LAFAYETTE, TN

Community Transportation Planning Grant

SR-52/ SR-10 Corridor Study

Table of Contents

INTRODUCTION

The City of Lafayette and the Tennessee Department of Transportation (TDOT) initiated the SR-52/SR-10 Corridor Study in March 2017 after the City made a successful application for Tennessee Community Transportation Planning Grant (CTPG) funds. This document identifies the vision and goals for the study and presents the findings of the study team in the form of a data inventory, overview of public involvement, existing conditions review, traffic analysis, future conditions analysis, and recommendations for improvements and policy guidance.

Lafayette is located in north- central Tennessee just south of the Tennessee/ Kentucky border. The impetus for the grant was that SR-52 operates a major east/west thoroughfare with frequent commercial and retail businesses located along it. Stakeholders identified transportation mobility and safety concerns that include:

- lack of turning lanes
- inefficient traffic control at certain intersections
- perception, that in certain segments, SR-52 has a cross-section that does not align with traffic demand or community needs
- lack of access control
- lack of vehicular and pedestrian mobility

SR-52 provides connectivity to and from the City of Lafayette and serves as a primary east-west route in the region. SR-10/College Street is a major north-south route that connects through the corridor. Without easy access to an Interstate, the corridors provide key connectivity to commercial, residential and recreational areas and provide access for commercial heavy truck and semi traffic within the region. The routes also serve as vital links for commerce and economy in the community.

In certain areas, SR-52 is characterized by frequent strip commercial sites with multiple access driveways. The City and County are desirable places to live due to lower cost housing and as a result the City has a high proportion of rental/multifamily style residential properties. A town square consisting of a roundabout, the Macon County courthouse and old main street buildings exists adjacent to the study area along College Street.

There are concerns about the proper routing of trucks to the city's industrial-zoned area, as well as truck ingress/egress to commercial properties along SR-52. Traffic often cuts through local roads to avoid driving through the town square. Maneuverability of trucks along the SR-52 corridor is restricted by tight turning radii and inadequate turn lanes. Pedestrian and bike routes could be improved with an increase in the number of sidewalks and improved access management. Strengthening active transportation and discouraging truck traffic through the downtown are concerns. There are safety concern issues regarding the need for improved signalization at several intersections along the route.

The corridor study and resultant findings will aim to preserve and enhance the operational and safety performance of the corridor in and around Lafayette. The greatest impact of the study on the state transportation system will be improvements to safety, efficiency of movement and planning for future development.

Tools that can assist communities in the development of safe and attractive transportation are access management plans and a suite of land use planning strategies targeted at improving traffic flow as land is developed. Access management plans impact safety by controlling the placement and access of driveways. By consolidating the length or number of driveways, it becomes safer for vehicles to enter a property and for cyclists and pedestrians to pass by a property by reducing conflict points with vehicles. Properly implemented, access management measures not only enhance safety, but can add to the attractiveness of roadway facilities.

Land use and zoning planning strategies encourage thorough review of transportation needs during the development process. Zoning approvals are generally tied to transportation improvements especially sidewalks, controlled entrances and turn lanes, which are needed to improve the capacity and safety of the transportation system based upon the additional impacts of new development.

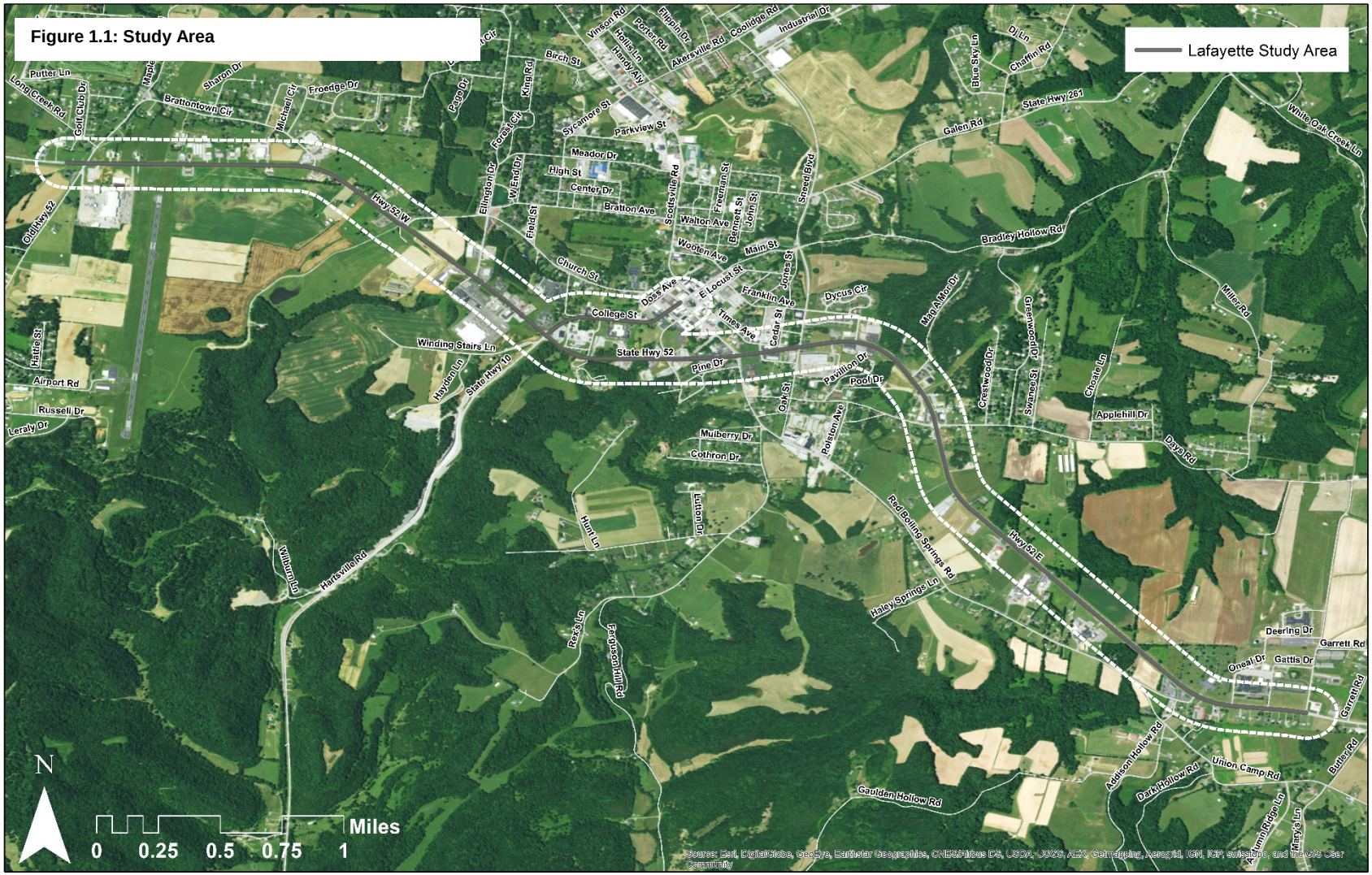


Figure 1.1: Study Area
Lafayette Study Area
N
0 0.25 0.5 0.75 1
Miles
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

1.1. Project Study Area

The project study area is an approximately five mile section of SR-52 and 0.5 mile portion of SR-10 within Lafayette, Macon County. The study area begins at SR-52 (Hwy 52 Bypass) from near Brattontown Circle to Days Road (east) and includes the 0.5 mile portion of SR-10 from SR-52 (Hwy 52 Bypass) to Church Street. The study area is show in Figure 1.1.

1.2. Grant Application Background

The purpose of the grant application was to seek funds for a study to identify strategies to improve transportation operations within the study area for vehicular traffic, pedestrians, bicyclists and freight movement. Specifically, the study would analyze the corridors to identify deficiencies and develop improvement strategies for:

- Safety improvements at intersections and identified high accident locations
- Operational improvements at critical areas
- Accommodation of all travel modes as appropriate
- Access management on developed properties
- General roadway capacity improvements

The benefits to the community will take the form of visible, near-term improvements as well as longer- term improvements through the corridor planning and land-use plan components. Immediate benefits will come from operational modifications and minor construction projects for spot improvements. A proposed action plan will provide a systematic approach to implementation and further development of study recommendations.

The intent of this corridor study is to address four distinct but related concepts: overall corridor plan, access management issues, spot intersection improvements, and safety-focused considerations.

- The spot intersection improvement considerations include both operational improvements, as well as, slightly more involved projects, which may require right-of-way acquisition and more extensive construction than the access management projects. The study will provide adequate information regarding these projects, including functional schematics and cost estimates where applicable, to allow them to be developed either as locally funded projects, through the TDOT Locally Managed Projects process, or through traditional TDOT project development channels.
- Safety considerations will play a direct role in the study's evaluation and suggestions. This includes intersection and segmental factors. Vehicle crash records and field observations will help inform the study's review and ultimate recommendations.
- Access management plan will be implemented both through adoption of access management policies for new development along the corridor, as well as, retrofit of existing access as a series of small projects as funding is available or when opportunities present themselves through redevelopment of properties abutting the routes. Business owners along the route should be engaged in the process and provided information on the benefits of access management to the productivity of their businesses.
- The overall corridor plan will be used to guide implementation of the individual study elements to ensure that future improvements are done in a way that is logical for the planned future development of the corridor.

1.3. Vision

The vision of the Lafayette SR 52/ SR-10 Corridor Study is to address prevailing community concerns and plan for future needs along the corridor while supporting the existing historic square commerce by developing a comprehensive corridor plan for the study area that addresses current deficiencies in capacity and safety, provides actionable guidance for improvements, and creates a framework to guide future development and public investment through economic development policy and access management policy for the subject routes.

1.4. Goals

Goal 1: Enhance the functionality of the routes for all users through geometric and operational improvements to address safety concerns capacity deficiencies, and increase multimodal connections and access management issues.

The SR-52/ SR-10 corridor suffers lack of turning lanes and inefficient traffic control at certain intersections. Increased traffic flow through the area has exacerbated these issues. The plan will identify deficiencies and develop both near-term and long-term solutions to address those issues.

Goal 2: Provide for the efficient movement of people and goods through the corridor and the adjacent residential streets.

Truck traffic utilizing SR-10 and SR-52 does not have an efficient north-south route through the city. This document will evaluate mitigating measures and provide guidance for reducing heavy truck traffic on local streets. This document will also suggest improvements to infrastructure to improve ease of use and safety for heavy truck traffic in targeted areas.

Goal 3: Support appropriate mobility along the project corridors and multimodal connections between the adjacent historic downtown square and recent commercial development along the corridor.

The plan will identify possible scenarios for modifications to the cross-section and design of the study corridors in support of community needs and priorities: safe and efficient movement of people and commerce, multimodal accessibility and reliable transportation network.

Goal 4: Ensure compatibility of future development with the transportation network through appropriate transportation planning.

The plan will develop access management guidance and economic development policy guidance for the corridor to ensure that development occurs in a way that is integrated with the ability of the transportation network to support the increasing demand. This plan will support the development of a future major thoroughfare plan.

1.5. Study Team

Individuals representing TDOT and the City of Lafayette comprised the Study Team. Neel-Schaffer, Inc. assisted in the process. Representatives of the organizations include:

Richard Driver, Mayor, City of Lafayette
Steve Jones, Mayor, Macon County
Annette Morgan, Finance Officer, Recorder, City of Lafayette
Steve Turner, Council Member, City of Lafayette
Jason Phelps, Council Member, City of Lafayette
Jonathan Russell, TDOT
Joren Dunnavant, TDOT
Kwabena Aboagye, TDOT
Mark Dudney, UCDD Dale Hollow RPO
Greg Judy, Neel-Schaffer, Inc
Trey Todd, Neel-Schaffer, Inc
Maria Scheitz, Neel-Schaffer, Inc

CHAPTER 2: DATA COLLECTION AND INVENTORY

The data collection and inventory process included a review of roadway features, planned developments, traffic, crash history and existing plan documents.

2.1 Roadway Features

SR-52 is considered a Rural Minor Arterial. There is no standard cross-section within the corridor. The right-of-way width, number of lanes and speed limit vary considerably. In the developed areas of the corridor, the road widens to 5 lanes and the speed limit drops to 40 mph.

Table 2.1: SR-52 Roadway Features

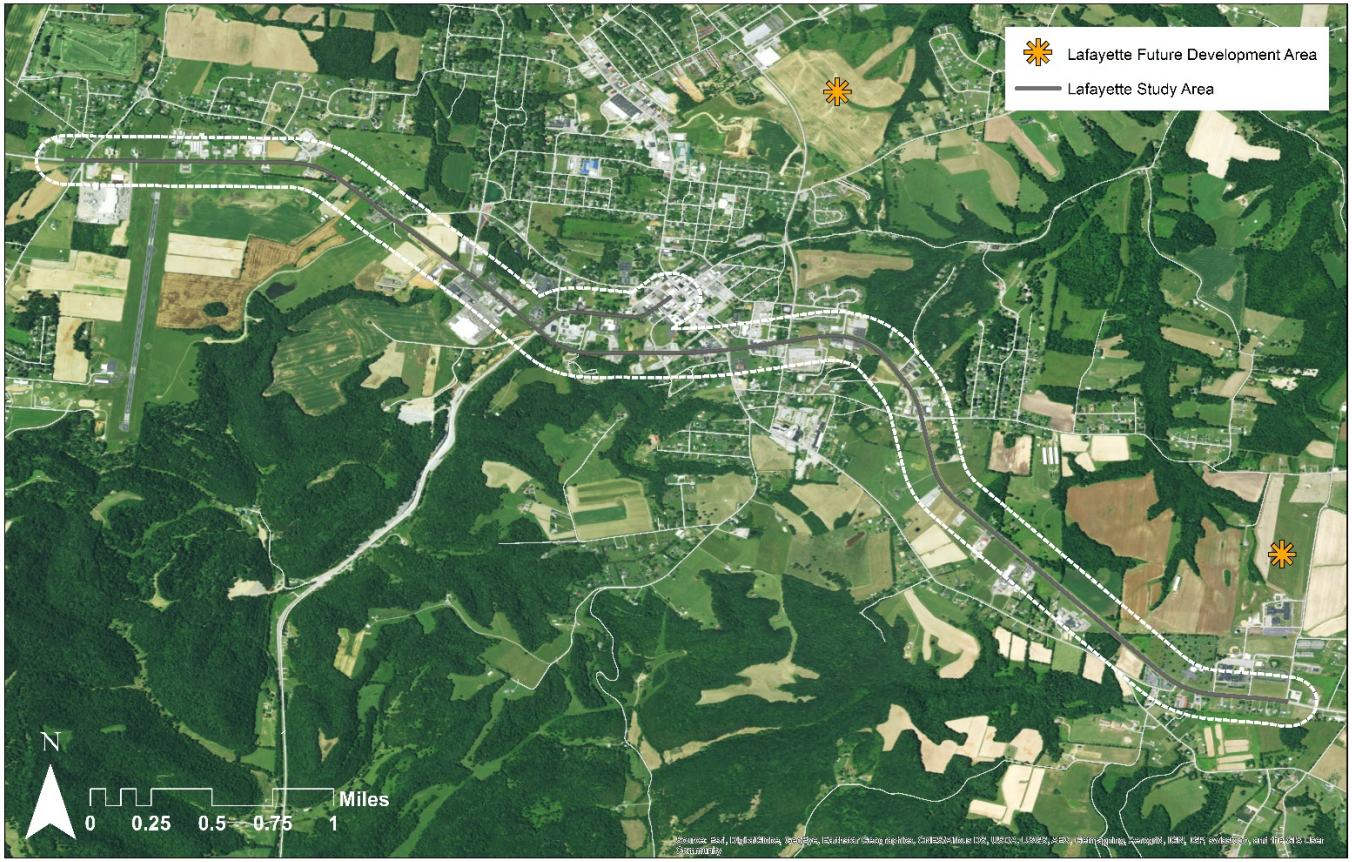
Start Point	End Point	Functional Class	Right of Way (ft)	Access Control	Type of Terrain	Land Use	Number of Lanes	Speed Limit
Brattontown Circle (West)	Brattontown Circle (East)	Rural Minor Arterial	200/120	None	Rolling	Mixed Residential & Commercial	2	40
Brattontown Circle (East)	Church St.	Rural Minor Arterial	120/70	None	Rolling	Mixed Residential & Commercial	2/ 4 (TWLTL Begins at Church)	40
Church St.	Ellington Dr.	Rural Minor Arterial	80	None	Rolling	Rural	5	40
Ellington Dr.	Days Rd (West)	Rural Minor Arterial	80/90/150	None	Rolling	Commercial	5	40
Days Rd (West)	Red Boiling Springs (East)	Rural Minor Arterial	150	None	Rolling	Mixed Residential & Commercial	4/4 (3 lanes begins E of Red)	50
Red Boiling Springs (East)	Days Rd (East)	Rural Minor Arterial	150	None	Rolling	Mixed Residential & Commercial	3	50 (25 MPH School Zone)

2.2 Planned Development

Future elementary and high school construction is planned adjacent to and directly behind the existing school property at the intersection of SR-52 and Days Road East. The property has been purchased. An increase in traffic in the vicinity around the school is anticipated in the future. Approximately 1400 new students will be attending the newly developed schools, with the anticipation of 600 new vehicular trips within this area.

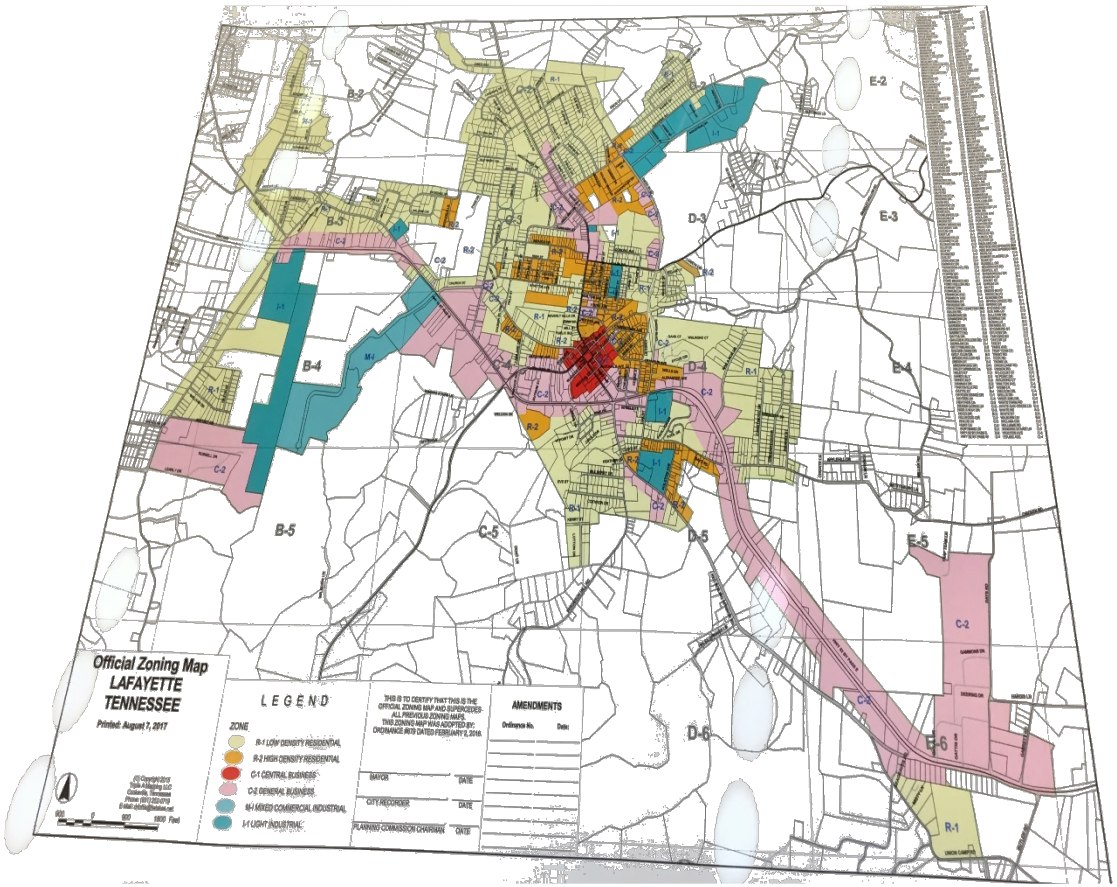
Future development is expected in the industrial park on Sneed Rd near its intersection with Highway 261. Sneed Road intersects SR-52 in the project area. An increase in traffic, including an increase in heavy truck traffic is expected (Figure 2.1).

Figure 2.1: Future Development Areas



The official zoning map for the City of Lafayette, TN is on file in the office of the Lafayette Regional Planning Commission and is shown below. The zoning map does not show planned future developments, but it illustrates the current use categories approved for each parcel of land within Lafayette. There is no approved comprehensive plan containing a future land use map and transportation plan for the City of Lafayette.

Figure 2.2: Official Zoning Map for the City of Lafayette, TN



2.3 Traffic Counts

Traffic Counts were conducted on March 23, 2017 at the locations shown in Figure 2.4 and listed below.

Peak Hour Turning Movement Count Locations:

1. SR-52 @ Old Hwy 52 / Brattontown Cir
2. SR-52 @ Old Hwy 52 / Brattontown Cir E
3. SR-52 @ Church St
4. SR-52 @ Ellington Dr (12-hour)
5. SR-52 @ College St / SR-10
6. SR-52 @ Spring Hollow Rd / Spring Dr
7. SR-52 @ Red Boiling Springs Rd (W)
8. SR-52 @ Sneed Blvd / Oak St (12-hour)
9. SR-52 @ Days Rd (W)
10. SR-52 @ Red Boiling Springs Rd (E)
11. SR-52 @ Days Rd (E) (12-hour)
12. SR-10 @ Burtrum Ln

The count data was collected using video cameras on site and processed manually in the office. Counts were conducted between the hours of 7-8 AM, 12-1 PM, and 3-5 PM (SR-10 at SR-52 had a PM count between 3:30-5:30 PM; Red Boiling Springs West at SR-52 had a PM count between 2:30-4:30 PM). These counts made it possible to conduct the capacity analysis on both an intersection and corridor basis. Counts were taken for four hours on March 23, 2017 at the locations marked Peak Hour TMC and 12 hours at the locations marked 12 hour TMC. Results of the counts are included in Appendix A.

Along with these traffic counts, a field inventory was collected at all of the intersections to clearly define traffic parameters. These parameters include measuring lane widths, identifying speed limits, and taking pictures of all approaches at each intersection. Sample field inventory data collection sheets are included as Figure 2.5.

Figure 2.4: Traffic Count Locations

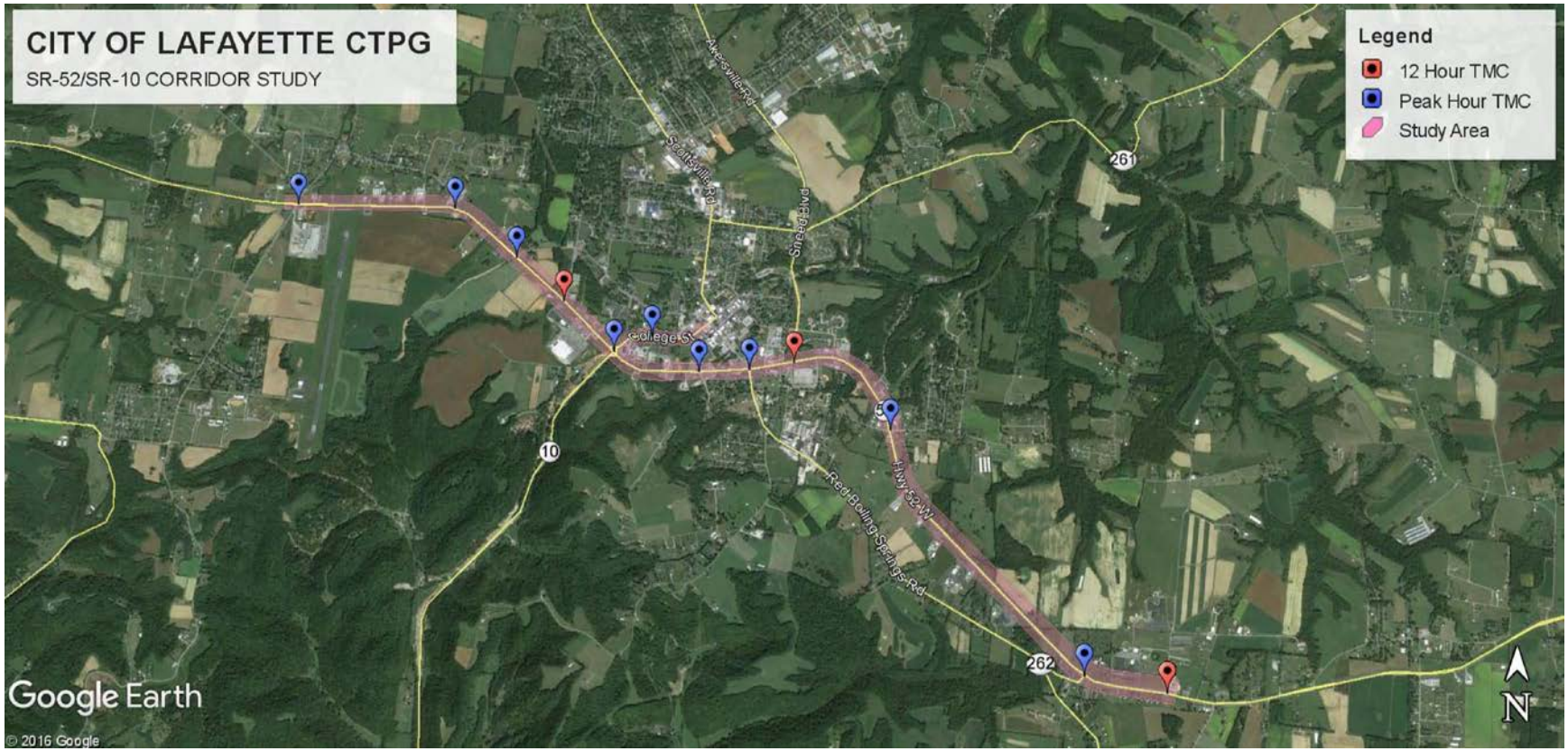
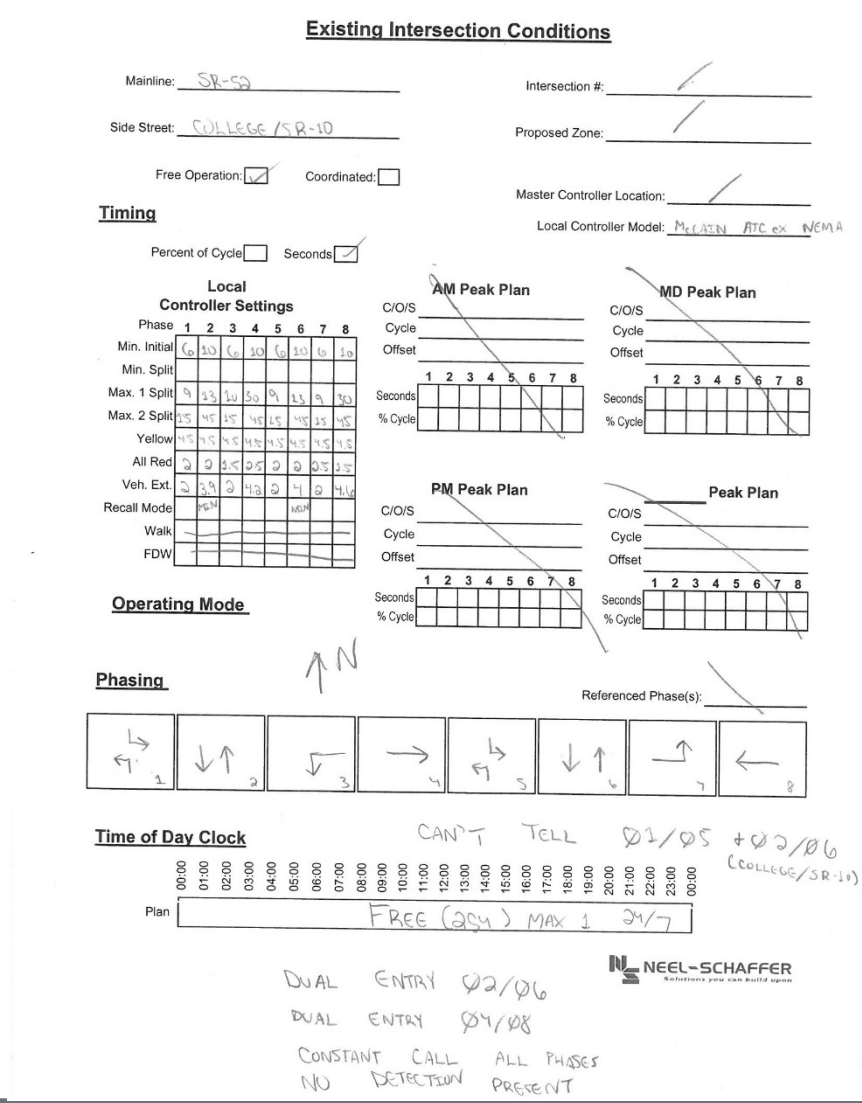


Figure 2.5: Data Collection Sheets



Existing Intersection Conditions

Mainline: SR-52 | Intersection #:

Side Street: COLLEGE / SR-10 | Proposed Zone:

Free Operation: ☑ | Coordinated: ☐ | Master Controller Location:

Local Controller Model: McCAIN ATC eX NEMA

Timing

Percent of Cycle ☐ Seconds ☑

Local Controller Settings

Phase	1	2	3	4	5	6	7	8
Min. Initial	6	10	6	10	6	10	6	10
Min. Split								
Max. 1 Split	9	33	20	30	9	33	9	30
Max. 2 Split	45	45	45	45	45	45	45	45
Yellow	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
All Red	2	2	2.5	2.5	2	2	2.5	2.5
Veh. Ext.	2	3.0	2	4.0	2	4	2	4.0
Recall Mode		MIN				MIN		
Walk								
FDW								

AM Peak Plan

C/O/S
Cycle
Offset

	1	2	3	4	5	6	7	8
Seconds								
% Cycle								

MD Peak Plan

C/O/S
Cycle
Offset

	1	2	3	4	5	6	7	8
Seconds								
% Cycle								

PM Peak Plan

C/O/S
Cycle
Offset

	1	2	3	4	5	6	7	8
Seconds								
% Cycle								

_____ Peak Plan

C/O/S
Cycle
Offset

	1	2	3	4	5	6	7	8
Seconds								
% Cycle								

Operating Mode

Phasing

N

Referenced Phase(s):

Time of Day Clock

CAN'T TELL Ø1/Ø5 + Ø2/Ø6 (COLLEGE/SR-10)

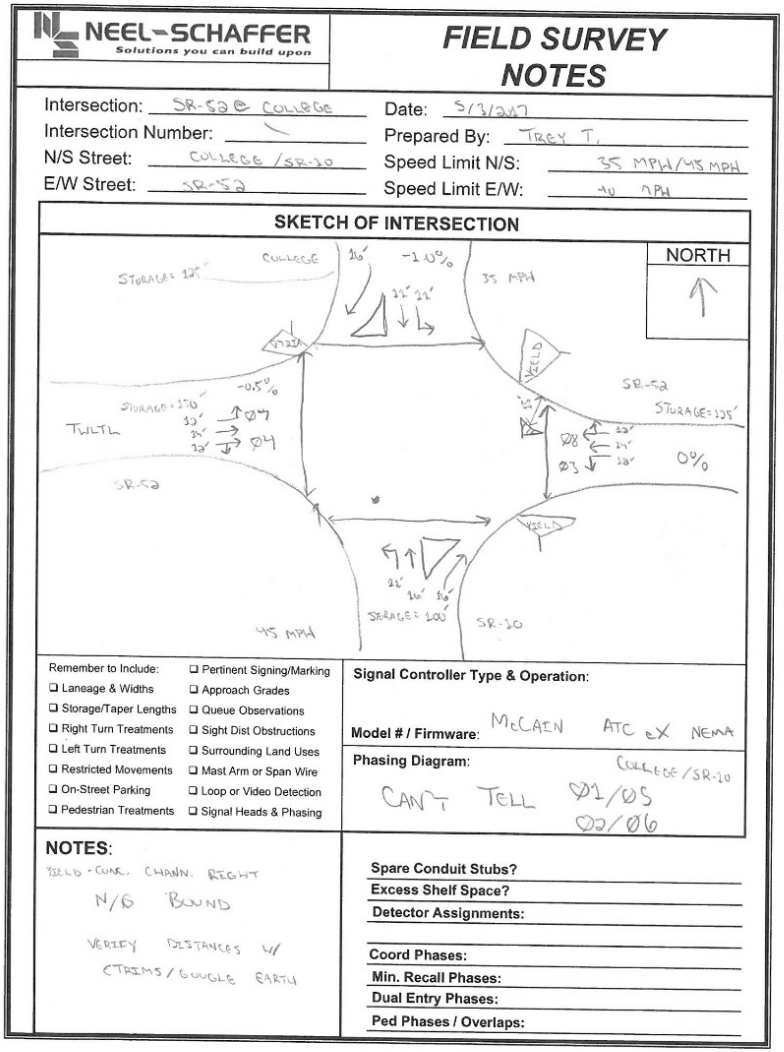
	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	00:00
Plan	FREE (2SY) MAX 1 24/7																								

NEEL-SCHAFFER Solutions you can build upon

DUAL ENTRY Ø2/Ø6

DUAL ENTRY Ø4/Ø8

CONSTANT CALL ALL PHASES PRESENT NO DETECTION



NEEL-SCHAFFER Solutions you can build upon

FIELD SURVEY NOTES

Intersection: SR-52 @ COLLEGE | Date: 5/3/2017

Intersection Number: | Prepared By: TREY T.

N/S Street: COLLEGE / SR-10 | Speed Limit N/S: 35 MPH / 45 MPH

E/W Street: SR-52 | Speed Limit E/W: 40 MPH

SKETCH OF INTERSECTION

NORTH

COLLEGE
STORAGE = 125'
-1.0%
35 MPH
SR-52
STORAGE = 225'
0%
TWLTL
STORAGE = 170'
-0.5%
SR-52
45 MPH
STORAGE = 200'
SR-10

Remember to Include:	
❑ Laneage & Widths	❑ Pertinent Signing/Marking
❑ Storage/Taper Lengths	❑ Approach Grades
❑ Right Turn Treatments	❑ Queue Observations
❑ Left Turn Treatments	❑ Sight Dist Obstructions
❑ Restricted Movements	❑ Surrounding Land Uses
❑ On-Street Parking	❑ Mast Arm or Span Wire
❑ Pedestrian Treatments	❑ Loop or Video Detection
	❑ Signal Heads & Phasing

Signal Controller Type & Operation:

Model # / Firmware: McCAIN ATC eX NEMA

Phasing Diagram: COLLEGE/SR-10

CAN'T TELL Ø1/Ø5 Ø2/Ø6

NOTES:

YIELD - CONC. CHANN. RIGHT

N/B BOUND

VERIFY DISTANCES W/ CTRIMS / GOOGLE EARTH

Spare Conduit Stubs?

Excess Shelf Space?

Detector Assignments:

Coord Phases:

Min. Recall Phases:

Dual Entry Phases:

Ped Phases / Overlaps:

2.4 Crash History

Crash data was collected within the study area from 2012 to 2016. The crash data was taken from information maintained by TDOT for the corridor. Data was aggregated by intersection for use in the crash analysis discussed in section 3.2 of this document. The data was used to identify high hazard locations and crash patterns in the crash analysis.

2.5 Existing Transportation Studies and Reports

The following documents were consulted during the study process:

1. Road Safety Audit Report for the intersection of SR-52 and Sneed Road
2. Hartsville CTPG Corridor study
3. Corridor study in Portland, TN
4. PLAN Go TDOT Long Range Transportation Plan (2005) Bike and Ped Element
5. 2010 TN Statewide Bicycle Plan
6. TDOT 25-Year Long Range Transportation Policy Plan

These documents were consulted to ensure consistency and efficiency of the plan with all ongoing planning efforts.

Additionally, TDOT is currently implementing a plan to upgrade SR-10 to the south of the study area which will promote access and traffic flow to its intersection with SR-52 (PIN 103773.02). Resurfacing projects are currently under development by TDOT for SR-52.

CHAPTER 3: EXISTING CONDITIONS

3.1 Capacity Analysis/ Level of Service

Integration of the traffic movement counts and field inventory made it possible to conduct a capacity analysis on all the intersections within the corridor and along the corridor. The analysis was measured using Level of Service (LOS), which incorporated average control delay for individual approaches at unsignalized intersections and overall total delay for signalized intersections.

The concept of Level of Service is defined as a qualitative measure of traffic flow describing operational conditions within a traffic stream based on road conditions and the perceptions of motorists. A Level of Service (LOS) designation provides characterization of the quality of traffic flow in terms of factors such as speed, travel time, freedom to maneuver, traffic interruptions, comfort, and convenience. The LOS analysis results in an assignment of a letter value to all approaches at an intersection or the intersection as a whole based on traffic control measures at the respective location (signalized, All-Way Stop, Two-Way Stop, etc.). Corridors were also assigned letter values corresponding to level of service.

Signalized Intersections

The LOS criterion for signalized intersections is referred to as control delay. Control delay accounts for interruption of traffic flow in addition to the time actually spent stopped. Control delay involves delay in association with deceleration, queue up-movement, and re-start acceleration. Levels of service for signalized intersections are calculated using the operational analysis methodology of the 2010 *Highway Capacity Manual*. This method assesses the effects of signal type, timing, phasing, and progression; vehicle mix, and geometrics on delay. Level of Service designations are based solely on the criterion of calculated average control-delay per vehicle, since delay is a measure of driver discomfort, frustration, fuel consumption, and increased travel time (Table 3.1).

Unsignalized Intersections

The levels of service for unsignalized intersections are determined by application of a separate procedure described in the 2010 *Highway Capacity Manual.* The procedure accounts for lane configurations on both the minor and major approaches, and conflicting

Table 3.1 and 3.2: Level of Service Criteria

Level of Service Criteria
Signalized Intersections[1]

Level of Service	Control Delay per Vehicle (Seconds)
A	≤10
B	>10 and ≤20
C	>20 and ≤35
D	>35 and ≤55
E	>55 and ≤80
F	>80

[1]Source: *Highway Capacity Manual*, 5th Edition, Transportation Research Board; Washington, DC; 2011.

Level of Service Criteria
Unsignalized Intersections[1]

Level of Service	Average Control Delay (Seconds/Vehicle)
A	≤10
B	>10 and ≤15
C	>15 and ≤25
D	>25 and ≤35
E	>35 and ≤50
F	>50

[1]Source: *Highway Capacity Manual*, Special Report 209, Transportation Research Board; Washington, DC; 2000. Page 17-2.

traffic stream volumes. First, the theoretical maximum or "potential capacity" of vehicles for each minor approach lane is calculated based on a gap acceptance procedure. The capacities are then compared to the demand at the respective minor approaches to determine the average control delay for each vehicle. Average control delay is used as the criterion for estimating level of service for minor street traffic. Table 3.2 summarizes the relationship between control delay and level of service for an unsignalized intersection.

Intersection Levels of Service

After review of the LOS Study, it was determined if a LOS grade of D or lower was assigned then further recommendations should be established to promote efficient traffic operations. Study assessment determined that a LOS designation of C would be the threshold of acceptable performance. Dense urban areas experience high traffic volumes and lower LOS of D are accepted because improvements to infrastructure would not mitigate congestion due to volume. In rural areas such as this, a LOS C is an indication that improvements to infrastructure could improve service levels and alleviate congestion. The traffic count data was used to determine the peak AM, mid-day, and PM travel times at each intersection. The AM peak travel time was determined to be 7:00 AM- 8:00 AM, the mid-day peak lasted from 12:00 AM to 1:00 PM and the PM peak lasted from 3:00 PM to 4:00 PM. Table 3.3 documents the existing LOS for each intersection in the study area. For unsignalized intersections, a LOS is assigned to each leg of the intersection, eastbound (EB), westbound (WB), northbound (NB) and southbound (SB). For signalized intersections, LOS represents overall intersection performance for each peak period. The LOS for AM and PM peaks is illustrated in Figures 3.1 and 3.2.

From these evaluation, it was determined that the following Intersections should be investigated within the next stage of the Corridor Study:

- Brattontown Rd (East) at SR-52
- Ellington Dr at SR-52
- College/SR-10 at SR-52
- Red Boiling Springs (West) at SR-52

It should be noted that Ellington Dr at SR-52 shows LOS grades at each approach and for the intersection as a whole due to the intersection being All-Way-Stop control and warranting a traffic signal, which is also noted in section 3.4.

Table 3.3: Level of Service

Intersection		AM		MD		PM	
Brattontown Rd W at SR-52 [4]	TOTAL	C (25s)		B (18s)		C (23s)	
Brattontown Rd E at SR-52	EB	A		A		A	
	WB	A		A		A	
	NB	**E (36s)**		C (22s)		**E (40s)**	
	SB	**E (41s)**		C (20s)		**E (38s)**	
Church St at SR-52	EBL	A		A		A	
	WB	A		A		A	
	SBL	A		B		C (17s)	
	SBR	B		B		B	
Ellington Dr at SR-52 [3]	EB	**D (26s)**	C (23)	C (18s)	C (18s)	**E (36s)**	**E (36s)**
	WB	C (22s)		C (19s)		**E (49s)**	
	NB	B		C		C (23s)	
	SB	C (17s)		C		C (21s)	
College/SR-10 at SR-52 [4]	TOTAL	C (21s)		C (21s)		C (21s)	
Spring Hollow Rd/Spring Dr at SR-52	EB	A		A		A	
	WB	A		A		A	
	NBL	C (20s)		C (16s)		C (21s)	
	NBR	B		A		B	
	SB	B		A		B	
Red Boiling Springs Rd (W) at SR-52 [4]	TOTAL	C (29s)		B (14s)		C (25s)	
Sneed Rd/Oak St at SR-52	EB	A		A		B	
	WB	B		A		A	
	NB	**E (44s)**		B		C (21s)	
	SB	**E (45s)**		B		**D (28s)**	
Days Rd (W) at SR-52	EB	B		A		A	
	WB	B		A		A	
	NBL	A		C (15)		**E (41s)**	
	NBR	B		A		B	
	SBL	**E (45s)**		B		C (24s)	
	SBR	B		A		B	
Red Boiling Springs (E) at SR-52	EB	A		A		A	
	WB	B		A		A	
	NB	C (22s)		B		**C (16s)**	
Days Rd (E) at SR-52	WB	B		A		A	
	NB	C (21s)		B		A	
Burtrum Ln at SR-10	EB	A		A		A	
	WB	A		A		A	
	NB	A		B		B	

[1] AM 7:00-8:00am; MD 12:00-1:00pm; PM 3:00-4:00pm.

[2] The Horizon Year scenario includes additional traffic demand from TDOT and __% background annual gr

[3] Intersection meets warrants under 2017 conditions.

[4] Intersection is Signalized

Figure 3.1: Level of Service AM

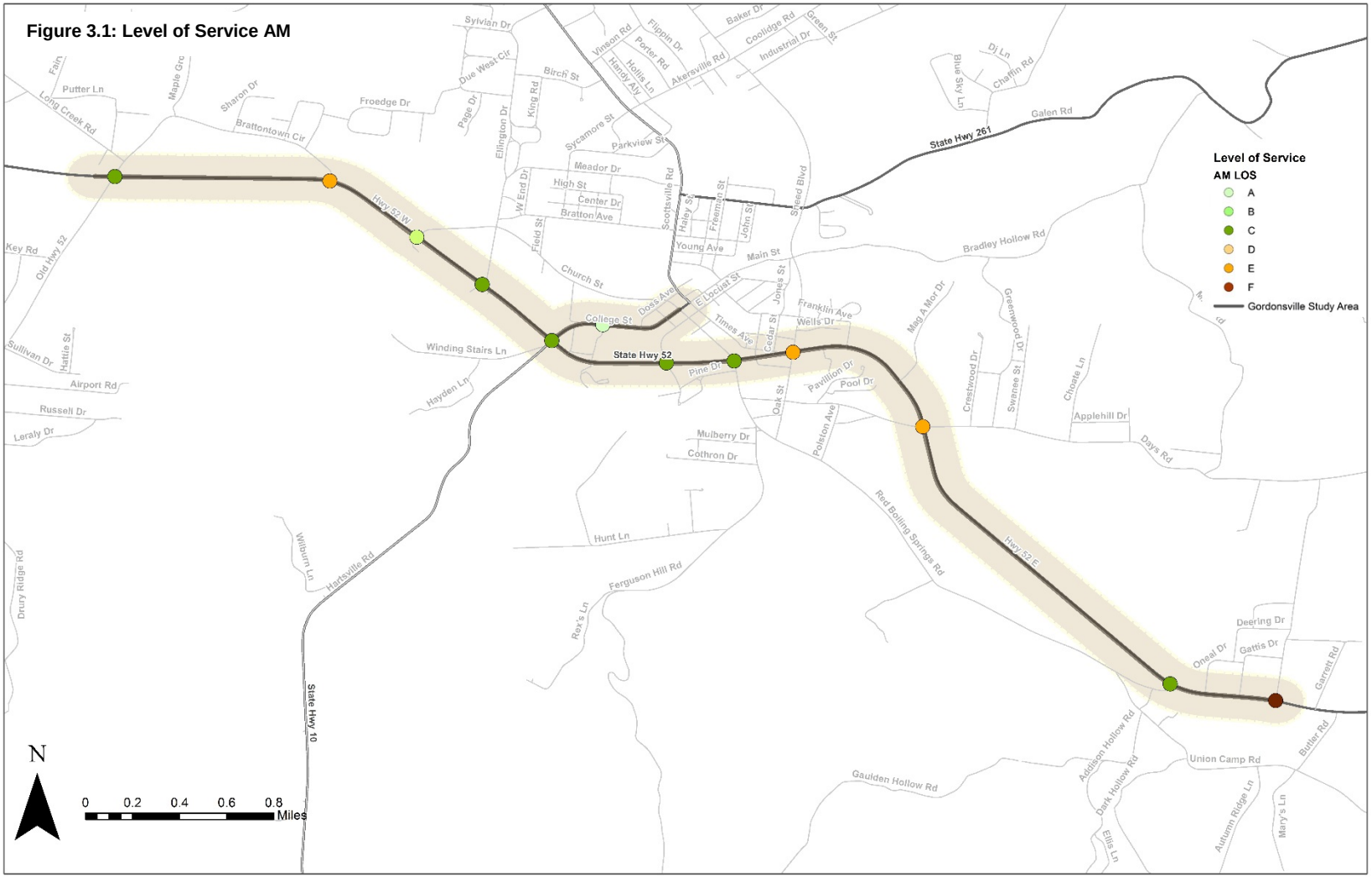
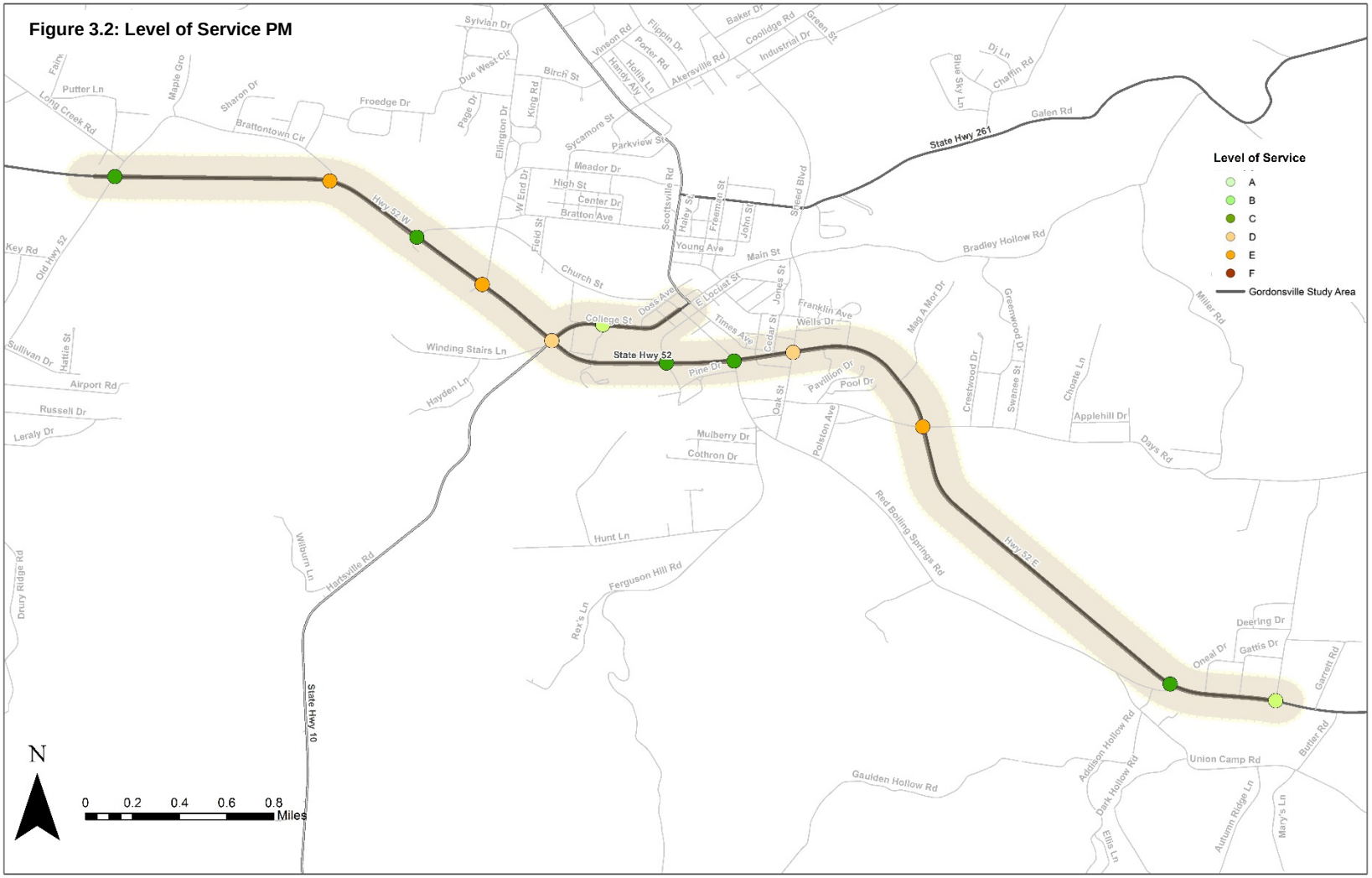


Figure 3.2: Level of Service PM



Corridor Level of Service

Level of service (LOS) at the corridor level is determined by a volume to capacity ratio. The volume to capacity (V/C) ratios compare roadway demand or volume against roadway supply or capacity. A low V/C indicates that a roadway is operating relatively smoothly and corresponds to a LOS of A, B, or C. A higher V/C ratio indicates congestion and recurring delays.

Table 3.4: Level of Service (LOS) Descriptions:

LOS	A	B	C	D	E	F
V/C RATIO	low					high
Description	Represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream.	Is in the range of reasonably free flow, but the presence of other users in the traffic stream begins to be noticeable.	Is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream.	Represents high-density, but still stable, flow. Speed and freedom to maneuver are severely restricted, and the driver experiences a generally poor level of comfort and convenience.	Represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Ability to maneuver within the traffic stream is extremely difficult.	Is used to define forced or breakdown flows. This condition exists wherever the amount of traffic approaching a point exceeds the amount, which can traverse the point. Queues form behind such locations. Operations within the queue are characterized by stop-and-go waves, and they are extremely unstable.

Table 3.5: Corridor LOS

Segment		Existing (2017) AM	MD	PM
Brattontown Rd W to Ellington Dr	EB	B	B	B
	WB	B	A	A
Ellington Dr to College St/SR-10	EB	C	C	C
	WB	**D**	C	C
College St/SR-10 to Red Boiling Springs W	EB	C	B	C
	WB	B	B	B
Red Boiling Springs W to Days Rd E	EB	A	A	A
	WB	A	A	A
SR-52 CORRIDOR FROM BRATTONTOWN CIR TO DAYS RD E)	TOTAL	B	B	B

[1] AM 7:00-8:00am; MD 12:00-1:00pm; PM 3:00-4:00pm.

[2] The Horizon Year scenario includes additional traffic demand from TDOT and __% background annual gr

The LOS for of each of four sections of the corridor as well as a LOS for the entire corridor is included in Table 3.5. Analysis results show that corridor segments throughout the study area operates at LOS rating ranging from A to C for all peak periods. This indicates that corridor conditions operate within acceptable thresholds under existing conditions, although drivers experience excessive delay at some specific intersections. Travel conditions for the SR-52 corridor as a whole ranks at a LOS B for each peak period.

