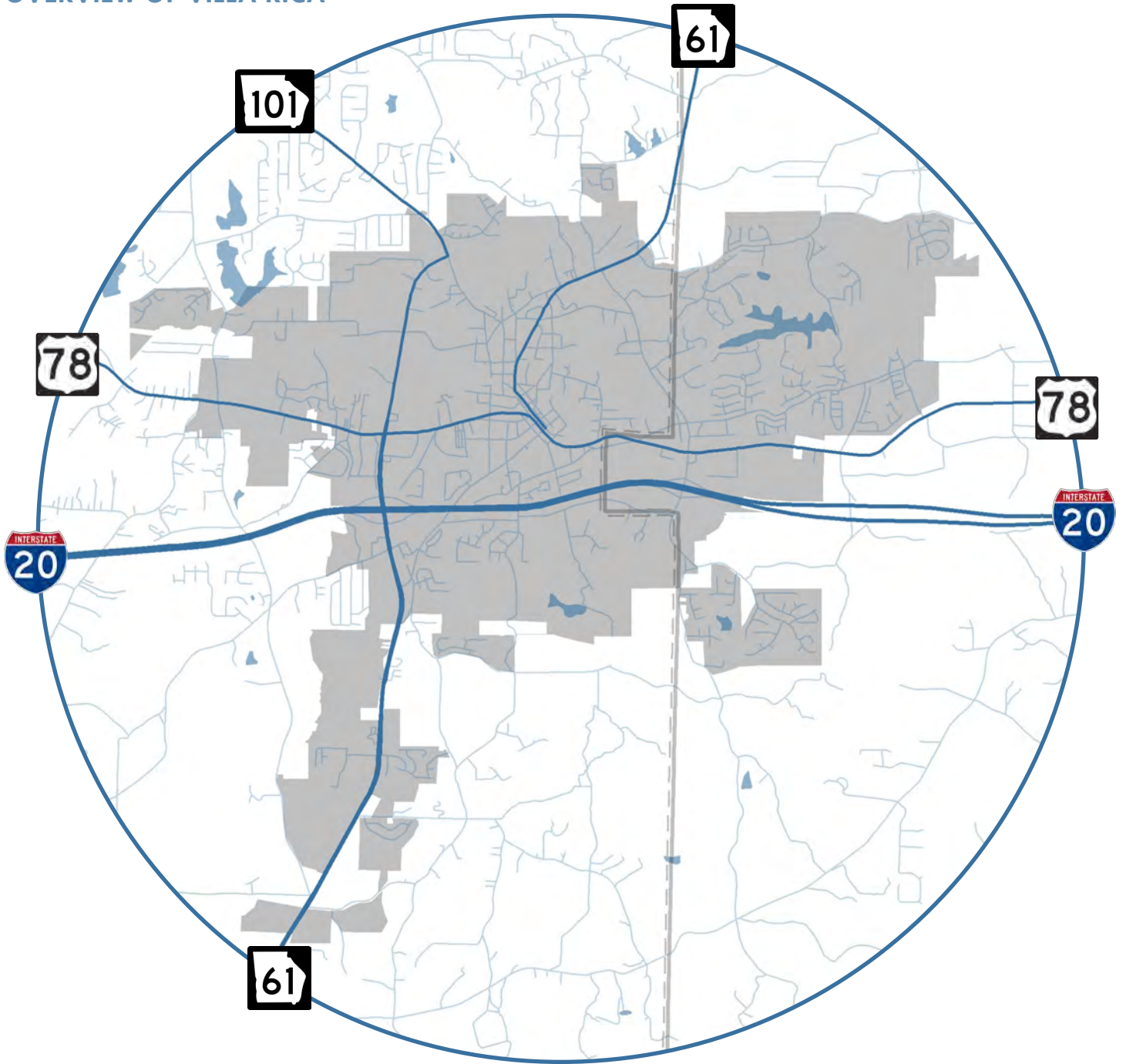
With the growth Villa Rica has experienced recently, there are new needs and challenges to serve residents and businesses. This growth has put a strain on existing roadways with new traffic traveling throughout the community and to and from other regional destinations. This plan is intended to perform a review of transportation conditions and concerns in Villa Rica, to identify potential solutions to these challenges, and to prioritize these projects by need and by implementation difficulty. This plan should aid decision-makers as they choose which projects to pursue and when, and to coordinate with adjoining and overlapping organizations to ensure an effective transportation system.

## HOW TO USE AND UNDERSTAND THE TMP

The Transportation Master Plan (TMP) document is organized to largely reflect the process that was used to create the TMP. As such, it includes the following elements:

- Chapter 1, Introduction: Introducing the purpose of the TMP and the history of the City.
- Chapter 2, Community Profile: An exploration of underlying community conditions and trends in the City that influences travel behavior, transportation needs, and decision making.
- Chapter 3, Community Goals: A description of various transportation and broader community related goals that are used to help guide the transportation planning process. These goals include consideration of federal, state, and regional transportation goals; localized goals; and systematic goals that describe holistically the local vision for the future of the transportation system.
- Chapter 4, Plan Development: A documentation of the various efforts used to inform the plan's recommendations. This includes discussion of the community engagement efforts utilized as well as the various technical analyses utilized to determine the transportation system's existing and future needs.
- Chapter 5, Evaluation and Implementation Plan: Further documentation focusing on the plan's recommendations, including the efforts to develop transportation projects and initiatives, evaluate and prioritize those projects and initiatives, and finally documentation of an Implementation Plan that includes fiscal considerations of future transportation funding and anticipated implementation costs.

## OVERVIEW OF VILLA RICA



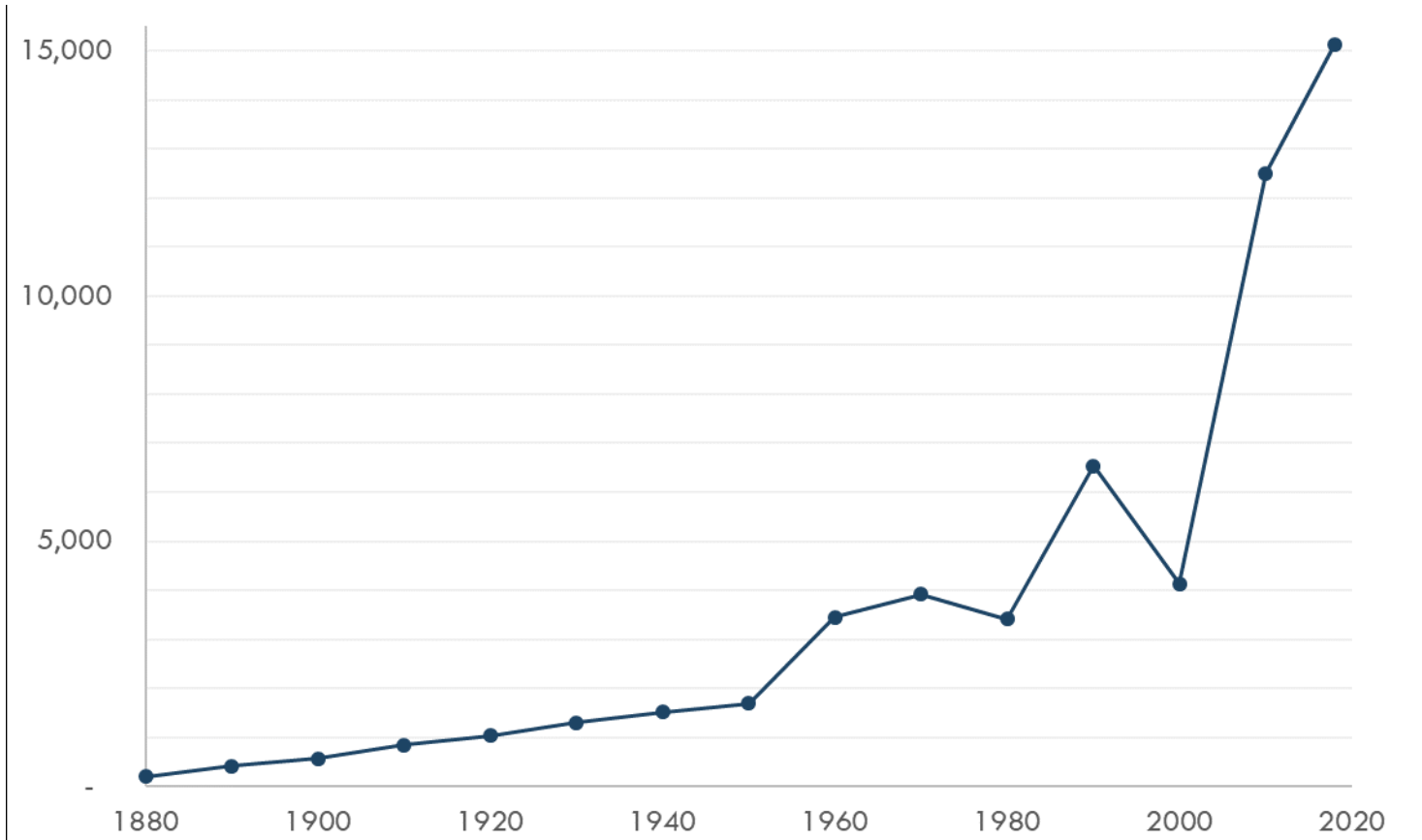
# COMMUNITY PROFILE

## TRENDS IN POPULATION

Villa Rica is a rapidly growing community. While the population stayed under 2,000 people through 1950, the period since then has seen quicker growth, especially in the last twenty years. In 1980, the U.S. Census reported that Villa Rica’s population was 3,420 people. In 2018, the U.S. Census Bureau’s American Community Survey (ACS) estimates the population was over 15,000 people, more than four times the population less than forty years ago. Some of this population growth has occurred as a result of annexation, which brings people already living in the area into the city limits and thus into their population count, but much of the growth can be attributed to an overall increase in the residential population of the area. The Mirror Lake subdivision alone, which began construction in the late 1990s, will include thousands of homes upon completion, attracting new residents to Villa Rica.

The Villa Rica Comprehensive Plan 2018 Update references a handful of projections that anticipate continued growth, with the population reaching 25,000-35,000 by year 2040.

## HISTORIC POPULATION OF VILLA RICA, 1880-2018



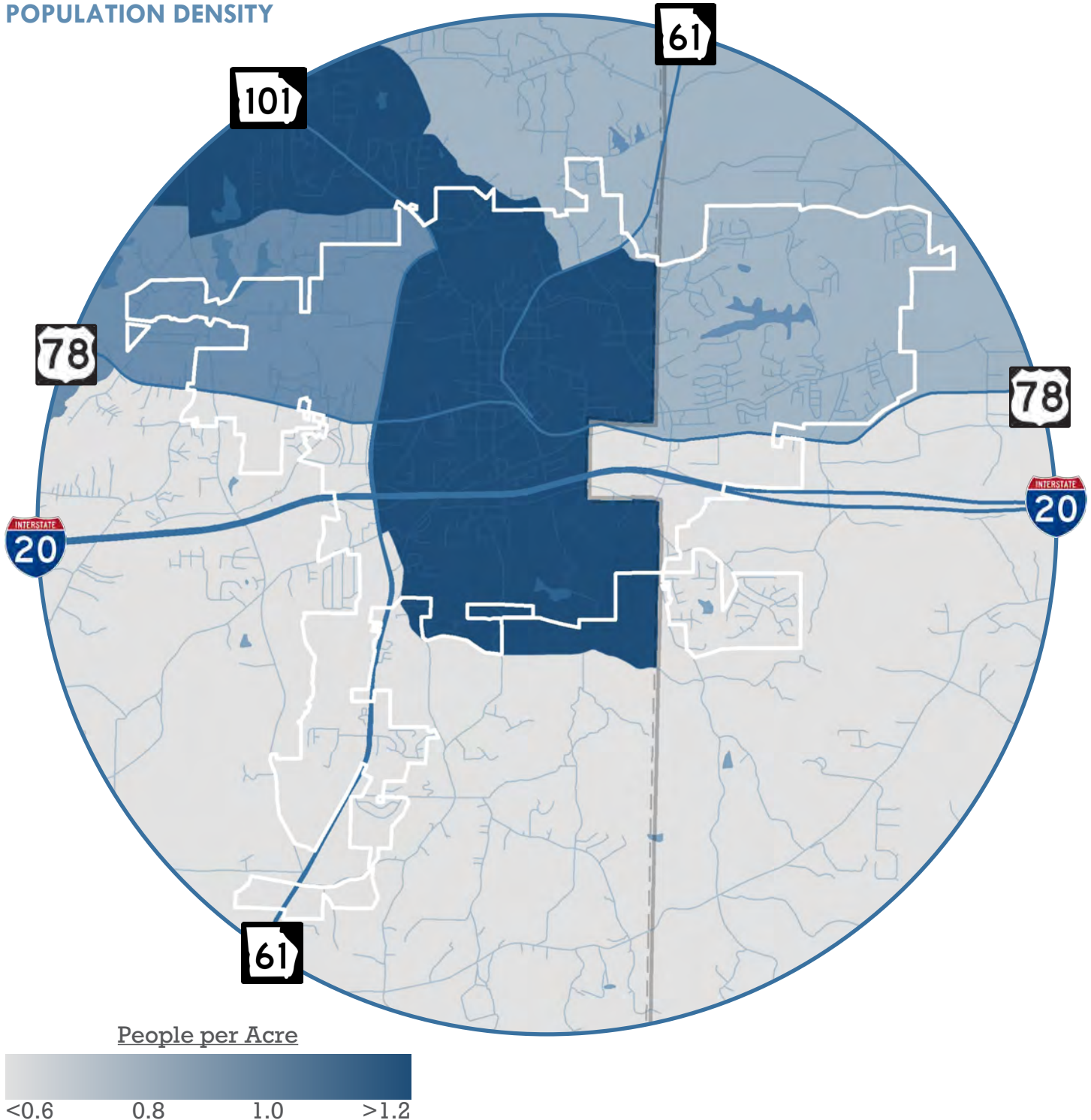
Source: US Census Bureau



## POPULATION DENSITY

While total population and households help to define why a region or area may need specialized transportation planning through a TMP process, there is also a need to understand where and how population is clustered in the community. The population is most concentrated in the downtown area. In addition, there is a higher population density in the northern area of the city relative to the southern area.

### POPULATION DENSITY



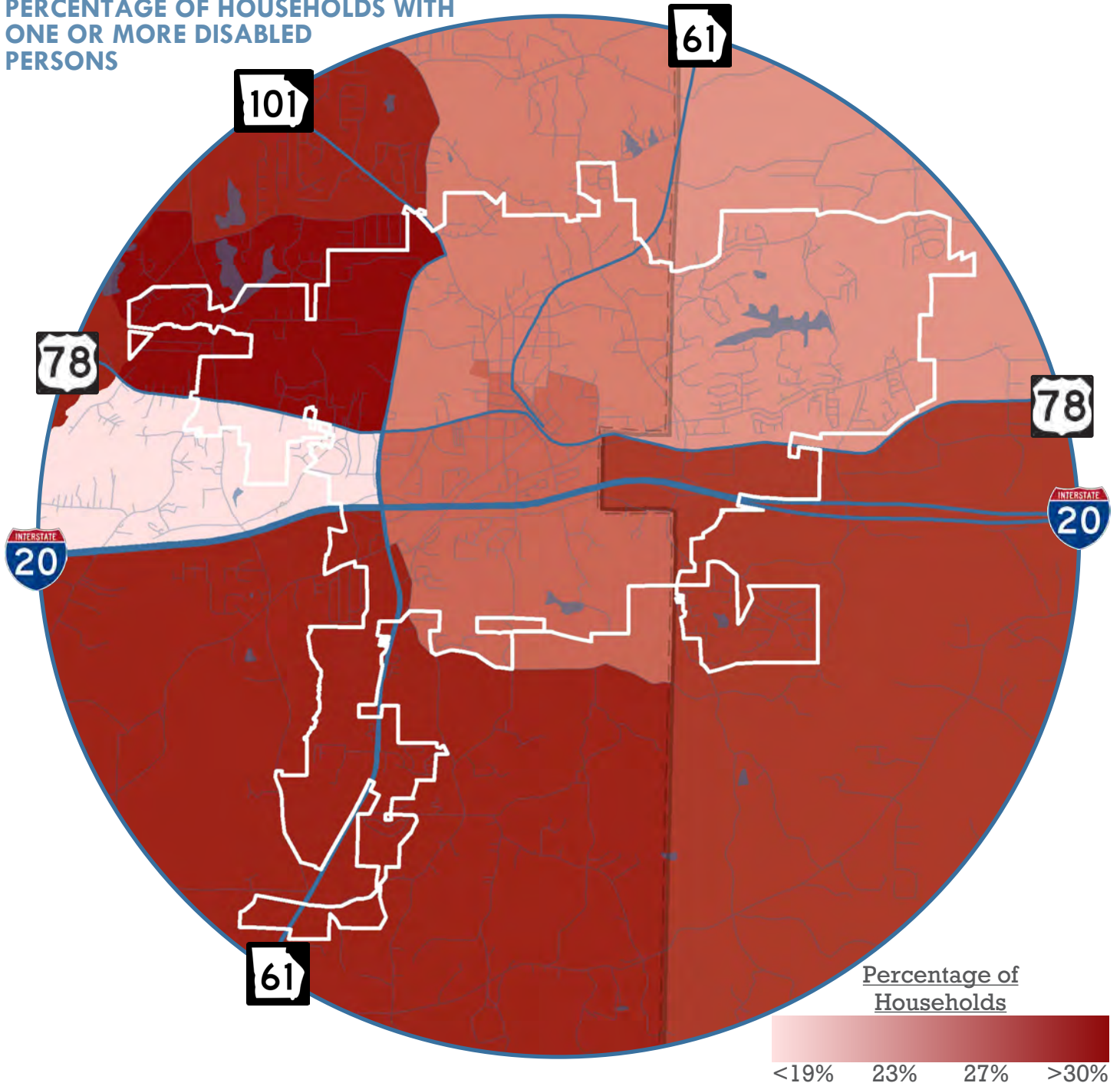
## SENSITIVE POPULATIONS

In addition to general population and household density, there are also sensitive populations that have specialized needs. Understanding what areas have higher concentrations of these populations is needed to effectively serve them.

### DISABLED POPULATION

In the city of Villa Rica, 21.9% of households are with one or more persons with a disability. Using Census block groups, mapping of the region shows several areas exceeding the regional average.

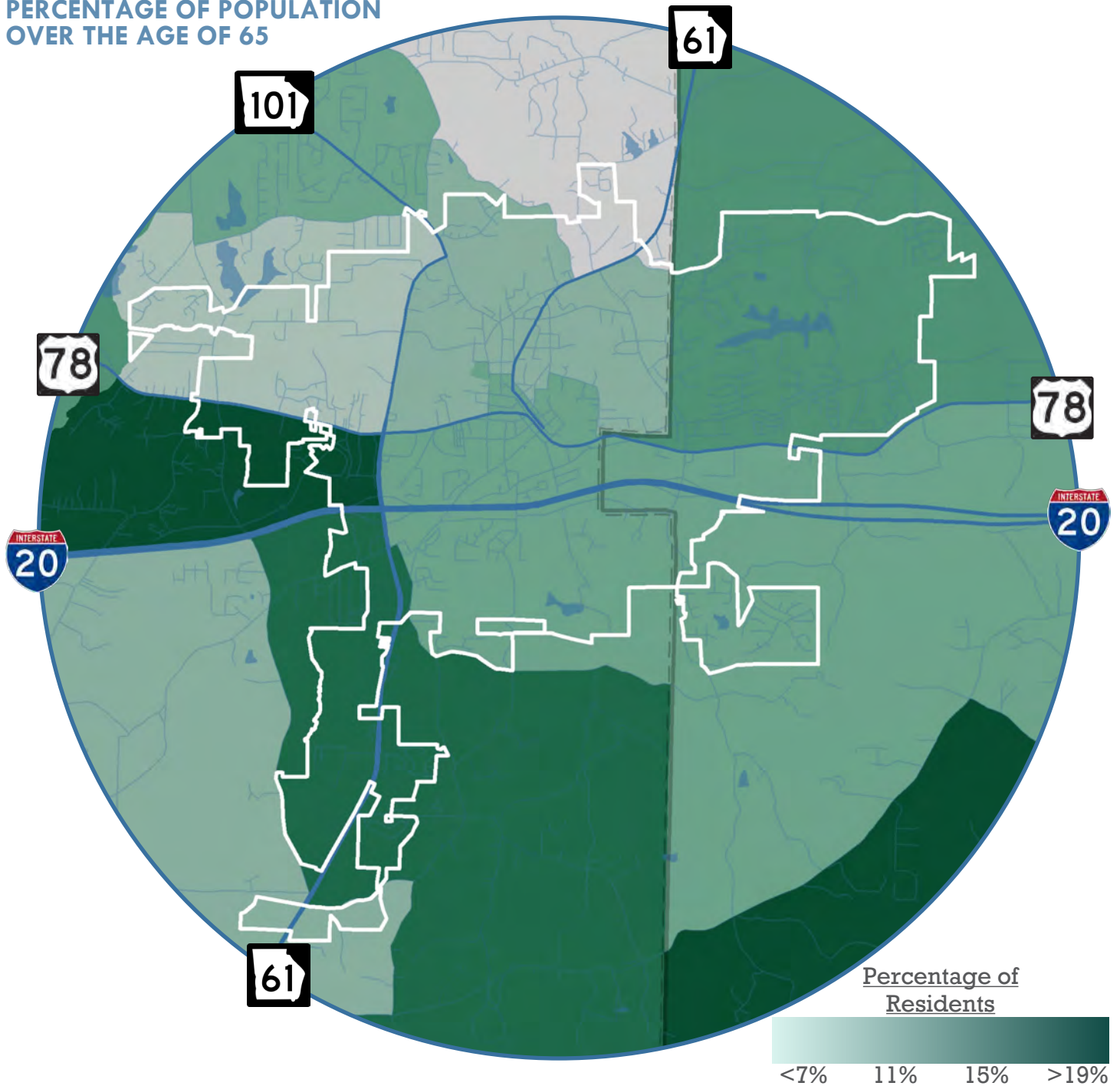
### PERCENTAGE OF HOUSEHOLDS WITH ONE OR MORE DISABLED PERSONS



## ELDERLY POPULATION

The city of Villa Rica has a regional average elderly population of 9.1 percent of the total population. Using Census block groups, mapping of the region shows several areas exceeding the regional average.

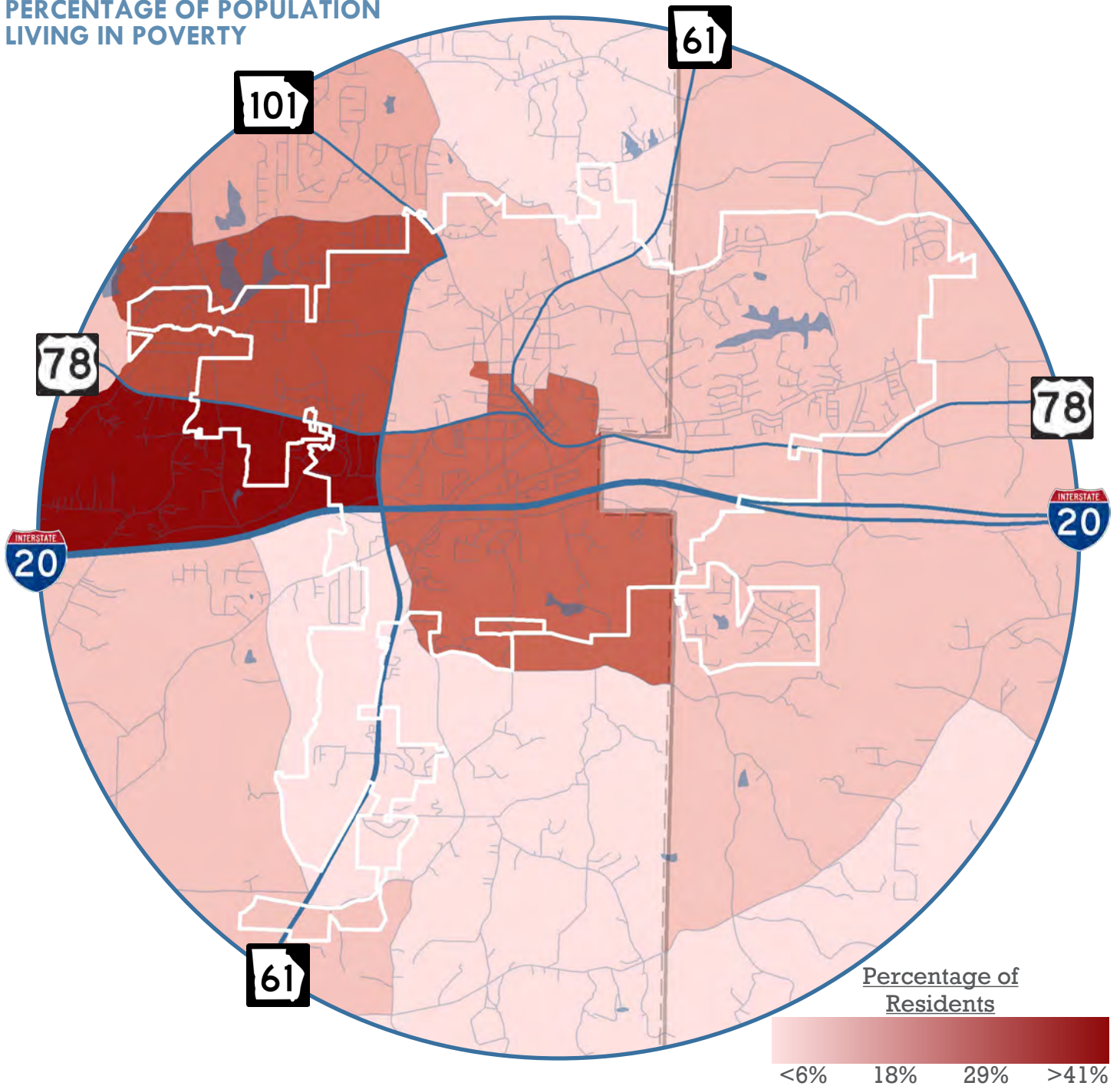
### PERCENTAGE OF POPULATION OVER THE AGE OF 65



**IMPOVERISHED POPULATION**

The City of Villa Rica has a regional average impoverished population of 13.7 percent of the total population. Using Census block groups, mapping of the region shows several areas exceeding the regional average.

