

Final Report

Columbia, TN

Transportation Master Plan

Prepared for:
The City of Columbia
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TABLE OF CONTENTS

	<u>Page</u>
1.0 Introduction	3
1.1. Purpose of Study	3
1.2. Description of the Study Area	3
1.3. Study Methodology.....	5
2.0 Existing Conditions	7
2.1. Major Roadway Segments.....	7
2.2. Intersection Inventory and Review	12
3.0 Future Conditions	14
3.1. Background Area Growth.....	14
3.2. Major Roadway Segments.....	14
4.0 Identification of Roadway Needs	16
4.1. Short Term Roadway Needs.....	17
4.2. Long Term Roadway Needs	19
4.3. Additional Analysis and Recommended Improvements.....	21
5.0 Funding Plan and Implementation Strategies	23
6.0 Summary and Conclusions	31
APPENDIX A: Historic and Projected 24-Hour Average Daily Traffic Counts and Capacities	
APPENDIX B: Meeting Minutes	
APPENDIX C: Intersection Sketches and Photos	
APPENDIX D: Recommended Improvements and Cost	

LIST OF FIGURES

	<u>Page</u>
Figure 1. Study Area Map	4
Figure 2. Existing Laneage and Functional Classification	8
Figure 3. Existing ADT and Level of Service	10
Figure 4. Future ADT and Level of Service	15
Figure 5. Short Term Roadway Needs	18
Figure 6. Long Term Roadway Needs	20
Figure 7. Recommended Roadway Improvements	22

LIST OF TABLES

	<u>Page</u>
Table 1. Roadway Level of Service (LOS) Definitions	9
Table 2. Existing Roadways with Unacceptable Level of Service	11
Table 3. Intersection Short Term Capacity and Safety Improvements	163
Table 4. Future Roadways with Unacceptable Level of Service	16
Table 5. Short Term Transportation Improvements from the Planning Charrette.....	17
Table 6. Long Term Transportation Improvements from the Planning Charrette.....	19
Table 7. Long Term Transportation Improvements from Capacity Analysis.....	23
Table 8. Priority Transportation Improvements and Anticipated Costs.....	24
Table 9. Projected Funding for Transportation Improvements.....	31

1.0 Introduction

1.1. Purpose of Study

The purpose of the Columbia Transportation Master Plan Study is to evaluate the ability of the existing roadway system to accommodate future traffic volumes and identify recommendations for improvements to mitigate future traffic congestion within the study area. The project includes the development of a master transportation improvement list that identifies projects necessary to provide sufficient transportation capacity to serve the City to the year 2030.

The project approach represents an integrated planning process, which includes identifying study vision and objectives; documenting existing and future transportation conditions; developing a transportation plan; and formulating an implementation plan. This approach is structured around coordination with TDOT officials and proactive citizen and stakeholder involvement.

1.2. Description of the Study Area

The study area, as illustrated in **Figure 1**, is the area within the Planning Region boundary. The study area encompasses approximately 77 square miles in the central region of Maury County, and includes the area within the existing City limits, as well as Columbia's annexation reserve area.

The major roadways that serve the study area are I-65, Nashville Highway (US 31/SR 6), US 43/SR 6, Trotwood Avenue (SR 243), Williamsport Pike (SR 50), James Campbell Boulevard (SR 50), Hampshire Pike (US 412/SR 99), Bear Creek Pike (US 412/SR 99), Campbellsville Pike (SR 245), Pulaski Highway (US 31/SR 7), Santa Fe Pike, and Theta Pike.

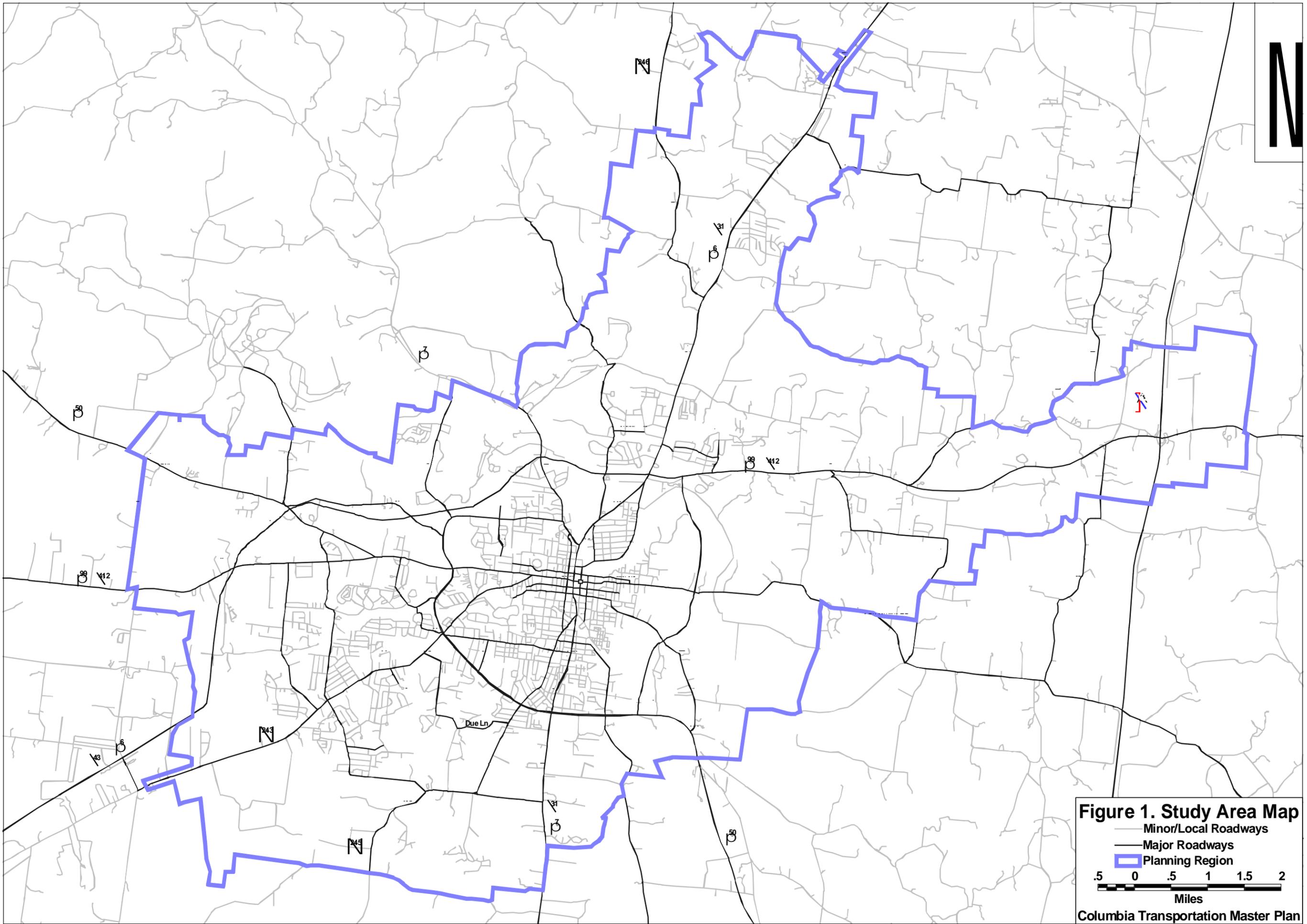


Figure 1. Study Area Map
— Minor/Local Roadways
— Major Roadways
▭ Planning Region
.5 0 .5 1 1.5 2
Miles
Columbia Transportation Master Plan

1.3. Study Methodology

The study methodology included public involvement, data collection, existing conditions analysis, review of ten critical intersections in the City, travel forecasting, future conditions analysis, identification of roadway needs and recommendations, and transportation funding and implementation strategies.

A two-day planning charrette was held to increase awareness and understanding of the planning process, as well as to gain input from the public on important transportation issues. The charrette included City staff, the general public, and key stakeholder groups. A public meeting notice was advertised in the local newspaper, and key stakeholder groups and locally elected officials were notified by letter.

The first evening charrette was held on January 11, 2005. During this meeting, attendees broke out into work groups with questionnaires and large area-wide maps to discuss critical transportation issues. Issues discussed included transportation planning and land use, quality of life issues related to transportation, economics and the transportation system, and a transportation priority list. The second meeting was held on January 12, 2005. This meeting was used to inform the attendees of the results of the work session groups, and solicit responses and comments. A transportation priority list was developed over the course of these meetings. Minutes of the planning charrette are included in Appendix B.

Data was collected from TDOT and the City of Columbia to provide background information on the roadway network within the study area. Historical 24-hour average daily traffic (ADT) volumes were obtained from the Tennessee Department of Transportation's (TDOT) Tennessee Roadway Information Management System (TRIMS) database for all count stations maintained within the study area. Coordinates were also provided for each count station for geo-referencing. GIS files were provided by the City of Columbia and were used to create an area map with roadways, stream locations, city limits, and planning region. Aerial photos for specific spot locations were

also provided for further reference. Roadway segment information was also provided by TDOT identifying functional classification, roadway laneage, and the limits for each count station.

An existing conditions analysis was completed for each of the major roadway segments within the study area. Capacity analyses were completed based on the methodologies outlined in the Highway Capacity Manual to identify congested segments within the study area.

The historical 24-hour traffic counts were used as the baseline to determine the estimated future traffic growth in the City. Trendline analyses were completed for each count station to estimate the traffic volume for each major roadway segment in the year 2030. Where roadway segments had a projected year 2030 ADT less than that of existing ADT, a 0.5% growth rate was assumed per year.

Future roadway conditions analyses were completed to determine the magnitude of congestion in the future. The methodology used was the same as in the existing conditions analyses. The future 2030 volumes obtained from the trendline analyses were used to estimate the congestion of roadways and determine areas where roadway improvements may be warranted.

A list of ten critical intersections was obtained from the City of Columbia. A brief field review of each of these intersections was conducted to observe traffic flow characteristics, intersection geometry, and existing traffic control measures. The intersections were inventoried to determine if there were specific improvements that could be made to improve the operation and safety of the intersection.

Short and long-term roadway needs were established based on information obtained from the public meetings as well as the future conditions analyses. Recommendations were established based on the ADT volumes, warranting capacity, or operational improvements.

2.0 Existing Conditions

The most current traffic volumes obtained from TDOT for each count station within the study area were used to establish a base for the existing conditions analysis. The roadway characteristics and roadway segment level of service analyses were completed to evaluate the existing conditions of the surrounding roadway network. The existing conditions analysis was conducted for all major routes contained in the study area, and for the critical intersections identified by the City of Columbia.

2.1. Major Roadway Segments

Existing roadway laneage and functional classification for major roadway segments within the planning boundary were determined based on the data provided by TDOT and from aerial photographs provided by the City. The existing laneage and functional classification for the major roadways are illustrated in **Figure 2**. The most current average daily traffic (ADT) volumes are provided in **Appendix A**.

Existing capacity analyses were developed based on existing roadway functional classification and geometry. Typically, roadway congestion comparisons utilize a term known as Level of Service (LOS). Roadway LOS is a qualitative measure of roadway performance based on roadway capacity, traffic volume, intersection delay, and average speed, as outlined in the Transportation Research Board's *Highway Capacity Manual* (HCM).

The roadway segment LOS and the associated traffic conditions for each LOS designation is described in **Table 1**. Roadway LOS is given a letter designation ranging from LOS A (free-flow operations and minimal delays) to LOS F (extreme congestion, low speeds, and long delays).

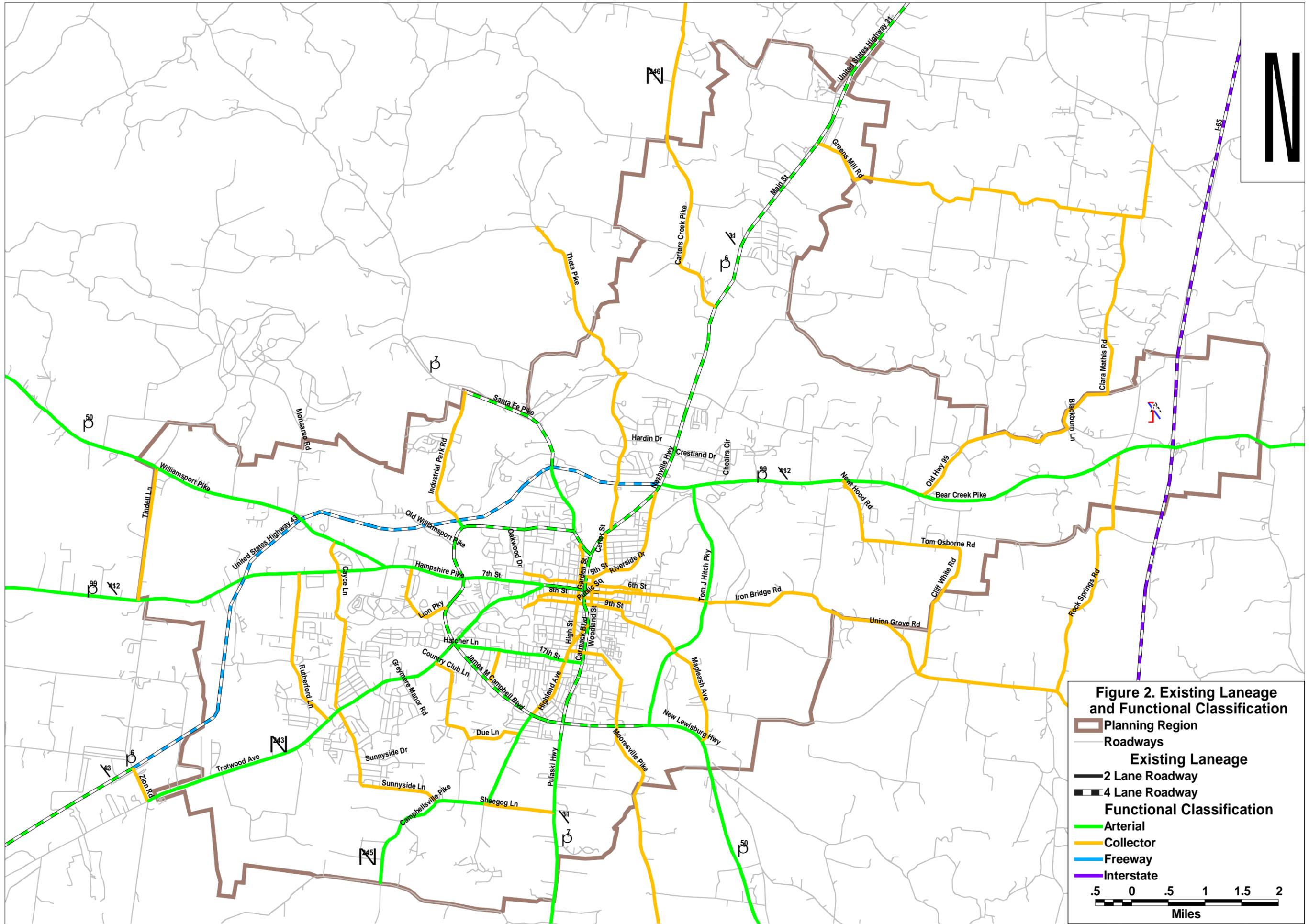


Figure 2. Existing Laneage and Functional Classification

Planning Region
 Roadways

Existing Laneage

2 Lane Roadway
 4 Lane Roadway

Functional Classification

Arterial
 Collector
 Freeway
 Interstate

.5 0 .5 1 1.5 2
 Miles

Table 1. Roadway Level of Service (LOS) Definitions

LOS		Description
Acceptable	A	Free-flow traffic operations at average travel speeds. Vehicles completely unimpeded in ability to maneuver. Minimal delay at signalized intersections.
	B	Reasonably unimpeded traffic operations at average travel speeds. Vehicle maneuverability slightly restricted. Low traffic delays.
	C	Stable traffic operations. Lane changes becoming more restricted. Travel speeds reduced to half of average free flow travel speeds. Longer intersection delays.
Unacceptable	D	Small increases in traffic flow can cause increased delays. Delays likely attributable to increase traffic, reduced signal progression and adverse timing.
	E	Significant delays. Travel speeds reduced to one third of average free flow travel speed.
	F	Extremely low speeds. Intersection congestion. Long delays. Extensive traffic queues at intersections.

Source: Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington, D.C., 2000.

For planning level analyses, most municipalities consider LOS A - LOS C as the range of acceptable operations and LOS D - LOS F as the range of unacceptable traffic conditions. The methods in the HCM were used to determine roadway capacities and Levels of Service for the major roadway segments within the study area. Volume thresholds for each level of service designation were developed for each type of roadway within the study area using ARTPLAN. ARTPLAN is a planning level analysis tool which utilizes methodologies provided in the Highway Capacity Manual. The volume thresholds for each LOS designation and roadway type are provided in **Appendix A**.

Figure 3 illustrates the existing ADT and Level of Service (LOS) for the study area roadways. Existing roadways in the study area operating with less than acceptable level of service are included in **Table 2**.

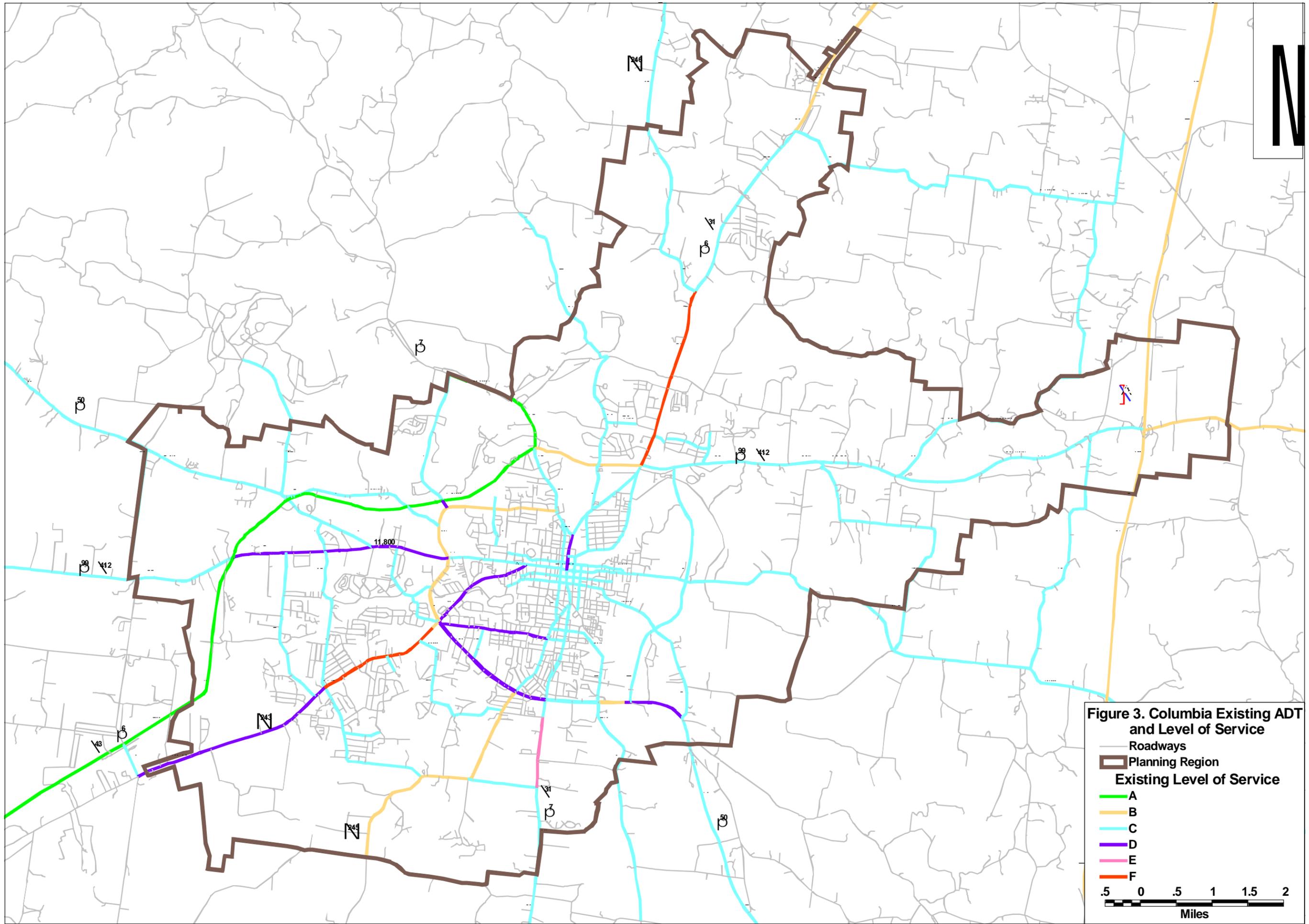


Figure 3. Columbia Existing ADT and Level of Service

— Roadways
 — Planning Region
Existing Level of Service
 — A
 — B
 — C
 — D
 — E
 — F

.5 0 .5 1 1.5 2
 Miles

Table 2. Existing Roadways with Unacceptable Level of Service

Route	From	To	LOS
Nashville Highway (US 31)	US 43	Carters Creek Pike	F
Garden Street (SR 7)	James M. Campbell	7th Street	D
Pulaski Highway (SR 7)	Sheegog Lane	Cord Drive	E
James M. Campbell Boulevard (SR 50)	Trotwood Avenue	Pulaski Highway	D
Lewisburg Highway (SR 50)	Tom J. Hitch Parkway	Mapleash Avenue	D
Hampshire Pike (SR 99)	US 43	James M. Campbell Blvd.	D
Bear Creek Pike (US 412)	Cheairs Circle	Mount Olivet Road	F
Trotwood Avenue (SR 243)	Zion Road	Sunnyside Lane	D
Trotwood Avenue (SR 243)	Sunnyside Lane	James M. Campbell Blvd.	F
Trotwood Avenue (SR 243)	James M. Campbell Boulevard	West 7th Street	D
Hatcher Lane	James M. Campbell Boulevard	Highland Avenue	D
Industrial Park Road	James M. Campbell	US 43	D

Generally, municipalities consider providing capacity improvements on roadway segments with a LOS worse than D. On the existing roadway network, there are currently four roadway segments that operate with a LOS E or F. There are a number of potential short and long term strategies that could be employed to reduce congestion on the existing street network. Short term strategies include:

1. Carpooling, vanpooling, and alternative work hours,
2. Intersection and roadway widening, channelization, traffic surveillance and control systems, traffic control centers, computerized signal systems,
3. Park and ride and mode change facilities,
4. Transit service enhancement or expansion, and
5. Incident management.

Long term strategies include:

1. Growth management and activity center strategies,
2. Access management techniques,
3. Telecommuting,
4. Motorist information systems
5. Bus bypass lanes, exclusive transit right-of-way, and paratransit services
6. Transit traffic signal preemption, transit information services
7. Bicycle facilities, pedestrian facilities
8. Intelligent transportation systems and advanced public transportation system technology.

Of the short and long term strategies described above, roadway widening seems the most appropriate for the congested segments of Nashville Highway (US 31), Bear Creek Pike (US 412), and Pulaski Highway (SR 7). As an interim improvement, traffic signal coordination should be considered for the congested segment of Trotwood Avenue (SR 243). Based on the most current traffic count data provided, all other major roadway segments operate with an acceptable level of service.

2.2. Intersection Inventory and Review

The City of Columbia provided a list of the ten most critical intersections within the study area. The intersections identified were considered by the City to be the most congested or critical in terms of safety. The intersections identified by the City include:

1. Nashville Highway (US 31) at Bear Creek Pike (US 412),
2. South James Campbell Boulevard at the Mall Entrance,
3. South James Campbell Boulevard at Brookmeade Drive/Fairway Drive,
4. Nashville Highway (US 31) at North Point Road,
5. Trotwood Avenue (SR 243) at Rutherford Lane,
6. Nashville Highway (US 31) at Baker Road/Columbia Rock Road,
7. Nashville Highway (US 31) at Hospitality Lane,
8. South James Campbell Boulevard at Campbellsville Park/Highland,
9. Carmack Boulevard (US 31) at West 17th Street, and
10. North Garden Street at 4th Street.

A field review was conducted at each intersection to obtain photographs, take notes on potential operational or safety issues, and develop schematic sketches showing laneage, markings, signs, and signal displays. Schematic sketches and photos are provided in **Appendix C**. A listing of short term improvements for each intersection was developed based on information obtained in the field review. A listing by intersection of the recommend short term improvements is shown in **Table 3**.

