



Board of Commissioners
Regular Meeting Agenda
Tuesday, April 28, 2026, 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** - Highway 70 Corridor Study Report
- VII. PUBLIC COMMENTS:
- VIII. REGULAR AGENDA:
 1. Municipal Planning Commission Business:
 - a. **Action** - recommending approval to adopt the Highway 70 Corridor Study to the Board of Commissioners.
 2. Board of Commissioners Business:
 - a. **Resolution** - adopting the Highway 70 Corridor Study.
- IX. ANNOUNCEMENTS:
- X. ADJOURNMENT:



2026

HIGHWAY 70 CORRIDOR STUDY

LAKELAND, TN

ACKNOWLEDGMENTS

Thank you to the residents, stakeholders, community leaders, staff, and officials who invested their time and expertise in the creation of this Corridor Study for the future of Highway 70 in Lakeland, Tennessee.

City of Lakeland

Josh Roman, Mayor
Michele Dial, Vice Mayor
Jim Atkinson, Commissioner
Derek Johnston, Commissioner
Connie McCarter, Commissioner
Emily Harrell, City Manager and City Engineer
Luis Camarillo Hernandez, Senior Engineer
Paul Luker, Planning Director
Alex Barthol, Planner
Jasmine Barbee, Executive Administrator

Lakeland Stakeholders

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Prepared by:



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01

Executive Summary

PLAN PURPOSE

PLANNING PROCESS

RESEARCH AND PUBLIC INPUT

PROPOSED CONCEPT VISUALIZATION

CORRIDOR RECOMMENDATIONS

Executive Summary

PLAN PURPOSE

The Highway 70 Corridor Study provides guidance on key recommendations and strategies to create a functional, beautiful, multimodal environment in the City of Lakeland. Research and analysis have been conducted to understand the issues and opportunities associated with Highway 70 within the city limits. This analysis serves as the basis for future policy recommendations regarding land use, transportation, streetscape improvements, and economic development strategies.

Key Objectives

While developing the plan, it became evident that residents and local leaders are clear about what they do not want, having cited numerous nearby examples of hazardous roads. However, determining the exact future design of Highway 70 is challenging. The community has reached a consensus that this plan will accomplish the following objectives:

- » Create a safe design for pedestrians to cross Highway 70 and access destinations along the corridor
- » Foster a stronger sense of place and identity for Lakeland along the highway
- » Improve traffic safety by reducing vehicle speeds.
- » Identify potential funding sources for enhancements



PLANNING PROCESS

The consulting team used a four-step process for this project, which included the following:

Discovery and Analysis

This phase focused on exploring existing conditions, including land use, transportation safety and operations, and physical conditions, among other data. Past plans were reviewed, and input was solicited from residents, business owners, and leadership. Public engagement included key stakeholder interviews and a public survey.

Imagine and Create

This phase built upon the understanding of current conditions to explore opportunities and priorities for Highway 70 from the community. This effort built from community needs and desires and technical analysis to craft a vision for the corridor. The consultant team hosted a public workshop to gain input on the draft vision for the corridor.

Test and Refine

The next step utilized public input and technical analysis to draft and define strategies and recommendations to accomplish community desires.

Implementation Strategies

The final step of the process analyzed the strategies and framework needed to implement the corridor vision. Actions to support mobility improvements and public realm considerations were identified and organized into an implementation matrix.

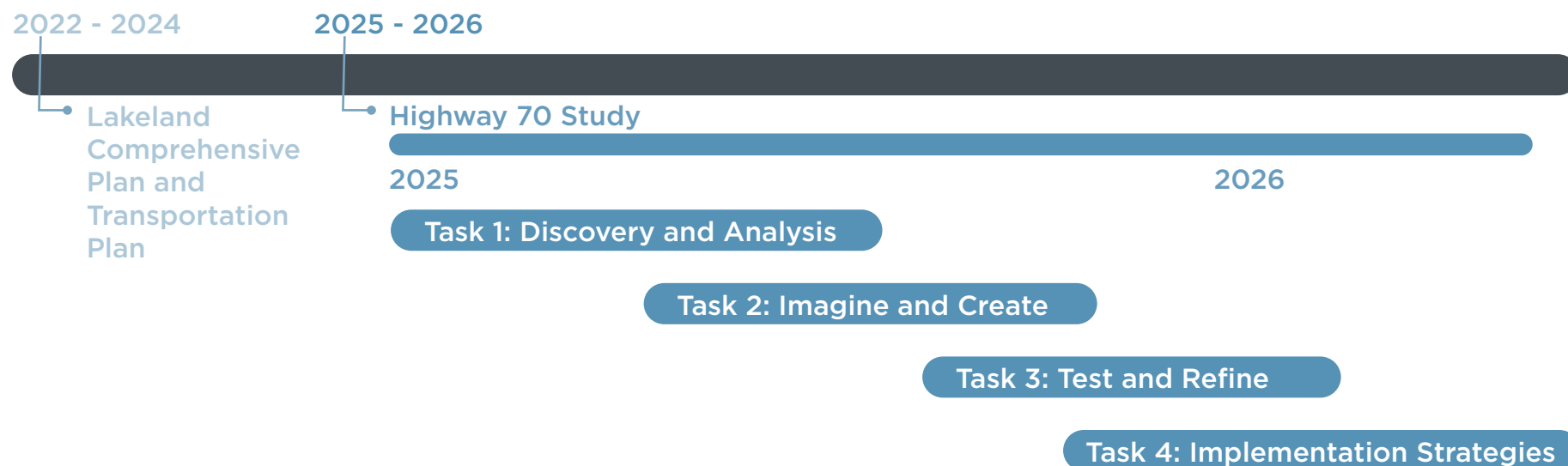


FIGURE 1-1: CORRIDOR STUDY AREA

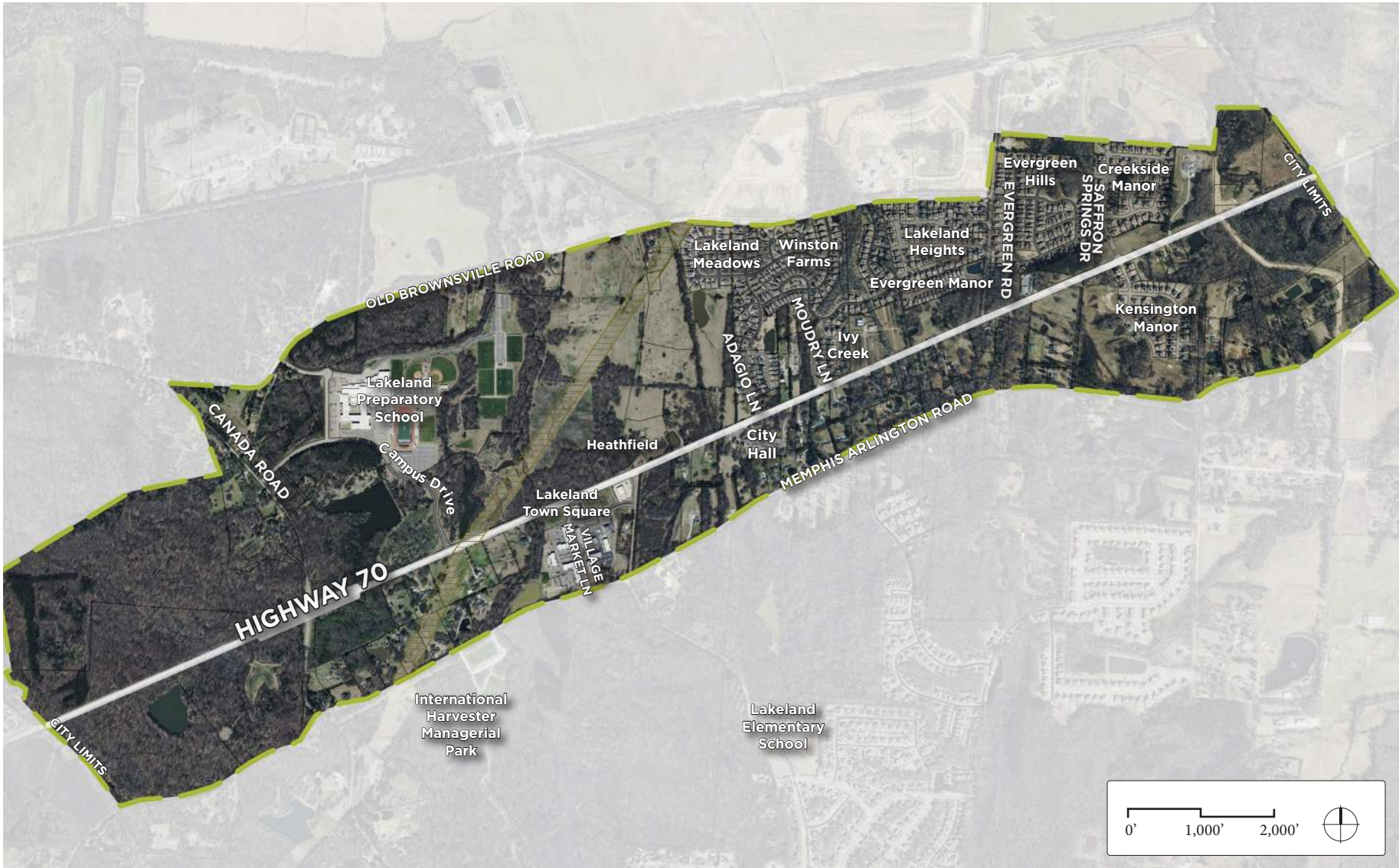
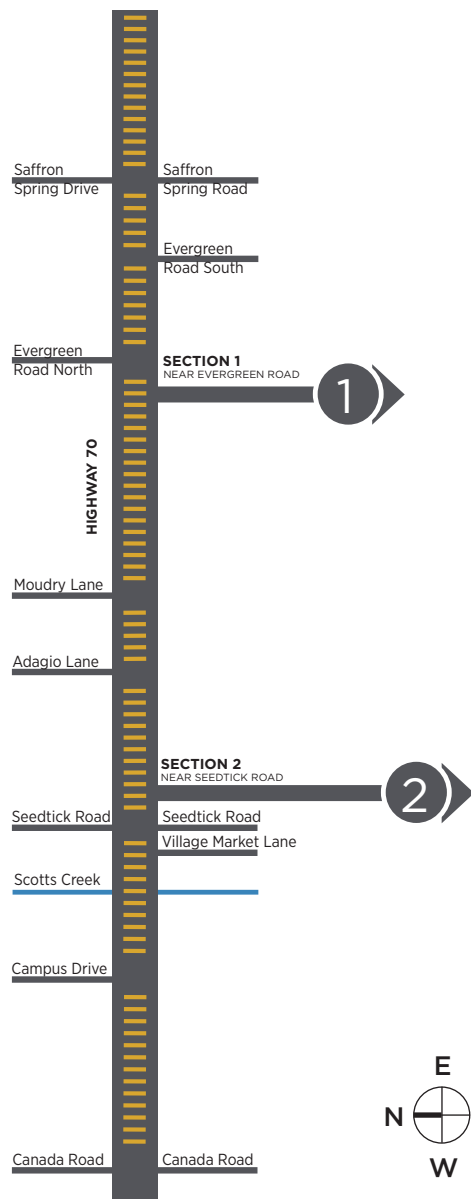
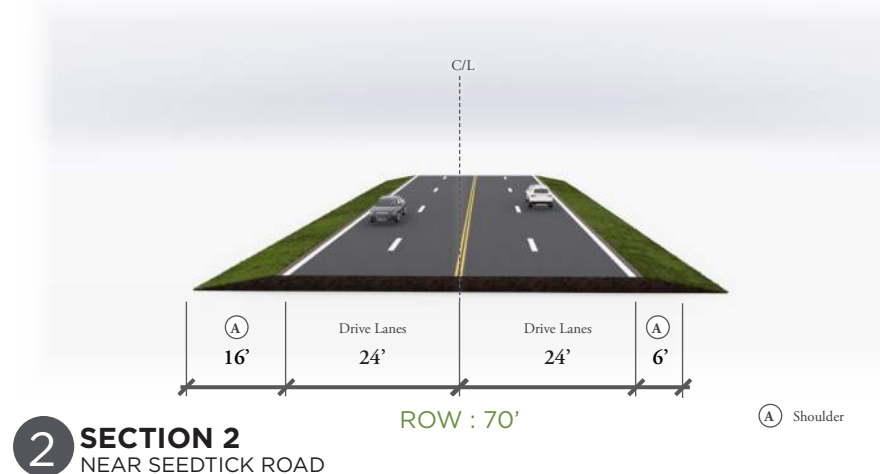
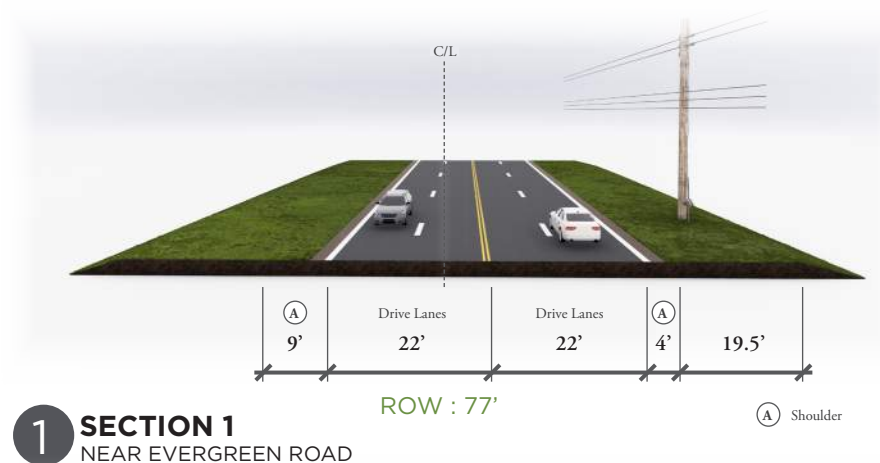


FIGURE 1-2: CORRIDOR DIAGRAM



EXISTING INFRASTRUCTURE

The majority of the corridor is a four lane section with a right-of-way of approximately 70 to 77 feet. The roadway is wider near Canada Road.



RESEARCH AND PUBLIC INPUT

Current Land Use Along Highway 70

- Predominantly **residential and agricultural** land uses dominate the corridor.
- **Low-density development** includes single-family homes and large tracts of undeveloped land.
- **Scattered commercial uses** are located near key intersections, such as Canada Road and Seed Tick Road.
- **Canada Road** serves as a gateway to Lakeland, connecting I-40 to SR-1 (U.S. Highway 70), and traverses both residential and commercial zones.
- The existing **infrastructure is limited**, with narrow lanes, minimal sidewalks, and poor sight distances especially in residential areas.
- The city's Land Development Regulations emphasize **a need for walkable areas** and building public space.
- The Lakeland Comprehensive Plan supports **smart growth, multimodal transportation, and sustainable land use**.

Public Input

Following the discovery and analysis phase of this project, an initial plan was developed and reviewed by a stakeholder group. Next, the first of two surveys was conducted. The result of that input, along with a community visioning workshop and a second survey, is documented in this report. Below is a summary of key takeaways from the public engagement process:



Safety is identified as the #1 priority for the corridor.



Stakeholders and residents reached a consensus on the need to preserve Lakeland's rural, tree-lined character and differentiate it from neighboring cities by incorporating natural elements.



A significant portion of the opposition is focused on the proposed roundabout near Lakeland Prep (Campus Road), with residents fearing it would be too difficult for young, inexperienced drivers to navigate.

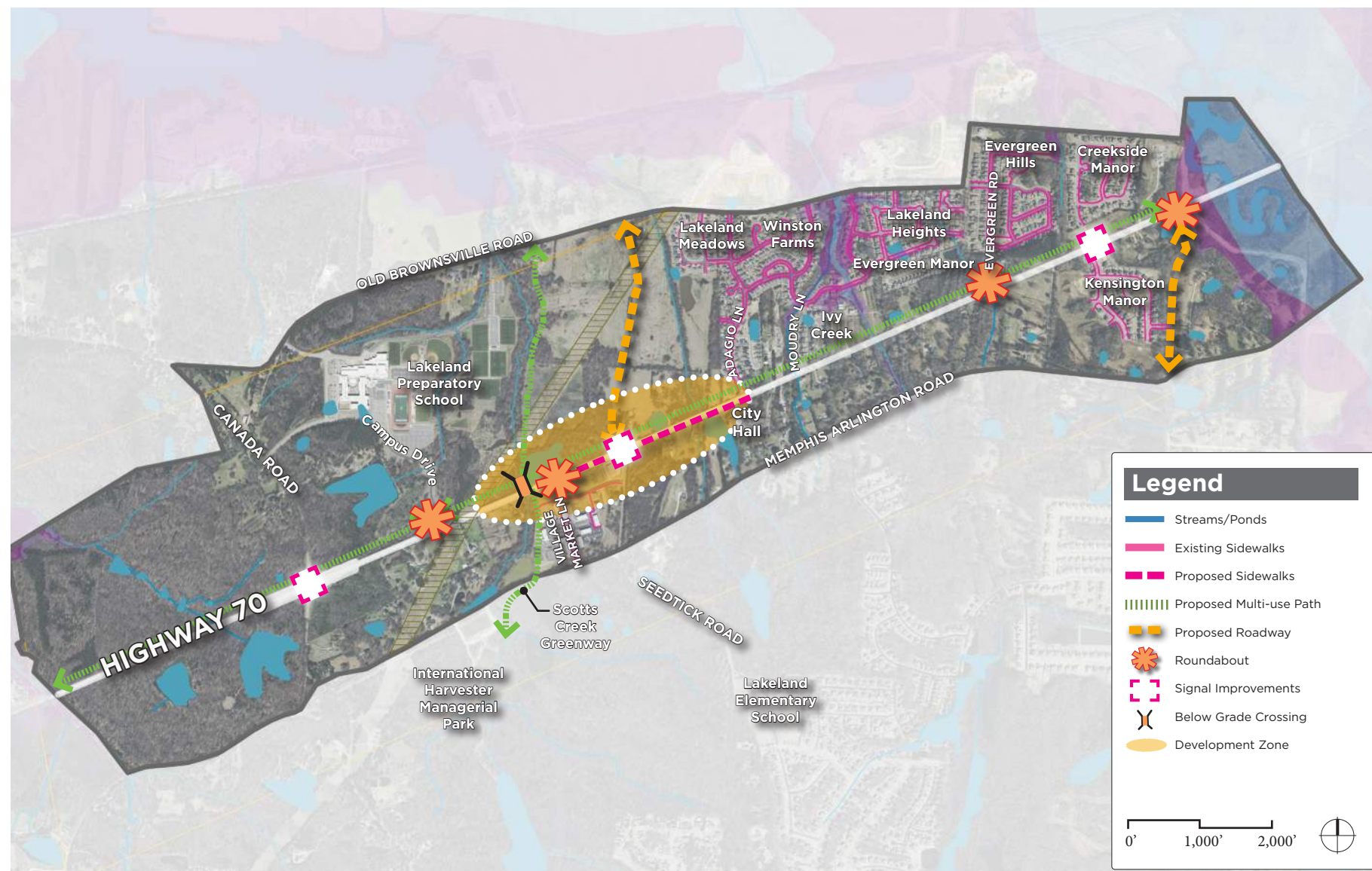


Community members expressed frustration with current construction impacts and requested more frequent project updates and better notice for neighborhood-specific disruptions.



78% of respondents indicated a willingness to walk at least half a mile if safe access is provided, and 60% would bike at least one mile, highlighting the potential success of improved connectivity.

FIGURE 1-3: PROPOSED CONCEPT PLAN



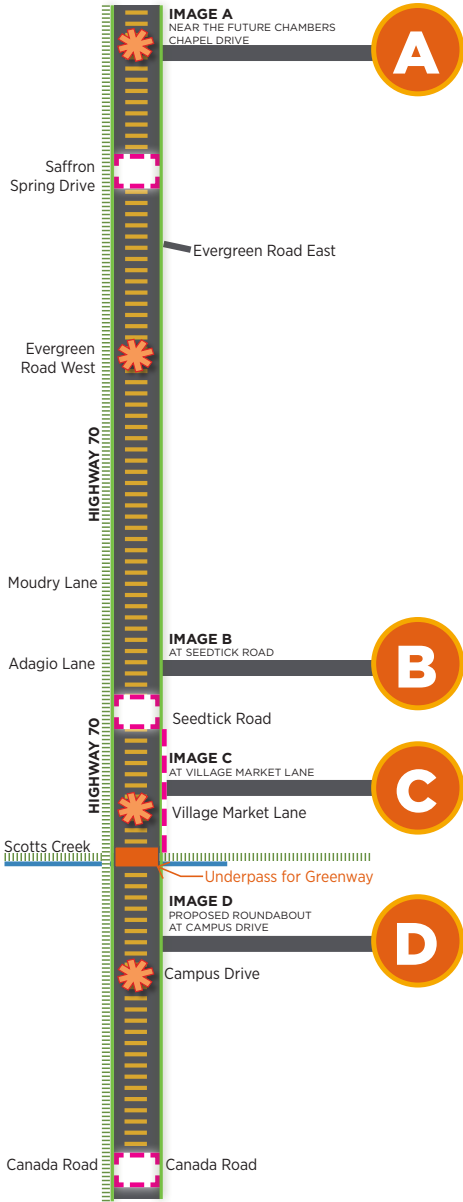
PROPOSED CONCEPT VISUALIZATION

Following the establishment of the preferred Development Scenario Concept, the team prepared a series of conceptual visualizations illustrating the recommended alternative for local leaders, stakeholders, and the public to review. The visualizations highlighted key development focus areas and integrated roadway concept design with preferred surrounding development scenarios to demonstrate their interaction.



Scan the QR code or follow this link: <https://vimeo.com/1144931972/58c3b81846?share=copy&fl=sv&fe=ci> to see the full fly-through video.

FIGURE 1-4: CORRIDOR DIAGRAM



Images from Visualization



CORRIDOR RECOMMENDATIONS

Summary of improvements

The key elements of the plan include the following:

- » 3.2 miles of multi-use path
- » 4,670 linear feet of sidewalks
- » 1 new bridge over Scotts Creek with greenway connection
- » 7 intersection improvements (including 4 roundabouts)

The project team developed short-, mid-, and long-term actions that will help guide the City of Lakeland.

Short-term Actions (1-10 Years)

ROW Verification Survey

The city should complete a boundary survey of the entire corridor. This crucial first step will allow the city to verify existing TDOT ROW, utility easements, and property owners along Highway 70. By establishing this accurate baseline, the city can strategically identify areas to acquire additional ROW, directly supporting the goal of increasing physical separation between users and motorized traffic.

ROW Acquisition and Dedication

The city should begin the process of ROW acquisition for the corridor improvements. Because of the length of the corridor and number of properties lining the corridor, ROW acquisition will be a lengthy process that will continue into mid and potentially long-term actions. The city should expect appraisals, review appraisals, negotiations, and even some properties to go to condemnation. Each of these takes time in the ROW acquisition process.

Utility Relocation

The city should also begin any utility relocations determined necessary from the survey in the short-term due to the lengthy nature of the utility relocation process. In particular, the relocation of the MLGW aerial powerlines should begin, to make room for the multi-use pathway and remove the need for guardrail.

Temporary Traffic Signal at Evergreen Road West

This measure will immediately improve the safety of this intersection, which is currently unsafe due to sight distance concerns. Residents expressed concern during the public engagement process about this intersection, which has had at least one serious crash as described in the crash analysis and appendix.

Grant Applications

With the corridor study in-hand, the city should begin applying for TDOT and Federal Grants to in-part fund the improvements in the mid- and long-term. A discussion of applicable grants is included in this section.

“City Core” Design

The city should begin design of the Core improvements of the corridor. This section extends from Campus Drive east to City Hall. Improvements in this section include a roundabout at Campus Drive, a new bridge over Scotts Creek, a roundabout at Village Market Lane, pedestrian improvements at the new Seedtick Road signal, multi-use pathway on the north side of the highway, and sidewalk on the south side of the highway.

Mid-Term Actions (10 to 20 Years)

Phased “City Core” Construction

Once grant funding has been obtained and design is complete, the city should begin implementing improvements to the “City Core” section of the corridor.

- » Coordinate with TDOT for the replacement of Scotts Creek bridge to ensure clearance for a multiuse pathway under the bridge.

“Corridor Extension” Design

The city should begin the design of the remainder of the corridor, which can be broken into two sections:

- » The west section of the complete corridor runs from the west city limits to Campus drive and includes pedestrian upgrades to the intersection with Canada Road and a multi-use pathway on the north side of the highway for the entire length.
- » The east section of the complete corridor runs from City Hall to the east city limits, and includes a roundabout at Evergreen Road West, pedestrian improvements at Saffron Springs Drive, a roundabout at the new Chambers Chapel Road extension, and multi-use pathway on the north side of the highway for the entire length.

Long-Term Actions (20 to 30 Years)

- » “Corridor Extension” construction, optionally separated into an east and west phase.
- » Reconstruction of the Scotts Creek Bridge and multi-use path underpass if did not occur during “City Core construction”
- » Multi-use path connection to Scotts Creek Greenway extending toward Lakeland Prep School and International Harvester Managerial Park.



Drone Image of Moudry Lane Intersection

02

Existing Conditions

OVERVIEW

COMMUNITY PROFILE

CORRIDOR STUDY AREA

EXISTING INFRASTRUCTURE

02

Existing Conditions

OVERVIEW

Lakeland is a suburban city in northeastern Shelby County, Tennessee, located within the Memphis metropolitan area. Incorporated in 1977, the city has grown steadily over the past two decades due to its family-oriented neighborhoods, strong schools, and commitment to green space. Proximity to Interstate 40 allows for easy access to Memphis employment centers while preserving Lakeland's suburban identity.

Community Snapshot

	Population (2023 estimate)	14,068
	Median Age	39.5 years
	Households	5,246
	Median Household Income	\$113,843
	Poverty Rate	2.35%
	Median Home Value	\$373,800
	Homeownership	80%
	Average Commute	27 minutes
	Racial Composition	73% White, 10% Black, 5% Asian, 7% Hispanic, 5% Other



COMMUNITY PROFILE

Population & Growth

Lakeland's population has more than doubled since 2000, reflecting suburban expansion in Shelby County. Growth is projected to continue, though at a moderate pace compared to earlier decades.

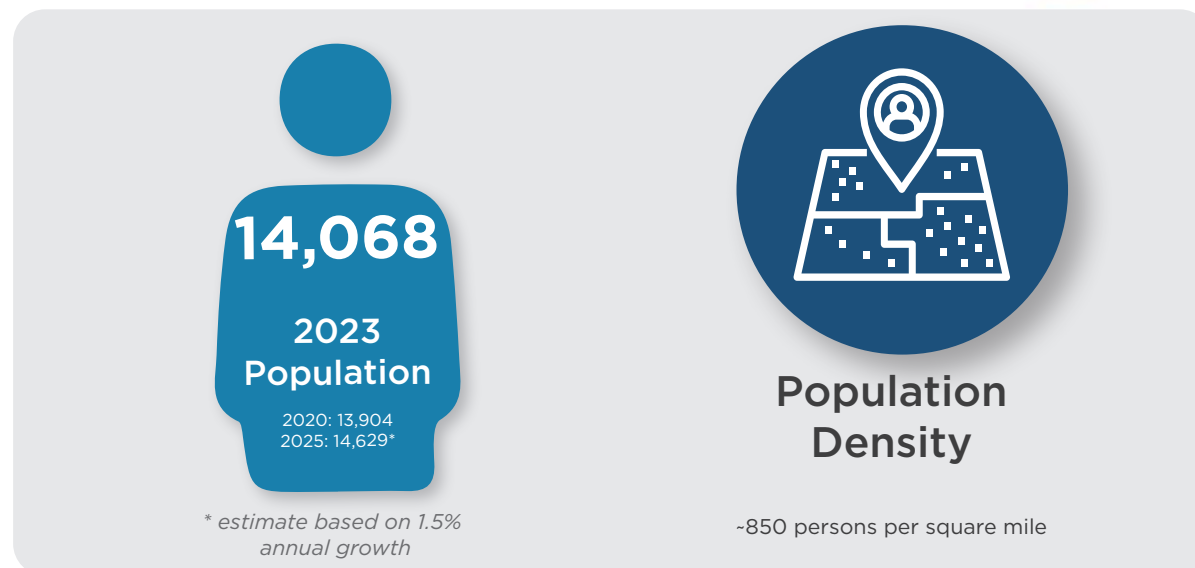
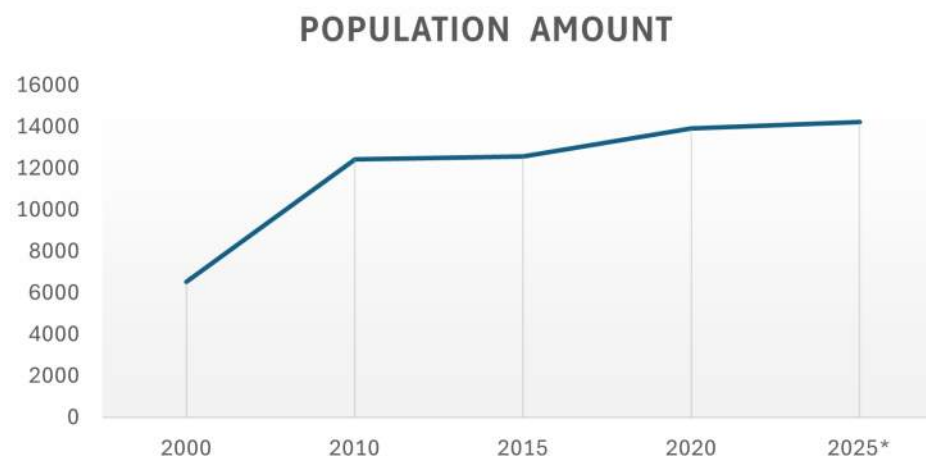


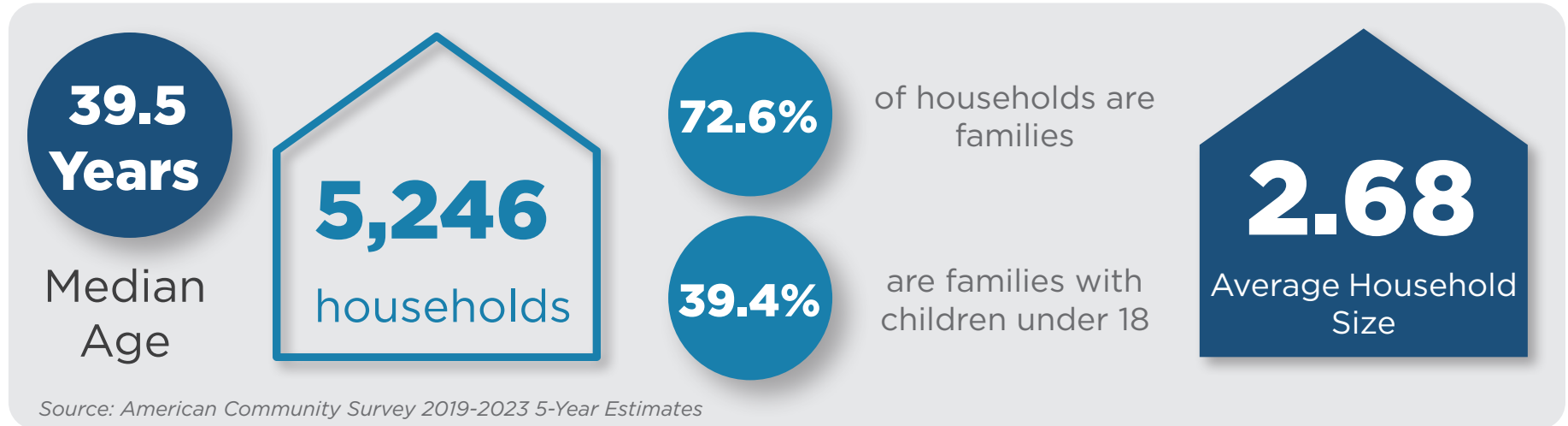
FIGURE 2-1: Population Change in Lakeland, TN (2000 - 2025)



Source: American Community Survey 2019-2023 5-Year Estimates.

* ESRI 2025 projection estimate

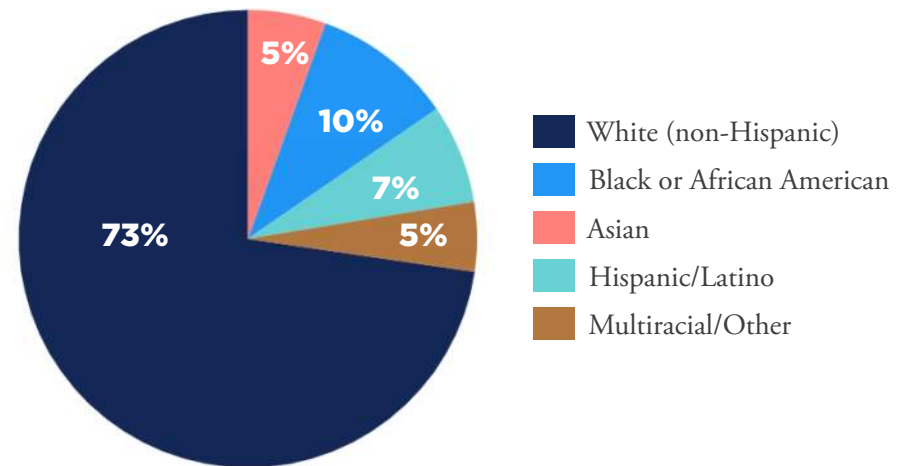
Demographics



Race and Ethnicity

Lakeland is majority White but has become more racially diverse over the past decade, with notable growth in Hispanic and Asian populations.

FIGURE 2-2: Racial Composition



Source: 2020 Census



Education

Education levels in Lakeland are significantly above state averages, reflecting a well-educated resident base and the city's emphasis on high-quality public schools.

97%

have obtained
a high school
diploma or higher

53%

have obtained a
Bachelor's degree
or higher



*Lakeland School District (established in 2014) consists of Lakeland Elementary (K-4) and Lakeland Preparatory School (5-12).
Source: Lakeland School District.*

Economy and Income

Lakeland residents benefit from relatively high incomes, and poverty levels are among the lowest in the region. The majority of employed residents commute to nearby Memphis and surrounding suburbs for work. Figure 2-3 provides a comparison on the median household income between Lakeland to Memphis MSA, state, and national data.

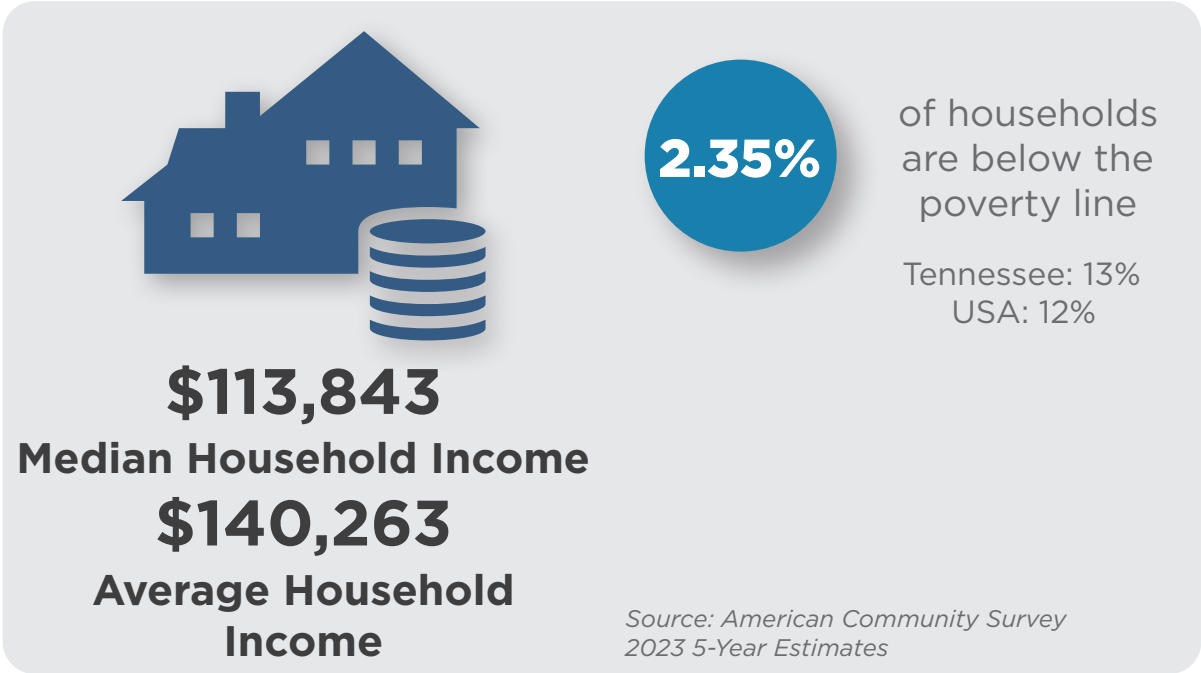
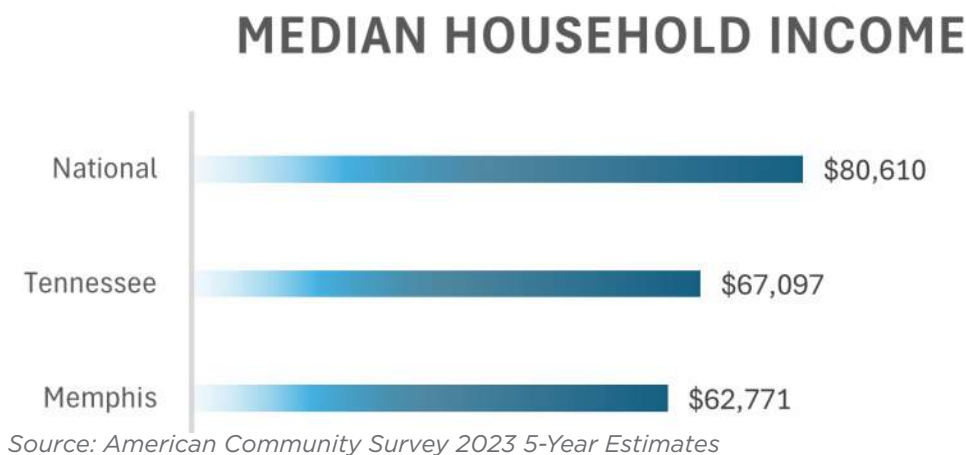


FIGURE 2-3: Median Household Income Comparison



Housing

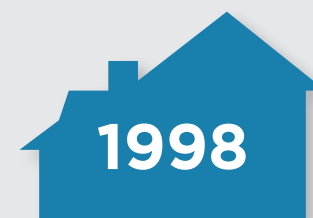
Lakeland's housing stock is primarily owner-occupied single-family homes in established subdivisions, reflecting its low-density, suburban character. However, recent developments are introducing more diverse housing options.

Lakeland Town Square is a mixed-use project that includes nearly 300 units, offering walkable access to shops, restaurants, and services.¹ This development introduces "missing middle" housing that helps bridge the gap between single-family homes and large apartment complexes.

Nearby projects like Heathfield will further diversify housing with high-end townhomes and amenities like trails and a boutique hotel.² These future developments appear to support the city's goals for smart growth, walkability, and mixed-use zoning.



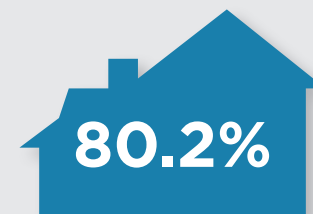
5,270 housing units



Median Year Built



\$373,800
Median Home Value



**Owner-Occupied
Housing Units**



\$1,817
**Median Monthly
Mortgage Cost**

Source: ESRI Business Analyst

¹ Shelby County Chamber Alliance.

² Shelby County Chamber Alliance.

Transportation

Lakeland functions largely as a commuter suburb. Limited public transit options place high reliance on private automobiles. Only 1.6% of households do not have access to a vehicle, compared with 7.3% in the Memphis MSA. The WalkScore for Lakeland is low and considered car dependent.



Average Commute Time



2 vehicles per household

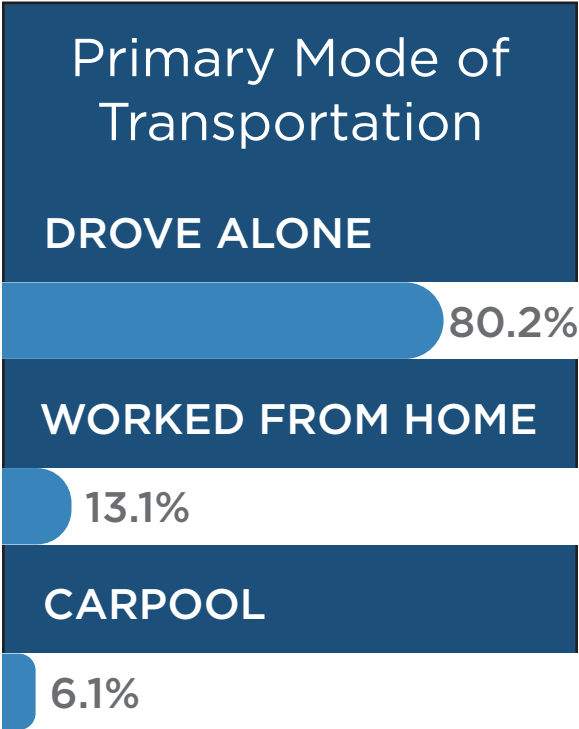
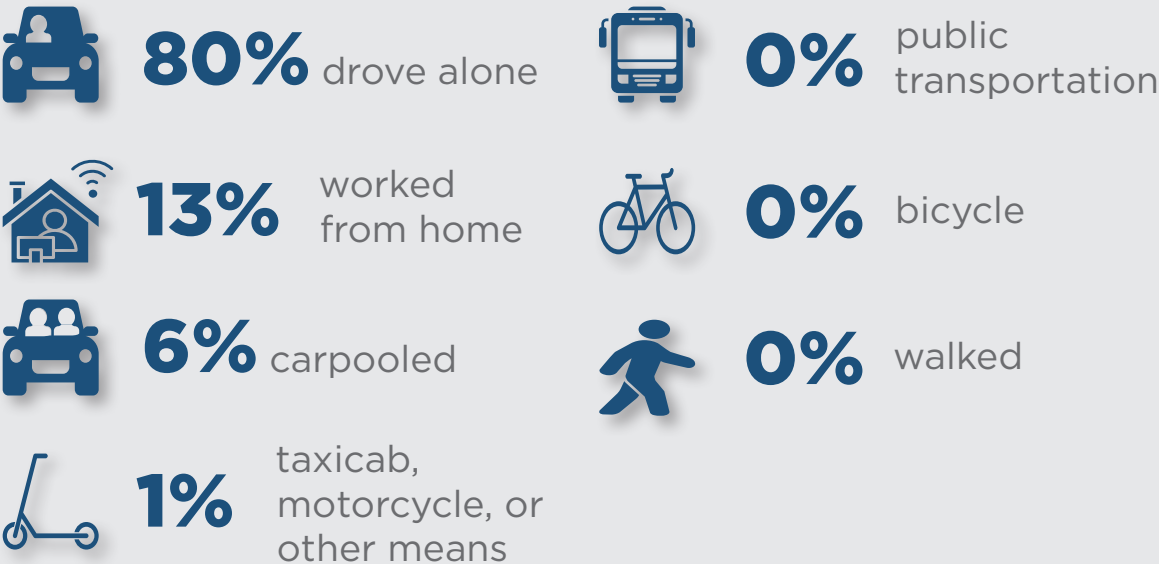


FIGURE 2-4: TRANSPORTATION MODE SHARE



Source: American Community Survey 2023 5-Year Estimates

Planning Considerations



Growth Management: Continued residential development requires balanced investment in infrastructure and public facilities.



