



July 6, 2026

Lynn Taylor
Planning & Zoning Administrator
Hall County Planning & Zoning
2875 Browns Bridge Road
Gainesville, GA 30503

RE: 2714 Barker Road Rezoning Request - Trip Generation

Ms. Taylor:

The latest rezoning plan for this property consists of two commercial/retail buildings totaling 18,975 sf and a 5,282 sf c-store with 16 gas pumps.

Using The Trip Generation Manual for Land Use Code (LUCs) 853, trip generation for a c-store is based on units of 1,000 sf of buildings area (KSF). The estimated number of trips is 4,465 per day with 315 PM peak trips. The specific use for the retail buildings is not known at this time; therefore, the LUC 820, shopping center, is used. The estimated number of trips is 815 per day with 64 PM peak trips. This is the total number of trips both ingress and egress. If you have any questions regarding this correspondence or if you would like to discuss the project in general, please do not hesitate to call.

Sincerely,

A handwritten signature in black ink, appearing to read 'James Irvin', with a large, stylized initial 'J'.

James Irvin, PE
Foothills Land Design, LLC

TRAFFIC IMPACT STUDY

FOR

PROPOSED RETAIL DEVELOPMENT AT
2714 BARKER ROAD

CITY OF GAINESVILLE, HALL COUNTY, GEORGIA



Prepared for:

***America's Home Place
2144 Hilton Drive
Gainesville, GA 30501***

Prepared By:



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August 29, 2026
A & R Project # 26-145

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1.0 INTRODUCTION

The purpose of this study is to determine the traffic impact for the proposed retail development that will be located at 2714 Barker Road, in Hall County, Georgia. The traffic analysis includes evaluation of the current operations and future conditions with the traffic generated by the development. The development will consist of 18,975 SF of retail space and a gas station with 16 fueling positions and 5,282 SF convenience store.



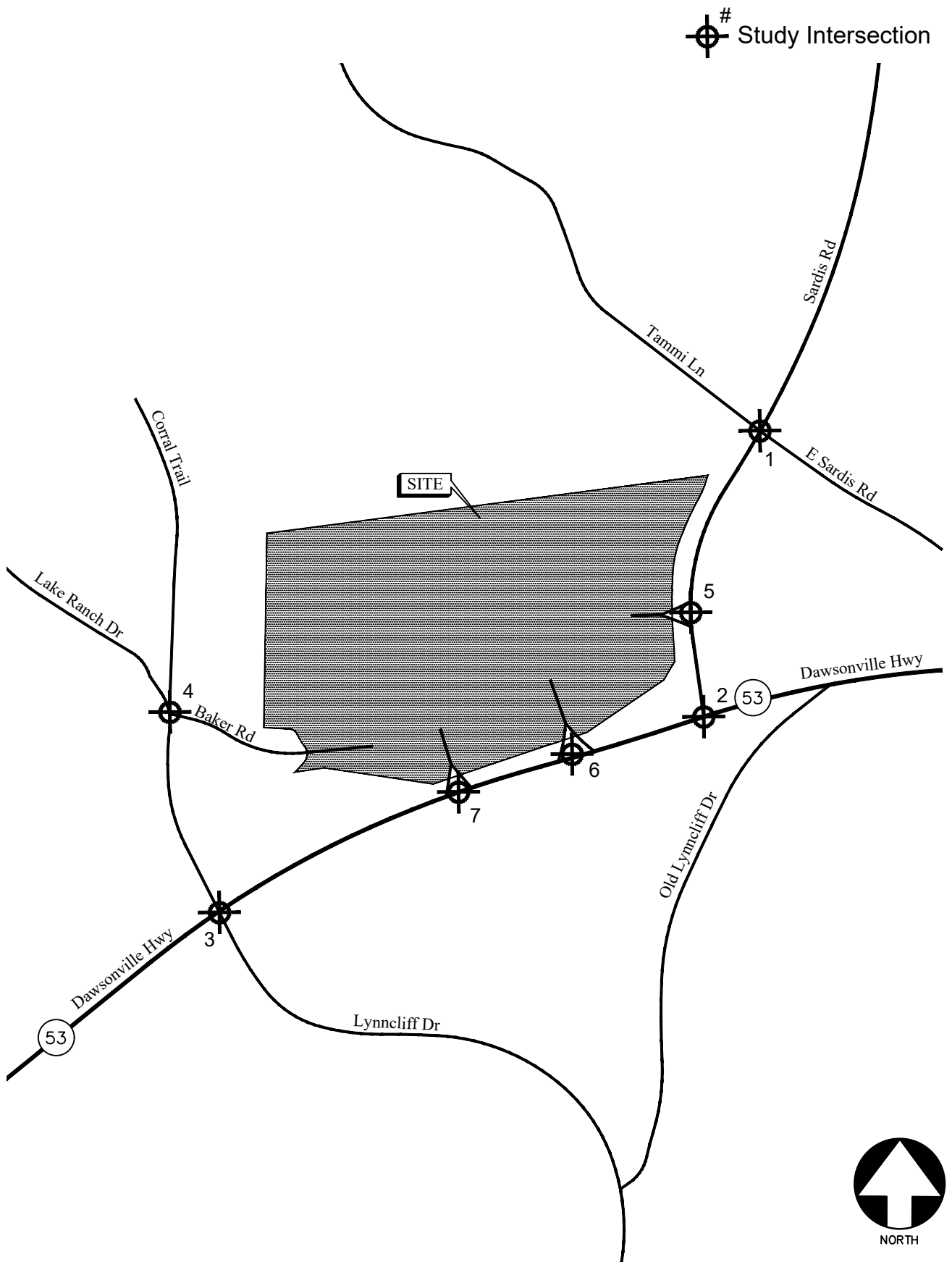
The development proposes access at the following locations:

- Site Driveway 1: Right-In/Right-Out Driveway on Sardis Road
- Site Driveway 2: Right-In/Right-Out Driveway on SR 53 (Dawsonville Highway)
- Site Driveway 3: Right-In/Right-Out Driveway on SR 53 (Dawsonville Highway)
- Site Driveway 4: Site Connection to Barker Road

The AM and PM peak hours have been analyzed in this study. This study includes the evaluation of traffic operations at the site access points as well as the intersections of:

1. Sardis Road at Tammi Lane / E. Sardis Road
2. SR 53 (Dawsonville Highway) at Sardis Road
3. SR 53 (Dawsonville Highway) at Lynncliff Drive / Lake Ranch Drive
4. Lake Ranch Drive at Barker Road / Corral Trail

Recommendations to improve traffic operations have been identified as appropriate and are discussed in detail in the following sections of the report. The location of the development and the surrounding roadway network is shown in Figure 1.



LOCATION MAP

FIGURE 1
A&R Engineering Inc.

2.0 EXISTING FACILITIES / CONDITIONS

2.1 Roadway Facilities

The following is a brief description of each of the roadway facilities located in proximity to the site:

2.1.1 SR 53 (*Dawsonville Highway*)

SR 53 (Dawsonville Highway) is an east-west, four-lane, median divided roadway with a posted speed limit of 55 mph in the vicinity of the site. Georgia Department of Transportation (GDOT) traffic counts (Station ID: 139-0267) indicate that the daily traffic volume on SR 53 (Dawsonville Highway) in 2024 was 29,600 vehicles per day southeast of Venture Drive. GDOT classifies SR 53 (Dawsonville Highway) as an urban principal arterial roadway.

2.1.2 *Sardis Road*

Sardis Road is a north-south, four-lane, median divided roadway with a posted speed limit of 35 mph in the vicinity of the site. Georgia Department of Transportation (GDOT) traffic counts (Station ID: 139-0507) indicate that the daily traffic volume on Sardis Road in 2024 was 16,000 vehicles per day northeast of Tammi Lane / E. Sardis Road. GDOT classifies Sardis Road as an urban minor arterial roadway.

2.1.3 *Lake Ranch Drive*

Lake Ranch Drive is a north-south, two-lane, undivided roadway with a posted speed limit of 25 mph in the vicinity of the site.

2.1.4 *Lynncliff Drive*

Lynncliff Drive is a north-south, two-lane, undivided roadway with a posted speed limit of 30 mph in the vicinity of the site. Georgia Department of Transportation (GDOT) traffic counts (Station ID: 139-7379) indicate that the daily traffic volume on Lynncliff Drive in 2024 was 1,700 vehicles per day south of Springdale Park Drive. GDOT classifies Springdale Park Drive as an urban major collector roadway.

2.1.5 *Barker Road*

Barker Road is an east-west, two-lane, undivided roadway with an assumed speed limit of 25 mph in the vicinity of the site.

2.1.6 *E. Sardis Road*

E. Sardis Road is an east-west, two-lane, undivided roadway with a posted speed limit of 35 mph in the vicinity of the site.

2.1.7 *Tammi Lane*

Tammi Lane is an east-west, two-lane, undivided roadway with a posted speed limit of 25 mph in the vicinity of the site.

3.0 STUDY METHODOLOGY

In this study, the methodology used for evaluating traffic operations at each of the subject intersections is based on the criteria set forth in the Transportation Research Board's *Highway Capacity Manual, 7th edition (HCM 7)*. Synchro software, which utilizes the HCM methodology, was used for the analysis. The following is a description of the methodology employed for the analysis of unsignalized and signalized intersections.

3.1 Unsignalized Intersections

For unsignalized intersections controlled by a stop sign on minor streets, the level-of-service (LOS) for motor vehicles with controlled movements is determined by the computed control delay according to the thresholds stated in Table 1 below. LOS is determined for each minor street movement (or shared movement), as well as major street left turns. LOS is not defined for the intersection as a whole or for major street approaches. The LOS of any controlled movement which experiences a volume to capacity ratio greater than 1 is designated as "F" regardless of the control delay.

Control delay for unsignalized intersections includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Several factors affect the control delay for unsignalized intersections, such as the availability and distribution of gaps in the conflicting traffic stream, critical gaps, and follow-up time for a vehicle in the queue.

Level of service is assigned a letter designation from "A" through "F". Level of service "A" indicates excellent operations with little delay to motorists, while level of service "F" exists when there are insufficient gaps of acceptable size to allow vehicles on the side street to cross the main road without experiencing long delays.

Table 1 – Level of Service Criteria for Unsignalized Intersections		
Control Delay (sec/vehicle)	LOS by Volume-to-Capacity Ratio*	
	v/c ≤ 1.0	v/c > 1.0
≤ 10	A	F
> 10 and ≤ 15	B	F
> 15 and ≤ 25	C	F
> 25 and ≤ 35	D	F
> 35 and ≤ 50	E	F
> 50	F	F

*The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection.