Table 3. Intersection Short Term Capacity and Safety Improvements

Intersection	Recommended Short Term Improvement
Nashville Hwy (US 31) at Bear Creek Pk (US 412)	<ul style="list-style-type: none"> • Install larger span-mounted street name signs (12-inch) • Remove “Left Turn Yield on Green” sign for the westbound approach • Install tether wires for traffic signal displays
James Campbell Blvd. at the Mall Entrance	<ul style="list-style-type: none"> • Shift the southbound easternmost traffic signal display to the east to allow increased visibility • Restripe the northbound approach to the intersection • Reinstall faded lane use sign for southbound approach • Consider guardrail for the east and westbound approaches to the intersection in the median at the existing concrete drainage culvert • Install tether wires for traffic signal displays
James Campbell Blvd. at Brookemeade Dr./Fairway Dr.	<ul style="list-style-type: none"> • Restripe the northbound approach to the intersection • Add a right turn overlap signal phase for the southbound right • Adjust utilities to increase visibility of signal displays • Install tether wires for traffic signal displays
Nashville Hwy (US 31) at North Point Road	<ul style="list-style-type: none"> • Restripe eastbound approach to the intersection • Consider traffic signal installation if traffic warrants are met
Trotwood Avenue (SR 243) at Rutherford Ln.	<ul style="list-style-type: none"> • Install larger street name signs • Restripe the westbound approach to the intersection • Install back-plates on the east and westbound signal displays • Consider installation of LED lenses for all approaches
Nashville Hwy (US 31) at Baker Rd/Columbia Rock Rd	<ul style="list-style-type: none"> • Realign Columbia Rock Road to the north to eliminate the offset intersection • Construct left and right turn lanes for north and southbound approaches • Construct a northbound acceleration lane from Baker Road • Install stop bar on westbound Baker Road • Consider traffic signal installation if traffic warrants are met
Nashville Highway at Hospitality Lane	<ul style="list-style-type: none"> • Construct north and southbound right turn deceleration lane • Extend southbound left turn lane • Construct northbound left turn lane Replace existing stop sign and add pavement markings for westbound approach • Install stop sign and stop bar for eastbound approach • Consider traffic signal installation if traffic volume warrants are met
James Campbell Blvd. at Campbellsville Park/Highland	<ul style="list-style-type: none"> • Install back-plates for each of the traffic signal heads • Raise signal head height (appears to be lower than minimum height) • Install tether wire for signal displays

Carmack Blvd. (US 31) at West 17th Street	<ul style="list-style-type: none"> • Install larger street name signs • Install handicapped ramps, pedestrian crosswalks, displays, and pushbuttons • Consider LED lenses for all signal displays • Install tether wire for signal displays • Reinstall street name sign in the northeast corner
North Garden Street at 4 th Street	<ul style="list-style-type: none"> • See Garden Street Reconstruction Plans for detailed improvements

3.0 Future Conditions

Future average daily traffic (ADT) volumes (Year 2030) were estimated to determine the future conditions of the study area roadway network. The future traffic demand was evaluated with the existing roadway network to determine the future year network deficiencies. As in the base year analysis, the key metric in determination of congestion is level of service (LOS).

3.1. Background Area Growth

Historical 24-hour ADT volumes were used to establish a background for the evaluation of the future traffic conditions in the study area. Future 2030 ADTs were forecast using trendline analysis based on the available counts for each roadway segment. Where future year 2030 ADTs were lower than existing ADTs, a 0.5% growth rate per year was used. The future year 2030 ADT volumes are provided in **Appendix A** for each count station within the study area.

3.2. Major Roadway Segments

Utilizing the procedure outlined in the existing conditions section of this study, the future year 2030 LOS was determined for the roadways within the study area. The existing roadway functional classification, laneage, and geometries were used to determine where future improvements are warranted. The estimated future ADT and LOS for each roadway segment using existing roadway characteristics is shown in **Figure 4**.

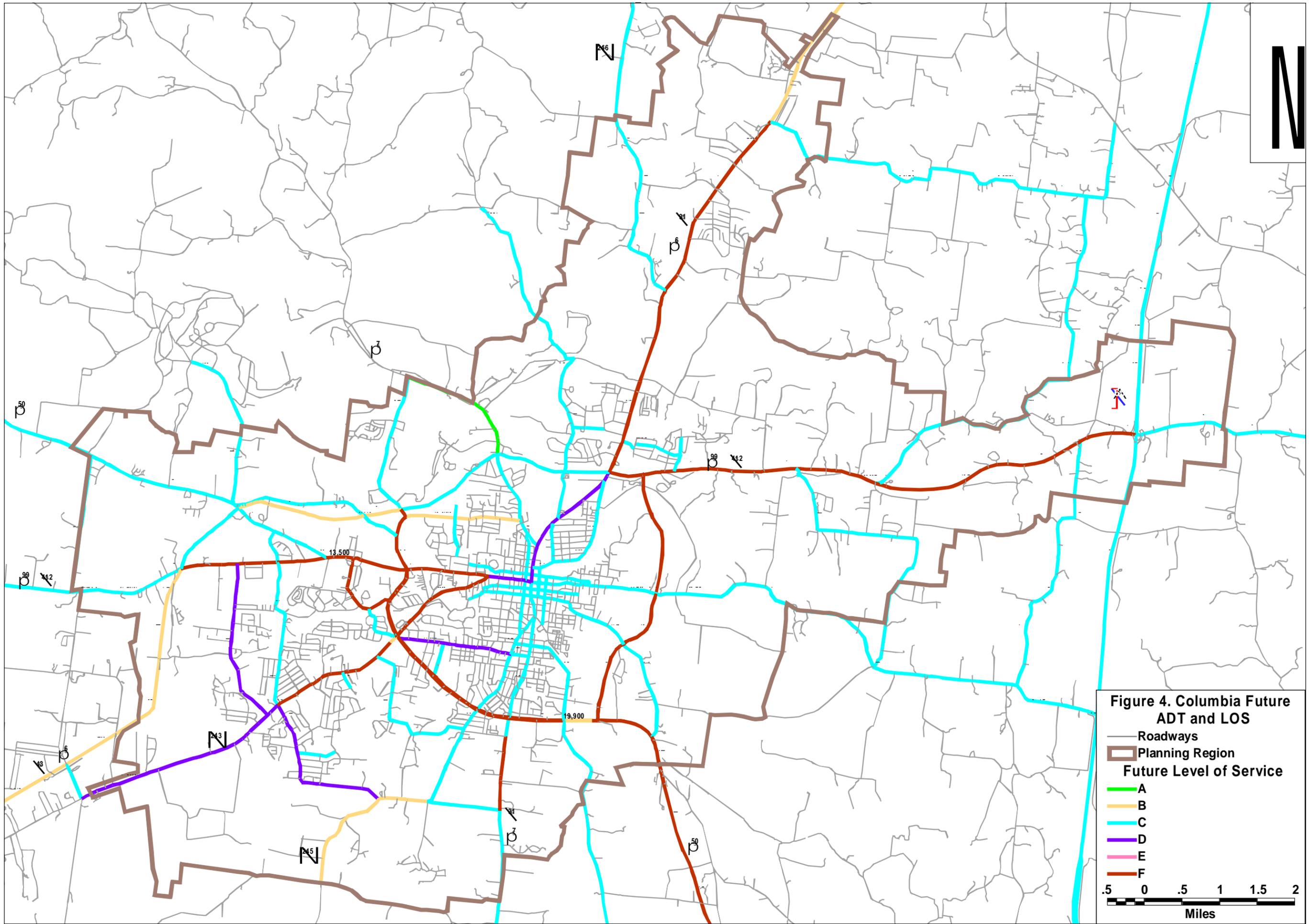


Figure 4. Columbia Future ADT and LOS

— Roadways
 — Planning Region
Future Level of Service
 A
 B
 C
 D
 E
 F

.5 0 .5 1 1.5 2
 Miles

Numerous roadway segments within the study area are expected to operate with unacceptable level of service by the year 2030. Roadway segments that will operate with an unacceptable level of service in the future are provided in **Table 4**.

Table 4. Future Roadways with Unacceptable Level of Service

Route	From	To	LOS
SR 6 (Nashville Highway)	Greens Mill Road	US 43	F
Nashville Highway/Garden Street	US 43	7th Street	D
SR 7 (Pulaski Highway)	Sheegog Lane	Cord Drive	F
SR 50 (James M. Campbell Boulevard)	Industrial Park Road	Mooresville Pike	F
SR 50 (New Lewisburg Highway)	Tom J. Hitch Parkway	Culleoka Highway	F
SR 99 (Hampshire Pike)	US 43	Trotwood Avenue	F
SR 99 (West 7th Street)	Trotwood Avenue	Garden Street	D
SR 99 (Bear Creek Pike)	Nashville Highway	Mount Olivet Road	F
SR 99 (Bear Creek Pike)	Mount Olivet Road	I-65	D
SR 243 (Trotwood Avenue)	Zion Road	Sunnyside Lane	D
SR 243 (Trotwood Avenue)	Sunnyside Lane	James Campbell Blvd	F
SR 243 (Trotwood Avenue)	James M. Campbell Boulevard	West 7th Street	F
Tom J. Hitch Parkway	James M. Campbell Boulevard	Bear Creek Pike	F
Lion Parkway	Hampshire Pike	James Campbell Blvd	F
Hatcher Lane	James M. Campbell Boulevard	Highland Avenue	D
Industrial Park Road	James M. Campbell	US 43	F
Sunnyside Lane	Campbellsville Pike	Trotwood Avenue	D
Rutherford Lane	Trotwood Avenue	Hampshire Pike	D

The future conditions analysis shows that future ADT volumes on existing roadway geometries will result in a much worse level of service than the existing conditions. Therefore, both short and long term strategies for congestion mitigation may be warranted on these roadways to reduce potential congestion in the future.

4.0 Identification of Future Roadway Needs

In addition to the congestion management strategies identified in the existing conditions analysis, several other types of improvement were identified in the planning charrette.

These improvements included:

- Newly Constructed Roadways / Interchanges,
- Introduction of Community Gateways,
- Greenways, and
- Intersection Safety Improvements.

As part of the charrette process, numerous solutions to mitigate future congestion were developed. The attendees then ranked the top 15 projects in order of priority. These solutions were evaluated to determine their impact to the short and long term needs of the City.

4.1. Short Term Roadway Needs

The short term roadway needs identified during the planning charrette are illustrated in **Figure 5** and shown in **Table 5**.

Table 5. Short Term Transportation Improvements from the Planning Charrette

Roadway/Intersection Location	Improvement
Carmack Blvd North of Wayne St	Gateway
Trotwood Ave at 7th St	Gateway
Trotwood Ave at James M Campbell	Gateway
US 31 (Nashville Highway) at US 43	Gateway
Nashville Hwy (US 31) at Baker/Columbia Rock	Intersection Safety
SR 245 at Sheegog Ln	Intersection Safety
SR 50 at SR 243	Intersection Safety
SR 50 at SR 99 (US 412)	Intersection Safety
US 31 at Spring Meade	Intersection Safety
Nashville Highway (US 31) at Hospitality	Median Turn Bays/Safety
Brookmeade Dr at James M Campbell	Signal Improvement
Campbellsville Pk at James M Campbell	Signal Improvement
Carmack Blvd at Main St	Signal Improvement
Hampshire Pk at James M Campbell	Signal Improvement
Pulaski Hwy at James M Campbell	Signal Improvement
Shady Brook St at James M Campbell	Signal Improvement
US 31 (Garden St) at 5th St	Signal Improvement
US 31 (Garden St) at 6th St	Signal Improvement
US 31 (Garden St) at 7th St	Signal Improvement
US 31 (Garden St) at 8th St	Signal Improvement
US 31 (Garden St) at James M Campbell	Signal Improvement
US 31 (Nashville Highway) at Burt Drive	Signal Improvement
US 31 (Nashville Highway) at US 43	Signal Improvement

4.2. Long Term Roadway Needs

As with the short term improvements identified as part of the planning charrette, the long term transportation needs of the City were also reviewed and evaluated. The long term roadway needs identified during the planning charrette are illustrated in **Figure 6** and are shown in **Table 6**.

Table 6. Long Term Transportation Improvements from the Planning Charrette

Roadway/Intersection Location	Type of Improvement	Description
6th Street	Capacity Improvement	Widen to 4-lane
Baker Road	Capacity Improvement	Widen to 4-lane
Bear Creek Pike	Capacity Improvement	Widen to 4-lane
Bear Creek Pike at I-65	Capacity Improvement	Interchange Improvement
Campbellsville Pike	Capacity Improvement	Widen to 4-lane
Columbia Rock Rd / Baker Rd	Capacity Improvement	Intersection Improvements
Columbia Rock Road	Capacity Improvement	Widen to 4-lane
Hatcher Lane	Capacity Improvement	Widen to 4-lane
Industrial Park Road	Capacity Improvement	Widen to 4-lane
Iron Bridge Road	Capacity Improvement	Widen to 4-lane
James M. Campbell Blvd	Capacity Improvement	Widen to 6-lane
Mooresville Pike	Capacity Improvement	Widen to 4-lane
Mount Olivet Road	Capacity Improvement	Widen to 4-lane
Santa Fe Pike	Capacity Improvement	Widen to 6-lane
Sheegog Lane	Capacity Improvement	Widen to 4-lane
Sunnyside Lane	Capacity Improvement	Widen to 4-lane
Union Grove Road	Capacity Improvement	Widen to 4-lane
Witherspoon Road	Capacity Improvement	Widen to 4-lane
Maury Co Park to Woodland Park	Greenway	-
Woodland Park to New Park	Greenway	-
Union Grove at I-65	New Interchange	-
6th Street	New Roadway	New 4-lane
Columbia Rock Rd	New Roadway	New 2-lane
Sheegog Lane to Mooresville Pk	New Roadway	New 4-lane
Sunnyside Lane to US 43	New Roadway	New 4-lane
Tom Hitch from Mooresville Pk to SR 50	New Roadway	New 4-lane
Union Grove Road	New Roadway	New 4-lane and Interchange
7th at Trotwood	Roundabout	-

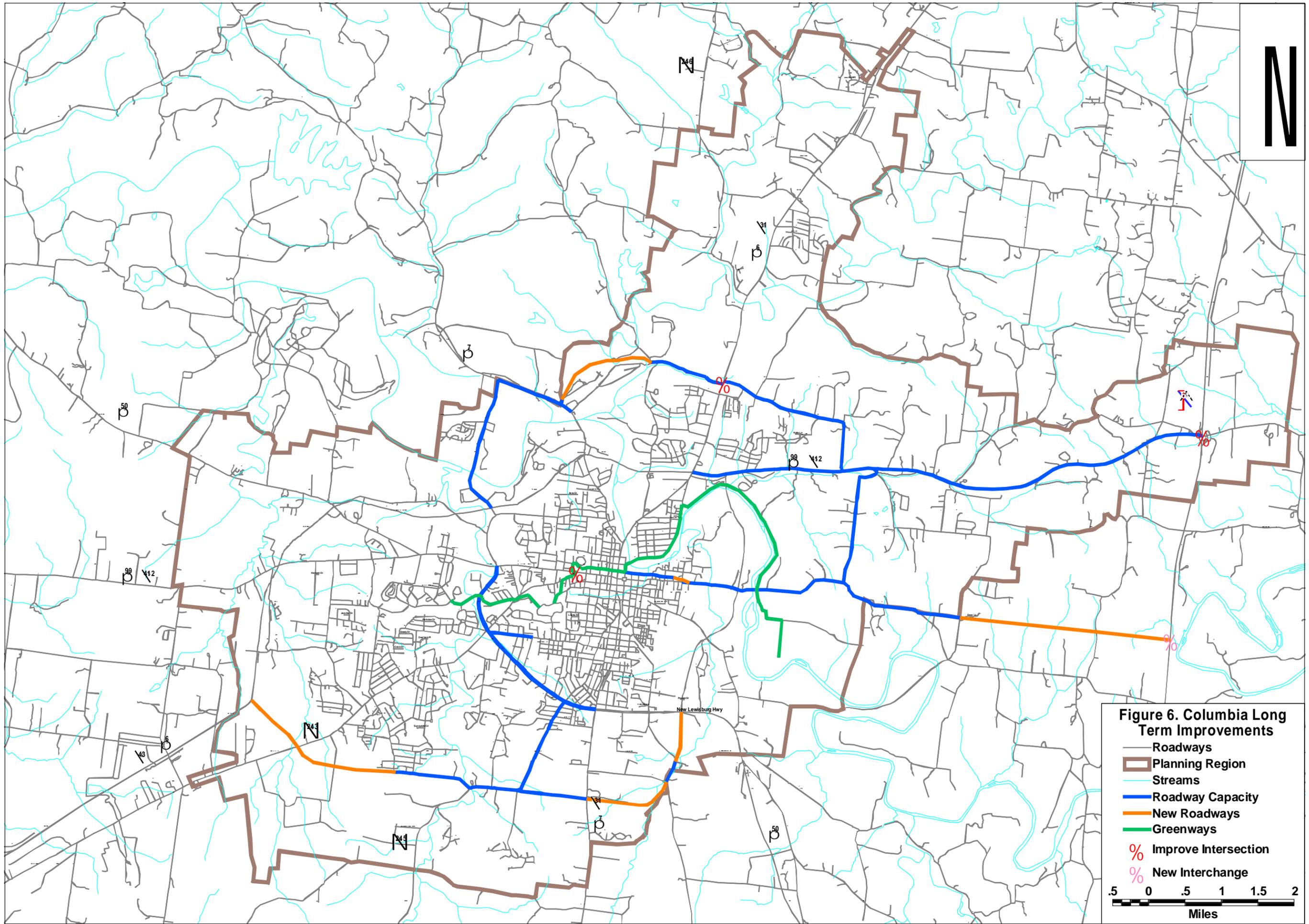


Figure 6. Columbia Long Term Improvements

- Roadways
- ▭ Planning Region
- Streams
- Roadway Capacity
- New Roadways
- Greenways
- % Improve Intersection
- % New Interchange

.5 0 .5 1 1.5 2
Miles

There are five (5) major proposed roadways in the study area including (1) extension of Union Grove Road from Cliff White Road to I-65, (2) extension of Sheegog Lane utilizing existing sections of Mooresville Pike and connecting to Tom J. Hitch Parkway, (3) extension of East 6th Street from Eastland Drive to Iron Bridge Road, (4) Columbia Rock Road from Witherspoon Road to Theta Pike and (5) extension of Sunnyside Lane from the existing portion of Sunnyside Lane west of Springdale Drive to US-43.

4.3. Additional Analysis and Recommended Improvements

There were a number of roadways identified in the future year deficiency analysis as operating below an acceptable level of service that were not identified in the planning charrette. Analyses were conducted to determine what improvements would be required to achieve an acceptable level of service on these roadways. The improvements included providing additional lanes in each direction, adding a two-way left turn lane, or constructing new roadways.

The introduction of the extension of Union Grove Road with a new interchange at I-65, as well as the extension of Sunnyside Lane is expected to attract future traffic volumes from existing roadways that are expected to operate over capacity. The amount of traffic that would be shifted was estimated by balancing the estimated travel times between existing roadways and proposed roadways.

The resulting traffic volume and level of service was used to develop a list of improvements to relieve congestion on the roadway network. Upon making these improvements, all major roadways are expected to achieve acceptable levels of service in the future. The long term roadway needs identified as part of the future year capacity analysis are illustrated in **Figure 7** and are shown in **Table 7**. A list of these improvements is also provided in **Appendix D**.

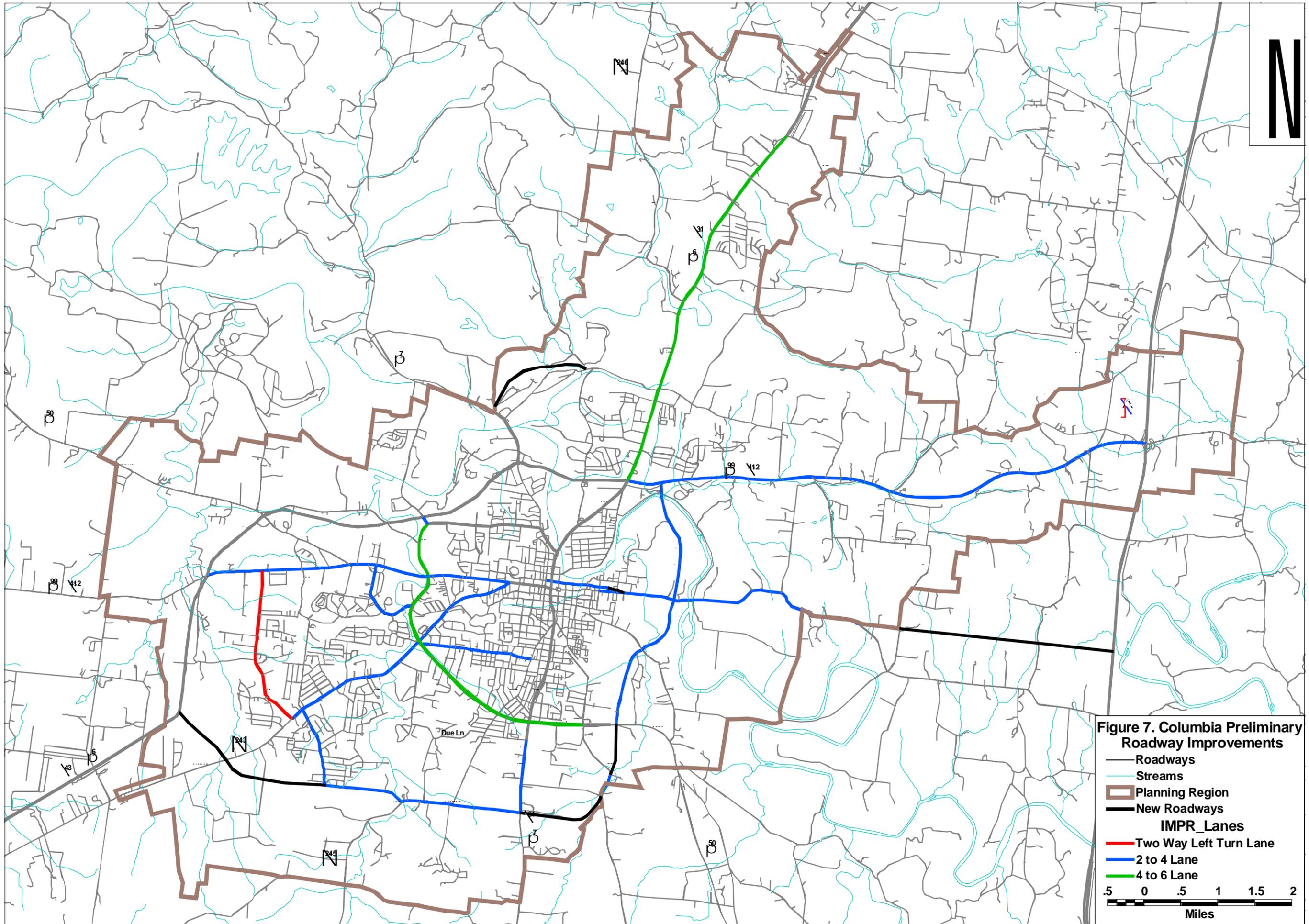


Figure 7. Columbia Preliminary Roadway Improvements

- Roadways
- Streams
- Planning Region
- New Roadways

IMPR_Lanes

- Two Way Left Turn Lane
- 2 to 4 Lane
- 4 to 6 Lane

0 0.5 1 1.5 2
Miles

Table 7. Long Term Transportation Improvements from Capacity Analysis

Roadway	Location	Improvement
Iron Bridge Road	East End St to Union Grove Rd	Widen to 4 Lane
Mooresville Pike	Morrow Lane to Mooresville Pike	Widen to 4 Lane
James Campbell Blvd	Hampshire Pike to Industrial Park Rd	Widen to 6 Lane
Hatcher Lane	James Campbell Blvd to Highland Ave	Widen to 4 Lane
Industrial Park Road	James Campbell Blvd to US 43	Widen to 4 Lane
Lion Parkway	James Campbell Blvd to Hampshire Pike	Widen to 4 Lane
Rutherford Lane	Hampshire Pike to Trotwood Ave	Add TWLTL*
Sunnyside Lane	Trotwood Avenue to Pulaski Hwy	Widen to 4 Lane
Tom J. Hitch Parkway	James Campbell Blvd to Bear Creek Pk	Widen to 4 Lane
Trotwood Avenue	Rutherford Ln to SW of James Campbell Blvd	Widen to 4 Lane
Trotwood Avenue	James Campbell Blvd to W. 7th Street	Widen to 4 Lane
Campbellsville Pike	Sunnyside Ln to Sheegog Ln	Widen to 4 Lane
Hampshire Pike	Williamsport Pike to James Campbell Blvd	Widen to 4 Lane
James Campbell Blvd	West 7th Street to Pulaski Highway	Widen to 6 Lane
James Campbell Blvd	Pulaski Highway to Mooresville Pike	Widen to 6 Lane
Nashville Highway	US 43/SR 99 to Greens Mill Rd	Widen to 6 Lane
Pulaski Highway	Sheegog Lane to Cord Drive	Widen to 4 Lane
Hampshire Pike	US 43 to Williamsport Pike	Widen to 4 Lane
West 7th Street	James Campbell Blvd to Hastings St	Widen to 4 Lane
Bear Creek Pike	Nashville Highway to I-65	Widen to 4 Lane
Sunnyside Lane	US 43 to Sunnyside Lane	New 4 Lane
Sheegog Lane	Pulaski Highway to Morrow Lane	New 4 Lane
Tom J. Hitch Parkway	Mooresville Pike to James Campbel Blvd	New 4 Lane
Union Grove Road	Iron Bridge Rd to I-65	New 4 Lane
East 6th Street	High Street to Iron Bridge Rd	Widen to 4 Lane
East 6th Street	Eastland Drive to Iron Bridge Rd	New 4 Lane
Columbia Rock Road	Witherspoon Road to Theta Pike	New 2 Lane

* TWLTL - Two-way Left Turn Lane

5.0 Funding Plan and Implementation Strategies

Based on the short and long term transportation needs shown in Figures 5, 6, and 7, a planning level estimate of cost was developed (see **Appendix D**). The total estimated cost for the short and long-term transportation improvements combined is approximately \$250 million. Although the horizon year is 2030 for this plan, the anticipated revenues for transportation improvements over this time period are not adequate to fund all of these projects. As part of the planning charrette process, priorities were established for transportation improvements. The top 10 priorities were identified by the group. **Table 8** provides a project list by priority, including the anticipated planning level project costs.