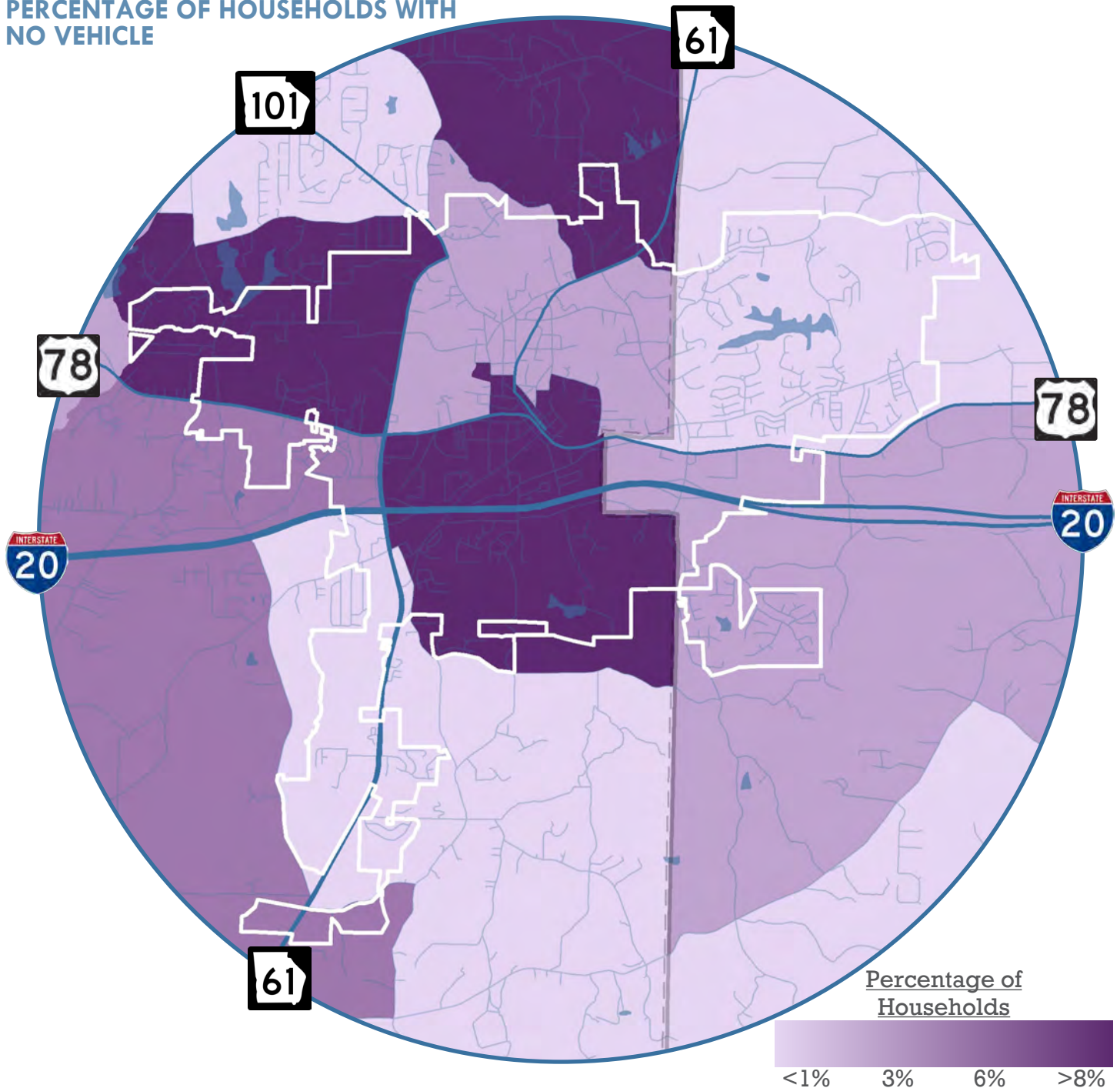
**PERCENTAGE OF POPULATION LIVING IN POVERTY**



## HOUSEHOLDS WITH NO VEHICLES

The City of Villa Rica has a regional average of households with no access to a vehicle of 6.3 percent of the total population. Using Census block groups, mapping of the region shows several areas exceeding the regional average.

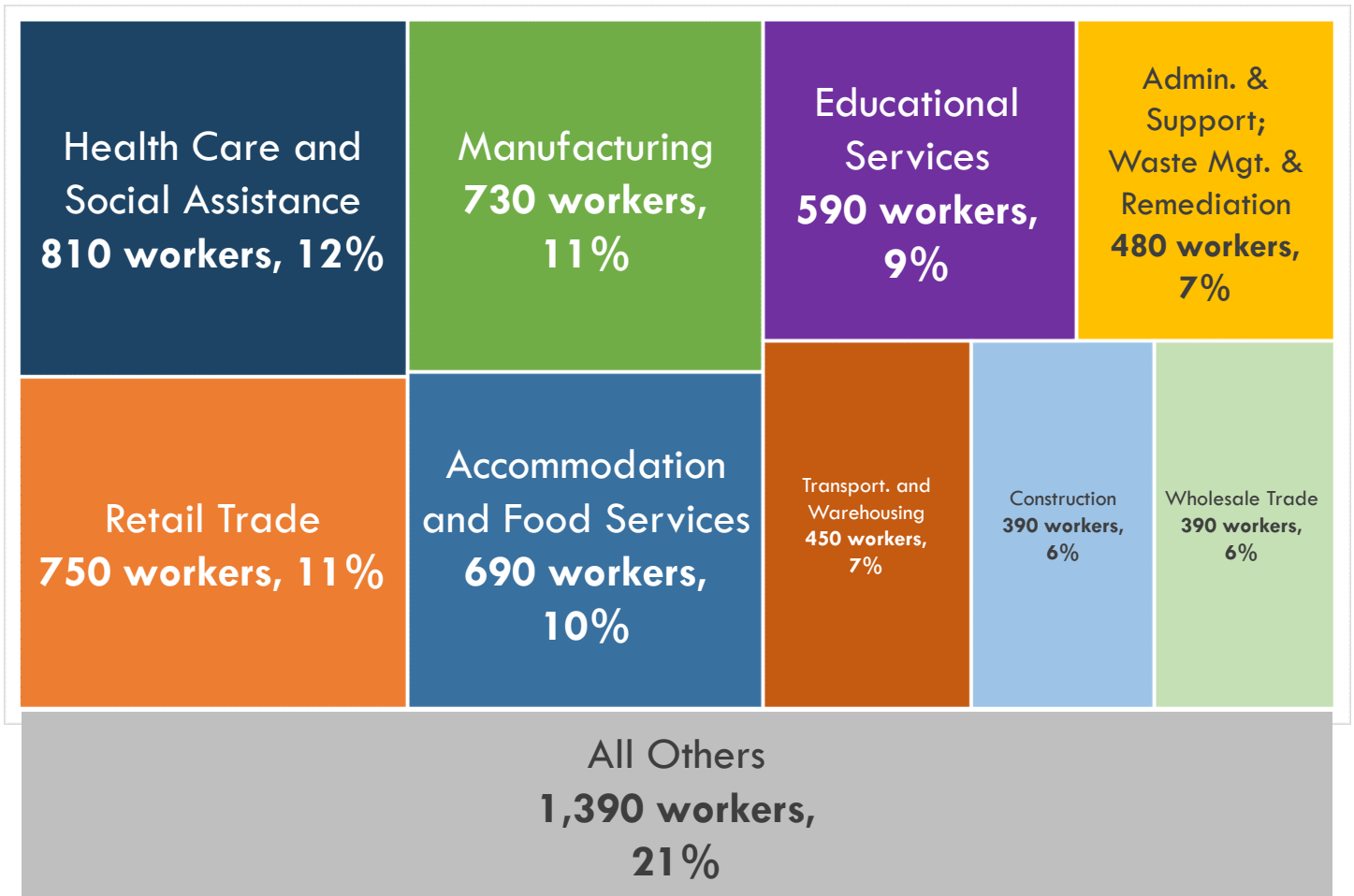
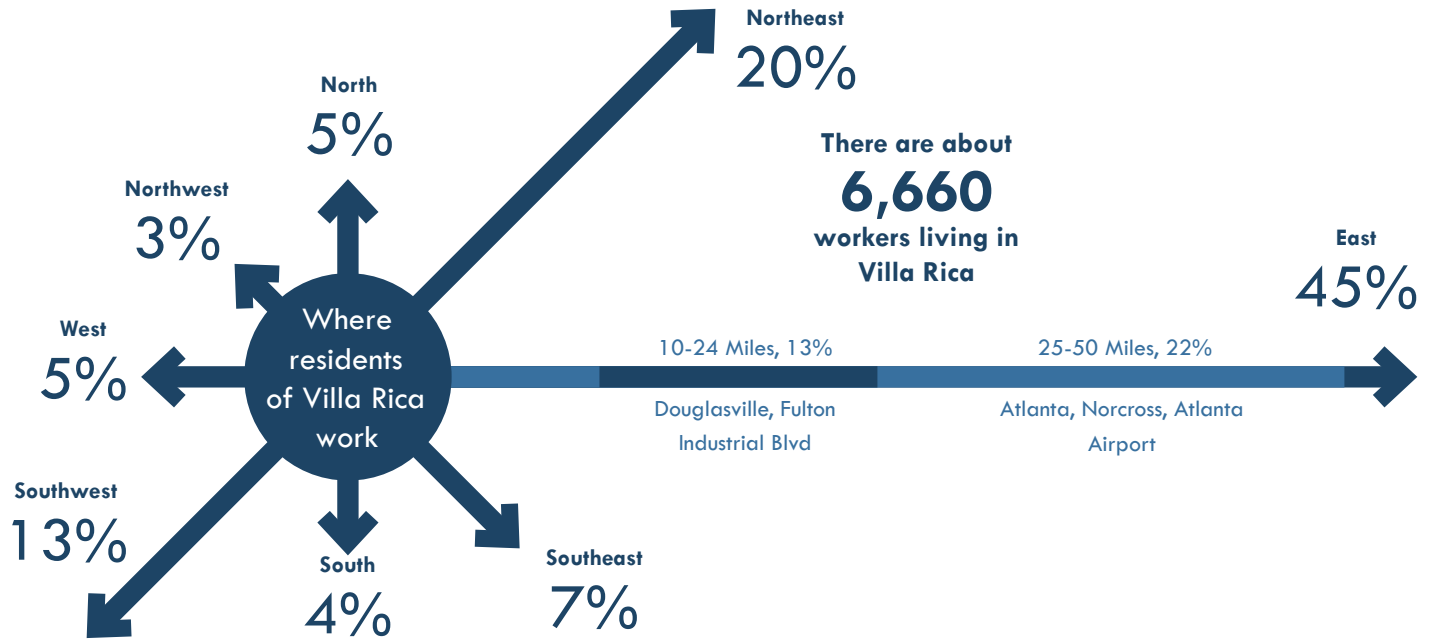
### PERCENTAGE OF HOUSEHOLDS WITH NO VEHICLE



## **COMMUTER PATTERNS**

The graphics on the following pages show the directions that commutes to and from Villa Rica travel for work. Villa Rica has a similar number of jobs as it does workers (7,260 jobs to 6,660 workers), but very few Villa Rica residents are also Villa Rica workers (about 570 people in 2017). This is not atypical for peer communities in suburban areas, as many suburban community residents commute towards the center city for work. Over two-thirds of workers who live in Villa Rica commute to the east (including the northeast and southeast), and many of these likely travel on I-20 for at least part of their commutes. This kind of concentration of commute trips can drive traffic and indicates how important access to points east is to Villa Rica as a whole.

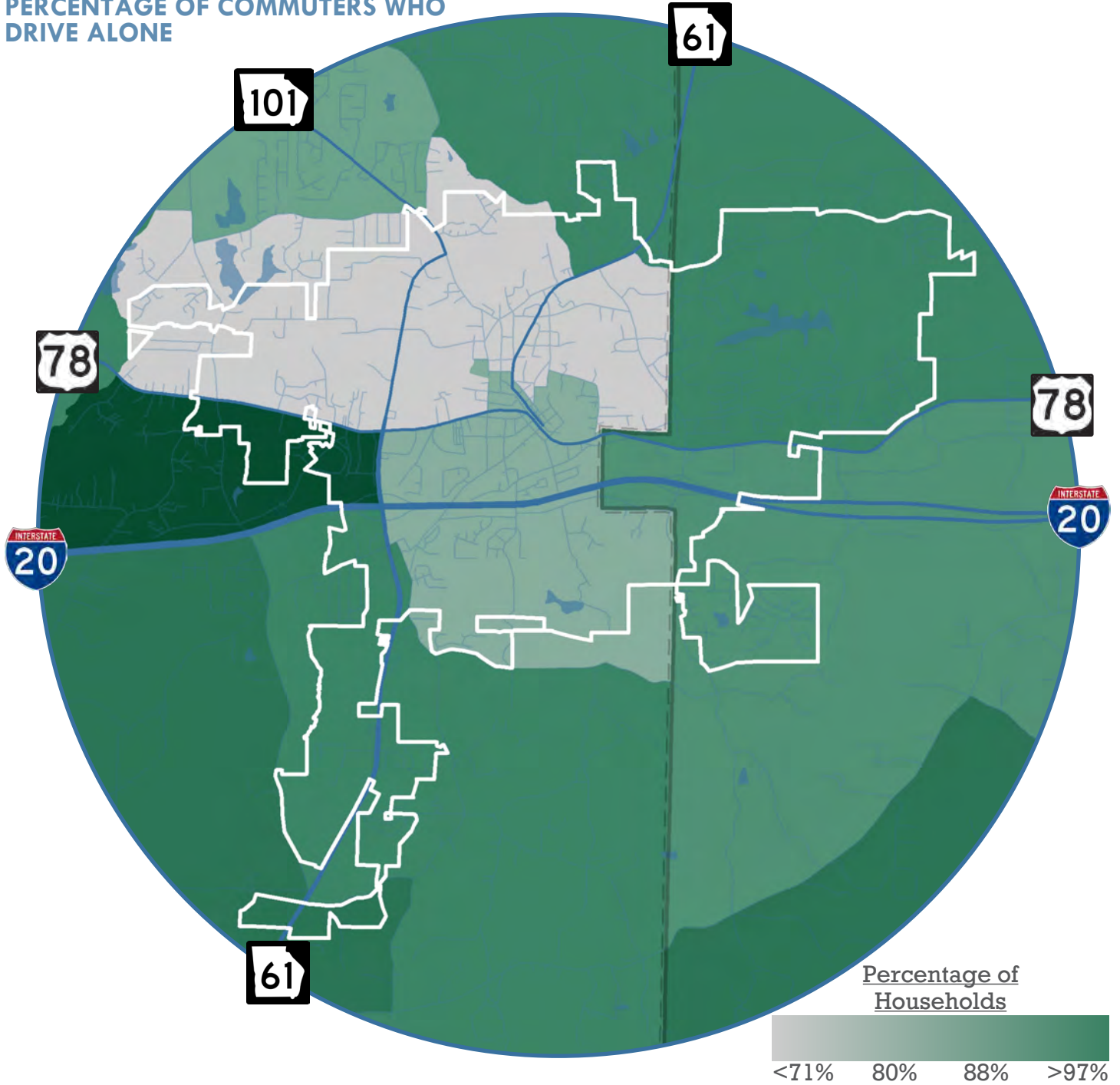




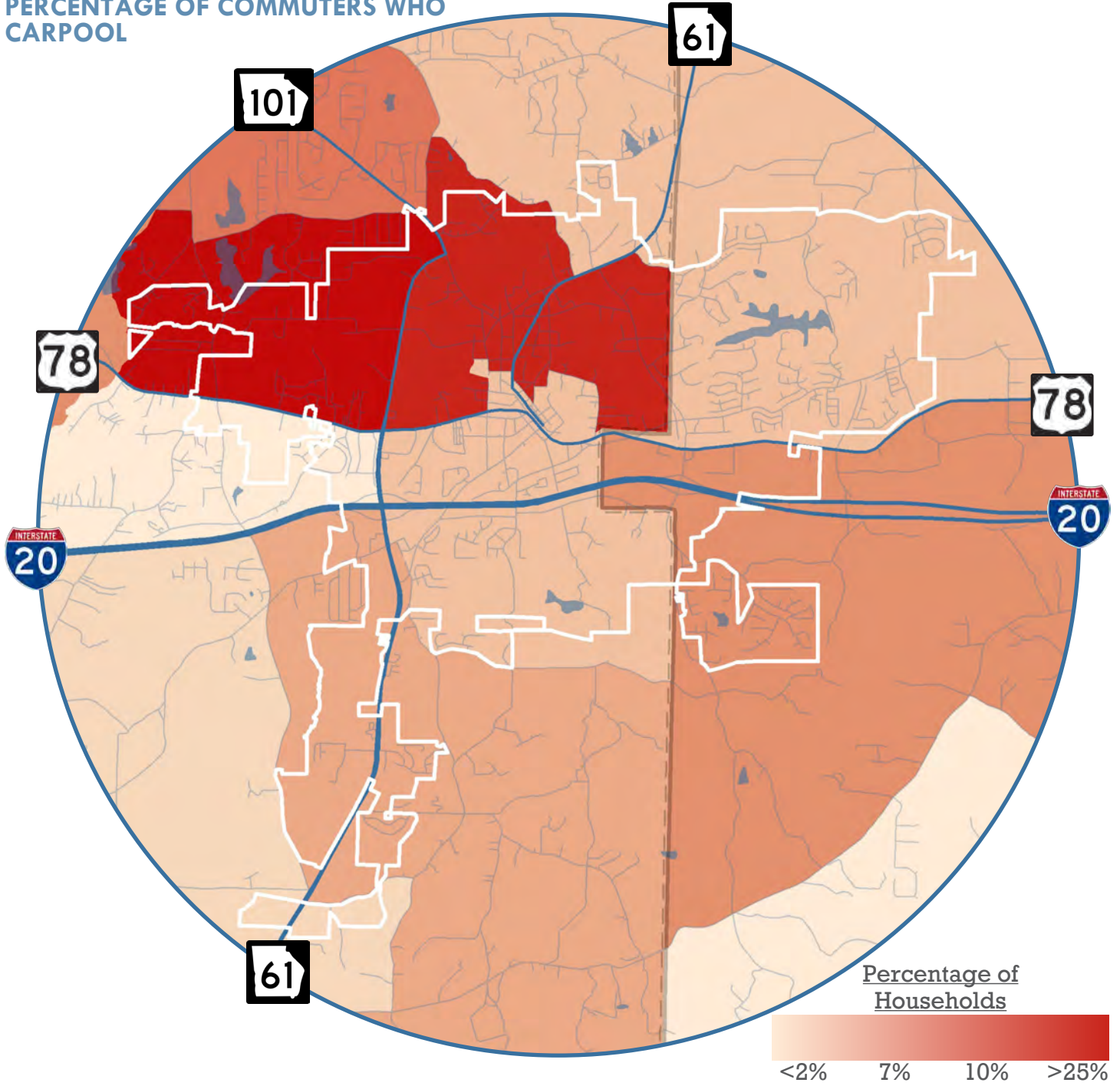
# COMMUTER MODES

Using American Community Survey data, we can also understand that the majority of commuters in Villa Rica (86.4 percent) drive alone to work. However, a relatively high amount of people (9.7 percent) indicate that they carpool with others to get to and from their place of work.

## PERCENTAGE OF COMMUTERS WHO DRIVE ALONE



**PERCENTAGE OF COMMUTERS WHO CARPOOL**



## **EMPLOYMENT AND WORKFORCE IN VILLA RICA**

Employment refers to jobs that are physically located in the City of Villa Rica. About 7,260 jobs call Villa Rica home, and are shown by industry in the graphic on top of the facing page. The top industries present in the area include health care, manufacturing, hospitality, retail and wholesale trades, and construction.

Workforce refers to the types of jobs done by workers who live in the City of Villa Rica (regardless of whether their job is physically in the City or elsewhere). The graphic at the bottom of the facing page shows the breakdown of the approximately 6,660 jobs worked by Villa Rica residents. Many of the top industries are similar to those in Villa Rica employment – all of the top six employment industries also employ over 5% of the Villa Rica workforce. However, some categories like education appear in much higher rates in the workforce than in the employment. This suggests that Villa Rica houses more teachers and similar professionals than it employs, and that these residents must commute elsewhere to find work in their field.

## **LAND USE AND COMPREHENSIVE PLANNING**

Much of the anticipated growth in the region is guided by the comprehensive planning being conducted by local governments in the region with particular emphasis on the elements of these plans focusing on future land use and development.

### **THE CITY OF VILLA RICA**

The city of Villa Rica's Comprehensive Plan was prepared by the city and adopted in 2018. The Land Use Regulations section for this plan identifies several 'Character Areas' that relate to land use and offer narrative descriptions implying the future intensity of development and the overall 'character' intended for these areas.

### **DOUGLAS COUNTY**

The Douglas County Comprehensive Master Plan Update was prepared by the county adopted in 2018. Similarly, the Future Land Use and Narrative section of this plan identifies several 'Character Areas' that relate to land use and offer narrative descriptions implying the future intensity of development and the overall 'character' intended for these areas.

### **CARROLL COUNTY**

The Carroll County Comprehensive Master Plan Update was prepared by the county adopted in 2018. Similarly, Analysis of Development Patterns section of this plan identifies several 'Character Areas' that relate to land use and offer narrative descriptions implying the future intensity of development and the overall 'character' intended for these areas.

# COMMUNITY GOALS

## PLANNING LEGACIES

In addition to incorporating anticipated changes in population and employment growth and the land use elements of the region's Comprehensive Plans, the TMP is influenced heavily by the legacy of transportation planning and policy for the region. Much of this is articulated in the context of national, state, and regional goals as described in the following section.

## FAST ACT

On December 4, 2015, President Obama signed the Fixing America's Surface Transportation (FAST) Act – federal law authorizing \$305 billion over fiscal years 2016 through 2020 for highway and motor safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs. The FAST Act states that the metropolitan transportation planning process must address specific factors as described below:

- Support **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency
- Increase the **safety** of the transportation system for motorized and non-motorized users
- Increase the **security** of the transportation system for motorized and non-motorized users
- Increase **accessibility and mobility** of people and freight
- **Protect and enhance the environment**, promote energy conservation, **improve the quality of life**, and promote consistency between transportation improvement and state and local planned growth and economic development patterns
- Enhance the **integration and connectivity of the transportation system, across and between modes, for people and freight**
- Promote **efficient system management** and operation
- Emphasize the preservation of the existing transportation system
- Improve the **resiliency and reliability** of the transportation system and reduce or mitigate stormwater impacts of surface transportation
- Enhance **travel and tourism**

Further, the national Federal-aid Highway Program performance goals as established by Congress are:

- **Safety** - To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- **Infrastructure Condition** - To maintain the highway infrastructure asset system in a state of good repair
- **Congestion Reduction** - To achieve a significant reduction in congestion on the National Highway System
- **System Reliability** - To improve the efficiency of the surface transportation system
- **Freight Movement and Economic Vitality** - To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
- **Environmental Sustainability** - To enhance the performance of the transportation system while protecting and enhancing the natural environment.
- **Reduced Project Delivery Delays** - To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices

**GEORGIA STATEWIDE STRATEGIC TRANSPORTATION PLAN**

Similarly, the Georgia Statewide Strategic Transportation Plan (SSTP) Update from 2018 includes several goals that relate to the federal goals as described below.

SSTP GOAL	RELATED FEDERAL GOAL
Improve safety	Safety
Improve reliability	System Reliability
Reduce congestion	Congestion Reduction
Maintain and preserve the system	Infrastructure Condition
Improve freight/economic growth	Freight Movement and Economic Vitality
Improve the environment	Environmental Sustainability

## ATLANTA REGIONAL COMMISSION REGIONAL TRANSPORTATION PLAN

The 2020 Atlanta Regional Transportation Plan (RTP) was prepared by the Atlanta Regional Commission (ARC) with the goal of allocating funding for transportation projects in the 20-county Atlanta region through the year 2050. The RTP includes the following objectives:

- Improve quality of life at the neighborhood, city, county, and regional levels
- In partnership with local communities, equitably and strategically focus resources in areas of need and importance
- Improve public health through the built environment
- Integrate sound environmental principles that ensure the region’s sustainability
- Maintain and operate the existing transportation system to provide for reliable travel
- Improve transit and nonsingle-occupant vehicle options to boost economic competitiveness and reduce environmental impacts
- Strategically expand the transportation system while supporting local land use plans
- Provide for a safe and secure transportation network
- Promote an accessible and equitable transportation system
- Support the reliable movement of freight and goods
- Foster the application of advanced technologies to the transportation system

## TRANSPORTATION SYSTEM GOALS

With these considerations, broader transportation system goals were developed to help guide long term transportation investment decisions. These goals are shown below and presented on the next page with correlated federal, state, and regional goals.



**Developing East-West Travel**



**Developing an Active Mode Network**



**Improving North-South Travel**



**Making Connections to I-20**



**Developing Freight Corridors**



**Supporting Economic Development**

VILLA RICA TRANSPORTATION SYSTEM GOAL	RELATED ARC RTP GOAL(S)	RELATED SSTP GOAL(S)	RELATED FEDERAL GOAL(S)
Developing East/West Travel	<ul style="list-style-type: none"> <li>•Strategically expand the transportation system while supporting local land use plans</li> <li>• Provide for a safe and secure transportation network</li> <li>• Promote an accessible and equitable transportation system</li> <li>• Support the reliable movement of freight and goods</li> <li>•Improve quality of life at the neighborhood, city, county, and regional levels</li> <li>• In partnership with local communities, equitably and strategically focus resources in areas of need and importance</li> </ul>	<ul style="list-style-type: none"> <li>•Improve safety</li> <li>•Improve reliability</li> <li>•Reduce congestion</li> <li>•Improve freight/economic growth</li> </ul>	<ul style="list-style-type: none"> <li>•Safety</li> <li>•System Reliability</li> <li>•Congestion Reduction</li> <li>•Freight Movement and Economic Vitality</li> </ul>
Developing an Active Mode Network	<ul style="list-style-type: none"> <li>•Strategically expand the transportation system while supporting local land use plans</li> <li>• Provide for a safe and secure transportation network</li> <li>• Promote an accessible and equitable transportation system</li> <li>• Improve public health through the built environment</li> <li>•Improve quality of life at the neighborhood, city, county, and regional levels</li> <li>• In partnership with local communities, equitably and strategically focus resources in areas of need and importance</li> </ul>	<ul style="list-style-type: none"> <li>•Improve safety</li> <li>•Improve reliability</li> </ul>	<ul style="list-style-type: none"> <li>•Safety</li> <li>•System Reliability</li> </ul>
Improving North/South Travel	<ul style="list-style-type: none"> <li>•Strategically expand the transportation system while supporting local land use plans</li> <li>• Provide for a safe and secure transportation network</li> <li>• Promote an accessible and equitable transportation system</li> <li>• Support the reliable movement of freight and goods</li> <li>•Improve quality of life at the neighborhood, city, county, and regional levels</li> <li>• In partnership with local communities, equitably and strategically focus resources in areas of need and importance</li> </ul>	<ul style="list-style-type: none"> <li>•Improve safety</li> <li>•Improve reliability</li> <li>•Reduce congestion</li> <li>•Improve freight/economic growth</li> </ul>	<ul style="list-style-type: none"> <li>•Safety</li> <li>•System Reliability</li> <li>•Congestion Reduction</li> <li>•Freight Movement and Economic Vitality</li> </ul>

VILLA RICA TRANSPORTATION SYSTEM GOAL	RELATED ARC RTP GOAL(S)	RELATED SSTP GOAL(S)	RELATED FEDERAL GOAL(S)
Make Connections to I-20	<ul style="list-style-type: none"> <li>•Strategically expand the transportation system while supporting local land use plans</li> <li>• Provide for a safe and secure transportation network</li> <li>• Promote an accessible and equitable transportation system</li> <li>• Support the reliable movement of freight and goods</li> <li>•Improve quality of life at the neighborhood, city, county, and regional levels</li> <li>• In partnership with local communities, equitably and strategically focus resources in areas of need and importance</li> </ul>	<ul style="list-style-type: none"> <li>•Improve safety</li> <li>•Improve reliability</li> <li>•Reduce congestion</li> <li>•Improve freight/ economic growth</li> </ul>	<ul style="list-style-type: none"> <li>•Safety</li> <li>•System Reliability</li> <li>•Congestion Reduction</li> <li>•Freight Movement and Economic Vitality</li> </ul>
Develop Freight Corridors	<ul style="list-style-type: none"> <li>•Strategically expand the transportation system while supporting local land use plans</li> <li>• Provide for a safe and secure transportation network</li> <li>•Support the reliable movement of freight and goods</li> <li>•In partnership with local communities, equitably and strategically focus resources in areas of need and importance</li> </ul>	<ul style="list-style-type: none"> <li>•Improve safety</li> <li>•Improve reliability</li> <li>•Reduce congestion</li> <li>•Improve freight/ economic growth</li> </ul>	<ul style="list-style-type: none"> <li>•Safety</li> <li>•System Reliability</li> <li>•Congestion Reduction</li> <li>•Freight Movement and Economic Vitality</li> </ul>
Supporting Economic Development	<ul style="list-style-type: none"> <li>•Strategically expand the transportation system while supporting local land use plans</li> <li>• Provide for a safe and secure transportation network</li> <li>• Promote an accessible and equitable transportation system</li> <li>• Support the reliable movement of freight and goods</li> <li>•Improve quality of life at the neighborhood, city, county, and regional levels</li> <li>• In partnership with local communities, equitably and strategically focus resources in areas of need and importance</li> </ul>	<ul style="list-style-type: none"> <li>•Improve safety</li> <li>•Improve reliability</li> <li>•Reduce congestion</li> <li>•Improve freight/ economic growth</li> </ul>	<ul style="list-style-type: none"> <li>•Safety</li> <li>•System Reliability</li> <li>•Congestion Reduction</li> <li>•Freight Movement and Economic Vitality</li> </ul>

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# PLAN DEVELOPMENT

## COMMUNITY ENGAGEMENT

In order to incorporate public opinion into the planning process, several opportunities for the community to provide input were provided. Details of the community engagement process are provided in Appendix A.