3.2 Average Daily Traffic

In addition to Level of Service analysis, the overall magnitude of average daily traffic (ADT) volumes traveling within corridor segments can indicate desired roadway treatments and transportation needs. TDOT gathers this information and produces an average daily estimate for strategic locations along the road network. These numbers are included for Brattontown Circle (W), Church Street, College Street, Red Boiling Springs, and Days Rd (East) within the study area (Figure 3.3, 3.4, 3.5) . It is important to note that the counts are bi-directional and some stations experience heavier flow during certain peak periods.

Recommendations on roadway cross-section width can also be produced by using ADT counts. Throughout the City of Lafayette, the cross-sections fluctuate from a 2-lane with shoulder up to a 5-lane without shoulder. Thes study will conduct investigation to determine if conditions dictate the opportunity or need for modifications to the SR-52 cross-section that support the goals of the corridor study: safety, traffic operations, economic development, etc.

Figure 3.6 compares the ADT's along the corridor and indicates a directional flow of traffic at peak periods.

Figure 3.6: Bi-Directional Peak Hour Volume by Direction

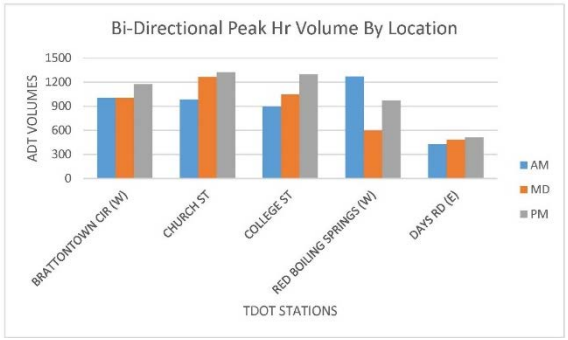
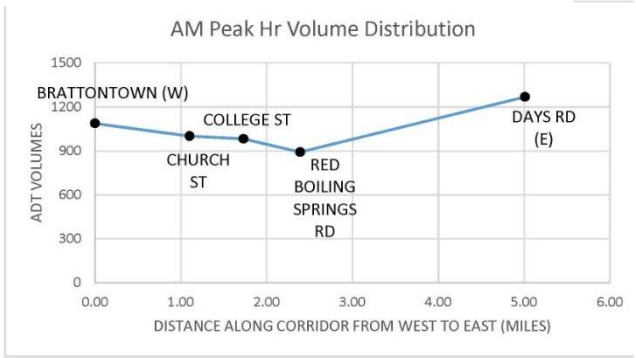
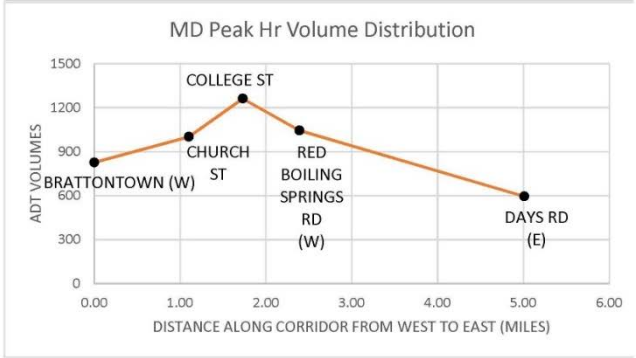
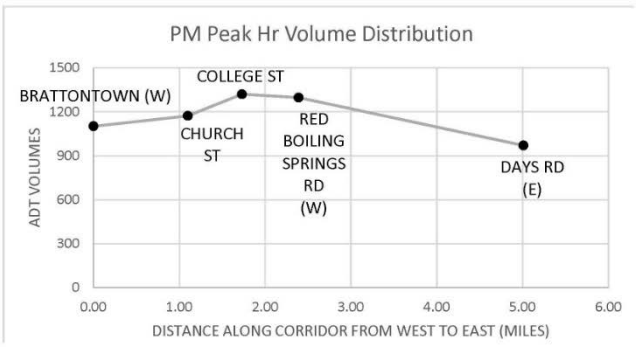


Figure 3.3, 3.4 and 3.5: Peak Hour Volume







3.3 Crash Analysis

Crash data between the years of 2012 to 2016, roadway typologies based on number of lanes and median type, and Annual Average Daily Traffic Volumes were compiled for the study area by intersection and utilized to determine a critical crash rate for each intersection.

The methodology of this analysis was detailed as follows:

1. Crash data was presented to the consultant group from TDOT for all intersections within the corridor
2. The manner of collision made it possible to identify possible trends of safety concerns.
3. The total number of crashes at study intersections and statewide crash rate averages made it possible to develop a critical crash rate for all intersections.
4. Crash rates at each intersection were compared to the Tennessee Statewide Average Crash Rate. Locations moderately above state average are highlighted in yellow while areas only slightly above average are highlighted in green on Table 3.6. These rates are illustrated in Figures 3.7.
5. This comparison identified several intersections above the average crash rate, most notably:
    - Church St at SR-52
    - Sneed Blvd/Oak St at SR-52
    - Days Rd (West) at SR-52

Sneed Blvd/Oak St at SR-52 had a trend of crashes that were mainly angle crashes coming from the side street. This could indicate that drivers experience difficulty in entering and crossing SR-52 from the Sneed Rd/Oak St approaches. A high incident of crashes could be a potential indicator for warning flasher or signalization measures, which is further discussed in section 3.4.

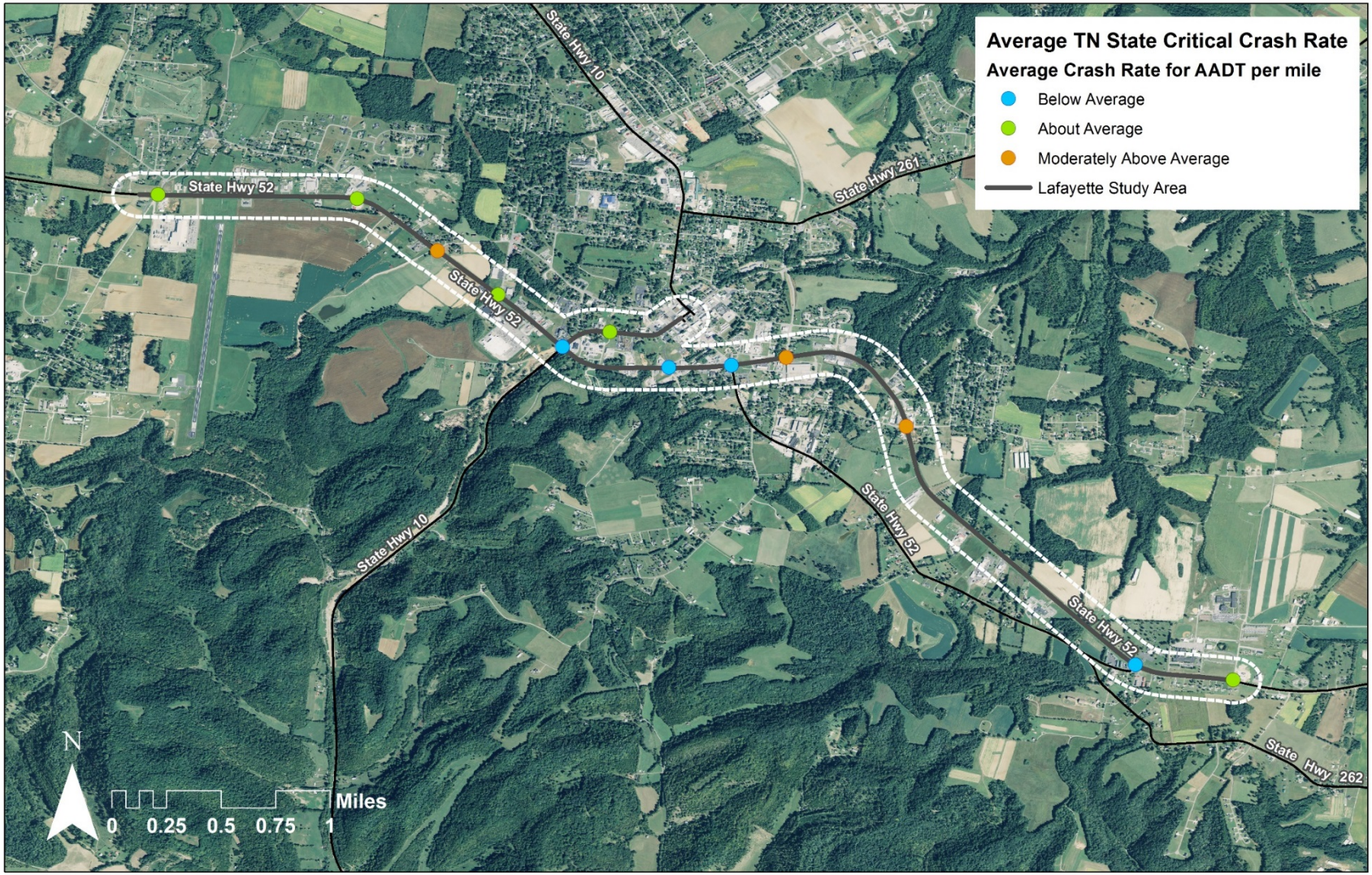
Days Rd (West) had a trend of crashes that were mainly rear-end crashes departing Days Rd. Federal Highway Administration (FHWA) has noted that “the potential for rear-end and sideswipe crashes on the departure lanes may increase as the vehicles turning onto the crossroad merge with the vehicles already on the road”(https://safety.fhwa.dot.gov). Channelized right-turn movements can provide benefits in certain situations, but the combination of side-street channelized turns with higher travel speeds on SR-52 could explain why collisions at Days Rd (West) are moderately above average.

Table 3.6: Crash Data Analysis 2012-2016

LOCATION	CRASH TYPE				MANNER OF COLLISION				VOLUME	STATISTICAL COMPUTATIONS			
Intersection	Total Number of Crashes	Property Damage	Injury	Fatal	Rear-End	Angle	HeadOn	Sideswipe	Avg Entering Traffic Volume (vpd)	Crash Rate	Critical Crash Rate	TN Statewide Avg Crash Rate	Equiv PDO Rating [1]
SR-52 @ Brattontown Circle (West)	18	15	3	0	9	6	1	1	14,060	0.701	0.673	0.666	48
SR-52 @ Brattontown Circle (East)	6	4	2	0	1	3	0	1	12,561	0.262	0.183	0.179	26
SR-52 @ Church St	10	7	3	0	7	2	0	1	16,229	0.338	0.139	0.136	40
SR-52 @ Ellington Dr	26	24	2	0	5	14	1	3	19,099	0.746	0.552	0.547	46
SR-52 @ SR-10	* Traffic Control Changed from AWSC to Signalized in 2016.												
SR-52 @ Spring Hollow Road/Spring Dr	3	3	0	0	0	1	0	1	13,167	0.125	0.139	0.136	3
SR-52 @ Red Boiling Springs (West)	11	8	3	0	6	1	0	3	17,499	0.344	0.778	0.772	41
SR-52 @ Sneed Blvd/Oak St	24	17	5	2	4	11	2	1	15,374	0.855	0.139	0.136	1156
SR-52 @ Days Rd (West)	15	12	3	0	9	4	0	1	12,600	0.652	0.139	0.136	45
SR-52 @ Red Boiling Springs (East)	1	1	0	0	0	0	0	0	12,074	0.045	0.163	0.16	1
SR-52 @ Days Rd (East)	5	4	1	0	1	3	0	0	10,477	0.261	0.164	0.16	15
SR-10 @ Burtrum	3	2	1	0	3	0	0	0	5,916	0.278	0.184	0.179	13

[1] EPDO Weighted Factors have come from HSM and AASHTO (2010). Fatal = 542, Injury = 11, PDO = 1
SR-52 @ Sneed Blvd/Oak St Fatality crashes were Pedestrian-Related and Angle, respectively.

Figure 3.7: Intersection Critical Crash Rates



The intersection of Church Street at SR-52 had a critical crash rate moderately above the state average. It was noted in aerials taken in 2014 and 2015, that the lane assignment pattern changed from an exclusive east bound left turn lane in 2014 to a two way left turn lane in 2015 (Figures 3.8, 3.9). The crash data indicate a slight increase in crashes after 2014. The lane assignment at Church St changed in 2015 due to alignment issues with the Park Entrance on the south side of SR-52. Crash analysis showed a likely correlation between rear-end collisions and the presence of the channelized southbound right turn movement.

Figures 3.8 and 3.9: Church Street Lane

3.4 Signal Warrant Assessment

Three intersections within the study area were analyzed for meeting traffic signalization warrants. These intersections include:

- Ellington Dr at SR-52
- Sneed Blvd/Oak St at SR-52
- Days Rd (East) at SR-52

Methodology

Traffic counts were taken for 12 hours of the day at the above mentioned intersections. In accordance with the Manual of Uniform Traffic Control Devices (MUTCD), volumes had to meet a minimum of 8 hours on one of two conditions or for 4 hours during peak travel times throughout the day. The two conditions are considered as Condition A and Condition B.

Condition A is defined as the minimum vehicular volume of an intersection, with a higher emphasis on the volume coming from the side street. Condition B is defined as the interruption of continuous traffic, with a higher emphasis on the volume coming from the major street.

Of the three intersections, Ellington Dr at SR-52 met the signal warrants based on the amount of traffic volumes traveling through the intersection (Figures 3.10, 3.11, 3.12). An additional signal warrant analysis was conducted for Sneed Blvd/Oak St at SR-52 to account for the amount of crashes that have occurred at the intersection within 12 months (Table 3.6, Figures 3.13, 3.14, 3.15).

According to the signal warrant methodology that considers crash experience, three conditions must be met to allow for a signal:

- Consider alternative measures to a traffic signal before implementing signalization
- Document five or more reported crashes that can be corrected by a traffic signal within a 12-month period
- For 8 hours of any day, volumes meet 80% of Condition A or Condition B

Findings

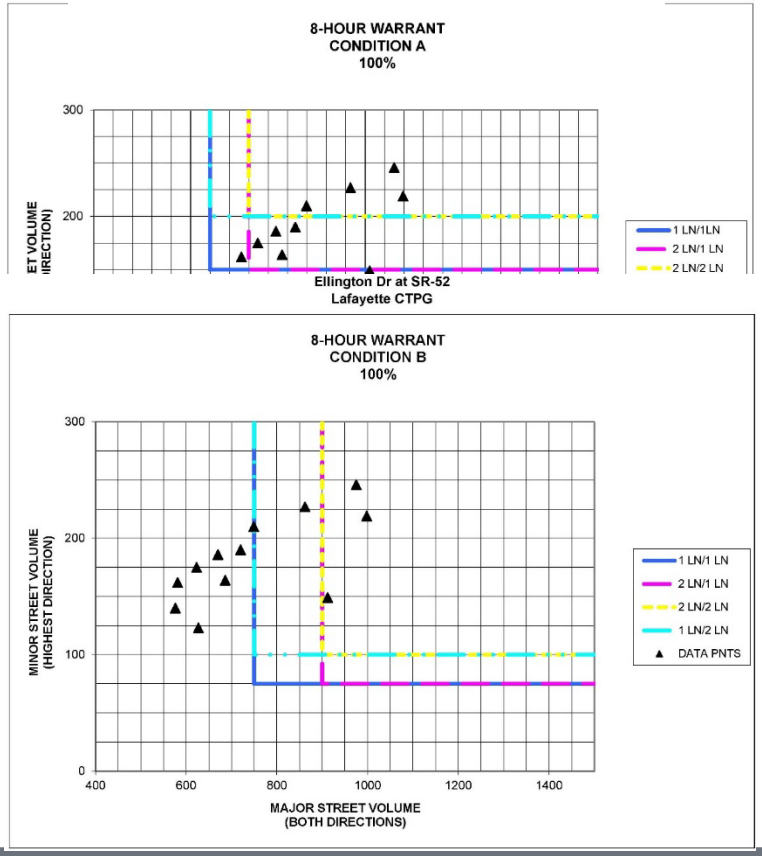
Sneed Blvd/Oak St at SR-52 did meet the crash experience signal warrant based on the number of reported crashes and prevailing traffic volumes and based on the 80% volume condition B. There were 24 crashes from 2012 to 2016 or an average of 6 per year. Full Signal Warrant Analyses for all three intersections are included in Appendix B.

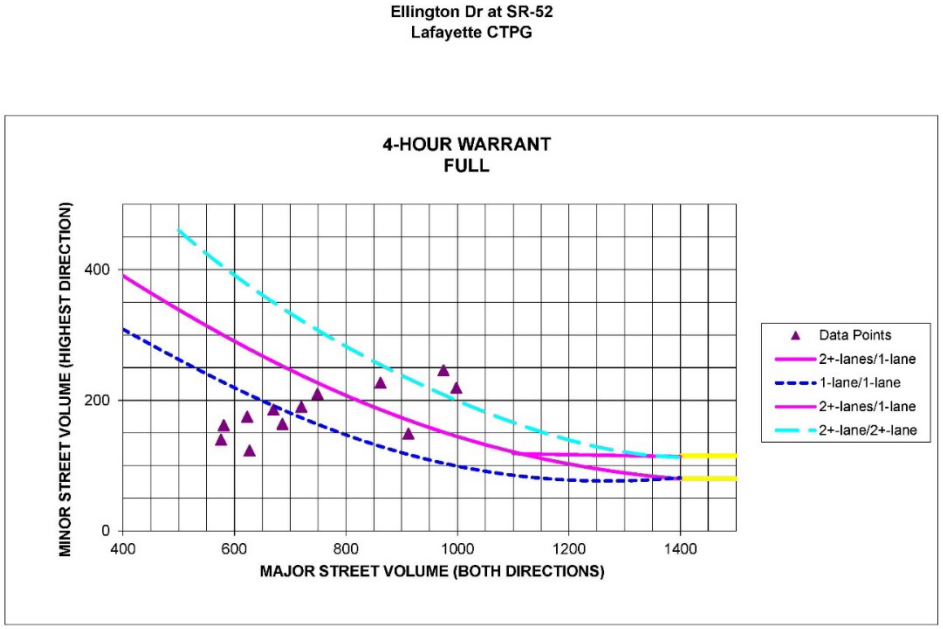
Along with the crash experience signal warrant assessment, a 70% threshold was investigated due to the population of the community and speed limit surrounding the intersection. According to the MUTCD, the 70% threshold scenario “may be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000.” The speed limit at this specific intersection is posted as 40

mph, with a population of 5,200 within the city. Therefore conditions to use the 70% threshold were met and as expected, Sneed Blvd/Oak St at SR-52 the 70% threshold was warranted.

Additionally, the Fire Department at Sneed Blvd/Oak St reported having a difficult time entering SR-52 during peak hour traffic. During conversation with the steering committee, it is anticipated that traffic within this area will increase in the coming years as a result of additional development at the city's industrial park.

Figures 3.10, 3.11, 3.12 Ellington Drive Signal Warrant

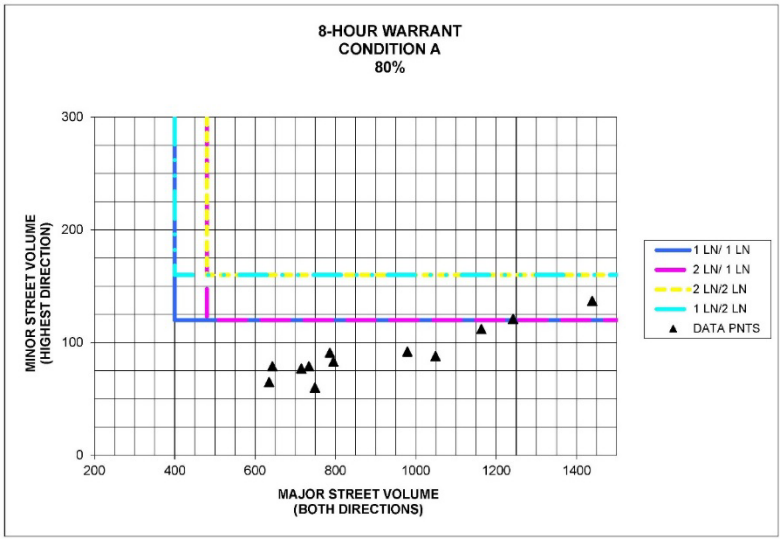


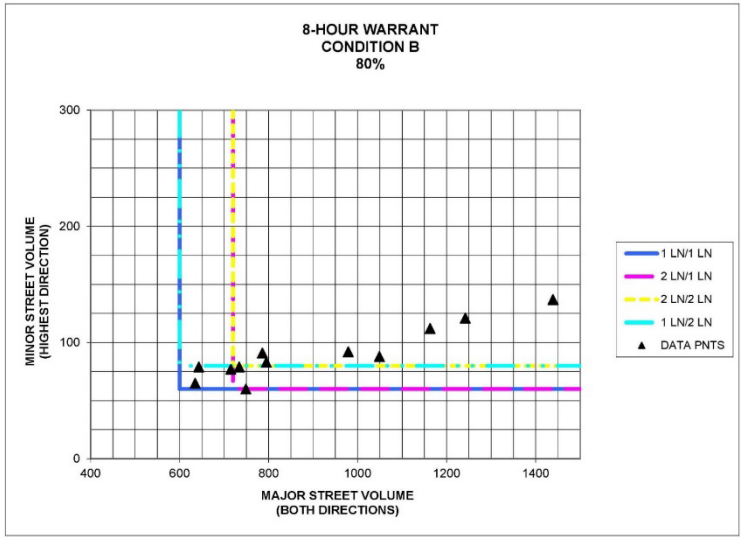


Figures 3.13, 3.14, 3.15 OakSt./Sneed Rd. Signal Warrant

6/19/2017

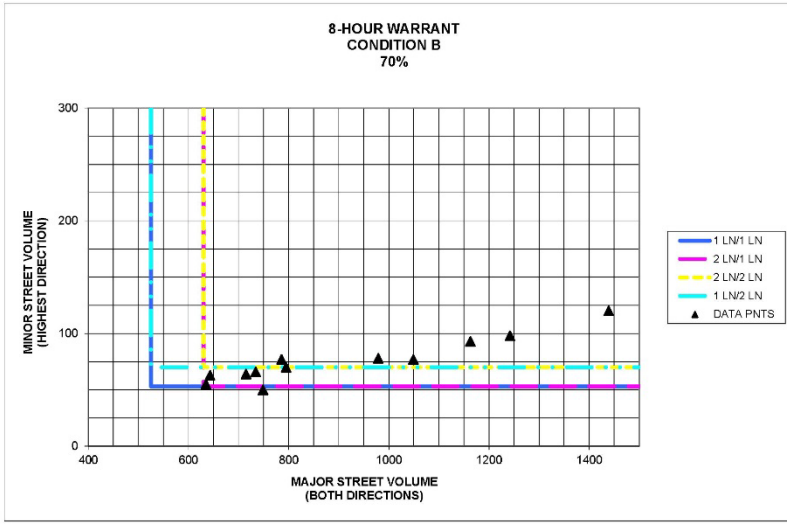
Oak St/Sneed Rd at SR-52
Lafayette CTPG





Oak St/Sneed Blvd at SR-52
Lafayette CTPG

9/13/2017



3.5 Multimodal Review

This review supports the stated guiding principles regarding multimodal transportation in TDOT's 25-Year Long Range Transportation Policy Plan. This plan supports the development of a robust and integrated multimodal system. Specifically the guiding principles are as follows:

- **Preserve and Manage the Existing System** – Effective public transportation systems, a robust TDM program, and the provision of non-motorized options reduce single occupancy vehicles and helps to preserve roadway capacity. The assets that provide these services are equally important and must be effectively managed and maintained.
- **Provide for the Efficient Movement of People and Freight** – The promotion of mobility options, reliable public transportation systems, and TDM programs has the potential to optimize the movement of people and goods by providing greater access to transportation services for all people and by building better connections among different modes of transportation, thereby increasing the total throughput of persons and goods on the state roadway system.
- **Build Partnerships for Sustainable and Livable Communities** – Broad public input and community involvement from public, private, and non-profit entities are required for the successful development and implementation of mobility options, TDM programs, and nonmotorized, which in turn help communities be more sustainable and livable.
- **Protect Natural, Cultural and Environmental Resources** – Reducing overall VMT (or the at which it is increasing) by reducing the reliance on single occupant vehicles reduces congestion and gas consumption, enhances air quality, and reduces the potential need for additional roadway widening and/or extensions.
- **Emphasize Financial Responsibility** – Effective public transportation services, TDM programs, and the provision of non-motorized accommodations represent low-cost measures that increase transportation system efficiency and reduce potential capital outlays.

Bicycle and pedestrian connections to the commercial area along SR-52 near the Wal-mart and along College Street are a priority. The stakeholder group indicated that the priority for multimodal improvements is to move pedestrians and bicycles safely along the corridor. They indicated that the majority of bicycle and pedestrian traffic in the study area and vicinity flows toward the commercial node containing a Wal-mart, restaurants and other commercial businesses near the intersection of SR-52 and College Street/ SR-10. There are no sidewalks along SR-52 in this area. Comparatively, a measurable amount of non-motorized traffic originates from low-income housing just north of the town square and to the west of the intersection and the assisted living community in the city.

A planning level analysis of mode of transportation to work (excluding personal vehicles and carpooling) and percent of persons in poverty supports these observations. Transportation to work data shows more persons using public transportation in the north and west portion of the study area (Figure 3.16). The percent of individuals experiencing wages below the poverty level was also highest for the study area to the northwest (Figure 3.17). Data was not available at the block level for this area.

Figure 3.16: Mode of Transportation to Work

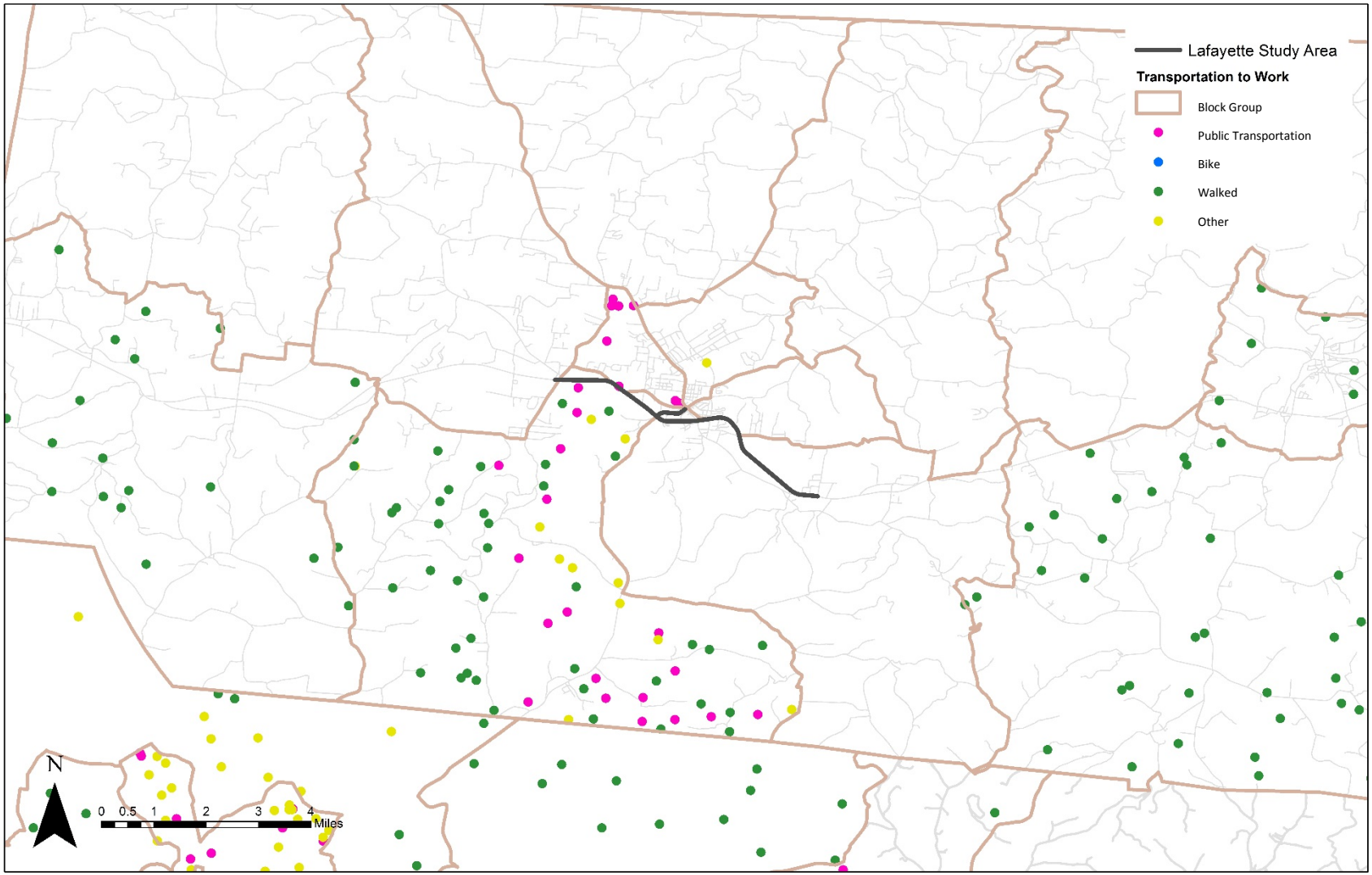
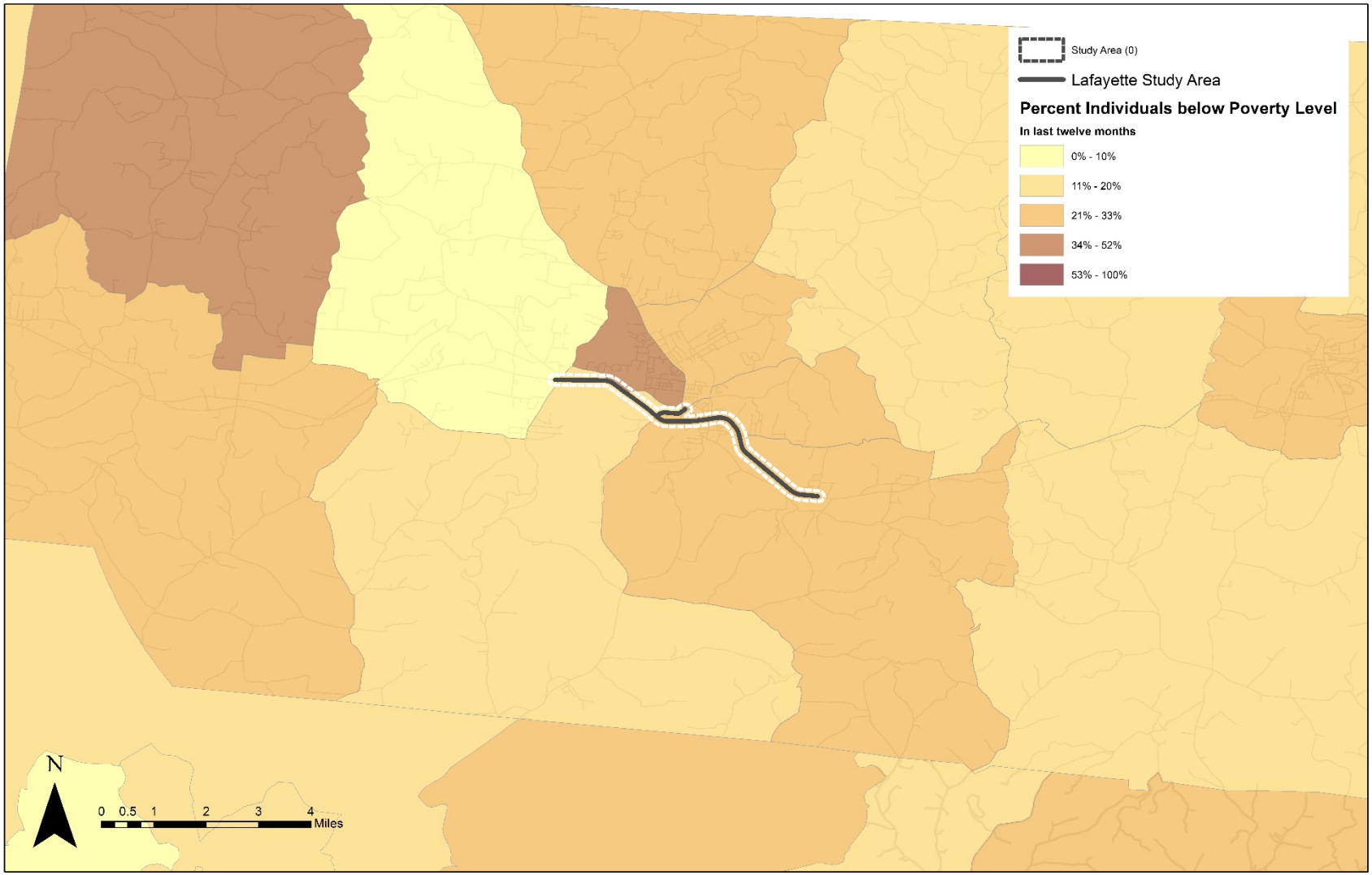


Figure 3.17: Percent Individuals below Poverty Level



Pedestrian Mobility

Sidewalks connecting downtown Lafayette to SR-52 are disconnected. Sidewalks exist north of the intersection of College Street and SR-52 along the west side of College Street but do not connect to the intersection. Crosswalks and pedestrian signals exist at the intersection of College Street and SR-52. The sidewalk along College Street is privately owned (Figure 3.18).

Sidewalks exist along Brattontown Circle to Church Street and from just west of Red Boiling Springs to east of Sneed Boulevard on both sides of the roadway. There are no sidewalks connecting the commercial node west of the intersection of SR-52 and College Street along SR-52.

Figure 3.18: Sidewalks

Bicycle

An analysis completed as part of the PLAN Go TDOT Long Range Transportation Plan (2005) Bike and Ped Element indicates that the low Average Daily Traffic (ADT) and large shoulder width make SR-52 through Lafayette more suitable for bicycling. Just north of Lafayette, higher ADT and narrow shoulders make bicycling more difficult (Figure 3.19). Because this is a high level analysis and due to the age of the plan, results should serve as guidance only for planning level analysis. An update to the state bicycle plan shows a current bicycle level of service (BLOS) along SR-52 through Lafayette at a BLOS A while both north/south routes through the city operate at a BLOS D (Figure 3.20). No state bicycle routes were identified in Lafayette in the 2010 Statewide Bicycle Plan completed by TDOT (Figure 3.20).

Figure 3.18: Suitability of Roadway for Bicycling

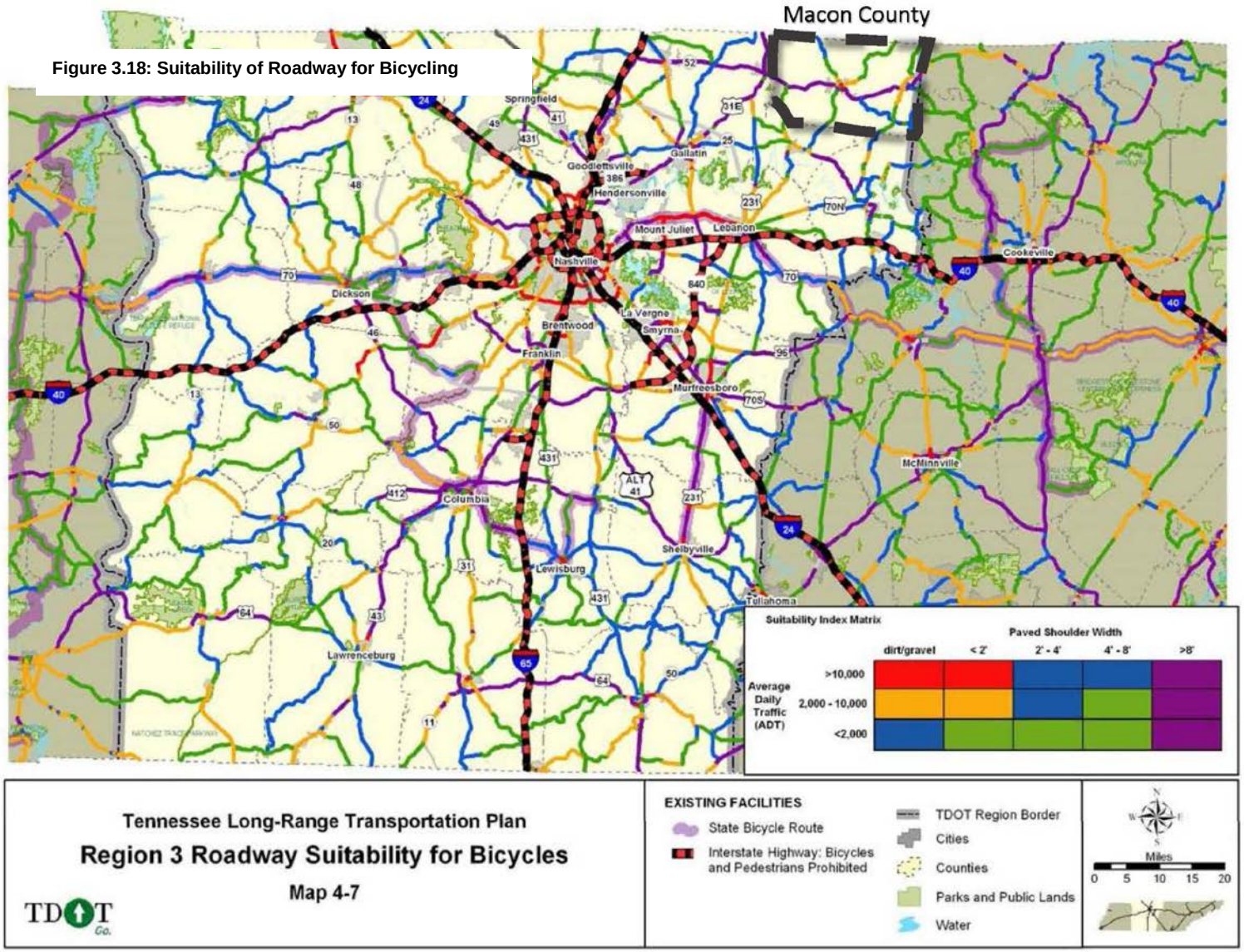


Figure 3.19: TDOT Region 3 Bicycle Level of Service

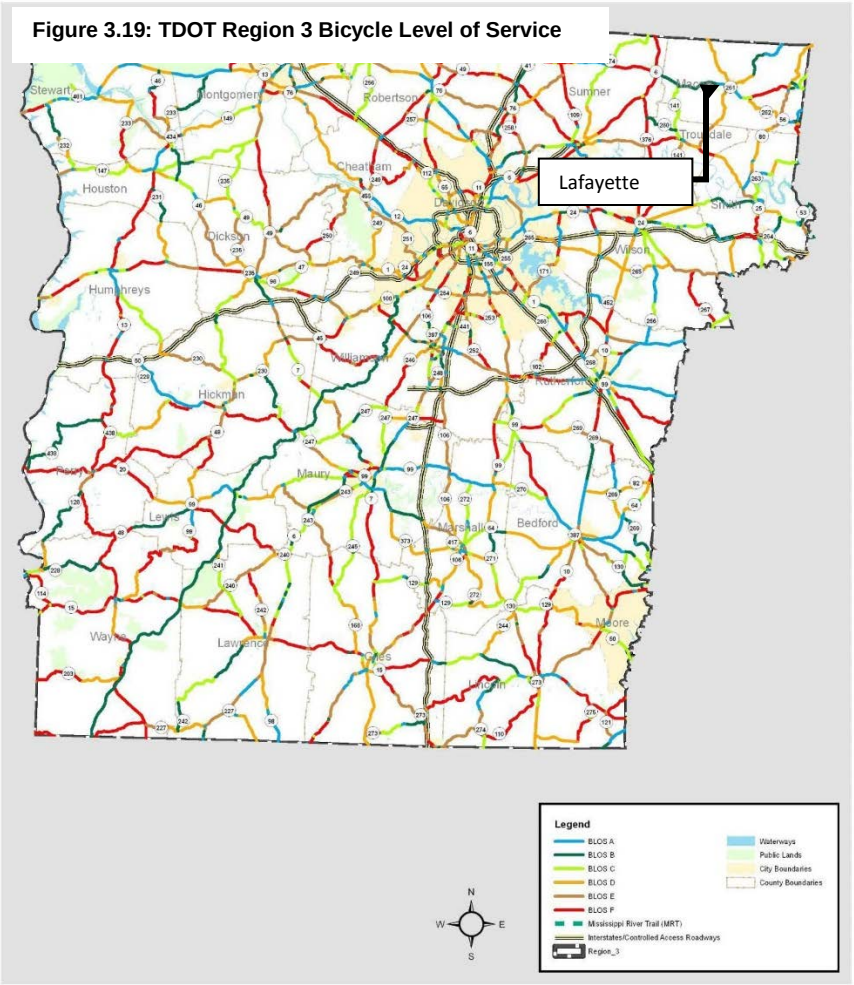
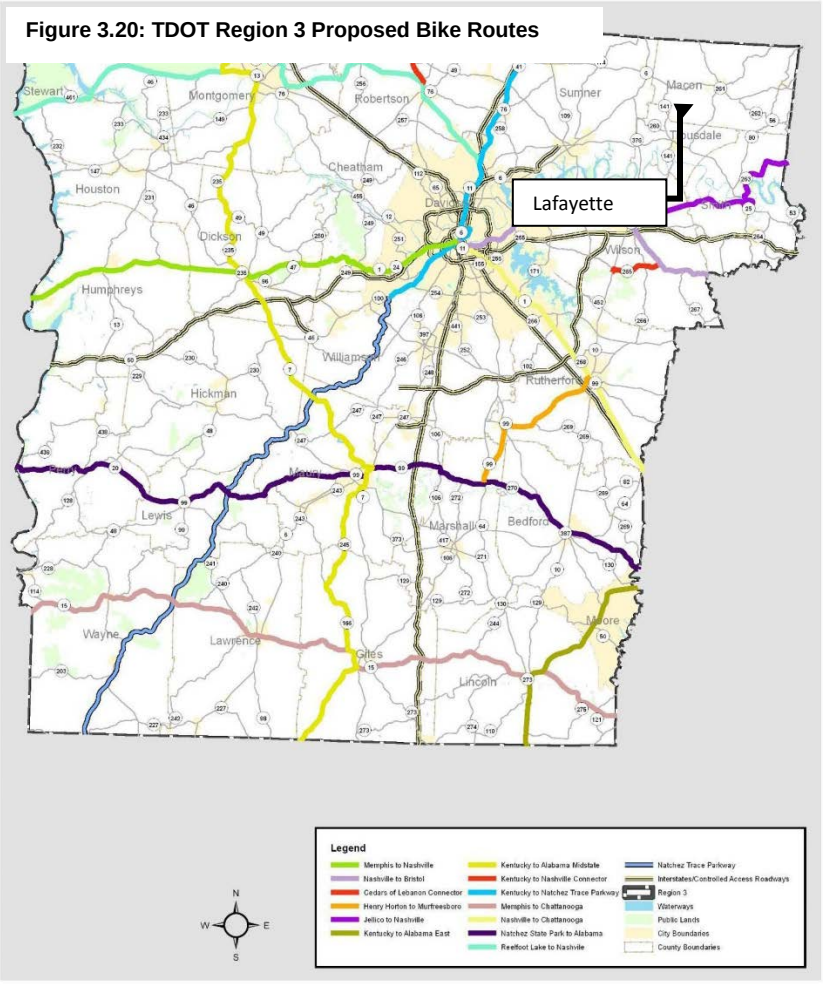


Figure 3.20: TDOT Region 3 Proposed Bike Routes



Source: 2010 Statewide Bicycle Plan Update

Public Transportation

There is no fixed route public transportation system in Lafayette. The Upper Cumberland Human Resource Agency (UCHRA) provides transportation services to rural residents of all ages, giving first priority to elderly, handicapped and economically disadvantaged with medical needs while providing deviated fixed route and demand-response service. Residents within the city of Lafayette can schedule a bus pick-up Monday through Friday from 8:00 AM-4:30 PM.

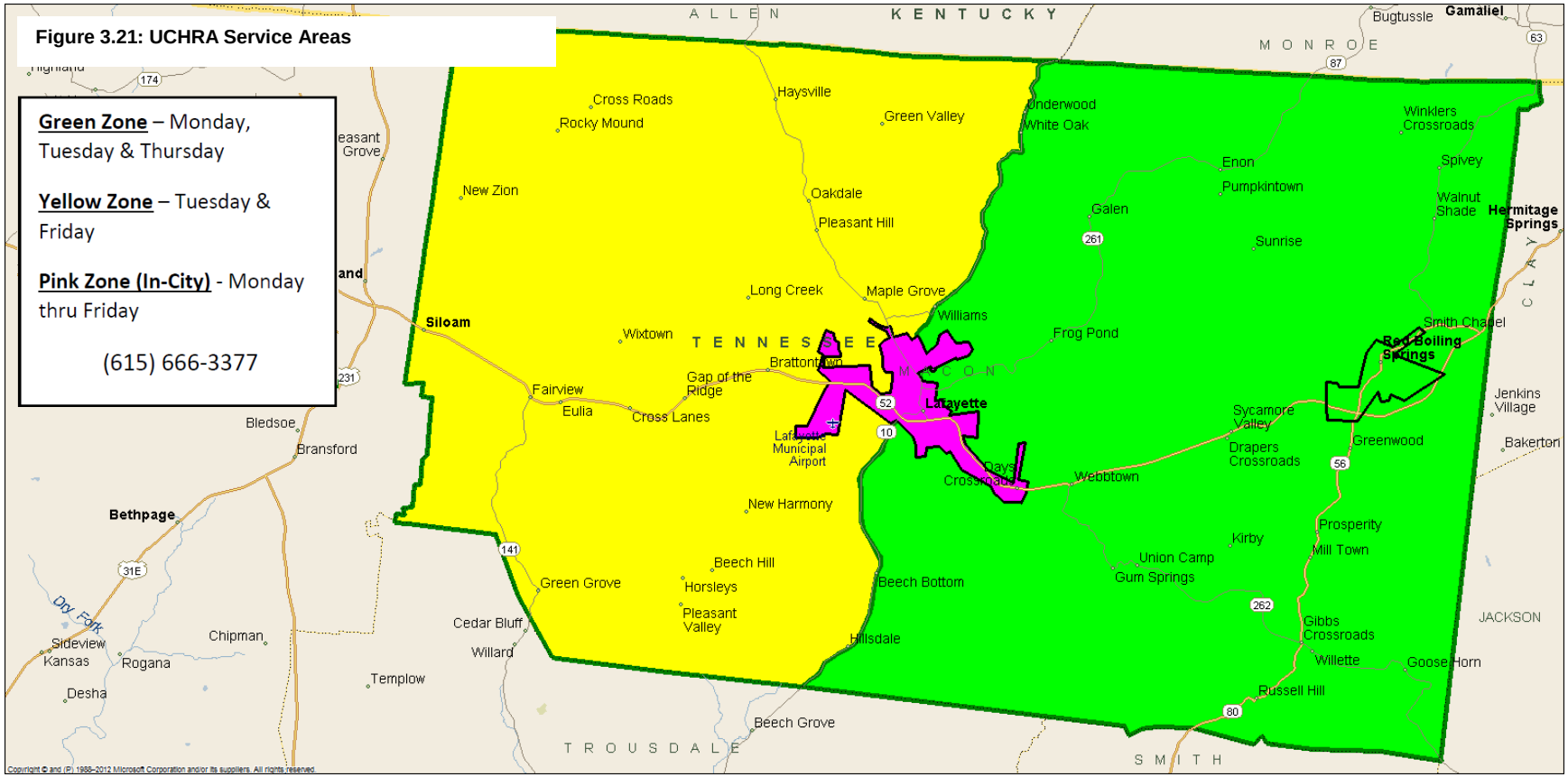


Figure 3.21: UCHRA Service Areas

3.6 Access Review

Access management is an operational tool used to manage roadway mobility and accessibility. Typically, access management defines how and to what extent roadway users gain ingress and egress between intersections and driveways. Generally, a higher degree of access management enhances mobility by preserving the operating efficiencies of the primary roadway. Examples of access management techniques include the following:

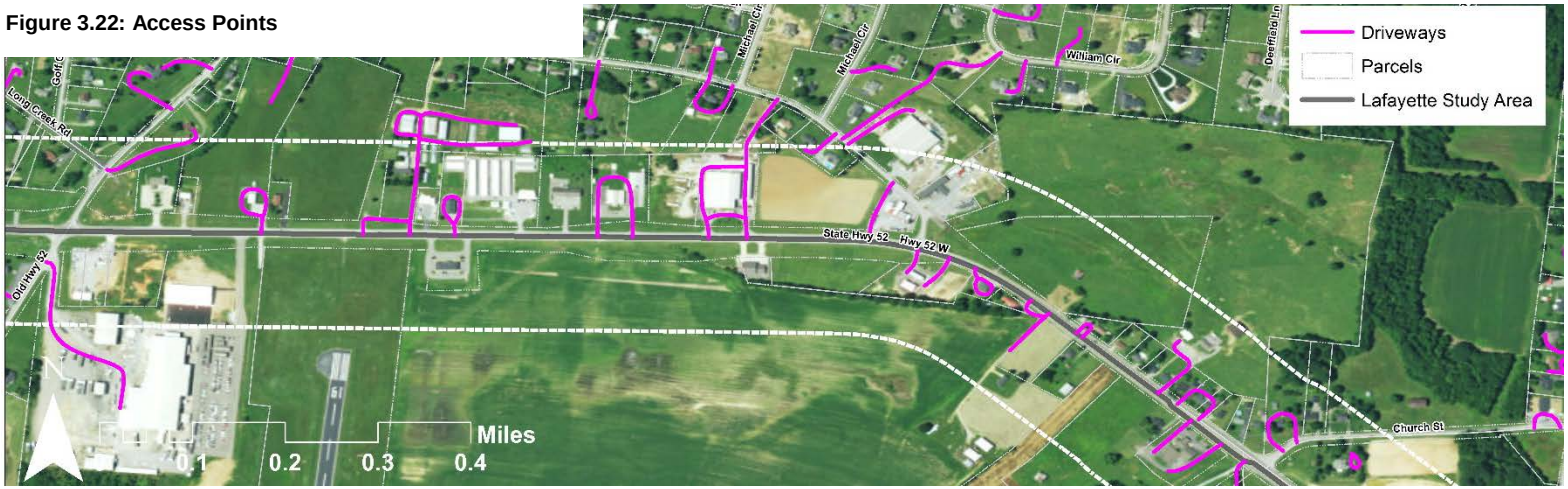
- median treatment and openings
- turn or movement restrictions
- minimum intersection and driveway spacing
- shared driveway access
- traffic signal spacing

Strategic use of access management benefits many aspects of the transportation system: safe and efficient operation of the road network, preservation of roadway functionality, and reduced frequency of crashes.

The TDOT 2015 Manual for Constructing Driveways on State Highways give specific guidelines for the construction of access points along State Highways. The Access Design portion within the Manual highlight specific control dimensions that must be followed to insure the safety of the public. For example, driveway spacing must be held at a 40' minimum between adjacent driveways on a state route along with a corner clearance of 100 to 200 feet depending on the classification of intersecting roadway. These guidelines are highlighted within Section 5 of the Manual for Constructing Driveways on State Highways. Local governments may enact additional standards and the more restrictive standard will reply.

Several stretches of SR-52 within the study area contain short distances between access points and have multiple driveways. The section of SR-52 from Brattontown Road to Church Street illustrates this issue (Figure 3.22). SR-52 from Ellington Road to College Street is currently experiencing impacts of lack of access management. Long traffic queues and difficult turning movements are evident in this section of roadway. In the future, the segment of SR-2 from Brattontown Road to Church Street illustrates a location of potential concerns as development intensifies and traffic increases, due to the cross-section of roadway being a 2 lane section. Implementation of access management will lessen current traffic issues and prevent future issues.

Figure 3.22: Access Points



3.7 School Access Review

Future elementary and high school construction is planned adjacent to and directly behind the existing school property (Figure 3.23). The property has been purchased. Officials expect that a "master plan" outlining access and circulation may be required in the future. The future school is anticipated to bring an additional 1600 students to the Days Rd (East) location, along with an estimated 600 vehicles that will arrive and leave the location. A Traffic Impact Study will be anticipated to see if future volumes will warrant for a signal.