Table 8. Priority Transportation Improvements and Anticipated Costs

Project Rank*	Roadway/Intersection Location	Improvement	Anticipated Cost**
1	Nashville Highway (US 31) at Hospitality	Median Turn Bays/Safety	\$140,000
2	Nashville Hwy (US 31) at Baker/Columbia Rock***	Intersection Safety	\$225,000
3	Iron Bridge Road Connector to I-65	New Roadway	\$34,510,000
4	Provide Study to Locate and Plan for School Growth***	Location Study	\$85,000
5	Hampshire Pike at Schools/YMCA/Hum. Serv./Apts***	Intersection Safety	\$125,000
6	Develop Plan to Finance Transportation Projects at an Accelerated Rate***	Study and Implementation	\$25,000
7	Central Business District Transportation Improvements (Biking and Walkability)***	Transportation Enhancement	\$1,500,000
8	James Campbell Blvd from Industrial Park Road to Hampshire Pike (SR 99)	Capacity Improvement	\$3,650,000
9	Nashville Highway (US 31) at Springmeade	Intersection Safety	\$125,000
10	Hatcher Lane from James Campbell Blvd to Shady Brook	Capacity/Safety Improvement	\$7,250,000
Total -			\$47,635,000

* Project ranking from planning charrette

** Anticipated costs are order of magnitude costs only, are not to be used for budgeting or design, and should be thoroughly reviewed prior to project initiation.

*** Project not capacity related, but was identified in the planning charrette as a priority transportation improvement project.

While the short and long term costs are significant, there are a number of potential funding sources that are available to the City of Columbia for transportation improvements. A list of the transportation funding sources follows with a description of each.

- Local Revenues
- Impact Fees
- Tennessee Department of Transportation
 - Surface Transportation Program (STP)
 - Transportation Enhancement (STP)

- State STP Discretionary
- Congestion Mitigation and Air Quality Improvements
- Optional Safety Program
- Local Interstate Connector
- State Industrial Access Road
- Interchange Lighting
- Bridge Replacement Program
- State Street Aid
- Private Transportation Funding

Local Revenues

Local Revenues are a source for transportation improvements. Local funds can be used to fully fund projects, or can be used as a match for projects funded by the Tennessee Department of Transportation and/or Federal Government. Local funds allocated by the City of Columbia through the general fund for transportation improvements have historically been approximately \$250,000 per year.

A general obligation bond for the funding of a specific group of major transportation improvements could be issued by the City of Columbia. This would allow the City to fund improvements and defer the cost, much the same way the City currently funds wastewater improvements. The sale of the general obligation bond may be subject to voter approval.

There are a variety of additional potential funding sources available to the City that could be used to increase the revenue available for transportation improvements. These include a local sales tax option, an increase in the local property tax, a wheel tax, or an increase in the local motor fuel tax.

Impact Fees

Impact fees are an alternative means to provide local funding for roadway and transportation improvements. A proposal was previously developed by the City to assess

an impact fees for new development within the City. The initial rate was to be similar to that imposed by the County (\$0.50 and \$0.30 per square foot for residential and non-residential, respectively). As proposed, the rates would increase over time to a maximum of \$3.00 and \$1.50 per square foot for residential and non-residential, respectively. With one-quarter of the total impact fee going to transportation infrastructure, it was estimated that this impact fee could generate up to \$60,000 per year for roadway improvements. There are several steps to the process required to implement impact fees, including authorization by the State Legislature. Because of this process, this alternative transportation funding source may not be a viable alternative.

Tennessee Department of Transportation

Tennessee Department of Transportation's Local Programs office administers both State and Federal funding available to local governments to improve their transportation systems. Programs available through Local Programs office include Surface Transportation Program (STP), Congestion Mitigation and Air Quality Improvement, Optional Safety, Local Interstate Connector, State Industrial Access Road, Interchange Lighting, and the Bridge Replacement Program. The following is a description of each and how they may be applied to improve the transportation system in Columbia.

Surface Transportation Program (STP) - The Surface Transportation Program funding is available to cities with a population greater than 5,000 (2000 Census), and can be used for any type of highway construction. For typical construction projects, this program pays for up to 80% of the project costs. If the project is on the State highway system, TDOT may provide up to a 20% match with the local government required to pay the balance, if any. For projects such as signalization, striping, signing, ridesharing, vanpooling, or safety-related work, the program allows for federal funds to pay up to 100% of the project costs. This program has historically been one of the largest funding sources for the City of Columbia. Over the past 4 years, the Federal allocations from this program to the City of Columbia have been over \$1.3 million (an average of \$338,000 per year). With the passing of the new transportation bill, funding of this program is expected to continue.

Transportation Enhancement Program (STP) - The Transportation

Enhancement Program is a subset of the STP program that is also administered by the Local Programs Office of TDOT. Under this program, up to 80% of the project's cost can be provided using STP funds with 20% coming from other sources. The program does not pay for preliminary engineering or right-of-way acquisition, but the value of preliminary engineering can be used as part or all of local matching share provided that the consultant is hired in accordance with state and federal regulations.

According to the Federal legislation, to be considered for this program and funding source, the project must be in one or more of the following categories:

- Provision of facilities for pedestrians and bicycles,
- Provision of safety and educational activities for pedestrians and bicyclists,
- Acquisition of scenic easements and scenic or historic sites (TDOT does not accept applications from local agencies for this activity),
- Scenic or historic highway programs (including the provision of tourist and welcome center facilities),
- Landscaping and other scenic beautification,
- Historic Preservation,
- Rehabilitation and operation of historic transportation buildings, structures or facilities (including historic railroad facilities and canals),
- Preservation of abandoned railway corridors (including the conversion and use thereof for pedestrian or bicycle trails),
- Control and removal of outdoor advertising,
- Archeological planning and research,
- Mitigation of water pollution due to highway runoff or reduce vehicle-caused wildlife mortality while maintaining habitat connectivity, and
- Establishment of Transportation Museums.

The process to obtain funding for a project under this program is to submit an application prior to a specified date of each year. The submitted applications are rated by TDOT staff, and recommendations for projects to be included in the program are made to the Commissioner. The project selections are made by the Governor and announced in the summer following the application date.

State STP Discretionary Fund – These funds are used to fund projects statewide and are distributed by the State at the discretion of the Tennessee Department of Transportation. To procure funds through this program, the City of Columbia would need to work closely with TDOT. For a project to be considered for this funding, it would likely need to be included in the TDOT Transportation Plan or be recommended by a Rural or Metropolitan Planning Organization.

Congestion Mitigation and Air Quality Improvement (CMAQ) - Congestion mitigation and air quality funds are available only for areas that have not attained conformance with the national ambient air quality standards of the Environmental Protection Agency (EPA). Columbia and Maury County are not listed by the EPA as non-attainment areas and are therefore not eligible for CMAQ funds.

Optional Safety Program - Traditionally, safety-related improvements could be funded by the Tennessee Department of Transportation through the optional safety program. However, safety-related improvements are now being administered in a by the State in a different manner due to the new Federal Transportation law (SAFETEA-LU). Guidance to incorporate new optional safety projects into an all inclusive safety program is now being developed by the Department of Transportation. The current optional safety program has been suspended. Once this guidance has been developed, the City's projects can be evaluated to determine their eligibility for this funding source

Local Interstate Connector - The Local Interstate Connecting Route program was established to construct a system of connector routes to provide adequate access to the interstate highway system from existing road and street networks along the interstate

system. This program could potentially be used for the Iron Bridge/Union Grove Road extension to Interstate 65 and new interchange. As shown in Figure 7, this connector would provide a new access to the interstate system, and would relieve congestion along Bear Creek Pike (US 412). For this program, the local government must provide 50% of the total project cost, with 50% funding by TDOT. Also, TDOT requires that 100% of the estimated cost of the engineering phase of the project be deposited with the State prior to initiation of the project, with 50% of this being reimbursed to the City at the time that the construction deposit is requested. Additional requirements and information can be obtained from the TDOT Local Programs office.

State Industrial Access Road - In accordance with the Industrial Highway Act of 1959, TDOT is authorized to contract with local governments to provide access to industrial areas by way of “Industrial Highways” to facilitate the development and expansion of industry in the State. The program is known as the TDOT SIA Program. Under this program, TDOT would pay for the survey and design; up to 50% of the ROW, utility relocation, and railroad crossing costs; construction costs for a standard 2-lane cross section; and all technical studies and permitting. If the desired cross section is in excess of the 2-lane section noted above, the local government would be required to provide the additional associated construction costs. This program could potentially be used to provide funding for projects such as the Columbia Rock Road extension as shown in Figure 7.

Interchange Lighting - The interchange lighting program available through the Tennessee Department of Transportation allows for the installation of lighting for interstate or interstate-type facilities. TDOT provides up to 50% of the cost of these projects with 50% coming from the local government. This program could be used to provide interchange lighting at I-65 and Bear Creek Road as well as several interchanges along US 43 in Columbia.

Bridge Replacement Program - A program is available through TDOT to replace deficient bridges within the State. Known as the Bridge Replacement Program

(BRZ OR BRZE), this Federal program pays for 80% of the eligible costs, with 20% coming from the local government. No bridge replacement project was included in the list of transportation improvement projects.

State Street Aid - State Street Aid funds are available from the State of Tennessee based on the City of Columbia's share of the gasoline tax (based on per capita population). These funds can only be used for construction and maintenance of City streets and other related street expenditures. The City of Columbia has historically used these funds for resurfacing existing streets, but these funds have also been used for other transportation infrastructure improvements such as a portion of the Garden Street Improvements and the Industrial Park Bridge Replacement Project. Average revenues generated through the State Street Fund are approximately \$912,000 per year. Columbia's allocation of these funds has ranged from \$855,000 to \$938,000 over the last four years

Private Transportation Funding

There are a variety of private funding options available to the City to provide for transportation improvements. They include cost sharing, private ownership, and tax increment financing. Many communities provide a major portion of their transportation system through improvements provided by private developers and/or through impact fees.

Cost sharing allows the private sector to pay some or all of the operating and/or capital costs for constructing and maintaining transportation facilities required for a particular development. For example, a developer could be required to improve or widen a roadway adjacent to their project site as a condition of approval for the development. These funds can also be collected by the City and combined with funds from other sources to provide improvements for a larger portion of that facility. For instance, funds collected from a private source in lieu of the developer building the improvement could also be used as all or a portion of a 20% local match to leverage federal funding of a more extensive improvement of that same facility.

Private ownership is a method of financing a roadway project where a private entity constructs and maintains a facility and the City pays for the use of the facility for the traveling public. This is accomplished by the City paying the private entity access fees or through a lease agreement.

Tax increment financing is a tool that could be used for the funding of transportation improvements within a defined area of the City. The concept is that as improvements are made within the defined area and property values increase, the resulting property tax revenue would be earmarked for a specific use within the area, such as transportation improvements.

Summary of Transportation Funding Sources

As mentioned earlier, the anticipated total transportation related costs exceed the traditional revenues that have been available to Columbia. **Table 9** shows the potential revenue sources available for transportation improvements.

Table 9. Projected Funding for Transportation Improvements

Funding Source	Current Allocation	Average Projected Annual Allocation	Revenue Projection for 2030
Local Revenue	\$250,000	\$350,000	\$8,400,000
Impact Fees	N/A	Varies	Varies
Surface Transportation Program (STP)	\$338,000	\$473,000	\$11,352,000
Transportation Enhancement (STP)	N/A	Varies	\$3,600,000
State STP Discretionary	-	Varies	Varies
Optional Safety Program	-	\$120,000	\$2,880,000
State Street Aid	\$307,000*	\$430,000	\$10,320,000
Private Funding	-	Varies	Varies
Total -			\$36,552,000

** based on average of actual and budgeted capital outlay from 2003-2005.

6.0 Summary and Conclusions

This study documents the analysis, findings, and recommendations for planned roadway improvements and the impacts of the existing and proposed land use to the City of Columbia. The study involved evaluation of the short and long term transportation needs of the City and included a planning charrette to develop a prioritized list of transportation improvements. Included in the study was an evaluation of ten isolated intersections in the City with safety and capacity recommendations for each. Based on the short and long term improvements identified as part of the analysis and planning charrette, alternative funding methods will be required to meet the transportation needs of this community. Based on the analysis of existing funding sources, there will be a shortfall in the revenues available for transportation improvements. As recommended in the planning charrette, an additional study should be conducted to develop a plan to finance transportation projects at an accelerated rate. To accomplish this goal, alternative transportation funding methods will need to be used.

**APPENDIX A:
Historical 24 Hour Average Daily Traffic
Counts**

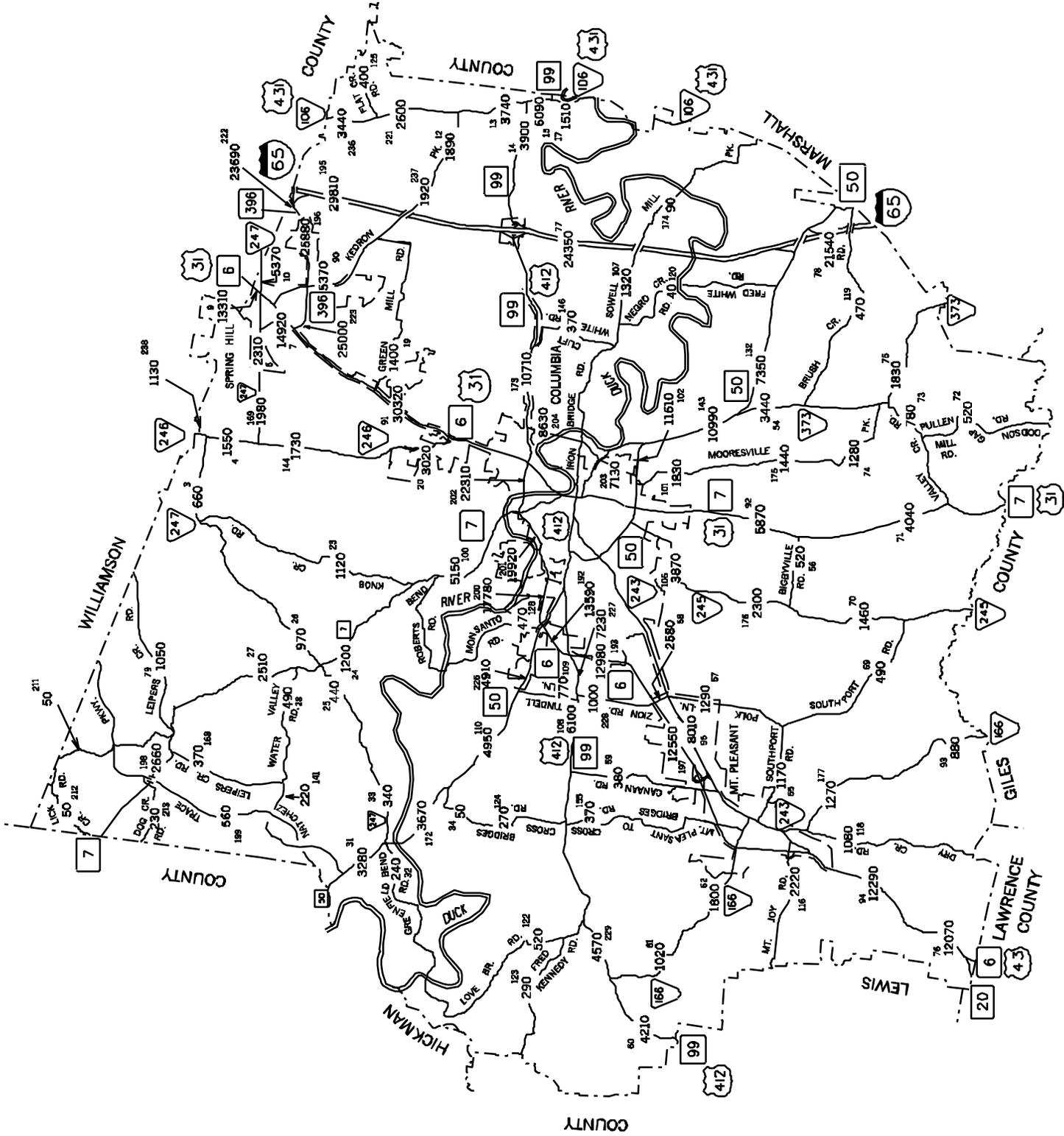
LEGEND

- 350 — AVERAGE DAILY TRAFFIC VOLUME
- 40 — INTERSTATE HIGHWAY SYSTEM
- 20 — U.S. NUMBERED HIGHWAY SYSTEM
- 10 — STATE SECONDARY HIGHWAY SYSTEM
- 20 — STATE PRIMARY HIGHWAY SYSTEM
- LOCAL ROAD OR STREET
- COUNTY LINE
- STATE LINE
- INCORPORATED CITY BOUNDARY
- RESERVATION BOUNDARY
- WIDE STREAM
- 000 STATION NUMBER



2004 TRAFFIC MAP
MAURY COUNTY
TENNESSEE

PREPARED BY THE
 TENNESSEE DEPARTMENT OF TRANSPORTATION
 PLANNING DIVISION
 IN COOPERATION WITH THE
 U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION



Historical Average Daily Traffic from TDOT

TDOT Station Number	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Forecast 2030
2	628	698	653	675	762	770	552	331	619	630	1,436	500	1,550	1,651	1,663	1,922					3,900
3	398	518	477	491	687	578	601	716	711	913	822	815	710	793	705	731	828	654	679	660	1,200
4	488	560	557	518	870	691	746	603	908	907	964	955	782	1,383	1,360	1,393	1,308	1,370	1,506	1,551	3,100
6	625	793	1,044	950	785	829	1,309	1,146	1,150	1,652	1,689	1,561	1,452	1,649	2,133	1,978	2,222	2,162	2,079	2,314	4,700
7	6,734	10,000	9,048	10,461	8,570	8,431	9,820	8,847	9,626	10,789	12,016	12,521	13,758	14,720	14,334	14,847	16,180	15,343	14,298	14,920	27,500
8	184	130	133	140	340	389	400	273	324	350	439	582	590	465	579						1,600
9	8,626	10,832	8,935	10,016	6,400	6,895	7,895	8,000	7,521	8,880	9,184	10,237	11,042	10,806	9,797	9,902	12,862	11,965	12,924	13,311	18,300
10	598	729	632	788	544	508	577	601	662	889	1,093	1,170	1,394	1,722	2,171	2,493	3,091	3,607	3,100	5,369	8,500
12	320	365	388	518	760	441	628	640	982	1,034	1,374	1,286	1,300	1,340	1,363	1,480	1,663	1,752	1,804	1,891	4,200
13	956	1,155	1,152	1,250	1,430	1,209	1,537	1,944	1,925	2,286	2,400	2,669	2,530	2,738	2,493	2,642	3,114	2,834	3,690	3,744	7,100
14	1,671	1,862	1,901	2,480	2,796	2,254	2,318	2,688	2,862	2,740	3,492	3,970	3,545	4,438	4,177	4,242	4,490	3,555	4,125	3,896	8,200
15	1,877	2,144	2,136	2,149	3,366	2,724	2,500	3,610	2,637	4,038	4,230	5,436	5,277	5,267	6,056	6,298	7,130	5,189	5,124	6,093	13,300
17	711	758	831	1,119	1,125	907	1,247	1,311	1,351	1,325	1,494	1,397	1,410	1,971	1,558	1,419	1,271	1,314	1,465	1,508	2,700
18	192	188	152	142	142	144	150	284	457	623	672	790	800	812	857	806	951	1,009	1,067	1,093	2,700
19	423	610	474	585	658	640	618	642	640	650	979	1,056	963	970	1,231	1,165	1,089	1,184	1,359	1,399	2,700
20	1,242	1,402	1,545	1,502	1,706	1,608	1,814	1,800	2,089	2,258	2,294	2,415	2,613	2,822	2,701	2,484	2,850	2,452	2,788	3,020	5,400
21	199	346	338	311	356	308	413	484	287	363	441	471	447	460	499	502	517	655	597	614	1,100
23	628	798	617	823	777	716	781	860	940	822	924	892	864	870	1,465	1,210	705	1,084	1,054	1,121	1,800
24	1,658	1,946	1,629	1,894	1,982	1,857	2,422	2,331	2,151	1,792	2,757	2,768	2,789	2,922	2,292	1,644	1,419	1,467	1,511	1,196	1,600
25	218	212	301	321	260	301	337	307	302	341	343	341	287	354	392	481	438	428	387	440	800
26	405	325	410	412	498	463	534	618	703	664	654	838	717	735	761	685	773	853	958	967	1,800
27	895	1,067	952	1,200	1,243	997	1,690	1,419	1,520	1,612	2,430	2,089	1,978	2,041	2,105	2,161	2,393	2,091	2,154	2,510	4,700
28	314	390	333	352	348	370	344	368	464	424	421	415	420	449	452	515	483	493	503	485	800
31	1,632	2,150	1,782	1,925	2,066	2,025	1,895	2,042	1,566	1,611	2,015	2,643	2,545	2,531	2,965	2,926	3,346	3,913	2,990	3,283	5,800
32	325	145	207	220	210	155	88	127	110	93	149	223	220	235	238	270	200	202	272	238	300
33	184	212	241	311	262	512	203	283	262	236	350	331	327	395	331	465	311	361	367	337	600
34	102	242	35	64	63	84	74	65	67	89	68	50	60	162	203	223	200	154	45	47	200
35	181	92	133	108	121	531	95	81	115	68	120	124	130	140	101	110	115	104	93	95	200
36	6,665	7,533	7,404	8,519	8,472	11,741	14,423	15,264	13,267	8,804	9,573	10,570	9,260	10,568	10,060	11,734	11,029	10,445	11,531	11,401	15,600
37	4,020	4,354	3,811	3,757	3,820	4,549	5,523	5,550	4,484	4,500	3,777	4,170	4,197	4,282	3,979	3,995	4,213	4,316	4,409	4,520	5,200
38	5,173	6,494	5,657	5,578	6,444	7,900	7,341	7,187	7,544	6,359	7,510	7,785	8,333	8,575	8,858	8,785	8,006	8,758	9,115	9,340	14,300
39	12,108	13,815	11,731	12,222	12,740	13,035	12,974	12,724	12,600	10,553	11,212	10,584	10,146	11,038	11,212	11,008	12,788	10,149	11,732	12,084	10,000
40	3,243	4,480	4,124	4,175	4,472	4,990	4,755	4,909	5,336	5,017	4,843	5,525	5,711	5,466	5,734	5,950	6,549	6,163	5,525	5,690	9,400
41	6,233	7,231	7,310	7,688	6,845	8,558	9,032	8,938	9,447	10,097	9,778	10,626	10,511	11,573	11,920	11,970	12,730	11,944	12,155	12,520	22,000
42	6,818	7,708	6,832	8,206	7,585	8,458	6,542	6,500	6,690	4,322	5,138	3,666	4,155	4,925	4,721	4,648	3,300	4,757	4,447	4,580	5,300
43	2,312	2,573	2,230	2,177	2,093	2,105	2,150	2,043	1,834	2,007	2,025	2,377	2,614	2,642	2,780	3,128	3,158	3,067	3,039	3,130	4,500
44	18,951	17,941	15,926	17,615	20,696	32,622	32,308	31,441	32,724	31,595	24,797	29,305	30,135	31,443	31,554	31,165	34,330	34,059	33,586	36,811	59,700
45	6,662	7,500	8,787	9,698	8,945	8,006	7,734	7,304	9,160	9,499	9,543	9,241	10,355	12,022	12,103	13,079	11,773	13,234	13,523	13,504	22,300
46	29,679	31,136	26,345	27,476	32,473	39,017	41,829	41,468	45,085	15,505	21,631	22,152	23,584	30,815	22,159	28,211	28,530	22,043	21,672	22,903	9,400
47	447	504	461	409	531	609	665	634	891	888	973	1,085	1,103	1,096	1,004	1,203	1,253	1,173	1,033	1,064	2,500