Source: *Highway Capacity Manual, 7th Edition, Exhibit 20-2 LOS Criteria: Motorized Vehicle Mode*

3.2 Signalized Intersections

According to HCM procedures, LOS can be calculated for the entire intersection, each intersection approach, and each lane group. HCM uses control delay alone to characterize LOS for the entire intersection or an approach. Control delay per vehicle is composed of initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Both control delay and volume-to-capacity ratio are used to characterize LOS for a lane group. A volume-to-capacity ratio greater than 1.0 for a lane group indicates failure from capacity perspective. Therefore, such a lane group is assigned LOS F regardless of the amount of control delay.

Table 2 below summarizes the LOS criteria from HCM for motorized vehicles at signalized intersection.

Table 2 – Level of Service Criteria for Signalized Intersections		
Control Delay (sec/vehicle) *	LOS for Lane Group by Volume-to-Capacity Ratio*	
	v/c ≤ 1.0	v/c > 1.0
≤ 10	A	F
> 10 and ≤ 20	B	F
> 20 and ≤ 35	C	F
> 35 and ≤ 55	D	F
> 55 and ≤ 80	E	F
> 80	F	F

*For approach-based and intersection wide assessments, LOS is defined solely by control delay

Source: *Highway Capacity Manual, 7th Edition, Exhibit 19-8 LOS Criteria: Motorized Vehicle Mode*

LOS A is typically assigned when the volume-to-capacity (v/c) ratio is low and either progression is exceptionally favourable, or the cycle length is very short. LOS B is typically assigned when the v/c ratio is low and either progression is highly favorable, or the cycle length is short. However, more vehicles are stopped than with LOS A. LOS C is typically assigned when progression is favorable, or the cycle length is moderate. Individual *cycle failures* (one or more queued vehicles are not able to depart because of insufficient capacity during the cycle) may begin to appear at this level. Many vehicles still pass through the intersection without stopping, but the number of vehicles stopping is significant. LOS D is typically assigned when the v/c ratio is high and either progression is ineffective, or the cycle length is long. There are many vehicle-stops and individual cycle failures are noticeable. LOS E is typically assigned when the v/c ratio is high, progression is very poor, the cycle length is long, and individual cycle failures are frequent. LOS F is typically assigned when the v/c ratio is very high, progression is very poor, the cycle length is long, and most cycles fail to clear the queue.