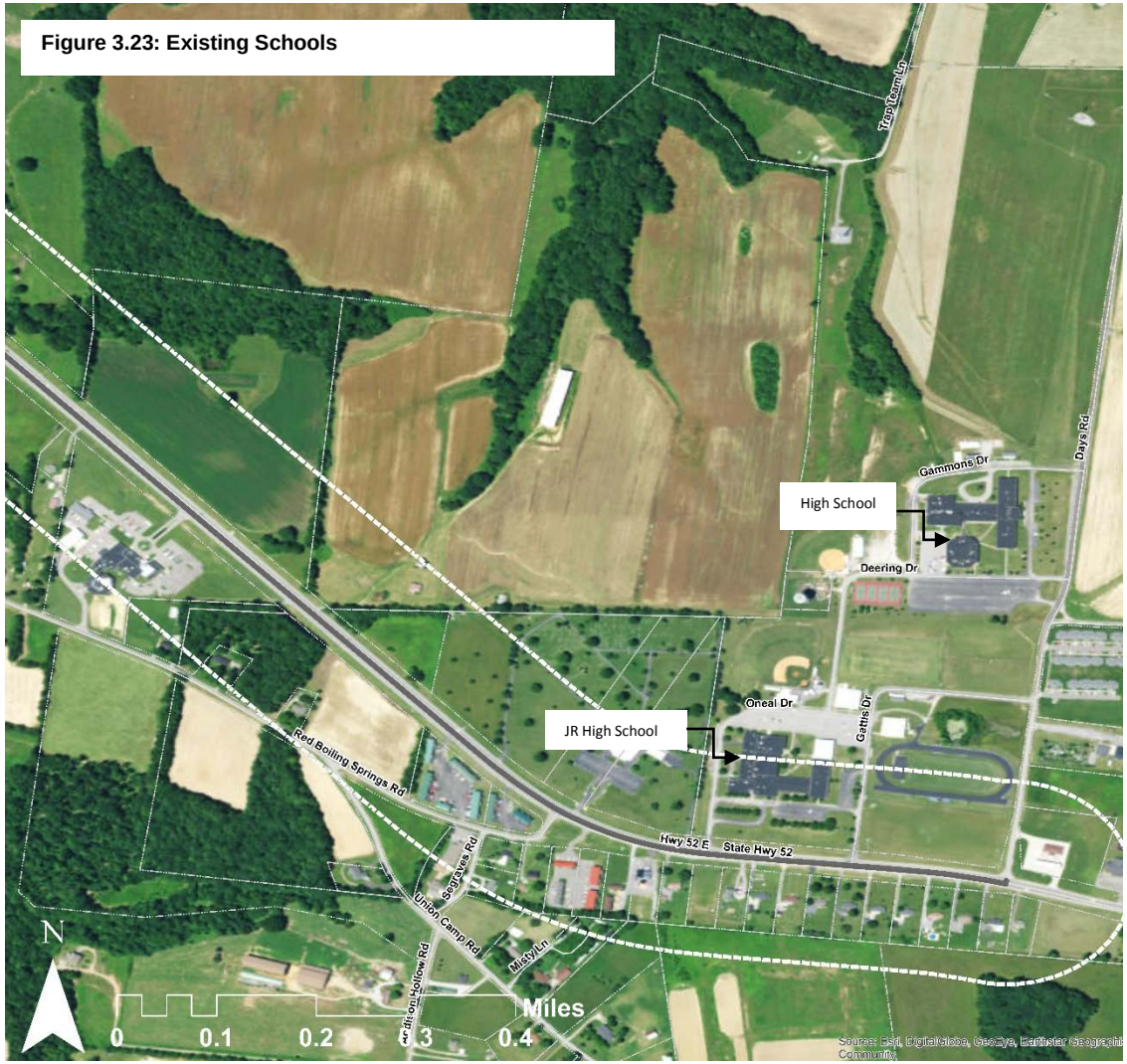


Figure 3.23: Existing Schools

3.8 Environmental Screening

The preliminary environmental screening has been conducted on a planning level to identify potential environmental constraints within the approximate 5.5 mile project area.

The environmental screening included a one mile radius search of hazardous facilities located along the proposed corridor with potential for negative environmental impacts to the corridor. Other sensitive or potentially sensitive areas were evaluated within and adjacent to the ROW. Potential wetlands exist along streams/roadside ditches and in low-lying areas within and near the proposed project corridor. Impacts to streams and tributaries within and near the proposed project corridor are likely. Potentially designated historic architectural structures and districts and a county park were observed adjacent to the proposed corridor, and critical habitats could potentially be located within or near the proposed project corridor and could be negatively impacted by proposed activities. Prior to development of the proposed corridor area, further environmental studies and compliance with state and federal agencies should be conducted to ensure sensitive resources will not be affected by construction activities.

The full environmental screening including maps corresponding to each section of the environmental review are included in Appendix C**.**

Right-of-Way

The amount of land to be acquired as a result of the proposed action has not yet been determined. The potential for the acquisition of more than one acre of right-of-way and/or the displacement of any commercial or residential occupants is still under review. Once the project limits have been determined, these criteria along with temporary easement locations should be presented to the Tennessee Department of Transportation (TOOT) point of contact (POC) for further recommendations.

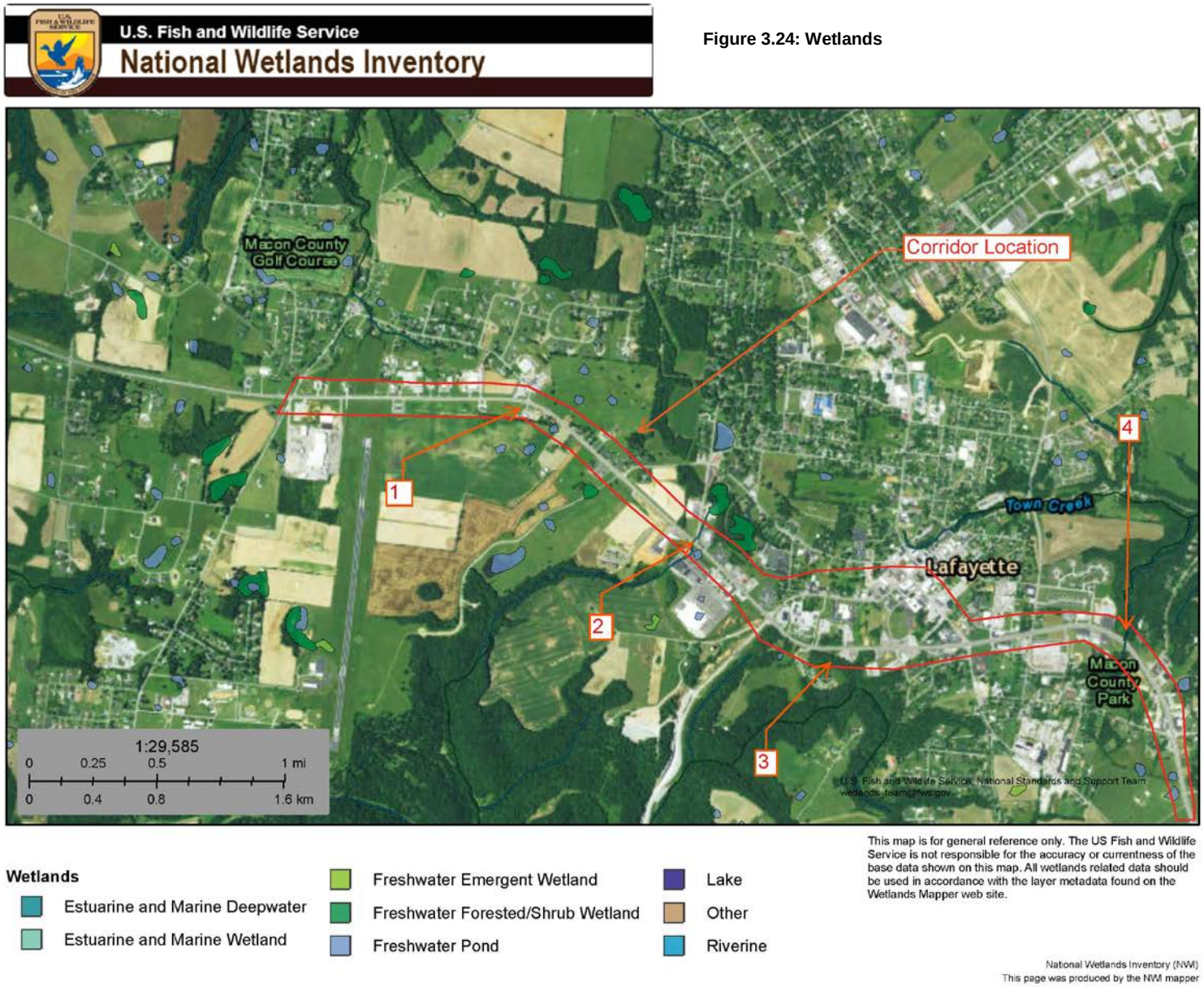
Wetlands

According to the United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) Digital Wetlands Mapper, no wetland or riparian areas have been recorded for this area. However, the potential exists for the presence of wetland indicators in four areas throughout the project area. These potential areas are located along existing stormwater drainage and low-lying areas and may be impacted by future construction activities. Many of these areas could be jurisdictional wetlands and waters. These potential areas are indicated on Figures 3.24 and 3.25 and should be evaluated for the presence of potential wetlands and and other waters of the U.S. both the United States Army Corps of Engineers (USACE) Louisville and Nashville Districts (refer to section 6.0). Areas 1, 2, and 3 located south of SR-52 appear to drain into Goose Creek and Sullivan Branch which ultimately confluence with the Cumberland River (a traditional navigable waterway).

The proposed project corridor is located within two watersheds of the Cumberland River Basin, U.S. Geological Service (USGS) hydrologic unit code HUC 12 (05130108). The Barren River Watershed (HUC 12-05110002) is approximately 1,661 square miles and drains to the Green River. The Old Hickory Lake Watershed (HUC 12-05130201) is approximately 983 square miles and drains to the Cumberland River. The corresponding

watershed map is located in Appendix C.

Figure 3.24: Wetlands



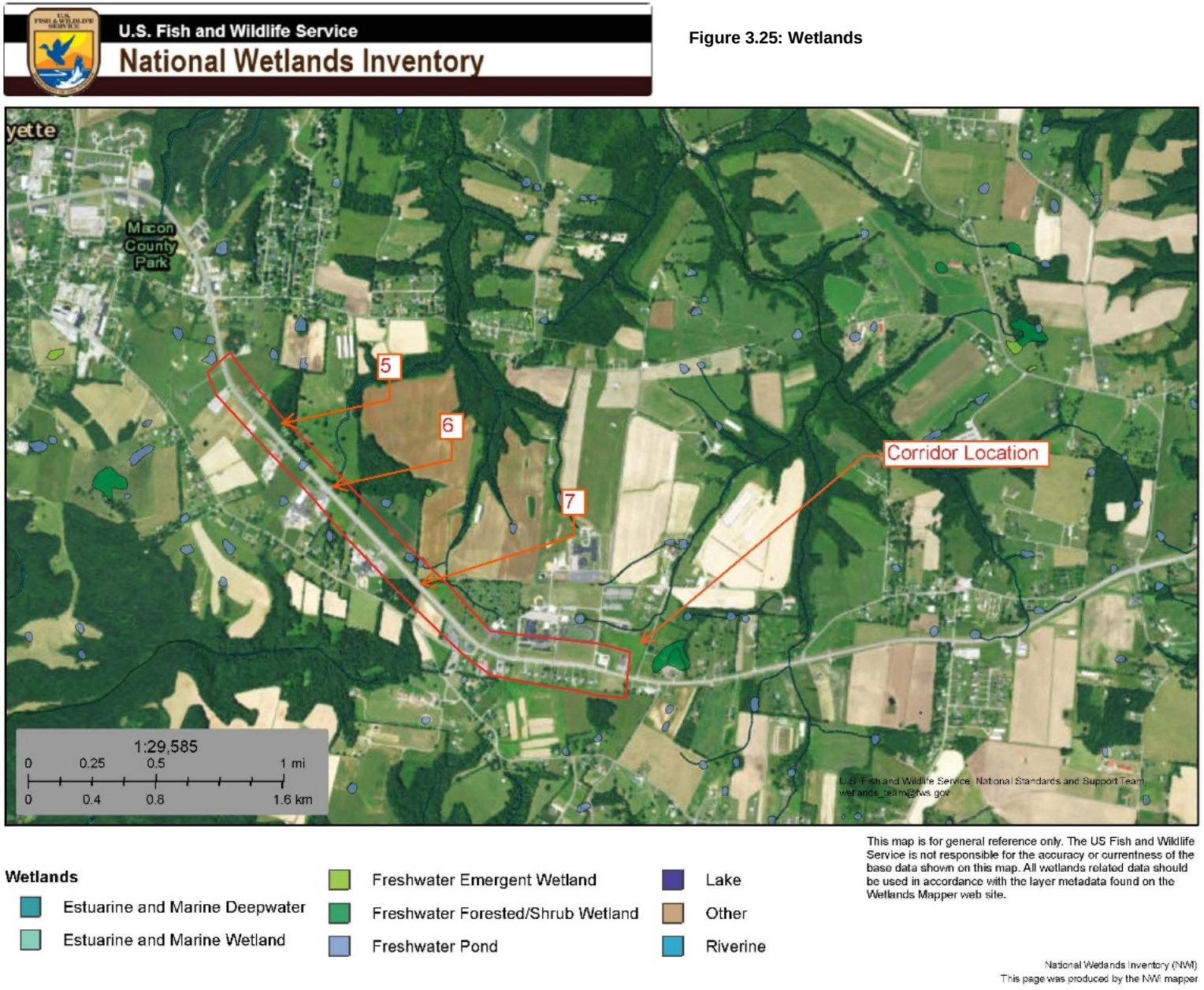


Figure 3.25: Wetlands

Threatened and Endangered Species

The Tennessee Department of Environment and Conservation (TDEC) maintains an online database of federal and state-listed rare, threatened, and endangered species. The results of the Macon County, Tennessee database search are show in Table 3.8. The USFWS and TDEC should be contacted prior to work along the corridor for a determination of the presence of listed species along the corridor and the impact to those species in accordance with the Clean Water Act; the Endangered Species Act; Fish and Wildlife coordination Act; Executive Order 11988, Floodplain Management; Executive Order 11990; Protection of Wetlands; Tennessee Non-game and Endangered or Threatened Wildlife Species Conservation Act of 1974; Tennessee Rare Plant Protection and Conservation Act of 1985; and the Tennessee Water Quality Control Act of 1977.

No threatened or endangered species or critical habitats were observed along the corridor during the site visit nor were they indicated on the location map provided by the USFWS in Appendix C. However, TDEC may require an evaluation of undisturbed, wooded areas along the corridor conducive to critical habitat conditions by a biologist, especially those of bat species although not identified. A list of rare species of Macon County, TN is shown in Table 3.8 below.

Table 3.8. State and Federally Listed Rare, Threatened, or Endangered Species in Macon County

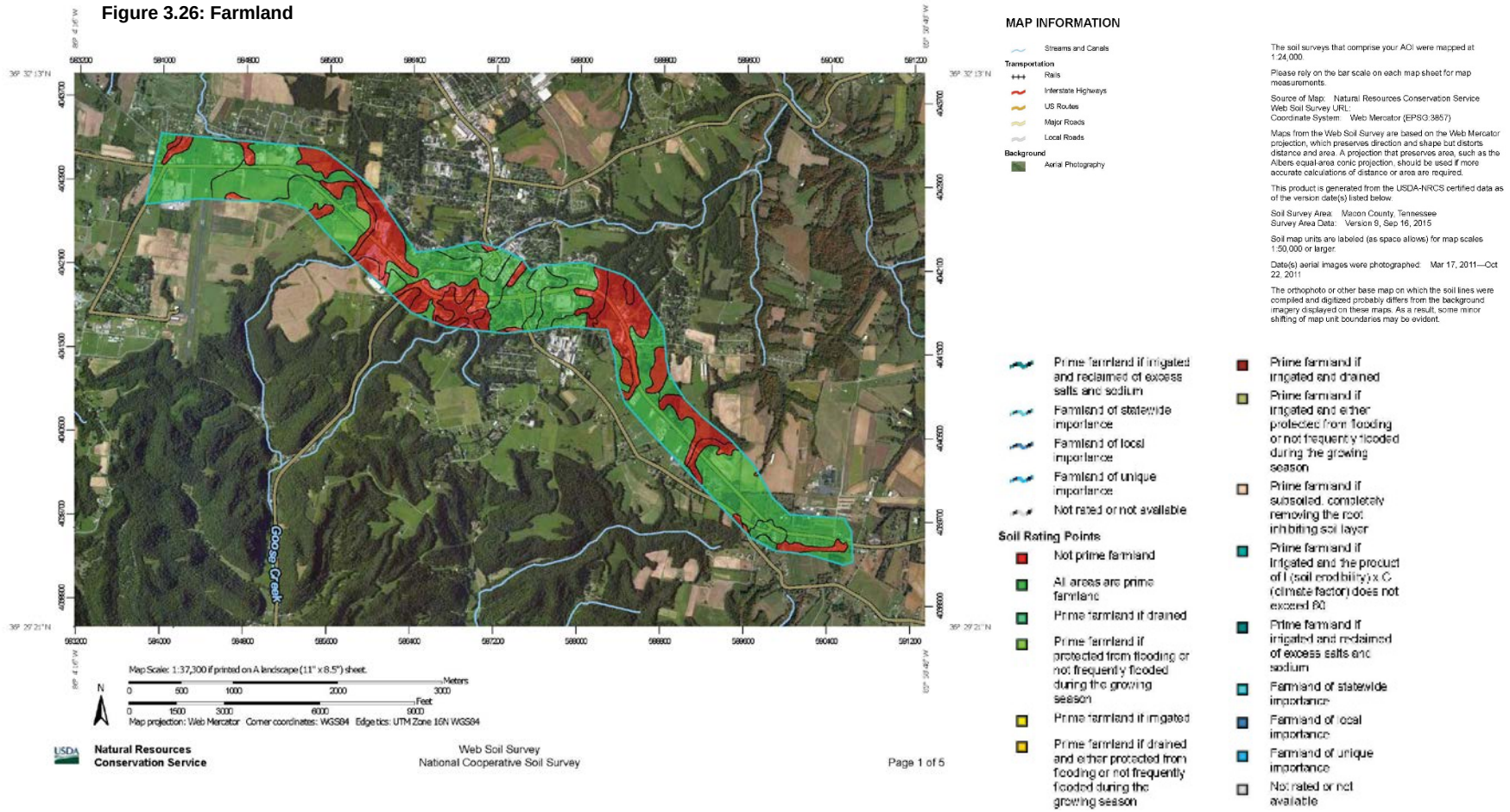
Scientific Name	Common Name	Status	Group
Thryomanes bewickii	Bewick's Wren	Endangered	Bird
Etheostoma bellum	Orangefin Darter	Deemed in need of Management	Fish
Hemitremia flammea	Flame Chub	Deemed in need of Management	Fish
Panax quinquefolius	American Ginseng	Special Concern	Flowering Plant
Thoburnia atripinnis	Blackfin Sucker	Deemed in need of Management	Fish
Etheostoma kantuckeense	Highland Rim Darter	Rare, Not State Listed	Fish
Etheostoma barbouri	Teardrop Darter	Deemed in need of Management	Fish
Chondestes grammacus	Lark Sparrow	Threatened	Bird
Percina macrocephala	Longhead Darter	Threatened	Fish
Juglans cinerea	Butternut	Threatened	Flowering Plant
Desmognathus welteri	Black Mountain Salamander	Deemed in need of Management	Amphibian
Percina stictogaster	Frecklebelly Darter	Deemed in need of Management	Fish
Accipiter striatus	Sharp-shinned Hawk	Deemed in need of Management	Bird
Etheostoma barrenense	Splendid Darter	Deemed in need of Management	Fish
Barbicambarus cornutus	Bottle Brush Crayfish	Rare, Not State Listed	Crustacean

Farmland

The Natural Resources Conservation Service (NRCS) Web Soil Survey indicated soil units of prime farmland throughout the project corridor. During the site reconnaissance, a few areas of cultivated land were identified adjacent to the project corridor. The majority of soil units suitable for prime farm land within or adjacent to the project area have previously been developed by roadway, residential, commercial, or industrial construction.

The Natural Resources Conservation Service (NRCS) Web Soil Survey indicated soil units of prime farmland throughout the project corridor. The area could affect areas of prime farmland due to adjacent cultivated lands.

Figure 3.26: Farmland



Wild and Scenic Byways

The Tennessee Wildlife Resources Agency (TWRA), USDA, and TDEC maintain a list of state and federal-listed scenic rivers located throughout Tennessee. Wild and Scenic Rivers were not identified within the proposed corridor buffer.

Air Quality

An air quality analysis will be conducted upon the release of proposed corridor plans. The air quality analysis should include transportation conformity and Mobile Source Air Toxics (MSATs) for all projects, and pertinent information provided to the POC.

Noise

A noise study and abatement measures analysis will be conducted upon the release of proposed corridor plans, if required.

Floodplains and Floodways

No areas were identified as being located within the 100 year flood zone or floodways of waters of the U.S within the project area (Appendix C) according to the Federal Emergency Management Agency (FEMA) Digital Flood Insurance Rate Map (DFIRM). The USACE Nashville and Louisville Districts and TDOT POC should be contacted for direction prior to work being performed within the corridor for additional construction restrictions in these areas.

Cultural and Historic Resources

The National Park Service (NPS) maintains an online database of registered historic archaeological and architectural resources. There were no historical structures or cultural resources indicated as being located within the project area by the NPS that would be impacted by construction. However, numerous architectural resources with potential for listing on the National Register of Historic Places are located adjacent to the proposed project corridor that could be significantly impacted by proposed construction activities. These resources include residences, businesses, and churches, and vacant buildings located along SR-10 and the eastern portion of SR-52. Representative photographs of these areas and corresponding map locations can be found in Appendix C. Four cemeteries were also shown near to the proposed corridor.

The City of Lafayette the Tennessee Historical Commission (THC), and the NPS should be contacted prior to work activities along the corridor area to identify any potential or unrecorded historic properties that could be affected by construction and determine any undesired impacts to

these resources. An assessment of architectural structures located within and adjacent to the proposed project area will determine the National Register eligibility of these resources and mitigation requirements for updating records at the THC.

Parks or Recreational Resources

Macon County Park was identified adjacent to the proposed corridor and within the city limits of Lafayette. No wildlife refuges were located within the project area. The NPS and TDEC Recreational Educational Services Division, Grants Program Office should be contacted prior to construction activities for a local review and potential impact analysis of the proposed work.

Native American Coordination

Although state and federal protected Native American lands are not located within the proposed corridor, coordination with Native American Tribes will be required if proposed activities involve acquisition of new ROW on previously undisturbed land (refer to Appendix C). Native America Tribes will most likely request a complete cultural resources assessment of the undisturbed areas by an Archaeologist that meets the Secretary of the Interior's requirements. Consultation with the TDOT POC should be conducted once the proposed project plans are available for guidance on Native American Tribe coordination.

Hazardous Materials

Numerous businesses with underground storage tanks (USTs) and bulk storage, use, and transportation of hazardous materials were located adjacent to the project corridor. These facilities included service stations, local municipality complexes, automotive repair shops, vehicle dealerships, hardware distribution facilities, industrial manufacturing facilities, a funeral home, and a correctional facility.

The Environmental Protection Agency's (EPA's) Envirofacts website indicated the following sites and number of instances as being located within one mile of the proposed project corridor (refer to Appendix C):

- Toxic Releases (1)
- Water Dischargers (4)
- Air Pollution (7)
- Hazardous Waste (13)

Prior to work within the project area, a thorough Phase I Environmental Site Assessment

should be conducted to identify any hazardous sites through documents and avenues not readily available in the preliminary screening process that could potentially impact or have previously impacted the project area.

Environmental Justice

The majority of the project area is located along business routes and would primarily impact businesses and single family residences. The project will not have significant impacts to minority and low-income populations. According to the 2010 Census, a total of 4,474 residents lived in Lafayette, TN, up 6.7% from the previous census collection. 97% of the residents were of caucasion decent. In 2015, the population grew to 4,962 residents, and the median household income was $30,508 with median gross rent of $534. Average household size is 2.3 people with median resident age of 41.5 years.

Environmental Summary

In conclusion, NSI has performed this preliminary environmental screening of the proposed project corridor to identify any sensitive resources that could be impacted by construction activities Potential wetlands and other waters of the U.S., potential historic architectural structures and districts, a county park, and four cemeteries were identified adjacent to or near the proposed project corridor that could be potentially impacted by future development. Numerous sites with hazardous materials utilization and storage as well as previous toxic releases are located within one mile of the proposed project corridor. Prior to development of the proposed roadway project, thorough studies and reviews of sensitive resources in the area are recommended to ensure these resources will not be negatively impacted by proposed construction activities.

CHAPTER 4: TRAFFIC FORECASTING AND FUTURE CONDITIONS ANALYSIS

4.1 Traffic Projections

TDOT forecasted existing counts to the Horizon Year of 2027. This increase was approximately 1 to 1.5% growth per year compounded over ten years. This translates into 15% overall growth for traffic volumes. Results from the crash analysis and signal warrant assessments were analyzed further to verify expected horizon year conditions.

4.2 Future Land Use Considerations

The City of Lafayette provided future land use plans that were accounted for in addition to TDOT horizon year traffic projections. These land use plans include: expansion of the existing high school and middle school campus, residential area growth, and projected commercial growth along the corridor.

4.3 Future Traffic Assignment

Information gathered during traffic counts was utilized along with TDOT's traffic model for the region to estimate the rate of growth in Lafayette for the Horizon Year 2027. The future LOS was projected for the road network to year 2027 with both no changes to the existing network and for a road network that integrates the recommendations of this document.

Turning Movement Counts were taken March 21, 2017. Traffic projections for each turning movement are shown in figures 4.1 and 4.2. These counts were integrated into HCS Models to conduct analysis on the Existing and Horizon Year to provide a basis for recommendations. With the assistance of TDOT, the Turning Movement Counts were projected out to the Horizon Year (2027). It was determined that there was a growth rate of approximately 1% per year in the City of Lafayette. The projected counts were integrated into all Horizon and Future Recommendations models to gauge the impact of volume increases on Level of Service and to develop recommended scenarios.

In order to see the effect of the forecasted traffic on the City of Lafayette, Level of Service (LOS) was thoroughly analyzed in 1) the Existing Year Conditions, 2) the Horizon Year Existing Conditions, and 3) the Recommended Horizon Year Conditions. Level of service at an unsignalized intersection takes into account the amount of delay and gap acceptance for specific turning movements at a given approach. The level of service at a signalized intersection is calculated for the entire intersection and is dependent on the signal operations, timings, and amount of traffic volume at the intersection. The level of service is assigned a letter grade that correlates to the amount of delay as discussed is section 3.1.

Figure 4.1: Turning Movements for current year 2017 and Horizon Year 2027

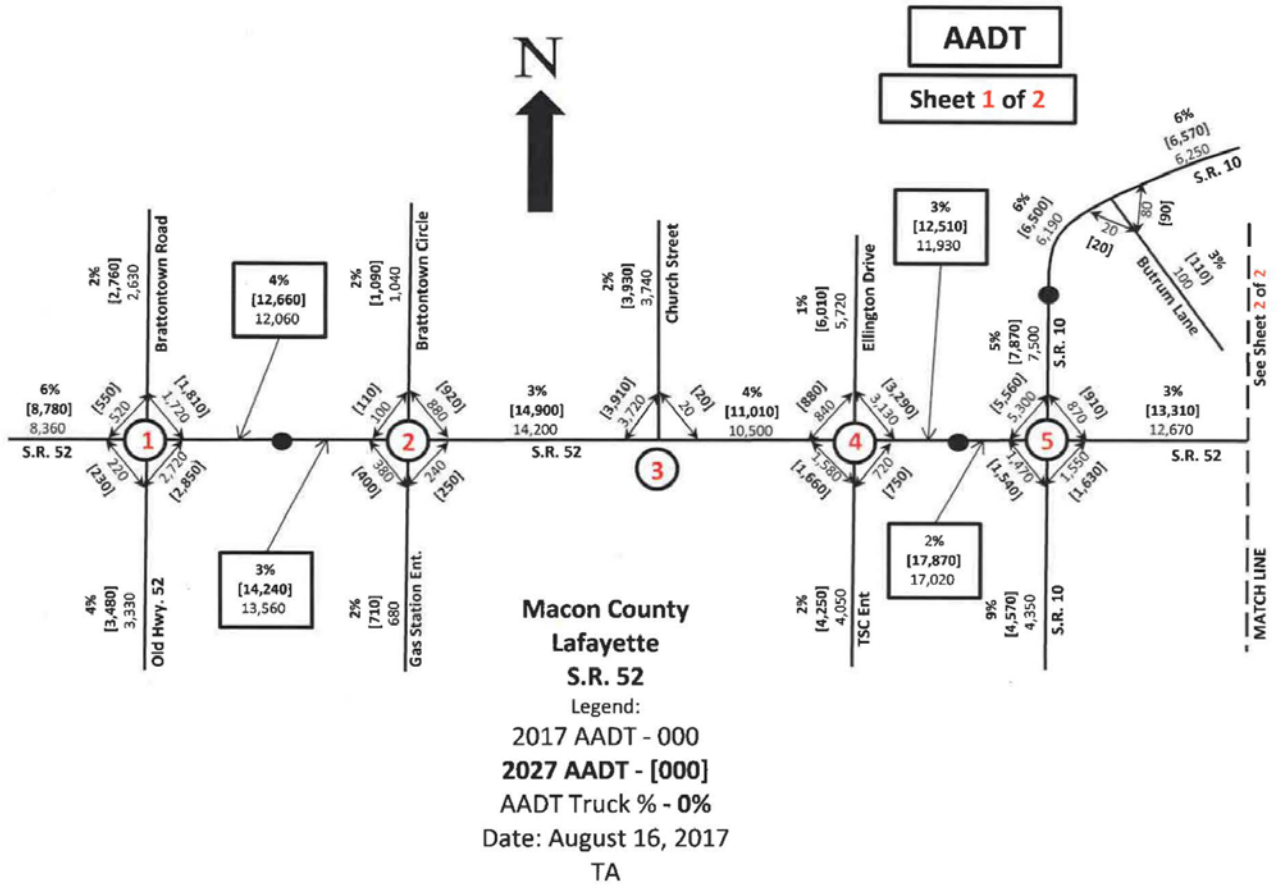
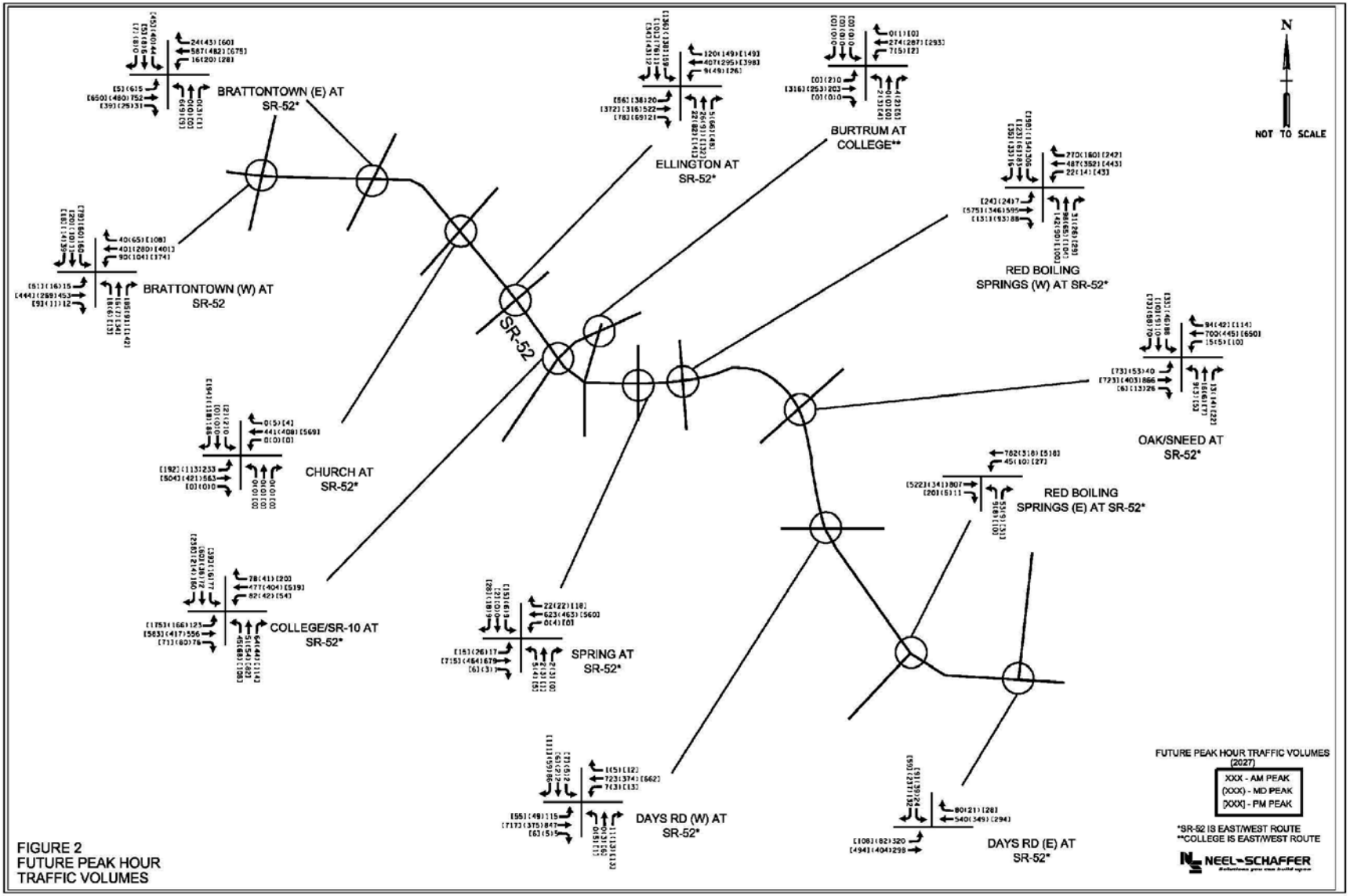


Figure 4.2: 2027 Peak Traffic Volumes



4.4 Capacity Analysis

Methods

TDOT traffic projections were incorporated into the Horizon Year and Future Recommended HCS Models. After inputting the projected traffic volumes, LOS and capacity were analyzed at an intersection and a corridor level. The capacity analysis was broken into three separate studies: Existing Year, Horizon Year Existing Conditions, and Horizon Year Recommended Conditions. Recommended scenarios were developed for the majority of intersections within the study along with specific cross-sections. Two different HCS Modules, analyzing two way stop control and streets, were used to analyze the LOS for the City of Lafayette. The Streets Module was able to analyze the entire corridor along with signalized intersections. The Two-Way Stop Control (TWSC) Module was able to analyze unsignalized intersections and calculate delay for all approaches. It is important to note that both Modules had to be utilized to define the Level of Service for all segments and intersections within the study area. The modules identified specific intersections that could use improvements such as optimization of timings and additions of turn lanes. These recommendations reflect the LOS differences between Horizon Year Existing Conditions and Recommended Horizon Year Conditions.

Horizon Year 2027 LOS findings

The Horizon Year analysis shows an increase in volumes without any improvement to the existing roadway network. As expected LOS results worsened as a result of existing geometrics and traffic control with higher volumes. Horizon year 2027 LOS are illustrated in Figures 4.3 and 4.4.

Intersections that had poor LOS within the Horizon Year analysis include:

- Ellington Dr at SR-52
- Red Boiling Springs (West) at SR-52
- Days Rd (East) at SR-52

Figure 4.3: AM LOS Horizon Year 2027

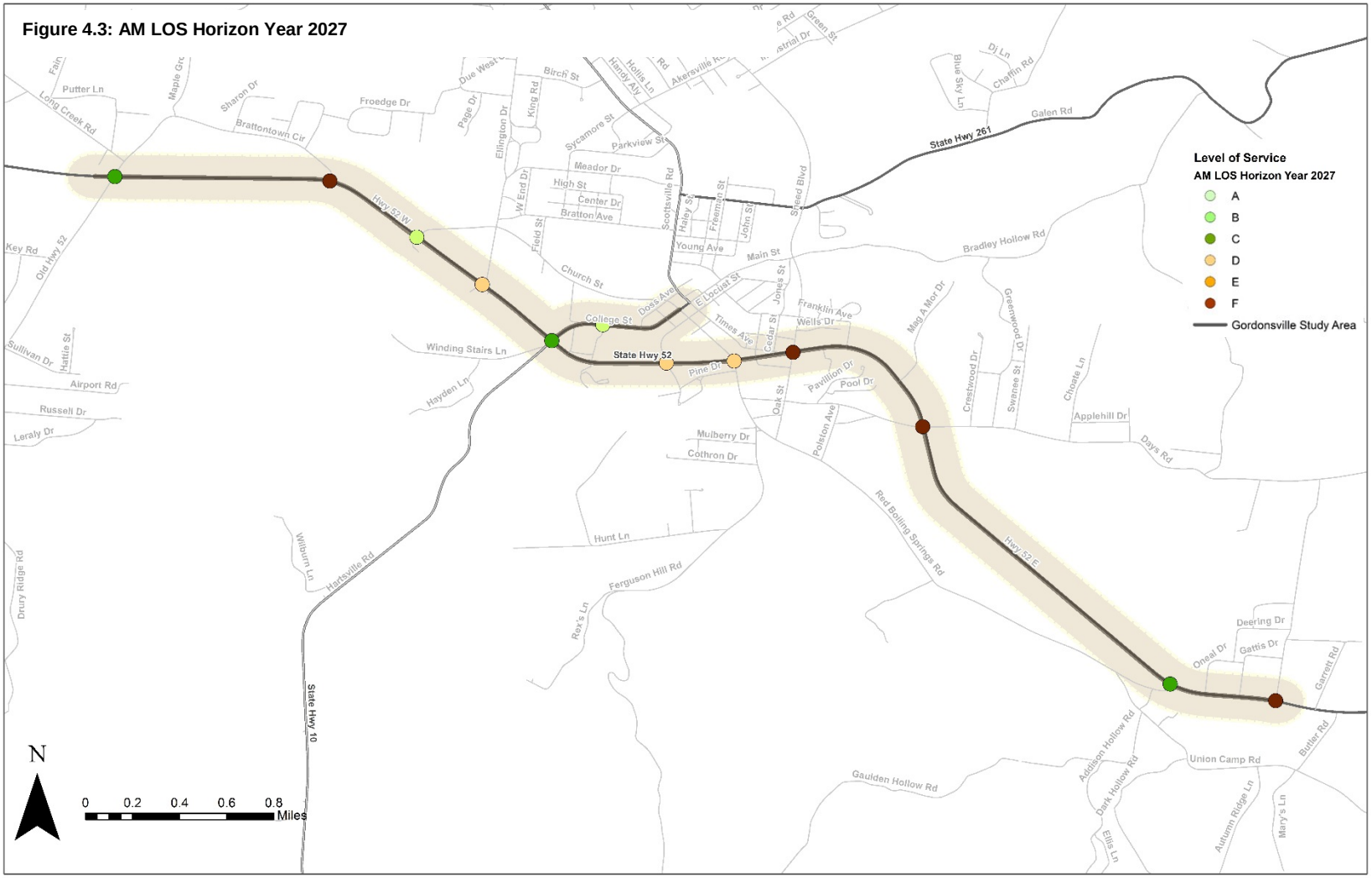
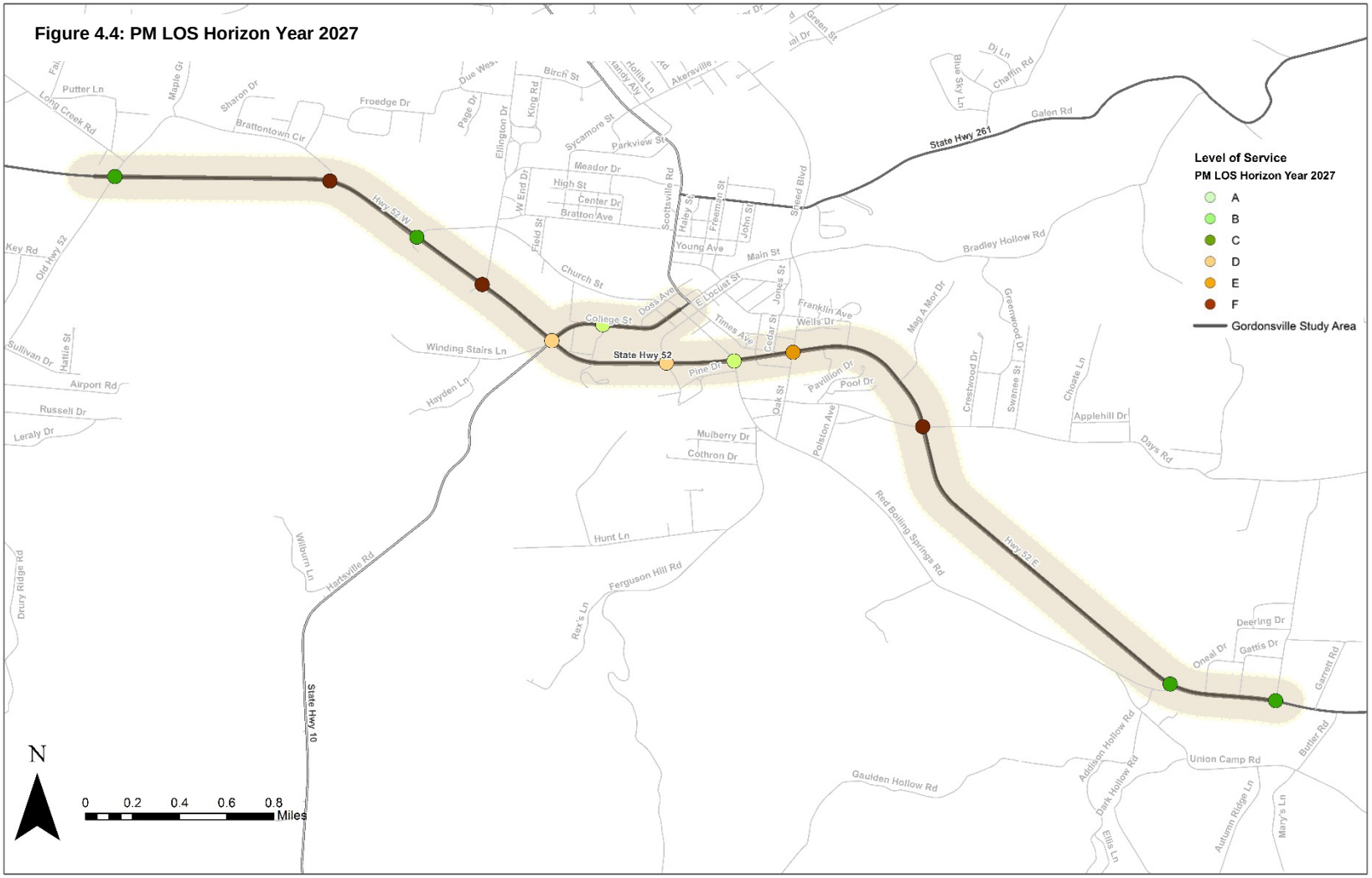


Figure 4.4: PM LOS Horizon Year 2027



The projected volumes show that the efficiency threshold of the 4-way stop at **Ellington Drive** has been surpassed resulting in an F LOS in Horizon Year 2027.

Red Boiling Springs (West) southbound left turn worsened, specifically in the AM Peak, due to growth in volume and insufficient existing timings for the southbound approach.

Days Rd (East) shows high delay due to projected volumes surrounding the school area during AM and MD peak along with a lack of an exclusive right turn lane for the southbound approach.

Intersection and Corridor Recommended Scenarios Evaluation

Scenarios for improvement at each of the identified intersections and corridors were developed and evaluated. LOS was recalculated for the Horizon Year for the Recommended Scenario. Potential for crash reduction was also considered.

Brattontown Road (West) has sufficient southbound left and northbound right turning volumes to justify a recommendation of an exclusive northbound right turn lane and southbound left turn lane.

Church St at SR-52 had a concerning issue of rear-end crashes due to a southbound channelized right turn. It is recommended that the southbound channelized right be removed and replaced with an exclusive southbound right turn lane. The park entrance was recommended to be re-aligned with Church St. However, the right-of-way on the southern side of SR-52 nearest the park entrance is privately owned and the steering committee noted that it will be difficult to acquire from the current landowner. Recommendations reflect a realignment of Church Street to match the park entrance in the future as the ideal scenario should it become possible in the future.

Potential recommendations for the **segment between Ellington Dr. to College/SR-10** were investigated. These include:

- *Changing traffic control from a 4-way stop to signalization at Ellington Dr*: Signal plans are in the process of being designed for Ellington Dr.
- *An exclusive westbound right turn lane at Ellington Drive*: Westbound right turn volumes at Ellington Dr. are significantly high.
- *Raised concrete medians strategically placed within SR-52 to minimize left turn movement from retail drives onto SR-52* were explored. These medians would be placed so as not to impede tractor trailer delivery vehicles from accessing existing businesses including Walmart and Tractor Supply
- At College St (SR-10), *an exclusive northbound right turn lane* was analyzed due to the difficulty of making a right turn with thru traffic queuing past the beginning of channelization. An eastbound right turn lane is also recommended due to the amount of volume and right-of-way available along SR-52.

- *A right-in/right-out for the property to the East of Walmart*: The property is anticipated to be developed by 2027. Functional drawings do not show development of this area, however, a right-in/right-out would be recommended at this location of future development while having minimal spacing from College
- A Master Plan and Traffic Circulation Plan to coordinate future development are recommended. This was not part of the modeling but is an integral part of the future recommendations as it is assumed to mediate the impact of future traffic.
- Sidewalk connectivity is recommended on both sides of SR-52 between Ellington Dr and College to connect the downtown area and retail area. This was not modeled, but it is assumed that increased population will increase both the pedestrian traffic and the need for safe walkways separated from increased vehicular traffic.

Red Boiling Springs (West) has recommendations of optimization of timings, specifically southbound left turn phase, along with a westbound right turn lane to provide ease of movement. The signal pole at the northeast corner of this intersection will need to be relocated if a westbound right turn lane is installed.

Sneed Boulevard/Oak Street at SR-52 has recommendations of signalization and a proposed southbound thru-right shared lane. This location is a preferred truck route, which poses a safety concern. Industrial traffic is expected to increase as the city of Lafayette and local economic development officials pursue future opportunities for employment growth.

Days Rd (West) has recommendations of removing channelization and installing exclusive right turn lanes for the side street approaches. Transverse striping would also need to be installed to decrease rear-end crash potential. These recommendations will not significantly affect LOS, but will improve safety. This improvement has the net effect of reducing the size of the intersection and the distance required to cross and complete turning movements.

Days Rd (East) has a recommendation of an exclusive southbound right turn lane for ease of movement from school traffic within the AM and MD peaks. The MD peak at this location was determined to be during school dismissal, which is different from the rest of the corridor.

Recommendations and suggestions of changes to specific cross sections were also made.

- **From Brattontown Rd (West) to Church St**, it was recommended to expand from a 2-lane cross-section to a 3-lane cross-section with a two-way left turn lane (TWLTL). The shoulders within this area would be used to expand to a 3-lane cross-section, but would need sufficient design to handle the ADT volume and Equivalent Single Axle Loads (ESAL's) especially from truck traffic.
- **From Days Rd (West) to Red Boiling Springs (East)**, it was suggested that the cross-section be decreased from a 4-lane cross-section to a 3-lane cross-section with optional bike lanes and a TWLTL. Forecasted ADT volumes justify that a 3-lane cross-section would be sufficient

and provide the same LOS. The steering committee requested an evaluation of a 5-lane cross-section. A need for a left turn lane within the median is desired, but development and projected growth does not require 5-lane cross-section.

Figure 4.5: COUPLING INDEX (COORDINABILITY) ANALYSIS
Lafayette CTPG - SR-52/SR-10

Intersection Limits	Bi-Directional Volume (vph)	Distance (Miles)	Coupling Index (CI)
Brattontown Rd (W) to Ellington Dr	1004	1.42	0.50
Ellington Dr to College St	1222	0.34	10.57
College St to Red Boiling Springs (W)	1334	0.65	3.16
Red Boiling Springs (W) to Sneed/Oak	1711	0.19	47.40

NOTE: Coupling Index = $V/(D^2)$
V = Bi-Directional Volume (Divided By 1000)
D = Distance between Intersections (Miles)

Signal coordination within the corridor was explored. A Coupling Index (CI) was used to gauge which intersections could potentially be coordinated within Lafayette. It was recommended that Sneed Boulevard/Oak Street and Red Boiling Springs (West) be coordinated within the AM and PM peak periodsThe Module shows coordination between Red Boiling Springs (West) and Sneed/Oak. A Coordinability or Coupling Index was calculated to show that coordination would better improve traffic operations between these two intersections and benefit the segment and corridor as a whole. In general, the corridor would benefit from the presence of traffic signal coordination and associated technology. An outcome of the study includes a recommendation that city officials make plans for integrating infrastructure to provide coordination between Ellington Drive and Sneed Blvd, so that the required equipment will be in place at which time it will be needed in the future.

Recommended Network LOS findings

Functional drawings and specific recommendations were provided for intersections that were not performing to full traffic efficiency, along with corridor wide suggestions. HCS Modeling was used to provide proof that given recommendations improve projected LOS and delay. Recommended Network LOS findings are shown in figures 4.5 and 4.6 as well as table 4.1. At Brattontown Road East, Ellington Drive, Sneed Boulevard and Days Road East the projected LOS in the Horizon Year 2027 was an F. On the recommended network, the LOS increased to at least an E and at most a B.