Historical Average Daily Traffic from TDOT

TDOT Station Number	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Forecast 2030
48	842	928	1,014	1,042	1,084	982	996	1,073	858	1,257	923	876	965	1,339	1,529	1,394	1,291	1,234	1,261	1,336	2,000
49	1,160	1,303	1,295	1,263	1,255	1,597	1,382	1,666	1,774	1,956	1,580	1,792	1,612	1,618	1,340	1,392	2,016	2,005	1,528	1,573	2,500
50	173	317	278	280	283	374	375	311	470	503	423	534	540	621	630	640	553	643	691	717	1,400
52	215	285	232	259	283	238	290	238	336	231	303	318	330	340	354	355	350	361	369	377	600
53	221	292	217	214	203	225	230	318	371	275	579	647	624	630	610	660					1,800
54	1,397	1,859	2,054	1,911	2,242	2,100	2,132	2,153	2,236	2,643	2,517	2,670	2,357	2,983	3,120	3,185	3,096	3,486	3,204	3,441	6,000
55	96	155	145	114	104	122	82	84	80	62	77	79	91	100	53	56	45	45	56	58	100
56	312	348	285	306	296	317	401	424	302	286	405	463	470	438	447	446	467	478	489	521	900
57	592	671	625	694	624	677	595	650	780	800	763	777	785	810	1,303	1,118	1,032	951	1,255	1,292	2,100
58	1,775	1,990	1,960	2,616	2,523	1,813	1,871	2,095	2,329	2,249	2,451	2,775	2,780	2,630	2,710	3,153	2,906	2,945	2,822	2,581	4,500
59	231	319	368	360	292	300	209	366	251	236	216	329	346	360	312	380	550	382	336	384	600
60	2,145	2,130	2,279	2,314	2,360	2,390	2,635	2,510	2,352	2,856	3,299	3,361	3,353	3,499	4,269	3,876	3,959	3,685	3,932	4,211	7,400
61	621	647	794	745	697	769	665	810	743	841	815	907	928	926	813	838	933	937	985	1,015	1,500
62	1,492	1,438	1,510	1,395	1,475	1,453	1,522	1,568	1,720	1,884	1,800	1,824	1,885	1,955	1,989	1,991	1,628	1,736	1,748	1,800	2,600
63	566	563	486	384	435	580	539	549	552	586	515	557	523	530	716	679	624	790	897	924	1,300
64	6,520	6,825	7,576	7,571	8,010	7,888	8,481	8,909	7,787	10,580	7,410	7,900	8,245	8,037	8,487	9,835	11,192	9,198	9,474	9,897	13,800
65	784	786	863	843	983	819	662	744	487	789	925	1,063	1,082	1,090	1,105	1,169	1,674	1,246	1,245	1,173	2,200
66	1,683	2,242	1,989	2,081	2,040	2,338	2,105	2,275	2,028	1,945	2,418	2,448	2,295	2,581	2,685	2,354	2,784	2,502	2,639	2,696	3,800
67	4,040	3,892	3,690	3,812	3,930	4,045	3,567	3,487	3,828	3,902	3,702	3,757	3,413	3,542	3,671	4,013	4,207	3,426	3,682	3,792	4,000
68	679	617	486	611	680	778	520	530	818	826	882	937	950	1,120	1,140	1,366					2,500
69	111	270	255	338	438	498	326	322	287	392	409	389	425	430	402	459	415	472	443	488	800
70	638	632	842	683	749	897	898	1,022	962	978	1,031	1,149	1,299	1,266	1,217	1,585	1,436	1,313	1,419	1,461	2,800
71	1,772	2,004	2,027	2,475	2,371	2,556	2,208	2,586	2,448	2,376	3,292	3,237	3,101	4,035	3,422	3,813	3,719	3,612	3,677	4,036	7,100
72	255	291	253	267	301	280	297	297	422	492	428	389	400	424	462	478	441	451	501	515	900
73	376	462	361	435	438	457	494	481	713	720	786	815	767	790	748	751	878	910	753	775	1,700
74	500	558	544	585	658	719	817	1,032	734	1,022	867	1,014	1,020	939	1,016	1,120	1,160	1,200	1,240	1,279	2,400
75	784	1,005	1,122	1,078	992	970	1,270	1,300	1,343	1,300	1,369	1,552	1,670	1,483	1,536	1,661	1,759	1,603	1,577	1,827	3,100
76	4,998	6,015	5,706	6,025	6,471	6,745	6,746	6,568	7,096	6,851	6,900	8,558	7,716	8,194	9,488	10,065	9,730	10,488	11,513	12,070	19,500
77	13,159	11,166	12,237	14,232	15,510	15,336	15,570	16,949	15,642	15,537	17,439	18,933	21,749	19,969	25,260	21,447	25,090	23,349	22,026	24,354	43,000
78	10,945	11,000	11,254	10,485	12,000	14,680	13,407	14,841	13,397	14,954	17,105	19,568	19,445	20,726	25,932	23,109	20,134	21,548	19,700	21,539	42,100
79	435	598	469	554	647	562	510	360	704	555	717	729	739	760	923	906	860	965	1,022	1,052	1,800
80	21,905	24,409	29,309	29,014	31,095	35,446	33,257	34,489	34,200	31,044	27,860	30,821	33,745	34,935	30,242	30,220	33,043	33,815	28,905	29,385	38,300
81	18,835	17,887	24,075	20,784	19,958	30,870	21,614	21,807	22,000	28,600	27,414	24,134	28,651	35,948	27,498	23,787	30,450	32,329	30,055	32,078	48,900
82	7,279	8,817	9,432	8,954	10,774	11,342	10,884	10,703	13,126	13,413	13,899	15,896	15,317	14,627	17,813	18,400	21,100	18,943	18,210	20,479	38,300
83	13,434	13,598	12,564	15,645	13,777	14,578	16,156	16,200	12,673	12,325	13,256	13,022	12,122	15,799	14,240	15,111	15,564	14,814	15,280	15,738	16,900
84	11,855	10,802	10,958	11,864	12,765	18,593	13,776	14,470	14,500	6,712	5,980	5,945	6,326	6,631	6,430	5,585	5,806	5,287	5,464	5,627	6,500
85	19,834	20,000	22,789	21,653	23,045	23,002	20,433	20,714	20,350	19,321	17,884	19,160	20,015	19,780	18,895	18,897	30,013	22,756	20,606	17,888	20,500
86	19,090	18,767	19,090	19,285	20,265	20,671	19,826	19,131	21,309	21,166	18,546	19,163	20,694	19,626	20,503	23,774	24,324	22,156	19,591	18,763	24,400
87	22,390	23,432	22,534	23,501	23,157	22,977	22,126	23,905	23,104	22,646	21,749	22,506	22,826	22,895	28,912	22,027	24,091	22,211	20,864	23,132	23,400
88	11,529	13,780	14,690	14,496	16,155	17,939	16,543	19,174	17,500	14,881	14,530	16,720	21,708	29,725	24,265	28,752	29,361	27,404	26,607	29,044	53,200

Historical Average Daily Traffic from TDOT

TDOT Station Number	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Forecast 2030
89	4,800	3,400	6,447	6,954	5,460	5,284	4,564	4,237	4,700	4,750	6,299	6,941	7,022	8,286	8,282	9,252					15,300
90	798	800	846	779	1,220	1,100	1,150	2,236	2,462	2,998	3,599	4,145	4,150	4,235	4,267	4,714	5,127	5,437	5,727	5,372	13,800
91	9,022	10,334	9,833	11,643	16,510	15,303	19,229	19,642	20,906	22,257	24,941	23,600	27,282	26,643	27,152	28,764	30,777	27,462	28,802	30,322	63,600
92	2,411	3,182	3,367	3,456	3,585	3,596	3,996	4,149	4,402	4,640	4,689	5,079	4,707	5,543	5,550	5,662	5,529	5,359	5,662	5,870	10,500
93	589	695	704	652	749	923	636	550	854	830	952	938	870	889	721	871	783	793	898	881	1,200
94	5,587	5,603	6,120	6,285	6,300	7,212	6,778	7,013	7,100	7,200	8,884	9,550	9,105	10,862	12,020	10,117	11,890	10,913	11,851	12,289	22,300
95	10,281	11,564	11,457	12,768	12,827	9,137	10,281	10,320	9,326	10,204	10,000	8,043	8,104	8,240	8,296	8,354	7,207	6,934	7,777	8,009	700
96	2,893	3,331	2,813	2,932	3,378	3,200	2,254	2,676	2,200	3,880	3,351	2,906	2,914	3,666	3,533	3,935	4,418	3,752	3,691	3,846	5,400
97	659	734	983	1,055	1,288	1,613	622	640	2,024	628	673	899	681	739	775	804	857	842	934	962	800
98	3,650	6,337	3,748	3,763	3,869	4,623	4,228	4,300	3,435	4,409	4,067	4,367	4,061	4,080	3,619	3,744	4,152	4,583	4,797	4,954	5,100
99	15,980	17,255	17,416	17,315	17,869	19,827	18,385	19,125	20,977	20,554	17,821	18,077	18,678	19,008	18,712	19,692	19,846	17,874	17,409	17,931	20,700
100	2,674	2,968	2,677	3,320	3,210	3,066	2,773	2,800	3,401	4,009	4,078	4,351	2,871	4,376	4,523	4,866	5,153	5,339	4,729	5,149	8,800
101	1,095	1,636	1,500	1,201	1,333	1,361	1,517	1,440	1,317	1,660	1,648	1,759	1,598	1,650	1,567	1,698	1,725	1,881	1,767	1,827	2,600
102	5,571	6,753	6,479	7,597	9,364	9,043	9,777	9,938	9,671	10,597	9,336	9,771	11,127	11,064	10,980	11,736	12,552	11,138	11,057	11,607	19,900
103	5,327	6,473	6,097	6,550	6,784	7,018	5,590	5,259	6,178	6,181	6,047	5,708	5,139	5,290	6,845	5,806	7,028	6,044	5,905	5,751	5,800
105	5,429	4,898	4,661	4,433	4,197	4,582	3,968	3,847	3,900	4,891	3,924	4,535	4,467	4,373	3,217	3,552	3,667	3,811	3,911	3,382	2,100
106	1,895	2,434	2,271	2,390	2,331	2,928	2,672	2,764	3,135	2,647	3,138	3,346	3,555	3,536	3,234	3,634	3,583	3,439	3,600	3,867	6,200
107	212	438	443	534	602	570	580	417	720	914	933	1,022	996	1,171	1,047	1,195	1,155	1,190	1,248	1,324	2,800
108	3,127	3,640	4,091	3,758	3,686	3,923	4,367	4,433	4,456	4,915	4,666	5,157	5,317	5,614	5,610	5,764	5,491	5,495	5,636	6,098	9,800
109	304	300	204	301	274	373	354	414	407	410	501	596	485	500	1,053	695	729	763	712	774	1,700
110	2,096	3,459	2,832	2,900	2,877	3,139	2,810	1,881	3,465	3,283	3,661	3,658	3,586	4,426	4,770	4,916	5,287	4,287	4,533	4,950	8,600
111	3,805	5,565	5,464	5,906	5,840	3,117	2,575	7,455	7,877	8,906	8,476	10,544	10,272	10,435	9,207	10,549	10,424	12,080	12,180	12,242	24,600
112	466	483	456	413	563	702	749	939	874	1,022	898	904	900	937	1,279	1,151	1,384	1,040	1,091	1,110	2,400
113	5,634	4,924	5,375	5,922	6,039	6,588	6,820	7,310	7,227	6,867	8,173	10,696	10,269	9,445	10,081	10,279	10,708	11,214	11,724	12,003	22,000
114	6,073	5,325	5,351	5,336	6,002	6,043	6,464	6,782	7,058	8,024	7,858	9,874	9,638	9,655	9,841	9,811	10,064	10,731	11,637	11,986	21,100
115	6,015	4,830	5,289	5,638	5,672	5,967	6,077	6,477	8,090	7,567	6,873	8,366	8,532	8,513	9,425	9,406	9,570	9,994	11,256	11,295	19,300
116	2,412	2,195	2,333	2,805	2,327	2,624	2,036	2,074	2,087	2,609	2,469	2,497	2,500	2,071	2,116	2,265	2,069	2,042	2,152	2,216	2,100
117	2,213	2,230	2,212	2,365	2,147	2,573	2,258	2,684	2,566	2,451	2,385	2,266	2,321	2,305	2,632	2,506	2,515	2,155	2,311	2,106	2,500
118	559	753	697	741	732	889	770	780	291	897	865	862	870	981	984	1,020	1,036	1,064	1,048	1,079	1,700
119	157	189	192	235	198	233	230	192	154	242	247	305	218	230	384	443	339	351	363	465	800
120	19	18	46	35	40	12	37	26	39	32	36	43	50	43	45	47	49	51	52	35	100
121	903	935	944	874	815	955	995	1,062	917	1,103	1,215	1,109	1,155	1,190	1,105	1,200					1,900
122	362	324	371	321	337	329	335	337	315	466	215	423	420	466	479	493	539	555	510	522	900
123	120	145	159	153	194	216	219	249	213	236	254	277	285	300	303	323	336	348	284	292	700
124	242	364	141	172	164	156	152	162	148	237	250	270	280	268	289	289	268	274	279	274	500
125	194	203	259	237	312	245	250	304	253	230	349	374	371	380	404	386	469	428	365	397	800
126	1,546	1,699	1,688	1,797	2,069	2,343	2,314	2,372	2,429	2,738	2,580	2,920	2,687	2,977	2,745	3,020	2,969	3,243	2,849	2,633	5,200
127	43	67	58	110	126	139	179	164	193	208	220	247	243	250	268	299	298	327	343	359	800
128	1,338	1,298	478	815	587	577	340	464	378	252	347	374	370	364	416	413	425	445	458	471	600
129	9,335	13,890	10,352	11,307	11,301	12,105	11,692	10,567	13,904	10,923	11,313	10,992	11,518	12,734	10,434	11,056	11,513	12,138	10,920	11,522	11,700

Historical Average Daily Traffic from TDOT

TDOT Station Number	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Forecast 2030
130	3,750	3,564	4,020	4,200	4,100	3,850	3,929	3,653	3,745	4,072	4,233	4,051	3,985	3,319	3,810	3,378	3,756	2,920	3,228	1,443	1,500
131	3,732	3,596	3,362	3,170	3,115	3,250	2,490	2,337	2,794	2,265	2,410	2,235	2,323	3,068	3,944	3,966	2,836	2,739	2,241	2,645	2,200
132	3,264	3,862	3,648	4,163	4,333	4,912	4,572	4,011	5,886	5,844	6,108	6,240	6,330	9,031	6,924	6,728	6,440	6,529	7,046	7,347	13,500
133	2,514	4,142	3,519	4,985	2,791	3,213	3,014	3,000	3,693	3,931	3,783	3,648	4,293	4,300	3,761	3,971	4,018	4,479	3,507	3,925	5,100
134	12,169	14,345	13,549	14,712	15,852	16,549	17,453	16,400	17,331	7,682	7,206	7,167	7,314	7,295	6,872	6,875	7,081	6,559	6,521	7,096	8,100
135	227	308	266	346	242	269	199	178	206	212	164	190	188	198	202	214	168	284	231	191	200
136	3,488	4,626	4,553	4,922	4,563	4,620	4,500	3,267	4,192	3,210	3,647	2,429	3,244	5,133	4,044	4,749	4,890	3,658	3,485	4,141	4,000
137	367	656	416	407	514	614	455	519	530	540	444	450	413	474	484	522	420	499	373	384	400
138	2,650	3,224	2,790	2,953	3,125	3,623	3,452	3,500	2,804	2,984	2,684	2,658	3,056	2,840	2,660	2,917	3,277	2,892	2,979	3,068	3,200
139	457	515	409	388	518	494	192	210	367	519	548	699	792	741	590	661	680	826	633	651	1,300
140	308	184	170	157	138	220	136	184	200	228	163	179	189	215	169	177	175	170	175	185	200
141	180	254	229	245	154	149	156	166	194	180	194	161	159	170	187	192	148	153	199	222	300
143	4,526	5,544	4,763	5,119	6,850	7,300	7,613	7,482	8,014	7,501	8,223	8,621	8,517	9,734	9,673	10,123	10,459	10,095	9,275	10,989	19,200
144	637	669	721	666	878	806	817	800	892	1,425	1,048	1,274	1,073	1,543	1,535	1,668	2,464	1,574	1,703	1,732	3,800
145	26,062	29,610	29,962	30,483	32,832	33,663	35,258	35,582	35,597	25,399	23,155	22,311	23,333	23,785	24,049	24,165	25,505	23,051	23,215	23,911	10,800
146	79	87	114	113	120	80	99	129	152	205	221	227	240	310	320	298	319	336	352	369	900
147	9,357	12,051	9,718	10,876	13,410	16,325	17,741	17,500	15,712	8,940	9,661	11,300	10,372	11,498	10,321	11,333	12,424	12,757	11,339	11,715	11,900
148	2,796	3,358	2,476	2,658	2,557	2,996	2,968	2,717	2,463	2,714	2,677	2,598	2,574	2,768	2,740	2,726	2,386	2,699	2,419	2,522	2,400
149	5,740	6,170	5,960	5,604	5,481	5,951	5,403	4,938	5,440	4,814	4,945	4,918	4,720	4,052	3,815	4,083	4,231	5,745	6,563	6,759	4,800
150	2,764	1,816	2,060	1,653	1,588	1,650	1,684	1,746	1,760	1,981	1,744	1,648	1,648	1,546	1,660	1,597	1,458	1,632	1,386	1,493	700
151	1,802	1,780	1,535	1,599	1,669	2,017	1,795	2,041	1,900	1,816	1,702	1,644	1,776	1,877	1,578	1,765	1,764	1,737	1,619	1,703	2,000
152			1,618	1,614	1,527	1,858	1,697	1,242	2,091	1,934	2,230	2,156	2,170	2,554	2,563	2,654	3,187	3,187	3,347	3,418	6,400
153		50	68	72	60	70	107	85	54	82	96	110	122	130	143	154	188	151	138	142	400
154		108	64	145	163	150	94	116	91	80	69	95	100	89	101	108					200
155		147	177	189	142	187	153	160	176	230	240	298	198	210	315	358	421	360	327	369	800
156		2,626	3,509	3,210	3,458	2,952	3,000	3,879	3,895	4,115	4,189	4,359	4,481	4,556	4,541						9,100
157		1,060	1,157	1,211	1,078	1,763	2,167	2,155	2,500	2,421	2,598	2,600	2,141	2,787	2,528	3,064	3,084	3,782	3,326	3,632	7,300
158		1,022	807	700	750	921	1,010	1,025	1,001	1,090	1,879	2,129	1,938	2,490	2,284		2,623	2,210	2,679	2,805	6,100
159		5,978	4,128	4,723	5,524	5,600	6,544	7,420	9,953	9,861	7,075	7,801	7,868	8,433	8,316	8,833	9,579	7,821	10,162	9,056	16,400
160		1,523	1,119	1,007	1,228	1,768	1,755	2,039	1,969	2,042	2,260	2,268	2,390	2,414	2,609	2,618	2,719	2,900	2,849	3,081	5,900
161		5,164	4,086	4,801	4,249	4,408	4,250	4,154	4,417	4,463	4,217	5,001	4,371	4,593	6,700	5,025	5,120	5,179	5,639	5,808	7,400
162		7,785	7,277	7,427	6,655	7,996	8,454	8,500	7,126	7,449	7,392	7,657	7,970	7,886	7,720	7,273	8,339	7,282	6,832	7,036	7,200
163		806	926	950	862	859	829	766	1,028	864	716	754	934	878	736	806	800	738	750	772	700
164		960	938	887	832	973	1,252	946	774	791	893	1,040	977	1,363	2,139	2,300	1,677	1,055	1,066	1,097	2,500
165		1,756	1,817	1,795	1,690	2,377	1,100	1,795	1,237	1,962	1,422	1,421	1,930	1,762	1,645						1,500
166		266	327	323	366	564	370	612	610	590	687	649	661	636	788	630	563	601	725	708	1,400
167		14,458	13,210	13,100	15,036	13,434	12,873	13,376	14,620	12,939	12,612	13,242	13,640	14,175	13,882	14,552	15,783	14,732	14,070	14,421	16,000
168			436	327	381	330	361	264	381	264	363	333	350	395	416	345	355	366	358	373	400
169			391	491	510	650	735	842	995	1,092	866	1,215	1,243	1,493	1,419	1,559	1,646	1,756	1,964	1,983	4,400
170			895	1,162	1,070	912	1,286	1,165	1,213	1,543	1,727	1,882	1,890	2,376	2,458	2,531	2,564	2,697	2,819	2,950	6,400

Historical Average Daily Traffic from TDOT

TDOT Station Number	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Forecast 2030
171			292	302	259	270	351	381	400	689	751	838	953	960	1,379	1,390					4,000
172			2,198	2,274	2,579	2,847	2,256	1,863	1,817	2,409	2,553	2,901	2,519	2,798	3,110	3,129	3,621	3,054	3,633	3,671	5,700
173			6,911	8,459	6,290	6,338	6,250	3,917	6,640	6,275	7,277	8,340	8,372	13,502	9,565	9,852	10,190	9,981	10,487	10,711	19,000
174			170	197	174	180	160	22	45	55	63	73	80	102	108	69	79	81	83	85	100
175			732	644	795	980	907	1,086	1,228	1,167	1,173	1,176	1,334	1,340	1,156	1,416	1,471	1,520	1,487	1,437	2,800
176			1,538	1,493	1,596	1,736	1,590	1,779	1,502	1,802	1,830	1,894	2,101	2,237	2,024	2,036	2,039	2,128	2,086	2,300	3,400
177			1,251	1,210	1,216	1,405	1,227	1,311	1,200	1,466	1,447	1,568	1,392	1,552	1,440	1,302	1,315	1,255	1,230	1,267	1,500
178			4,879	5,229	5,395	5,537	5,716	6,013	6,721	5,632	6,653	8,230	8,343	7,959	8,901	8,970	8,415	9,135	9,833	9,945	18,100
179			672	553	540	559	235	240	481	501	553	717	895	903	1,123	1,179	1,020	1,066	1,112	1,427	2,600
180			1,100	1,400	1,129	1,206	1,200	1,163	1,226	1,241	1,040	1,099	1,210	1,299	1,326	1,426	1,288	1,474	1,122	1,155	1,500
181			575	478	503	563	535	593	633	512	494	576	550	546	557	559	1,947	498	559	575	1,200
182			6,500	4,965	6,828	7,096	5,693	5,070	5,799	9,154	8,943	8,545	9,686	10,732	10,693	10,760	12,772	13,000	10,553	11,116	23,600
183			6,232	5,694	5,122	5,300	6,371	6,920	6,700	5,694	6,100	5,185	5,768	5,656	8,000	7,816	7,865	5,402	5,907	4,750	7,100
184			7,054	8,389	6,154	7,455	6,336	7,190	6,750	6,850	4,486	5,044	4,902	4,202	5,084	5,338	5,800	4,899	4,713	4,854	5,600
186			6,138	5,090	5,814	5,429	4,952	5,000	3,788	3,326	4,170	3,741	3,587	2,741	4,902	4,623	4,762	4,055	3,596	3,377	700
187			3,300	3,363	4,683	4,863	5,486	6,387	6,995	7,463	6,553	6,950	6,420	7,737	8,781						20,600
188			2,633	2,295	1,845	2,532	2,415	2,440	2,388	2,472	2,548	2,335	2,411	2,447	2,441	2,497	2,829	2,744	2,826	2,910	3,600
189			631	586	526	599	550	320	610	599	610	583	696	599	710	718	802	428	423	418	600
190			1,927	1,771	1,860	1,940	1,880	961	1,685	1,601	1,607	1,586	1,638	1,516	1,588	1,660	1,492	1,214	1,421	1,463	1,000
191			2,387	1,972	2,371	2,828	2,295	3,078	2,875	3,175	3,296	3,391	3,659	3,849	5,250	4,773	5,495	4,826	4,637	4,776	10,300
192				384	501	1,083	1,052	1,472	1,738	9,721	10,000	11,734	11,123	10,942	12,781	13,273	16,326	13,765	13,981	13,588	44,900
193				1,020	1,564	4,556	5,226	4,502	6,079	6,198	6,775	9,850	10,091	10,021	11,876	11,070	12,321	12,441	12,600	12,978	34,100
194				1,133	1,708	5,013	5,841	5,629	5,438	8,857	8,407	10,954	9,700	10,619	11,331	10,902					37,900
195					20,857	18,772	18,754	18,630	20,587	19,052	20,158	20,363	23,805	25,588	25,184	26,986	30,539	28,301	28,433	29,809	51,500
196					7,799	9,331	12,504	13,478	14,462	14,499	15,438	16,482	18,135	18,506	17,456	21,152	21,580	24,135	24,946	25,880	54,100
197						4,515	5,669	4,461	6,336	7,982	7,800	9,550	8,678	8,960	9,452	10,241	10,535	11,341	12,007	12,554	27,000
198						554	523	994	1,223	1,344	1,275	1,312	1,712	1,782	2,010	2,300	2,171	2,254	2,413	2,660	6,500
199						154	309	221	530	515	464	557	579	613	725	588	553	737	546	562	1,500
200										14,543	12,102	13,379	12,316	15,460	15,231	16,652	16,350	16,867	17,056	17,782	31,000
201										13,789	14,550	16,185	15,738	17,517	18,207	17,860	18,662	19,923	20,741	21,305	40,200
202										16,448	19,881	16,741	15,559	22,561	18,400	18,668	20,502	19,362	20,759	22,037	32,000
203										1,404	5,046	6,553	5,342	5,437	6,022	6,054	6,539	7,415	7,502	7,129	18,300
204											4,495	7,873	6,800	6,381	7,024	7,234	7,707	8,014	8,320	8,627	16,600
205															1,309	2,055	2,208	2,568	2,407	2,780	9,400
206																381	390	399	419	428	800
207																287	274	261	345	355	900
208																587	605	623	366	382	500
209																	696	716	737	273	400
210																207	213	219	195	218	300
211																69	36	37	50	52	100

Historical Average Daily Traffic from TDOT

TDOT Station Number	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Forecast 2030
212																32	33	34	51	53	300
213																	171	176	215	231	900
214																137	140	143	82	85	100
215																4,363					4,400
216																3,036	4,500	9,637	10,357	10,667	66,800
217																454	634	653	673	712	2,200
218																462	476	490	391	405	500
219																304	345	386	243	284	400
220																191	199	207	152	160	200
221																	2,276	2,161	2,915	2,601	7,300
222																	24,076	24,151	25,792	26,389	48,700
223																	24,391	23,863	24,980	25,000	32,700
224																	523	539	443	456	600
225																	2,936	1,944	2,134	2,198	2,600
226																	5,341	4,495	4,764	4,906	2,400
227																	6,994	6,858	7,023	7,233	9,500
228																	1,306	1,345	967	996	1,200
229																	4,177	3,897	4,495	4,573	9,200
230																	403	372	341	365	500
231																	3,694	4,867	4,157	4,281	7,200
233																	9,950	13,145	14,869	15,315	62,400
234																	12,080	8,754	9,716	10,007	11,400
235																	2,207	1,534	1,945	1,591	1,900
236																		2,569	3,202	3,435	14,800
237																		1,782	1,849	1,916	3,700
238																		1,049	1,091	1,133	2,300