Transportation: Auto-dependence highlights the need for multimodal planning and regional connectivity.



Housing: Rising home values may present affordability challenges for younger households and seniors.



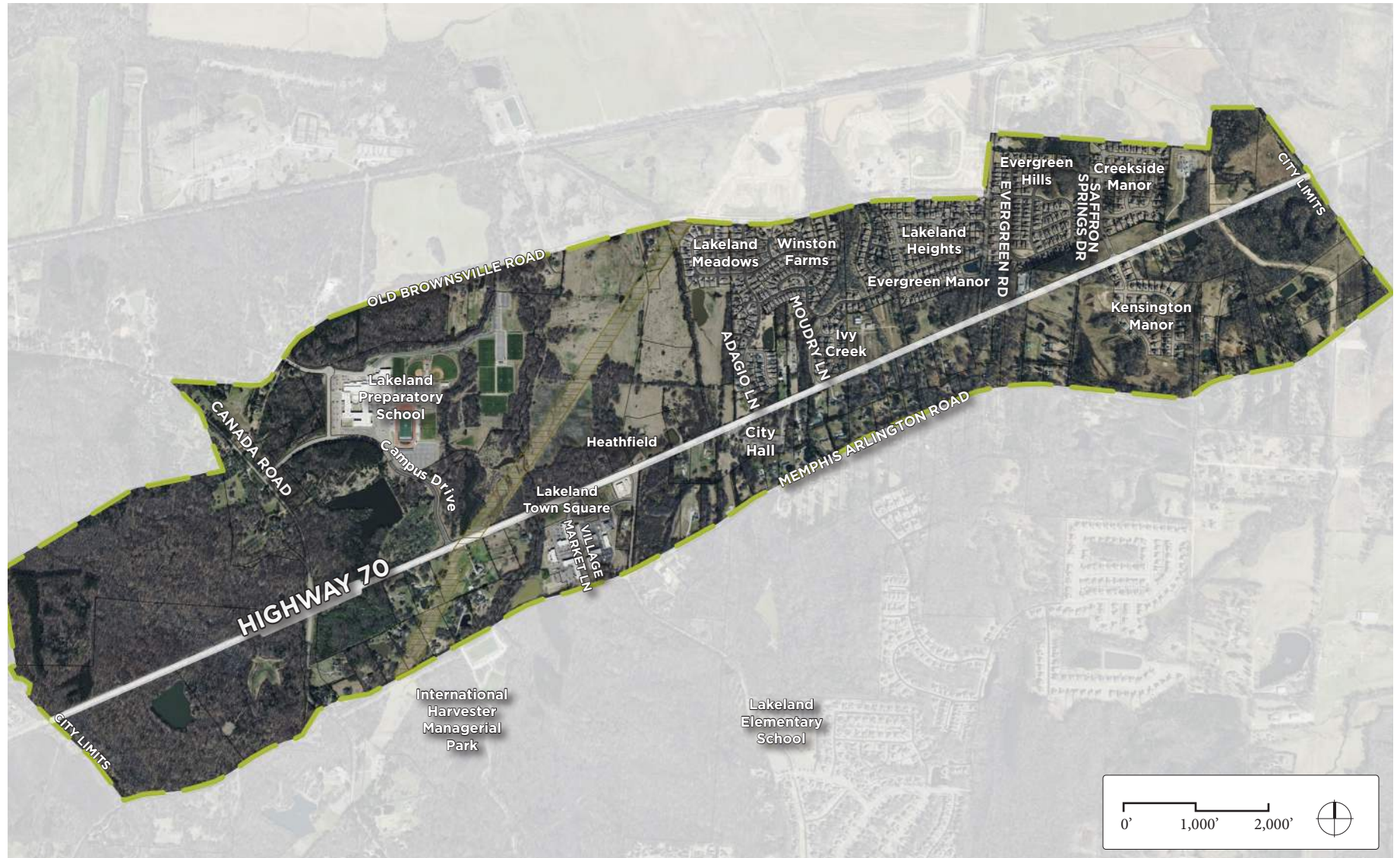
Demographics: Increasing diversity, relatively young median age, and ratio of families with children suggest demand for schools, parks, and family-oriented services.



Economic Development: High household incomes and educational attainment provide opportunities to attract professional services and small businesses to diversify the local economy.

CORRIDOR STUDY AREA

FIGURE 2-5: CORRIDOR STUDY AREA





Conditions Summary

The current land use along Highway 70 in Lakeland is predominantly residential and agricultural. The corridor is characterized by low-density development, including single-family homes and large tracts of undeveloped land, which contribute to a rural-suburban feel. Canada Road, which connects Interstate 40 to Highway 70, is considered a gateway to the city and traverses both residential and commercial zones; however, the existing infrastructure is limited, with narrow lanes, minimal sidewalks, and poor sight distances in some locations. The Lakeland Land Development Regulations aims to create walkable, aesthetically cohesive communities by focusing on the relationship between buildings and public spaces rather than strictly separating land uses.^{1, 2}

Lakeland Town Square, located at the intersection of U.S. Highway 70 and Village Market Lane, is a mixed-use development reshaping the land use character of the Highway 70 corridor. Phase 1 of the project, now complete, includes 138 residential flats and over 21,000 square feet of commercial space, with tenants ranging from restaurants and coffee shops to fitness studios and financial services. The development is designed to be pedestrian-friendly and vertically integrated, blending residential, retail, and entertainment uses in a compact footprint. Phase 2, currently underway, will add 102 more flats, 50

townhomes, and 37,500 square feet of additional commercial space. This project is supported by a Tax Increment Financing (TIF) district, which has increased in value from \$12 million to over \$21 million due to rising property appraisals. The Town Square creates a need for infrastructure improvements, including potential traffic calming measures and a new fire station.^{3, 4}

The area surrounding Lakeland Town Square is transitioning from predominantly low-density residential and agricultural land uses to a more urbanized, mixed-use environment. This shift is guided by the city's Comprehensive Plan and Land Development Regulations, which promote urban design. The Town Square is strategically positioned to serve as a central node in Lakeland's broader vision for growth, with nearby developments like Heathfield further reinforcing this trend. Heathfield, located directly across Highway 70, will include a boutique hotel, amphitheater, restaurants, and high-end townhomes, all connected by trails and golf-cart paths. These developments are reshaping the Highway 70 corridor into a vibrant, walkable district that supports a mix of uses and enhances community identity.

As Lakeland continues to grow, the integration of land use planning with transportation

improvements along Highway 70 will be critical to creating spaces that are sustainable, accessible, and aligned with the city's long-term goals.⁵

Looking ahead, Lakeland is actively planning for more integrated and higher-density development along the Highway 70 corridor. The newly approved TIF district targets areas north of Highway 70 and east of Lakeland Prep, supporting TIF developments like Lakeland Meadows and Heathfield. These projects aim to introduce a blend of residential, commercial, and civic uses, enhancing connectivity and community amenities. The city's Comprehensive Plan outlines a vision for future land use that includes multimodal transportation options, expanded public infrastructure, and preservation of natural resources. Recommendations for the corridor include implementing traffic calming measures, expanding pedestrian and bicycle infrastructure, and encouraging mixed-use zoning to support a vibrant, accessible, and sustainable community. These efforts reflect Lakeland's commitment to balancing growth with quality of life and environmental stewardship.⁶

1 Canada Road Project - Lakeland, TN

2 Land Development Regulations | Lakeland, TN - Official Website

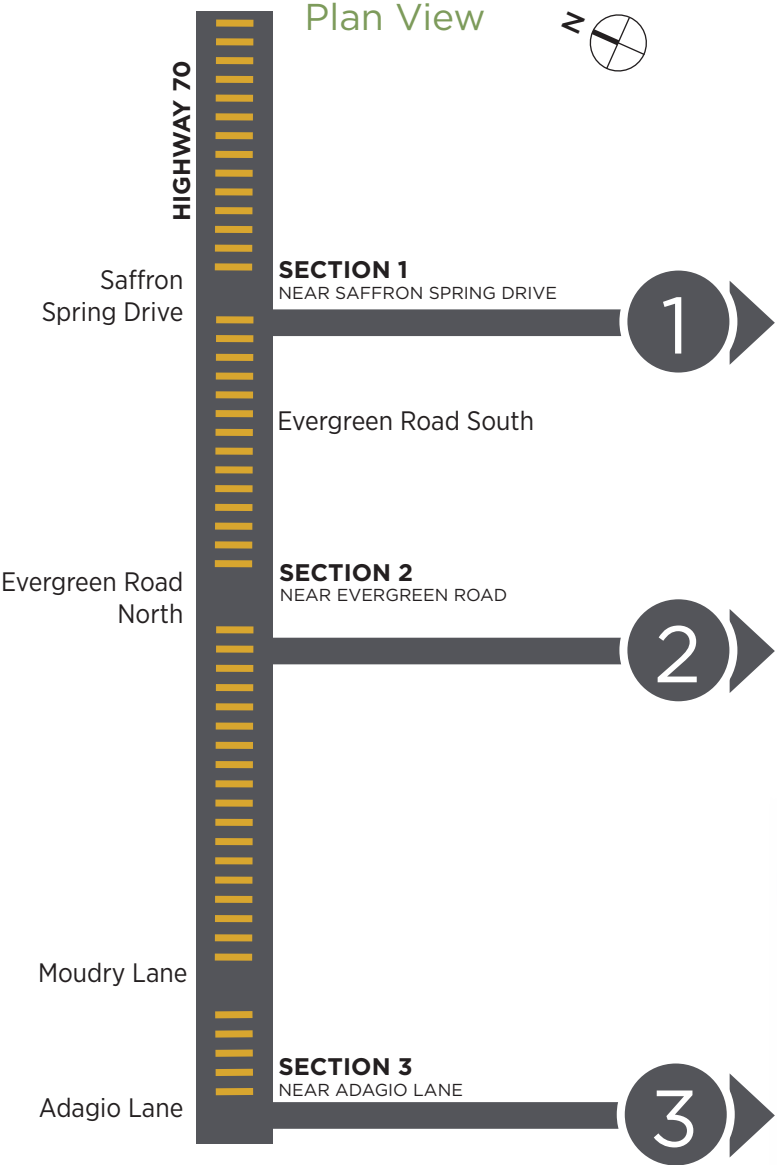
3 Work to begin on second and final phase at Lakeland Town Square

4 Lakeland Approved by Shelby County Commission for Fourth TIF District

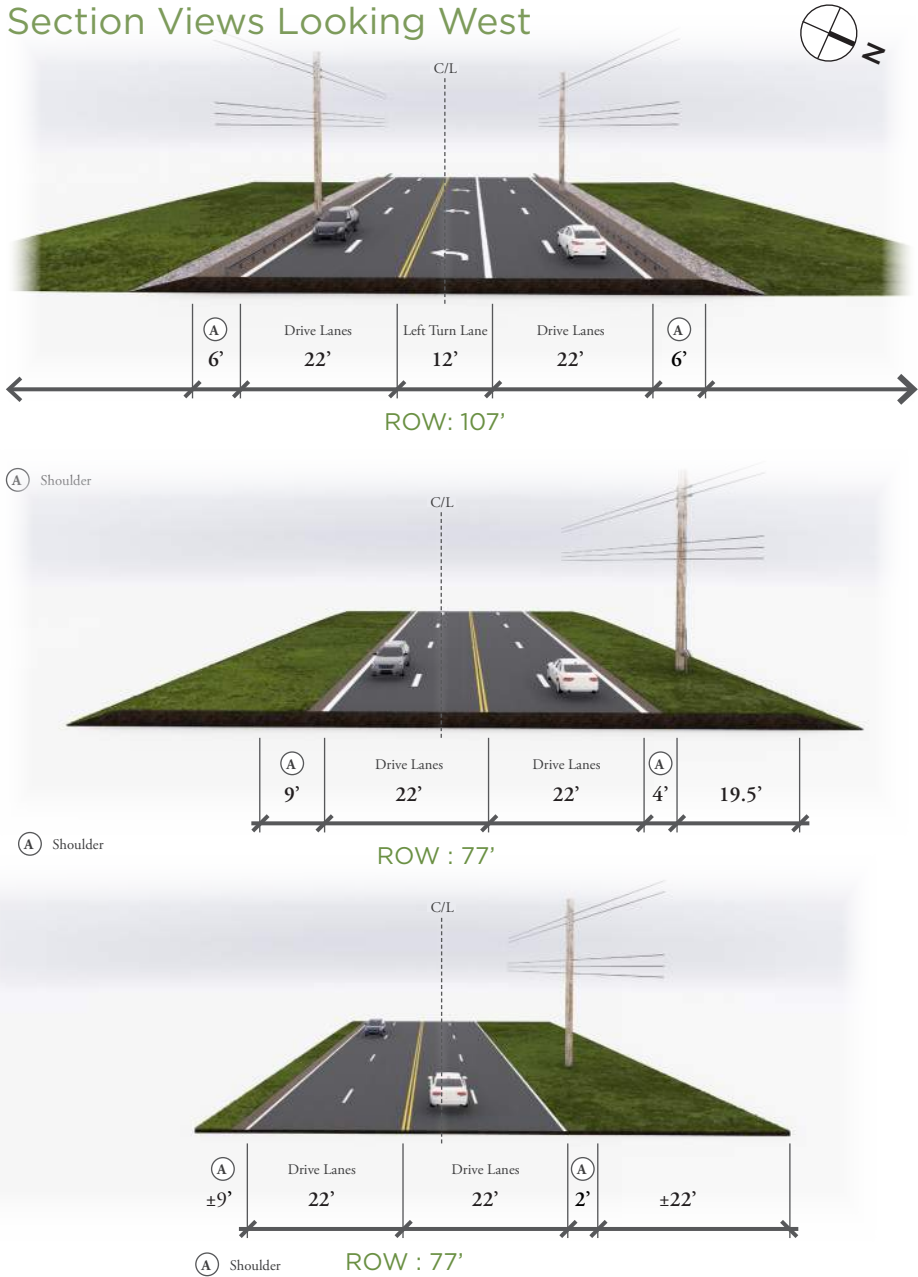
5 Heathfield Mixed Use Development Approved - Lakeland Currents

6 Comprehensive Plan | Lakeland, TN - Official Website

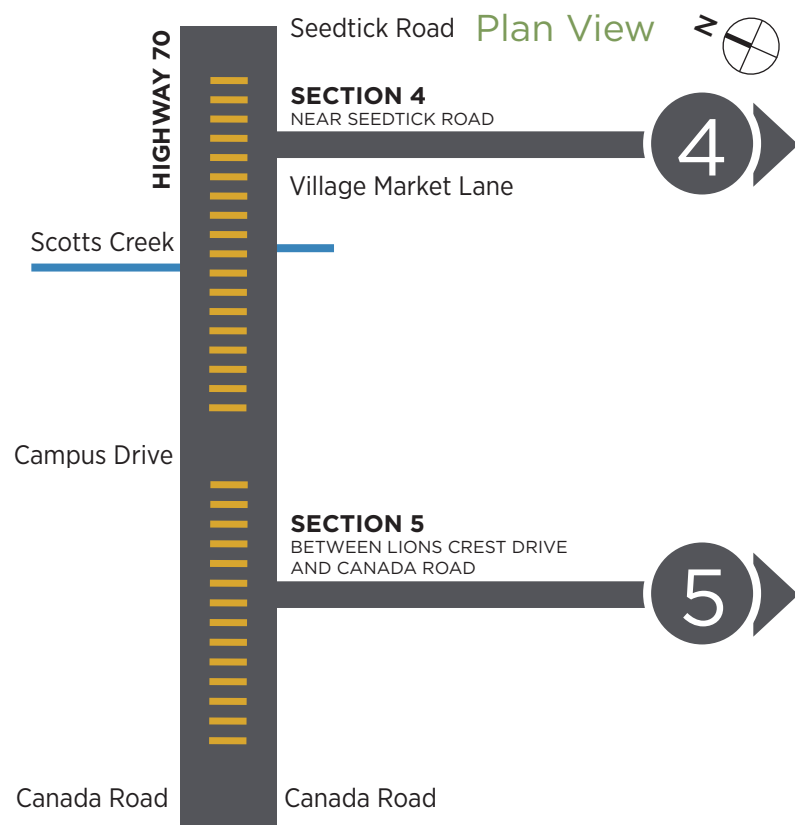
EXISTING INFRASTRUCTURE



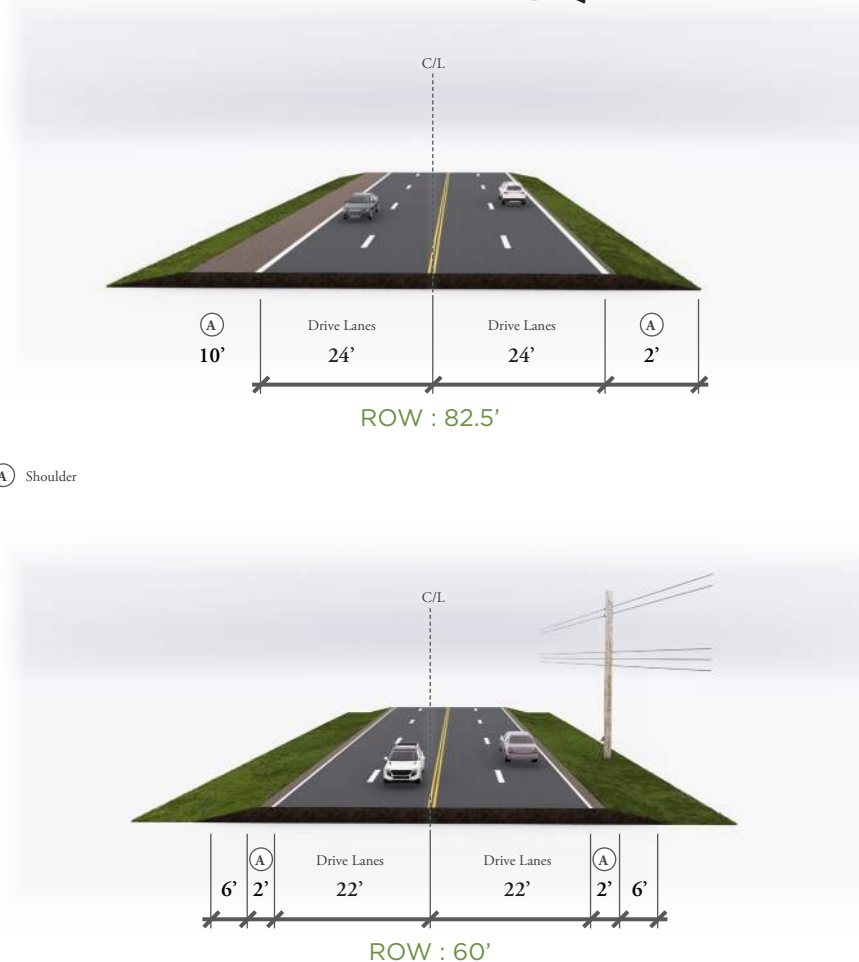
Section Views Looking West



EXISTING INFRASTRUCTURE



Section Views Looking West



03

Land Use Analysis and Scenario Planning

LAND USE RESEARCH

CORRIDOR ANALYSIS

PREVIOUS STUDIES

SCENARIO CONCEPTS

Land Use Analysis and Scenario Planning

LAND USE RESEARCH

As part of the ongoing Highway 70 Corridor Study, we have completed a land use analysis based on a review of the following planning documents:

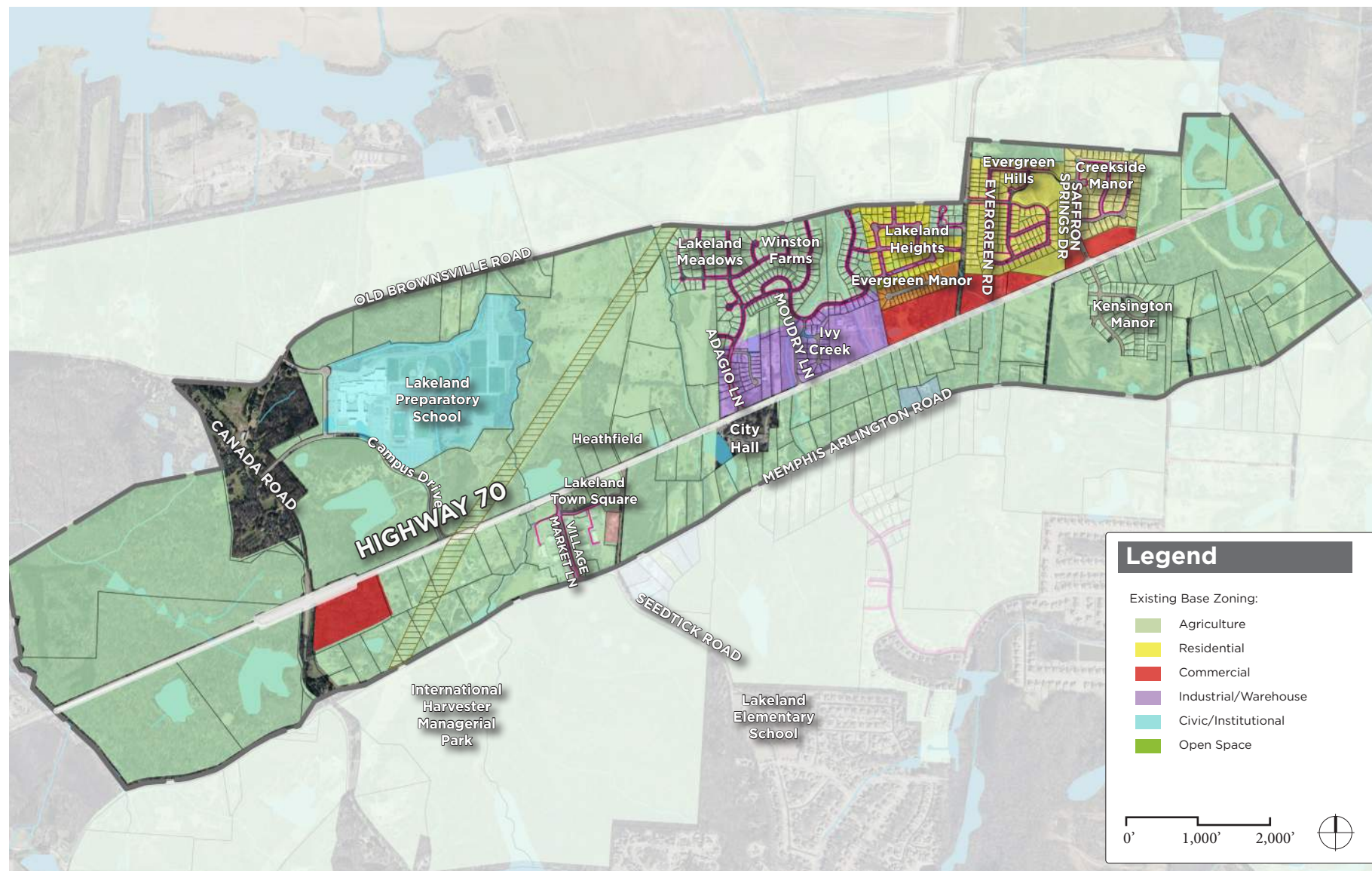
- » City of Lakeland Comprehensive Master Plan (2024)
 - » Existing Land Use Map
 - » Proposed Land Use Map
- » Lakeland Transportation Plan (2024)
- » City of Lakeland Land Development Regulations (2025)

The existing land use zoning is mostly agricultural (see Figure 3-1). This designation is considered a base zoning for several properties despite being redeveloped. For example, Lakeland Meadows and Winston Farms have an overlay that allows the residential zoning.



Drone image of Highway 70 near Moudry Lane.

FIGURE 3-1: Existing Land Use Zoning



CORRIDOR ANALYSIS

The project's analysis forecasts for future land use patterns along the Highway 70 corridor as follows:

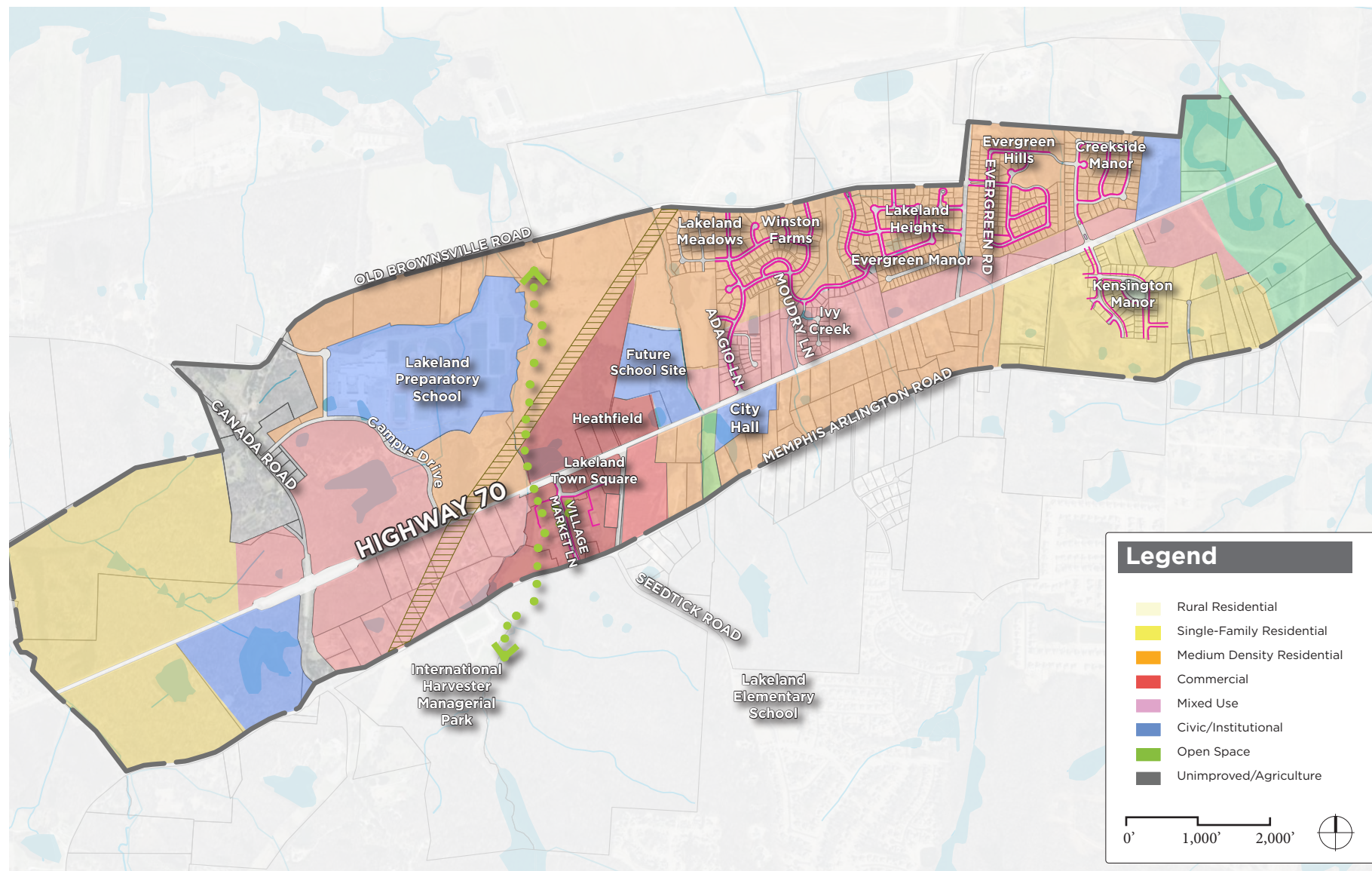
- » Eastern Corridor: Anticipated development of single-family residential neighborhoods, consistent with current zoning and adjacent land use trends.
- » Central Corridor (Seedtick Road & Village Market Lane): Continued growth of mixed-use development in the emerging downtown area, supporting walkability and integrated residential/commercial uses.
- » Eastern & Western Nodes of Highway 70: Potential for commercial development, leveraging proximity to major intersections and existing infrastructure.
- » Far Western Corridor: Preservation of open space, aligning with community goals for environmental conservation and recreational use.

The number of existing units and commercial square footage was calculated within this report. Using information from the Shelby County GIS website, the number of planned units and commercial spaces were also calculated. The land use analysis map on the following page illustrates the existing and future land use zoning.



Drone image of a subdivision near Highway 70.

FIGURE 3-2: Land Use Analysis Map



PREVIOUS STUDIES

The City of Lakeland Comprehensive and Transportation Plan serves as a guide for future land use, transportation, recreation, and natural resources, outlining the city's vision for sustainable growth, improved infrastructure, and enhanced quality of life for its residents.

The process began in 2022 and was completed a year later. As part of the Comprehensive Plan, the City of Lakeland also developed a Transportation Plan, which included recommendations for road widening on Highway 70.

During the community input process, citizens were invited to share their comments as shown on the map below. Safety concerns prompted the City of Lakeland to embark on a specific corridor study for Highway 70.

FIGURE 3-3: Transportation Plan Comments





SCENARIO CONCEPTS

The consulting team met with the client team on October 28, 2025, to discuss two potential options for improving the corridor.

Scenario Concept A – This concept offers the most comprehensive improvement plan, which includes four proposed roundabouts aimed at enhancing safety and serving as gateways into the community. A multi-use path will run along the north side of Highway 70, extending almost the entire length from the western city limits to the future Chambers Chapel Road intersection to the east. Additionally, a proposed sidewalk on the south side of the corridor will connect City Hall to Lakeland Town Square.

Scenario Concept B – This concept adopts a more conventional approach by utilizing signalized intersections instead of roundabouts. According to the data, signalized intersections are associated with a higher likelihood of collisions compared to roundabouts. However, some residents have expressed concerns about navigating roundabouts. This concept also restricts the length of the multi-use path, which starts at Adagio Lane and ends at the Campus Drive intersection. A sidewalk is proposed from Adagio Lane to Saffron Springs, but no sidewalks are planned for the south side, which would help reduce project costs.

Both Scenario Concepts aim to create a central downtown area, fostering a sense of place between City Hall and Lakeland Preparatory School. This will be achieved by adding a median with curb and gutter and improving pedestrian access along the corridor. During the meeting, the project team reached a clear consensus in favor of Scenario Concept A. This design aligns most closely with the project objectives to improve safety along the corridor. Studies indicate that roundabouts can reduce injury crashes by 80% and overall crashes by 40%¹. Furthermore, the roundabouts will serve as a gateway feature along the corridor.

Note: The scenario concepts serve as a long-term plan to help developers understand the need for dedication. Following the decision to move forward with Concept A, the team created a visualization (fly-through). The vision includes planned developments along the corridor and illustrates a full build-out of the concept.

¹AASHTO, The Highway Safety Manual, 2010

FIGURE 3-4: Scenario Concept A

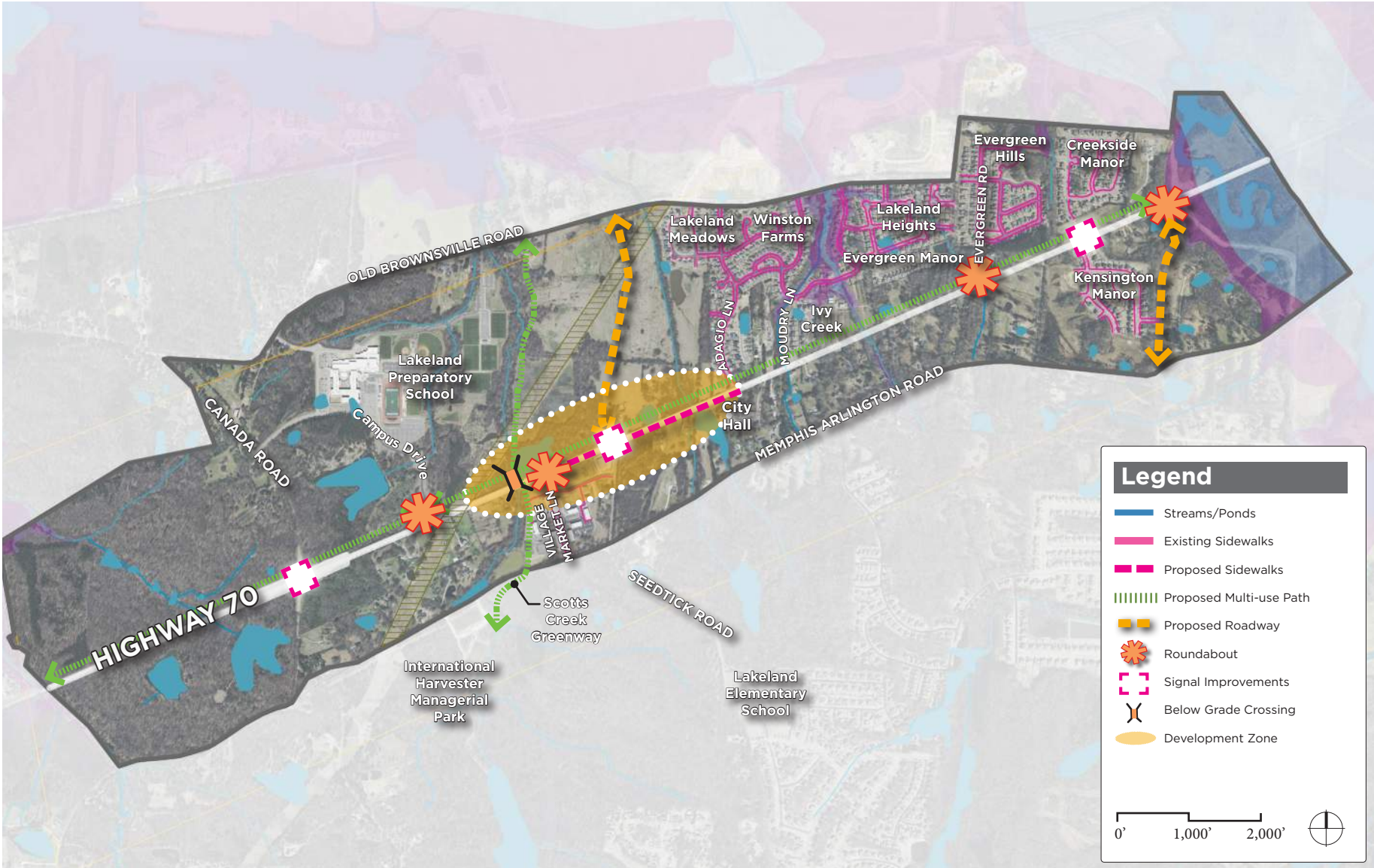


FIGURE 3-5: Scenario Concept B (Reduced COST and ROW Acquisition)

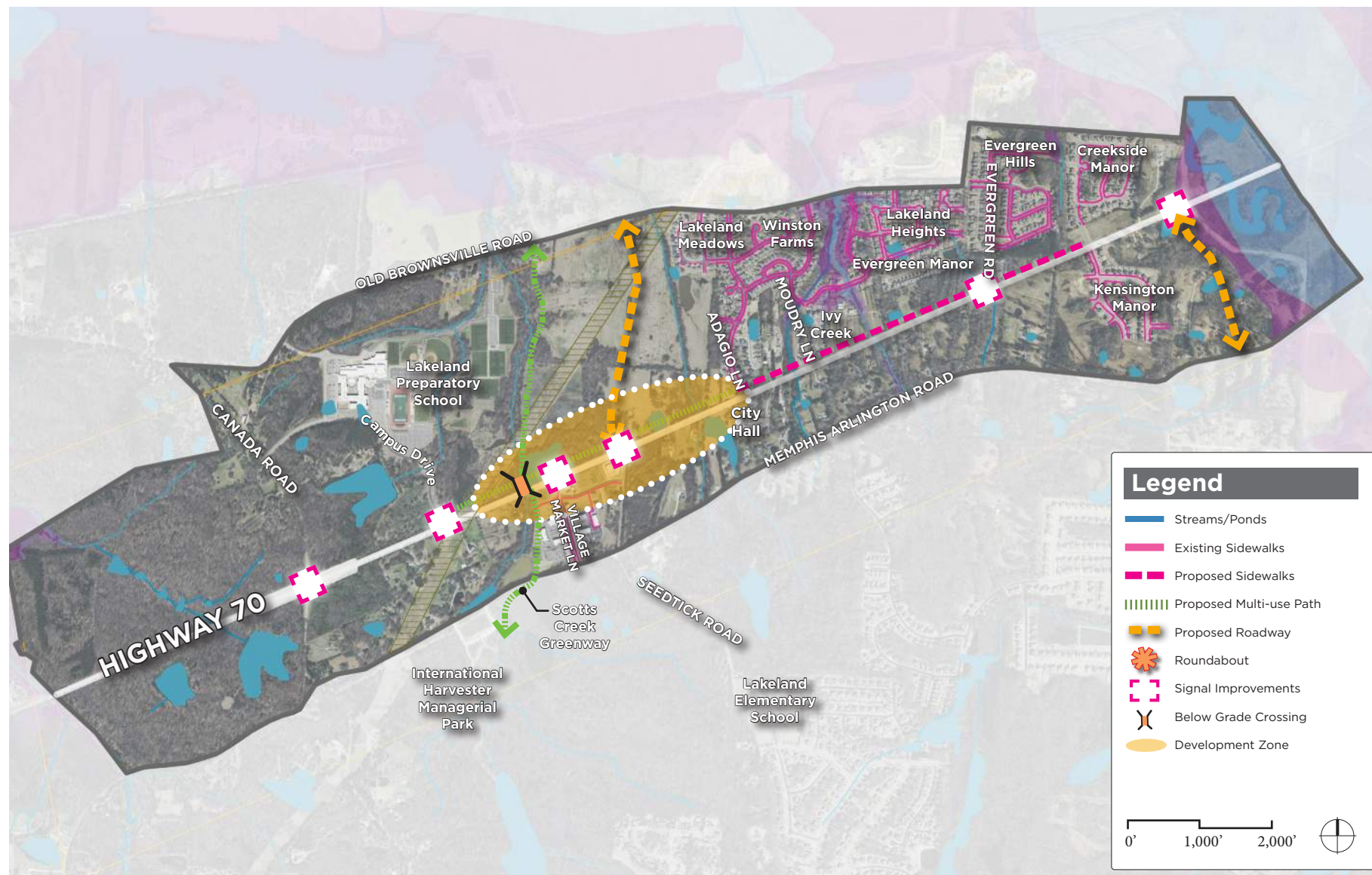


FIGURE 3-6: Scenario Concept A (Preferred Section) View Looking East

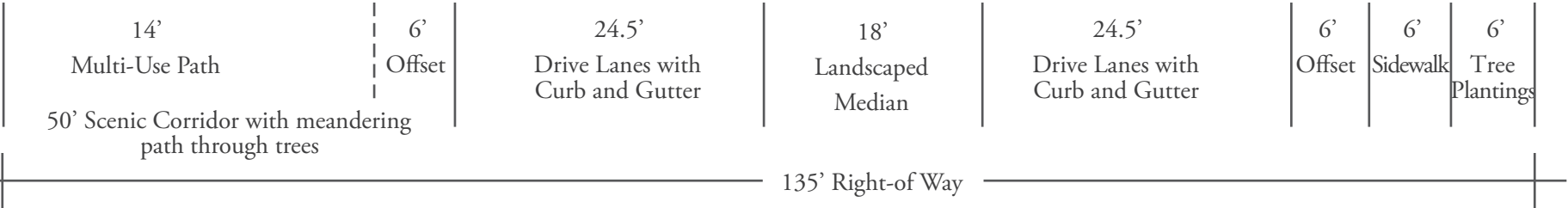


FIGURE 3-7: Scenario Concept B (Reduced Costs and Limited ROW Acquisition) View Looking East



6'	12'	6'	24.5'	12'	24.5'	6'	6'	6'
Tree Plantings	Multi-Use Path	Offset	Drive Lanes with Curb and Gutter	Landscaped Median	Drive Lanes with Curb and Gutter	Offset	Sidewalk	Tree Plantings
103' Right-of Way								

04

Traffic Analysis

OVERVIEW

EXISTING CONDITIONS

PROPOSED CONDITIONS

CONCLUSION

04

Traffic Analysis

OVERVIEW

The Highway 70 Corridor Study included a comprehensive evaluation of existing and future traffic conditions along a 4.9-mile segment of Highway 70 between Lamb Road and Brunswick Road. The purpose of this study is to assess current operational performance, identify safety concerns, and evaluate the traffic impacts associated with planned developments throughout the corridor. The analysis includes a detailed review of three years of crash data, existing intersection operations, and projected traffic conditions based on future development of the corridor.

To support these evaluations, traffic operations models were developed using Synchro 12.0 and Roundabout Design, Evaluation, and Linking (RODEL) software, incorporating observed traffic volumes, existing roadway geometry, and anticipated development-generated trip activity. The study also considers guidance from the Tennessee Department of Transportation's Highway System Access Manual (HSAM) to ensure that recommended improvements align with statewide access management and safety objectives.

The traffic analysis of the Highway 70 corridor provides key findings from the crash analysis, operational assessments, trip-generation forecasts, and intersection evaluations, including the potential application of roundabouts at select locations. The results provide a foundation for informed decision-making as the Highway 70 corridor continues to evolve with the City of Lakeland.



Intersection of Hwy 70 and Canada Road



EXISTING CONDITIONS

Speed Limits and Operating Speeds

The existing posted speed limit along the Highway 70 corridor within Lakeland is 50 mph, reflecting current roadway geometry and operating conditions. Any changes to the posted speed limit will require an engineering speed study, including evaluation of 85th percentile travel speeds, and would likely be implemented incrementally as corridor improvements are completed. Substantive reductions in operating speeds are expected to be most feasible following physical changes such as the addition of roundabouts, signal upgrades, and traffic calming features, which are intended to influence driver behavior and corridor function. Over time, particularly through more developed portions of the corridor, these improvements may support operating conditions consistent with speed limits in the 40 mph range. As major intersection or cross section changes are implemented, updated engineering studies can be conducted to reassess appropriate posted speeds based on observed conditions and safety performance.