INTERSECTION LEVEL OF SERVICE ANALYSIS
Lafayette CTPG - SR-52/SR-10

Intersection		Existing (2017) Peak Period [1] AM	MD	PM	Horizon Year (2027) [2] AM	MD	PM	Recommended Horizon Year (2027) [2] AM	MD	PM
Brattontown Rd W at SR-52 [4]	TOTAL	C	B	C	C	B	C	B	B	B
Brattontown Rd E at SR-52	EB	A	A	A	A	A	A	A	A	A
	WB	A	A	A	A	A	A	A	A	A
	NB	**E (36s)**	C	**E (40s)**	**F (57s)**	**D (30s)**	**F (78s)**	C	C	**D (28s)**
	SB	**E (41s)**	C	**E (38s)**	**F (82s)**	**D (30s)**	**F (94s)**	**D (30s)**	C	**D (29s)**
Church St at SR-52	EBL	A	A	A	A	A	A	A	A	A
	WB	A	A	A	A	A	A	A	A	A
	SBL	A	B	C	A	B	C	A	B	C
	SBR	B	B	B	B	B	B	B	B	B
Ellington Dr at SR-52 [3]	EB	**D (26s)**	C (16s)	**E (36s)**	**D (32s)**	**D (31s)**	E (47s)	B	B	B
	WB	**C (22s)**	C (19s)	**E (49s)**	**D (31s)**	**D (34s)**	**F (108s)**			
	NB	B	C (16s)	**C (23s)**	B (14s)	C (23s)	D (30s)			
	SB	C	C (16s)	**C**	C (21s)	C (23s)	**D (26s)**			
		C (23)	**C**	**E (38s)**	**D (30s)**	**D (29s)**	**F (61s)**			
College/SR-10 at SR-52 [4]	TOTAL	C	**D (36s)**	**D (38s)**	C	**D (39s)**	**D (44s)**	B	B	B
Spring Hollow Rd/Spring Dr at SR-52	EB	A	A	A	A	A	A	A	A	A
	WB	A	A	A	A	A	A	A	A	A
	NBL	C	C	C (21s)	**D (28s)**	C (20s)	**D (28s)**	**D (28s)**	C (20s)	**D (28s)**
	NBR	B	A	B	B	A	B	B	A	B
	SB	B	A	B	C	A	B	C	A	B
Red Boiling Springs Rd (W) at SR-52 [4]	TOTAL	C	B	C	**D (37s)**	B	B	B	B	B
Sneed Rd/Oak St at SR-52 [3]	EB	A	A	B	B	A	B	B	B	B
	WB	B	A	A	B	A	B			
	NB	**E (44s)**	B	C (21s)	**F (69s)**	C	**D (30s)**			
	SB	**E (45s)**	B	**D (28s)**	**F (114s)**	B	**E (47s)**			
Days Rd (W) at SR-52	EB	B	A	A	B	A	A	B	A	A
	WB	B	A	A	B	A	B	B	A	B
	NBL	A	C	**E (41s)**	A	C	**F (83s)**	A	C	**F (83s)**
	NBR	B	A	B	B	A	B	B	A	B
	SBL	**E (45s)**	B	C (24s)	**F (63s)**	B	**E (38s)**	**F (63s)**	B	**E (38s)**
	SBR	B	A	B	B	A	B	B	A	B
Red Boiling Springs (E) at SR-52	EB	A	A	A	A	A	A	A	A	A
	WB	B	A	A	B	A	A	B	A	A
	NB	C (22s)	B	C	C (25s)	B	C	C (19s)	B	C
Days Rd (E) at SR-52	WB	B	A	A	B	A	A	B	A	A
	SB	**F (54s)**	C	B	**F (389s)**	**E (45s)**	C (16s)	**D (27s)**	C (19s)	B
Burtrum Ln at SR-10	EB	A	A	A	A	A	A	A	A	A
	WB	A	A	A	A	A	A	A	A	A
	NB	A	B	B	B	B	B	B	B	B

Table 4.1: Horizon Year 2027 LOS on Current and Recommended Network

Segment		Existing (2017) Peak Period [1] AM	MD	PM	Horizon Year (2027) [2] AM	MD	PM	Recommended Horizon Year (2027) [2] AM	MD	PM
Brattontown Rd W to Church St	EB	**B**	**B**	**B**	**B**	**B**	**B**	A	A	**B**
	WB	**B**	A	A	**B**	A	**B**	A	A	A
Church St to College St/SR-10	EB	**D**	C	C	**D**	C	C	C	C	C
	WB	**D**	C	C	**D**	C	**D**	**B**	C	C
College St/SR-10 to Days Rd W	EB	C	**B**	C	B	B	B	B	B	**B**
	WB	C	**B**	**B**	B	C	C	B	B	**B**
Days Rd W to Days Rd E	EB	A	A	A	A	A	A	A	A	A
	WB	A	A	A	A	A	A	A	A	A
SR-52 CORRIDOR FROM BRATTONTOWN CIR TO DAYS RD E)	TOTAL	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**	**B**

Figure 4.5: Horizon Year 2027 AM LOS on Recommended Network

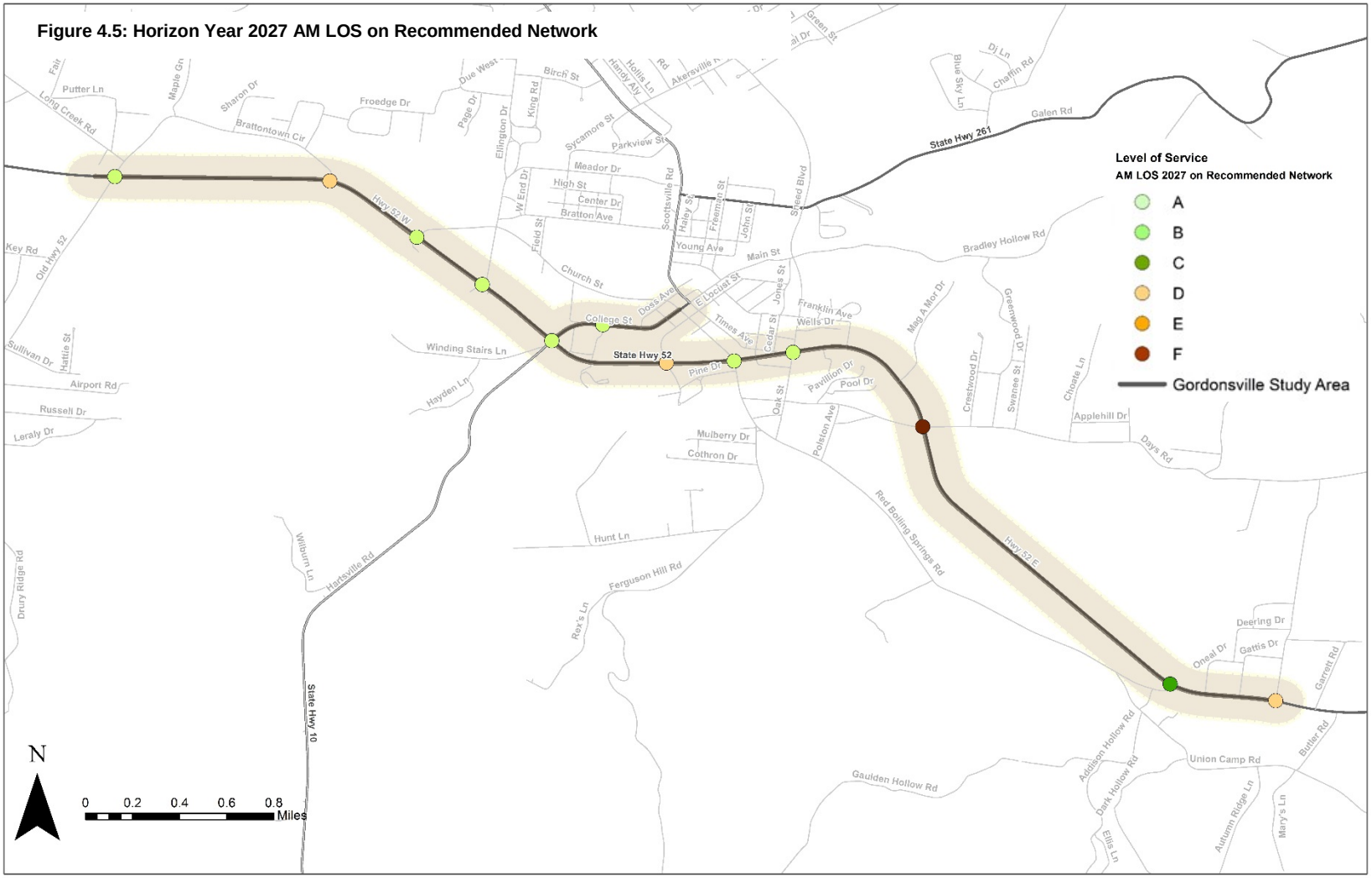
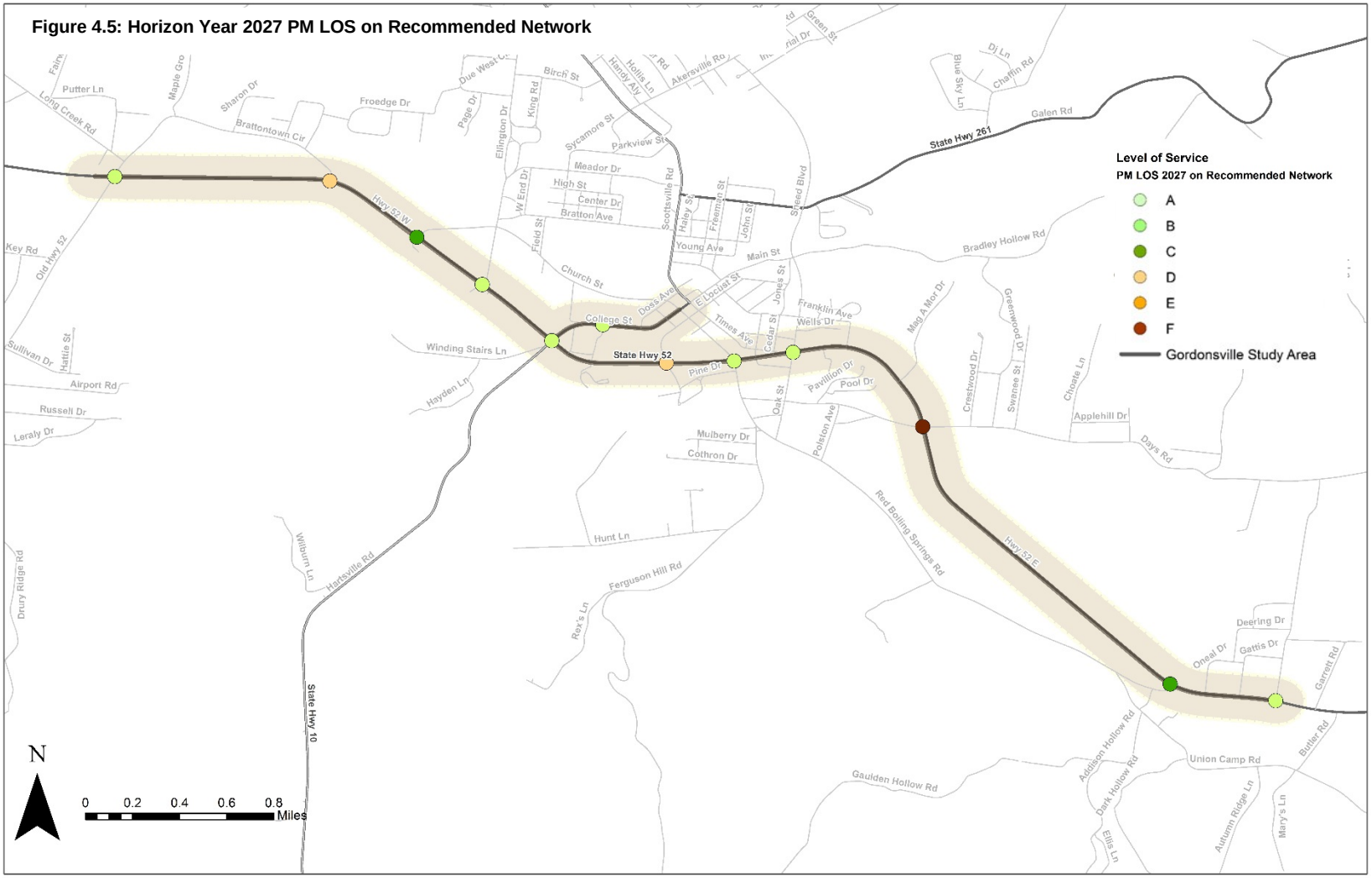


Figure 4.5: Horizon Year 2027 PM LOS on Recommended Network



Operations and Safety

A crash analysis was completed on the Existing Year by accounting for different crash types over the course of 5 years (Section 4.3). Upon completion of the crash analysis, it was apparent that changes to lane assignments at specific intersections could potentially reduce crash rates. For example, schematics for Days Rd (West) and Church Drive show removal of channelization by replacing channelized right turn movement with designated right turn lanes. Most crashes at these intersections were rear-end crashes due to hesitation of movement from the side street turning onto the main line (SR-52). A dedicated right turn lane will lessen these hesitations.

In addition, a crash signal warrant was done for Sneed/Oak at SR-52. The intersection met the threshold for a signal in two separate warrant analyses. The threshold for the signal warrant was dropped to 80% within the assessment and it was determined that it did meet the warrant for a signal. A 70% threshold warrant was also analyzed due to the population of the city. According to the MUTCD, the 70% threshold is available when the major-street speed exceeds 40 mph or in an isolated community with a population of 10,000. The City of Lafayette has an existing population of approximately 5,200. As expected, this assessment clearly met the 70% signal warrant. The proposed signalized intersection was incorporated into the Streets Module for Recommended Horizon Year.

4.5 Access Management

Future construction along SR-53 must follow the guidelines *TDOT Manual for Constructing Driveway Entrances on State Highways.* With the projected increase in vehicles per day, crash rates and decreased LOS will continue to negatively impact the functionality of the existing access points. Redesign of existing access points should be considered and is shown in the schematic design in some recommendations.

Access management practices and the *TDOT Manual for Constructing Driveway Entrances on State Highways* are discussed in section 3.6 of this document.

A Master Plan and Traffic Circulation Plan to coordinate future development are recommended. As property develops and roads are repaved in the future, opportunities for consolidation of driveways and restrictions for right-in/ right-out are probable. A Master Plan and Circulation plan will prepare the city for interagency cooperation and implementation. An approved plan will ensure a clarity of purpose and lay the groundwork for implementation and the level of the permit writer.

Two specific access management improvements are recommended.

Raised concrete medians strategically placed within SR-52 to minimize left turn movement from retail drives onto SR-52 were explored between Ellington Drive and College Street. These medians would be placed so as not to impede tractor trailer delivery vehicles from accessing existing businesses including Walmart and Tractor Supply.

When the property to the east of Walmart is developed, From Days Rd (West) to Red Boiling Springs (East), it was suggested that the cross-section be decreased from a 4-lane cross-section to a 3-lane cross-section with optional bike lanes and a TWLTL. Forecasted ADT volumes justify that a 3-lane cross-section would be sufficient and provide the same LOS.. The property is anticipated to be developed by 2027. Functional drawings do not show development of this area, however, a right-in/right-out would be recommended at this location of future development while having minimal spacing from College St.

4.6 Additional Considerations

Freight

The City should work with TDOT to communicate with the industrial area and truck companies and designate a preferred truck route so trucks likely will not travel throughout the downtown area. It is also recommended that directional signage be provided along the preferred route. This will alleviate the issues of semi-trucks using local roads not accommodating to the wide turning radii and right-of-way required for semi-truck traffic.

Pedestrian Mobility and Accessibility

Pedestrian mobility to the main commercial area in the study area near the Walmart and to the City Square were a priority of this plan. Functional drawings are included in the recommendations section focusing on safe pedestrian crossings at SR-52 and College Street, and on improving sidewalk connections in these specific areas. Pedestrian safety and ADA compliance are the main justifications for these recommendations. Additionally, it is assumed that businesses in the area will benefit from increased foot traffic and residents will find the area more desirable. These improvements in pedestrian safety will also increase vehicular safety by providing a clear path for pedestrians to cross at intersections rather than mid-block through traffic.

Bike Route Opportunities (TDOT suitability BLOS A TDOT Bike and Ped Plan)

Should the City decide to modify the cross section of SR-52 through the study area, there is an opportunity for a bicycle route. This route is described in the Project Sheets for the corridor in Appendix D. The low Average Daily Traffic (ADT) and large shoulder width make SR-52 through Lafayette more suitable for bicycling. The Bicycle LOS in the area is an A.

School Access and Circulation

Middle and High-school campus circulation should be considered as the campuses are further developed. A formal circulation plan and full assessment of traffic patterns may be warranted if problems arise.

CHAPTER 5: EVALUATION AND STUDY RECOMMENDATIONS

5.1 General Improvements

Final recommendations are listed in Table 5.1 and shown in Figures 5.1 and 5.2. Each project also comes with a recommendation for the time-frame for improvements: short term, mid-term or long term. Project sheets detailing each recommendation are included in Chapter 7. The TDOT project system was utilized to give planning level cost estimates.

Table 5.1: Recommended Improvements

Number	Location	Description	Implementation Priority	Planning Level Cost Estimate
S1	SR52@ Ellington Drive	Install WB Right Turn Lane, Install New Traffic Signal	Short-Term	$440,000
S2	SR52@ Church Street	Install SB Right Turn Lane, Realign to Match Park Entrance	Short-Term	$250,000
S3	SR52@ Days Road (East)	Install SB Right Turn Lane	Short-Term	$160,000
S4	SR-52@ Sneed Boulevard	Install SB Right Turn Lane, Install WB Right Turn Lane, Signalize Intersection, Truck Routing Plan	Short-Term	$500,000
S5	SR52@ Days Road (West)	Remove side street channelization, Install EB and WB Right Turn Lanes	Short-Term	$100,000
S6	SR52 from College Street to Church Street	Install Acess Control Medians, Install Crosswalks, Install Pedestrian Signalization, and Sidewalks	Short-Term	$460,000
M1	SR52@ College Street	Install EB Right Turn Lane, Install NB Right Turn Lane	Mid-Term	$320,000
M2	SR52@ Brattontown Circle (West)	Install NB Right Turn Lane, Install SB Left Turn Lane	Mid-Term	$220,000
M3	SR52@ Red Boiling Springs (West)	Install WB Right Turn Lane	Mid-Term	$350,000
L1	SR-52 from Brattontown Circle E to Brattontown Circle W	Modify Cross Section by Installing Two Way Left Turn Lane and optional Bike Lanes	Long-Term	$1,300,000
L2	SR-52 from Red Boiling Springs to E of Days Road	Modify Cross Section to Provide Two Way Left Turn Lane and optional Bike Lanes	Long-Term	$640,000

Figure 5.1

Action Plan- Short Term

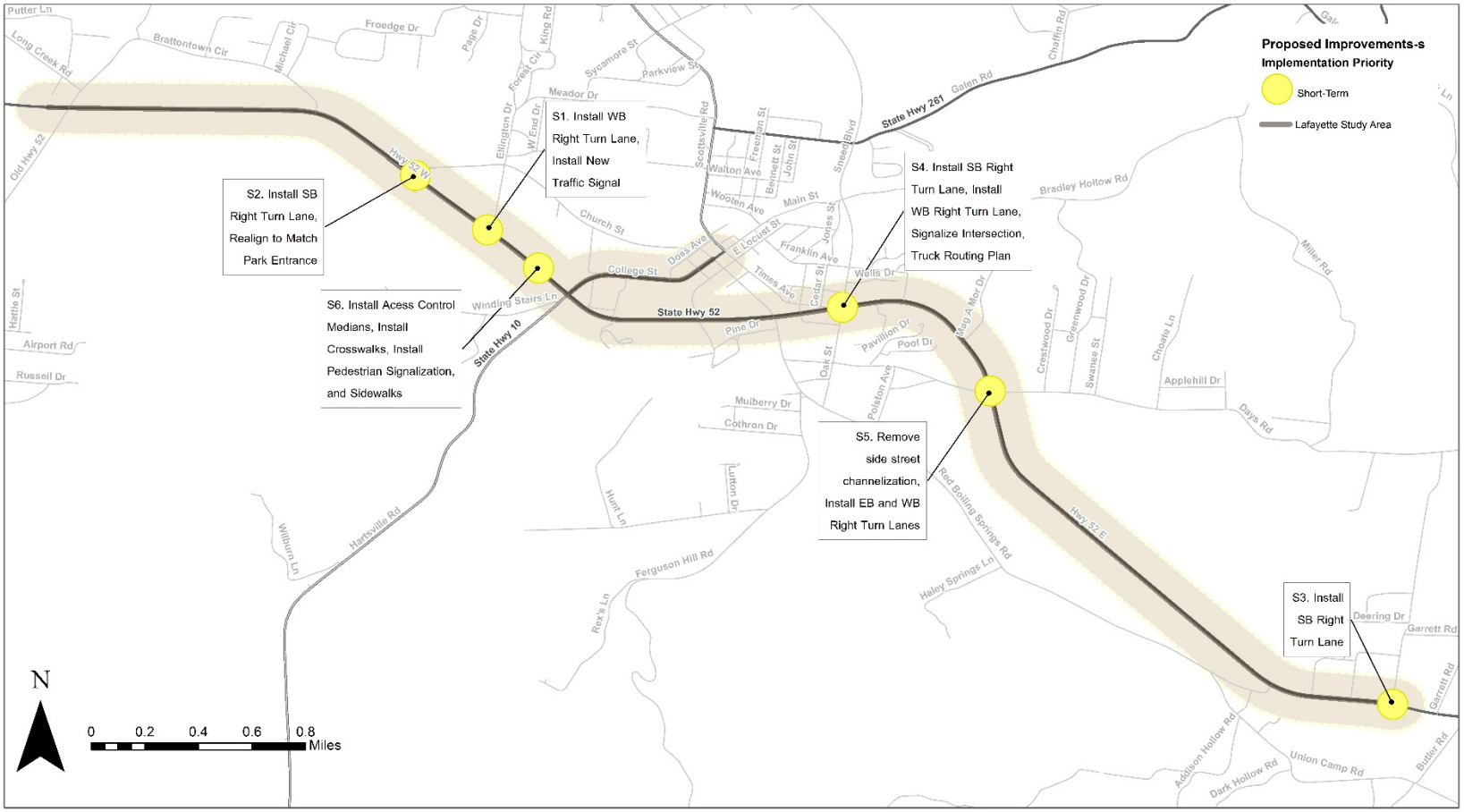
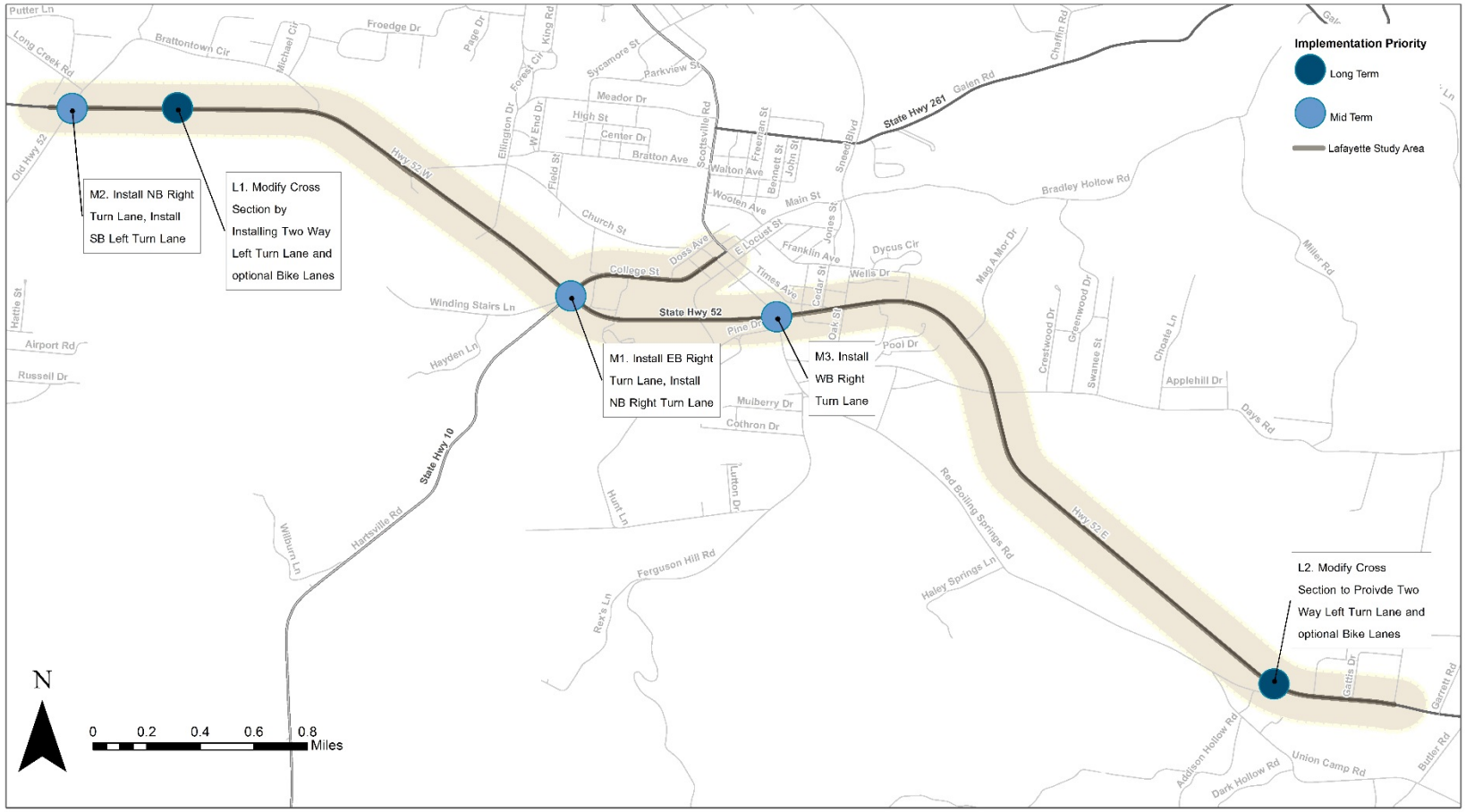


Figure 5.2

Action Plan- Mid/ Long Term



5.2 Funding

Funding of the projects will require a combination of federal, state and local funds. The table below shows some of the funding sources that may be available. It should be noted that federal and state funds require a matching ratio to be provided by the City or County. Other than the options below and local funds, funding of the recommended improvements would fall to regular TDOT project funding sources for any projects on state routes. The City may need to leverage private dollars in public-private partnerships as projects are constructed along the roadway. Some project improvements can be considered for inclusion in larger roadway maintenance projects to maximize the impact of limited funds.

Surface Transportation Block Grant (STBG)	Provides funding for roads functionally classified as rural major collector and above. Funds may be utilized on projects in Rural Areas, Urbanized Areas, Small Urban Areas, Enhancement, Safety and Rail-Highway Crossings. Also funds bridge replacement & rehabilitation on non-federal aid routes (activities previously under the BRR local program).	80% Federal 20% Non-Federal
Transportation Alternatives (set aside of STP)	Combines former funding programs for Enhancements, Safe Routes to Schools, Scenic Byways, and Recreational Trails. Eligible activities include bicycle and pedestrian facilities, sidewalks near elementary and middle schools, main street and boulevard projects, and environmental mitigation to address impacts of the transportation system.	80% Federal 20% Non- Federal
Highway Safety Improvement Program (HSIP)	Provides funds to make improvements to high hazard locations on eligible roadways, including highway-rail grade crossings. Projects are selected based on crash rate and crash frequency.	90% Federal 10% Non-Federal
TDOT Spot Safety Improvement Program	Provides funds for projects on state routes or intersections with state routes. May includes funds to install a traffic signal on a state route, fix a sight-distance problem on or near a state route, add a turning lane or lanes with or without signals on a state route, install school flashing signals on a state route, or install a flashing beacon on a state route. Emphasis is placed on cities and towns with a population of less than 5000.	90-100% Federal

5.3 Action Plan

Project Implementation

Immediate needs in the study area should be addressed as soon as possible to achieve short term relief from noted traffic problems. Capital funding management should also be organized with TDOT to alleviate costs of proposed design projects.

Programmatic Actions

Signal maintenance Agreement- It is recommended that the City enter into a traffic signal maintenance agreement with a vendor to provide routine and emergency traffic signal maintenance in the near term. Multiple communities within the Middle Tennessee area hold a signal maintenance agreement, and this can provide stability for traffic operations within the City.

Access Management is currently an issue along SR-52, specifically between College Street and Ellington Drive. Drivers entering and exiting the roadway at multiple closely placed points decreases the speed of traffic flow and increases crashes. TDOT has provided access management guidelines for use along state routes, and it is recommended that the City incorporate access management guidelines into any future developments or redevelopments within this area and Master Plan and Traffic circulation plan for implementation.

Capital Improvement Plan: Projects shown above should be included in future Capital Improvement Plans in order to build consensus around the project and organize match funding where necessary. Once the City of Lafayette wishes to prioritize recommendations and take given recommendations to the design stage, it is highly recommended that coordination with Metropolitan Planning Organization (MPO) and/or Rural Planning Organization (RPO) to launch a capital funding plan to provide ease to the City's funds. Capital funding management should also be organized with TDOT to alleviate costs of proposed design projects.

Projects should be coordinated with regional planning and STIP (TDOT) at every step of the process to ensure consistency and leverage funding. In addition, the City should work with TDOT to communicate with the industrial area and truck companies and designate a preferred truck route so trucks likely will not travel throughout the downtown area. It is also recommended that directional signage be provided along the preferred route.

CHAPTER 6: PUBLIC INVOLVEMENT

6.1 Steering Committee

A working Steering Committee selected by the City of Lafayette was formed to assist the study effort. Steering Committee Members included:

Richard Driver, Mayor, City of Lafayette
Steve Jones, Mayor, Macon County
Annette Morgan, Finance Officer, Recorder, City of Lafayette
Steve Turner, Council Member, City of Lafayette
Jason Phelps, Council Member, City of Lafayette
Jonathan Russell, TDOT
Joren Dunnavant, TDOT
Kwabena Aboagye, TDOT
Mark Dudney, UCDD Dale Hollow RPO
Greg Judy, Neel-Schaffer, Inc
Trey Todd, Neel-Schaffer, Inc
Maria Scheitz, Neel-Schaffer, Inc

Three meetings were held to guide and provide input to the study team.

Meeting 1: Objective and Visioning Session - March 16, 2017
Meeting 2: Preliminary Analysis Work Session - June 20, 2017
Meeting 3: Recommendations Work Session - September 14, 2017
Meeting 4: Project Prioritization- November 2, 2017

All meetings took place at the City Hall at 200 E Locust St, Lafayette, TN 37083.

A project summary and recommendations overview was presented before the Lafayette Regional Planning Commission meeting at its regularly scheduled meeting on Tuesday, November 14th, 2017.

CHAPTER 7: PROJECT SHEETS

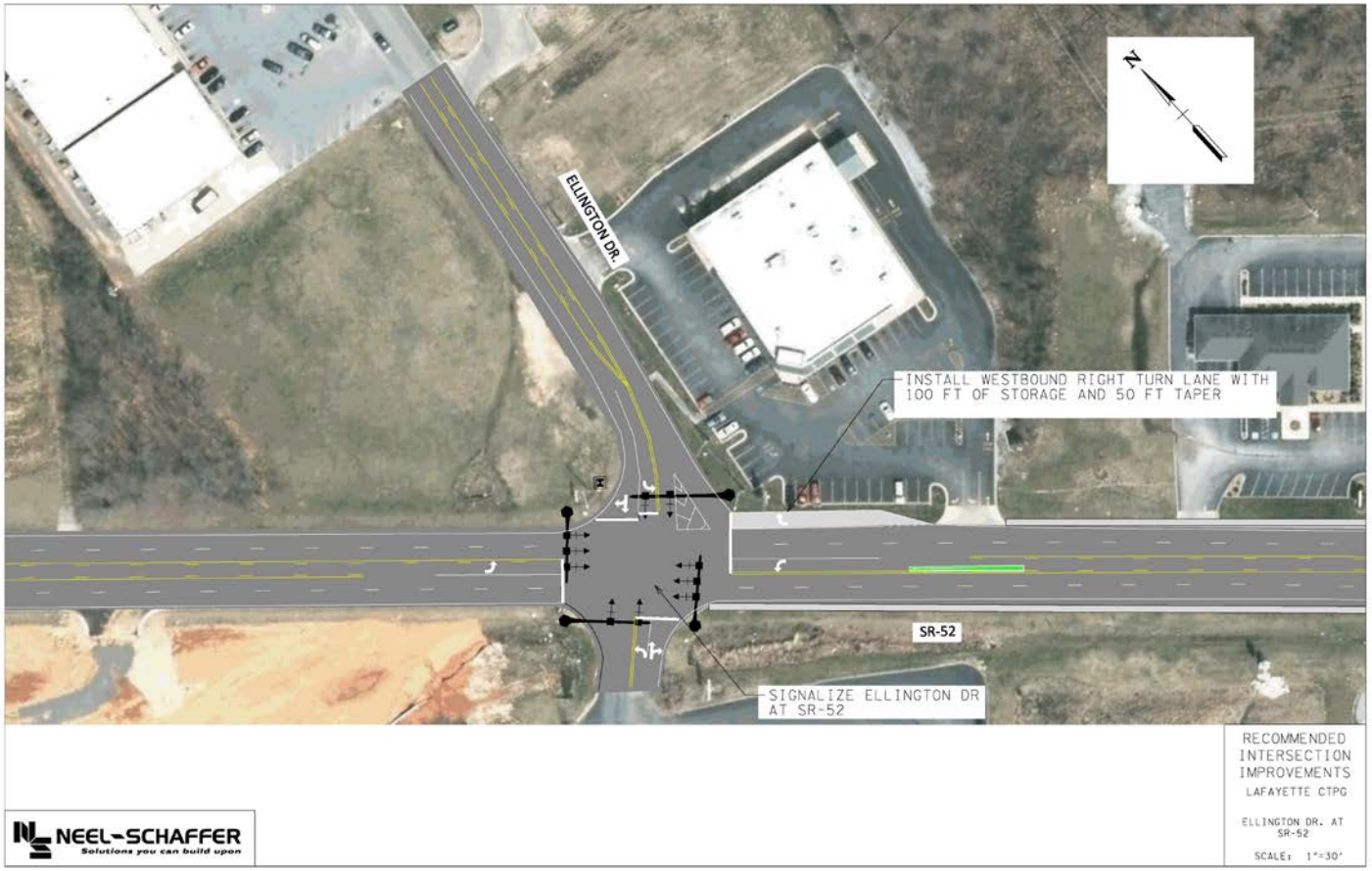
This section includes a project sheet summarizing each recommended project.

Project Sheet: S1

SR-52 @ Ellington

Number	Location	Description	Implementation Priority	Planning Level Cost Estimate
S1	SR52@ Ellington Drive	Install WB Right Turn Lane, Install New Traffic Signal	Short-Term	$440,000

Installation of a WB right turn lane and installation of a new traffic signal are recommended at the intersection of SR-53 with Ellington Drive. Westbound right turns at Ellington Drive are significantly high. The threshold for a signal was met in a signal warrant analysis.



Project Sheet: S2

SR-52 @ Church Street

Number	Location	Description	Implementation Priority	Planning Level Cost Estimate
S2	SR52@ Church Street	Install SB Right Turn Lane, Realign to Match Park Entrance	Short-Term	$250,000

The installation of a southbound right turn lane and realignment of Church Street is recommended. This intersection had a higher than average crash rate mostly due to rear end collisions in the channelized southbound turn lane.

Project Sheet: S3

SR-52 @ Days Road (East)

Number	Location	Description	Implementation Priority	Planning Level Cost Estimate
S3	SR52@ Days Road (East)	Install SB Right Turn Lane	Short-Term	$160,000

Days Rd (East) has a recommendation of an exclusive southbound right turn lane for ease of movement from school traffic within the AM and MD peaks. The MD peak at this location was determined to be during school dismissal, which is different from the rest of the corridor. This intersection did not meet the thresholds for signalization based on volume and crash rates.

Project Sheet: S4

SR-52 @ Sneed Boulevard

Number	Location	Description	Implementation Priority	Planning Level Cost Estimate
S4	SR-52@ Sneed Boulevard	Install SB Right Turn Lane, Install WB Right Turn Lane, Signalize Intersection, Truck Routing Plan	Short-Term	$500,000

Sneed Boulevard/Oak Street at SR-52 has recommendations of signalization and a proposed southbound thru-right shared lane. This location is a preferred truck route, which poses a safety concern. Industrial traffic is expected to increase within this area at a much higher rate than suggested within traffic forecast projections . Sneed Blvd/Oak St at SR-52 had a trend of crashes that were mainly angle crashes coming from the side street. This could indicate that drivers experience difficulty in entering and crossing SR-52 from the Sneed Rd/Oak St approaches. The intersection met thresholds for signalization.

Project Sheet: S5

SR-52 @ Days Road (West)

Number	Location	Description	Implementation Priority	Planning Level Cost Estimate
S5	SR52@ Days Road (West)	Remove side street channelization, Install EB and WB Right Turn Lanes	Short-Term	$100,000

Days Rd (West) has recommendations of removing channelization and installing exclusive right turn lanes for the side street approaches. Transverse striping would also need to be installed to decrease rear-end crash potential. These recommendations will not significantly affect LOS, but will improve safety.

Project Sheet: S6

SR-52 from College Street to Church Street

Number	Location	Description	Implementation Priority	Planning Level Cost Estimate
S6	SR52 from College to Church Street	Install Acess Control Medians, Install Crosswalks, Install Pedestrian Signalization, and Sidewalks	Short-Term	$460,000

Installation of access control medians, crosswalks, pedestrian signals and sidewalks are recommended in this corridor. The area developed before any access control measures were in place. This is a primary commercial area in corridor and safe, ADA compliant pedestrian access is recommended.

Project Sheet: M1

SR-52 @ College Street

Number	Location	Description	Implementation Priority	Planning Level Cost Estimate
M1	SR52@ College Street	Install EB Right Turn Lane, Install NB Right Turn Lane	Mid-Term	$320,000

An eastbound right turn land and northbound right turn lane are recommended at College Street. A northbound right turn lane is recommended due to the difficulty of making a right turn with thru traffic queuing past the beginning of channelization. An eastbound right turn lane is also recommended due to the amount of volume and right-of-way available along SR-52. Pedestrian improvements are also recommended at this intersection

Project Sheet: M2

SR-52 @ Brattontown Circle (West)

Number	Location	Description	Implementation Priority	Planning Level Cost Estimate
M2	SR52@ Brattontown Circle (West)	Install NB Right Turn Lane, Install SB Left Turn Lane	Mid-Term	$220,000

Brattontown Road (West) has sufficient southbound left and northbound right turning volumes to justify a recommendation of an exclusive northbound right turn lane and southbound left turn lane.

Project Sheet: M3

SR-52 @ Red Boiling Springs (West)

Number	Location	Description	Implementation Priority	Planning Level Cost Estimate
M3	SR52@ Red Boiling Springs (West)	Install WB Right Turn Lane	Mid-Term	$350,000

Red Boiling Springs (West) has recommendations of optimization of timings, specifically southbound left turn phase, along with a westbound right turn lane to provide ease of movement. The signal pole at the northeast corner of this intersection will need to be relocated if a westbound right turn lane is installed.

Project Sheet: L1

SR-52 from Brattontown Circle East to Brattontown Circle West

Number	Location	Description	Implementation Priority	Planning Level Cost Estimate
L1	SR-52 from Brattontown Circle E to Brattontown Circle W	Modify Cross Section by Installing Two Way Left Turn Lane and optional Bike Lanes	Long-Term	$1,300,000

From Brattontown Rd (West) to Brattontown Circle West, it was recommended to expand from a 2-lane cross-section to a 3-lane cross-section with a two-way left turn lane (TWLTL). The shoulders within this area would be used to expand to a 3-lane cross-section, but would need sufficient design to handle the ADT volume and Equivalent Single Axle Loads (ESAL's) especially from truck traffic

Project Sheet: L2

SR-52 from Red Boiling Springs Road to East of Days Road

Number	Location	Description	Implementation Priority	Planning Level Cost Estimate
L2	SR-52 from Red Boiling Springs to E of Days Road	Modify Cross Section to Proivde Two Way Left Turn Lane and optional Bike Lanes	Long-Term	$640,000

From Days Rd (West) to Red Boiling Springs (East), it was suggested that the cross-section be decreased from a 4-lane cross-section to a 3-lane cross-section with optional bike lanes and a TWLTL. Forecasted ADT volumes justify that a 3-lane cross-section would be sufficient and provide the same LOS.

APPENDIX A: TURNING MOVEMENT COUNTS

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Old Hwy 52/Brattontown Cir -- SR 52

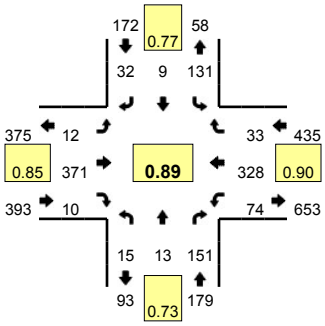
CITY/STATE: Lafayette, TN

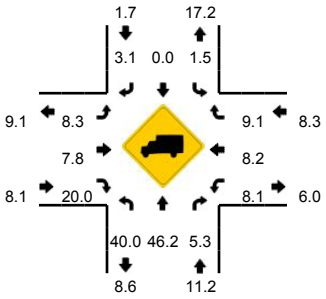
QC JOB #: 14096822

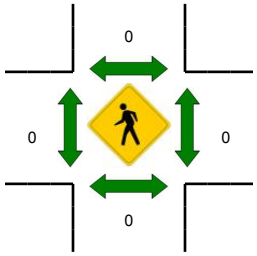
DATE: Tue, Mar 21 2017

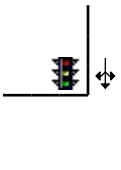
Peak-Hour: 7:00 AM -- 8:00 AM

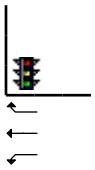
Peak 15-Min: 7:15 AM -- 7:30 AM

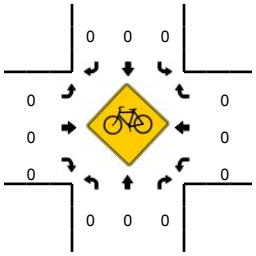


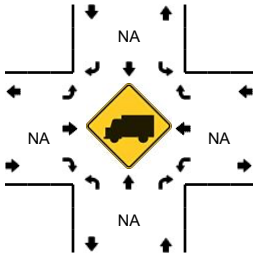


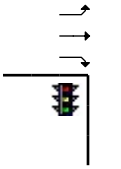


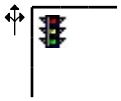


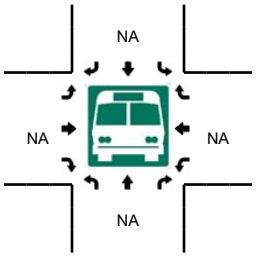












15-Min Count Period Beginning At	Old Hwy 52/Brattontown Cir (Northbound)				Old Hwy 52/Brattontown Cir (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	4	32	0	29	3	9	0	1	72	3	0	15	89	2	0	259	
7:15 AM	10	3	48	0	40	2	14	0	1	109	5	0	14	81	4	0	331	
7:30 AM	3	5	34	0	36	3	4	0	4	95	1	0	24	83	14	0	306	
7:45 AM	2	1	37	0	26	1	5	0	6	95	1	0	21	75	13	0	283	1179
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	920
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	589
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	283
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	40	12	192	0	160	8	56	0	4	436	20	0	56	324	16	0	1324
Heavy Trucks	16	8	8		0	0	0		0	48	4		0	24	0		108
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

LOCATION: Old Hwy 52/Brattontown Cir -- SR 52
CITY/STATE: Lafayette, TN

QC JOB #: 14096823
DATE: Tue, Mar 21 2017

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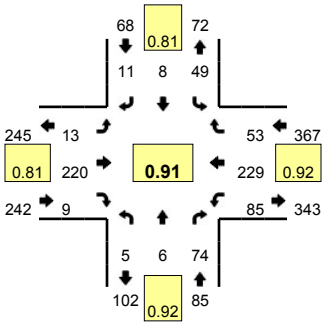
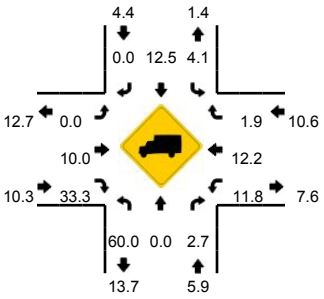
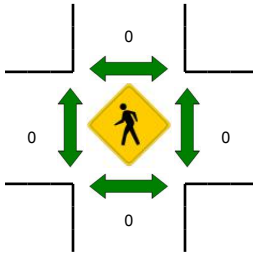
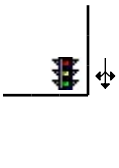
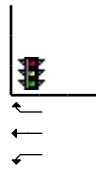
Peak 15-Min: 12:45 PM -- 1:00 PM

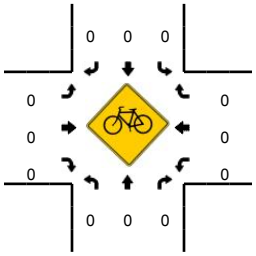


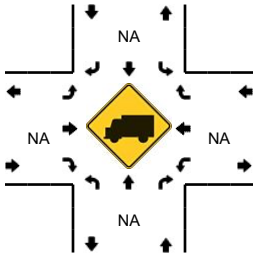


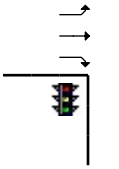


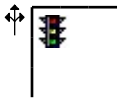


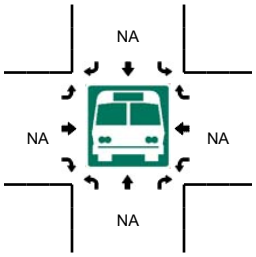












15-Min Count Period Beginning At	Old Hwy 52/Brattontown Cir (Northbound)				Old Hwy 52/Brattontown Cir (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
12:00 PM	3	2	16	0	10	3	3	0	4	43	2	0	25	54	12	0	177	
12:15 PM	2	3	18	0	12	1	2	0	1	55	2	0	29	55	16	0	196	
12:30 PM	0	1	19	0	12	2	2	0	3	55	2	0	10	62	12	0	180	
12:45 PM	0	0	21	0	15	2	4	0	5	67	3	0	21	58	13	0	209	762
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	585
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	389
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	209
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	84	0	60	8	16	0	20	268	12	0	84	232	52	0	836
Heavy Trucks	0	0	0		4	0	0		0	24	4		8	40	0		80
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

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CITY/STATE: Lafayette, TN

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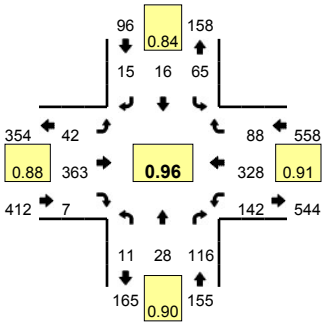
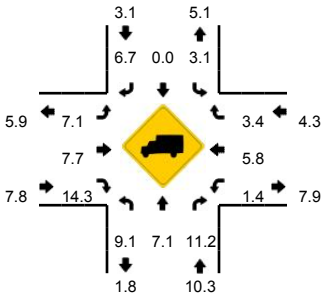
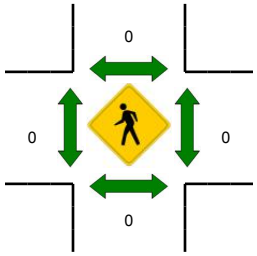
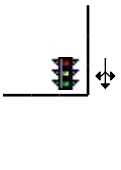
DATE: Tue, Mar 21 2017

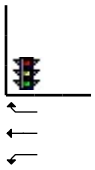


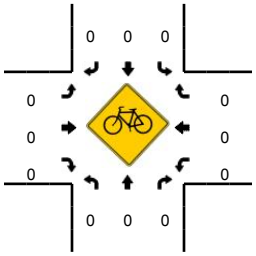
Peak-Hour: 3:45 PM -- 4:45 PM
Peak 15-Min: 4:30 PM -- 4:45 PM

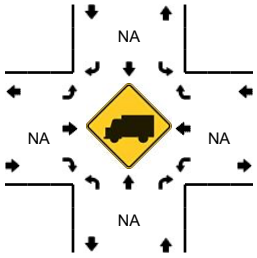


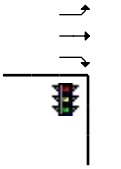


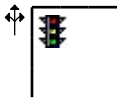


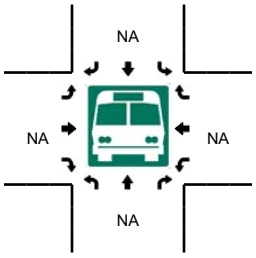












15-Min Count Period Beginning At	Old Hwy 52/Brattontown Cir (Northbound)				Old Hwy 52/Brattontown Cir (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	4	3	33	0	9	6	5	0	5	90	0	0	35	73	24	0	287	
3:15 PM	1	7	25	0	15	4	8	0	6	82	2	0	53	91	37	0	331	
3:30 PM	3	5	27	0	12	5	4	0	8	84	2	0	28	67	17	0	262	
3:45 PM	3	5	35	0	20	6	3	0	10	103	0	0	27	80	21	0	313	1193
4:00 PM	3	6	21	0	14	3	2	0	10	103	2	0	32	83	20	0	299	1205
4:15 PM	2	9	30	0	15	1	4	0	10	79	1	0	36	80	23	0	290	1164
4:30 PM	3	8	30	0	16	6	6	0	12	78	4	0	47	85	24	0	319	1221
4:45 PM	1	6	19	0	14	2	4	0	7	109	3	0	38	75	23	0	301	1209

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	12	32	120	0	64	24	24	0	48	312	16	0	188	340	96	0	1276
Heavy Trucks	0	4	12		0	0	4		0	16	0		0	24	4		64
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

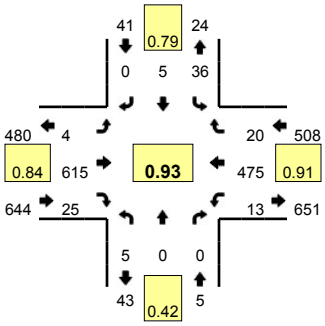
Method for determining peak hour: Total Entering Volume

LOCATION: Old Hwy 52/Brattontown Cir E -- SR 52

CITY/STATE: Lafayette, TN

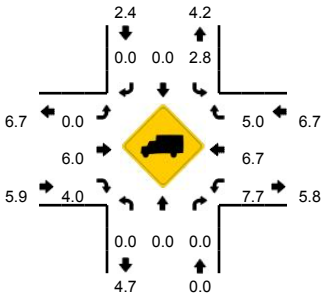
QC JOB #: 14096825

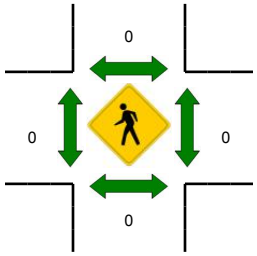
DATE: Tue, Mar 21 2017

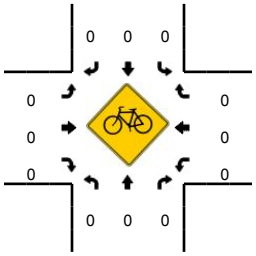


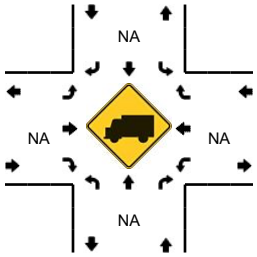
Peak-Hour: 7:00 AM -- 8:00 AM

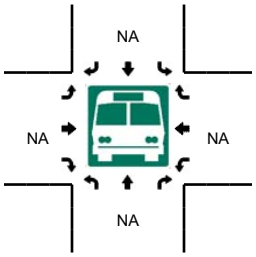
Peak 15-Min: 7:30 AM -- 7:45 AM











15-Min Count Period Beginning At	Old Hwy 52/Brattontown Cir E (Northbound)				Old Hwy 52/Brattontown Cir E (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	12	1	0	0	2	120	5	0	2	105	5	0	252	
7:15 AM	0	0	0	0	7	3	0	0	1	186	5	0	4	112	3	0	321	
7:30 AM	2	0	0	0	12	0	0	0	1	162	8	0	3	131	3	0	322	
7:45 AM	3	0	0	0	5	1	0	0	0	147	7	0	4	127	9	0	303	1198
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	946
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	625
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	303
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	8	0	0	0	48	0	0	0	4	648	32	0	12	524	12	0	1288
Heavy Trucks	0	0	0		0	0	0		0	20	0		4	20	0		44
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

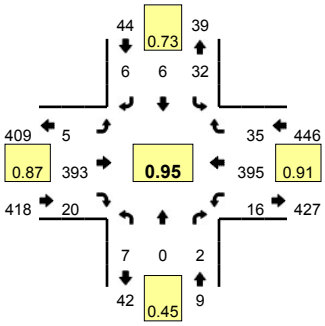
Method for determining peak hour: Total Entering Volume

LOCATION: Old Hwy 52/Brattontown Cir E -- SR 52

CITY/STATE: Lafayette, TN

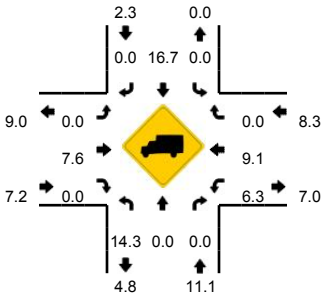
QC JOB #: 14096826

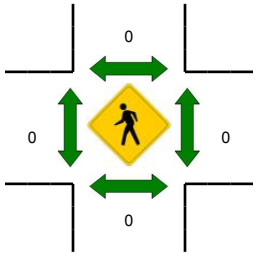
DATE: Tue, Mar 21 2017

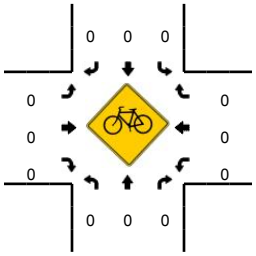


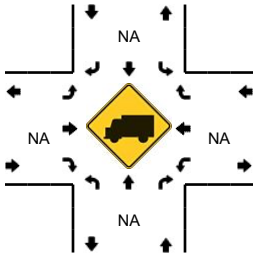
Peak-Hour: 12:00 PM -- 1:00 PM

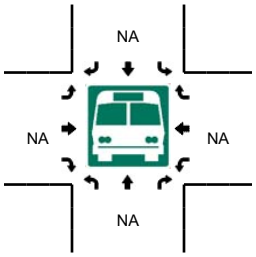
Peak 15-Min: 12:00 PM -- 12:15 PM











15-Min Count Period Beginning At	Old Hwy 52/Brattontown Cir E (Northbound)				Old Hwy 52/Brattontown Cir E (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
12:00 PM	2	0	1	0	9	0	0	0	0	112	8	0	3	99	7	0	241	
12:15 PM	4	0	1	0	2	2	4	0	1	79	3	1	5	108	10	0	220	
12:30 PM	0	0	0	0	8	3	1	0	2	100	2	0	5	90	8	0	219	
12:45 PM	1	0	0	0	13	1	1	0	1	102	7	0	3	98	10	0	237	917
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	676
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	456
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	237
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	8	0	4	0	36	0	0	0	0	448	32	0	12	396	28	0	964
Heavy Trucks	0	0	0		0	0	0		0	40	0		0	32	0		72
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

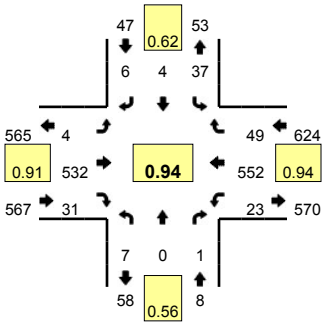
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

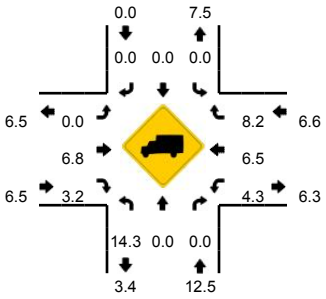
Method for determining peak hour: Total Entering Volume

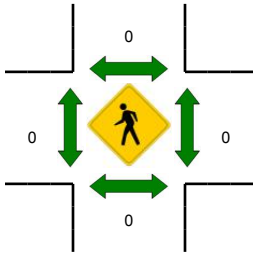
LOCATION: Old Hwy 52/Brattontown Cir E -- SR 52
CITY/STATE: Lafayette, TN

