



Board of Commissioners and Municipal Planning Commission
Special Called Joint Meeting Agenda
Thursday, February 29, 2024, 5:30 PM
City Hall, Lakeland, Tennessee 38002

- I. CALL TO ORDER BY MAYOR:
- II. INVOCATION:
- III. PLEDGE:
- IV. MUNICIPAL PLANNING COMMISSION ROLL CALL BY RECORDER:
- V. BOARD OF COMMISSIONERS ROLL CALL BY RECORDER:
- VI. REPORTS:
 1. **Presentation and Discussion** - Lakeland Transportation Plan 2024 and Lakeland PULSE Comprehensive Plan 2024.
- VII. PUBLIC COMMENTS:
- VIII. REGULAR AGENDA:
 1. Municipal Planning Commission Business:
 - a. **Action** - recommending approval of the Lakeland Transportation Plan 2024.
 - b. **Action** - recommending approval of the Lakeland PULSE Comprehensive Plan 2024.
 2. Board of Commissioners Business:
 - a. **Resolution** - approving the Lakeland Transportation Plan 2024.
 - b. **Resolution** - approving the Lakeland PULSE Comprehensive Plan 2024.
- IX. ANNOUNCEMENTS:
- X. ADJOURNMENT:

LAKELAND TRANSPORTATION PLAN 2024

LAKELAND, TENNESSEE



Kimley»Horn



COMPREHENSIVE PLAN

JANUARY 2024



Project Milestones

Phase 1

Project Initiation

First Phase includes: work planning, committee engagement, and existing data collection

Phase 2

Baseline Conditions, Projections, Priority Issues & Visioning

Second Phase establishes an understanding of area conditions and projections toward the future. Initial community engagement helps establish needs, desires and ultimate vision to support plan goals.

Phase 3

Future Growth Strategies

Third Phase includes analysis of land use, growth, mobility to establish guiding strategies and a future growth plan to inform land use.

Phase 4

Plan Development

The plan starts to come together in the fourth phase with the creation of planning framework elements and an action plan to implement the plan's strategies.

Phase 5

Plan Reporting & Adoption

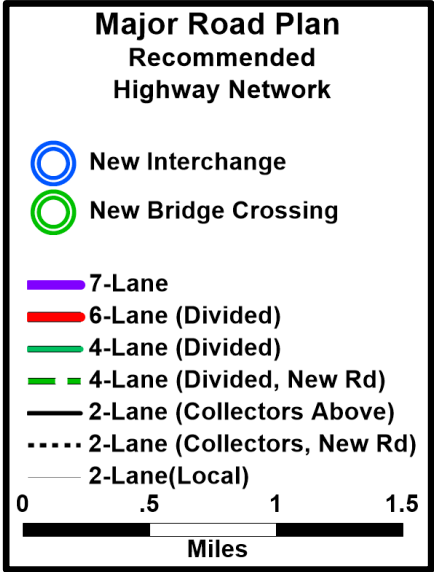
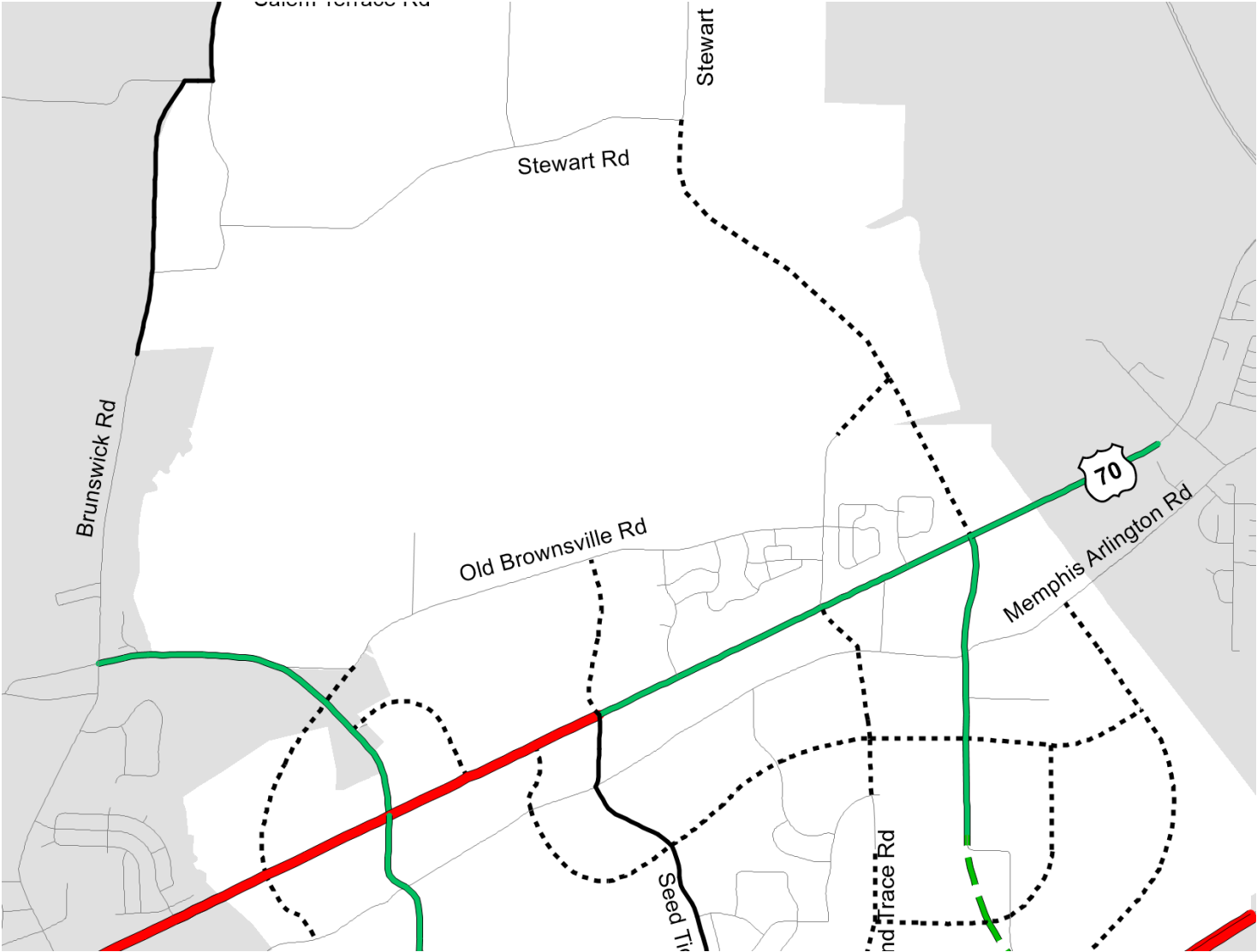
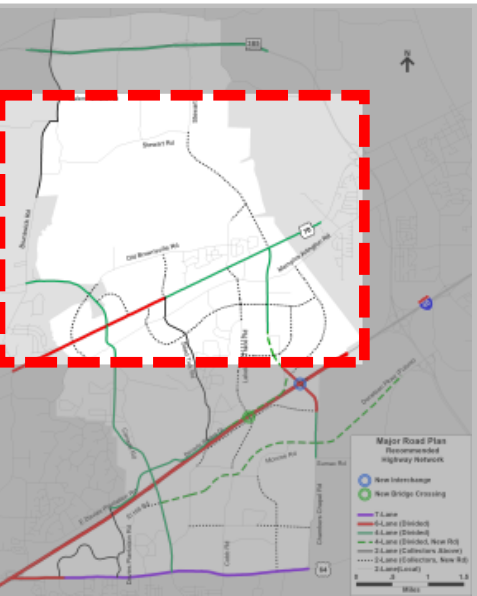
The final phase ensures a successful adoption of the Comprehensive Plan providing opportunity for broad review, feedback, and approval.



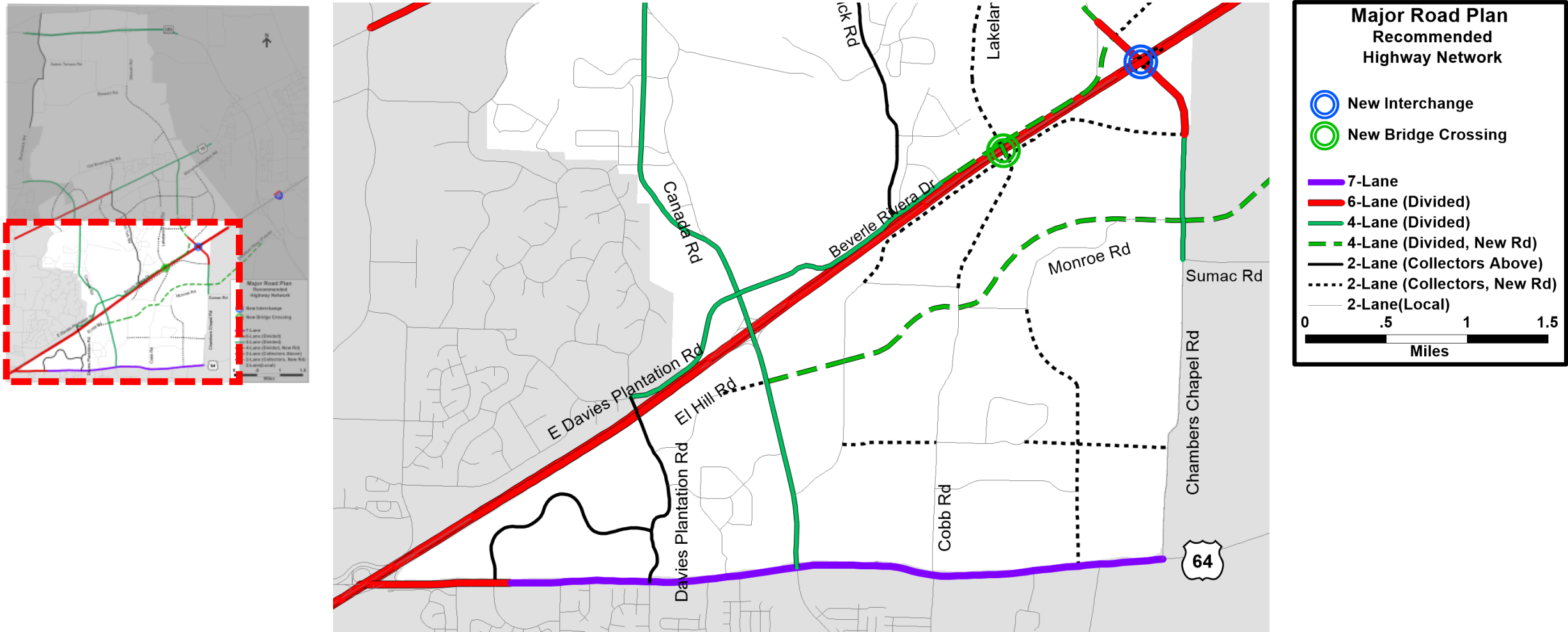
TRANSPORTATION PLAN CONTENTS

1. INTRODUCTION
2. PUBLIC INVOLVEMENT
3. STUDY METHODOLOGY
4. FUTURE TRAFFIC GROWTH AND DEFICIENCY ANALYSIS
5. ROADWAY ALTERNATIVES AND RECOMMENDED NETWORK
6. MULTIMODAL ANALYSIS
7. INTERSECTION ANALYSIS
8. SAFETY ANALYSIS
9. SUMMARY AND ADDITIONAL CONSIDERATIONS

Recommended Networks Plan: North



Recommended Networks Plan: South



LAKELAND P.U.L.S.E. CONTENTS

1. INTRODUCTION
2. COMMUNITY CHARACTERISTICS
3. GROWTH STRATEGY
4. FUTURE LAND USE
5. FRAMEWORK ELEMENTS
6. IMPLEMENTATION STRATEGIES

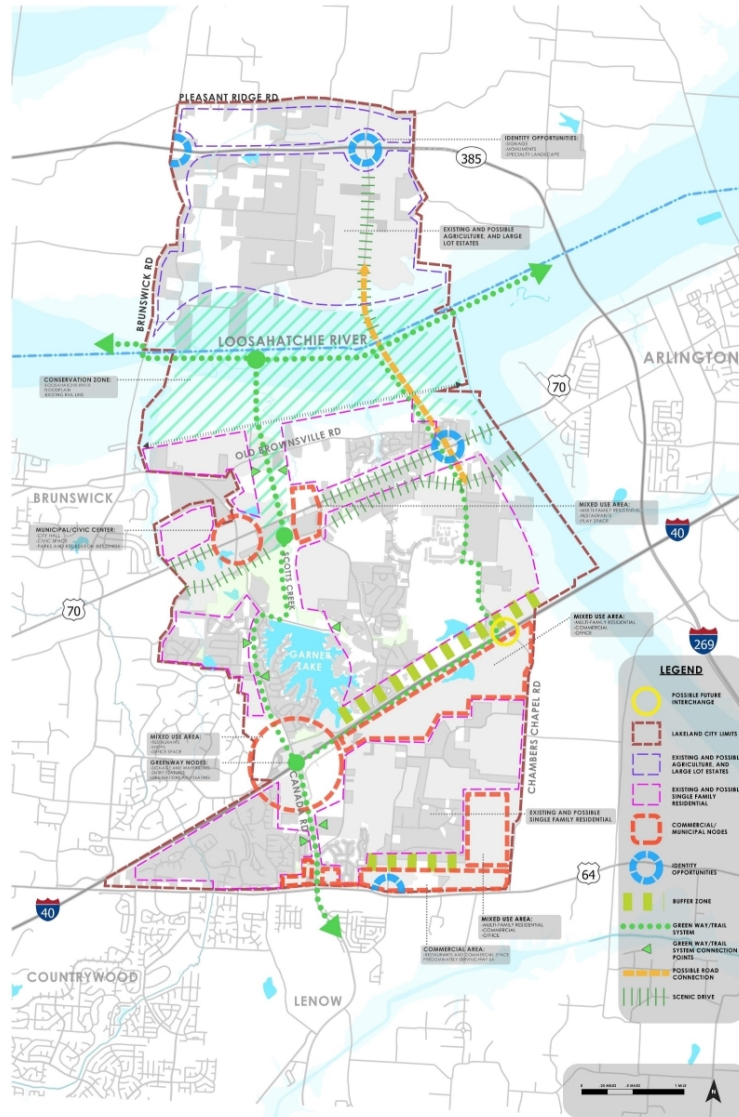
PUBLIC INTERACTION

1. INTERACTIVE MAP
2. ADVISORY COMMITTEE MEETING 1
3. SUBCOMMITTEE MEETINGS
4. ONLINE SURVEY
5. PUBLIC MEETING 1
6. ADVISORY COMMITTEE MEETING 2
7. TRANSPORTATION SUBCOMMITTEE MEETING 1
8. PUBLIC MEETING 2
9. ADVISORY COMMITTEE MEETING 3
10. TRANSPORTATION SUBCOMMITTEE MEETING 2
11. TRANSPORTATION SUBCOMMITTEE MEETING 3

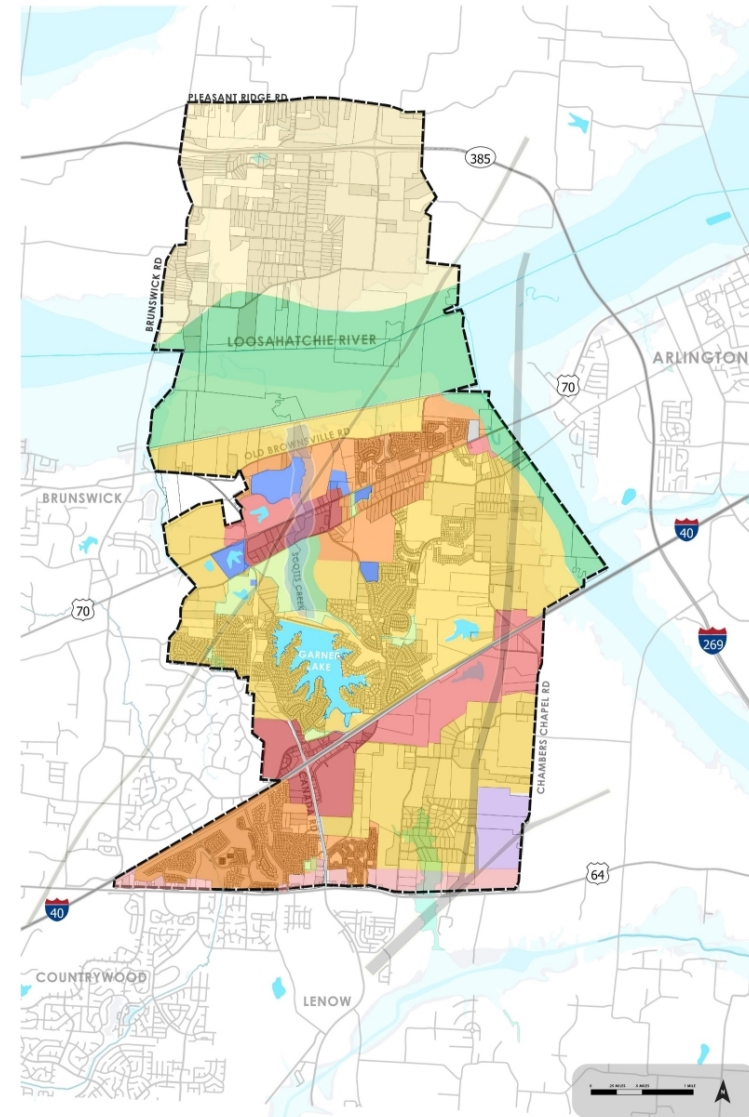


Credit: Alexis Cheyenne Photography

GROWTH STRATEGY



FUTURE LAND USE



IMPLEMENTATION STRATEGIES

LAND USE

ID	DESCRIPTION	PARTNERSHIP	HIGH PRIORITY	ON GOING ACTION	RESOURCE NEEDS
LU.1	Using the preferred growth strategy and future land use maps as guidance, develop new zoning ordinance.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
LU.2	Encourage unique, mixed-use opportunity areas that serve the Lakeland community without dominating the character of the city.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
LU.3	Promote infill development and clustered growth.	CITY	✗	✓	TIME ● ● ● COST ● ● ●
LU.4	Promote a diverse range of neighborhoods that vary in character and density.	CITY	✗	✓	TIME ● ● ● COST ● ● ●

TRANSPORTATION AND MOBILITY

ID	DESCRIPTION	PARTNERSHIP	HIGH PRIORITY	ON GOING ACTION	RESOURCE NEEDS
MO.1	Develop a Roadway Network that supports the future land use and desired growth.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
MO.2	Develop a Multi-modal Network that provides connectivity to facilities and destinations in Lakeland.	CITY	✗	✓	TIME ● ● ● COST ● ● ●

ECONOMIC DEVELOPMENT

ID	DESCRIPTION	PARTNERSHIP	HIGH PRIORITY	ON GOING ACTION	RESOURCE NEEDS
ED.1	Strengthen Lakeland's offerings for residents and visitors to shop and dine locally	CITY	✓	✓	TIME ● ● ● COST ● ● ●
ED.2	Update zoning ordinance to support economic development goals.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
ED.3	Develop a City-wide marketing campaign to expand existing/attract new consumer-oriented businesses and leverage local amenities and destination points.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
ED.4	Steer new economic development opportunities away from sensitive environmental areas to preserve Lakeland's natural resources and maximize connectivity to infrastructure.	CITY	✓	✓	TIME ● ● ● COST ● ● ●

NATURAL RESOURCES AND ENVIRONMENT

ID	DESCRIPTION	PARTNERSHIP	HIGH PRIORITY	ON GOING ACTION	RESOURCE NEEDS
RE.1	Develop policy and zoning that protects natural resources from invasive development	CITY	✓	✓	TIME ● ● ● COST ● ● ●
RE.2	Develop means for the public to access natural resources.	CITY	✗	✓	TIME ● ● ● COST ● ● ●
RE.3	Encourage and develop resources for public education.	CITY	✗	✓	TIME ● ● ● COST ● ● ●
RE.4	Connect into adjacent municipality's current and future greenway systems.	CITY	✗	✓	TIME ● ● ● COST ● ● ●

IMPLEMENTATION STRATEGIES

PUBLIC HEALTH AND EDUCATION

ID	DESCRIPTION	PARTNERSHIP	HIGH PRIORITY	ON GOING ACTION	RESOURCE NEEDS
PH.1	Develop infrastructure that promotes public health and connections.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
PH.2	Encourage new residential developments to connect to nearby school properties.	CITY	✓	✓	TIME ● ● ● COST ● ● ●

HOUSING

ID	DESCRIPTION	PARTNERSHIP	HIGH PRIORITY	ON GOING ACTION	RESOURCE NEEDS
HE.1	Preserve the residential character of Lakeland.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
HE.2	Evaluate zoning and development standards to allow for new development to occur where appropriate.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
HE.3	Maintain an adequate supply of housing that varies in size and style.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
HE.4	Pursue housing investment in and near mixed-use nodes.	CITY	✗	✓	TIME ● ● ● COST ● ● ●

PARKS AND OPEN SPACE

ID	DESCRIPTION	PARTNERSHIP	HIGH PRIORITY	ON GOING ACTION	RESOURCE NEEDS
PO.1	Protect existing and planned park land.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
PO.2	Provide bike and pedestrian connections to parks and open spaces.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
PO.3	Make the city's existing natural features more accessible to residents.	CITY	✗	✓	TIME ● ● ● COST ● ● ●

PUBLIC SERVICES AND UTILITIES

ID	DESCRIPTION	PARTNERSHIP	HIGH PRIORITY	ON GOING ACTION	RESOURCE NEEDS
PS.1	Plan for long term utility needs in north lakeland.	CITY	✗	✓	TIME ● ● ● COST ● ● ●
PS.2	Monitor utility needs in core development areas.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
PS.3	Utilize existing utility easements for connectivity and recreation opportunities.	CITY	✗	✓	TIME ● ● ● COST ● ● ●

LAKELAND TRANSPORTATION PLAN 2024

LAKELAND, TENNESSEE

DRAFT

FOR APPROVAL



TABLE OF CONTENTS

01 INTRODUCTION

02 PUBLIC INVOLVEMENT

03 STUDY METHODOLOGY

04 FUTURE TRAFFIC GROWTH AND DEFICIENCY ANALYSIS

05 ROADWAY ALTERNATIVES AND RECOMMENDED NETWORK

06 MULTIMODAL ANALYSIS

07 INTERSECTION ANALYSIS

08 SAFETY ANALYSIS

09 SUMMARY AND ADDITIONAL CONSIDERATIONS

APPENDICES

*Under separate cover

A. TECH MEMO 1

B. TAZ ID AND FULL BUILD-OUT SOCIOECONOMIC DATA MAPS

A. STANDARD GROWTH

B. AGGRESSIVE GROWTH

C. INTERSECTION ANALYSIS FIGURES

D. TRAFFIC COUNTS

E. SAFETY ANALYSIS TABLES

01 INTRODUCTION

Purpose of Study

The purpose of the Lakeland Transportation Plan is to evaluate the ability of the planned roadway network to accommodate future traffic volumes upon full build-out of the City of Lakeland in accordance with the Land Use Plan developed as part of the Lakeland Comprehensive Plan. The City of Lakeland's current recommended transportation network was adopted in 2009. This Plan provides recommendations that update the previous network to mitigate traffic congestion in the future. The Plan evaluates current and future operations at twelve intersections in the City and provides recommended intersection control based on full build-out of the City. The Plan also identifies existing high crash locations and ranks locations for future safety investments.

Study Area

The study area for this Plan includes the City of Lakeland and the Lakeland Annexation Reserve Area. The sub-area model includes additional buffer area outside the City limits and Reserve Area to ensure adequate detail is provided for traffic loading. Both the study area and subarea model area with the existing roadway network are shown in **Figure 1**.

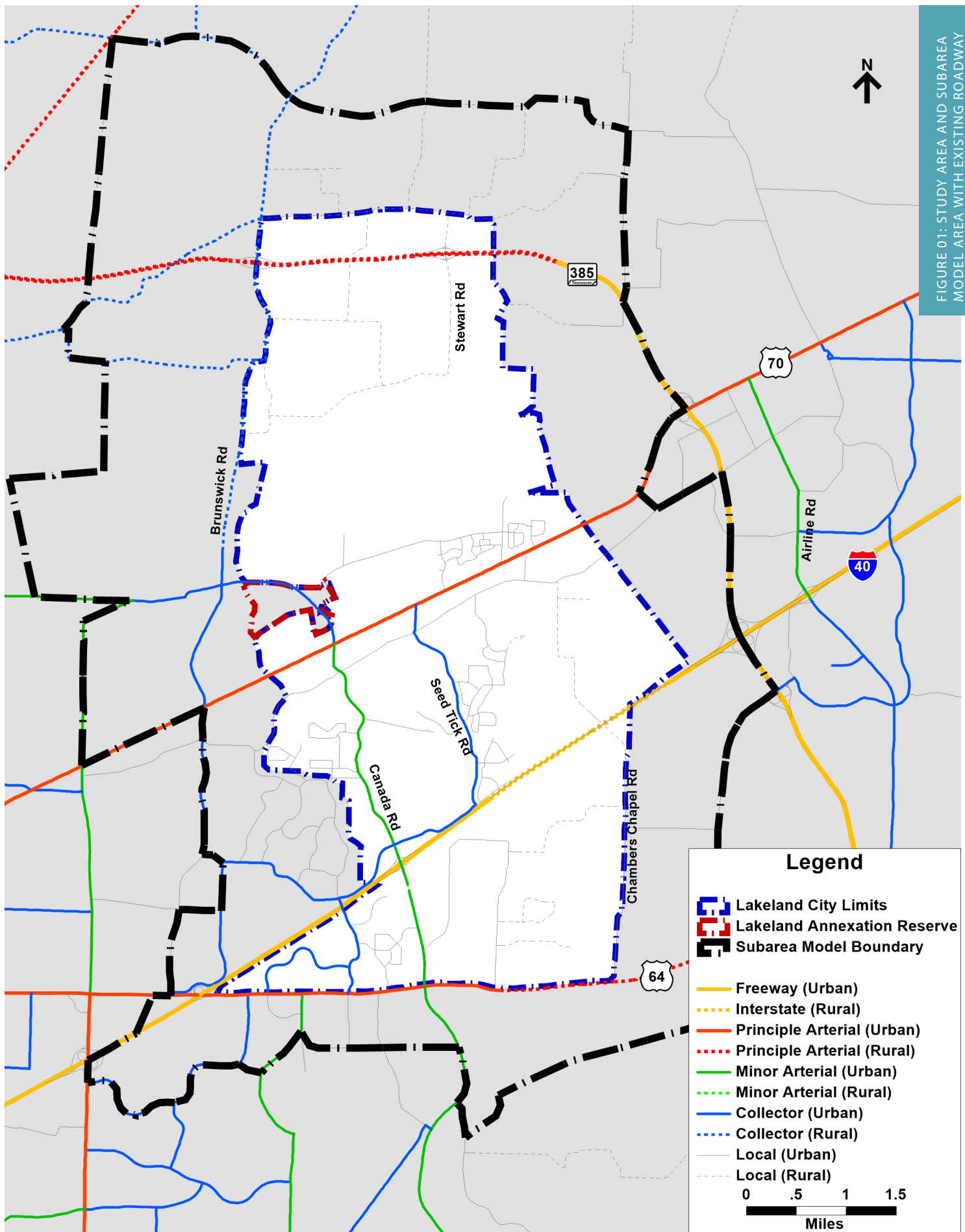


FIGURE 01: STUDY AREA AND SUBAREA MODEL AREA WITH EXISTING ROADWAY NETWORK

Goals and Objectives

The goals of the Transportation Plan were established during initial coordination meetings with the City of Lakeland staff and include:

- Develop a recommended roadway network that addresses connectivity and future City growth
- Develop a recommended multimodal network of on-street and off-street facilities
- Identify high crash frequency locations within the City
- Develop future intersection traffic control recommendations

Transportation Plan Process

The overall process of the Transportation Plan development is shown below in **Figure 2**. Individual items in the chart are expanded upon throughout this report.

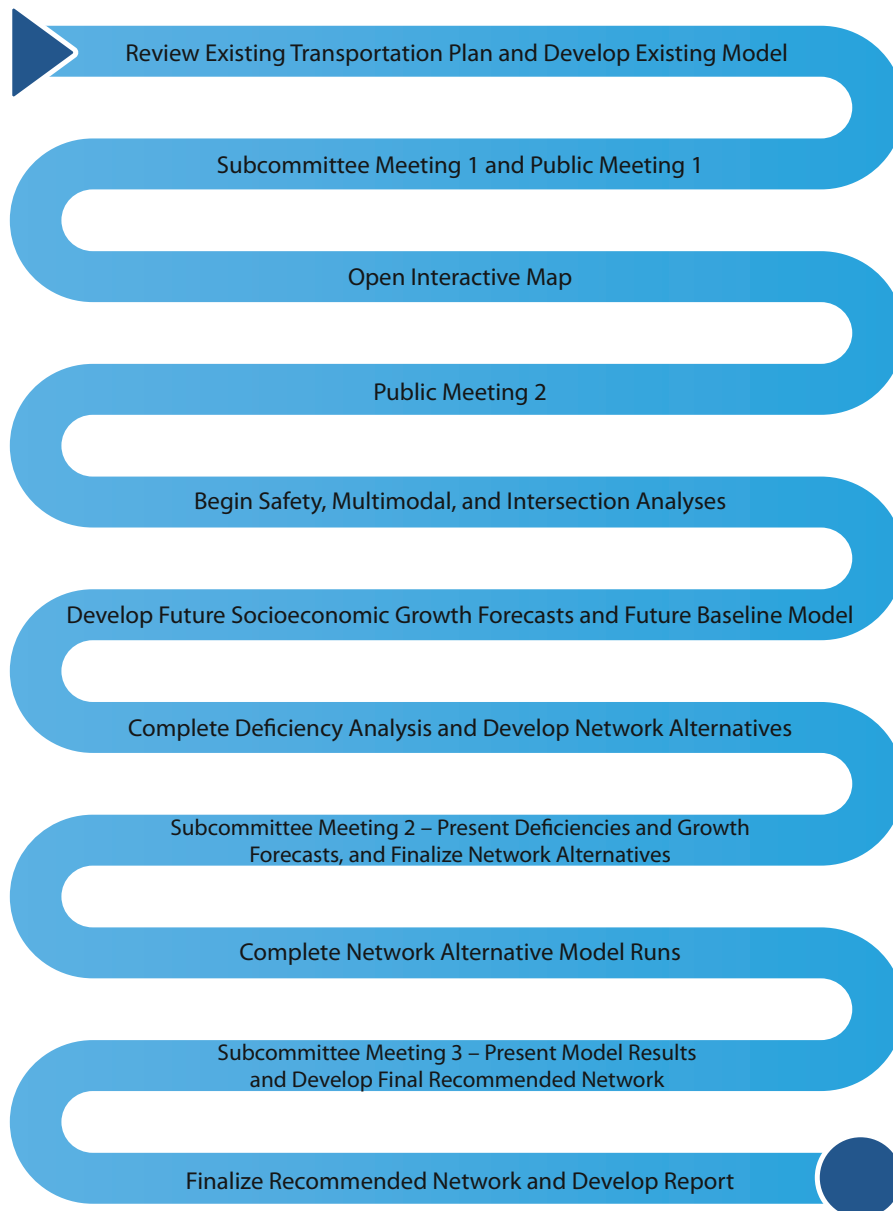


FIGURE 02: TRANSPORTATION PLAN PROCESS



02 PUBLIC INVOLVEMENT

Public engagement for the Transportation Plan was included with the outreach completed as a part of the Comprehensive Plan process. Two public meetings were held as part of the collaborative process. In addition, a transportation subcommittee was assembled that consisted of Lakeland residents and City staff. This subcommittee met three times in person, as well as communicated through email, to provide input on existing transportation conditions, focus areas, and recommended priority projects.

An interactive map was developed where the public could leave comments and recommendations on various transportation related topics. The interactive map was hosted on the Comprehensive Plan's online project website developed using the ESRI ArcGIS StoryMap platform that could be accessed at the following url: <https://city-of-lakeland-kimley-horn.hub.arcgis.com/pages/public-engagement>. To advertise the interactive map, the City sent out mailers to each address in Lakeland on January 18, 2023. The mailer can be seen below in **Figure 3**. During each public meeting, the interactive map was also made available for attendees to submit comments. The interactive map tool was open for comments from October 1, 2022 to August 31, 2023.



FIGURE 03: PUBLIC ENGAGEMENT MAILER

Through the interactive map, the public was provided the opportunity to identify safety issues, congested segments and intersections, locations for traffic calming, and potential transportation connections. Users could place icons and shapes representing different issues or recommendations directly on the map. The user was then prompted to provide further information about their what connection is to Lakeland and to expand on their comment/recommendation. The interactive map interface is displayed in **Figures 4-6**.

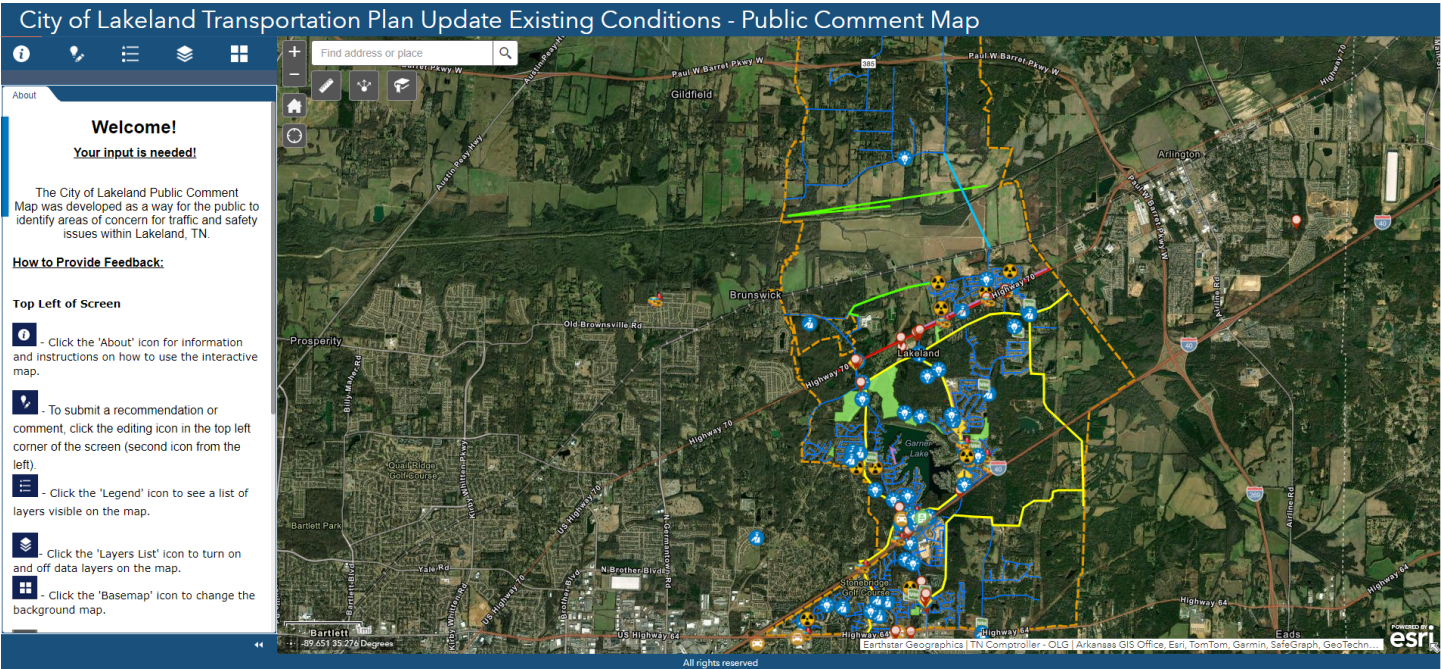


FIGURE 04: INTERACTIVE MAP INTERFACE

- Observed Transportation Condition**
- Difficult to Cross Street or Intersection
 - Excessive Traffic, Congestion
 - Signage or Pavement Markings Needed
 - Speeding Issues
 - Traffic Calming Device Needed
 - Traffic Signal Needed
 - Unsafe Driving Conditions
 - Vehicles Cut-Through Neighborhood
 - Other

FIGURE 05: INTERACTIVE MAP OBSERVED TRANSPORTATION CONDITION LEGEND

- Recommended Conditions**
- Greenway / Trail Connection
 - New Roadway Connection
 - New or Improved Bike Facility
 - Sidewalk Connection Needed
 - Widen Existing Road
 - Other

FIGURE 06: INTERACTIVE MAP RECOMMENDED CONNECTIONS LEGEND

There were a total of 152 comments submitted through the interactive map. Of these, there were 132 defined as Observed Transportation Conditions and 20 Recommended Connections. Of the 152 comments, 137 comments were from residents, one was from someone who works in Lakeland, one was left by a visitor to Lakeland, and three did not provide a response for their connection to Lakeland.

Figure 7 shows a summary of the Observed Transportation Conditions comments while **Figure 8** and shows a summary of the Recommended Connections comments.

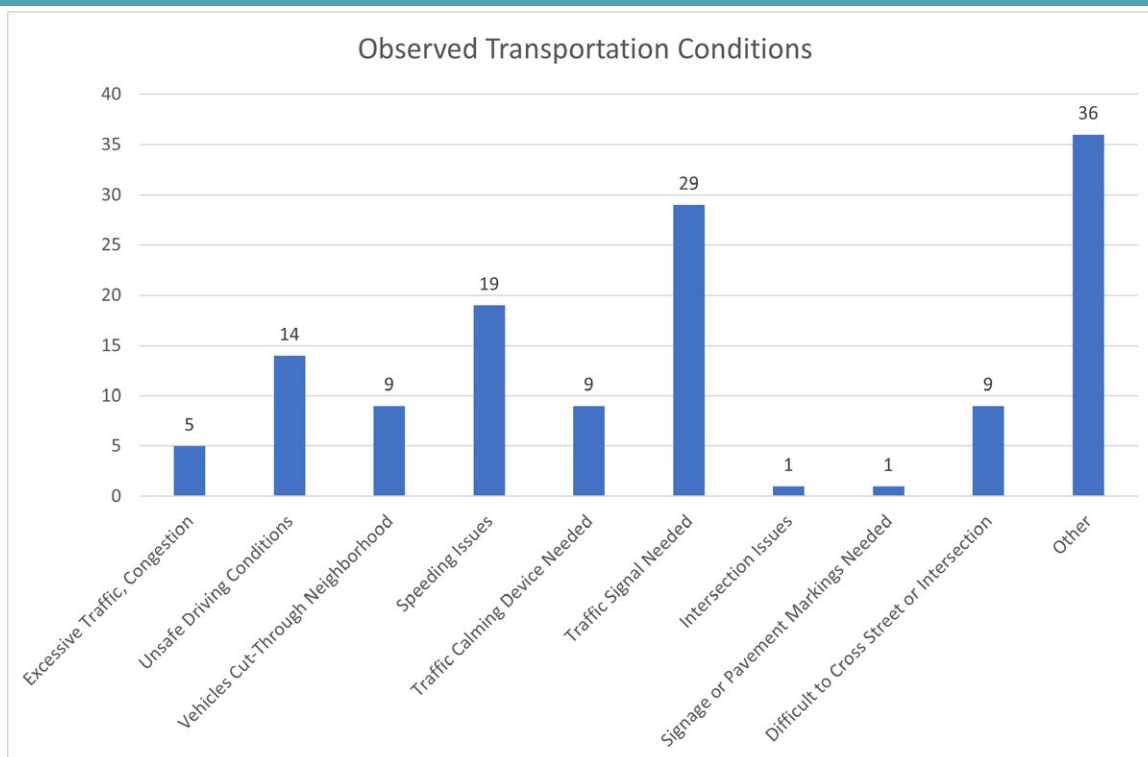


FIGURE 07: OBSERVED TRANSPORTATION CONDITIONS RESPONSES

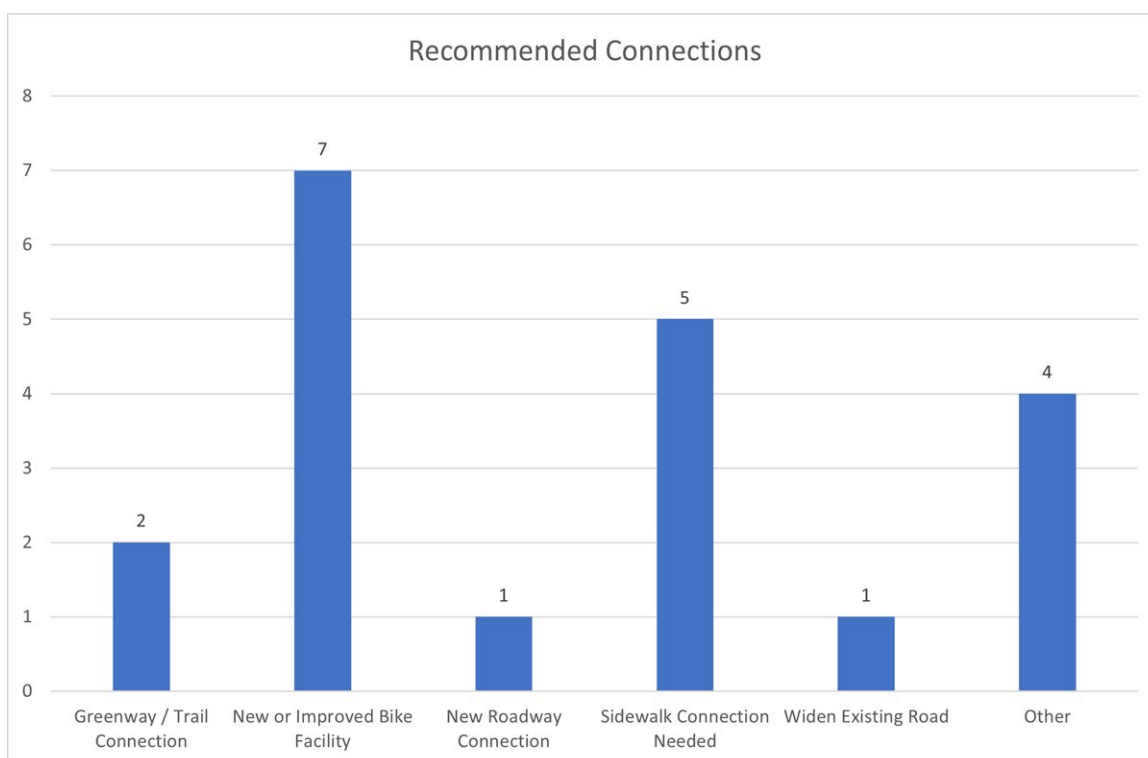


FIGURE 08: RECOMMENDED CONNECTIONS RESPONSES

Of the 40 comments listed as “Other,” 11 comments were unrelated to the transportation plan. Other popular items from the “Other” category include desire for roundabouts/traffic circles, wanting more/improved streetlighting, and recommending streets to be repaved.



03 STUDY METHODOLOGY

A Subarea Travel Demand Model (TDM) for the City of Lakeland was developed for use in this Plan. The Subarea Model is based on the official version of the Memphis Urban Area Metropolitan Planning Organization's (MPO) Regional TDM which has a base year of 2016 and was updated for the current 2050 Regional Transportation Plan. The Subarea Model inherited all the benefits and structure of the updated Regional Model such as more accurate regional demographic and economic forecasts and state-of-practice trip generation, distribution, and traffic assignment models. The Subarea Model is not a standalone model. Rather, it is still connected to the overall Regional TDM, just with more information and detail provided for the Lakeland area.