Crash Analysis

A three-year crash analysis (2022–2024) was conducted along approximately 3.5 miles of Highway 70, extending from Lamb Road to Brunswick Road. The study area includes three signalized intersections and the roadway segments connecting them. Intersection-related crashes were evaluated within a 250-foot radius of each intersection. A complete summary of the crash data, including detailed tabulations, is provided in Appendix B.

A total of 95 crashes were recorded along the corridor, including one fatal crash and four incapacitating (A-level) injury crashes. Of these, 30 occurred at signalized intersections, while 65 occurred along the roadway segments between intersections. Overall crash patterns observed are consistent with those typical of a multi-lane principal arterial with high through volumes and multiple access points.

At signalized intersections, angle crashes were the most frequent, accounting for 50% of all intersection crashes and generally associated with failure to yield the right-of-way. Rear-end crashes represented 30% of intersection crashes, primarily resulting from vehicles decelerating for traffic signals or queued traffic. The Brunswick Road intersection experienced the highest crash frequency among signalized locations, more

than half of the intersection crashes. No fatal or incapacitating injury crashes were reported at signalized intersections.

Crashes along roadway segments accounted for approximately 68% of total corridor crashes. Single-vehicle crashes were the most prevalent segment crash type, representing 38.5% of segment crashes, followed by rear-end crashes at 30.7%. A significant number of single-vehicle crashes involved collisions with fixed objects, most commonly deer and other wildlife, indicating substantial animal activity along the corridor. The segment between Lamb Road and Canada Road exhibited a higher crash frequency than the segment between Canada Road and Brunswick Road.

Based on identified crash patterns, several safety improvements are recommended. For signalized intersections, enhanced signal coordination, improved pavement markings, and increased visibility are expected to reduce angle and rear-end crashes. At unsignalized intersections, clearing vegetation and improving sight distance would help mitigate crashes caused by limited visibility. Along roadway segments, wildlife mitigation measures, such as enhanced signage or fencing, should be considered to reduce animal-related crashes.

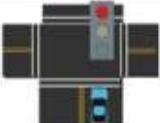
Level of Service Analysis

Operational analyses were conducted for the study intersections to evaluate traffic operations during the weekday AM and PM peak periods. Levels of service (LOS) were determined using Synchro Version 12.0, which incorporates methodologies from the Highway Capacity Manual (HCM), 7th Edition. The analysis reflects how each intersection operates under existing traffic volumes, geometric conditions, and traffic control features.

In the HCM framework, capacity represents the maximum number of vehicles that can pass through an intersection or along a roadway segment during a given period under prevailing conditions. LOS provides a qualitative description of traffic operations conditions relative to this available capacity, based on factors such as lane configuration, traffic control type, traffic and pedestrian volumes, and operating speeds. LOS is reported on a scale from A to F, where LOS A indicates free-flow conditions with minimal delay, while LOS F represents oversaturated conditions with excessive delay and demand exceeding capacity. For the three signalized intersections along the corridor, level of service is reported for the intersection as a whole based on the average control delay experienced by all vehicles. This approach aligns with Highway Capacity Manual (HCM) methodologies for evaluating overall signalized intersection operations.

Figure 4-1 summarizes the LOS criteria for signalized intersections. In general practice, LOS D is widely considered the minimum acceptable operating condition in urban and suburban settings, reflecting conditions where traffic demand approaches, but does not exceed, available capacity.

FIGURE 4-1: SIGNALIZED INTERSECTION LEVEL OF SERVICE

Level of Service	Delay per Vehicle (seconds)
A	 ≤10
B	 11-20
C	 21-35
D	 36-55
E	 56-80
F	 >80

Factors Affecting LOS of Signalized Intersection

Traffic Signal Conditions:

- Signal Coordination
- Cycle Length
- Protected left turn
- Timing
- Pre-timed of traffic activated signal
- Etc.

Geometric Conditions:

- Left and right turn lanes
- Number of lanes
- Etc.

Traffic Conditions:

- Percent of truck traffic
- Number of pedestrians
- Etc.

(Source: 2000 Highway Capacity Manual)



Operational Conditions

A traffic operations model representing existing conditions along Highway 70 was developed using Synchro 12.0 software. The model incorporates observed traffic volumes for all turning movements during weekday AM and PM peak periods, existing roadway geometry, lane configurations, traffic control devices, and current signal timing plans. The model was used to evaluate intersection delays, queue lengths, and level of service at signalized intersections.

Results indicate moderate traffic delay along the corridor, with the highest volumes occurring during the PM peak (4:00–6:00 PM). Through movements along Highway 70 account for the majority of PM peak demand, consistent with the corridor's function as a principal arterial. The lowest LOS occurs at the Canada Road intersection, which operates at LOS C, remaining within acceptable thresholds for a suburban arterial. A summary of PM peak control delays at the signalized intersections within the study area along Highway 70 are shown in Table 4-1; the full existing conditions analysis can be found in Appendix C.

TABLE 4-1: Signalized Intersection PM Peak Delay and Level of Service

INTERSECTION	HWY 70 EASTBOUND		HWY 70 WESTBOUND		HWY 70 NORTHBOUND		HWY 70 SOUTHBOUND		INTERSECTION	
	DELAY (SEC.)	LOS	DELAY (SEC.)	LOS	DELAY (SEC.)	LOS	DELAY (SEC.)	LOS	DELAY (SEC.)	LOS
CANADA ROAD	24.1	C	19.9	B	25.3	C	20.5	C	22.7	C
LAMB ROAD	21.4	C	20.7	C	30.0	C	22.5	C	24.7	C

PROPOSED CONDITIONS

Traffic associated with the proposed developments along the Highway 70 corridor was estimated using methodologies contained in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, applying published equations where available. Trip generation calculations were prepared for multiple land use types anticipated within the study area, including single-family residential, low-rise apartments, commercial retail/mixed-use development, and high-turnover restaurant uses.

The operational analysis includes an opening-year scenario that assumes full build-out of the proposed developments by 2040. To develop future baseline (background) traffic volumes, a two percent annual growth rate was applied to existing traffic counts to represent regional traffic growth unrelated to the proposed developments. These background volumes were then combined with the trips generated by the proposed developments to establish 2040 peak hour traffic volumes at each signalized and unsignalized intersection along the corridor. The resulting future year volumes were used as inputs to the Synchro model to evaluate proposed operational conditions. For the 2040 future conditions scenario, signal timing was optimized in Synchro to reflect reasonable operating conditions with projected demand.

Access Management and TDOT HSAM Considerations

This corridor study incorporates guidance from the Tennessee Department of Transportation's Highway System Access Manual (HSAM) to ensure that proposed improvements along Highway 70 support statewide goals for safety, operational performance, and context-sensitive planning. HSAM Volumes 1 and 2 provide the framework for evaluating access needs and selecting appropriate intersection forms, which is particularly relevant given the planned development activity along the corridor.

Consistent with HSAM guidance, proposed roundabouts and signalized intersections were evaluated using Synchro and RODEL to assess operational performance and alignment with access management objectives. Roundabouts reduce conflict points, support lower operating speeds, and improve safety and reliability, making them consistent with TDOT's access management principles for developing activity centers. For intersection treatment evaluation, TDOT requires the use of its Intersection and Interchange Evaluation Form (IIE). Guidance and the methodology for completing the analysis and form is detailed in TDOT's HSAM Volume 2: Intersection and Interchange Evaluation. The results from the analysis provide additional justification for the intersection treatment and will be required by TDOT during grant

application processes or for coordination during project implementation. Future design phases will reference HSAM Volume 3 geometric criteria, and any deviations from HSAM standards will be reviewed and coordinated with TDOT as needed.

2040 Future Operational Conditions Results

Several assumptions were made regarding development phasing and intersection improvements under proposed conditions. All proposed developments are assumed to be operational by the opening year, and the corresponding ITE-generated traffic volumes were added to the roadway network based on the type and intensity of each land use. Directional distribution, inbound/outbound proportions, and turning-movement assignments for development-generated trips were based on observed existing travel patterns using turning-movement counts from the study intersections. This approach ensures that future trips were assigned in a manner consistent with current travel behavior along the corridor.

Table 4-2 summarizes the AM and PM peak-hour trips generated by each development type assumed to be in place by the year 2040. These trip totals were used as inputs to the future-year Synchro traffic model to evaluate proposed operational conditions along the Highway 70 corridor. A full summary of the trips by development based on the ITE Trip Generation Manual can be found in Appendix E.

The results of the 2040 Horizon Year Analysis show that even under combined background and development generated traffic volumes, the Highway 70 corridor continues to operate within acceptable performance ranges using the existing lane configuration. The Canada Road intersection experiences the highest level of delay under future conditions, operating at Level of Service D, while all other intersections along the corridor operate at Level of Service B or better.



Hwy 70 Corridor Synchro Traffic Model

TABLE 4-2: ITE Trip Generation Manual, Estimated Trips by Development Type

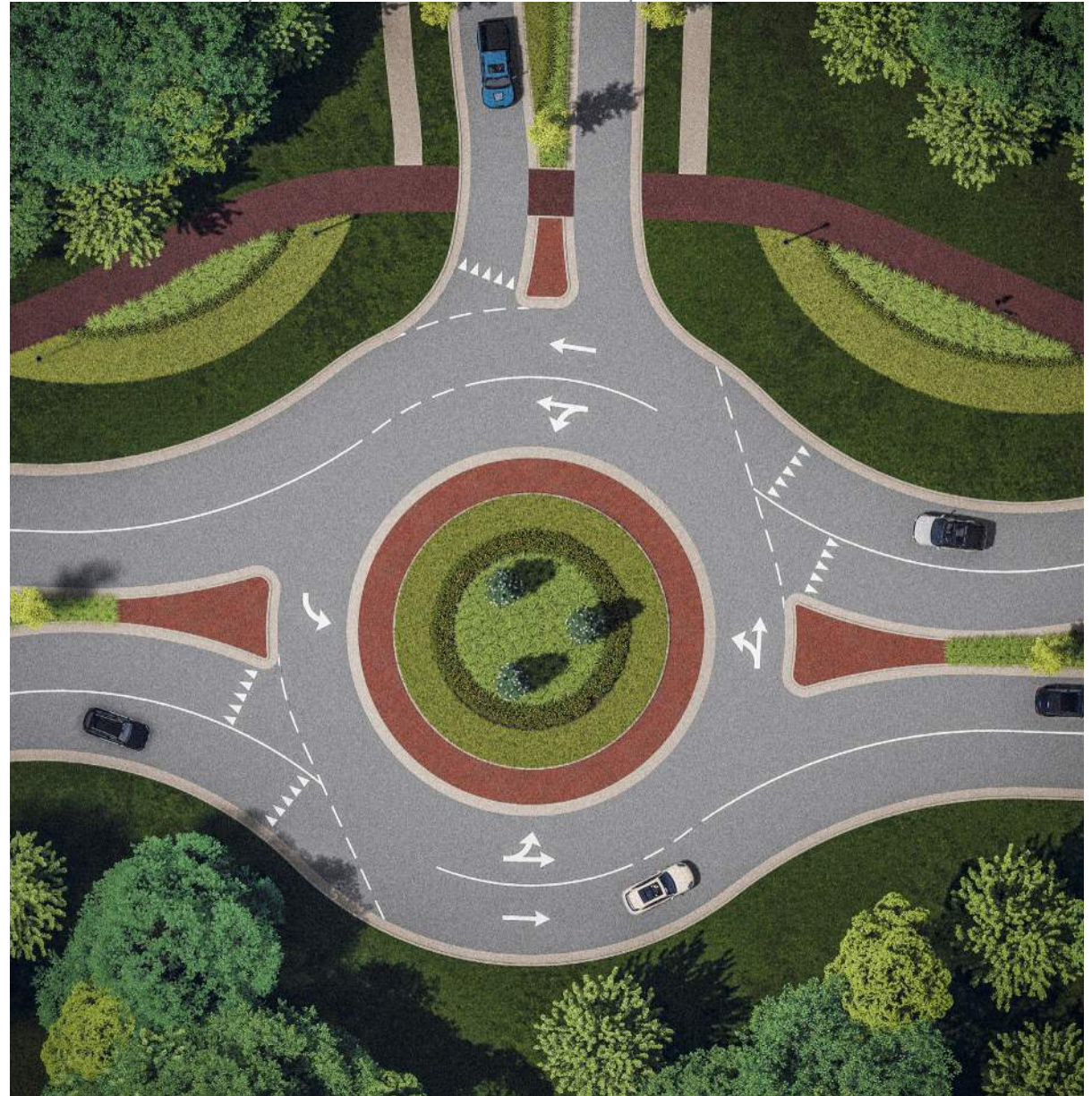
	RESIDENTIAL SINGLE FAMILY	RESIDENTIAL LOW-RISE APARTMENTS	COMMERCIAL SHOPPING / MIXED-USE RETAIL	HIGH-TURNOVER RESTAURANT (LC)
AM PEAK-HOUR TRIPS	154	60	76	287
PM PEAK-HOUR TRIPS	207	129	306	440

Roundabout Analysis

As part of the proposed conditions analysis, three intersections, Evergreen Drive West, Campus Drive, and Village Market Lane, were evaluated as roundabouts. Each roundabout planned for two lanes on Highway 70 and one lane entering on the side street. Figure 4-2: Proposed Roundabout shows a visual rendering of the Campus Drive intersection roundabout configuration. Note that a fourth roundabout at Chambers Chapel Road extension was not modeled due to unknown future traffic demand on the new roadway. However, Chambers Chapel is planned as a four-lane roadway, which should provide ample capacity.

The operational performance of the proposed roundabouts was analyzed using RODEL software, which is specifically designed to evaluate roundabout capacity and level of service. The analysis was conducted for both the AM and PM peak periods using 2040 opening year traffic volumes. The results indicate that all proposed roundabouts operate at Level of Service A during both peak hours, with minimal vehicle delay and short queue lengths, demonstrating efficient operations and sufficient capacity under projected future traffic conditions. A summary of the RODEL analysis is provided in Table 4-2. The full reports generated by the RODEL software including inputs for lane assignments, traffic volumes, and roundabout geometry can be found in Appendix F.

FIGURE 4-2: Proposed Roundabout at Campus Drive



CONCLUSION

Based on the results of the existing and future-year operational analyses, the Highway 70 corridor is expected to continue operating within acceptable performance thresholds through the 2040 horizon year with existing lane configurations. The addition of proposed developments along the corridor does not result in capacity deficiencies at the study intersections. Conceptual evaluations of three potential roundabouts at Evergreen Drive West, Campus Drive, and Village Market Lane indicate that each location would operate efficiently under projected peak-hour traffic volumes, providing LOS A operations in both the AM and PM periods.

The proposed access and intersection treatments evaluated in this study are consistent with the planning principles outlined in TDOT's HSAM, particularly regarding conflict-point reduction, multimodal accommodation, and context-sensitive design. As the corridor continues to develop into a mixed-use activity center, roundabouts and managed access help support safety, reliability, and community character. Future design phases will refine geometric details in accordance with HSAM Volume 3 and will coordinate any deviations with TDOT as required.



Case Study

OHM Advisors' reconstruction of Auburn Road in the City of Rochester Hills, MI serves as a strong case study in effective traffic calming and placemaking. Once a 40 mph suburban corridor, Auburn Road was transformed through roadway reconstruction and the installation of two modern roundabouts, supporting a reduced target and posted speed of 25 mph. These improvements enhanced safety for all users, improved access management, and significantly changed driver behavior while maintaining corridor functionality.

The project paired traffic calming with pedestrian oriented design elements, green infrastructure, and gateway features to help shift the corridor's role from a pass through roadway to a local destination that supports neighborhood identity and connectivity.

05

Public Engagement

PUBLIC ENGAGEMENT PROCESS

STAKEHOLDER MEETING

COMMUNITY SURVEY #1

COMMUNITY VISIONING WORKSHOP

COMMUNITY SURVEY #2

COMMUNITY ENGAGEMENT KEY TAKEAWAYS

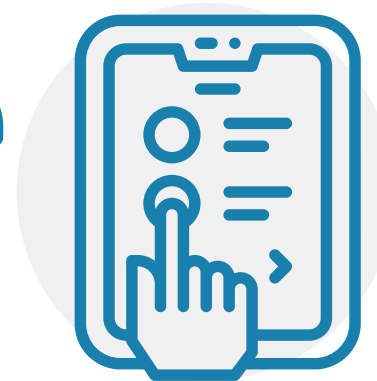
Public Engagement

PUBLIC ENGAGEMENT PROCESS

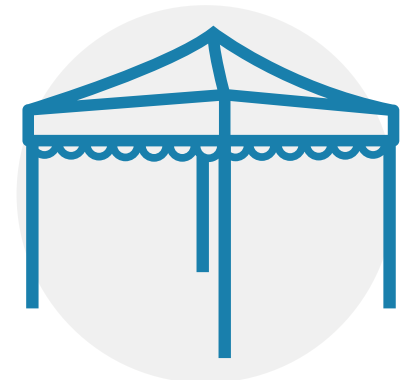
To create a plan that addresses the challenges and opportunities of the Highway 70 Study Corridor, the project team facilitated a public engagement process that included a series of outreach methods. This chapter summarizes the input received during the public engagement process. The public engagement portion of this plan included a series of outreach methods, such as a stakeholder meeting, community survey, and community meeting. The feedback from the existing Comprehensive and Transportation Plan, along with the feedback from the stakeholder meeting and the community survey #1 were then compiled and then compared to the public's input that was received at the community meeting.



STAKEHOLDER MEETING



COMMUNITY SURVEY



COMMUNITY MEETING

STAKEHOLDER MEETING

The public engagement process began with an initial stakeholder meeting, held on September 25, 2025, at the International Harvester Managerial Park. Below is a summary of the meeting outline and key discussion points.

Agenda:

- » Introductions
- » Review Project Scope and Schedule
- » Summary of Discovery and Analysis
 - Existing Traffic Conditions Analysis
 - Land Use Analysis
 - Parcel Discussion
 - Questions and Answers Session
 - Wrap Up

Note: these individuals represented landowners who have completed projects in the corridor or are involved with recently approved developments.

9

Stakeholder Meeting Participants

Key Takeaways:

- » Stakeholders were in agreement on the need to reduce vehicle speeds and to avoid creating a wide multi-lane roads lined with extensive commercial development, traffic signals, and interrupted by numerous driveways.
- » Lakeland should differentiate itself from neighboring cities by incorporating natural elements, multi-use paths, mixed-use developments, and higher density living.
- » Historically, residents have been resistant to change in the community; however, stakeholders suggested that new residents moving to Lakeland may accept changes if they are well planned.
- » The group favored strategies for slowing traffic, such as design elements like curves, roundabouts, and narrower lanes.



COMMUNITY SURVEY #1

This first online survey was launched on September 29 and closed on October 14, 2025. The City of Lakeland promoted the online survey through various methods, including direct emails and social media.

The target response number was 375 or more. The survey exceeded that goal, with 490 online responses. Based on a simple metric, this results in a 95% confidence level and a 5-point confidence interval, meaning that these results likely reflect the community’s opinions within ±5 points.

The survey was anonymous, though it tracked IP addresses to enable analysts to identify whether one person had participated multiple times from the same device, which could affect the results. No instances of multiple addresses or other concerns were found during the analysis.

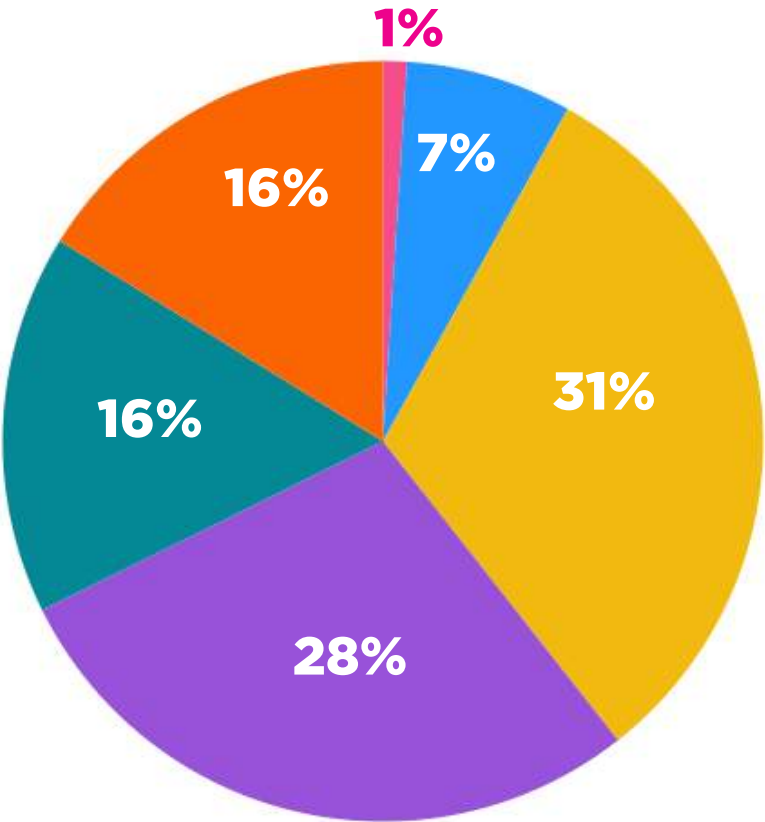
490
Survey Responses

Who Took the Survey?

The survey included several questions to determine whether it reached a representative sample of the community in the area. The survey recorded that most live near the corridor and travel through it regularly. Of those who reported they lived near and travel through the area regularly, the highest number of those respondents is in the 35-44 age demographic.

	Under 18
	18 - 24
	25 - 34
	35 - 44
	45 - 54
	55 - 64
	65+

WHAT IS YOUR AGE GROUP?





Desire for Improvements

The survey consisted of twelve questions. One of the most important questions asked residents was, “Which of the following items do you consider most critical to address along Highway 70 in Lakeland?” The top response was road safety, followed by traffic flow and congestion, and then road conditions improvements (see the list for all six options).

On the first day of the survey, some residents reached out to the city to express their frustration with this particular question. It was a ranking question, and participants were asked to reorder the list of options to reflect their priorities. While some individuals may have found reordering the items challenging, it is evident that road safety remains the top priority, as it received significantly higher scores than the other listed items.

In addition, the survey included two questions on the features residents would like to see on Highway 70. The top priority reported was trails and bike paths. The question included an option to list other items. Of the 28 responses, the top were turn lanes and restaurants. When asked what residents would not want to see, the top response was housing/mixed use developments.

*Note: the planning team interprets this high ranking regarding traffic flow and congestion due to the community’s concerns about left turns and turning out onto Highway 70 (i.e. access management issues, rather than gridlock)

Which of the following are the **most important items** to be addressed along Highway 70 in Lakeland?

#1

Road safety

#2

Traffic flow and congestion*

#3

Road condition improvements

#4

Preservation of trees and greenspace

#5

Visual appearance and landscaping

#6

Activities and destinations along the corridor

What features **would you like to see** along Highway 70 in Lakeland?

#1

Trails and bike paths

#2

Shopping destinations

#3

I like how it is now (i.e. no change)

#4

Roundabouts

#5

Public art/placemaking

#6

Housing/mixed use developments

Willingness to Walk

Based on previous community surveys from recent studies, there is a strong and growing demand for more places to safely walk and bike. The community of Lakeland is no different based on the results of the next question where residents were asked “How far would you be willing to walk, if safe and convenient access is provided?” See chart for a complete list of the options.

Notably, 87 survey participants skipped this question. Analysts do not know how they might vote, though given the total number of responses, they are reasonably confident that the results are within ± 5 percentage points.

When the amount of respondents who are willing to walk a half, one mile, and two plus miles are totaled, the results account for the majority of responses.

There were 72 comments on reasons for not walking, which included “It is not safe”, “disabled”, and “Highway 70 is too busy”. The dominant theme is that Highway 70 is unsafe and unsuitable for pedestrians due to high traffic speeds, heavy vehicle volume, and lack of pedestrian infrastructure.

78%
total number
of those willing
to walk at least
half a mile

How far would you be willing to WALK, if it is safe and convenient?

20 MINUTES (1 MILE) OR LESS

32%

10 MINUTES (0.5 MILE) OR LESS

27%

OTHER

22%

MORE THAN 40 MINUTES (2+MILES)

19%

SKIPPED

Not counted (87 of 490)



Willingness to Bike

When asked about biking, 47% of respondents indicated that they would bike one mile or more. Only 31% indicated that they would not bike any distance and there is a high number of participants (21%) who skipped this question.

Surprisingly, 102 survey participants skipped this question. Analysts do not know how they might vote, though given the total number of responses, they are reasonably confident that the results are within ± 6 percentage points.

There were 109 comments on reasons for not biking. Residents express strong opposition to biking along Highway 70. The primary reasons are safety risks from speeding traffic, unsuitable roadway design, and lack of need or destinations. Specific comments included “don’t bike”, “health issues,” and “too dangerous”.

60%

total number
of those willing
to bike at least
one mile

How far would you be willing to BICYCLE, if it is safe and convenient?

OTHER

40%

MORE THAN 20 MINUTES (5+ MILES)

37%

12 MINUTES (2 MILES) OR LESS

12%

6 MINUTES (1 MILE) OR LESS

12%

SKIPPED

Not counted (102 of 490)

Written Suggestions

Over 185 comments were received on the last question, which was an open-ended question asking if respondents had any comments. The overwhelming themes emphasize traffic safety, roadway improvements, and preservation of community character. Participants expressed both concern and optimism for how future planning could balance growth with safety and aesthetics. Although no clear solution has emerged to improve the roadway while preserving rural character, the analysis identified key themes.

SUMMARY OF RESPONSES

Traffic & Safety

- » Most urgent concern: The Highway 70 and Evergreen Road intersection, described by residents as dangerous and in need of a traffic signal.
- » Other priority areas include Seedtick Road, Adagio Lane, and the Lakeland Prep School entrance, where turn lanes, signals, or better lighting are requested.
- » Residents strongly support lower speed limits (35–45 mph) and greater police enforcement of speeding.

Roadway Design & Maintenance

- » Respondents recommend a continuous center turn lane and improved lighting throughout the corridor.
- » Requests for clearer signage, resurfacing, and vegetation trimming for better visibility.
- » Many emphasized prioritizing basic road maintenance over beautification projects.

Development & Community Character

- » Residents are divided on growth:
 - » One group advocates for preserving the rural, tree-lined character of Highway 70.
 - » Another supports responsible development focused on quality retail, restaurants, and local businesses.
- » Strong opposition to low-end commercial uses (e.g., car washes, vape shops, dollar stores).
- » Desire for cohesive design standards and attractive public spaces.

Pedestrian, Bicycle & School Access

- » Support for safe, separated multi-use paths linking neighborhoods, schools, and Town Square.
- » Widespread opposition to bike lanes on Highway 70 itself due to safety concerns.
- » The Lakeland Prep entrance is a major safety

issue—calls for traffic control during school hours and turn lanes.

Signals, Roundabouts & Speed Management

- » Traffic lights are slightly preferred over roundabouts, with several expressing concerns that roundabouts are unsafe for a 50-mph corridor.
- » Requests for speed reduction zones and better intersection design at key nodes.

KEY THEMES

- **Safety First:** Improve intersections, lighting, and speed control before new development.
- **Preserve Character:** Maintain trees and open space, avoiding over-commercialization.
- **Plan Growth Wisely:** Encourage well-designed, connected development that complements the existing community.

CONCLUSION

Residents want a Highway 70 corridor that is safe, functional, and reflective of Lakeland's small-town and natural beauty. Residents also strongly recommend an emphasis on traffic safety, aesthetic quality, and coordinated growth. With a balanced approach, the changes to the corridor could garner supports from residents and address both current needs and long-term community goals.



COMMUNITY VISIONING WORKSHOP

On Tuesday, December 9, 2025, a community meeting was held at the International Harvester Park clubhouse in Lakeland. The meeting was advertised through a variety of methods, including direct emails and social media.

At the meeting, the design team unveiled the fly-through video of the future corridor. Elements in the design include:

3.2 miles of multi-use path

4,670 linear feet of sidewalks

1 new bridge over Scotts Creek with greenway connection

7 intersection improvements

SUMMARY OF RESPONSES

Utility & Aesthetic Integration

- » Attendees expressed a strong desire to bury powerlines below grade. This would prevent the current lopsided pruning of trees caused by utilities and allow for a larger, more shaded canopy over the new multi-use paths.

Infrastructure & Traffic Safety

- » While there was support for roundabouts to slow traffic and improve safety, some residents expressed concern that any new commercial development might destroy the area's rural character.

Connectivity Improvements

- » There is a high interest in expanding the network beyond the immediate corridor, specifically by connecting sidewalks along Old Brownsville Road and linking the proposed Scotts Greenway to a new public parking area at the school.

Economic Development

- » Residents voiced a need for “daytime businesses” to support the new density, specifically mentioning essential services like doctors, dentists, barbershops, and general stores.

Construction Management & Communication

- » A significant point of frustration involved the current state of construction in Lakeland. The community is asking for better project updates, a regularly updated website, and more notice before construction impacts specific neighborhoods.

Fiscal & Practical Questions

- » Some participants raised questions regarding the cost to taxpayers and the practical necessity of bike trails, questioning if the usage justifies the land and expense, especially regarding safety near a highway.

COMMUNITY VISIONING
WORKSHOP





COMMUNITY SURVEY #2

Overview

In addition to the community visioning workshop, an online survey was utilized to gather feedback from a broader audience. The survey received 566 responses, resulting in a significant volume of feedback.

Key Themes of Support

Respondents in favor of the design frequently highlighted the following benefits:

- » **Safety and Traffic Calming:** Supporters believe the design will reduce the risk of high-speed accidents and protect turning vehicles from “sitting duck” scenarios.
- » **Modernization and Aesthetics:** Many expressed enthusiasm for the “small town feel,” planted medians, and general beautification of the once-forgotten area.
- » **Pedestrian Connectivity:** There is strong support for the multi-use paths and sidewalks, with residents noting the current lack of safe walking infrastructure on the north side of Highway 70.

Key Themes of Concern

The primary concerns cited by those opposed include:

- » **Appropriateness for a State Highway:** Many residents view Highway 70 as a critical thru-traffic corridor and expressed fear that roundabouts would impede flow, especially when the highway serves as an alternate route for I-40.
- » **Inexperienced Drivers:** A significant number of comments specifically opposed the roundabout near the high school (Campus Road), citing concerns that young, inexperienced drivers would struggle to navigate the intersection safely.
- » **Commercial and Large Vehicle Traffic:** Concerns were raised regarding the ability of tractor-trailers, RVs, and agricultural machinery to navigate multiple roundabouts in a short distance.
- » **Preference for Traditional Solutions:** Many respondents suggested that traditional turn lanes or synchronized traffic lights would be more effective and less confusing than the proposed geometry.

Public feedback reveals a strong, shared commitment to the core project goals of safety, connectivity, and beautification. While discussions have centered around the specific placement and number of roundabouts, the high support for pedestrian infrastructure and overall safety suggests that the community is highly receptive to the project’s intent. To best align with this safety-first mindset, a revised plan could explore a broader range of intersection treatments, ensuring the final design directly addresses localized traffic concerns while maintaining robust safety standards.

The flyover video of the corridor proposed design that was shown at the community visioning workshop was also available for survey takers.

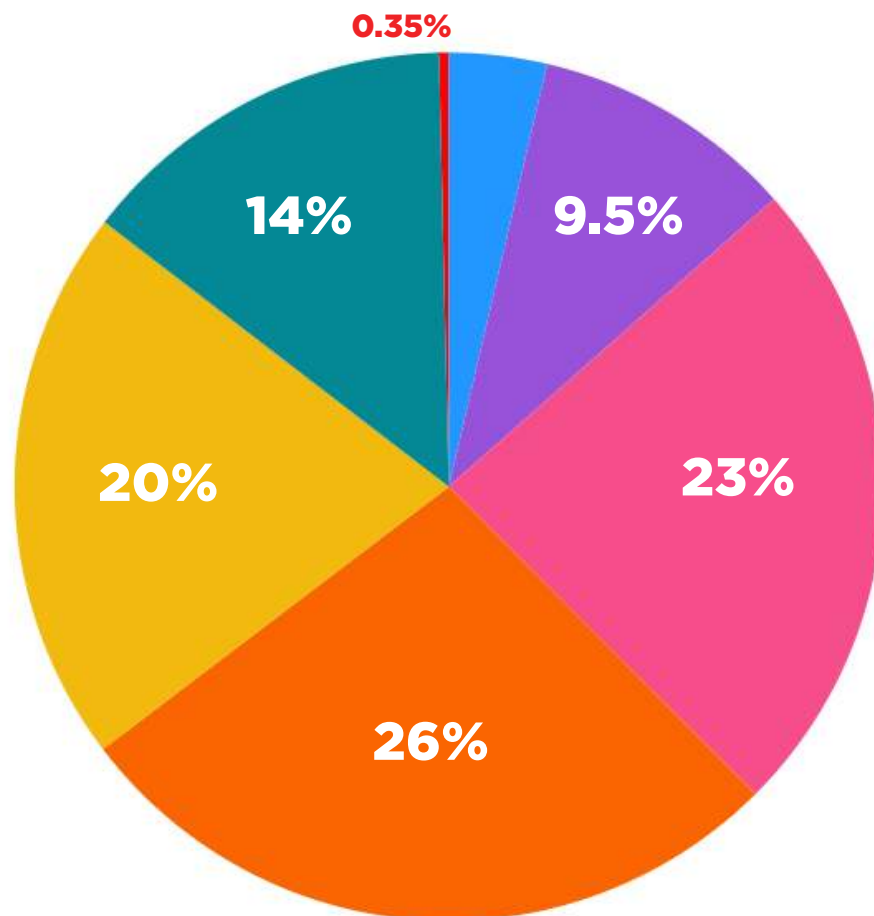


Who Took the Survey?

566

Survey Responses

Under 18
18 - 24
25 - 34
35 - 44
45 - 54
55 - 64
65+



82%

Regular
Commuters

73%

Nearby
Residents

46%

Visit Businesses
Along
Highway 70

14%

Work Along
Highway 70

COMMUNITY ENGAGEMENT KEY TAKEAWAYS

The following are key takeaways from community engagement and offer an overview of the issues and opportunities identified during the process.



Safety is identified as the #1 priority for the corridor, with the intersection of Highway 70 and Evergreen Road cited as the most urgent area in need of a traffic signal.



A significant portion of the concern is focused on the proposed roundabout near Lakeland Prep (Campus Road), with residents fearing it would be too difficult for young, inexperienced drivers to navigate.



Stakeholders and residents reached a consensus on the need to preserve Lakeland's rural, tree-lined character and differentiate it from neighboring cities by incorporating natural elements.



Community members expressed frustration with current construction impacts and requested more frequent project updates and better notice for neighborhood-specific disruptions.



78% of respondents indicated a willingness to walk at least half a mile if safe access is provided, and 60% would bike at least one mile, highlighting the potential success of improved connectivity. The current corridor is viewed as unsafe and unsuitable for pedestrians and cyclists.

06

Proposed Enhancements

SAFETY

MULTIMODAL CONNECTIVITY

STREETSCAPE DESIGN

ACCESS MANAGEMENT

Proposed Enhancements

OVERVIEW

This corridor study aims to develop a proposed enhancement that meets the community's multimodal transportation needs and demands for a safer corridor. This section covers the following key elements:

- » Safety
- » Multimodal Connectivity
- » Streetscape Sections
- » Access Management

SAFETY

When it comes to safety, it is essential to note that roundabouts are recognized as one of the safest and most efficient intersection designs in the United States. They encourage drivers to reduce their speed to a safe, consistent level while still facilitating the flow of traffic. Implementing roundabouts will help Lakeland enhance safety, beautify the corridor, and create a more predictable travel experience.

Another advantage of roundabouts is the reduced need for dedicated turn lanes (either left or right) compared to traditional signalized or stop-controlled intersections. Given the limited right-of-way in this corridor, this advantage is significant. By using a roundabout instead of a standard intersection, traffic flow can improve to the extent that dedicated turn lanes often become unnecessary. Roundabouts also support continuous traffic flow, which means that left-turning traffic does not accumulate or require a specific signal phase to clear the intersection. Furthermore, a series of roundabouts can efficiently accommodate safe reversal of direction, allowing them to replace the need for dedicated left-turn lanes at minor driveways. These benefits are crucial when considering the long-term needs of the corridor and future growth in the area.

Roundabouts: Safer, Slower Speeds for All Road Users



Calms traffic to safer operating speeds



More reaction time for drivers



Safer for novice and more mature drivers



Crashes, when they occur, are low-speed and less severe



Safer pedestrian crossings with shorter distances

Roundabouts: Safety and Efficiency Benefits

- » Up to 90% fewer fatal crashes
- » 76% reduction in crashes that result in an injury
- » 30 - 40% reduction in crashes involving pedestrians
- » 75% fewer conflict points (from 32 at a traditional intersection to just 8 in a roundabout)
- » Less stop-and-go traffic and shorter queues
- » Reduced need for additional turn lanes
- » Improved performance at intersections with heavy left turns
- » 30–50% increase in traffic capacity compared to intersections with stop lights

Data source: www.highways.dot.gov/safety/proven-safety-countermeasures/roundabouts

Roundabouts: Community Benefits and Cost Savings

- » Traffic calming that supports Lakeland's unique sense of place
- » Opportunities for landscaped center islands
- » Reduced congestion, noise, air pollution, and fuel consumption
- » Supports a more walkable, connected Lakeland
- » No signal equipment to install or maintain
- » \$5,000 average annual savings in electricity and maintenance
- » 25-year service life (vs. 10 years for signalized intersections)
- » Reduced idling saves fuel and reduces emissions

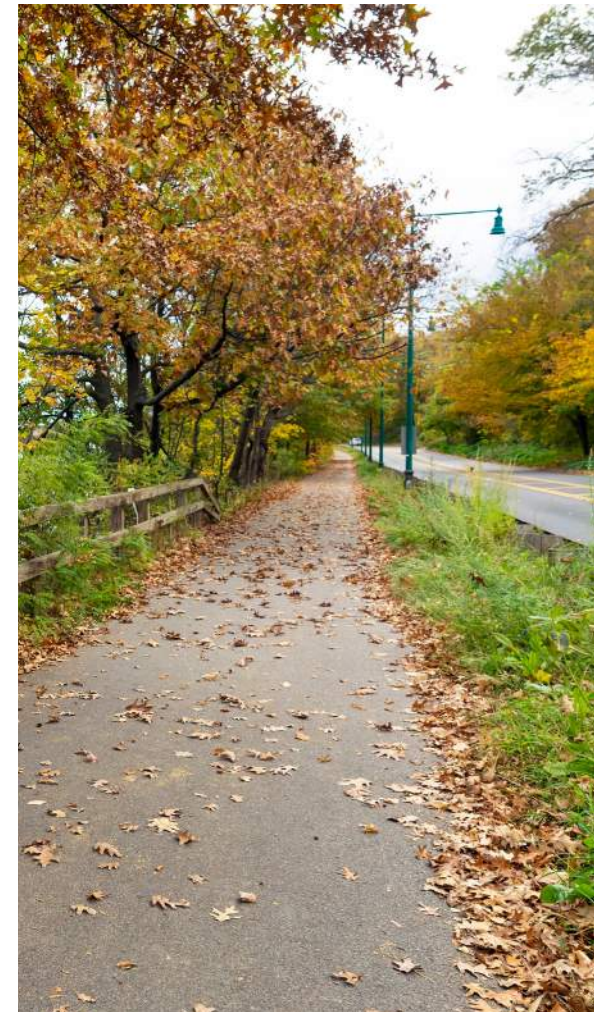
MULTIMODAL CONNECTIVITY

During the design and community engagement process, a strong need for increased pedestrian and bicyclist connectivity was identified.

Currently, the Lakeland Town Square area and the neighborhoods on the north side of Highway 70 have internal sidewalks (indicated by the pink lines on Figure 6-1). Based on the proposed improvements outlined in the Transportation Plan and specific feedback from residents, a comprehensive connectivity plan for the study area was developed. This plan includes a multi-use path along the north side of Highway 70, designed to connect the various neighborhoods on that side to Campus Drive. It will also link to the proposed Scotts Creek Greenway, which is planned to serve as a major north-south connection. Additionally, a multi-use path is proposed along Seedtick Road, with plans for it to extend to Old Brownsville Road. These three pathways should be prioritized, as they are essential for enhancing connectivity.

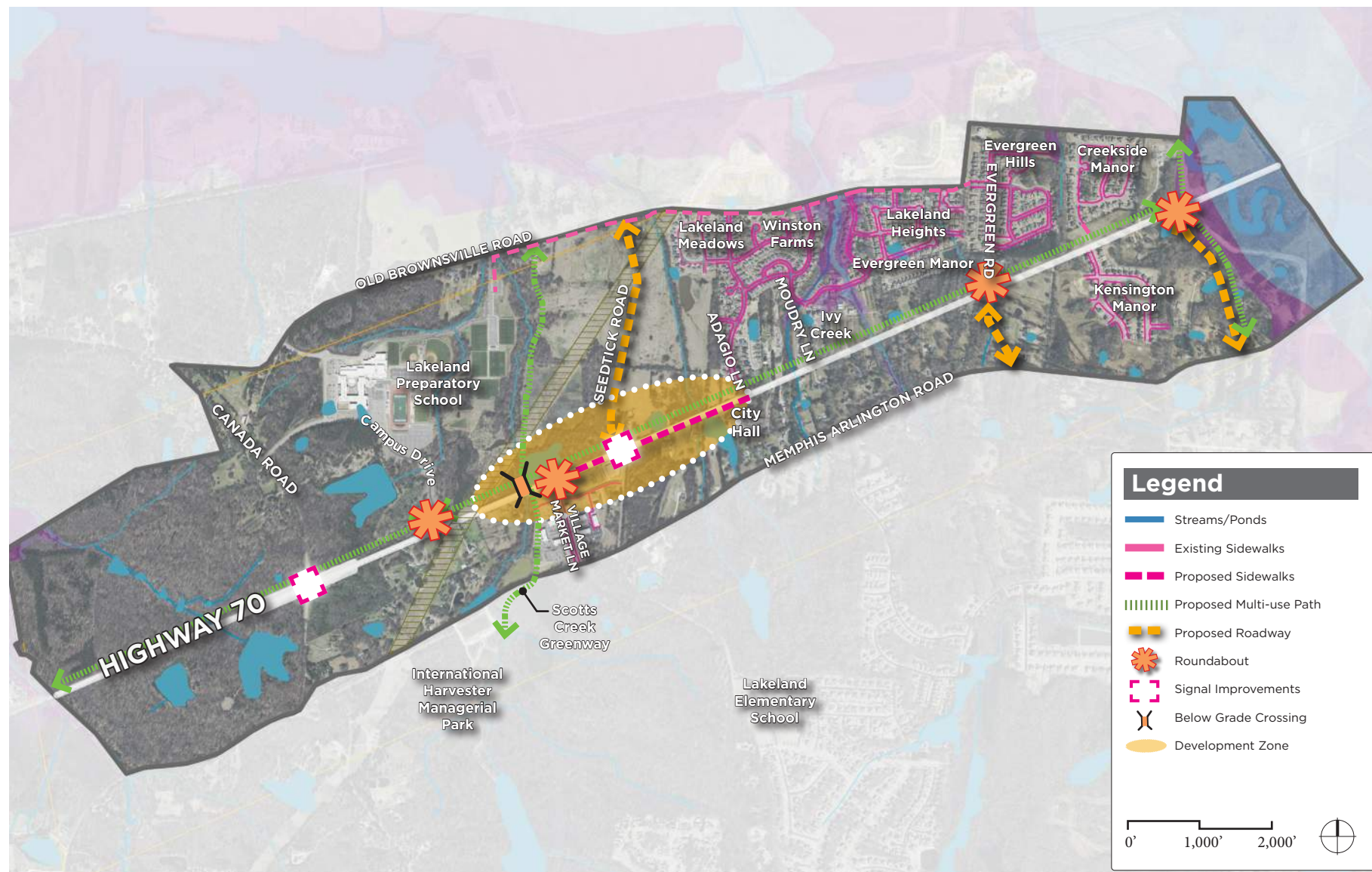
Other critical connections include a sidewalk on the south side of Highway 70, extending from City Hall to Lakeland Town Square. This connection will need to navigate around existing trees and drainage ditches. There are also proposals for sidewalks along Old Brownsville Road, from Lakeland Meadows to Lakeland Preparatory School.