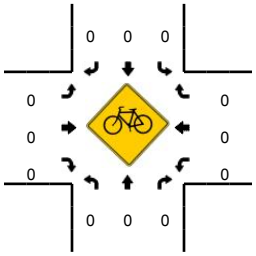
QC JOB #: 14096827
DATE: Tue, Mar 21 2017

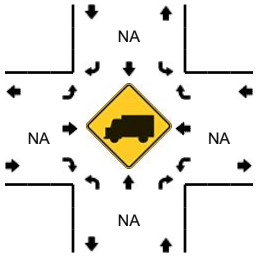


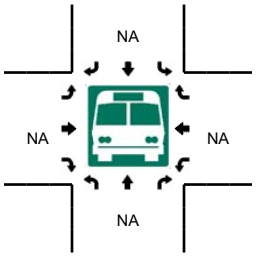
Peak-Hour: 3:00 PM -- 4:00 PM
Peak 15-Min: 3:15 PM -- 3:30 PM











15-Min Count Period Beginning At	Old Hwy 52/Brattontown Cir E (Northbound)				Old Hwy 52/Brattontown Cir E (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	3	0	0	0	13	3	3	0	1	127	5	0	5	148	17	0	325	
3:15 PM	1	0	0	0	9	1	3	0	0	130	3	0	4	168	13	0	332	
3:30 PM	0	0	0	0	9	0	0	0	1	123	16	0	9	116	8	0	282	
3:45 PM	3	0	1	0	6	0	0	0	2	152	7	0	5	120	11	0	307	1246
4:00 PM	0	1	0	0	7	1	0	0	2	139	9	0	3	131	15	0	308	1229
4:15 PM	2	0	0	0	8	3	0	0	0	134	4	0	6	138	4	0	299	1196
4:30 PM	2	0	0	0	10	1	4	0	2	130	5	0	8	147	11	0	320	1234
4:45 PM	1	0	0	0	6	0	2	0	1	137	5	0	6	143	18	0	319	1246

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	4	0	0	0	36	4	12	0	0	520	12	0	16	672	52	0	1328
Heavy Trucks	0	0	0		0	0	0		0	36	0		0	48	4		88
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

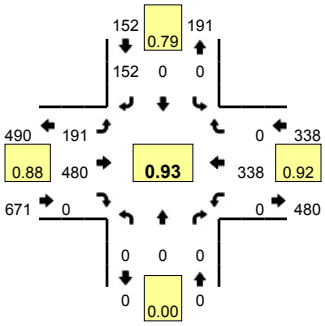
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

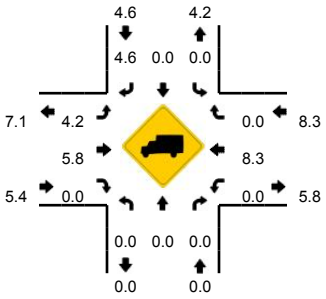
Method for determining peak hour: Total Entering Volume

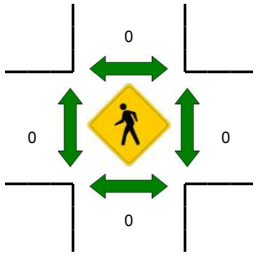
LOCATION: Church St -- SR 52
CITY/STATE: Lafayette, TN

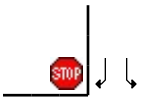
QC JOB #: 14096828
DATE: Tue, Mar 21 2017

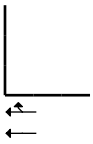


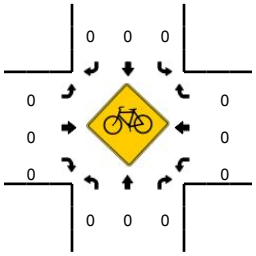
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

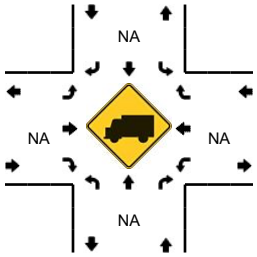


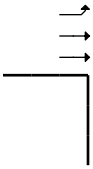


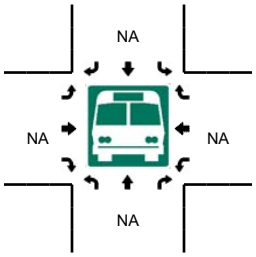












15-Min Count Period Beginning At	Church St (Northbound)				Church St (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	24	0	34	102	0	0	0	81	0	0	241	
7:15 AM	0	0	0	0	0	0	42	0	42	149	0	0	0	76	0	0	309	
7:30 AM	0	0	0	0	0	0	38	0	64	120	0	0	0	89	0	0	311	
7:45 AM	0	0	0	0	0	0	48	0	51	109	0	0	0	92	0	0	300	1161
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	920
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	611
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	300
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	0	0	152	0	256	480	0	0	0	356	0	0	1244
Heavy Trucks	0	0	0		0	0	4		4	16	0		0	32	0		56
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

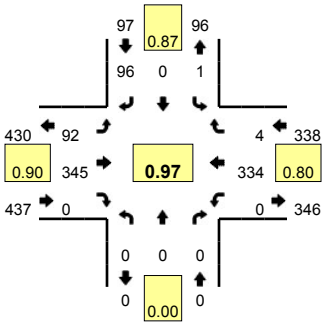
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

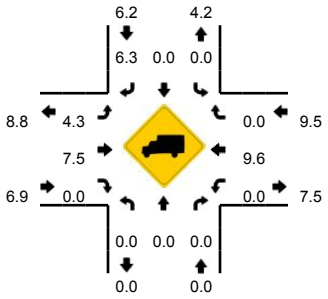
Method for determining peak hour: Total Entering Volume

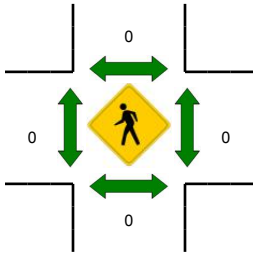
LOCATION: Church St -- SR 52
CITY/STATE: Lafayette, TN

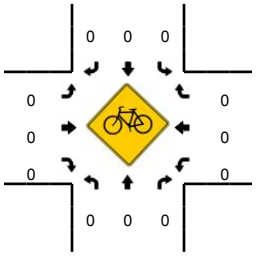
QC JOB #: 14096829
DATE: Tue, Mar 21 2017

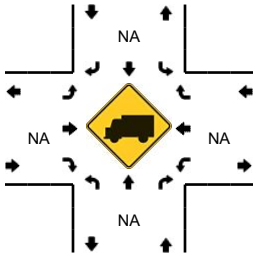


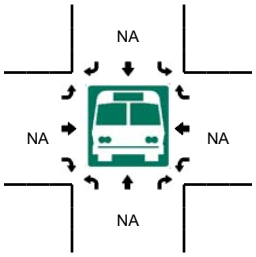
Peak-Hour: 12:00 PM -- 1:00 PM
Peak 15-Min: 12:00 PM -- 12:15 PM











15-Min Count Period Beginning At	Church St (Northbound)				Church St (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
12:00 PM	0	0	0	0	1	0	27	0	32	90	0	0	0	74	1	0	225	
12:15 PM	0	0	0	0	0	0	26	0	20	67	0	0	0	103	3	0	219	
12:30 PM	0	0	0	0	0	0	24	0	20	99	0	0	0	73	0	0	216	
12:45 PM	0	0	0	0	0	0	19	0	20	89	0	0	0	84	0	0	212	872
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	647
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	428
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	212
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	4	0	108	0	128	360	0	0	0	296	4	0	900
Heavy Trucks	0	0	0		0	0	8		8	32	0		0	28	0		76
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

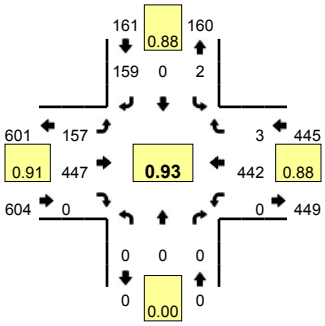
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

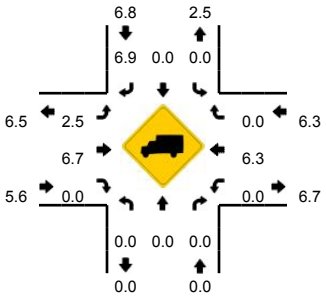
Method for determining peak hour: Total Entering Volume

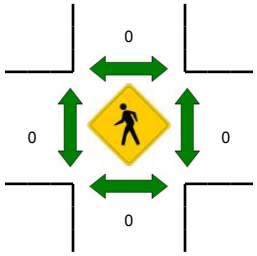
LOCATION: Church St -- SR 52
CITY/STATE: Lafayette, TN

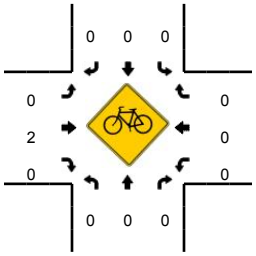
QC JOB #: 14096830
DATE: Tue, Mar 21 2017

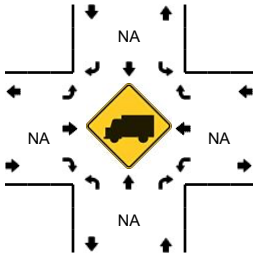


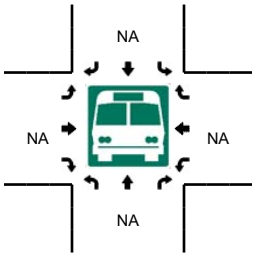
Peak-Hour: 3:00 PM -- 4:00 PM
Peak 15-Min: 3:00 PM -- 3:15 PM











15-Min Count Period Beginning At	Church St (Northbound)				Church St (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	0	0	0	0	0	0	43	0	45	105	0	0	0	132	2	0	327	
3:15 PM	0	0	0	0	1	0	45	0	41	107	0	0	0	125	1	0	320	
3:30 PM	0	0	0	0	0	0	35	0	28	108	0	0	0	92	0	0	263	
3:45 PM	0	0	0	0	1	0	36	0	43	127	0	0	0	93	0	0	300	1210
4:00 PM	0	0	0	0	0	0	33	0	35	109	0	0	0	112	1	0	290	1173
4:15 PM	0	0	0	0	0	0	33	0	32	123	0	0	0	108	0	0	296	1149
4:30 PM	0	0	0	0	0	0	32	0	27	120	0	0	0	132	0	0	311	1197
4:45 PM	0	0	0	0	0	0	49	0	36	116	0	0	0	112	0	0	313	1210

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	0	0	172	0	180	420	0	0	0	528	8	0	1308
Heavy Trucks	0	0	0		0	0	16		8	8	0		0	40	0		72
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

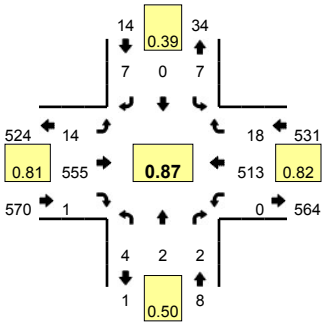
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

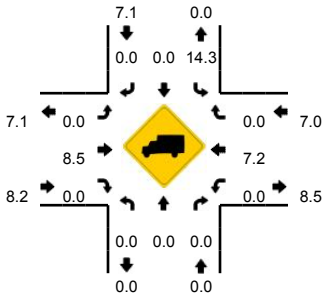
Method for determining peak hour: Total Entering Volume

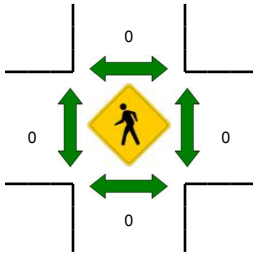
LOCATION: Spring Hollow Rd/Spring Dr -- SR 52
CITY/STATE: Lafayette, TN

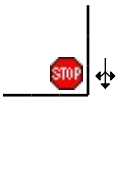
QC JOB #: 14096831
DATE: Tue, Mar 21 2017

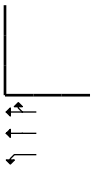


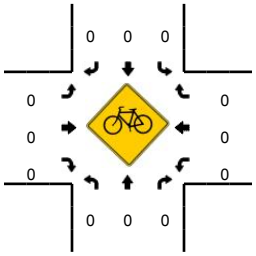
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

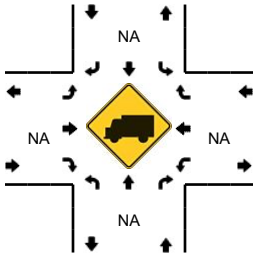


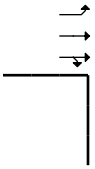


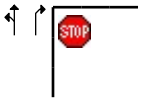


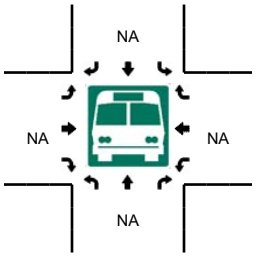












15-Min Count Period Beginning At	Spring Hollow Rd/Spring Dr (Northbound)				Spring Hollow Rd/Spring Dr (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	1	0	0	0	0	1	0	2	106	0	0	0	106	2	0	218	
7:15 AM	2	1	1	0	5	0	4	0	1	173	1	0	0	116	4	0	308	
7:30 AM	1	0	1	0	1	0	0	0	2	174	0	0	0	139	3	0	321	
7:45 AM	1	0	0	0	1	0	2	0	9	102	0	0	0	152	9	0	276	1123
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	905
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	597
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	276
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	4	0	4	0	4	0	0	0	8	696	0	0	0	556	12	0	1284
Heavy Trucks	0	0	0		0	0	0		0	64	0		0	40	0		104
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

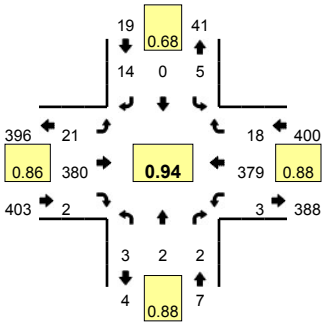
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

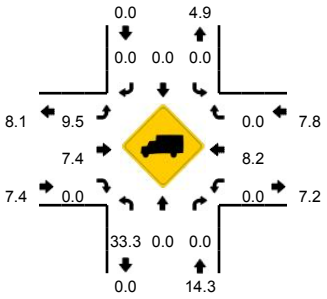
Method for determining peak hour: Total Entering Volume

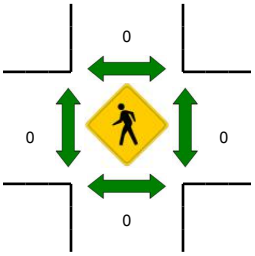
LOCATION: Spring Hollow Rd/Spring Dr -- SR 52
CITY/STATE: Lafayette, TN

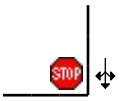
QC JOB #: 14096832
DATE: Tue, Mar 21 2017

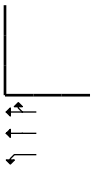


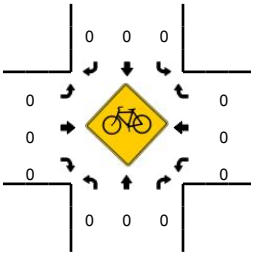
Peak-Hour: 12:00 PM -- 1:00 PM
Peak 15-Min: 12:30 PM -- 12:45 PM

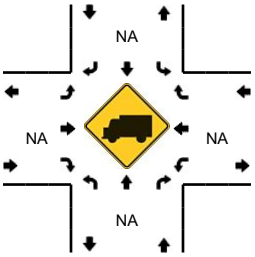


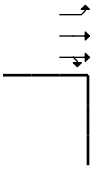


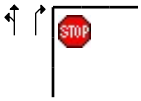


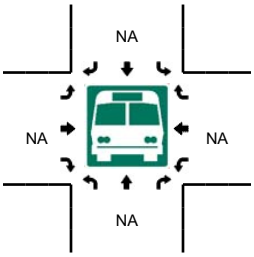












15-Min Count Period Beginning At	Spring Hollow Rd/Spring Dr (Northbound)				Spring Hollow Rd/Spring Dr (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
12:00 PM	1	0	0	0	0	0	7	0	4	85	1	0	1	98	4	0	201	
12:15 PM	1	0	1	0	2	0	2	0	4	88	0	0	0	107	6	0	211	
12:30 PM	0	1	1	0	2	0	3	0	3	114	0	0	1	90	4	1	220	
12:45 PM	1	1	0	0	1	0	2	0	10	93	1	0	0	84	4	0	197	829
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	628
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	417
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	197
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	4	4	0	8	0	12	0	12	456	0	0	4	360	16	4	880
Heavy Trucks	0	0	0		0	0	0		0	36	0		0	28	0		64
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

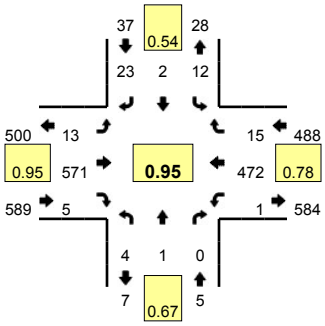
Method for determining peak hour: Total Entering Volume

LOCATION: Spring Hollow Rd/Spring Dr -- SR 52

QC JOB #: 14096833

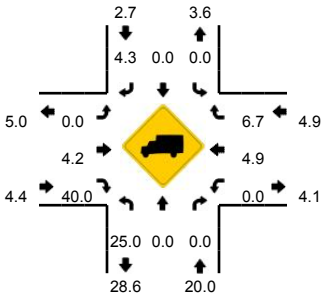
CITY/STATE: Lafayette, TN

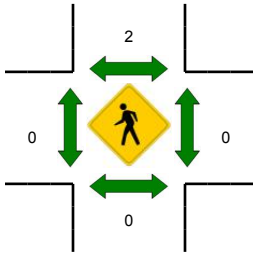
DATE: Tue, Mar 21 2017

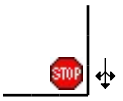


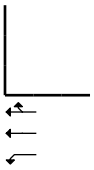
Peak-Hour: 3:45 PM -- 4:45 PM

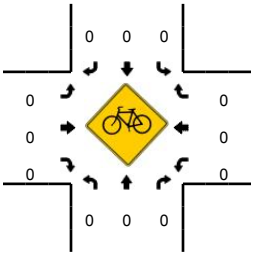
Peak 15-Min: 4:15 PM -- 4:30 PM

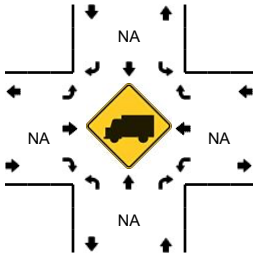


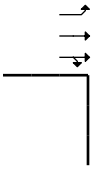


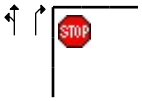


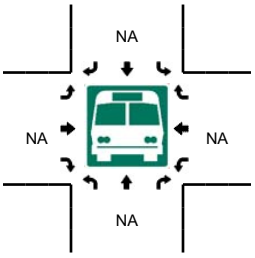












15-Min Count Period Beginning At	Spring Hollow Rd/Spring Dr (Northbound)				Spring Hollow Rd/Spring Dr (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	0	0	1	0	1	0	4	0	4	135	1	0	0	176	3	0	325	
3:15 PM	0	0	1	0	1	1	3	0	2	122	1	0	0	130	1	0	262	
3:30 PM	2	0	1	0	0	1	4	0	4	122	0	0	1	113	5	1	254	
3:45 PM	2	0	0	0	1	0	4	0	0	131	2	0	0	127	2	0	269	1110
4:00 PM	1	1	0	0	3	0	4	0	7	150	0	0	0	120	4	0	290	1075
4:15 PM	0	0	0	0	5	0	12	0	2	153	3	1	0	114	5	1	296	1109
4:30 PM	1	0	0	0	3	2	3	0	3	137	0	0	0	111	4	0	264	1119
4:45 PM	2	0	0	0	0	0	4	0	0	151	0	0	0	101	2	4	264	1114

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	20	0	48	0	8	612	12	4	0	456	20	4	1184
Heavy Trucks	0	0	0		0	0	4		0	24	4		0	32	0		64
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

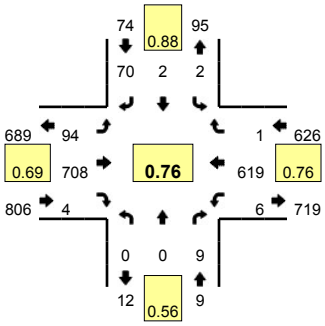
Type of peak hour being reported: Intersection Peak

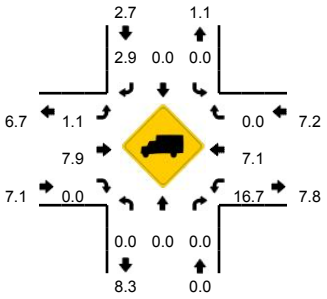
Method for determining peak hour: Total Entering Volume

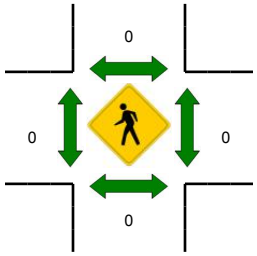
LOCATION: Days Rd W -- SR 52
CITY/STATE: Lafayette, TN

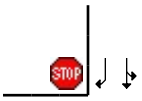
QC JOB #: 14096834
DATE: Tue, Mar 21 2017

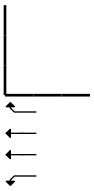
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

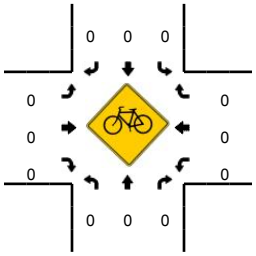


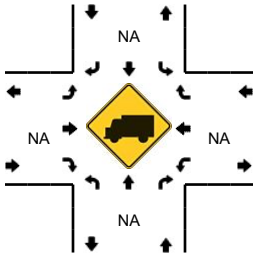


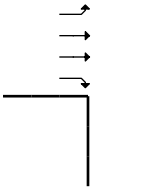


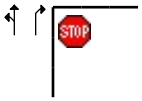


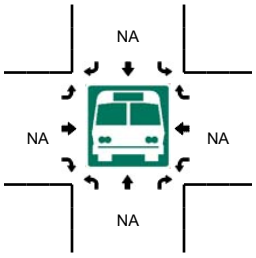












15-Min Count Period Beginning At	Days Rd W (Northbound)				Days Rd W (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	1	10	0	9	127	1	0	1	110	0	0	259	
7:15 AM	0	0	4	0	2	1	18	0	36	225	0	0	2	128	1	0	417	
7:30 AM	0	0	4	0	0	0	21	0	44	248	1	0	2	176	0	0	496	
7:45 AM	0	0	1	0	0	0	21	0	5	108	2	0	1	205	0	0	343	1515
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1256
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	839
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	343
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	16	0	0	0	84	0	176	992	4	0	8	704	0	0	1984
Heavy Trucks	0	0	0		0	0	0		0	72	0		0	56	0		128
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

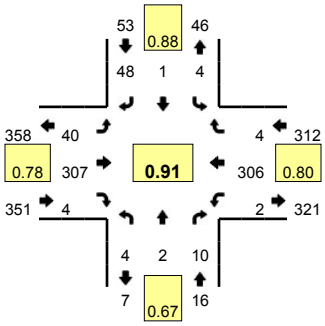
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

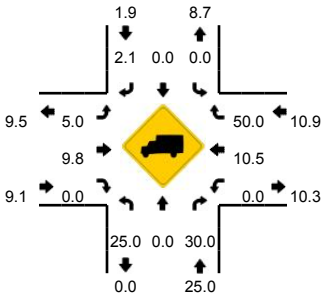
Method for determining peak hour: Total Entering Volume

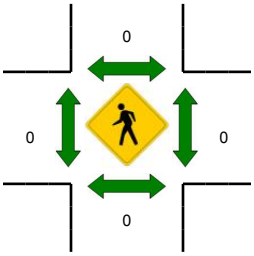
LOCATION: Days Rd W -- SR 52
CITY/STATE: Lafayette, TN

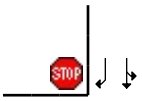
QC JOB #: 14096835
DATE: Tue, Mar 21 2017

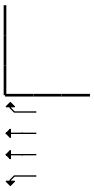


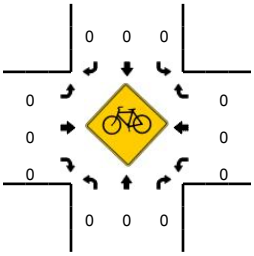
Peak-Hour: 12:00 PM -- 1:00 PM
Peak 15-Min: 12:00 PM -- 12:15 PM

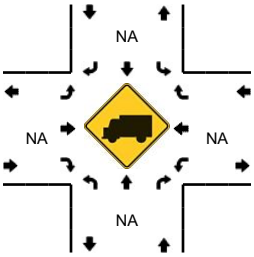


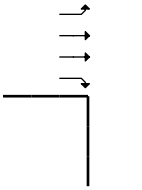


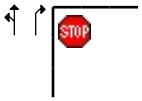


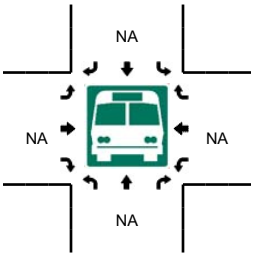












15-Min Count Period Beginning At	Days Rd W (Northbound)				Days Rd W (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
12:00 PM	0	1	2	0	1	0	11	0	11	76	1	0	1	95	2	0	201	
12:15 PM	1	0	2	0	1	0	14	0	11	64	2	0	1	78	1	0	175	
12:30 PM	2	1	3	0	2	0	11	0	10	102	1	0	0	64	0	0	196	
12:45 PM	1	0	3	0	0	1	12	0	8	65	0	0	0	69	1	0	160	732
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	531
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	356
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	160
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	4	8	0	4	0	44	0	44	304	4	0	4	380	8	0	804
Heavy Trucks	0	0	0		0	0	4		0	24	0		0	40	4		72
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

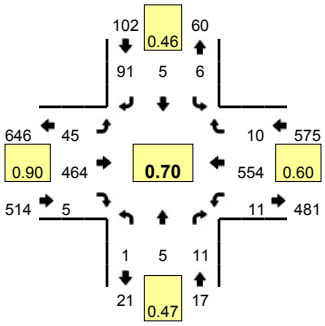
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

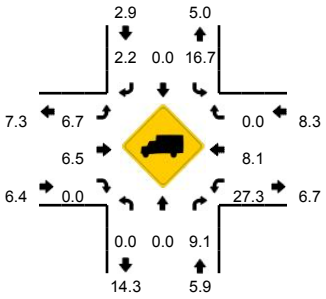
Method for determining peak hour: Total Entering Volume

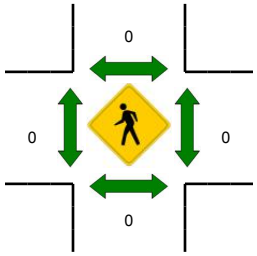
LOCATION: Days Rd W -- SR 52
CITY/STATE: Lafayette, TN

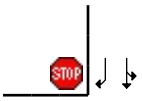
QC JOB #: 14096836
DATE: Tue, Mar 21 2017

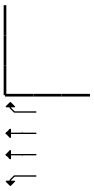


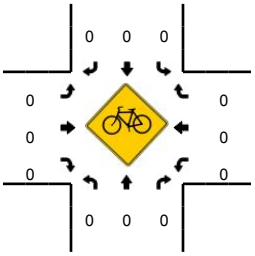
Peak-Hour: 3:00 PM -- 4:00 PM
Peak 15-Min: 3:00 PM -- 3:15 PM

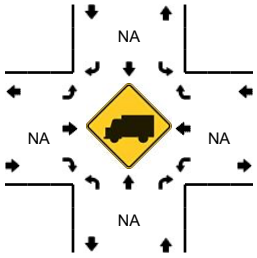


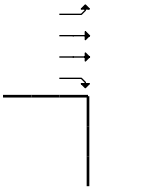


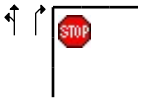


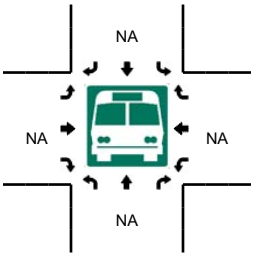












15-Min Count Period Beginning At	Days Rd W (Northbound)				Days Rd W (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	0	1	2	0	1	2	52	0	10	124	2	0	0	233	5	0	432	
3:15 PM	0	1	2	0	0	0	13	0	10	101	1	0	4	132	0	0	264	
3:30 PM	1	1	7	0	3	1	12	0	10	120	2	0	3	97	2	0	259	
3:45 PM	0	2	0	0	2	2	14	0	15	119	0	0	4	92	3	0	253	1208
4:00 PM	0	0	0	0	0	0	6	0	14	130	2	0	4	86	1	0	243	1019
4:15 PM	1	0	2	0	2	2	10	0	17	124	1	0	0	103	1	0	263	1018
4:30 PM	0	0	3	0	1	0	12	0	25	145	1	0	1	110	3	0	301	1060
4:45 PM	0	0	2	0	4	2	15	0	12	145	2	0	4	99	3	0	288	1095

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	4	8	0	4	8	208	0	40	496	8	0	0	932	20	0	1728
Heavy Trucks	0	0	0		0	0	8		0	28	0		0	100	0		136
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

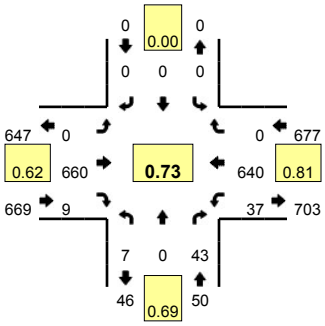
Method for determining peak hour: Total Entering Volume

LOCATION: Red Boiling Springs Rd E -- SR 52

CITY/STATE: Macon, TN

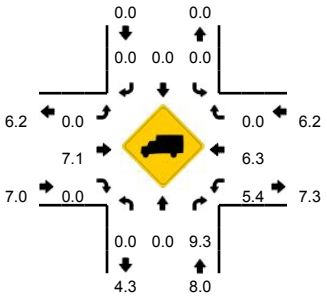
QC JOB #: 14096837

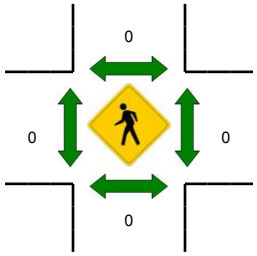
DATE: Tue, Mar 21 2017

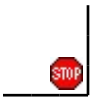


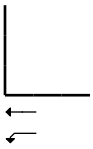
Peak-Hour: 7:00 AM -- 8:00 AM

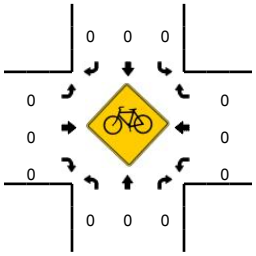
Peak 15-Min: 7:30 AM -- 7:45 AM

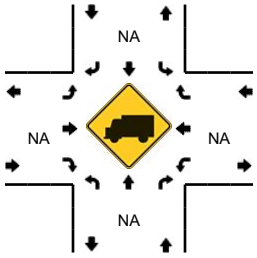


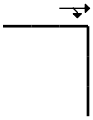


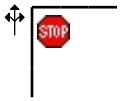


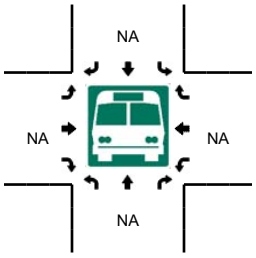












15-Min Count Period Beginning At	Red Boiling Springs Rd E (Northbound)				Red Boiling Springs Rd E (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	2	0	8	0	0	0	0	0	0	108	2	0	7	112	0	0	239	
7:15 AM	0	0	16	0	0	0	0	0	0	207	3	0	9	145	0	0	380	
7:30 AM	1	0	17	0	0	0	0	0	0	266	3	0	7	187	0	0	481	
7:45 AM	4	0	2	0	0	0	0	0	0	79	1	0	14	196	0	0	296	1396
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1157
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	777
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	296
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	4	0	68	0	0	0	0	0	0	1064	12	0	28	748	0	0	1924
Heavy Trucks	0	0	0		0	0	0		0	80	0		4	60	0		144
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

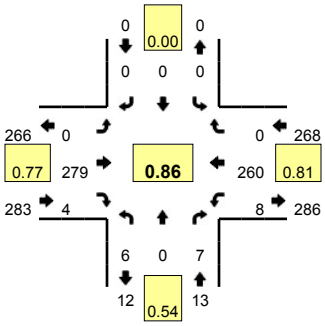
Type of peak hour being reported: Intersection Peak

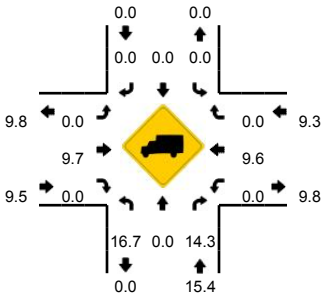
Method for determining peak hour: Total Entering Volume

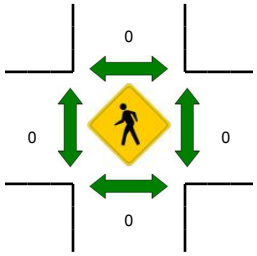
LOCATION: Red Boiling Springs Rd E -- SR 52
CITY/STATE: Macon, TN

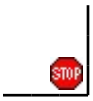
QC JOB #: 14096838
DATE: Tue, Mar 21 2017

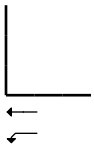
Peak-Hour: 12:00 PM -- 1:00 PM
Peak 15-Min: 12:00 PM -- 12:15 PM

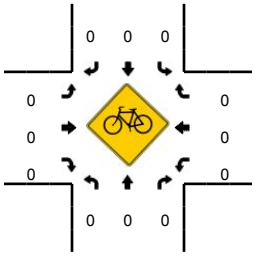


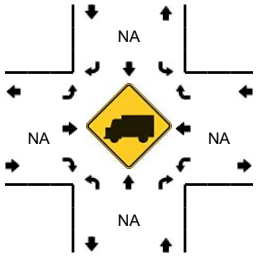


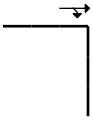


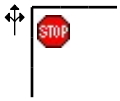


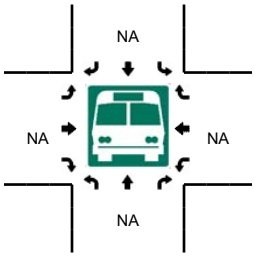












15-Min Count Period Beginning At	Red Boiling Springs Rd E (Northbound)				Red Boiling Springs Rd E (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
12:00 PM	2	0	1	0	0	0	0	0	0	77	1	0	1	82	0	0	164	
12:15 PM	3	0	3	0	0	0	0	0	0	54	2	0	4	66	0	0	132	
12:30 PM	1	0	1	0	0	0	0	0	0	92	0	0	2	53	0	0	149	
12:45 PM	0	0	2	0	0	0	0	0	0	56	1	0	1	59	0	0	119	564
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	400
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	268
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	119
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	8	0	4	0	0	0	0	0	0	308	4	0	4	328	0	0	656
Heavy Trucks	4	0	0		0	0	0		0	28	0		0	32	0		64
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

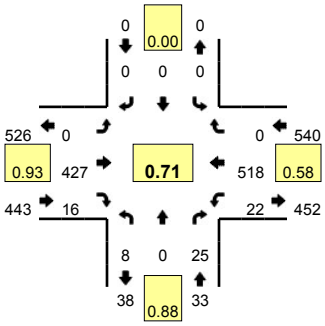
Type of peak hour being reported: Intersection Peak

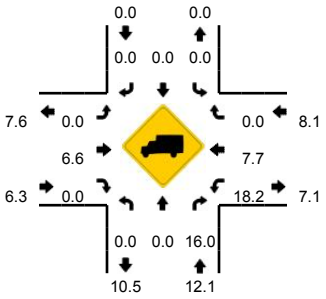
Method for determining peak hour: Total Entering Volume

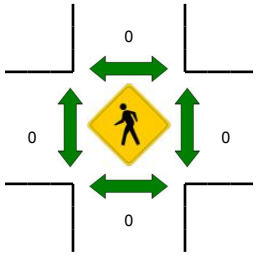
LOCATION: Red Boiling Springs Rd E -- SR 52
CITY/STATE: Macon, TN

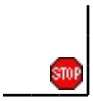
QC JOB #: 14096839
DATE: Tue, Mar 21 2017

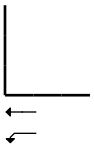
Peak-Hour: 3:00 PM -- 4:00 PM
Peak 15-Min: 3:00 PM -- 3:15 PM

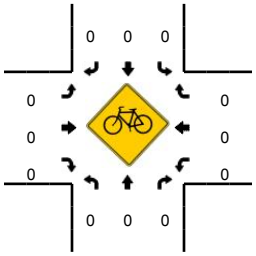


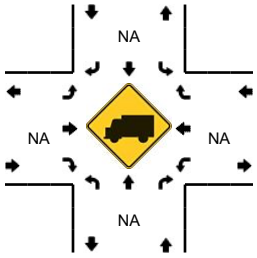


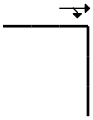


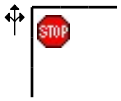


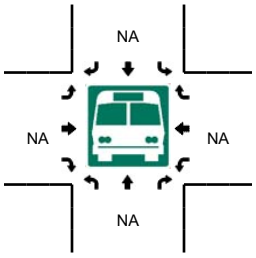












15-Min Count Period Beginning At	Red Boiling Springs Rd E (Northbound)				Red Boiling Springs Rd E (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	0	0	3	0	0	0	0	0	0	121	4	0	10	222	0	0	360	
3:15 PM	1	0	11	0	0	0	0	0	0	93	4	0	6	126	0	0	241	
3:30 PM	3	0	4	0	0	0	0	0	0	98	5	0	4	90	0	0	204	
3:45 PM	4	0	7	0	0	0	0	0	0	115	3	0	2	80	0	0	211	1016
4:00 PM	1	0	9	0	0	0	0	0	0	124	3	0	9	65	0	0	211	867
4:15 PM	2	0	7	0	0	0	0	0	0	123	3	0	5	90	0	0	230	856
4:30 PM	6	0	6	0	0	0	0	0	0	139	6	0	7	89	0	0	253	905
4:45 PM	0	0	5	0	0	0	0	0	0	138	2	0	3	82	0	0	230	924

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	12	0	0	0	0	0	0	484	16	0	40	888	0	0	1440
Heavy Trucks	0	0	0		0	0	0		0	32	0		4	80	0		116
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

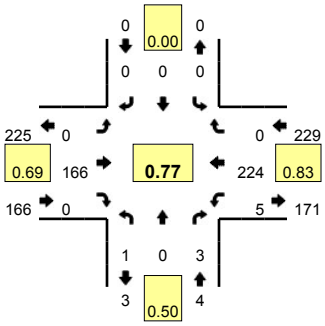
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

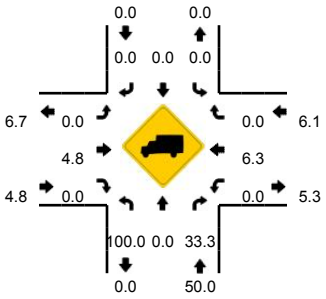
Method for determining peak hour: Total Entering Volume

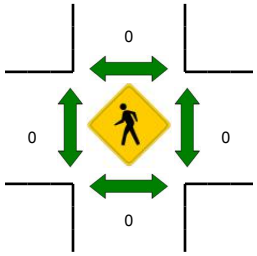
LOCATION: Burtrum Ln -- SR 10
CITY/STATE: Macon, TN

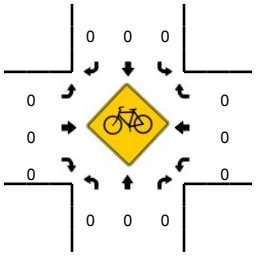
QC JOB #: 14096840
DATE: Tue, Mar 21 2017

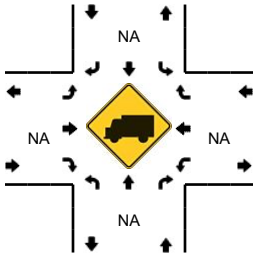


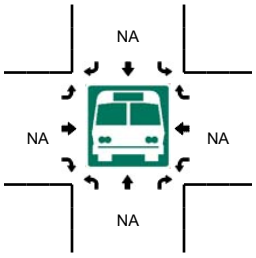
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:45 AM -- 8:00 AM











15-Min Count Period Beginning At	Burtrum Ln (Northbound)				Burtrum Ln (Southbound)				SR 10 (Eastbound)				SR 10 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	0	0	0	25	0	0	0	45	0	0	70	
7:15 AM	1	0	1	0	0	0	0	0	0	27	0	0	0	62	0	2	93	
7:30 AM	0	0	2	0	0	0	0	0	0	54	0	0	0	51	0	0	107	
7:45 AM	0	0	0	0	0	0	0	0	0	60	0	0	3	66	0	0	129	399
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	329
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	129
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	0	0	0	0	0	240	0	0	12	264	0	0	516
Heavy Trucks	0	0	0		0	0	0		0	12	0		0	20	0		32
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

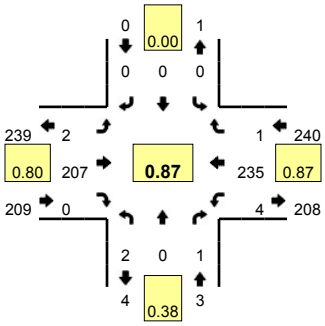
Type of peak hour being reported: Intersection Peak

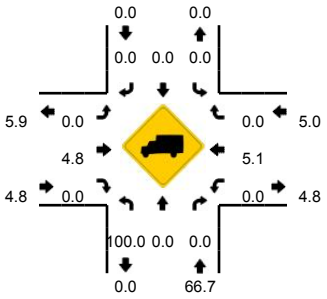
Method for determining peak hour: Total Entering Volume

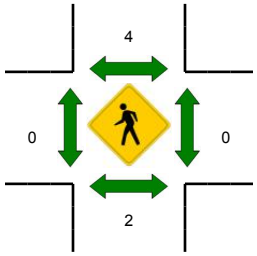
LOCATION: Burtrum Ln -- SR 10
CITY/STATE: Macon, TN

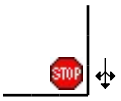
QC JOB #: 14096841
DATE: Tue, Mar 21 2017

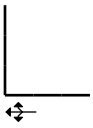
Peak-Hour: 12:00 PM -- 1:00 PM
Peak 15-Min: 12:00 PM -- 12:15 PM

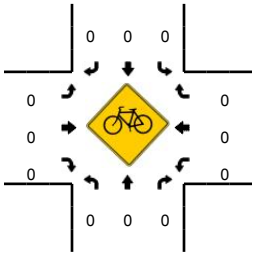


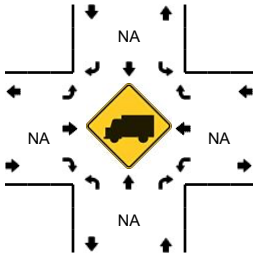


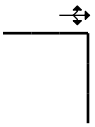


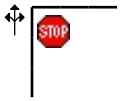


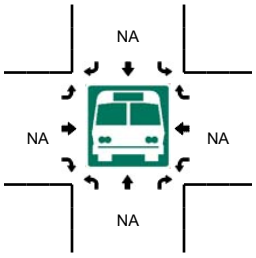












15-Min Count Period Beginning At	Burtrum Ln (Northbound)				Burtrum Ln (Southbound)				SR 10 (Eastbound)				SR 10 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
12:00 PM	1	0	0	0	0	0	0	0	0	64	0	1	1	63	0	0	130	
12:15 PM	0	0	0	0	0	0	0	0	0	42	0	0	1	67	1	0	111	
12:30 PM	1	0	1	0	0	0	0	0	0	52	0	1	1	62	0	0	118	
12:45 PM	0	0	0	0	0	0	0	0	0	49	0	0	1	43	0	0	93	452
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	322
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	211
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	93
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	4	0	0	0	0	0	0	0	0	256	0	4	4	252	0	0	520
Heavy Trucks	4	0	0		0	0	0		0	12	0		0	16	0		32
Pedestrians		0				12				0				0			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

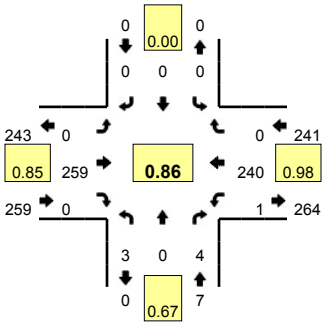
Type of peak hour being reported: Intersection Peak

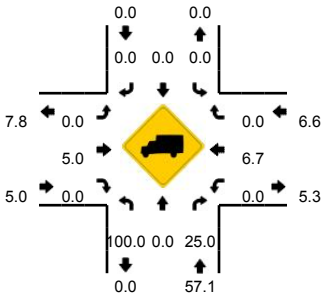
Method for determining peak hour: Total Entering Volume

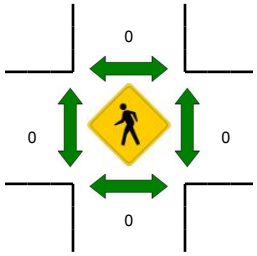
LOCATION: Burtrum Ln -- SR 10
CITY/STATE: Macon, TN

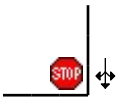
QC JOB #: 14096842
DATE: Tue, Mar 21 2017

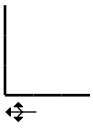
Peak-Hour: 3:00 PM -- 4:00 PM
Peak 15-Min: 3:00 PM -- 3:15 PM

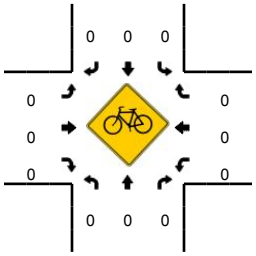


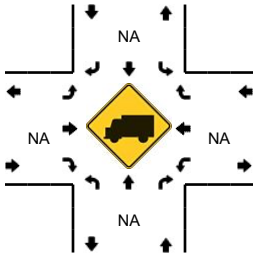


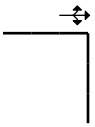


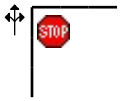


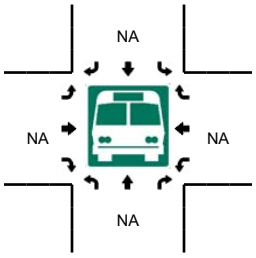












15-Min Count Period Beginning At	Burtrum Ln (Northbound)				Burtrum Ln (Southbound)				SR 10 (Eastbound)				SR 10 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:00 PM	3	0	2	0	0	0	0	0	0	76	0	0	0	67	0	0	148	
3:15 PM	0	0	1	0	0	0	0	0	0	70	0	0	0	55	0	1	127	
3:30 PM	0	0	1	0	0	0	0	0	0	63	0	0	0	56	0	0	120	
3:45 PM	0	0	0	0	0	0	0	0	0	50	0	0	0	62	0	0	112	507
4:00 PM	0	0	2	0	0	0	0	0	0	74	0	0	0	65	0	0	141	500
4:15 PM	0	0	1	0	0	0	0	0	0	55	0	0	0	61	0	0	117	490
4:30 PM	0	0	2	0	0	0	0	0	0	58	0	0	0	65	0	0	125	495
4:45 PM	1	0	2	0	0	0	0	0	0	52	0	0	0	63	0	0	118	501

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	12	0	8	0	0	0	0	0	0	304	0	0	0	268	0	0	592
Heavy Trucks	12	0	4		0	0	0		0	8	0		0	36	0		60
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

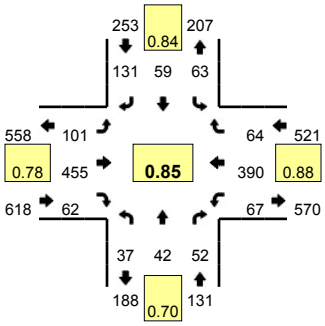
Method for determining peak hour: Total Entering Volume

LOCATION: College St/SR 10 -- SR 52

CITY/STATE: Lafayette, TN

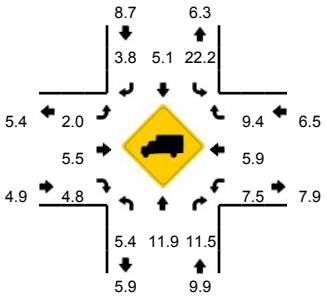
QC JOB #: 14096843

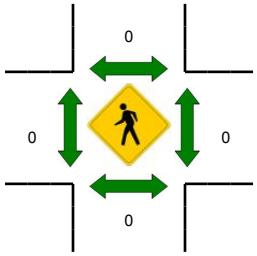
DATE: Tue, Mar 21 2017

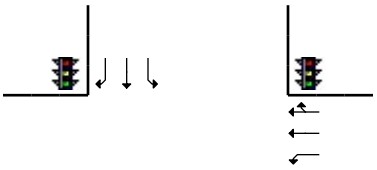


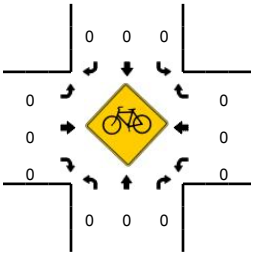
Peak-Hour: 7:00 AM -- 8:00 AM

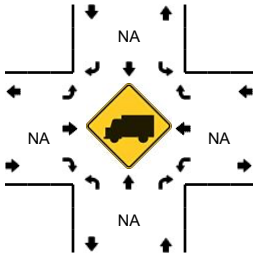
Peak 15-Min: 7:30 AM -- 7:45 AM

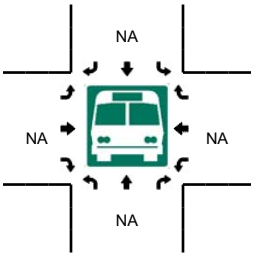












15-Min Count Period Beginning At	College St/SR 10 (Northbound)				College St/SR 10 (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	13	5	11	0	4	19	20	0	19	93	13	0	11	88	14	0	310	
7:15 AM	8	9	8	0	22	17	36	0	23	136	16	0	19	82	14	0	390	
7:30 AM	10	8	12	0	27	13	33	0	35	140	24	0	17	109	19	0	447	
7:45 AM	6	20	21	0	10	10	42	0	24	86	9	0	20	111	17	0	376	1523
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1213
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	823
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	376
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	40	32	48	0	108	52	132	0	140	560	96	0	68	436	76	0	1788
Heavy Trucks	0	4	0		24	0	8		0	36	0		4	36	8		120
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

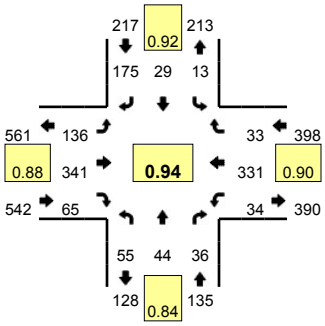
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

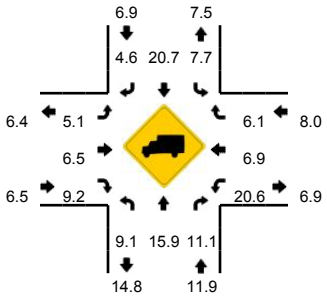
Method for determining peak hour: Total Entering Volume

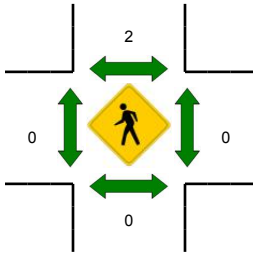
LOCATION: College St/SR 10 -- SR 52
CITY/STATE: Lafayette, TN

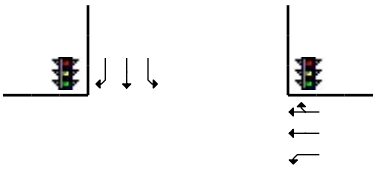
QC JOB #: 14096844
DATE: Tue, Mar 21 2017

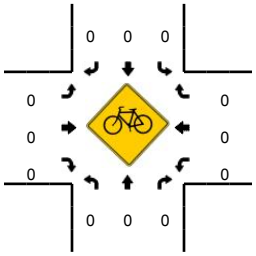


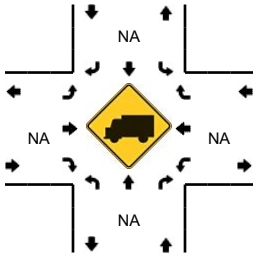
Peak-Hour: 12:00 PM -- 1:00 PM
Peak 15-Min: 12:00 PM -- 12:15 PM