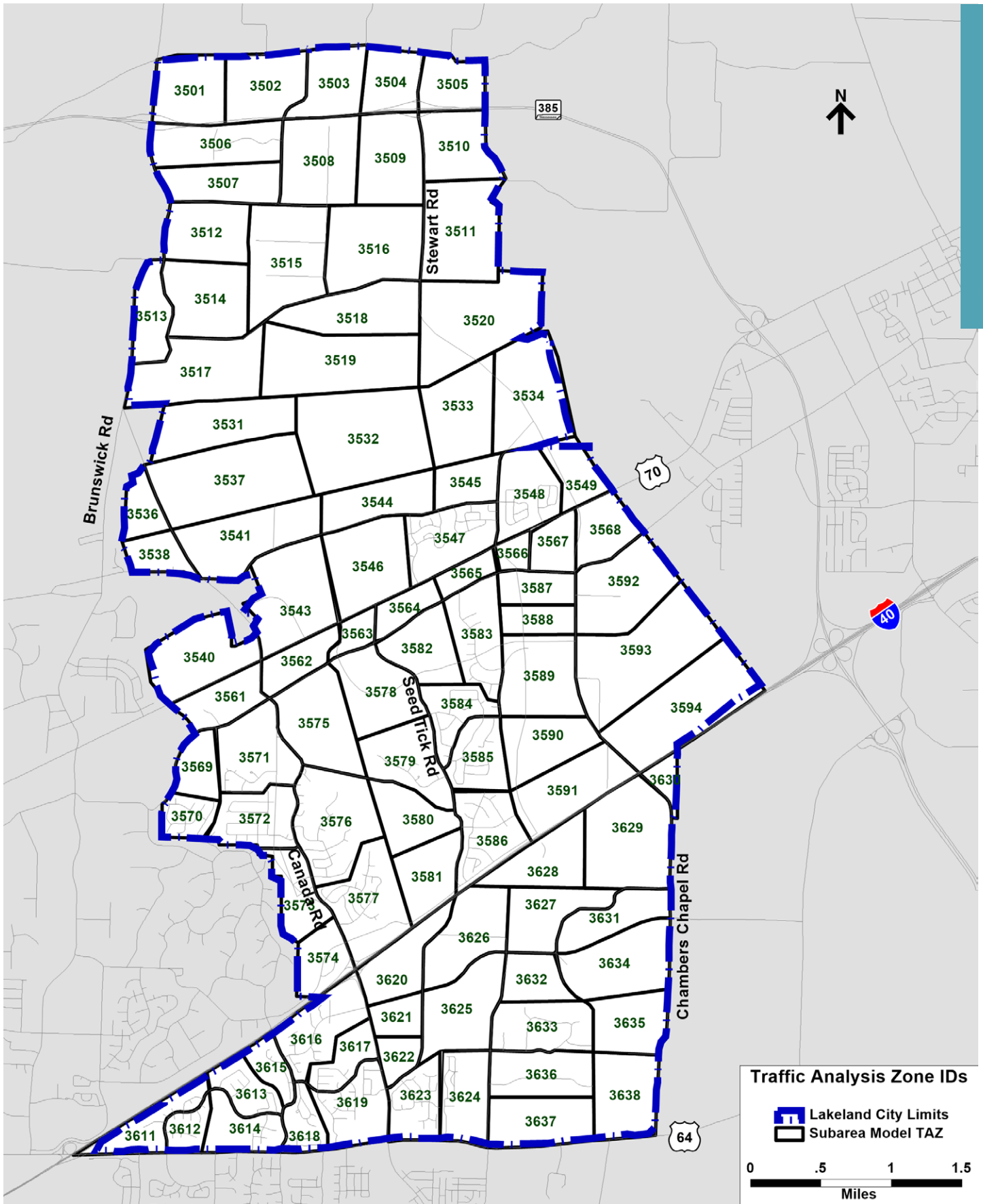
Base Year Subarea Model Development

The Lakeland Subarea Model retained the same base year of 2016 as the Regional Model. This base year was developed and validated to allow the subarea model to predict reasonably accurate base year traffic throughout Lakeland. The Regional Model is used primarily to forecast traffic on regionally significant roads. Therefore, the traffic analysis zones (TAZs) in the suburban areas, like Lakeland, are relatively large and many of the local roads that are important to Lakeland are not included. Existing TAZs in Lakeland and the buffer area were adjusted to provide more granularity in the model. In total, 54 TAZs from the Regional Model were split into 101 zones in the Subarea Model. **Figure 9** shows the final TAZ boundaries in the Subarea Model. Similarly, other roadways significant to Lakeland were added to the roadway network using the new TAZ structure as a guide. Where necessary, centroid connectors for each TAZ were modified in the network to replicate actual travel paths.

The primary socioeconomic attributes for each TAZ that affect traffic forecasts are number of households, total employment, and school enrollment. The household, employment, and enrollment values in the Regional Model TAZs were verified and reaggregated to the Subarea Model TAZs in separate processes. Household information was split based on zone boundaries overlaid on aerial photography. Employment totals were directly aggregated from the Infogroup geographic dataset used in the development of the Regional Model. The employment totals were then checked through aerial photography and available address information. School enrollment was allocated to the appropriate zone based on aerial photography. Other information, such as employment categories and household distributions, were carried over directly from the Regional Model TAZs.

The traffic assignment results from the Subarea Model were then compared with available traffic counts to validate the model. The model validation process is described further in **Technical Memorandum #1 – Subarea Travel Demand Model Base Year Validation**, attached as **Appendix A**.

FIGURE 09: LAKELAND TAZ ID
MAP



Full Build-Out Socioeconomic Forecasts

In the travel demand model, trips are assigned to each TAZ for the following nine trip purposes:

- Home-based work
- Home-based school
- Home-based university
- Home-based shopping
- Home-based social-recreational
- Home-based pickup/drop-off
- Home-based other
- Non-home-based work
- Non-home-based non-work

In the trip production and attraction models within the travel demand model, the number of trips produced and attracted by a TAZ is estimated based on its characteristics. For example, the number of home-based work trips a household within a TAZ produces per day depends on multiple factors including the average workers per household, the income level, and the number of vehicles. Similarly, the total home-based work trips attracted to a particular zone depends on the commercial mix and total employment of the destination zone. Further, the total home-based shopping trips are determined by the number of retail employees in a TAZ.

The Land Use Plan developed in the Comprehensive Plan was used to develop the demographic and economic forecasts for the full build-out scenario. The Land Use Plan designates the locations of different land uses within the City and describes the potential development and density that can be expected for each land use classification.

The first step in determining full build-out socioeconomic forecasts for the City of Lakeland is to start with known planned developments. The City provided site plans and documents for each approved development within the City, from which total households and total square footage of employment were gathered. These developments were then mapped to determine the appropriate TAZs to apply the data. The developments identified in this step include the following:

- Arcadia
- Ashmont
- Evergreen
- Heathfield on Scott's Creek
- Herons Ridge Section C & D
- Kensington Manor
- Lake District
- Lakeland Commons
- Lakeland Meadows
- Oakwood Grove
- Taylor Farms
- The Estates at Chambers Chapel
- Winstead Farms

The Land Use Plan was then applied to the remaining developable land in Lakeland after locating the approved developments. Developable land can be defined as undeveloped or underdeveloped parcels that are not located in floodways or protected open space areas. For more information about developable land, refer to Section 3 of the Comprehensive Plan. To convert the Land Use Plan to residential and employment inputs for the TDM, the Land Use Plan was overlaid with the TAZ boundaries. The area of overlap between the two layers was used to estimate the total area of each land use within each TAZ. For each TAZ, the total developable land for new residential and employment uses was developed using aerial photography. A floor area ratio (FAR) was developed for each land use to identify how much property is allocated to roads, utilities, and open space. FAR values per land use are shown below in **Table 1**.

TABLE 1: FLOOR AREA RATIO BY LAND USE

Land Use	Floor Area Ratio
Commercial Corridor	0.250
Mixed Use Commercial	0.550
Mixed Use Residential	0.575
Office/Neighborhood Service	0.300
Public/Institutional	0.200
Park/Public Activity	0.000
Compact Residential	0.650
Neighborhood Residential	0.600
Rural Residential	0.900
Environmentally Sensitive Area	0.000
Infrastructure	0.000

For residential land uses, the total number of dwelling units per acre was determined based on the Land Use Plan. These density rates are shown below in **Table 2**. The total developable land was combined with the associated FAR and density values to determine the total number of new households per TAZ.

TABLE 2: RESIDENTIAL DENSITY BY LAND USE

Land Use	Residential Density (units per acre)
Rural Residential	0.2
Neighborhood Residential	2.5
Compact Residential	4
Mixed Use Residential	6
Mixed Use Commercial	14

For land uses with potential employment opportunities, a maximum building area value was developed to identify the land available for buildings versus parking lots, drive aisles, etc. Maximum building area by land use is shown in **Table 3**. Four primary employment types were identified based on the Land Use Plan: retail, service, office, and government/school. The breakdown of each employment type varied by TAZ and primarily relied on the land use, the vicinity to TAZs with existing employment, and discussions with City staff. The total developable land was then combined with the associated FAR and maximum building area values to determine the amount of square feet of floor space associated with each employment type. Each employment type was assumed to have employment per 1,000 square feet of floor space, which was developed based on values in the 11th Edition of ITE Trip Generation Manual. The employment density by employment type is shown in **Table 4**.

TABLE 3: MAXIMUM BUILDING AREA BY LAND USE

Land Use	Max Building Area
Commercial Corridor	35%
Mixed Use Commercial	50%
Mixed Use Residential	35%
Office/Neighborhood Service	35%
Public/Institutional	20%

TABLE 4: EMPLOYMENT DENSITY BY EMPLOYMENT TYPE

Employment Type	Employees per 1,000 square feet
Retail	2.3
Service	4.9
Office	3.1
Government/School	3.0

School enrollment for the full build-out scenario was developed using existing data, projections provided by the Lakeland School System, potential new school locations, and growth ratios based on the total household growth within the City.

Appendix B includes maps showing TAZ IDs and the forecasted total number of households and employment for each zone.

The demographic and economic forecasts were used as inputs to the Lakeland Subarea Model to forecast the future traffic growth as described in section 4.

An alternative growth scenario was also developed to identify additional growth within Lakeland if certain areas and land uses developed more aggressively than what is described in the Land Use Plan. In this scenario, additional household and employment growth was allocated to the Mixed Use Residential, Mixed Use Commercial, Commercial Corridor, and Office/Neighborhood Service land uses. Additional growth was also identified in the TAZs directly adjacent to the two SR 385 interchanges in northern Lakeland. The socioeconomic data for this scenario is also included in Appendix B.

Table 5 shows the census data from 2016 along with the future projected households, employment, and school enrollment for each growth scenario based on the approach outlined above.

TABLE 5: TOTAL SOCIOECONOMIC DATA BY LAND USE SCENARIO

Scenario	HH	Emp	School
2016	5,840	2,294	1,640
Standard Growth	16,165	19,574	4,539
Aggressive Growth	18,556	26,318	5,211



04 FUTURE TRAFFIC GROWTH AND DEFICIENCY ANALYSIS

The Lakeland Subarea Model was used to forecast future traffic growth based on the full build-out socioeconomic forecasts discussed in Section 3. A deficiency analysis was conducted to evaluate the existing roadway network with the demand of the full build-out land use scenario of Lakeland. This analysis identified deficiencies in the network where there will be insufficient capacity to meet the demand if no new transportation improvements are made. A second run was completed to model projects identified in the Memphis MPO's 2023-2026 Transportation Improvement Program (TIP) and 2050 Regional Transportation Plan (RTP). Remaining deficiencies in the network after these runs were then addressed in the recommended roadway network described in Section 5.

Deficiency Analysis Methodology

Roadway Level Of Service (LOS) is a qualitative measure of roadway performance based on roadway capacity. Roadways are assigned a letter grade from A (best) to F (worst) based on their operational character. For new roadways, it is generally considered acceptable if it operates at a LOS between A and C. LOS between D through F represents roadways approaching or at capacity which will negatively impact the operation of the roadway. The Lakeland Subarea Model was used to estimate the LOS based on volume-to-capacity (V/C) ratios on each roadway segment for each time-of-day periods. As the volume on the roadway approaches the capacity, the LOS and operational efficiency of the roadway goes down and delays increase. The characteristics and definitions of the evaluation criteria for roadways with unacceptable operating characteristics are:

- LOS D – Approaching Capacity (V/C from 0.8 to 0.9) – A roadway with a volume to capacity ratio less than 0.8 typically operates adequately. As the volume increases, the roadway becomes more congested. A roadway approaching capacity may operate efficiently during non-peak hours but be congested during peak travel periods.
- LOS E – At Capacity (V/C from 0.9 to 1.0) – Roadways operating at capacity or slightly above capacity are heavily congested during peak periods and moderately congested during non-peak hours. Incidents greatly impact the travel flow on corridors operating within this range.
- LOS F – Over Capacity (V/C greater than 1.0) – The roadways in this category represent the most congested corridors. These roadways are congested during peak and non-peak hours and most likely operate in stop-and-go conditions during the peak travel periods.

Existing and Planned Roadway Network Evaluation

Two separate roadway networks were evaluated to identify locations with congestion during the future full build-out scenario:

- Existing Roadway Network – The existing roadway network in 2023
- Existing and planned roadway network – The existing roadway network plus four projects in the current Memphis MPO 2023-2026 TIP and 2050 RTP as shown in **Table 6**.

TABLE 6: TIP AND RTP PROJECTS

ID	Roadway Name	Termini	Improvement	Planned Opening Year	TIP/RTP ID
1	I-40	SR-177 (German-town Rd) to 1 mile east of Canada Rd	Widen from 6 to 8 lanes, interchange improvement at Hwy 64	TIP 2026	RTP ID 38 TIP NHS-2006-10-A
2	Canada Road (New alignment)	I-40 to US-70/SR-1	New 4-lane divided highway	TIP 2026	RTP ID 56 TIP STP-M-2006-01
3	Beverle Rivera Dr	Seed Tick Rd to Chambers Chapel Rd	New 2 lane road	RTP Tier 3.1 2046-2050	RTP ID 270
4	Lakeland Trace Extension	Beverle Rivera Dr to Mount McKenzie	Extend current roadway	RTP Tier 3.1 2046-2050	RTP ID 704

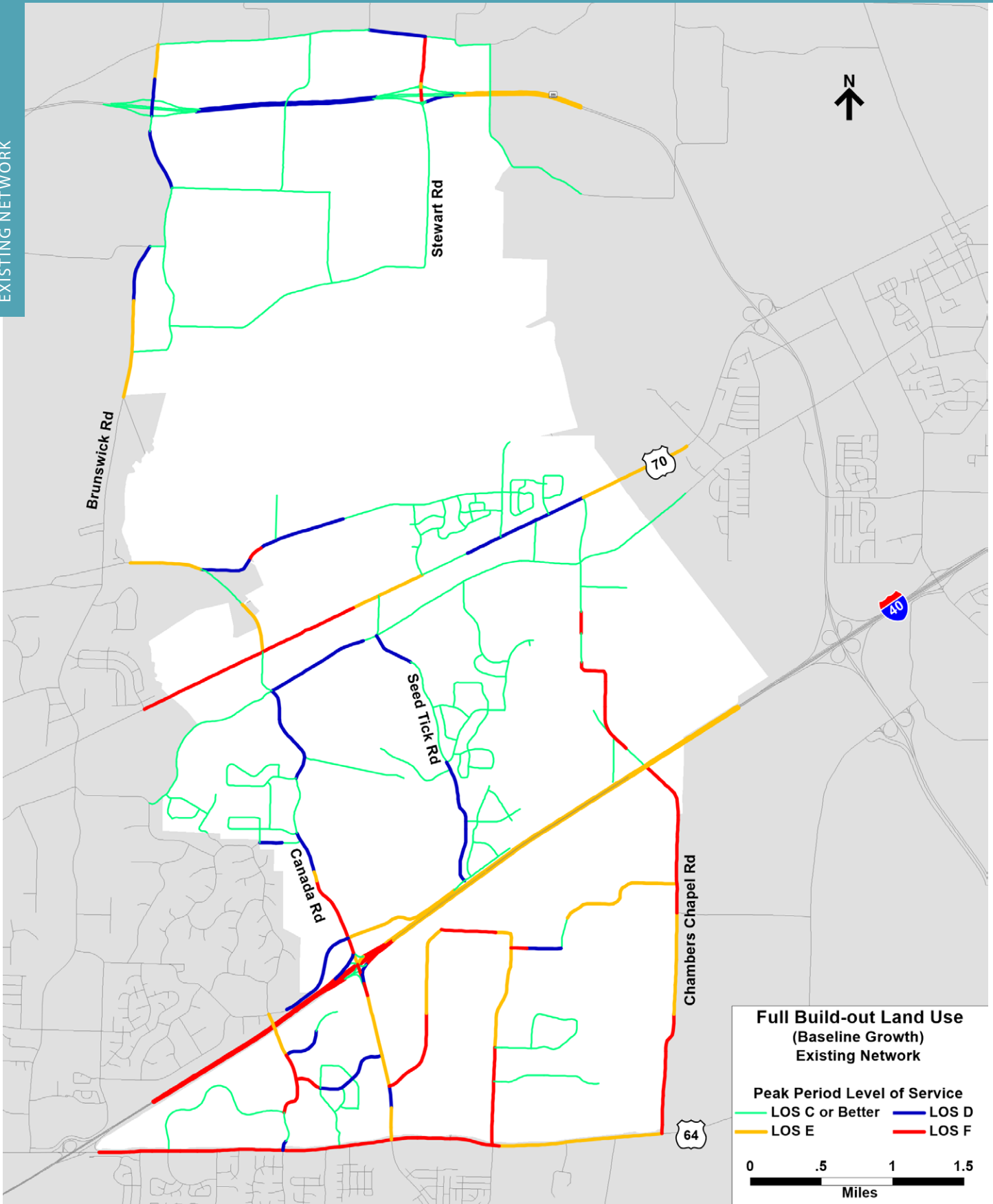
LOS summary

The Subarea Model was run for both network alternatives to determine the worst-case peak period LOS for each roadway segment in Lakeland. Model runs consisted of daily, AM peak, and PM peak period scenarios. **Figure 10** shows the peak period LOS for each segment on the existing roadway network for the full build-out standard land use growth scenario. The following segments are expected to operate at a LOS E or F under these conditions:

- Stewart Rd from SR 385 to Pleasant Ridge Rd
- SR 385 from Stewart Rd ramps to the east
- Old Brownsville Rd from City Limits to Canada Rd and from Lions Ridge Ln to east of Lions Ridge Ln
- Highway 70 from City Limits to future Campus Dr, from west of Seed Tick Rd to Adagio Ln, and from east of Saffron Spring to the City Limits
- Chambers Chapel Rd various locations between I-40 and Memphis Arlington Rd and from Highway 64 to I-40
- Canada Rd from Highway 70 to Campus Dr, from Monroe Rd to Green Spruce Dr, from Highway 64 to south of Woodland Park Dr
- Beverle Rivera Dr from Canada Rd to west of Seed Tick Rd
- Davies Plantation Rd from Fletcher Trace Pkwy to E Davies Plantation Rd
- Kingsridge Dr from Davies Plantation Rd to Shadow Green Ln
- Monroe Rd from Canada Rd to east of Cobb Rd and from east of Cobb Rd to Chambers Chapel Rd
- Cobb Rd from Highway 64 to Monroe Rd

Figure 11 shows the peak period LOS for each segment for the full build-out standard land use growth scenario on the existing and planned roadway network. Segments that improve with the RTP/TIP projects include Canada Road/ New Canada Road, Old Brownsville Road, Highway 70, Chambers Chapel Road north of I-40, Seed Tick Road, Davies Plantation Road, Monroe Road, and Cobb Road. The results also show an increase in traffic and lower LOS along Beverle Rivera and Memphis Arlington Road, between Canada Road and west of Scott's Creek.

FIGURE 10: FULL BUILD-OUT LOS FOR STANDARD LAND USE GROWTH WITH EXISTING NETWORK



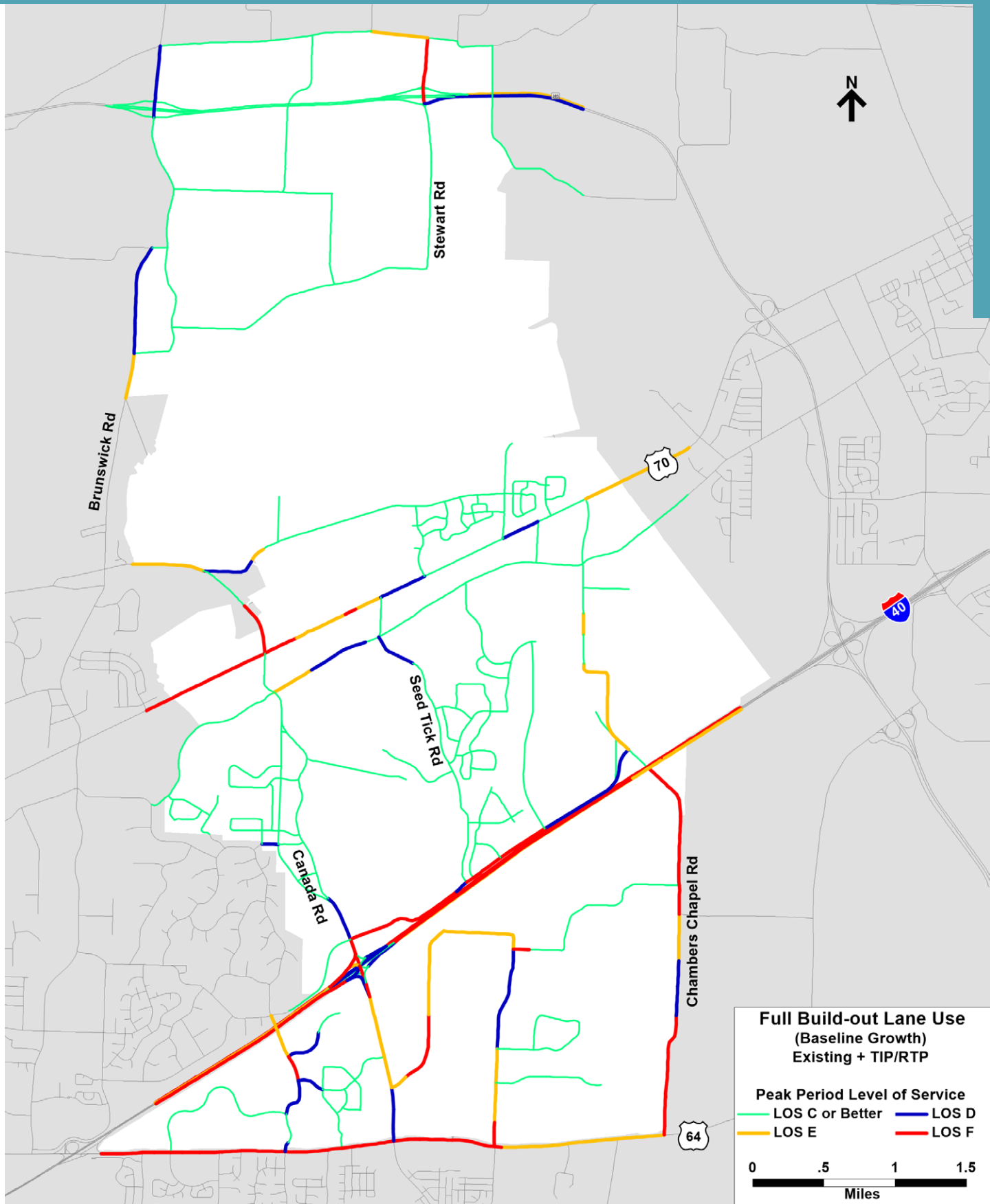


FIGURE 11: FULL BUILD-OUT LOS FOR STANDARD LAND USE GROWTH WITH EXISTING AND COMMITTED NETWORK

The results of the full build-out aggressive land use growth scenario on the existing roadway network are shown in **Figure 12**. In general, the results show many segments experiencing more congestion than the standard land use growth scenario. In addition to segments described previously, the following segments are expected to operate at a LOS E or F under these conditions:

- Old Brownsville Rd from Canada Rd to Lions Ridge Ln
- Canada Rd from south of Woodland Park Dr to Monroe Rd
- Memphis Arlington Rd from Canada Rd to west of Scott's Creek
- El Hill Rd from Davies Plantation Rd to El Hill Cv
- Monroe Rd between Cobb Rd and Chambers Chapel Rd

Figure 13 shows the peak period LOS for each segment for the full build-out aggressive land use growth scenario on the existing and planned roadway network. The results are similar to the standard growth scenario, but LOS improvements are not as significant. Segments that improve with the RTP/TIP projects include Canada Road/ New Canada Road, Old Brownsville Road, Highway 70, Seed Tick Road, Davies Plantation Road, and Monroe Road east of Cobb Road. An increase in traffic and lower LOS is also seen along Beverle Rivera Road. The deficiency analysis results were used to develop the roadway capacity improvements described in Section 5.

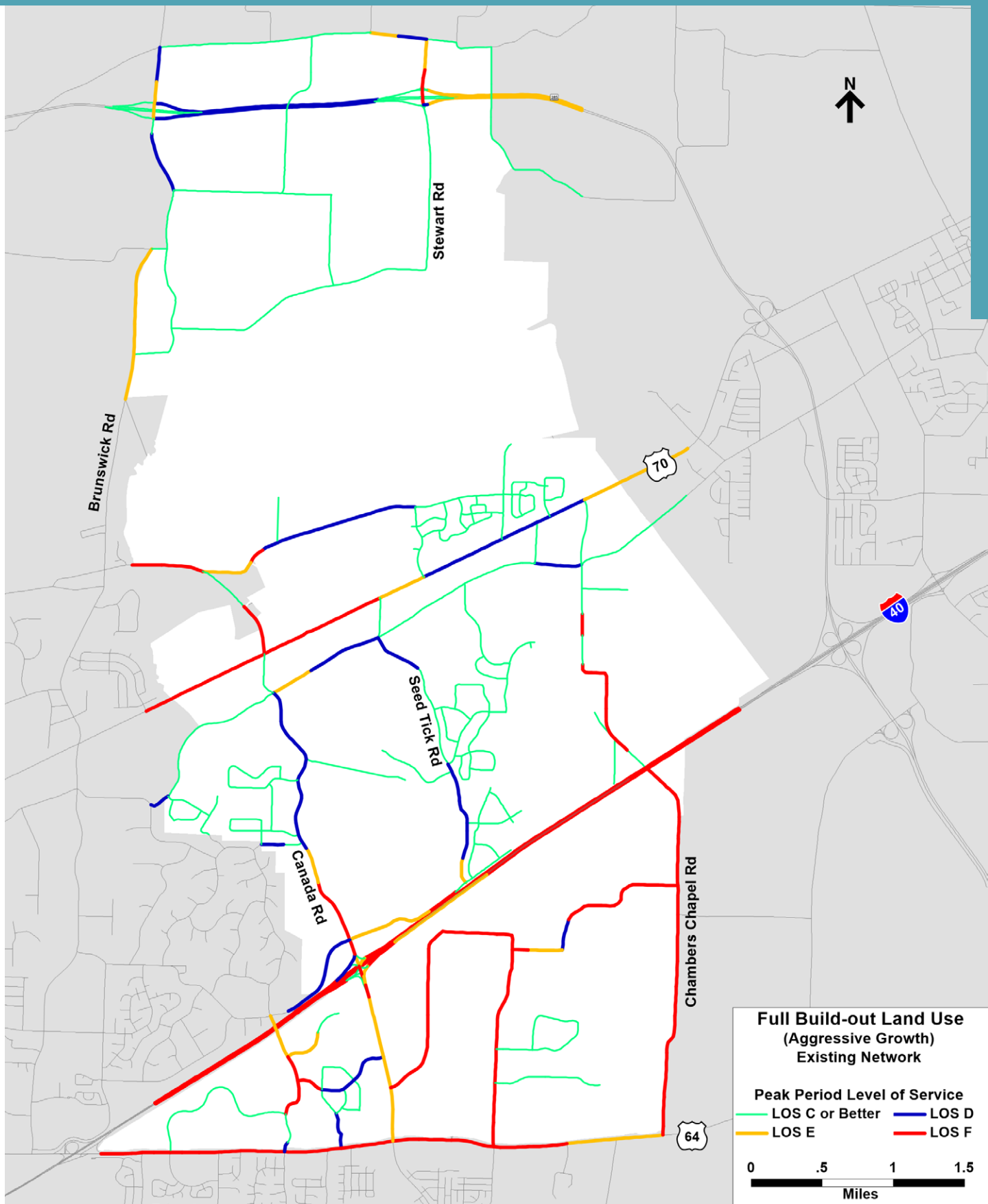
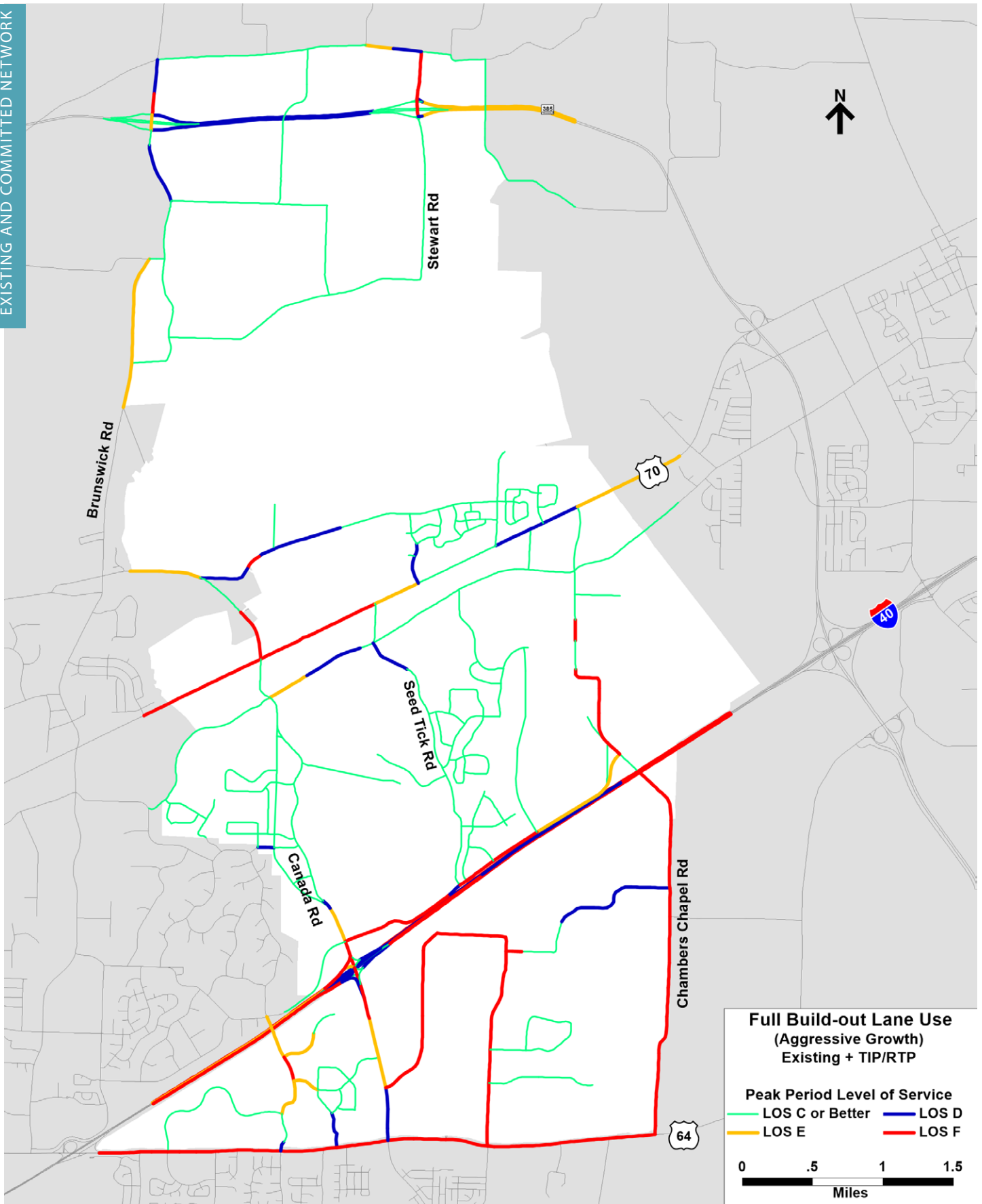


FIGURE 12: FULL BUILD-OUT LOS FOR AGGRESSIVE LAND USE GROWTH WITH EXISTING NETWORK

FIGURE 13: FULL BUILD-OUT LOS FOR AGGRESSIVE LAND USE GROWTH WITH EXISTING AND COMMITTED NETWORK



05 ROADWAY ALTERNATIVES AND RECOMMENDED NETWORK

Roadway improvements were developed to help relieve future congestion based on the findings of the deficiency analysis. The existing Transportation Plan was used as a starting point to identify potential improvements. Potential roadway improvements and associated laneage requirements were vetted with the transportation subcommittee and City staff. Two roadway network alternatives were developed for use in the Lakeland Subarea Model to determine a final Recommended Transportation Plan. Both the standard land use growth and aggressive land use growth scenarios were evaluated with each network alternative.

Roadway Network Alternatives

Figure 14 illustrates the roadway improvements included in Alternative 1 and Alternative 2. On the figure, new roadways are shown as dashed lines. Also displayed are the number of lanes and median type designation for each potential improvement. The improvements for each alternative are summarized in **Table 7**. The difference between the two network alternatives is the addition of a new I-40 interchange at Chambers Chapel Road. Alternative 2 consists of all projects listed in Alternative 1 with the addition of the new I-40 interchange and additional lanes on Chambers Chapel Rd at the new interchange. This allowed for the evaluation of the network with and without the interchange to determine the potential impact it would have throughout Lakeland.

FIGURE 14: ALTERNATIVE
ROADWAY PROJECTS

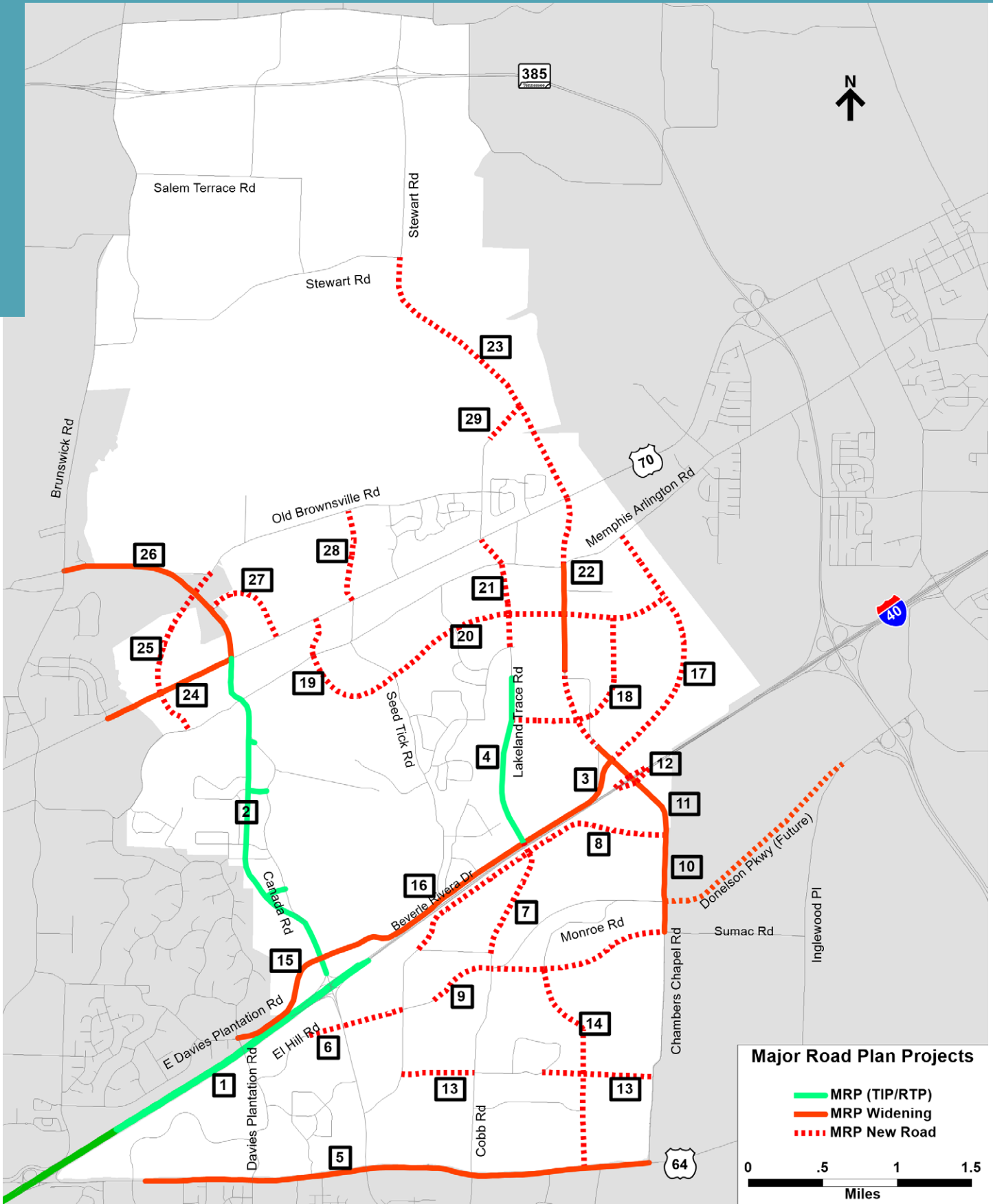


TABLE 7: ROADWAY NETWORK ALTERNATIVE PROJECTS

Plan	Index ¹	Route	Termini	Network Alternative 1 (Baseline)	Network Alternative 2
RTP / TIP	1 ²	I-40	SR-177 (Germantown Rd) to 1 mile east of Canada Rd	Widen from 6 to 8 lanes, interchange improvement at Hwy 64	Same as Baseline
	2	Canada Road (New alignment)	I-40 to US-70/SR-1	4-lane (divided)	Same as Baseline
	3	Beverle Rivera Dr	Seed Tick Rd to Chambers Chapel Rd	2-lane (undivided)	Same as Baseline
	4	Lakeland Trace Extension	Beverle Rivera Dr to Mount McKenzie Rd	2-lane (undivided)	Same as Baseline
Major Road Plan Proposed Projects	5 ²	Highway 64	Fletcher Trace Pkwy to Chambers Chapel Rd (outside city limits)	7-lanes	Same as Baseline
	6	El Hill Rd Extension	Davies Plantation Rd South to Canada Rd	2-lane (undivided)	Same as Baseline
	7	Cobb Rd Extension (Alternative I-40 Crossing)	Monroe Rd to Beverle Rivera Dr (Future)	4-lane (undivided)	Same as Baseline
	8	New frontage road south and parallel to I-40	Monroe Rd to Chambers Chapel Rd	2-lane (undivided)	Same as Baseline
	9	New E-W Road South of I-40	Canada Road to Chambers Chapel Rd	4-lane (divided)	Same as Baseline
	10	Chambers Chapel Rd	Sumac Rd to I-40 Frontage Road (Future)	4-lane (divided)	Same as Baseline
	11	Chambers Chapel Rd	I-40 Frontage Road (Future) to Beverle Rivera Dr (Future)	4-lane (divided)	6-lane (divided)
	12	Chambers Chapel Rd	I-40	No interchange	New interchange
	13	Bentbrooke Dr	Monroe Rd to Chambers Chapel	2-lane (undivided)	Same as Baseline
	14	New N-S Road between Cobb Rd and Chambers Chapel Rd	Highway 64 to Monroe Rd	2-lane (undivided)	Same as Baseline
	15	Davies Plantation E	Davies Plantation Rd South to Canada Rd	4-lane (divided)	Same as Baseline
	16	Beverle Rivera Dr	Canada Rd to Chambers Chapel Rd	4-lane (undivided)	Same as Baseline
	17	New N-S Residential Road (extension of future Beverle Rivera Dr east and north)	Chambers Chapel Rd to Memphis Arlington Rd	2-lane (undivided)	Same as Baseline

Plan	Index ¹	Route	Termini	Network Alternative 1 (Baseline)	Network Alternative 2
Major Road Plan Proposed Projects	18	Gillespie Oak Dr Extension	Lakeland Trace to Chambers Chapel Rd and beyond	2-lane (undivided)	Same as Baseline
	19	New N-S Road Parallel to and West of Seed Tick Road	Extension of E-W Road South of Memphis Arlington north to Highway 70	2-lane (undivided)	Same as Baseline
	20	New E-W road south of Memphis Arlington Rd	Seed Tick Rd to Chambers Chapel and east	2-lane (undivided)	Same as Baseline
	21	Lakeland Trace Rd Extension	Maple Walk Dr to Highway 70	2-lane (undivided)	Same as Baseline
	22	Chambers Chapel Rd	Beverle Rivera Dr (Future) to Highway 70	4-lane (divided) realignment and widening	Same as Baseline
	23	Chambers Chapel Rd	Highway 70 to Stewart Rd	2-lane (undivided)	Same as Baseline
	24	Highway 70	City Limits to Canada Rd	6-lane (divided)	Same as Baseline
	25	Old Brownsville Rd Extension	East of Canada Rd to Memphis Arlington Rd	2-lane (undivided)	Same as Baseline
	26	Canada Rd / Old Brownsville	Highway 70 to Brunswick Rd	4-lane (divided)	Same as Baseline
	27	Campus Dr	East of Canada Rd to Highway 70	2-lane (undivided)	Same as Baseline
	28	Seed Tick Road Extension	Highway 70 to Old Brownsville Rd	2-lane (undivided)	Same as Baseline
	29	Evergreen Road Extension	Extend Road to Chambers Chapel Rd (Future) north of 70	2-lane (undivided)	Same as Baseline

¹The list of projects are not in order of priority.

²Projects 1 and 5 are not the responsibility of the City of Lakeland. Highway 64 is outside the City limits.

Traffic Volume and Level of Service Analysis

Figure 15 and **Figure 16** illustrate the LOS from the Subarea Model for the standard land use growth scenario for Network Alternative 1 and Network Alternative 2, respectively. A majority of the routes in the study area will operate with an acceptable LOS. Based on the model results, the potential roadway projects reduce congestion along the following segments for Network Alternative 1:

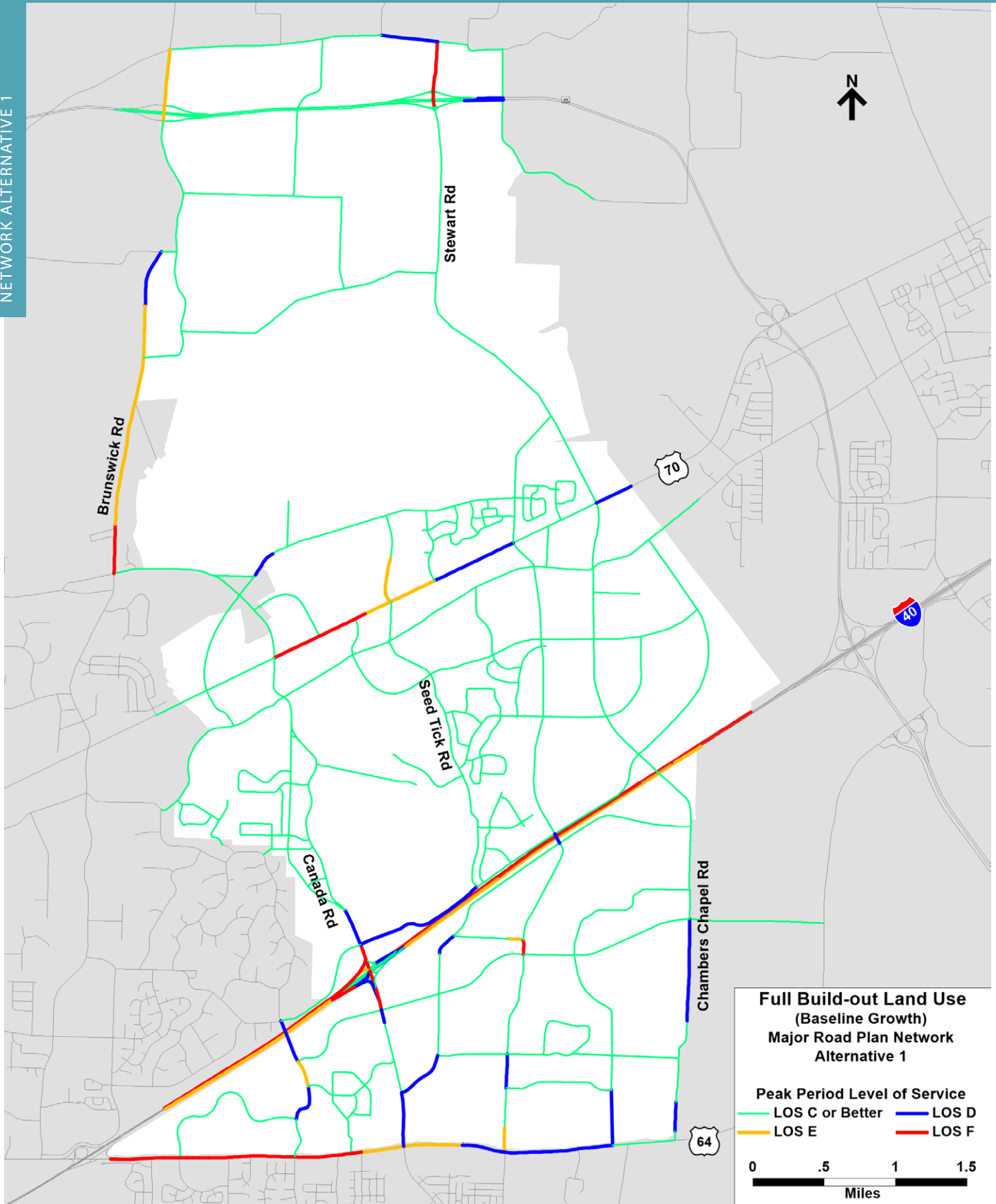
- SR 385 from Brunswick Rd to Stewart Rd
- Old Brownsville Rd from Brunswick Rd to west of future Seed Tick Rd Extension
- Highway 70 from City Limits to Canada Rd and from Evergreen Rd to the City Limits
- Memphis Arlington Rd from Canada Rd to Seed Tick Rd
- Canada Rd/New Canada Rd from Beverle Rivera Rd to Memphis Arlington Rd and from Highway 64 to El Hill Rd Extension
- Seed Tick Rd from Beverle Rivera Rd to Memphis Arlington Rd
- Beverle Rivera from Canada Rd to Seed Tick Rd
- Chambers Chapel Rd from Highway 64 to Memphis Arlington Rd
- Davies Plantation Rd from Highway 64 to E Davies Plantation Rd
- Kingsridge Dr from Davies Plantation Rd to Shadow Green Ln
- Monroe Rd from Canada Rd to Chambers Chapel Rd
- Cobb Rd from Highway 64 to Monroe Rd

Similarly, the model results for Network Alternative 2 show further improvement along SR 385, Beverle Rivera Rd, and around the I-40 at Canada Rd interchange.