In the long term, Memphis-Arlington Road should include a multi-use path designed to be sensitive to the existing trees and natural beauty of the corridor. To align with current planning efforts, this trail should be located on the north side of the road east of Scotts Creek, transitioning to the south side at the athletic complex. In the short term, the priority should be to establish north-south connections to the new improvements along Highway 70.



Source: Adobe Stock.

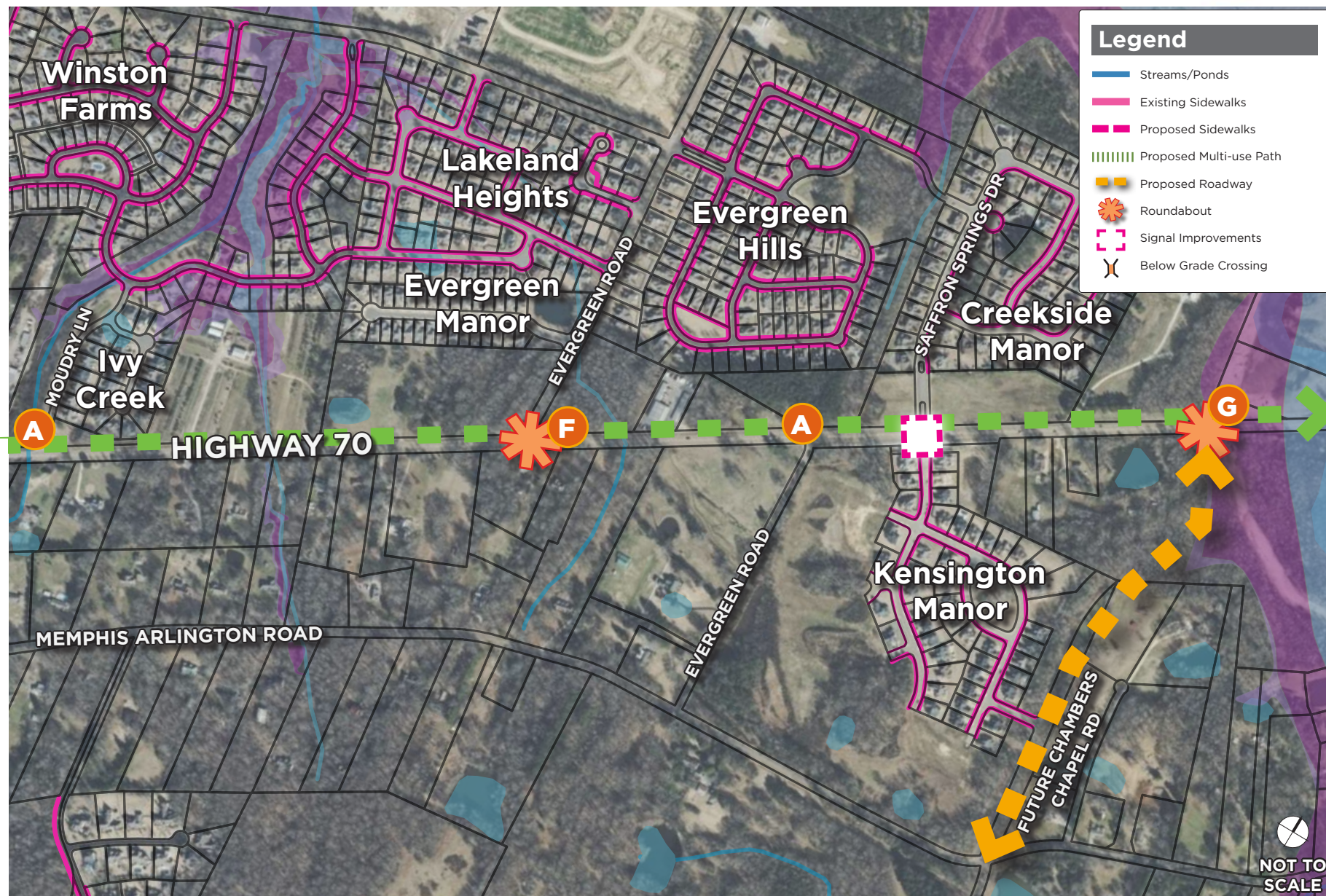
FIGURE 6-1: Overall Connectivity Plan



STREETSCAPE DESIGN

The figure on this page shows the proposed improvements to the Highway 70 corridor in Lakeland. Typical cross sections are shown on the following pages and correspond to the segments identified by the lettered orange circles. In general, the streetscape includes lighting on both sides, multi-use path on the north side with a sidewalk on the south side in the core area (City Hall to Lakeland Town Square), landscaping, and street trees.







Drive
Lanes

Land-
scaped
Median

Drive
Lanes

Multi-Use Path

A Multi-use Path, Typical



B Campus Drive



C Scotts Greenway Connection



D Seedtick Road



Sidewalk Drive Lanes Land-scaped Median Drive Lanes Multi-Use Path

E Seedtick to City Hall



F Evergreen Road



G Chambers Chapel Road

Streetscape Elements

Key elements in the streetscape design should include the follow:

- » Protect existing trees where possible to maintain natural beauty
- » Provide street trees and planting design that is low-maintenance with native plants and complaint with TDOT requirements
- » Include decorative lighting for street and pedestrian paths with banners for branding Lakeland and celebrating local events
- » Create a multi-use path with a signature style and signage, which could be used throughout the city

ACCESS MANAGEMENT

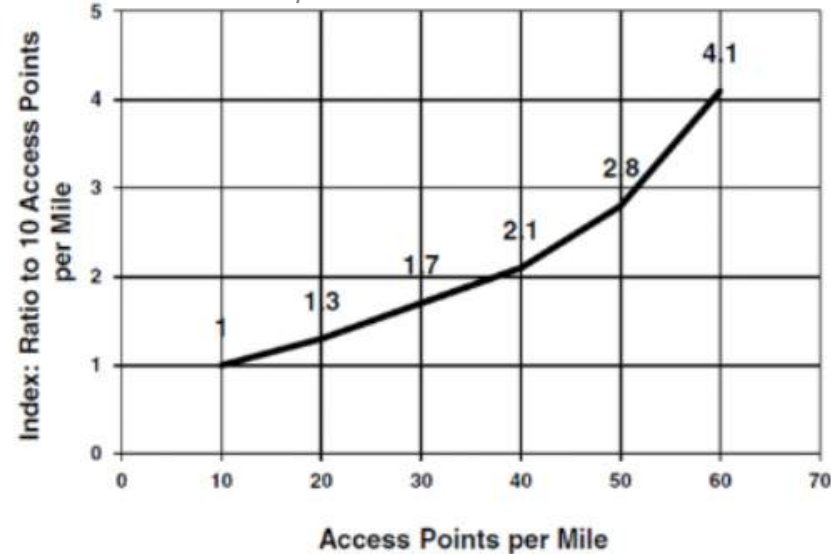
The Highway 70 Corridor Study includes an access management strategy to implement access management through a combination of traffic engineering measures, local land use regulations, and close coordination among transportation and land use decision makers.

Background

Research has shown that there is a direct relationship between number of driveways and number of crashes along a highway. Every access point constructed on Highway 70 increases the crash risk and deteriorates traffic operations. The cumulative impact of closely spaced access points over time is one of the largest contributors to high crash rates and traffic congestion. Controlling access to the Highway 70 corridor will reduce injuries and damage due to crashes. Below are some statistics regarding safety and access management.

- » Effective access management programs can reduce crashes by 50%, increase roadway capacity by 45% and reduce travel time and delay by 60%.
- » According to the National Highway Traffic Safety Administration (NHTSA), left turns account for nearly 22% of all intersection-related crashes.

FIGURE 6-2: Composite Crash Rate Indexes



Source: TRB Access Management Manual 2nd Edition, 2014, pg. 26

TDOT's Highway System Access Manual covers both access from properties onto a highway system, as well as intersections and interchanges along the highway system. Intersection Control selection is discussed in Section 5 – Traffic Analysis.

“Reasonable access means that a property owner will have access to the public highway system, but it does not mean that potential patrons are guaranteed the most direct or convenient access from a specific roadway to the owner’s property.”
-TDOT Highway System Access Manual

Proper access control benefits much more than the motorist. By decreasing conflict points, access control benefits cyclists, pedestrians, and business owners along the corridor.



Application

For the Highway 70 Corridor, access control will be handled in three ways. These access management techniques exist with the goal of reducing conflict points and improving the safety of streets.

- » **Road and Intersection Design** - Signal spacing, turning restrictions, and intersection standards to reduce conflict points
- » **Site Access and Design** - Driveway and shared access standards to facilitate safe access
- » **Planning and Ordinances** - Zoning and land use standards to regulate access

The planned raised and landscaped median in the roadway section will restrict left turns. In some areas, breaks in the median will allow left turns at appropriate areas. If there is an extended length of left turns needed, the median will be replaced with a two-way left turn lane. However, the ideal situation will be for traffic to use the roundabouts spread along the corridor to make U-turn movements, which will lead into right turns.

The medians will also facilitate “right-in, right-out,” a treatment that eliminates left turns and through movements at highway accesses. In locations with a median, exiting traffic will not be able to make a left, but instead motorists will turn right, avoiding crossing multiple lanes of traffic for a left turn. This reduces conflict points, thus minimizing crash severity and eliminating T-bone style crashes.

Access control at major intersections will be handled by the intersection treatments. Driveways near intersections create unsafe conditions for drivers, due to the complicated mix of turning movements at the intersection. As such, it is recommended that no driveways be within 200 ft of a signalized intersection or roundabout. Driving paths will be concentrated into one access point for a development or site, such as Lakeland Town Center or Heathfield being concentrated at Village Market Lane, or redirected to Seedtick via Shady Village Lane. If two businesses develop on adjacent parcels, the businesses may be able to share a driveway.

Highway access can be controlled through the development regulations and city ordinances. Because Highway 70 is a state route, a commercial or residential driveway permit is required for any new access along the highway. However local land-use standards can also restrict the entry points of a site onto a main road.

TABLE 6-1: Who Benefits from Access Management?

User	Benefit
Motorist	Fewer decision points results in improved safety and less delay
Cyclist	Fewer conflicts with turning vehicles improving safety
Pedestrian	Fewer conflicts with fewer driveways, medians provide refuge
Transit Riders	Less transit delays, safer for pedestrian access, connectivity to stops
Business Owners	Improved access and stable or increasing property values
Communities	Enhanced business environment, property values, greater fuel efficiency with reduced emissions, livable roadway corridors

Source: TDOT Highway System Access Manual

07

Implementation Plan

OVERVIEW

PRIORITIES

SUMMARY OF IMPROVEMENTS

SUMMARY OF COSTS

POTENTIAL FUNDING SOURCES

Implementation Plan

OVERVIEW

The goals of this corridor study are to create a plan for Highway 70 through the City of Lakeland that creates a safe, distinct, and visually appealing corridor. The city envisions Highway 70 developing cohesively with the fronting properties along the corridor, controlling access management for properties, providing dedicated space for left-hand turns, and a planted median in spaces without left-hand turns. There is also a focus on safety, particularly at intersections, where high-severity crashes are concentrated. The city and this report have concluded that roundabouts are a practical solution that slow drivers coming from all directions, inherently increasing the safety of the intersection, while maintaining traffic efficiency and providing an area for aesthetic landscaping. Finally, the city wishes to provide transportation routes for all users, such as pedestrians and cyclists, through an extensive multi-use path and sidewalk network that runs along the corridor and ties into surrounding networks.

PRIORITIES

To frame the implementation plan, priorities should be identified. This corridor study and its priorities build upon the Lakeland Transportation Plan and the Land Use Plan developed as part of the Comprehensive Planning process. A key priority is safety – any improvements should focus on addressing the safety of the overall corridor. Some “quick fixes,” such as the signalization of Evergreen Road West at Highway 70 and clearing vegetation to improve sight distances to address residents’ concerns at the intersection.

With safety underpinning all improvements, practical considerations can be given to the order of larger improvements for the overall corridor. Because there is a high level of ongoing and upcoming development between the City Hall and Campus Drive, this section of the corridor has identified as the “core” area of improvements. Outside of this area, there is less development pressure, a higher concentration of single-family residences, and additional ROW concerns. These areas (east of City Hall to city limits and west of

Campus Drive to city limits) are considered the “complete” areas.

A tool to assist with priority identification of the intersections specifically is TDOT’s Intersection & Interchange Evaluation (IIE) tool. As described in the traffic section of this report, the IIE tool uses real traffic inputs to make a “preferred option selection” on the intersection treatment based on asking the following questions:

1. Is the option feasible and reasonable?
2. Is the option likely to improve or maintain safety?
3. Is the option likely to improve operations?
4. Is the option likely to improve or maintain multimodal access?



These questions translate into the following priorities: overall feasibility, safety, efficiency, multimodal access, as well incorporating construction cost, life-cycle cost, and stakeholder support.

Based on the above listed goals and priorities, a recommended implementation plan has been created. However, it should be noted that the plan is living and flexible, and changes may be necessary due to funding availability, community support or demands, stakeholder opinions, and landowner cooperation (i.e. ROW acquisition progress). The city should set forth clear intentions with this plan, which will help prepare landowners, developers, or residents of Lakeland for the implementation process. A project website is also recommended to provide periodic updates on the project.

SUMMARY OF IMPROVEMENTS

- » 3.2 miles of multi-use path
- » 4,670 linear feet of sidewalks
- » 1 new bridge over Scotts Creek with greenway connection
- » 7 intersection improvements (including 4 roundabouts)

The following lays out short-, mid-, and long-term actions that are recommended to meet the goals and priorities of the Highway 70 Corridor Study:

Short-term Actions (1 - 10 Years)

ROW Verification Survey

The city should complete a boundary survey of the entire corridor. This crucial first step will allow the city to verify existing TDOT right-of-way, utility easements, and property owners along Highway 70. This will set the city up to begin right-of-way acquisition.

Temporary Traffic Signal at Evergreen Road West

This measure will immediately improve the safety of this intersection, which is currently unsafe due to sight distance concerns. Additionally, this

intersection has had at least one serious crash as described in the crash analysis and appendix.

ROW Acquisition and Dedication

The city should begin the process of right-of-way acquisition for the corridor improvements. Because of the length of the corridor and number of properties lining the corridor, right-of-way acquisition will be a lengthy process that will continue into mid and potentially long-term actions. The city should expect appraisals, review appraisals, negotiations, and even some properties to go to condemnation. Each of these takes time in the right-of-way acquisition process.

Utility Relocation

The city should also begin any utility relocations determined necessary from the survey in the short-term due to the lengthy nature of the utility relocation process. In particular, the relocation of the MLGW aerial powerlines should begin, to make room for the multi-use pathway and remove the need for guardrail.

Grant Applications

With the corridor study in-hand, the city should begin applying for TDOT and Federal Grants to in-part fund the improvements in the mid- and long-term. A discussion of applicable grants is included in this section.

“City Core” Design

The city should design and engineer the City Core improvements of the corridor. This section is from Campus Drive east to City Hall. Improvements in this section include a roundabout at Campus Drive, a new bridge over Scotts Creek, a roundabout at Village Market Lane, pedestrian improvements at the new Seedtick Road signal, multi-use pathway on the north side of the highway, and sidewalk on the south side of the highway.

Mid-Term Actions (10 - 20 Years)

Phased “City Core” Construction

Once grant funding has been obtained and design is complete, the city should work to begin construction for improvements to the “City Core” section of the corridor.

- » Coordinate with TDOT for the replacement of Scotts Creek bridge to ensure clearance for a multi-use pathway under the bridge.

“Corridor Extension” Design

The city should complete the remainder of the corridor, which can be broken into two sections:

- » The west section of the complete corridor runs from the west city limits to Campus drive and includes pedestrian upgrades to the intersection with Canada Road and a multi-use pathway on the north side of the highway for the entire length.
- » The east section of the complete corridor runs from City Hall to the east city limits, and includes a roundabout at Evergreen Road West, pedestrian improvements at Saffron Springs Drive, a roundabout at the new Chambers Chapel Road extension, and multi-use pathway on the north side of the highway for the entire length.

Long-Term Actions (20 - 30 Years)

- » “Corridor Extension” construction, optionally separated into an east and west phase.
- » Reconstruction of the Scotts Creek Bridge and multi-use path underpass if did not occur during “City Core construction”
- » Multi-use path connection to Scotts Creek Greenway extending toward Lakeland Prep School and IH Park.



SUMMARY OF THE COSTS

This section of the report utilized TDOT's Conceptual Cost Estimate Tool to create cost summaries for the implementation of the Corridor Study. The estimate was verified with internal opinion of cost tools based on conceptual engineered project quantities to verify the order of magnitude of the TDOT estimate.

For simplicity, the costs of the corridor improvements are separated into the "City Core" and "Corridor Extension" sections as described above. All costs are grouped according to each section including survey, engineering, ROW, Utilities, and construction costs.

It is important to note that this is a conceptual level estimate based on conceptual engineering and is for planning purposes only. This estimate does not include project-specific auxiliary costs such as the Memphis Light, Gas and Water (MLGW) relocation or right-of-way verification survey. Additionally, these estimates are based on current 2026 prices, and subject to escalation over time. Inflated cost breakdown for a 10-year period based on a 5.5% inflation rate for each section is included in this opinion of cost.

*TABLE 7-1: CORRIDOR
IMPROVEMENT COST ESTIMATE*

CORRIDOR SECTION	CONCEPTUAL LEVEL COST ESTIMATE
City Core	\$31,400,000
Corridor Extension	\$71,300,000

POTENTIAL FUNDING SOURCES

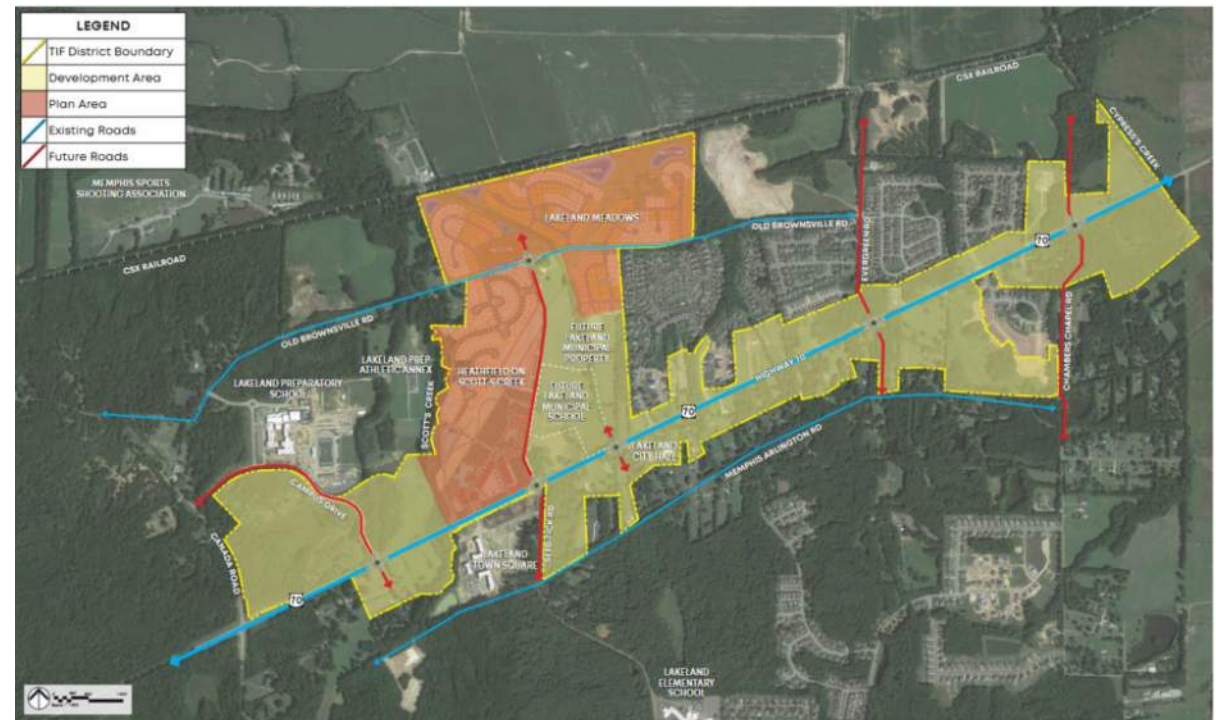
As part of this corridor study, the report considers multiple funding sources to implement the corridor improvements.

The primary funding source is grants. TDOT's Office of Community Transportation provides a Transportation Funding Database that provides information on federal, state, and non-profit funding opportunities for transportation projects. Table 7-1 documents a variety of grants that may be applicable to the improvements recommended by this corridor study. Included with each grant is the agency it is administered by, a description, grant amount, and local match amount (typically 20%).

A secondary source is to utilize ongoing and future developments along the corridor. The existing Lakeland Safety Tax Increment Financing (TIF) was instated to improve public infrastructure as set forth in the Lakeland Development Corporation TIF Program Policies and Procedure. This option leverages the existing TIF district to fund improvements in that district (centered on the "City Core" section of the corridor). Developers are directly contributing financially to the improvements. Alternatively, the city can require developers to improve their frontage along the corridor according to the improvements

recommended by this corridor study, as well as dedicate the required right-of-way with their site improvements.

FIGURE 7-1: LAKELAND SAFETY TIF DISTRICT MAP



Source: Daily Memphian



TABLE 7-2: FUNDING

GRANT	AGENCY	DESCRIPTION	AMOUNT	LOCAL MATCH AMOUNT	NOTES
Active Transportation Infrastructure Investment Program (ATIIP)	FHWA	ATIIP is a competitive FHWA grant program that funds planning, design, and construction of walking, bicycling, and other active transportation infrastructure. *Projects seeking Planning and Design grants must have planning and design costs of at least \$100,000 to be eligible. Projects seeking Construction grants must have total costs of at least \$15 million to be eligible	\$100,000-\$15 million*	20%	Highly competitive grant, and funding may not be available due to a recension of funds
Better Utilizing Investments to Leverage Development (BUILD)	FHWA	FHWA provides grants to states and local entities for high-impact projects across multiple transportation modes, including eligible highway, bridge, transit, passenger rail, and freight rail projects.	\$5 million minimum for urban, \$1 million minimum for rural. 15% maximum funding amount for any single state	20%	Best option to get the project build at one time. Highly competitive and requires a Benefit-Cost Analysis.
Carbon Reduction Program	TDOT	TDOT provides funding for projects that reduce transportation emissions, including nonmotorized trail facilities, public transit, intersection improvements, and congestion management technologies.	Varies	20% Local Government, though depends on population	Potential funding for multi-use trail and sidewalks
Multimodal Access Grant (MMAG)	TDOT	TDOT provides funding for pedestrian, bicycle, and transit infrastructure projects on state routes that close sidewalk and multi-use path gaps, meet ADA/ PROWAG standards, and include local match and maintenance commitments.	\$1.25 million	Counties *10% match for projects in all other counties	Potential funding for multi-use trail and sidewalks
Transportation Alternatives Program (TAP)	TDOT	TDOT's Transportation Alternatives Program funds a wide range of pedestrian, bicycle, trail, scenic, and historic transportation projects across Tennessee for eligible public agencies.	No cap (usually around \$1 million)	20% local for construction only	Potential funding for multi-use trail
Safe Streets and Roads for All (SS4A)	FHWA	The SS4A program provides grants to regional, local, and Tribal entities to plan and implement safety actions that reduce roadway deaths and serious injuries.	Varies by . Tennessee received over \$24.7 million in FY 2024	20% Local Governments	Consider this grant for phased approached. Requires safety action plan adopted by City.
Surface Transportation Block Grant (STBG)	TDOT	TDOT provides flexible funding for highway, bridge, tunnel, pedestrian, bicycle, and transit capital projects on public roads.	Varies	20%. Available to cities with a population of 5000 or greater	Consider this grant for phased approached

Active Transportation Infrastructure Investment Program (ATIIP)

ATIIP is a competitive FHWA grant program that provides funding to plan, design, and construct infrastructure that will provide substantial additional opportunities for walking, bicycling, and other forms of active transportation. ATIIP will award two types of grants: Planning and Design grants and Construction grants. FHWA will award Planning and Design grants for eligible applicants to develop plans for active transportation networks and active transportation spines. FHWA will award Construction grants to eligible applicants to construct projects to provide safe and connected active transportation facilities in an active transportation network or active transportation spine.

GRANT DETAILS

\$100,000 - \$15 million, 20% local match

Projects seeking Planning and Design grants must have planning and design costs of at least \$100,000 to be eligible. Projects seeking Construction grants must have total costs of at least \$15 million to be eligible.

Better Utilizing Investments to Leverage Development (BUILD)

FHWA provides grants to states and local entities for projects that will have significant local/regional impact. Grants support a diverse array of modes. BUILD-eligible projects include a highway or bridge project eligible for assistance under title 23 of USC, public transportation projects eligible under chapter 53 of title 49, USC, and passenger rail or freight rail transportation projects eligible under title 49 of USC. Please see the website for additional eligible projects.

GRANT DETAILS

\$5 million minimum for urban, \$1 million minimum for rural. 15% maximum funding amount for any single state. 20% local match.

Carbon Reduction Program

TDOT funding for projects to support transportation emission reductions. States may use Carbon Reduction Program funds for projects that support the reduction of transportation emissions, including: the construction, planning, and design of trail facilities for pedestrians, bicyclists, and other nonmotorized forms of transportation;

public transportation projects; roundabout and other intersection improvement projects, and congestion management technologies.

GRANT DETAILS

Varies; 20% local match dependent on population.

Multimodal Access Grant (MMAG)

TDOT funding that supports transportation needs of pedestrians, bicyclists, and transit users through infrastructure projects that address existing gaps in sidewalks/multi-use paths along state routes. Projects must (1) be located on a state route; (2) meet ADA and PROWAG standards; (3) primarily serve a transportation need; (4) be contiguous and must include new construction or rehab of existing facilities; and (5) applicant must commit to a local match and ongoing maintenance responsibility.

GRANT DETAILS

\$1.25 million, 5% match for projects in Distressed/At-Risk Counties, 10% match for projects in all other counties.



Transportation Alternatives Program (TAP)

TDOT's Transportation Alternatives Program (TAP) has funded projects in hundreds of communities throughout the state of Tennessee. Eligible activities include pedestrian and bicycle facilities and safe routes for non-drivers, conversion of abandoned railway corridors to trails, scenic turnouts and overlooks, historic preservation and rehab of historic transportation facilities, and archaeological activities. Eligible applicants include local governments (cities or counties), state natural resource agencies, and public land agencies.

GRANT DETAILS

No cap (usually around \$1 million), 20% local match (for construction only).

Safe Streets and Roads for All (SS4A)

The FHWA SS4A program funds regional, local, and Tribal initiatives through grants to prevent roadway deaths and serious injuries. The following activities are eligible for the SS4A program: (1) Develop or update a comprehensive safety action plan (Action Plan); (2) Conduct planning, design, and development activities in support of an Action Plan; (3) Carry out projects and strategies identified in an Action Plan.

GRANT DETAILS

Varies; 20% local match.

Surface Transportation Block Grant (STBG)

TDOT provides flexible funding that may be used by States and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals.

GRANT DETAILS

Varies; 20% local match. Available to cities with a population of 5,000 or greater.

08

Appendix

Appendix

CONTENT

Appendix A: Work Cited

Appendix B: Crash Analysis

Appendix C: Existing Conditions Analysis

Appendix D: Summary of ITE Trip Generation and Proposed Conditions

Appendix E: Summary of RODEL Analysis

Appendix F: Community Survey #1 Written Suggestions

Appendix G: Community Survey #2 Written Suggestions



Appendix A: Work Cited

1. U.S. Census Bureau. (n.d.). "American Community Survey 2019-2023 5-Year Estimates." Retrieved January 28, 2026, from www.census.gov/data/developers/data-sets/acs-5year.html
2. AASHTO. "Highway Safety Manual. 2010"
3. Highway Capacity Manual. 2000. Transportation Research Board, National Research Council.
4. Tennessee Department of Transportation. "Annual Daily Traffic Count (TCDS)", TDOT, tdot.public.ms2soft.com. Accessed January 28, 2026.
5. City of Lakeland. "Lakeland's Comprehensive Plan." Lakeland, TN, www.lakelandtn.gov/155/Lakelands-Comprehensive-Plan. Accessed January 28, 2026.
6. Municipal Code of Lakeland. "Tennessee Municipal Technical Advisory Service." www.mtas.tennessee.edu/code/municipal-code-lakeland. Accessed January 28, 2026.
7. <https://highways.dot.gov/safety/proven-safety-countermeasures/roundabouts>

Appendix B: Crash Analysis

Memorandum
Page 2 of 7



memorandum

Date: August 5, 2025

To: Luis Camarillo Hernandez, Senior Engineer, City of Lakeland

cc: James Robert Dearman, PE

From: Anas Alrejfal, PE & Adam Jadun, PE

Re: Highway 70 from Lamb Road to Brunswick Road Crash Analysis

A traffic crash analysis was prepared for the segment of Highway 70 within the limits of the City of Lakeland, Tennessee. This segment is approximately 3.5 miles in length. This crash analysis included the nearest major intersections just beyond the city limits of Lamb Road to the east and Brunswick Road to the west . These intersections are located just outside the project limits and were included to provide additional context. The primary focus of this analysis was to identify high crash locations and potentially correctable crash patterns. Particular attention was given to head-on and angle crashes, which tend to result in more serious injuries and greater property damage.

The segment of Highway 70 from Lamb Road to Brunswick Road is a multi-lane principal arterial for its entire length, with a five-lane cross section at the signalized intersections at Lamb Rd, Canada Rd and Brunswick Rd. The cross section transitions to a four-lane section between the intersections with two lanes each direction.

Crash data for the analysis was obtained from Tennessee Department of Transportation (TDOT) AASHTOWare software, which provides crash summary data. The crash data encompassed a period of three full years spanning January 1, 2022, through December 31, 2024. The intersection crash analysis included all crashes that occurred within a 250' radius.

INTERSECTION CRASH ANALYSES

A crash analysis was performed for the major intersections along Highway 70 from Lamb Road to Brunswick Road . The intersections of Highway 70 at Lamb Road, Highway 70 at Canada Road and Highway 70 at Brunswick Road are signalized. A summary of the intersection crash data is shown below in Tables 1 through 8.

TABLE 1: Summary of Intersection Crash Data (2022-2024)

Highway 70 from Lamb Road to Brunswick Road													
Intersection	Crash Type										Injuries		
	Side Swipe	Head On	Head On – Left Turn	Angle	Rear End	Single Vehicle	Back	Other	TOTAL	Fatal	A-Level (Incapacitating)	B-Level (Non-Incapacitating)	C-Level (Possible)
Highway 70 at Lamb Road	0	1	0	3	0	0	0	0	4	0	0	0	2
Highway 70 at Canada Road	1	1	0	2	3	0	0	0	7	0	0	0	3
Highway 70 at Brunswick	1	1	0	10	6	1	0	0	19	0	0	0	3
TOTAL	2	3	0	15	9	1	0	0	30	0	0	0	8
% TOTAL	6.7%	10%	0%	50%	30%	3.3%	0%	0%	100.0%	0%	0%	0%	26.7%

TABLE 2: Summary of Intersection Crash Data (2022-2024)

	Highway 70 at Lamb Rd												
Crash Year	Crash Type									Injuries			
	Side Swipe	Head On	Head On-Left Turn	Angle	Rear End	Single Vehicle	Back	Other	TOTAL	Fatal	A-Level (Incapacitating)	B-Level (Non-Incapacitating)	C-Level (possible)
2022	0	0	0	1	0	0	0	0	1	0	0	0	0
2023	0	0	0	0	0	0	0	0	0	0	0	0	0
2024	0	1	0	2	0	0	0	0	3	0	1	1	0
TOTAL	0	1	0	3	0	0	0	0	4	0	1	1	0
% TOTAL	0%	25%	0%	75%	0%	0%	0%	0%	100.0%	0%	25%	25%	0%



TABLE 3: Summary of Intersection Crash Data (2022-2024)

Crash Year	Highway 70 at Canada Rd													
	Crash Type									TOTAL	Injuries			
	Side Swipe	Head On	Head On-Left Turn	Angle	Rear End	Single Vehicle	Back	Other			Fatal	A-Level (Incapacitating)	B-Level (Non-Incapacitating)	C-Level (Possible)
2022	0	0	0	1	2	0	0	0		3	0	0	0	0
2023	1	0	0	1	0	0	0	0		2	0	0	0	2
2024	0	1	0	0	1	0	0	0		2	0	0	0	1
TOTAL	1	1	0	2	3	0	0	0		7	0	0	0	3
% TOTAL	14.3%	14.3%	0%	28.6%	42.9%	0%	0%	0%		100.0%	0%	0%	0%	42.9%

TABLE 4: Summary of Intersection Crash Data (2022-2024)

Crash Year	Highway 70 at Brunswick Road													
	Crash Type									TOTAL	Injuries			
	Side Swipe	Head On	Head On-Left Turn	Angle	Rear End	Single Vehicle	Back	Other			Fatal	A-Level (Incapacitating)	B-Level (Non-Incapacitating)	C-Level (Possible)
2022	0	0	0	4	2	0	0	0		6	0	0	0	3
2023	1	0	0	2	2	1	0	0		6	0	0	0	0
2024	0	1	0	4	2	0	0	0		7	0	0	0	0
TOTAL	1	1	0	10	6	1	0	0		19	0	0	0	3
% TOTAL	5.3%	5.3%	0%	52.6%	31.6%	5.3%	0%	0%		100.0%	0%	0%	0%	15.8%

1. Sideswipe Crashes:

There were two sideswipe crashes reported at these intersections during the study period. One crash occurred at the intersection of Highway 70 and Brunswick Road in 2023, and one crash occurred at the intersection of Highway 70 and Canada Road in 2023. Both crashes were related to lane changing maneuvers near the intersections.

2. Head On Crashes:

All three head-on crashes reported at these intersections occurred in 2024. One crash took place at Highway 70 and Brunswick Road, one at Highway 70 and Canada Road, and one at Highway 70 and Lamb Road. In each case, the crash resulted from a vehicle leaving its lane and entering oncoming traffic.

3. Angle Crashes:

There were fifteen angle crashes reported at these intersections during the study period. The majority (66.7%) of these crashes occurred at the intersection of Highway 70 and Brunswick Road with ten crashes. The intersection of Highway 70 and Lamb Road had three angle crashes, while Highway 70 and Canada Road had two angle crashes. These crashes typically involved vehicles failing to yield right-of-way when entering or crossing the intersection.

5. Rear End Crashes:

There were nine rear end crashes reported at these intersections during the study period. The intersection of Highway 70 and Brunswick Road experienced the most rear end crashes with six incidents (66.7% of total rear end crashes). Highway 70 and Canada Road had three rear end crashes, while Highway 70 and Lamb Road had no rear end crashes during the study period. These crashes typically occurred during deceleration for traffic signals or turning movements.

6. Single Vehicle Crashes:

There was one single vehicle crash reported at these intersections during the study period. This crash occurred at the intersection of Highway 70 and Brunswick Road in 2023. The crash involved a vehicle losing control and leaving the roadway.

SEGMENT CRASH ANALYSES

There were sixty-five crashes that occurred within the study area that were not located within the 250' radius of the major intersections noted above. The segment crash data can be seen in Table 5, 6 and 7 below.

TABLE 5: Summary of Segment Crash Data (2022-2024)

Segment	Highway 70 from Lamb Rd to Brunswick Rd													
	Crash Type									Crashes / Mile	Injuries			
	Side Swipe	Head On	Head On - Left Turn	Angle	Rear End	Single Vehicle	Back	Other			Fatal	A-Level (Incapacitating)	B-Level (Non-Incapacitating)	C-Level (Possible)
Lamb to Canada	5	2	0	7	16	21	0	2		53	1	2	6	7
Canada to Brunswick	3	0	0	1	4	4	0	0		12	0	2	1	1
TOTAL	8	2	0	8	20	25	0	2		65	1	4	7	8
% TOTAL	12.3%	3.1%	0%	12.3%	30.7%	38.5%	0.0%	3.1%		100.0%	1.5%	6.1%	10.7%	12.3%



TABLE 6: Summary of Segment Crash Data (2022-2024)

Highway 70 from Lamb Rd to Canada													
Crash Year	Crash Type								Crashes / Mile	Injuries			
	Side Swipe	Head On	Angle	Rear End	Single Vehicle	Back	Other	TOTAL		Fatal	A-Level (Incapacitating)	B-Level (Non-Incapacitating)	C-Level (Possible)
2022	1	1	2	6	8	0	1	19	5.7	1	1	0	4
2023	1	0	1	1	5	0	0	8	2.4	0	0	2	1
2024	3	1	4	9	8	0	1	26	7.9	0	1	4	2
TOTAL	5	2	7	16	21	0	2	53	16	1	2	6	7
% TOTAL	9.4%	3.8%	13.2%	30.2%	39.6%	0%	3.8%	100.0%	-	1.9%	3.8%	11.3%	13.2%

TABLE 7: Summary of Segment Crash Data (2022-2024)

Highway 70 from Canada to Brunswick													
Crash Year	Crash Type								Crashes / Mile	Injuries			
	Side Swipe	Head On	Angle	Rear End	Single Vehicle	Back	Other	TOTAL		Fatal	A-Level (Incapacitating)	B-Level (Non-Incapacitating)	C-Level (Possible)
2022	2	0	1	1	0	0	0	4	2.9	0	0	0	0
2023	1	0	0	1	2	0	0	4	2.9	0	2	1	1
2024	0	0	0	2	2	0	0	4	2.9	0	0	0	0
TOTAL	3	0	1	4	4	0	0	12	8.7	0	0	1	1
% TOTAL	25.0%	0.0%	8.3%	33.3%	33.3%	0.0%	0.0%	100.0%	-	0%	0.0%	8.3%	8.3%

The following provides the segment summary of the crash data:

1. Sideswipe Crashes:

There were eight sideswipe crashes reported throughout these segments during the study period. The majority of these crashes were sideswipe-same direction crashes caused by improper lane changing and failure to maintain proper lane position. One sideswipe-opposite direction crash occurred when a vehicle departed its lane and struck an oncoming vehicle. These crashes were distributed across all three years with an increase noted in 2024.

2. Head On Crashes:

There were two head-on crashes reported throughout these segments during the study period. Both crashes occurred when vehicles crossed the centerline into oncoming traffic. One crash was attributed to inattentive driving, while the other had no specific contributing action identified. These crashes resulted in serious injuries, highlighting the severity of head-on collisions.



3. Angle Crashes:

There were eight angle crashes reported throughout these segments during the study period. The majority of these crashes occurred at intersections with side streets. Most angle crashes were caused by failure to yield right of way, with vehicles making turning movements that conflicted with through traffic. The crashes were distributed across all years, with 2024 showing the highest frequency.

4. Rear End Crashes:

There were twenty rear-end crashes reported throughout these segments during the study period, making this the second most common crash type. The majority of these crashes were caused by following too closely, driver inattention, and failure to observe traffic conditions. Several crashes involved multiple vehicles, with one four-vehicle crash resulting in serious injuries. Many rear-end crashes occurred during clear weather and daylight conditions, suggesting driver behavior rather than environmental factors as primary causes.

5. Single Vehicle Crashes:

There were twenty-five single vehicle crashes reported throughout these segments during the study period, representing the most common crash type (38.5%). These crashes involved vehicles striking various fixed objects including:

- Deer and other animals (most common)
- Utility poles
- Trees
- Guardrails and guardrail ends
- Ditches

The high frequency of deer strikes indicates significant wildlife activity in the corridor. Many single vehicle crashes were attributed to lane departure, operator inexperience, and swerving to avoid hazards.

6. Other Crashes:

There were two crashes classified as "other" during the study period. These included unusual circumstances such as rear-to-rear collisions and other non-standard crash configurations.

7. Fatal Crashes:

One fatal crash was reported during the study period. This incident occurred in 2022 at the unsignalized intersection of Highway 70 and Evergreen Road. The crash was classified as an angle collision involving two vehicles.

8. Serious Injury Crashes:

A total of four serious injury (A-level) crashes were reported along these segments during the study period. One incident involved a head-on collision between three vehicles in 2024, resulting from lane departure into opposing traffic. Another crash in 2023 involved a single-vehicle rollover, with contributing factors likely related to driver loss of control. In 2022, a four-vehicle rear-end chain reaction crash occurred at an unsignalized intersection, at Seedtick Road, with alcohol impairment identified as a contributing factor.