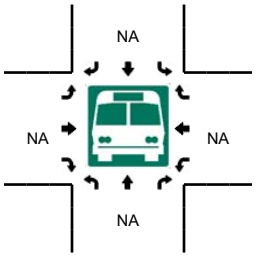












15-Min Count Period Beginning At	College St/SR 10 (Northbound)				College St/SR 10 (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
12:00 PM	16	12	5	0	6	7	46	0	39	78	23	0	7	95	8	0	342	
12:15 PM	15	10	7	0	4	7	48	0	28	70	16	0	10	86	12	0	313	
12:30 PM	14	8	8	0	3	7	46	0	34	107	13	0	8	80	8	0	336	
12:45 PM	10	14	16	0	0	8	35	0	35	86	13	0	9	70	5	0	301	1292
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	950
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	637
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	301
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	64	48	20	0	24	28	184	0	156	312	92	0	28	380	32	0	1368
Heavy Trucks	8	8	0		0	0	12		4	28	8		4	28	0		100
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

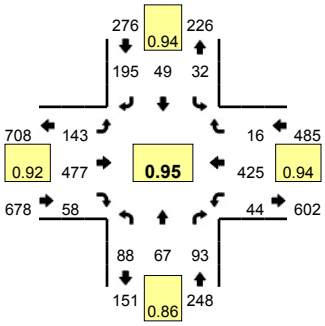
Type of peak hour being reported: Intersection Peak

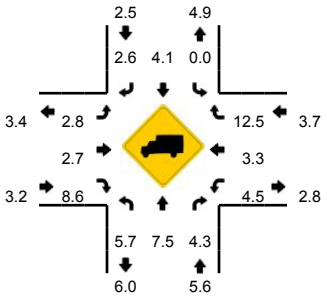
Method for determining peak hour: Total Entering Volume

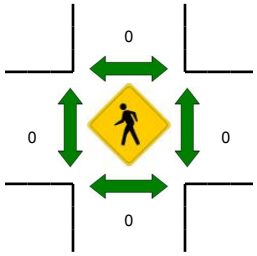
LOCATION: College St/SR 10 -- SR 52
CITY/STATE: Lafayette, TN

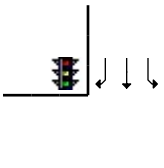
QC JOB #: 14096845
DATE: Tue, Mar 21 2017

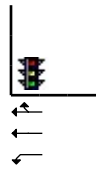
Peak-Hour: 4:00 PM -- 5:00 PM
Peak 15-Min: 4:00 PM -- 4:15 PM

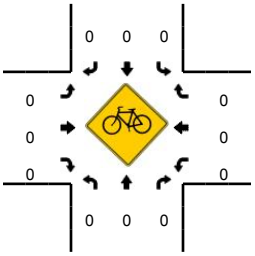


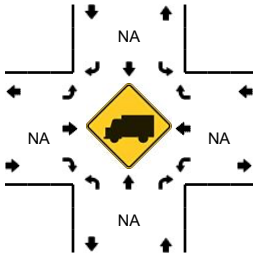


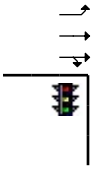


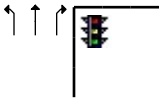


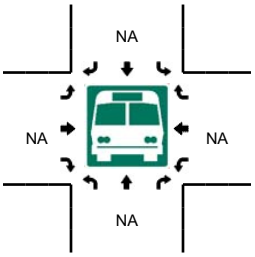












15-Min Count Period Beginning At	College St/SR 10 (Northbound)				College St/SR 10 (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	19	17	16	0	11	9	50	0	34	91	10	0	7	95	4	0	363	
3:45 PM	10	22	19	0	6	11	50	0	28	101	18	0	12	106	9	0	392	
4:00 PM	17	17	25	0	8	15	52	0	48	119	17	0	14	109	4	0	445	
4:15 PM	23	20	30	0	11	8	50	0	25	126	18	0	10	121	3	0	445	1645
4:30 PM	25	16	19	0	9	15	44	0	37	110	13	0	9	103	3	0	403	1685
4:45 PM	23	14	19	0	4	11	49	0	33	122	10	0	11	92	6	0	394	1687
5:00 PM	21	17	25	0	4	9	48	0	47	122	16	0	15	94	3	0	421	1663
5:15 PM	21	20	25	0	6	10	31	0	35	110	8	0	7	105	1	0	379	1597

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	68	68	100	0	32	60	208	0	192	476	68	0	56	436	16	0	1780
Heavy Trucks	0	0	4		0	4	4		4	28	8		4	20	4		80
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

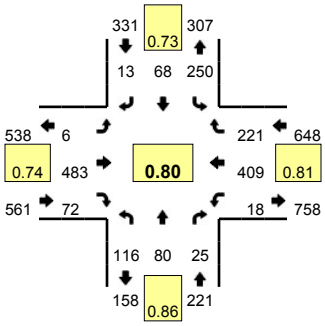
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

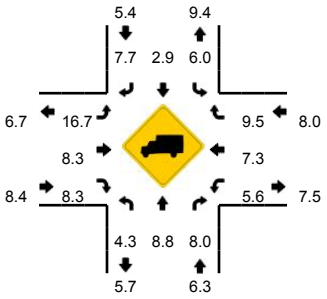
Method for determining peak hour: Total Entering Volume

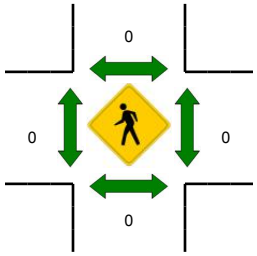
LOCATION: Red Boiling Springs Rd W -- SR 52
CITY/STATE: Lafayette, TN

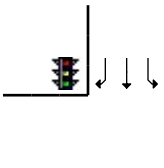
QC JOB #: 14096846
DATE: Tue, Mar 21 2017

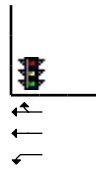


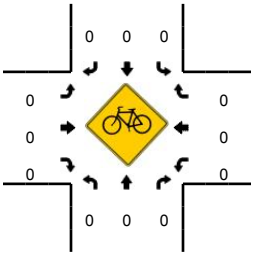
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:30 AM -- 7:45 AM

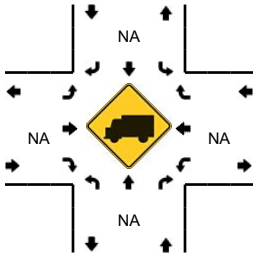


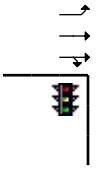


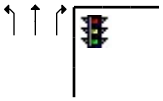


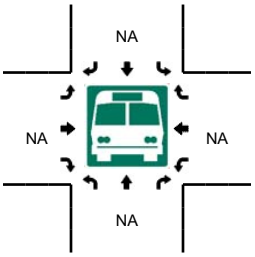












15-Min Count Period Beginning At	Red Boiling Springs Rd W (Northbound)				Red Boiling Springs Rd W (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	30	7	7	0	39	6	1	0	1	86	12	0	3	83	32	0	307	
7:15 AM	27	24	6	0	81	16	1	0	2	147	20	0	4	92	53	0	473	
7:30 AM	31	28	5	0	82	24	8	0	2	164	24	0	9	104	69	0	550	
7:45 AM	28	21	7	0	48	22	3	0	1	86	16	0	2	130	67	0	431	1761
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1454
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	981
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	431
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	124	112	20	0	328	96	32	0	8	656	96	0	36	416	276	0	2200
Heavy Trucks	0	8	4		12	4	0		0	56	12		4	40	12		152
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

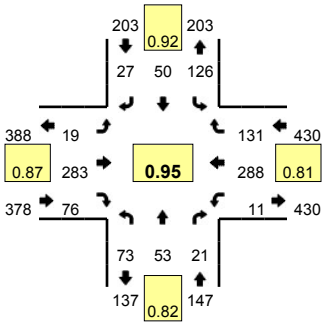
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

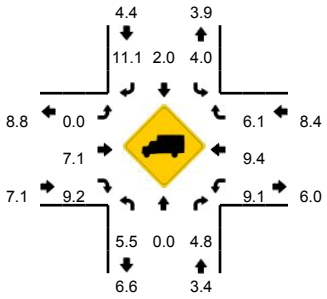
Method for determining peak hour: Total Entering Volume

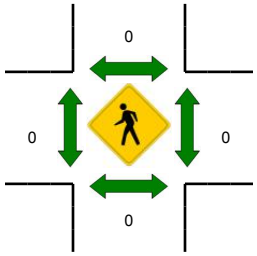
LOCATION: Red Boiling Springs Rd W -- SR 52
CITY/STATE: Lafayette, TN

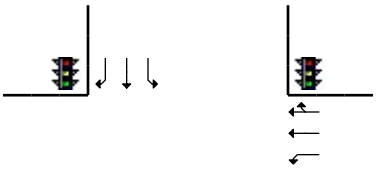
QC JOB #: 14096847
DATE: Tue, Mar 21 2017

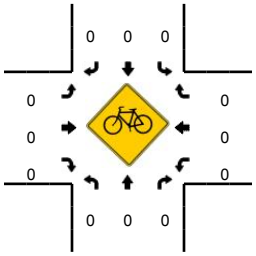


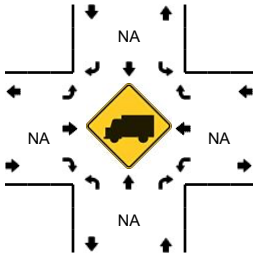
Peak-Hour: 12:00 PM -- 1:00 PM
Peak 15-Min: 12:30 PM -- 12:45 PM

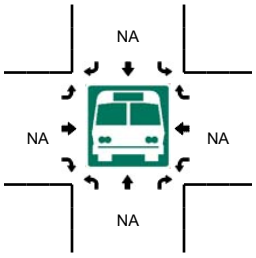












15-Min Count Period Beginning At	Red Boiling Springs Rd W (Northbound)				Red Boiling Springs Rd W (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
12:00 PM	13	14	6	0	31	15	8	0	2	61	21	0	4	85	44	0	304	
12:15 PM	26	9	3	0	31	14	6	0	5	65	18	0	1	65	40	0	283	
12:30 PM	19	19	7	0	33	14	8	0	3	87	19	0	1	70	25	0	305	
12:45 PM	15	11	5	0	31	7	5	0	9	70	18	0	5	68	22	0	266	1158
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	854
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	571
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	266
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	76	76	28	0	132	56	32	0	12	348	76	0	4	280	100	0	1220
Heavy Trucks	4	0	4		0	0	0		0	32	4		0	24	8		76
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

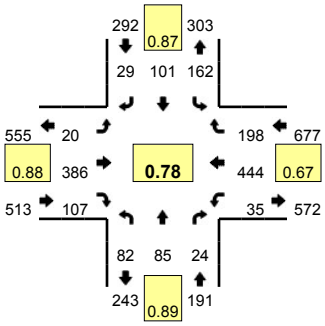
Method for determining peak hour: Total Entering Volume

LOCATION: Red Boiling Springs Rd W -- SR 52

QC JOB #: 14096848

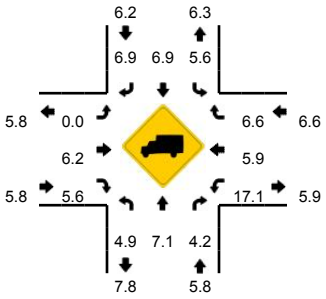
CITY/STATE: Lafayette, TN

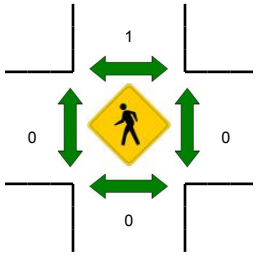
DATE: Tue, Mar 21 2017

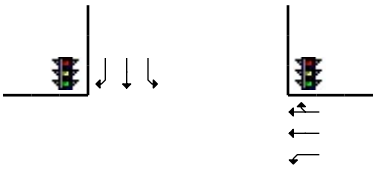


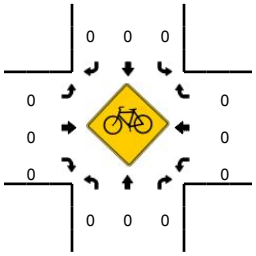
Peak-Hour: 3:00 PM -- 4:00 PM

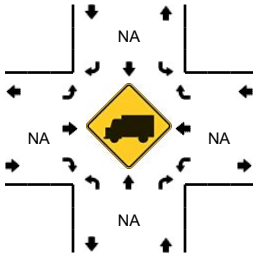
Peak 15-Min: 3:00 PM -- 3:15 PM

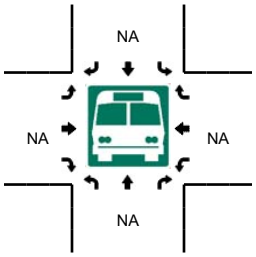












15-Min Count Period Beginning At	Red Boiling Springs Rd W (Northbound)				Red Boiling Springs Rd W (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
2:30 PM	17	17	6	0	33	17	4	0	3	107	24	0	2	72	37	0	339	
2:45 PM	22	12	4	0	30	14	7	0	1	98	23	0	5	89	47	0	352	
3:00 PM	22	27	8	0	48	26	10	0	4	104	31	0	14	149	92	0	535	
3:15 PM	14	15	8	0	37	33	5	0	7	96	22	0	8	108	41	0	394	1620
3:30 PM	22	18	4	0	37	14	8	0	5	94	28	0	7	91	36	0	364	1645
3:45 PM	24	25	4	0	40	28	6	0	4	92	26	0	6	96	29	0	380	1673
4:00 PM	22	20	8	0	33	16	11	0	2	125	27	0	3	91	31	0	389	1527
4:15 PM	26	21	10	0	29	16	8	0	2	128	31	0	10	90	33	0	404	1537

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	88	108	32	0	192	104	40	0	16	416	124	0	56	596	368	0	2140
Heavy Trucks	0	8	0		8	4	4		0	12	8		0	60	24		128
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/13/2017 11:22 AM

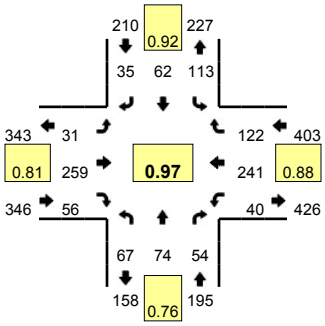
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

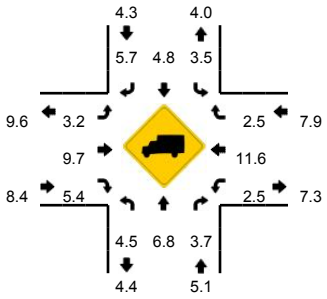
Method for determining peak hour: Total Entering Volume

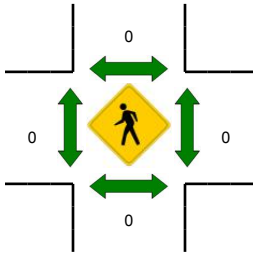
LOCATION: Ellington Dr -- SR 52
CITY/STATE: Lafayette, TN

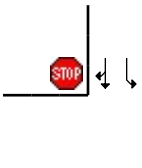
QC JOB #: 14096849
DATE: Tue, Mar 21 2017

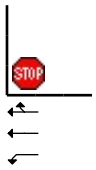


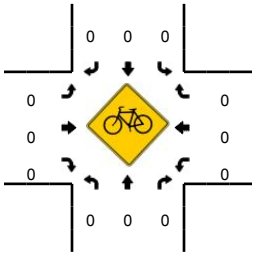
Peak-Hour: 12:00 PM -- 1:00 PM
Peak 15-Min: 12:30 PM -- 12:45 PM

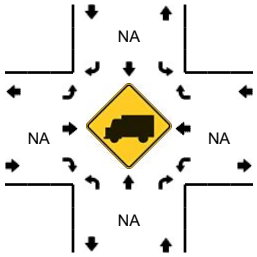


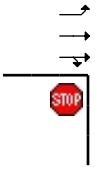


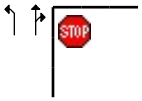


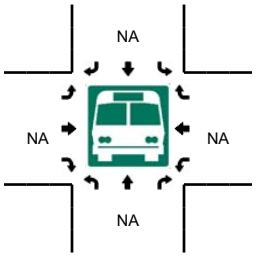












15-Min Count Period Beginning At	Ellington Dr (Northbound)				Ellington Dr (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	6	2	0	0	36	2	2	0	2	98	3	0	0	77	14	0	242	
7:15 AM	1	4	1	0	32	2	3	0	3	147	1	0	1	69	26	0	290	
7:30 AM	6	6	2	0	38	1	3	0	5	117	6	0	3	84	27	0	298	
7:45 AM	5	9	1	0	24	4	2	0	6	96	7	0	3	86	31	0	274	1104
8:00 AM	5	9	1	0	21	4	7	0	1	62	3	0	3	62	23	0	201	1063
8:15 AM	12	7	2	0	18	5	5	0	4	68	5	0	4	50	26	0	206	979
8:30 AM	10	7	1	0	23	6	3	0	4	66	4	0	1	75	23	0	223	904
8:45 AM	11	11	2	0	21	3	7	0	2	47	4	0	1	62	27	0	198	828
9:00 AM	8	5	3	0	14	11	9	0	7	41	8	0	2	53	18	0	179	806
9:15 AM	4	10	6	0	23	5	8	0	7	61	11	0	2	57	17	0	211	811
9:30 AM	9	9	6	0	23	7	5	0	2	38	3	0	5	47	23	0	177	765
9:45 AM	8	9	2	0	18	12	5	0	8	64	14	0	4	55	29	0	228	795
10:00 AM	6	15	5	0	24	10	5	0	4	48	6	0	2	59	28	0	212	828
10:15 AM	15	12	8	0	25	10	6	0	4	49	12	0	4	56	19	0	220	837
10:30 AM	21	13	3	0	16	9	6	0	5	55	11	0	5	41	22	0	207	867
10:45 AM	11	12	8	0	27	22	2	0	8	63	14	0	1	42	23	0	233	872
11:00 AM	10	19	5	0	18	19	10	0	11	56	13	0	4	48	32	0	245	905
11:15 AM	18	21	9	0	21	16	5	0	10	59	14	0	8	51	28	0	260	945
11:30 AM	17	16	8	0	30	13	12	0	8	78	11	1	12	46	36	0	288	1026
11:45 AM	21	15	14	0	24	18	4	0	6	55	11	0	11	74	38	0	291	1084
12:00 PM	13	17	10	0	28	18	9	0	10	60	22	0	12	57	24	0	280	1119
12:15 PM	21	15	13	0	29	15	14	0	6	50	13	0	10	65	33	0	284	1143
12:30 PM	12	19	11	0	30	17	7	0	9	74	11	0	10	59	38	0	297	1152
12:45 PM	21	23	20	0	26	12	5	0	6	75	10	0	8	60	27	0	293	1154

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	48	76	44	0	120	68	28	0	36	296	44	0	40	236	152	0	1188
Heavy Trucks	0	12	4		0	0	4		0	24	0		0	24	4		72
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/17/2017 4:51 PM

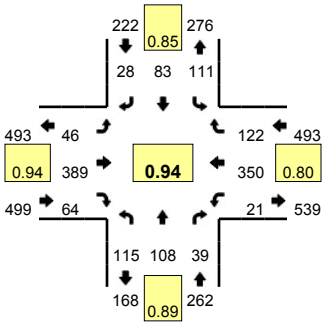
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

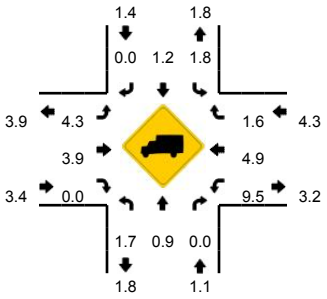
Method for determining peak hour: Total Entering Volume

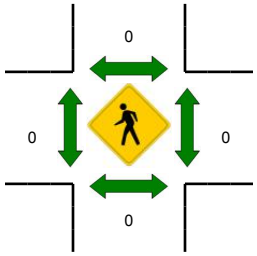
LOCATION: Ellington Dr -- SR 52
CITY/STATE: Lafayette, TN

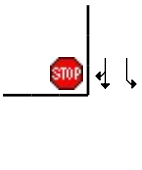
QC JOB #: 14096850
DATE: Tue, Mar 21 2017

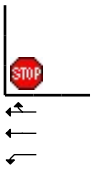


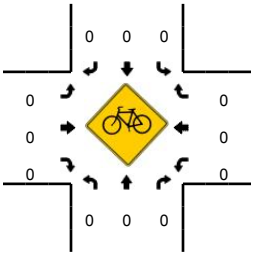
Peak-Hour: 4:15 PM -- 5:15 PM
Peak 15-Min: 4:30 PM -- 4:45 PM

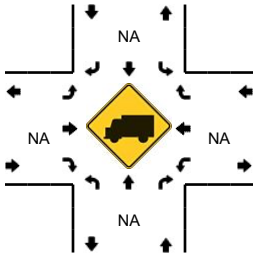


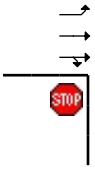


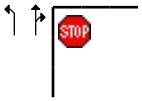


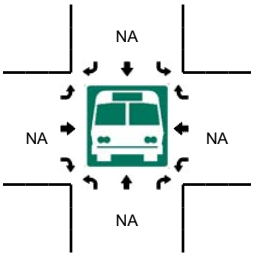












15-Min Count Period Beginning At	Ellington Dr (Northbound)				Ellington Dr (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
1:00 PM	14	20	5	0	27	12	4	0	6	87	8	0	2	58	26	0	269	
1:15 PM	17	14	9	0	18	13	8	0	8	54	20	0	4	53	29	0	247	
1:30 PM	21	20	10	0	28	17	10	0	12	61	11	0	8	44	18	0	260	
1:45 PM	25	15	16	0	26	16	6	0	10	61	11	0	3	48	28	0	265	1041
2:00 PM	25	19	8	0	32	13	7	0	9	52	11	0	3	69	22	0	270	1042
2:15 PM	15	15	4	0	22	9	3	0	7	74	7	0	2	44	27	0	229	1024
2:30 PM	13	13	7	0	18	11	5	0	9	93	7	0	5	49	24	0	254	1018
2:45 PM	10	18	5	0	32	6	6	0	11	61	13	0	4	55	28	0	249	1002
3:00 PM	15	28	13	0	37	15	9	0	7	80	16	0	7	113	50	0	390	1122
3:15 PM	24	24	8	0	33	21	8	0	8	96	14	0	8	100	39	0	383	1276
3:30 PM	26	22	8	0	21	13	8	0	12	80	15	0	7	63	43	0	318	1340
3:45 PM	22	22	7	0	30	9	6	0	8	99	17	0	5	70	41	0	336	1427
4:00 PM	20	25	10	0	32	18	9	0	4	103	11	0	6	81	32	0	351	1388
4:15 PM	30	24	7	0	26	16	5	0	16	94	13	0	7	81	31	0	350	1355
4:30 PM	32	32	10	0	37	24	8	0	11	91	15	0	7	89	36	0	392	1429
4:45 PM	19	26	11	0	31	21	7	0	12	96	18	0	6	86	29	0	362	1455
5:00 PM	34	26	11	0	17	22	8	0	7	108	18	0	1	94	26	0	372	1476
5:15 PM	19	31	10	0	24	11	8	0	8	84	16	0	7	82	29	0	329	1455
5:30 PM	15	27	9	0	11	14	10	0	10	78	14	0	4	58	20	0	270	1333
5:45 PM	15	25	5	0	31	11	10	0	8	82	13	0	5	64	26	0	295	1266
6:00 PM	25	22	5	0	19	23	7	0	13	51	20	0	6	52	29	0	272	1166
6:15 PM	12	16	5	0	15	15	9	0	11	81	3	0	3	44	25	0	239	1076
6:30 PM	14	24	8	0	22	19	9	0	6	46	6	0	3	66	19	0	242	1048
6:45 PM	13	23	8	0	7	11	10	0	5	39	14	0	8	49	24	0	211	964

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	128	128	40	0	148	96	32	0	44	364	60	0	28	356	144	0	1568
Heavy Trucks	4	0	0		4	4	0		0	8	0		4	16	0		40
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/17/2017 4:51 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

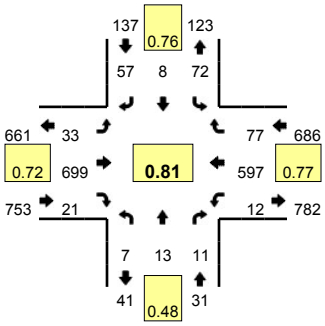
Method for determining peak hour: Total Entering Volume

LOCATION: Sneed Blvd/Oak St -- SR 52

CITY/STATE: Lafayette, TN

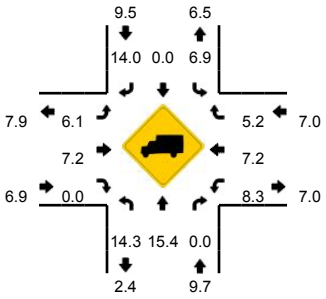
QC JOB #: 14096851

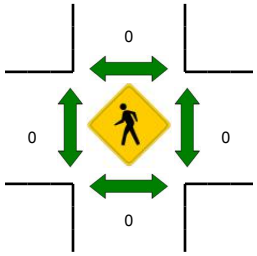
DATE: Tue, Mar 21 2017

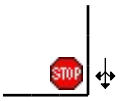


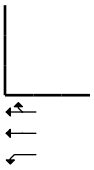
Peak-Hour: 7:00 AM -- 8:00 AM

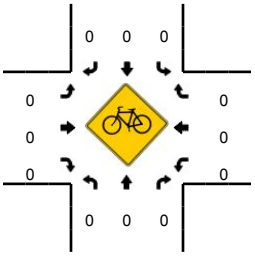
Peak 15-Min: 7:30 AM -- 7:45 AM

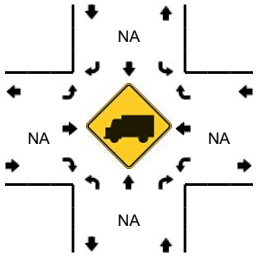


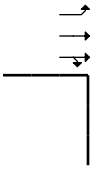


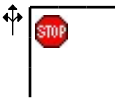


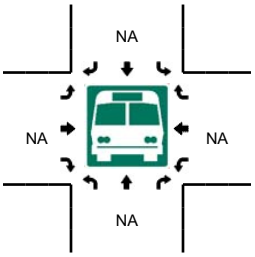












15-Min Count Period Beginning At	Sneed Blvd/Oak St (Northbound)				Sneed Blvd/Oak St (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	2	11	3	0	19	0	10	0	10	107	2	0	1	106	11	0	282	
7:15 AM	4	0	4	0	25	3	17	0	4	232	5	0	4	131	18	0	447	
7:30 AM	0	1	4	0	17	1	19	0	12	242	7	0	5	171	16	0	495	
7:45 AM	1	1	0	0	11	4	11	0	7	118	7	0	2	189	32	0	383	1607
8:00 AM	3	1	4	0	8	4	15	0	7	70	5	0	1	98	11	0	227	1552
8:15 AM	0	5	2	0	8	1	5	0	10	82	1	0	1	85	8	0	208	1313
8:30 AM	3	1	3	0	5	1	12	0	8	74	1	0	2	86	8	0	204	1022
8:45 AM	1	1	1	0	5	2	11	0	7	53	1	0	6	86	4	0	178	817
9:00 AM	2	1	2	0	14	1	13	0	7	58	0	0	2	76	6	0	182	772
9:15 AM	1	2	2	0	6	0	5	0	7	61	2	0	2	86	9	0	183	747
9:30 AM	0	1	3	0	2	3	9	0	3	61	3	0	1	76	8	0	170	713
9:45 AM	1	1	1	0	4	1	7	0	7	60	0	0	2	91	7	0	182	717
10:00 AM	0	1	3	0	9	1	12	0	4	56	0	0	0	96	8	0	190	725
10:15 AM	2	0	0	0	3	2	14	0	6	56	1	0	2	67	12	0	165	707
10:30 AM	2	2	2	0	4	2	16	0	10	66	0	0	1	77	15	0	197	734
10:45 AM	1	1	4	0	4	1	11	0	9	68	0	0	1	77	11	0	188	740
11:00 AM	1	2	4	0	7	0	10	0	9	73	2	0	1	78	5	0	192	742
11:15 AM	1	3	1	0	3	2	6	0	4	72	3	0	2	88	12	0	197	774
11:30 AM	1	0	5	0	5	0	3	0	11	93	0	0	3	95	12	0	228	805
11:45 AM	1	2	2	0	7	1	16	0	17	91	5	0	1	68	4	0	215	832
12:00 PM	1	1	3	0	10	0	17	0	14	84	0	0	0	110	16	0	256	896
12:15 PM	1	0	2	0	7	2	14	0	12	79	2	0	2	91	5	0	217	916
12:30 PM	0	2	2	0	14	3	8	0	7	97	3	0	0	91	4	0	231	919
12:45 PM	0	2	4	0	6	2	8	0	11	70	5	0	2	72	9	0	191	895

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	4	16	0	68	4	76	0	48	968	28	0	20	684	64	0	1980
Heavy Trucks	0	4	0		0	0	12		0	64	0		4	40	0		124
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/17/2017 4:51 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

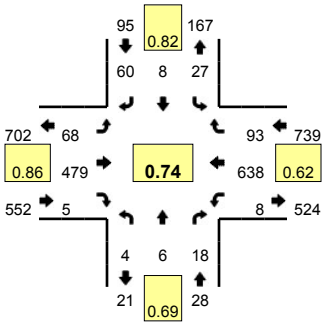
Method for determining peak hour: Total Entering Volume

LOCATION: Sneed Blvd/Oak St -- SR 52

CITY/STATE: Lafayette, TN

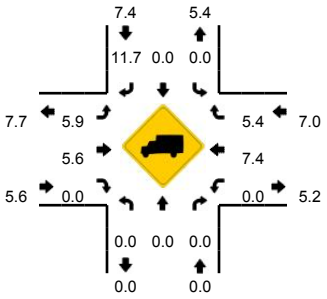
QC JOB #: 14096852

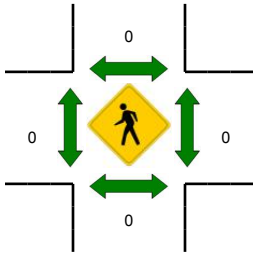
DATE: Tue, Mar 21 2017

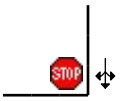


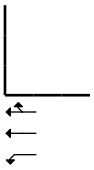
Peak-Hour: 2:45 PM -- 3:45 PM

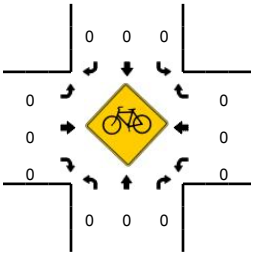
Peak 15-Min: 3:00 PM -- 3:15 PM

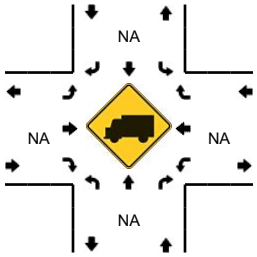


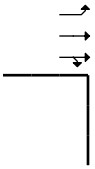


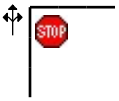


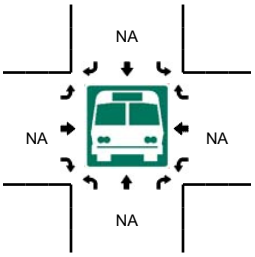












15-Min Count Period Beginning At	Sneed Blvd/Oak St (Northbound)				Sneed Blvd/Oak St (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
1:00 PM	0	1	7	0	10	1	9	0	19	109	3	0	1	77	4	0	241	
1:15 PM	2	2	2	0	10	1	13	0	12	81	3	0	1	74	7	0	208	
1:30 PM	4	1	2	0	5	3	8	0	13	83	1	0	2	97	5	0	224	
1:45 PM	1	0	3	0	6	5	12	0	11	93	1	0	0	87	11	0	230	903
2:00 PM	0	2	2	0	10	2	16	0	15	91	0	0	1	102	5	0	246	908
2:15 PM	2	4	3	0	6	5	11	0	17	112	3	0	3	90	8	0	264	964
2:30 PM	0	2	3	0	11	1	13	0	13	119	1	0	3	84	11	0	261	1001
2:45 PM	1	1	2	0	8	3	6	0	11	117	2	0	3	148	20	0	322	1093
3:00 PM	0	1	7	0	7	0	17	0	17	131	2	0	0	250	47	0	479	1326
3:15 PM	2	4	5	0	3	1	13	0	19	115	1	0	3	135	16	0	317	1379
3:30 PM	1	0	4	0	9	4	24	0	21	116	0	0	2	105	10	0	296	1414
3:45 PM	2	3	2	0	13	6	24	0	18	103	2	0	3	102	24	0	302	1394
4:00 PM	1	1	4	0	10	4	13	0	28	142	1	0	1	99	15	0	319	1234
4:15 PM	3	2	3	0	11	2	21	0	21	140	3	0	0	114	16	0	336	1253
4:30 PM	1	0	9	0	10	2	13	0	22	150	0	0	2	108	22	0	339	1296
4:45 PM	0	0	5	0	5	6	15	0	17	132	3	0	5	103	19	0	310	1304
5:00 PM	4	4	5	0	16	1	13	0	21	176	2	0	4	90	8	0	344	1329
5:15 PM	1	1	4	0	10	3	14	0	22	126	2	0	3	105	14	0	305	1298
5:30 PM	1	1	5	0	6	3	4	0	22	120	4	0	0	87	15	0	268	1227
5:45 PM	1	0	0	0	8	3	7	0	26	98	3	0	0	84	17	0	247	1164
6:00 PM	1	0	3	0	10	2	17	0	20	70	0	0	1	64	12	0	200	1020
6:15 PM	1	0	1	0	6	1	7	0	10	73	0	0	3	63	7	0	172	887
6:30 PM	0	1	4	0	9	1	9	0	7	67	0	0	3	165	20	0	286	905
6:45 PM	1	1	3	0	4	4	9	0	13	59	1	0	2	70	4	0	171	829

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	4	28	0	28	0	68	0	68	524	8	0	0	1000	188	0	1916
Heavy Trucks	0	0	0		0	0	8		0	20	0		0	92	12		132
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/17/2017 4:51 PM

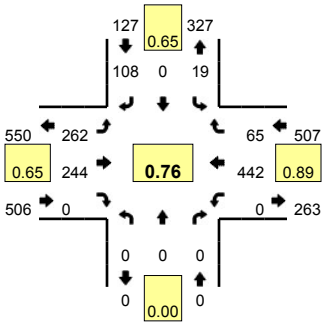
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

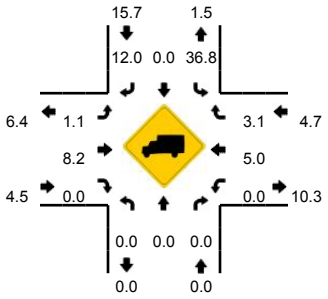
Method for determining peak hour: Total Entering Volume

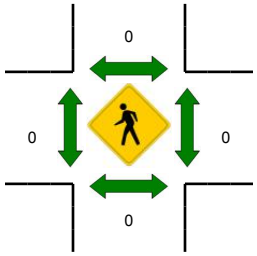
LOCATION: Days Rd E -- SR 52
CITY/STATE: Lafayette, TN

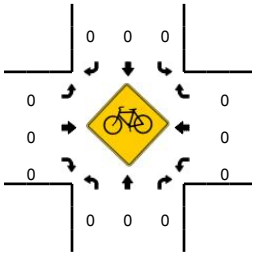
QC JOB #: 14096853
DATE: Tue, Mar 21 2017

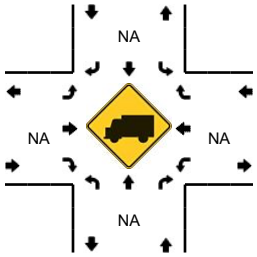


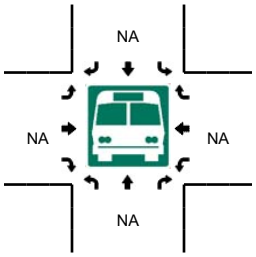
Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:30 AM -- 7:45 AM











15-Min Count Period Beginning At	Days Rd E (Northbound)				Days Rd E (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	1	0	14	0	35	63	0	0	0	104	3	0	220	
7:15 AM	0	0	0	0	1	0	22	0	85	58	0	0	0	116	27	0	309	
7:30 AM	0	0	0	0	9	0	40	0	127	69	0	0	0	105	26	0	376	
7:45 AM	0	0	0	0	8	0	32	0	15	54	0	0	0	117	9	0	235	1140
8:00 AM	0	0	0	0	2	0	10	0	8	37	0	0	0	70	1	0	128	1048
8:15 AM	0	0	0	0	1	0	4	0	3	56	0	0	0	71	1	0	136	875
8:30 AM	0	0	0	0	1	0	5	0	7	36	0	0	0	44	0	0	93	592
8:45 AM	0	0	0	0	0	0	7	0	2	37	0	0	0	64	0	0	110	467
9:00 AM	0	0	0	0	0	0	3	0	3	51	0	0	0	41	0	0	98	437
9:15 AM	0	0	0	0	1	0	11	0	6	39	0	0	0	61	0	0	118	419
9:30 AM	0	0	0	0	3	0	3	0	8	42	0	0	0	51	2	0	109	435
9:45 AM	0	0	0	0	1	0	15	0	16	34	0	0	0	68	2	0	136	461
10:00 AM	0	0	0	0	5	0	18	0	4	42	0	0	0	46	1	0	116	479
10:15 AM	0	0	0	0	1	0	3	0	4	33	0	0	0	54	1	0	96	457
10:30 AM	0	0	0	0	3	0	4	0	9	42	0	0	0	54	3	0	115	463
10:45 AM	0	0	0	0	0	0	6	0	7	44	0	0	0	46	0	0	103	430
11:00 AM	0	0	0	0	1	0	9	0	11	57	0	0	0	40	0	0	118	432
11:15 AM	0	0	0	0	0	0	7	0	2	44	0	0	0	62	0	0	115	451
11:30 AM	0	0	0	0	0	0	5	0	6	62	0	0	0	46	2	0	121	457
11:45 AM	0	0	0	0	1	0	3	0	6	59	0	0	0	51	2	0	122	476
12:00 PM	0	0	0	0	1	0	10	0	10	62	0	0	0	69	2	0	154	512
12:15 PM	0	0	0	0	3	0	14	0	19	37	0	0	0	55	1	0	129	526
12:30 PM	0	0	0	0	5	0	8	0	7	82	0	0	0	44	3	0	149	554
12:45 PM	0	0	0	0	6	0	4	0	5	49	0	0	0	49	1	0	114	546

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	36	0	160	0	508	276	0	0	0	420	104	0	1504
Heavy Trucks	0	0	0		16	0	36		8	24	0		0	36	0		120
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/17/2017 4:51 PM

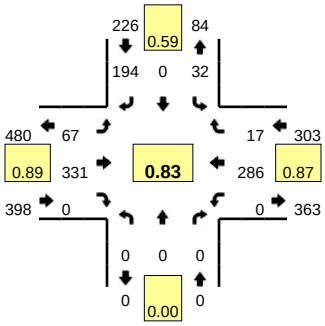
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

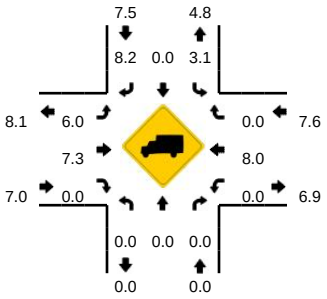
Method for determining peak hour: Total Entering Volume

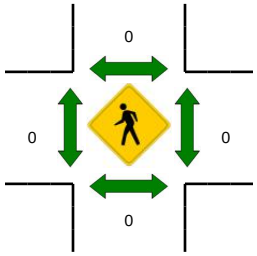
LOCATION: Days Rd E -- SR 52
CITY/STATE: Lafayette, TN

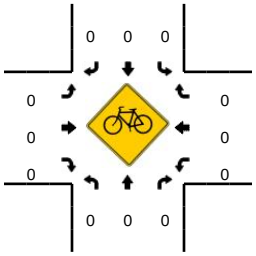
QC JOB #: 14096854
DATE: Tue, Mar 21 2017

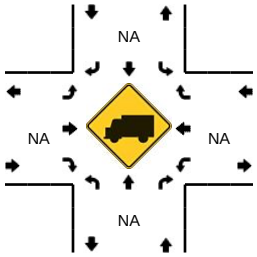


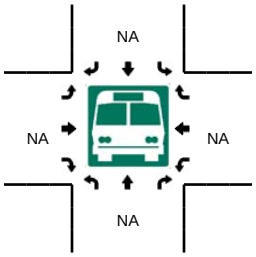
Peak-Hour: 2:45 PM -- 3:45 PM
Peak 15-Min: 2:45 PM -- 3:00 PM











15-Min Count Period Beginning At	Days Rd E (Northbound)				Days Rd E (Southbound)				SR 52 (Eastbound)				SR 52 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
1:00 PM	0	0	0	0	0	0	7	0	11	75	0	0	0	51	1	0	145	
1:15 PM	0	0	0	0	4	0	10	0	12	55	0	0	0	61	3	0	145	
1:30 PM	0	0	0	0	2	0	21	0	7	64	0	0	0	58	2	0	154	
1:45 PM	0	0	0	0	3	0	10	0	2	62	0	0	0	50	2	0	129	573
2:00 PM	0	0	0	0	4	0	14	0	5	72	0	0	0	62	4	0	161	589
2:15 PM	0	0	0	0	4	0	19	0	9	71	0	0	0	58	3	0	164	608
2:30 PM	0	0	0	0	3	0	16	0	22	76	0	0	0	57	8	0	182	636
2:45 PM	0	0	0	0	10	0	85	0	28	77	0	0	0	73	5	0	278	785
3:00 PM	0	0	0	0	12	0	65	0	21	82	0	0	0	62	4	0	246	870
3:15 PM	0	0	0	0	9	0	26	0	13	77	0	0	0	80	7	0	212	918
3:30 PM	0	0	0	0	1	0	18	0	5	95	0	0	0	71	1	0	191	927
3:45 PM	0	0	0	0	2	0	7	0	13	102	0	0	0	66	2	0	192	841
4:00 PM	0	0	0	0	3	0	15	0	16	103	0	0	0	59	1	0	197	792
4:15 PM	0	0	0	0	2	0	13	0	17	105	0	0	0	67	5	0	209	789
4:30 PM	0	0	0	0	1	0	9	0	21	106	0	0	0	59	9	0	205	803
4:45 PM	0	0	0	0	1	0	11	0	34	91	0	0	0	56	8	0	201	812
5:00 PM	0	0	0	0	6	0	11	0	54	105	0	0	0	61	17	0	254	869
5:15 PM	0	0	0	0	7	0	9	0	41	111	0	0	0	82	4	0	254	914
5:30 PM	0	0	0	0	2	0	11	0	9	93	0	0	0	62	2	0	179	888
5:45 PM	0	0	0	0	4	0	14	0	9	81	0	0	0	56	1	0	165	852
6:00 PM	0	0	0	0	3	0	10	0	7	64	0	0	0	38	0	0	122	720
6:15 PM	0	0	0	0	13	0	43	0	6	44	0	0	0	39	0	0	145	611
6:30 PM	0	0	0	0	18	0	58	0	4	70	0	0	0	38	3	0	191	623
6:45 PM	0	0	0	0	4	0	22	0	4	56	0	0	0	37	1	0	124	582

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	40	0	340	0	112	308	0	0	0	292	20	0	1112
Heavy Trucks	0	0	0		0	0	24		8	36	0		0	36	0		104
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

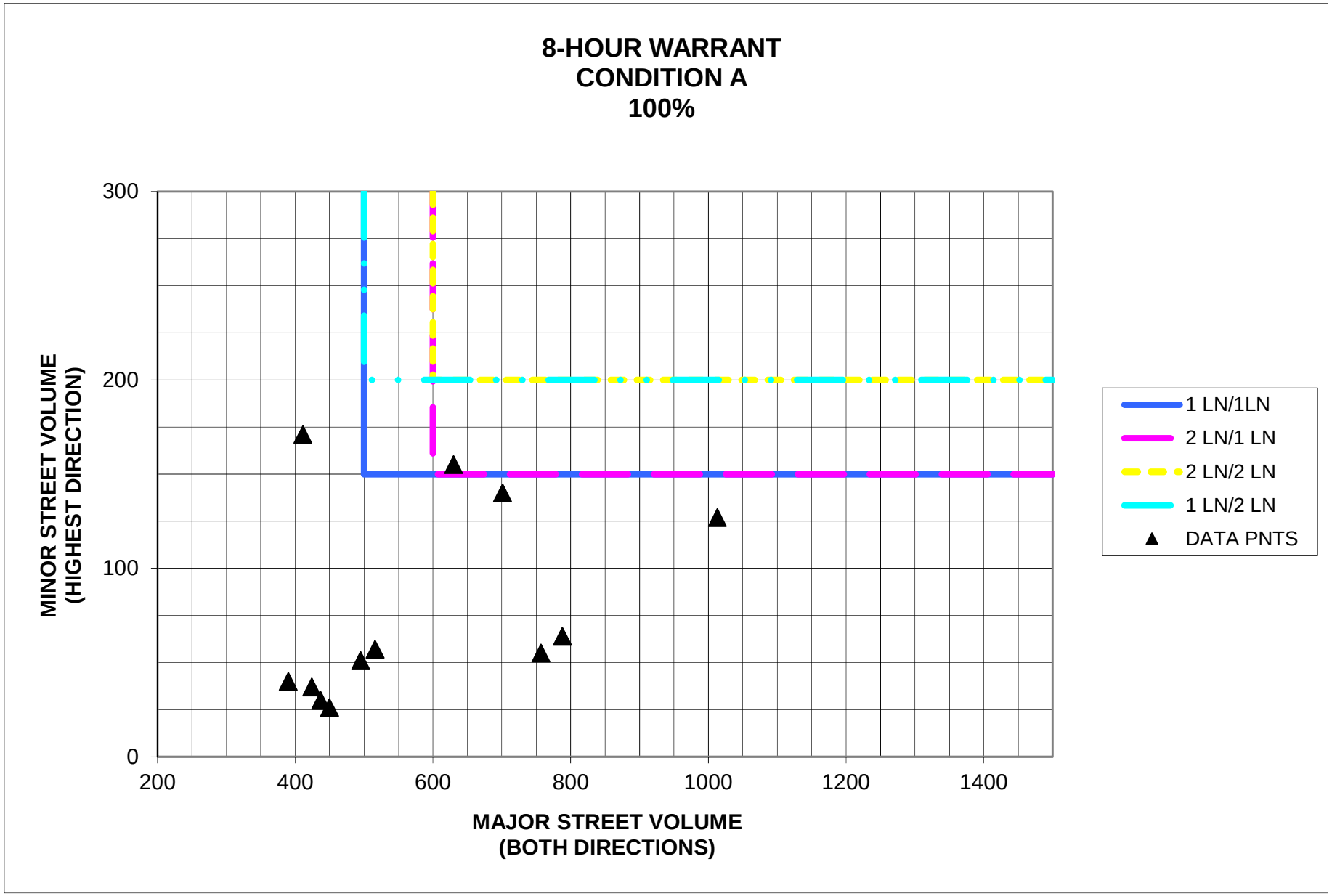
Comments:

Report generated on 8/25/2017 6:44 AM

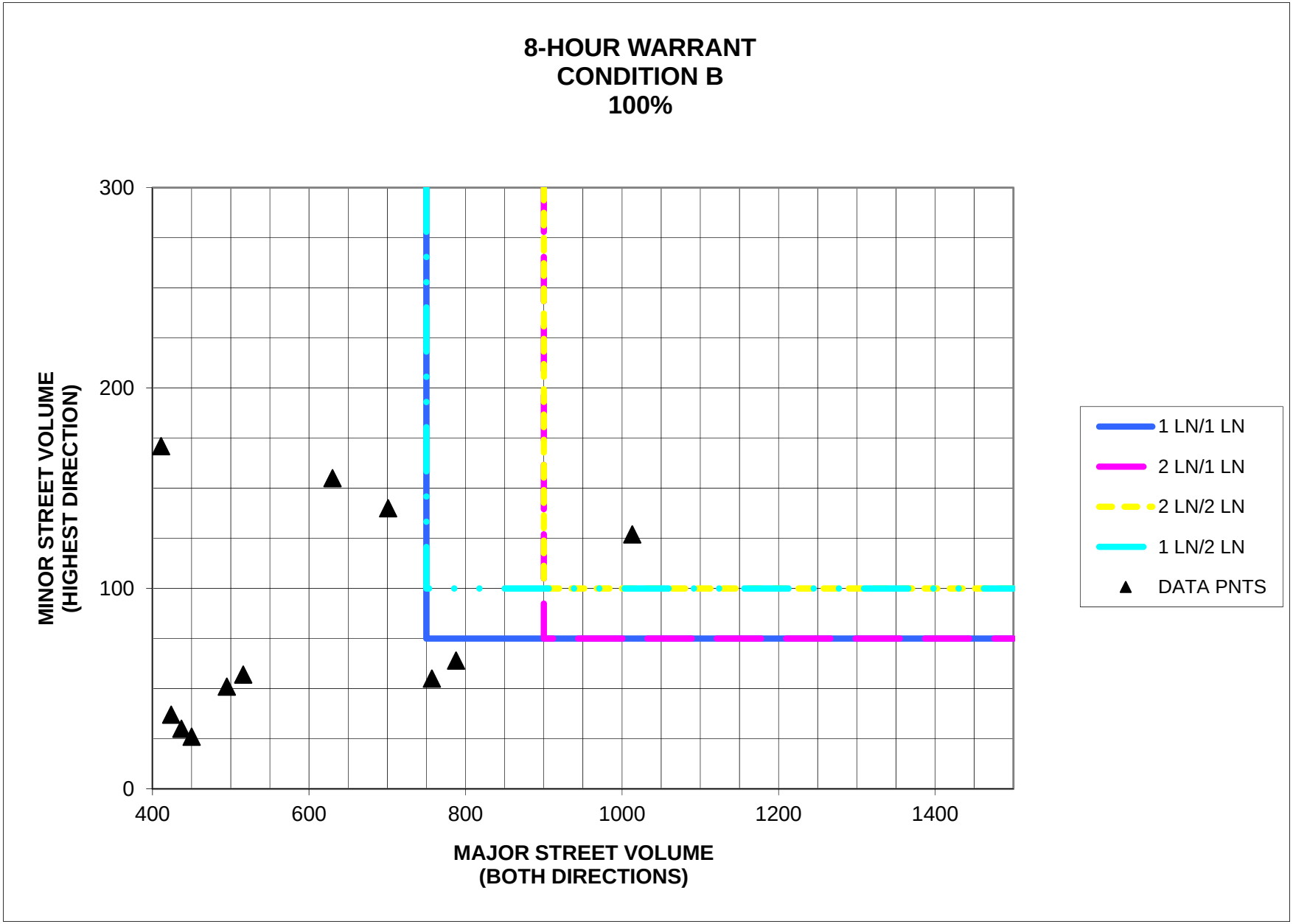
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