For the aggressive land use growth scenario, many of the same locations experience improved congestion comparing the results between Network Alternative 1 and Network Alternative 2, as shown in **Figure 17** and **Figure 18**, respectively. The primary benefits from Network Alternative 2 in the aggressive land use growth scenario are seen along Beverle Rivera Rd and Cobb Rd.

In both land use growth scenarios, the main differences in LOS and traffic volume occur along Beverle Rivera Rd and the roads that cross I-40 (Davies Plantation Rd, Canada Rd, new crossing at Lakeland Trace Rd, and Chambers Chapel Rd). **Table 8** and **Table 9** below display the differences in volume for each of these roadways for each network alternative and land use growth scenario. From this information, the areas that would be most affected by the new I-40 interchange at Chambers Chapel Rd are Beverle Rivera Rd, Canada Rd north of I-40, and the entirety of Chambers Chapel Rd.

FIGURE 15: FULL BUILD-OUT LOS FOR
STANDARD LAND USE GROWTH WITH
NETWORK ALTERNATIVE 1



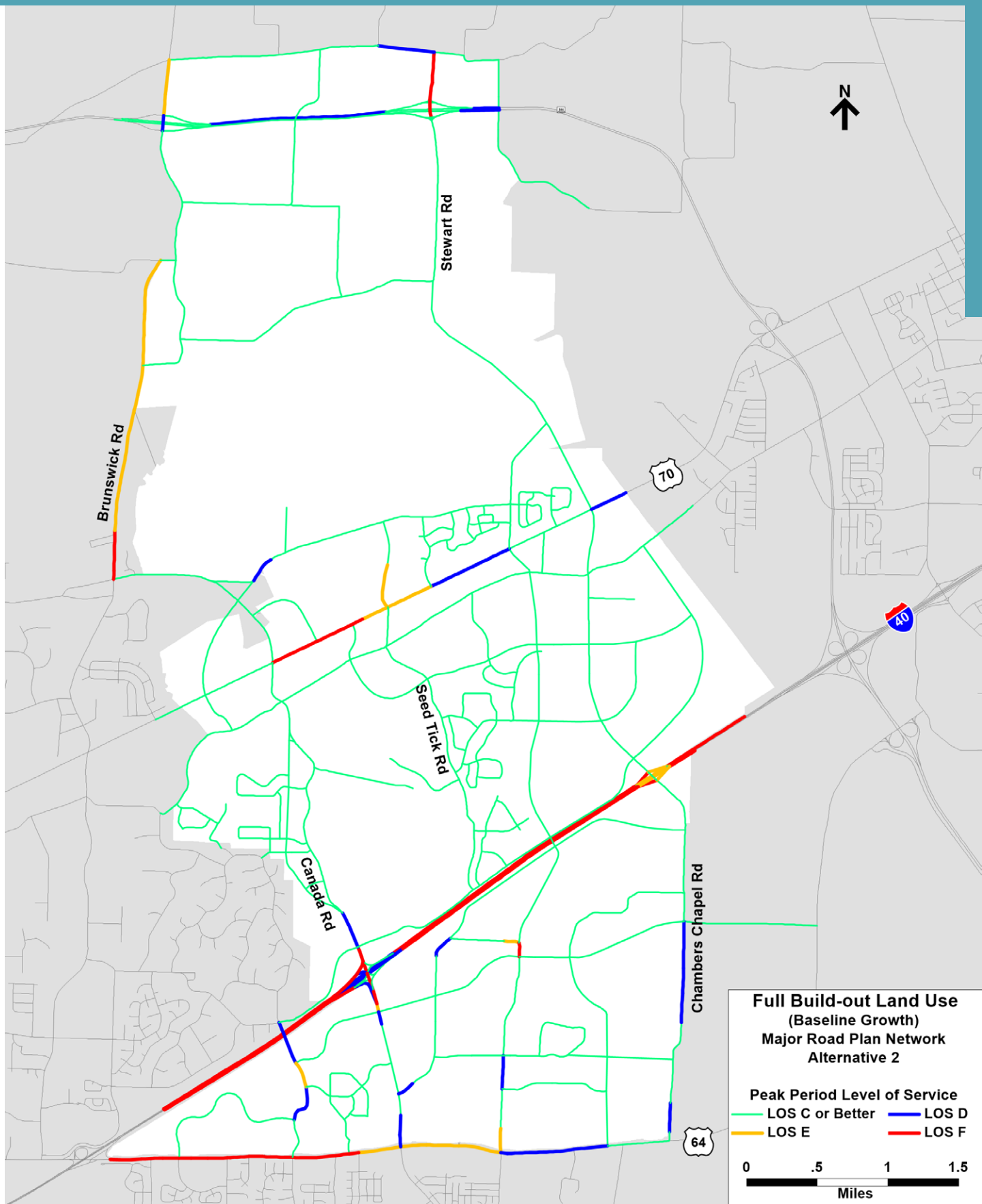
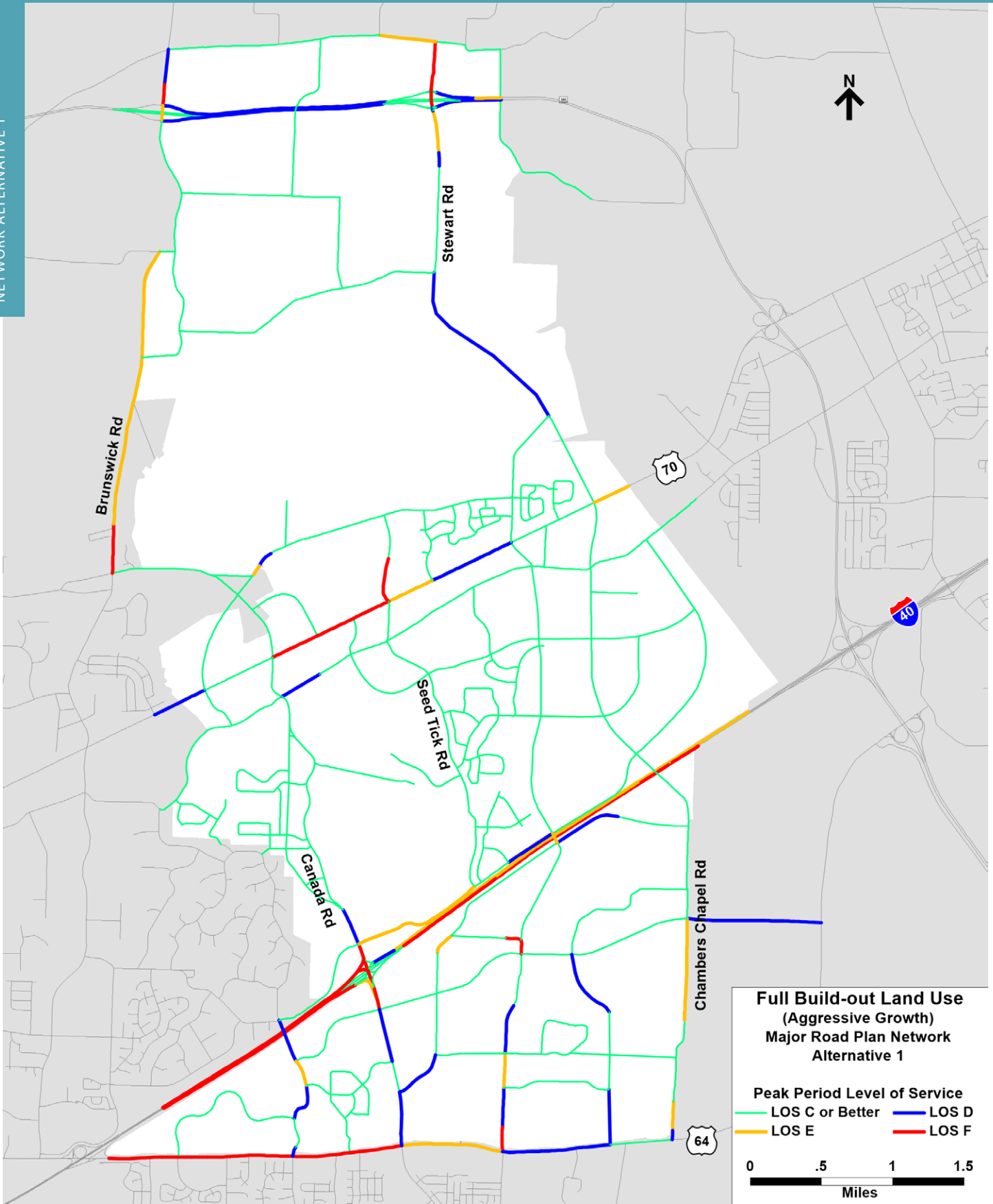


FIGURE 16: FULL BUILD-OUT LOS FOR
STANDARD LAND USE GROWTH WITH
NETWORK ALTERNATIVE 2

FIGURE 17: FULL BUILD-OUT LOS FOR
AGGRESSIVE LAND USE GROWTH WITH
NETWORK ALTERNATIVE 1



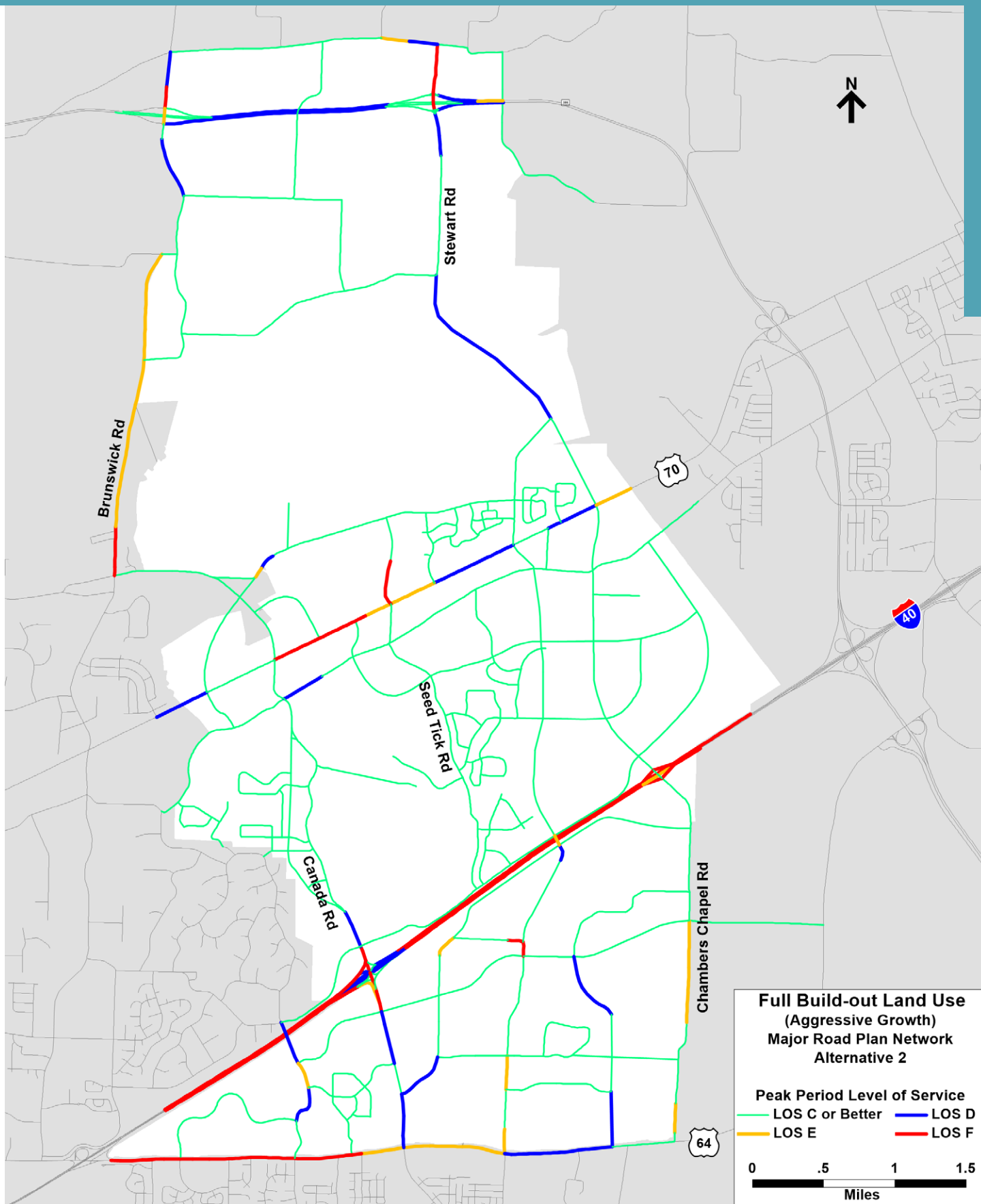


FIGURE 18: FULL BUILD-OUT LOS FOR
AGGRESSIVE LAND USE GROWTH
WITH NETWORK ALTERNATIVE 2

TABLE 8: STANDARD LAND USE GROWTH TRAFFIC VOLUME COMPARISON

Location		Baseline Land Use Growth		
		Existing Network	Network Alternative 1	Network Alternative 2 (Chambers Chapel Interchange)
Beverle Rivera Rd	East of Canada Rd	9,241	16,882	10,787
Davies Plantation Rd	Bridge	9,362	7,491	7,485
Canada Rd	North of I-40	31,377	40,435	33,286
	Bridge	25,865	27,877	27,642
	South of I-40	34,151	36,098	35,498
New Crossing at Lakeland Trace Rd	North of I-40	-	5,548	3,522
	Bridge	-	15,286	14,427
	South of I-40	-	10,720	12,246
Chambers Chapel Rd	North of I-40	11,238	9,852	24,221
	Bridge	11,238	9,852	20,119
	South of I-40	11,238	9,852	15,612

TABLE 9: AGGRESSIVE LAND USE GROWTH TRAFFIC VOLUME COMPARISON

Location		Aggressive Land Use Growth		
		Existing Network	Network Alternative 1	Network Alternative 2 (Chambers Chapel Interchange)
Beverle Rivera Rd	East of Canada Rd	9,823	18,644	12,086
Davies Plantation Rd	Bridge	9,905	8,039	7,914
Canada Rd	North of I-40	33,037	42,115	35,068
	Bridge	27,475	29,448	29,537
	South of I-40	35,908	38,544	38,027
New Crossing at Lakeland Trace Rd	North of I-40	-	5,879	4,183
	Bridge	-	19,202	18,227
	South of I-40	-	14,249	15,943
Chambers Chapel Rd	North of I-40	13,616	12,804	27,863
	Bridge	13,616	12,804	24,394
	South of I-40	13,616	12,804	20,452

Recommended Network

The results of the Subarea Model runs were discussed with the transportation subcommittee to determine the final Recommended Transportation Plan. This roadway network consists of all projects identified in Network Alternative 2 along with four additional changes. The first two changes are improving Beverle Rivera Rd and Highway 70 from Canada Rd to Seed Tick Rd from 4-lane undivided to 4-lane divided. The third change is the alignment of Index Project # 9 New East/West Road South of I-40 to intersect with the future alignment of Donelson Farms Parkway at Chambers Chapel Rd instead of Sumac Road. The fourth change is to improve Highway 70 from Canada Rd to Seed Tick to 6-lane divided. This allowed for this segment of Highway 70 to improve from LOS F to LOS C or better. Final model results for the Recommended Transportation Plan are shown in **Figure 19** and **Figure 20**. The final Recommended Transportation Plan is shown in **Figure 21** with the final list of projects described in **Table 10**.

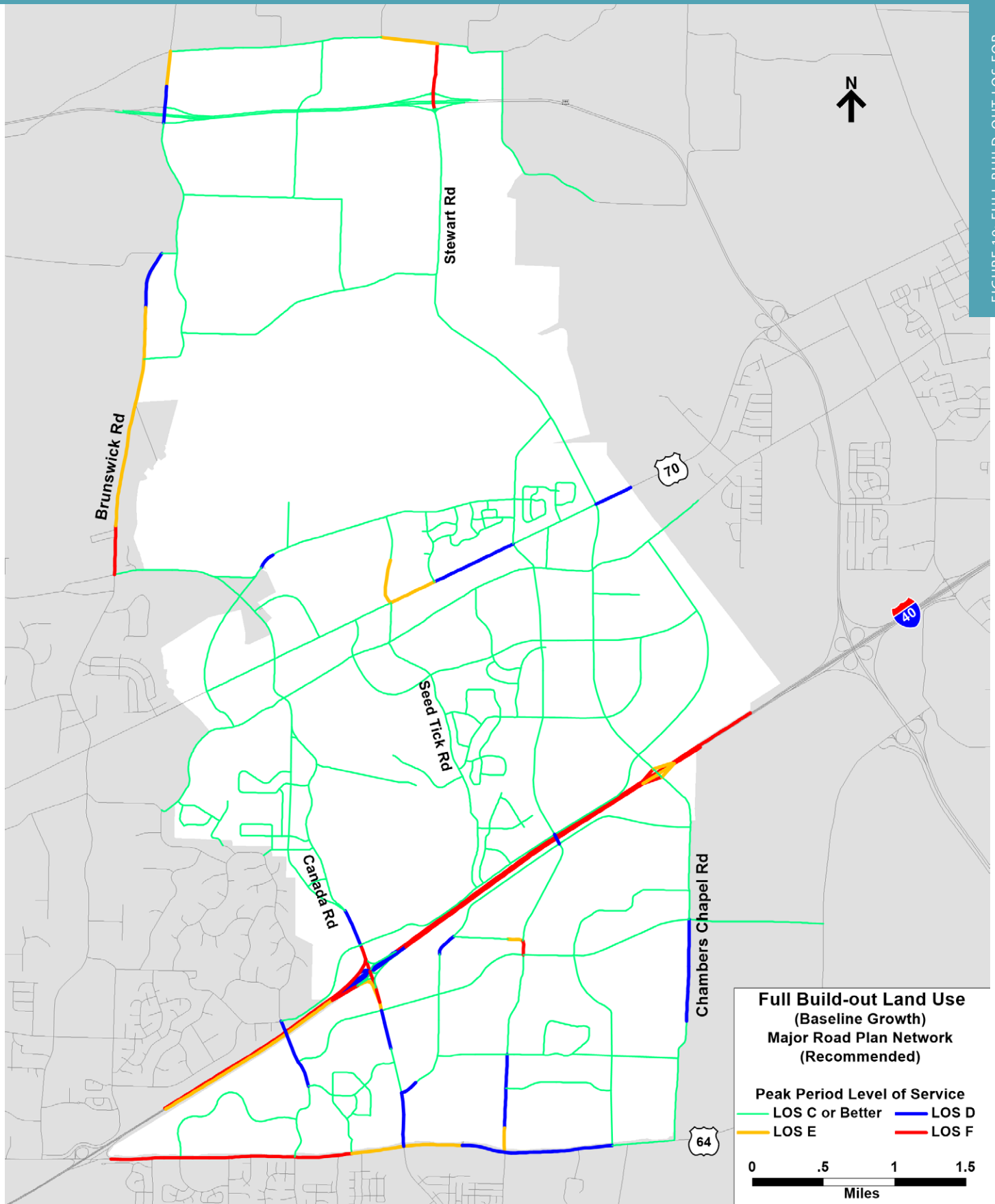


FIGURE 19: FULL BUILD-OUT LOS FOR STANDARD LAND USE GROWTH WITH THE RECOMMENDED TRANSPORTATION PLAN

FIGURE 20: FULL BUILD-OUT LOS FOR AGGRESSIVE LAND USE GROWTH WITH THE RECOMMENDED TRANSPORTATION PLAN

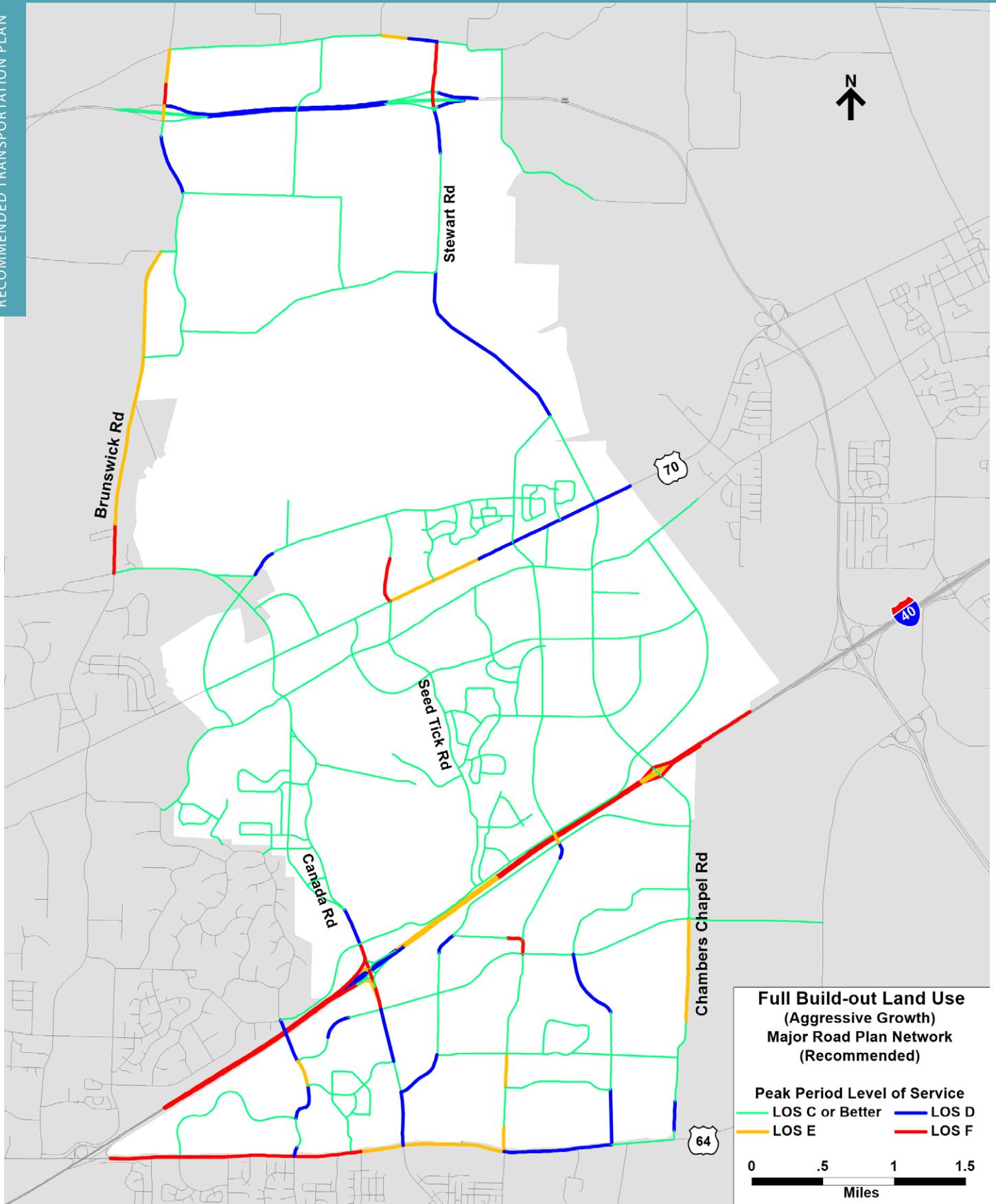


FIGURE 21: RECOMMENDED
TRANSPORTATION PLAN

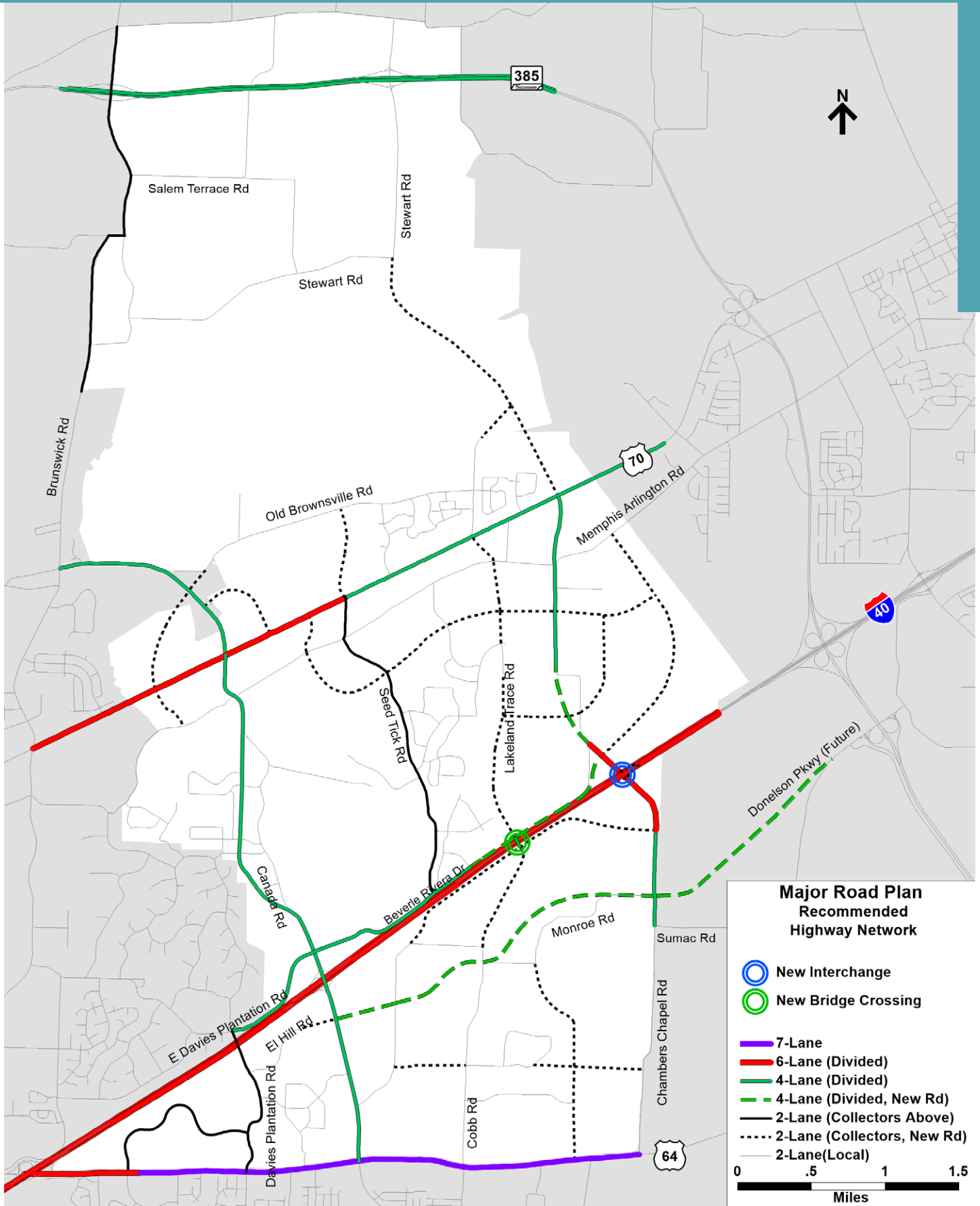


TABLE 10: FINAL RECOMMENDED NETWORK IMPROVEMENTS

Index ¹	Route	Termini	Final Recommended Network
1 ²	I-40	SR-177 (Germantown Rd) to 1 mile east of Canada Rd	Widen from 6 to 8 lanes, interchange improvement at Hwy 64
2	Canada Road (New alignment)	I-40 to US-70/SR-1	4-lane (divided)
3	Beverle Rivera Dr	Seed Tick Rd to Chambers Chapel Rd	2-lane (undivided)
4	Lakeland Trace Extension	Beverle Rivera Dr to Mount McKenzie Rd	2-lane (undivided)
5 ²	Highway 64	Fletcher Trace Pkwy to Chambers Chapel Rd (outside city limits)	7-lanes
6	El Hill Rd Extension	Davies Plantation Rd South to Canada Rd	2-lane (undivided)
7	Cobb Rd Extension (Alternative I-40 Crossing)	Monroe Rd to Beverle Rivera Dr (Future)	4-lane (undivided)
8	New frontage road south and parallel to I-40	Monroe Rd to Chambers Chapel Rd	2-lane (undivided)
9	New E-W Road South of I-40	Canada Road to Chambers Chapel Rd	4-lane (divided)
10	Chambers Chapel Rd	Sumac Rd to I-40 Frontage Road (Future)	4-lane (divided)
11	Chambers Chapel Rd	I-40 Frontage Road (Future) to Beverle Rivera Dr (Future)	6-lane (divided)
12	Chambers Chapel Rd	I-40	New interchange
13	Bentbrooke Dr	Monroe Rd to Chambers Chapel	2-lane (undivided)
14	New N-S Road between Cobb Rd and Chambers Chapel Rd	Highway 64 to Monroe Rd	2-lane (undivided)
15	Davies Plantation E	Davies Plantation Rd South to Canada Rd	4-lane (divided)
16	Beverle Rivera Dr	Canada Rd to Chambers Chapel Rd	4-lane (divided)
17	New N-S Residential Road (extension of future Beverle Rivera Dr east and north)	Chambers Chapel Rd to Memphis Arlington Rd	2-lane (undivided)

Index ¹	Route	Termini	Final Recommended Network
18	Gillespie Oak Dr Extension	Lakeland Trace to Chambers Chapel Rd and beyond	2-lane (undivided)
19	New N-S Road Parallel to and West of Seed Tick Road	Extension of E-W Road South of Memphis Arlington north to Highway 70	2-lane (undivided)
20	New E-W road south of Memphis Arlington Rd	Seed Tick Rd to Chambers Chapel and east	2-lane (undivided)
21	Lakeland Trace Rd Extension	Maple Walk Dr to Highway 70	2-lane (undivided)
22	Chambers Chapel Rd	Beverle Rivera Dr (Future) to Highway 70	4-lane (divided) realignment and widening
23	Chambers Chapel Rd	Highway 70 to Stewart Rd	2-lane (undivided)
24	Highway 70	City Limits to Canada Rd	6-lane (divided)
25	Old Brownsville Rd Extension	East of Canada Rd to Memphis Arlington Rd	2-lane (undivided)
26	Canada Rd / Old Brownsville	Highway 70 to Brunswick Rd	4-lane (divided)
27	Campus Dr	East of Canada Rd to Highway 70	2-lane (undivided)
28	Seed Tick Road Extension	Highway 70 to Old Brownsville Rd	2-lane (undivided)
29	Evergreen Road Extension	Extend Road to Chambers Chapel Rd (Future) north of 70	2-lane (undivided)
30	Highway 70	Canada Rd to Seed Tick Rd	6-Lane (divided)
31	Highway 70	Seed Tick Rd to City Limits	4-lane (divided)

¹The list of projects are not in order of priority.

²Projects 1 and 5 are not the responsibility of the City of Lakeland. Highway 64 is outside the City limits.

MULTIMODAL ANALYSIS

This transportation plan aims to align the communities multimodal transportation and mobility needs with the proposed bike and pedestrian network, and offers a holistic understanding of the connections between proposed roadway network and multimodal networks.

STATEMENT OF OBJECTIVE

The City of Lakeland seeks to increase connectivity between existing and proposed pedestrian and bike networks. Encouraging the development of comfortable biking and walking pathways fosters an increase in recreational activity throughout the city. The multimodal map shown in **Figure 22** may be used as a tool to identify and implement future multimodal connections to create a cohesive multimodal network.

MAP OVERVIEW

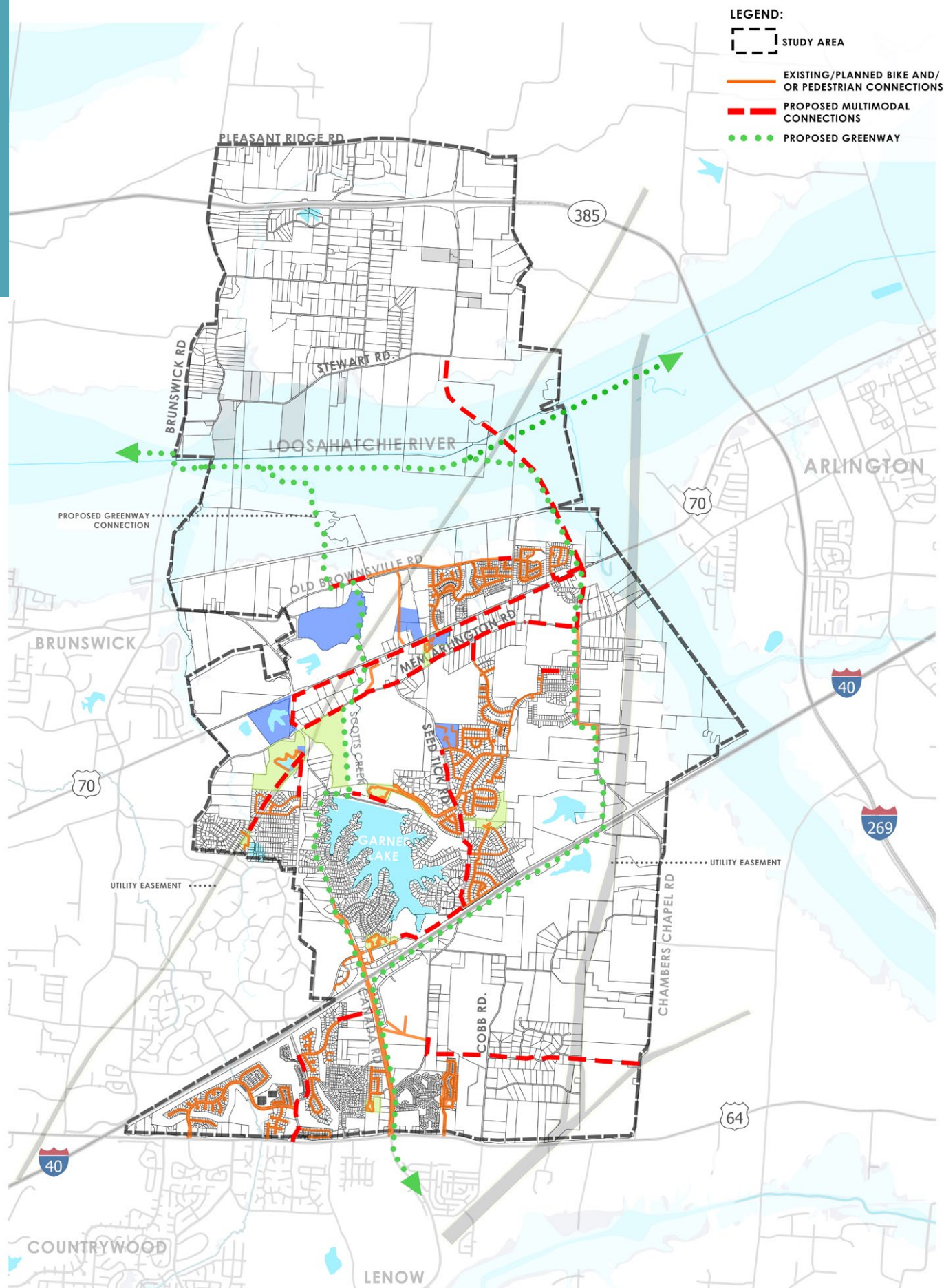
Figure 22 illustrates Lakeland's multimodal opportunities based on development status, presence of existing and approved bike and pedestrian infrastructure and access to public parks and civic/academic locations in the area. The proposed multimodal connections were determined by studying the approved and existing pathways and identifying gaps in the network. The proposed roadway network was analyzed alongside the multimodal network to help determine high traffic areas and to understand potential growth patterns. The proposed greenway network intersects the multimodal network at key nodes to establish connections to the northeast towards Arlington, as well as to the northwest towards Bartlett. The public/institutional and park/public activity land use parcels are included in the map as they were identified as key connection points for the surrounding community.

EXISTING AND PLANNED MULTIMODAL NETWORK EVALUATION

Two multimodal networks were used to evaluate and identify locations needing future connection.

1. Existing bike and/or pedestrian network
2. Planned and approved bike and/or pedestrian network – including public sidewalks, bikes lanes, and shared-use paths.

FIGURE 22: MULTIMODAL MAP



07 INTERSECTION ANALYSIS

In addition to understanding the future needs of the roadway network in Lakeland, the City wanted to understand the future needs at key intersection locations around the City. The City identified 12 locations at which to perform an existing and future capacity analysis. The analysis would incorporate the future roadway volumes projections from the subarea model and identify potential needs for changes in intersection control or additional lanes. The 12 intersections identified for the additional analysis are listed below:

- | | |
|--------------------------------------|---|
| 1. Canada Rd at Monroe Rd | 7. Hwy 70 at Evergreen Rd N |
| 2. Canada Rd at Beverle Rivera Dr | 8. Memphis Arlington Rd at Seed Tick Rd |
| 3. Canada Rd at Memphis Arlington Rd | 9. Memphis Arlington Rd at Chambers Chapel Rd |
| 4. Canada Rd at Old Brownsville Rd | 10. Seed Tick Rd at Beverle Rivera Dr |
| 5. Hwy 70 at Canada Rd | 11. Chambers Chapel Rd at Monroe Rd |
| 6. Hwy 70 at Seed Tick Rd | 12. Monroe Rd at Cobb Rd |

Peak hour turning movement counts were collected at the intersections in September 2023 and are provided in Appendix D. The existing volumes and existing geometry were used in the existing capacity analysis to understand how the intersections operate under current conditions.

Future projected turning movement volumes were generated using the subarea model developed and validated for the future roadway network. The volumes from the model were validated utilizing the existing traffic patterns, future roadway volumes, and surrounding land use. Intersections that were close in proximity were also compared to ensure volume balancing along corridors. Inconsistencies identified in turning movement projections were adjusted utilizing estimated growth rates for each peak hour developed from the future roadway volumes at the intersection.

The intersection analysis consisted of evaluating the following scenarios: Existing, Future Baseline, and Future Proposed. A description of each scenario is found below:

1. Existing Scenario: This scenario consisted of an analysis of the turning movement counts collected in 2023 with existing intersection geometry and intersection control type.
2. Future Baseline Scenario: This scenario consisted of an analysis of the validated future turning movement projections with future roadway laneage and existing intersection control type. For this scenario, there were two intersections where the control type was changed from two-way stop to all-way stop control for the Future Baseline Scenario: Memphis Arlington Road at Chambers Chapel Road and Monroe Road at Cobb Road.
3. Future Proposed Scenario: This scenario consisted of an analysis of the validated future turning movement projections with future roadway laneage and recommended additional turn lanes and intersection control type. The intersection control types evaluated under this scenario were signalization and roundabout. If an intersection was currently signalized, such as Canada Road at Beverle Rivera Dr, a roundabout was not evaluated under the Future Proposed Scenario.

Level of Service (LOS) and average delay per vehicle for individual movements, approaches, and overall intersections were developed and evaluated for each intersection in the analysis scenarios. **Table 11** shows the LOS delay thresholds published in the Highway Capacity Manual for signalized and unsignalized intersections with corresponding definitions that are used as guidelines when determining the LOS.

TABLE 11: LOS CONTROL DELAY THRESHOLDS

LOS	Signalized Intersections – Control Delay Per Vehicle [sec/ veh]	Unsignalized Intersections – Average Control Delay [sec/veh]	Relative Delay
A	≤ 10	≤ 10	Short Delays
	Free-flow traffic operations at average travel speeds. Vehicles completely unimpeded in ability to maneuver. Minimal delay at signalized intersections.		
B	> 10 – 20	> 10 – 15	
	Reasonably unimpeded traffic operations at average travel speeds. Vehicle maneuverability slightly restricted. Low traffic delays.		
C	> 20 – 35	> 15 – 25	
	Stable traffic operations. Lane changes becoming more restricted. Travel speeds reduced to half of average free flow travel speeds. Longer intersection delays.		
D	>35 – 55	> 25 – 35	Moderate Delays
	Small increases in traffic flow can cause increased delays. Delays likely attributable to increased traffic, reduced signal progression and adverse timing.		
E	>55 – 80	> 35 – 50	
	Significant delays. Travel speeds reduced to one third of average free flow travel speed.		
F	> 80	> 50	Long Delays
	Extremely low speeds. Intersection congestion. Long delays. Extensive traffic queues at intersections.		

Source: Highway Capacity Manual, Transportation Research Board, Washington, D.C., 2010

A summary of the intersection volumes and capacity analysis results are shown on the intersection analysis figures in Appendix C. Based on the results of the intersection analysis, the recommended future intersection control types and additional laneage are summarized below in **Table 12**.

TABLE 12: RECOMMENDED FUTURE INTERSECTION CONTROL TYPES

Intersection	Existing Control Type	Recommended Control Type	Additional Laneage Notes
Canada Rd. at Monroe Rd.	Two-Way Stop-Controlled	Signalized	Add WB right turn lane
Canada Rd. at Beverle Rivera Dr.	Signalized	Signalized	Add WB double left and EB right turn lanes.
Canada Rd. at Memphis Arlington Rd.	All-Way Stop-Controlled	Signalized	
Canada Rd. at Old Brownsville	Two-Way Stop-Controlled	Roundabout	
Canada Rd. at U.S. Hwy 70	Signalized	Signalized	Add NB and SB right turn lanes
U.S. Hwy 70 at Seed Tick Rd.	Two-Way Stop-Controlled	Roundabout	Add SB and EB free flowing right turn lanes
U.S. Hwy 70 at Evergreen Rd.	Two-Way Stop-Controlled	Roundabout	
Memphis Arlington Rd. at Seed Tick Rd.	All-Way Stop-Controlled	Roundabout	
Memphis Arlington Rd. at Chambers Chapel Rd.	Two-Way Stop-Controlled	Roundabout	
Beverle Rivera Dr. at Seed Tick Rd.	Two-Way Stop-Controlled	Roundabout	Add SB free flowing right turn lane
Chambers Chapel at Monroe Rd.	Two-Way Stop-Controlled	Signalized	Add left turn lane for all approaches
Monroe Rd. at Cobb Rd.	Two-Way Stop-Controlled	Roundabout	Add NB and SB free flowing right turn lanes

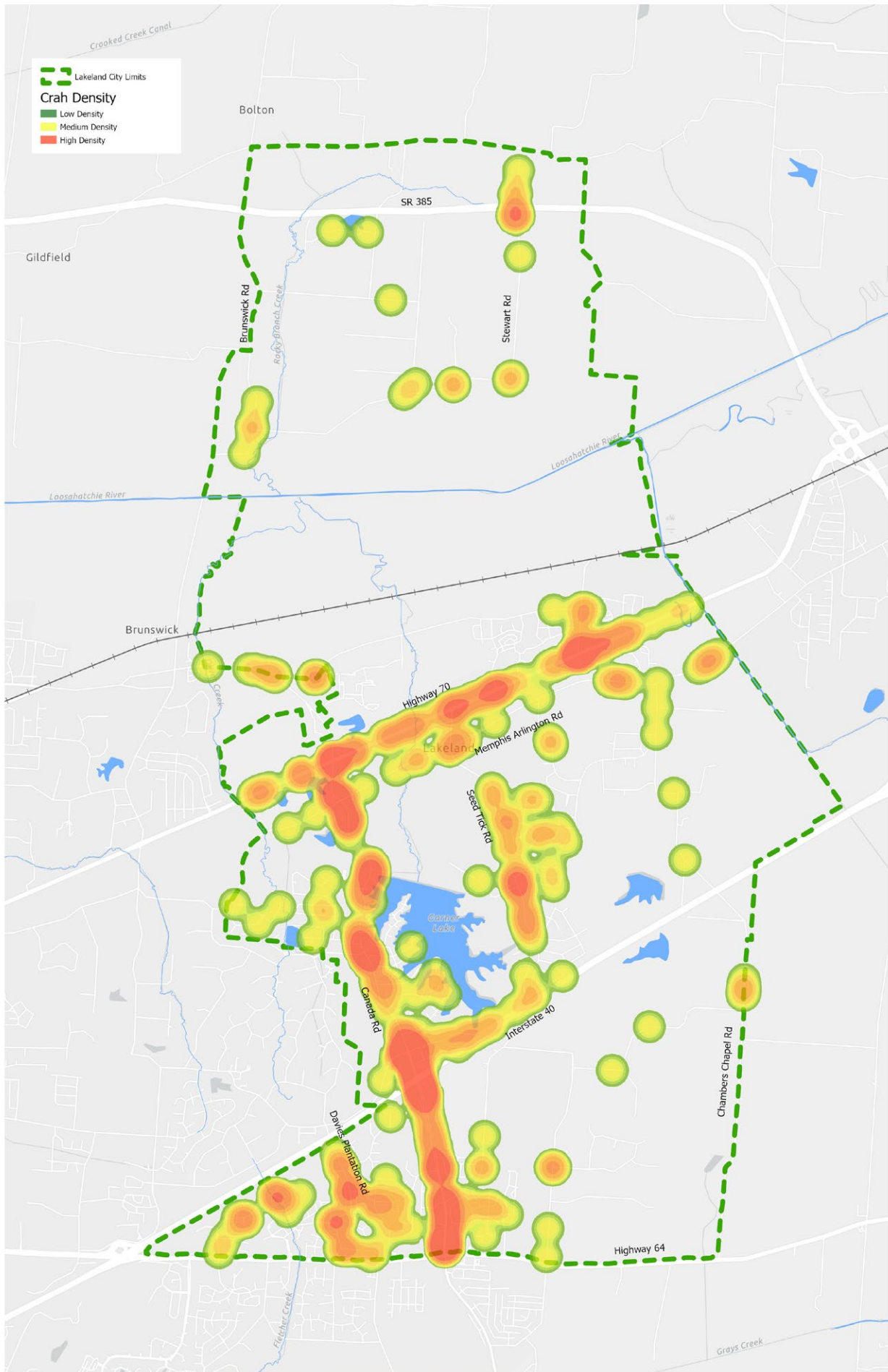


08 SAFETY ANALYSIS

A goal of the City of Lakeland as a part of the Transportation Plan was to identify high crash-frequency locations on the roadway network. Historical crash data was obtained from the Tennessee Department of Transportation's (TDOT) Enhanced Tennessee Roadway Information Management System (eTRIMS) for January 1, 2018 through December 31, 2022 for all crashes in the City of Lakeland. Summary crash data from eTRIMS was reviewed to identify data reporting issues related to reported crash locations and other data elements. The crash data was geocoded and linked to specific roadways/routes in GIS using the eTRIMS network. Crash data was then assigned to specific intersections and road segments within the study area for the purposes of identifying the intersections and road segments in the city with the highest crash frequencies. All crashes within a 300-foot radius of signalized intersections or 150-foot radius of unsignalized intersections were assigned to the corresponding intersection. All crashes between major intersections were assigned to the corresponding road segment. Intersection crashes were also assigned to the appropriate road segment. Intersections and road segments were then analyzed separately.