9. Minor Intersection Crashes:

There were 18 intersection-related crashes reported along Highway 70 from Brunswick Rd to Lamb Rd during the study period (2022–2024), accounting for 27.7% of the total 65 crashes. These crashes occurred exclusively at unsignalized intersections with cross streets and were predominantly Angle (nine crashes, 50.0%) and Rear-End (nine crashes, 50.0%) types, with no Sideswipe, Head-On, Single Vehicle, or Other crash types reported at intersections. The majority of these crashes were concentrated in the Canada to Lamb segment (14 crashes, 77.8%), with only 4 crashes (22.2%) in the Brunswick to Canada segment. All 18 intersection crashes are Angle or Rear-End, with 6 injuries (1



Fatal, 3 B-Level, 2 C-Level), all injuries occurred in the Canada to Lamb segment.

FINDINGS AND RECOMMENDATIONS

A total of 95 crashes occurred along Highway 70 from Brunswick Rd to Lamb Rd during the study period (2022–2024), including one fatal and four A-level (incapacitating) injury crashes. These crashes were distributed across three signalized intersections (Brunswick Rd, Canada Rd, Lamb Rd) and two segments (Brunswick to Canada, Canada to Lamb), spanning approximately 5 miles.

The Highway 70 corridor experienced typical crash patterns, however, there were patterns that can be addressed through these countermeasures:

1. Signalized Intersections

- **Brunswick Road:** Implement adaptive signal timing to reduce angle and rear-end crashes caused by failure to yield.
- **Canada Road:** Install advanced warning signs for high-speed approaches, as multiple B-level injury crashes indicate a risk of severe outcomes.
- **Lamb Road:** Improve lane markings to reduce angle crashes and enhance signal visibility for north-south traffic, addressing failure-to-yield issues.

2. Unsignalized Intersections

- Conduct a detailed review of unsignalized intersections within the Canada Road to Lamb Road segment, with particular focus on the Seedtick Road intersection.

3. Segment Safety

- Deploy wildlife mitigation strategies, such as deer crossing signs and fencing, to reduce animal-related crashes.

4. Access Management

- Evaluate and consolidate driveways near signalized intersections to improve safety and reduce conflict points.

If you have any questions, or require any additional information, please feel free to contact me.

Appendix C: Existing Conditions Analysis

HCM 7th Signalized Intersection Summary
1001: Brunswick Rd & Hwy 70

01/29/2026

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔		↔	↔	
Traffic Volume (veh/h)	93	272	20	60	503	10	31	89	35	20	144	338
Future Volume (veh/h)	93	272	20	60	503	10	31	89	35	20	144	338
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	97	283	21	77	645	13	35	101	40	22	155	363
Peak Hour Factor	0.96	0.96	0.96	0.78	0.78	0.78	0.88	0.88	0.88	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	290	892	66	412	904	18	167	338	134	404	128	299
Arrive On Green	0.06	0.27	0.27	0.05	0.25	0.25	0.03	0.27	0.27	0.02	0.26	0.26
Sat Flow, veh/h	1781	3355	247	1781	3563	72	1781	1275	505	1781	497	1164
Grp Volume(v), veh/h	97	149	155	77	322	336	35	0	141	22	0	518
Grp Sat Flow(s),veh/h/ln	1781	1777	1826	1781	1777	1857	1781	0	1779	1781	0	1661
Q Serve(g_s), s	2.5	4.2	4.2	2.0	10.3	10.3	0.9	0.0	3.9	0.6	0.0	16.0
Cycle Q Clear(g_c), s	2.5	4.2	4.2	2.0	10.3	10.3	0.9	0.0	3.9	0.6	0.0	16.0
Prop In Lane	1.00		0.14	1.00		0.04	1.00		0.28	1.00		0.70
Lane Grp Cap(c), veh/h	290	472	486	412	451	471	167	0	472	404	0	426
V/C Ratio(X)	0.33	0.32	0.32	0.19	0.71	0.71	0.21	0.00	0.30	0.05	0.00	1.22
Avail Cap(c_a), veh/h	870	1112	1142	471	570	596	258	0	472	511	0	426
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.5	18.3	18.4	16.0	21.2	21.2	18.3	0.0	18.3	16.6	0.0	23.2
Incr Delay (d2), s/veh	0.2	0.8	0.8	0.1	5.1	4.9	0.2	0.0	0.1	0.0	0.0	116.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.6	1.6	0.7	4.2	4.4	0.3	0.0	1.5	0.2	0.0	19.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.8	19.1	19.2	16.1	26.3	26.1	18.5	0.0	18.4	16.6	0.0	139.8
LnGrp LOS	B	B	B	B	C	C	B		B	B		F
Approach Vol, veh/h		401			735			176			540	
Approach Delay, s/veh		18.6			25.1			18.4			134.8	
Approach LOS		B			C			B			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.9	23.6	7.8	22.0	9.7	22.8	7.3	22.6				
Change Period (Y+Rc), s	6.0	7.0	6.0	6.0	6.0	7.0	6.0	6.0				
Max Green Setting (Gmax), s	5.0	39.0	5.0	16.0	24.0	20.0	5.0	16.0				
Max Q Clear Time (g_c+I1), s	4.0	6.2	2.9	18.0	4.5	12.3	2.6	5.9				
Green Ext Time (p_c), s	0.0	3.2	0.0	0.0	0.1	3.5	0.0	0.3				

Intersection Summary												
HCM 7th Control Delay, s/veh		55.0										
HCM 7th LOS		E										
Notes												
User approved pedestrian interval to be less than phase max green.												

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HCM 7th Signalized Intersection Summary
1002: Canada Rd & Hwy 70

01/29/2026

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔		↔	↔		↔	↔	
Traffic Volume (veh/h)	32	262	36	52	452	69	28	88	93	130	233	44
Future Volume (veh/h)	32	262	36	52	452	69	28	88	93	130	233	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	276	0	60	520	0	35	110	116	217	388	73
Peak Hour Factor	0.95	0.95	0.95	0.87	0.87	0.87	0.80	0.80	0.80	0.60	0.60	0.60
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	41	873		77	945		265	199	210	475	505	95
Arrive On Green	0.02	0.25	0.00	0.04	0.27	0.00	0.03	0.24	0.24	0.12	0.33	0.33
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	833	879	1781	1531	288
Grp Volume(v), veh/h	34	276	0	60	520	0	35	0	226	217	0	461
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1712	1781	0	1819
Q Serve(g_s), s	1.2	3.9	0.0	2.0	7.7	0.0	0.9	0.0	7.1	5.2	0.0	13.9
Cycle Q Clear(g_c), s	1.2	3.9	0.0	2.0	7.7	0.0	0.9	0.0	7.1	5.2	0.0	13.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.51	1.00		0.16
Lane Grp Cap(c), veh/h	41	873		77	945		265	0	408	475	0	600
V/C Ratio(X)	0.83	0.32		0.78	0.55		0.13	0.00	0.55	0.46	0.00	0.77
Avail Cap(c_a), veh/h	438	1338		583	1629		534	0	981	755	0	1221
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.7	18.8	0.0	28.9	19.3	0.0	17.3	0.0	20.4	13.7	0.0	18.4
Incr Delay (d2), s/veh	33.1	0.4	0.0	15.6	1.1	0.0	0.2	0.0	1.7	0.7	0.0	3.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.4	0.0	1.1	2.8	0.0	0.3	0.0	2.7	1.9	0.0	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.8	19.3	0.0	44.5	20.4	0.0	17.5	0.0	22.1	14.4	0.0	21.3
LnGrp LOS	E	B		D	C		B		C	B		C
Approach Vol, veh/h		310			580			261			678	
Approach Delay, s/veh		24.1			22.9			21.5			19.1	
Approach LOS		C			C			C			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.6	22.0	10.4	21.1	6.4	23.2	4.8	26.6				
Change Period (Y+Rc), s	5.0	7.0	3.0	6.5	5.0	7.0	3.0	6.5				
Max Green Setting (Gmax), s	20.0	23.0	17.0	35.0	15.0	28.0	11.0	41.0				
Max Q Clear Time (g_c+I1), s	4.0	5.9	7.2	9.1	3.2	9.7	2.9	15.9				
Green Ext Time (p_c), s	0.1	2.4	0.4	1.9	0.0	5.2	0.0	4.3				

Intersection Summary												
HCM 7th Control Delay, s/veh		21.5										
HCM 7th LOS		C										
Notes												
Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.												

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HCM 7th Signalized Intersection Summary

1003: Lamb Rd & Hwy 70

01/29/2026

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↩	↩		↩	↩		↩	↩	↩	↩	↩	↩
Traffic Volume (veh/h)	4	2	5	108	1	263	1	261	72	102	363	4
Future Volume (veh/h)	4	2	5	108	1	263	1	261	72	102	363	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	3	8	180	2	438	1	284	78	119	422	5
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60	0.92	0.92	0.92	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	94	252	562	2	473	336	942	420	431	1196	533
Arrive On Green	0.01	0.21	0.21	0.10	0.30	0.30	0.00	0.27	0.27	0.07	0.34	0.34
Sat Flow, veh/h	1781	451	1203	1781	7	1579	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	7	0	11	180	0	440	1	284	78	119	422	5
Grp Sat Flow(s),veh/h/ln	1781	0	1654	1781	0	1586	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.2	0.0	0.4	5.6	0.0	20.3	0.0	4.8	2.9	3.5	6.7	0.2
Cycle Q Clear(g_c), s	0.2	0.0	0.4	5.6	0.0	20.3	0.0	4.8	2.9	3.5	6.7	0.2
Prop In Lane	1.00		0.73	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	144	0	346	562	0	476	336	942	420	431	1196	533
V/C Ratio(X)	0.05	0.00	0.03	0.32	0.00	0.93	0.00	0.30	0.19	0.28	0.35	0.01
Avail Cap(c_a), veh/h	444	0	515	700	0	494	651	2497	1114	619	2497	1114
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.2	0.0	23.7	18.5	0.0	25.6	20.3	22.1	21.4	17.3	18.8	16.7
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.3	0.0	23.0	0.0	0.2	0.2	0.3	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	2.1	0.0	9.7	0.0	2.0	1.0	1.4	2.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.4	0.0	23.8	18.8	0.0	48.6	20.3	22.3	21.6	17.7	19.0	16.7
LnGrp LOS	C		C	B		D	C	C	C	B	B	B
Approach Vol, veh/h		18			620			363			546	
Approach Delay, s/veh		24.0			40.0			22.2			18.7	
Approach LOS		C			D			C			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.0	27.0	7.3	29.1	6.6	32.4	14.2	22.3				
Change Period (Y+Rc), s	6.5	7.0	6.5	6.5	6.5	7.0	6.5	6.5				
Max Green Setting (Gmax), s	13.5	53.0	13.5	23.5	13.5	53.0	13.5	23.5				
Max Q Clear Time (g_c+I1), s	5.5	6.8	2.2	22.3	2.0	8.7	7.6	2.4				
Green Ext Time (p_c), s	0.2	2.3	0.0	0.3	0.0	3.0	0.2	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh			28.1									
HCM 7th LOS			C									

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HCM 7th Signalized Intersection Summary

8003: Seed Tick Rd & Hwy 70

01/29/2026

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↩	↩	↩	↩	↩	↩
Traffic Volume (veh/h)	336	70	79	615	217	59
Future Volume (veh/h)	336	70	79	615	217	59
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No		No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	405	84	89	691	289	79
Peak Hour Factor	0.83	0.83	0.89	0.89	0.75	0.75
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1217	250	642	2283	369	329
Arrive On Green	0.41	0.41	0.16	0.64	0.21	0.21
Sat Flow, veh/h	3029	603	1781	3647	1781	1585
Grp Volume(v), veh/h	244	245	89	691	289	79
Grp Sat Flow(s),veh/h/ln	1777	1762	1781	1777	1781	1585
Q Serve(g_s), s	9.0	9.1	2.1	8.3	14.8	4.0
Cycle Q Clear(g_c), s	9.0	9.1	2.1	8.3	14.8	4.0
Prop In Lane		0.34	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	737	730	642	2283	369	329
V/C Ratio(X)	0.33	0.34	0.14	0.30	0.78	0.24
Avail Cap(c_a), veh/h	737	730	642	2283	369	329
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.2	19.2	9.2	7.7	36.2	31.9
Incr Delay (d2), s/veh	1.2	1.2	0.5	0.3	15.2	1.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	3.6	0.7	2.6	7.8	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	20.4	20.5	9.7	8.0	51.4	33.6
LnGrp LOS	C	C	A	A	D	C
Approach Vol, veh/h	489			780	368	
Approach Delay, s/veh	20.4			8.2	47.6	
Approach LOS	C			A	D	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	22.0	48.0		26.5		70.0
Change Period (Y+Rc), s	7.0	8.0		6.5		8.0
Max Green Setting (Gmax), s	15.0	40.0		20.0		62.0
Max Q Clear Time (g_c+I1), s	4.1	11.1		16.8		10.3
Green Ext Time (p_c), s	0.1	1.5		0.2		2.8
Intersection Summary						
HCM 7th Control Delay, s/veh			20.7			
HCM 7th LOS			C			

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HCM 7th Signalized Intersection Summary 1001: Brunswick Rd & Hwy 70

01/29/2026

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	335	645	45	40	399	26	33	106	23	23	106	155
Future Volume (veh/h)	335	645	45	40	399	26	33	106	23	23	106	155
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	No	No	No	No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	356	686	48	50	499	32	35	112	24	24	112	163
Peak Hour Factor	0.94	0.94	0.94	0.80	0.80	0.80	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	500	1210	85	316	731	47	201	299	64	318	133	193
Arrive On Green	0.18	0.36	0.36	0.04	0.22	0.22	0.03	0.20	0.20	0.02	0.19	0.19
Sat Flow, veh/h	1781	3369	236	1781	3391	217	1781	1493	320	1781	688	1002
Grp Volume(v), veh/h	356	362	372	50	261	270	35	0	136	24	0	275
Grp Sat Flow(s), veh/h/ln	1781	1777	1828	1781	1777	1831	1781	0	1813	1781	0	1690
Q Serve(g_s), s	9.4	10.7	10.7	1.4	8.8	8.9	1.0	0.0	4.2	0.7	0.0	10.2
Cycle Q Clear(g_c), s	9.4	10.7	10.7	1.4	8.8	8.9	1.0	0.0	4.2	0.7	0.0	10.2
Prop In Lane	1.00	1.00	0.13	1.00	0.12	1.00	1.00	0.18	1.00	1.00	0.59	1.00
Lane Grp Cap(c), veh/h	500	638	656	316	383	395	201	0	363	318	0	326
V/C Ratio(X)	0.71	0.57	0.57	0.16	0.68	0.68	0.17	0.00	0.37	0.08	0.00	0.84
Avail Cap(c_a), veh/h	834	1061	1091	387	544	561	287	0	444	416	0	414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.9	16.9	16.9	18.8	23.6	23.6	21.0	0.0	22.6	20.5	0.0	25.4
Incr Delay (d2), s/veh	0.7	1.7	1.7	0.1	4.5	4.4	0.2	0.0	0.2	0.0	0.0	9.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	3.9	4.0	0.5	3.7	3.8	0.4	0.0	1.7	0.3	0.0	4.7
Unsig. Movement Delay, s/veh	15.6	18.5	18.5	18.9	28.1	28.0	21.2	0.0	22.8	20.6	0.0	35.3
LnGrp Delay(d), s/veh	B	B	B	B	C	C	C	C	C	C	C	D
LnGrp LOS	B	B	B	B	C	C	C	C	C	C	C	D
Approach Vol, veh/h	1090	1090	1090	581	581	581	171	171	171	299	299	299
Approach Delay, s/veh	17.6	17.6	17.6	27.2	27.2	27.2	22.5	22.5	22.5	34.1	34.1	34.1
Approach LOS	B	B	B	C	C	C	C	C	C	C	C	C
Timer - Assigned Phs	1	2	3	4	5	6	7	8	1	2	3	4
Phs Duration (G+Y+Rc), s	8.4	30.5	7.9	18.6	17.8	21.1	7.4	19.1	11.5	24.0	5.5	22.4
Change Period (Y+Rc), s	6.0	7.0	6.0	6.0	6.0	7.0	6.0	6.0	5.0	7.0	3.0	6.5
Max Green Setting (Gmax), s	5.0	39.0	5.0	16.0	24.0	20.0	5.0	16.0	25.0	23.0	11.0	25.0
Max Q Clear Time (g_c+1), s	3.4	12.7	3.0	12.2	11.4	10.9	2.7	6.2	6.8	12.4	3.5	13.8
Green Ext Time (p_c), s	0.0	8.4	0.0	0.4	0.4	3.2	0.0	0.3	0.3	4.6	0.0	2.1
Intersection Summary												
HCM 7th Control Delay, s/veh	22.9											
HCM 7th LOS	C											
Notes												
User approved pedestrian interval to be less than phase max green.												

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HCM 7th Signalized Intersection Summary 1002: Canada Rd/Canada & Hwy 70

01/29/2026

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱	↱	↰	↱	↱	↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	17	584	88	121	367	80	66	188	125	49	142	24
Future Volume (veh/h)	17	584	88	121	367	80	66	188	125	49	142	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	No	No	No	No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	19	649	0	139	422	0	73	209	139	56	163	28
Peak Hour Factor	0.90	0.90	0.90	0.87	0.87	0.87	0.90	0.90	0.90	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	24	953	183	1270	381	263	175	251	381	65	447	478
Arrive On Green	0.01	0.27	0.00	0.10	0.36	0.00	0.05	0.25	0.25	0.04	0.25	0.25
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1048	697	1781	1555	267
Grp Volume(v), veh/h	19	649	0	139	422	0	73	0	348	56	0	191
Grp Sat Flow(s), veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1745	1781	0	1822
Q Serve(g_s), s	0.7	10.4	0.0	4.8	5.5	0.0	1.9	0.0	11.8	1.5	0.0	5.6
Cycle Q Clear(g_c), s	0.7	10.4	0.0	4.8	5.5	0.0	1.9	0.0	11.8	1.5	0.0	5.6
Prop In Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.40	1.00	1.00	0.15	1.00
Lane Grp Cap(c), veh/h	24	953	183	1270	381	0	438	251	0	447	478	478
V/C Ratio(X)	0.79	0.68	0.76	0.33	0.19	0.00	0.79	0.22	0.00	0.43	0.22	0.43
Avail Cap(c_a), veh/h	421	1287	701	1847	609	0	687	489	0	718	718	718
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.2	20.8	0.0	27.7	14.9	0.0	16.9	0.0	22.2	17.9	0.0	20.2
Incr Delay (d2), s/veh	42.6	1.9	0.0	6.4	0.3	0.0	0.2	0.0	4.8	0.4	0.0	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	3.9	0.0	2.1	1.9	0.0	0.7	0.0	5.0	0.6	0.0	2.3
Unsig. Movement Delay, s/veh	73.8	22.7	0.0	34.2	15.2	0.0	17.2	0.0	27.0	18.3	0.0	21.1
LnGrp Delay(d), s/veh	E	C	C	B	B	B	C	B	C	B	C	C
LnGrp LOS	E	C	C	B	B	B	C	B	C	B	C	C
Approach Vol, veh/h	668	668	561	561	421	421	247	247	247	247	247	247
Approach Delay, s/veh	24.1	24.1	19.9	19.9	25.3	25.3	20.5	20.5	20.5	20.5	20.5	20.5
Approach LOS	C	C	B	B	C	C	C	C	C	C	C	C
Timer - Assigned Phs	1	2	3	4	5	6	7	8	1	2	3	4
Phs Duration (G+Y+Rc), s	11.5	24.0	5.5	22.4	5.9	29.7	5.9	22.1	11.5	24.0	5.5	22.4
Change Period (Y+Rc), s	5.0	7.0	3.0	6.5	5.0	7.0	3.0	6.5	5.0	7.0	3.0	6.5
Max Green Setting (Gmax), s	25.0	23.0	11.0	25.0	15.0	33.0	11.0	25.0	25.0	23.0	11.0	25.0
Max Q Clear Time (g_c+1), s	6.8	12.4	3.5	13.8	2.7	7.5	3.9	7.6	6.8	12.4	3.5	13.8
Green Ext Time (p_c), s	0.3	4.6	0.0	2.1	0.0	4.7	0.1	1.2	0.3	4.6	0.0	2.1
Intersection Summary												
HCM 7th Control Delay, s/veh	22.7											
HCM 7th LOS	C											
Notes												
Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.												

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HCM 7th Signalized Intersection Summary

1003: Lamb Rd & Hwy 70

01/29/2026

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱		↰	↱		↰	↱	↱	↰	↱	↱
Traffic Volume (veh/h)	4	1	4	138	3	252	2	468	125	8	337	100
Future Volume (veh/h)	4	1	4	138	3	252	2	468	125	8	337	100
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	7	2	7	230	5	420	2	544	145	9	362	108
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60	0.86	0.86	0.86	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	240	94	329	660	7	573	280	726	324	277	990	442
Arrive On Green	0.01	0.26	0.26	0.12	0.37	0.37	0.00	0.20	0.20	0.08	0.28	0.28
Sat Flow, veh/h	1781	365	1276	1781	19	1569	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	7	0	9	230	0	425	2	544	145	9	362	108
Grp Sat Flow(s), veh/h/ln	1781	0	1641	1781	0	1588	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.2	0.0	0.3	6.9	0.0	18.0	0.1	11.1	6.2	0.3	6.3	4.1
Cycle Q Clear(g_c), s	0.2	0.0	0.3	6.9	0.0	18.0	0.1	11.1	6.2	0.3	6.3	4.1
Prop In Lane	1.00		0.78	1.00		0.99	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	240	0	424	660	0	580	280	726	324	277	990	442
V/C Ratio(X)	0.03	0.00	0.02	0.35	0.00	0.73	0.01	0.75	0.45	0.03	0.37	0.24
Avail Cap(c_a), veh/h	532	0	1123	761	0	1087	585	1078	481	449	1078	481
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.4	0.0	21.4	16.0	0.0	21.3	24.3	28.9	27.0	20.2	22.4	21.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.0	1.8	0.0	1.6	1.0	0.0	0.2	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	2.5	0.0	6.0	0.0	4.4	2.3	0.1	2.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.4	0.0	21.4	16.3	0.0	23.1	24.4	30.6	28.0	20.2	22.7	21.9
LnGrp LOS	C		C	B		C	C	C	C	C	C	C
Approach Vol, veh/h		16			655			691			479	
Approach Delay, s/veh		21.4			20.7			30.0			22.5	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.6	27.0	12.5	22.3	7.3	35.3	6.8	28.1				
Change Period (Y+Rc), s	6.5	7.0	6.5	6.5	6.5	7.0	6.5	6.5				
Max Green Setting (Gmax), s	13.5	53.0	13.5	23.5	13.5	53.0	13.5	23.5				
Max Q Clear Time (g_c+I1), s	8.9	2.3	2.3	13.1	2.2	20.0	2.1	8.3				
Green Ext Time (p_c), s	0.3	0.0	0.0	2.7	0.0	2.8	0.0	2.3				
Intersection Summary												
HCM 7th Control Delay, s/veh			24.7									
HCM 7th LOS			C									

PM Peak 10:44 am 07/29/2025 Baseline

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HCM 7th Signalized Intersection Summary

8003: Seed Tick Rd & Hwy 70

01/29/2026

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↱	↱	↰	↱	↰	↱
Traffic Volume (veh/h)	686	97	48	502	73	99
Future Volume (veh/h)	686	97	48	502	73	99
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	789	111	51	528	94	127
Peak Hour Factor	0.87	0.87	0.95	0.95	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1297	182	486	2283	369	329
Arrive On Green	0.41	0.41	0.16	0.64	0.21	0.21
Sat Flow, veh/h	3222	440	1781	3647	1781	1585
Grp Volume(v), veh/h	448	452	51	528	94	127
Grp Sat Flow(s), veh/h/ln	1777	1791	1781	1777	1781	1585
Q Serve(g_s), s	19.1	19.1	1.2	6.0	4.3	6.7
Cycle Q Clear(g_c), s	19.1	19.1	1.2	6.0	4.3	6.7
Prop In Lane		0.25	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	737	742	486	2283	369	329
V/C Ratio(X)	0.61	0.61	0.10	0.23	0.25	0.39
Avail Cap(c_a), veh/h	737	742	486	2283	369	329
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	22.1	10.8	7.2	32.0	33.0
Incr Delay (d2), s/veh	3.7	3.7	0.4	0.2	1.7	3.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	7.9	0.4	1.9	2.0	2.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	25.8	25.8	11.3	7.5	33.7	36.4
LnGrp LOS	C	C	B	A	C	D
Approach Vol, veh/h	900			579	221	
Approach Delay, s/veh	25.8			7.8	35.2	
Approach LOS	C			A	D	
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	22.0	48.0		26.5		70.0
Change Period (Y+Rc), s	7.0	8.0		6.5		8.0
Max Green Setting (Gmax), s	15.0	40.0		20.0		62.0
Max Q Clear Time (g_c+I1), s	3.2	21.1		8.7		8.0
Green Ext Time (p_c), s	0.0	3.0		0.3		2.0
Intersection Summary						
HCM 7th Control Delay, s/veh			20.9			
HCM 7th LOS			C			

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Appendix D: Summary of ITE Trip Generation

ITE Code	Existing Building Uses	Amount	Future Development	Additional Amount	Trips per Unit		Unit of Measure	AM Trips	PM Trips
					(AM Peak)	(PM Peak)			
210	Residential - Single Family	783 units	Residential - Single Family	540 units	0.75	0.99	Dwelling Units	405	534.6
221	Residential - Low Rise Apartments	289 units	Residential - Low Rise Apartments	300 units	0.35	0.39	Dwelling Units	105	117
710	General Office in Lakeland Commons	18000 SF	General Office in Lakeland Commons	n/a	1.52	1.44	1000 SF		
820	Commercial - shopping/mixed use retail*	86000 SF	Commercial - shopping/mixed use retail*	100000 SF	2.87	4.4	1000 SF	287	440
912	Drive-in Bank in LC	3000 SF	Drive-in Bank in LC	n/a	14.78	20.92	1000 SF		
932	High-Turnover (sit down) Restaurant in LC	10000 SF	High-Turnover (sit down) Restaurant in LC	10000 SF	13.68	16.35/25.83		136.8	163.5
934	Fast-Food Restaurant in LC	7000 SF	Fast-Food Restaurant in LC	n/a					258.3
730	Civic (City Hall+maintenance)	19800 SF	Civic (City Hall+maintenance)	n/a					
525/528	Civic (Lakeland High School)	175000 SF	Civic (Lakeland High School)	n/a					
525/529	Civic (Lakeland Gym)	62000 SF	Civic (Lakeland Gym)	n/a					
310	Hotel	n/a SF	Hotel	100 rooms	0.53	0.6	Rooms	53	60

Future Development		Trips per Unit (AM Peak)		AM Trips	PM Trips
		Trips per Unit (AM Peak)	Trips per Unit (PM Peak)		
Residential - Single Family	200	0.7	0.94	140	188
Residential - Single Family	50	0.7	0.94	35	47
Residential - Low Rise Apartments	50	0.37	0.39	18.5	19.5
Hotel	100	0.46	0.59	46	59
Commercial	40000	0.84	3.4	33.6	136
Residential - Single Family	70	0.7	0.94	49	65.8
Residential - Low Rise Apartments	180	0.37	0.39	66.6	70.2
Residential - Single Family	40	0.7	0.94	28	37.6
Residential - Single Family	20	0.37	0.39	7.4	7.8
Canada Commercial NE	10000	0.84	3.4	8.4	34
Canada Commercial NW	10000	0.84	3.4	8.4	34
Canada Commercial SE	10000	0.84	3.4	8.4	34
Canada Commercial SW	10000	0.84	3.4	8.4	34
Residential - Single Family	90	0.7	0.94	63	84.6



HCM 7th Signalized Intersection Summary

1001: Brunswick Rd & Hwy 70

01/30/2026

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (veh/h)	93	272	20	60	503	10	31	89	35	20	144	338	
Future Volume (veh/h)	93	272	20	60	503	10	31	89	35	20	144	338	
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0	
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Ped-Bike Adj(A_pbT)			1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Work Zone On Approach	No			No			No			No			
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	
Adj Flow Rate, veh/h	97	283	21	77	645	13	35	101	40	22	155	363	
Peak Hour Factor	0.96	0.96	0.96	0.78	0.78	0.78	0.88	0.88	0.88	0.93	0.93	0.93	
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2	
Cap, veh/h	290	892	66	412	904	18	167	338	134	404	128	299	
Arrive On Green	0.06	0.27	0.27	0.05	0.25	0.25	0.03	0.27	0.27	0.02	0.26	0.26	
Sat Flow, veh/h	1781	3355	247	1781	3563	72	1781	1275	505	1781	497	1164	
Grp Volume(v), veh/h	97	149	155	77	322	336	35	0	141	22	0	518	
Grp Sat Flow(s),veh/h/ln	1781	1777	1826	1781	1777	1857	1781	0	1779	1781	0	1661	
Q Serve(g_s), s	2.5	4.2	4.2	2.0	10.3	10.3	0.9	0.0	3.9	0.6	0.0	16.0	
Cycle Q Clear(g_c), s	2.5	4.2	4.2	2.0	10.3	10.3	0.9	0.0	3.9	0.6	0.0	16.0	
Prop In Lane	1.00		0.14	1.00		0.04	1.00		0.28	1.00		0.70	
Lane Grp Cap(c), veh/h	290	472	486	412	451	471	167	0	472	404	0	426	
V/C Ratio(X)	0.33	0.32	0.32	0.19	0.71	0.71	0.21	0.00	0.30	0.05	0.00	1.22	
Avail Cap(c_a), veh/h	870	1112	1142	471	570	596	258	0	472	511	0	426	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	
Uniform Delay (d), s/veh	16.5	18.3	18.4	16.0	21.2	21.2	18.3	0.0	18.3	16.6	0.0	23.2	
Incr Delay (d2), s/veh	0.2	0.8	0.8	0.1	5.1	4.9	0.2	0.0	0.1	0.0	0.0	116.6	
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	0.8	1.6	1.6	0.7	4.2	4.4	0.3	0.0	1.5	0.2	0.0	19.4	
Unsig. Movement Delay, s/veh													
LnGrp Delay(d), s/veh	16.8	19.1	19.2	16.1	26.3	26.1	18.5	0.0	18.4	16.6	0.0	139.8	
LnGrp LOS	B	B	B	B	C	C	B		B	B		F	
Approach Vol, veh/h	401			735			176			540			
Approach Delay, s/veh	18.6			25.1			18.4			134.8			
Approach LOS	B			C			B			F			
Timer - Assigned Phs	1	2	3	4	5	6	7	8					
Phs Duration (G+Y+Rc), s	8.9	23.6	7.8	22.0	9.7	22.8	7.3	22.6					
Change Period (Y+Rc), s	6.0	7.0	6.0	6.0	6.0	7.0	6.0	6.0					
Max Green Setting (Gmax), s	5.0	39.0	5.0	16.0	24.0	20.0	5.0	16.0					
Max Q Clear Time (g_c+I1), s	4.0	6.2	2.9	18.0	4.5	12.3	2.6	5.9					
Green Ext Time (p_c), s	0.0	3.2	0.0	0.0	0.1	3.5	0.0	0.3					

Intersection Summary	
HCM 7th Control Delay, s/veh	55.0
HCM 7th LOS	E
Notes	
User approved pedestrian interval to be less than phase max green.	

AM Peak 1:15 pm 06/27/2025 Baseline

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HCM 7th Signalized Intersection Summary

1002: Canada Rd/Canada & Hwy 70

01/30/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	396	51	77	643	100	40	118	125	197	306	239
Future Volume (veh/h)	48	396	51	77	643	100	40	118	125	197	306	239
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	51	417	0	89	739	0	50	148	156	328	510	398
Peak Hour Factor	0.95	0.95	0.95	0.87	0.87	0.87	0.80	0.80	0.80	0.60	0.60	0.60
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	66	827		116	927		133	276	291	528	429	335
Arrive On Green	0.04	0.23	0.00	0.06	0.26	0.00	0.03	0.33	0.33	0.14	0.44	0.44
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	834	879	1781	974	760
Grp Volume(v), veh/h	51	417	0	89	739	0	50	0	304	328	0	908
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1712	1781	0	1734
Q Serve(g_s), s	2.6	9.5	0.0	4.6	18.1	0.0	1.7	0.0	13.4	10.7	0.0	41.0
Cycle Q Clear(g_c), s	2.6	9.5	0.0	4.6	18.1	0.0	1.7	0.0	13.4	10.7	0.0	41.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.51	1.00		0.44
Lane Grp Cap(c), veh/h	66	827		116	927		133	0	567	528	0	763
V/C Ratio(X)	0.78	0.50		0.77	0.80		0.38	0.00	0.54	0.62	0.00	1.19
Avail Cap(c_a), veh/h	287	878		383	1068		288	0	644	603	0	763
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.5	31.1	0.0	42.9	32.1	0.0	24.6	0.0	25.3	16.5	0.0	26.1
Incr Delay (d2), s/veh	17.4	1.0	0.0	10.2	4.9	0.0	1.8	0.0	1.1	1.6	0.0	98.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	3.9	0.0	2.2	7.8	0.0	0.8	0.0	5.4	4.2	0.0	36.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.9	32.1	0.0	53.1	37.0	0.0	26.3	0.0	26.5	18.1	0.0	124.3
LnGrp LOS	E	C		D	D		C		C	B		F
Approach Vol, veh/h	468			828			354			1236		
Approach Delay, s/veh	35.3			38.7			26.4			96.1		
Approach LOS	D			D			C			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.0	28.7	16.1	37.3	8.4	31.3	5.9	47.5				
Change Period (Y+Rc), s	5.0	7.0	3.0	6.5	5.0	7.0	3.0	6.5				
Max Green Setting (Gmax), s	20.0	23.0	17.0	35.0	15.0	28.0	11.0	41.0				
Max Q Clear Time (g_c+1), s	6.6	11.5	12.7	15.4	4.6	20.1	3.7	43.0				
Green Ext Time (p_c), s	0.1	3.1	0.4	2.4	0.1	4.2	0.0	0.0				

Intersection Summary	
HCM 7th Control Delay, s/veh	61.2
HCM 7th LOS	E
Notes	
Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.	

AM Peak 1:15 pm 06/27/2025 Baseline

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HCM 7th Signalized Intersection Summary

1003: Lamb Rd & Hwy 70

01/30/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	3	5	143	1	342	1	372	102	133	490	5
Future Volume (veh/h)	5	3	5	143	1	342	1	372	102	133	490	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	5	5	155	2	570	1	404	111	155	533	6
Peak Hour Factor	0.60	0.60	0.92	0.92	0.60	0.60	0.92	0.92	0.92	0.86	0.92	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	117	351	351	532	2	492	302	847	378	376	1463	653
Arrive On Green	0.01	0.41	0.41	0.31	0.31	0.31	0.24	0.24	0.24	0.09	0.41	0.41
Sat Flow, veh/h	1781	858	858	1405	6	1580	866	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	8	0	10	155	0	572	1	404	111	155	533	6
Grp Sat Flow(s), veh/h/ln	1781	0	1716	1405	0	1586	866	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.2	0.0	0.3	6.5	0.0	23.5	0.1	7.4	4.3	4.7	7.8	0.2
Cycle Q Clear(g_c), s	0.2	0.0	0.3	6.5	0.0	23.5	0.1	7.4	4.3	4.7	7.8	0.2
Prop In Lane	1.00		0.50	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	117	0	703	532	0	493	302	847	378	376	1463	653
V/C Ratio(X)	0.07	0.00	0.01	0.29	0.00	1.16	0.00	0.48	0.29	0.41	0.36	0.01
Avail Cap(c_a), veh/h	414	0	703	532	0	493	302	847	378	538	2494	1112
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.3	0.0	13.2	20.1	0.0	26.0	21.9	24.7	23.6	18.1	15.4	13.1
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.3	0.0	92.3	0.0	1.9	2.0	0.7	0.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	1.9	0.0	20.3	0.0	3.2	1.7	1.8	2.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.6	0.0	13.3	20.4	0.0	118.3	22.0	26.6	25.5	18.8	15.5	13.1
LnGrp LOS	C		B	C		F	C	C	C	B	B	B
Approach Vol, veh/h	18			727			516			694		
Approach Delay, s/veh	16.5			97.4			26.4			16.2		
Approach LOS	B			F			C			B		
Timer - Assigned Phs	1	2	3	4		6		8				
Phs Duration (G+Y+Rc), s	13.1	25.0	7.4	30.0		38.1		37.4				
Change Period (Y+Rc), s	6.5	* 7	6.5	6.5		7.0		6.5				
Max Green Setting (Gmax), s	13.5	* 18	13.5	23.5		53.0		23.5				
Max Q Clear Time (g_c+I1), s	6.7	9.4	2.2	25.5		9.8		2.3				
Green Ext Time (p_c), s	0.2	2.0	0.0	0.0		3.9		0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	49.1											
HCM 7th LOS	D											
Notes												
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.												

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HCM 7th Signalized Intersection Summary

8003: Seed Tick Rd & Hwy 70

01/30/2026

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱↰		↰	↱↰		↰	↱			↱↰	
Traffic Volume (veh/h)	0	514	94	110	842	0	295	0	78	0	0	0
Future Volume (veh/h)	0	514	94	110	842	0	295	0	78	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	619	113	124	946	0	393	0	104	0	0	0
Peak Hour Factor	0.92	0.83	0.83	0.89	0.89	0.92	0.75	0.92	0.75	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	917	167	285	1588	0	385	0	627	0	386	0
Arrive On Green	0.00	0.31	0.31	0.07	0.45	0.00	0.22	0.00	0.40	0.00	0.00	0.00
Sat Flow, veh/h	593	3002	547	1781	3647	0	1781	0	1585	0	3741	0
Grp Volume(v), veh/h	0	366	366	124	946	0	393	0	104	0	0	0
Grp Sat Flow(s), veh/h/ln	593	1777	1772	1781	1777	0	1781	0	1585	0	1777	0
Q Serve(g_s), s	0.0	16.6	16.6	4.2	18.5	0.0	19.9	0.0	3.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	16.6	16.6	4.2	18.5	0.0	19.9	0.0	3.9	0.0	0.0	0.0
Prop In Lane	1.00		0.31	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	78	543	541	285	1588	0	385	0	627	0	386	0
V/C Ratio(X)	0.00	0.67	0.68	0.44	0.60	0.00	1.02	0.00	0.17	0.00	0.00	0.00
Avail Cap(c_a), veh/h	78	543	541	285	1588	0	385	0	627	0	386	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	27.9	28.0	20.5	19.2	0.0	36.0	0.0	18.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	6.6	6.6	4.8	1.7	0.0	51.0	0.0	0.6	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.4	7.4	1.9	7.0	0.0	13.8	0.0	1.5	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	34.5	34.6	25.3	20.8	0.0	87.1	0.0	18.6	0.0	0.0	0.0
LnGrp LOS		C	C	C	C		F		B			
Approach Vol, veh/h	732			1070			497			0		
Approach Delay, s/veh	34.6			21.4			72.7			0.0		
Approach LOS	C			C			E					
Timer - Assigned Phs	1	2	3	4	6			8				
Phs Duration (G+Y+Rc), s	13.0	36.1	26.4	16.5	49.1			42.9				
Change Period (Y+Rc), s	7.0	8.0	6.5	6.5	8.0			* 6.5				
Max Green Setting (Gmax), s	6.0	28.1	19.9	8.0	41.1			* 36				
Max Q Clear Time (g_c+I1), s	6.2	18.6	21.9	0.0	20.5			5.9				
Green Ext Time (p_c), s	0.0	1.8	0.0	0.0	3.8			0.6				
Intersection Summary												
HCM 7th Control Delay, s/veh				36.7								
HCM 7th LOS				D								
Notes												
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.												

AM Peak 1:15 pm 06/27/2025 Baseline

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HCM 7th Signalized Intersection Summary

1001: Brunswick Rd & Hwy 70

01/30/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	335	645	45	40	399	26	33	106	23	23	106	155
Future Volume (veh/h)	335	645	45	40	399	26	33	106	23	23	106	155
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No				No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	356	686	48	50	499	32	35	112	24	24	112	163
Peak Hour Factor	0.94	0.94	0.94	0.80	0.80	0.80	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	500	1210	85	316	731	47	201	299	64	318	133	193
Arrive On Green	0.18	0.36	0.36	0.04	0.22	0.22	0.03	0.20	0.20	0.02	0.19	0.19
Sat Flow, veh/h	1781	3369	236	1781	3391	217	1781	1493	320	1781	688	1002
Grp Volume(v), veh/h	356	362	372	50	261	270	35	0	136	24	0	275
Grp Sat Flow(s),veh/h/ln	1781	1777	1828	1781	1777	1831	1781	0	1813	1781	0	1690
Q Serve(g_s), s	9.4	10.7	10.7	1.4	8.8	8.9	1.0	0.0	4.2	0.7	0.0	10.2
Cycle Q Clear(g_c), s	9.4	10.7	10.7	1.4	8.8	8.9	1.0	0.0	4.2	0.7	0.0	10.2
Prop In Lane	1.00		0.13	1.00		0.12	1.00		0.18	1.00		0.59
Lane Grp Cap(c), veh/h	500	638	656	316	383	395	201	0	363	318	0	326
V/C Ratio(X)	0.71	0.57	0.57	0.16	0.68	0.68	0.17	0.00	0.37	0.08	0.00	0.84
Avail Cap(c_a), veh/h	834	1061	1091	387	544	561	287	0	444	416	0	414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.9	16.9	16.9	18.8	23.6	23.6	21.0	0.0	22.6	20.5	0.0	25.4
Incr Delay (d2), s/veh	0.7	1.7	1.7	0.1	4.5	4.4	0.2	0.0	0.2	0.0	0.0	9.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	3.9	4.0	0.5	3.7	3.8	0.4	0.0	1.7	0.3	0.0	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.6	18.5	18.5	18.9	28.1	28.0	21.2	0.0	22.8	20.6	0.0	35.3
LnGrp LOS	B	B	B	B	C	C	C	C	C	C	C	D
Approach Vol, veh/h	1090			581			171			299		
Approach Delay, s/veh	17.6			27.2			22.5			34.1		
Approach LOS	B			C			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.4	30.5	7.9	18.6	17.8	21.1	7.4	19.1				
Change Period (Y+Rc), s	6.0	7.0	6.0	6.0	6.0	7.0	6.0	6.0				
Max Green Setting (Gmax), s	5.0	39.0	5.0	16.0	24.0	20.0	5.0	16.0				
Max Q Clear Time (g_c+I1), s	3.4	12.7	3.0	12.2	11.4	10.9	2.7	6.2				
Green Ext Time (p_c), s	0.0	8.4	0.0	0.4	0.4	3.2	0.0	0.3				
Intersection Summary												
HCM 7th Control Delay, s/veh	22.9											
HCM 7th LOS	C											
Notes												
User approved pedestrian interval to be less than phase max green.												