APPENDIX B: SIGNAL WARRANTS

Days Rd E at SR-52
Lafayette CTPG



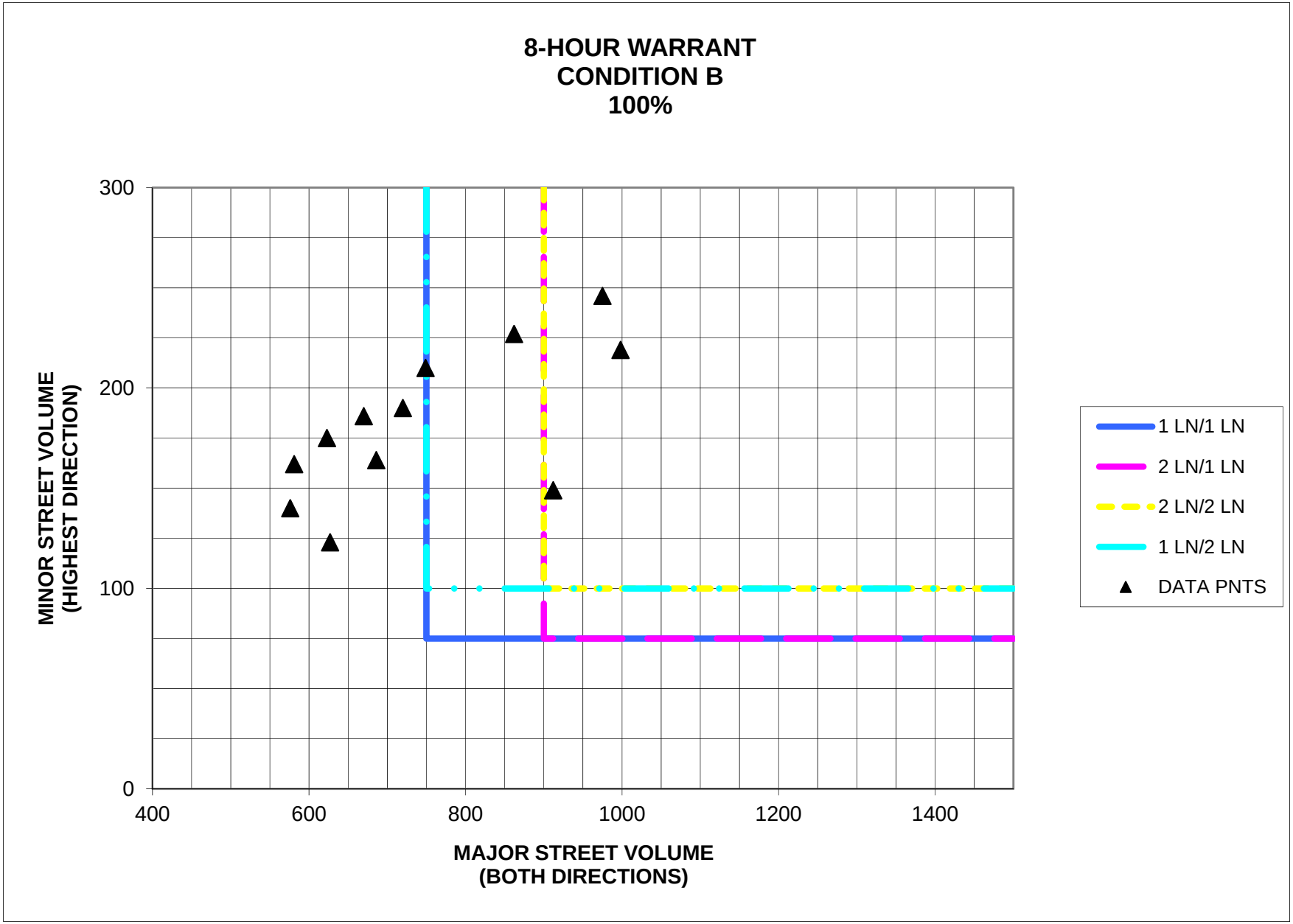
Days Rd E at SR-52
Lafayette CTPG



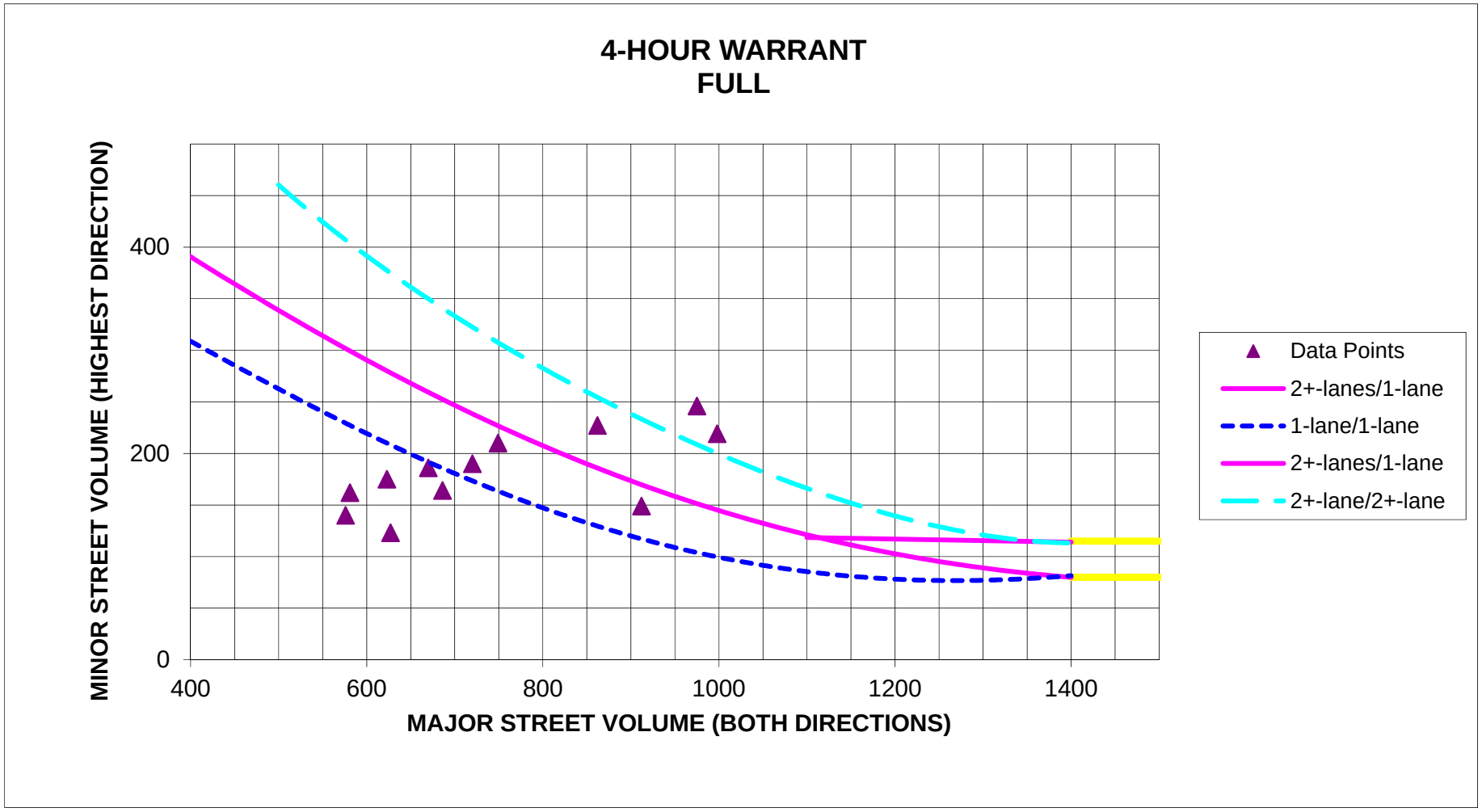
Days Rd E at SR-52
Lafayette CTPG

Ellington Dr at SR-52
Lafayette CTPG

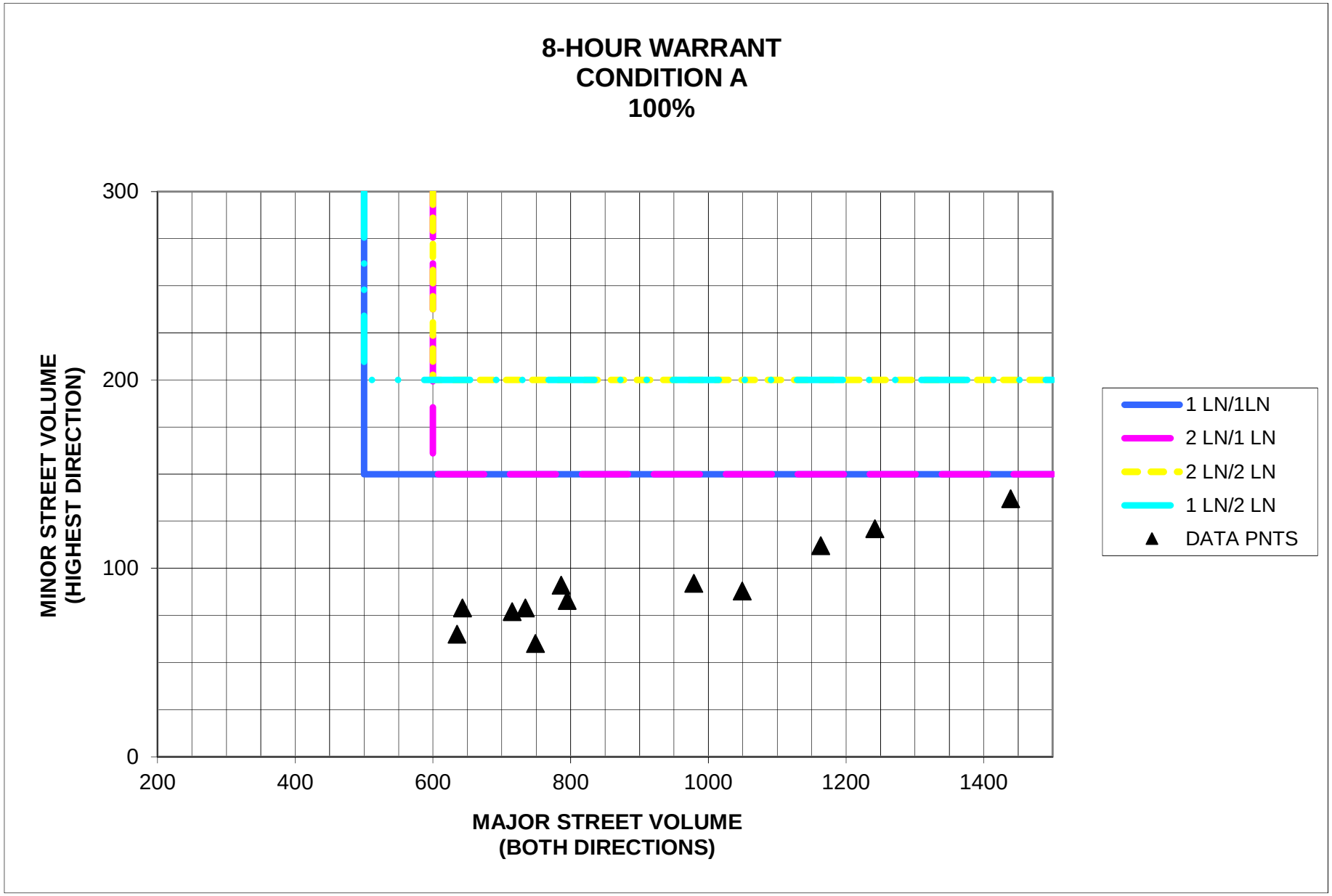
Ellington Dr at SR-52
Lafayette CTPG



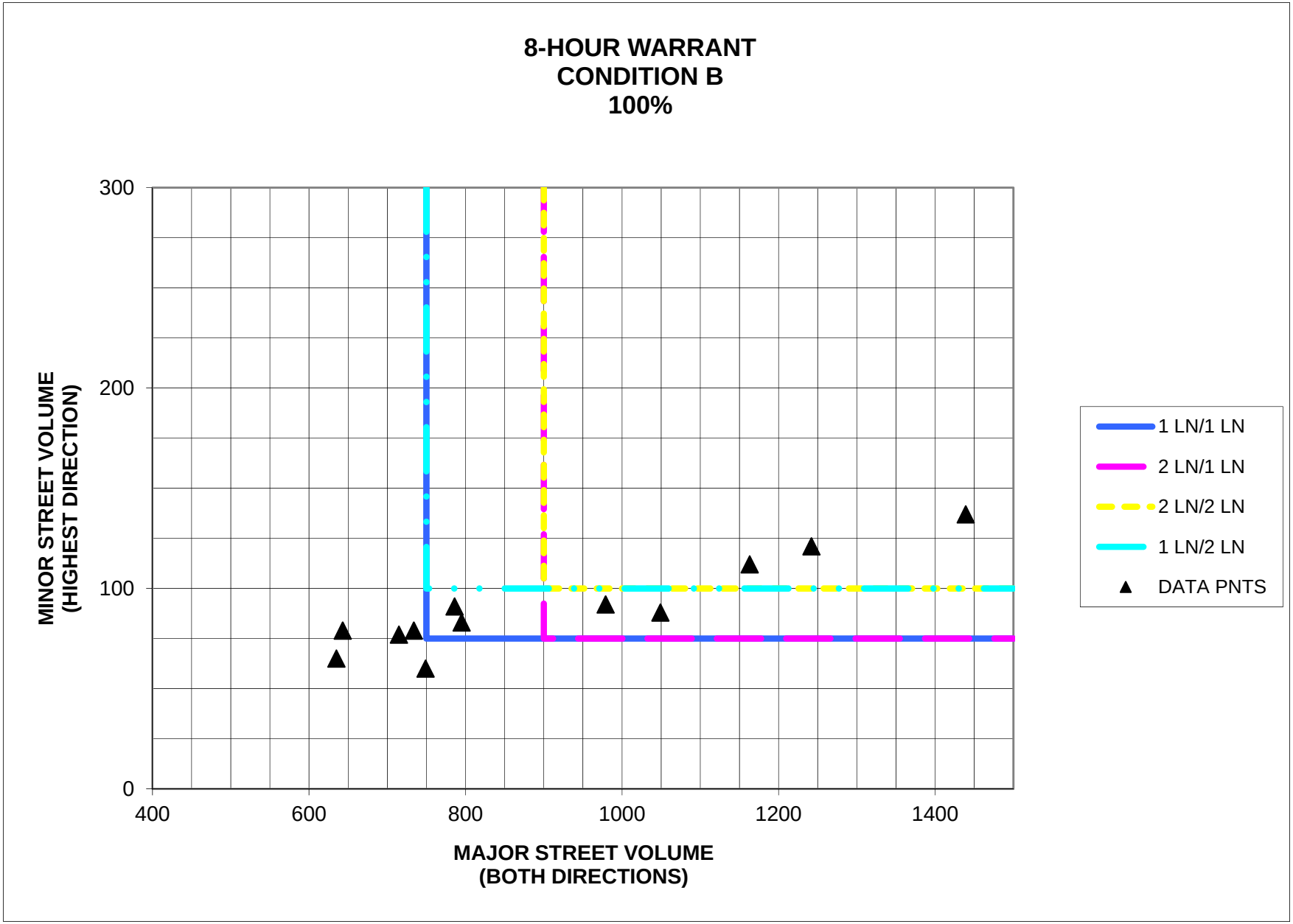
Ellington Dr at SR-52
Lafayette CTPG



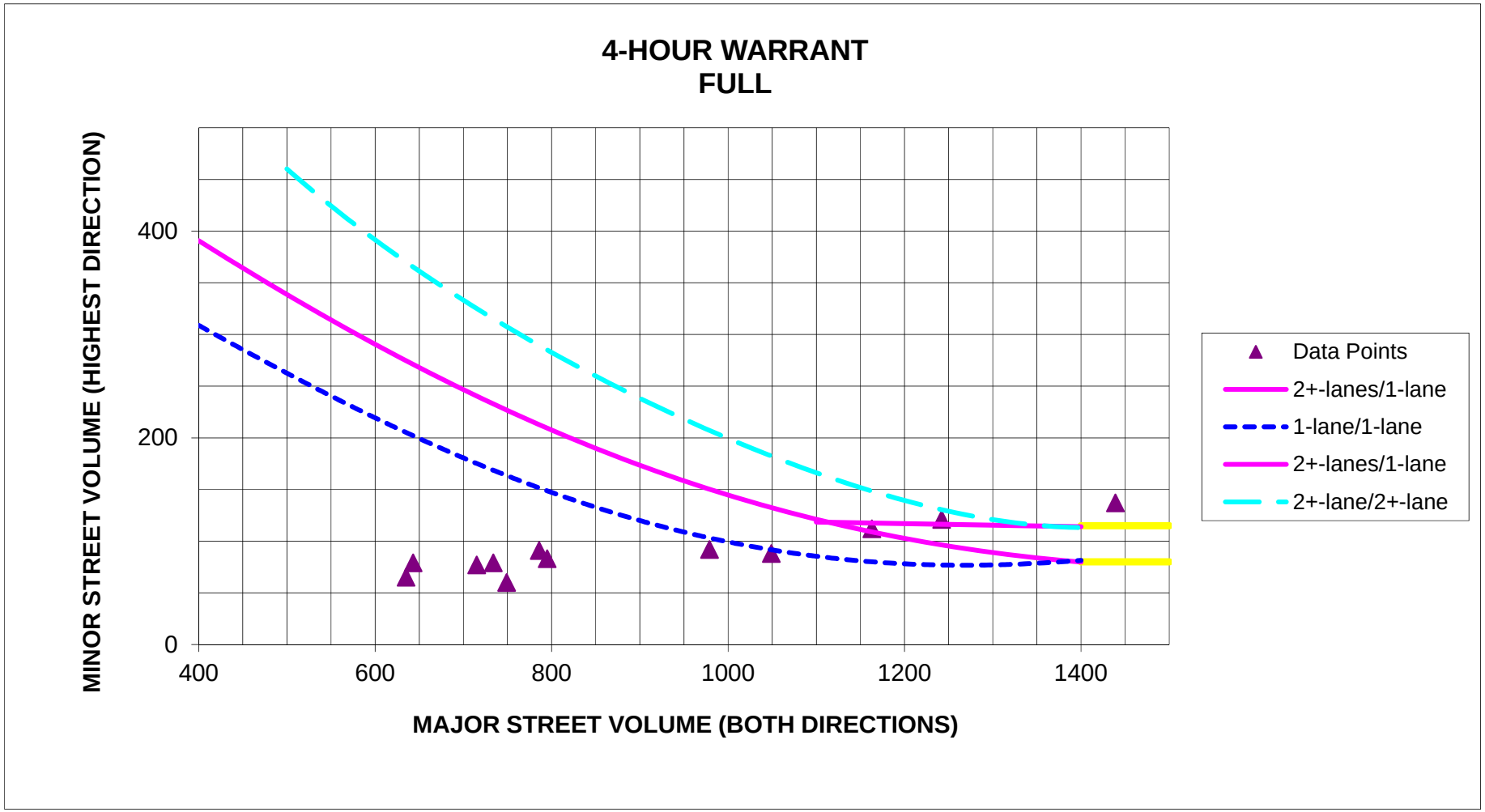
Oak St/Sneed Rd at SR-52
Lafayette CTPG



Oak St/Sneed Rd at SR-52
Lafayette CTPG

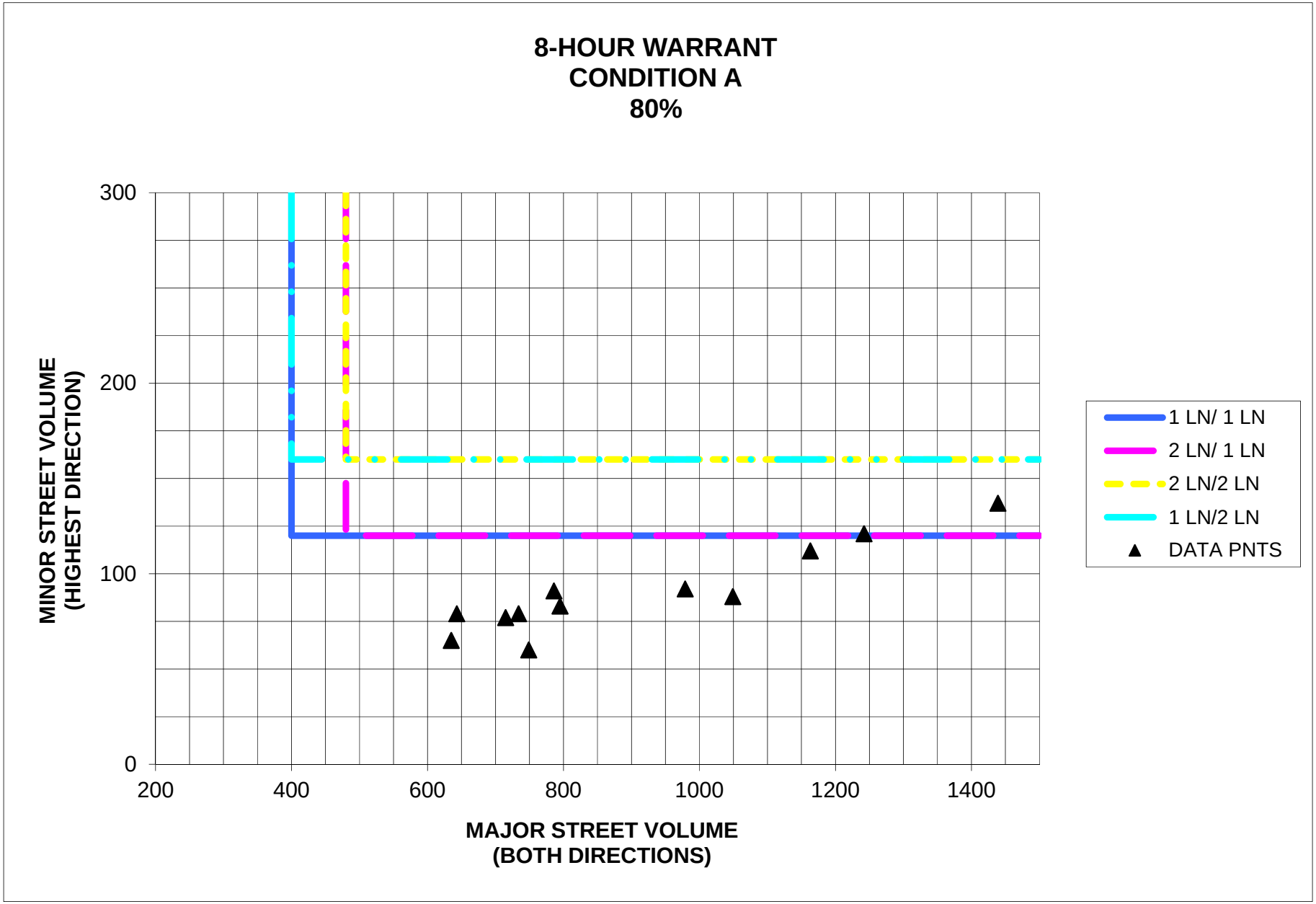


Oak St/Sneed Rd at SR-52
Lafayette CTPG

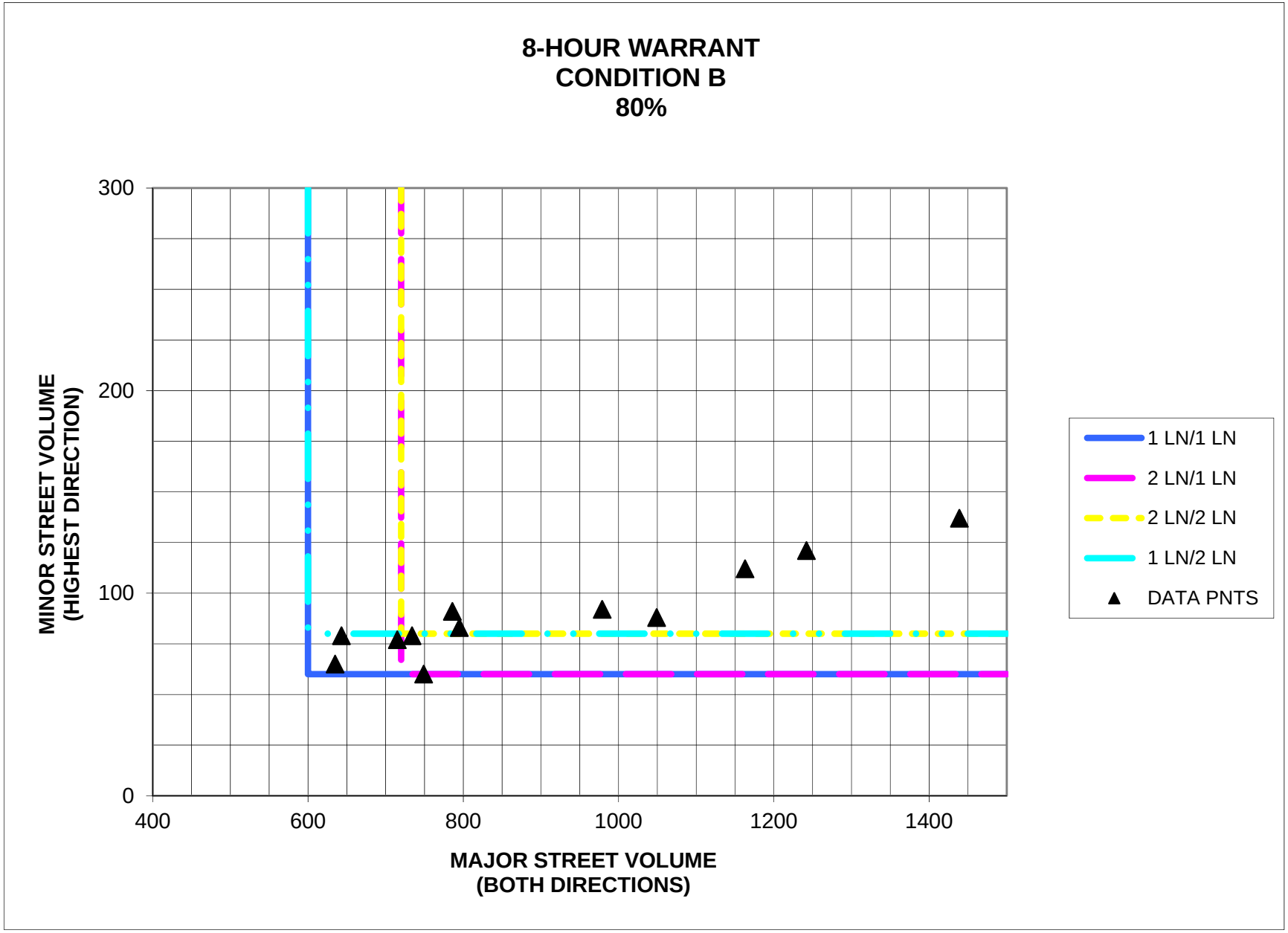


Oak St/Sneed Rd at SR-52
Lafayette CTPG

6/19/2017



Oak St/Sneed Rd at SR-52
Lafayette CTPG



LAFAYETTE CTPG - SR-52/SR-10

SR-52/SR-10 CRASH DATA ANALYSIS (2012-2016)

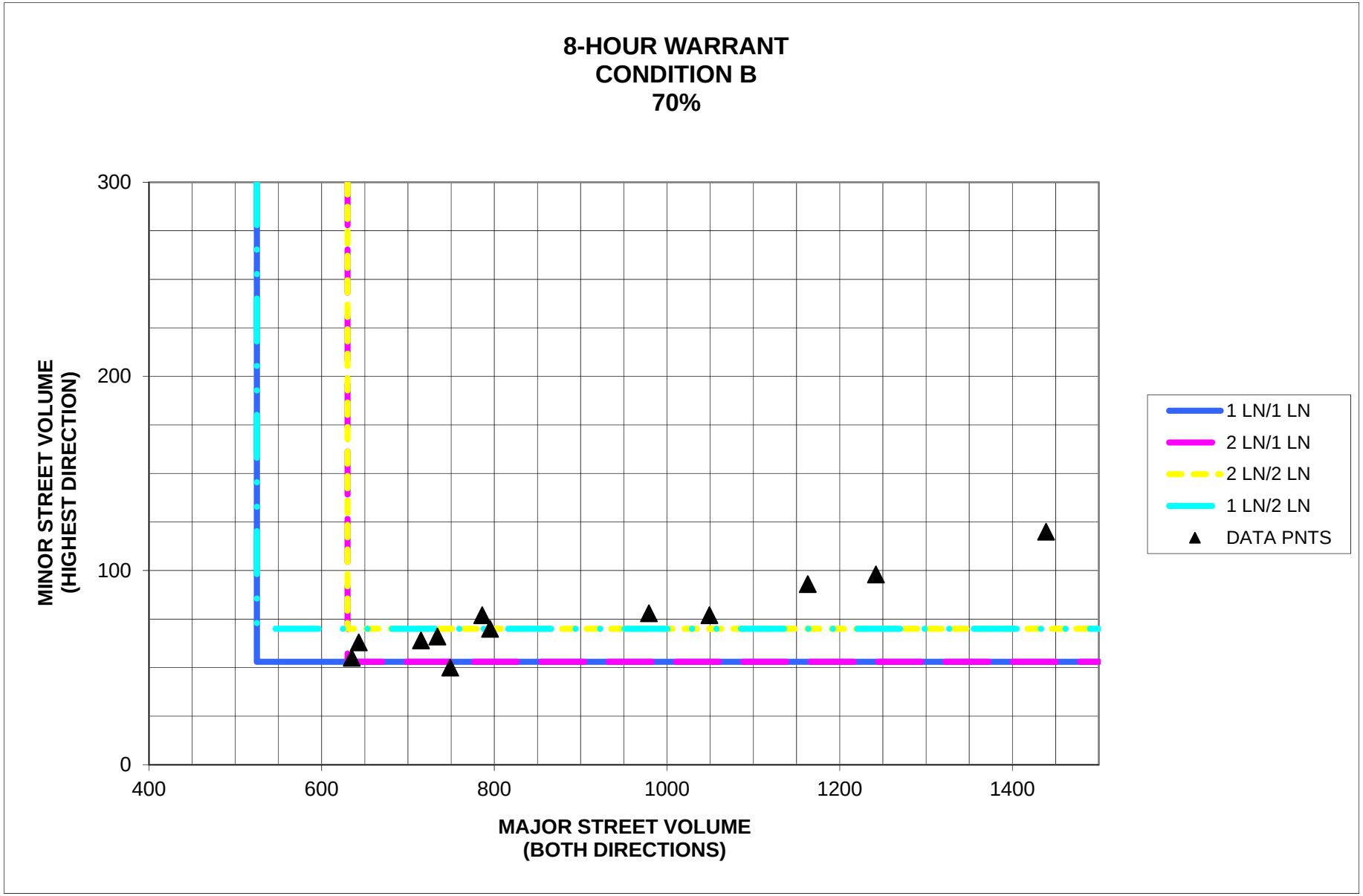
LOCATION	CRASH TYPE				MANNER OF COLLISION				VOLUME	STATISTICAL COMPUTATIONS			
Intersection	Total Number of Crashes	Property Damage	Injury	Fatal	Rear-End	Angle	HeadOn	Sideswipe	Avg Entering Traffic Volume (vpd)	Crash Rate	Critical Crash Rate	TN Statewide Avg Crash Rate	Equiv PDO Rating [1]
SR-52 @ Brattontown Circle (West)	18	15	3	0	9	6	1	1	14,060	0.701	0.673	0.666	48
SR-52 @ Brattontown Circle (East)	6	4	2	0	1	3	0	1	12,561	0.262	0.183	0.179	26
SR-52 @ Church St	10	7	3	0	7	2	0	1	16,229	0.338	0.139	0.136	40
SR-52 @ Ellington Dr	26	24	2	0	5	14	1	3	19,099	0.746	0.552	0.547	46
SR-52 @ SR-10	* Traffic Control Changed from AWSC to Signalized in 2016.												
SR-52 @ Spring Hollow Road/Spring Dr	3	3	0	0	0	1	0	1	13,167	0.125	0.139	0.136	3
SR-52 @ Red Boiling Springs (West)	11	8	3	0	6	1	0	3	17,499	0.344	0.778	0.772	41
SR-52 @ Sneed Blvd/Oak St	24	17	5	2	4	11	2	1	15,374	0.855	0.139	0.136	1156
SR-52 @ Days Rd (West)	15	12	3	0	9	4	0	1	12,600	0.652	0.139	0.136	45
SR-52 @ Red Boiling Springs (East)	1	1	0	0	0	0	0	0	12,074	0.045	0.163	0.16	1
SR-52 @ Days Rd (East)	5	4	1	0	1	3	0	0	10,477	0.261	0.164	0.16	15
SR-10 @ Burtrum	3	2	1	0	3	0	0	0	5,916	0.278	0.184	0.179	13

1) EPDO Weighted Factors have come from HSM and AASHTO (2010). Fatal = 542, Injury = 11, PDO = 1

* Fatality crashes were Pedestrian-Related and Angle, respectively.

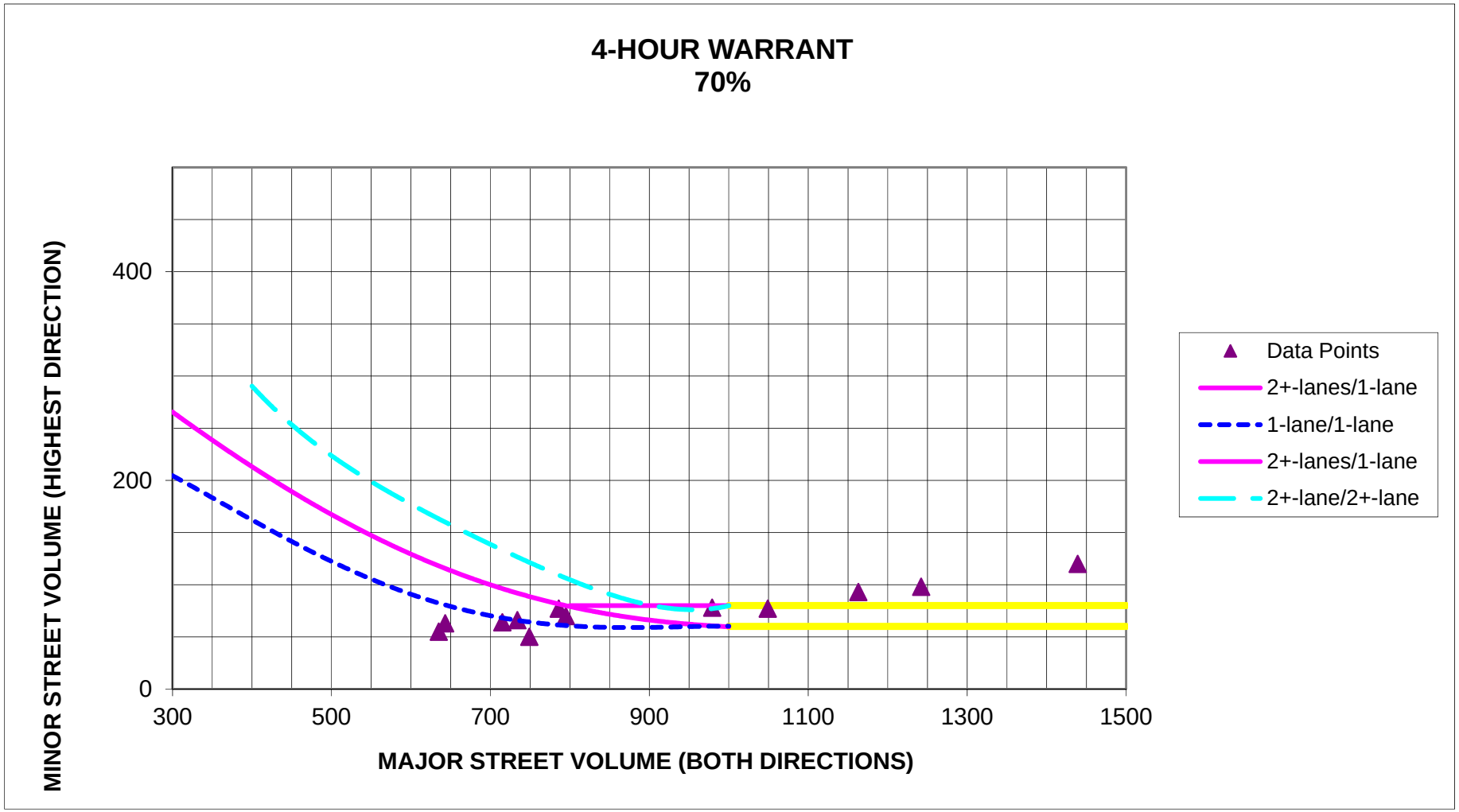
Oak St/Sneed Blvd at SR-52
Lafayette CTPG

9/13/2017



Oak St/Sneed Rd at SR-52
Lafayette CTPG

9/13/2017



APPENDIX C: ENVIRONMENTAL SCREENING

Preliminary Environmental Screening for Proposed Corridor Study

Lafayette, Macon County, Tennessee

Project Number: 13176.002

For:
City of Lafayette
Community Transportation Planning Grant
Lafayette, Macon County, Tennessee

Prepared By:
Neel-Schaffer, Inc.
1022 Highland Colony Parkway, Suite 202
Ridgeland, Mississippi 39157

Report Date: July 10, 2017

TABLE OF CONTENTS

List of Tables

List of Figures

i. ACRONYMS/ABBREVIATIONS

AFS	Air Facility System
AST	Aboveground Storage Tank
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCUS	Comprehensive Environmental Response, Compensation and Liability Information System
CESQG	Conditionally Exempt Small Quantity Generator
CORRACTS	Corrective Action Sites
ERNS	Emergency Response Notification System
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
HUC	Hydrologic Unit Code
LQG	Large Quantity Generator
LUST	Leaking Underground Storage Tank
MSAT	Mobile Source Air Toxics
NFRAP	No Further Remedial Action Planned
NPL	National Priorities List
NPS	National Park Service
NRCS	National Resources Conservation Service
NSI	Neel-Schaffer, Inc.
NWI	National Wetland Inventory
POC	Point of Contact
RCRA	Resource Conservation and Recovery Act
SHWS	State Hazardous Waste Sites
SQG	Small Quantity Generator
SWF/LF	Solid Waste Landfills
TDEC	Tennessee Department of Environment and Conservation
TDOT	Tennessee Department of Transportation
TRI	Toxic Release Inventory
TWRA	Tennessee Wildlife Resources Agency
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank

i. EXECUTIVE SUMMARY

Neel-Schaffer, Inc. (NSI) has performed a preliminary environmental screening for areas of land along existing roadways in Lafayette, Macon County, Tennessee. It is our understanding that the City of Lafayette will be conducting work under a Community Transportation Planning Grant for a potential roadway widening project within the City of Lafayette, Macon County, Tennessee. The preliminary environmental screening has been conducted on a planning level to identify potential environmental constraints within the approximate 5.5 mile project area.

The environmental screening included a one mile radius search of hazardous facilities located along the proposed corridor with potential for negative environmental impacts to the corridor. Other sensitive or potentially sensitive areas were evaluated within and adjacent to the ROW. Potential wetlands exist along streams/roadside ditches and in low-lying areas within and near the proposed project corridor. Impacts to streams and tributaries within and near the proposed project corridor are likely. Potentially designated historic architectural structures and districts and a county park were observed adjacent to the proposed corridor, and critical habitats could potentially be located within or near the proposed project corridor and could be negatively impacted by proposed activities. Prior to development of the proposed corridor area, further environmental studies and compliance with state and federal agencies should be conducted to ensure sensitive resources will not be affected by construction activities.

1.0 INTRODUCTION

The proposed action will include the widening and/or modifications to three existing roadways located within the City of Lafayette in Macon County, Tennessee. The preliminary environmental screening was completed through online desktop applications and a windshield survey on April 27, 2017. Topographic maps and aerial photographs were compiled utilizing GIS software and are attached in Appendix A (Maps 1 and 2, respectively).

The approximate study limits begin at the western city limits on State Road-52 (Highway 52 Bypass) and extend southeast to the intersection of State Road-52 and Days Road. The project limits also extend from the intersection of State Road-10 and State Road-52 to Church Street. The total project length is approximately 5.5 miles.

2.0 RIGHT-OF-WAY

The amount of land to be acquired as a result of the proposed action has not yet been determined. The potential for the acquisition of more than one acre of right-of-way and/or the displacement of any commercial or residential occupants is still under review. Once the project limits have been determined, these criteria along with temporary easement locations should be presented to the Tennessee Department of Transportation (TOOT) point of contact (POC) for further recommendations.

3.0 ACCESS CONTROL

Proposed access control information will be available upon the release of proposed corridor plans.

4.0 STREAMS/WETLANDS

According to the United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) Digital Wetlands Mapper, no wetland or riparian areas have been recorded for this area. However, the potential exists for the presence of wetland indicators in four areas throughout the project area. These potential areas are located along existing stormwater drainage and low-lying areas and may be impacted by future construction activities. Many of these areas could be jurisdictional wetlands and waters. These potential areas are indicated on Figures 3-1 and 3-2 (Appendix B) and should be evaluated for the presence of potential wetlands and and other waters of the U.S. both the United States Army Corps of Engineers (USACE) Louisville and Nashville Districts (refer to section 6.0). Areas 1, 2, and 3 located south of SR-52 appear to drain into Goose

Creek and Sullivan Branch which ultimately confluence with the Cumberland River (a traditional navigable waterway).

The proposed project corridor is located within two watersheds of the Cumberland River Basin, U.S. Geological Service (USGS) hydrologic unit code HUC 12 (05130108). The Barren River Watershed (HUC 12-05110002) is approximately 1,661 square miles and drains to the Green River. The Old Hickory Lake Watershed (HUC 12-05130201) is approximately 983 square miles and drains to the Cumberland River. The corresponding watershed map is located in Appendix B.

5.0 ENDANGERED SPECIES

The Tennessee Department of Environment and Conservation (TDEC) maintains an online database of federal and state-listed rare, threatened, and endangered species. The results of the Macon County, Tennessee database search are show in Table 1. The USFWS and TDEC should be contacted prior to work along the corridor for a determination of the presence of listed species along the corridor and the impact to those species in accordance with the Clean Water Act; the Endangered Species Act; Fish and Wildlife coordination Act; Executive Order 11988, Floodplain Management; Executive Order 11990; Protection of Wetlands; Tennessee Non-game and Endangered or Threatened Wildlife Species Conservation Act of 1974; Tennessee Rare Plant Protection and Conservation Act of 1985; and the Tennessee Water Quality Control Act of 1977.

No threatened or endangered species or critical habitats were observed along the corridor during the site visit nor were they indicated on the location map provided by the USFWS in Appendix C. However, TDEC may require an evaluation of undisturbed, wooded areas along the corridor conducive to critical habitat conditions by a biologist, especially those of bat species although not identified. A list of rare species of Macon County, TN is shown in Table 1 below.

Table 1. State and Federally Listed Rare, Threatened, or Endangered Species in Macon County

Scientific Name	Common Name	Status	Group
Thryomanes bewickii	Bewick's Wren	Endangered	Bird
Etheostoma bellum	Orangefin Darter	Deemed in need of Management	Fish
Hemitremia flammea	Flame Chub	Deemed in need of Management	Fish
Panax quinquefolius	American Ginseng	Special Concern	Flowering Plant
Thoburnia atripinnis	Blackfin Sucker	Deemed in need of Management	Fish
Etheostoma kantuckeense	Highland Rim Darter	Rare, Not State Listed	Fish

Scientific Name	Common Name	Status	Group
Etheostoma barbouri	Teardrop Darter	Deemed in need of Management	Fish
Chondestes grammacus	Lark Sparrow	Threatened	Bird
Percina macrocephala	Longhead Darter	Threatened	Fish
Juglans cinerea	Butternut	Threatened	Flowering Plant
Desmognathus welteri	Black Mountain Salamander	Deemed in need of Management	Amphibian
Percina stictogaster	Frecklebelly Darter	Deemed in need of Management	Fish
Accipiter striatus	Sharp-shinned Hawk	Deemed in need of Management	Bird
Etheostoma barrenense	Splendid Darter	Deemed in need of Management	Fish
Barbicambarus cornutus	Bottle Brush Crayfish	Rare, Not State Listed	Crustacean

6.0 FLOODPLAIN/FLOODWAY

No areas were identified as being located within the 100 year flood zone or floodways of waters of the U.S within the project area (Appendix D) according to the Federal Emergency Management Agency (FEMA) Digital Flood Insurance Rate Map (DFIRM). The USACE Nashville and Louisville Districts and TDOT POC should be contacted for direction prior to work being performed within the corridor for additional construction restrictions in these areas.

7.0 FARMLAND

The Natural Resources Conservation Service (NRCS) Web Soil Survey indicated soil units of prime farmland throughout the project corridor. During the site reconnaissance, a few areas of cultivated land were identified adjacent to the project corridor. The majority of soil units suitable for prime farm land within or adjacent to the project area have previously been developed by roadway, residential, commercial, or industrial construction. The NRCS Prime Farmland Report is located in Appendix E.

8.0 WILD AND SCENIC RIVERS

The Tennessee Wildlife Resources Agency (TWRA), USDA, and TDEC maintain a list of state and federal-listed scenic rivers located throughout Tennessee. Wild and Scenic Rivers were not identified within the proposed corridor buffer, and a map indicating these findings can be found in Appendix F.

9.0 AIR QUALITY

An air quality analysis will be conducted upon the release of proposed corridor plans. The

air quality analysis should include transportation conformity and Mobile Source Air Toxics (MSATs) for all projects, and pertinent information provided to the POC.

10.0 NOISE

A noise study and abatement measures analysis will be conducted upon the release of proposed corridor plans, if required.

11.0 CULTURAL AND HISTORIC RESOURCES

The National Park Service (NPS) maintains an online database of registered historic archaeological and architectural resources. There were no historical structures or cultural resources indicated as being located within the project area by the NPS that would be impacted by construction. However, numerous architectural resources with potential for listing on the National Register of Historic Places are located adjacent to the proposed project corridor that could be significantly impacted by proposed construction activities. These resources include residences, businesses, and churches, and vacant buildings located along SR-10 and the eastern portion of SR-52. Representative photographs of these areas and corresponding map locations can be found in Appendix G. Four cemeteries were also shown near to the proposed corridor on the topographic map (Map 2).

The City of Gordonsville, the Tennessee Historical Commission (THC), and the NPS should be contacted prior to work activities along the corridor area to identify any potential or unrecorded historic properties that could be affected by construction and determine any undesired impacts to these resources. An assessment of architectural structures located within and adjacent to the proposed project area will determine the National Register eligibility of these resources and mitigation requirements for updating records at the THC.

12.0 PARKS AND RECREATIONAL RESOURCES

On the attached Figure 10 in Appendix H provided by the National Park Service (NPS), Macon County Park was identified adjacent to the proposed corridor and within the city limits of Lafayette. No wildlife refuges were located within the project area. The NPS and TDEC Recreational Educational Services Division, Grants Program Office should be contacted prior to construction activities for a local review and potential impact analysis of the proposed work.

13.0 NATIVE AMERICAN COORDINATION

Although state and federal protected Native American lands are not located within the

proposed corridor, coordination with Native American Tribes will be required if proposed activities involve acquisition of new ROW on previously undisturbed land (refer to Appendix G). Native America Tribes will most likely request a complete cultural resources assessment of the undisturbed areas by an Archaeologist that meets the Secretary of the Interior's requirements. Consultation with the TDOT POC should be conducted once the proposed project plans are available for guidance on Native American Tribe coordination.

14.0 HAZARDOUS MATERIALS

Numerous businesses with underground storage tanks (USTs) and bulk storage, use, and transportation of hazardous materials were located adjacent to the project corridor. These facilities included service stations, local municipality complexes, automotive repair shops, vehicle dealerships, hardware distribution facilities, industrial manufacturing facilities, a funeral home, and a correctional facility.

The Environmental Protection Agency's (EPA's) Envirofacts website indicated the following sites and number of instances as being located within one mile of the proposed project corridor (refer to Appendix H):

- Toxic Releases (1)
- Water Dischargers (4)
- Air Pollution (7)
- Hazardous Waste (13)

Prior to work within the project area, a thorough Phase I Environmental Site Assessment should be conducted to identify any hazardous sites through documents and avenues not readily available in the preliminary screening process that could potentially impact or have previously impacted the project area.

15.0 ENVIRONMENTAL JUSTICE

The majority of the project area is located along business routes and would primarily impact businesses and single family residences. The project will not have significant impacts to minority and low-income populations. According to the 2010 Census, a total of 4,474 residents lived in Lafayette, TN, up 6.7% from the previous census collection. 97% of the residents were of caucasion decent. In 2015, the population grew to 4,962 residents, and the median household

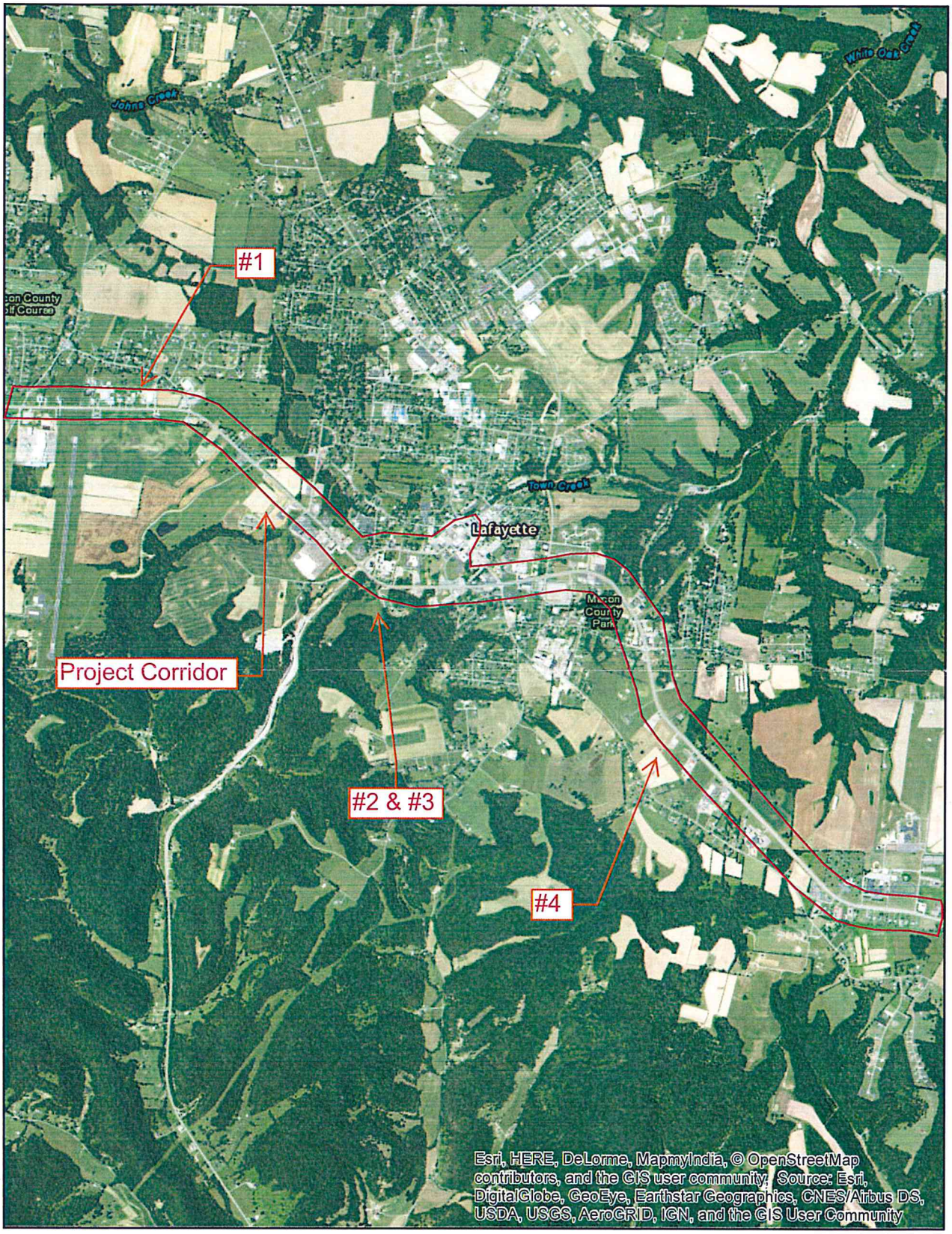
income was $30,508 with median gross rent of $534. Average household size is 2.3 people with median resident age of 41.5 years.

16.0 CONCLUSION

In conclusion, NSI has performed this preliminary environmental screening of the proposed project corridor to identify any sensitive resources that could be impacted by construction activities Potential wetlands and other waters of the U.S., potential historic architectural structures and districts, a county park, and four cemeteries were identified adjacent to or near the proposed project corridor that could be potentially impacted by future development. Numerous sites with hazardous materials utilization and storage as well as previous toxic releases are located within one mile of the proposed project corridor. Prior to development of the proposed roadway project, thorough studies and reviews of sensitive resources in the area are recommended to ensure these resources will not be negatively impacted by proposed construction activities.

APPENDIX A

SR-52/SR-10 Corridor Study, Lafayette, Macon County, TN



0 0.375 0.75 1.5 Miles

N

Map 1
Project Corridor on Aerial Photograph
with Corresponding Photograph
Numbers

Photo 1. View facing west along SR-52 toward west corridor boundary.

Photo 2. View southeast along SR-52 near intersection of SR-52 and SR-10.