### STAKEHOLDER ENGAGEMENT

On February 27, 2020, community stakeholders were invited to participate in roundtable discussions. This included one meeting aimed at agencies and organizations in the City and a separate meeting targeted at businesses and property owners. These meetings were utilized to understand specific issues or concerns as well as to publicize the community open house.

### COMMUNITY MEETINGS

One formal community meeting was held on March 5, 2020. A total of eighteen people attended this meeting, which included the following informational material and input exercises:

- An Introduction station including background on the TMP process
- An Existing Conditions Station including the initial research on the transportation system
- An 'Exercises' Station where the community could provide facilitated input including:
  - A ranking of the transportation system goals previously described in Chapter 3
  - A ranking of which project types would be most beneficial to the community
  - An exercise where community members could indicate on a map the areas they felt transportation investments were the most critical
  - An exercise where community members could comment on a map of the existing Gold Nugget Trail Master Plan

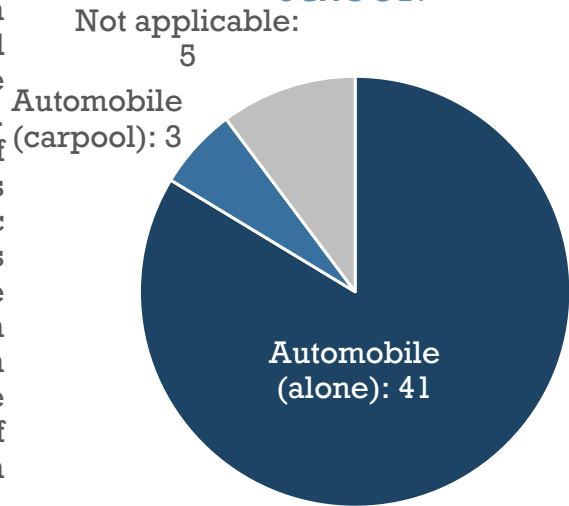


## ONLINE ENGAGEMENT

To supplement the in-person engagement, opportunities for the community to engage online were created through a Social Pinpoint website that included traditional survey formats and an interactive map. This website was publicized in a variety of ways including via social media, e-mail lists, and coordination with planning partners in the region. 58 people participated in the traditional survey component of the site, while 187 comments were registered on the interactive map. The online survey was developed to replicate two of the exercises from the traditional community meetings while included a handful of additional demographic questions in order to understand how well responses reflected known transportation conditions in the community. For instance, respondents were asked on their typical commute modes (as shown below) which compares relatively well – in both the number of ‘drive alone’ responses as well the relatively large number of ‘carpoolers’ - to data on the region from the American Community Survey.

Other questions in the survey focus on overall transportation conditions such as average distance and travel time to/from work.

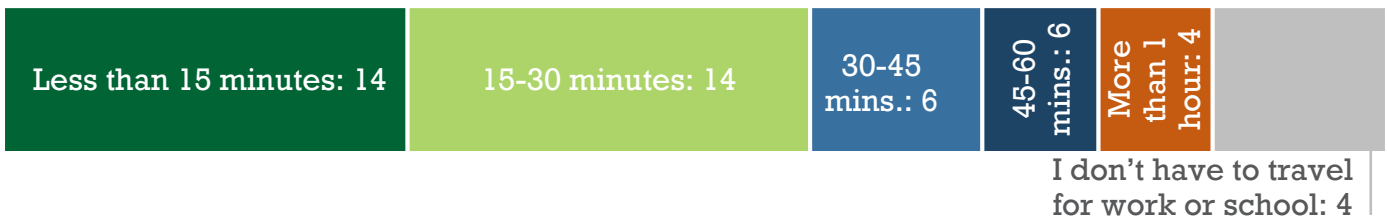
### SURVEY RESPONSES TO “WHAT IS YOUR PRIMARY MODE OF TRANSPORTATION FOR COMMUTING TO WORK OR SCHOOL?”



### SURVEY RESPONSES TO “HOW FAR DO YOU TRAVEL TO WORK OR SCHOOL?”



### SURVEY RESPONSES TO “HOW LONG DOES IT TYPICALLY TAKE YOU TO GET TO/FROM WORK OR SCHOOL?”



The key part of the survey replicates two of the exercises from the public meetings. One question focuses on the types of transportation projects that would be most helpful. Respondants were asked to rank project types from one (most desired) to seven (least desired.) Similar to what was observed in the community meetings, the top categories include ‘roadway capacity and operations’ and ‘intersection improvements.’

<b>CATEGORY</b>	<b>AVERAGE RANK</b>
Roadway Capacity and Operations	2.3
Intersection Improvements	2.2
Roadway Safety	3.2
ITS Infrastructure	3.9
Bicycle Infrastructure	5.5
Pedestrian Infrastructure	5.5
Freight Mobility	5.5

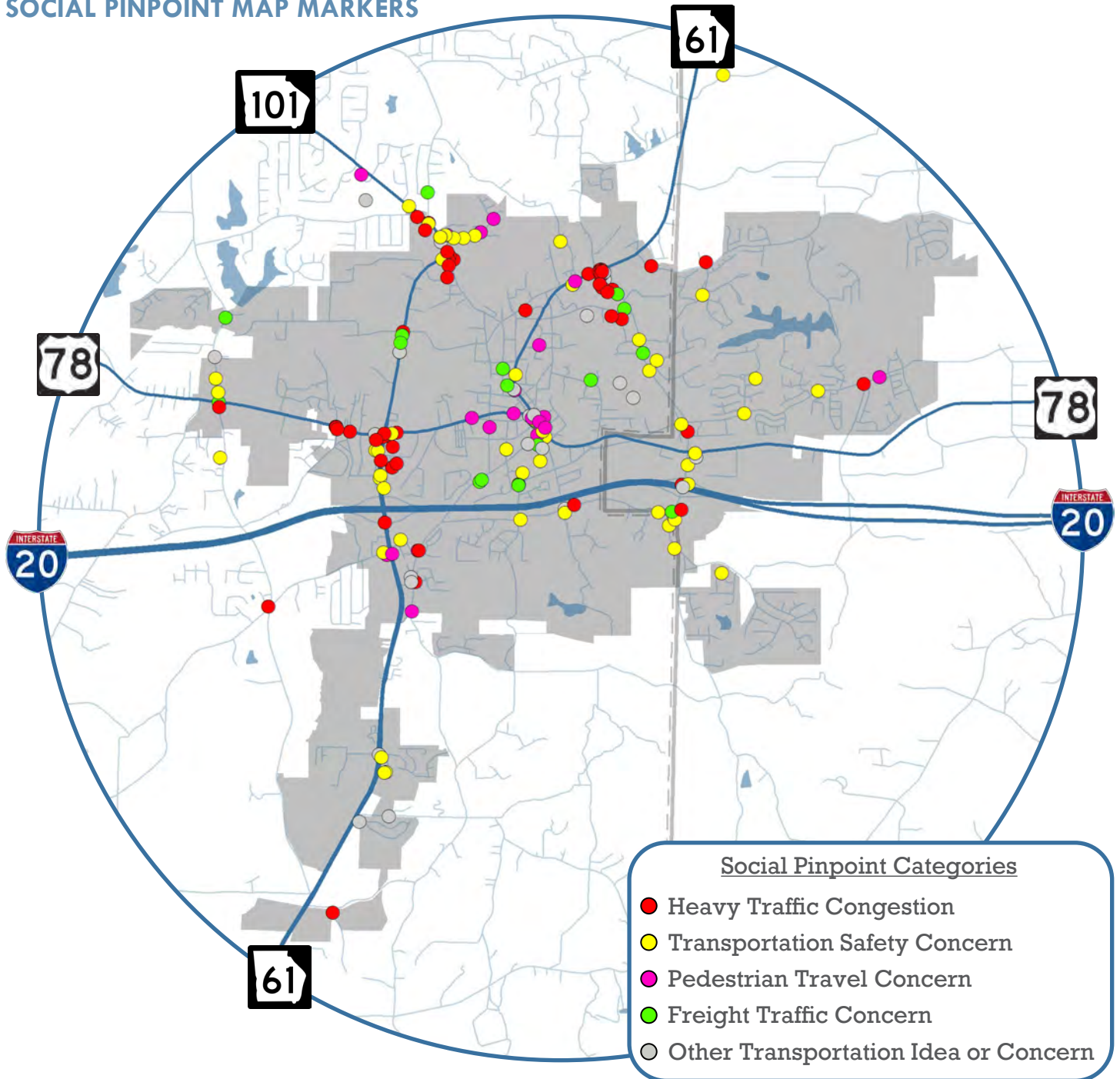
Similarly, respondents were also asked on their preferences for the transportation system goals, showing collective preferences similar to what was observed in the community meetings, with a larger emphasis on developing east west travel and developing freight corridors.

<b>CATEGORY</b>	<b>AVERAGE RANK</b>
Developing East West Travel	2.6
Developing an Active Mode Network	4.5
Improving North South Travel	2.9
Making Connections to I-20	4.6
Developing Freight Corridors	4.8
Supporting Economic Development	4.5

The other component of the online engagement involved the use of an interactive map where respondents could place pins down on a map representing different types of concerns and comments and provide additional commentary as they felt needed. Categories included:

- Transportation Safety Concern
- Heavy Traffic Congestion
- Freight Traffic Concern
- Pedestrian Travel Concern
- Other Transportation Idea or Concern

### SOCIAL PINPOINT MAP MARKERS

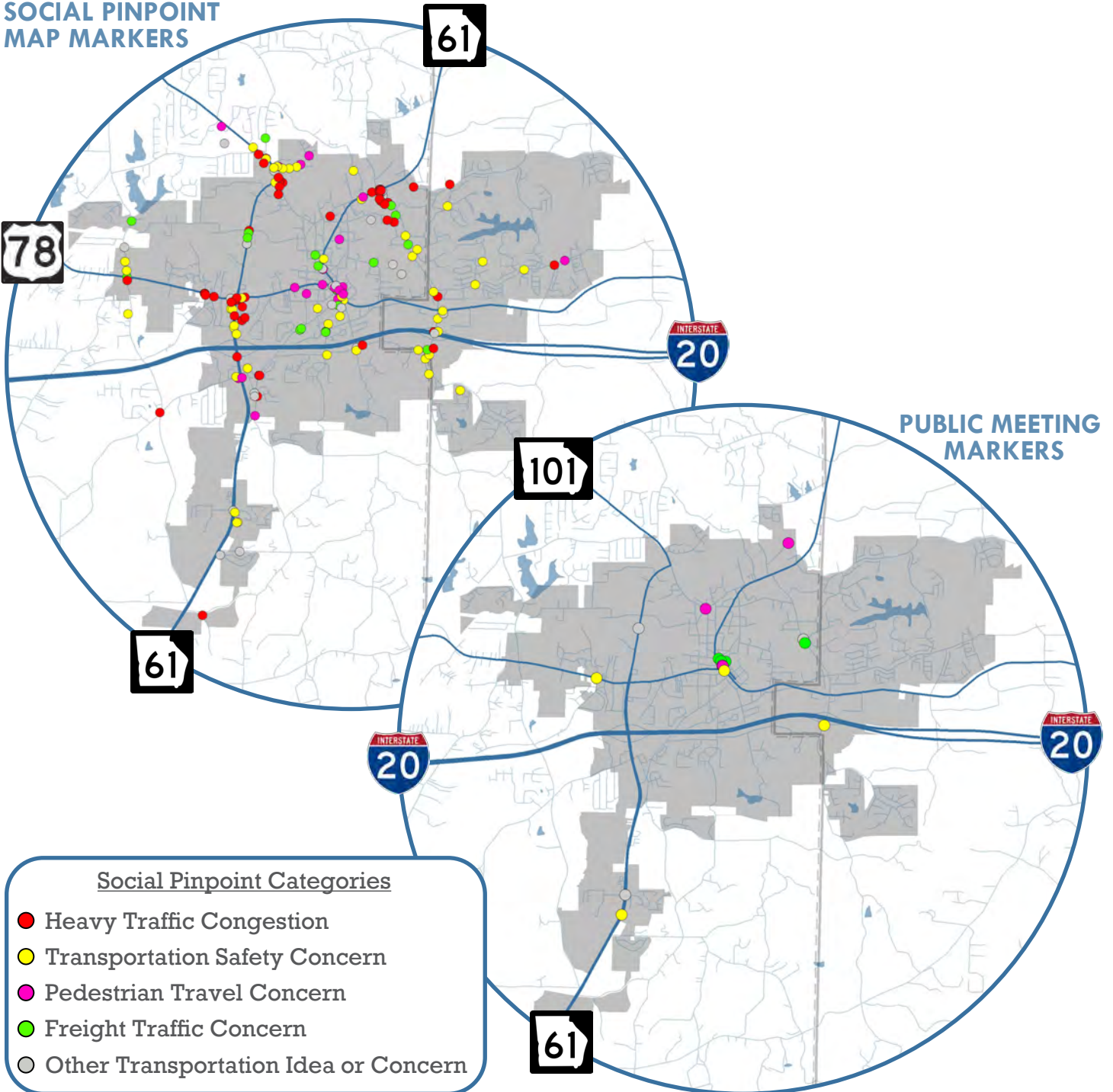


**SUMMARY OF COMMUNITY ENGAGEMENT AND INPUT**

Given the disparate sources of community engagement and input, further compilation of results and input was appropriate to understand the collective direction from the community. In particular, this includes the three main exercises and questions held over the course of both the public and stakeholder meetings as well as through the online engagement tools.

- An exercise where community members could indicate on a map the areas where they felt transportation improvements were the most critical, the results presented below.

**SOCIAL PINPOINT MAP MARKERS**



**PUBLIC MEETING MARKERS**

- A ranking of the transportation system goals previously described in Chapter 3, the results presented below

### PUBLIC MEETING GOALS RANKING

CATEGORY	NUMBER OF DOTS
Developing East West Travel	3
Developing an Active Mode Network	5
Improving North South Travel	13
Making Connections to I-20	2
Developing Freight Corridors	10
Supporting Economic Development	6

### ONLINE SURVEY GOALS RANKING

CATEGORY	AVERAGE RANK
Developing East West Travel	2.6
Developing an Active Mode Network	4.5
Improving North South Travel	2.9
Making Connections to I-20	4.6
Developing Freight Corridors	4.8
Supporting Economic Development	4.5

### COMMUNITY GOALS RANKING

CATEGORY	MEETING SCORE	SURVEY SCORE
Developing East West Travel	48	100
Developing an Active Mode Network	62	75
Improving North South Travel	100	94
Making Connections to I-20	39	75
Developing Freight Corridors	88	73
Supporting Economic Development	70	75

## TECHNICAL ANALYSIS

Complimenting the community input during the TMP process, a technical analysis was used to evaluate and understand different aspects of the transportation system including establishing existing conditions and needs, identify anticipated future conditions, and determine the needed improvements.

### INTERSECTION IMPROVEMENT PROJECTS

#### EXISTING CONDITIONS ANALYSIS

In coordination with the City staff, the planning team identified 29 major intersections at the city to analyze in further detail. Peak hour turning movement counts were collected the week of November 20, 2019 at these locations. The AM and PM peak hour conditions were modeled using the traffic engineering software Synchro and analyzed using standard reference Highway Capacity Manual (HCM) methodology in order to determine the average delay experienced by each vehicle at each intersection, which in turn is used to determine Level of Service (LOS). The HCM reports are included in Appendix B.



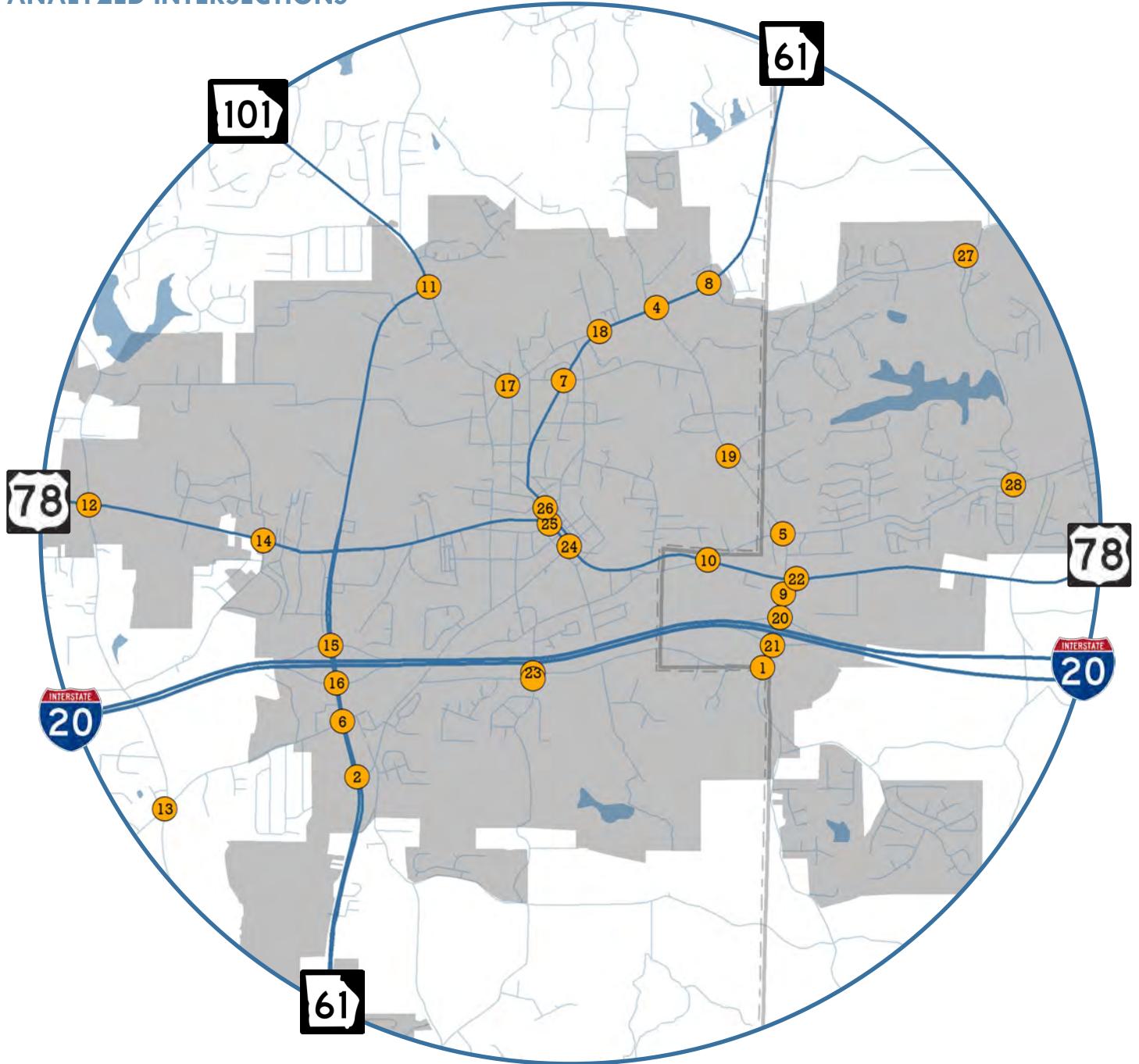
Two additional intersections (SR 61 at Vicksburg Dr/Bay Springs and SR 101/Rockmart Road at Reid Plantation Drive) were identified in the community engagement process. Due to the nature of the desired improvement at SR 61 at Vicksburg Dr/Bay Springs (a median break), it was not modeled in Synchro. Instead, volumes were calculated using the ITE Trip Generation Manual and delay was calculated based on the distance to the nearest median break. Due to the late addition and limited data availability, congestion was not calculated for SR 101/Rockmart Road at Reid Plantation Drive.

The improvement of the intersection of US 78 and GA SR 61 is a planned and funded GDOT project. While it is included in this plan, it was not analyzed as the project planning and design is already underway.

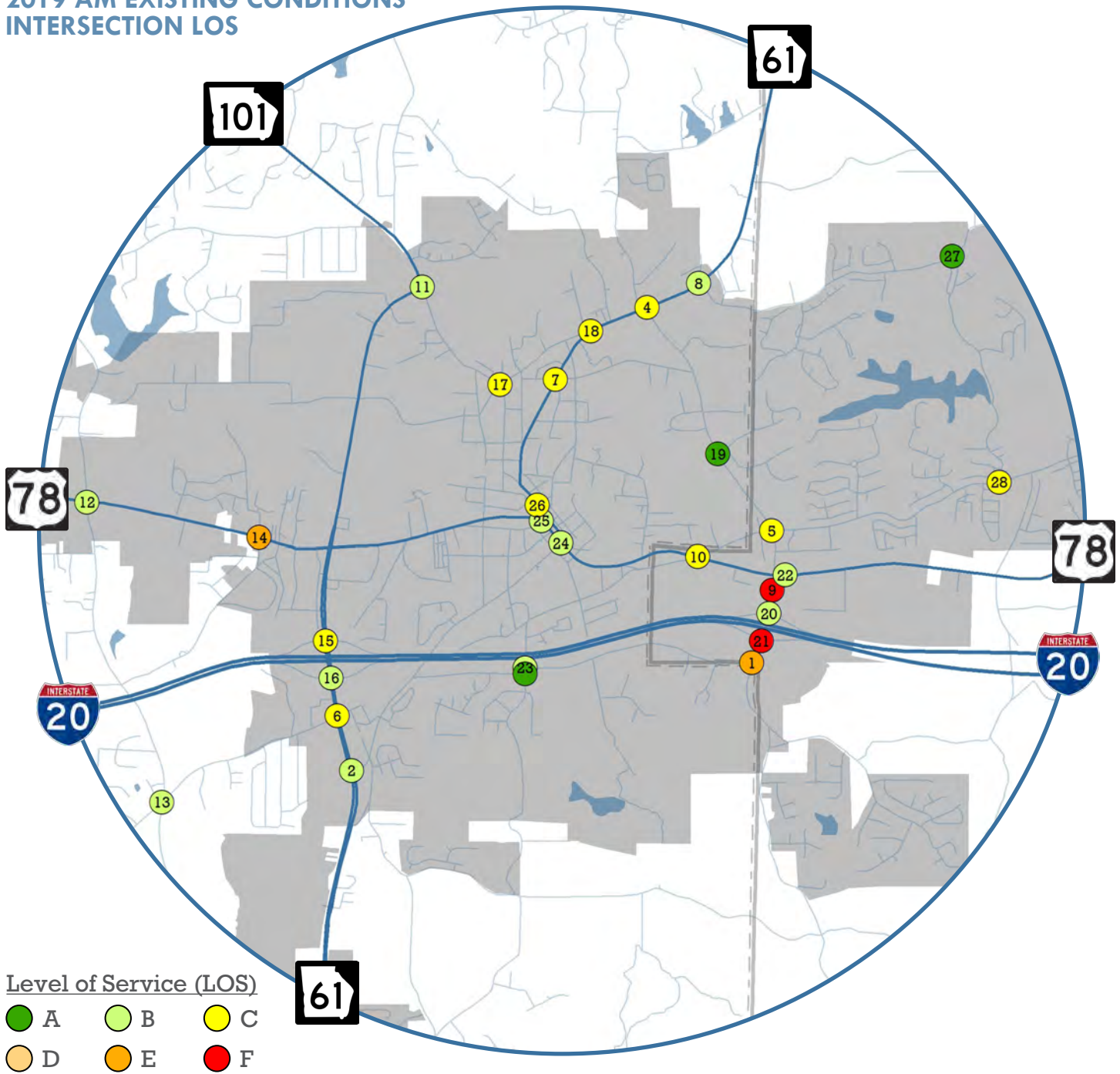
## ANALYZED INTERSECTIONS

INTERSECTION ID	INTERSECTION
1	Liberty Rd @ Edge Rd
2	Hwy 61 @ South Carroll Rd
3	Hwy 61 @ US 78/; US 78 @ Rocky Branch Rd
4	Punkintown Rd @ Dallas Hwy
5	Mirror Lake Blvd @ Conners Rd
6	Hwy 61 @ Hickory Level Rd
7	Dallas Hwy @ Old Stone Rd
8	Hwy 61 @ Stockmar Rd
9	Liberty Rd @ Liberty Rd Connector
10	Conners Rd @ Veterans Memorial Hwy
11	Hwy 61 @ West/East Industrial Blvd
12	Us 78 @ Van Wert Rd
13	South Van Wert Rd @ Hickory Level Rd
14	Rocky Branch Rd @ Hwy 78
15	Hwy 61 @ I-20 @WB Ramps
16	Hwy 61 @ I-20 @EB Ramps
17	Rockmart Rd @ Old Town Rd
18	Dallas Hwy @ Old Town Rd
19	Punkintown Rd @ Shoreline Pkwy
20	Liberty Rd @ I-20 WB Ramps
21	Liberty Rd @ I-20 EB Ramps
22	Liberty Rd Connector @ Hwy 78
23	Daniel Rd @ Edge Rd
24	Hwy 78 @ South Carroll Rd
25	Hwy 78 @ Westview Dr
26	Main St @ Cheeves St
27	Mirror Lake Pkwy @ Stockmar Rd
28	Mirror Lake Pkwy @ Conners Rd
29	Daniel Rd @ Berry Dr
50	SR 61 @ Vicksburg Dr/Bay Springs Dr