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HCM 7th Signalized Intersection Summary

1002: Canada Rd/Canada & Hwy 70

01/30/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 						 	
Traffic Volume (veh/h)	34	784	126	179	551	124	99	249	185	109	188	59
Future Volume (veh/h)	34	784	126	179	551	124	99	249	185	109	188	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	No	No	No	No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	871	0	206	633	0	110	277	206	125	216	68
Peak Hour Factor	0.90	0.90	0.90	0.87	0.87	0.87	0.90	0.90	0.90	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	48	931		248	1330		366	284	211	214	398	125
Arrive On Green	0.03	0.26	0.00	0.14	0.37	0.00	0.06	0.28	0.28	0.07	0.29	0.29
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	996	741	1781	1364	429
Grp Volume(v), veh/h	38	871	0	206	633	0	110	0	483	125	0	284
Grp Sat Flow(s), veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1737	1781	0	1793
Q Serve(g_s), s	1.9	21.0	0.0	9.9	11.9	0.0	3.8	0.0	24.2	4.3	0.0	11.7
Cycle Q Clear(g_c), s	1.9	21.0	0.0	9.9	11.9	0.0	3.8	0.0	24.2	4.3	0.0	11.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.43	1.00		0.24
Lane Grp Cap(c), veh/h	48	931		248	1330		366	0	494	214	0	523
V/C Ratio(X)	0.80	0.94		0.83	0.48		0.30	0.00	0.98	0.58	0.00	0.54
Avail Cap(c_a), veh/h	304	931		507	1335		479	0	494	313	0	523
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.5	31.7	0.0	36.8	20.9	0.0	20.7	0.0	31.1	23.2	0.0	26.2
Incr Delay (d2), s/veh	24.9	16.7	0.0	7.0	0.6	0.0	0.5	0.0	34.5	2.5	0.0	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	10.4	0.0	4.5	4.5	0.0	1.5	0.0	14.3	1.8	0.0	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.4	48.3	0.0	43.8	21.5	0.0	21.2	0.0	65.6	25.8	0.0	27.7
LnGrp LOS	E	D		D	C		C		E	C		C
Approach Vol, veh/h		909			839			593			409	
Approach Delay, s/veh		49.1			27.0			57.3			27.1	
Approach LOS		D			C			E			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.2	30.0	9.1	31.5	7.4	39.9	8.5	32.1				
Change Period (Y+Rc), s	5.0	7.0	3.0	6.5	5.0	7.0	3.0	6.5				
Max Green Setting (Gmax), s	25.0	23.0	11.0	25.0	15.0	33.0	11.0	25.0				
Max Q Clear Time (g_c+I1), s	11.9	23.0	6.3	26.2	3.9	13.9	5.8	13.7				
Green Ext Time (p_c), s	0.4	0.0	0.1	0.0	0.0	6.5	0.1	1.6				
Intersection Summary												
HCM 7th Control Delay, s/veh				40.9								
HCM 7th LOS				D								
Notes												
Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.												

PM Peak 10:44 am 07/29/2025 Baseline

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HCM 7th Signalized Intersection Summary

1003: Lamb Rd & Hwy 70

01/30/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	5	182	4	328	3	642	170	10	456	130
Future Volume (veh/h)	5	1	5	182	4	328	3	642	170	10	456	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	2	8	303	7	547	3	747	198	11	490	140
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60	0.86	0.86	0.86	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	85	339	689	8	609	240	857	382	220	1075	480
Arrive On Green	0.01	0.26	0.26	0.14	0.39	0.39	0.00	0.24	0.24	0.07	0.30	0.30
Sat Flow, veh/h	1781	327	1308	1781	20	1568	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	8	0	10	303	0	554	3	747	198	11	490	140
Grp Sat Flow(s),veh/h/ln	1781	0	1635	1781	0	1588	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.3	0.0	0.4	10.7	0.0	29.7	0.1	18.3	9.8	0.4	10.1	6.1
Cycle Q Clear(g_c), s	0.3	0.0	0.4	10.7	0.0	29.7	0.1	18.3	9.8	0.4	10.1	6.1
Prop In Lane	1.00		0.80	1.00		0.99	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	153	0	424	689	0	617	240	857	382	220	1075	480
V/C Ratio(X)	0.05	0.00	0.02	0.44	0.00	0.90	0.01	0.87	0.52	0.05	0.46	0.29
Avail Cap(c_a), veh/h	396	0	954	702	0	927	496	920	410	368	1075	480
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.0	0.0	25.0	18.3	0.0	26.1	26.0	33.1	29.9	23.3	25.6	24.2
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.4	0.0	8.0	0.0	8.7	1.1	0.1	0.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.2	4.0	0.0	11.3	0.0	8.3	3.6	0.2	4.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.1	0.0	25.1	18.7	0.0	34.1	26.0	41.8	30.9	23.4	25.9	24.6
LnGrp LOS	C		C	B		C	C	D	C	C	C	C
Approach Vol, veh/h	18			857			948			641		
Approach Delay, s/veh	25.5			28.6			39.5			25.6		
Approach LOS	C			C			D			C		
Timer - Assigned Phs												
Phs Duration (G+Y+Rc), s	19.3	30.6	12.5	28.4	7.6	42.3	6.9	34.0				
Change Period (Y+Rc), s	6.5	7.0	6.5	6.5	6.5	7.0	6.5	6.5				
Max Green Setting (Gmax), s	13.5	53.0	13.5	23.5	13.5	53.0	13.5	23.5				
Max Q Clear Time (g_c+1), s	12.7	2.4	2.4	20.3	2.3	31.7	2.1	12.1				
Green Ext Time (p_c), s	0.1	0.0	0.0	1.6	0.0	3.6	0.0	2.5				
Intersection Summary												
HCM 7th Control Delay, s/veh	32.0											
HCM 7th LOS	C											

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HCM 7th Signalized Intersection Summary

8003: Seed Tick Rd & Hwy 70

01/30/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (veh/h)	0	991	136	63	761	0	98	0	129	0	0	0
Future Volume (veh/h)	0	991	136	63	761	0	98	0	129	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1139	156	66	801	0	126	0	165	0	0	0
Peak Hour Factor	0.92	0.87	0.87	0.95	0.95	0.92	0.78	0.92	0.78	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	88	1141	156	218	1855	0	176	0	477	0	438	0
Arrive On Green	0.00	0.36	0.36	0.07	0.52	0.00	0.10	0.00	0.30	0.00	0.00	0.00
Sat Flow, veh/h	679	3141	429	1781	3647	0	1781	0	1585	0	3741	0
Grp Volume(v), veh/h	0	643	652	66	801	0	126	0	165	0	0	0
Grp Sat Flow(s),veh/h/ln	679	1777	1793	1781	1777	0	1781	0	1585	0	1777	0
Q Serve(g_s), s	0.0	29.6	29.8	1.7	11.4	0.0	5.6	0.0	6.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	29.6	29.8	1.7	11.4	0.0	5.6	0.0	6.7	0.0	0.0	0.0
Prop In Lane	1.00	0.24	1.00			0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	88	646	652	218	1855	0	176	0	477	0	438	0
V/C Ratio(X)	0.00	1.00	1.00	0.30	0.43	0.00	0.72	0.00	0.35	0.00	0.00	0.00
Avail Cap(c_a), veh/h	88	646	652	218	1855	0	176	0	477	0	438	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	26.0	26.1	18.5	12.1	0.0	35.8	0.0	22.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	34.4	35.4	3.5	0.7	0.0	22.0	0.0	2.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	16.9	17.4	0.8	3.9	0.0	3.4	0.0	2.6	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	60.5	61.5	22.1	12.8	0.0	57.8	0.0	24.3	0.0	0.0	0.0
LnGrp LOS	E		F	C	B	E		C				
Approach Vol, veh/h	1295				867				291			
Approach Delay, s/veh	61.0				13.5				38.8			
Approach LOS	E				B				D			
Timer - Assigned Phs	1	2	3	4	6				8			
Phs Duration (G+Y+Rc), s	13.0	37.8	14.6	16.6	50.8				31.2			
Change Period (Y+Rc), s	7.0	8.0	6.5	6.5	8.0				* 6.5			
Max Green Setting (Gmax), s	6.0	29.8	8.1	8.1	42.8				* 25			
Max Q Clear Time (g_c+1), s	3.7	31.8	7.6	0.0	13.4				8.7			
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	3.3				0.8			
Intersection Summary												
HCM 7th Control Delay, s/veh	41.6											
HCM 7th LOS	D											
Notes												
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.												

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HCM 7th Signalized Intersection Summary 1001: Brunswick Rd & Hwy 70

01/30/2026

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↩	↩	↩	↩	↩	↩	↩	↩	↩	↩	↩	↩
Traffic Volume (veh/h)	335	645	45	40	399	26	33	106	23	23	106	155
Future Volume (veh/h)	335	645	45	40	399	26	33	106	23	23	106	155
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	No	No	No	No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	356	686	48	50	499	32	35	112	24	24	112	163
Peak Hour Factor	0.94	0.94	0.94	0.80	0.80	0.80	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	411	1101	77	294	907	58	222	316	68	340	140	204
Arrive On Green	0.10	0.33	0.33	0.04	0.27	0.27	0.03	0.21	0.21	0.02	0.20	0.20
Sat Flow, veh/h	1781	3369	236	1781	3391	217	1781	1493	320	1781	688	1002
Grp Volume(v), veh/h	356	362	372	50	261	270	35	0	136	24	0	275
Grp Sat Flow(s), veh/h/ln	1781	1777	1828	1781	1777	1831	1781	0	1813	1781	0	1690
Q Serve(g_s), s	6.0	10.7	10.7	1.2	7.8	7.9	1.0	0.0	4.0	0.7	0.0	9.6
Cycle Q Clear(g_c), s	6.0	10.7	10.7	1.2	7.8	7.9	1.0	0.0	4.0	0.7	0.0	9.6
Prop In Lane	1.00	0.13	1.00	0.12	1.00	0.18	1.00	0.59	0.59	0.59	0.59	0.59
Lane Grp Cap(c), veh/h	411	581	598	294	475	490	222	0	383	340	0	345
V/C Ratio(X)	0.87	0.62	0.62	0.17	0.55	0.55	0.16	0.00	0.35	0.07	0.00	0.80
Avail Cap(c_a), veh/h	411	973	1001	371	944	973	285	0	1080	415	0	1007
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.1	17.7	17.7	15.9	19.5	19.5	19.4	0.0	20.9	19.0	0.0	23.5
Incr Delay (d2), s/veh	16.7	2.3	2.3	0.1	2.1	2.1	0.1	0.0	0.2	0.0	0.0	1.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	3.9	4.0	0.4	3.0	3.1	0.4	0.0	1.5	0.3	0.0	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.8	20.0	19.9	16.0	21.6	21.6	19.5	0.0	21.1	19.0	0.0	25.1
LnGrp LOS	D	B	B	B	C	C	B		C	B		C
Approach Vol, veh/h	1090			581			171			299		
Approach Delay, s/veh	25.5			21.1			20.8			24.6		
Approach LOS	C			C			C			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.3	27.3	7.8	18.7	12.0	23.6	7.4	19.1				
Change Period (Y+Rc), s	6.0	7.0	6.0	6.0	6.0	7.0	6.0	6.0				
Max Green Setting (Gmax), s	5.0	34.0	4.0	37.0	6.0	33.0	4.0	37.0				
Max Q Clear Time (g_c+1), s	3.2	12.7	3.0	11.6	8.0	9.9	2.7	6.0				
Green Ext Time (p_c), s	0.0	7.6	0.0	1.1	0.0	5.4	0.0	0.4				
Intersection Summary												
HCM 7th Control Delay, s/veh	23.8											
HCM 7th LOS	C											

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HCM 7th Signalized Intersection Summary 1002: Canada Rd/Canada & Hwy 70

01/30/2026

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↩	↩	↩	↩	↩	↩	↩	↩	↩	↩	↩	↩
Traffic Volume (veh/h)	34	784	126	179	551	124	99	249	185	109	188	59
Future Volume (veh/h)	34	784	126	179	551	124	99	249	185	109	188	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	No	No	No	No	No	No	No	No	No	No	No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	871	0	206	633	0	110	277	206	125	216	68
Peak Hour Factor	0.90	0.90	0.90	0.87	0.87	0.87	0.90	0.90	0.90	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	48	1066		238	1445		330	282	210	166	363	114
Arrive On Green	0.03	0.30	0.00	0.13	0.41	0.00	0.06	0.28	0.28	0.04	0.27	0.27
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	996	741	1781	1364	429
Grp Volume(v), veh/h	38	871	0	206	633	0	110	0	483	125	0	284
Grp Sat Flow(s), veh/h/ln	1781	1777	1585	1781	1777	1585	1781	0	1737	1781	0	1793
Q Serve(g_s), s	1.9	20.5	0.0	10.2	11.6	0.0	3.9	0.0	24.8	4.0	0.0	12.4
Cycle Q Clear(g_c), s	1.9	20.5	0.0	10.2	11.6	0.0	3.9	0.0	24.8	4.0	0.0	12.4
Prop In Lane	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.43	1.00	0.24	0.24	0.24
Lane Grp Cap(c), veh/h	48	1066		238	1445		330	0	492	166	0	477
V/C Ratio(X)	0.80	0.82		0.87	0.44		0.33	0.00	0.98	0.75	0.00	0.60
Avail Cap(c_a), veh/h	119	1066		238	1445		339	0	492	166	0	477
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	43.6	29.2	0.0	38.2	19.3	0.0	22.3	0.0	32.0	28.6	0.0	28.8
Incr Delay (d2), s/veh	25.4	7.0	0.0	27.0	1.0	0.0	0.6	0.0	35.7	17.6	0.0	2.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	8.9	0.0	5.9	4.4	0.0	1.6	0.0	14.8	2.7	0.0	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	69.0	36.2	0.0	65.2	20.2	0.0	22.9	0.0	67.7	46.2	0.0	31.2
LnGrp LOS	E	D		E	C		C		E	D		C
Approach Vol, veh/h	909			839			593			409		
Approach Delay, s/veh	37.5			31.3			59.4			35.8		
Approach LOS	D			C			E			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.0	34.0	7.0	32.0	7.4	43.6	8.6	30.4				
Change Period (Y+Rc), s	5.0	7.0	3.0	6.5	5.0	7.0	3.0	6.5				
Max Green Setting (Gmax), s	12.0	27.0	4.0	25.5	6.0	33.0	6.0	23.5				
Max Q Clear Time (g_c+1), s	12.2	22.5	6.0	26.8	3.9	13.6	5.9	14.4				
Green Ext Time (p_c), s	0.0	3.0	0.0	0.0	0.0	6.6	0.0	1.4				
Intersection Summary												
HCM 7th Control Delay, s/veh	40.1											
HCM 7th LOS	D											

Notes

Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

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HCM 7th Signalized Intersection Summary

1003: Lamb Rd & Hwy 70

01/30/2026

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	1	5	182	4	328	3	642	170	10	456	130
Future Volume (veh/h)	5	1	5	182	4	328	3	642	170	10	456	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	8	2	8	303	7	547	3	747	198	11	490	140
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60	0.86	0.86	0.86	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	91	365	681	8	608	239	849	379	220	1069	477
Arrive On Green	0.01	0.28	0.28	0.12	0.39	0.39	0.00	0.24	0.24	0.07	0.30	0.30
Sat Flow, veh/h	1781	327	1308	1781	20	1568	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	8	0	10	303	0	554	3	747	198	11	490	140
Grp Sat Flow(s), veh/h/ln	1781	0	1635	1781	0	1588	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.3	0.0	0.4	10.7	0.0	29.5	0.1	18.2	9.8	0.4	10.1	6.1
Cycle Q Clear(g_c), s	0.3	0.0	0.4	10.7	0.0	29.5	0.1	18.2	9.8	0.4	10.1	6.1
Prop In Lane	1.00		0.80	1.00		0.99	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	153	0	456	681	0	616	239	849	379	220	1069	477
V/C Ratio(X)	0.05	0.00	0.02	0.44	0.00	0.90	0.01	0.88	0.52	0.05	0.46	0.29
Avail Cap(c_a), veh/h	250	0	456	681	0	616	349	896	400	220	1069	477
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.9	0.0	23.5	18.1	0.0	25.9	25.9	33.0	29.8	23.2	25.5	24.1
Incr Delay (d2), s/veh	0.1	0.0	0.1	0.5	0.0	18.5	0.0	9.7	1.1	0.1	0.3	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.2	4.0	0.0	13.0	0.0	8.4	3.6	0.2	3.9	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.0	0.0	23.6	18.6	0.0	44.4	25.9	42.7	30.9	23.3	25.8	24.5
LnGrp LOS	C		C	B		D	C	D	C	C	C	C
Approach Vol, veh/h	18			857			948			641		
Approach Delay, s/veh	24.3			35.3			40.2			25.5		
Approach LOS	C			D			D			C		
Timer - Assigned Phs												
	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.4	32.1	12.5	28.0	7.6	41.9	6.9	33.6				
Change Period (Y+Rc), s	6.5	7.0	6.5	6.5	6.5	7.0	6.5	6.5				
Max Green Setting (Gmax), s	10.9	23.9	6.0	22.7	6.0	28.8	6.0	22.7				
Max Q Clear Time (g_c+1), s	12.7	2.4	2.4	20.2	2.3	31.5	2.1	12.1				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.3	0.0	0.0	0.0	2.5				
Intersection Summary												
HCM 7th Control Delay, s/veh	34.6											
HCM 7th LOS	C											

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HCM 7th Signalized Intersection Summary

8003: Seed Tick Rd & Hwy 70

01/30/2026

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	991	136	63	761	0	98	0	129	0	0	0
Future Volume (veh/h)	0	991	136	63	761	0	98	0	129	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	1139	156	66	801	0	126	0	165	0	0	0
Peak Hour Factor	0.92	0.87	0.87	0.95	0.95	0.92	0.78	0.92	0.78	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	88	1141	156	218	1855	0	176	0	477	0	438	0
Arrive On Green	0.00	0.36	0.36	0.07	0.52	0.00	0.10	0.00	0.30	0.00	0.00	0.00
Sat Flow, veh/h	679	3141	429	1781	3647	0	1781	0	1585	0	3741	0
Grp Volume(v), veh/h	0	643	652	66	801	0	126	0	165	0	0	0
Grp Sat Flow(s),veh/h/ln	679	1777	1793	1781	1777	0	1781	0	1585	0	1777	0
Q Serve(g_s), s	0.0	29.6	29.8	1.7	11.4	0.0	5.6	0.0	6.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	29.6	29.8	1.7	11.4	0.0	5.6	0.0	6.7	0.0	0.0	0.0
Prop In Lane	1.00		0.24	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	88	646	652	218	1855	0	176	0	477	0	438	0
V/C Ratio(X)	0.00	1.00	1.00	0.30	0.43	0.00	0.72	0.00	0.35	0.00	0.00	0.00
Avail Cap(c_a), veh/h	88	646	652	218	1855	0	176	0	477	0	438	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	26.0	26.1	18.5	12.1	0.0	35.8	0.0	22.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	34.4	35.4	3.5	0.7	0.0	22.0	0.0	2.0	0.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	16.9	17.4	0.8	3.9	0.0	3.4	0.0	2.6	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	60.5	61.5	22.1	12.8	0.0	57.8	0.0	24.3	0.0	0.0	0.0
LnGrp LOS	E		F	C	B		E		C			
Approach Vol, veh/h	1295			867			291			0		
Approach Delay, s/veh	61.0			13.5			38.8			0.0		
Approach LOS	E			B			D					
Timer - Assigned Phs	1	2	3	4	6			8				
Phs Duration (G+Y+Rc), s	13.0	37.8	14.6	16.6	50.8			31.2				
Change Period (Y+Rc), s	7.0	8.0	6.5	6.5	8.0			* 6.5				
Max Green Setting (Gmax), s	6.0	29.8	8.1	8.1	42.8			* 25				
Max Q Clear Time (g_c+1), s	3.7	31.8	7.6	0.0	13.4			8.7				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	3.3			0.8				
Intersection Summary												
HCM 7th Control Delay, s/veh	41.6											
HCM 7th LOS	D											

PM Peak - Optimized 10:23 am 11/19/2025 Baseline

Synchro 12 Report
Page 4



Appendix E: Summary of RODEL Analysis

2025 PM Peak
50% Confidence Level
Daylight conditions

Project: Hwy 70 Corridor Study
Scheme: Hwy 70 at Evergreen Road
Rodel-Win1 - Full Geometry

2025 PM Peak
50% Confidence Level
Daylight conditions

Project: Hwy 70 Corridor Study
Scheme: Hwy 70 at Evergreen Road
Rodel-Win1 - Full Geometry

Operational Data

Main Geometry (ft)

Approach and Entry Geometry

Leg	Leg Names	Approach Bearing (deg)	Grade Separation G	Half Width V	Approach Lanes n	Entry Width E	Entry Lanes n	Flare Length L'	Entry Radius R	Entry Angle Phi
1	Evergreen Rd SB	0	0	12.00	1	16.00	1	50.00	75.00	40.00
2	Hwy 70 EB	90	0	24.00	2	28.00	2	100.00	75.00	40.00
3	Evergreen Rd NB	180	0	12.00	1	16.00	1	50.00	75.00	40.00
4	Hwy 70 WB	270	0	24.00	2	28.00	2	100.00	75.00	40.00

Circulating and Exit Geometry

Leg	Leg Names	Inscribed Diameter D	Circulating Width C	Circulating Lanes nc	Exit Width Ex	Exit Lanes nex	Exit Half Width Vx	Exit Half Width Lanes nvx
1	Evergreen Rd SB	145.00	32.00	2	16.00	1	12.00	1
2	Hwy 70 EB	130.00	18.00	1	28.00	2	24.00	2
3	Evergreen Rd NB	145.00	32.00	2	16.00	1	12.00	1
4	Hwy 70 WB	130.00	18.00	1	28.00	2	24.00	2

Capacity Modifiers and Capacity Calibration (veh/hr)

Leg	Leg Names	Entry Capacity		Entry Calibration		Approach Road			Exit Road		
		Capacity + or -	XWalk Factor	Intercept + or -	Slope Factor	V (ft)	Default Capacity	Calib Capacity	V (ft)	Default Capacity	Calib Capacity
1	Evergreen Rd SB	0	1.000	0	1.000	20.00	1792	0	12.00	1792	0
2	Hwy 70 EB	0	1.000	0	1.000	20.00	3584	0	24.00	3584	0
3	Evergreen Rd NB	0	1.000	0	1.000	20.00	1792	0	12.00	1792	0
4	Hwy 70 WB	0	1.000	0	1.000	20.00	3584	0	24.00	3584	0

Operational Results

2025 PM Peak - 60 minutes

Flows and Capacity

Leg	Leg Names	Bypass Type	Flows (veh/hr)				Capacity (veh/hr)			
			Arrival Flow		Opposing Flow		Exit Flow		Capacity	
			Entry	Bypass	Entry	Bypass	Entry	Bypass	Entry	Bypass
1	Evergreen Rd SB	None	127		772		194		877	0.1449
2	Hwy 70 EB	None	1003		101		798		2267	0.4423
3	Evergreen Rd NB	None	99		1005		99		789	0.1254
4	Hwy 70 WB	None	826		140		964		2226	0.3711

Delays, Queues and Level of Service

Leg	Leg Names	Bypass Type	Average Delay (sec)			95% Queue (veh)		Level of Service		
			Entry	Bypass	Leg	Entry	Bypass	Entry	Bypass	Leg
1	Evergreen Rd SB	None	6.08		6.08	0.49		A		A
2	Hwy 70 EB	None	6.11		6.11	2.48		A		A
3	Evergreen Rd NB	None	6.29		6.29	0.42		A		A
4	Hwy 70 WB	None	5.58		5.58	1.90		A		A

2025 AM Peak
50% Confidence Level
Daylight conditions

Project: Project-1
Scheme: Hwy 70 at Lion Crest Dr
Rodel-Win1 - Full Geometry

Operational Data

Main Geometry (ft)

Approach and Entry Geometry

Leg	Leg Names	Approach Bearing (deg)	Grade Separation G	Half Width V	Approach Lanes n	Entry Width E	Entry Lanes n	Flare Length L'	Entry Radius R	Entry Angle Phi
1	Lion Crest Dr SB	0	0	12.00	1	16.00	1	50.00	75.00	40.00
2	Hwy 70 EB	90	0	24.00	2	28.00	2	100.00	75.00	40.00
3	Hwy 70 WB	270	0	24.00	2	28.00	2	100.00	75.00	40.00

Circulating and Exit Geometry

Leg	Leg Names	Inscribed Diameter D	Circulating Width C	Circulating Lanes nc	Exit Width Ex	Exit Lanes nex	Exit Half Width Vx	Exit Half Width Lanes nvx
1	Lion Crest Dr SB	145.00	32.00	2	16.00	1	12.00	1
2	Hwy 70 EB	130.00	18.00	1	28.00	2	24.00	2
3	Hwy 70 WB	130.00	18.00	1	28.00	2	24.00	2

Capacity Modifiers and Capacity Calibration (veh/hr)

Leg	Leg Names	Entry Capacity		Entry Calibration		Approach Road			Exit Road		
		Capacity + or -	XWalk Factor	Intercept + or -	Slope Factor	V (ft)	Default Capacity	Calib Capacity	V (ft)	Default Capacity	Calib Capacity
1	Lion Crest Dr SB	0	1.000	0	1.000	12.00	1792	0	12.00	1792	0
2	Hwy 70 EB	0	1.000	0	1.000	12.00	3584	0	24.00	3584	0
3	Hwy 70 WB	0	1.000	0	1.000	12.00	3584	0	24.00	3584	0

2025 AM Peak
50% Confidence Level
Daylight conditions

Project: Project-1
Scheme: Hwy 70 at Lion Crest Dr
Rodel-Win1 - Full Geometry

Operational Results

2025 AM Peak - 60 minutes

Flows and Capacity

Leg	Leg Names	Bypass Type	Flows (veh/hr)				Capacity (veh/hr)			
			Arrival Flow Entry	Bypass	Opposing Flow Entry	Bypass	Exit Flow	Capacity Entry	Bypass	Average VCR Entry Bypass
1	Lion Crest Dr SB	None	125		950		390	810		0.1543
2	Hwy 70 EB	None	516		38		1037	2334		0.2210
3	Hwy 70 WB	None	1266		74		480	2296		0.5514

Delays, Queues and Level of Service

Leg	Leg Names	Bypass Type	Average Delay (sec)			95% Queue (veh)		Level of Service		
			Entry	Bypass	Leg	Entry	Bypass	Entry	Bypass	Leg
1	Lion Crest Dr SB	None	6.62		6.62	0.54		A		A
2	Hwy 70 EB	None	4.32		4.32	0.94		A		A
3	Hwy 70 WB	None	8.11		8.11	4.72		A		A



2025 PM Peak
50% Confidence Level
Daylight conditions

Project: Project-1
Scheme: Hwy 70 at Lion Crest Dr
Rodel-Win1 - Full Geometry

2025 PM Peak
50% Confidence Level
Daylight conditions

Project: Project-1
Scheme: Hwy 70 at Lion Crest Dr
Rodel-Win1 - Full Geometry

Operational Data

Main Geometry (ft)

Approach and Entry Geometry

Leg	Leg Names	Approach Bearing (deg)	Grade Separation G	Half Width V	Approach Lanes n	Entry Width E	Entry Lanes n	Flare Length L'	Entry Radius R	Entry Angle Phi
1	Lion Crest Dr SB	0	0	12.00	1	16.00	1	50.00	75.00	40.00
2	Hwy 70 EB	90	0	24.00	2	28.00	2	100.00	75.00	40.00
3	Hwy 70 WB	270	0	24.00	2	28.00	2	100.00	75.00	40.00

Circulating and Exit Geometry

Leg	Leg Names	Inscribed Diameter D	Circulating Width C	Circulating Lanes nc	Exit Width Ex	Exit Lanes nex	Exit Half Width Vx	Exit Half Width Lanes nvx
1	Lion Crest Dr SB	145.00	32.00	2	16.00	1	12.00	1
2	Hwy 70 EB	130.00	18.00	1	28.00	2	24.00	2
3	Hwy 70 WB	130.00	18.00	1	28.00	2	24.00	2

Capacity Modifiers and Capacity Calibration (veh/hr)

Leg	Leg Names	Entry Capacity		Entry Calibration		Approach Road			Exit Road		
		Capacity + or -	XWalk Factor	Intercept + or -	Slope Factor	V (ft)	Default Capacity	Calib Capacity	V (ft)	Default Capacity	Calib Capacity
1	Lion Crest Dr SB	0	1.000	0	1.000	12.00	1792	0	12.00	1792	0
2	Hwy 70 EB	0	1.000	0	1.000	12.00	3584	0	24.00	3584	0
3	Hwy 70 WB	0	1.000	0	1.000	12.00	3584	0	24.00	3584	0

Operational Results

2025 PM Peak - 60 minutes

Flows and Capacity

Leg	Leg Names	Bypass Type	Flows (veh/hr)				Capacity (veh/hr)			
			Arrival Flow		Opposing Flow		Exit Flow		Capacity	
			Entry	Bypass	Entry	Bypass	Entry	Bypass	Entry	Average VCR
1	Lion Crest Dr SB	None	99		673		99		914	0.1084
2	Hwy 70 EB	None	1013		72		700		2298	0.4408
3	Hwy 70 WB	None	754		18		1067		2356	0.3201

Delays, Queues and Level of Service

Leg	Leg Names	Bypass Type	Average Delay (sec)			95% Queue (veh)		Level of Service		
			Entry	Bypass	Leg	Entry	Bypass	Entry	Bypass	Leg
1	Lion Crest Dr SB	None	5.36		5.36	0.35		A		A
2	Hwy 70 EB	None	5.89		5.89	2.32		A		A
3	Hwy 70 WB	None	4.99		4.99	1.50		A		A

2025 AM Peak
50% Confidence Level
Daylight conditions

Project: Hwy 70 Corridor Study
Scheme: Hwy 70 at Market Green Place
Rodel-Win1 - Full Geometry

Operational Data

Main Geometry (ft)

Approach and Entry Geometry

Leg	Leg Names	Approach Bearing (deg)	Grade Separation G	Half Width V	Approach Lanes n	Entry Width E	Entry Lanes n	Flare Length L'	Entry Radius R	Entry Angle Phi
1	Hwy 70 EB	90	0	24.00	2	28.00	2	100.00	75.00	40.00
2	Market Green PI NB	180	0	12.00	1	16.00	1	50.00	75.00	40.00
3	Hwy 70 WB	270	0	24.00	2	28.00	2	100.00	75.00	40.00

Circulating and Exit Geometry

Leg	Leg Names	Inscribed Diameter D	Circulating Width C	Circulating Lanes nc	Exit Width Ex	Exit Lanes nex	Exit Half Width Vx	Exit Half Width Lanes nvx
1	Hwy 70 EB	130.00	16.00	1	28.00	2	24.00	2
2	Market Green PI NB	145.00	32.00	2	16.00	1	12.00	1
3	Hwy 70 WB	130.00	18.00	1	28.00	2	24.00	2

Capacity Modifiers and Capacity Calibration (veh/hr)

Leg	Leg Names	Entry Capacity		Entry Calibration		Approach Road			Exit Road		
		Capacity + or -	XWalk Factor	Intercept + or -	Slope Factor	V (ft)	Default Capacity	Calib Capacity	V (ft)	Default Capacity	Calib Capacity
1	Hwy 70 EB	0	1.000	0	1.000	12.00	3584	0	24.00	3584	0
2	Market Green PI NB	0	1.000	0	1.000	12.00	1792	0	12.00	1792	0
3	Hwy 70 WB	0	1.000	0	1.000	12.00	3584	0	24.00	3584	0

2025 AM Peak
50% Confidence Level
Daylight conditions

Project: Hwy 70 Corridor Study
Scheme: Hwy 70 at Market Green Place
Rodel-Win1 - Full Geometry

Operational Results

2025 AM Peak - 60 minutes

Flows and Capacity

Leg	Leg Names	Bypass Type	Flows (veh/hr)				Capacity (veh/hr)			
			Arrival Flow		Opposing Flow		Capacity		Average VCR	
			Entry	Bypass	Entry	Bypass	Entry	Bypass	Entry	Bypass
1	Hwy 70 EB	None	604		7		1219		2367	0.2552
2	Market Green PI NB	None	96		578		33		949	0.1011
3	Hwy 70 WB	None	1142		84		590		2286	0.4997

Delays, Queues and Level of Service

Leg	Leg Names	Bypass Type	Average Delay (sec)			95% Queue (veh)		Level of Service		
			Entry	Bypass	Leg	Entry	Bypass	Entry	Bypass	Leg
1	Hwy 70 EB	None	4.31		4.31	1.02		A		A
2	Market Green PI NB	None	5.09		5.09	0.32		A		A
3	Hwy 70 WB	None	6.47		6.47	2.93		A		A



2025 PM Peak
50% Confidence Level
Daylight conditions

Project: Hwy 70 Corridor Study
Scheme: Hwy 70 at Market Green Place
Rodel-Win1 - Full Geometry

2025 PM Peak
50% Confidence Level
Daylight conditions

Project: Hwy 70 Corridor Study
Scheme: Hwy 70 at Market Green Place
Rodel-Win1 - Full Geometry

Operational Data

Main Geometry (ft)

Approach and Entry Geometry

Leg	Leg Names	Approach Bearing (deg)	Grade Separation G	Half Width V	Approach Lanes n	Entry Width E	Entry Lanes n	Flare Length L'	Entry Radius R	Entry Angle Phi
1	Hwy 70 EB	90	0	24.00	2	28.00	2	100.00	75.00	40.00
2	Market Green PI NB	180	0	12.00	1	16.00	1	50.00	75.00	40.00
3	Hwy 70 WB	270	0	24.00	2	28.00	2	100.00	75.00	40.00

Circulating and Exit Geometry

Leg	Leg Names	Inscribed Diameter D	Circulating Width C	Circulating Lanes nc	Exit Width Ex	Exit Lanes nex	Exit Half Width Vx	Exit Half Width Lanes nvx
1	Hwy 70 EB	130.00	16.00	1	28.00	2	24.00	2
2	Market Green PI NB	145.00	32.00	2	16.00	1	12.00	1
3	Hwy 70 WB	130.00	18.00	1	28.00	2	24.00	2

Capacity Modifiers and Capacity Calibration (veh/hr)

Leg	Leg Names	Entry Capacity		Entry Calibration		Approach Road			Exit Road		
		Capacity + or -	XWalk Factor	Intercept + or -	Slope Factor	V (ft)	Default Capacity	Calib Capacity	V (ft)	Default Capacity	Calib Capacity
1	Hwy 70 EB	0	1.000	0	1.000	12.00	3584	0	24.00	3584	0
2	Market Green PI NB	0	1.000	0	1.000	12.00	1792	0	12.00	1792	0
3	Hwy 70 WB	0	1.000	0	1.000	12.00	3584	0	24.00	3584	0

Operational Results

2025 PM Peak - 60 minutes

Flows and Capacity

Leg	Leg Names	Bypass Type	Flows (veh/hr)				Capacity (veh/hr)			
			Arrival Flow		Opposing Flow		Exit Flow		Capacity	
			Entry	Bypass	Entry	Bypass	Entry	Bypass	Entry	Bypass
1	Hwy 70 EB	None	1122		34		874		2339	0.4798
2	Market Green PI NB	None	40		1080		76		761	0.0525
3	Hwy 70 WB	None	882		26		1094		2347	0.3758

Delays, Queues and Level of Service

Leg	Leg Names	Bypass Type	Average Delay (sec)			95% Queue (veh)		Level of Service		
			Entry	Bypass	Leg	Entry	Bypass	Entry	Bypass	Leg
1	Hwy 70 EB	None	6.28		6.28	2.77		A		A
2	Market Green PI NB	None	5.36		5.36	0.16		A		A
3	Hwy 70 WB	None	5.30		5.30	1.80		A		A

2025 AM Peak
50% Confidence Level
Daylight conditions

Project: Hwy 70 Corridor Study
Scheme: Hwy 70 at Evergreen Road
Rodel-Win1 - Full Geometry

2025 AM Peak
50% Confidence Level
Daylight conditions

Project: Hwy 70 Corridor Study
Scheme: Hwy 70 at Evergreen Road
Rodel-Win1 - Full Geometry

Operational Data

Main Geometry (ft)

Approach and Entry Geometry

Leg	Leg Names	Approach Bearing (deg)	Grade Separation G	Half Width V	Approach Lanes n	Entry Width E	Entry Lanes n	Flare Length L'	Entry Radius R	Entry Angle Phi
1	Evergreen Rd SB	0	0	12.00	1	16.00	1	50.00	75.00	40.00
2	Hwy 70 EB	90	0	24.00	2	28.00	2	100.00	75.00	40.00
3	Evergreen Rd NB	180	0	12.00	1	16.00	1	50.00	75.00	40.00
4	Hwy 70 WB	270	0	24.00	2	28.00	2	100.00	75.00	40.00

Circulating and Exit Geometry

Leg	Leg Names	Inscribed Diameter D	Circulating Width C	Circulating Lanes nc	Exit Width Ex	Exit Lanes nex	Exit Half Width Vx	Exit Half Width Lanes nvx
1	Evergreen Rd SB	145.00	32.00	2	16.00	1	12.00	1
2	Hwy 70 EB	130.00	18.00	1	28.00	2	24.00	2
3	Evergreen Rd NB	145.00	32.00	2	16.00	1	12.00	1
4	Hwy 70 WB	130.00	18.00	1	28.00	2	24.00	2

Capacity Modifiers and Capacity Calibration (veh/hr)

Leg	Leg Names	Entry Capacity		Entry Calibration		Approach Road			Exit Road		
		Capacity + or -	XWalk Factor	Intercept + or -	Slope Factor	V (ft)	Default Capacity	Calib Capacity	V (ft)	Default Capacity	Calib Capacity
1	Evergreen Rd SB	0	1.000	0	1.000	20.00	1792	0	12.00	1792	0
2	Hwy 70 EB	0	1.000	0	1.000	20.00	3584	0	24.00	3584	0
3	Evergreen Rd NB	0	1.000	0	1.000	20.00	1792	0	12.00	1792	0
4	Hwy 70 WB	0	1.000	0	1.000	20.00	3584	0	24.00	3584	0

Operational Results

2025 AM Peak - 60 minutes

Flows and Capacity

Leg	Leg Names	Bypass Type	Flows (veh/hr)				Capacity (veh/hr)			
			Arrival Flow		Opposing Flow		Exit Flow		Capacity	
			Entry	Bypass	Entry	Bypass	Entry	Bypass	Entry	Bypass
1	Evergreen Rd SB	None	165		816		120		860	0.1918
2	Hwy 70 EB	None	581		101		880		2267	0.2562
3	Evergreen Rd NB	None	99		583		99		947	0.1045
4	Hwy 70 WB	None	845		91		591		2278	0.3709

Delays, Queues and Level of Service

Leg	Leg Names	Bypass Type	Average Delay (sec)			95% Queue (veh)		Level of Service		
			Entry	Bypass	Leg	Entry	Bypass	Entry	Bypass	Leg
1	Evergreen Rd SB	None	6.89		6.89	0.70		A		A
2	Hwy 70 EB	None	4.44		4.44	1.04		A		A
3	Evergreen Rd NB	None	5.15		5.15	0.34		A		A
4	Hwy 70 WB	None	5.42		5.42	1.83		A		A



Appendix F: Community Survey #1 Written Suggestions

Over 185 comments were received (note: minor revisions were made to address grammar in some cases and responses were sorted alphabetically, which is why some comments appear to be listed more than once).