**TABLE 4 - 1
GENERALIZED ANNUAL AVERAGE DAILY VOLUMES FOR FLORIDA'S
URBANIZED AREAS***

UNINTERRUPTED FLOW HIGHWAYS							FREEWAYS					
Level of Service							Interchange spacing ≥ 2 mi. apart					
Lanes Divided		A	B	C	D	E	Lanes	A	B	C	D	E
2 Undivided		2,000	7,000	13,800	19,600	27,000	4	23,800	39,600	55,200	67,100	74,600
4 Divided		20,400	33,000	47,800	61,800	70,200	6	36,900	61,100	85,300	103,600	115,300
6 Divided		30,500	49,500	71,600	92,700	105,400	8	49,900	82,700	115,300	140,200	156,000
STATE TWO-WAY ARTERIALS							Interchange spacing < 2 mi. apart					
Class I (>0.00 to 1.99 signalized intersections per mile)							Level of Service					
Lanes Divided		A	B	C	D	E	Lanes	A	B	C	D	E
2 Undivided		**	4,200	13,800	16,400	16,900	4	22,000	36,000	52,000	67,200	76,500
4 Divided		4,800	29,300	34,700	35,700	***	6	34,800	56,500	81,700	105,800	120,200
6 Divided		7,300	44,700	52,100	53,500	***	8	47,500	77,000	111,400	144,300	163,900
8 Divided		9,400	58,000	66,100	67,800	***	10	60,200	97,500	141,200	182,600	207,600
Class II (2.00 to 4.50 signalized intersections per mile)							Level of Service					
Lanes Divided		A	B	C	D	E	Lanes	A	B	C	D	E
2 Undivided		**	1,900	11,200	15,400	16,300	12	72,900	118,100	170,900	221,100	251,200
4 Divided		**	4,100	26,000	32,700	34,500	BICYCLE MODE					
6 Divided		**	6,500	40,300	49,200	51,800	(Note: Level of service for the bicycle mode in this table is based on roadway geometrics at 40 mph posted speed and traffic conditions, not number of bicyclists using the facility.) (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
8 Divided		**	8,500	53,300	63,800	67,000	Paved Shoulder/ Bicycle Lane					
Class III (more than 4.5 signalized intersections per mile and not within primary city central business district of an urbanized area over 750,000)							Coverage					
Lanes Divided		A	B	C	D	E	0-49%	**	**	3,200	13,800	>13,800
2 Undivided		**	**	5,300	12,600	15,500	50-84%	**	2,500	4,100	>4,100	***
4 Divided		**	**	12,400	28,900	32,800	85-100%	3,100	7,200	>7,200	***	***
6 Divided		**	**	19,500	44,700	49,300	PEDESTRIAN MODE					
8 Divided		**	**	25,800	58,700	63,800	(Note: Level of service for the pedestrian mode in this table is based on roadway geometrics at 40 mph posted speed and traffic conditions, not number of pedestrians using the facility.) (Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)					
Class IV (more than 4.5 signalized intersections per mile and within primary city central business district of an urbanized area over 750,000)							Level of Service					
Lanes Divided		A	B	C	D	E	Sidewalk Coverage	A	B	C	D	E
2 Undivided		**	**	5,200	13,700	15,000	0-49%	**	**	**	6,400	15,500
4 Divided		**	**	12,300	30,300	31,700	50-84%	**	**	**	9,900	19,000
6 Divided		**	**	19,100	45,800	47,600	85-100%	**	2,200	11,300	>11,300	***
8 Divided		**	**	25,900	59,900	62,200	BUS MODE (Scheduled Fixed Route)					
Class IV (more than 4.5 signalized intersections per mile and within primary city central business district of an urbanized area over 750,000)							(Buses per hour)					
Level of Service							(Note: Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.)					
Lanes Divided		A	B	C	D	E	Sidewalk Coverage	A	B	C	D	E
2 Undivided		**	**	9,100	14,600	15,600	0-84%	**	>5	≥4	≥3	≥2
4 Divided		**	**	21,400	31,100	32,900	85-100%	>6	>4	≥3	≥2	≥1
6 Divided		**	**	33,400	46,800	49,300	ARTERIAL/NON-STATE ROADWAY ADJUSTMENTS					
Major City/County Roadways							DIVIDED/UNDIVIDED					
Level of Service							(alter corresponding volume by the indicated percent)					
Lanes Divided		A	B	C	D	E	Lanes	Median	Left Turns Lanes	Adjustment Factors		
2 Undivided		**	**	4,800	10,000	12,600	2	Divided	Yes	+5%		
4 Divided		**	**	11,100	21,700	25,200	2	Undivided	No	-20%		
Other Signalized Roadways (signalized intersection analysis)							Multi Undivided Yes -5%					
Lanes Divided		A	B	C	D	E	Multi Undivided No -25%					
2 Undivided		**	**	4,800	10,000	12,600	ONE-WAY FACILITIES					
4 Divided		**	**	11,100	21,700	25,200	Decrease corresponding two-directional volumes in this table by 40% to obtain the equivalent one directional volume for one-way facilities.					
Source: Florida Department of Transportation Systems Planning Office 605 Suwannee Street, MS 19 Tallahassee, FL 32399-0450 http://www11.myflorida.com/planning/systems/sm/los/default.htm							02/22/02					

*This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Values shown are two-way annual average daily volumes (based on K₁₀₀ factors) for levels of service and are for the automobile/truck modes unless specifically stated. Level of service letter grade thresholds are probably not comparable across modes and, therefore, cross modal comparisons should be made with caution. Furthermore, combining levels of service of different modes into one overall roadway level of service is not recommended. The table's input value defaults and level of service criteria appear on the following page. Calculations are based on planning applications of the Highway Capacity Manual, Bicycle LOS Model, Pedestrian LOS Model and Transit Capacity and Quality of Service Manual, respectively for the automobile/truck, bicycle, pedestrian and bus modes.

**Cannot be achieved using table input value defaults.

***Not applicable for that level of service letter grade. For automobile/truck modes, volumes greater than level of service D become F because intersection capacities have been reached. For bicycle and pedestrian modes, the level of service letter grade (including F) is not achievable, because there is no maximum vehicle volume threshold using table input value defaults.

APPENDIX B:
Meeting Minutes

PUBLIC NOTICE on TRANSPORTATION MASTER PLAN

The City of Columbia is conducting a two-day Transportation Master Plan meeting. The meeting will be in the City Council Chambers at City Hall on Tuesday, January 11th and Wednesday, January 12th, 2005 from 5:00 p.m. until 8:00 p.m. The general public, City staff, and key groups, such as Columbia Main Street, Columbia Downtown Business Organization, Maury Alliance, etc., are invited to attend.

The project includes development of a master transportation plan for the City of Columbia. This master plan will identify the list of projects necessary to provide a transportation system to serve the City to the year 2030.

The project approach represents an integrated planning process, which includes identifying study vision and objectives; documenting existing and future transportation conditions; developing a transportation plan, and formulating an implementation plan. The transportation master plan will also maintain consistency with any planning activities that have been undertaken, or that may be undertaken, pursuant to PC 1101, Tennessee's urban growth boundary law. Contact the City of Columbia at (931) 388-0780 for additional information.

City of Columbia Transportation Master Plan

Planning Charrette

January 12, 2005

Name	Organization / Affiliation	Address	Phone Number	Email Address
June Beckum	Maury County Commissioner	6007 Clifton Drive	931-388-3325	
Wayne Hickmon	Maury County Commissioner	402 Cheyenne Trail	931-388-8795	
Rick Webster		2205 Golf Club Lane	840-8582	
Chet Rhodes	City Engineer	707 N. Main Street	388-0780	
George Vrailas	Burger King	800 Hatcher Lane	381-2651	
Kristi Martin	Director	8 Public Square	388-3647	
William		1150 S. M.	388-6464	
Bill Gentner	City Council	226 Porter Circle	388-0057	
Sarah Anderson	Maury County Commissioner	400 W. 6th Street	388-8086	
Eugene Richardson	Maury County Commissioner	2127 Polk Drive	381-0682	
Barbara McIntyre	Mayor	707 N. Main Street	381-3833	
Tom Williford	WMCP Radio	1503 Shadow Lawn Dr.	388-3241	
Christa Martin	City Council	707 . Main Street		
Kim Jameson	Citizen	2583 Antrim Circle		
Kirsten Broden	Citizen			
A. T. Burchell	Owner - Shoppes of Neapolis	P. O. Box 454 (Columbia, TN)		atburchell@bellsouth.net
Charles Sanders	Vice Mayor - City of Columbia	707 N. Main Street		



**City of Columbia
Transportation Master Plan
Study**

**Transportation Planning
Charrette Workbook**

Part I

Transportation Planning and Future Land Use

Directions: *As a Group or Team, discuss issues pertaining to Columbia's **Transportation Planning and Future Land Use**. Appoint a team secretary to write comments and discussion notes on the map and worksheets provided. There are no wrong answers, just unique ideas relating to your team's approach to issues in Columbia. A designated team spokesperson will narrate your ideas and solutions later in the program. **ALLOW APPROXIMATELY TWENTY (20) MINUTES PER QUESTION.** Revisit questions as time permits.*

1. Growth Areas. Pretend there are no designated urban growth boundaries and project where your team feels growth will occur in the next 20 years. Indicate on your map where you project residential, commercial or industrial, and public (hospital, schools, etc.) growth to occur. Is there a need for increased multi-family housing? Is the regional transportation network sufficient in your projected growth areas?

Group 1

I-65 and US 412 (east of I-65)

Neapolis

West to Carter's Creek – east to I-65

Group 2

Highway 31 North – Neapolis, Double Branch Rd. – Greens Mill Rd., major residential development proposed – insufficient roads exist.

Tom Hitch Parkway – 170-200 acre Residential/Commercial/Golf Course development proposed – transportation network sufficient.

East/West Connector could benefit downtown to Tom Hitch Parkway.

Recreation Area To Be Developed – 325 acres – need access at Tom Hitch.

Campbellsville Pike/Sheegog Lane – Wind Hill Farm to be residential development.

Bear Creek Pike at 1-65 – Cracker Barrell – Burger King – Stan’s – Outlet Mall

2. Protect Neighborhood Integrity and Preserve Pedestrian \ Residential Scale. Indicate on your map those areas where protection of neighborhood integrity is an issue. Does the existing transportation system protect or detract from these areas? Discuss the benefit or detriment to using elements that contribute to the pedestrian and residential scale, and help define transportation corridors such as landscaping, street trees, signage, crosswalks, parking, lighting, general character, etc. Mark areas on the map that you think are particularly good or bad examples.

Group 1

Blue Marked w/”P” = Need Protection

Bear Creek Pike Corridor

Nashville Highway Corridor

Group 2

Favorable Elements – Downtown District Streetscape – Lighting./Sidewalks/Landscaping - Need Improv. Signage

Abandoned Cars – Streetside Parking

Streetscape Plan – West 7th Street to Trotwood Avenue.

Improve Public Parking in Downtown Area

3. Traffic Congestion. Indicate on your map routes where the traffic congestion is a problem. Indicate on your map routes that you have taken expressly to avoid congestion on other routes. Have you noticed these alternates becoming more congested and the travel conditions deteriorating? On which routes would you like to see additional capacity? Show where new routes or connections should be made. Indicate the best locations for “park and ride” or multimodal facilities.

Group 1

Green = Roads Need More Capacity

65/Bear Creek Pike Exchange

Campelsville Pike/Sheegon Pike

Old Highway 99

Baker/Columbia Rock Road

Greens Mill Road

Trotwood, South of James Campbell to Mt. Pleasant

Hampshire Pike

Widen & Lengthen Baker Road

Connect Columbia Rock Road with Highway 7

Group 2

Highway 32 (Nashville Highway) at Baker Road – Columbia Rock Road

See Part II Item 5 – 7:00 – 7:30 a.m.!

Highway 31 at Neapolis – Burger King & Nolens BBQ area

Traffic Congestion – Turning Mov. Cong. Speeding

Traffic – Shopping Center – No Deceleration Lane – No Turn lane

Hampshire Pike – Major Congestion! Oak Springs – Schools (3), Human Serv., College,

YMCA – Safety Connector from Highway 43

James Campbell and Lion Parkway – Domino’s Pizza to Columbia Cent. H.S. – No Turn

Lane – Congestion

James Campbell & Trotwood – Hospital – Burger King – McDonald’s – Bone & Joint

Clinic – Ambulatory Care Center Lane

Attention to Pedestrian Traffic – Pedestrian Bridge?

Sidewalks

Park & Ride – Bear Creek & I-65, Nashville Highway & Saturn Parkway

Maintain Existing Sidewalks

4. Accommodate Redevelopment. Indicate on your map areas appropriate for infill or redevelopment projects. Indicate areas you would consider “blighted” or deteriorated on your map. Are there any problems with the existing infrastructure in these areas? How could infrastructure improvements spark investment/reinvestment in these areas? Indicate infill and redevelopment projects that have been successful.

Group 1

Blighted – Woodland Street, Galloway, near Woodland Park, Iron Bridge Road, behind McDowell Elementary School

Assets – Dock River, Utilities, Presence of Like-Industry, Downtown Historical District, Regional Hospital, Parks

Group 2

West 8th Street

North of McDowell School – Infill/Redevelopment (West 7th Street)

Woodland/Glade/Iron Bridge Road/East 7th Street – “Blighted” Area

South Main Street to Carmack Blvd. – Improve

Riggins Road – Blighted

Train Depot and Surrounding Neighborhoods – Redevelop as Historical District with Des. Guidelines

Maury County Shopping Center on Mt. Pleasant Pike – Redevelop

5. Current and Future Development. What features and assets of Columbia would interest a developer? How can the City best capitalize or showcase these features? Do the city's existing transportation standards encourage or discourage development? List instances in your community and neighboring cities where transportation projects have been successful and advantageous for the surrounding community. List projects that have not been successful. To what do you attribute these successes or failures? Were traffic access or flow

control problems a factor? What features and assets of Columbia would interest a developer? How can the City best capitalize or showcase these features?

Group 1

Assets (see previous page)

Failed – Maury County Shopping Center area owner pricing too high; non-negotiable

Lack of landscaping on high traffic areas

Group 2

Substandard Build Codes/ Restrictions – Less Investment for Develop – Less Quality for Citizens

Access/Transportation Facility – Tom Hitch Parkway

Access/Transportation – U.S. 43

Low Property Tax

No Impact Fees or Facilities Tax

Centrally Located – I-65

Historically Rich

Moderate Climate

Successful Transportation Project – Tom J. Hitch, Hwy. 43 West (new by-pass) to Lawrenceburg, Saturn Parkway, Garden Street Improvement Project, West 7th Street

Part II

Quality of Life

Directions: *As a Group or Team, discuss issues pertaining to Smyrna's **Quality of Life**. Appoint a team secretary to write comments and discussion notes on the map and worksheets provided. There are no wrong answers, just unique ideas relating to your team's approach to the issues in Smyrna. A designated team spokesperson will narrate your ideas and solutions later in the program. **ALLOW APPROXIMATELY TWENTY (20) MINUTES PER QUESTION.** Revisit questions as time permits.*

1. Environmental Quality. Identify natural resources or environmentally sensitive areas that should be protected in Columbia. Are there areas where roads or other public improvements have lead to environmental degradation? Indicate on your map. Are problems related to lack of resources in the neighborhoods or commercial districts? Should Columbia sponsor an incentive or reward program for alternative transportation strategies or improvements? What kinds of alternative modes of transportation would be feasible and effective?

Group 1

Duck River

Lytle Creek

Aching Branch Stream (in front of Kroger)

Bigby

Monsanto Road/TVA Has Large Environmental Issues – do not build in that area

Group 2

Duck River – River Walk Project

2. Recreation Activities and Facilities. How do residents get to community activities? Are the park and greenspace areas in and near Columbia accessible to all residents? How can the pedestrian orientation and "walkability" of the Central Business District be enhanced? Where could bike lanes, walking trails or recreational travel modes provide linkages between recreation facilities or

commercial centers? How can these be combined with roadway improvements?

Group 1

Woodland Park – has walking trails in planning stage

Maury Columbia Park

Riverwalk

UNALI

Extend Woodland Park Walking Trail to Riverwalk

Connect M. Columbia Park to Woodland Park

Group 2

Improve Pedestrian/Bicycle Routes – Sidewalks, Bike Paths – Linking Community to

Downtown + Riverwalk Project

Provide Public Transportation

Enhance CBD with Signage, Cross Walks (traffic calming)

3. Maintain a "Sense of Place" in the Town. List the elements that define Columbia and make it unique from other area cities. What factors do you most value? In what ways do you perceive these elements or factors as being threatened? Identify streets or other infrastructure features on your map you feel detract from Columbia's "Sense of Place" and need attention. How can transportation improvements enhance Columbia’s “Sense of Place?”

Group 1

Historical Significance

Mules

Civil War History

Downtown Square

Group 2

James K. Polk Pres. Home Site – Protect!

Historic Main Street Community

Historic Home Sites

Columbia Mil. Academy

Athenacum Girl’s School

4. Appearance / Pride. Are there thoroughfares or roadways that are unattractive? Indicate on your map. What features or steps could enhance the appearance of these areas? Label places on your map where beautification programs or features have enhanced transportation corridors. What groups or entities can or should partner to form programs to enhance Columbia’s streetscapes?

Group 1

Landscaping from 4 Entry – Ways to City

Cement Medians Need Landscaping

James Campbell Blvd. – Need Landscaping! Garden Street

Historical Area Around West 7th is Great

Group 2

James Campbell Blvd. – Improve Zoning & Building Codes – 8th Street to Highway 31

Hatcher Lane – Improve Traffic Plan – Re: Appearance & Safety

Gard. Street from Bear Cr. Pike to 5th Street

5. Safety. Indicate on your map where you feel safety is a concern, either from traffic or crime or other hazards. Are there locations where streetlights should be installed? What about traffic signals or “walk – don’t walk” traffic lights?

Are there areas of problem traffic flow or parking hazards? Clearly identify them on your map. Can increased access controls at driveways improve safety? What major public investments should Columbia consider for funding in order to address these concerns?

Group 1

Bake Road & Nashville Highway

Hampshire Pike & Williamsport Pike

Neapolis

Campbellsville Pike

Bear Creek/ I-65

Tom Hitch & 50

Bear Creek & Baker Road

Polk Lane/Mt.Pleasant Pike – Sight Issue

43/412

Trotwood/Hampshire Pike

Iron Bridge Rd./Fairview Park Area – High Crime Area

Blighted Areas = Safety Issues

Group 2

Highway 31 (Nashville Hwy.) at Baker Rd. & Columbia Rock Rd.

Traffic Congestion – Turning Vehicles – Dump Trucks (Vulcan)

School Traffic = Conflicts – 7 – 7:30 a.m.

Suggestion – Realign Baker Rd. & Columbia Rock Rd.

Susan Stephenson 388-9237

Boomers Music – Traffic Accidents too Frequently at Neapolis on Hwy. 31 – Burger King,

Nolen’s, Shops of Neapolis

Campbellsville Pike at Sheegog Lane

Improve Signage throughout Town

Hidden Lakes Area – Due Lane – Sharp Curve

Part III

Economics and the Transportation System

Directions: *As a Group or Team, discuss issues pertaining to Smyrna's **Economics and Transportation System**. Appoint a team secretary to write comments and discussion notes on the map and worksheets provided. There are no wrong answers, just unique ideas relating to your team's approach to issues in Smyrna. A designated team spokesperson will narrate your ideas and solutions later in the program. **ALLOW APPROXIMATELY TWENTY (20) MINUTES PER QUESTION.** Revisit questions as time permits.*

1. Increased Tax Base. Indicate on your map areas suitable for more intense uses such as industry or retail. Discuss reasons why some of these areas have not developed more intensely. Are deficiencies in the transportation system preventing further industrial or commercial developments? Discuss incentives the city could use to help provide public improvements and attract diverse industries.

Group 1

I-65/Bear Creek Pike

North Columbia/Neapolis

North Point Industrial

Tom Hitch Parkway

Industrial Park

School Bus Zone in N. Columbia

2. Create Balance between Economic Growth and Development and Quality of Life. Discuss the ways you feel economic growth and development affect the quality of life in Columbia, both positive and negative. Discuss strategies to address the stress of new development on the existing transportation system. What development standards and tools should be investigated to reduce negative effects and enhance any positive effects of redevelopment to the community?

Group 1

Strategies = Impact Fees?

Mall Upgrades

Road Connecting the Mall & Walmart & Connect to Hatcher Lane

Group 2

Weak Zoning & Building Material Guidelines

3. Fiscal Health. What do you see as the sources of Columbia’s financial growth and fiscal health? How can those sources be protected or augmented? Discuss the importance of office or retail development or redevelopment to Columbia’s financial vitality, now and in the future. How important are efficient commuter routes to and from Nashville and other employment centers in the region? Discuss their significance to the future economic health of Columbia.

Group 1

Saturn/GM

840 Interchange

Outer-Loop (Tom Hitch Connect to Sunnyside to 43)

Group 2

Saturn Corporation

Regional Hospital

Regional Market Place

Farm Bureau

Low Property Rates

Low Property Taxes

Green Space – Farm Land

Improve Retail Development in Historical District

Commuter Routes – Important! – Highway 31

4. Create Accessibility and Connections to Business Areas from Residential Areas. Identify on your map the areas where accessibility and connectivity between commercial and employment centers, and residential neighborhoods has been achieved. What specific factors have made these transitions successful? Identify where the lack of accessibility and connectivity is significant or detrimental to economic development. Indicate on your map areas where truck traffic is a concern. Describe. How can Columbia address this issue in future development proposals?

Group 1

Tom Hitch Parkway

Lakes of Columbia Apartment Homes on Hampshire Pike

Highway 43 Bypass

Baker Rd & Columbia Rock – Trucks

43/31 N.

Trucks to/from Saturn Plant

Garden & 7th – Huge Intersection

412/99 – Huge Intersection

Group 2

Truck Traffic – Highway 31 – Baker Rd. – Columbia Rock

5. Regional Competitiveness: Map the major arterial roads through Columbia that provide access to Columbia merchants and major employers. Are they sufficient? Indicate areas where better access should be provided or where existing access should be improved. What limitations or deficiencies exist in the transportation system that would encourage developers, employers or employees to look elsewhere?

Group 1

Highway 31

Route 6

43

412

James Campbell Blvd.

Highway 99

Highway 50

Highway 7

*** No Coordinated Light System**

See Additions/Expansion On The Map

Deficiencies: West-East movement

I-65 Interchange b/w Highway 43 & Highway 50

Part IV

If I Were King or Queen of Columbia

Directions: *As a Team, discuss issues pertaining to Columbia's future without constraints. Appoint a team secretary to write comments and discussion notes on the map and worksheets provided. There are no wrong answers, just unique ideas relating to your team's approach to issues in Columbia. A designated team spokesperson will narrate your ideas and solutions later in the program. ALLOW APPROXIMATELY TWENTY (20) MINUTES PER QUESTION. Revisit questions as time permits.*

1. A Perfect Transportation System. Without consulting each other, each team member should list up to three main features that Columbia's transportation system would have if it was perfect (e.g. no traffic jams, kids don't need parents to drive them anywhere, etc). Next, after sharing the lists with each other, each team should pick one feature to share with the rest of the group.

Group 1

*** Widen Main Roads/Main Arteries & Collectors**

*** Public Transportation**

Coordinated Light Effort (fiber-optic communication) Monorail System

***Build a Loop Around City with Spokes Bridge at Trotwood/James Campbell Blvd.**

East/West Connector

North Loop

Group 2

Underground Utilities

Improved Sidewalks/Pedestrian Traffic

Improved Signage/Signalization/Landscaping

Green Buffer Zone in Commercial Areas

Public Transportation

2. **Current Issues.** What are the major problems and issues affecting transportation in Columbia? As a team, list Columbia's three top transportation problems, in their order of priority.

Group 1

Narrow Roads

Growth Without Planning

Rapid Growth

Lack of Adequate Funding

Lack of Comprehensive Planning

Group 2

Traffic Calming on Cemetary Avenue – Currently 20 Miles Per Hour

Traffic Calming

Safety Concerns on Highway 31 at Neopalis & Baker Rd/Columbia Rock

Hampshire Pike at Schools/YMCA/Human Serv./Apartments

Hatcher Lane – James Campbell – Trotwood Area

Mall/Wal-Mart/Belk's/Goody's Area

Claremont/Sheegog Lane

3. **How to Make It Perfect.** List five steps that Columbia should take in order to fix its problems and to achieve a perfect transportation system.

Group 1

Increase Some Tax Increase – Impact Fees?