The crash data was screened to identify and rank sites based on the relative safety of each location. Crash mapping was used to display the frequency and location of crashes within the study area. **Figure 23** shows a crash density heat map for the study area.

FIGURE 23: CRASH DENSITY
HEAT MAP



In addition to analyzing the frequency of crashes, crash rates were calculated to account for exposure and to provide a comparison of safety across similar locations within the city limits. Crash rates were calculated by dividing the number of crashes by the total traffic volume at each location. Traffic volumes used for each intersection and road segment were from the Subarea Model to provide a consistent estimate of exposure data. Intersection crash rates provide values in crashes per million entering vehicles and road segment crash rates provide values in crashes per million miles of travel on the road segment.

The severity of crashes was also considered to measure the impact of fatal, injury, and property damage only crashes at each location. The equivalent property damage only (EPDO) method, as documented in the AASHTO Highway Safety Manual, was used to develop a combined crash frequency and severity score for each intersection and road segment. This method uses severity weighting factors to summarize locations in terms of Property Damage Only (PDO) crash costs.

The crash frequency, exposure to traffic, and crash severity were used for comparison of relative safety across each location within the city limits. Locations with higher crash frequency, exposure to traffic, and EPDO scores were ranked higher in the screening process. **Table 13** provides the Top 5 Intersection Rankings and **Table 14** provides the Top 5 Road Segment Rankings. The full list of intersection and road segment rankings is provided in Appendix E.

TABLE 13: TOP 5 INTERSECTION RANKINGS

Ranking	Intersection	Number of Crashes at Intersection	EPDO Score	Crash Rate	Statewide Intersection Crash Rates	Crash Rate / SW
1	Evergreen Rd. at U.S. Hwy 70	12	603.6	0.58	0.109	5.3
2	Canada Rd. at Pine Point Dr.	8	558.9	0.98	0.143	6.9
3	Lakeland City Hall at U.S. Hwy 70	6	556.9	0.27	0.143	1.9
4	Canada Rd. at Davies Plantation Rd.	34	74.6	1.33	0.141	9.4
5	Canada Rd. at ALDI Dr.	17	57.6	0.57	0.109	5.3

TABLE 14: TOP 5 ROAD SEGMENT RANKINGS

Ranking	Road Segment	Number of Crashes	EPDO Score	Crash Rate	Statewide Crash Rates	Crash Rate / SW
1	U.S. Hwy 70 (Seed Tick Rd to Evergreen Rd)	30	1192.8	1.63	3.753	0.4
2	Canada Rd. (Beverle Rivera to Memphis Arlington)	59	782.7	3.57	3.121	1.1
3	Memphis Arlington Rd. (West City Limits to Canada Rd.)	7	578.2	5.79	3.301	1.8
4	Canada Rd. (Memphis Arlington Rd. to U.S. Hwy 70)	6	577.2	13.16	3.301	4.0
5	U.S. Hwy 70 (West City Limits to Canada Rd.)	19	559.7	1.49	3.753	0.4

SUMMARY AND ADDITIONAL CONSIDERATIONS

This Transportation Plan provides recommendations for roadway, intersection, multimodal, and safety improvements throughout the City of Lakeland. The City can use the lists of recommended improvements to prioritize projects. The prioritized list can be used to develop the capital improvements program and to work with the MPO and the State of Tennessee for obtaining state and federal funding. It can also be used to determine improvements that will be required to support proposed developments. From these efforts, the City can establish time frames for project implementation.

The City should continue to enforce the following established policies and guidelines to help the implementation of the Transportation Plan and to achieve its community goals:

- Access control policy
- Traffic impact study requirements to determine potential traffic impact of development
- Roadway right-of-way dedication requirements for developing properties
- Roadway improvement or payment in-lieu-of-improvement policy based on traffic impacts
- Consistency requirement for the transportation system and land use

The implementation of policies to clarify the City's position on these issues will provide the development community with information vital to the successful development of their properties, will assure there are no surprises to the developers or other citizens of Lakeland, and will help to provide orderly growth of the community.

This Transportation Plan and the Land Use Plan developed as part of the Comprehensive Planning process are dynamic documents that will change over time. As Lakeland continues to develop, there may be potential changes to the Land Use Plan and transportation impacts of those changes must be considered. If the Land Use Plan is amended, the Transportation Plan should also be updated to account for those changes. It is recommended that the Transportation Plan be reviewed annually to incorporate minor land use changes. In addition, crash statistics should be monitored on an annual basis in order to address potential safety issues as they arise.

This Plan assumed full build-out scenarios for the City of Lakeland, but the socioeconomic characteristics for the rest of the MPO region are only forecasted to year 2050. In addition, roadway network improvements outside of the City are limited to the projects in the current RTP/TIP with a horizon year of 2050. Major land use changes or significant roadway capacity improvements in adjacent jurisdictions could affect Lakeland. The Transportation Plan should be reviewed and updated when these occur.

It is also important for this Transportation Plan to remain compatible with the MPO's major planning documents, such as TIP and RTP, and Major Road Plans for adjacent cities, such as Bartlett, Memphis, and Arlington. The City should actively work with the MPO to incorporate the recommendations of the Transportation Plan into the improvement plans developed and maintained by the MPO. The City is also encouraged to coordinate with adjacent cities to maintain consistent cross sections on major arterials and provide multimodal connections.

Lakeland Functional Class

Functional classifications of roadways are defined according to the use and operation of each roadway. Roadway functional class is broken down into seven main categories: interstates, freeways and expressways, principal arterials, minor arterials, major collectors, minor collectors, and local roads. Multiple factors are considered when determining a roadway's functional class including speed limit, access points, route spacing, volume/usage, efficiency, number of lanes, vehicle mix, and regional significance. Functional classification is important because it directs roadway design and sets expectations for preservation, maintenance, safety, and mobility. Further, functional class determines eligibility for state and federal funding.

Based on the results and recommendations of this Plan, there is the need to update the functional classifications of routes within Lakeland. Specifically, Chambers Chapel Road, Stewart Road, Lakeland Trace/Cobb Road, and Memphis Arlington Road will become more important to the transportation network for the City and should be reclassified from local roads to collectors. Also, the new East-West Road south of I-40 from Canada Road to Chambers Chapel Road will be a key connector to Arlington and should be classified as a collector. **Figure 24** shows the recommended functional class of each road in Lakeland based on the full build-out of the City.

Lakeland Scenic Corridors

The purpose of designating scenic corridors is to preserve and protect the nature and character of an existing roadway. The Lakeland network consists of several roadways that are currently designated as scenic corridors. During the public engagement process, residents of Lakeland expressed a desire to maintain the scenic beauty of Lakeland. Therefore, the recommended network for this Transportation Plan Update ensured that the nature and character of these roadways would be preserved as the City of Lakeland continues to grow. **Figure 25** shows the roadways designated as scenic corridors throughout the City limits.

FIGURE 24: FUNCTIONAL CLASS MAP

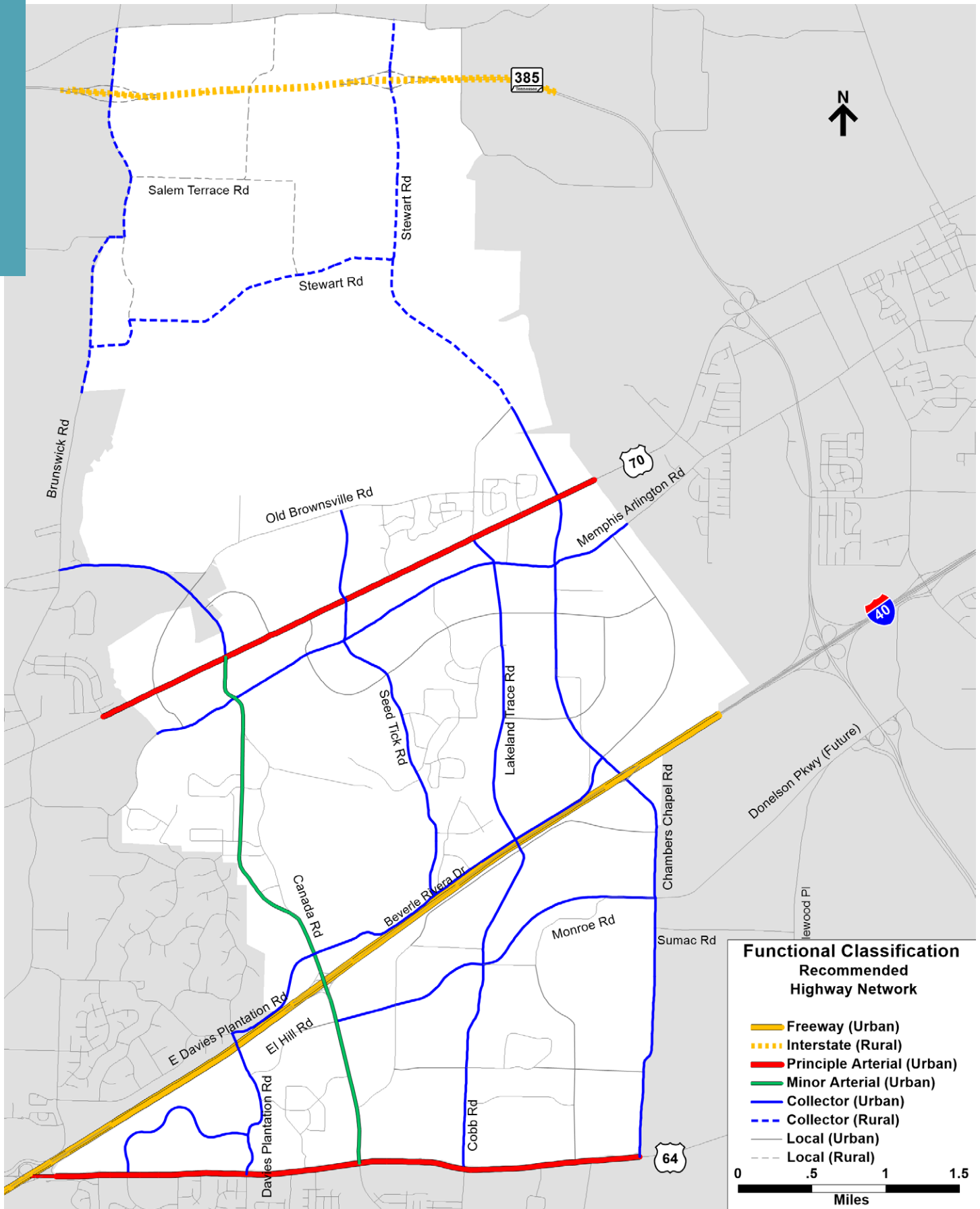
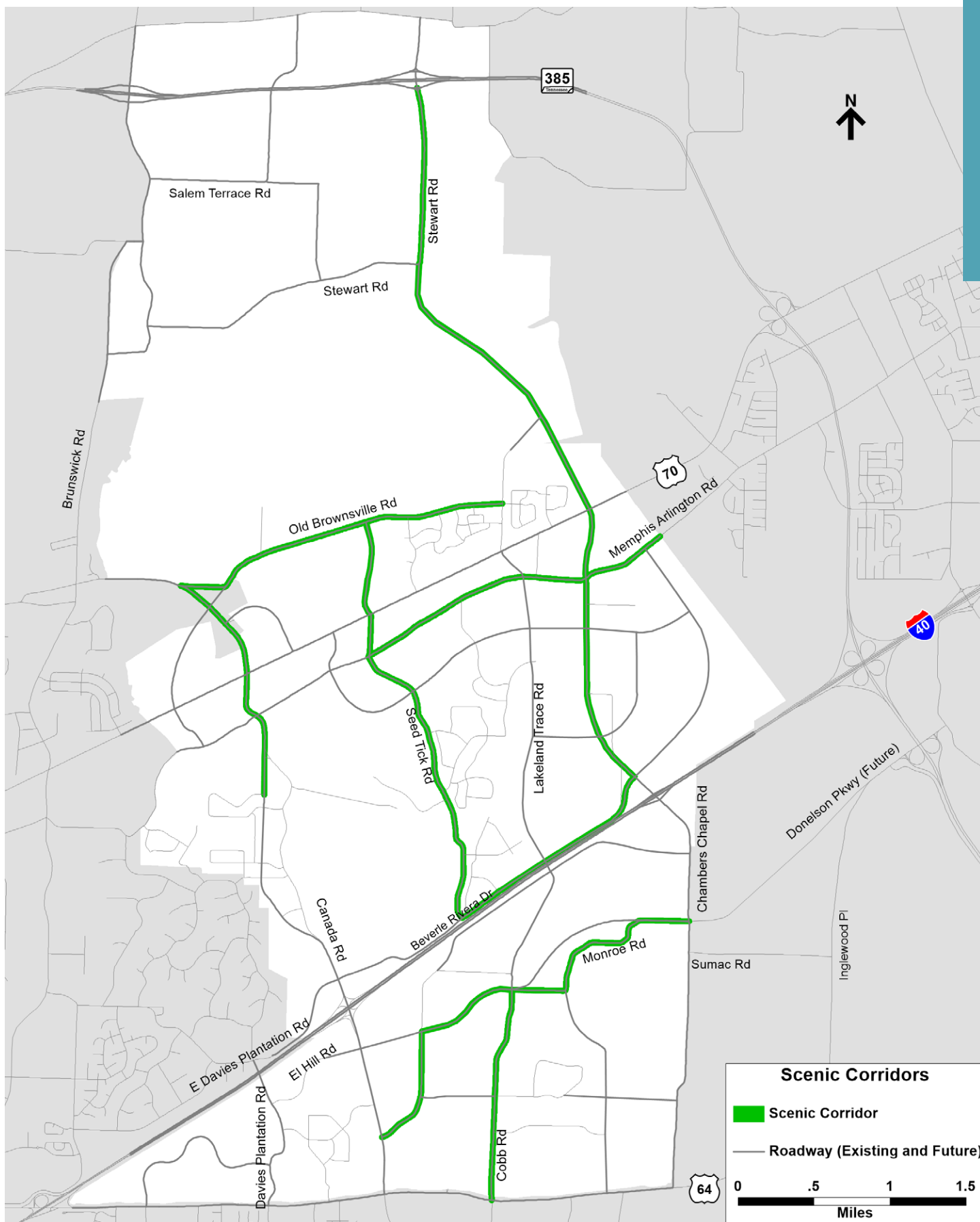


FIGURE 25: SCENIC CORRIDORS
MAP







COMPREHENSIVE PLAN

JANUARY 2024

**DRAFT FOR
APPROVAL**

ADOPTION

This Plan shall become effective upon adoption by the Board of Commissioners of the City of Lakeland, Tennessee.

ADOPTED this the xxth day of xxxx, 2024 by the Board of Commissioners of the City of Lakeland, Tennessee.

Attest

City Recorder

Mayor

ACKNOWLEDGMENTS

Lakeland PULSE was recommended for adoption by the Lakeland Planning Commission on [Recommendation Date]. The plan was officially adopted by the Lakeland Board of Commissioners on [Adoption Date]

We extend our sincere appreciation and gratitude to the residents, business owners, elected officials, City staff, and stakeholders who participated in the planning process and guided the development of Lakeland PULSE. Everyone’s time, input, and energy are greatly appreciated.

LAKELAND PULSE ADVISORY COMMITTEE

- | | |
|------------------|---------------------------|
| Kevin Bingham | Mark Donley |
| Randall Hoeschen | Rebecca Hecker-Mosbrugger |
| Scott Milliet | Connie McCarter |
| Ben Ledsinger | Carl Helton |
| Keith Acton | Jim Atkinson |

CITY OF LAKELAND

- Michael Walker, City Manager
- Paul Luker, Planning Director
- Alex Barthol, Planner
- Emily Harrell, City Engineer

CONSULTANT

- KIMLEY-HORN AND ASSOCIATES, INC.
- LRK
- DEVELOPMENT STUDIO, LLC

TABLE OF CONTENTS

INTRODUCTION	
COMMUNITY CHARACTERISTICS	11
GROWTH STRATEGY	49
FUTURE LAND USE	57
FRAMEWORK ELEMENTS	71
IMPLEMENTATION STRATEGIES	95



The background of the slide is a photograph of a park. In the foreground, there is a body of water with a fountain spraying water upwards. In the background, there are large, leafy green trees under a clear blue sky. The entire image is overlaid with a semi-transparent dark blue filter.

01 INTRODUCTION

THIS SECTION PROVIDES AN OVERVIEW OF THE LAKELAND PULSE DOCUMENT DEVELOPMENT AND FOCUSES ON THREE IMPORTANT ELEMENTS:

- THE PURPOSE
- THE PROCESS
- STUDY AREA

THE PURPOSE

Lakeland PULSE will be the framework guiding the next 20 years of growth and development in the City of Lakeland. This document will condense the expressed interests of the public and existing resources and help steer growth in sustainable and desired directions.

The primary objective of Lakeland PULSE is to develop a new future land use plan to guide community development with the goals of:

Preserving and bolstering the pastoral, natural condition of Lakeland

Providing local business opportunities

Connecting the City through non-intrusive vehicular, bike, and pedestrian networks

Capitalizing on the transportation networks throughout Lakeland to attract businesses

Controlling future growth within the context of adjacent municipal growth

THE PROCESS

The consulting team, with the guidance of the Advisory and Subcommittees, produced the land use plan. The following process was followed in the production of the plan:

- 1 Engage the public through work sessions and surveys to understand community desires
- 2 Understand previously existing, applicable plans
- 3 Summarize existing community resources and factors
- 4 Provide applicable strategies for Lakeland to grow in a controlled and desired manner

BUILDING OFF OF EXISTING FOUNDATIONS

Lakeland has a number of previously produced plans that helped contextualize this plan. While this document will stand alone and not be dictated by other plans, documents such as the parks and recreation master plan and the previously produced land use plan will help guide in this process.





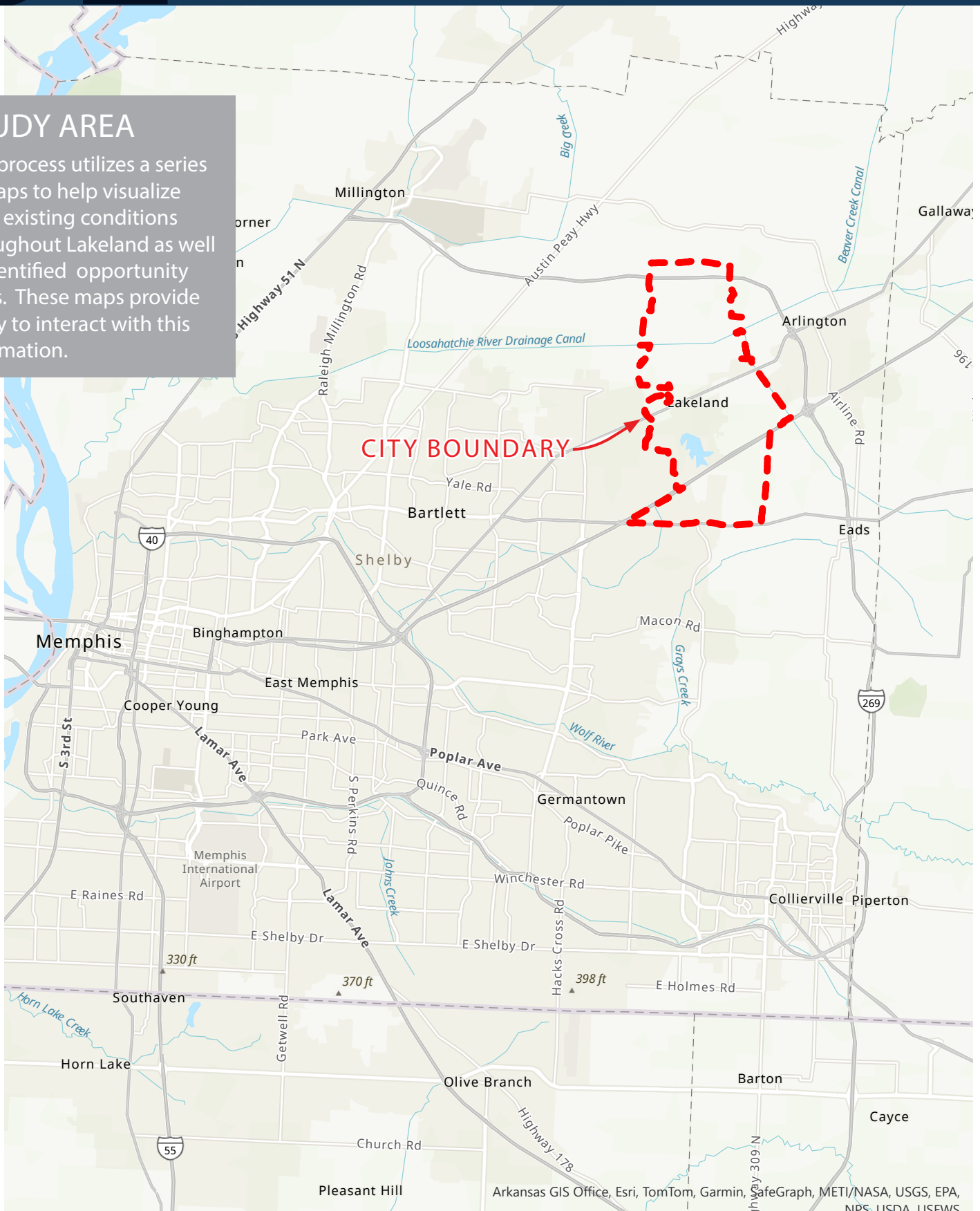
Credit: Alexis Cheyenne Photography

INTRODUCTION

STUDY AREA

STUDY AREA

This process utilizes a series of maps to help visualize both existing conditions throughout Lakeland as well as identified opportunity areas. These maps provide a way to interact with this information.







The background of the slide is a photograph of a community meeting. Several large maps are displayed on easels. One map on the right is titled 'CRASH DENSITY' and shows a color-coded map of a city area with a legend for 'Lakeland City Limits', 'Sparse', and 'Dense'. Another map on the left is partially visible and appears to be a 'DISTRICT MAP'. The scene is dimly lit, with the primary light source being the overhead lights of the meeting room.

02

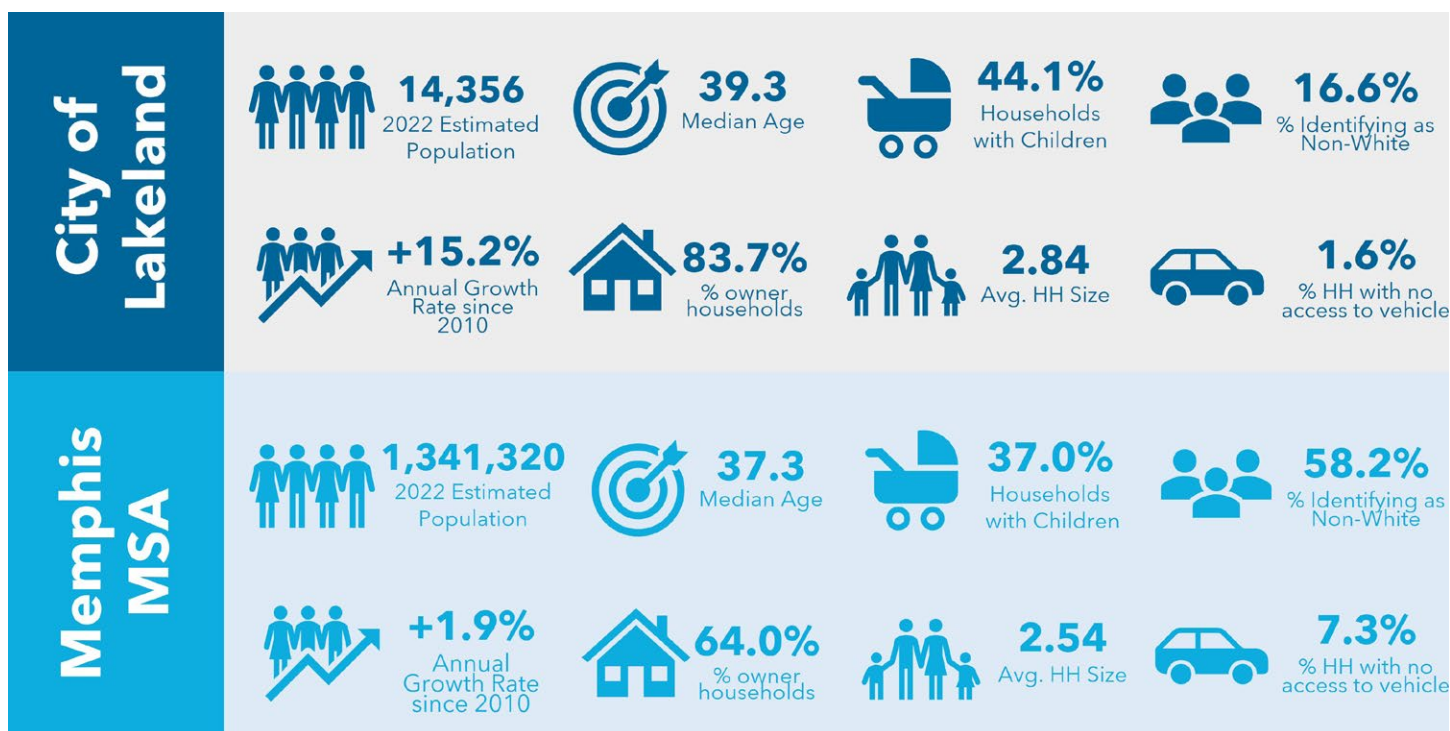
COMMUNITY CHARACTERISTICS

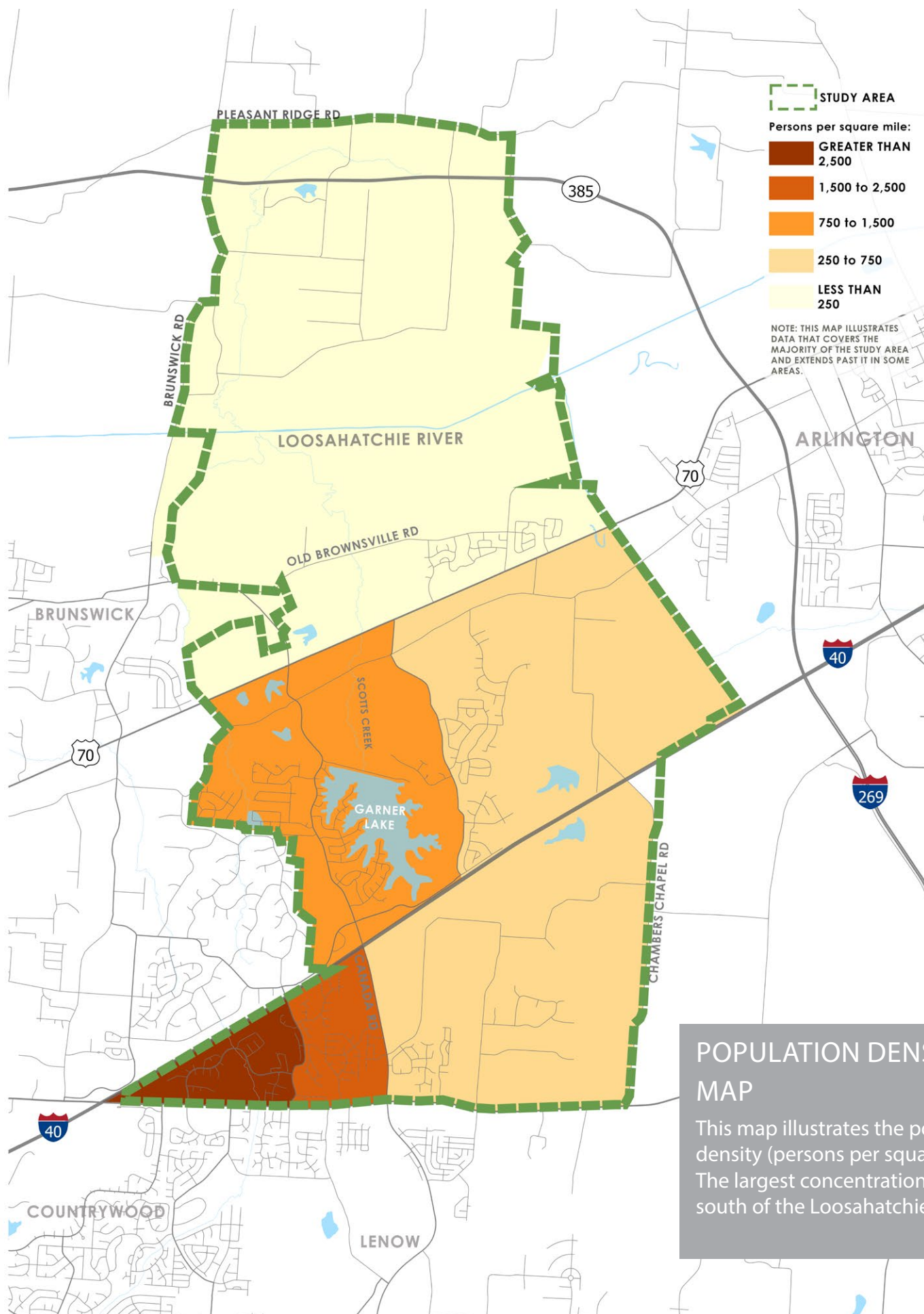
02 COMMUNITY CHARACTERISTICS

DEMOGRAPHICS

DETERMINING DEMOGRAPHIC AND ECONOMIC TRENDS IS VITAL TO ANTICIPATING THE FUTURE NEEDS AND POSSIBILITIES OF THE CITY. IN ADDITION TO PLANNING FOR THE FUTURE, UNDERSTANDING LAKELAND AS IT IS MADE UP TODAY MAY HELP REALIZE CURRENT NEEDS AND OPPORTUNITIES THAT NEED TO BE ADDRESSED.

DEMOGRAPHICS AT A GLANCE





POPULATION DENSITY MAP

This map illustrates the population density (persons per square mile). The largest concentrations are south of the Loosahatchie River.

EXISTING CONDITIONS MAPS

OVERARCHING MAPS SUMMARIZING AND VISUALIZING THE STATUS OF IMPORTANT ASPECTS OF THE LAKELAND COMMUNITY AND ITS RESOURCES.





LAND USE

Outlining the status of land uses in Lakeland and comparing these to the previously produced land use plan. Overlaying constraints in order to locate suitable opportunity areas.



MOBILITY

Highlighting various vehicular and pedestrian options to improve connectivity and ensure adequate connections for future development.



ECONOMIC DEVELOPMENT

Identifying economic trends and development opportunities based on projections.



PARKS, RECREATION, AND OPEN SPACE

Locating existing and future park land and its proximity to surrounding land uses. This plan is based on the previously produced Parks and Recreation Master Plan.



INFRASTRUCTURE

Taking inventory of current infrastructure in order to identify current and future needs as well as development constraints.



COMMUNITY RESOURCES AND SERVICES

Taking inventory of community resources such as schools and emergency services in order to gauge the community's needs and desire for future additions.



HOUSING

Identifying current housing characteristics. Comparing this plan with the current land use plan and community input will help inform housing options on the growth strategy map.

LAND USE SCREENING PROCESS

Lakeland PULSE screening process began with mapping the existing development status and overlaying environmental constraints to help locate areas of opportunity. This overlay was compared with the existing land use plan in order to identify possible future uses as well as noteworthy land use areas that may require change in classification.

DEVELOPMENT STATUS

Development Status assigns a “status” to each parcel based on tax value, size, and land use. The following table provides additional information on each category: a description, Area (Acreage), and % of study area.

The Development Status map guides the land use planning process by outlining parcels that may be primed to accept new development. Parcels receiving the “undeveloped” and “underdeveloped” categories will have a much higher likelihood of change than those labeled “developed.” An important item to note on these broad categories is that being labeled “developed” does not automatically mean that these parcels will never change or develop further. Rather, these parcels are simply less likely to develop/redevelop than their undeveloped/underdeveloped counterparts.

NAME	DESCRIPTION	AREA (ACRES)	% OF STUDY AREA
DEVELOPED	Building value is greater than land value	4399.28	30%
UNDEVELOPED	Vacant Land or parcels with a building value of 0	7091.92	49%
UNDERDEVELOPED LARGE PARCEL	Parcels larger than 10 acres where building value is less than land value but greater than 0	2156.11	15%
UNDERDEVELOPED SMALL PARCEL	Parcels smaller than 10 acres where building value is less than land value but greater than 0	190.96	1%
CONSERVED OPEN SPACE	Parks, conservation buffers, open space, and other areas not available for development	636.76	5%

NATURAL FEATURES

An environmental screening overview identifies environmental constraints that may affect the potential for parcels to be developed. This study focuses primarily on the hydrological constraint areas such as rivers, flood plains, and lakes. While these areas are often constraints for development, proximity to these features may also be seen as desirable.

AREAS OF POTENTIAL CHANGE

A series of land use, development status, and environmental constraints informs location of potential opportunity areas. These are areas that the likelihood of development has not been decreased by any of the outline constraints. These are not the only developable parcels; however, development is more likely than other areas.

LAND USE MAPS

PREVIOUS LAND USE (2006)

This map contains the previous land use areas. This map is broken up into nine land use categories.

DEVELOPMENT STATUS

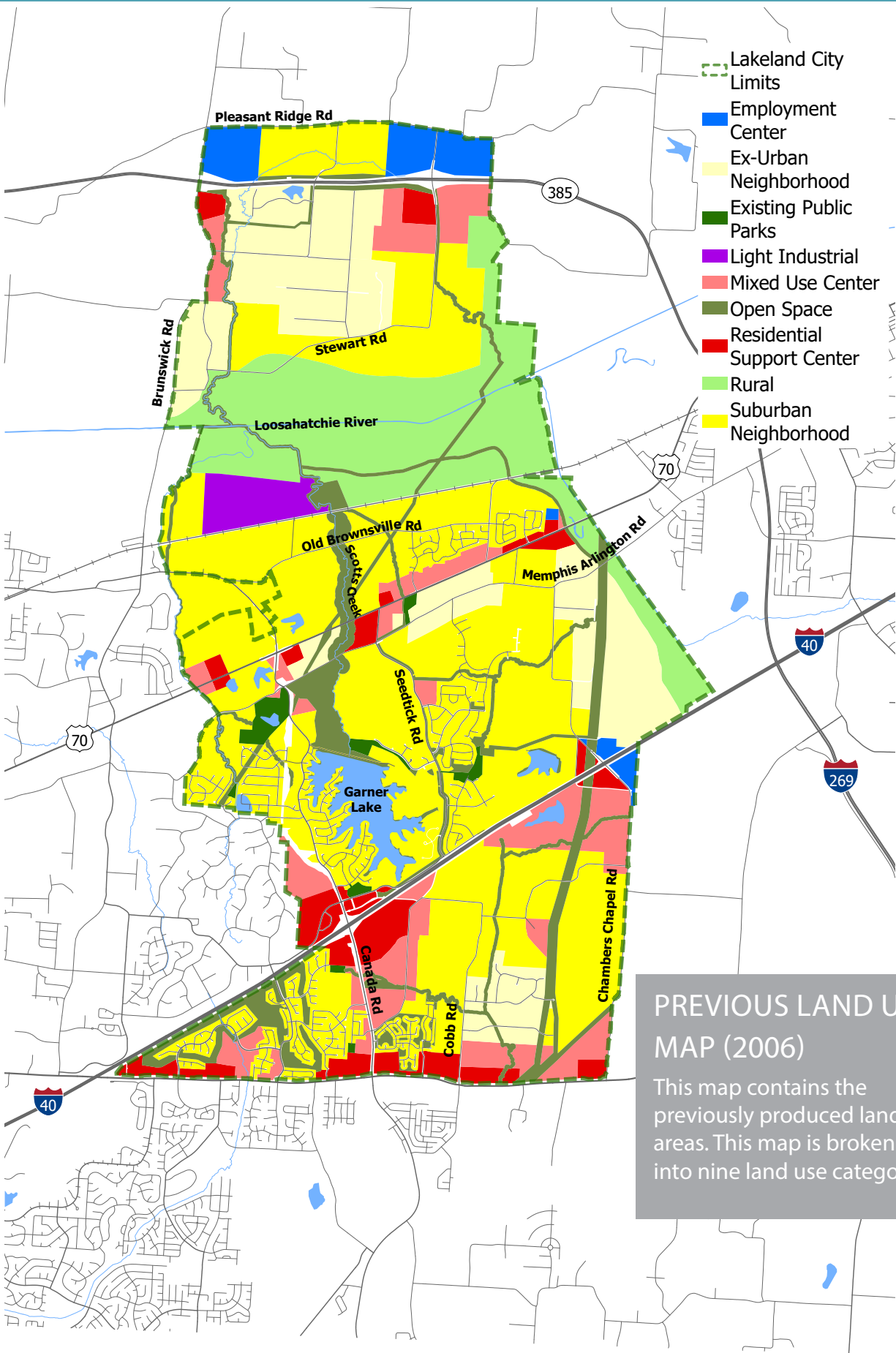
This map illustrates parcels based on tax value, size, and land use to identify areas susceptible to change.

ENVIRONMENTAL FEATURES

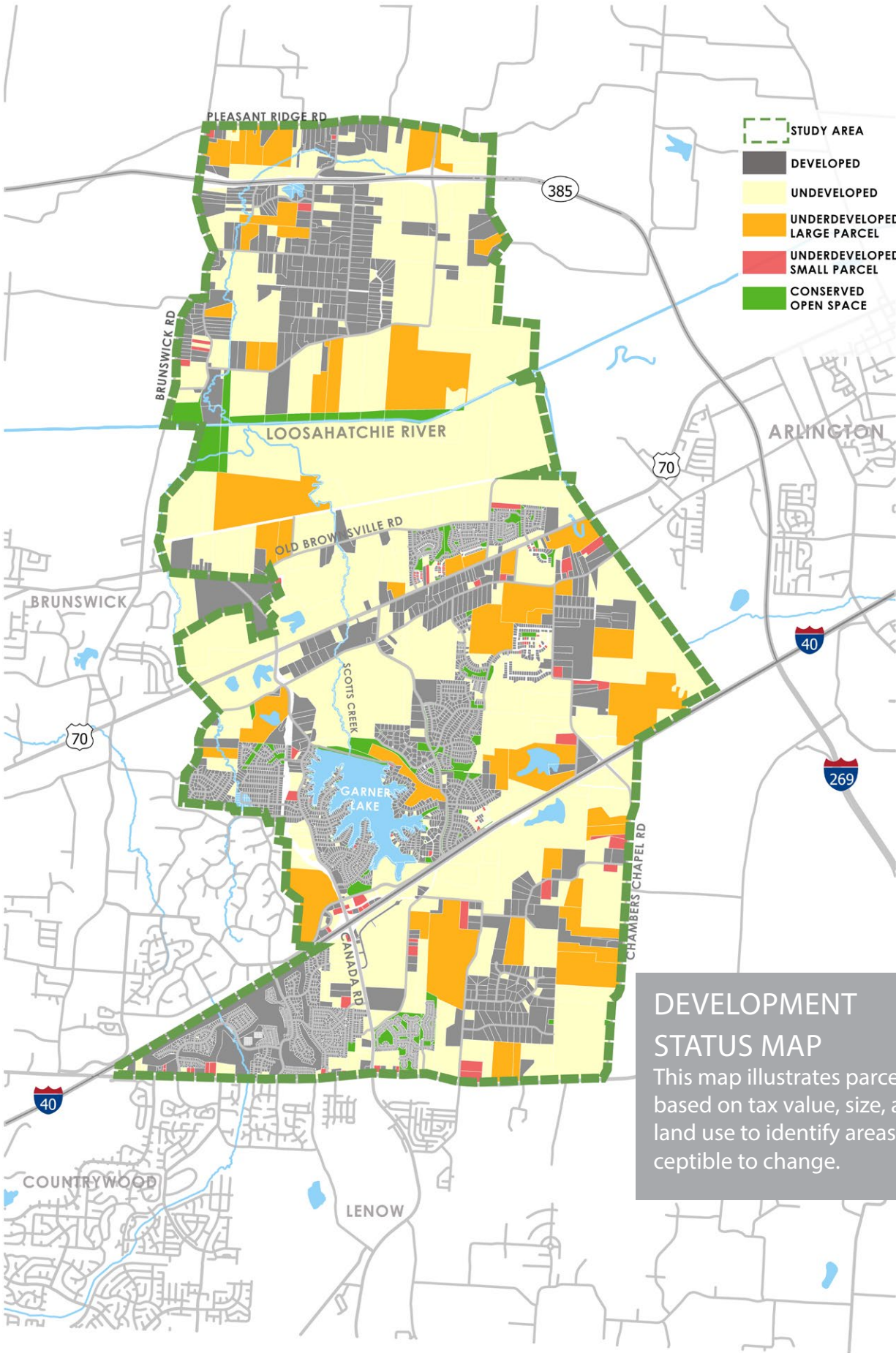
This map illustrates environmental development constraints such as rivers, flood plains, and lakes.

DEVELOPMENT OPPORTUNITIES

This map highlights opportunity areas by overlaying each of the identified constraints.



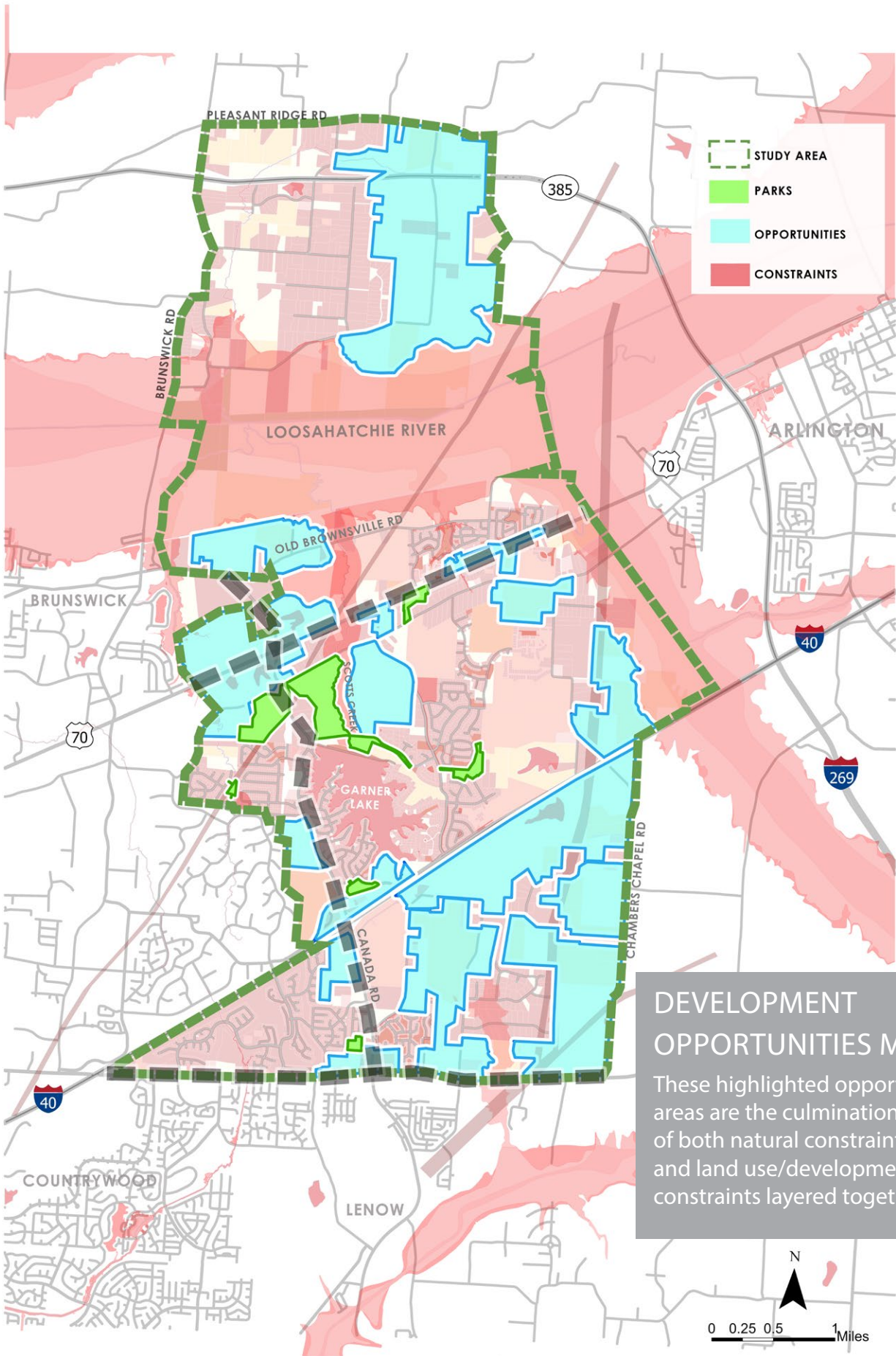
PREVIOUS LAND USE MAP (2006)
 This map contains the previously produced land use areas. This map is broken up into nine land use categories.