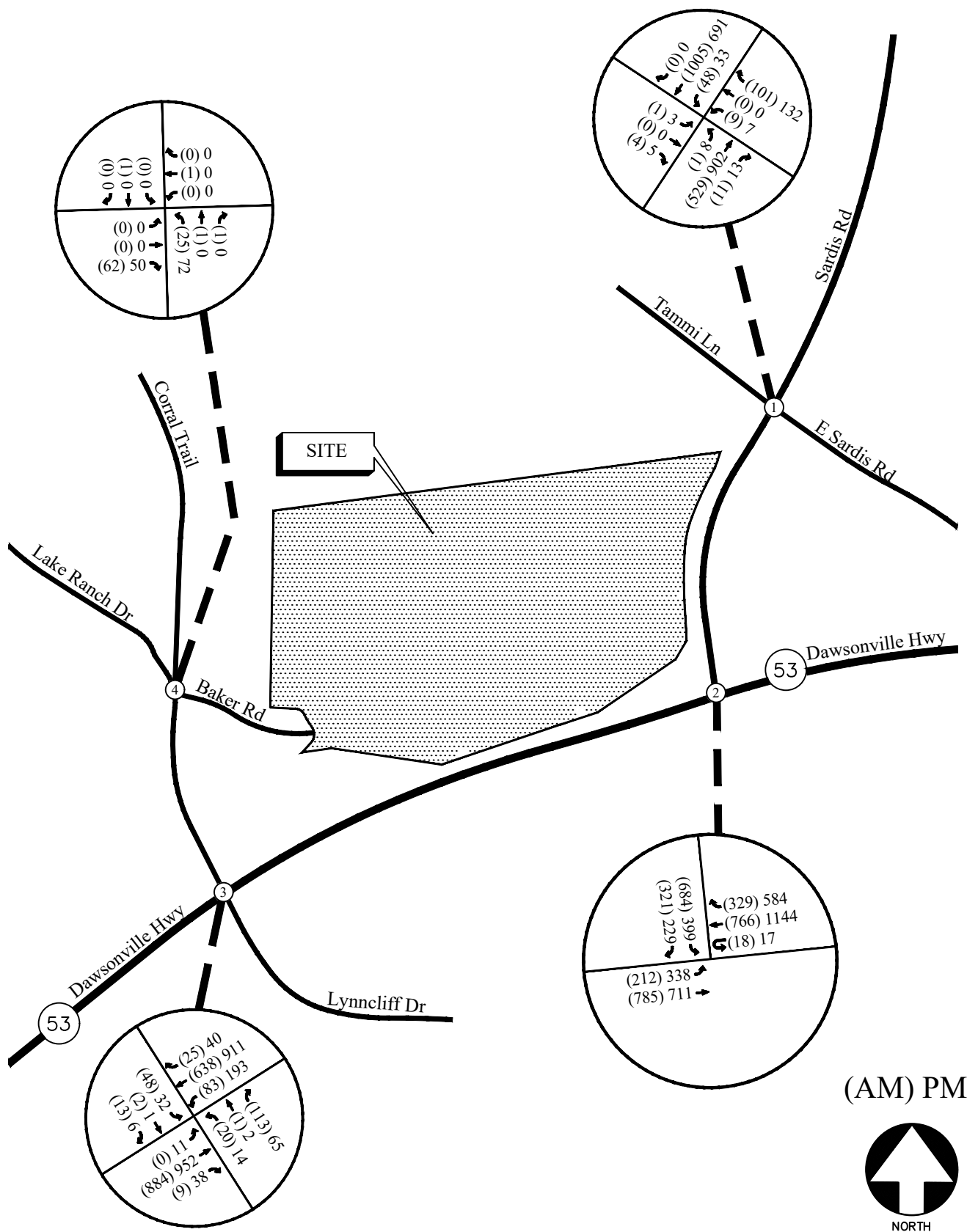
4.0 EXISTING 2026 TRAFFIC ANALYSIS

4.1 Existing Traffic Volumes

Existing traffic counts were obtained at the following study intersections:

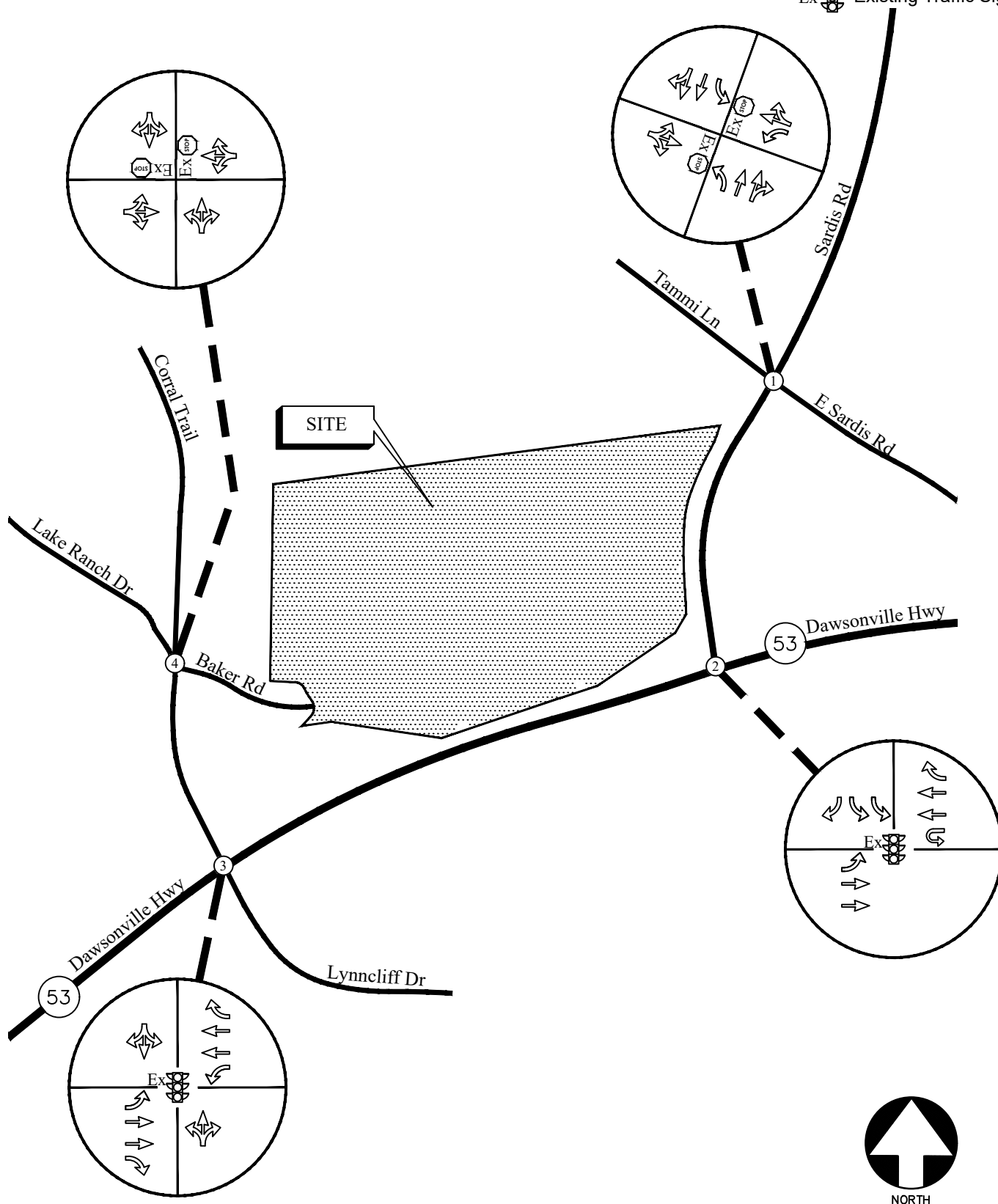
1. Sardis Road at Tammi Lane / E. Sardis Road
2. SR 53 (Dawsonville Highway) at Sardis Road
3. SR 53 (Dawsonville Highway) at Lynnclyff Drive / Lake Ranch Drive
4. Lake Ranch Drive at Barker Road / Corral Trail

Turning movement counts were collected on Tuesday, August 11, 2026, during the AM and PM peak hours between 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM, respectively. The four consecutive 15-minute interval volumes that summed to produce the highest volume at the intersections were then determined. These volumes make up the peak hour traffic volumes for the intersections counted and are shown in Figure 2. The existing traffic control and lane geometry for the intersections are shown in Figure 3.