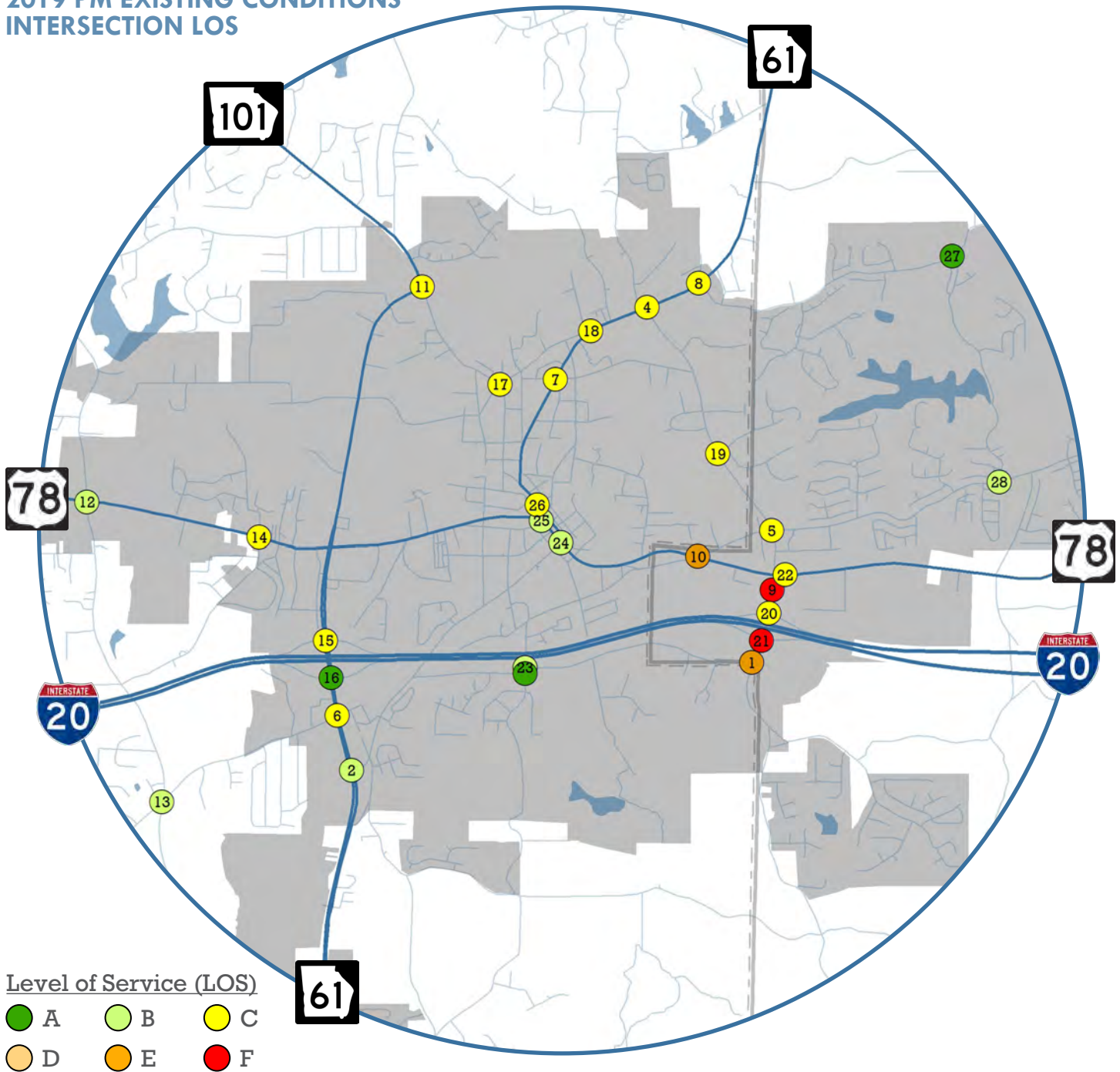
### ANALYZED INTERSECTIONS



2019 AM EXISTING CONDITIONS  
INTERSECTION LOS



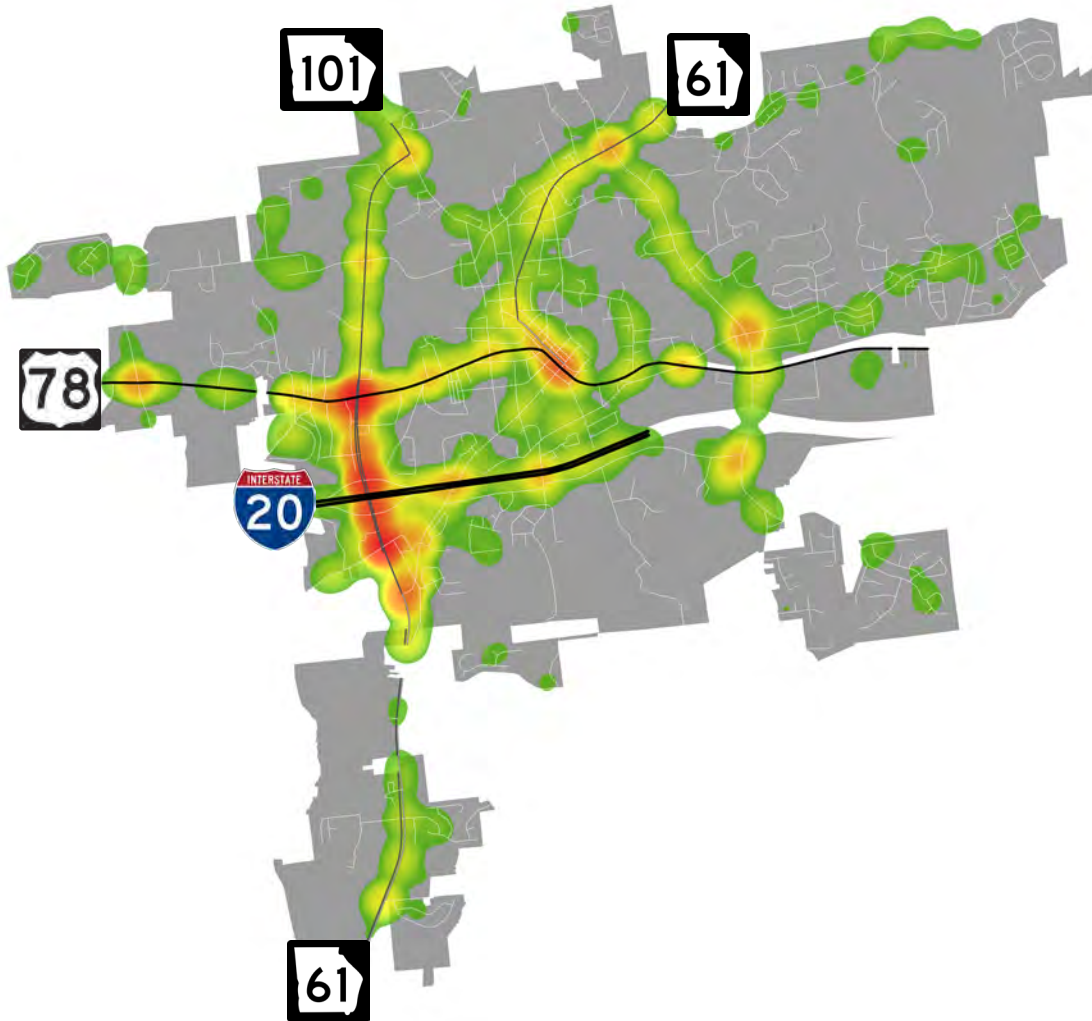
**2019 PM EXISTING CONDITIONS  
INTERSECTION LOS**



Crash history from the years 2014-2018 was collected through the city and analyzed at each intersection using the Georgia Electronic Accident Reporting System (GEARS) to identify safety issues.

## HEATMAP OF VILLA RICA CRASH HISTORY

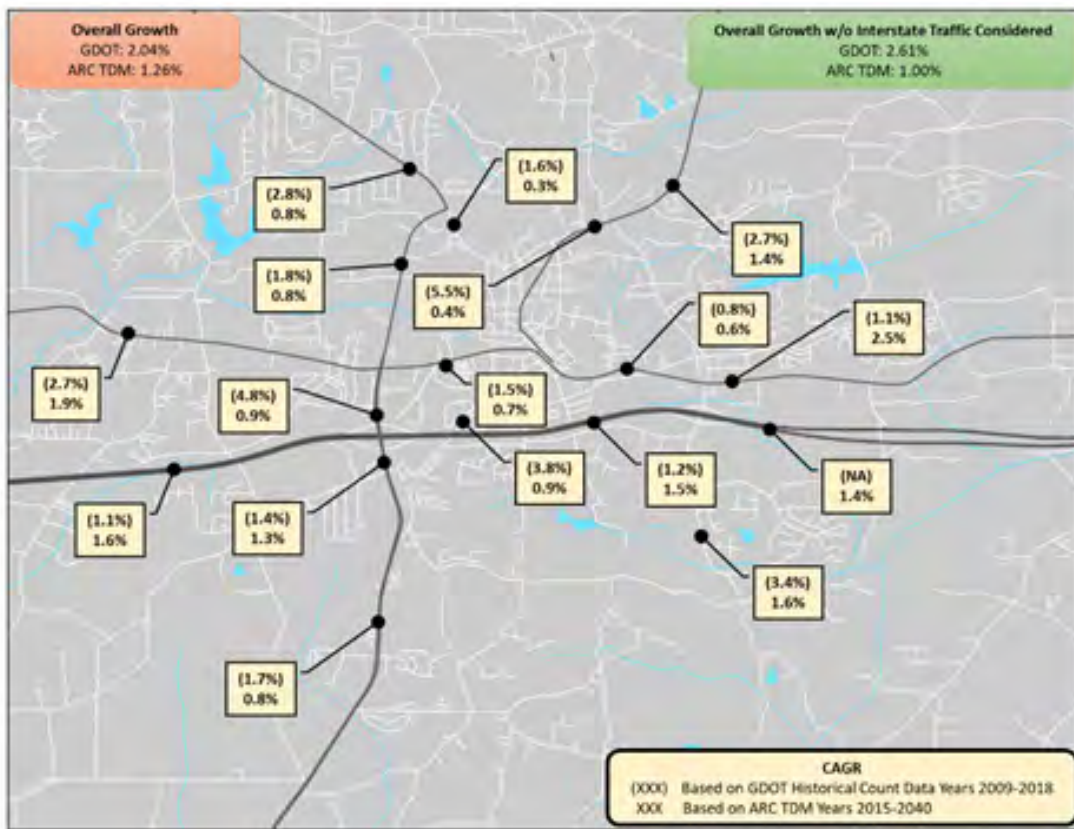
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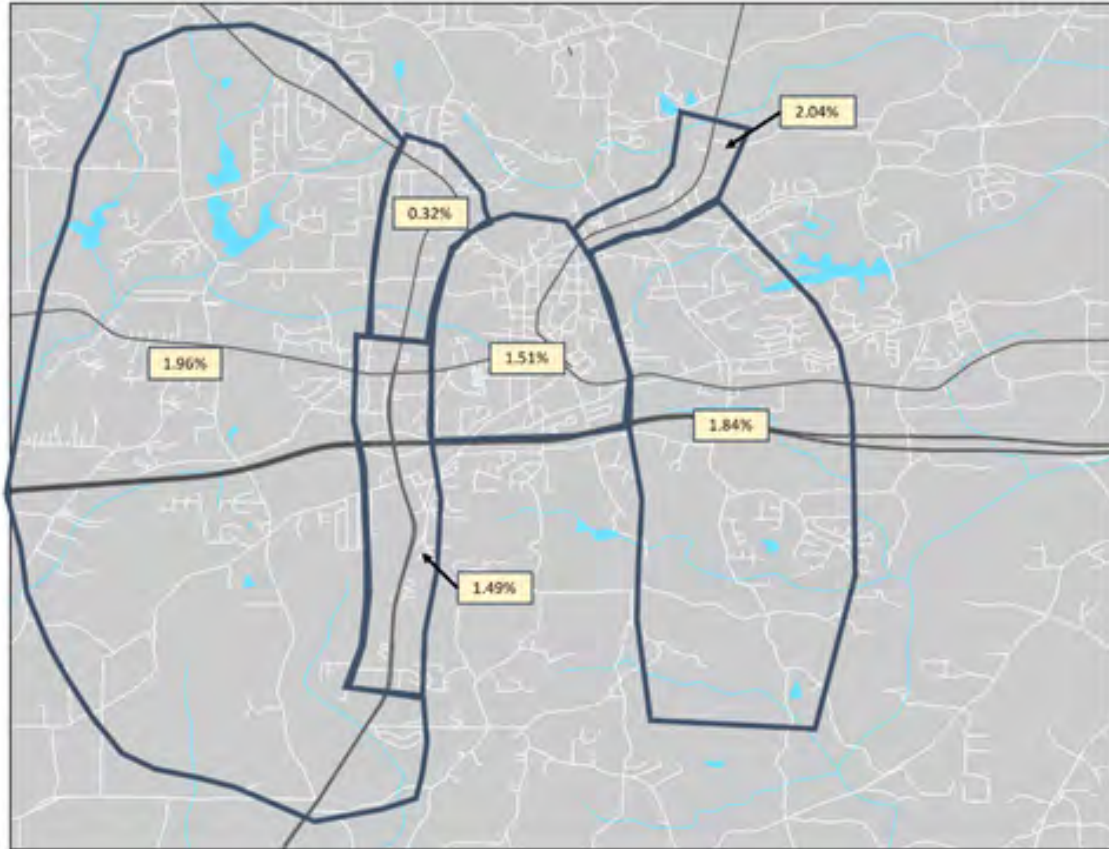
A field review was performed on February 4, 2020 in order to further identify operational and safety concerns. The operation of each intersection was observed in the AM and PM peak hour. The notes from this field review and the crash data are included in Appendix C.

**TRAFFIC FORECASTING**

In order to determine needed improvements, future traffic volume forecasting was performed. Intersection turning volumes were calculated for the planned year of 2045 using a compound annual growth rate determined using GDOT historical data and the ARC’s Travel demand model (TDM) The historical data was used to determine past annual growth rates based on an exponential regression model of best fit. The TDM was utilized to understand projected traffic volume trends for the future along the corridor which is based on information about the anticipated demand of traffic (generated through anticipated changes in land use) and couples it with information on the anticipate supply (where roads are location, number of lanes, etc.) of the transportation system. It is important to note that the while the exact traffic volumes from the TDM may not accurately reflect actual volumes on study area roadways, changes in volume identified by the model are still useful for traffic projections because they account for changes in future land uses, land use intensities, population, and employment. A growth rate based on the TDM was calculated at each GDOT count location, presented below. The growth calculations based on historical data and the TDM are included in Appendix D.



In order to account for the fact that different areas of the city are expected to grow at different rates, the city was divided into six “growth zones,” presented below. GDOT historical count stations within each zone and the corresponding TDM based growth rates were averaged in order to determine a growth rate for each zone, presented below.

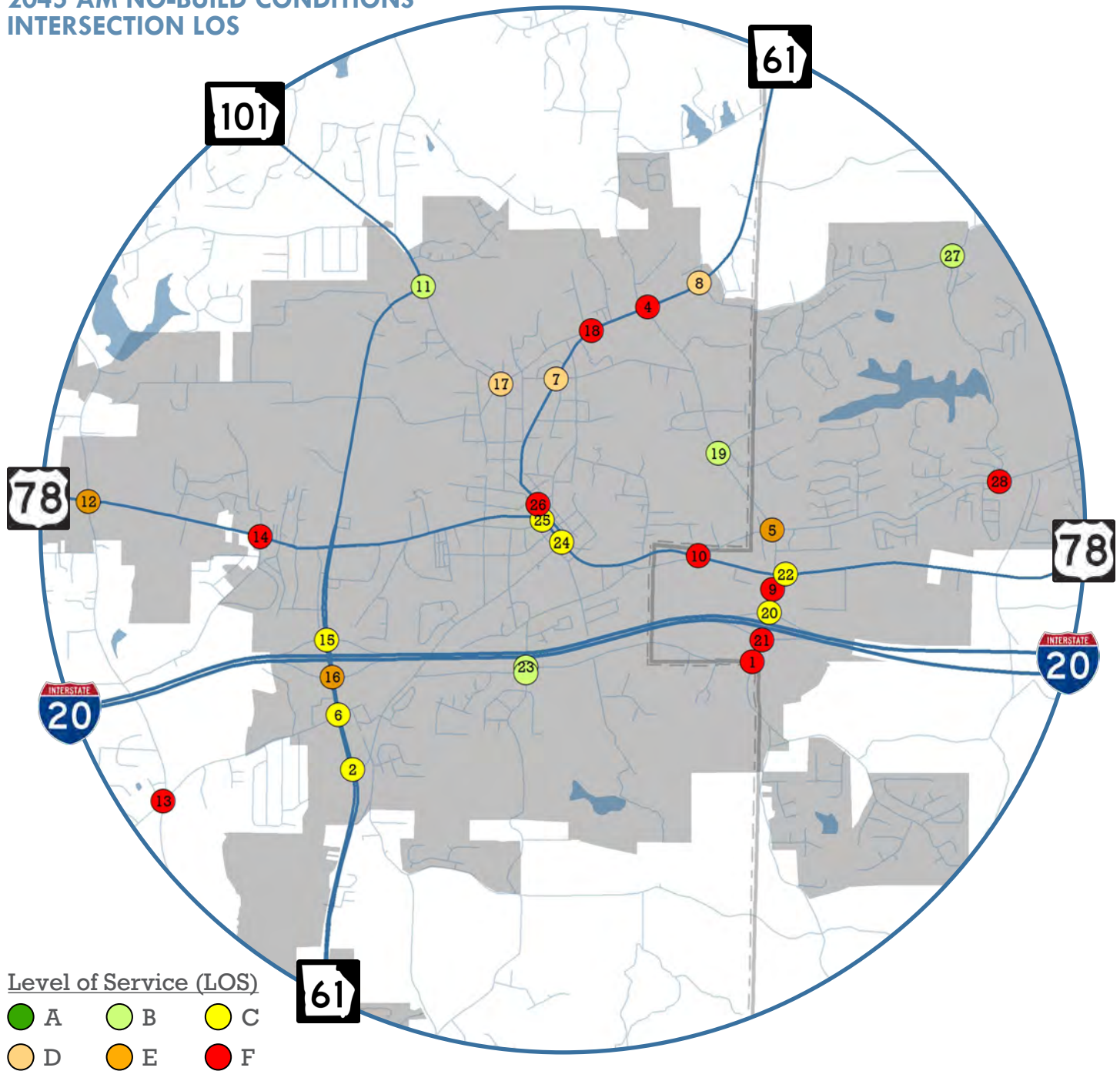


The calculated growth rates were applied to the existing 2019 traffic counts at each intersection to calculate 2045 future volumes. Future traffic volumes are provided in Appendix E.

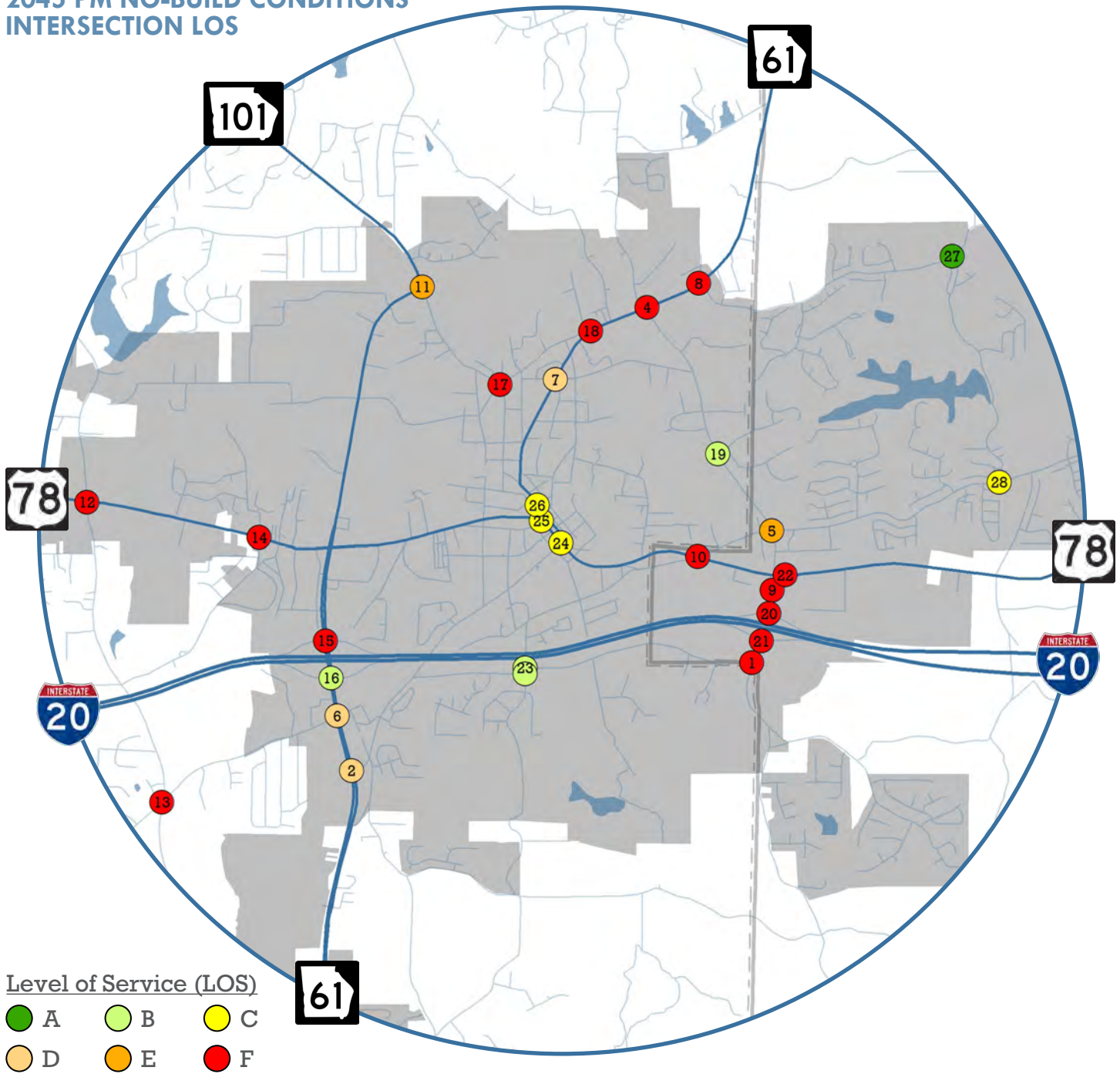
#### PROJECT DEVELOPMENT

The forecasted traffic volumes were input into the Synchro model and analyzed using HCM methodology to determine the 2045 No Build conditions in the AM and PM peak hours. At each location project improvements, if needed, were determined based on engineering judgment, feasibility and delay reduction. Each intersection was added as a project for consideration in the Transportation Master Plan if improvements were determined to be necessary. These improvements were modeled in Synchro and analyzed using HCM methodology to calculate the 2045 Build Conditions in the AM and PM peak hours.

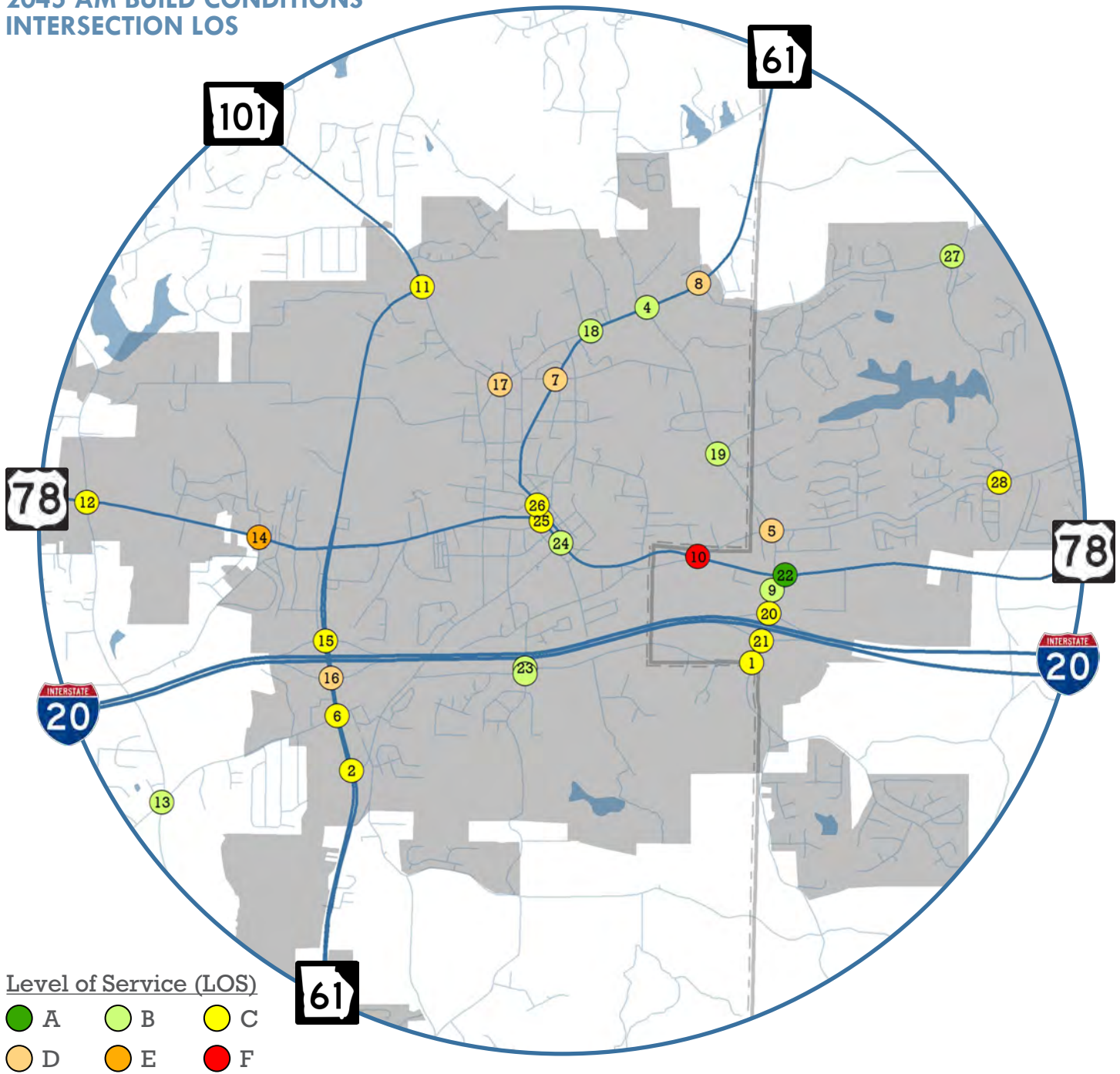
**2045 AM NO-BUILD CONDITIONS  
INTERSECTION LOS**



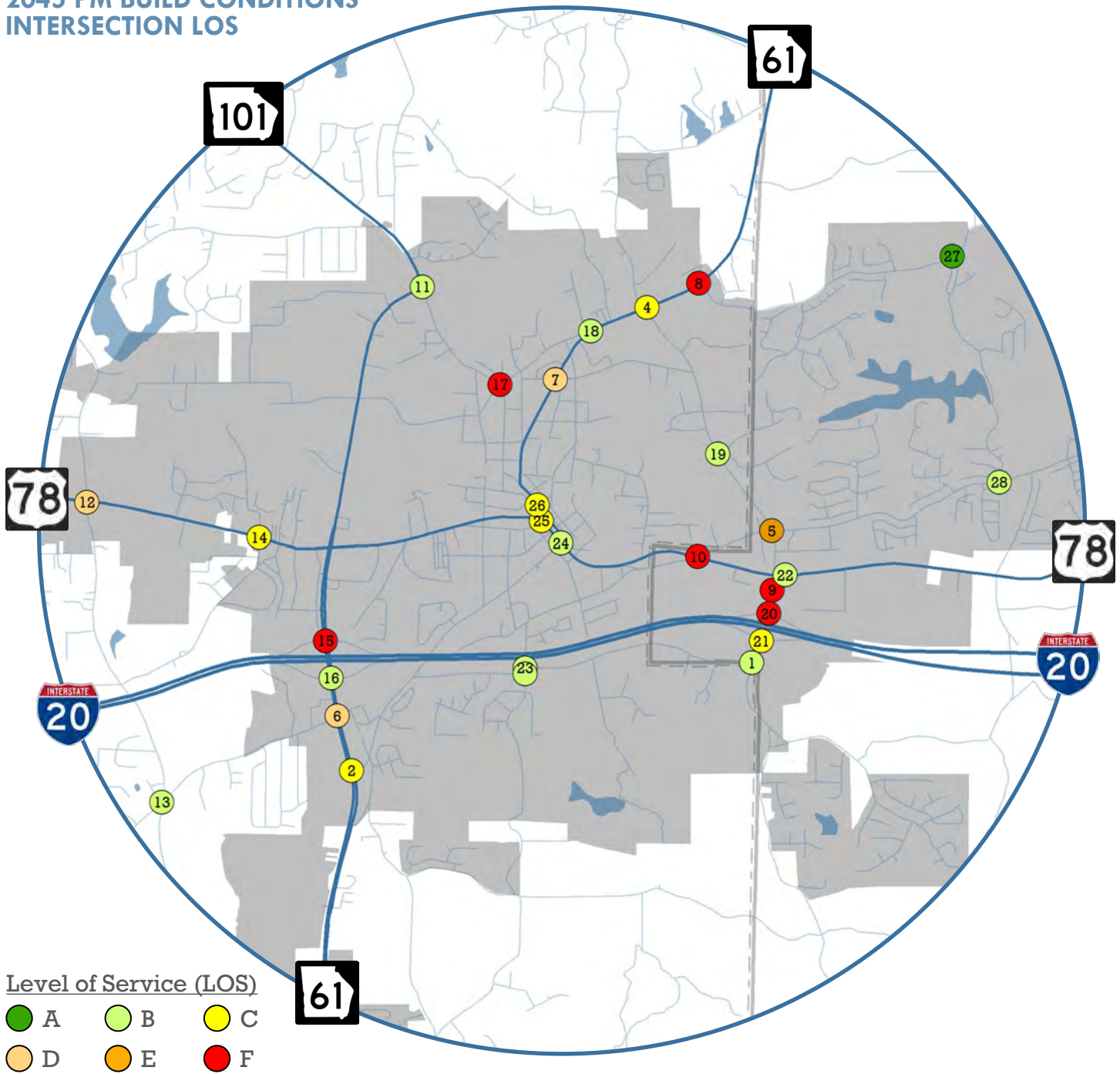
2045 PM NO-BUILD CONDITIONS  
INTERSECTION LOS