ENVIRONMENTAL FEATURES MAP

The Loosahatchie River and flood plains create a large barrier for development. These areas also present a valuable opportunity for protecting natural resources and allowing residents to interact with the undeveloped, natural environment.



MOBILITY AND CONNECTION PROCESS

Connection and mobility are vital to the overall success and health of a community. Vehicular connection is very important to a community's well being, however, it is not the only important connection. The ability to drive, bike, and walk in and around a City leads to prosperous developments and healthy, happy residents.

MOBILITY MAPS

FUNCTIONAL CLASS

The functional classification system groups streets and highways into categories based on their character and service. This functional class map is grouped into:

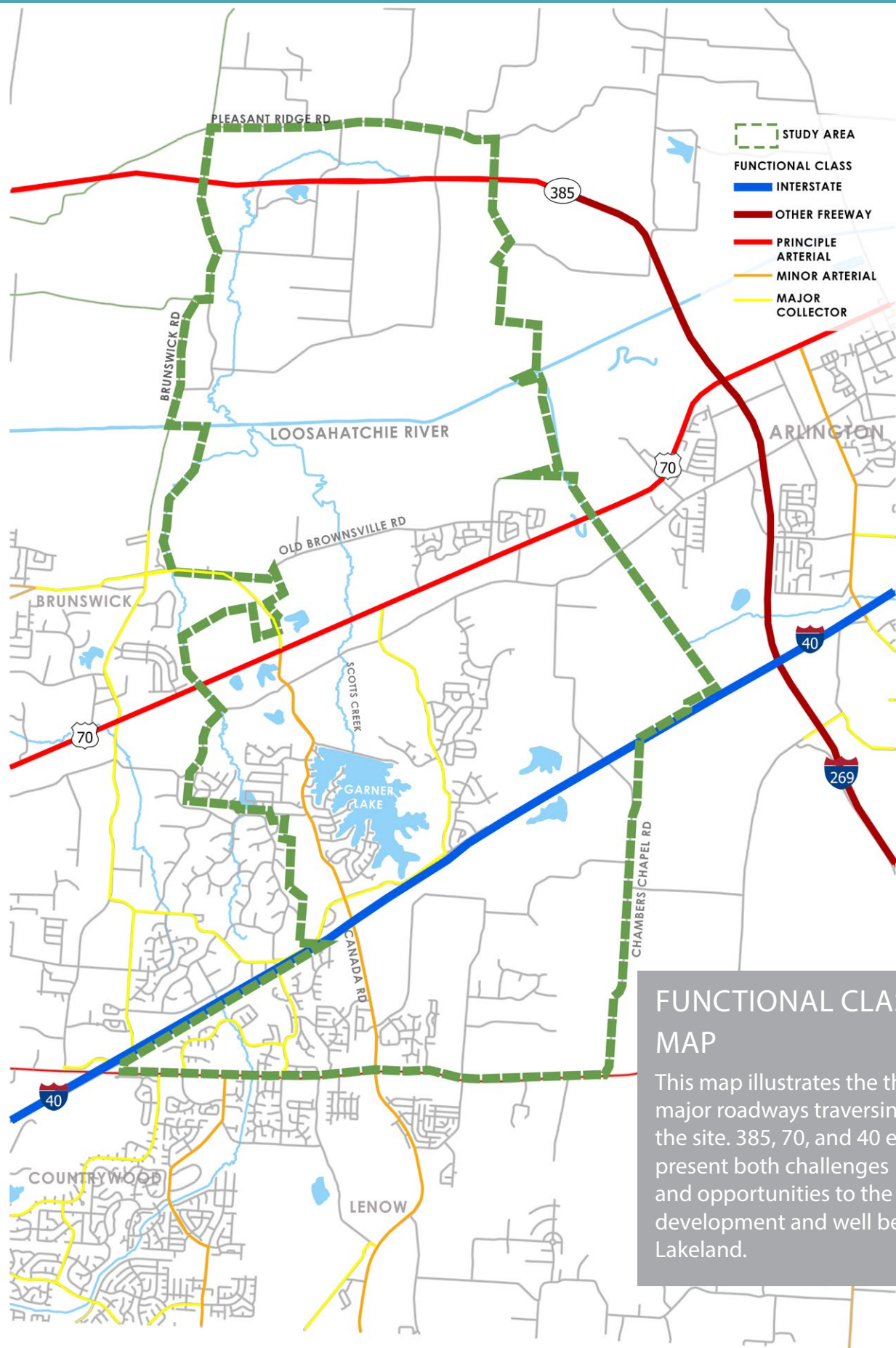
- Interstate
- Other Freeway
- Principle Arterial
- Minor Arterial
- Major Collector

Along with the functional class groups, this map shows the existing, local road network.

BIKE PEDESTRIAN AND PARK

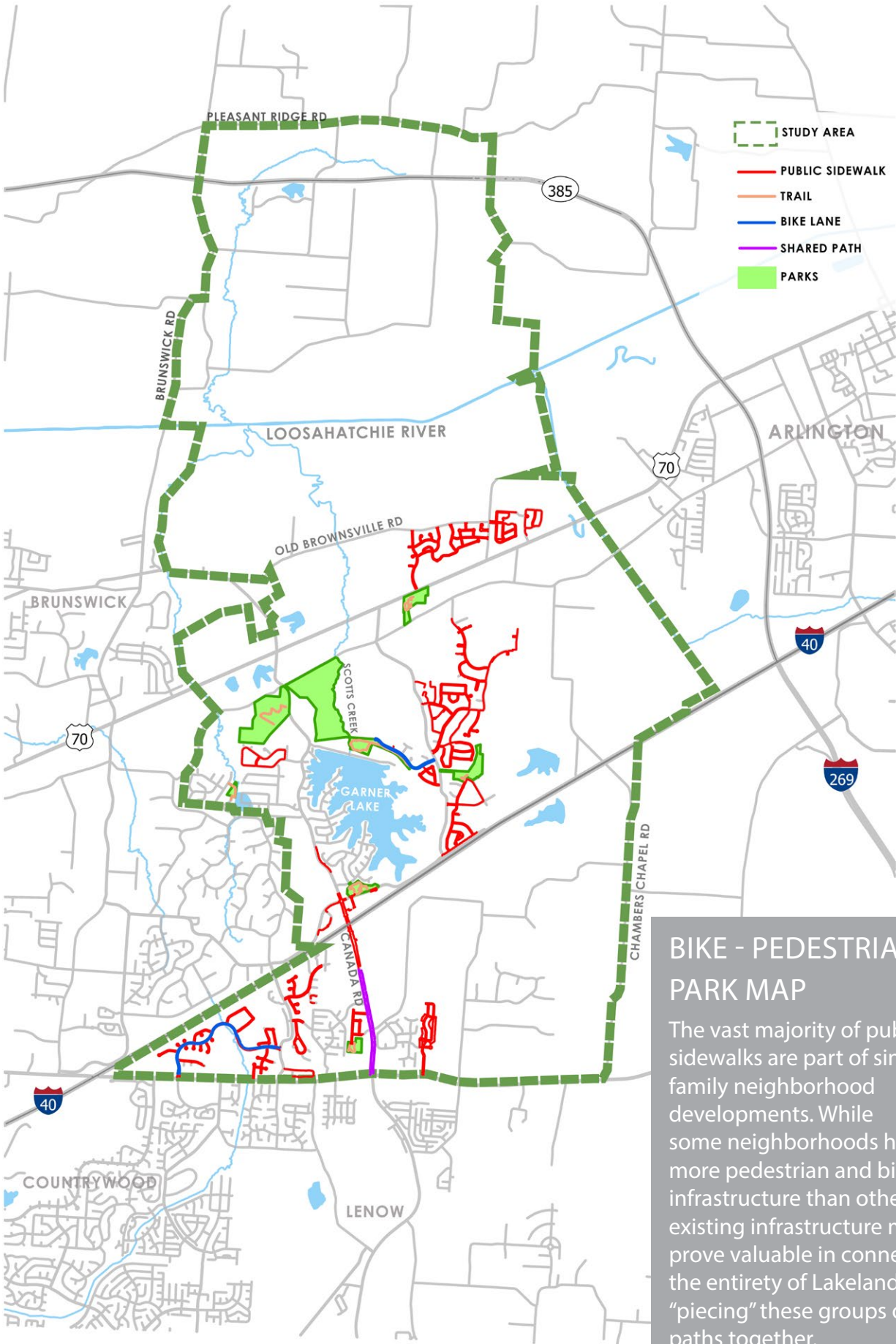
The Bike, Pedestrian, and Park map shows public sidewalks, bike lanes, and shared paths. This map illustrates areas that may be well connected in addition to those which are lacking pedestrian and bike infrastructure. Parks are included on this map as pedestrian and bike infrastructure typically provide valuable access to park resources.





FUNCTIONAL CLASS MAP

This map illustrates the three major roadways traversing the site. 385, 70, and 40 each present both challenges and opportunities to the development and well being of Lakeland.

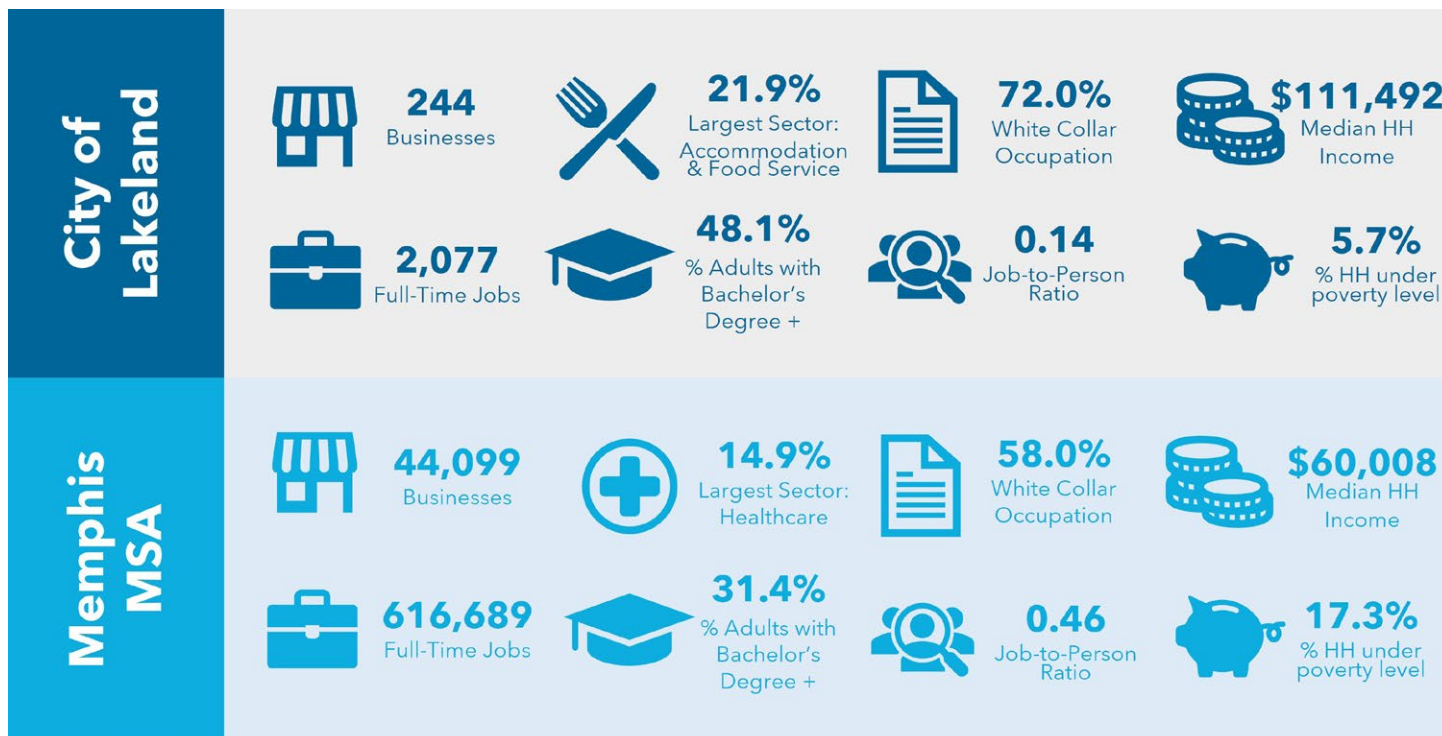


BIKE - PEDESTRIAN - PARK MAP

The vast majority of public sidewalks are part of single family neighborhood developments. While some neighborhoods have more pedestrian and bike infrastructure than others, the existing infrastructure may prove valuable in connecting the entirety of Lakeland by “piecing” these groups of paths together.

02 COMMUNITY CHARACTERISTICS ECONOMICS

ECONOMICS AT A GLANCE



ECONOMICS MAPS

AVERAGE VALUE PER ACRE

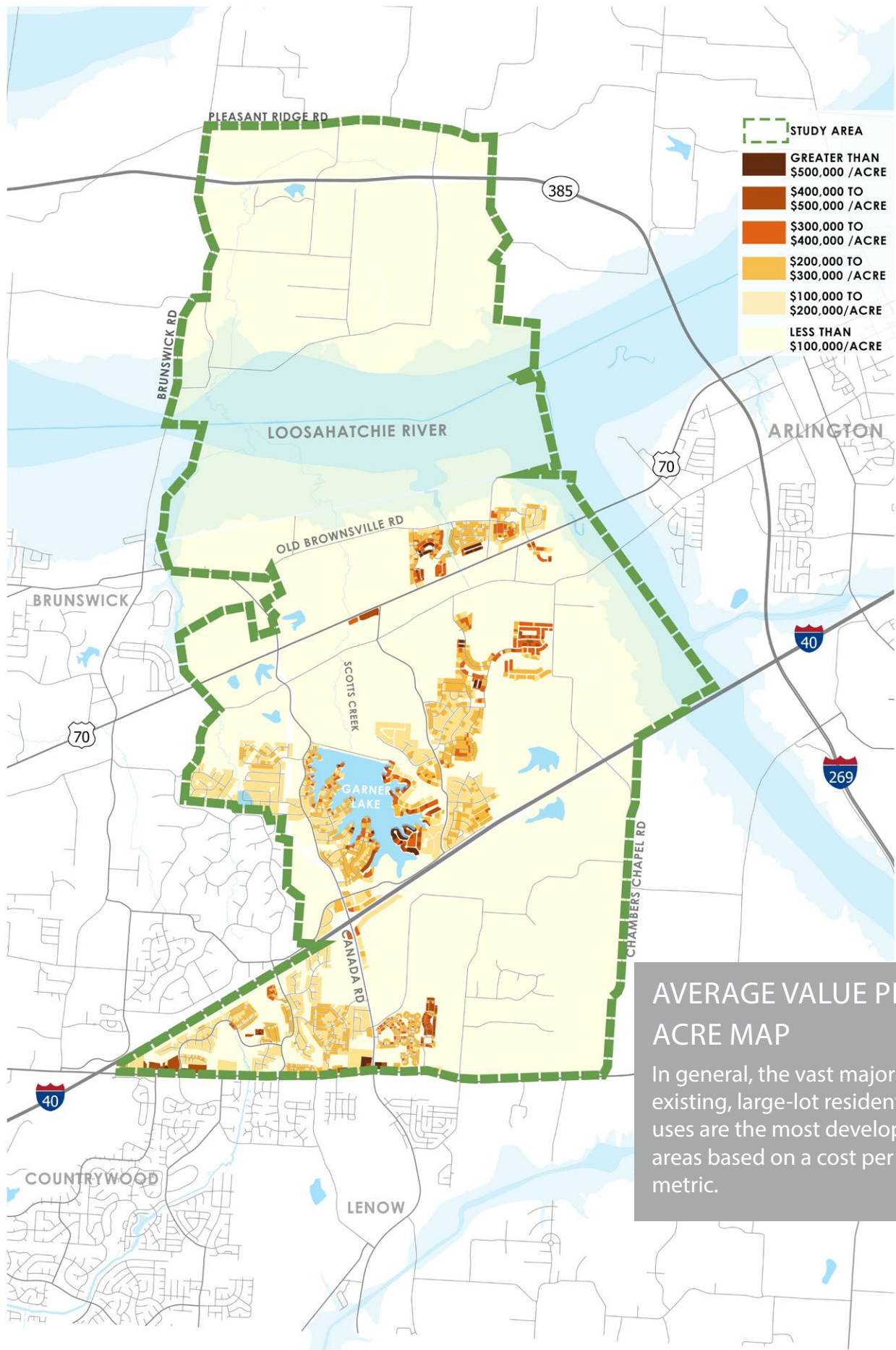
The average value per acre map illustrates land valued per acre at:

- Greater than \$500,000
- \$400,000 to \$500,000
- \$300,000 to \$400,000
- \$200,000 to \$300,000
- \$100,000 to \$200,000
- Less than \$100,000

MEDIAN HOUSEHOLD INCOME

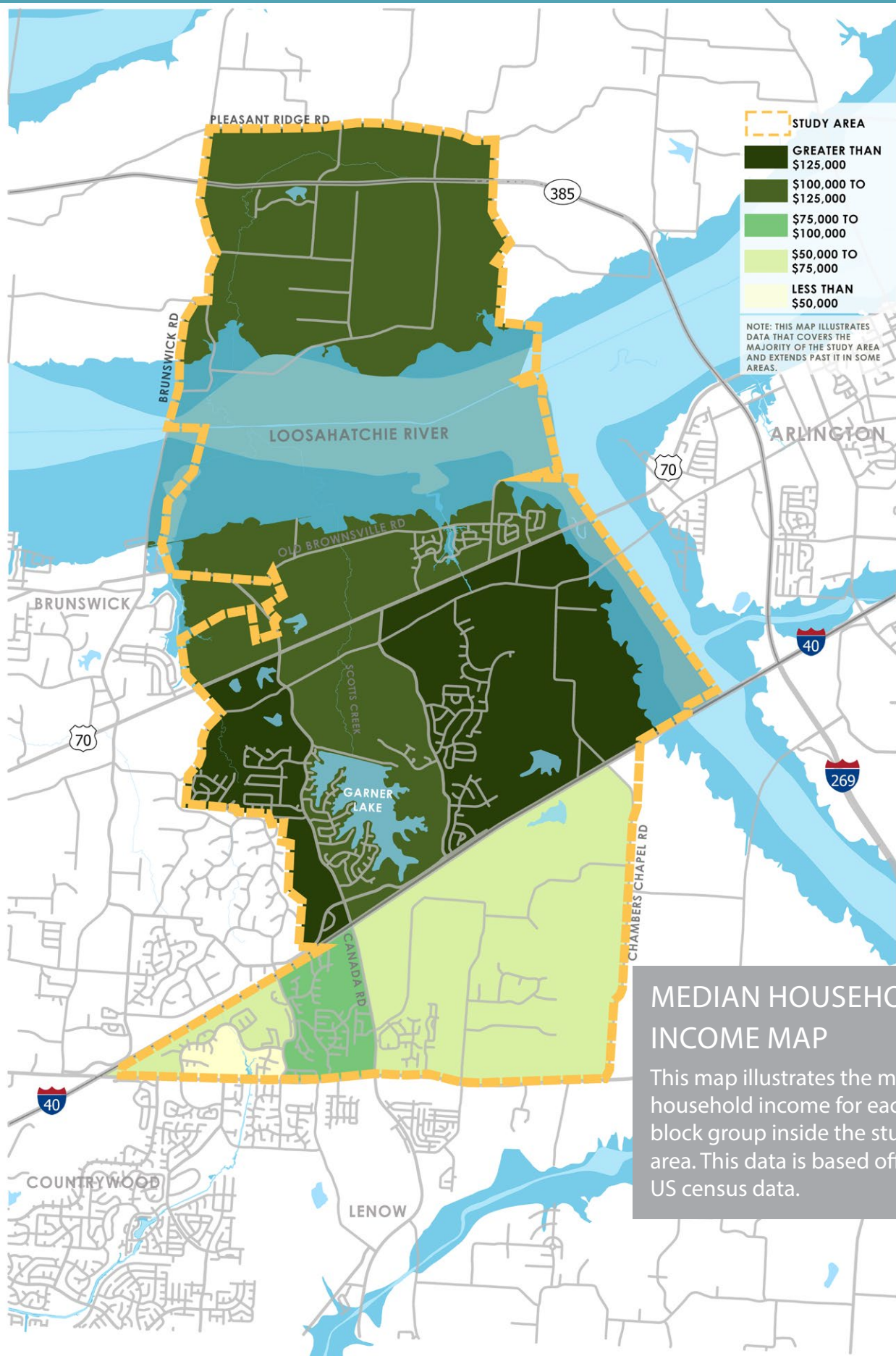
The median household income:

- Greater than \$125,000
- \$100,000 to \$125,000
- \$75,000 to \$100,000
- \$50,000 TO \$75,000
- Less than \$50,000



AVERAGE VALUE PER ACRE MAP

In general, the vast majority of existing, large-lot residential uses are the most developable areas based on a cost per acre metric.



MEDIAN HOUSEHOLD INCOME MAP

This map illustrates the median household income for each block group inside the study area. This data is based off of US census data.



PARKS PLANNING PROCESS

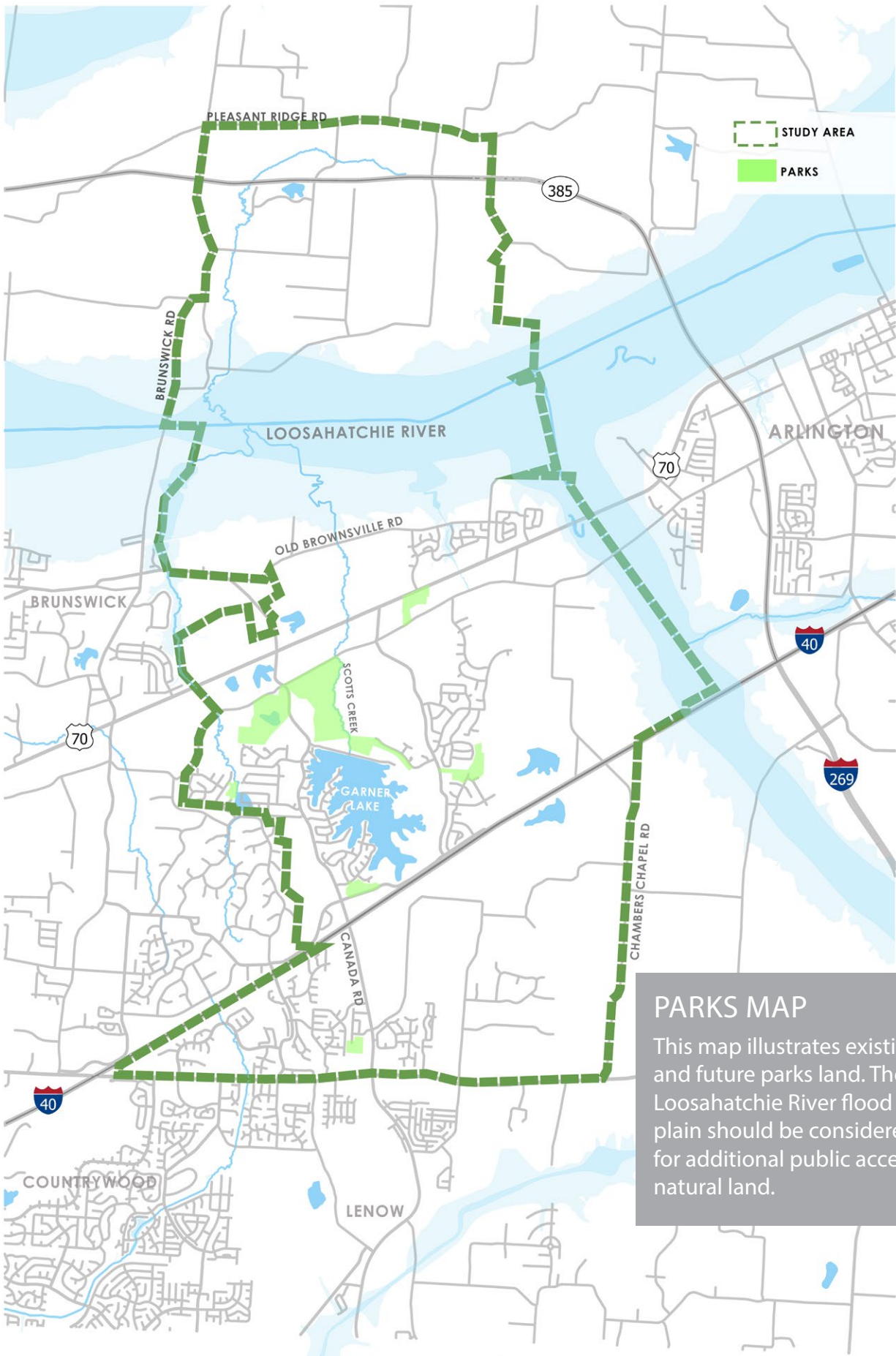
The City of Lakeland has produced a Parks and Recreation System Wide Master Plan. This master plan took inventory of the City's various park facilities and made recommendations to improve them. This plan also recommends the addition of a community center.

PARKS MAPS

EXISTING AND FUTURE PARKS MAP

This map illustrates the existing and planned park spaces overlaid with natural resource information. All park space is located south of the Loosahatchie River. A large majority of the land around these park spaces is residential. Some of the large residential neighborhoods do not currently have access to park space within walking distance.





02 COMMUNITY CHARACTERISTICS COMMUNITY RESOURCES AND SERVICES

EMERGENCY SERVICES, FIRE SERVICES, POLICE SERVICES

The City currently employs Shelby County fire and police services. As the City grows, a need for centrally located public services will likely become more apparent. There are several centrally located opportunity areas which would provide ideal locations for Police, Fire, and Emergency Services.

SCHOOLS

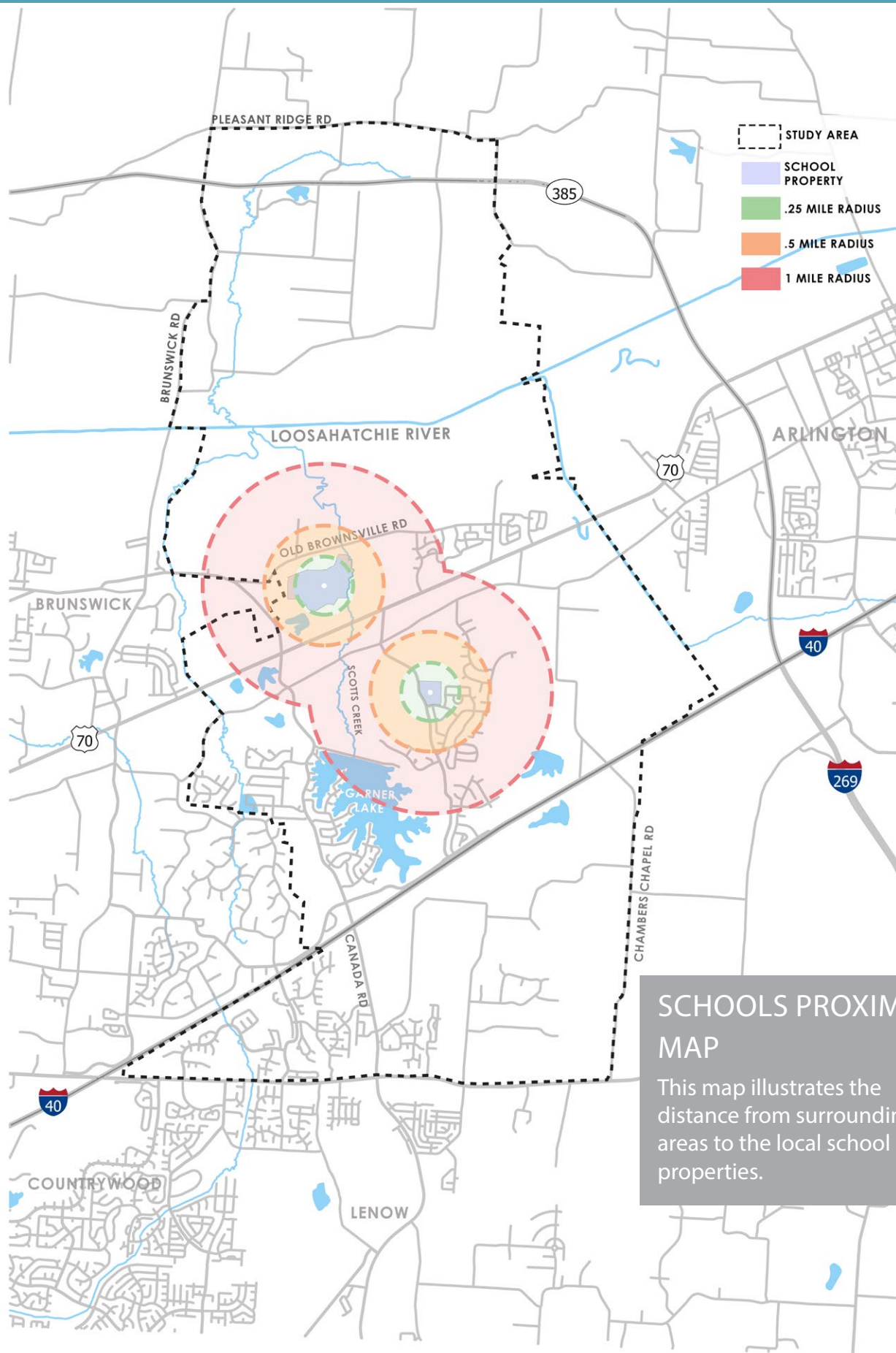
The school system in Lakeland is one that is steadily growing year by year. The currently owned school land is centrally located and provides ample opportunities for complementary development around these sites.

Residents of Lakeland expressed the desire for their children to have the option to walk and bike to school. Bolstering walking and biking infrastructure in proximity to school properties would be a valuable investment for the City.

COMMUNITY RESOURCES MAPS

SCHOOLS PROXIMITY MAP

This map illustrates 1, .5, and .25 mile radius zones from school properties. This map may help target specific areas for improvement of walking and biking infrastructure in addition to other future land uses that may benefit from proximity to schools. The large majority of land within these 1-mile radius zones are either single family residential or undeveloped land. With the planned expansion of parks and recreation offerings north of Garner lake, both the schools and park land will benefit from improved connectivity.



SCHOOLS PROXIMITY MAP

This map illustrates the distance from surrounding areas to the local school properties.

HOUSING SCREENING PROCESS

Using US census data, housing types and characteristics can be determined in order to interpolate trends moving forward. Housing types and needs are ever-changing and need to be planned for both from a housing stand point as well as a commercial and municipal development stand point. As housing demographics change, so do the servicing needs of the community.

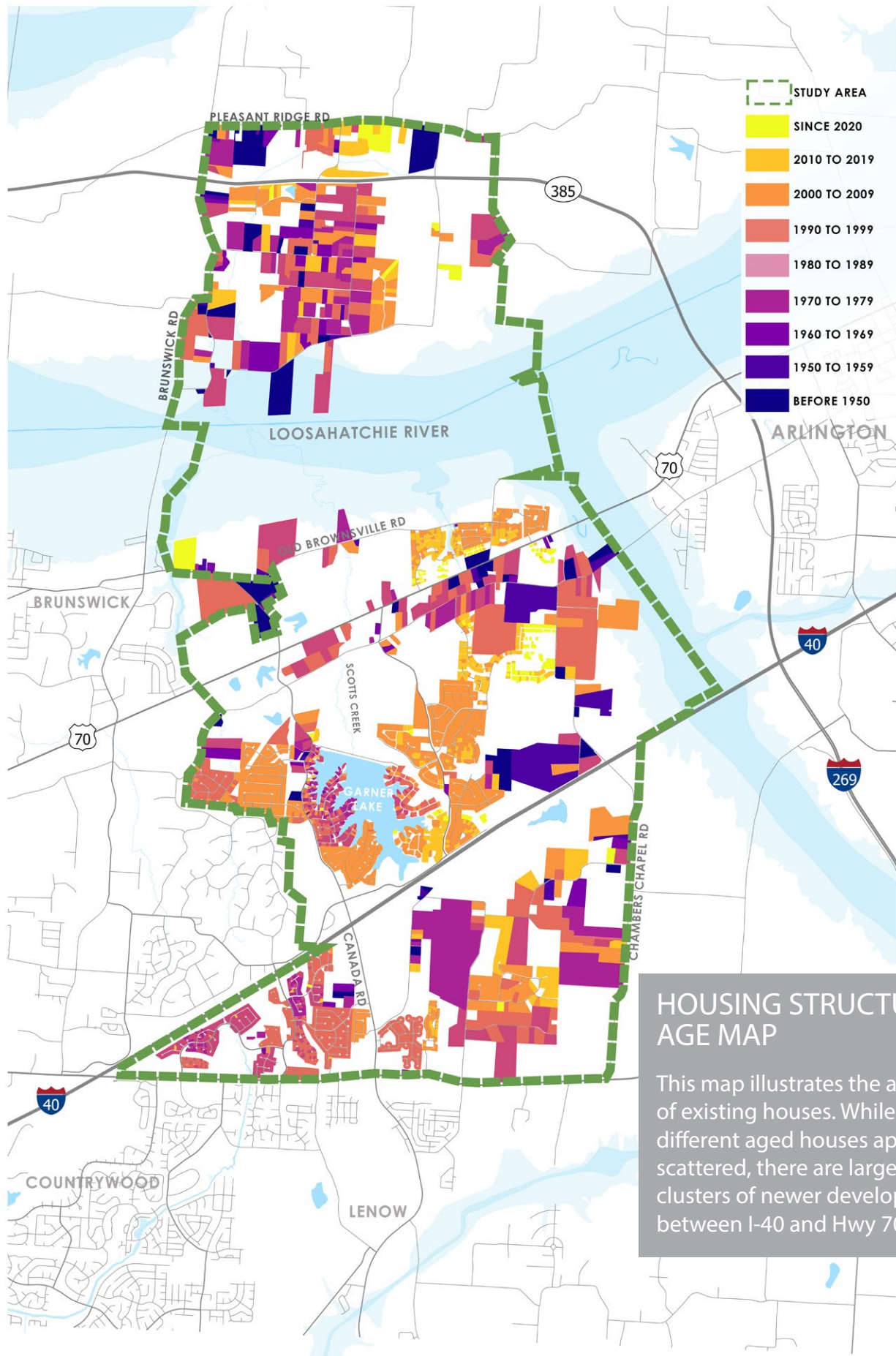
HOUSING MAPS

HOUSING STRUCTURE AGE MAP

This map illustrates the age of existing houses. While the different aged houses appear scattered, there are large clusters of newer development between I-40 and Hwy 70.

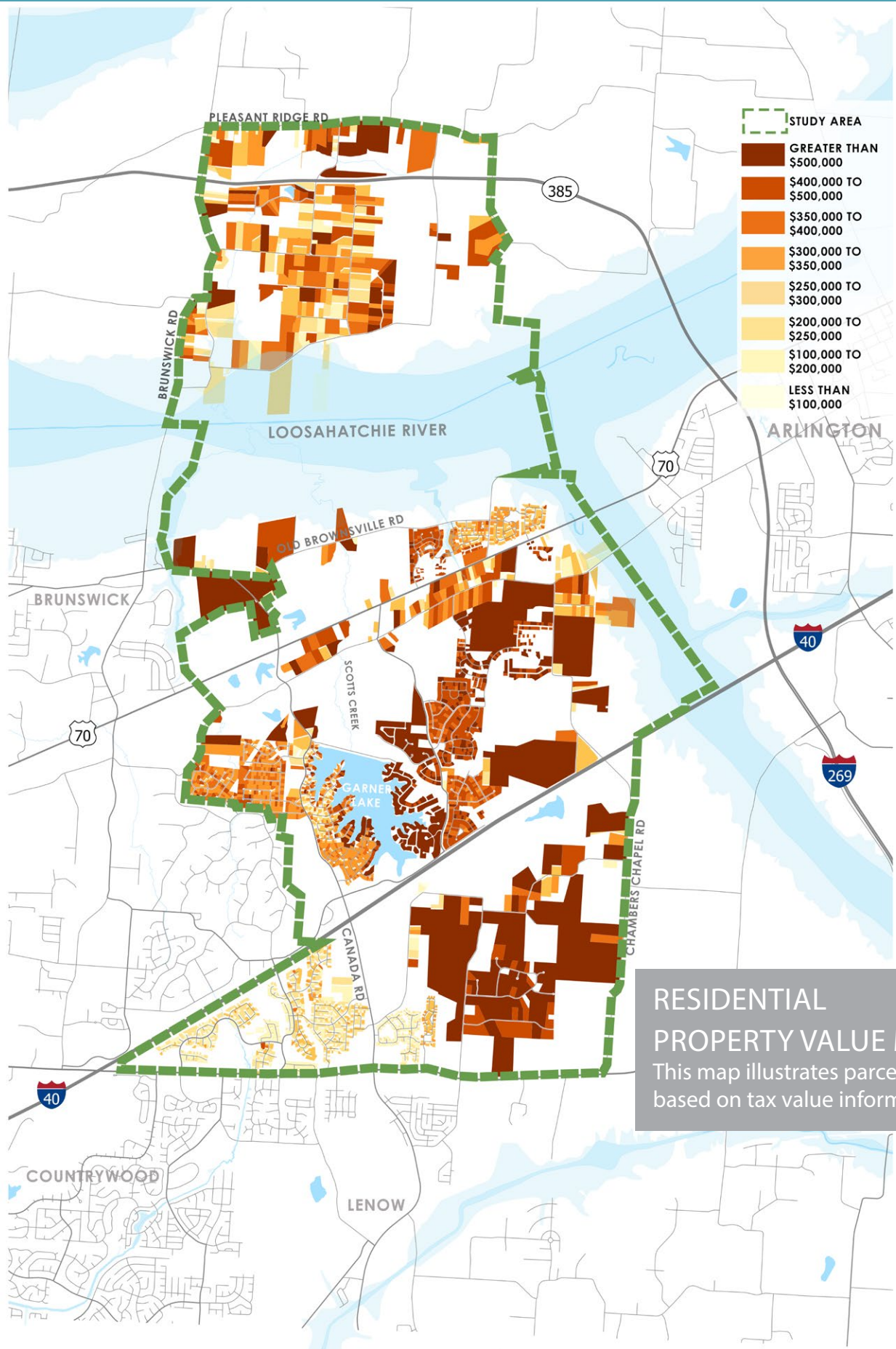
RESIDENTIAL PROPERTY VALUE

This map illustrates parcels based on tax value information which are separated into 8 categories ranging from values less than \$100,000 and up to values greater than \$500,000.



HOUSING STRUCTURE AGE MAP

This map illustrates the age of existing houses. While the different aged houses appear scattered, there are large clusters of newer development between I-40 and Hwy 70.



RESIDENTIAL PROPERTY VALUE MAP

This map illustrates parcels based on tax value information.



Credit: Alexis Cheyenne Photography

02 COMMUNITY CHARACTERISTICS PLAN AND POLICY REVIEW

PLAN AND POLICY OVERVIEW

When planning for the future in Lakeland, it is important to factor in applicable plans and policy in order to capitalize on the work already produced by planning professionals. This sections outlines various applicable documents.

LAKELAND PARKS AND RECREATION MASTER PLAN (2022)

OVERVIEW

An updated System Wide Parks and Recreation Master Plan was developed by the City of Lakeland in 2022.

RELEVANT RECOMMENDATIONS

This document provides development priorities for additional parks and community spaces. These priorities range from high impact, high budget objectives to lower impact, lower budget options.

Planning for these future facilities should be a priority in order to optimize connection options and make sure they are set up in sustainable situations.

PARKS AND RECREATION MASTER PLAN FUTURE FACILITIES LIST				
FACILITY	PRIORITY	SCOPE	POTENTIAL BUDGET IMPACT	POTENTIAL FUNDING SOURCES
NEW FACILITIES				
Community Center	High	- Select a community center site and plan for its construction - This will include and aquatics center	High	City, Private/ Public Partnerships
Lakeland Athletic Complex	High	Complete remaining phases of the master plan	High	City, Private/ Public Partnerships, Grants
Community garden	Low	Provide a community garden space with staff support	Low	City, Volunteer Group
Greenways	High	- Develop a greenway master plan to connect parks and key destinations - Phase out the plan and install	High	City, Grants
New Parks	High	Identify and develop parks in under serviced areas	High	City, Private/ Public Partnerships
Racket Sports	High	- A: Expand tennis center at Woodward Slopes Park with 2 additional tennis courts and 2 pickleball courts - B: Develop plan for a tennis center at City Hall Park	High	City, Private/ Public Partnerships, Grants
Skate Park	Low	Included in Lakeland Sports Complex Master Plan	Medium	City, Grants
Playgrounds	Low	- Implement both the Lakeland Sports Complex and IH Park Master plans - Identify and develop one additional playground	Medium	City, Grants
Nature Center	Low	Utilize existing assets to create interpretive nature opportunities	Low	City, Private/ Public Partnerships, Grants

PARKS AND RECREATION MASTER PLAN COVER

CITY OF
LAKELAND
TENNESSEE
SYSTEM-WIDE MASTER PLAN
JULY 2022



Kimley»Horn

LOOSAHATCHIE RIVER GREENWAY TRAIL MASTER PLAN (2014)

OVERVIEW

The Town of Arlington developed the Loosahatchie Greenway Trail Master Plan in 2014. This plan provides a trail plan stretching across Arlington that capitalizes on the Loosahatchie River resource.

RELEVANT RECOMMENDATIONS

Provide Greenway trail opportunities that connect to the adjacent trails. The Loosahatchie River should be viewed as a resource for bringing residents closer to nature and providing fitness and health opportunities.

Facilities should be planned in order to capitalize on outside users coming through Lakeland on these trail systems.



MOVING TOGETHER 2050 REGIONAL TRANSPORTATION PLAN

OVERVIEW

The Memphis Metropolitan Planning Organization (MPO) updated the Regional Transportation Plan (RTP) in 2023. This Plan guides the goals, objectives, and priorities of the region's transportation network through the year 2050.

RELEVANT RECOMMENDATIONS

The RTP includes four roadway projects in Lakeland:

- Widen I-40 from 6 to 8 lanes with interchange improvements at Hwy 64 from SR-177 (Germantown Road) to 1 mile east of Canada Road
- Construct the new alignment of Canada Road (4-lane divided) from I-40 to US-70/SR-1
- Extend Beverle Rivera Drive (2-lane undivided) from Seed Tick Road to Chambers Chapel Road
- Extend Lakeland Trace (2-lane undivided) from Beverle Rivera Drive to Mount McKenzie Road



02 COMMUNITY CHARACTERISTICS ENGAGEMENT

PUBLIC ENGAGEMENT OVERVIEW

The City of Lakeland prioritized public engagement throughout the planning process. Community, staff, and key stakeholder input is vital to create a plan that is sensitive to the wants and needs of the community.

ADVISORY COMMITTEE MEETING NUMBER 1

Date: June 13, 2022

Time: 5:30 pm-7:30 pm CST

Location: IH Clubhouse & Park

SUMMARY:

Advisory committee members met with the planning team and identified constraint and opportunity areas, points of emphasis, and preferences on the planning process.

IDENTIFIED SUB-COMMITTEES:

- Parks and Recreation
- Economic Development
- Land Use and Housing
- Transportation

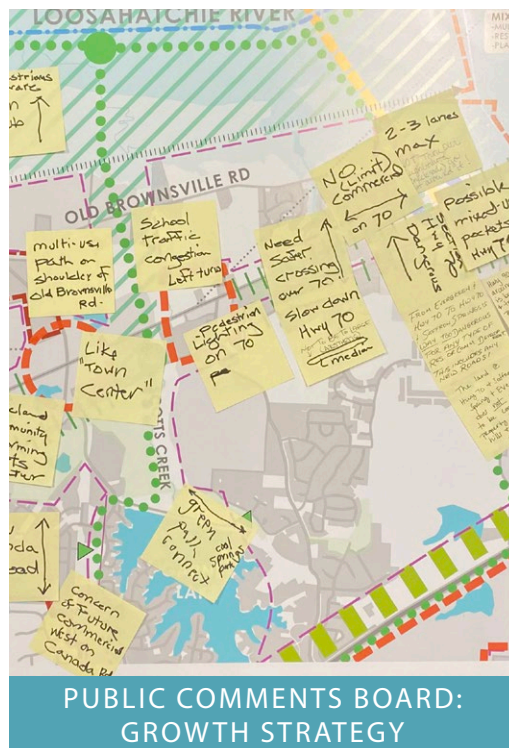
GROUP DISCUSSION CATEGORIES:

- Transportation
- Conservation
- Growth
- Infrastructure/Utilities
- Access to Services/Amenities
- Retail/Restaurants
- Establish a vision for the future of Lakeland
- Importance of information and communication transparency in planning process
- Need to address Homeowners Association and Planned Development issues encountered by the city
- Zoning/regulations

SUB-COMMITTEE MEETINGS

SUMMARY:

Four sub-committee groups with applicable expertise met in person to discuss: Economic Development, Parks and Recreation, Land Use and Housing, and Transportation. Members of the sub-committees provided input on each subject for consideration in the plan development. Some of the key topics of discussion in these meetings are listed on the next page.