- *A stop light at 70 & Evergreen!! Clearing of vegetation at intersection such at Mouldry & 70 to make visibility better when pulling out.*
- *"A turning lane down the entire center of Hwy 70 is desperately needed. Due to less thoughtful housing growth and unsafe driving, wrecks occur regularly.*
- *Further, Lakeland must decide where to concentrate growth in town services- on Highway 70, Memphis Arlington, Canada, or connected to the schools. For a small town, town services are strangely dispersed and should be better aggregated. The future of Highway 70 should factor into those plans.*
- *Thanks for soliciting feedback."*
- *Better lighting and turn lanes*
- *Better utilize the new shopping center on 70. It should be the hotspot of the area. It's boring. The coffee shop is basic. The owners box is average. Nothing to make someone want to try it again. I like that they aren't chains but we need more non chains there as well.*
- *Bike and walking needs to at least have a curb away from the road. Not just a painted bike lane. Also, put reflectors on the road. Tons of reflectors all thru Lakeland. With no streetlights all roads are hard to see in rain and dark.*
- *Blind spots near Evergreen Road. With all the trucks entering and exiting due to development along Old Brownsville Rd it's dangerous*
- *Building and construction need to be stopped until the road conditions are improved. There are likely to be casualties around Hwy 70 and Evergreen as the population in that area increases.*
- *Control the speeding and improve lighting*
- *Create a safer situation for homeowners taking a left into their neighborhoods*
- *"Development along Highway 70 is not necessary, it would be unsafe and costly. Cutting down trees seems to be all that Lakeland leaders are interested in, we are supposed to be known for our trees.*
- *We do NOT make this a Summer Avenue extended."*
- *DO NOT trash it up with a bunch of disconnected strip malls. And, don't bulldoze anything unless there is actually a commitment to build something almost immediately. (I-40 / Canada Rd mess is a prime example!)*
- *Don't add red lights it slows down commute.*
- *Evergreen and 70 is very difficult to turn. Should have a light or other solution.*
- *Evergreen and 70 need a stop light or a 4 way stop*
- *Evergreen and 70 needs a traffic light ASAP.*
- *Evergreen needs a stop light. Alternatively, a turning lane needs added (but it's understandable adding a lane would probably be too expensive)*
- *"Fix the potholes and the ugly eye sore median in the front of Winstead farms that has just grass on it. People have hit, specially at night it has not lighting at all. It's hazardous. And it's across the street from city hall!!!! It looks terrible and run down.*
- *I would love to see city hall a little more beautiful. It's kind of old looking and sad. And a new pavilion to rent out for parties like the large old one that was destroyed would be great. Or even a two story, pavilion on the bottom and air conditioned heat on the second floor for city holiday events for kids or rental space for small venues people could rent out. I specially if weather is bad.*
- *Fix the turning onto Seedtick as the curb is 90 degrees on the west side and lane is narrow coming from east*
- *Get a light asap at evergreen and 70. More turn lanes like saffron springs and 70 into Creekside manor again for safety*
- *Hate to see a lot of money thrown into redesigning Highway 70. Money could be used for something else. Maybe future needs may require change as land along side grows.*
- *Highway 70 doesn't need any changes other than good road maintenance and adequate lighting.*
- *Highway 70 is a state highway that should remain 50 mph. This is too fast for a roundabout and the speed limit should not be lowered. Roundabouts are fine for slower roads like Memphis Arlington and Canada roads.*



- *Highway 70 is as safe as any other main highway in Memphis. The road isn't the problem. The drivers and increase in compact residential development is the problem. Too many people in too small a space.*
- *Highway 70 is never congested during high traffic times unless there is an accident. It could maybe use repaving but that's it. I love looking at the trees and nature each day on my way to work. It would be a shame to add businesses to it and take away from the beauty of Lakeland.*
- *Hwy 70 is dangerous and needs to be improved.*
- *Hwy 70 needs turning lanes and emergency lanes first for safety. Allot of us avoid it because we're terrified*
- *Hwy 70 should be left ALONE to preserve its rural feel. NOTHING extra is needed.*
- *Hwy 70 through Lakeland is dangerous due to restricted sight lines from the hills in the roadway. Needs to be more level.*
- *I am a delivery driver and on a daily basis I am traveling up and down 70, and in/out of driveways, etc. Upon trying to pull out a couple the driveways, it's a safety issue for me because the trees/brush aren't cut back far enough....hindering visibility for me. One of the driveways (10085 Hwy 70 specifically) is bad because it sits just on the other side of the crest of the highway. Traffic flow at times is fast and heavy...and in order for me to be able to pull out safely, I have to almost pull partly out onto the highway in my truck because I am unable to see completely to my left under the trees/brush. Yes, it has been cut back but needs to be cut back even more. All you need to do is get into a high profile truck in that driveway....looking to your left as if to pull out, and you'll see what i'm referring to.*
- *"I am generally satisfied with the condition of Highway 70 in Lakeland.*
- *More stoplights might be helpful as my main concern is with traffic safety when entering or exiting the highway. The long straight lanes encourage a high speed of travel, which can make merging hazardous. I think stoplights could help.*
- *I do not want trails or bike paths. In other areas of the city these mainly facilitate the transit of vagrants and miscreants to otherwise attractive parts of town, and I believe the same would happen here. Mixed use housing similarly allows a less disciplined demographic to occupy the space and bring their problems with them. See for example West Stonebridge, which should be a more attractive area and yet experiences auto break-ins and property crimes on a regular basis due to the concentration of rental properties and apartments."*
- *I am greatly concerned about the intersection at Evergreen and Highway 70. There have been many accidents there and my daughter lives nearby. There needs to be a change made to that intersection where it is more safe.*
- *I appreciate the lighting along Hwy 70. I do not want to see commercial buildings at the edge of existing neighborhoods.*
- *"I believe you need to complete*
- *New Canada Road project over 20 yrs old*
- *The Lake District project*
- *The development at Canada Rd and Davies Plantation Rd*
- *Before you start anymore projects and they become dormant as well. "*
- *"I can't rate what's most important on this poll. -traffic and congestion, 2)safety, 3)preservation of trees, 4)road improvements "*
- *I don't believe roundabouts in the way to go.*
- *I don't feel safe driving in the left lane. I'm always so nervous the car going the opposite direction is going to veer into my lane and hit me - and it's rather fast on that road too.*
- *I don't know why there's a double yellow in front of neighborhoods like Evergreen and Winstead Farms. How are drivers supposed to legally turn left into their neighborhoods? I almost get rear ended all the time because of the hills along Highway 70 people don't always see me slowing down and signaling to turn in advance. More turning lanes and or stoplights are needed to allow drivers the space and safety to slow down to turn into their neighborhoods without the fear or likelihood of being rear ended.*
- *I don't want it to become retail. I like the trees and rural feel. I like how town square is off the road. There aren't parking lots or strip malls. Preserve the woodsy feel while providing activities and dining.*
- *I don't want more traffic lights. I think it would benefit the most to put in a middle lane for turning*
- *I feel for safety purposes that Hwy 70 needs a medium or some separation between flows of traffic in opposite directions.*
- *I generally feel it is unsafe to walk along the highway. I also think I the flow of traffic is too fast for all the unmarked turns into developments. Too many accidents.*

- *I have some specific ideas on how you can improve the highway, especially in regards to the new developments along it. First, there needs to be viable alternatives to driving for people living in the neighborhoods along 70 who wish to get to areas like the Lakeland Town square. This could include separated bike lanes. Roundabouts should also be included because they are cheaper, safer, and more efficient at moving cars. Finally, the highway, in between LTS and the new development across from it, should be shortened and include raised crosswalks to increase pedestrian and cyclist safety. Thanks!*
- *I like how hwy 70 is a safe and easy corridor between Arlington and Bartlett. I want the focus of the hwy plan to continue to prioritize safety while providing easy and timely access through our community.*
- *I like the Lakeland Town Square but don't care to have any more mixed use properties. Keep it out by I-40.*
- *I live on the highway with my husband and 3 sons. I simply want the highway to be safer to drive on. A roundabout would be a great way to slow down traffic. It's so fast pace and dangerous.*
- *I personally would like to see more trails and bike paths through the residential areas. That is one of the things that attracted me to Lakeland. Now it has stopped. :(I think few people like to walk or bike near busy traffic areas.*
- *I think there needs to be a turn lane through the whole corridor along 70. It's pretty hilly between Evergreen and Seed Tick. I've experienced many close calls of people attempting to turn left onto Evergreen and Seed Tick. My route to work each day includes turning left onto Seed Tick from 70. The light has helped, but I really think there needs to be a separate turn lane there.*
- *I think there should be a turning lane for Lakeland Town Square and a light in front of it on HWY 70 for those turning in and out especially during school drop off/pick up traffic.*
- *I would like a light in front of Winstead Farms. People fly down highway 70 and I almost get hit pulling in and out of the subdivision.*
- *"I would like if mowing and weed control would be addressed for safety."*
- *Turning out of side roads onto 70 is hindered by eyeline sight being clear of tall weeds and grasses. "*
- *I would like them to put a light at Chamber Chapel/ Memphis Arlington heading to 70 Hwy.*
- *I would like to see a bike/running path added.*
- *I would like to see the speed limit at about 35-40. I know there would have to be major changes to the actual highway to accomplish that. But, it's that low on Arlington and Mason, and Stanton along Hwy 70.*
- *I would love a center turn lane into the Lakeland High School entrance (not the Canada Rd intersection).*
- *I would love for there to be better signage about what Lakeland has to offer. I love the idea of a dog park or playground and I'm a HUGE fan of walking and biking trails!! That is so important for our family.*
- *I'm fine with businesses and shopping. I just don't want it to be cement covered strip malls and dollar stores. Please keep trees and green spaces in mind. Ashmont got completely razed and it'll look weird and dystopian even with the tiny trees that get planted neatly seven feet apart. Town square even feels sterile with the lack of larger trees. It'll be a very long time before it has a lived in old charm and I'm not sure the trees planted get very large at all.*
- *If Lakeland continues to expand at this rate, they need to govern themselves accordingly and widen Highway 70 to accommodate for future housing, developments, and retail spaces. This would be most efficiently done by creating a two-lane highway on each side with a center turn lane the extent of the highway through Lakeland.*
- *If you do sidewalks seed tick needs them more - more value in sidewalks on seed tick and Beverle Rivera first to connect.*
- *If you put in stores don't make them junky. Nice options including good restaurants. Would. Love to keep my money in my town.*
- *Improve Seed Tick and Hwy 70 intersection going toward LES.*
- *Improving the intersections for safety is most important to me.*
- *In the near future Hwy 70 needs to have dedicated turn lanes especially at key intersections/subdivision entrances.*
- *Instead of trying to fix something that isn't broken please push all the excess funds you have for this project into street paving. If you don't take care of the roads, the city is doomed.*
- *Intersection at 70/evergreen- would love a light there as well.*
- *"Intersection of Seed Tick and 70 needs to be reworked. Eliminate 90 degree angles and widen the turn areas.*
- *Need a light at the high school entrance during drop off and pick up. Especially a left turn arrow when leaving the school. It's dangerous, especially since inexperienced students are driving to and from school. "*
- *It has become so dangerous the more that is built on the highway. Wish we could just keep all the trees and keep it how it is. The highway was not made for that much traffic.*



- *"It seems to work fine*
- *20 years ago it was nothing but a speed trap*
- *I think bike paths and walking trails are better suited to other areas of Lakeland, not to cause issue along the highway. "*
- *It would be safer to add turn lanes (both left and right) to busier neighborhoods along 70, ie across from city hall*
- *It's dangerous. Try to make a left turn at Evergreen going east. There needs to be a light. Also, lack of any turning lanes with cars traveling over 50 mph right behind you serving to avoid you as you try to turn left or right.*
- *Just make sure you can see when pulling offside streets*
- *Keep it rural, but keep it safe.*
- *Lakeland already has two massive "mixed-use" projects currently under construction on Canada Rd. Lakeland needs to focus on building single family homes and nicer neighborhoods with amenities that will attract families that are financially, emotionally and socially committed to Lakeland and it's top ranked schools.*
- *Lakeland as a whole needs more walking and biking access. There are a lot of active people who live here and the city has so much potential to be an area where we can spend more time outside than just walking the neighborhood.*
- *Leave it alone and leave tax dollars in tax payers pockets*
- *"LPS high school entrance DESPERATELY needs a light before a MAJOR accident happens.*
- *People take a left out of there during the times you are not supposed to. It is VERY DANGEROUS!!!"*
- *Make a turning lane. Tired of being tailgated & almost rear-ended by them or distracted drivers turning into subdivisions especially around city hall!!*
- *Make it safer. So many accidents*
- *More street lights much like the city of Bartlett along the same corridor*
- *More traffic lights and more patrol for speeding*
- *My primary concern is the building the proper road infrastructure to meet the growing housing development. Too many blind spots along 70 which make for dangerous turns on/off Hwy 70. Would love to see more biking trails and community park space that could connect communities. Love the idea of sensible businesses and community art centers to make Lakeland an attractive community of choice.*
- *Need a median*
- *Need more left turn lanes off of HWY 70 into housing neighborhoods*
- *Need to remove the automatic tag readers. Need a sound barrier next to the road in front of Creekside manor.*
- *"Need traffic signals and caution lighting before and at neighborhood entrances*
- *Lower speed limit"*
- *Need turn lanes where there is no stop light. Evergreen left turn is an example. Very dangerous and accidents.*
- *Need turning lanes and additional lighting*
- *Needs more police presence*
- *Needs turn lane. School needs light at dismissal*
- *No additional traffic lights*
- *No businesses*
- *No more apartments*
- *No roundabouts*
- *Not being able to make a left out of the high school entrance during school drop off and pick up needs to change with perhaps a light. Making a left there and at evergreen is so dangerous. There has to be a safer way.*
- *Our roads are so bad.*
- *People drive very fast on Hwy 70 and there have been several bad accidents. I would like to see more police patrol and enforcement of speed and traffic rules in that area.*
- *People need to slow down*
- *Please connect Stewart to 70.*
- *Please do not build it up to slow the traffic flow or make it an eyesore full of strip malls, box stores, gas stations, and chain restaurants. We love Lakeland for its peaceful character and open spaces. Do not sacrifice quality of living to appease developers eager to build junk and take away from the uniqueness of Lakeland. We moved to Lakeland because it does not look like any other cookie cutter city full of ant farm housing developments, half-empty strip malls, and a ton of chain restaurants.*
- *Please do not fill it with apartments or strip malls full of vape shops.*
- *Please don't think about putting bike lanes. No one is going to bike down a busy highway. We will bike and walk in neighborhoods. We should have a neighborhood with large land plots for ppl who want a big yard.*

- *There really needs to be a turn lane. It's really dangerous.*
- *There should be large visible entrance signage for all the neighborhoods along 70 so cars will slow near these areas and realize that cars may be entering or turning into neighborhoods. Hopefully this will help cars pay more attention as I was rear ended while waiting to turn into my neighborhood.*
- *Too many speeders*
- *Traffic calming measures such as Roundabouts and reduced speed limit should be a priority*
- *Traffic light @ Evergreen*
- *Seedtick and 70 the turn onto Seedtick is dangerous it needs a turn lane one the side and open up the street.*
- *Turn lanes at crossroads without stoplights*
- *Turn left anywhere on highway 70 is so dangerous because if the hills... cars behind you come at a fast speed and we have had many accidents because cars are trying to turn. We need turning lanes!!*
- *Turning lane and traffic turn light at highway 70 and Seed Tick.*
- *Turning left into neighborhoods off of Highway 70 is very unsafe. I have been rear ended by a driver going 50 miles an hour while waiting to turn. Also we really need to have pedestrian and bike access.*
- *Turning onto side streets is dangerous!! Can't see oncoming traffic near Seedtick.*
- *US-70 could use dedicated turn lanes for the left turns on the stretch in Lakeland but the route is fine as is. Little traffic, little congestion, a non-issue compared to other roads in the area. (i.e Canada Rd) I use the route on a regular basis because it is significantly safer, less prone to road rage and calmer than the other routes going East-West in the area. (US-64, I-40, etc.). Funds would be better used on continued improvement of Canada Rd.*
- *Very dangerous intersections that need traffic signals ASAP*
- *Visibility turning ON to hwy 70 is tricky at some roads*
- *We desperately need a red light at Evergreen and Hwy 70 before any other changes are made.*
- *We live on 70 across from seed tick intersection and it's extremely dangerous with my daughter catching the bus at the end of our driveway. People fly by the stopped bus with lights flashing. We've almost seen a wreck as she was getting off the bus after someone slammed on brakes coming over the hill.*
- *We need a light at 70 & Evergreen*
- *We need a red light at 70 and evergreen. It's dangerous*
- *We need a stoplight at evergreen and 70. Seems like in the 9 years we have lived there i have seen 30 plus accidents. It feels like it's going to take someone dying for this to happen.*
- *We need a turn light at the new High School entrance & exit. Drivers are not following the right of way or the 35 mile speed limit. A matter of time before a new student driver gets into a terrible accident.*
- *We need a turning lane or even better is roundabouts to help flow of traffic*
- *We really need a better-monitored traffic light at Seedtick and Hwy 70. Traffic during school hours backs up and blocks non-school travelers from getting through the light to turn onto Hwy 70.*
- *We also need either a traffic light or traffic control (SCSD) at highway 70 turning into Lakeland Prep. During school dropoff and pickup, it is extremely difficult to turn across 70 going to or from the school. "*
- *We really need a turning lane due to the number of hills restricting views, increased traffic due to new neighborhoods, multiple exit and entry points, and the addition of commercial. We need to limit anymore streets onto 70 and consider lowering the speed limit like Arlington and Bartlett.*
- *What is wrong with highway 70. I like it as is. Have sheriffs give more tickets for speeding.*
- *Will need a turn lane if more developments are added. Turn arrow to access Seedtick Rd.*
- *With more developments and heavier traffic it has become hazardous trying to get onto 70 from our development. The average speed is above 50 mph which adds to the frustration and concern for safety.*
- *Would love to see a Publix grocery store*
- *Would love to see a traffic circle at Canada and Memphis Arlington leading to/from Highway 70*
- *You need to focus more on Canada Road with all the development occurring near Interstate 40 before Highway 70 in addition to the other streets that are in disrepair. The recent repairs that occurred on Green Spruce were poor. There are still potholes where they were working.*



Appendix G: Community Survey #2 Written Suggestions

Over 566 comments were received (note: minor revisions were made to address grammar in some cases and responses were sorted alphabetically, which is why some comments appear to be listed more than once).

- “Please let us know your thoughts about the design shown in the video.”
- Twice too many roundabouts...2 max if any at all on 70. Do NOT put one at Campus Rd...too many young/new drivers. Need Old Brownsville Rd access from LPHS student Parking lot to alleviate traffic density onto 70
- 3roundabouts on a 50 mph highway seem like a bad idea. Will the whole corridor have a reduced speed limit??
- 4 roundabouts seem excessive. Maybe 2 down the corridor would help slow traffic. I like the one at the Lakeland Commons entrance going into the apartment, retail and restaurant area. I do love they give a small town feel.
- A lot of roundabouts. Does speed limit decrease? The overall idea is sound.
- A round about is not going to solve the issue of people being selfish and wanting to “take their turn”. It is absolutely insane to think of all the high school students leaving LPS, who already ignore the no left turn onto 70 from the school, getting into and out of the round about without causing issues.
- A roundabout, ANYWHERE, on hwy 70 is the worst possible idea that you could come up with. There are now plenty of traffic lights up and down 70 now with the current developments accept for maybe something needed on the 70 entrance of the new lake district.... but NOT a roundabout!
- Absolutely a bad idea!
- Absolutely not! A highway is not the place for a round about. Not all people using Highway 70 are familiar and I feel this is going to get someone hurt or killed. Just lower the speed limit.
- Absolutely not. No one will figure it out and it will cause traffic backups
- Absolutely not. People don't stop at stop signs, red lights, especially to make a right turn. They don't follow many rules of the road so expecting them to learn to navigate a roundabout is a big stretch of hope.
- Absolutely ridiculous.
- Absolutely terrible idea. Astonishing that this was even considered as a viable option. This will cause nothing but trouble and impede the flow of traffic on a highway.
- All that's needed is a turn lane.
- All the roundabouts are ridiculous and unnecessary. In order to “calm” traffic, a stoplight is the only way to stop speeders. The wide walking path, however gives safer pedestrian access to the street.
- Although uncommon in our area, roundabouts keep traffic moving and are statistically safer than stop light and stop sign intersections. I say yes to the proposed video.
- Amazing I love it. Walkable paths are perfect and roundabouts to avoid red lights also great.
- Amazing! 10 out of 10!
- Any change to slow down the traffic on hwy 70 would be a welcome change. I'm all for the right developments but the quaint and rustic beauty of Lakeland is being demolished.
- Are they intended for traffic management or aesthetic purposes? Why not install more traffic lights as needed? Most times of the day traffic is light and flows well between Canada Rd and 385.
- “As a concerned resident, I want to share my thoughts on the proposed design. While the overall appearance is attractive, I have serious concerns about how the roundabouts will impact traffic flow.

Roundabouts may significantly slow traffic and could create confusion for many drivers who are not accustomed to navigating them. Currently, there are already several stop lights in place that slow the flow of traffic, and adding roundabouts may further compound this issue.

Additionally, the overall length and duration

of the project raises concerns. This roadway is frequently used as an alternative route when there are accidents or detours on I-40. Any prolonged construction, lane reductions, or detours will greatly impact traffic congestion during those times”

- *As a parent who has had two kids total their cars turning into our subdivision, I am excited about the change to slow down traffic and make this stretch of 70 safer. Simply putting more traffic lights will not do the trick as the hills obstruct views and you are a sitting duck hoping the cars coming up behind you will see you stopped before it's too late. We would need turning lanes throughout and even those can be dangerous at times. I also appreciate the connectivity of the design. We have no parks or fully connected walking paths on the north side of 70. With all the added traffic with more houses, soccer fields, etc. I no longer feel safe walking down the street.*
- *As a person who has lived and driven in Europe for years, roundabouts sound cool until you live with them and realize they cause more accidents than not. Hear me out, how well does it work when the power is out and we obey the person on the right goes first at a malfunctioning stop light. Rarely works. It'll take a functioning 50 mph high way and slow it and will also reduce commercial traffic, which may be the hope but commercial vehicles pay a lot of road taxes. Looks beautiful in the video, but reduces user functionality.*
- *As a resident who drives on Hwy 70 from Canada Road to Saffron Springs several times daily, I feel that there are too many roundabouts proposed. One is not needed near the project by Seed Tick road since there is a significant traffic*

light being installed.

- *As an Arlington resident, would love to see Arlington follow suit and have roundabouts on 70 from Fayette county line to Bartlett. I live off of 70 and Milton Wilson so we travel this way frequently.*
- *Aside from being costly with no apparent benefit other than change, I would think that TDOT would have a real problem with it. As for funding, I would hope that TDOT would spend the limited funds on more worthwhile projects. Surely Lakeland wouldn't be paying for this.*
- *Awful idea to implement on a Highway!*
- *Bad idea*
- *Bad idea*
- *Bad idea!*
- *Basically in favor of it however I WOULD LIKE TO SEE BIKE LANES INCLUDED IN THIS NEW DESUGN*
- *Beautiful and functional. It will take some time for people to learn who has the right of way in the roundabouts.*
- *Chaos*
- *Concerned about future health field complex and losing all trees in area.*
- *Concerned about the speed cars are typically traveling on 70 and the roundabouts. I think they work well in areas where cars are not going as fast*
- *Crazy. This would cause more accidents along a stretch of 70 that is dangerous enough now.*
- *Definitely need the median. Not sure about roundabouts on a US highway*
- *“Design appears functional and will serve to reduce speed thru the Hwy corridor. Please keep tree cutting to a minimum. The disappearance of trees at the new Canada Road Memphis Arlington interchange*

is disgraceful for a town once dedicated to preserving trees. This has resulted in a tremendous unnecessary eyesore to nearby landowners and visitors traveling in the area. Very disappointing!”

- *Design looks good however this is a heavily traveled state high. Has a traffic study been completed on the number of tractor trailers traveling through those areas?*
- *Design looks nice. Seems to help slow down traffic, which would help with safety.*
- *DO NO DO THIS!! Please! The thing that I love about Lakeland is that it feels like small town. I also live off Evergreen and do not want my road to become a main road! In addition, I drive on 70 everyday for work and do not want it to become congested while this is in construction.*
- *Do not believe the proposed work would make solutions as traffic runs very well right now in these areas. I believe the traffic back up would only worsen. Not a fan!*
- *Do not like it, Rotarys are horrible.*
- *Do not like roundabouts*
- *Do not like roundabouts. I think they cause confusion and potential accidents. It would be hard to notice the shift in lanes at night if you weren't familiar with this area.*
- *DO NOT LIKE ROUNDABOUTS! Make another plan. This plan will definitely slow traffic on highway 70 and will not help the flow at all.*
- *Do not like this idea. Not sure the point*
- *“Don't do it. Just no. Gonna see more accidents than already happen.”*
- *Don't like it.*
- *Don't like it*
- *Dumb as [redacted]*



- *Everywhere I have encountered a roundabout drivers struggle with navigating them. People take these things on 2 wheels even they are not on very busy highways. I believe adding several roundabouts on a very busy highway is asking for accidents to occur. This is not even taking into account that several are slated where new drivers from the high school will have to navigate to and from school each day. I can't believe that this would even be considered on a 4 lane state road. If I didn't work at the Lake District, I would more than likely take an entirely different route to Arlington just to avoid them especially with so many installed in such a short distance.*
 - *Excellent design that will bring enhanced esthetic, traffic flow, and safety to Lakeland. But get ready for a fight. So many naysayers will do everything possible to delay and derail any progress. I just hope it can be completed faster than New Canada Road which was a nearly 30 year concept.*
 - *"Excellent! Although I suspect there will be a learning curve (acclimation period) for drivers using roundabouts, the layout looks well thought out & effective!"*
 - *Excellent. Bring on the roundabouts. They are great for traffic flow, speed control, and safety*
 - *"Excessive land and tree destruction Lakeland destroys so many trees as a city Waste of money. Traffic lights work just fine All the natural/ nature destruction is getting out of control. No real planning, just destruction"*
 - *First I grew up in Lakeland. I am 34 now and have avid memories of funfest etc, I have seen so much change over the years. The roundabouts are not user friendly and don't provide a solution for the rapid growth you seek. Canada, seed tick and chambers chapel act as favorable short cuts for most in this area. I think standard pathways and exploring lights and accessibility is the main goal. I love the mixed use of retail and living on seed tick and 70! What life you have breathed into a once forgotten area. Way to go!*
 - *For a college campus or lighter traffic area?? Yes. Highway 70!?!? No. Im shocked it got past so many intelligent people to even be an option. I strongly disagree. Add stoplights at only the high wreck areas.*
 - *Four roundabouts seems like a lot for this highway and will slow down traffic passing through. I would reserve only for the busiest intersections.*
 - *Futures improvements shown will be very beneficial to the hwy 70.*
 - *Going to make it very busy & congested. It flows smoothly now in my opinion. I'll never go that way if they do roundabouts.*
 - *Great design. Could save lives.*
 - *Great video! Very informative. Ive used roundabouts in Europe and found that they can be very helpful. I like the proposed changes, especially as adding stoplight at all those proposed sites would be annoying*
 - *Great video. Having 4 traffic circles that close together on a major state route will slow down high 70 traffic. During rush hour it will be almost impossible for someone off the side street to access the circle to make a 270 turn in the opposite direction of the rush hour traffic.*
 - *Great video. Loved the new look and the pedestrian multipurpose lane alongside the Hwy. The roundabouts seem like a great idea to keep the traffic flowing. I've seen double lane roundabouts in other cities be confusing to some, but people will learn.*
 - *Great video. The campus needs a light. Not a confusing roundabout for beginners in driving. Love the Seed Tick interchange. Wish that hill could be taken down a bit but I'm pretty sure that's not doable.*
 - *Great. Much safer*
 - *Hard to follow, if I make it bigger I can't read the street name. But I don't like round about. I you been on the one on Highway 72 in Mississippi to confusing*
 - *Having grown up with one in Long Beach, CA (Traffic Circle) connecting one major highway and three major boulevards I like the plan for the 70 Corridor. People will slow down and be cautious while keeping traffic moving.*
 - *"Having lived directly off Highway 70 for over 20 years and witnessed the influx of traffic patterns from neighborhood developments, I highly disagree with the implication of roundabouts as a reasonable solution regarding public safety. The biggest concern over the years has been the placement of subdivision entrances along Hwy 70's rolling hills which limits sight lines and gives very little reaction time for surrounding vehicles; along with the absence of turn lanes near these entrances.*
- The city of Lakeland knows there have been several deadly accidents involving cars trying to turn into neighborhoods over the past 20 years and have done little to lessen the risk"*
- *Having lived on the north side of evergreen rd since 2011, I think it's perfect. Love the roundabouts and walking path.*
 - *Highway 70 is a major east to west state highway. It has high traffic, as well as wildlife - deer, etc.. Roundabouts are a really bad idea along this*

portion of the highway. If concerns are for traffic flow, install traffic lights at the intersections where the roundabouts are shown. People know more how to use a traffic light than a roundabout - it will cause more trouble/accidents than it's worth.

- Horrible. It will make traffic so much worse! Shelby County drivers have issues with straight. You're gonna throw geometry at them? No. Just no. No one knows how to use roundabouts around here and traffic just won't move on 70.
- Hwy 70 needs a turning lane, not turn abouts.
- Hwy 70 shouldn't have a round about. They are fine for little towns or side streets but not 2 lane highways
- I think it'll be too many accidents with those still not paying attention even though their speed will be lower. I am not a fan of these intersections.
- I agree that more lights are needed on Hwy 70 to improve traffic flow at specific intersections. I believe the roundabouts are a horrible idea as Hwy 70 is a thruway. Please do not impede traffic moving thru these areas and causing more traffic accidents.
- I agree with the use of roundabouts. I was hoping that the city would follow thru when they proposed a roundabout at seedtick. I do not like the signal light at that intersection. The roundabout would have been better.
- I am a big fan of roundabouts. The intersection at Seed Tick has a stoplight, why? What is the cost of a typical ra? Will you have the ability to insert them at the other intersections in the future if needed?
- I am a relatively new resident to Lakeland, but previously lived in an area where a similar project was completed. The roundabouts caused

much confusion, wrecks, and interrupted the flow of traffic considerably. These may work well in low-speed urban situations, but with the speeds involved on HWY 70 these will be very dangerous. Consider driver's passing through who may not be familiar with the area, and/or drivers who do not have experience with roundabouts, at 50+mph it doesn't take much to catch a driver off guard, causing loss of control.

- I am adamantly opposed to roundabouts on highway 70. I think it will slow traffic and be such a waste of time and money. People use highway 70 to get into town quickly and especially as an alternate route when I-40 has a wreck, which is very frequently.
- I am all in for the city of Lakeland to improve their infrastructure through highway 70 as well as adding more development and a future primary school, but I disagree with the roundabouts at the four intersections, Ever since i started driving and use highway 70 through Lakeland, I haven't seen no accidents and this is on a more than 5 year period, In my opinion, implementing the roundabouts can have an increase of accidents, my best thought is to have a median lane at the intersections at least to turn left, a median lane that only starts to form once your a maybe 1000 - 2000 feet from the intersection, for now keep the stop signs but that will help with of creating traffic lights in the future if there is an increase of traffic, as for the sidewalk, well lets just hope a drainage system can be implemented as there is already a natural fall that runs water off from highway 70.
- I am always in favor of anything that helps traffic flow more smoothly and roundabouts are right at the top of that list
- I am not a fan of roundabouts especially on

highways. They can be very confusing and hard to manage.

- I am not a fan of the round abouts. Beautiful idea. Unfortunately, not enough people with common sense to use them safely.
- I am NOT in favor of roundabouts for Hwy 70.
- I am opposed to the proposed roundabout.
- I am very much opposed to roundabouts. I believe a turn lane would better serve the corridor. I especially do not like the idea of one at the school entrance. Student drivers cannot even drive safely in the school parking lot, this would create a mess.
- I appreciate the video and potential time spent on this project. I also recognize the city's view on the use of roundabouts slowing down traffic. I do not support the use of this number of roundabouts along this stretch of highway. I would have loved to have seen a turn lane and stoplights considered.
- I believe Hwy 70 has too many heavy duty and commercial vehicles that use this road daily. Roundabouts are not very friendly for long wheel based vehicles and tractor trailers. If the reason is to slow traffic then run radar more frequently? Not that I'm in favor of that because I am a habitual speeder. I am not in favor of roundabouts on the larger state highways.
- I believe it is very forward thinking about a very old concept that has been around for over a hundred years. I like the research . I like the comments. I like the layout of the project. Well done.
- I believe the design shown would be a great improvement. I also believe that roundabouts make for very efficient intersections and locals just don't accept them due to their lack of experience with them.



- *I believe you are on the current path.*
- *I can't see where this many roundabouts is reasonable. Do you not like traffic lights? I understand the need to slow traffic down in specific areas but maybe a road diet is better than a full roundabout.*
- *I dislike the roundabouts proposed along highway 70.*
- *I do like the idea of roundabouts, although I do think there are too many proposed on this stretch of highway 70. I suggest a revision with a few less or to switch them for a traffic signal instead.*
- *I do not believe a round about belongs on a highway.*
- *I do not believe roundabouts on a Hwy is the answer to slowing traffic down.*
- *I do not like roundabouts. What is wrong with traffic lights? I think this plan will only cause confusion. Please reconsider.*
- *I do not like the design. It will disrupt traffic flow and be extremely difficult for any tractor trailer traffic that may have to detour off of I40 to navigate.*
- *I do not like the idea of multiple roundabouts on Hwy. 70. Adding a turning lane would solve the problem and keep traffic moving.*
- *I do not like the idea of round abouts on hwy 70.*
- *I do not like the roundabouts*
- *I do not like the roundabouts on this road. It is a busy highway and these would be better suited for a roadway with less traffic. Look at the ones Oxford MS has as you head South from the Square and intersect with Hwy 7. It is an overpass so the traffic does not have to slow down*
- *I do not like the roundabouts. Would like to use hwy 70 as a highway and roundabouts slows cars down too much.*
- *I do not support this design. Roundabouts*

perform best at balanced intersections; research cautions against their use where one direction dominates traffic, as this leads to increased delay and operational problems. Multilane roundabouts show smaller safety benefits than single-lane designs and present greater challenges for pedestrians, particularly near schools. The safety and delay statistics often cited are based on individual intersections and do not account for repeated, closely spaced installations, which can increase rear-end crashes, driver confusion, and cumulative delay on the main roadway. Speed reduction is assumed but not guaranteed without a fundamental corridor redesign. Safer, more context-appropriate solutions should be considered.

- *I do NOT think all of the roundabouts are a good idea at all. I think this will cause more confusion and accidents.*
- *I do not think it makes sense for a highway*
- *I do not think the roundabouts are a good idea.*
- *I do not think the round about help at all. They cause traffic to back up and make people late trying to get to work in Arlington. I-40 is bad enough backing up with traffic. Usually Hwy 70 is the alternate. This will cause major backup with morning traffic as well as afternoon school traffic. I'm totally against it.*
- *I do not think this is a solution that the general public is willing to follow. Highway 70 is not just a local route, it is in many respects a main connector to and from Memphis for many outlying communities. While everyone wants to believe drivers are respectful and courteous, drivers on this roadway have proven time and again they feel they own the road and purposefully disregard all efforts to ensure safety on the roadway. I do not believe this design is a*

solution for the travel issues on Highway 70.

- *I do not think this will be an effective solution for this area. The amount of confusion and chaos it will create is mind boggling. The drivers in this area are not accustomed to roundabouts.*
- *I do not want a roundabout.*
- *I do not want the roundabouts.*
- *I do not want to have to deal with 3 roundabouts just to get through Lakeland area. Just stupid for that type busy highway. Use traffic lights if something must be done.*
- *I don't dislike it. I think growth is inevitable and this is a way of handling the uptick in traffic. The roundabouts are a must to slow people down. Start there.*
- *I don't like it.*
- *I don't think roundabouts are good idea on HWY 70. It's going to slow down traffic on the street and also shift more people to Memphis Arlington to avoid the roundabouts.*
- *I don't think roundabouts have a place on state highways.*
- *I don't think the roundabout entrance to Lakeland Prep is necessary. The current intersection as it stands is sufficient considering the fact that it is only used twice per day for about an hour. Not including special events. I think it will show down the main traffic corridor too much.*
- *I don't understand why we need them. Seems like a waste of money*
- *I don't agree with this plans for roundabouts on Hwy 70. Too many people here don't have a clue how to maneuver them and the biggest trucks that have to use hwy 70 will not be able to maneuver them easily either. Everytime I40 is shutdown traffic is rerouted to 70 and 64. This would make it harder to do so for hwy 70.*

Highways do not need these kind of changes. Lights yes. But this area has proven time and again they do not drive well on a straight road on a normal day. These changes will end up causing more chaos. Look at the crosswalk for our i40 exit. People are constantly driving into the other lanes and down the wrong ways. Sounds cool till you realize the MidSouth area does not own how to consistently drive anything new or halfway different.

- I don't like the design. I think more accidents will occur. Red lights would be better, there are a lot of young drivers on that roadway and it isn't a common traffic flow design.
- I don't mind the round about but don't think the one for the school entrance is a good idea. Round about and young drivers I feel would make for a bad combination.
- I don't think it's a great idea. I think there are other routes that would make better sense.
- I don't think the roundabout is a good idea, it appears to be dangerous.
- I hate it ' it's on a four lane Hwy & it won't work. I've used those in RI & hated them & saw a lot of accidents. Maybe try on Memphis / ARLINTON where u have a four way stop. Should never be on a main Hwy . It will be dangerous & we need a better solution then this idea .
- "I have concerns about people not knowing how to use roundabouts, but I like the idea of reducing the accident risks that could come from incorporating. I'd hate to see the speed dramatically reduced, but down a little would be ok. I like this most by the high school to help keep kids safe."
- I have concerns with the amount of drivers

who struggle with simple roundabouts who already speed through the corridor

- I have driven around round-abouts in other areas especially in Florida. I have never met one person who liked them. This would be really bad because it's on a highway. Small city/town roundabouts are bad enough. People drive the wrong way around them.
- I have lived in places with roundabouts and they are awful. They cause accidents especially with 2 lanes because people don't understand how they work which ends up slowing traffic down and creating dangerous driving situations. There's too much traffic on 70 to make it walkable so again you're creating a dangerous situation. No one is walking to the commons for anything even if there was anything there to actually walk to. Also the deforestation of Lakeland has got to stop. People that have moved here have done so because of what Lakeland looks like and it is being ruined. The district and commons and empty but you keep building more and more. At some point we are going to need to expand the schools and I believe Lakeland will be bankrupt to do so by then. The wrong things are being prioritized.
- "I know the keyboard warriors are negative on the roundabouts. Having seen many in Nashville and Knoxville, I think they are effective, and I favor them. I like the proposal My one callout is there is no right turn lane on eastbound Hwy 70 at Seed Tick. The traffic heading east is going uphill - mostly pretty fast because the speed limit is 55. A right turn lane would get the cars headed south onto Seed Tick and out of the way of the eastbound traffic"
- I like everything I see! Would also like to see a roundabout at Memphis Arlington and Seed

Tick.

- I like it
- I like it
- I like it
- I like it and think it will be much safer for my children.
- I like it but wonder how 18 wheelers and trucks with something pulled behind them would handle. Would be a learning curve for many that have not used before. Looks like it would keep traffic moving better than signals
- I like it!
- I like it!
- I like it! I just worry about the number of people in the Memphis area that don't know how to drive through a roundabout. However I think it's better than having drivers stop in a lane with moving traffic to turn left. Overall, I'm pro-roundabouts
- I like it! The paths would be nice, but would the speed limit be reduced if walkers and bikers would now be close to the road? The plantings are a great to soften the road, but who would maintain them?
- I like it. I think what is most important to me is adding healing trails and connecting the community even more. I am actually building a home right now in Lakeland Meadows off of Old Brownsville and am really looking forward to the accessibility to everything.
- I like roundabouts in theory, just not for 70. It's too busy of a highway in my opinion and at the very least not by the high school entrance. That needs a dedicated light.
- I like roundabouts, but I don't think this is wise a state hwy with large semis, truck pulling trailers, etc
- I like that there aren't many added traffic lights,



but I don't necessarily care for the roundabouts. But they are a better choice than multiple traffic lights.

- I like the design but do we need so many in that short area?*
- I like the design. I think it will improve traffic flow.*
- I like the design. Roundabouts would be useful.*
- I like the layout and concept. I think it's a smart move.*
- I like the overall design and the benefit it will bring. I believe that the roundabouts will become bothersome. I have lived in locations with roundabouts, and they do have a lot of benefits especially on medium usage areas. I think on a major highway it just turns into mandatory slowdowns for everyone on the highway. It also can make it more difficult for larger trucks and agricultural machines. While the design makes it easier to get on and off of Highway 70, the through traffic which is the greatest amount will be slowed repeatedly. I believe also living in a state with no drivers ed and drivers that have few skills roundabouts could be a painful new experience for some.*
- I like the roundabouts on hwy 70. The blind spot at 70 and south Evergreen needs to be addressed.*
- I like the roundabouts shown in the video. They are much more efficient than red lights.*
- I like the way it all looks and think a more safer roadway is important.*
- I liked it*
- I live near hwy70 and evergreen. A round about will not fix the issues at that intersection.*
- I lost count of how many roundabouts were proposed, but I commute to my job back and forth between Bartlett and Arlington every day. I see this adding more time to my commute. I'm*

against this idea.

- I love a roundabout. If utilized properly they ease the flow of traffic and keep speeding down.*
- I love it!*
- I love it!*
- I love it! Especially the walkway along the new road*
- I love it! I only wish it had been done sooner for my new driver to benefit from the improvements as she travels to school. Maybe it'll be in time for her younger brother.*
- I love it! it is safer for all commuters, especially now that our school is expanding and busier. Aesthetically, it is significantly improved and safer.*
- I love it! Our extended family lives in Louisiana. These are everywhere there, and we love them!*
- "I love the beautification (planted medians, etc.)*

I'm curious about the signaled crosswalk. Is the thought kids will be walking to school? I can't imagine that's very likely.

I also love a good roundabout. I travel the Atoka one every day for work and it's so smooth. By the end of the video it did start to feel like there were a LOT of them though."

- I love the idea and think roundabout are very efficient.*
- I love the idea of all the roundabouts. I have lived in other parts of the country and they work really well. I live in Eads and travel Hwy 70 into Bartlett several times a month. I hope you continue with this project.*
- "I love the idea of traffic circles. It cuts down on maintenance costs of traffic lights, it reduces traffic backup because everything keeps flowing, and it looks better.*

The multi use trails are a great addition as well."

- I love the ideas . I like the multi use path . I'm optimistic about the roundabouts .*
- I love the multi use paths. We need these to connect neighborhoods all over the city. It would be great if we could have pedestrian bridges over highway 70 as well. Also, it would be great to have them along Old Brownsville so kids could walk that way to school. That road is unsafe to walk at this point. I'm not sure what the obsession is with roundabouts but they are confusing for anyone that doesn't live in the immediate area. I'm afraid they'll cause more problems than they fix. Why not just use stoplights like everyone else?*
- I love the proposed design. This would hopefully slow down the traffic on 70.*
- I love the roundabouts in Oregon and find them helpful for traffic flow so I think this is a great plan.*
- I love the roundabouts. I have used roundabouts all over the country and even several in other parts of the world and everywhere I encounter them. They seem like a good solution. Highly recommend them.*
- I love this idea from Arlington resident opinion.*
- I mean, I think it looks pretty good.*
- I oppose the proposed plan along HWY 70 for multiple reasons. Cost could be allocated to improving fire/Ems coverage and continuing school growth.*
- I personally like round abouts, but some of these do seem close together. Overall like it.*
- I personally like the proposed roundabouts. They are aesthetically pleasing and much preferred over traffic lights when only a few cars are trying to enter an intersection at a time - keeping traffic flowing appropriately. I also like the separation*

of a slight median between the two directions of traffic, reducing risks of head on collisions when people currently cross over the double yellow lines at high speeds.

- I personally love it! That entire area between Bartlett-Lakeland-Arlington is growing. People fly down the 70 and there are so many accidents for people turning left. So this would keep traffic moving, but slow down at those busier sections and less likely to cause accidents. I think it looks great! I travel down the 70 every day to drop my daughter off at preschool and would personally really like the plan in the video.*
- I prefer the roundabouts and think they will significantly slow traffic down throughout the area.*
- I really like the continuous multi-purpose path along so much of 70. I think it'll create a lot more actually functional outdoor space and provide better safer access to the schools for nearby neighborhoods*
- I really love it!*
- I see the need at the high school and Lakeland Village. Four roundabouts in that short distance is too many on a state highway. Chamber's Chapel and Evergreen South could be eliminated.*
- I see the reasoning but that's a lot of roundabouts. I think one would be sufficient*
- I see these becoming popular in other cities and do believe they work to slow down traffic.*
- I see these round about in Tipton county, at a 4 way but going down Hwy 70 and someone traveling 55 -60 miles an hour and then comes up on a round about seems dangerous to me coming from a intersection I could understand if there were caution lights and so forth but the one going down Hwy 70 when people use it as a race track I'm nervous about !*

- I support the idea of roundabouts on busy intersections.*
- I think a roundabout at that location is a horrible idea. I have lived in this area for 22 years and have had 2 wrecks on 70. One was a deer that ran out in front of us and surprisingly hit 3 cars and the second also a deer that took our car in front of me and we hit them after the car behind me hit me. People cannot drive and are not used to roundabouts in this area.*
- I think any round about on 70 is a big mistake. Please don't.*
- I think highway 70 is going to be a very busy highway. There needs to be a traffic light there.*
- I think it is the perfect solution for the corridor.*
- I think it looks good, but I don't know if the entries into the roundabouts were curved like that on purpose. Just make them straight into the roundabout and then start curving to the right. The little jog right, left, then right into the roundabout will only cause accidents with the idiots that already will fail to use the roundabout correctly.*
- I think it looks great and would make it much safer.*
- I think it looks great! It modernizes the highway and creates the foundation for safer roads and smoother traffic.*
- I think it looks great. I hope the proposal moves forward.*
- I think it will be fantastic and beneficial.*
- I think it will slow down traffic, which will be necessary based on all the new development on Hwy 70.*
- I think it will work well for all intersections except the school access. During the beginning and end of school time I believe the congestion created could cause a hazard with the flow of*

pass through traffic. Otherwise, good idea.