LEGEND

- Ex  Existing Signed Approach
-  Existing Lane Geometry
- Ex  Existing Traffic Signal



EXISTING TRAFFIC CONTROL AND LANE GEOMETRY

FIGURE 3
A&R Engineering Inc.

4.2 Existing Traffic Operations

Existing 2026 traffic operations were analyzed at the study intersections in accordance with the HCM methodology. The results of the analyses are shown in Table 3.

Table 3 – Existing Intersection Operations				
Intersection		Traffic Control	LOS (Delay)	
			AM Peak	PM Peak
1	<u>Sardis Road at Tammi Lane / E. Sardis Road</u> -Eastbound Approach -Westbound Approach -Northbound Left -Southbound Left	Stop Controlled on EB and WB Approaches	C (22.7) B (13.4) B (10.8) A (8.9)	D (27.4) C (16.4) A (9.3) B (10.5)
2	<u>SR 53 (Dawsonville Highway) at Sardis Road</u> -Eastbound Approach -Westbound Approach -Southbound Approach	Signalized	<u>C (24.6)</u> B (15.8) C (25.8) D (35.9)	<u>D (41.3)</u> C (34.4) D (50.3) C (33.7)
3	<u>SR 53 (Dawsonville Highway) at Lake Ranch Drive / Lynnclyff Drive</u> -Eastbound Approach -Westbound Approach -Northbound Approach -Southbound Approach	Signalized	<u>A (4.9)</u> A (4.4) A (0.4) E (55.7) E (58.2)	<u>A (3.8)</u> A (4.7) A (0.7) E (56.1) E (57.7)
4	<u>Lake Ranch Drive at Barker Road / Corral Trail*</u> -Westbound Approach -Northbound Left -Southbound Approach	Stop Controlled on SB and WB Approaches	A (7.1) A (2.6) A (4.7)	A (0.0) A (1.9) A (0.0)

*Level of service is reported using SimTraffic as HCM cannot analyse a 4-leg intersection with a stop-control on Corral Trail (SB) and Barker Road (WB)

The results of the existing traffic operations analysis indicate that the signalized study intersections are operating at an overall level of service “D” or better during both the AM and PM peak hours. The stop-controlled approaches at the unsignalized study intersections are operating at a level of service “D” or better during both the AM and PM peak hours.

5.0 PROPOSED DEVELOPMENT

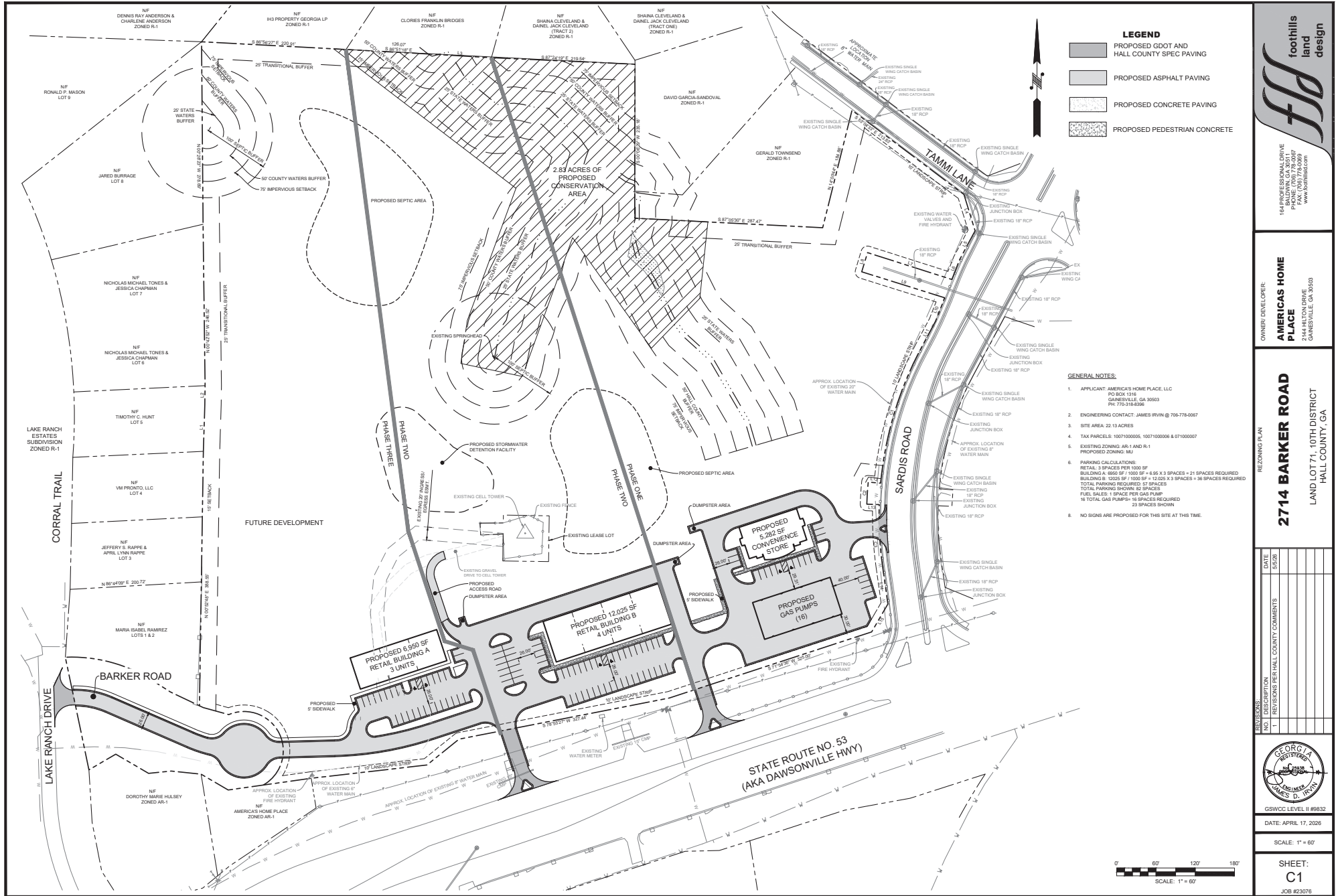
The retail development that will be located at 2714 Barker Road, Hall County, Georgia. The development will consist of 18,975 SF of retail space and a gas station with 16 fueling positions and 5,282 SF convenience store.