ECONOMIC DEVELOPMENT:

- Demographics and Economics Comparisons
- Define what the Lakeland residents do for employment compared to the jobs within the city
- Need to know what would attract large businesses
- Industrial - has not been a prominent topic of discussion in the past
- North Lakeland - employment center land use and preserving rural character
- Blue Oval Concerns and opportunity
- Factoring in future school growth into development

PARKS AND RECREATION:

- Reviewing land development regulations related to green space requirements
- Multimodal connection options to parks
- Public survey strategies

LAND USE AND HOUSING:

- Lack of middle housing for young professionals or elderly grandparents. Family oriented.
- Sterling Place PUD is currently the only elderly community
- Provide military “geo-bacheloring” and short-term, long term housing.

TRANSPORTATION:

- Safety and traffic calming toolbox
- Lakeland School traffic issues
- Various traffic congestion around the City
- Concerns in preparation for Blue Oval City

PUBLIC MEETING NUMBER 1

Date: September 27th, 2022

Time: 6:30 pm CST

Location: Lakeland Preparatory School Cafeteria

SUMMARY:

The public was asked to participate in a meeting to review the progress of Lakeland mapping exercises and inform the planning team about the vision they want for Lakeland. Various maps were marked up and discussed by the public, City officials, and the planning team. The public was also asked to fill out a brief survey and had the opportunity to add comments to an online, interactive map.

TRANSPORTATION STATION:

Residents desire stronger connectivity by implementing various solutions such as trails, sidewalks, transit, and safer roads. They desire to keep the pastoral feel of the road system while having enough infrastructure to keep congestion to a minimum.

PARKS AND OPEN SPACE STATION:

There are several needs for parks particularly in North Lakeland and connectivity to both new and existing neighborhoods. A variety of connections are desired by the community to create better access to desired city elements as well as other municipality’s bike and walking infrastructure.

02 COMMUNITY CHARACTERISTICS ENGAGEMENT

ASSETS AND OPPORTUNITIES

Community members geographically located “assets” and “opportunities” via a mapping exercise throughout Lakeland. Overall, there are strong desires to keep a rural and agricultural feel while preserving and connecting existing character and infrastructure.

ECONOMIC DEVELOPMENT AND LAND USE

Many comments centered around the 2006 land use plan. This meeting gave residents a chance to refresh themselves on what the 2006 land use plan entailed and share their thoughts and vision for the future of Lakeland.

ADVISORY COMMITTEE MEETING NUMBER 2

Date: November 14, 2022

Time: 5:30 pm-7:00 pm CST

Location: City Hall – Board Chambers

SUMMARY:

Members of the Advisory Committee met with the planning team to review and discuss progress and future goals in a publicly broadcasted meeting.

REVIEW OF PUBLIC FEEDBACK:

- Previous public comments
- Survey responses

Visioning and Issues review:

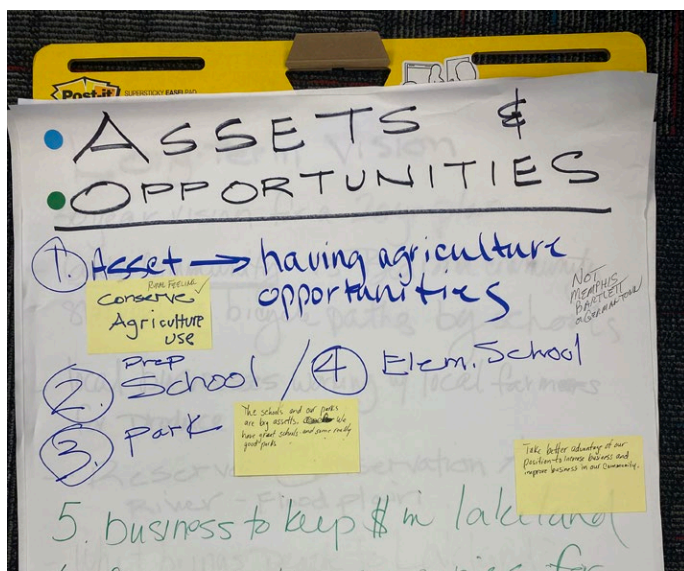
- Reviewing and discussing a draft vision statement
- Reviewing and discussing guiding principals

Areas of Opportunity work session:

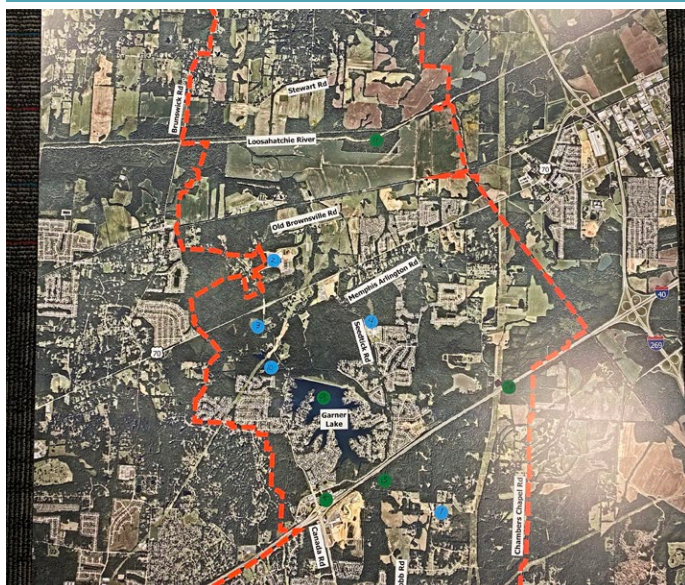
- Reviewing development status map
- Discussing identified areas
- Reviewing corridor and node opportunities

Growth strategy:

- Land use and character discussion in preparation for growth strategy map production



PUBLIC COMMENTS BOARD: ASSETS AND OPPORTUNITIES



PUBLIC COMMENTS BOARD: OVERALL MAP

PUBLIC MEETING NUMBER 2

Date: February 28, 2023

Time: 5:30 pm-7:00 pm CST

Location: IH Clubhouse & Park

SUMMARY:

Members of the public gathered to review the conceptual growth map and provide feedback which would dictate the production of the future land-use map. After a brief presentation from the planning team, the public had an opportunity to visit several stations to ask questions, review maps, and provide feedback.

TRANSPORTATION STATION:

Residents expressed a desire for more multi-modal transportation options such as sidewalks, shared use paths, bike paths, and greenway trails.

AERIAL MAP AND OPPORTUNITY AREAS:

The comments at this station expressed a wide range of ideas and concerns. Many of the comments dealt with roadway safety and concerns about commercial zoning.

CONCEPTUAL GROWTH MAPS:

Overall Conceptual Growth Map:

A majority of the comments on the overall growth strategy map focused on the commercial/municipal nodes along Highway 70. Many residents are excited about the potential for these areas if safety and smart growth is prioritized.

Middle Enlargement Conceptual Growth Map:

There were both concerns and excitement expressed for development, particularly along Hwy 70. Safety and thoughtful development were common priorities that were mentioned.

Southern Enlargement Conceptual Growth Map:

Residents expressed concerns for flooding and dangerous road conditions. A desire for additional pedestrian and bike infrastructure was voiced. Additional roadway connections are also an expressed need. Connecting Lakeland to its natural resources through pedestrian infrastructure as well as potential community programs is an opportunity.

ADVISORY COMMITTEE MEETING NUMBER 3

Date: May 16, 2023

Time: 6:00 pm-7:30 pm CST

Location: City Hall – Board Chambers

SUMMARY:

Members of the Advisory Committee met with the planning team to review and discuss the future land-use plan in a publicly broadcasted meeting.

Land-use Map:

- Reviewed suggested revisions to the Land-use map from the advisory committee
- The design team explained the reasoning behind proposed land-use decisions

Individual Land-use review:

- Discussed land-use definitions
- Discussed visions for different land-use categories

Public Comment:

- Public discussions predominantly on individual parcels around Lakeland



CITY-WIDE COMPREHENSIVE PLAN PUBLIC ENGAGEMENT MEETING

WHERE? WHEN?

Please help shape the future of the City of Lakeland by participating in the Lakeland Pulse Comprehensive plan meeting. Join us on **Tuesday, September 27th at 6:30 PM**, in the Lakeland Preparatory School Cafeteria, **5020 Lions Crest Dr., Lakeland, TN 38002**.

SURVEY



The City of Lakeland is developing a Comprehensive plan that will guide future development. Your feedback, both by filling out the survey and participating in the public meeting, will provide valuable input for making informed decisions.
Survey Link:
https://www.surveymonkey.com/r/Lakeland_PULSE



CITY-WIDE COMPREHENSIVE PLAN PUBLIC ENGAGEMENT MEETING

Please join us for the second City-wide public meeting to discuss the City of Lakeland Comprehensive Plan.

Tuesday, January 31st at 6:00 PM
I.H. Clubhouse at International Harvester Managerial Park
4523 Canada Rd, Lakeland, TN 38002

SURVEY AND RESPONSES

QUESTION 1: WHICH OF THE FOLLOWING BEST DESCRIBES YOU?

90% of participants that took the survey were a resident of Lakeland. Approximately 12% were business or property owners adjoining the City of Lakeland, and 7% don't live or work in Lakeland but have interest in the city.

QUESTION 2: WHAT ARE YOUR THREE FAVORITE THINGS ABOUT LAKELAND?

Based on the responses to this question there are four main things that the residents enjoy about the City of Lakeland. The residents of Lakeland love the fact that their city is in a rural area and that it has kept its small-town charm and it has remained safe throughout the years. Even though Lakeland is a rural area the residents enjoy that it is close enough to neighboring municipalities and the City of Memphis. The responses showed that the residents are delighted to have a great school system. Lakeland is also a naturally beautiful area with nice parks and green spaces and the residents take pride in having a nice place to live.

QUESTION 3: WHAT ARE YOUR TWO BIGGEST CONCERNS REGARDING THE FUTURE OF THE CITY OF LAKELAND?

The main concern expressed by residents is that the city is growing too fast and will be overcrowded, and future developments will be rushed and not planned out. Residents state that the city has already begun to overcrowd and that the schools are also reaching their limit. Another large concern is that new developments will bring more crime to Lakeland. Last major concern is the residents are worried that future developments will not be designed well, and they want Lakeland to keep its small-town charm. A preference for fewer fast-food restaurants and more family restaurants and businesses was expressed.

- Want their own police department
- Becoming too much like neighboring suburbs
- Not having a shared vision on identity of Lakeland moving forward
- Road and sewer infrastructure

QUESTION 4: WHAT TWO THINGS WOULD YOU LIKE TO SEE CHANGED TO IMPROVE THE OVERALL QUALITY OF LIFE IN YOUR COMMUNITY?

The residents of Lakeland would like to have their own police department and have a larger police presence in the city. With the city growing they feel this is a necessity for safety and prevention of future problems. They have also voiced concerns of having neither adequate infrastructure nor developments that are comfortable and safe for pedestrians and people on bicycles.

- Grocery store
- No new apartments
- Better retail and restaurants

QUESTION 5: WHAT TWO RESULTS WOULD YOU MOST LIKE TO SEE FROM THIS COMPREHENSIVE PLANNING INITIATIVE?

70% of residents that took the survey wanted this comprehensive planning initiative to be a guide for future land use decisions. 50% of residents stated that they want to make it a priority for the planning for future infrastructure and transportation network. The third largest response and 30% of participants agreed that there needs to be a shared community vision moving forward.

02 COMMUNITY CHARACTERISTICS ENGAGEMENT

QUESTION 6: WHAT IS YOUR VISION/ HOPE FOR THE CITY OF LAKELAND OVER THE NEXT DECADE?

One major vision that all residents voiced was that they want Lakeland to succeed and grow, but they want the City to make smart decisions and grow at an acceptable rate that doesn't compromise the city. By doing this there will be a high quality of life for the residents and attract high quality businesses and developments.

QUESTION 7: RANK YOUR TOP PRIORITIES CONCERNING THE FUTURE OF THE CITY OF LAKELAND'S BUILT ENVIRONMENT?

1. Quality growth and development
2. Preservation of natural and community resources
3. Expansion of public infrastructure and community services

QUESTION 8: WOULD YOU BE INTERESTED IN PARTICIPATING AND PROMOTING FUTURE ACTIVITIES AS IT RELATES TO THE COMPREHENSIVE PLAN?

50% of participants said they might be interested in the future and to keep them informed. 30% said they would be interested in participating and the remaining 20% said they would not be interested.

QUESTION 9: ADDITIONAL COMMENTS

- "great potential on most unbuilt space, let's not mess it up"
- Quality growth is the vision
- Roads and infrastructure need help
- Lakeland doesn't have its own zip code or post office

IMPORTANT TAKE AWAYS:

- Negative reviews about the Wolfchase Galleria area – keep this type of development out of Lakeland
- Concerns with inadequate sewer infrastructure
- Canada Road is a concern
- Strict restrictions on future residential development
- Preserve and capitalize on outdoors (bike and pedestrian trails, green spaces, parks)
- Small town feel with big town amenities
- Quality restaurants
- Remain a city that is family friendly
- Residents show strong dislike for the existing motels at Canada Rd. and Interstate 40
- Schools are a significant concern for residents with overcrowding and some kids not being able to go to school
- Bicycle friendly preference



Credit: Alexis Cheyenne Photography



The background is a solid light blue color. It is decorated with various abstract geometric elements: a large, faint, light blue number '03' is positioned behind the main text; several dashed lines in shades of blue and teal crisscross the upper half of the page; a dotted horizontal line is visible; and various other shapes like triangles, rectangles, and circles are scattered throughout in different shades of blue and teal. The text 'GROWTH STRATEGY' is written in a bold, white, sans-serif font, centered horizontally and partially overlaid by the large '03' and the dashed lines.

03 GROWTH STRATEGY

VISION STATEMENT

Lakeland residents would like to see intentional growth and development while maintaining the small-town charm and rural character that defines the community's identity today. Lakeland's proximity to larger cities and ease of access to additional amenities and employment opportunities are critical to the overall quality of life. Incorporating smart development, conservation, preservation, and access to natural areas, green corridors, and neighborhood parks describe a balanced approach to development and change.

LAND USE PRINCIPLES

TRANSPORTATION

ESTABLISHING NEW AND CAPITALIZING ON EXISTING CORRIDORS THROUGHOUT LAKELAND



Improve transportation infrastructure and focus on multi-modal accessibility including pedestrians and bicycles to enhance interconnectivity within the City of Lakeland.

MULTI-GENERATIONAL GROWTH

FOSTERING DEVELOPMENT THAT SERVES ALL AGES AND STAGES OF LIFE



Encourage multi-generational growth with expansion of recreational facilities, amenities, and community services.

PRESERVATION

PROTECTING THE NATURAL LOOK AND FEEL OF LAKELAND



Preserve and enhance Lakeland's rural community character with special emphasis placed on areas north of the Loosahatchie River. Encouraging new development that respects the characteristics of Lakeland that residents value.

SMART GROWTH

ENCOURAGING STABLE, SUSTAINABLE DEVELOPMENT



Encourage smart, quality growth through clustered development patterns that engage existing communities.

HIGH QUALITY DEVELOPMENT

DEVELOPING STANDARDS FOR DEVELOPMENT THAT PRIORITIZE HIGH QUALITY DESIGN



New development should be of high quality and reflect architectural design and scale appropriate to the character of Lakeland.

OVERVIEW

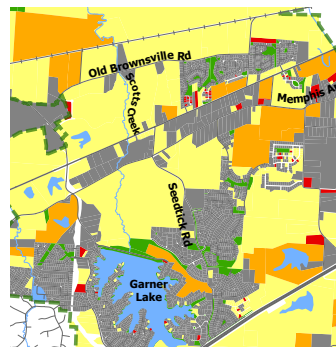
Through the use of community meetings, online surveys, interactive maps, and subcommittee meetings, residents of the City of Lakeland had an opportunity to express desires and ideas for the future growth of Lakeland. This input was documented and reviewed. Existing community characteristics of the City were collected and reviewed in order to inventory the resources, character, and constraints impacting Lakeland. Aided with US census data, a “snapshot” of Lakeland’s existing characteristics was taken through various mapping exercises.

All of this data and input was combined and processed together to inform the production of an overall growth strategy map. This map helps visualize the informed decisions made for Lakeland, taking into account the identified opportunities and desires of the city. A draft of this map was presented in a workshop to city officials where feedback was taken into account to finalize the map.



COMMUNITY INVOLVEMENT

- Subcommittee Meetings
- Public Input Meeting
- Online Survey
- Interactive Map



COMMUNITY CHARACTERISTICS

- Demographic Information
- Existing Conditions
- Land Use Conditions



GROWTH STRATEGY

- Vision Principals
- Conceptual Growth
- Preferred Growth Strategy



LEGEND

POSSIBLE FUTURE INTERCHANGE



LAKELAND CITY LIMITS



EXISTING AND POSSIBLE AGRICULTURE, AND LARGE LOT ESTATES



EXISTING AND POSSIBLE SINGLE FAMILY RESIDENTIAL



COMMERCIAL/MUNICIPAL NODES



IDENTITY OPPORTUNITIES



BUFFER ZONE



GREEN WAY/TRAIL SYSTEM



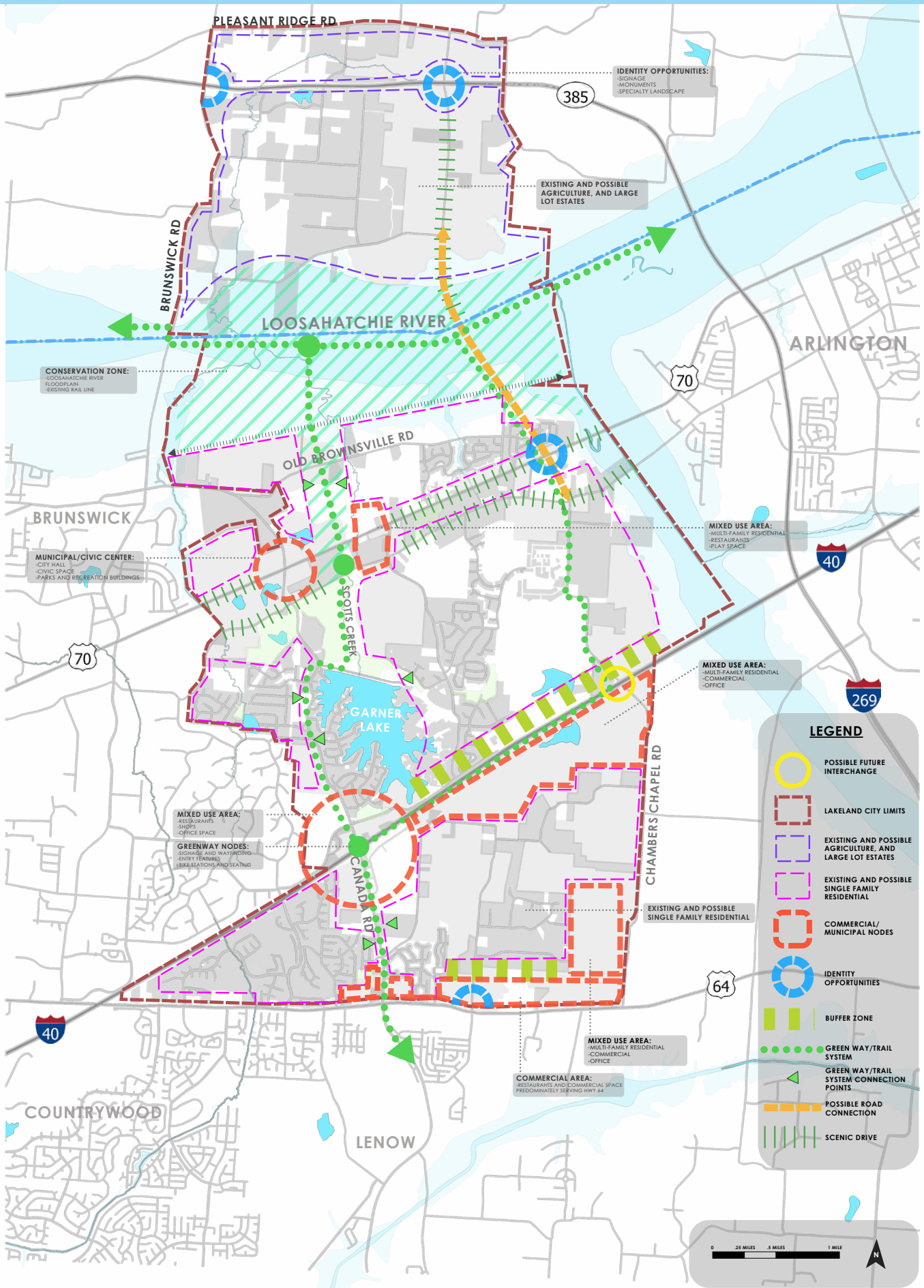
GREEN WAY/TRAIL SYSTEM CONNECTION POINTS

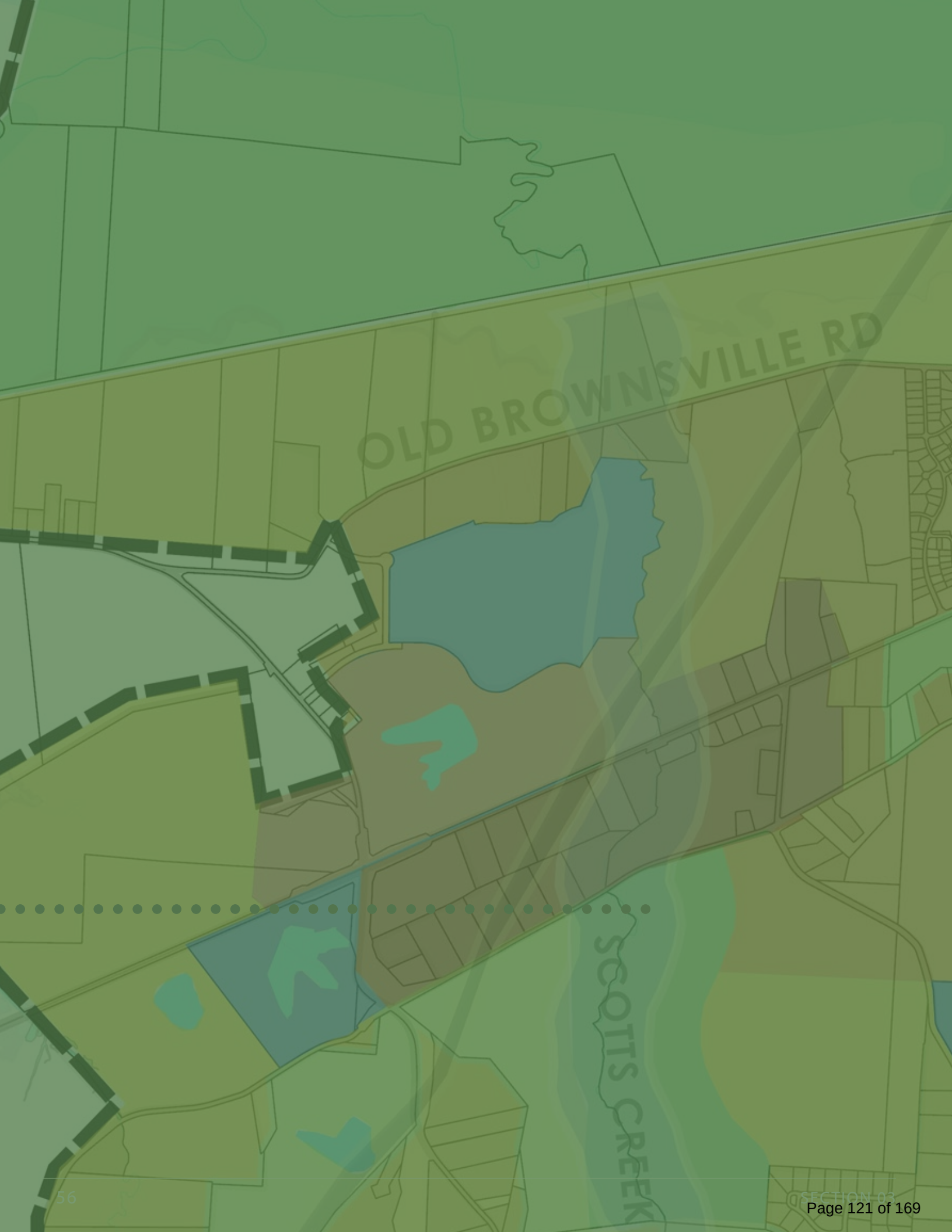


POSSIBLE ROAD CONNECTION



SCENIC DRIVE





OLD BROWNSVILLE RD

SCOTT'S CREEK



04

FUTURE LAND-USE

MIXED-USE COMMERCIAL

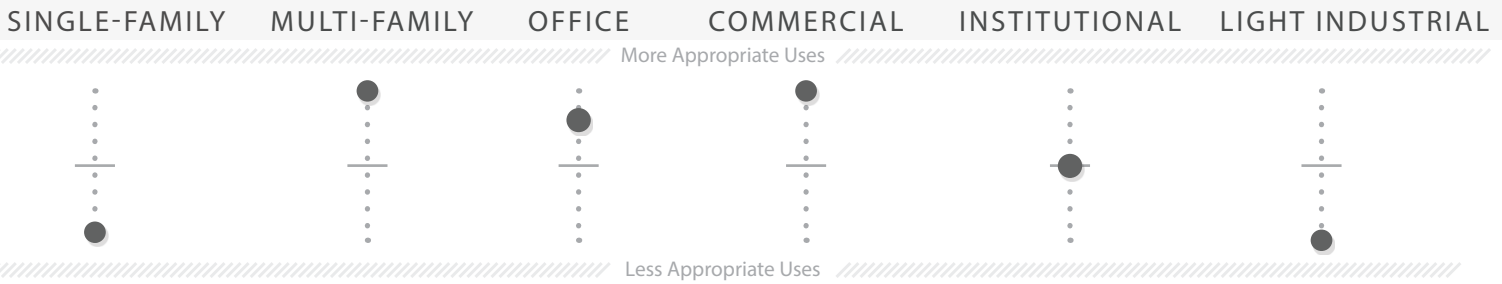
DESCRIPTION

The proposed Mixed-Use Commercial land uses are located along both I-40 and Highway 70. The goal of this designation is to create central, commercial uses that serve the surrounding neighborhoods. These developments should be appropriately scaled as to complement surrounding uses and existing character.

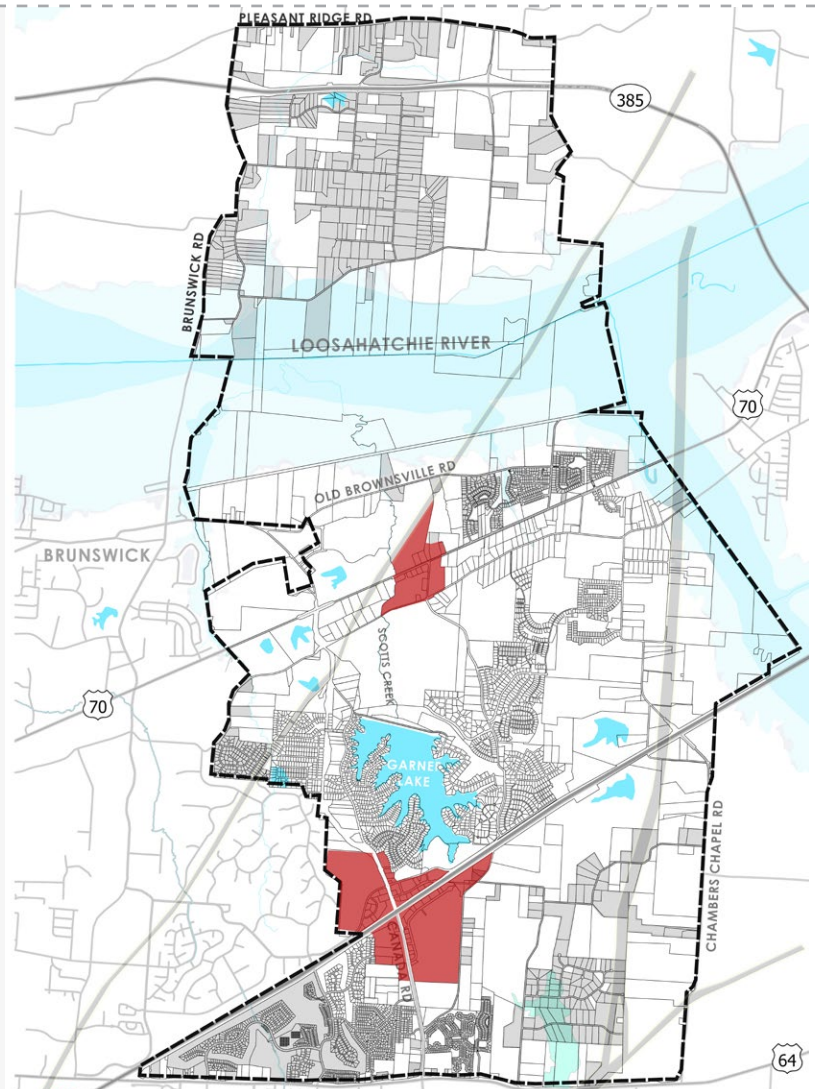
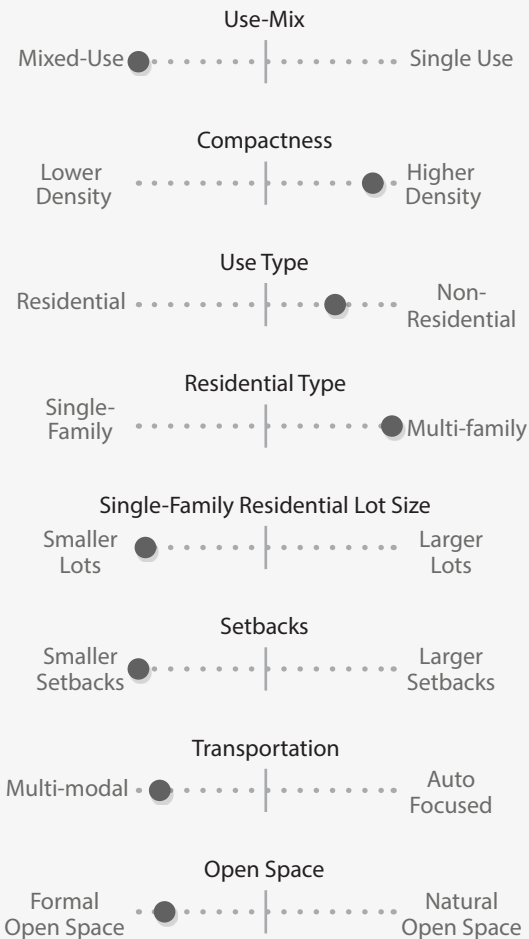
INTENT

- Provide accessible commercial space in centralized, compact areas occupied by businesses that serve Lakeland resident's needs.
- Multi-family residential housing options may accompany the commercial uses only where deemed appropriate.
- Formal open space should accompany developments.
- Multi-modal transportation such as sidewalk and bike paths should be easily accessible.

APPROPRIATE LAND USES



CHARACTERISTICS



COMMERCIAL CORRIDOR

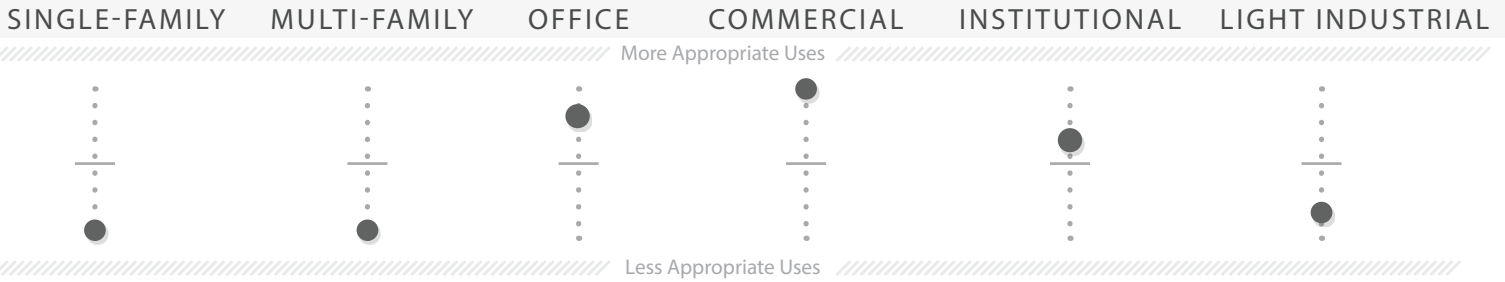
DESCRIPTION

The proposed Commercial Corridor land uses are located along Highway 64. The goal of this designation is to create a commercial coordinator along Highway 64, capitalizing on the vehicular traffic along this corridor and matching the commercial uses to the south.

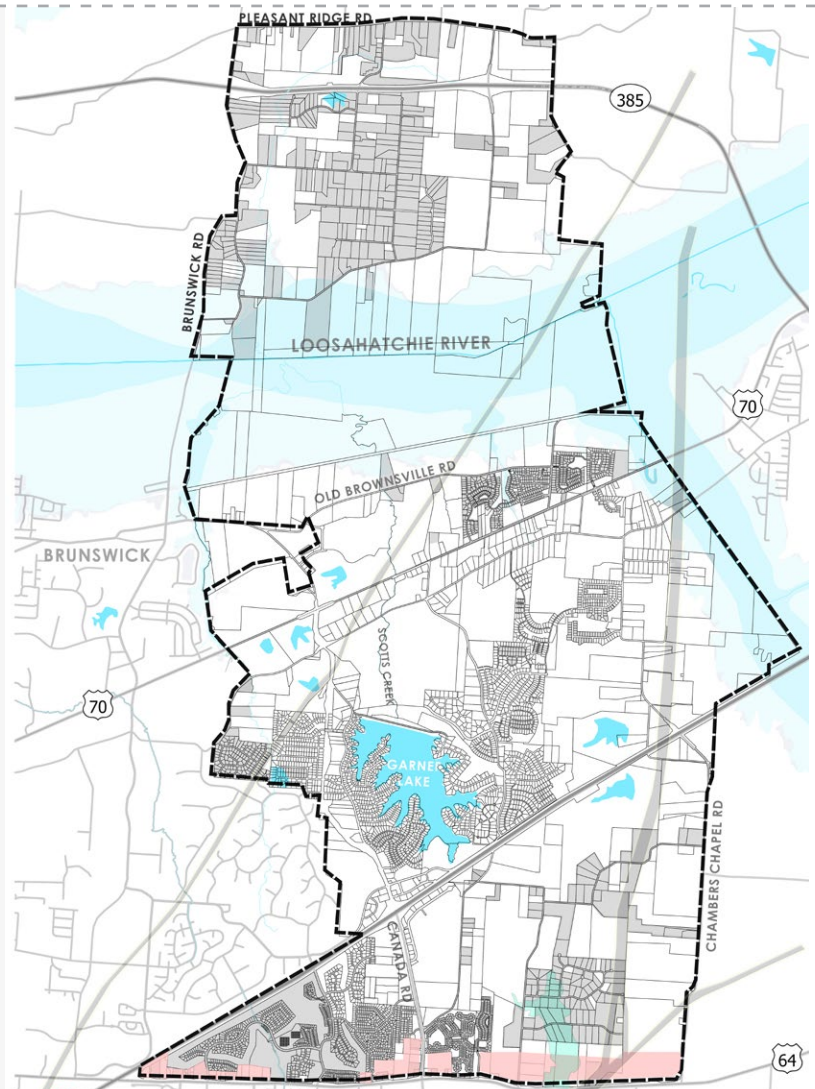
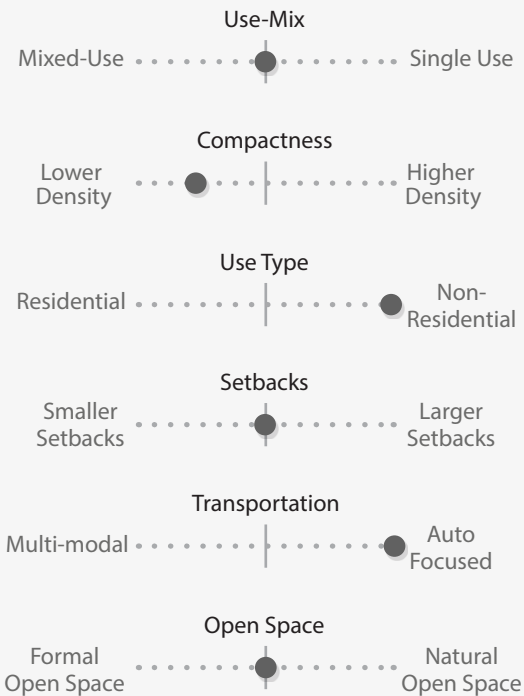
INTENT

- Provide traditional style commercial space.
- Match style of existing development across Highway 64 to the south.

APPROPRIATE LAND USES



CHARACTERISTICS



OFFICE/NEIGHBORHOOD SERVICE

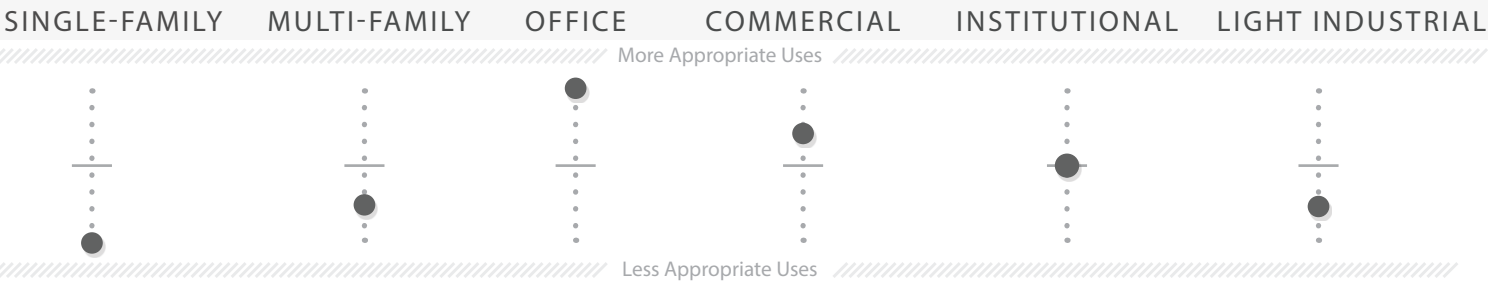
DESCRIPTION

The proposed Office/Neighborhood Service land use is located along Chambers Chapel Road near Highway 64. Development within this land use should provide space for office park developments and neighborhood services uses.

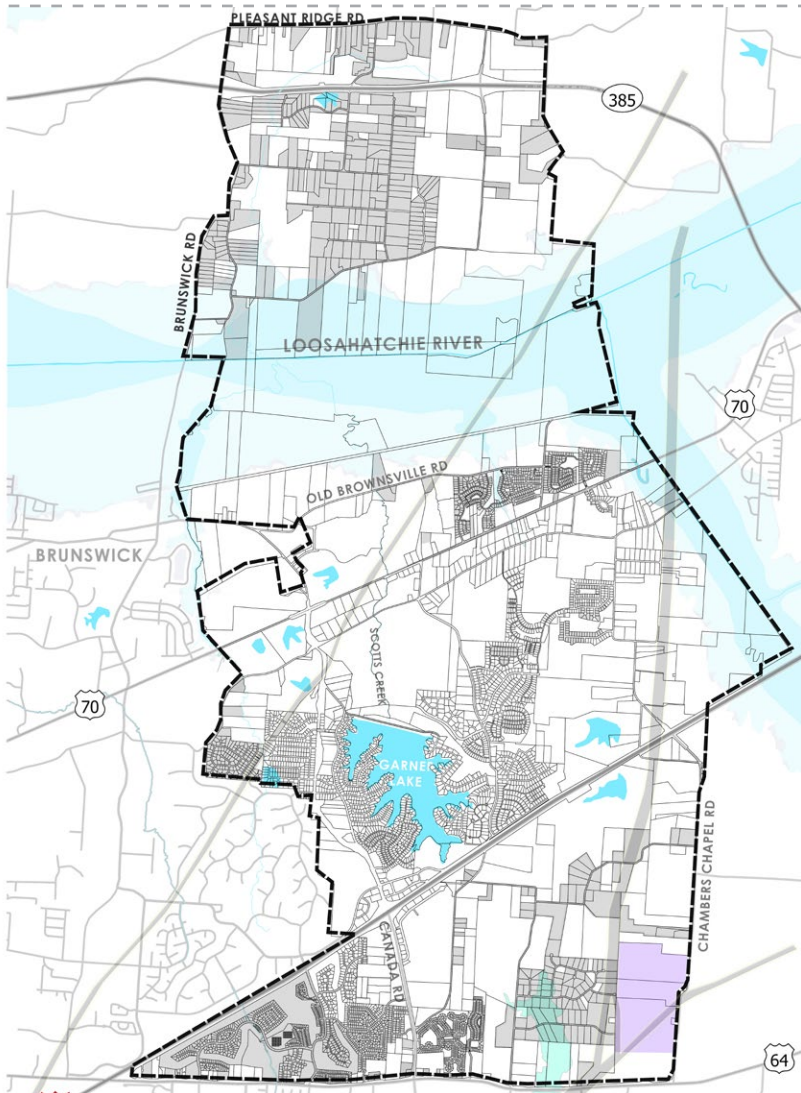
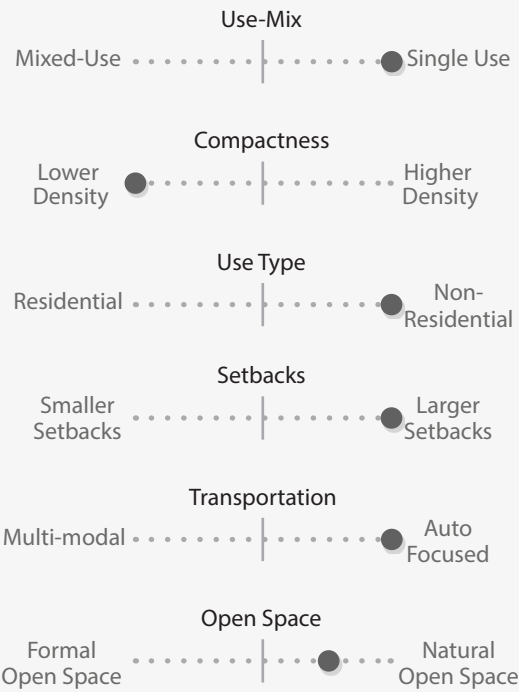
INTENT

- Less dense, office park style development
- Neighborhood service uses such as grocery, etc.

APPROPRIATE LAND USES



CHARACTERISTICS



PUBLIC/INSTITUTIONAL

DESCRIPTION

The proposed Public/Institutional land use is located primarily along Highway 70. The goal of this designation is to create institutional opportunity areas for civic and municipal uses that are centrally located to serve the entirety of Lakeland. In addition to municipal uses, this land use may provide opportunity for future public service uses such fire and police stations.