**2045 AM BUILD CONDITIONS  
 INTERSECTION LOS**



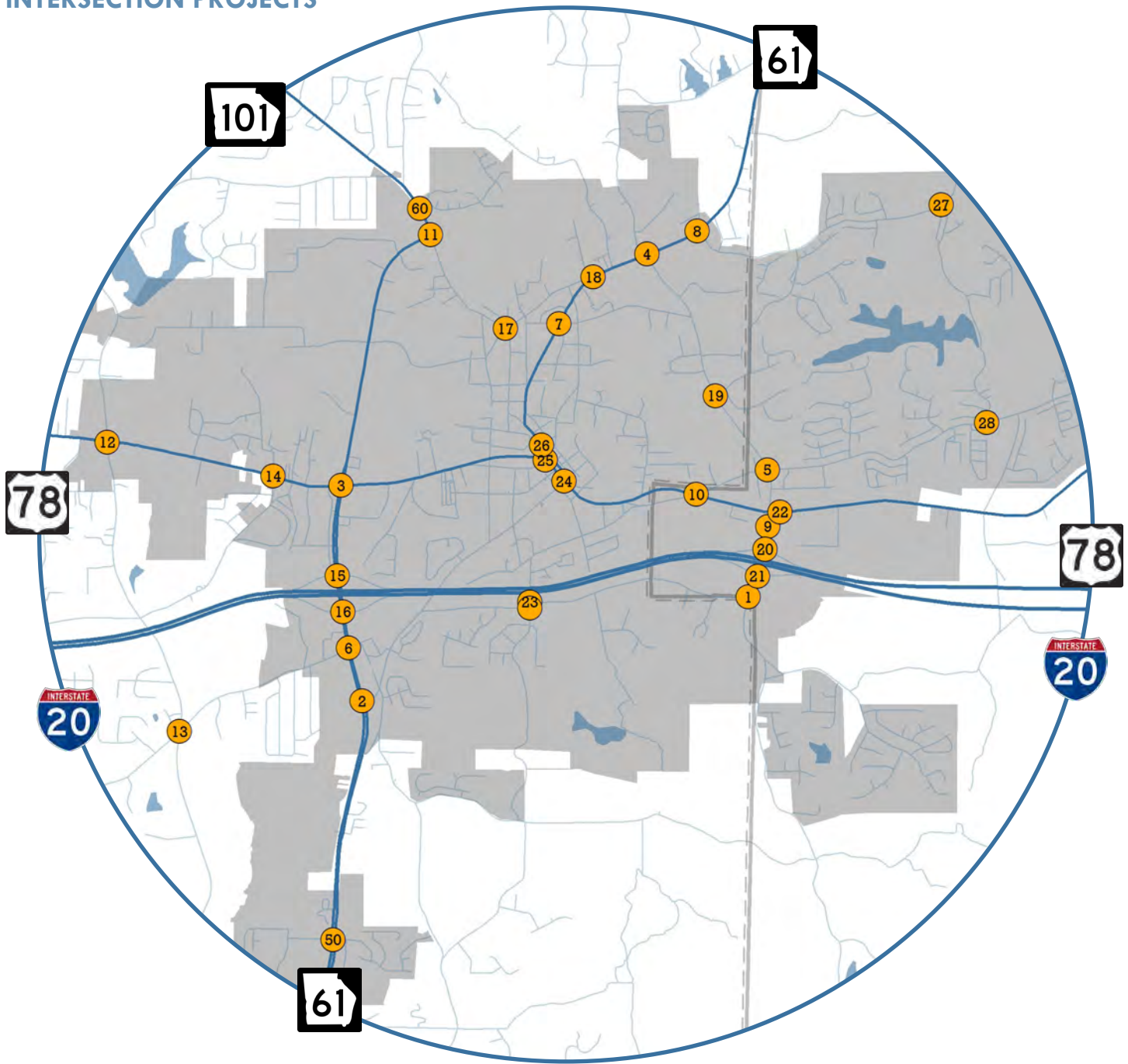
2045 PM BUILD CONDITIONS  
INTERSECTION LOS



## INTERSECTION PROJECTS

PROJECT ID	PROJECT	DESCRIPTION
1	Liberty Rd @ Edge Rd	Install roundabout
2	Hwy 61 @ South Carroll Rd	Make WBL double LT
3	Hwy 61 @ US 78/; US 78 @ Rocky Branch Rd	GDOT intersection improvements
4	Punkintown Rd @ Dallas Hwy	Install roundabout with bypasses on all approaches
5	Mirror Lake Blvd @ Conners Rd	Install EB and WB double LT
7	Dallas Hwy @ Old Stone Rd	Add SB LTL
8	Hwy 61 @ Stockmar Rd	Install roundabout
9	Liberty Rd @ Liberty Rd Connector	Restrict westbound lefts, route around and back down; Long term, construct connector bridge on west side of Mirror Lake Blvd
10	Conners Rd @ Veterans Memorial Hwy	Install roundabout
11	Hwy 61 @ West/East Industrial Blvd	Install roundabout
12	Us 78 @ Van Wert Rd	Install SBL and SBR turn lanes; Install NBL turn lane
13	South Van Wert Rd @ Hickory Level Rd	Install roundabout
14	Rocky Branch Rd @ Hwy 78	Signalize; Give WBL pm+pt phase
15	Hwy 61 @ I-20 @WB Ramps	Extend NBL turn bay to 250 ft; make NBL double LT
16	Hwy 61 @ I-20 @EB Ramps	Extend SBL turn bay to 250 ft; make SBL double LT;
17	Rockmart Rd @ Old Town Rd	Install WBR turn bay
18	Dallas Hwy @ Old Town Rd	Install roundabout
19	Punkintown Rd @ Shoreline Pkwy	Install WBR turn bay
20	Liberty Rd @ I-20 WB Ramps	Make WBR double RT, add lane with taper OR drop lane at Liberty Rd connector intersection
21	Liberty Rd @ I-20 EB Ramps	Signalize; make SBL double left
22	Liberty Rd Connector @ Hwy 78	Install roundabout
24	Hwy 78 @ South Carroll Rd	Install SBR turn bay
26	Main St @ Cheeves St	Install TWLTL
28	Mirror Lake Pkwy @ Conners Rd	Install SB LTL; NB RTL; TWLTL
50	SR 61 @ Vicksburg Dr/Bay Springs Dr	Provide median break
60	SR 101/Rockmart Rd @ Reid Plantation Dr	Convert to unsignalized High-T intersection

# INTERSECTION PROJECTS



## BICYCLE AND PEDESTRIAN PROJECTS

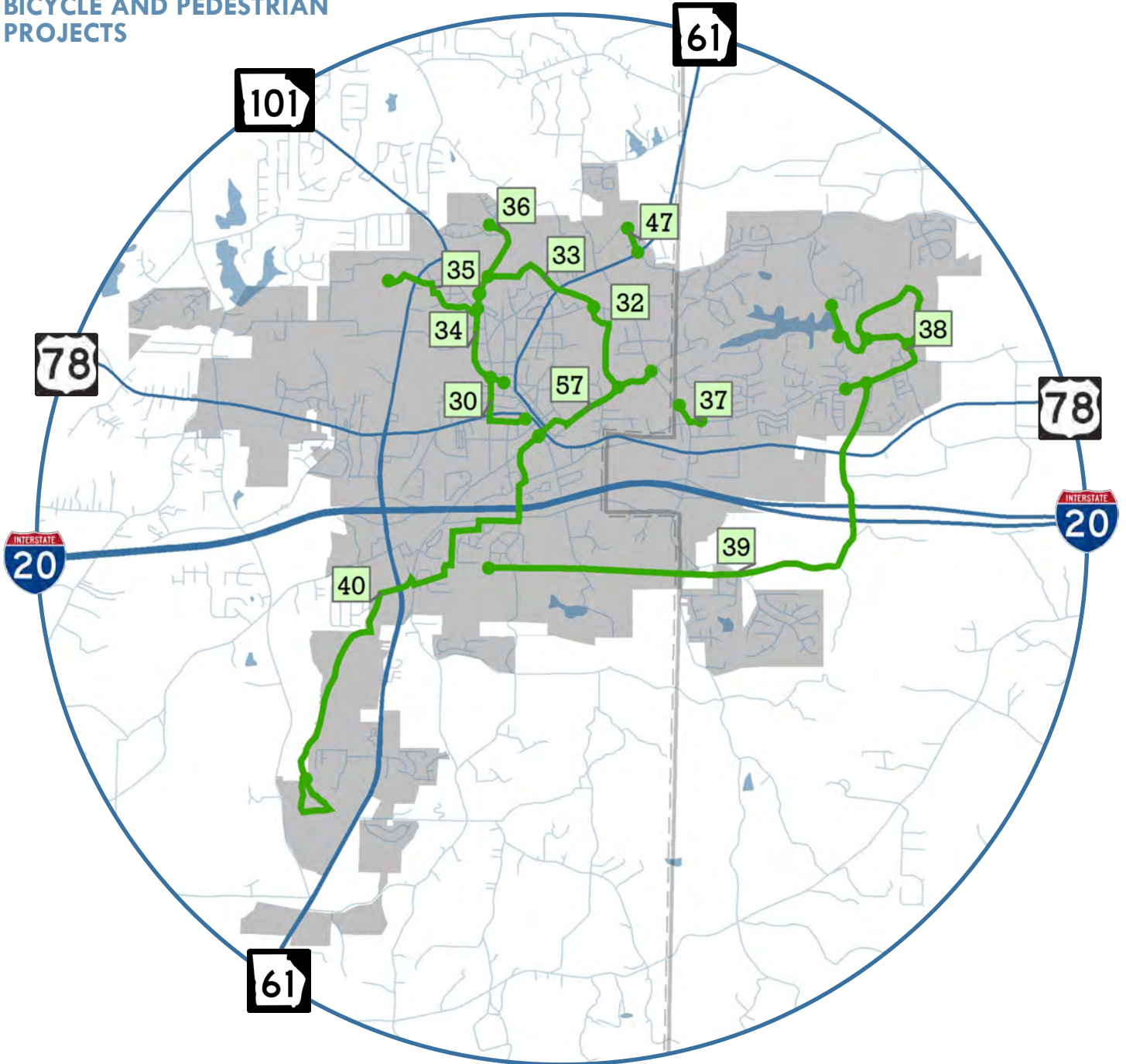
### PROJECT DEVELOPMENT

Bicycle and pedestrian projects include trails, sidewalk, and bike lanes. The starting point for the bicycle and pedestrian element of the Transportation Master Plan was the Gold Nugget Trail Master Plan. All projects from that effort were incorporated into the Transportation Master Plan, as well as other projects added based on input from the community and city staff. The bicycle and pedestrian component of the Shoreline Connector New Location roadway was also analyzed and incorporated into project evaluation.

### BICYCLE AND PEDESTRIAN PROJECTS

PROJECT ID	PROJECT
30	Downtown Connector Trail
32	Cleghorn to Old Stone Rd Trail
33	Tanner to Fullerville Trail
34	Downtown to Fullerville Trail
35	Gold Dust Park Connector Trail
36	Fullerville to Reid Plantation Trail
37	Mirror Lake Loop Trail
38	Conners Rd Park Trail
39	Tyson Rd Corridor Trail
40	South Connector Trail
47	Seniors Trail
57	Shoreline Connector
59	Downtown Grade Separated Ped RR Crossing

**BICYCLE AND PEDESTRIAN  
PROJECTS**



## PROPENSITY ANALYSIS

Each bicycle and pedestrian project was evaluated for propensity. Propensity analysis in combination with public input helps to determine which projects will be the most effective at serving community needs. Data collected and evaluated in this analysis includes:

- History of bicycle and pedestrian crashes from the years 2014-2018 in the project vicinity utilizing GEARS data
- Population density utilizing American Community Survey data
- Employment density utilizing Longitudinal Employer-Household Dynamics (LEHD) data
- Density of households with no vehicle utilizing American Community Survey data
- Project connection to the downtown area based on the project limits

PROJECT ID	CRASHES	POPULATION DENSITY (PERSONS/ACRE)	EMPLOYMENT DENSITY (JOBS/ACRE)	HH W/ NO VEHICLE DENSITY (HH/ACRE)	DOWNTOWN CONNECTION
30	4	1.49	1.72	0.06	Yes
32	0	0.75	1.61	0.06	No
33	2	0.95	1.44	0.05	No
34	0	1.14	0.76	0.06	Yes
35	1	0.44	0.91	0.05	No
36	0	0.94	0.2	0.06	No
37	0	1.02	0.26	0.01	No
38	0	1.02	0.08	0	No
39	0	1.23	0.03	0.02	No
40	9	1.04	0.78	0.03	Yes
47	0	0.63	0.22	0.02	No
57	4	1.3	1.02	0.06	Yes
59	0	1.49	1.72	0.06	Yes

## ROADWAY PROJECTS

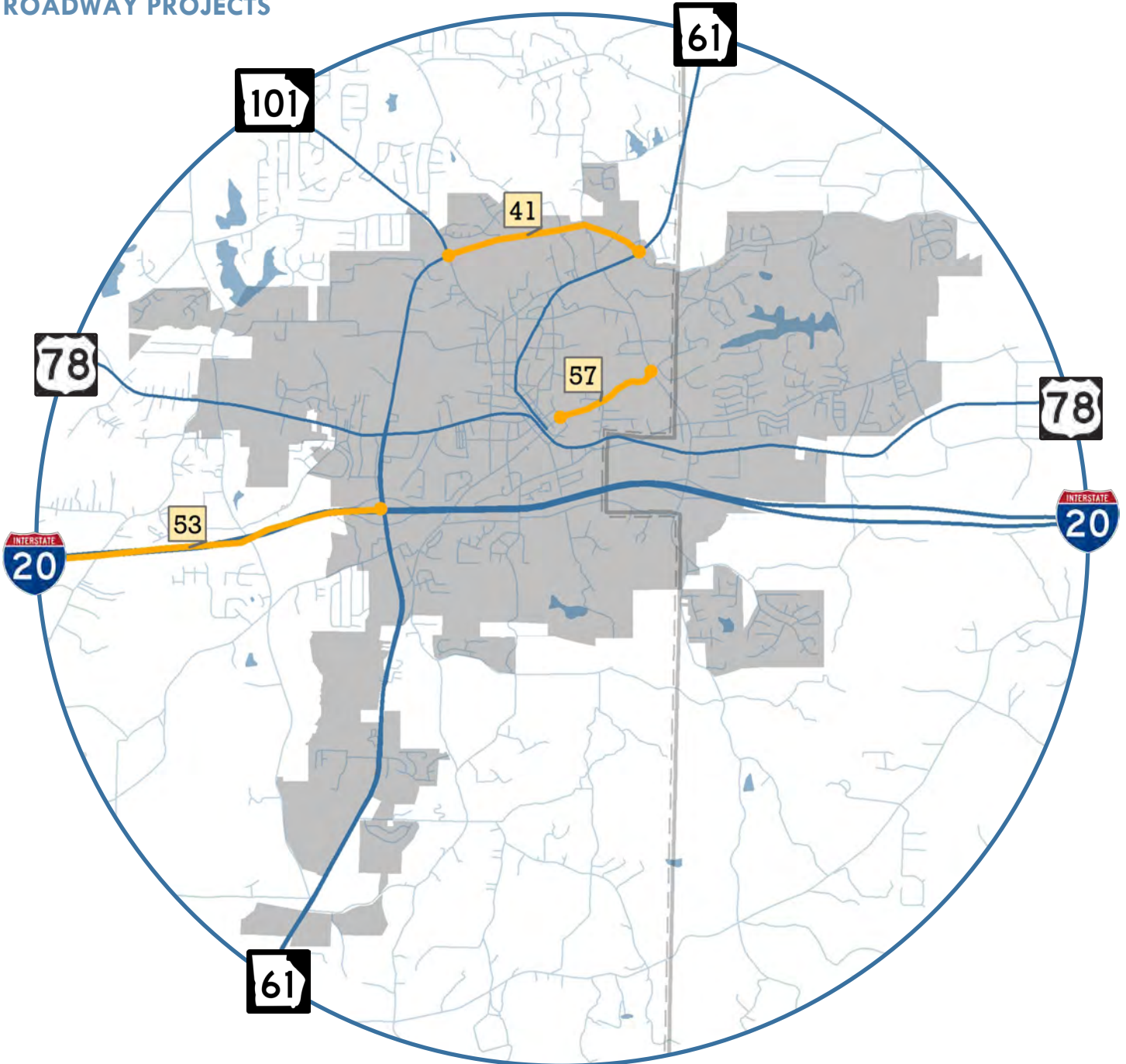
### PROJECT DEVELOPMENT

Roadway projects include widening and new location projects. The list of roadway projects was developed using existing planned state and local projects in addition to community input.

## ROADWAY PROJECTS

PROJECT ID	PROJECT	DESCRIPTION
41	North Loop	New Roadway
53	I-20 from SR 61 to SR 113	Widening to 6 Lanes
57	Shoreline Connector	New Roadway

## ROADWAY PROJECTS



**CRASH ANALYSIS**

Vehicle crash history from the years 2014-2018 was collected for the affected area of each project using GEARS.

INTERSECTION ID	CRASHES	EXISTING WEIGHTED CONGESTION	NO BUILD WEIGHTED CONGESTION	BUILD WEIGHTED CONGESTION	VEHICLES SERVED
41	125	6,046	10,653	9,393	49,769
53	348	124,982	213,414	173,545	707,014
57	230	5,268	8,537	8,213	39,187

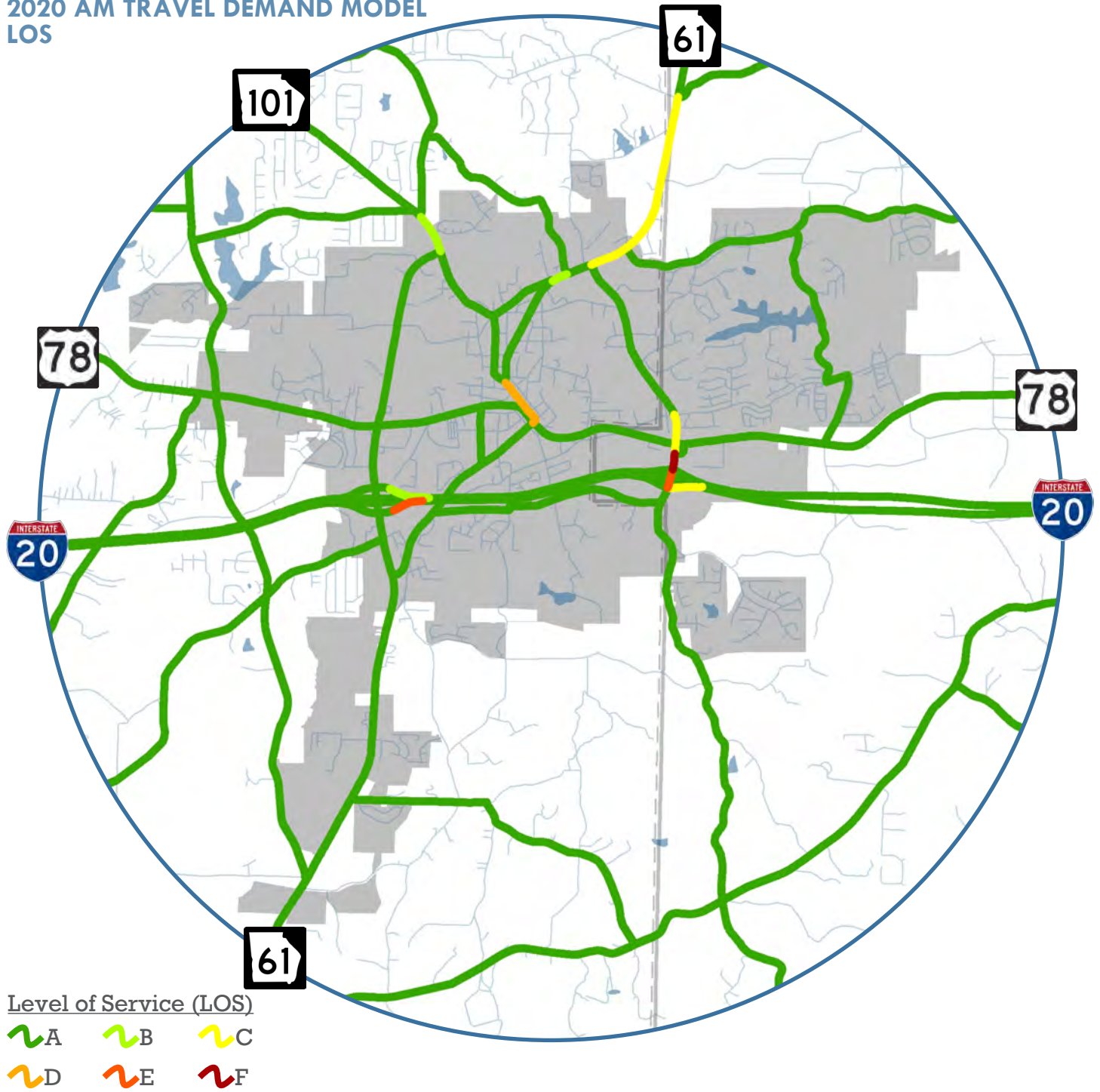
## TRAVEL DEMAND MODEL ANALYSIS

Roadway projects were analyzed using the ARC TDM in Cube software. Projects were modeled in three scenarios: 2020 Existing Conditions, 2020 No Build Conditions, and 2050 Build Conditions to compare and contrast how traffic flow and overall congestion may change. The following data from the model runs for each project affected area was used to evaluate the projects:

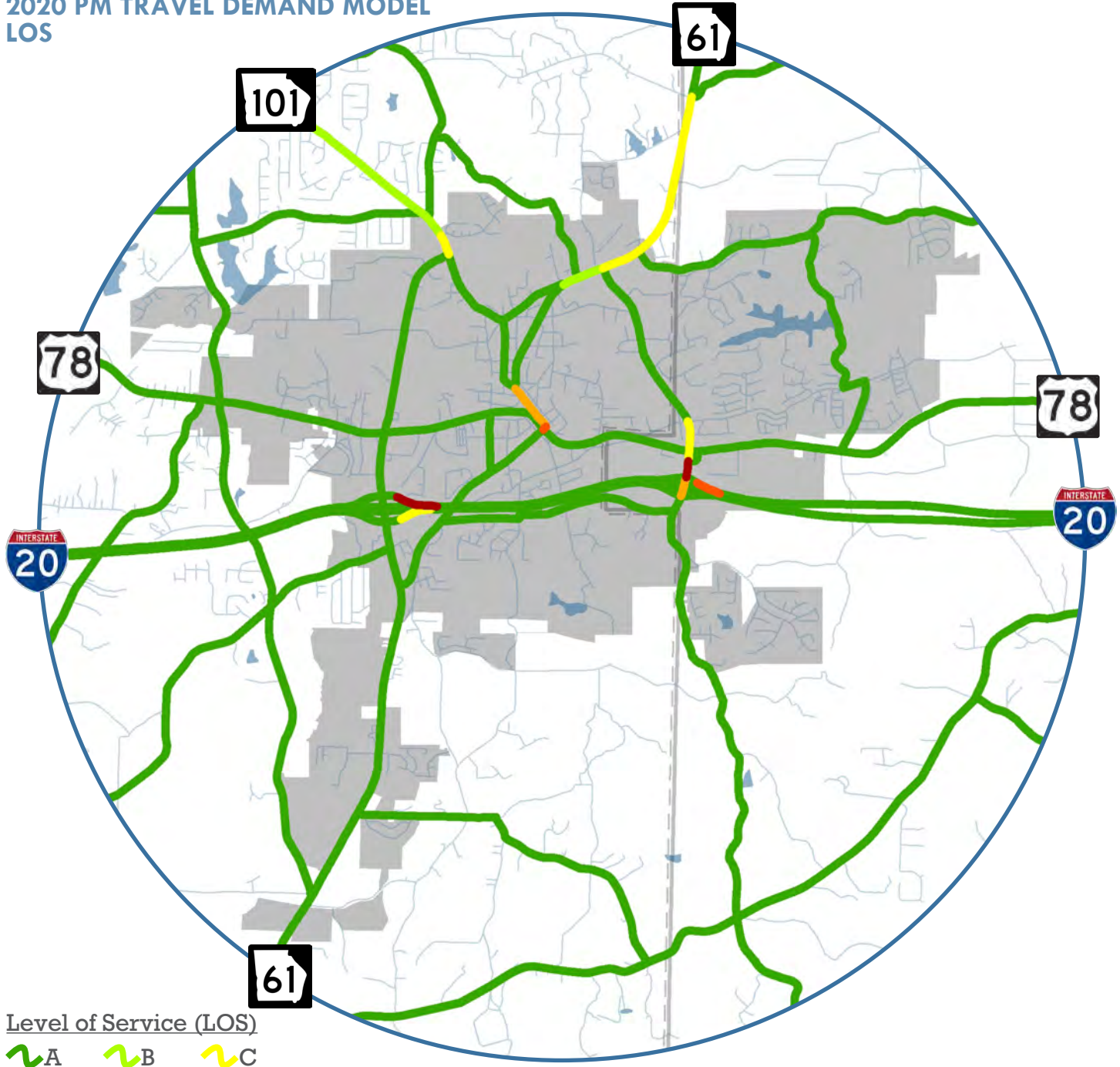
- Existing Conditions weighted congestion- Calculated based on the 2020 Existing Conditions model run, this data is the result of summing the multiple of volume to capacity ratio and vehicle miles traveled for all affected links for each project. This is an indication of the amount of congestion travelers currently experience in the project affected area.
- No-Build Conditions weighted congestion- Calculated based on the 2050 No Build Conditions model run, this data is the result of summing the multiple of volume to capacity ratio and vehicle miles traveled for all affected links for each project. This is an indication of the amount of congestion travelers are projected to experience in the project affected area in the year 2050 if the project is not installed.
- Build Conditions weighted congestion- Calculated based on the 2050 Build Conditions model run, this data is the result of summing the multiple of volume to capacity ratio and vehicle miles traveled for all affected links for each project. This is an indication of the amount of congestion travelers are projected to experience in the project affected area in the year 2050 if the project is installed.
- Vehicles Served- Calculated based on the 2050 Build Conditions, this data is the result of summing vehicle miles traveled for all links in the project affected area. This is an indication of the number of travelers that will be impacted by the project in the year 2050 if the project is installed.

The results of the model runs are plotted by peak hour Level of Service in the AM and PM conditions for each scenario. The Level of Service results indicated from the travel demand model are more generalized to the overall capacity of roadway segments, based on the number of through lanes. Unlike the intersection Level of Service analysis, this Level of Service isn't able to understand the impacts of signal timing or intersection constraints and how that may impact congestion.