Make New Developers Pay for Improvements

Continue With Long Range Planning

Put New Codes in Place

Group 2

Maintain Contract with Kimley-Horn

Solicit All Available Federal & State Funds

TOP ISSUES

1. **Loop Around City**
2. **Road Widening – Collectors & Arterials**
3. **Smart Signals**
4. **Light in Neapolis**
5. **Develop Bear Creek Pike/65 Interchange**
6. **Beautification of Gateways to City**
7. **Recreational Greenways/Pedestrian Friendly**
8. **Public Transportation**
9. **Hatcher Lane/James Campbell**
10. **North Loop Near Baker Road**
 - East/West Connector**
 - New Roads in Northeast Growth Area**
 - New Interchange Off 65 b/w Bear Creek & Wighway 50**

GROUP PRIORITIES

1. Hampshire Pike at Schools/YMCA
2. Hatcher Lane – James Campbell to Shady Lane
3. Nashville Highway at Neapolis (between shopping center)
4. Loop Around City
5. E/W Connector to I-65
6. Baker Road/Columbia Rock to Highway 7 Extension
7. Smart Growth
8. Trotwood From Hospital (at west Zion Dr.) to Mt. Pleasant (increase capacity)
9. Willingness to Finance Public Projects at Accelerated Rate
10. ST RT 50/I-65 Interchange
11. Improvements to James Campbell from Armory (just beyond Hampshire) to Shoneys
12. Locate (plan for) School Growth
13. Campbellsville & Sheegog Interstate Improvements
14. Nashville Highway at Spring Mead
15. CBD

ISSUES

1. Way Finding to I-65
2. N. Garden & 7th Street (left turns)
3. 7th & Trotwood – Signage/Geometry
4. Future Schools – Locate Highway _____? Pulaski?
5. 2 – Hour Parking Limit
 - Overall Evaluations
 - Parking Consolidation
6. Hospital Access from Life Care
7. Baker Road/Columbia Rock to Theta. Connection may cause cut-through/increase traffic on Theta. Need to preserve residence neighborhood on Theta.
8. Review School Time Stagers
9. Include by Reference Airport Study
10. Residential Parking Pass for Residents Implemented
11. Consolidate Court Parking
12. James Campbell _____ New Development – Need to be aware of Development
13. Any Consideration for 1 – way Street
14. Speeding on West 6th
15. Passing on Right – Trotwood/Columbia Avenue

TOP ISSUES

1. Loop Around the City (incl. widen Bear Creek and Columbia Rock Springs Road)
2. Widen Collectors & Arterials
3. Interconnect Traffic Signals
4. Traffic Signal Nashville Highway at Neapolis
5. Improve I-65/Bear Creek Pike Interchange
6. Beautification of City Arterials and Gateways
7. Greenways Connecting Parks
8. Pubic Transportation Fixed Guideway System
9. Hatcher Lane/James Campbell Interchange
10. E-W Connector
11. Improve Road System in NE Growth Area
12. New I-65 Interchange South of Bear Creek Interchange
13. Impact Fees
14. James Campbell – From Hampsire Pike to Shoneys T/S +Widening

PRIORITIES

1. Safety Concerns on Highway 31 at Neopolis and Baker Rd./Columbia Rock (access and safety issues)
2. Hampshire Pike at Schools/YMCA/Hum. Serv./Apts (congestion safety)
3. Hatcher Lane – James Campbell – Trotwood Area (congestion, uncontrolled access, alignment)
4. Claremont/Sheegog Lane (multiple intersections, geometric safety)
5. CBD – Walkability
6. “Smart Growth” – Take advantage of existing infrastructure.
7. Bear Creek Pike and I-65 Access
8. East/West Connector
9. Trotwood/West 7th

**Columbia Transportation Master Plan
Project Status Meeting
May 25, 2005, 10:00 a.m.**

Agenda

- I. Scope of Services
 - Project Background
 - RFP due February, 2004
 - KHA Selected
 - Funding Issues with City and TDOT

- II. Progress Report (Handouts)
 - Completed Tasks
 - Project Kick-off Meeting
 - Planning Charrette
 - Data Collection
 - Schematic Layout
 - Development of Project List
 - Trendline Analysis
 - Tasks to Complete
 - Finalize Project List
 - Complete Needs Analysis
 - Develop Recommended Improvements
 - Funding and Implementation Strategies
 - Draft and Final Report

- III. Project Work Plan and Schedule
 - Submittal Dates
 - City reviews
 - Project Deliverables

- IV. Work Product

APPENDIX C:
Intersection Sketches and Photos

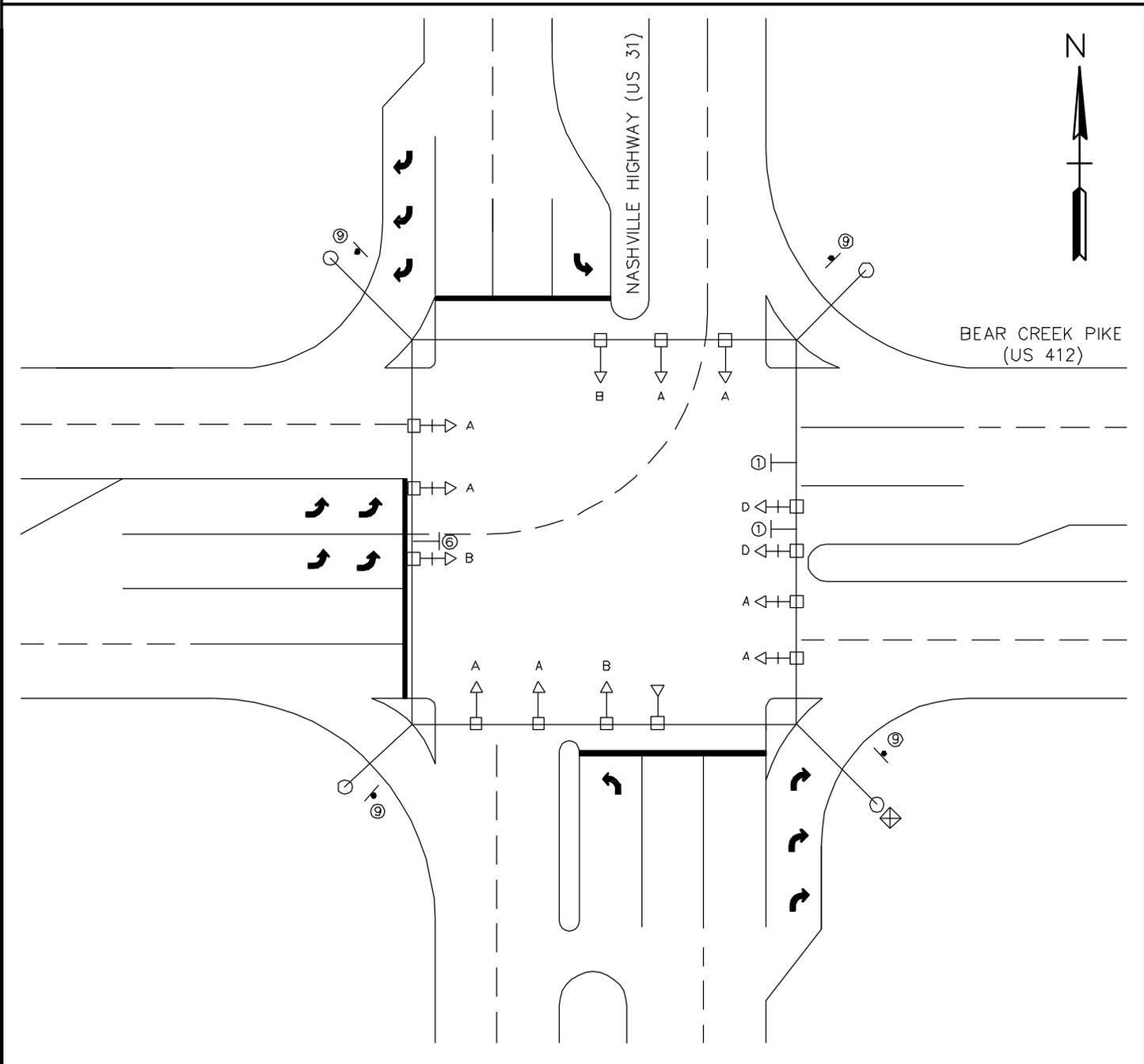
CITY OF COLUMBIA SIGNALIZED INTERSECTION INVENTORY

INTERSECTION ID: 1 N/S STREET: NASHVILLE HIGHWAY (US ROUTE 31) E/W STREET: BEAR CREEK PIKE (US ROUTE 412)

DATE OF LAST UPDATE MAY 2005 OBSERVER K.M., J.C.



KIMLEY-HORN AND ASSOCIATES, INC.



LEGEND		SIGNAL HEAD TYPES		SIGNS		
WOOD POLE		E.V.P. DETECTOR				
STEEL POLE		E.V.P. CONFIRMATION STROBE		LEFT TURN ONLY	RIGHT TURN ONLY	THRU ONLY
MASTARM POLE		E.V.P. CONFIRMATION BEACON		①	②	③
LOOP DETECTOR		POLE MOUNTED CONTROLLER CABINET				
SIGNAL HEAD		BASE MOUNTED CONTROLLER CABINET		LEFT TURN OK	LEFT TURN THRU	LEFT TURN YIELD ON GREEN
SIGNAL HEAD WITH BACKPLATE		GUY WIRE		④	⑤	⑥
PEDESTRIAN SIGNAL HEAD		SPAN MOUNTED SIGN				
PEDESTRIAN PUSHBUTTON				NO LEFT TURN	STOP SIGN	YIELD SIGN
ROADSIDE SIGN				⑦	⑧	⑨

**Columbia Transportation Masterplan
Maury County, Tennessee
Nashville Highway (US Route 31) at Bear Creek Pike (US Route 412)**



Bear Creek Pike (US Route 412) Eastbound Approach



Nashville Highway (US Route 31) Northbound Approach



Bear Creek Pike (US Route 412) Westbound Approach



Nashville Highway (US Route 31) Southbound Approach

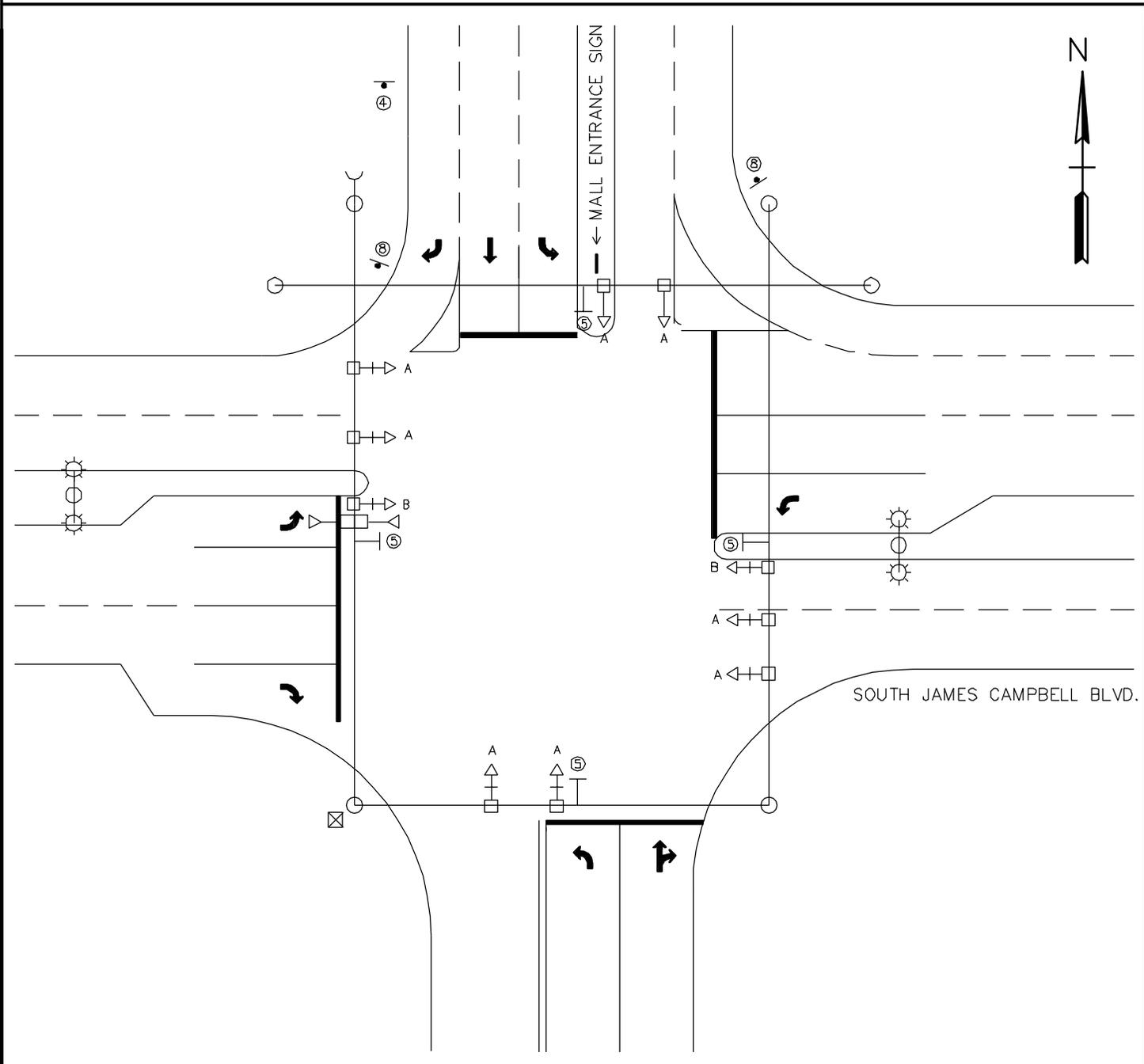
CITY OF COLUMBIA SIGNALIZED INTERSECTION INVENTORY

INTERSECTION ID: 2 N/S STREET: MALL ENTRANCE E/W STREET: SOUTH JAMES CAMPBELL BLVD.

DATE OF LAST UPDATE MAY 2005 OBSERVER K.M., J.C.



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LEGEND		SIGNAL HEAD TYPES		SIGNS		
WOOD POLE		E.V.P. DETECTOR				
STEEL POLE		E.V.P. CONFIRMATION STROBE				
MASTARM POLE		E.V.P. CONFIRMATION BEACON				
LOOP DETECTOR		POLE MOUNTED CONTROLLER CABINET				
SIGNAL HEAD		BASE MOUNTED CONTROLLER CABINET				
SIGNAL HEAD WITH BACKPLATE		GUY WIRE				
PEDESTRIAN SIGNAL HEAD		SPAN MOUNTED SIGN LUMINAIRE				
PEDESTRIAN PUSHBUTTON						
ROADSIDE SIGN						

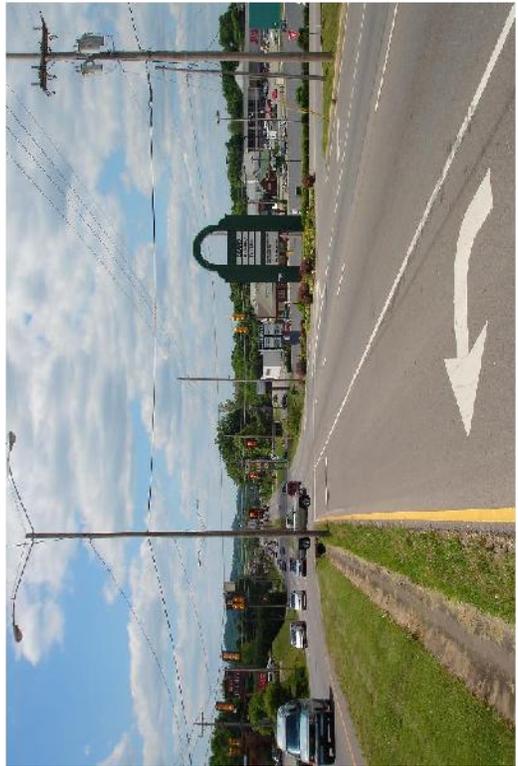
**Columbia Transportation Masterplan
Maury County, Tennessee
800 South James Campbell Boulevard (State Route 50) at the Mall**



South James Campbell Boulevard (State Route 50) Eastbound Approach



Mall Southbound Approach



South James Campbell Boulevard (State Route 50) Westbound Approach



Mall Looking North

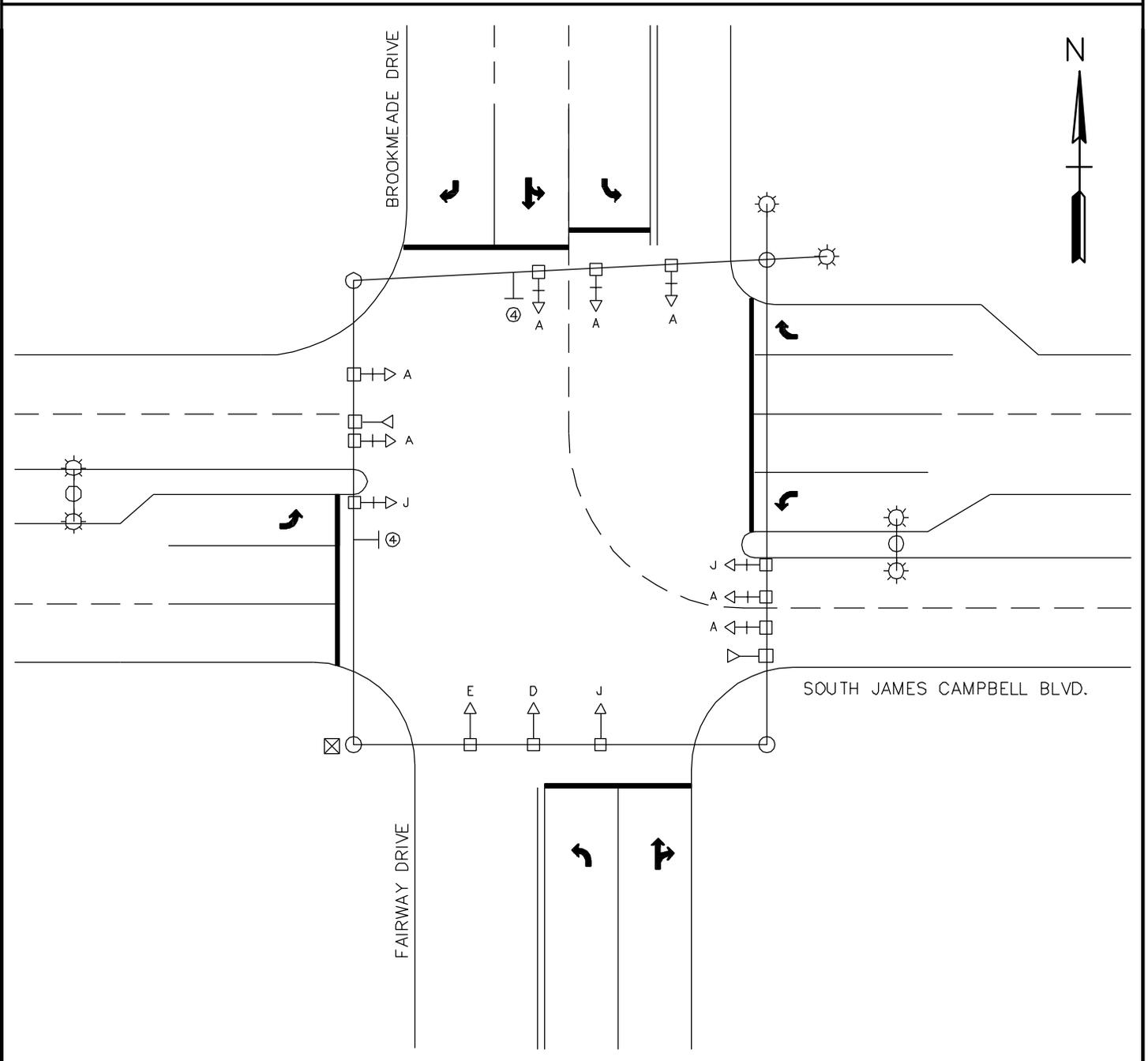
CITY OF COLUMBIA SIGNALIZED INTERSECTION INVENTORY

INTERSECTION ID: 3 N/S STREET: BROOKMEADE DR/FAIRWAY DR E/W STREET: SOUTH JAMES CAMPBELL BLVD.

DATE OF LAST UPDATE MAY 2005 OBSERVER K.M., J.C.



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LEGEND		SIGNAL HEAD TYPES		SIGNS		
WOOD POLE		E.V.P. DETECTOR				
STEEL POLE		E.V.P. CONFIRMATION STROBE		LEFT TURN ONLY ①	RIGHT TURN ONLY ②	THRU ONLY ③
MASTARM POLE		E.V.P. CONFIRMATION BEACON				
LOOP DETECTOR		POLE MOUNTED CONTROLLER CABINET		LEFT ON ARROW ONLY ④	LEFT TURN YIELD ON GREEN ⑤	STOP SIGN ⑥
SIGNAL HEAD		BASE MOUNTED CONTROLLER CABINET				
SIGNAL HEAD WITH BACKPLATE		GUY WIRE		LEFT ON ARROW ONLY ④	LEFT TURN YIELD ON GREEN ⑤	YIELD SIGN ⑦
PEDESTRIAN SIGNAL HEAD		SPAN MOUNTED SIGN LUMINAIRE				
PEDESTRIAN PUSHBUTTON						
ROADSIDE SIGN						

**Columbia Transportation Masterplan
Maury County, Tennessee
South James Campbell Boulevard (State Route 50) at Fairway/Brookmeade**



South James Campbell Boulevard (State Route 50) Eastbound Approach



Fairway/Brookmeade Northbound Approach



South James Campbell Boulevard (State Route 50) Westbound Approach



Fairway/Brookmeade Southbound Approach

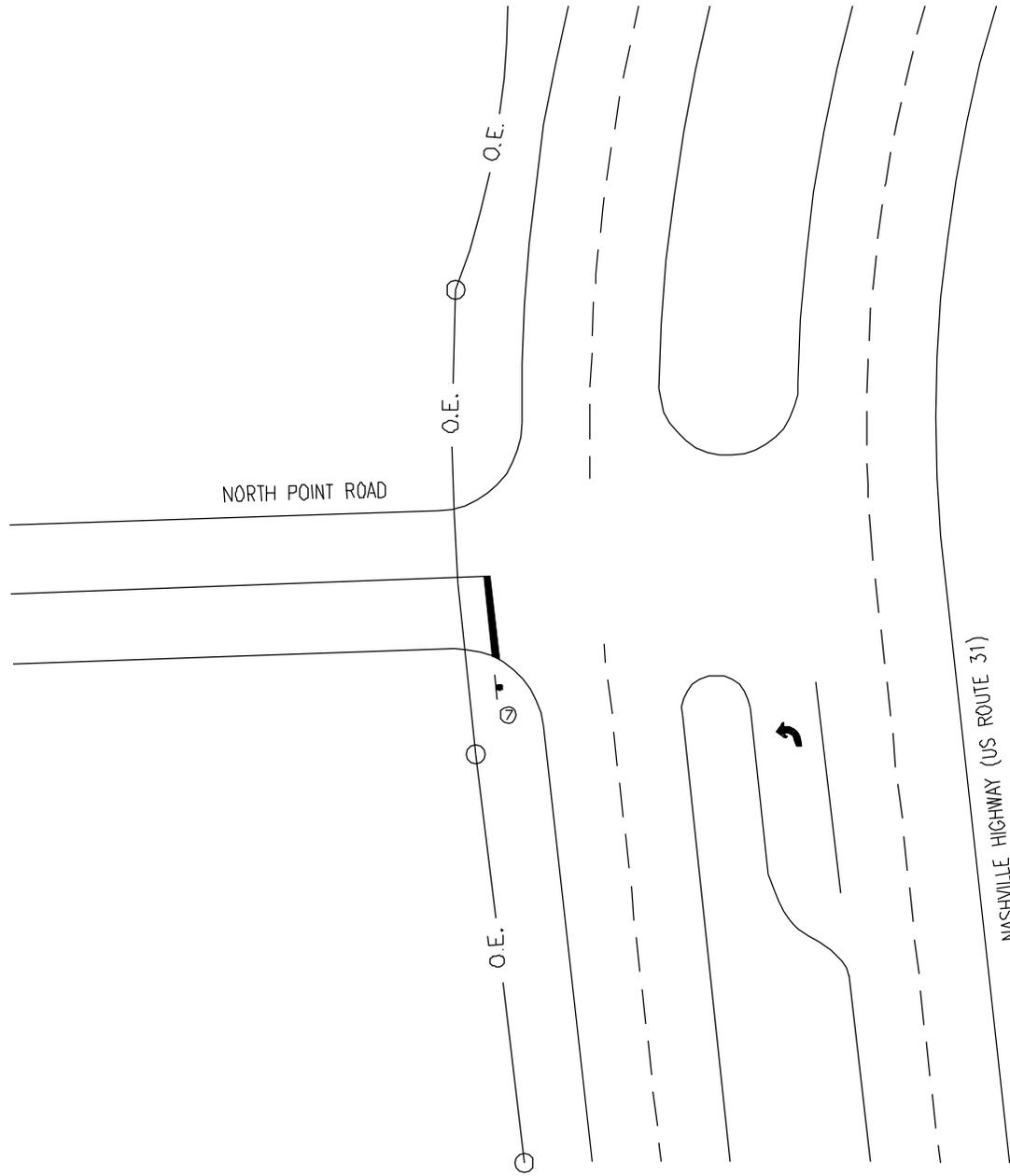
CITY OF COLUMBIA SIGNALIZED INTERSECTION INVENTORY

INTERSECTION ID: 4 N/S STREET: NASHVILLE HIGHWAY (US ROUTE 31) E/W STREET: NORTH POINT ROAD

DATE OF LAST UPDATE MAY 2005 OBSERVER K.M., J.C.



KIMLEY-HORN AND ASSOCIATES, INC.