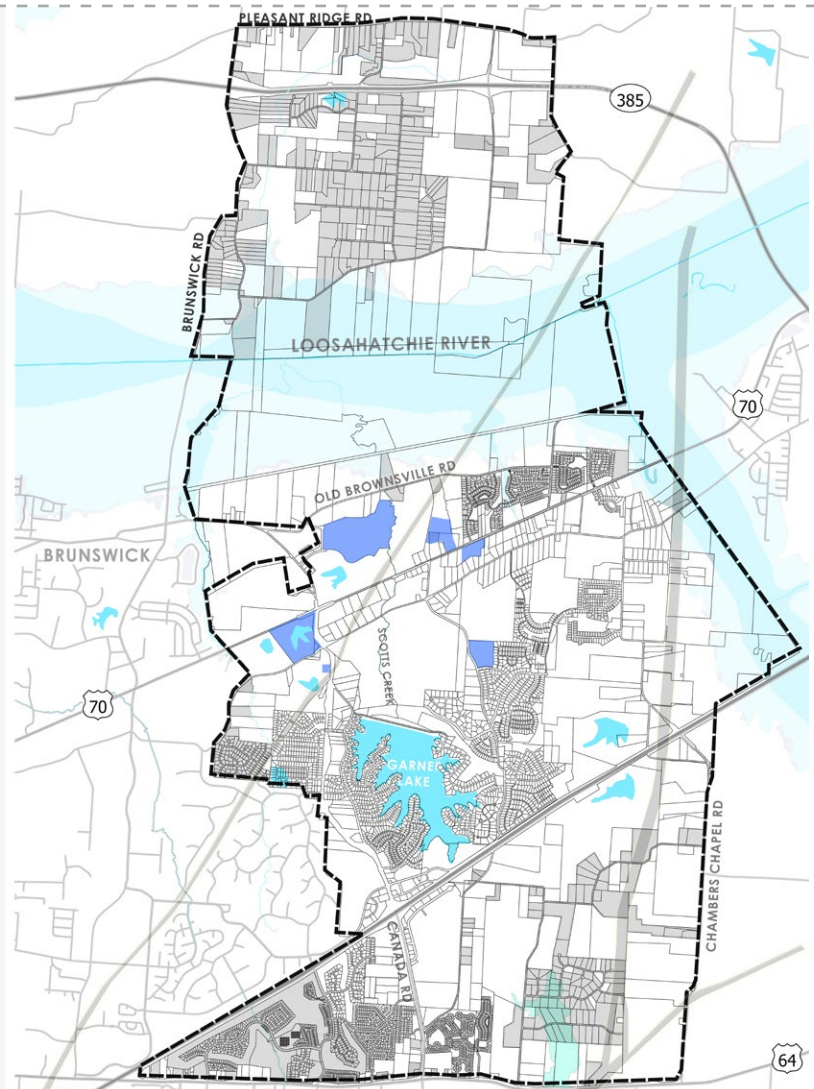
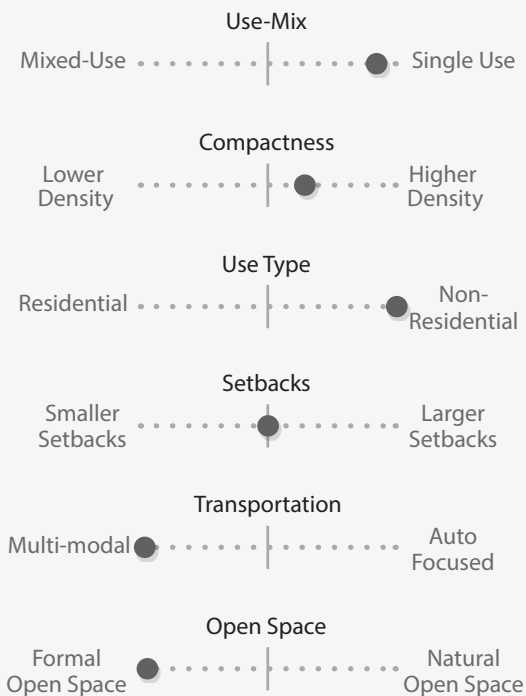
APPROPRIATE LAND USES

INTENT

- Provide municipal, centralized zones for city government buildings to grow
- Allow the planned growth of public services such as police and fire stations
- Allot land for desired community services such as a library or farmers market if desired by the community
- Create formal open space for city gatherings and celebrations



CHARACTERISTICS



PARK/PUBLIC ACTIVITY

DESCRIPTION

The proposed Park/Public Activity land uses are located at existing, planned, and proposed park and public open spaces based on the Parks and Recreation master plan.

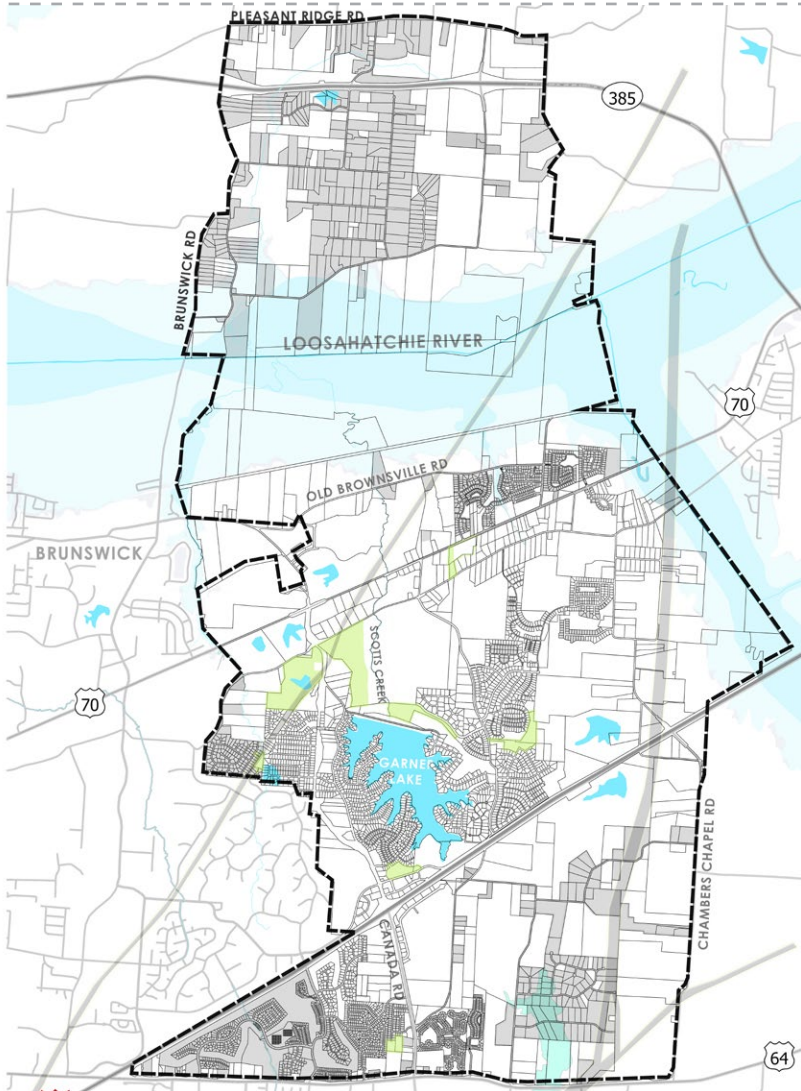
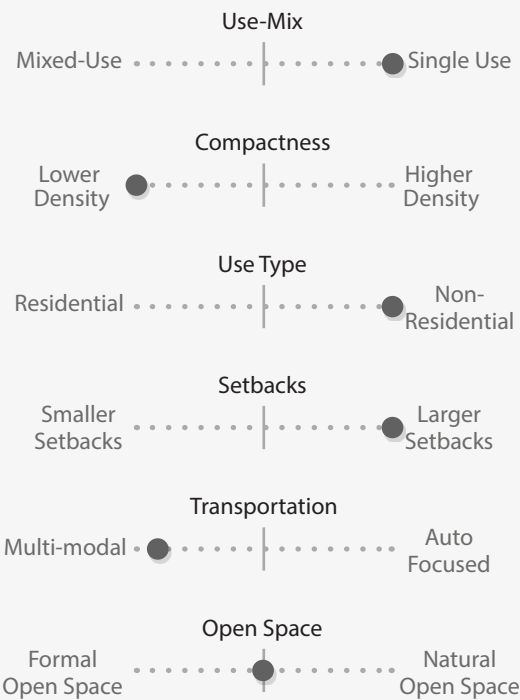
INTENT

- Conserve open space for public use
- Provide outdoor recreation amenities

APPROPRIATE LAND USES



CHARACTERISTICS



COMPACT RESIDENTIAL

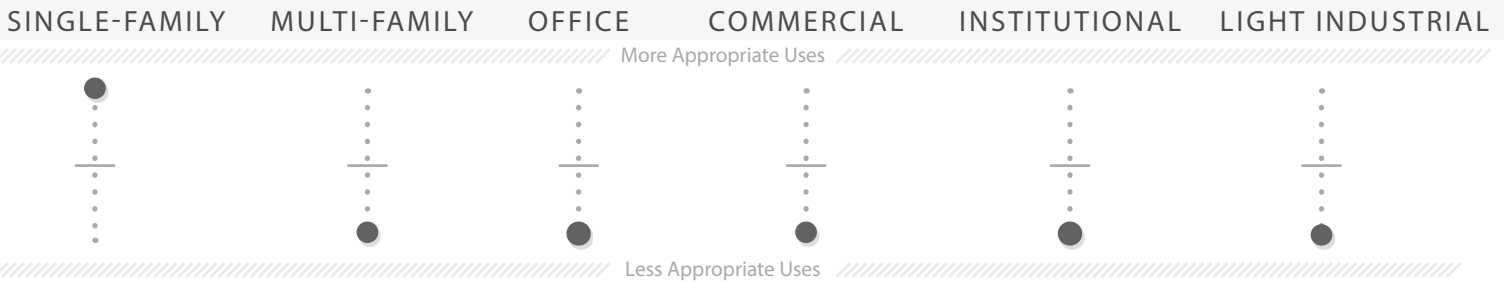
DESCRIPTION

The proposed Compact Residential land uses are located south of the Loosahatchie River. The goal of this designation is to create tight-knit, walkable neighborhoods that transition in density between mixed-use areas and neighborhood residential areas.

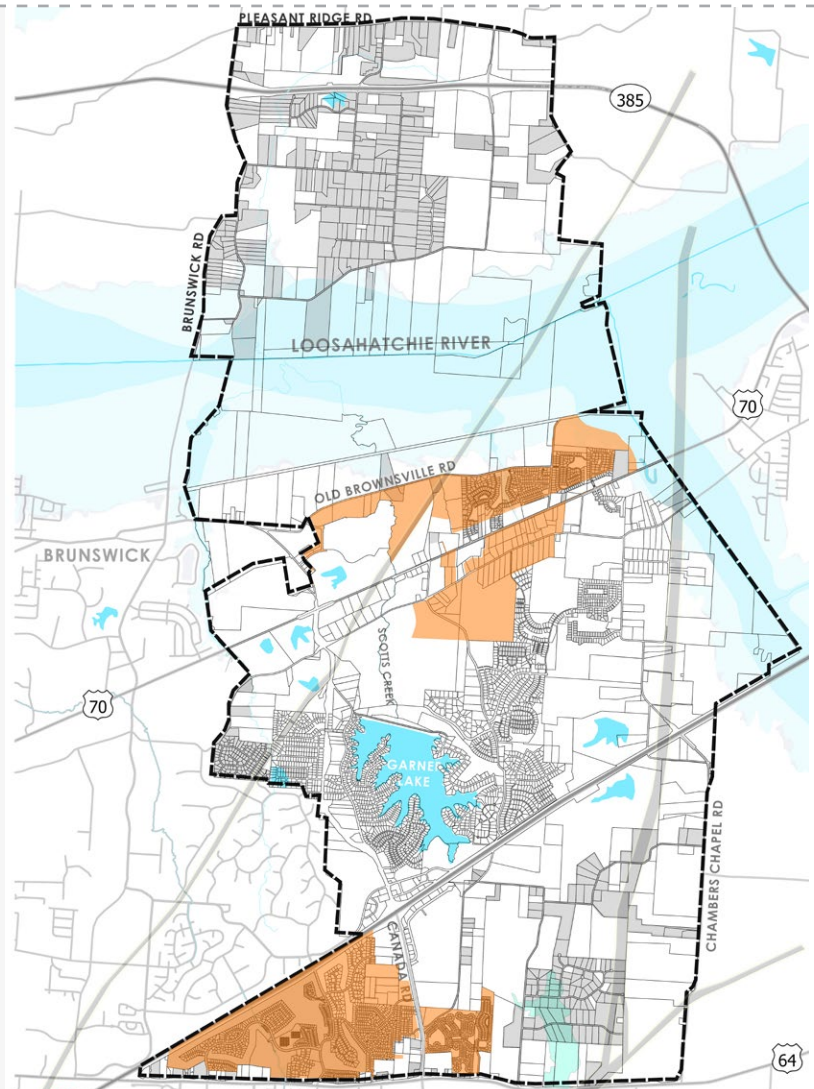
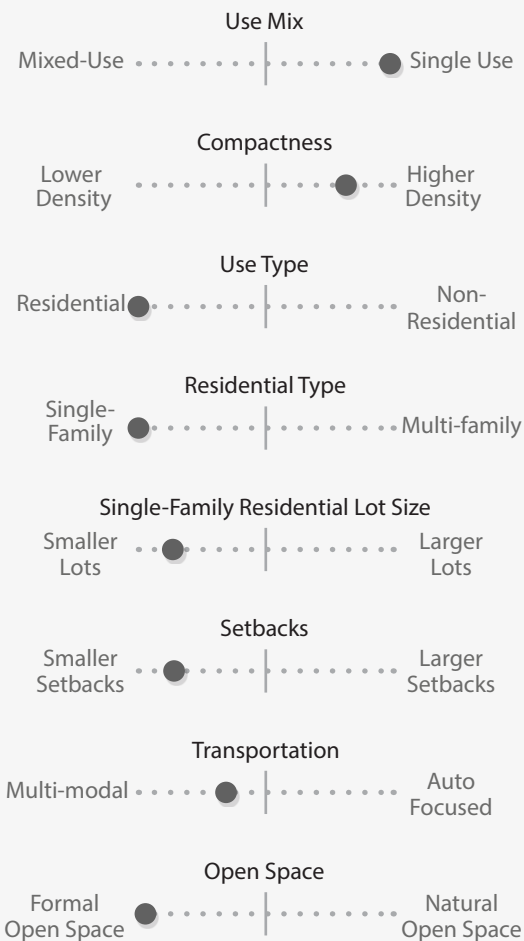
INTENT

- Allow small lot single family residential neighborhoods
- Creating a more dense neighborhood without sacrificing the suburban character and feel enjoyed by many Lakeland residents

APPROPRIATE LAND USES



CHARACTERISTICS



DESCRIPTION

The proposed Compact Residential land uses are located south of the Loosahatchie River. The goal of this designation is to expand upon the existing, medium density residential neighborhoods found today.

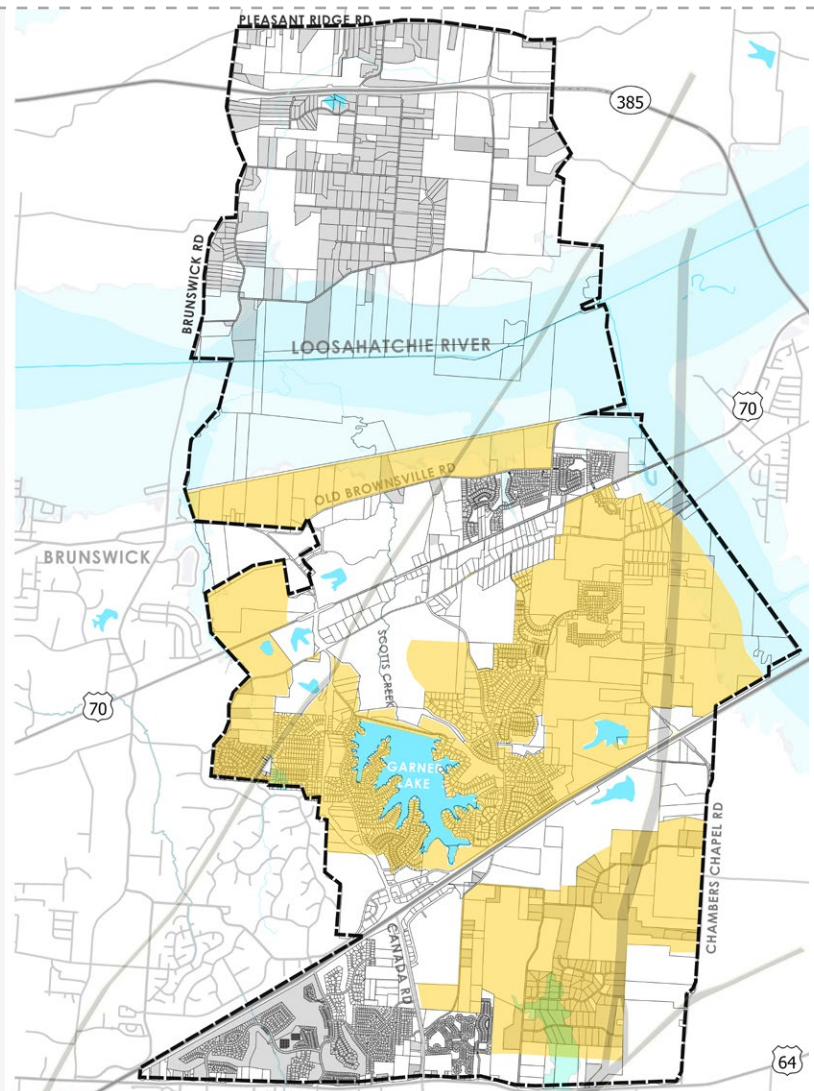
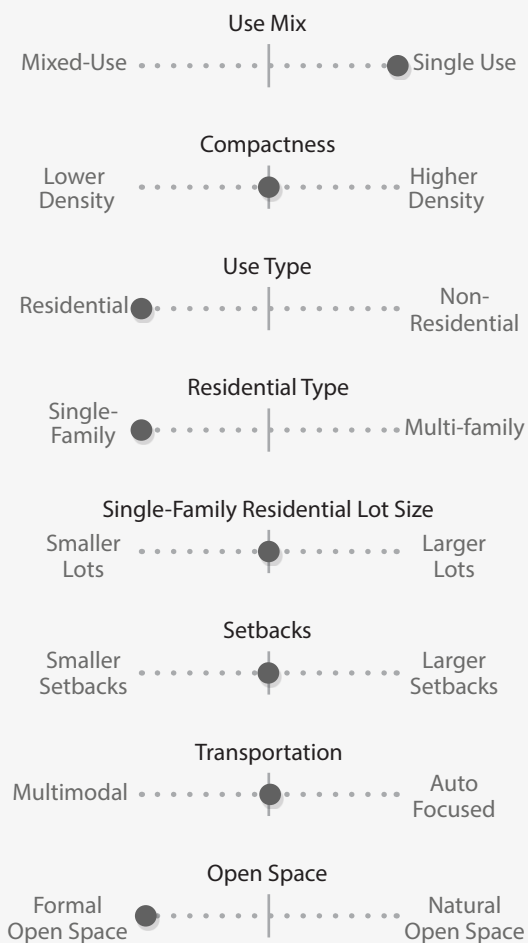
INTENT

- Encourage additional medium density, single family residential homes in line with the character of existing Lakeland neighborhoods

APPROPRIATE LAND USES



CHARACTERISTICS



RURAL RESIDENTIAL

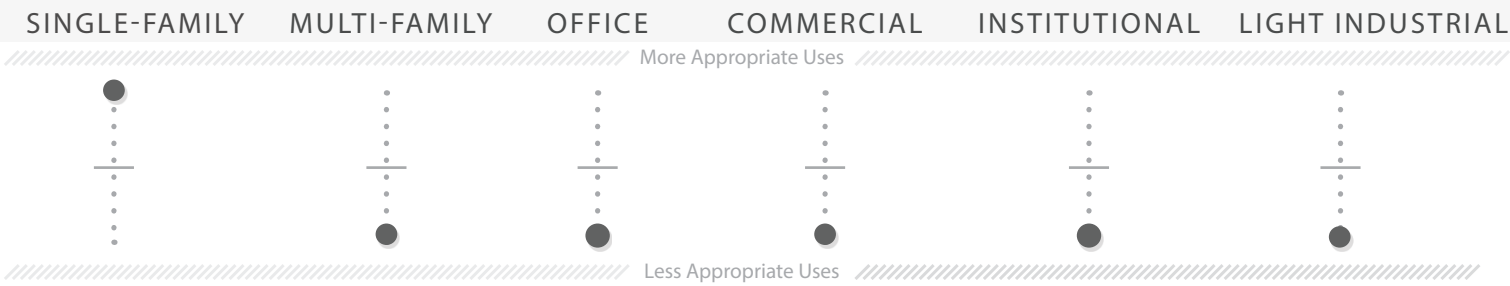
DESCRIPTION

The proposed Rural Residential land use is located North of the Loosahatchie River. The goal of this designation is to preserve the large lot, pastoral character of Lakeland. The Land Use Plan recognizes existing agricultural uses as acceptable. Intensive agricultural uses including, but not limited to, feed lots and dairy farming shall be prohibited. Acceptable agricultural uses and appropriate standards are further defined in the City's Land Development Regulations.

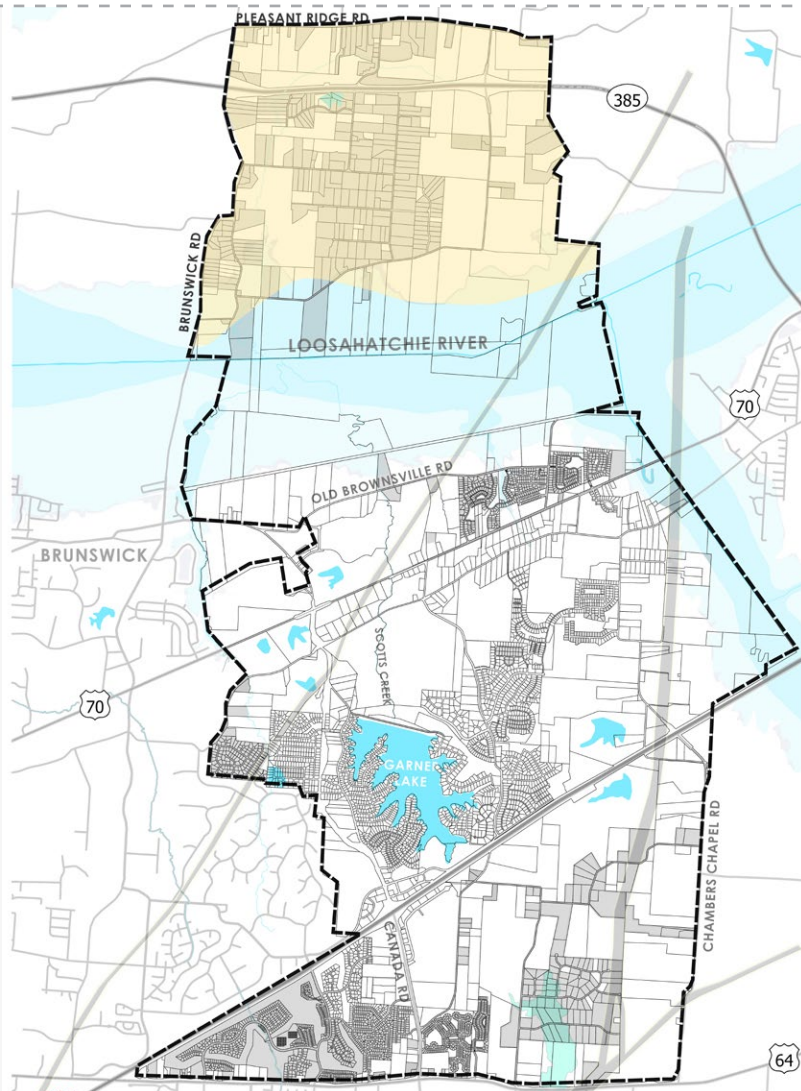
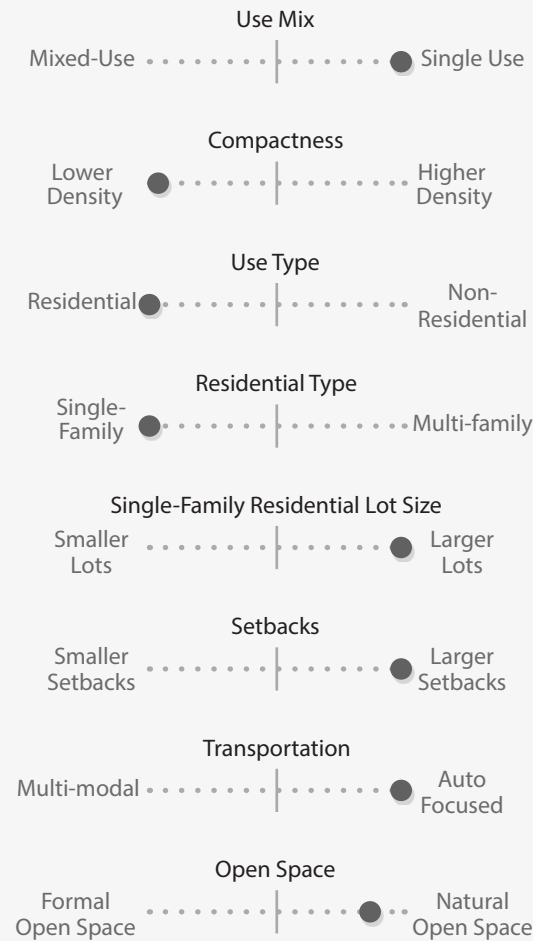
INTENT

- Preserve large, estate style single family residential lots
- Promote and maintain rural/pastoral character through setbacks and buffering

APPROPRIATE LAND USES



CHARACTERISTICS



ENVIRONMENTALLY SENSITIVE AREA

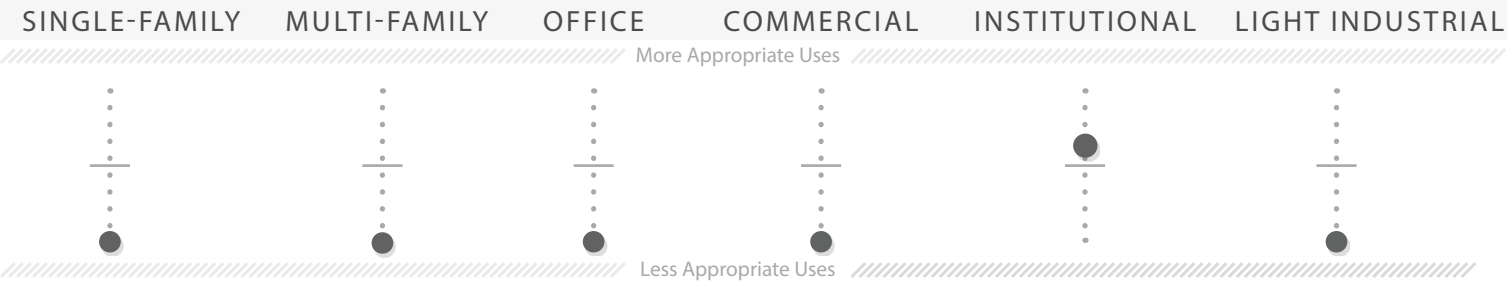
DESCRIPTION

The proposed Environmentally Sensitive land uses are located on the existing flood plains and flood way. The goal of this designation is to preserve natural space and capitalize on the existing natural resources.

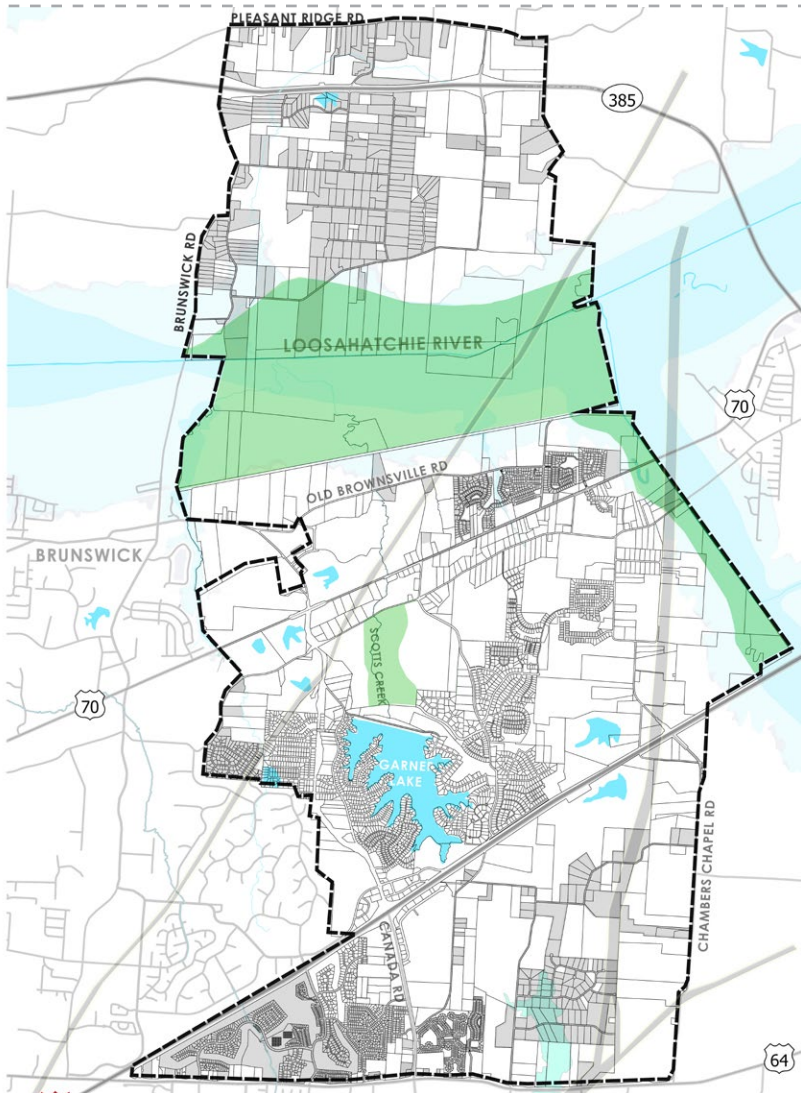
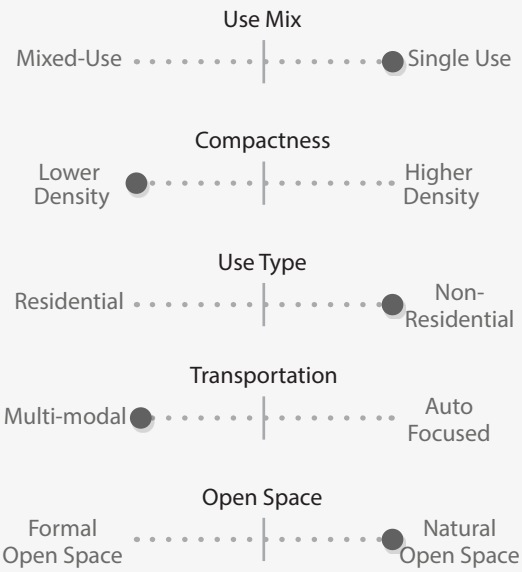
INTENT

- Preserve natural open space by discouraging invasive development in designated zones
- Encourage sustainable, pedestrian development such as board walks, trails, kayak launches, and nature education opportunities in order to promote sustainable public use of these areas.

APPROPRIATE LAND USES



CHARACTERISTICS



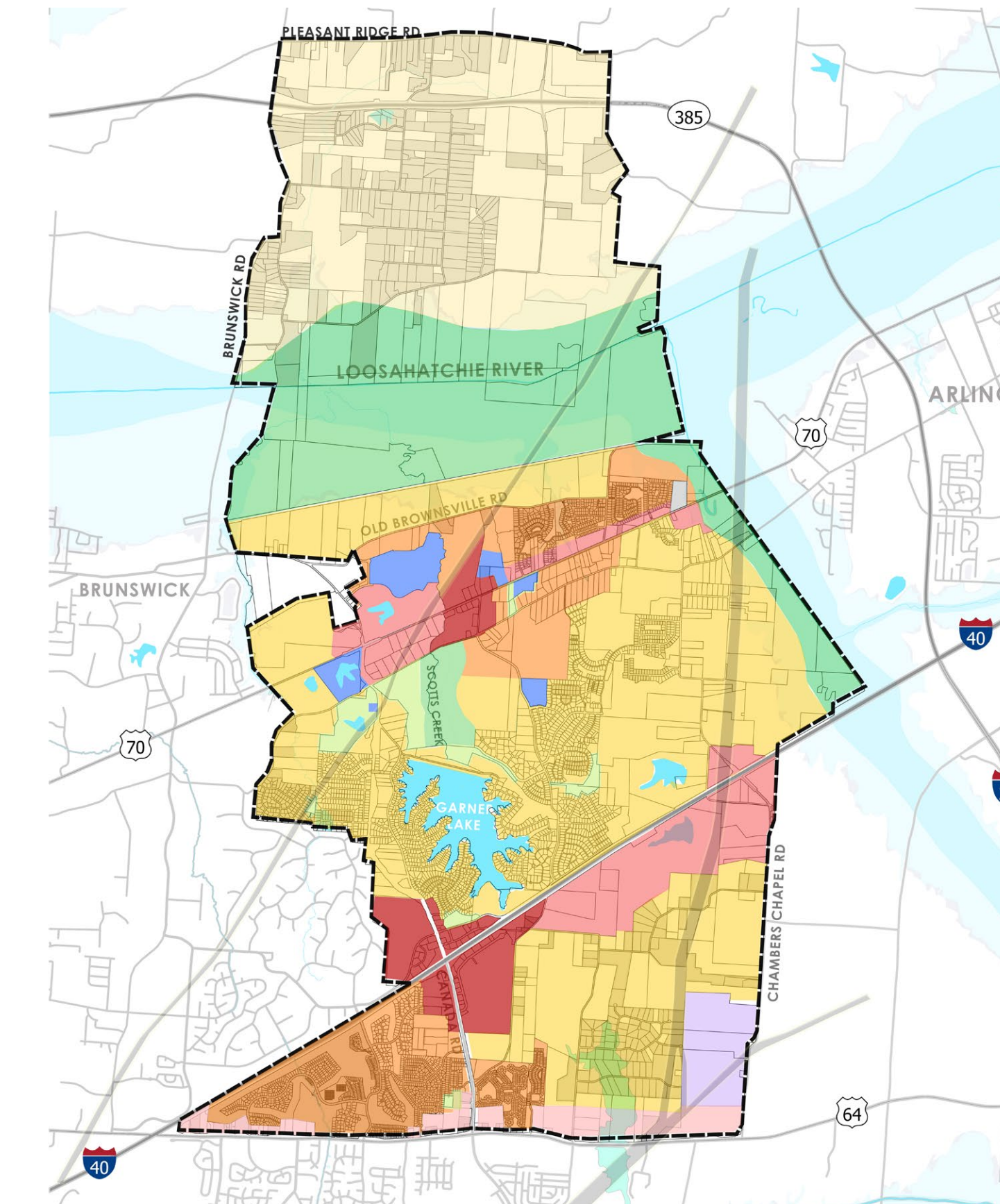
FUTURE LAND-USE SUMMARY TABLE

This table provides a summary of each future land-use along with the corresponding color as illustrated in the overall future land-use map.

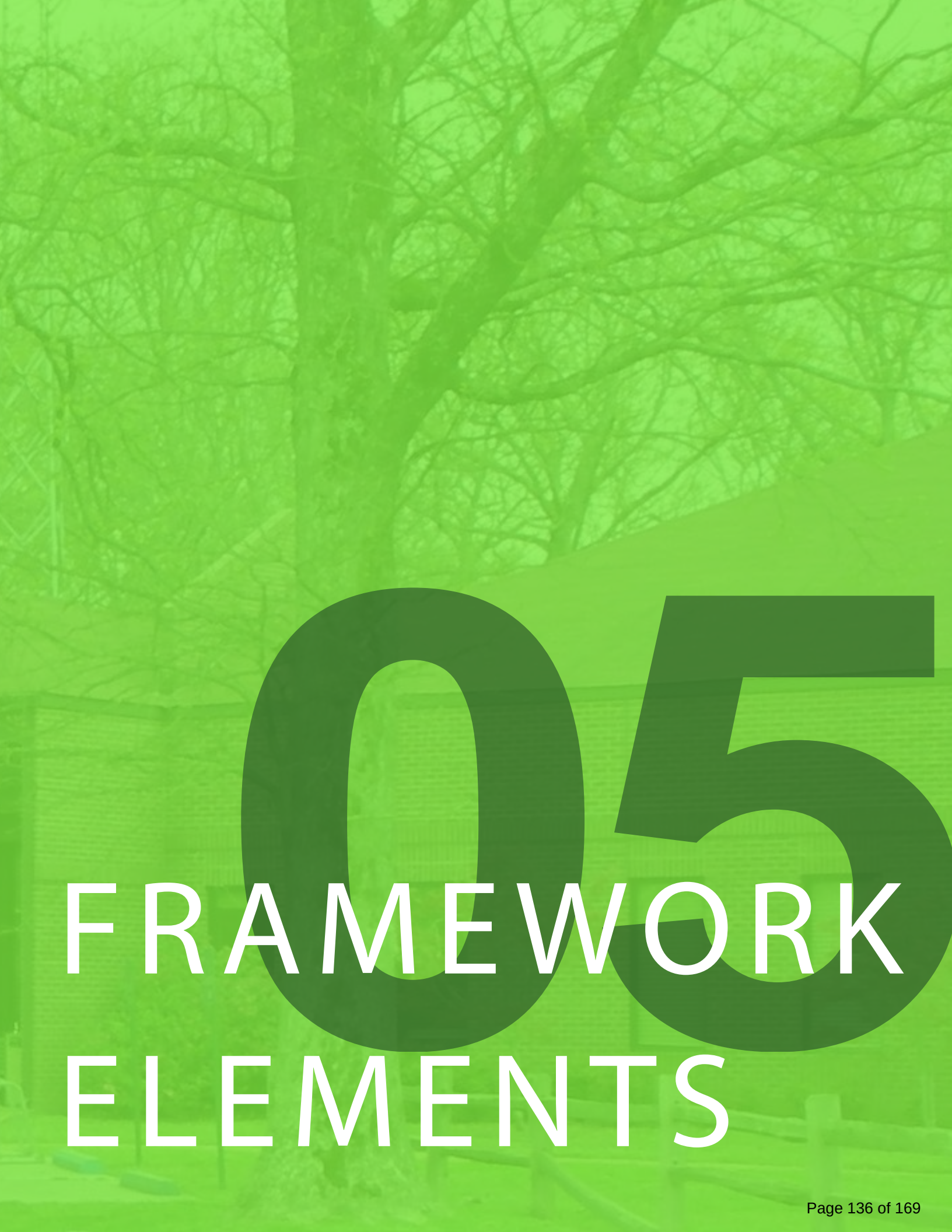
MAP COLOR	CLASSIFICATION	GENERAL CLASSIFICATION NOTES
	Commercial Corridor	- Traditional commercial developments - Matches the character of existing development to the south of Lakeland in Memphis
	Mixed Use Commercial	- Developments with a mix of commercial and multi-family residential uses - Office as a tertiary use
	Mixed Use Residential	- Neighborhood service commercial uses - Single Family attached - Small lot single family detached - More emphasis on residential than commercial
	Office/Neighborhood Service	- Office Park development - Neighborhood services—Ex. Grocery
	Public/Institutional	- Municipal buildings - Police/Fire buildings - Library and other public service uses - Schools
	Park/Public Activity	Park land, Community Centers, Athletic facilities
	Compact Residential	Small lot single family residential neighborhoods
	Neighborhood Residential	Traditional style, medium lot single family residential neighborhoods
	Rural Residential	- Large lot estate style single family uses - Modeled after the existing character of North Lakeland
	Environmentally Sensitive Area	- Protecting and preserving natural areas - Minimal uses apart from walks, trails, boardwalks, Kayak launches, and nature centers

FUTURE LAND-USE OVERALL MAP

This map illustrates all future land-use designations to be referenced along with the summary table.







05

FRAMEWORK ELEMENTS

LAND USE

This Future Land Use plan consolidates the preferred growth strategy plan and existing constraints to develop the City's desired character through Land Use designations.

ECONOMIC DEVELOPMENT

This framework plan was developed using a market based analytic approach to help the City of Lakeland expand its potential for economic development opportunities while preserving the community's character.

PUBLIC HEALTH AND EDUCATION

When planning for the future, public health and education is a high priority. Access to public resources should be prioritized.

PARKS AND OPEN SPACE

Parks and open space are a vital aspect to any community. The City of Lakeland recently adopted their parks and recreation master plan, detailing out a vision for the future of their park system. This document should be used in conjunction with the parks and recreation master plan to create planned, connected, and healthy parks.

TRANSPORTATION AND MOBILITY

The purpose of the Lakeland Transportation Plan is to evaluate the ability of the planned roadway network to accommodate future traffic volumes upon ultimate build-out of the City of Lakeland in accordance with the Land Use Plan developed in this Comprehensive Plan document.

NATURAL RESOURCES AND ENVIRONMENT

Lakeland boasts a number of natural resources and environmental opportunities that should be protected, celebrated, and utilized. While many of these natural resources may be a constraint to development, this may prove beneficial to the overall health and character of the City.

HOUSING

This framework plan aims to align the community's housing needs with the Conceptual Growth Map and offers an overview of the City's housing inventory.

PUBLIC SERVICES AND UTILITIES

Reviewing the City's existing infrastructure to help dictate future needs as well as limits that development activities will need to consider due to utility capacities.



LAND USE

This Future Land Use plan consolidates the preferred growth strategy plans and existing constraints to develop the City's desired character through Land Use designations.

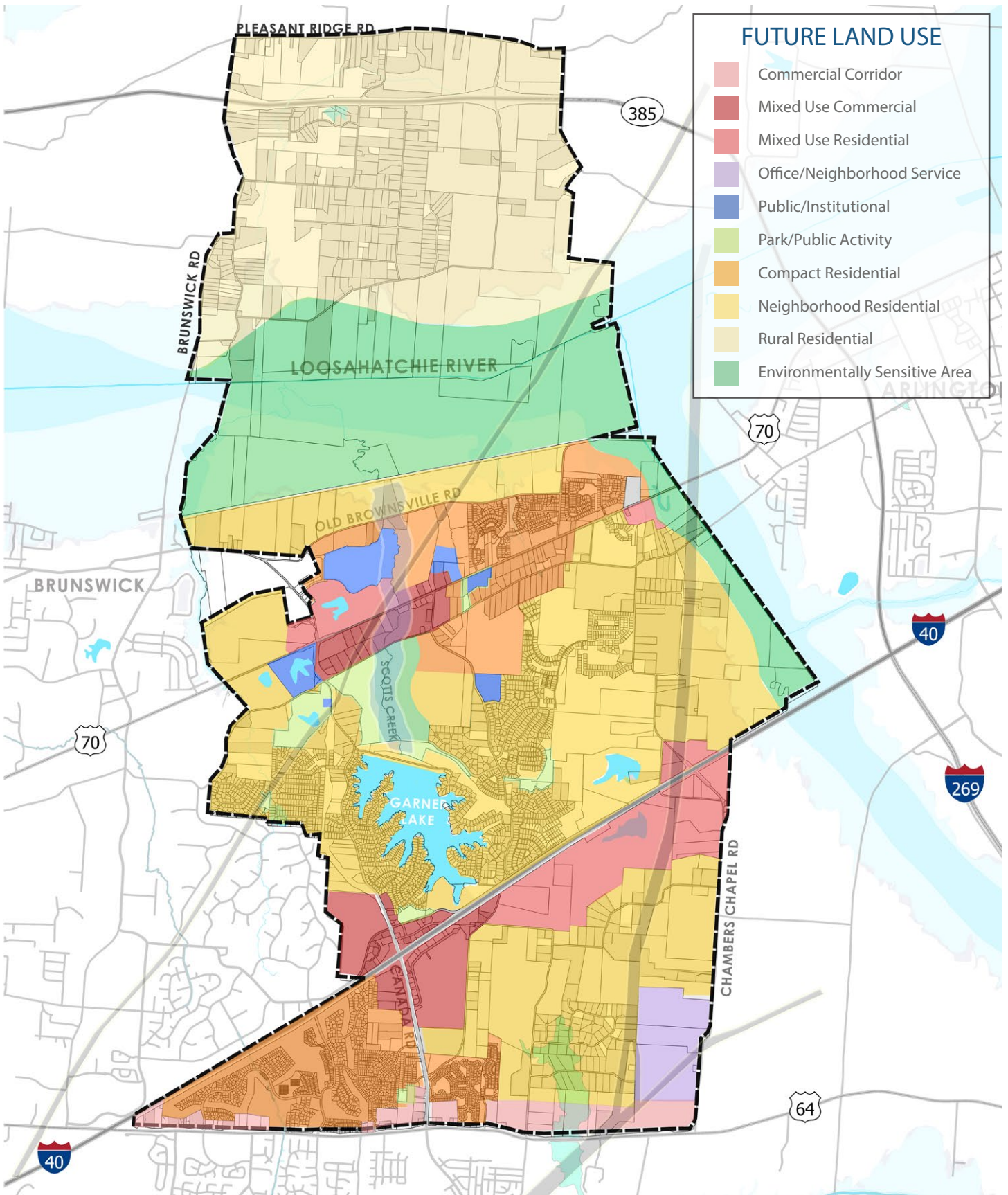
MAP OVERVIEW

The City of Lakeland may use the future land use map as a tool to visualize how the city continues to develop while preserving the characteristics it holds valuable.

LAND USE POLICY RECOMMENDATIONS

- LU.1** | **Using the preferred growth strategy and future land use maps as guidance, develop new zoning ordinance.**
New zoning ordinance should foster strategic, thoughtful development that preserves the natural elements and character that residents of Lakeland desire.
- LU.2** | **Encourage unique, mixed-use opportunity areas that serve the Lakeland community without dominating the character of the city.**
Future developments should be encouraged to follow the identity established by the comprehensive plan and adhere to the strategies established by the future growth strategy and future land use maps.
- LU.3** | **Promote infill development and clustered growth.**
The commercial mixed-use development create pockets of opportunity that are unique and attractive in character and uses.
- LU.4** | **Promote a diverse range of neighborhoods that vary in character and density.**
While the City of Lakeland residents expressed a desire for the character of the City to remain the same, additional options for housing should be provided that keep up with growth and build on the existing character.