**2020 AM TRAVEL DEMAND MODEL  
 LOS**

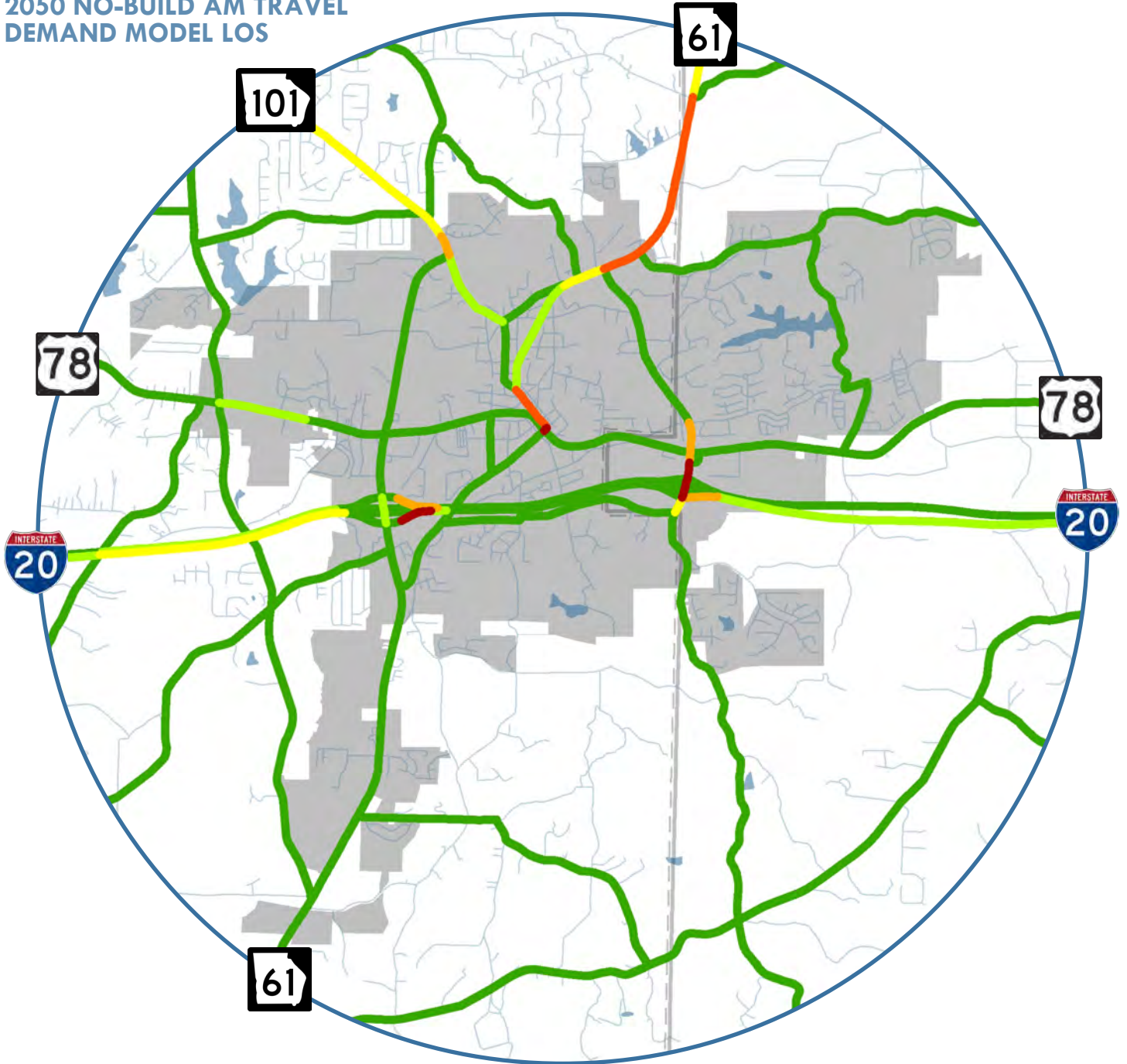


2020 PM TRAVEL DEMAND MODEL  
LOS

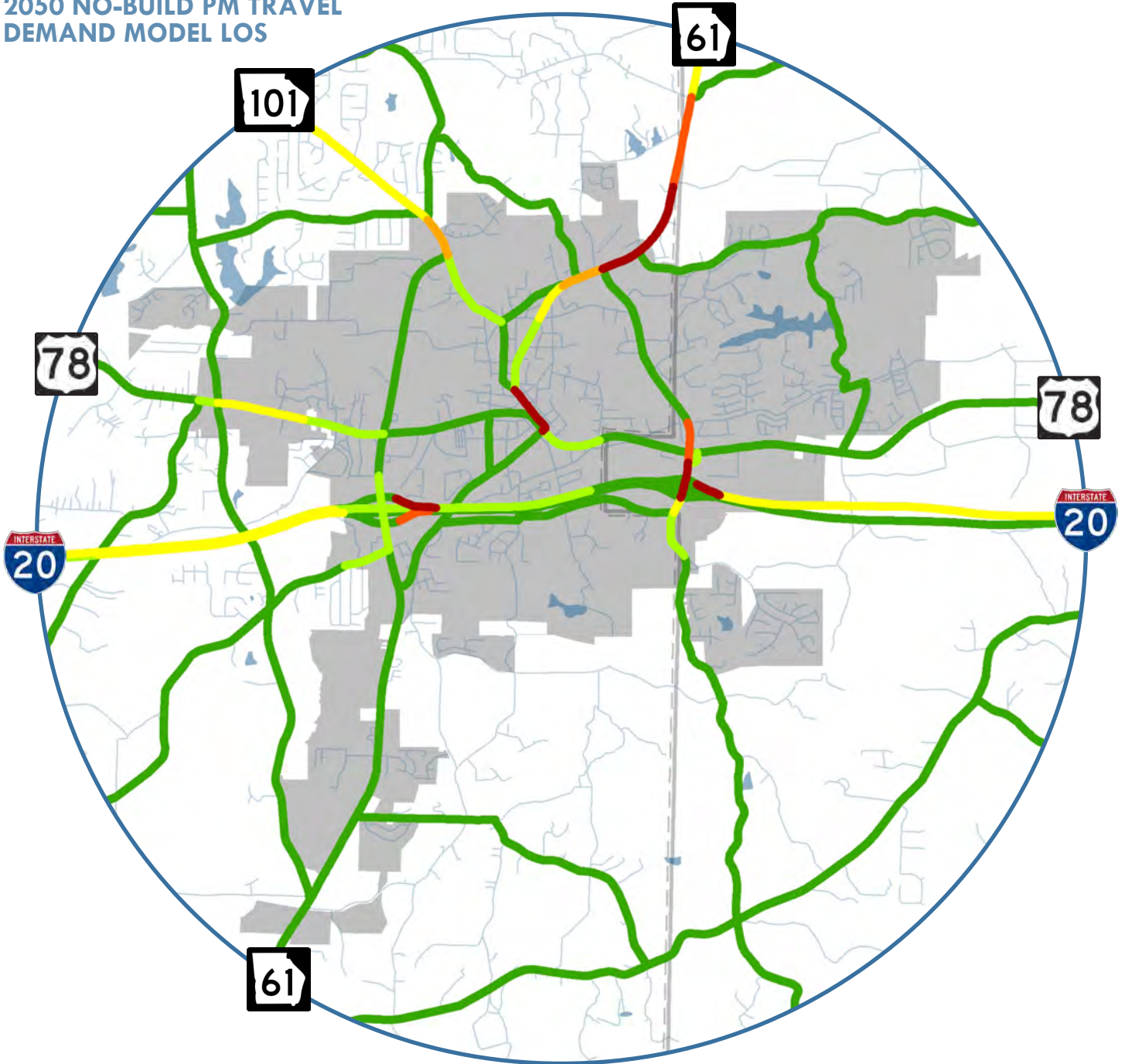


Level of Service (LOS)  
A B C  
D E F

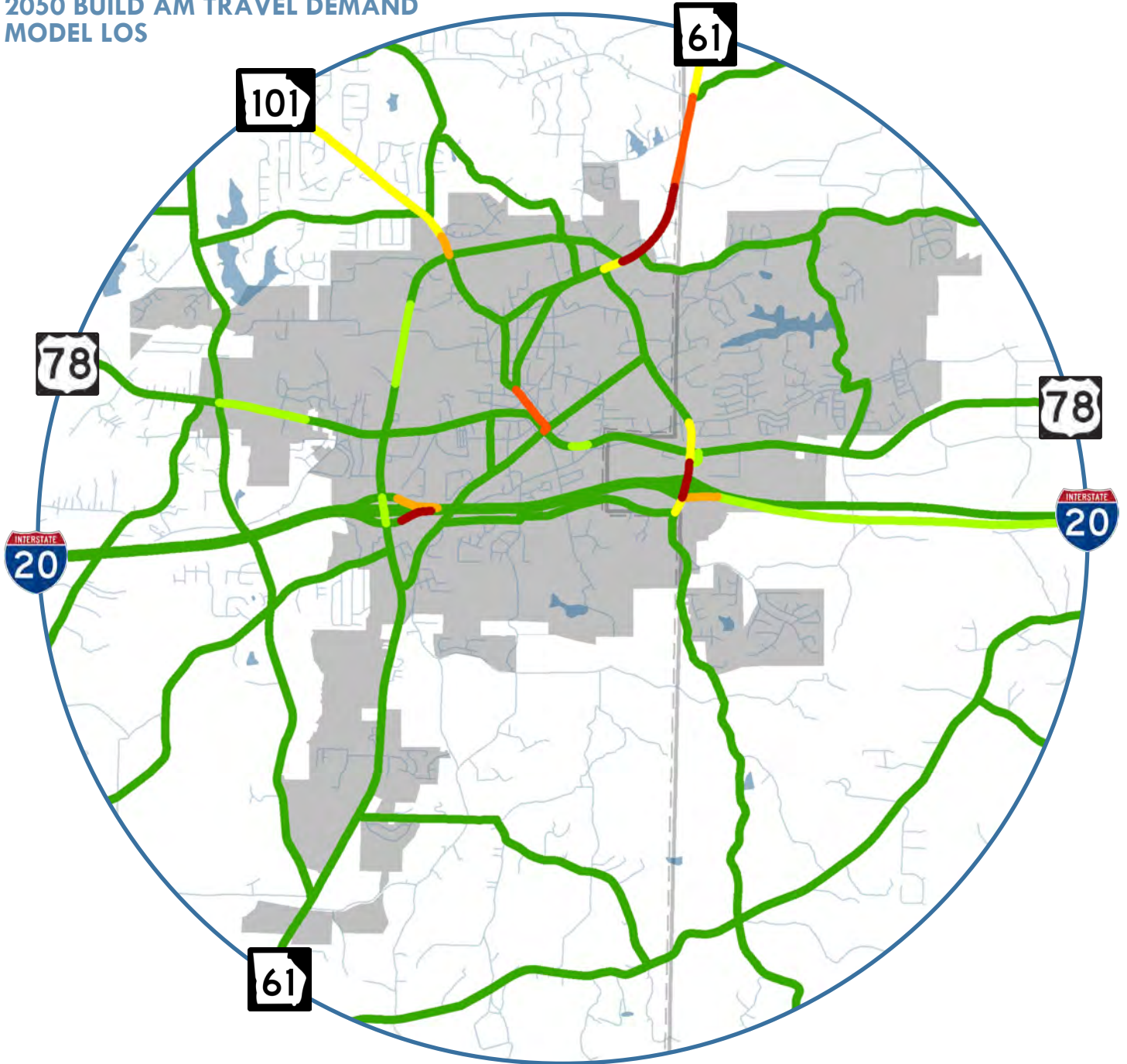
**2050 NO-BUILD AM TRAVEL  
DEMAND MODEL LOS**



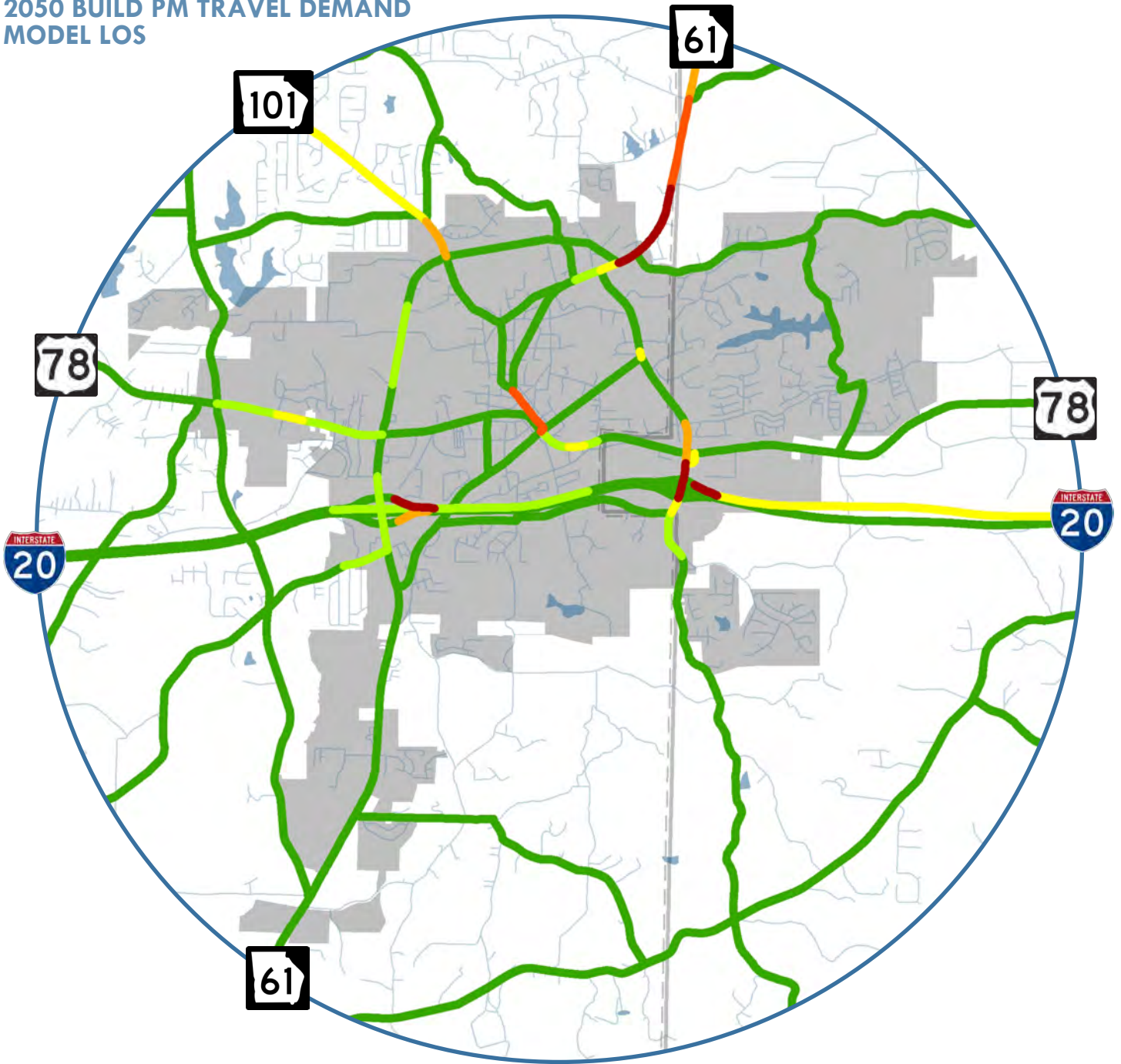
2050 NO-BUILD PM TRAVEL  
DEMAND MODEL LOS



**2050 BUILD AM TRAVEL DEMAND  
MODEL LOS**



2050 BUILD PM TRAVEL DEMAND  
MODEL LOS



**SAFETY/OPERATIONAL PROJECTS**

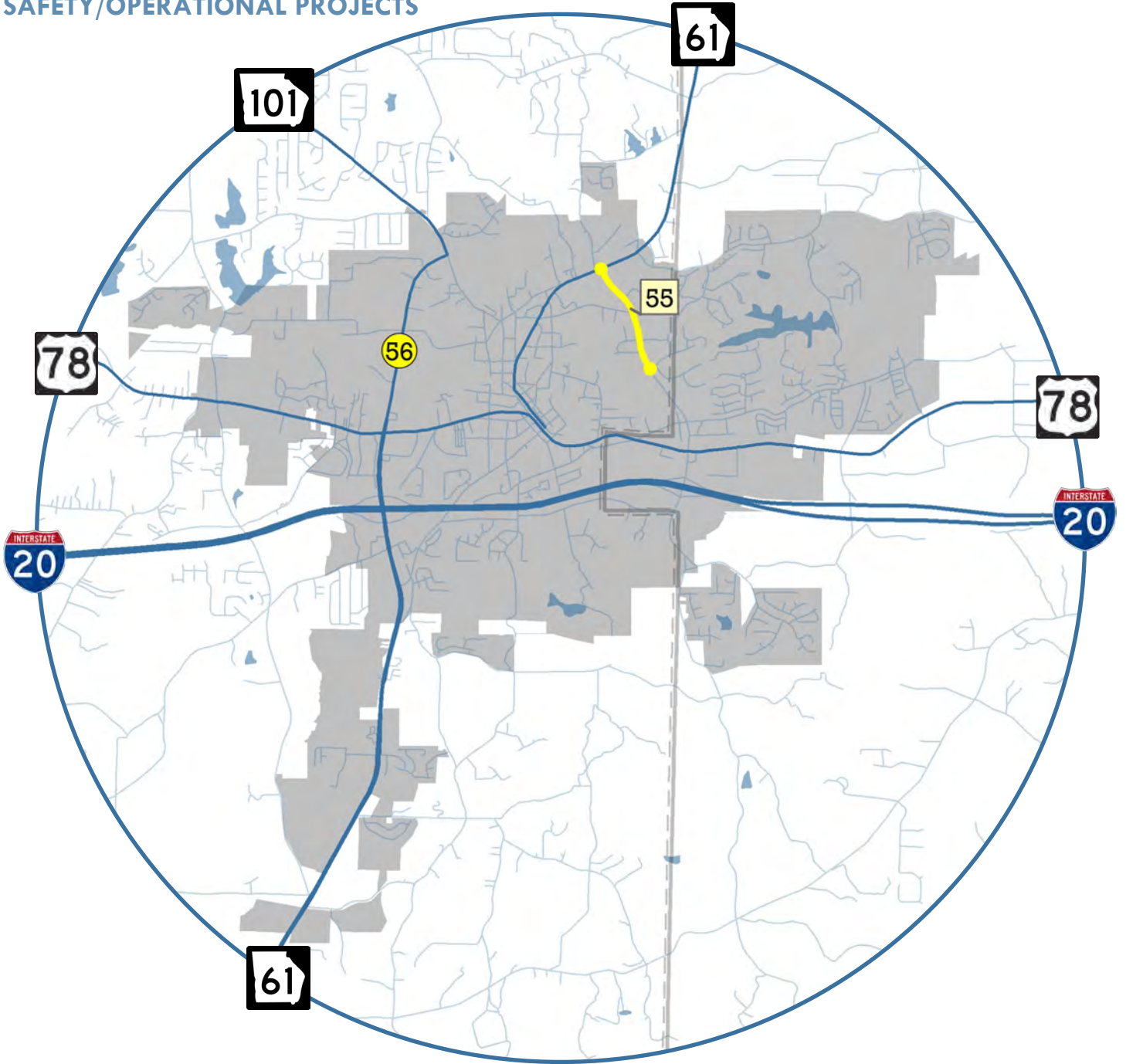
Several projects were developed based on input from the community and city staff to enhance the safety and operation of the city transportation system. While these improvements could not be analyzed for delay reduction using Synchro or Cube software, they were evaluated based on the following criteria:

- Vehicle crash history from the years 2014-2018 collected from GEARS.
- Number of Vehicles Served based on GDOT historical count data and ADT traffic counts collected the week of November 20, 2019 for the purposes of this plan.

**SAFETY/OPERATIONAL PROJECTS**

<b>INTERSECTION ID</b>	<b>INTERSECTION</b>	<b>CRASHES</b>	<b>ESTIMATED AADT</b>
55	Punkintown Rd	45	14,421
56	Industrial Blvd Railroad Crossing	6	16,200

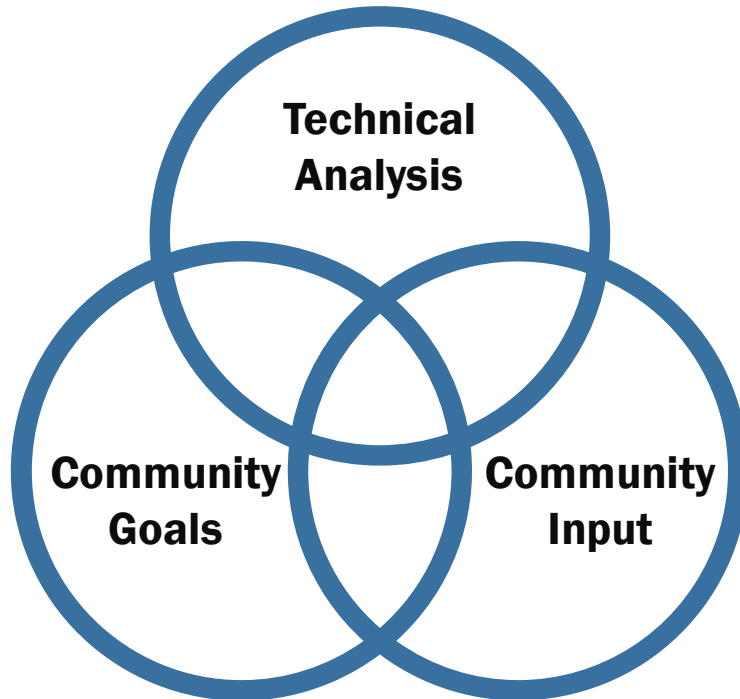
SAFETY/OPERATIONAL PROJECTS



# EVALUATION AND IMPLEMENTATION PLAN

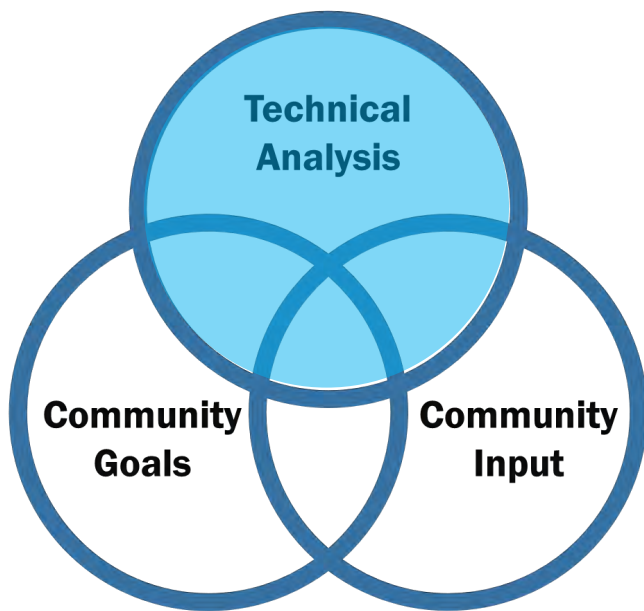
## PROJECT EVALUATION

In order to provide a blueprint for the installation of transportation projects an evaluation process was developed to help guide decision making on which projects are likely to be the most beneficial for the city of Villa Rica. In this process, projects were prioritized by developing a scoring system based on plan goals, community input, and technical analysis. A score was calculated out of ten points for each category based on various performed analysis. A total project score was developed by adding the technical, community goals, and community input scores together. The scoring system is relative, each calculated score and is calculated by comparison to the project that most effectively meets the project needs for that evaluation metric.



## TECHNICAL ANALYSIS

Project scores were developed based on technical analysis of intersection, bicycle and pedestrian, roadway, and safety/operational projects discussed in Chapter 4. These scores represent the projects effectiveness at meeting community needs based on the analyzed data for each type of project. As different transportation project types have different potential metrics, purposes, and methods for analysis different analysis procedures were developed as discussed below.



### Roadway Projects

- Congestion Reduction
- Number of Vehicles Served
- Existing Congestion
- Crash History

### Intersection Projects

- Delay Reduction
- Existing Control Delay
- Number of Vehicles Served
- Crash History

### Bike/Ped Projects

- Population Density
- Employment Density
- Density of Households with No Vehicles
- Crash History
- Connection to Downtown

## INTERSECTION PROJECTS

These projects incorporated four equally weighted technical analysis metrics to evaluate the relative value of each candidate project:

**Delay Reduction:** In order to prioritize locations that are likely to experience the most dramatic decreases in delay if a transportation project is introduced, the Synchro models discussed in Chapter 4 were used to compare delay between the 2045 No Build Conditions the 2045 Build Conditions.

**Number of Vehicles Served:** Locations that are anticipated to serve the most vehicles in the future were prioritized by identifying the total number of travelers at each intersection in the year 2045.

**Level of Existing Delay:** Intersections where vehicles currently experience the highest delay were also prioritized by comparing the delay observed in the 2019 Existing Conditions Synchro model at each intersection.

**Crashes:** To incorporate potential safety benefits of projects, the volume of at each intersection were also compared with the logic that the introduction of new designs (as well as the engineering and study that goes along with these design) can be used to potentially mitigate safety challenges.

Please note that the intersection of SR 101/Rockmart Road at Reid Plantation Drive was added during the planning process as a response to community feedback. As such, a full intersection turning movement count was not taken at this location. Due to this limitation, delay scores could not be calculated. The intersection volume was approximated based on two pieces of information. The volume on SR 101/Rockmart Road was taken from the count performed at SR 101/Rockmar Road at Industrial Boulevard. An estimate of the volume on Reid Plantation Drive was generated using the number of homes in the attached subdivision and the 2017 version of the ITE Trip Generation Manual. The total score at this location was based only on these two scores.

## INTERSECTION PROJECTS

PROJECT ID	PROJECT	DELAY REDUCTION SCORE	VEHICLES SERVED SCORE	EXISTING DELAY SCORE	CRASH SCORE	TECHNICAL SCORE
1	Liberty Rd @ Edge Rd	2.1	1.6	0.8	1.3	5.8
2	Hwy 61 @ South Carroll Rd	0.6	2.3	0.8	1.2	5.0
3	Hwy 61 @ US 78/; US 78 @ Rocky Branch Rd	N/A	N/A	N/A	N/A	N/A
4	Punkintown Rd @ Dallas Hwy	1.9	1.9	0.6	0.8	5.2
5	Mirror Lake Blvd @ Conners Rd	0.4	2.1	0.8	1.2	4.6
7	Dallas Hwy @ Old Stone Rd	0.0	1.3	0.4	0.7	2.4
8	Hwy 61 @ Stockmar Rd	0.2	1.7	0.6	0.5	2.9
9	Liberty Rd @ Liberty Rd Connector	2.5	2.0	1.5	1.4	7.4
10	Conners Rd @ Veterans Memorial Hwy	1.9	1.6	0.7	0.5	4.8
11	Hwy 61 @ West/East Industrial Blvd	0.4	1.5	0.6	0.6	3.1
12	US 78 @ Van Wert Rd	1.2	1.9	0.6	0.8	4.5
13	South Van Wert Rd @ Hickory Level Rd	1.2	1.4	0.4	0.3	3.4
14	Rocky Branch Rd @ Hwy 78	2.3	1.8	0.8	0.9	5.8
15	Hwy 61 @ I-20 WB Ramps	0.5	2.4	1.0	2.0	6.0
16	Hwy 61 @ I-20 EB Ramps	0.5	2.5	0.7	2.5	6.2
17	Rockmart Rd @ Old Town Rd	0.3	1.3	0.5	0.4	2.5
18	Dallas Hwy @ Old Town Rd	1.7	1.5	0.5	0.8	4.5
19	Punkintown Rd @ Shoreline Pkwy	0.1	1.7	0.5	0.5	2.9
20	Liberty Rd @ I-20 WB Ramps	0.6	2.1	0.7	1.6	5.0
21	Liberty Rd @ I-20 EB Ramps	2.5	1.9	2.5	1.7	8.5
22	Liberty Rd Connector @ Hwy 78	1.1	1.4	0.4	1.5	4.3
24	Hwy 78 @ South Carroll Rd	0.5	1.8	0.5	1.2	4.0
26	Main St @ Cheeves St	0.6	1.4	0.5	1.2	3.7
28	Mirror Lake Pkwy @ Conners Rd	1.2	1.1	0.4	0.4	3.0
50	SR 61 @ Vicksburg Dr/Bay Springs Dr	0.1	0.2	0.1	0.4	0.9
60	SR 101/Rockmart Rd @ Reid Plantation Drive	N/A	1.5	N/A	0.9	4.7

### BICYCLE AND PEDESTRIAN PROJECTS

Bicycle and Pedestrian projects were evaluated using the five equally weighted technical analysis metrics described below:

**Crashes:** To incorporate potential safety benefits of bicycle and pedestrian projects, the volume of crashes involving bicyclist and pedestrians the vicinity of locations where projects are being considered were compared.

**Accessibility to Population Density:** Acknowledging that areas in the city that have more population density are likely to have both more bicycle and/or pedestrian need as well as more appropriateness in land use and urban character to introduce bicycle and/or pedestrian facilities, the population density of the areas surrounding candidate bicycle and pedestrian projects were compared.

**Accessibility to Employment Density:** Similarly, locations with more accessibility to employment were prioritized.

**Accessibility to Households With No Vehicles:** Locations where Census data tell us that there are more households without access to vehicles were prioritized acknowledging these communities are likely to have an acute need for bicycle and pedestrian facilities.

**Connection to Downtown:** Projects with access to the downtown area will provide economic benefit and likely be more utilized than projects that do not.

## BICYCLE AND PEDESTRIAN PROJECTS

PROJECT ID	PROJECT	CRASH SCORE	POPULATION DENSITY SCORE	EMPLOYMENT DENSITY SCORE	HH W/ NO VEHICLE SCORE	DOWNTOWN CONNECTION SCORE	TECHNICAL SCORE
30	Downtown Connector Trail	1	2	2	2	2	9.3
32	Cleghorn to Old Stone Rd Trail	0	1	2	2	0	5.3
33	Tanner to Fullerville Trail	0.9	1.6	1.8	1.9	0	6.3
34	Downtown to Fullerville Trail	0	1.7	1.3	1.9	2	7
35	Gold Dust Park Connector Trail	0.7	1.1	1.5	1.8	0	5
36	Fullerville to Reid Plantation Trail	0	1.6	0.7	1.9	0	4.2
37	Mirror Lake Loop Trail	0	1.7	0.8	0.7	0	3.1
38	Conners Rd Park Trail	0	1.7	0.4	0	0	2.1
39	Tyson Rd Corridor Trail	0	1.8	0.3	1.3	0	3.3
40	South Connector Trail	2	1.7	1.3	1.4	2	8.4
47	Seniors Trail	0	1.3	0.7	1.1	0	3.1
57	Shoreline Connector	1	2	2	2	2	8.7
59	Downtown Grade-Separated Ped RR Crossing	1.3	2	2	2	2	9.3

## ROADWAY PROJECTS

Roadway projects were evaluated using the four equally weighted technical analysis metrics described below:

**Change in Corridor Congestion:** In order to prioritize locations that are likely to experience the most dramatic decreases in congestion if a transportation project is introduced, the travel demand models were used to compare weighted congestion between the 2050 No Build Conditions and the 2050 Build Conditions.