LEGEND		SIGNAL HEAD TYPES		SIGNS		
WOOD POLE		E.V.P. DETECTOR		<div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="text-align: center;"> LEFT TURN ONLY ① </div> <div style="text-align: center;"> RIGHT TURN ONLY ② </div> <div style="text-align: center;"> THRU ONLY ③ </div> <div style="text-align: center;"> LEFT, STRAIGHT, & RIGHT TURNS ONLY ④ </div> <div style="text-align: center;"> LEFT TURN YIELD ON GREEN ⑤ </div> <div style="text-align: center;"> NO LEFT TURN ⑥ </div> <div style="text-align: center;"> STOP SIGN ⑦ </div> <div style="text-align: center;"> YIELD SIGN ⑧ </div> </div>		
STEEL POLE		E.V.P. CONFIRMATION STROBE				
MASTARM POLE		E.V.P. CONFIRMATION BEACON				
LOOP DETECTOR		POLE MOUNTED CONTROLLER CABINET				
SIGNAL HEAD		BASE MOUNTED CONTROLLER CABINET				
SIGNAL HEAD WITH BACKPLATE		GUY WIRE				
PEDESTRIAN SIGNAL HEAD		SPAN MOUNTED SIGN LUMINAIRE				
PEDESTRIAN PUSHBUTTON						
ROADSIDE SIGN						

**Columbia Transportation Masterplan
Maury County, Tennessee
North Point Road at Nashville Highway (US Route 31)**



North Point Road Eastbound Approach



Nashville Highway (US Route 31) Northbound Approach



North Point Road Looking West



Nashville Highway (US Route 31) Southbound Approach Looking North

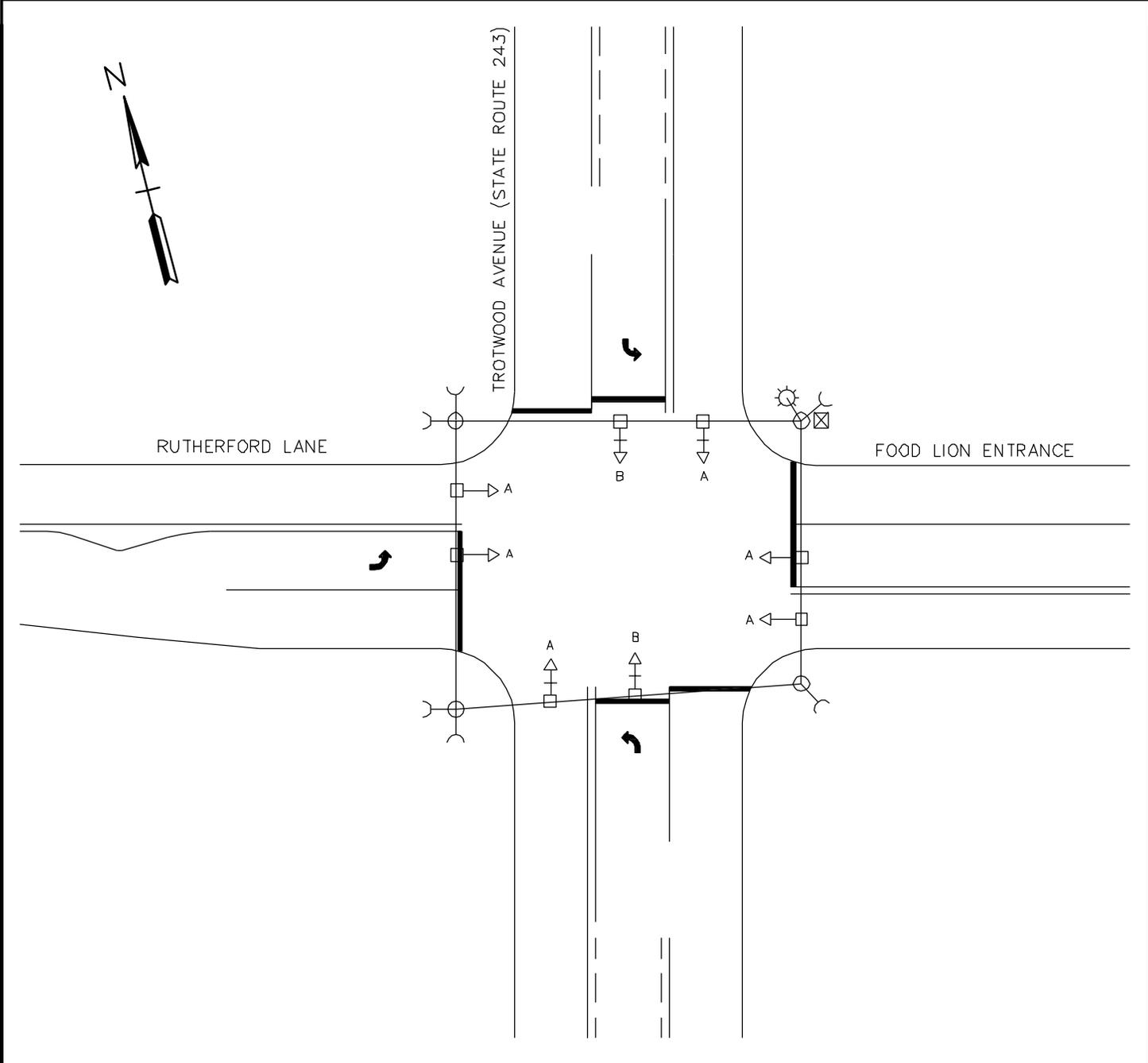
CITY OF COLUMBIA SIGNALIZED INTERSECTION INVENTORY

INTERSECTION ID: 5 N/S STREET: TROTWOOD AVE. (STATE ROUTE 243) E/W STREET: RUTHERFORD LANE

DATE OF LAST UPDATE MAY 2005 OBSERVER K.M., J.C.



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LEGEND		SIGNAL HEAD TYPES		SIGNS		
WOOD POLE		E.V.P. DETECTOR		<div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="text-align: center;"> LEFT TURN ONLY ① </div> <div style="text-align: center;"> RIGHT TURN ONLY ② </div> <div style="text-align: center;"> THRU ONLY ③ </div> <div style="text-align: center;"> STOP ⑥ </div> <div style="text-align: center;"> LEFT ON ARROW ONLY ④ </div> <div style="text-align: center;"> LEFT TURN YIELD ON GREEN ⑤ </div> <div style="text-align: center;"> YIELD ⑦ </div> </div>		
STEEL POLE		E.V.P. CONFIRMATION STROBE				
MASTARM POLE		E.V.P. CONFIRMATION BEACON				
LOOP DETECTOR		POLE MOUNTED CONTROLLER CABINET				
SIGNAL HEAD		BASE MOUNTED CONTROLLER CABINET				
SIGNAL HEAD WITH BACKPLATE		GUY WIRE				
PEDESTRIAN SIGNAL HEAD		SPAN MOUNTED SIGN LUMINAIRE				
PEDESTRIAN PUSHBUTTON						
ROADSIDE SIGN						

Columbia Transportation Masterplan
Maury County, Tennessee
Trotwood Avenue (State Route 243) at Rutherford Lane



Rutherford Lane Eastbound Approach



Trotwood Avenue (State Route 243) Northbound Approach



Rutherford Lane Westbound Approach



Trotwood Avenue (State Route 243) Southbound Approach

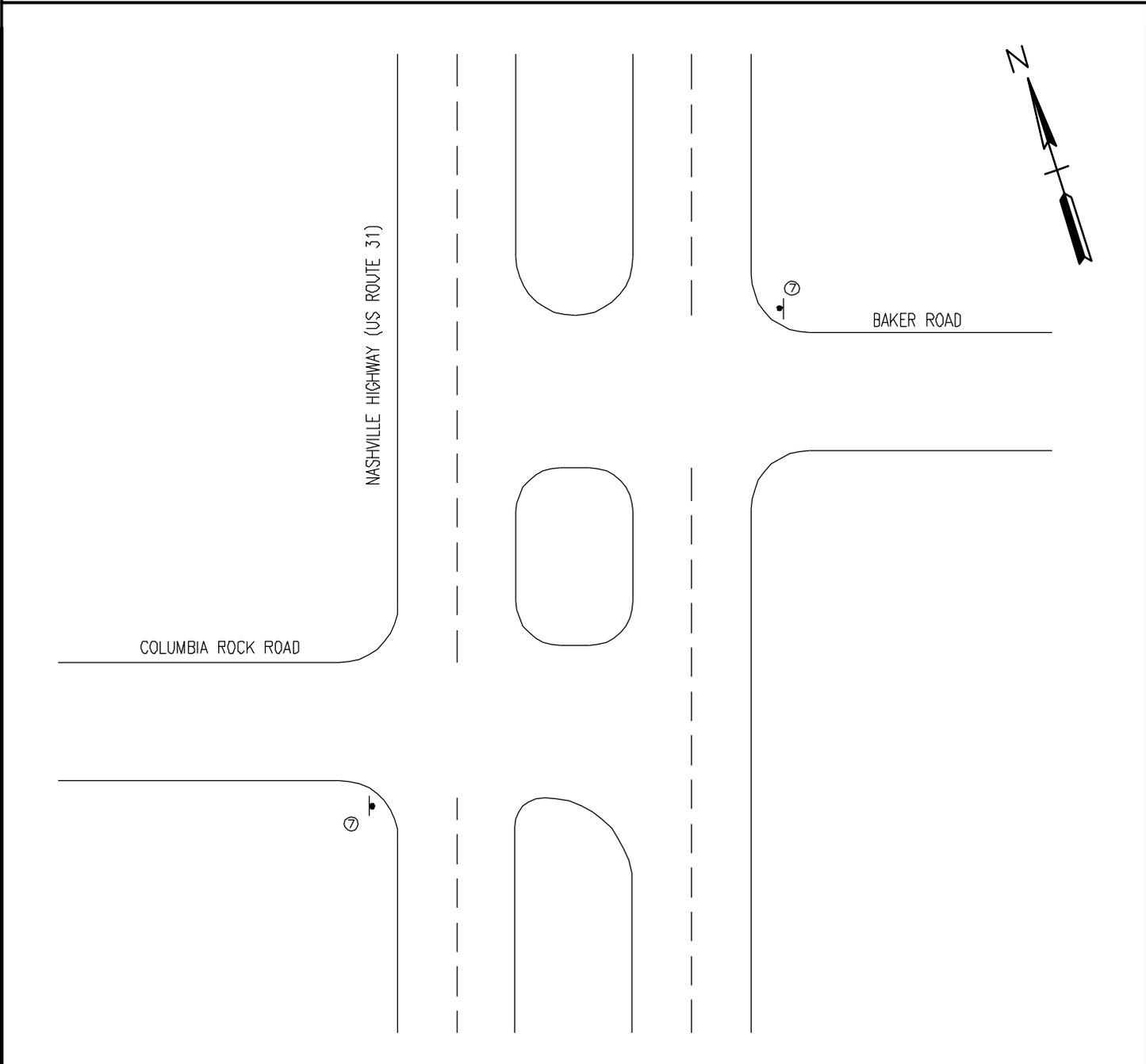
CITY OF COLUMBIA SIGNALIZED INTERSECTION INVENTORY

INTERSECTION ID: 6 N/S STREET: NASHVILLE HIGHWAY (US ROUTE 31) E/W STREET: BAKER ROAD/COLUMBIA ROCK ROAD

DATE OF LAST UPDATE MAY 2005 OBSERVER K.M., J.C.



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LEGEND		SIGNAL HEAD TYPES		SIGNS		
WOOD POLE		E.V.P. DETECTOR				
STEEL POLE		E.V.P. CONFIRMATION STROBE		LEFT TURN ONLY ①	RIGHT TURN ONLY ②	THRU ONLY ③
MASTARM POLE		E.V.P. CONFIRMATION BEACON				LEFT TURN YIELD ON GREEN ⑤
LOOP DETECTOR		POLE MOUNTED CONTROLLER CABINET		LEFT, STRAIGHT, & RIGHT TURNS ONLY ④		NO LEFT TURN ⑥
SIGNAL HEAD		BASE MOUNTED CONTROLLER CABINET			STOP SIGN ⑦	
SIGNAL HEAD WITH BACKPLATE		GUY WIRE			YIELD SIGN ⑧	
PEDESTRIAN SIGNAL HEAD		SPAN MOUNTED SIGN				
PEDESTRIAN PUSHBUTTON		LUMINAIRE				
ROADSIDE SIGN						

**Columbia Transportation Masterplan
Maury County, Tennessee
Nashville Highway (US Route 31) at Baker Road**



Nashville Highway (US Route 31) Northbound Approach
Looking South



Baker Road Westbound Approach



Nashville Highway (US Route 31) Southbound Approach

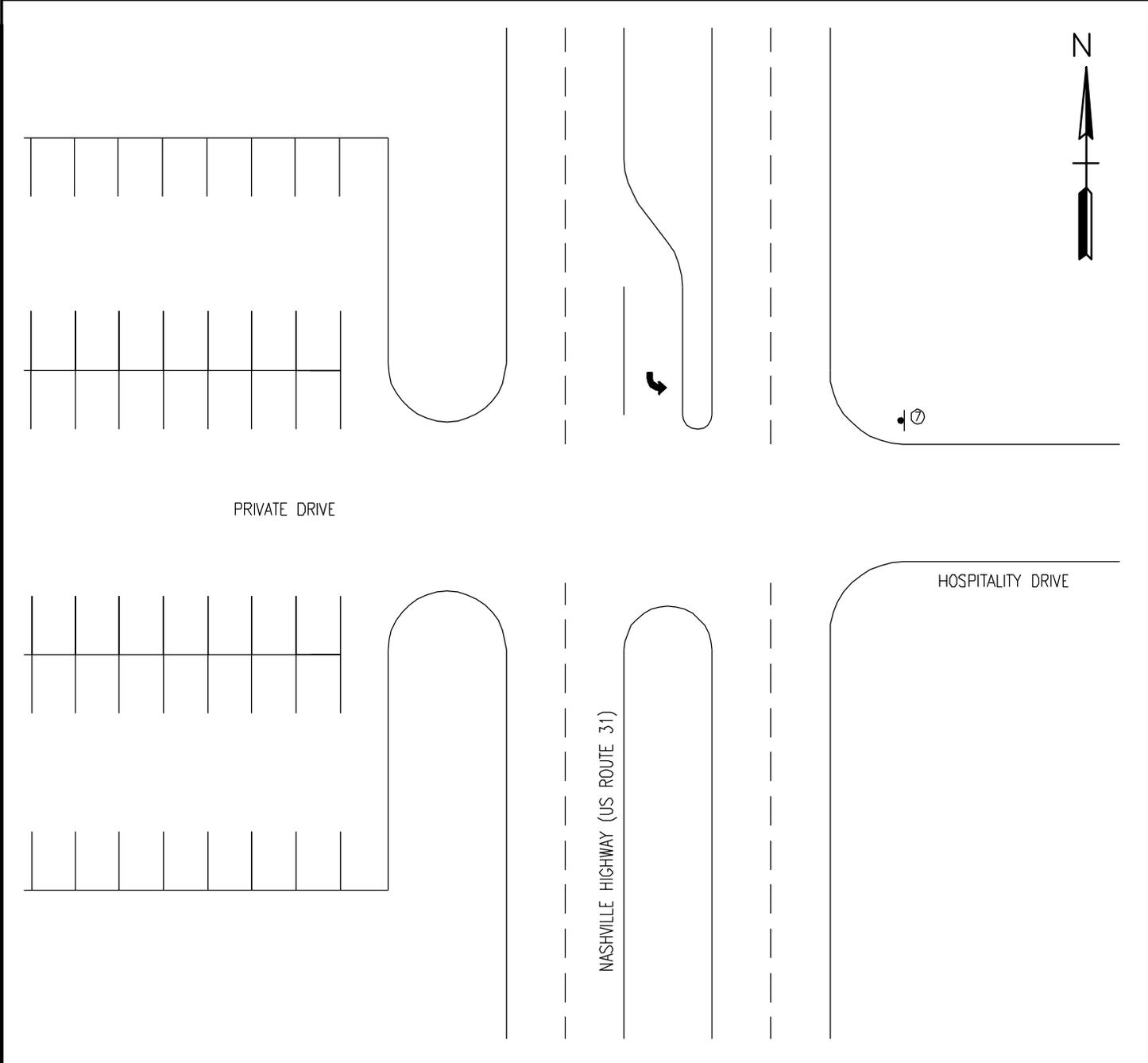
CITY OF COLUMBIA SIGNALIZED INTERSECTION INVENTORY

INTERSECTION ID: 7 N/S STREET: NASHVILLE HIGHWAY (US ROUTE 31) E/W STREET: HOSPITALITY LANE

DATE OF LAST UPDATE MAY 2005 OBSERVER K.M., J.C.



KIMLEY-HORN AND ASSOCIATES, INC.



PRIVATE DRIVE

HOSPITALITY DRIVE

NASHVILLE HIGHWAY (US ROUTE 31)

LEGEND		SIGNAL HEAD TYPES		SIGNS		
WOOD POLE		E.V.P. DETECTOR				
STEEL POLE		E.V.P. CONFIRMATION STROBE		①	②	③
MASTARM POLE		E.V.P. CONFIRMATION BEACON				
LOOP DETECTOR		POLE MOUNTED CONTROLLER CABINET		④	⑤	
SIGNAL HEAD		BASE MOUNTED CONTROLLER CABINET		⑥	⑦	⑧
SIGNAL HEAD WITH BACKPLATE		GUY WIRE				
PEDESTRIAN SIGNAL HEAD		SPAN MOUNTED SIGN				
PEDESTRIAN PUSHBUTTON		LUMINAIRE				
ROADSIDE SIGN						

**Columbia Transportation Masterplan
Maury County, Tennessee
Nashville Highway (US Route 31) at Hospitality Lane**



Nashville Highway (US Route 31) Northbound Approach



Hospitality Lane Westbound Approach



Nashville Highway (US Route 31) Southbound Approach



Hospitality Lane Looking East

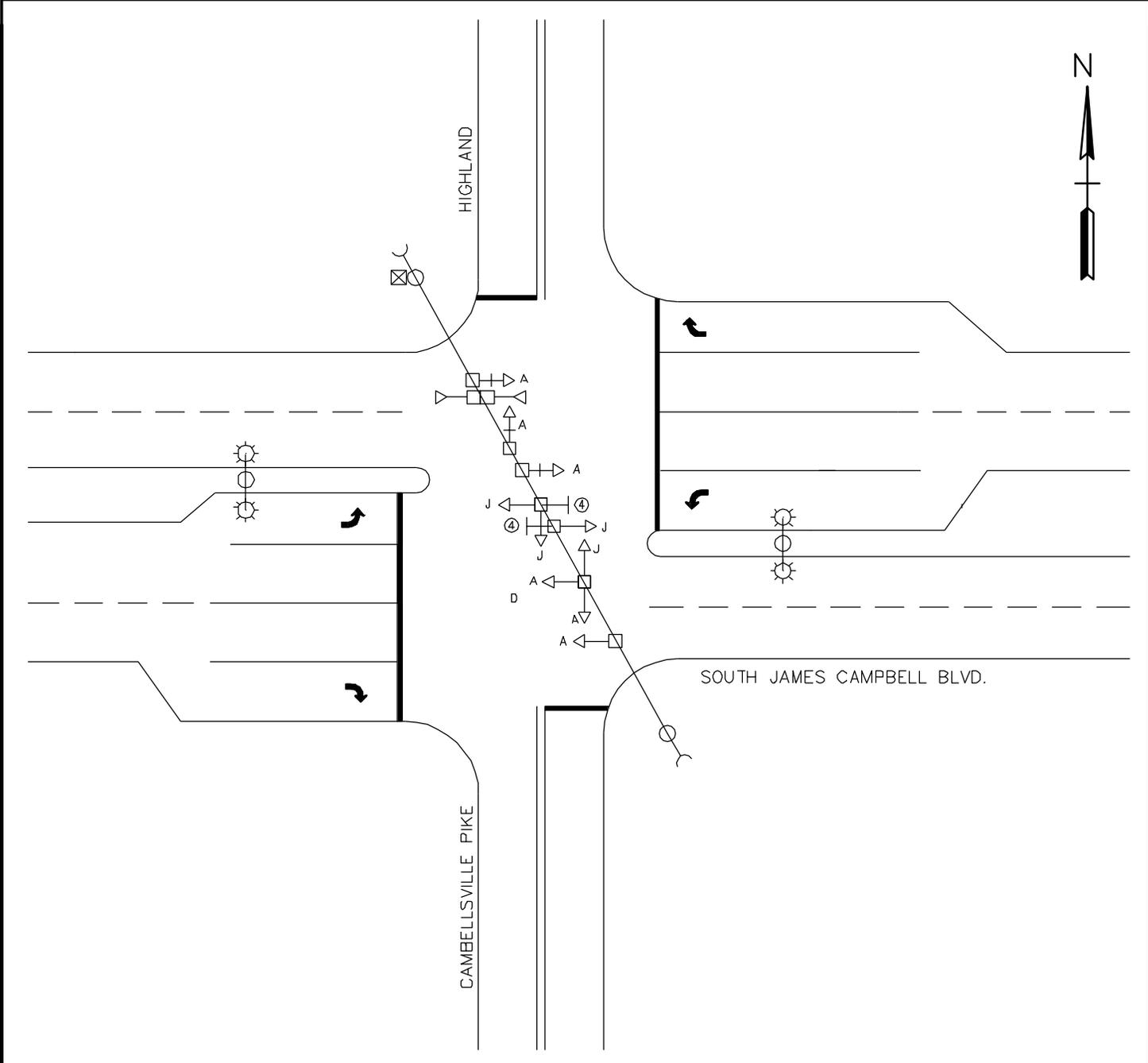
CITY OF COLUMBIA SIGNALIZED INTERSECTION INVENTORY

INTERSECTION ID: 8 N/S STREET: HIGHLAND/CAMBELLVILLE PIKE E/W STREET: SOUTH JAMES CAMPBELL BLVD.

DATE OF LAST UPDATE MAY 2005 OBSERVER K.M., J.C.



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LEGEND		SIGNAL HEAD TYPES		SIGNS		
WOOD POLE		E.V.P. DETECTOR				
STEEL POLE		E.V.P. CONFIRMATION STROBE				
MASTARM POLE		E.V.P. CONFIRMATION BEACON				
LOOP DETECTOR		POLE MOUNTED CONTROLLER CABINET				
SIGNAL HEAD		BASE MOUNTED CONTROLLER CABINET				
SIGNAL HEAD WITH BACKPLATE		GUY WIRE				
PEDESTRIAN SIGNAL HEAD		SPAN MOUNTED SIGN LUMINAIRE				
PEDESTRIAN PUSHBUTTON						
ROADSIDE SIGN						

**Columbia Transportation Masterplan
Maury County, Tennessee
South James Campbell Boulevard (State Route 50) at Campbellsville Pike**



South James Campbell Boulevard (State Route 50) Eastbound Approach



Campbellsville Pike Northbound Approach



South James Campbell Boulevard (State Route 50) Westbound Approach



Highland Southbound Approach

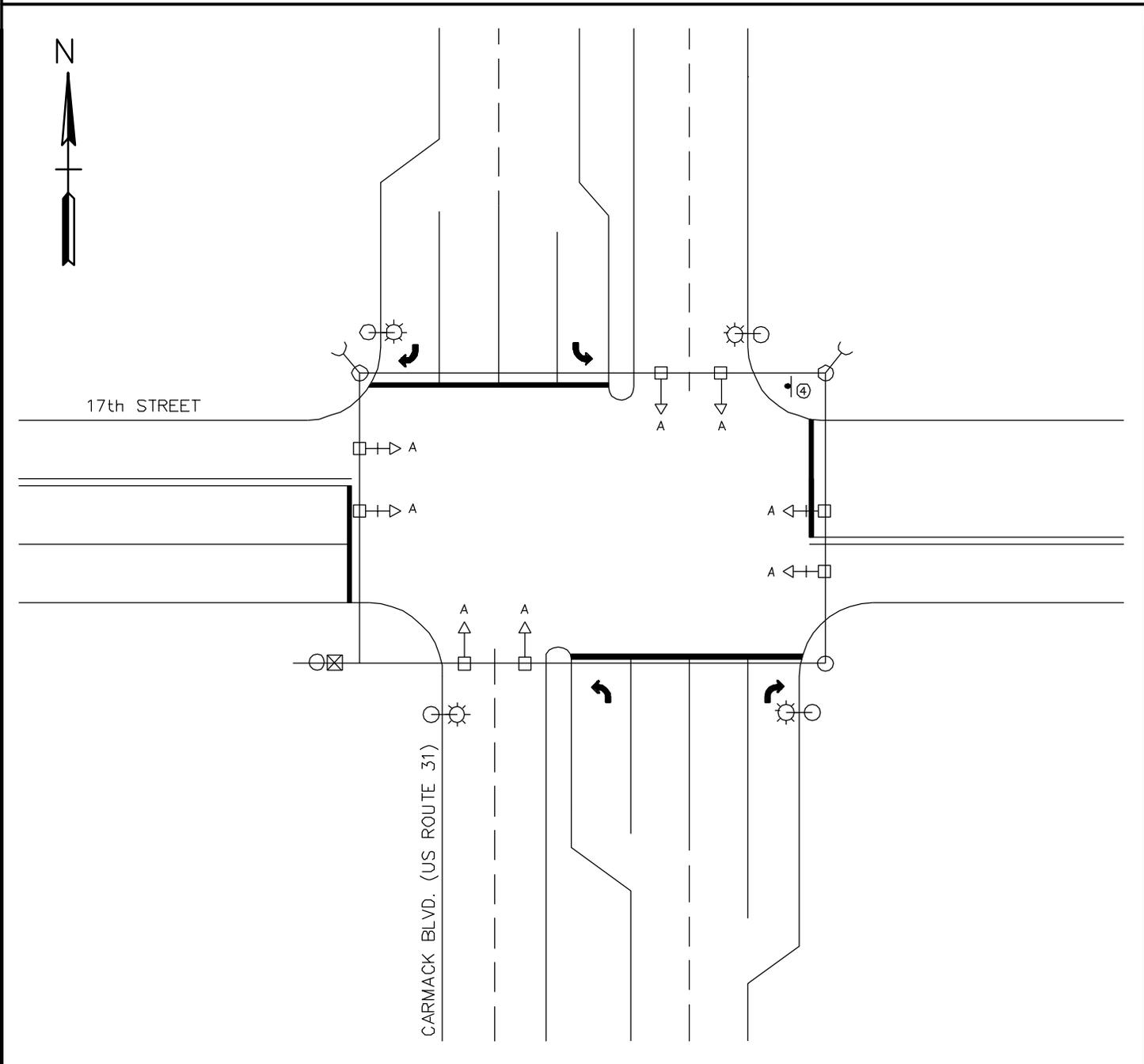
CITY OF COLUMBIA SIGNALIZED INTERSECTION INVENTORY

INTERSECTION ID: 9 N/S STREET: CARMACK BLVD. (US ROUTE 31) E/W STREET: 17th STREET

DATE OF LAST UPDATE MAY 2005 OBSERVER K.M., J.C.