The development proposes access at the following locations:

- Site Driveway 1: Right-In/Right-Out Driveway on Sardis Road
- Site Driveway 2: Right-In/Right-Out Driveway on SR 53 (Dawsonville Highway)
- Site Driveway 3: Right-In/Right-Out Driveway on SR 53 (Dawsonville Highway)
- Site Driveway 4: Site Connection to Barker Road

A site plan is shown in Figure 4.



foothills
land
design

164 PROFESSIONAL DRIVE
SUITE 100
GAINESVILLE, FL 32609
PHONE: (770) 778-0087
FAX: (770) 778-0087
WWW.FOOTHILLSD.COM

OWNER/DEVELOPER:
**AMERICA'S HOME
PLACE**
2144 HILTON DRIVE
GAINESVILLE, GA 30605

2714 BARKER ROAD
REZONING PLAN
LAND LOT 71, 10TH DISTRICT
HALL COUNTY, GA



GSWCC LEVEL II #9832

DATE: APRIL 17, 2020

SCALE: 1" = 60'

SHEET:
C1

JOB: 02/2076

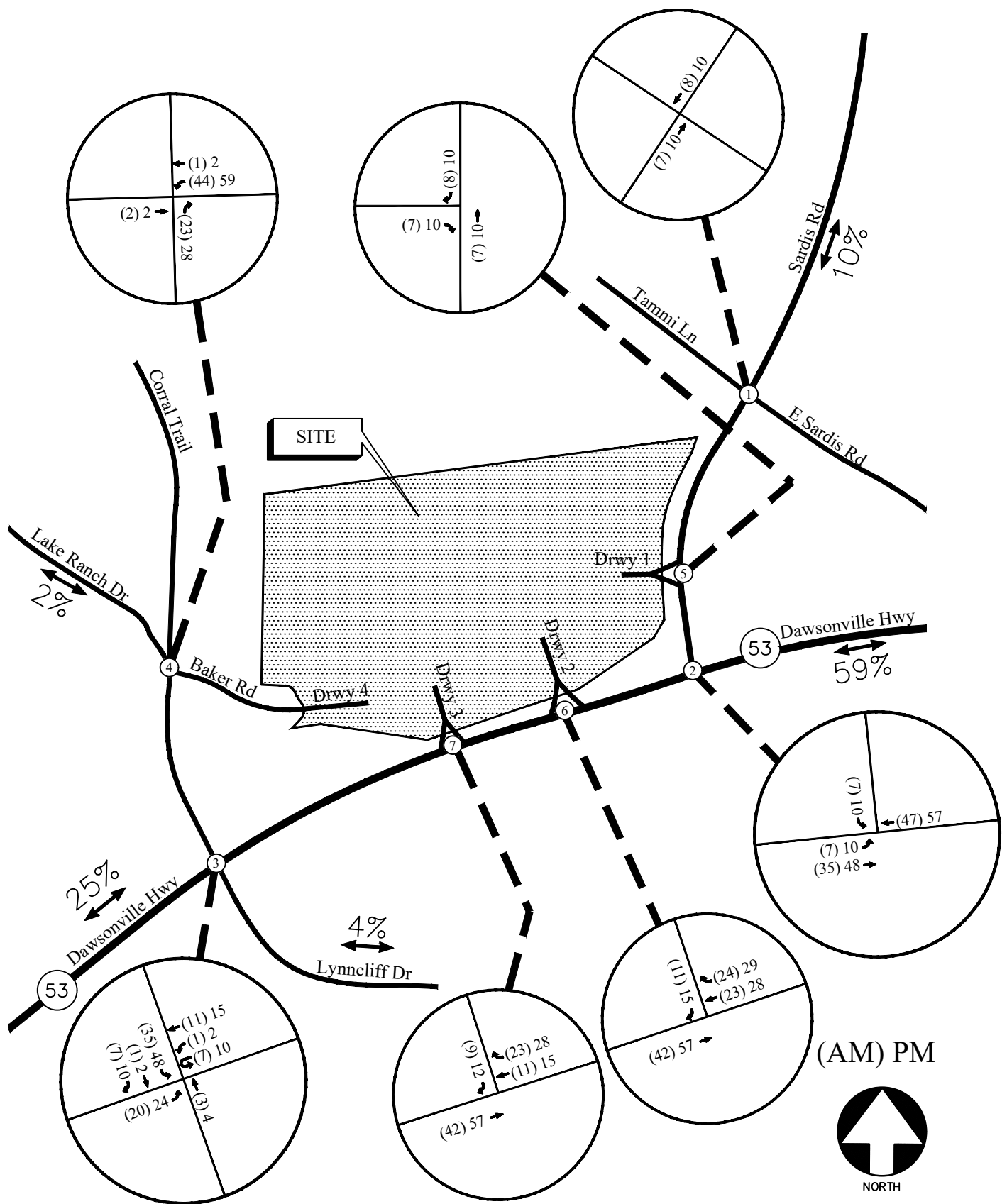
5.1 Trip Generation

Trip generation estimates for the project were based on the rates and equations published in the 12th Edition of the *Institute of Transportation Engineers (ITE) Trip Generation Manual*. This reference contains traffic volume count data collected at similar facilities nationwide. The trip generation was based on the following ITE land uses: 822 – *Strip Retail Plaza (<40K)* and 945 – *Convenience Store/Gas Station - GFA (4-5.5k)*. The calculated trip generation volumes for the proposed development are shown in Table 4.