**Number of Vehicles Served:** Locations that are anticipated to serve the most vehicles in the future were prioritized by identifying the total number of travelers in the vicinity of each project location in the 2050 Build Conditions in the travel demand model.

**Level of Existing Congestion:** Locations that already suffer from some level of congestion were also prioritized by comparing the amount of congestion observed in the 2020 Existing Conditions travel demand model in the affected area of projects that are being considered.

**Crashes:** To incorporate potential safety benefits of projects, the volume of crashes in the vicinity of locations where projects are being considered were also compared with the logic that the introduction of new designs (as well as the engineering and study that goes along with these design) can be used to potentially mitigate safety challenges.

## ROADWAY PROJECTS

PROJECT ID	PROJECT	CHANGE IN CONGESTION SCORE	VEHICLES SERVED SCORE	EXISTING CONGESTION SCORE	CRASHSCORE	TECHNICAL SCORE
41	North Loop	0.4	0.7	0.5	1.5	3.2
53	Widen I-20 from SR 61 to SR 113 from 4-6 lanes	2.5	2.5	2.5	2.5	10.0
57	Shoreline Connector	0.2	0.6	0.5	2.0	3.4

**SAFETY/OPERATIONAL PROJECTS**

Safety/Operational projects were evaluated using the two equally weighted technical analysis metrics described below:

**Crashes:** The volume of crashes at the location of these projects was used to evaluate the need for safety improvements.

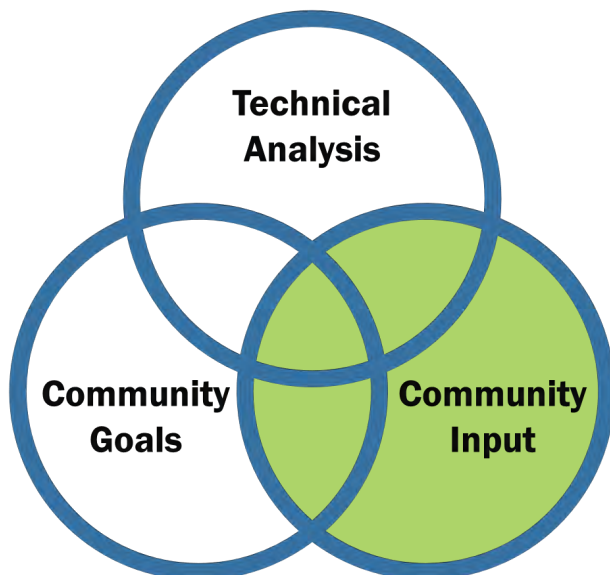
**Number of Vehicles Served:** Locations that are anticipated to serve the most vehicles in the future were prioritized by identifying the total number of travelers at each intersection in the year 2045.

PROJECT ID	PROJECT	CRASH SCORE	VEHICLES SERVED SCORE	TECHNICAL SCORE
55	Punkintown Rd	5.0	4.7	9.7
56	Industrial Blvd Railroad Crossing	1.8	5.0	6.8

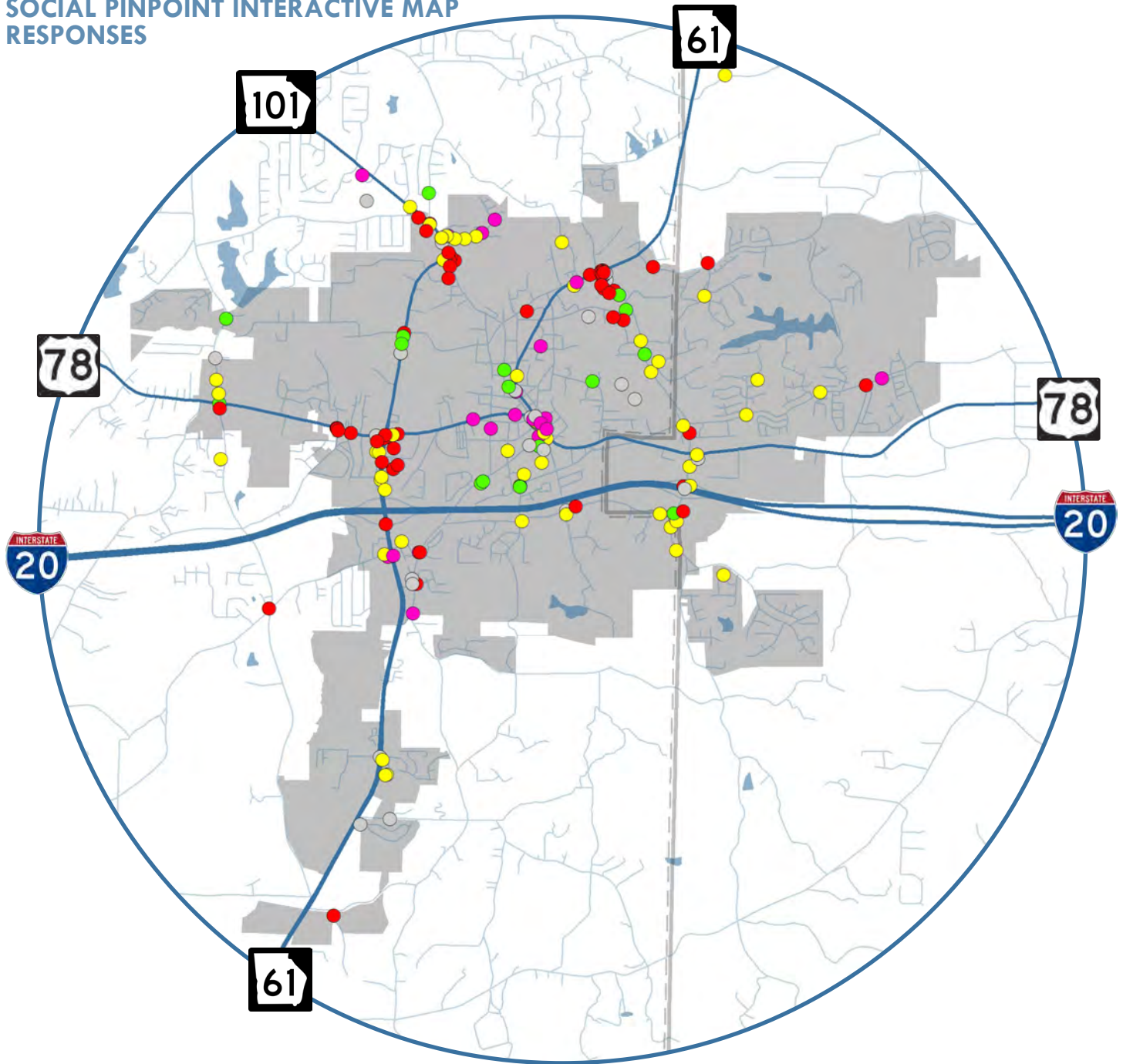
## COMMUNITY ENGAGEMENT

Each of the projects were ranked and analyzed based on the relative amount of community input received in the vicinity of their locations. Using spatial analysis, a capture area was created around the affected area of each project and compared to the geographic locations indicated by the community from the formal community meeting and online interactive map which were depicted in Chapter 4 on Page X and shown here again for convenience.

- Comments identified as “Transportation safety concern” were used to score the relative volume of comments for all project types
- Comments identified as “Pedestrian travel concern” were used to score the relative volume of comments for bicycle and pedestrian projects
- Comments identified as “Heavy traffic congestion” were used to score the relative volume of comments for all project types except bicycle and pedestrian projects
- Comments identified as “Freight traffic concern” were used to score the relative volume of comments for all project types except bicycle and pedestrian projects
- Comments identified as “Other transportation idea or concern” were used to score the relative volume of comments for all project types except bicycle and pedestrian projects



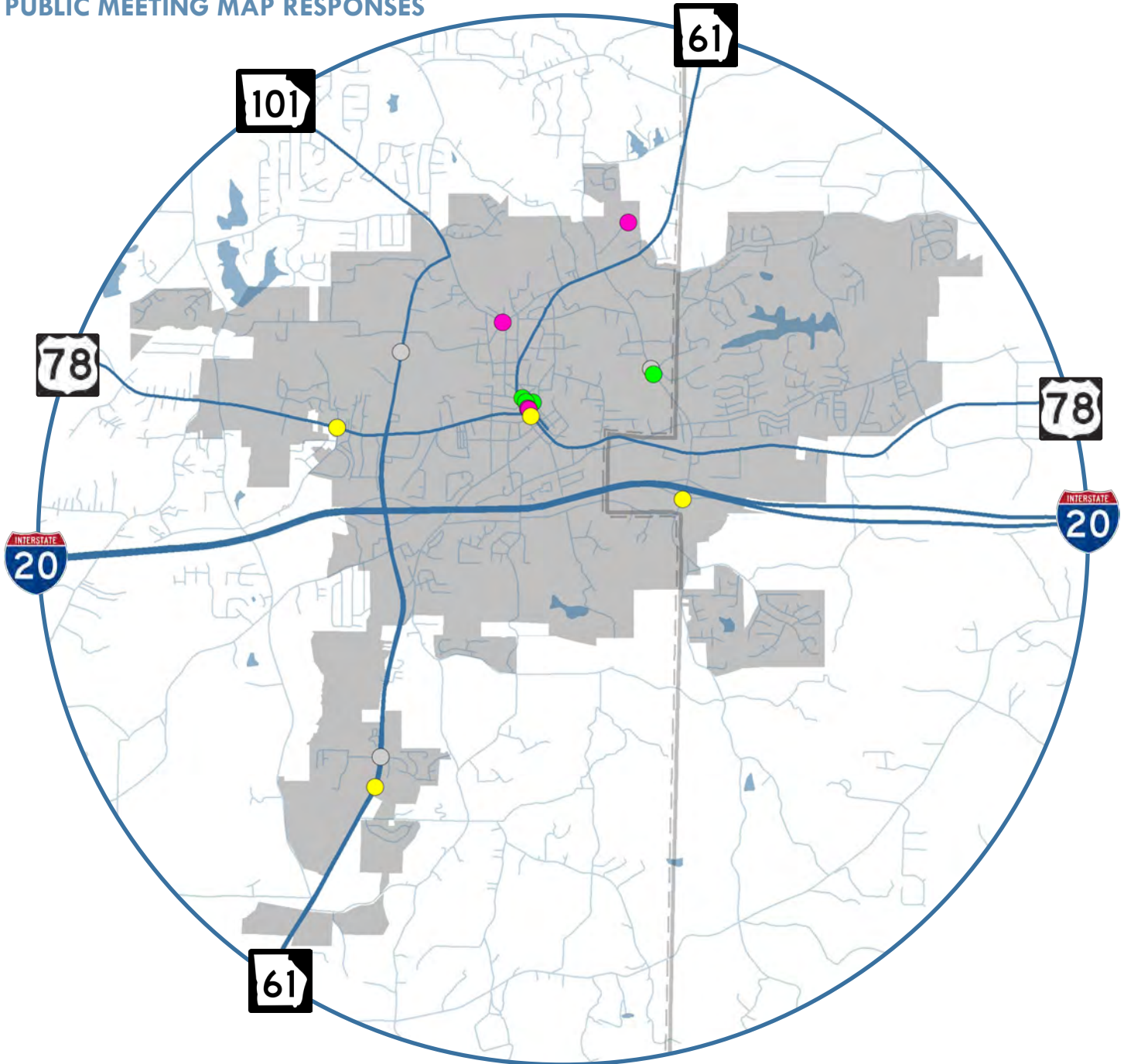
**SOCIAL PINPOINT INTERACTIVE MAP  
RESPONSES**



Public Input Categories

- Heavy Traffic Congestion
- Transportation Safety Concern
- Pedestrian Travel Concern
- Freight Traffic Concern
- Other Transportation Idea or Concern

# PUBLIC MEETING MAP RESPONSES



**Public Input Categories**

- Heavy Traffic Congestion
- Transportation Safety Concern
- Pedestrian Travel Concern
- Freight Traffic Concern
- Other Transportation Idea or Concern

### TRANSPORTATION SYSTEM GOALS

The transportation system goals were also used to rank the relative value of projects based on each project’s ability to support the system goals. The relative importance of these goals as indicated by the community through the community meeting and online survey were used to weight the importance of each goal category as presented below, with a total possible score of 1.



### PUBLIC MEETING GOALS RANKING

CATEGORY	NUMBER OF DOTS	SCORE
Developing East West Travel	3	0.48
Developing an Active Mode Network	5	0.62
Improving North South Travel	13	1.00
Making Connections to I-20	2	0.39
Developing Freight Corridors	10	0.88
Supporting Economic Development	6	0.68

### ONLINE SURVEY GOALS RANKING

CATEGORY	AVERAGE RANK	SCORE
Developing East West Travel	2.6	1.0
Developing an Active Mode Network	4.5	0.8
Improving North South Travel	2.9	0.9
Making Connections to I-20	4.6	0.8
Developing Freight Corridors	4.8	0.7
Supporting Economic Development	4.5	0.8

### COMMUNITY GOALS RANKING

CATEGORY	MEETING SCORE	SURVEY SCORE	TOTAL SCORE
Developing East West Travel	0.5	1.0	0.7
Developing an Active Mode Network	0.6	0.8	0.7
Improving North South Travel	1.0	0.9	1.0
Making Connections to I-20	0.4	0.7	0.6
Developing Freight Corridors	0.9	0.7	0.8
Supporting Economic Development	0.7	0.8	0.7

## COMMUNITY GOALS SCORING

PROJECT ID	PROJECT	DEVELOPING EAST/WEST TRAVEL	DEVELOPING AN ACTIVE MODE NETWORK IMPROVING NORTH SOUTH TRAVEL MAKE	CONNECTIONS TO I-20	DEVELOP FREIGHT CORRIDORS	SUPPORTING ECONOMIC DEVELOPMENT	WEIGHTED GOALS AGGREGATE	GOALS SCORE	
1	Liberty Rd @ Edge Rd	0	0	1	0	1	1	2.48	7.70
2	Hwy 61 @ South Carroll Rd	1	0	0	0	1	1	2.26	7.00
4	Punkintown Rd @ Dallas Hwy	1	0	0	0	1	1	2.26	7.00
5	Mirror Lake Blvd @ Conners Rd	0	0	1	0	0	0	0.97	3.00
7	Dallas Hwy @ Old Stone Rd	0	0	1	0	1	1	2.48	7.70
8	Hwy 61 @ Stockmar Rd	1	0	1	0	1	1	3.22	10.00
9	Liberty Rd @ Liberty Rd Connector	1	0	1	0	0	0	1.71	5.30
10	Conners Rd @ Veterans Memorial Hwy	1	0	0	0	1	1	2.26	7.00
11	Hwy 61 @ West/East Industrial Blvd	0	0	1	0	1	1	2.48	7.70
12	US 78 @ Van Wert Rd	1	0	0	0	1	1	2.26	7.00
13	South Van Wert Rd @ Hickory Level Rd	1	0	1	0	0	0	1.71	5.30
14	Rocky Branch Rd @ Hwy 78	1	0	0	0	1	1	2.26	7.00
15	Hwy 61 @ I-20 @WB Ramps	0	0	1	1	1	1	3.05	9.47
16	Hwy 61 @ I-20 @EB Ramps	0	0	1	1	1	1	3.05	9.47
17	Rockmart Rd @ Old Town Rd	1	0	0	0	0	0	0.74	2.30
18	Dallas Hwy @ Old Town Rd	1	0	1	0	1	1	3.22	10.00
19	Punkintown Rd @ Shoreline Pkwy	1	0	0	0	0	0	0.74	2.30
20	Liberty Rd @ I-20 WB Ramps	0	0	1	1	1	1	3.05	9.47
21	Liberty Rd @ I-20 EB Ramps	0	0	1	1	1	1	3.05	9.47

PROJECT ID	PROJECT	DEVELOPING EAST/WEST TRAVEL	DEVELOPING AN ACTIVE MODE NETWORK IMPROVING NORTH SOUTH TRAVEL	MAKE CONNECTIONS TO I-20	DEVELOP FREIGHT CORRIDORS	SUPPORTING ECONOMIC DEVELOPMENT	WEIGHTED GOALS AGGREGATE	GOALS SCORE	
22	Liberty Rd Connector @ Hwy 78	1	0	0	0	1	1	2.26	7.00
24	Hwy 78 @ South Carroll Rd	0	0	1	0	0	0	0.97	3.00
26	Main St @ Cheeves St	0	0	1	0	0	0	0.97	3.00
28	Mirror Lake Pkwy @ Conners Rd	0	0	1	0	0	0	0.97	3.00
30	Downtown Connector Trail	0	1	0	0	0	1	1.40	4.35
32	Cleghorn to Old Stone Rd Trail	0	1	0	0	0	0	0.69	2.13
33	Tanner to Fullerville Trail	0	1	0	0	0	0	0.69	2.13
34	Downtown to Fullerville Trail	0	1	0	0	0	1	1.40	4.35
35	Gold Dust Park Connector Trail	0	1	0	0	0	0	0.69	2.13
36	Fullerville to Reid Plantation Trail	0	1	0	0	0	0	0.69	2.13
37	Mirror Lake Loop Trail	0	1	0	0	0	0	0.69	2.13
38	Conners Rd Park Trail	0	1	0	0	0	0	0.69	2.13
39	Tyson Rd Corridor Trail	0	1	0	0	0	0	0.69	2.13
40	South Connector Trail	0	1	0	0	0	1	1.40	4.35
41	North Loop	1	0	0	0	1	1	2.26	7.00
42	Mirror Lake Blvd Widening	0	0	1	0	0	0	0.97	3.00
45	SR 61 @ I-20 Left Turn Lanes	0	0	0	1	1	1	2.09	6.47
47	Seniors Trail	0	1	0	0	0	0	0.69	2.13
50	SR 61 @ Vicksburg Dr/Bay Springs Dr	0	0	0	0	0	0	0.00	0.00
53	Widen I-20 from SR 61 to SR 113 from 4-6 lanes	1	0	0	1	1	0	2.11	6.55

**COMMUNITY GOALS SCORING (CONTINUED)**

PROJECT ID	PROJECT	DEVELOPING EAST/WEST TRAVEL	DEVELOPING AN ACTIVE MODE NETWORK IMPROVING NORTH SOUTH TRAVEL	MAKE CONNECTIONS TO I-20	DEVELOP FREIGHT CORRIDORS	SUPPORTING ECONOMIC DEVELOPMENT	WEIGHTED GOALS AGGREGATE	GOALS SCORE
55	Punkintown Rd	0	0	1	0	0	0.97	3.00
56	Industrial Blvd RR Crossing	0	0	1	0	1	1.77	5.49
57	Shoreline Connector	1	1	0	0	1	2.14	6.64
58	Hwy 61 @ Hwy 78	1	0	1	0	1	3.22	10.00
59	Downtown Grade-Separated Ped RR Crossing	1	1	0	0	1	2.14	6.64
60	SR 101/Rockmart Rd @ Reid Plantation Dr	0	0	1	0	0	0.97	8.71

## OVERALL EVALUATION RESULTS

The transportation system goals were also used to rank the relative value of projects based on each project’s ability to support the system goals. The relative importance of these goals as indicated by the community through the community meeting and online survey were used to weight the importance of each goal category as presented below, with a maximum score for each category of 10 and a maximum total score of 30.

### OVERALL EVALUATION RESULTS

PROJECT ID	PROJECT	GOALS SCORE	COMMUNITY INPUT SCORE	TECHNICAL SCORE	TOTAL SCORE
1	Liberty Rd @ Edge Rd	7.70	6.06	5.77	19.53
2	Hwy 61 @ South Carroll Rd	7.00	4.06	4.99	16.04
4	Punkintown Rd @ Dallas Hwy	7.00	8.86	5.19	21.05
5	Mirror Lake Blvd @ Conners Rd	3.00	3.73	4.59	11.32
7	Dallas Hwy @ Old Stone Rd	7.70	1.13	2.44	11.27
8	Hwy 61 @ Stockmar Rd	10.00	1.13	2.91	14.04
9	Liberty Rd @ Liberty Rd Connector	5.30	4.50	7.37	17.16
10	Conners Rd @ Veterans Memorial Hwy	7.00	0.00	4.76	11.76
11	Hwy 61 @ West/East Industrial Blvd	7.70	9.14	3.11	19.95
12	Us 78 @ Van Wert Rd	7.00	7.63	4.48	19.11
13	South Van Wert Rd @ Hickory Level Rd	5.30	0.00	3.42	8.71
14	Rocky Branch Rd @ Hwy 78	7.00	5.85	5.83	18.67
15	Hwy 61 @ I-20 @WB Ramps	9.47	4.77	5.99	20.23
16	Hwy 61 @ I-20 @EB Ramps	9.47	3.56	6.18	19.20
17	Rockmart Rd @ Old Town Rd	2.30	1.13	2.47	5.89
18	Dallas Hwy @ Old Town Rd	10.00	2.52	4.54	17.05
19	Punkintown Rd @ Shoreline Pkwy	2.30	5.03	2.88	10.20
20	Liberty Rd @ I-20 WB Ramps	9.47	5.28	5.04	19.79
21	Liberty Rd @ I-20 EB Ramps	9.47	6.16	8.53	24.17
22	Liberty Rd Connector @ Hwy 78	7.00	4.36	4.30	15.66
24	Hwy 78 @ South Carroll Rd	3.00	6.56	4.01	13.57
26	Main St @ Cheeves St	3.00	6.06	3.69	12.75

**OVERALL EVALUATION RESULTS (CONTINUED)**

PROJECT ID	PROJECT	GOALS SCORE	COMMUNITY INPUT SCORE	TECHNICAL SCORE	TOTAL SCORE
28	Mirror Lake Pkwy @ Conners Rd	3.00	1.95	3.05	8.00
31	Downtown to Cleghorn St Park Trail	4.35	7.03	8.69	20.06
32	Cleghorn to Old Stone Rd Trail	2.13	2.52	5.28	9.92
33	Tanner to Fullerville Trail	2.13	2.52	6.27	10.91
34	Downtown to Fullerville Trail	4.35	2.98	7.02	14.34
35	Gold Dust Park Connector Trail	2.13	2.52	4.96	9.61
36	Fullerville to Reid Plantation Trail	2.13	2.25	4.18	8.55
37	Mirror Lake Loop Trail	2.13	3.18	3.10	8.41
38	Conners Rd Park Trail	2.13	1.95	2.08	6.16
39	Tyson Rd Corridor Trail	2.13	2.25	3.34	7.72
40	South Connector Trail	4.35	9.00	8.43	21.78
41	North Loop	7.00	10.00	3.16	20.15
43	Downtown Connector	2.30	6.46	3.36	12.12
47	Seniors Trail	2.13	0.00	3.12	5.25
50	SR 61 @ Vicksburg Dr/Bay Springs Dr	0.00	3.56	0.90	4.46
53	Widen I-20 from SR 61 to SR 113 from 4-6 lanes	6.55	2.98	10.00	19.53
54	SR 61 Park and Ride Lot	N/A	N/A	N/A	N/A
55	Punkintown Rd	3.00	9.35	9.72	22.06
56	Industrial Blvd Railroad Crossing	5.49	3.56	6.83	15.87
58	Hwy 61 @ US 78/; US 78 @ Rocky Branch Rd	N/A	N/A	N/A	N/A
59	Downtown Grade Separated Ped RR Crossing	6.64	3.38	9.33	19.35
60	SR 101/Rockmart Rd @ Reid Plantation Dr	3.00	8.71	4.67	16.38

## IMPLEMENTATION PLAN

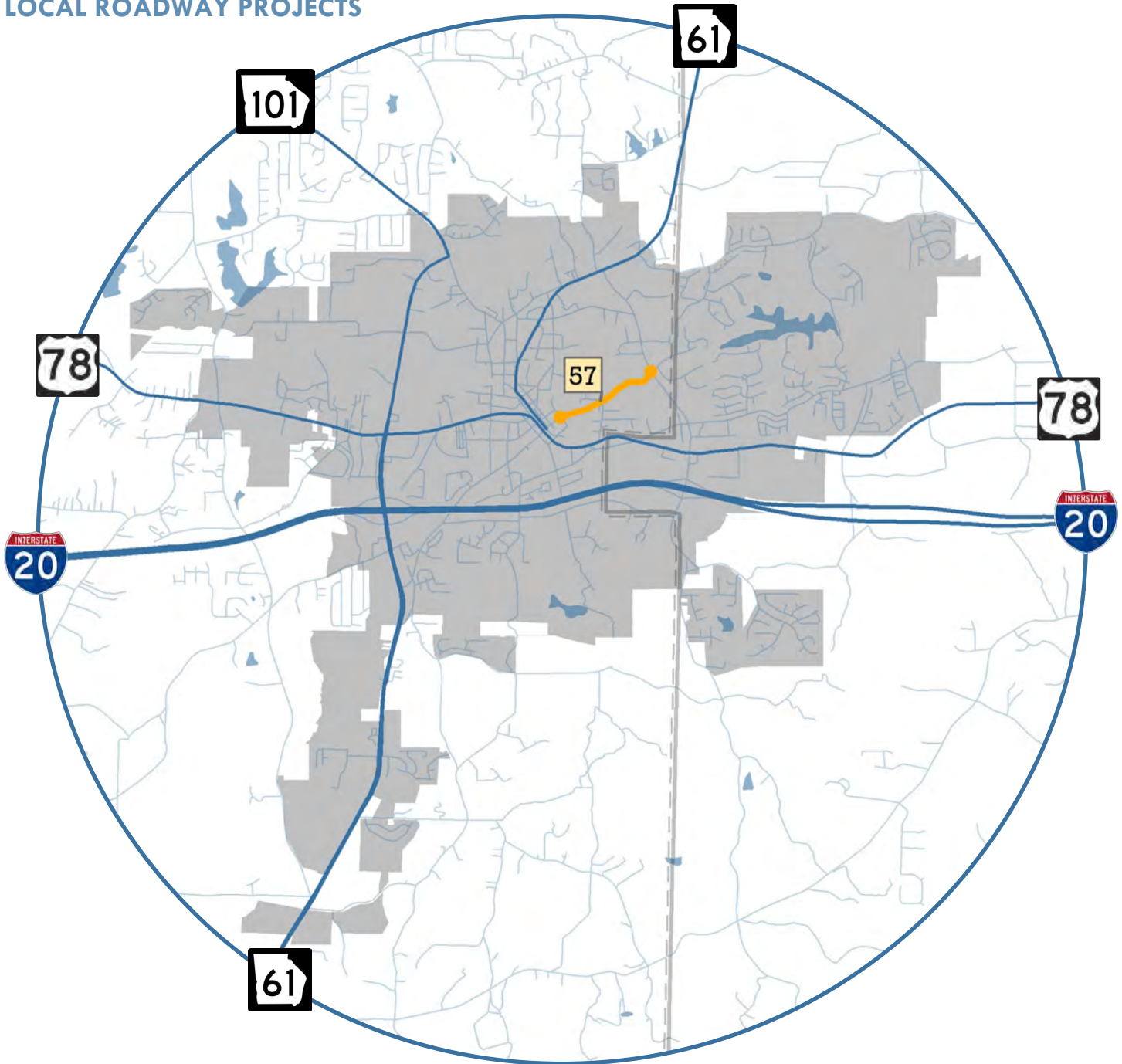
The implementation plan was developed by grouping together similar projects into project classes and prioritizing projects within those groups using the project scores. This allows for easy comparisons of similar projects in the transportation decision-making process. While all projects are recommended and will provide value to the Villa Rica community, this process can be used to understand how projects prioritize when compared with each other. Therefore, each project is assigned as either High Priority, Medium Priority, or Low Priority which are then organized to all of the locally funded project classifications. A One-Sheet for each project with an overview map, prioritization and cost information has been prepared and is provided in **Appendix F**.