FUTURE LAND USE MAP



TRANSPORTATION AND MOBILITY

STATEMENT OF OBJECTIVE

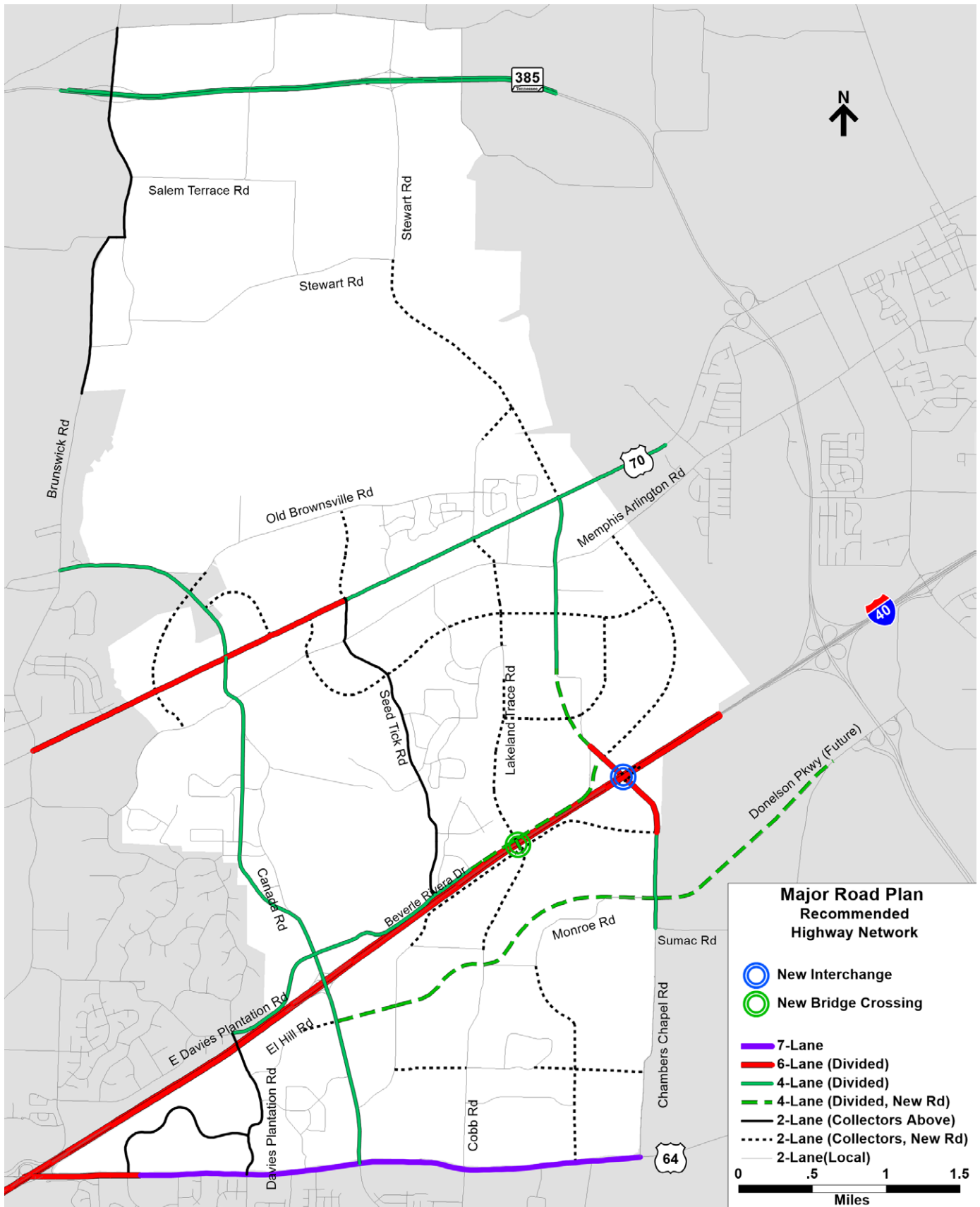
The purpose of the Lakeland Transportation Plan is to evaluate the ability of the planned roadway network to accommodate future traffic volumes upon ultimate build-out of the City of Lakeland in accordance with the Land Use Plan developed in this Comprehensive Plan document. The Plan is an update to the current Recommended Transportation Network developed in 2009. The Transportation Plan achieves four main objectives:

- Develop a recommended roadway network that addresses connectivity and future City growth
- Develop a recommended multimodal network of on-street and off-street facilities
- Identify high crash frequency locations within the City
- Develop future intersection control recommendations

TRANSPORTATION AND MOBILITY POLICY RECOMMENDATIONS

- MO.1** | **Develop a Roadway Network that supports the future land use and desired growth.**
The future recommended roadway network map developed under the Transportation Plan should be followed as development occurs in the City.
- MO.2** | **Develop a Multimodal Network that provides connectivity to facilities and destinations in Lakeland.**
The City of Lakeland should build-out a multimodal network providing options and amenities for their citizens as the City continues to grow.

RECOMMENDED ROADWAY NETWORK



ECONOMIC DEVELOPMENT

This framework plan was developed using a market-based analytic approach to help the City of Lakeland expand its potential for economic development opportunities while preserving the community's character.

STATEMENT OF OBJECTIVE

The City of Lakeland seeks to increase its attractiveness for potential economic development opportunities to increase offerings for residents and visitors to shop, work, and play locally, while maintaining high quality of life standards.

MAP OVERVIEW

Lakeland's economic opportunity areas are highlighted on the following map. These areas are focused along the Key Commercial Corridors: I-40, US 64, and US 70. These areas reflect the vision illustrated on the Conceptual Growth Map. In addition to the Key Commercial Corridors, the economic opportunity areas also include the mixed-use areas and identified opportunity areas.

Key Commercial Corridors

Land Use Mix:

- Commercial Frontage

Mixed-Use Areas

Land Use Mix:

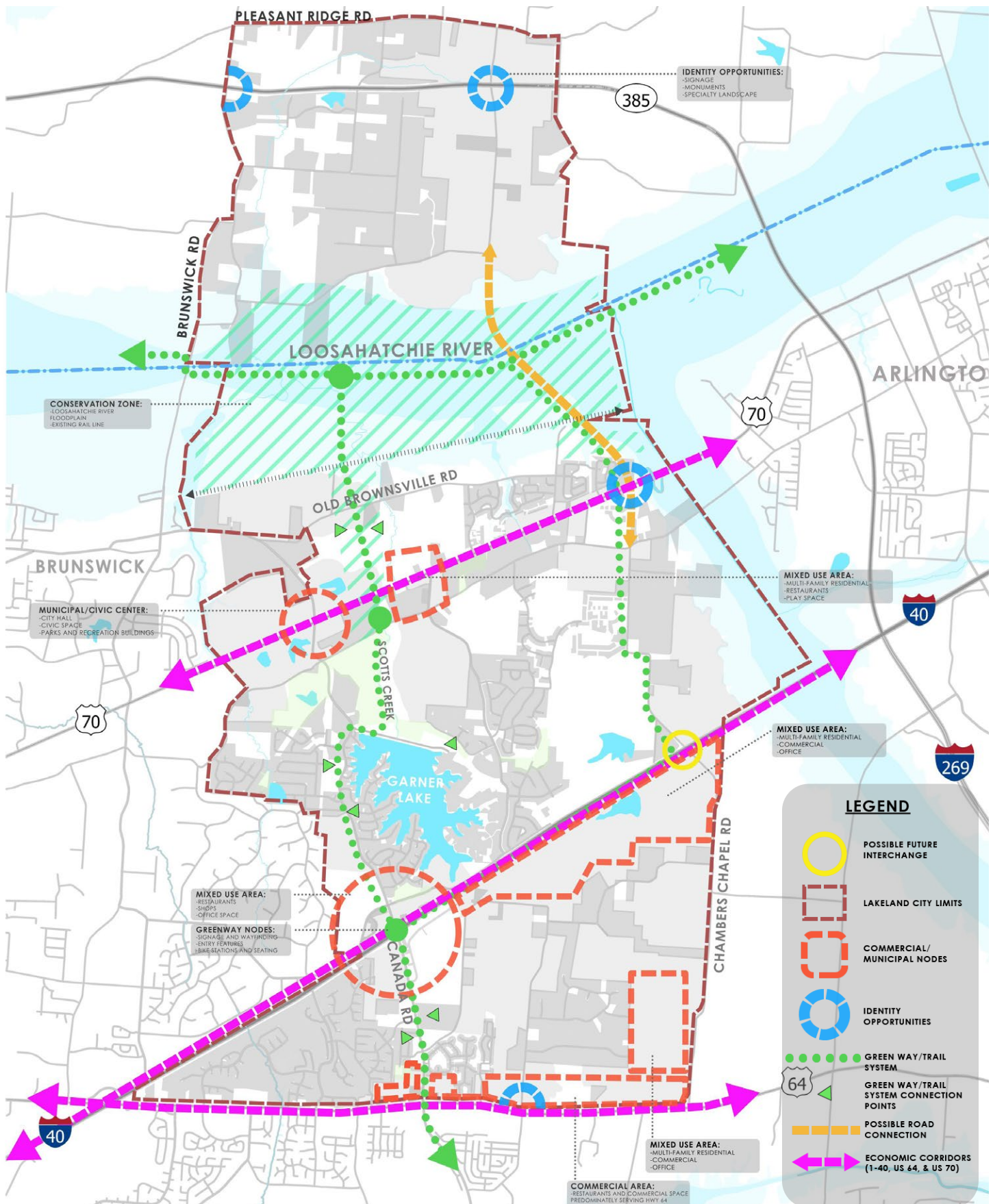
- Multi-Family Residential
- Commercial
- Office
- Retail & Restaurants
- Recreational Space

Identity Opportunity Areas

Land Use Mix:

- Retail & Restaurants
- Office
- Residential
- Recreational Space

ECONOMIC OPPORTUNITY AREAS MAP



ECONOMIC DEVELOPMENT POLICY RECOMMENDATIONS

- ED.1** | **STRENGTHEN LAKELAND’S OFFERINGS FOR RESIDENTS AND VISITORS TO SHOP AND DINE LOCALLY**
To promote more of these uses, the City of Lakeland should ensure there is sufficient land zoned for commercial growth, and support continued public investments in infrastructure, wayfinding, and streetscape enhancements in commercial areas to allow for adequate access to goods and services.
- ED.2** | **UPDATE ZONING ORDINANCE TO SUPPORT ECONOMIC DEVELOPMENT GOALS**
The City of Lakeland should review its zoning ordinance and update it, as necessary, to safeguard the potential for the development of key parcels into the desired uses as envisioned by the Conceptual Growth Map in order to maximize economic opportunity.
- ED.3** | **DEVELOP A CITY-WIDE MARKETING CAMPAIGN TO EXPAND EXISTING/ATTRACT NEW CONSUMER-ORIENTED BUSINESSES AND LEVERAGE LOCAL AMENITIES AND DESTINATION POINTS**
Partner with the Greater Memphis Area Chamber of Commerce and Lakeland Industrial Development Board to develop a marketing strategy to expand existing and recruit new businesses that are compatible with the City’s vision for growing the local economy, as well as promoting the City’s recreational offerings and amenities for visitors.
- ED.4** | **STEER NEW ECONOMIC DEVELOPMENT OPPORTUNITIES AWAY FROM SENSITIVE ENVIRONMENTAL AREAS TO PRESERVE LAKELAND’S NATURAL RESOURCES AND MAXIMIZE CONNECTIVITY TO INFRASTRUCTURE**
As new commercial development is proposed, the Future Land Use Map should be used as a guide by the City of Lakeland during the approvals process in order to protect the City’s natural resources and environmentally sensitive areas.

AERIAL MAP

Pleasant Ridge Rd

Stewart Rd

Loosahatchie River

Old Brownsville Rd

Memphis Arlington Rd

Seaboard

Chambers Chapel Rd

Cobb Rd

Credit: Alexis Cheyenne Photography

NATURAL RESOURCES AND ENVIRONMENTAL

Lakeland boasts a number of natural resources and environmental opportunities that should be protected, celebrated, and utilized. While many of these natural resources may be a constraint to development, this may prove beneficial to the overall health and character of the City.

STATEMENT OF OBJECTIVE

Provide opportunities for residents to interact with the natural environment and protect and bolster the natural and pastoral feel of the City.

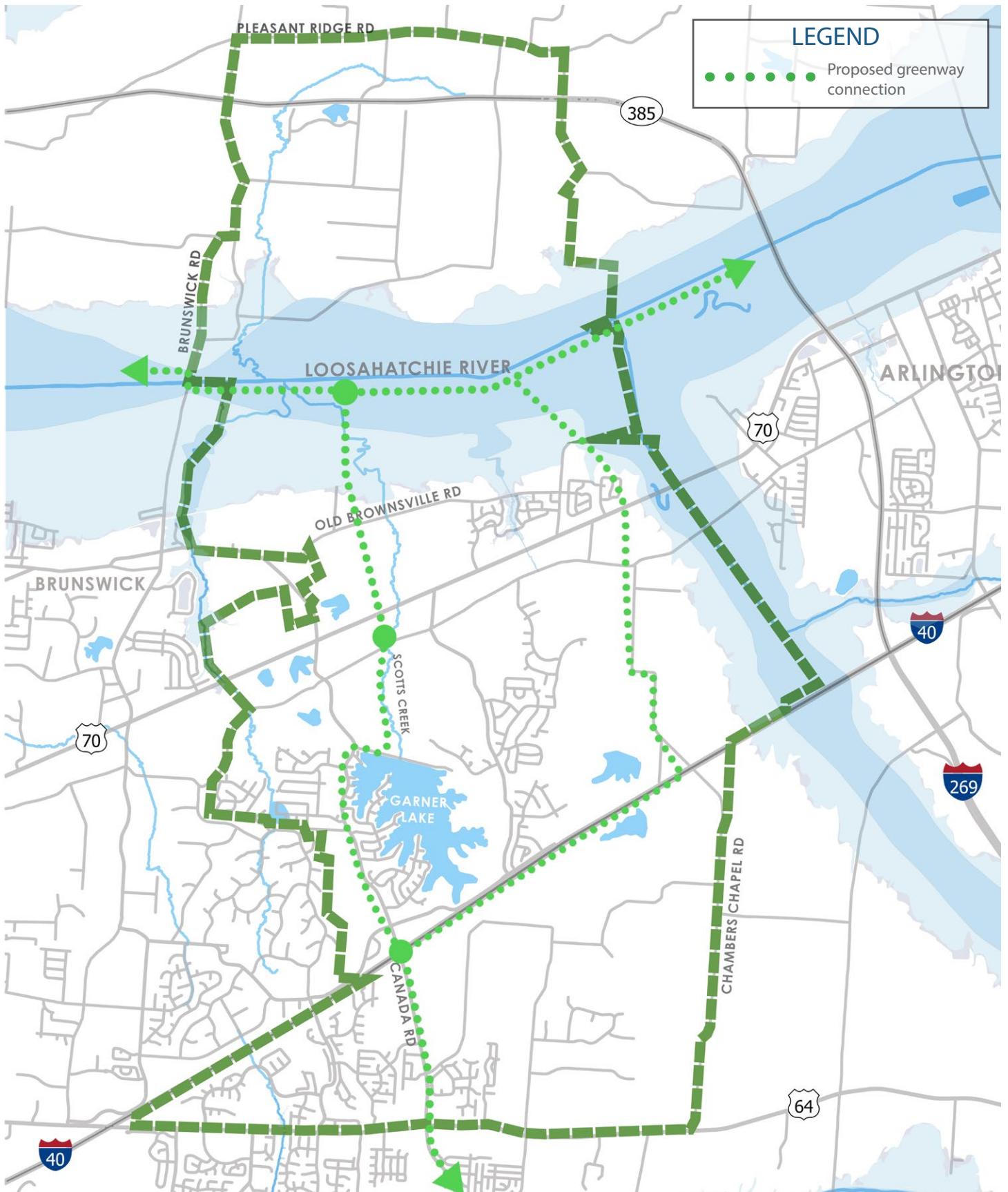
MAP OVERVIEW

This map provides an overview of the natural resources and constraints found in Lakeland today.

NATURAL RESOURCES AND ENVIRONMENTAL POLICY RECOMMENDATIONS

- RE.1** | **Develop policy and zoning that protects natural resources from invasive development**
The future land use map should be referenced when developing near the outlined environmental areas to ensure natural resources are preserved and accessible.
- RE.2** | **Develop means for the public to access natural resources**
A system of “greenway” trails and connectors should be considered in order to provide walking and biking access for residents. Future developments should be encouraged to factor in access to the greenway system.
- RE.3** | **Encourage and develop resources for public education**
Development of parks, greenways, natural education centers, and educational signage should all be considered as a means of educating the public on Lakeland's rich natural resources.
- RE.4** | **Connect into adjacent municipality's current and future greenway systems**
Consider coordination and cooperation with adjacent municipalities in the region in order to give Lakeland residents access to a larger natural system.

NATURAL RESOURCES AND ENVIRONMENTAL MAP



PUBLIC HEALTH AND EDUCATION

When planning for the future, public health and education is a high priority. Access to public resources should be prioritized.

STATEMENT OF OBJECTIVE

Make services accessible to the public in order to increase the overall health and education of the City moving forward.

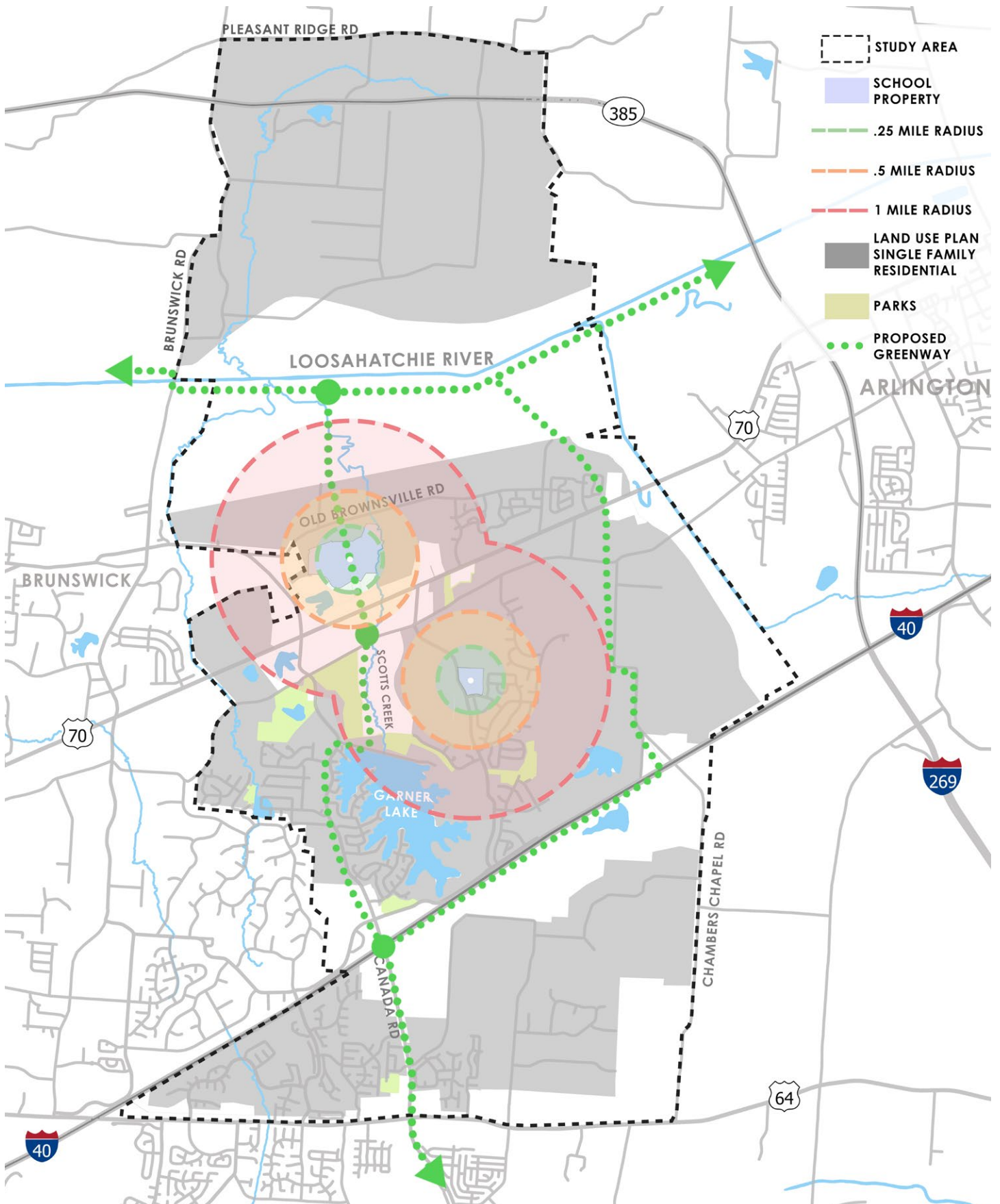
MAP OVERVIEW

The public health and education map illustrates proximity of schools, future neighborhoods, parks, and the proposed greenway system.

PUBLIC HEALTH AND EDUCATION POLICY RECOMMENDATIONS

- PH.1** | **Develop infrastructure that promotes public health and connections**
Providing adequate walking and biking infrastructure including bike lanes, shared use paths, greenways, walkways, and trails fosters a healthy community.
- PH.2** | **Encourage new residential developments to connect to nearby school properties**
Having the option for kids to walk and bike to school was a sentiment expressed by many Lakeland residents. Following the Land Use plan, future neighborhoods should be placed near school property or walking infrastructure.

PUBLIC HEALTH AND EDUCATION



HOUSING

This framework plan aims to align the community’s housing needs with the Conceptual Growth Map and offers an overview of the City’s housing inventory.

STATEMENT OF OBJECTIVE

The City of Lakeland seeks to define a proactive approach that balances the need to accommodate its growing housing inventory with preserving the community’s character.

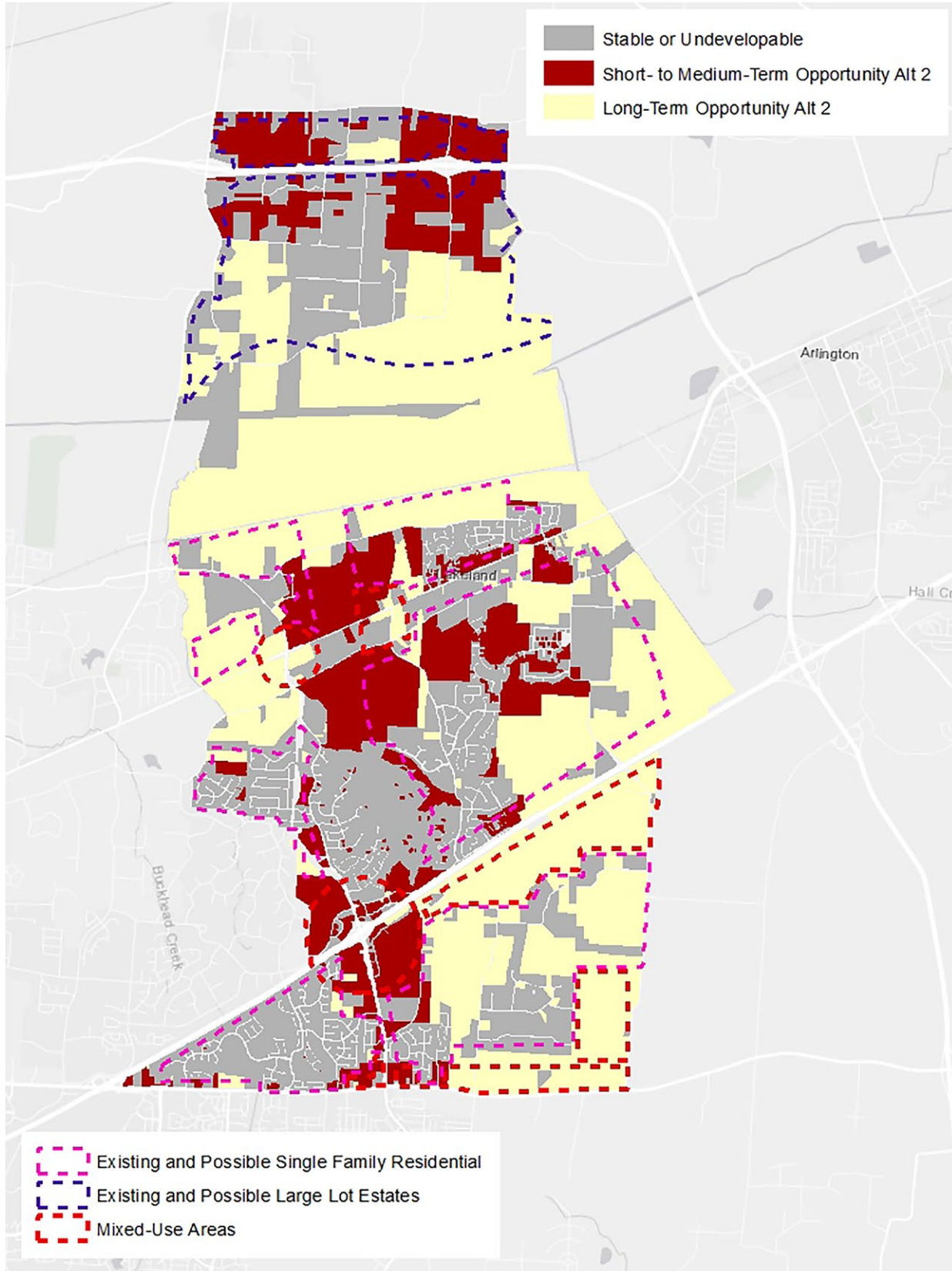
MAP OVERVIEW

This map illustrates Lakeland’s housing opportunities based on development status, presence of utilities, location within the floodplain or floodway, and convenience of access to the area’s primary transportation corridors.

Stable areas encompass neighborhoods that are established and are expected to undergo minimal changes in the near future, while undevelopable land refers to areas that are considered environmentally sensitive. The areas considered to be short-to medium-term opportunities include properties that are most likely to experience (re)development pressures in the coming years due to attractive site and location characteristics. Long-term opportunity areas include properties that have a higher barrier for development, including the need to extend utilities, address concerns of being in a flood hazard area, and not offering convenient access. Sites requiring less investment to be developed are likely to be prioritized over these properties.

Characteristics	Stable or Undevelopable	Short-/Medium-term	Long-term
Development Status	Developed/ undevelopable	Underdeveloped	Underdeveloped/ undeveloped
Presence of Utilities	no/yes	yes	no
Located with- in Floodplain/ Floodway	no/yes	no	no/yes
Convenient Access to Primary Transportation Corridors	no/yes	yes	no

HOUSING MAP



HOUSING POLICY RECOMMENDATIONS

HE.1 | PRESERVE THE RESIDENTIAL CHARACTER OF LAKELAND

Maintain single-family as the City's dominant housing type by concentrating other types of development in areas more suitable for moderate- to higher-density uses. Use the Conceptual Growth Map as a guide for steering new development to the appropriate locations.

HE.2 | EVALUATE ZONING AND DEVELOPMENT STANDARDS TO ALLOW FOR NEW DEVELOPMENT TO OCCUR WHERE APPROPRIATE

Where appropriate, the City of Lakeland should encourage Planned Residential Developments (PRDs) and educate officials and residents on the advantages of this development type. Regulations relating to height restrictions, setback, dwellings per acre, and lot sizes should be re-evaluated to allow for increased flexibility, which may help accommodate Lakeland's growing population.

HE.3 | MAINTAIN AN ADEQUATE SUPPLY OF HOUSING THAT VARIES IN SIZE AND STYLE

The City of Lakeland should aim to preserve stable neighborhoods and enhance areas that offer short- and medium-term residential development opportunities. Providing design standards that encourage a mixture of lot sizes, housing types, and price points will result in a more resilient community. Requirements for multifamily and affordable housing should be evaluated periodically and updated as appropriate.

HE.4 | PURSUE HOUSING INVESTMENT IN AND NEAR MIXED-USE NODES

More compact housing options in locations identified as Compact Residential or Mixed-Use Residential should be promoted to provide a greater connection between commercial uses and residents. This residential development pattern appeals to a diverse portion of the population by creating a more walkable community, including Lakeland residents who would like to age in place but are seeking a lower-maintenance lifestyle with convenient access to amenities.



Credit: Alexis Cheyenne Photography

PARKS AND OPEN SPACE

Parks and open space are a vital aspect to any community. The City of Lakeland recently adopted their parks and recreation masterplan, detailing out a vision for the future of their park system. This document should be used in conjunction with the parks and recreation master plan to create planned, connected, and healthy parks and open space.

STATEMENT OF OBJECTIVE

The Lakeland PULSE Comprehensive Plan and the System wide Parks and Recreation Master Plan should be cross referenced to guide the city's growth. Existing and future parks should be in consideration when future roadway, bikeway, trail, and sidewalk planning and development efforts occur. Parks, open space, community centers, and residential communities should be well connected.

MAP OVERVIEW

This map outlines the various existing and future designated park land. Continuous efforts should be made to preserve this land and adapt to meet the changing needs and desires of the community.

PARKS AND OPEN SPACE POLICY RECOMMENDATIONS

PO.1 PROTECT EXISTING AND PLANNED PARK LAND

Parks and open space preservation should be considered in all future development within the City of Lakeland.

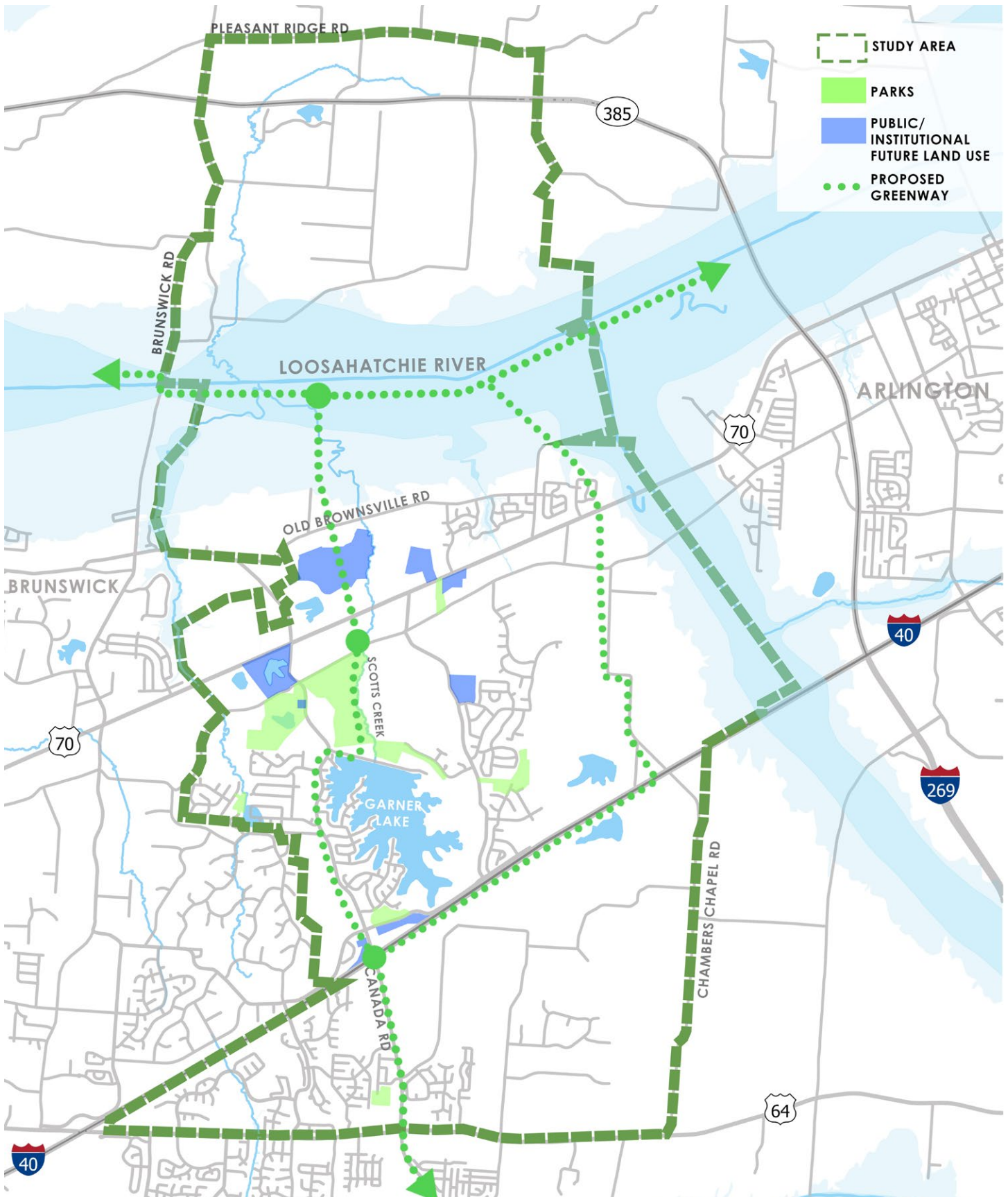
PO.2 PROVIDE BIKE AND PEDESTRIAN CONNECTIONS TO PARKS AND OPEN SPACES.

Develop trails, sidewalks, bike paths, and multi-modal paths with a priority of connecting single and multi-family developments to local parks and open space.

PO.3 MAKE THE CITY'S EXISTING NATURAL FEATURES MORE ACCESSIBLE TO RESIDENTS

The City's natural features, including the Loosahatchie River and Scott's Creek should receive investment into trails, access, and education opportunities with the goal of making it easier for all residents to interact with the natural environment.

PARKS AND OPEN SPACE MAP



PUBLIC SERVICES AND UTILITIES

STATEMENT OF OBJECTIVE

Consider the City's existing infrastructure to help dictate future needs as well as limits to maximize growth potential that is in-line with the Community Vision.

MAP OVERVIEW

This following map exhibits the existing utility easements and existing substation property. The City of Lakeland has access to water, electric, storm, and sanitary sewer mapping.

PS.1 PLAN FOR LONG TERM UTILITY NEEDS IN NORTH LAKELAND

As the City grows, considerations should be given to utility needs and opportunities in North Lakeland that are in concert with the Land Use Plan.

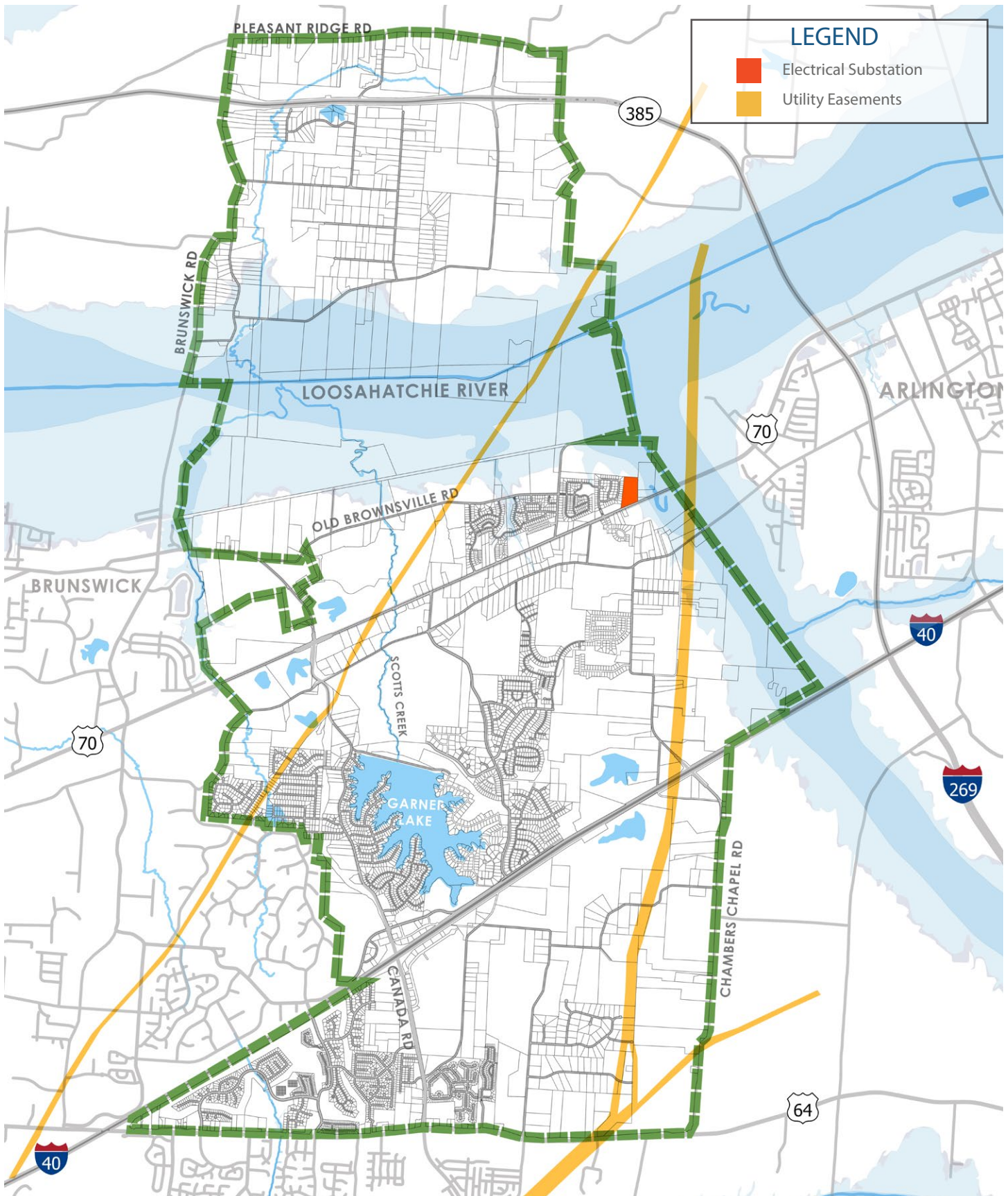
PS.2 MONITOR UTILITY NEEDS IN CORE DEVELOPMENT AREAS

As core development areas increase in density, the City should monitor utility capacities. The identified higher density areas in the Land Use Plan should be considered when budgeting for utility expansion and/or improvements.

PS.3 UTILIZE EXISTING UTILITY EASEMENTS FOR CONNECTIVITY AND RECREATION OPPORTUNITIES

Consideration of existing utility easements should be given when identifying bike and pedestrian connectivity and other recreation opportunities for the community.

PUBLIC SERVICES AND UTILITIES MAP





The background of the slide features a photograph of a school building with a brick facade and a gabled roof, partially obscured by bare trees. A large, semi-transparent green circle is centered over the image. The text '06' is written in a large, bold, dark green font, with the '0' and '6' overlapping the green circle. Below this, the words 'IMPLEMENTATION' and 'STRATEGIES' are written in a white, bold, sans-serif font, stacked vertically and centered within the green circle.

06 IMPLEMENTATION STRATEGIES

06 IMPLEMENTATION STRATEGIES

OVERVIEW

The following charts provide a summary of the framework recommendations, the suggested priority level, and estimated time/cost requirements, needed partnership, and if each item is an on going action.

LAND USE

ID	DESCRIPTION	PARTNERSHIP	HIGH PRIORITY	ON GOING ACTION	RESOURCE NEEDS
LU.1	Using the preferred growth strategy and future land use maps as guidance, develop new zoning ordinance.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
LU.2	Encourage unique, mixed-use opportunity areas that serve the Lakeland community without dominating the character of the city.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
LU.3	Promote infill development and clustered growth.	CITY	✗	✓	TIME ● ● ● COST ● ● ●
LU.4	Promote a diverse range of neighborhoods that vary in character and density.	CITY	✗	✓	TIME ● ● ● COST ● ● ●

TRANSPORTATION AND MOBILITY

ID	DESCRIPTION	PARTNERSHIP	HIGH PRIORITY	ON GOING ACTION	RESOURCE NEEDS
MO.1	Develop a Roadway Network that supports the future land use and desired growth.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
MO.2	Develop a Multi-modal Network that provides connectivity to facilities and destinations in Lakeland.	CITY	✗	✓	TIME ● ● ● COST ● ● ●

ECONOMIC DEVELOPMENT

ID	DESCRIPTION	PARTNERSHIP	HIGH PRIORITY	ON GOING ACTION	RESOURCE NEEDS
ED.1	Strengthen Lakeland's offerings for residents and visitors to shop and dine locally	CITY	✓	✓	TIME ● ● ● COST ● ● ●
ED.2	Update zoning ordinance to support economic development goals.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
ED.3	Develop a City-wide marketing campaign to expand existing/attract new consumer-oriented businesses and leverage local amenities and destination points.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
ED.4	Steer new economic development opportunities away from sensitive environmental areas to preserve Lakeland's natural resources and maximize connectivity to infrastructure.	CITY	✓	✓	TIME ● ● ● COST ● ● ●

NATURAL RESOURCES AND ENVIRONMENT

ID	DESCRIPTION	PARTNERSHIP	HIGH PRIORITY	ON GOING ACTION	RESOURCE NEEDS
RE.1	Develop policy and zoning that protects natural resources from invasive development	CITY	✓	✓	TIME ● ● ● COST ● ● ●
RE.2	Develop means for the public to access natural resources.	CITY	✗	✓	TIME ● ● ● COST ● ● ●
RE.3	Encourage and develop resources for public education.	CITY	✗	✓	TIME ● ● ● COST ● ● ●
RE.4	Connect into adjacent municipality's current and future greenway systems.	CITY	✗	✓	TIME ● ● ● COST ● ● ●

PUBLIC HEALTH AND EDUCATION

ID	DESCRIPTION	PARTNERSHIP	HIGH PRIORITY	ON GOING ACTION	RESOURCE NEEDS
PH.1	Develop infrastructure that promotes public health and connections.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
PH.2	Encourage new residential developments to connect to nearby school properties.	CITY	✓	✓	TIME ● ● ● COST ● ● ●

HOUSING

ID	DESCRIPTION	PARTNERSHIP	HIGH PRIORITY	ON GOING ACTION	RESOURCE NEEDS
HE.1	Preserve the residential character of Lakeland.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
HE.2	Evaluate zoning and development standards to allow for new development to occur where appropriate.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
HE.3	Maintain an adequate supply of housing that varies in size and style.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
HE.4	Pursue housing investment in and near mixed-use nodes.	CITY	✗	✓	TIME ● ● ● COST ● ● ●

PARKS AND OPEN SPACE

ID	DESCRIPTION	PARTNERSHIP	HIGH PRIORITY	ON GOING ACTION	RESOURCE NEEDS
PO.1	Protect existing and planned park land.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
PO.2	Provide bike and pedestrian connections to parks and open spaces.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
PO.3	Make the city's existing natural features more accessible to residents.	CITY	✗	✓	TIME ● ● ● COST ● ● ●

PUBLIC SERVICES AND UTILITIES

ID	DESCRIPTION	PARTNERSHIP	HIGH PRIORITY	ON GOING ACTION	RESOURCE NEEDS
PS.1	Plan for long term utility needs in north lakeland.	CITY	✗	✓	TIME ● ● ● COST ● ● ●
PS.2	Monitor utility needs in core development areas.	CITY	✓	✓	TIME ● ● ● COST ● ● ●
PS.3	Utilize existing utility easements for connectivity and recreation opportunities.	CITY	✗	✓	TIME ● ● ● COST ● ● ●



Credit: Alexis Cheyenne Photography





Board of Commissioners and Municipal Planning Commission

Meeting Cycle: Thursday, February 29, 2024

Subject: **Resolution** - approving the Lakeland Transportation Plan 2024.

Staff Contact: Emily Harrell, City Engineer

STAFF RECOMMENDATION

City Staff recommends the Board of Commissioners approve resolution R-24-2024.

BUDGET IMPACT

There is no direct budgetary impact related to this resolution.

DISCUSSION

RESOLUTION R-24-2024

APPROVING THE LAKELAND TRANSPORTATION PLAN 2024

WHEREAS, On February 29, 2024, the City of Lakeland Municipal Planning Commission recommended approval of the Lakeland Transportation Plan 2024:

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of the City of Lakeland, Tennessee, that the Lakeland Transportation Plan 2024 is hereby approved.

APPROVED AND ADOPTED by the Board of Commissioners of the City of Lakeland, Tennessee, this 29th day of February 2024, the public welfare requiring it.

ATTEST:

Josh Roman
Mayor

Cheyenne Carter
City Recorder

Meeting Cycle: Thursday, February 29, 2024

Subject: **Resolution** - approving the Lakeland PULSE Comprehensive Plan 2024.

Staff Contact: Paul Luker, Planning Director

STAFF RECOMMENDATION

City Staff recommends the Board of Commissioners approve resolution R-25-2024.

BUDGET IMPACT

There is no direct budgetary impact related to this resolution.

DISCUSSION

Lakeland P.U.L.S.E. establishes the vision and framework that will guide the growth and development of the City for the next twenty (20) years. The process for developing the plan began in the summer of 2022 and consisted of numerous public meetings and outreach to solicit input from our citizens, the advisory committee, the Municipal Planning Commission and Board of Commissioners. This document represents the culmination of that effort and vision.

RESOLUTION R-25-2024

APPROVING THE LAKELAND PULSE COMPREHENSIVE PLAN 2024

WHEREAS, On February 29, 2024, the City of Lakeland Municipal Planning Commission recommended approval of the Lakeland PULSE Comprehensive Plan 2024:

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of the City of Lakeland, Tennessee, that the Lakeland PULSE Comprehensive Plan 2024 is hereby approved.

APPROVED AND ADOPTED by the Board of Commissioners of the City of Lakeland, Tennessee, this 29th day of February 2024, the public welfare requiring it.

ATTEST:

Josh Roman
Mayor

Cheyenne Carter
City Recorder