Table 4 – Trip Generation for Proposed Development								
Land Use	Size	AM Peak Hour			PM Peak Hour			24-Hr
		Enter	Exit	Total	Enter	Exit	Total	2-Way
ITE 822 – Strip Retail Plaza	18,975 SF	41	34	75	59	59	118	1,031
ITE 945 – Convenience Store / Gas Station	16 VFP	162	157	319	153	153	306	3,256
Pass-by Trips (76%) 75%		-123	-119	-242	-115	-115	-230	-2,300
Total Trips (without Reductions)		203	191	394	212	212	424	4,287
New External Trips (with Reductions)		80	72	152	97	97	194	1,987

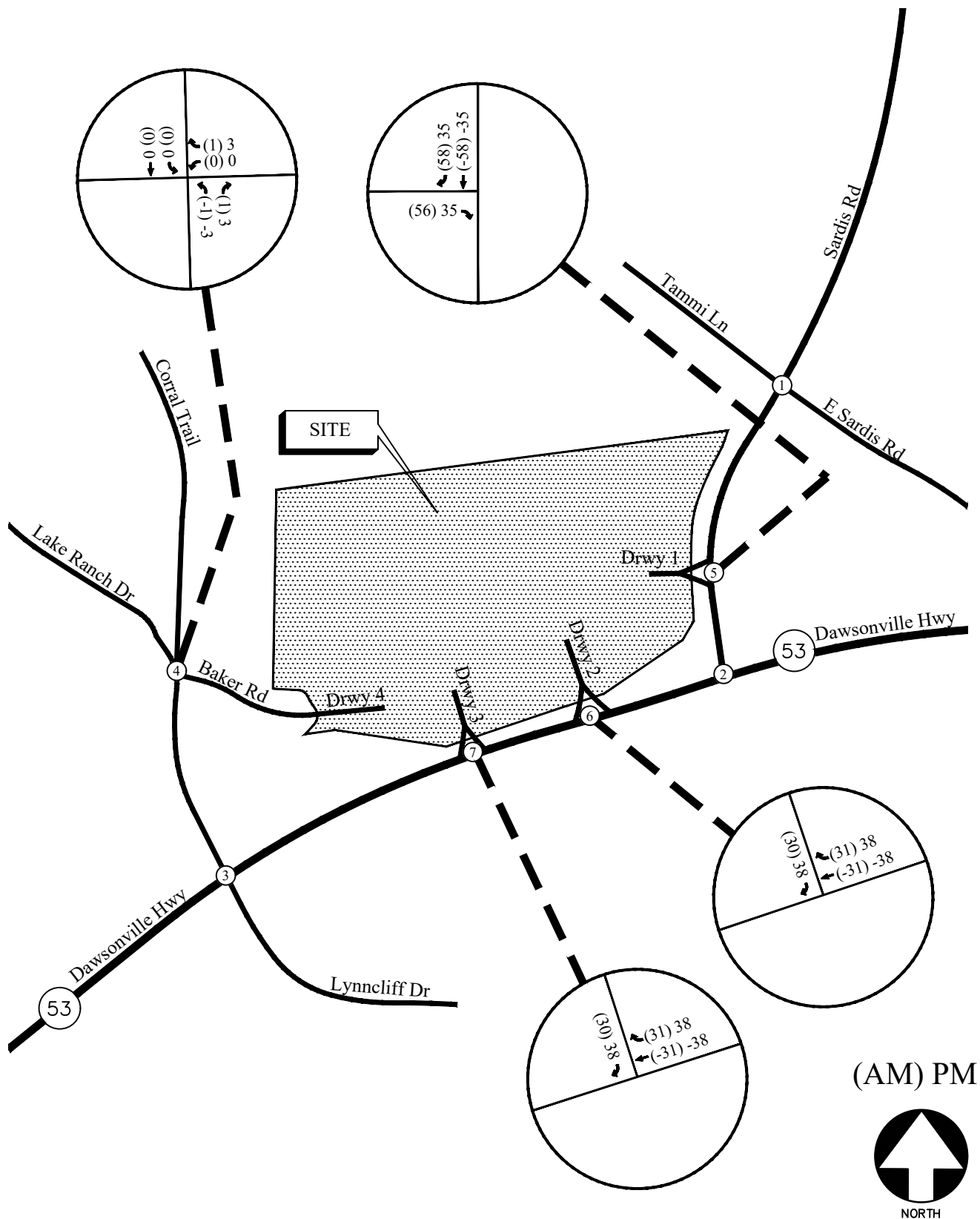
5.2 Trip Distribution

The trip distribution describes how traffic arrives and departs from the site. An overall trip distribution was developed for the site based on a review of the existing travel patterns in the area and the locations of major roadways and highways that will serve the development. The site-generated peak hour traffic volumes, shown in Table 4, were assigned to the study area intersections based on this distribution. The outer-leg distribution and AM and PM peak hour new traffic generated by the site are shown in Figure 5. Pass-by volumes have also been distributed based on existing travel patterns and are shown in Figure 6.