- I think it's a great idea.*
- I think it's a ridiculous waste of taxpayer money to put in so many roundabouts on a busy road. A few stoplights would be adequate.*
- I think it's an unnecessary waste of money at this point. Lakeland isn't developed enough to need this and it's not one but like 4 roundabouts.. I see it being a problem for the younger drivers as well*
- I think it's ok. I live on Hwy. 70 and the traffic has increased vastly in the last 5 years or so, making it difficult for access to and from my driveway. I like the idea of roundabouts better than traffic lights.*
- I think it's awful! I believe it will impede the flow of traffic to where it is a detriment and danger. I don't believe it will increase safety at all. This is a main corridor and would create a lot of traffic issues.*
- I think people need to stop spending money on things that don't need to be spent money on that road is fine just like it is*
- I think roundabouts to keep traffic moving while also safely allowing side streets to enter 70 are a smart and thoughtful design.*
- I think roundabouts would be a wonderful and efficient way of driving through 70.*
- I think that it would be great after the construction. It will be very disruptive till that point. This will be one of the only places with multiple round abouts in the city.*
- I think the design is great!!*
- I think the design is nice and will help the flow of traffic.*
- I think the design is very nice and improves the areas landscape and traffic concerns*
- I think the design looks great. I prefer*



roundabouts as long as there are no lights nearby. Sometimes ppl fail to see the stoplights because they're watching traffic at the roundabout.

- I think the design will add beauty to the landscape. It will add pleasure and serenity to the driving experience. Beautification attracts newcomers to the area.
- I think the intersections in the video are well designed and would be a great improvement for Highway 70.
- I think the proposed design is great.
- I think the roundabouts for major traffic areas will help. That said, I felt like there were a lot in that small stretch. I also think a signaled intersection and a roundabout seem unnecessary by the apartments/owners box area. I would think one would suffice.
- I think the video looks great and I can't wait to see the plan in action. Roundabouts are a great way to keep traffic flowing.
- I think this is a bad idea to do on a Highway where the speed is 50 and people do more than that. This design is meant for streets, not Highways.
- I think this is a ridiculous idea. This is a major travel thoroughfare across the state. Putting up stoplights if nothing else should be more appropriate as opposed to a roundabout which most people do not know how to navigate and ends up causing more accidents than they are worth. You also have numerous tractor trailers that travel the Highway 70 corridor, and this will impede them getting to their destinations in a timely and safe manner. Save the roundabouts for busy residential areas with a high traffic flow that needs some way to slow people down.
- I think this would be a nightmare. Hwy 70 is a highly traveled hwy that can be congested during

rush hour times especially when 385 and I40 are backed up. This would increase commute times and would not benefit anyone.

- I think you are over using the roundabouts. It seems to reduce the flow of traffic through the area.
- I thought the music added to the background was kinda corny, but other than that, good!
- I thought the video presentation was well done but I do not think roundabouts are necessary or flat good idea.
- I use HWY 70 everyday and do not see the need for a round about anywhere. The traffic moves just fine.
- I use Hwy 70 usually to travel to Arlington, and while I hate to lose the time that the improvements will cause (it will take longer to get where I am going), i understand that changes must be made with the increase in traffic. Please keep the roundabouts. People who don't like them have just never used them, and they will get used to them eventually and appreciate them for the timesavers and safety measures that they are.
- I vote no! Who is coming up with these ridiculous ways to spend money!!!
- I want a roundabout. Thank you.
- I was a no when I started the video and was a yes when I finished.
- I was thoroughly impressed and like to say it can't be done soon enough! This will obviously make every turn onto and off of 70 so much safer and address traffic flow.
- I watched the design video twice. Thanks for the descriptive information. I like the design and I think it will slow down traffic through our community. This will solve the current issues at Evergreen Rd. The multi use path on the side of

the highway is a good addition as well.

- I would be concerned about having one at Campus Drive. I don't feel that the student drivers are proficient enough to properly navigate a roundabout.
- I would be opposed to this hairbrained idea.
- I'm neutral about most of the proposals but the roundabout at the school near Canada Rd is unnecessary. There are peak times of traffic during arrival and dismissal that require more throughput and control than a roundabout can give. Outside of these times there is minimal cross traffic to control, thus making the slower speed in the roundabout a nuisance rather than a safety item as the traffic is just going along hwy 70
- I'm not in favor of roundabouts. I would like to see stop lights in place of those and more public walkway trails/sidewalks to town square. Old Brownsville road desperately needs sidewalks.
- If you put a roundabout on 70 I'll never spend another dollar in Lakeland
- If you want more wrecks and traffic on highway 70 then the roundabouts are a great idea. The problem is nobody either knows how to use them or is too self centered to use them correctly so they go when they want which will cause multiple wrecks.
- "If your plan is to make the drive on 70 much slower and cause more backups, you have a winner here. I drive 70 every day. I prefer the smooth drive going to down 70 as it is now. There is very little traffic that enters from the side streets during my daily drive and even light traffic on 70. Traffic is not heavy enough on 70 to cause long delays to access 70 at any time.

I assume you will be lowering the speed limit and at each roundabout, drivers on 70 will have

to come to a full stop to enter. The trees leading to the roundabout from each way will limit visibility of people entering the roundabout from other streets than 70. Grass or lower type of foliage would be better for longer visibility.

Final thought - why stop at Canada Road? Brunswick is becoming a much more congested intersection than any of the ones indicated in this update."

- *I'm approve of the plan laid out in the video, but I'm unclear of there's a circle at Canada and 70. (Or New Canada and 70) I recommend having one. I also recommend a circle at Canada/New Canada and Memphis Arlington.*
- *"In my opinion, This has way too many roundabouts in such a short distance area. 3, maybe 4 max should be the goal and only at heavy traffic areas. I do like the implementation of bike lanes and places to jog making it safer for joggers and cyclists."*
- *Install stop lights instead of roundabout system. So many do not understand how to get through a roundabout.*
- *It causes more accidents and harm than good. Lived in another state that had these. Nothing but headaches with so many accidents.*
- *It doesn't reflect the true use of 70 especially when used as an alternative route when 40 closes due to accidents. Additionally no large trucks or RV (43'), shown. They have difficulty in making the transition. Witness this situation on the East-coast at several roundabout s. It's not as efficient as presented in heavy traffic conditions especially when drivers are inexperienced or nervous. Working their timing becomes more difficult entering the roundabout.*
- *It doesn't seem practical to put any roundabouts on a major highway such as 70.*
- *It is a stupid idea with all of the new high school drivers. Just put more stop lights up.*
- *It is a terrible design. It will cause much more difficulty with the traffic on the highway*
- *It is not going to work out well.*
- *"It is very concerning and I am not in favor as it will affect traffic flow Negatively and slow down commutes. It is a state highway. Not a local thoroughfare."*
- *It look great, in the meantime a traffic signal @ evergreen and anything resembling any sort of speed enforcement including SCSO on Hwy 70 AT ANY PONT EVER would be lovely. Filling in the holes and collapsing road edge of an absolute travesty that has become old Brownsville in the name of development would be super awesome too.*
- *It looks beautiful and efficient, it will make the city looks very nice and upgraded.*
- *It looks like a very functional design. The roundabouts will keep traffic flowing.*
- *It was great*
- *It was put together well and very informative*
- *It would greatly slow traffic for us who travel Hwy 70 daily. That is far too many roundabouts on a major thoroughfare. This would be devastating for us who travel daily from Arlington to Bartlett.*
- *It's idiotic, it's a horrible idea and will be dangerous. Also it's a waste of tax payers dollars. It's not broke, so don't fix it. Plus how long are you people thinking this is going to take to do? This will take years to complete, and it will hinder traffic flow for hundreds of people if not thousands, for no gain. Just so the City of Lakeland can keep their rich looking front.*
- *It's nice. The built environment aspects like sidewalks and greenways/walking trails is great. It's a high traffic area so less roundabouts.*
- *It's not realistic*
- *It's terrible - there should not be roundabouts on highway 70.*
- *It's terrible.*
- *It's a horrible idea. Hwy 70 has way too much traffic for this. I think it will cause more accidents.*
- *It's stupid to put a round about on a state highway.*
- *Just put in stoplights.*
- *Leave highway as is presently.*
- *Like it a lot. Especially the proposal for green walkways*
- *Lived in Michigan. Dexter, Mi and surrounding communities have flourished because of roundabouts. While they can be annoying they do really improve traffic flow.*
- *Looks fantastic! Can't wait for these improvements to be made!*
- *Looks good to me. Roundabout works.*
- *Looks good, but i wonder how much of hey 70 will become divided*
- *Looks good, roundabouts have been proven very effective*
- *Looks good. How will construction affect traffic. What is start date? And expected completion date?*
- *Looks great*
- *Looks great and will improve safety. I have lived in other parts of the country where roundabouts are common. They are great to keep traffic flowing. Great idea and project! I hope it gets approved.*
- *Looks great!*
- *Looks great!*



the seed tick light. If the roundabouts annoy me I'll just take Mem-Arl rd.

The End"

- *People don't understand roundabouts enough. I think this would just lead to wrecks*
- *Placing roundabouts on Hwy 70 would attribute to more wrecks on this stretch of highway and would impede the flow of traffic. This is the alternate route for citizens and semi traffic into Memphis when I-40 is shutdown for wrecks, which occurs frequently.*
- *Please do not add roundabouts*
- *Please do not add roundabouts.*
- *Please do not use a traffic circle*
- *Please don't do around about.*
- *Please don't do it*
- *"Please no roundabouts on Hwy 70.*

Please do traffic lights if anything."

- *Poopy*
- *Pretty dumb if you ask me, just put a median/ middle lane for turning cars*
- *Pretty to look at and idea for pedestrian inclusion is good but 70 is a highway and roundabouts don't make sense for the total flow of traffic it gets traveling from Midtown to Brownsville. Those would be better implemented on the major cross streets that already have 4 way stops backing up and causing major delays.*
- *Pure ignorance, people on the road can't figure out flashing yellow vs. flashing red lights. They certainly won't figure out a roundabout.*
- *Really?? it will never work. Please do not do this.*
- *Red lights bad. Roundabouts good.*
- *Reduce the number of roundabouts. Widen to 6 lanes and a grass median. Extended turn lanes at intersections. Left turn lanes at signalized intersections set to activate when more than one*

car is turning.

- *Ridiculous to put roundabouts on a highway. Absolutely not a good idea.*
- *Round a bouts are Great!*
- *Round about a would ruin the ability to make it to work on time, also causing traffic*
- *Round about do not seem like a good alternative for hey 70 especially due to the speed at which most are traveling. Has consideration for J-Turns been thought about? Most wrecks are due to left turns and this would mitigate a lot of the risk?*
- *Round about sound good but I don't think Memphis is cut out for roundabouts. I don't think the school intersection should be a roundabout for sure. It needs a light for safety of parents and high school drivers.*
- *Round abouts are a terrible idea. No need to slow down traffic. Its a state highway not a neighborhood street.*
- *Round abouts are better suited when you have more roads you are merging. This looks like a safety hazard. Lights would be more appropriate not a traffic circle. This is going to be dangerous please rethink this!*
- *Round abouts are great in neighborhoods and busy town streets but I don't think it's a good idea on a decent sized highway. Sure it will be nice for the smaller roads but the faster highway traffic will have to slow down significantly to make the round about. The speed limit difference between the smaller roads and the highway could cause some confusion between drivers. Never seen it done on a major highway like this so not sure about it.*
- *Round abouts on Highway 70 are a bad idea. This is a HIGHWAY. It is not an inner city street commonly traveled at low speeds where a round about would make sense. Do NOT put round*

abouts on Hwy 70. Please consider another method such as a signal device if traffic needs more control at those locations

- *Round abouts should not even be a part of the road system! They can be very confusing to drivers. There are lots of incoming traffic in all areas of a round about.*
- *"Roundabout on US 70 is not a good idea. There will be more accidents. People in the area not used to roundabouts. Why not just put stoplights?"*
- *Roundabouts and walking trails along Hwy 70 is a terrible and dangerous idea.*
- *Roundabouts are a terrible idea for traffic flow through a Highway!*
- *Roundabouts are a terrible idea. Red lights are much easier to navigate. This isn't Europe.*
- *Roundabouts are awesome in Europe where people know how to use them, they suck here where people do not. Stick to stop lights.*
- *Roundabouts are confusing, dangerous and will cause crashes! NO ROUNDABOUTS!*
- *Roundabouts are fine, but that's too many. Definitely need a turn lane at seed tick. Do you really think a roundabout with school traffic in a school zone is a good idea? People already don't know how to drive and get confused, as well as so many people do not slow down through the school zone*
- *Roundabouts are great in theory, terrible in execution. With the large vehicles that travel through the area, especially with the extreme growth our area is witnessing, we will see them get stuck/topple in that type of intersection. Additionally, Drivers Ed does not give much information on roundabouts and the yield and right of ways are going to cause issue for the increased younger generation on 70 traveling to*

the new high school. This is of no fault of the youth, drivers education removed a lot of good teachable moments about defensive driving the last decade.

- *Roundabouts are great once everyone gets used to it. People only hate them or don't want them when they haven't seen them work in cities elsewhere. We had them at many major intersections in Maryville TN and it kept traffic moving. No more stopping at stop signs when no one is there or the awkward waiting to see who got there first. Excited for the roundabouts!*
- *Roundabouts are harder to maneuver through in a 4 lane road. If people enter in the inside lane and find that they need to move to the outside lane I expect there will be increased accidents.*
- *Roundabouts are not safe in my opinion. They are very confusing. They inserted several in Arkansas where I grew up and have been confusing to residents.*
- *Roundabouts are too confusing for older drivers. I'd rather have traffic signals than roundabouts.*
- *Roundabouts aren't the answer. They only make traffic slower and I have seen a lot more wrecks with roundabouts from people not being patient enough to use them.*
- *"Roundabouts do not belong on highway 70 Developing roundabouts will cause excessive traffic problems and take away the land from people along the highway Ther needs to be a turn lane when turning south off of highway and o to Evergreen"*
- *"Roundabouts do NOT belong on HWY 70. Large trucks, farming equipment will not be able to navigate. Lowering speed limits and traffic signals is all that is needed."*

- *Roundabouts keep the traffic flowing. Always a good thing. Wish we had more.*
- *Roundabouts on a 4 lane highway with 50 mph speed limits not a good idea. Against putting in roundabouts.*
- *"Roundabouts on a major highway? BAD idea. Just make nice intersections."*
- *Roundabouts on Hwy 70 seem like a disaster waiting to happen. Other areas, sure, but Hwy 70 can get high speed even if you aren't trying. And even if this was an attempt to stop that from happening I can't help but wonder will people just attempt to speed through them when others are having a hard time adjusting.*
- *Roundabouts seem like a good idea. I've seen them used effectively in Oxford MS and they keep pace of traffic with safer turn lanes but do not allow people to drive at unsafe speeds.*
- *Roundabouts up and down highway 70 are STUPID and insane. It is a highway that handles A LOT of traffic this is disruptive. Not to mention how much harder it will be for first responder vehicles to maneuver these ridiculous features. AND the construction trucks that Lakeland wants in order to expand and get more tax money. Dumb, Dumb, Dumb.*
- *Roundabouts will serve no purpose on HWY 70. It is a highway! Add more red lights if you want to slow traffic but a roundabout in any area on Hwy 70 is not the way.*
- *Roundabouts would not be a good idea on Hwy 70, you would hinder traffic and cause many accidents. They're more common in residential or commercial areas that already have a slow traffic flow.*
- *Roundabouts? Really? We already have enough problems with wrecks*
- *Seedtick has a traffic light already. Consider a*

light for the school traffic too (it would actually make sense to put a turn arrow at Canada/70 too for school traffic). It makes way more sense to disrupt traffic twice than 8 times.

- *Seems fine, not sure you need a signaled intersection and roundbouts so close together at the town square; maybe one signaled intersection as the main and another less controlled mainly for right-turn entrance. I'm also somewhat skeptical of a roundabout for a 3-way intersection.*
- *"Seriously???? Roundabouts on a STATE highway????"*

Please NO!!!!!!

The rest is nice. But I vote against roundabouts on Hwy 70! And yes, I have driven them in other areas, including England for years."

- *Should help with future growth and increased traffic. I've experienced roundabouts in other parts of the US and in Europe and it will be a big improvement once people get used to them.*
- *So not want roundabouts.*
- *Something has to be done and this seems like a reasonable fix. I'm still young enough to figure the roundabouts out. And if i can't i will travel by detour.*
- *Strongly oppose. So many roundabouts seems like a waste of tax payer dollars. It's too much.*
- *Sudden deceleration from highway speeds are a crash risk. The numerous roundabouts in this video is comical for a highway. I can see one maybe at the school exit, but there isnt enough constant traffic on the side streets to warrant a roundabout.*
- *"Terrible idea for a US highway!! Widen the highway and put a turning lane in*



- Looks great!
- Looks great! Will help with traffic at dangerous intersections.
- Looks great. Roundabouts will help.
- Looks like a great way to mess up traffic. Especially those of us that travel that route daily to avoid I-40
- Looks like it can really make the town seem like a community and not just neighborhoods and businesses along 70.
- Looks nice
- Looks nice and efficient. Much better than stop sign and or stop lights.
- Looks nice but no I don't think we need a round about shown in the video. People in Memphis already struggle following the regular driving rules that have been around a long time.
- Looks nice, would help with speed control through that corridor. Probably would help with future small business, office, and residential development in the future.
- Looks really nice!
- Looks very nice although people will need to be educated on how roundabouts actually work.
- Love a round-about-
- Love it
- Love it
- Love it!
- love it!
- Love it! Looking forward to a safer and functional road for everyone.
- Love it! More roundabouts please!
- Love it, roundabouts are an excellent traffic calming and smoothing solution.
- Love it. Great addition for public safety for drivers traveling along this road entering and exiting businesses, school and neighborhoods.
- Love roundabout

- Love the idea
- Love the idea of medians and side walks.. connectivity between high school and future elementary school is going to be very beneficial. Hate the idea of having too many roundabouts. None of the side roads except the seedtick road in the morning has high volume of vehicles. Roundabouts will significantly slowdown this major corridor. This will create massive inconvenience for people who actually travel through 70.
- Love the increased amount of paved walking trails. Sidewalks and walking trails are a huge perk for all ages to have safe place to exercise and enjoy the outdoors. Roundabouts will be excellent for traffic flow and should help with speeding through Lakeland.
- Love the roundabouts.
- Love the roundabouts. They help keep traffic flowing and reduce accidents.
- Love the split highway, walking paths, connection of neighborhoods through mixed use paths. Hate the roundabouts.
- "Love the traffic circle additions, but would even prefer to go that way at Seedtick due to speed & efficiency (no stop light proposed near existing campus drive).

Regardless, walking path addition is great & will give excellent, safe access for pedestrians along the renovation."
- Memphis drivers don't understand roundabouts.
- Multiple or single roundabouts on a highway is an asinine idea, especially when bookended on either side by traffic lights. These will serve no purpose in eliminating traffic and cause further congestion down highway 70 before

even accounting for the public's inability to properly navigate a traffic circle.

- My first thought is that the multi lane size is of Hwy 70 and commercial traffic along this route seems not suited for turnabouts. If safety is an issue along Hwy 70 at intersections why not use traditional traffic signals?
- My first thought would be have they really thought it through putting roundabouts on a US highway as heavily traveled as US 70 is? I cannot imagine it being able to handle that amount of traffic without causing major traffic issues. Training people to use a roundabout, which is actually a good thing that is now being used, is difficult especially when you consider that half the people in this part of the country with drivers licenses shouldn't have one! If you want to test that theory, pull up to any four-way stop sign intersection and watch what happens.
- My property is on the south side of the highway at Evergreen. This will significantly effect my property value and make it more difficult to enter the highway from my home. A traffic light would take care of this. Stupid is as stupid does.
- My research has uncovered the poor quality or total lack of drivers education courses/state requirements which contributes to a copious amount of uneducated and untrained drivers that can barely navigate stop signs. Therefore being able to properly navigate single lane much less multiple lane roundabouts will create utter nightmares for daily driving!
- Nice
- Nice video but this was just cause more wrecks and slow down traffic
- Nice video. Not sure that these changes are necessary and more development seems to be disturbing the natural beauty that we've enjoyed

about Lakeland. Tree City no more!

- *No*
- *No*
- *no many round about*
- *No more round abouts. And fix the lake mess first before making any more big messes that cost too much.*
- *"No one is walking up and down 70! That is the dumbest idea ever."*
- *No round abouts please, thats going to be a wreck hotzone.*
- *NO ROUNDABOUT*
- *No roundabouts*
- *no roundabouts*
- *No roundabouts and stop tearing trees down*
- *No roundabouts needed. Not enough traffic*
- *NO roundabouts on a major hwy like 70 way I see wat too many accidents in the future from people not knowing what to do and trucks taking up both lanes of the roundabout and having to slow down*
- *No roundabouts on highway 70.*
- *No roundabouts please.*
- *No roundabouts they are accident prone no matter what*
- *No roundabouts! They are horrible. Tractor trailers and pickups pulling trailers are a huge hazard. People can't drive properly here now and you want to add these? I see many accidents if these are installed.*
- *No roundabouts!!!*
- *NO ROUNDABOUTS!!! It's a highway, speed is too high for a round about. Agreed that a light at seed tick rd and possibly the next rd will eventually be necessary but a round about will cause more wrecks. No one really knows how to use them. There's one in Atoka off Rosemark and it's terrible.*

- *No roundabouts, they are a terrible idea and a waste of tax payer dollars*
- *No roundabouts. Do you want people to crash? Especially the kids coming out of the school?*
- *"-No roundabouts. Either intersection lights or extra turn lane should be sufficient. -The multi path sounds great!"*
- *No roundabouts. They are ridiculous and do nothing but slow police, fire, and ambulance response.*
- *"No to Chambers Chapel addition! Yes to 70 highway upgrade."*
- *No to round about, people here do not know how to use them appropriately. Enhance/enlarged intersections with red lights would be better*
- *No to roundabouts*
- *No to roundabouts! Hwy 70 is a beautiful drive that needs to stay that way.*
- *No to the roundabouts*
- *No!!!! It's a highway and is not ment to hampered by round abouts*
- *no.*
- *NO. Highway 70 is already a heavily traveled arterial road. Adding a roundabout in the middle of an already busy corridor will increase congestion, confuse drivers, slow emergency response, and disrupt traffic flow. Roundabouts belong on low-volume roads—not major highways. This change creates problems instead of solving them.*
- *No. I do not want a roundabout.*
- *No. this is a terrible plan. Highway 70 is just that, a highway. Having to slow down for roundabouts multiple times between Arlington and Bartlett is unacceptable.*
- *Nobody asked for this. Ruin Collierville and Germantown not Lakeland and Arlington.*
- *Not a fan of the roundabout at Evergreen.*

Would propose a traffic signal instead.

- *Not for the round about*
- *Not looking forward to it.*
- *Not needed on Hwy. 70. Waste of money. Paving the road would make more sense.*
- *Not needed. A few strategice traffic lights would solve the problem better and at less cost to the taxpayers.*
- *Not safe or effective! Horrible design!*
- *Not sure yet.*
- *Ok design but definitely not for here. I do not like it and would not want this in my drive.*
- *Overall I like it. Though it will be an ambitious project. I'm not deterred from roundabouts and in fact enjoy them. The one problem I see from this is it's initial adoption and usage. We Americans are stubborn against new ideas and those intersections will likely be a problem. In the long term we'll be better for it. Just be prepared for complaints.*
- *Overall I like the design. But a roundabout at the school entrance on 70 seems like it will be a nightmare when school is beginnnin and letting out*
- *"Overall I would be pleased. I think where junctions are being created or changed are all good things that need to happen. My concern is this; From the video it looks like the roundabouts span much wider than the existing road. With the addition of a pedestrian pathway along 70 how much space would actually be used? Far enough away to be safely away from the road but not too much to encroach on existing developments. I'm sure thought has already been put in to this. I'd would like to ride my bike from my house to the quick stop in a safe manner, this looks like I can do that. Traffic speeds will go down with the roundabouts, it already has with*

the middle.”

- *Terrible idea for traffic flow on a major highway. TDOT is supposed to widen Hwy 70 all the way to Arlington. How would that impact said roundabouts? Better to add a turn lane and/or additional lanes.*
- *“Terrible idea, especially being near a HS with new drivers.
I could see the Canada Rd/Memphis-Arlington intersection having one, but definitely not in the HWY!”*
- *Terrible idea. Not no, but hell no. Leave the roundabout's for the Europeans. A stoplight will work just fine like it always has. Cease and desist.*
- *Terrible idea. Besides the deforestation, this seems like an attempt to modernize Lakeland and make it appear “walkable”.*
- *Terrible. Will cause more problems.*
- *That is the dumbest plan possible with those roundabouts! You want to see people crash and die, then add those stupid roundabouts. People here already can't drive or even use a turn signal and you expect them to drive safely and properly with roundabouts? Whoever thought of this plan should lose their job!*
- *That looks like a future nightmare.*
- *That's a lot of roundabouts. I think that the roundabout at the high school might be too confusing for new drivers*
- *That's seems like ALOT of round about really close together... no problem with them. They just get annoying sometimes. Love the idea of it at campus drive as that produces sooo much traffic dropping my girls off for school.*
- *The “fly through” is a round about. No thank you. Not a fan of round abouts or “fly throughs” as it's being referenced.*

- *The design is excellent for traffic flow (speed control). It's also beneficial for the aesthetic and desirability of Lakeland residents and visitors. The multi use path and bridge are also awesome for pedestrians and cyclists - enhancing the livability and desirability of Lakeland and surrounding areas.*
- *The design is nice but exclude the roundabouts.*
- *“The design is well thought out and looks good to me.
I hope this is to be done in the next year or so and not 10 years from now as highway 70 continues to grow.”*
- *The design looks good but I have concerns about the round-a-bouts on such a highly traveled road. I would be against the round-a-bouts.*
- *The design looks ok.*
- *The design sounds great but I think realistically there needs to be a turning lane all the way down Highway 70 and that would solve most of the wrecks. So I oppose the roundabouts.*
- *The designs look great. I think the use of roundabouts versus additional lights is good. I am not so sure that roundabout on Hwy 70 is the best solution for the school. Is that really necessary versus a crossing guard for a half hour in the morning and a half hour in the afternoon?*
- *The excessive number of roundabouts seem unsafe and likely to cause additional delays. I would avoid that route as designed unless absolutely necessary. Whats wrong with regular street lights?*
- *The idea of putting round abouts on Hwy 70 is interesting. What would be the change in the posted speed limit? My concern is not with a slower speed limit but making sure drivers will naturally understand the lower speed limit. This may require the properties along 70 to be*

developed more.

- *The Lakeland town square round about and light makes sense. The others don't make enough sense to put round abouts where they are listed. Especially for Evergreen. It will slow down the commute time from one end of the highway to the other.*
- *The majority of drivers in Shelby County cannot navigate a 4-way stop signs. What on God's green earth makes anyone think these are a good idea? However I have owned and operated a towing service in this county since 1988 so these will increase my revenue..*
- *The only proposed intersection that I agree with is the light at Seedtick.*
- *The proposed design and layout of the roundabouts look very clean and understandable even for those who may not be as familiar with them. Comparing to other cities I have visited I think the plan is a great idea and could really decrease issues with backed up traffic coming out of campus drive and the safety of intersections like at Evergreen.*
- *The round a bouts looks like it will be beneficial to traffic flow and safety. I particularly appreciate the continuous gras strip the full length of the project.*
- *The round a bouts will lead to more accidents at those intersections.*
- *“The round about at the town square, is it too close the the new red light?”*

What about Evergreen where there seems to be a lot of accidents?”

- *The roundabouts are a bad idea, people fly down 70, it will cause a lot of accidents, I use the road to get to and from Arlington and Bartlett, I don't want to take anymore time then I have to, to go*

- around roundabouts, they are very annoying.
- The roundabouts are excessive. I think Campus Drive and Seed tick both need signalized intersections.
- The roundabouts are unsafe and unnecessary on a HIGHWAY, people are used to driving 50mph and will continue to.
- The roundabouts do not see necessary and seem like they would cause more issues if anything. The intersection by the apartments though would be nice and more organized.
- “The roundabouts on 70 are an unbelievably terrible idea.
You have a fast-moving highway that would be better served by traffic lights instead of roundabouts. During off-peak times, which will be most of the day, traffic will be able to move more quickly without slowing down to navigate the roundabout, assuming you’re not forced to stop at every traffic light. With a roundabout, those slowdowns are no longer optional. And then you have to take into consideration all the semi-truck traffic navigating that roundabout.”
- The roundabouts will slow down traffic needlessly making it harder for those that travel it daily. Those areas only have moderate traffic at certain peak times of the day. It is unnecessary to cause disturbance for general everyday traffic just to accommodate a few at peak times. Lights set to stop traffic when necessary are the better option.
- The traffic is not bad enough for this to even be an option
- The video is basic to the point it looks like it was done by middle school students.
- The video shows that people will not be able to handle this roundabout well. Accidents will happen.
- The video was great at showcasing the potential

- future changes. I am in favor of the round about.
- there are to many dumb drivers nowadays that wouldnt get the concept of this i think it puts people in danger
- There are too many roundabouts for a high traffic highway. Red lights seem more appropriate.
- There are too many roundabouts for this road. This solves nothing.
- There are way too many roundabouts where just regular traffic lights would be sufficient.
- There is already enough lights on that little section of 70 much less adding this many roundabouts on a state highway. Not a fan of all these and in no way is it gonna save time etc.
- There needs to be a turn lane all the way down Highway 70. Even if there is roundabouts because the traffic along Highway 70 will be a LOT greater in 15 years. With growth in Arlington, Tipton County and Lakeland. And even Blue oval or whatever they call it now. Keep up the good work
- There needs to be an extra lane and wider lanes.
- Think a better choice in terms of dollars and traffic flow would be a light
- Think it is a waste of tax payer money. The round a bout locations are not needed.
- Think it’s a great idea
- This has to be one of the single most horrible ideas ever proposed by Lakeland government. Round a bouts on highway 70 would be a disaster and waste public funds for no reason.
- “This is a hard “no” for me. Roundabouts are meant for slow speed areas not highways where speed is 50+ miles per hour. Is too hard for people to slow down to get through a roundabout traveling at 5560 miles an hour. Poor performance under heavy traffic and the area is constantly growing. Reduced traction with

circular motion so this will impact the areas during rain, sleet and snow. Why not add more red lights which again will slow down the traffic but elevates the confusion of a roundabout. Roundabouts often result in more total wrecks than red-light intersections.”

- This is a highway and a turnabout is not warranted for this area. They are confusing and the 18 wheelers will have an additional hardship. Again, it’s a highway. They are confusing! A turnabout would be cute somewhere in the middle of town. To think this will work is utterly ridiculous.
- This is a horrible idea, with the exception of the full intersection. The roundabouts are just asking for more traffic accidents. People can drive down highway 70 in a straight line without wrecking, much less a roundabout.
- This is a much appreciated addition to the community if it goes through, this as is promotes speeding and can become a highway of crime for Memphis as it grows if we don’t help keep traffic on this road from going well above the speed limit.
- This is a terrible idea. This will only cause traffic and accidents. People in this area are not familiar enough with roundabouts to be able to use them safely. I’ve visited other states with roundabouts on highways and it is always a nightmare and only cause problems. As someone who travels down 70 from Bartlett to Arlington daily, I am absolutely opposed to this.
- This is about the stupidest thing you could do on a highway with as much traffic that runs through there.
- This is an INSANE waste of money. No one wants 4 roundabouts on hwy 70. Whoever designed this needs to go back to the drawing



board. Traffic through this part of 70 is smooth, it flows with no problems. These additions will hinder something that works fine as it is.

- This is such a well traversed roadway I don't think the public would take to the roundabout additions well, especially how many there are within a short distance. I envision it causing confusion, frustration, and traffic jams. The multi-purpose walkway I think is a great idea however having a walkway so close to a busy highway with its current speed limits seems a little dangerous. I'd like more thoughts around that aspect of the proposed plan. Another thing that I could see needing to be implemented if the proposed changes are made would be better street lighting especially around any roundabouts. If that was covered in the video I might've missed it.
- This is the most wasteful and stupid use of money. This a state highway and should be used as such. This is designed to deter and delay traffic and cause accidents and congestion.
- This looks beautiful. I love roundabouts, I think it is very smart way to use space and not to slow traffic.
- This looks like a great design
- This will cause multiple car accidents and slow traffic tremendously. Put a stop light if necessary.
- This would be the most ridiculous waste of money for taxpayers
- Thst is alot of roundabouts in a short span of miles. Surely there could be a better way. Roundabouts are common along areas like college campuses such as ole miss but never seen them used on a major highway. In my personal experience even in small neighborhoods people don't respect or show courtesy in the roundabout so I can only imagine how they would act on hey 70 when they are trying to get to work, school etc.

I vote no!!!!

- To be honest I think this is a terrible idea. I take Highway 70 to avoid the accidents and traffic on the interstate, but if these changes are made i can honestly say i would start taking the interstate again.
- To many stops
- Too many round about in a short distance Like the signal and road work by seed tick
- Too many round abouts in a short distance.
- Too many round abouts. Its a hwy, speed limit is 50 no need to slow it down with a bunch of terrible round abouts. If you want to slow down speeder out more law enforcement out there.
- Too many roundabouts
- Too many roundabouts for a highway but i guess better than traffic lights .
- Too many roundabouts for this stretch of road.
- Too many roundabouts in a short stretch of road. There will be more accidents when this happens. It looks cute but not practical. Of you cut it to two roundabouts it could work. I would keep the one at Evergreen and the one at the mixed use area. Putting it near the school or Canada Rd. would not be good and cause traffic delays and accidents.
- "Too many roundabouts in just a short distance. 2-3 will be fine. The highway traffic is currently fine and has no problems with flow.

I think the greenway and sidewalks will be very nice near the creek."

- Too many roundabouts in too close proximity. Having seen how the high school students drive, definitely not a good idea to put one on Campus Drive.
- Too many roundabouts planned. I would prefer 3 maximum

- Too many roundabouts!!
- Too many roundabouts. I'm afraid they will create congestion & traffic issues. Hwy 70 is a good alternative route when I-40 is backed up. This design will eliminate 70 as an alternate route.
- Too many roundabouts. Suggest no more than three.
- Too many traffic circles! I like the idea of proper turn lanes at the lights as that is a point of congestion on a morning
- Too much traffic and speed. A tuning lane is needed but this seems dangerous for highway
- Totally against round about on highway 70 as it would disrupt the flow of traffic
- Totally against this, this plan will cause more accidents and traffic backups
- Traffic flow is fine right now. Circle drives only slow down traffic. They are very confusing, because there are so few here and no one has had driver education to explain how they are to be used. Also difficult for 18 wheelers to negotiate.
- Truthfully....terrible! All those roundabouts on a state highway.....nightmare for those traveling on 70 and setup for lots of accidents. This is a major thoroughfare and should not be impeded in this way.
- Unnecessary
- Unnecessary, except for the stoplights at Seedtick. Total waste of money otherwise, that will probably cause many accidents due to confusion from generally unskilled drivers with no experience with roundabouts. It could be a good revenue generator for the Lakeland Police Department -- oh wait, they don't have one!
- Useless- leave Hwy 70 as is because this would be a waste of money.
- Very detailed but opposing round a bouts

- *Very impressive! Slowing traffic is a main priority for me while maintaining the trended landscape as much as possible*
- *Very interesting that you would choose roundabouts as opposed to traffic lights.*
- *Very much needed.*
- *Video is a great way to visualize what's going to happen or the possible plans*
- *Video is very well done and easily shows the changes to highway 70. I think the changes are needed and would definitely help with the flow of traffic and slow the traffic down.*
- *Video looks cool, but misleading. Way too many roundabouts in a short stretch of highway.*
- *Video was very helpful.*
- *Voting no*
- *Waist of tax payer money. In my experience, people hate roundabouts. I do.*
- *Way too many roundabouts*
- *WAY TOO MANY ROUNDABOUTS!!!! Why not just stop lights?*
- *We live off Evergreen Road and fully support these improvements. We were rear ended while turning onto Evergreen last month, which unfortunately totaled the other driver's car, and it really highlighted the importance of safe and functional road design. We also want to say how much we love the walking path and appreciate the investment being made in that area.*
- *Well prepared video.*
- *What is with all the roundabouts? We have bad drivers, they have even problems at intersections. Keep it simple. It is easy, just need to get people from point A to point B. Germantown did not use roundabouts, they just widened the intersections. Whatever you do stop thinking into it. Always the same, take time to think about it, then determine what to do and*

complete it just to find way the area changed. You were ten years behind and what you did still has you ten years behind.

- *"While roundabouts are aesthetically pleasing they are extremely cumbersome to navigate for all vehicles not to mention buses and large bed vehicles.*

Too many (four) roundabouts for the distance of the proposed corridor.

70 is a highway with higher speed limits. And, serves as an alternate route for 40 for Lakeland residents to travel to Arlington and Bartlett. For a slower quieter drive, use Memphis Arlington.

Safety: Intersections w/stop lights would provide safe intersections with better flow and less awkwardness it takes in navigating a RA. Also lights would allow the speed limit to remain unless there's a red light. Intersections can also be made to be aesthetically pleasing to the eyetown as well as serving its functional purpose.

Noise pollution: if you're concerned about the noise pollution, don't buy a home along 70, it's a highway. We're not putting roundabouts on 40 to reduce noise pollution for homes off Beverley Rivera and The Lake District."

- *While roundabouts have their place, a highway like 70 isn't it. I think a much better place for them is memphis-arlington.*
- *While the video shows a very comprehensive plan, I am concerned about our ability to support the additional growth. Lakeland loses power more than anywhere we have ever lived evidenced by the majority of homeowners investing in home generators. Adding that to the planning effort*

would definitely sell your plan to the community. Why so many roundabouts? Has a red light been considered for Evergreen road and highway 70? It's a very dangerous exit and it gets worse when utility trucks block the view by parking on the shoulder of the road blocking the view.

- *Why would you put in a roundabout on a straight through road? This will disrupt traffic.*
- *With the future developments in store I believe these roundabouts are a smart proposal.*
- *With the young high school drivers, I believe traffic lights would be a safer option for everyone.*
- *wonderful ideas. love the walking path and roundabouts.*
- *Worked well in atoka. Everyone will complain at first but it's proven to be more effective in traffic control.*
- *Works for me.*
- *Yes, yes, yes! US70 needs more of this! Modern roundabouts are a fantastic way to reduce excessive speed on the thoroughfare, enhancing public safety, and increase the efficiency of traffic, flow and annoyance of red lights.*
- *You absolutely do not put a roundabout on anything that has highway in its name. Show me where other roundabouts are done on highways at 50+ miles an hour in speed limit and I may reconsider.*
- *You made the video look appealing like it's just as easy as popping the roundabouts right in. I think roundabout is a word someone started saying and hoping it would catch on. I would like you to propose other ideas. Whatever you do I don't want to be inconvenienced with the construction of all of this.*
- *"You should attempt traffic circles on minor roadways before you try it on major highways. I think you will abandon the idea after you try*



traffic circles.

Large cities in Texas (Plano and Frisco) tried them out on minor roadways and have not expanded the idea.

Specifically you should not put a traffic circle near the high school. The high school entrance has a lot of young inexperienced drivers and circles are risky since more aggressive drivers will assert their perceived right of way."

- You should put lights instead of roundabouts. I have polled neighbors and no one wants a roundabout. Too confusing, traffic slow down.*
- Your examples include a two lane road ...Not a four lane hwy.You might as well plan a hospital close by...this is a major disaster waiting to happen.*
- Your video proposal looks great, but Highway 70 is not the right place for them. There's too much commercial traffic, and people often use HWY 70 as their main way into and out of Bartlett and Memphis to commute for work and school. HWY 70 is also often used as a bypass to I-40 when it's backed up, which has been happening quite a bit lately. Also, drivers in this area are not used to roundabouts, so introducing more roundabouts could create more traffic problems and accidents.*

2025

HIGHWAY 70 CORRIDOR STUDY

LAKELAND, TN



Board of Commissioners

Meeting Cycle: Tuesday, April 28, 2026

Subject: Municipal Planning Commission Business:

Staff Contact:

STAFF RECOMMENDATION

BUDGET IMPACT

DISCUSSION



Board of Commissioners

Meeting Cycle: Tuesday, April 28, 2026

Subject: Board of Commissioners Business:

Staff Contact:

STAFF RECOMMENDATION

BUDGET IMPACT

DISCUSSION



Board of Commissioners

Meeting Cycle: Tuesday, April 28, 2026

Subject: **Resolution** - adopting the Highway 70 Corridor Study.

Staff Contact: Paul Luker, Planning Director

STAFF RECOMMENDATION

City Staff recommends the Board of Commissioners approve resolution R-56-2026

BUDGET IMPACT

There is no direct budgetary impact related to this resolution

DISCUSSION

The Highway 70 Corridor Study establishes the vision and framework that will guide the growth and development of the Highway 70 corridor into the foreseeable future. The process for developing the plan began in the summer of 2025 and consisted of numerous public and stakeholder meetings and outreach to solicit input from our citizens, the stakeholder committee, the Municipal Planning Commission and Board of Commissioners. This document represents the culmination of that effort and vision.

RESOLUTION R-56-2026

APPROVING THE HIGHWAY 70 CORRIDOR STUDY

WHEREAS, On April 28, 2026, the City of Lakeland Municipal Planning Commission recommended approval of the Highway 70 Corridor Study:

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of the City of Lakeland, Tennessee, that the Highway 70 Corridor Study is hereby approved.

RESOLVED, the Board of Commissioners of the City of Lakeland, Tennessee shall refer to the Highway 70 Corridor Study attached hereto as Exhibit A.

APPROVED AND ADOPTED by the Board of Commissioners of the City of Lakeland, Tennessee, this 28th day of April 2026, the public welfare requiring it.

ATTEST:

Josh Roman
Mayor

Rebecca Hume
City Recorder

RESOLUTION R-56-2026

APPROVING THE HIGHWAY 70 CORRIDOR STUDY

Exhibit A
Highway 70 Corridor Study