### LOCAL ROADWAY PROJECTS

These projects consist of widening and new location projects that are currently not programmed by GDOT. They are expected to improve mobility, connectivity, and safety for vehicles.

PROJECT ID	PROJECT	TOTAL SCORE	RANK	PRIORITY
57	Shoreline Connector	21.1	1	High

LOCAL ROADWAY PROJECTS

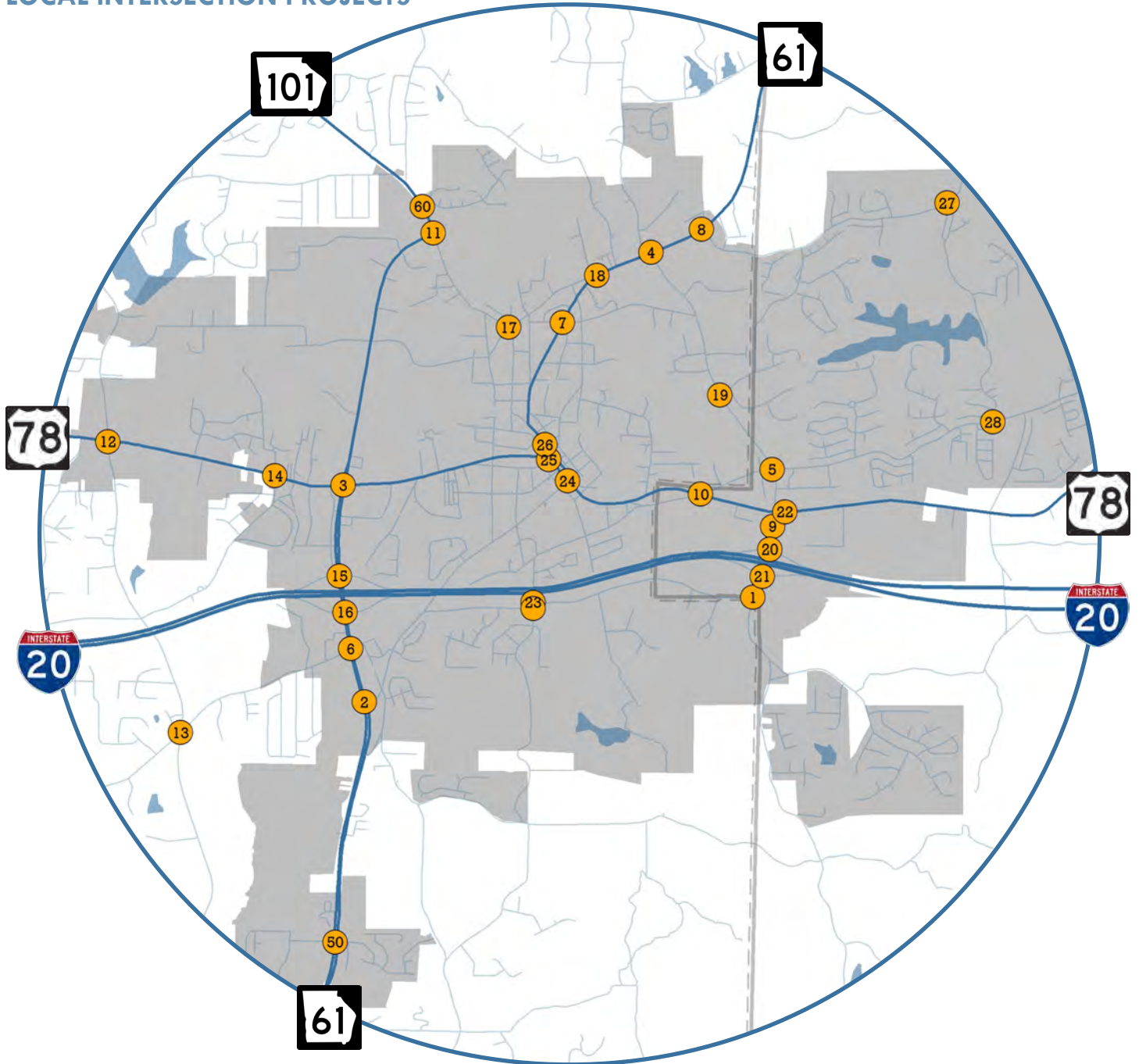


## LOCAL INTERSECTION PROJECTS

These projects consist of intersection improvement projects that are currently not programmed by GDOT. They are expected to reduce delays and improve safety at roadway intersections within the city.

PROJECT ID	PROJECT	TOTAL SCORE	RANK	PRIORITY
1	Liberty Rd @ Edge Rd	19.53	6	High
2	Hwy 61 @ South Carroll Rd	16.04	12	Mid
4	Punkintown Rd @ Dallas Hwy	21.05	2	High
5	Mirror Lake Blvd @ Conners Rd	11.32	17	Low
7	Dallas Hwy @ Old Stone Rd	11.27	18	Low
8	Hwy 61 @ Stockmar Rd	14.04	14	Mid
9	Liberty Rd @ Liberty Rd Connector	17.16	9	Mid
11	Hwy 61 @ West/East Industrial Blvd	19.95	4	High
12	US 78 @ Van Wert Rd	19.11	8	High
13	South Van Wert Rd @ Hickory Level Rd	8.71	20	Low
15	Hwy 61 @ I-20 @WB Ramps	20.23	3	High
16	Hwy 61 @ I-20 @EB Ramps	19.2	7	High
17	Rockmart Rd @ Old Town Rd	5.89	22	Low
18	Dallas Hwy @ Old Town Rd	17.05	10	Mid
19	Punkintown Rd @ Shoreline Pkwy	10.2	19	Low
20	Liberty Rd @ I-20 WB Ramps	19.79	5	High
21	Liberty Rd @ I-20 EB Ramps	24.17	1	High
22	Liberty Rd Connector @ Hwy 78	15.66	13	Mid
24	Hwy 78 @ South Carroll Rd	13.57	15	Mid
26	Main St @ Cheeves St	12.75	16	Mid
28	Mirror Lake Pkwy @ Conners Rd	8	21	Low
50	SR 61 @ Vicksburg Dr/Bay Springs Dr	4.46	23	Low
60	SR 101/Rockmart Rd @ Reid Plantation Dr	16.38	11	Mid

# LOCAL INTERSECTION PROJECTS

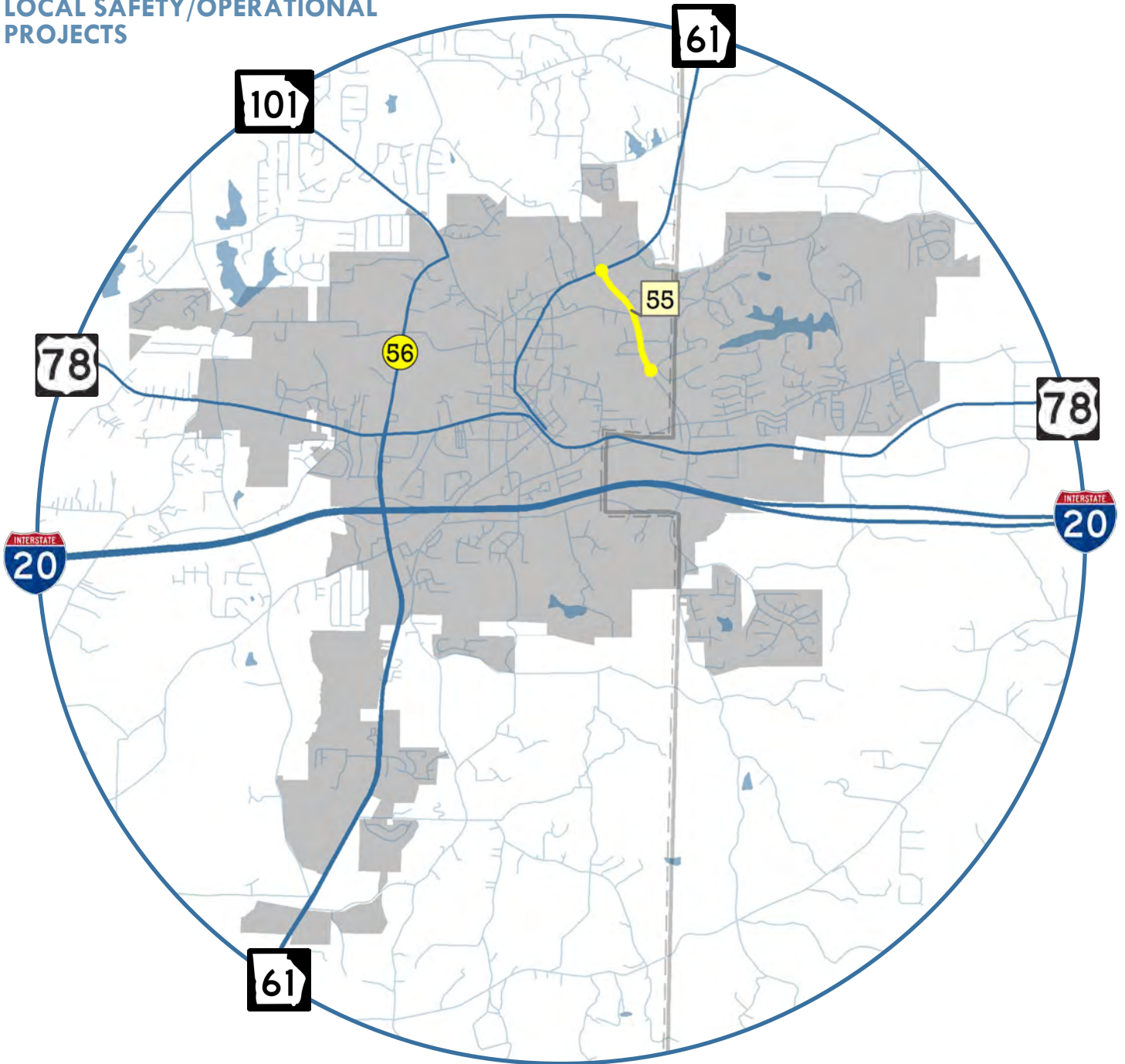


### LOCAL SAFETY/OPERATIONAL PROJECTS

These projects improve the safety and/or operation of the existing transportation network and are not currently planned by GDOT. They are expected to reduce crashes and/or delays at the locations they are installed.

PROJECT ID	PROJECT	TOTAL SCORE	RANK	PRIORITY
55	Punkintown Rd	22.06	1	High
56	Industrial Blvd Railroad Crossing	15.87	2	Mid

LOCAL SAFETY/OPERATIONAL  
PROJECTS

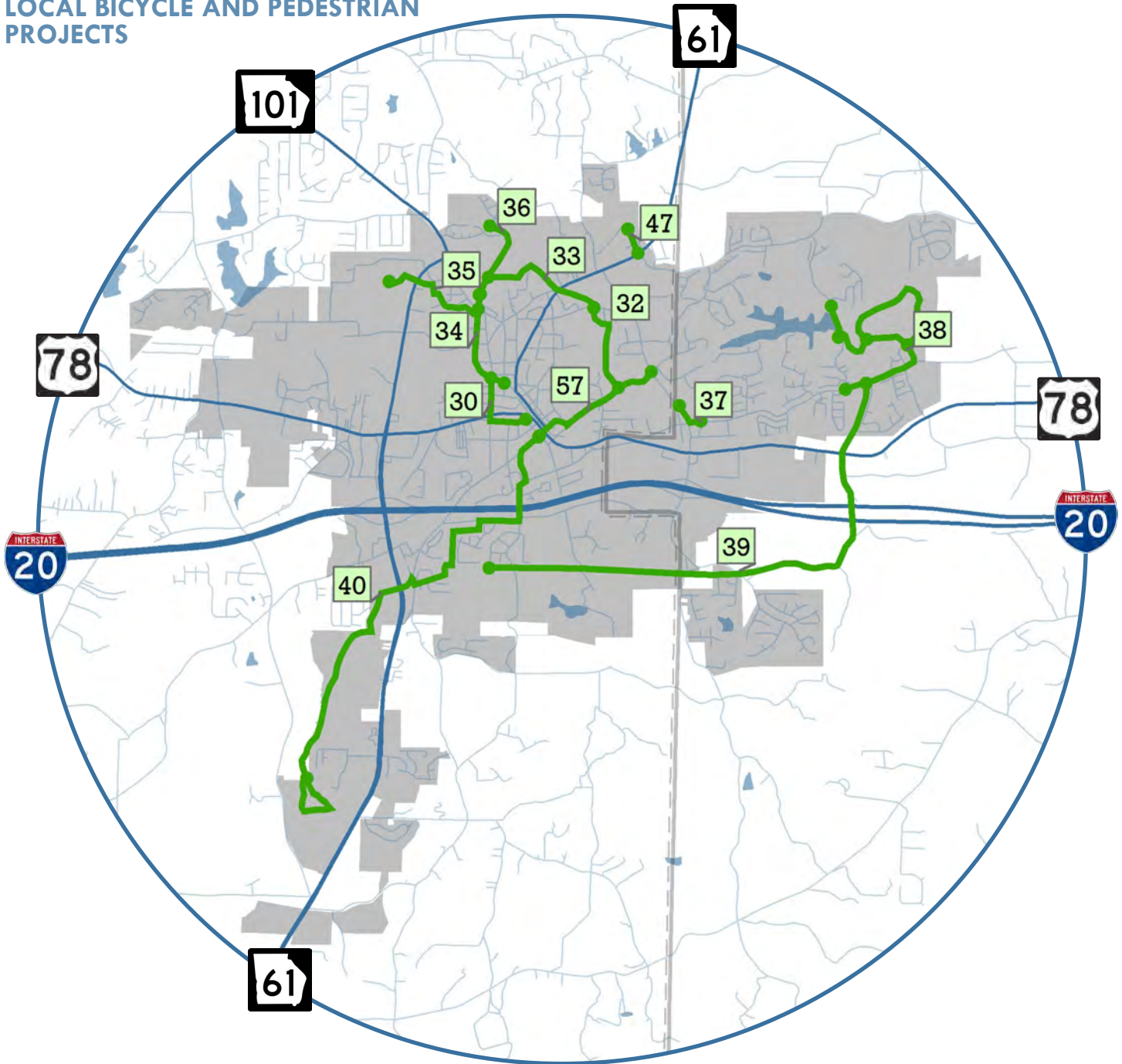


## LOCAL BICYCLE AND PEDESTRIAN PROJECTS

These projects consist of improvements to the bicycle and pedestrian network that are currently not programmed by GDOT. They are expected to provide better facilities for bicyclists and pedestrians and improve safety.

PROJECT ID	PROJECT	TOTAL SCORE	RANK	PRIORITY
30	Downtown Connector Trail	21.23	2	High
32	Cleghorn to Old Stone Rd Trail	9.92	8	Mid
33	Tanner to Fullerville Trail	10.91	7	Mid
34	Downtown to Fullerville Trail	14.34	6	Mid
35	Gold Dust Park Connector Trail	9.61	9	Mid
36	Fullerville to Reid Plantation Trail	8.55	10	Low
37	Mirror Lake Loop Trail	8.41	11	Low
38	Conners Rd Park Trail	6.16	13	Low
39	Tyson Rd Corridor Trail	7.72	12	Low
40	South Connector Trail	21.78	1	High
47	Seniors Trail	5.25	14	Low
57	Downtown Connector	16.67	5	High
59	Downtown Grade Separated Ped RR Crossing	19.35	4	High

**LOCAL BICYCLE AND PEDESTRIAN PROJECTS**

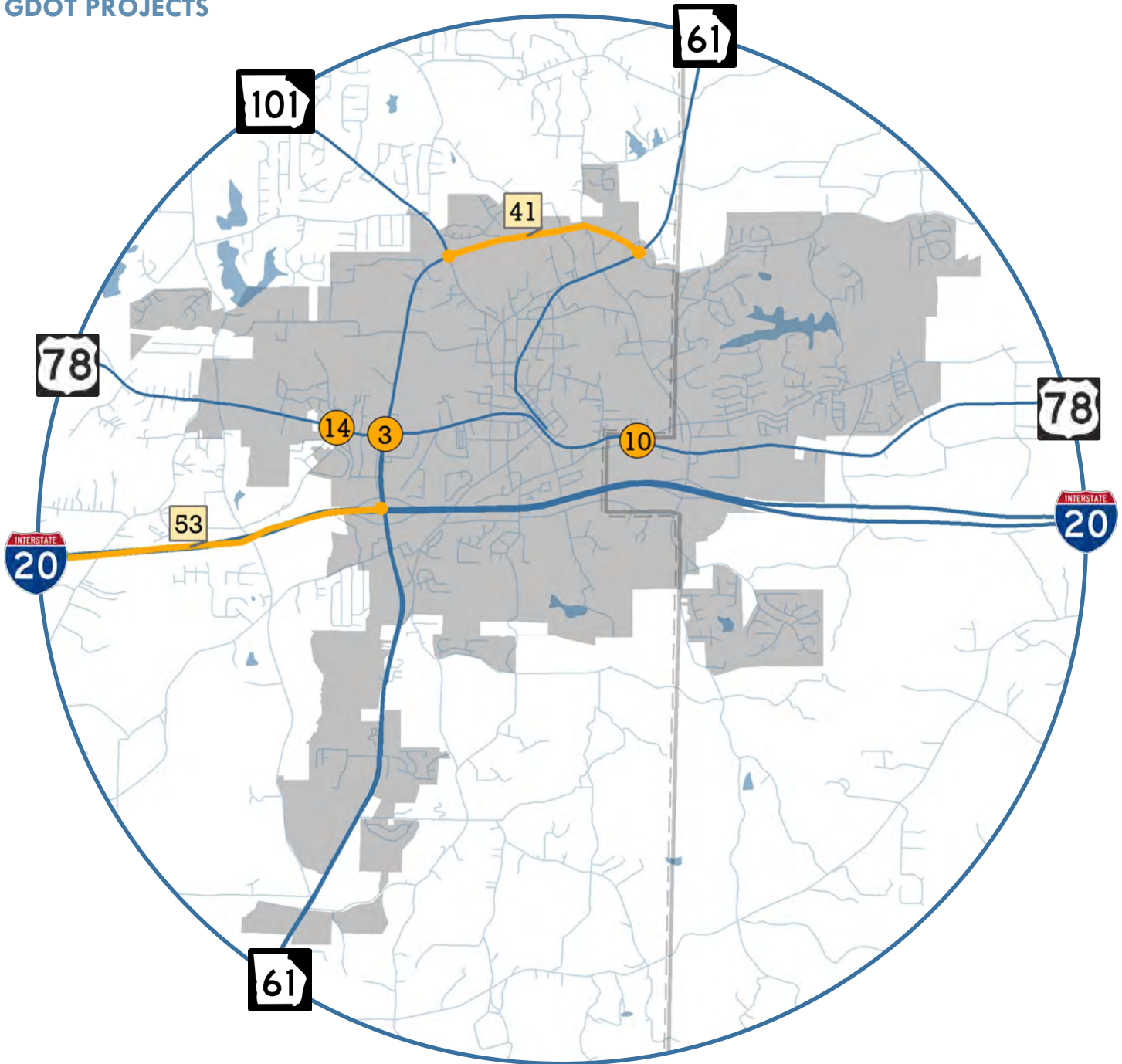


## GDOT PROJECTS

These projects would largely be the responsibility of GDOT and will be implemented based on their internal schedules.

PROJECT ID	PROJECT	TOTAL SCORE	GDOT PI#
3	Hwy 61 @ US 78/; US 78 @ Rocky Branch Rd	N/A	Not Yet Available
10	Conners Rd @ Veterans Memorial Hwy	11.76	15679
14	Rocky Branch Rd @ Hwy 78	18.67	Not Yet Available
41	North Loop	20.15	631490
53	Widen I-20 from SR 61 to SR 113 from 4-6 lanes	19.53	14888

GDOT PROJECTS



## COST ESTIMATES

In order to assist transportation decision makers, the costs of candidate transportation projects were estimated to include the cost of preliminary engineering, right-of-way, utilities, construction, and contingencies if feasible. For other projects, a more detailed scoping is required to develop realistic cost estimates. Most cost estimates are considered 'planning-level' in that they are reflect general ballpark estimation that may fluctuate as actual engineering, design, and construction of the project is conducted. For some projects, GDOT was a source of more detailed costing information. Project Cost Estimates are presented below. Note: Project development and cost currently being conducted through separate GDOT process for Project ID #3.

### COST ESTIMATES BY PROJECT

PR ID	PROJECT	DESCRIPTION	PE COST	ROW COST	UTL COST	CST COST	CONTIN-GENCY COST	TOTAL COST
1	Liberty Rd @ Edge Rd	Install roundabout	\$225,000	\$149,195	\$225,000	\$1,500,000	\$390,000	\$2,340,000
2	Hwy 61 @ South Carroll Rd	Make WBL double LT	\$15,750	\$45,040	\$15,750	\$105,000	\$27,300	\$163,800
4	Punkintown Rd @ Dallas Hwy	Install roundabout with bypasses on all approaches	\$225,000	\$28,150	\$225,000	\$1,500,000	\$390,000	\$2,340,000
5	Mirror Lake Blvd @ Conners Rd	Install EB and WB double LT	\$42,000	\$1,309	\$42,000	\$280,000	\$72,800	\$436,800
7	Dallas Hwy @ Old Stone Rd	Add SB LTL	\$15,750	\$12,668	\$15,750	\$105,000	\$27,300	\$163,800
8	Hwy 61 @ Stockmar Rd	Install roundabout	\$225,000	\$-	\$225,000	\$1,500,000	\$390,000	\$2,340,000
9	Liberty Rd @ Liberty Rd Connector	Restrict westbound lefts, route around and back down; Long Term: Construct connector bridge on west side of Mirror Lake Blvd	\$37,500	\$68,686	\$37,500	\$250,000	\$65,000	\$390,000
10	Conners Rd @ Veterans Memorial Hwy	Install roundabout	\$37,500	\$265,736	\$37,500	\$250,000	\$65,000	\$390,000
11	Hwy 61 @ West/ East Industrial Blvd	Install roundabout	\$225,000	\$5,630	\$225,000	\$1,500,000	\$390,000	\$2,340,000

**COST ESTIMATES BY PROJECT (CONTINUED)**

PR ID	PROJECT	DESCRIPTION	PE COST	ROW COST	UTL COST	CST COST	CONTIN- -GENCY COST	TOTAL COST
12	US 78 @ Van Wert Rd	Install SBL and SBR turn lanes; Install NBL turn lane	\$39,000	\$8,727	\$39,000	\$260,000	\$67,600	\$405,600
13	South Van Wert Rd @ Hickory Level Rd	Install roundabout	\$225,000	\$-	\$225,000	\$1,500,000	\$390,000	\$2,340,000
14	Rocky Branch Rd @ Hwy 78	Signalize; Give WBL pm+pt phase	\$37,500	\$12,749	\$37,500	\$250,000	\$65,000	\$390,000
15	Hwy 61 @ I-20 WB Ramps	Extend NBL turn bay to 250 ft; make NBL double LT; Long Term: Interchange study	\$31,500	\$12,842	\$31,500	\$210,000	\$54,600	\$327,600
16	Hwy 61 @ I-20 EB Ramps	Extend SBL turn bay to 250 ft; make SBL double LT; Long Term: Interchange study	\$15,750	\$-	\$15,750	\$105,000	\$27,300	\$163,800
17	Rockmart Rd @ Old Town Rd	Install WBR turn bay	\$7,500	\$7,601	\$7,500	\$50,000	\$13,000	\$78,000
18	Dallas Hwy @ Old Town Rd	Install roundabout	\$225,000	\$-	\$225,000	\$1,500,000	\$390,000	\$2,340,000
19	Punkintown Rd @ Shoreline Pkwy	Install WBR turn bay	\$7,500	\$23,646	\$7,500	\$50,000	\$13,000	\$78,000
20	Liberty Rd @ I-20 WB Ramps	Make WBR double RT add lane with taper OR drop lane at Liberty Rd connector intersection; Long Term: Add additional NB lane along Mirror Lake Blvd	\$15,750	\$12,272	\$15,750	\$105,000	\$27,300	\$163,800
21	Liberty Rd @ I-20 EB Ramps	Signalize; make SBL double left	\$53,250	\$109,785	\$53,250	\$355,000	\$92,300	\$553,800

**COST ESTIMATES BY PROJECT (CONTINUED)**

PR ID	PROJECT	DESCRIPTION	PE COST	ROW COST	UTL COST	CST COST	CONTIN- -GENCY COST	TOTAL COST
22	Liberty Rd Connector @ Hwy 78	Install roundabout	\$225,000	\$2,494	\$225,000	\$1,500,000	\$390,000	\$2,340,000
24	Hwy 78 @ South Carroll Rd	Install SBR turn bay	\$7,500	\$-	\$7,500	\$50,000	\$13,000	\$78,000
26	Main St @ Cheeves St	Install TWL/TL	\$31,500	\$9,684	\$31,500	\$210,000	\$54,600	\$327,600
28	Mirror Lake Pkwy @ Connors Rd	Install SB LTL; NB RTL; TWL/TL	\$54,750	\$-	\$54,750	\$365,000	\$94,900	\$569,400
30	Downtown Connector Trail	Bike/Ped improvements	\$73,751	\$-	\$-	\$618,934	\$103,903	\$796,588
32	Cleghorn to Old Stone Rd Trail	Bike/Ped improvements	\$118,970	\$-	\$-	\$1,058,357	\$176,599	\$1,353,926
33	Tanner to Fullerville Trail	Bike/Ped improvements	\$226,294	\$-	\$-	\$1,935,057	\$324,203	\$2,485,554
34	Downtown to Fullerville Trail	Bike/Ped improvements	\$76,653	\$-	\$-	\$517,248	\$89,085	\$682,986
35	Gold Dust Park Connector Trail	Bike/Ped improvements	\$138,549	\$-	\$-	\$1,131,682	\$190,535	\$1,460,766
36	Fullerville to Reid Plantation Trail	Bike/Ped improvements	\$97,822	\$-	\$-	\$670,715	\$115,281	\$883,818
37	Mirror Lake Loop Trail	Bike/Ped improvements	\$106,972	\$-	\$-	\$3,207,666	\$497,196	\$3,811,834
38	Connors Rd Park Trail	Bike/Ped improvements	\$314,803	\$-	\$-	\$3,217,842	\$529,897	\$4,062,542
39	Tyson Rd Corridor Trail	Bike/Ped improvements	\$624,166	\$-	\$-	\$5,954,709	\$986,831	\$7,565,706
40	South Connector Trail	Bike/Ped improvements	\$685,077	\$7,990,000	\$-	\$5,955,557	\$996,095	\$7,636,729
41	North Loop	New roadway	\$769,000	\$368,765	\$504,956	\$14,907,697	N/A	\$24,171,653

**COST ESTIMATES BY PROJECT (CONTINUED)**

PR ID	PROJECT	DESCRIPTION	PE COST	ROW COST	UTL COST	CST COST	CONTIN- -GENY -COST	TOTAL COST
47	Seniors Trail	Bike/Ped	\$19,845	\$28,150	\$19,845	\$132,300	\$34,398	\$206,388
50	SR 61 @ Vicksburg Dr/ Bay Springs Dr	Intersection	\$21,000	\$-	\$21,000	\$140,000	\$36,400	\$218,400
53	Widen I-20 from SR 61 to SR 113 from 4-6 lanes	Widening	*	*	*	*	*	*
54	SR 61 Park and Ride Lot	Transit	*	*	*	*	*	*
55	Punkintown Rd	Safety/Operational	*	*	*	*	*	*
56	Industrial Blvd Railroad Crossing	Safety/Operational	*	*	*	*	*	*
57	Shoreline Connector	New roadway	*	*	*	*	*	*
58	Hwy 61 @ US 78; US 78 @ Rocky Branch Rd	Intersection	*	*	*	*	*	*
59	Downtown Grade Separated Ped RR Crossing	Bike/Ped	*	*	*	*	*	*
60	SR 101/ Rockmart Rd @ Reid Plantation Dr	Convert to unsignalized High-T intersection	\$32,100	\$14,075	\$32,100	\$214,000	\$58,455	\$350,730

\* These projects will require significant additional development before a reasonable cost estimate can be constructed