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LEGEND		SIGNAL HEAD TYPES		SIGNS		
WOOD POLE		E.V.P. DETECTOR				
STEEL POLE		E.V.P. CONFIRMATION STROBE		LEFT TURN ONLY ①	RIGHT TURN ONLY ②	THRU ONLY ③
MASTARM POLE		E.V.P. CONFIRMATION BEACON				STOP SIGN ⑥
LOOP DETECTOR		POLE MOUNTED CONTROLLER CABINET		STREET NAME SIGN ④	LEFT TURN YIELD ON GREEN ⑤	YIELD SIGN ⑦
SIGNAL HEAD		BASE MOUNTED CONTROLLER CABINET				
SIGNAL HEAD WITH BACKPLATE		GUY WIRE				
PEDESTRIAN SIGNAL HEAD		SPAN MOUNTED SIGN LUMINAIRE				
PEDESTRIAN PUSHBUTTON						
ROADSIDE SIGN						

Columbia Transportation Masterplan
Maury County, Tennessee
Carmack Boulevard (US Route 31) at West 17th Street



West 17th Street Eastbound Approach



Carmack Boulevard (US Route 31) Northbound Approach



West 17th Street Westbound Approach



Carmack Boulevard (US Route 31) Southbound Approach

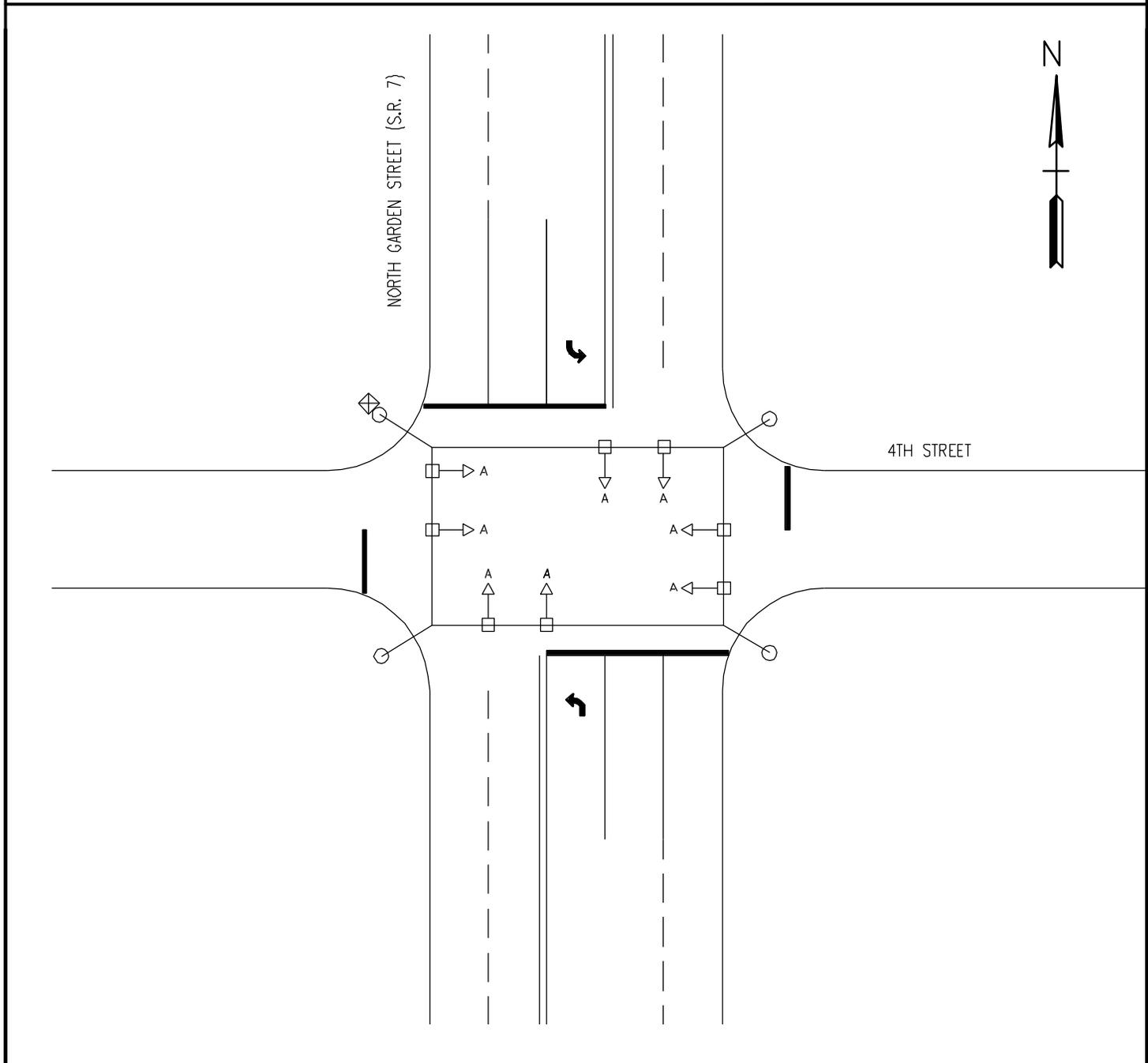
CITY OF COLUMBIA SIGNALIZED INTERSECTION INVENTORY

INTERSECTION ID: 10 N/S STREET: NORTH GARDEN STREET (S.R. 7) E/W STREET: 4TH STREET

DATE OF LAST UPDATE MAY 2005 OBSERVER K.M., J.C.



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LEGEND		SIGNAL HEAD TYPES		SIGNS		
WOOD POLE		E.V.P. DETECTOR				
STEEL POLE		E.V.P. CONFIRMATION STROBE		LEFT TURN ONLY ①	RIGHT TURN ONLY ②	THRU ONLY ③
MASTARM POLE		E.V.P. CONFIRMATION BEACON				
LOOP DETECTOR		POLE MOUNTED CONTROLLER CABINET		LEFT, STRAIGHT, & RIGHT TURNS ONLY ④	LEFT TURN YIELD ON GREEN ⑤	
SIGNAL HEAD		BASE MOUNTED CONTROLLER CABINET				
SIGNAL HEAD WITH BACKPLATE		GUY WIRE		NO LEFT TURN ⑥	STOP SIGN ⑦	YIELD SIGN ⑧
PEDESTRIAN SIGNAL HEAD		SPAN MOUNTED SIGN LUMINAIRE				
PEDESTRIAN PUSHBUTTON						
ROADSIDE SIGN						

Columbia Transportation Masterplan
Maury County, Tennessee
North Garden Street (US Route 31) at 4th Street



4th Street Eastbound Approach



North Garden Street (US Route 31) Northbound Approach



4th Street Westbound Approach



North Garden Street (US Route 31) Southbound Approach

APPENDIX D:
Recommended Improvements and Cost

Columbia, Tennessee
Long Range Transportation Plan Projects

LRTP Project Listing								
Project Number	Project Name	Location	Est. Letting Date	Project Type	ID #	Cost	Status	Description of Project
1	7th Street Sidewalks	West 7th Street		Sidewalk Impr.				Replacement of deteriorated sidewalks along W. 7th Street
2	8th/South Garden	8th @ South Garden		Traffic Signal				Add SB LT traffic light
3	Baker Road	School near Bear Creek Pike		Roadway New			Transportation Concern	Extend Baker Road to school area of Bear Creek Pike
4	Bear Creek Pike	Bear Creek Pike/Newt Hood Road		Traffic Signal				Install Traffic Signal/Intersection Improvements
5	Bear Creek Pike (SR 99)	Bear Creek Pike		Roadway Impr.			Transportation Concern	Four lane Bear Creek Pike to I-65 with center turn lane
6	Bear Creek Pike (SR 99)	Mt. Olivet to Old 99		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
7	Bear Creek Pike (SR 99)	Old 99 to I-65		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
8	Bear Creek Pike (SR 99)	Tom Hitch Pky to Mt. Olivet		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
9	Bear Creek Pike (SR 99)	US 31 to Tom Hitch Pky		Potential				Capacity Problems Identified in Columbia Transportation Study (2000)
10	Campbell Boulevard	Campbellville Pike to US 31		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
11	Campbell Boulevard	Hampshire Pike to Lion Parkway		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
12	Campbell Boulevard	Lion Parkway to Trotwood Avenue		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
13	Campbell Boulevard	Trotwood Avenue to Campbellville Pike		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
14	Columbia Academy Access	SR-99 (US-412) to Columbia Academy		Roadway Impr.			Under Development	From SR-99 (US-412) to Columbia Academy (relocation)
15	Columbia North/South Artery	West side of Columbia to Saturn Parkway		Roadway New			Transportation Concern	Build north/south artery from west side of Columbia to Saturn Parkway Connecting Industrial Park Road, Carters Creek Pike, and Hwy 7.
16	Corridor Planning	Countywide		Planning				Conduct corridor planning for all major thoroughfares throughout the county
17	Cox Elementary	Bear Creek Pike @ Newt Hood Road		Traffic Signal			Transportation Concern	Bear Creek Pike @ Newt Hood Road (light)
18	Domino's Pizza	Lyon Parkway/Westover Dr./James Campbell Blvd.		Planning			Transportation Concern	Domino's Pizza/Lyon Parkway/Westover Dr./James Campbell Blvd.
19	Drainage Improvements LP #3915	Mooreville Pike, Newt Hood Rd., Lion Pkwy.	Spring 2005	Drainage				Drainage Improvements
20	Garden Street	Downtown Area		Potential				Intersection Capacity Problems Identified in Columbia Transportation Study (2000)
21	Garden Street LP #3072	Garden Street	winter/spring 2004	Roadway Impr.	101796.00	\$2.2 million	Construction	Section 1: Garden Street
22	Hampshire Pike	Hampshire Pike @ Williamsport Pike		Traffic Signal			Transportation Concern	Install Traffic Signal/Intersection Improvements
23	Hampshire Pike (SR 99)	Between Lion Parkway and Williamsport Pike		Potential				Intersection Capacity Problems Identified in Columbia Transportation Study (2000)
24	Hampshire Pike (SR 99)	Campbell Boulevard to Lion Parkway		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
25	Hampshire Pike (SR 99)	Lion Parkway to Williamsport Pike		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
26	Hampshire Pike (SR 99)	Rutherford Lane to US 43		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
27	Hampshire Pike (SR 99)	Williamsport Pike to Cayce Lane		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
28	Hampshire Pike (SR 99)	College Park and Oak Springs Drive		Potential			Transportation Concern	Realign College Park Drive to tie into Oak Springs Drive
29	Hatcher Lane	US 31 to Campbell Boulevard		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
30	Hospital RH Lane	Hospital		Roadway Impr.			Transportation Concern	Hospital Right Hand Lane
31	Hwy 31/Spring Meade Blvd.	Hwy 31/Spring Meade Blvd. in Neapolis		Traffic Signal			Transportation Concern	Install Traffic Signal/Intersection Improvements
32	Hwy 43 Merge/entry lane	Hwy 43 @ Hwy 31 south		Roadway Impr.				Add merge/entry lane on Hwy 43 turning right from Hwy 31 South
33	Hwy 50 & Hwy 412	Hwy 50 @ Hwy 412		Roadway Impr.				Re-engineer congested area at Hwy 50 and Hwy 412 near schools
34	I-65	I-65 @ SR 99 (US-412)		Planning			TDOT Planning	Bear Creek Pike Interchange Modification
35	Industrial Park Bridge	Industrial Park Road		Roadway Impr.	Bridge # 60-03209-0070			Improve the bridge on Industrial Park Road
36	Industrial Park Bridge LP #3424	Industrial Park Bridge	Fall 2004	Roadway Impr.	101743.00			
37	Industrial Park Drive	US 43 to Campbell Boulevard		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
38	Industrial Road	Bridge over Duck River		Roadway Impr.			Under Development	Industrial Road - Bridge over Duck River
39	James Campbell Boulevard	Hampshire Pike Bridge to Trotwood Avenue		Planning				Corridor Study of James Campbell Blvd from Hampshire Pike Bridge to Trotwood Avenue
40	James Campbell Boulevard	Intersections along James Campbell Blvd.		Roadway Impr.			Transportation Concern	Re-engineer traffic flow on James Campbell Blvd. including intersections at West 7th Street, Trotwood Avenue, Hatcher Lane, Campbell Plaza, Brookmeade, Union Place, Hwy. 31, etc.
41	Keith Drive LP #3975	SR 50 (James Campbell Blvd.) @ Keith Drive		Traffic Signal	102076.00		TDOT Planning	Install Traffic Signal/Intersection Improvements
42	Lewisburg Highway	East Campbell Boulevard to Goose Creek		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
43	Lighting Improvements	Along Tom Hitch Pkwy & Hwy 43 By-Pass		Roadway Impr.				Install /Improve lighting on roads (i.e. Tom Hitch Pkwy, Hwy 43 By-Pass)
44	Lion Parkway/412	Not Specified		Drainage			Under Development	Drainage Improvements along Lion Parkway/412

LRTP Project Listing

Project Number	Project Name	Location	Est. Letting Date	Project Type	ID #	Cost	Status	Description of Project
45	Maintenance Improvements	Countywide		Roadway Impr.				Increase/improve maintenance of all city and county roads
46	Maury County Airport	Maury County Airport		Airport			Transportation Concern	Expand and improve Maury County airport
47	Maury County Park	Maury County Park Entrances		Roadway Impr.			Transportation Concern	Improve entrances to Maury County Park
48	Maury Regional Hospital Emergency Room Entrance	Maury Regional Hospital Emergency Room Entrance @ James Campbell Blvd.		Traffic Signal			Transportation Concern	Maury Regional Hospital Emergency Room Entrance off of James Campbell Blvd. (light)
49	Mooreville Pike	Not Specified		Drainage			Under Development	Drainage Improvements along Mooreville Pike
50	Mt. Pleasant Highway (SR 243)	Campbell Blvd. to Cayce Lane		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
51	Mt. Pleasant Highway (SR 243)	Cayce Lane to Rutherford Lane		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
52	Mt. Pleasant Highway (SR 243)	Rutherford Lane to Polk Lane		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
53	Nashville Highway	Nashville Highway @ North Point Drive		Traffic Signal				Traffic Signal Installation
54	New Exit at YMCA	Hwy 43/412 bypass to YMCA area		Roadway Impr.			Transportation Concern	Construct a new exit from Hwy 43/412 by-pass to YMCA area
55	New Exits	840 at Leipers Creek Road and Hwy 7		Roadway Impr.				Add exits to/from 840 at Leipers Creek Road and Hwy 7
56	New Roadway (Downtown Columbia to Tom Hitch Pkwy)	Downtown to Tom Hitch Pkwy. (Columbia)		Roadway New			Transportation Concern	Build new roadway from downtown Columbia to Tom Hitch Parkway at East 7th Street/Iron Bridge Road Intersection
57	Newt Hood Road	Not Specified		Drainage			Under Development	Drainage Improvements along Newt Hood Road
58	North Pointe Road	North Pointe Road @ Hwy 31 North		Traffic Signal			Transportation Concern	North Pointe Road @ Hwy 31 North (light)
59	Public Transit System	Area wide		Transit				Develop a public transportation system serving all individuals
60	Riverside Dr./Duck River Bridge	Riverside Dr./Duck River Bridge		Roadway Impr.			Transportation Concern	Smooth the transition from Riverside Dr. to the city side of the Duck River Bridge
61	Santa Fe Pike	US 43 to Industrial Park Drive		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
62	Southern By-Pass/Beltway	Tom Hitch Parkway to Hwy 43		Roadway New			Transportation Concern	Develop/Build a southern by-pass/Beltway connecting south end of Tom Hitch Parkway and Hwy 43 south of Columbia
63	Speed Bump Project	All residential areas		Roadway Impr.				Increase number of speed bumps in residential areas
64	SR 243	Bridge over Railroad @ 11.39		Roadway Impr.			Under Development	SR 243 Bridge over Railroad @ 11.39
65	SR 50 @ Mooreville Pike	SR 50 @ Mooreville Pike		Roadway Impr.			Transportation Concern	SR 50 @ Mooreville Pike lane modifications
66	SR 7 (US-31)	8th to west of 6th & SR 99 (High St) to SR 7		Roadway Impr.			Under Development	SR 7 (US-31) 8th to west of 6th & SR 99 (High St) to SR 7
67	SR 7 (US-31)	South of Neeley Hollow to Existing 4-lane		Planning			TDOT Planning	US-31 (SR 7) South of Neeley Hollow to Existing 4-lane
68	SR 99/50 (US-412)	Hampshire Pike to James Campbell Blvd.		Planning			TDOT Planning	Widening of Hampshire Pike SR-6 (US-43) to North James Campbell Blvd.
69	SR-245 (Campbellsville Pike) / Indian Camp Springs Road	Campbellsville Pike/Indian Camp Springs Road Intersection		Roadway Impr.				Re-engineer Campbellsville Pike/Indian Camp Springs Road Intersections
70	Sunnyside Drive	Sunnyside Drive to Trotwood Avenue		Roadway Impr.			Transportation Concern	Add RT lane on Sunnyside Dr. to Trotwood Ave.
71	Sunnyside/Campbellsville Pike	Sunnyside Dr. @ Campbellsville Pike		Traffic Signal			Transportation Concern	Install Traffic Signal
72	Theta Pike	Theta Pike @ SR 6		Roadway Impr.				Add SB turning lane to the north on Theta Pike
73	Tom Hitch Parkway	Bear Creek Pike to E. 6th Street Ext		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
74	Tom Hitch Parkway	E. 6th Street Ext. to Lewisburg Highway		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
75	Traffic Control Technology			Research				Invest in traffic control technology
76	Trotwood Avenue	7th Street to Campbell Boulevard		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
77	Trotwood Avenue	Trotwood Avenue south of the hospital		Roadway Impr.			Transportation Concern	Four lane Trotwood Avenue south of the hospital
78	Trotwood Avenue RR Bridge	Trotwood Avenue RR Bridge		Roadway Impr.	60950-1236-94			Trotwood Avenue RR Bridge
79	US 31	Bear Creek Pike to Theta Pike		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
80	US 31	Campbell Boulevard to Cord Lane		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
81	US 31	Carters Creek Pike to Bear Creek Pike		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
82	US 31	Santa Fe Pike to 7th Street		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
83	US 31	Saturn Parkway to Carters Creek Pike		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
84	US 31	Theta Pike to Santa Fe Pike		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
85	US 43	Theta Pike to Santa Fe Pike		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
86	US 43	US 31 to Theta Pike		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
87	US 43 Interchanges	All interchanges from Old Zion Rd. to US 31		Potential				Intersection Capacity Problems Identified in Columbia Transportation Study (2000)

LRTP Project Listing

Project Number	Project Name	Location	Est. Letting Date	Project Type	ID #	Cost	Status	Description of Project
88	Wal-Mart Signal	Wal-Mart		Traffic Signal			Transportation Concern	Improve traffic flow at Wal-Mart
89	Walnut Lane	Walnut Lane @ Trotwood Avenue		Roadway Impr.			Transportation Concern	Walnut Lane @ Trotwood Avenue across from Graymere Manor Road
90	West 7th Street	US 31 to Trotwood Avenue		Potential				Roadway Capacity Problems Identified in Columbia Transportation Study (2000)
91	Woodland Park Bridge LP #2500	Woodland Park Bridge Entrance over RR	Fall 2003	Roadway Impr.			Under Development	Bridge Over Railroad
92	SR-245 (Campbellsville Pike)	Sheegog Lane @ SR-245 (Campbellsville Pike)		Roadway Impr.			Under Development	Intersection Sheegog Lane @ SR-245 (Campbellsville Pike)
93	SR 7 at Industrial Park Road			Traffic Signal				Traffic Signal Installation (too dark?)

Roadway Improvements

Route	Roadway	From Roadway	To Roadway	From MP	To MP	Length	Improvement	Cost per Mile	Bridge Cost	Interchange Cost	Estimated Project Cost
970	Iron Bridge Road	East End Street	Union Grove Road	0.67	4.46	3.79	2 Lane to 4 Lane	\$5,000,000			\$18,950,000
1243	Mooresville Pike	Morrow Lane	Mooresville Pike	7.65	7.97	0.32	2 Lane to 4 Lane	\$5,000,000			\$1,600,000
3194	James Campbell Boulevard	SR 50 (Hampshire Pike)	Industrial Park Road	0.00	0.73	0.73	4 Lane to 6 Lane	\$5,000,000			\$3,650,000
3198	Hatcher Lane	SR 50 (James Campbell Blvd)	Highland Avenue	0.00	1.45	1.45	2 Lane to 4 Lane	\$5,000,000			\$7,250,000
3209	Industrial Park Road	James Campbell Blvd	US 43	0.00	0.15	0.15	2 Lane to 4 Lane	\$5,000,000			\$750,000
3211	Lion Parkway	SR 50 (James Campbell Blvd)	SR 99 (Hampshire Pike)	0.00	1.13	1.13	2 Lane to 4 Lane	\$5,000,000			\$5,650,000
3215	Rutherford Lane	SR 99 (Hampshire Pike)	SR 243 (Trotwood Avenue)	0.00	2.18	2.18	Two Way Left Turn Lane	\$2,000,000			\$4,360,000
4039	Sunnyside Lane	SR 243 (Trotwood Avenue)	SR 7 (Pulaski Highway)	0.00	3.06	3.06	2 Lane to 4 Lane	\$5,000,000			\$15,300,000
4837	Tom J. Hitch Parkway	SR 7 (James Campbell Blvd)	SR 99 Bear Creek Pike	0.00	3.54	3.54	2 Lane to 4 Lane	\$5,000,000	\$2,000,000	\$2,000,000	\$21,700,000
SR 243	Trotwood Avenue	Rutherford Lane	SW of SR 50 (James Campbell Blvd)	8.37	10.21	1.84	2 Lane to 4 Lane	\$5,000,000			\$9,200,000
SR 243	Trotwood Avenue	SR 50 (James Campbell Blvd)	SR 99 (West 7th Street)	10.47	11.93	1.46	2 Lane to 4 Lane	\$5,000,000			\$7,300,000
SR 245	Campbellsville Pike	Sunnyside Lane	Sheegog Lane	9.91	10.58	0.67	2 Lane to 4 Lane	\$5,000,000			\$3,350,000
SR 50	Hampshire Pike	SR 50 (Williamsport Pike)	SR 50 (James Campbell Blvd)	12.23	13.32	1.09	2 Lane to 4 Lane	\$5,000,000			\$5,450,000
SR 50	James Campbell Boulevard	SR 99 (West 7th Street)	SR 7 (Pulaski Highway)	13.32	16.20	2.88	4 Lane to 6 Lane	\$5,000,000			\$14,400,000
SR 50	James Campbell Boulevard	SR 7 (Pulaski Highway)	Mooresville Pike	16.20	16.93	0.73	4 Lane to 6 Lane	\$5,000,000			\$3,650,000
SR 6	Nashville Highway	US 43/SR 99	Greens Mill Road	23.29	28.47	5.18	4 Lane to 6 Lane	\$5,000,000	\$2,000,000		\$27,900,000
SR 7	Pulaski Highway	Sheegog Lane	Cord Drive	10.35	11.31	0.96	2 Lane to 4 Lane	\$5,000,000			\$4,800,000
SR 99	Hampshire Pike	US 43	SR 50 (Williamsport Pike)	13.30	15.25	1.95	2 Lane to 4 Lane	\$5,000,000			\$9,750,000
SR 99	West 7th Street	SR 50 (James Campbell Blvd)	Hastings Street	15.25	16.35	1.10	2 Lane to 4 Lane	\$5,000,000			\$5,500,000
SR 99	Bear Creek Pike	SR 6 (Nashville Highway)	I-65	16.93	24.15	7.22	2 Lane to 4 Lane	\$5,000,000			\$36,100,000
	Sunnyside Lane	US 43	Sunnyside Lane	--	--	2.33	New 4 Lane Roadway	\$4,000,000			\$9,320,000
	Sheegog Lane	SR 7 (Pulaski Highway)	Morrow Lane	--	--	1.24	New 4 Lane Roadway	\$4,000,000			\$4,960,000
	Tom J. Hitch Parkway	Mooresville Pike	SR 7 (James Campbell Blvd)	--	--	0.68	New 4 Lane Roadway	\$4,000,000			\$2,720,000
	Union Grove Road	Iron Bridge Road	I-65	--	--	2.89	New 4 Lane Roadway	\$4,000,000	\$2,000,000	\$2,000,000	\$15,560,000
	East 6th Street	High Street	Iron Bridge Road	--	--	0.89	2 Lane to 4 Lane	\$5,000,000			\$4,450,000
	East 6th Street	Eastland Drive	Iron Bridge Road	--	--	0.22	New 4 Lane Roadway	\$4,000,000			\$880,000
	Columbia Rock Road	Witherspoon Road	Theta Pike	--	--	1.48	New 2 Lane Roadway	\$2,500,000			\$3,700,000

Total \$248,200,000

\$250,425,000