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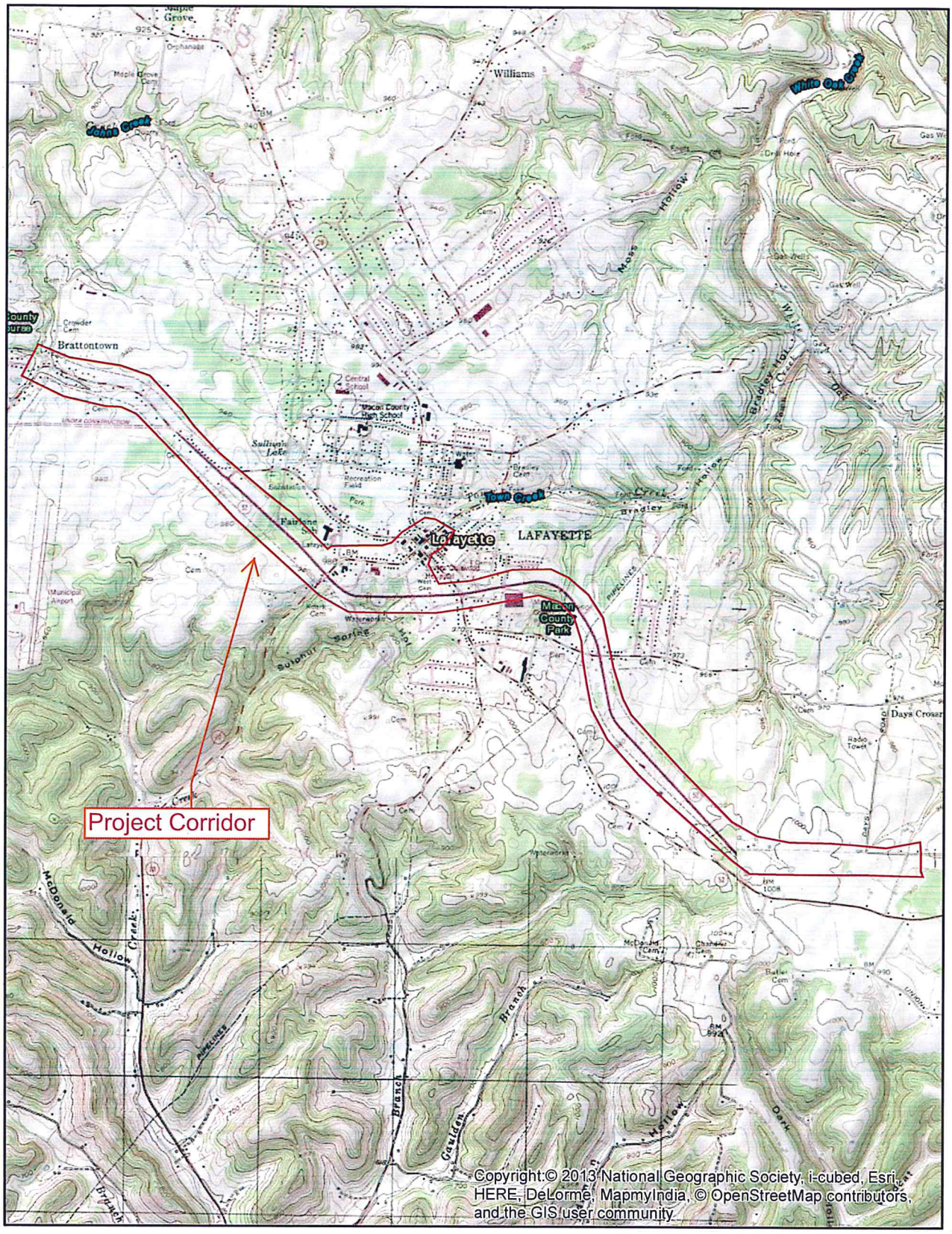
Solutions you can build upon

Lafayette Site
Lafayette, Macon County, TN
Date of Photography: April 27, 2017

Photo 3. View facing intersection of SR-52 and SR-10.

Photo 4. View facing southeast along SR-52 near the east corridor boundary.

SR-52/SR-10 Corridor Study, Lafayette, Macon County, TN



0 0.4 0.8 1.6 Miles

Map 2
Corridor Location on a Topographic Map

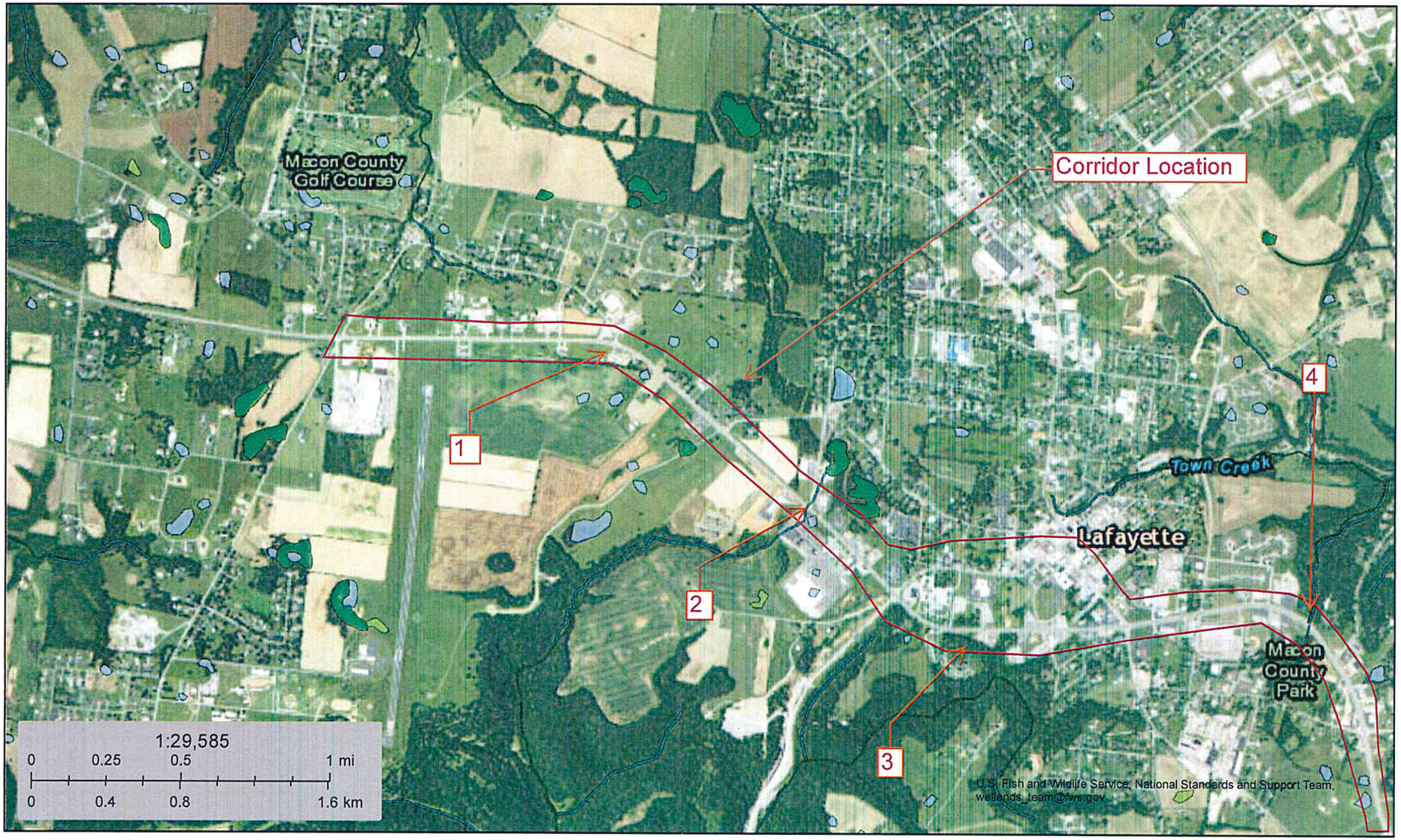
N

APPENDIX B

U.S. Fish and Wildlife Service

National Wetlands Inventory

Lafayette, TN 3-1



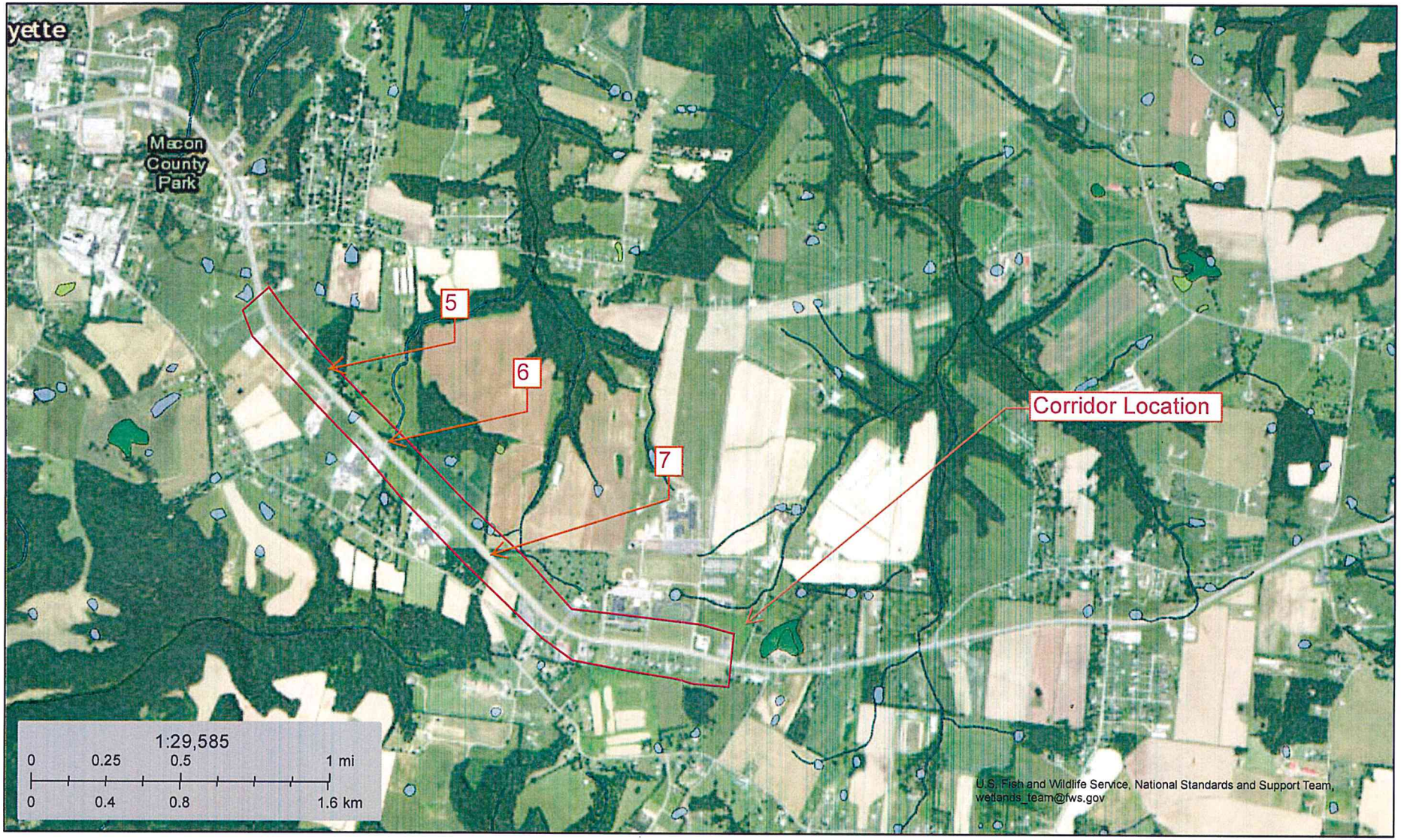
Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

U.S. Fish and Wildlife Service

National Wetlands Inventory

Lafayette, TN 3-2



Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

Photo 1. View facing south along SR-52 drainage area.

Photo 2-1. View northwest along SR-52 near intersection of SR-52 and Ellington Drive.

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Solutions you can build upon

Lafayette Site
Lafayette, Macon County, TN
Date of Photography: April 27, 2017

Photo 2-2. View facing west near intersection of SR-52 and Ellington Drive.

Photo 2-3. View facing west near intersection of SR-52 and Ellington Drive. Retention pond/roadside ditch appeared to connect to the tributary of Goose Creek

Photo 3. View facing east along SR-52 near intersection of SR-52 and SR-10/College St.

Photo 4. View east along SR-52 near intersection of SR-52 and Music Row Drive and tributary of Goose Creek.

NEEL-SCHAFFER
Solutions you can build upon

Lafayette Site
Lafayette, Macon County, TN
Date of Photography: April 27, 2017

Photo 5. View facing southeast along SR-52.

Photo 6. View facing east from SR-52.

NEEL-SCHAFFER
Solutions you can build upon

Lafayette Site
Lafayette, Macon County, TN
Date of Photography: April 27, 2017

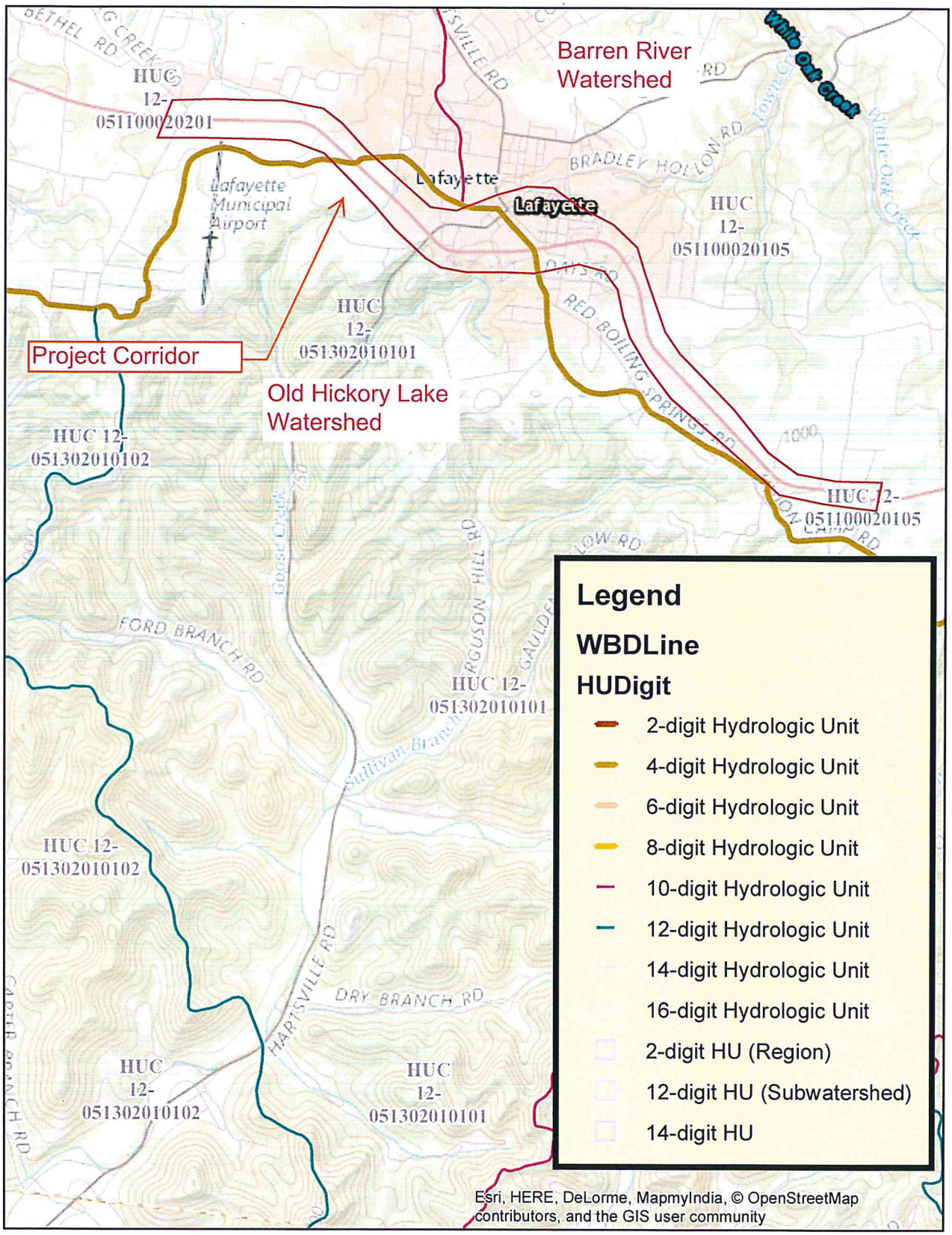
Photo 7. View facing north along SR-52 near funeral home. The area appeared to drain south toward Sullivan Branch.

Photo 7. View facing north from SR-52 near the funeral home.

NEEL-SCHAFFER
Solutions you can build upon

Lafayette Site
Lafayette, Macon County, TN
Date of Photography: April 27, 2017

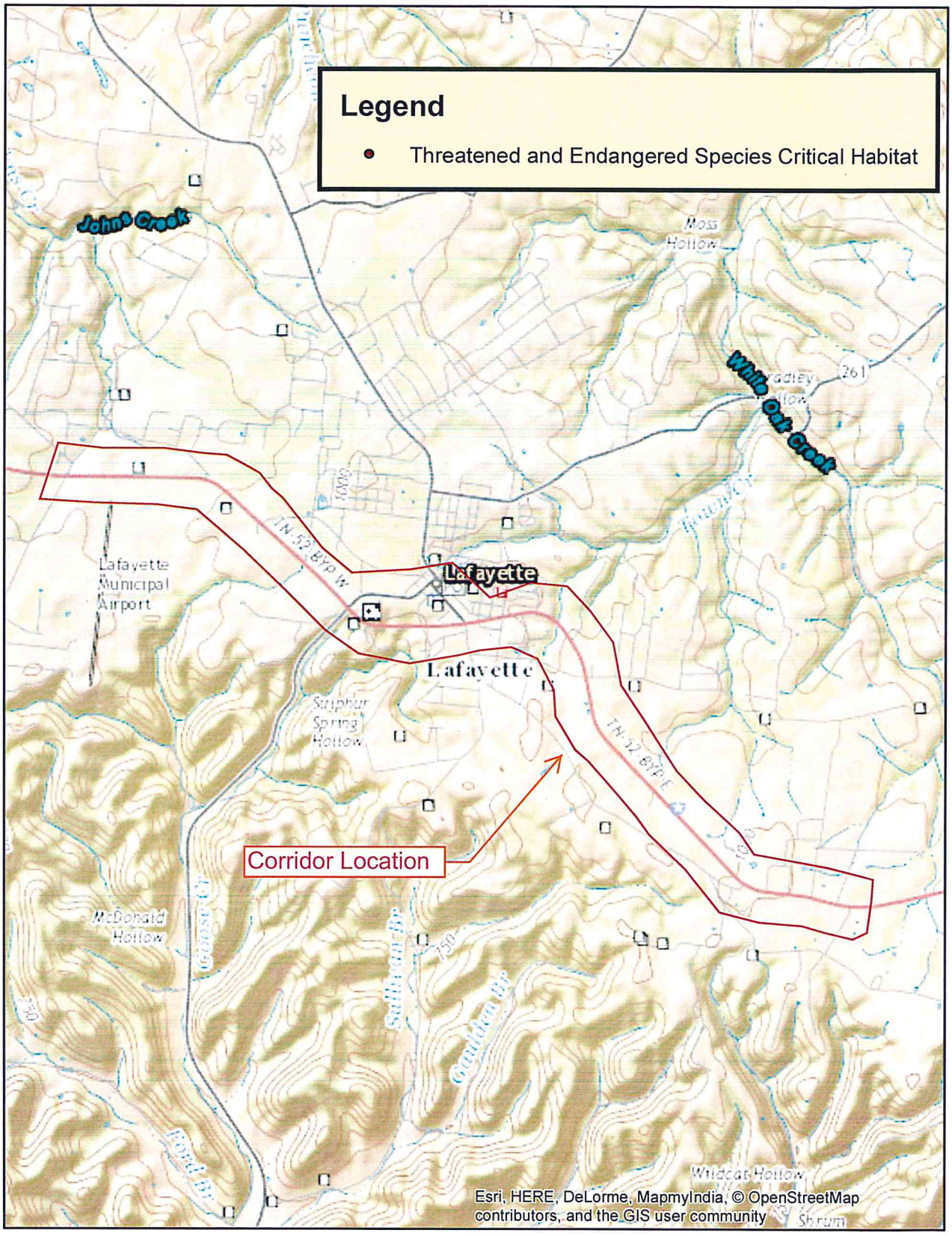
SR-52/SR-10 Corridor Study, Lafayette, Macon County, TN



Map 4
Macon County Watersheds

Appendix C

SR-52/SR-10 Corridor Study - Lafayette, Macon County, TN



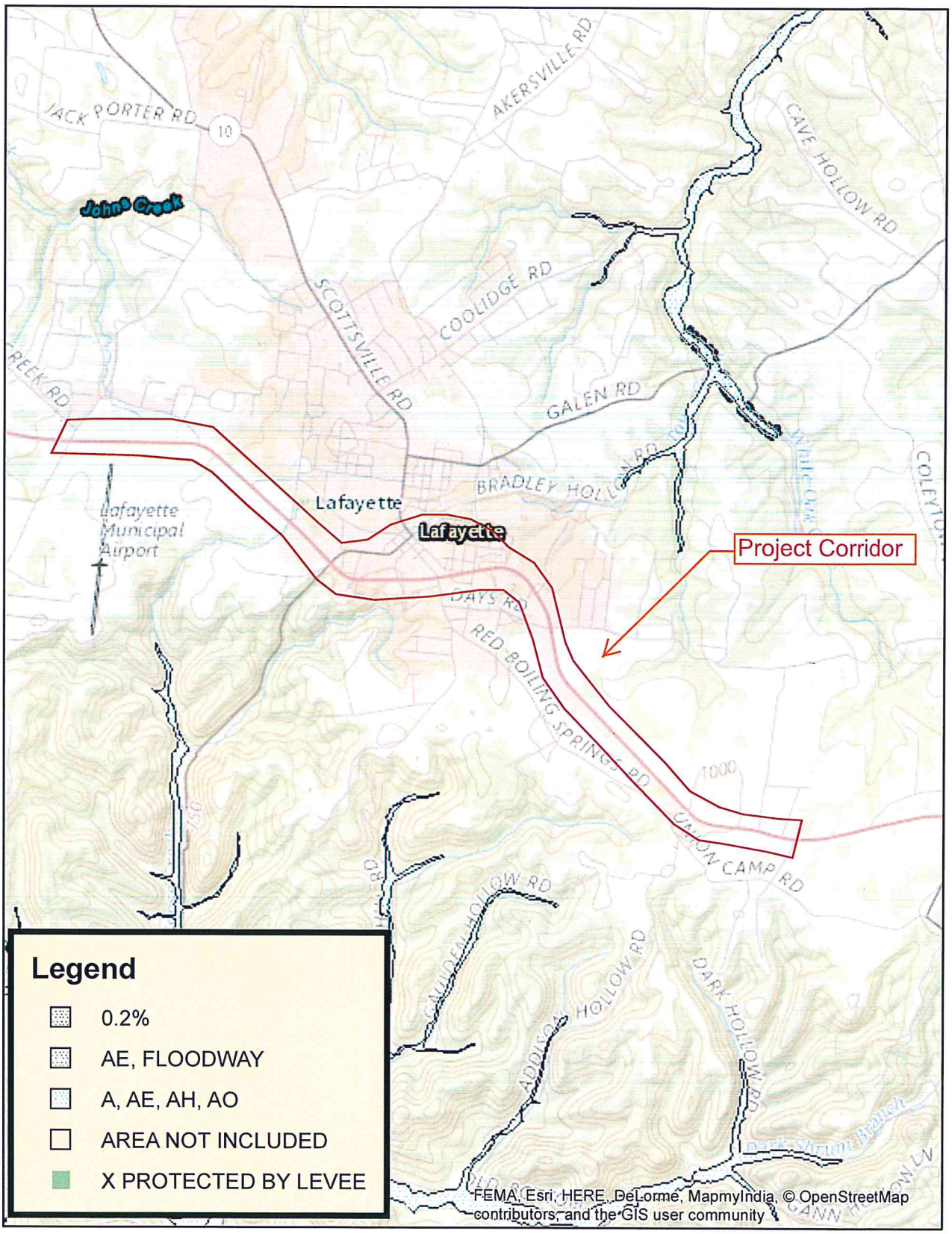
0 0.25 0.5 1 Miles

N

Map 5: Threatened and Endangered Species Critical Habitat

Appendix D

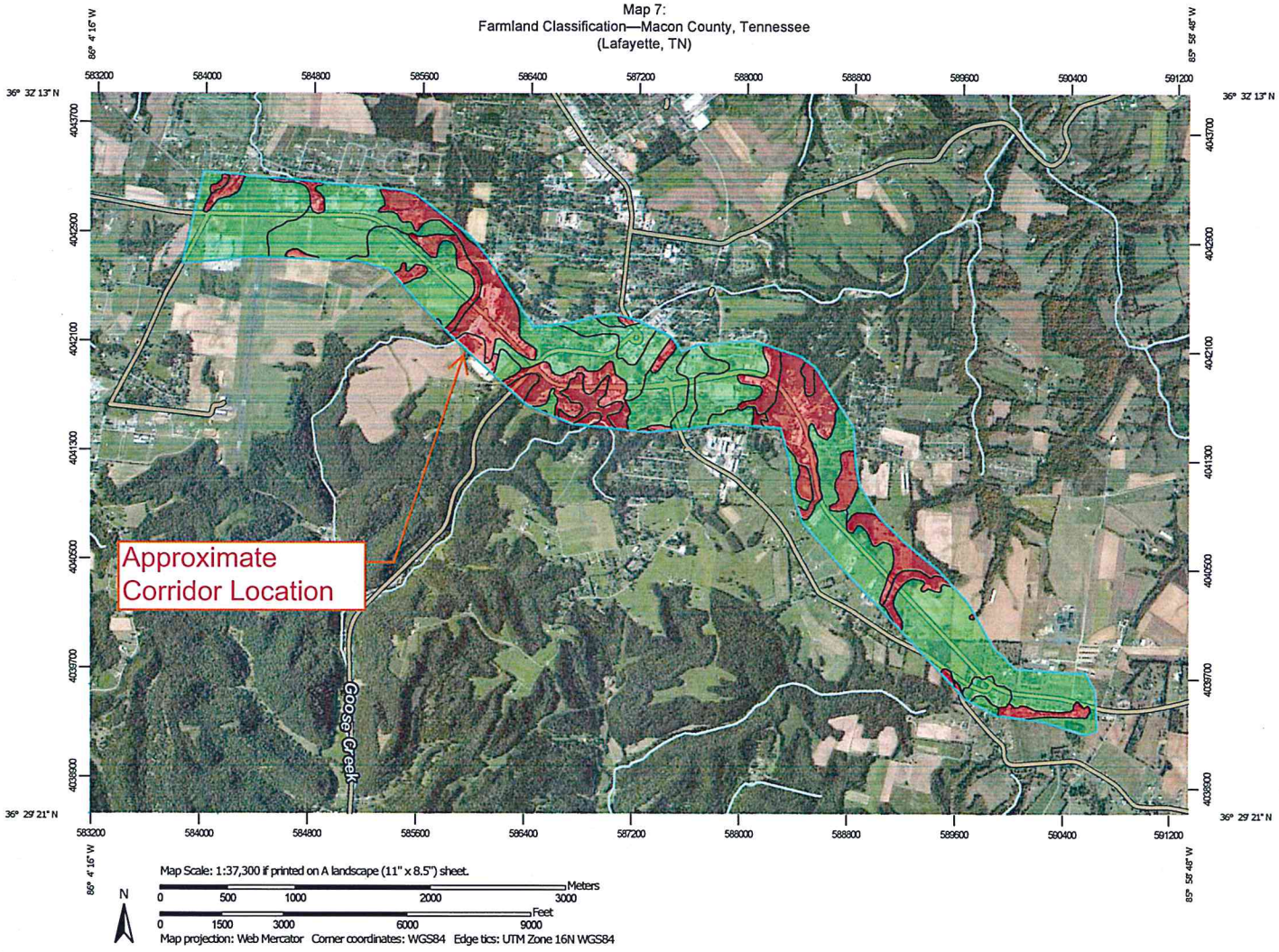
SR-52/SR-10 Corridor Study, Lafayette, Macon County, TN



Map 6
Macon County Flood Hazard Areas

Appendix E

Map 7:
Farmland Classification—Macon County, Tennessee
(Lafayette, TN)



Map Scale: 1:37,300 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 500 1000 2000 3000

Feet
0 1500 3000 6000 9000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

Farmland Classification—Macon County, Tennessee
(Lafayette, TN)

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of local importance
- Farmland of unique importance
- Not rated or not available

Soil Rating Lines

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of local importance
- Farmland of unique importance
- Not rated or not available

Soil Rating Points

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of local importance
- Farmland of unique importance
- Not rated or not available

Water Features

MAP INFORMATION

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Macon County, Tennessee
Survey Area Data: Version 9, Sep 16, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 17, 2011—Oct 22, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Farmland Classification

Farmland Classification— Summary by Map Unit — Macon County, Tennessee (TN111)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BaF	Barfield-Ashwood-Rock outcrop complex, 20 to 50 percent slopes	Not prime farmland	3.1	0.3%
BeB2	Bewleyville silt loam, 2 to 5 percent slopes, eroded	All areas are prime farmland	168.8	14.9%
DkB2	Dickson silt loam, 2 to 5 percent slopes	All areas are prime farmland	442.5	39.1%
Gu	Guthrie silt loam, ponded	Not prime farmland	120.0	10.6%
HaF	Hawthorne gravelly silt loam, 20 to 60 percent slopes	Not prime farmland	51.6	4.6%
Ln	Lindell silt loam, 0 to 2 percent slopes, occasionally flooded	All areas are prime farmland	6.2	0.5%
MtB2	Mountview silt loam, 2 to 5 percent slopes	All areas are prime farmland	136.1	12.0%
MtC2	Mountview silt loam, 5 to 12 percent slopes	Not prime farmland	3.4	0.3%
SeC2	Sengtown gravelly silt loam, 5 to 12 percent slopes	Not prime farmland	189.9	16.8%
SeD2	Sengtown gravelly silt loam, 12 to 20 percent slopes	Not prime farmland	2.3	0.2%
SrC2	Sugargrove gravelly silt loam, 5 to 12 percent slopes, eroded	Not prime farmland	1.0	0.1%
SrD2	Sugargrove gravelly silt loam, 12 to 20 percent slopes, eroded	Not prime farmland	7.1	0.6%
Totals for Area of Interest			**1,132.1**	**100.0%**

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

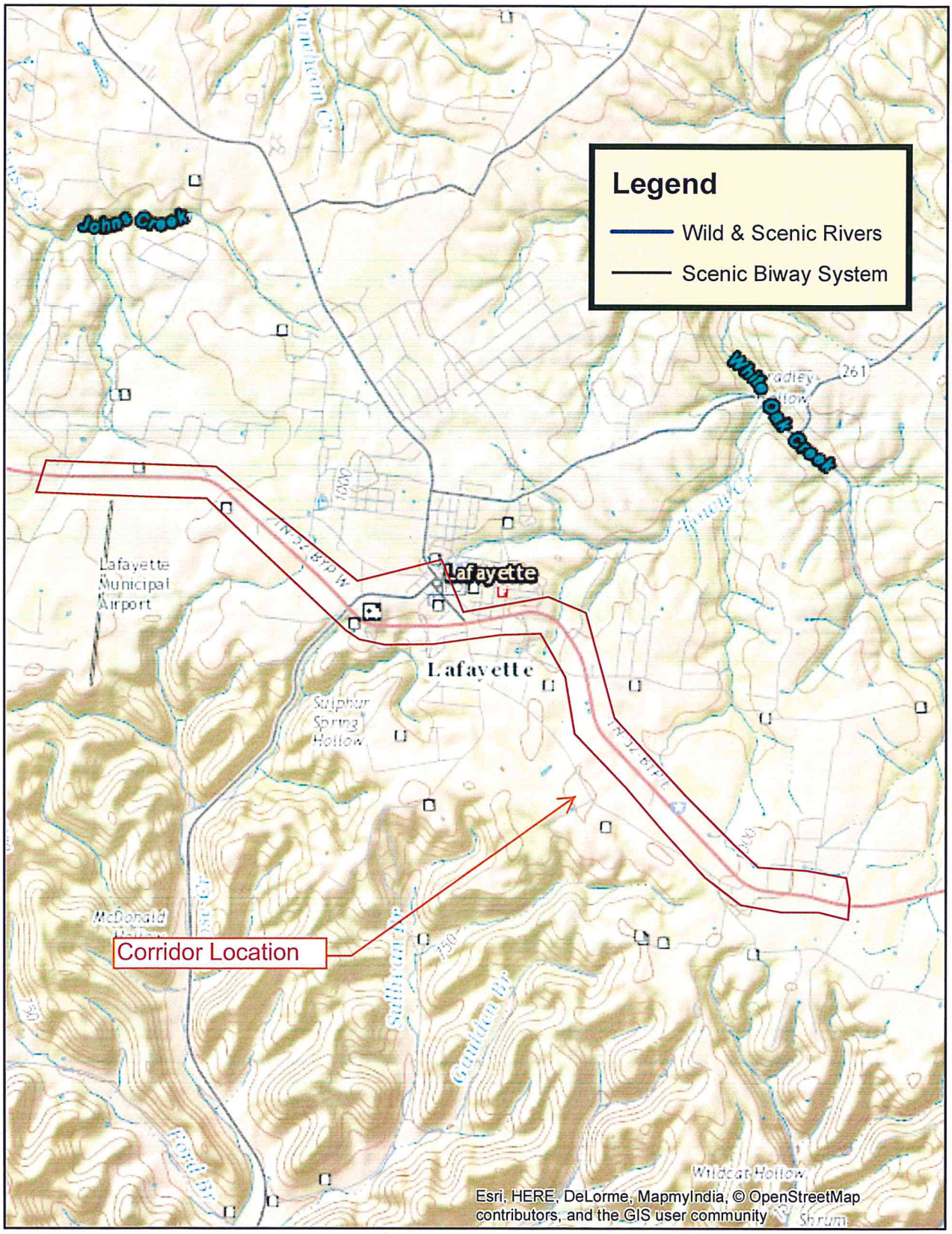
Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower

Appendix F

SR-52/SR-10 Corridor Study - Lafayette, Macon County, TN



0 0.25 0.5 1 Miles

Map 8: Wild and Scenic Rivers and Scenic Biway Systems

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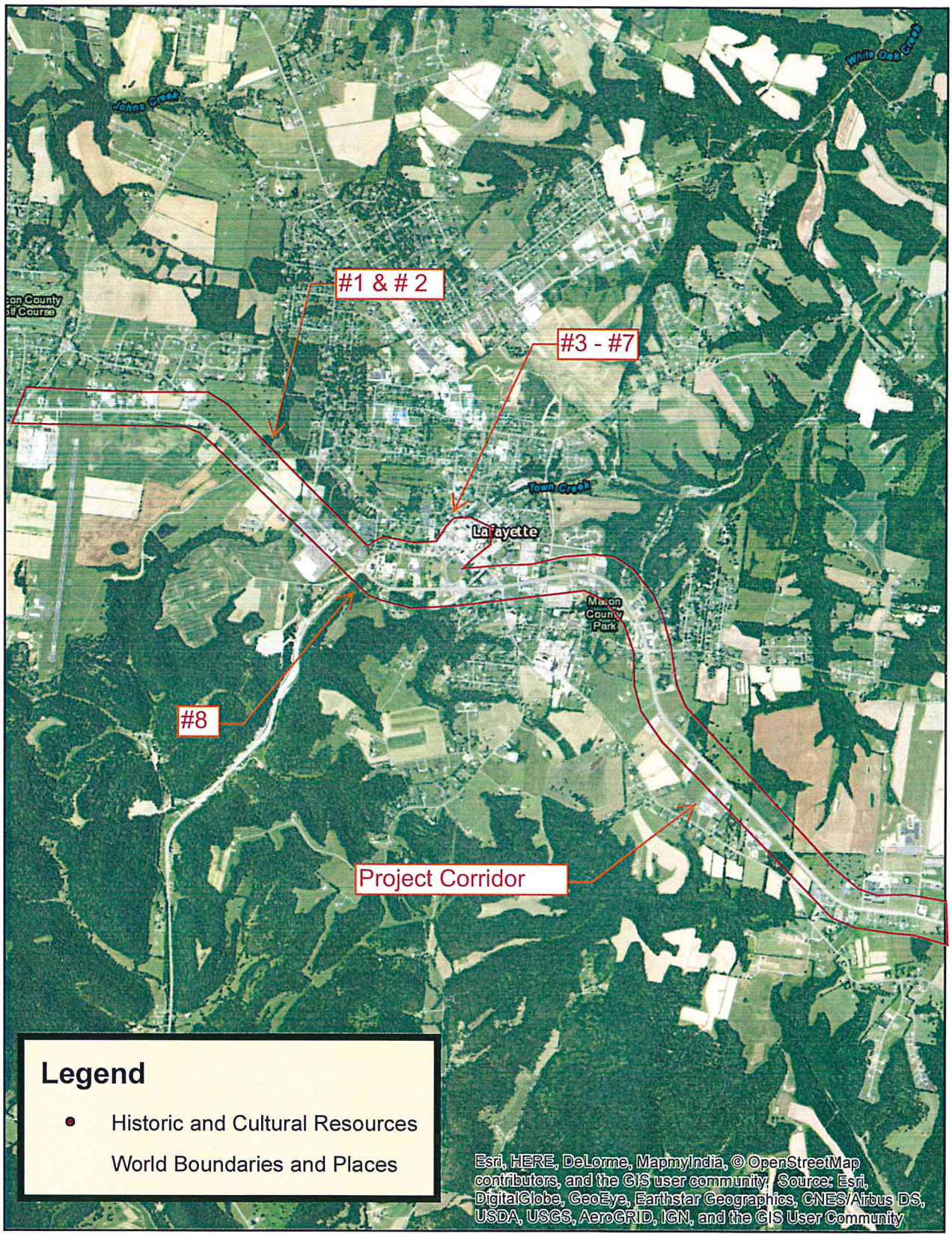
Appendix G

SR-52/SR-10 Corridor Study, Lafayette, Macon County, TN



Map 9
Historic and Cultural Resources

Photo 1. View facing northeast toward residences on SR-52.

Photo 2. View looking north from intersection of SR-52 and Church Street.

NEEL-SCHAFFER
Solutions you can build upon

Lafayette Site
Lafayette, Macon County, TN
Date of Photography: April 27, 2017

Photo 3. View facing south toward SR-10 and older residence.

Photo 4. View facing northwest toward movie theatre.

NEEL-SCHAFFER
Solutions you can build upon

Lafayette Site
Lafayette, Macon County, TN
Date of Photography: April 27, 2017

Photo 5. View facing east from SR-10 and town square center/Macon County Clerk's office.

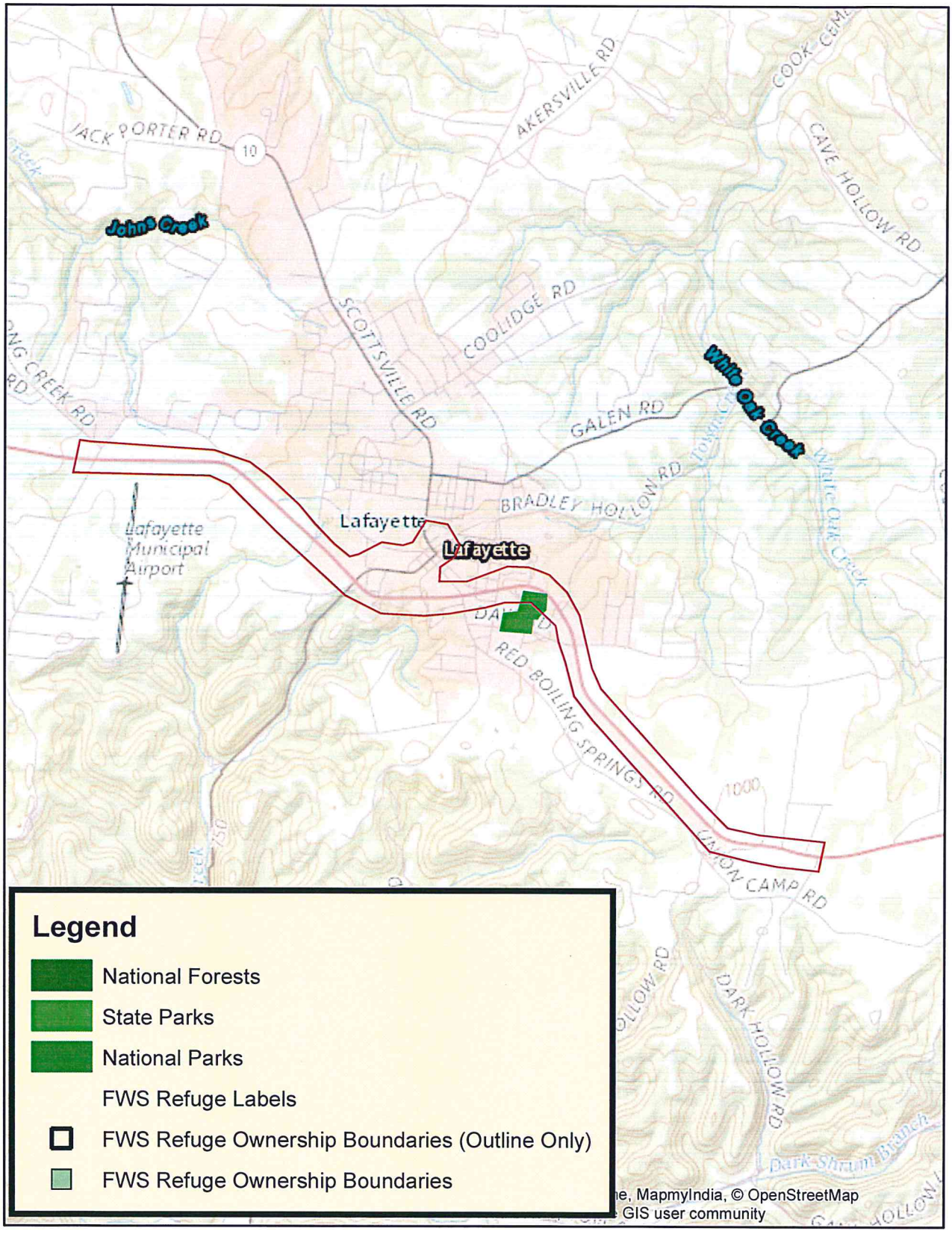
Photo 6. View facing southeast toward older buildings along SR-10 from near Macon County Clerk's office.

Photo 7. View facing southeast near town square center and SR-10.

Photo 8. View facing east from SR-52 toward cemetery.

Appendix H

SR-52/SR-10 Corridor Study, Lafayette, Macon County, TN



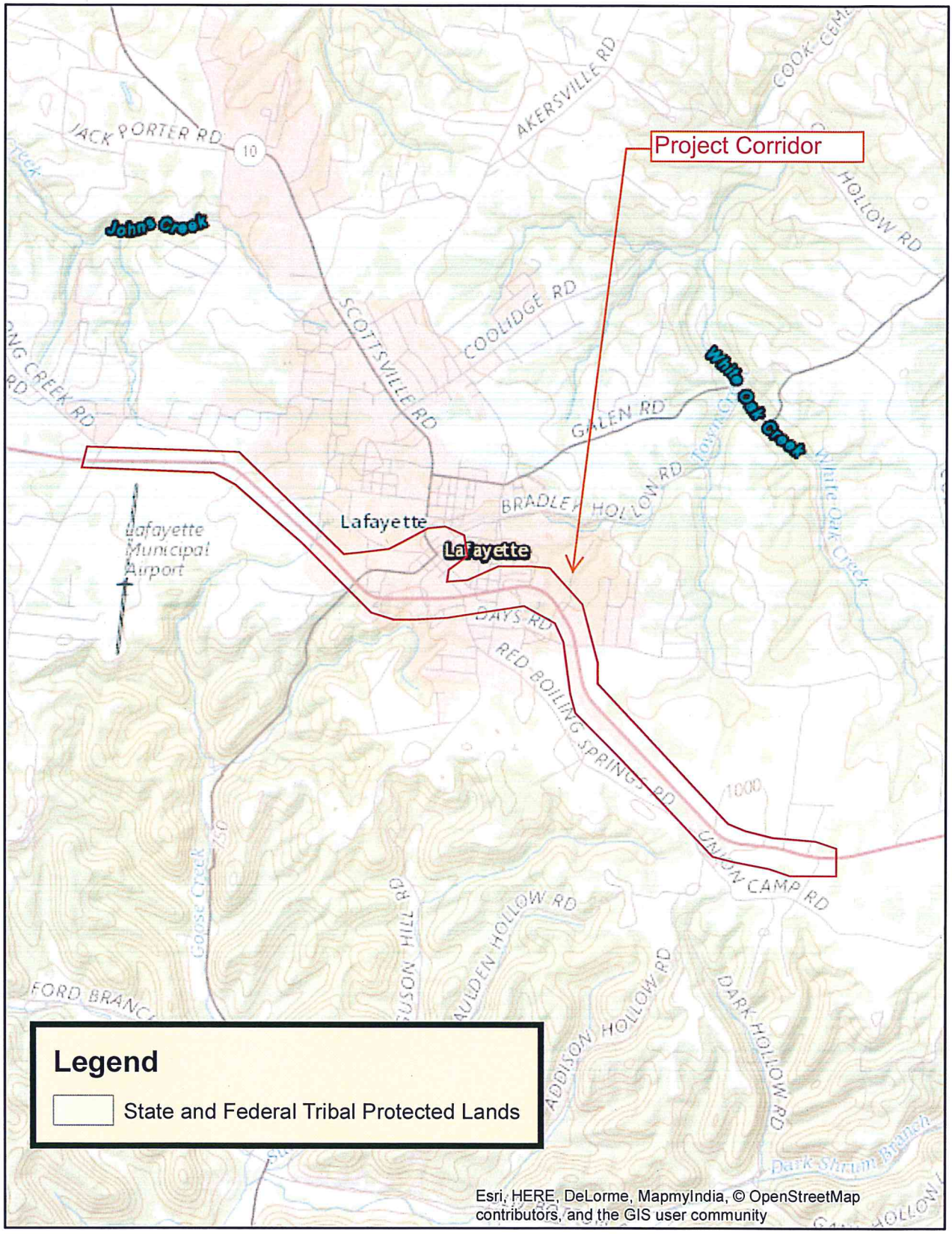
0 0.5 1 2 Miles

Map 10
National Park Service Information

N

Appendix I

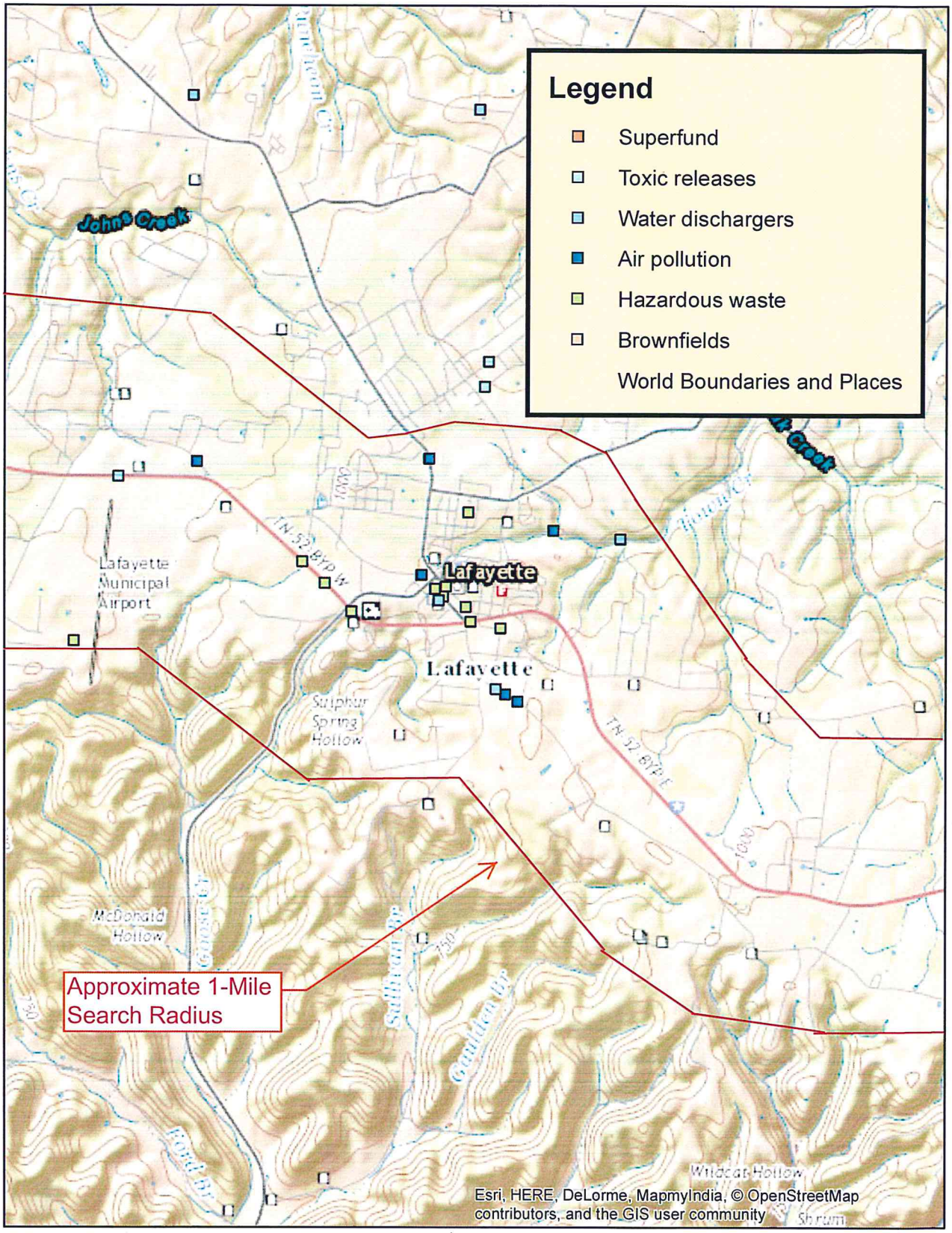
SR-52/SR-10 Corridor Study, Lafayette, Macon County, TN



Map 11
State and Federal Tribal Protected Lands

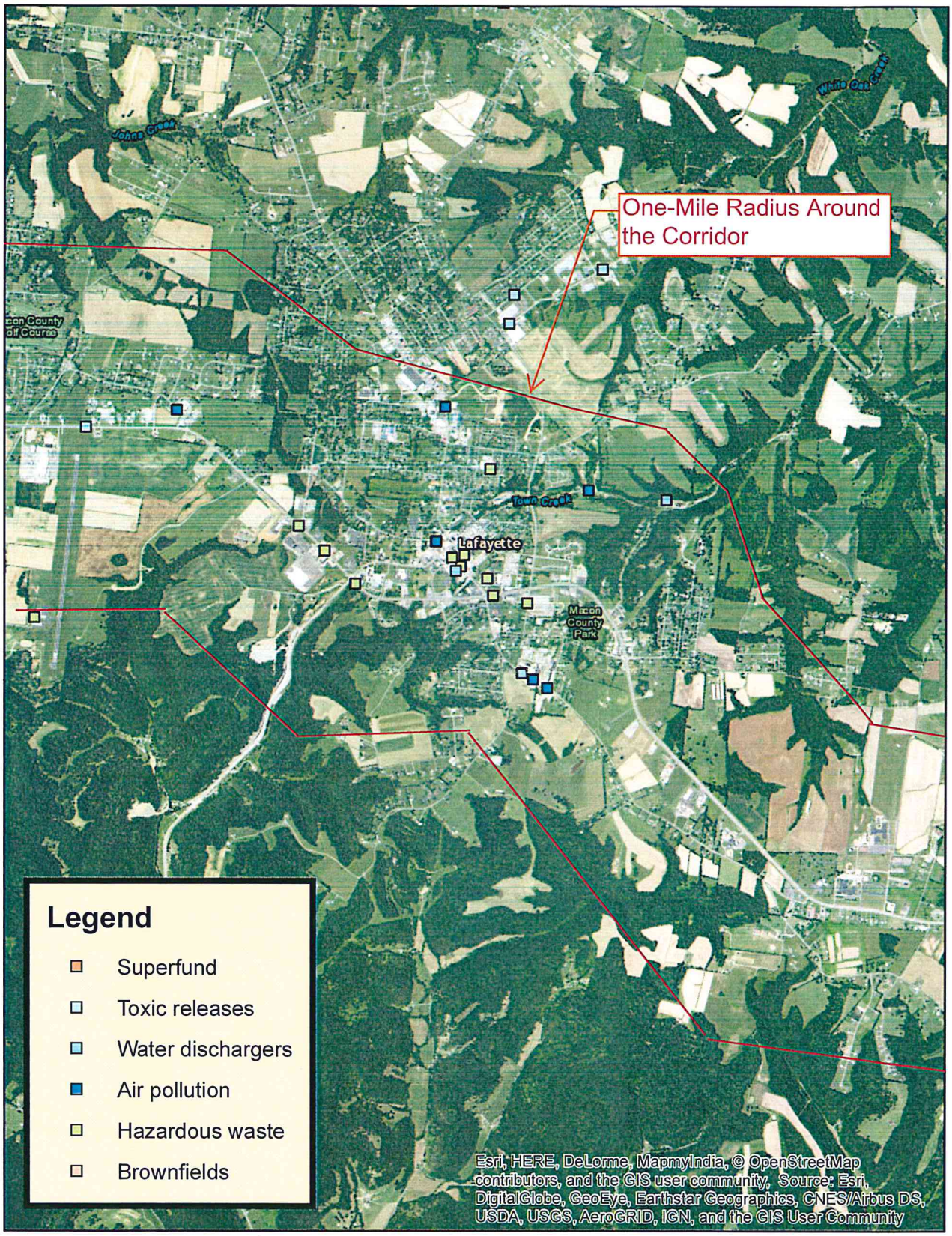
Appendix J

SR-52/SR-10 Corridor Study - Lafayette, Macon County, TN



Map 12-1. Sites with Known or Potential Hazardous Materials

SR-52/SR-10 Corridor Study, Lafayette, Macon County, TN



Map 12-2
Site with Hazardous Materials Aerial Photograph