TRIP DISTRIBUTION AND NEW SITE-GENERATED
WEEKDAY PEAK HOUR VOLUMES

FIGURE 5
A&R Engineering Inc.



SITE PEAK HOUR PASS-BY VOLUMES

FIGURE 6
A&R Engineering Inc.

6.0 FUTURE 2028 TRAFFIC ANALYSIS

The future 2028 traffic operations are analyzed for the “Build” and “No-Build” conditions.

6.1 Future “No-Build” Conditions

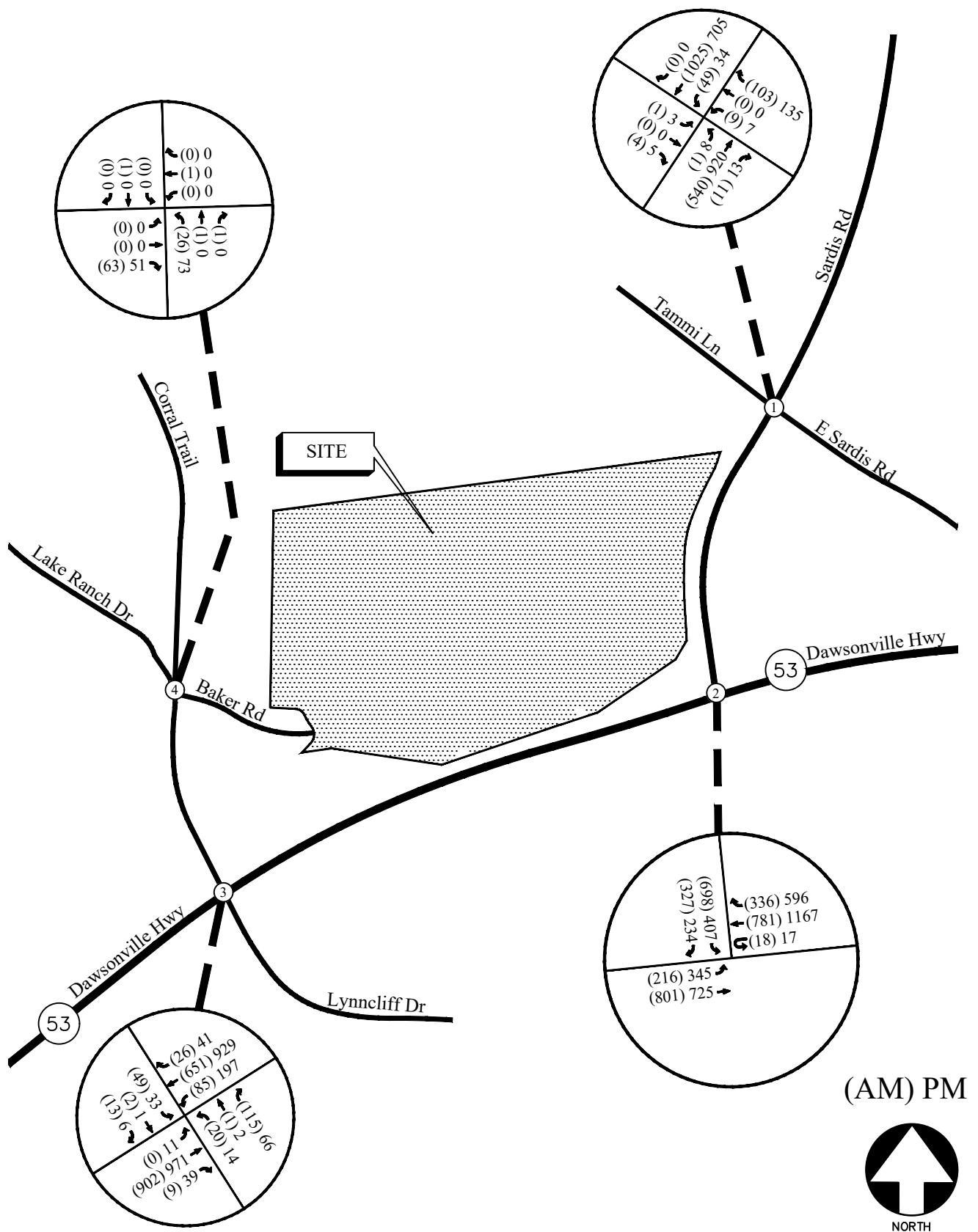
The “No-Build” (or background) conditions provide an assessment of how traffic will operate in the study horizon year without the study site being developed as proposed, with projected increases in through traffic volumes due to normal annual growth. The Future “No-Build” volumes consist of the existing traffic volumes (Figure 2) plus increase for annual growth of traffic.

6.1.1 Annual Traffic Growth

In order to evaluate future traffic operations in this area, a projection of normal traffic growth was applied to the existing volumes. The Georgia Department of Transportation recorded average daily traffic volumes at several locations in the vicinity of the site. Reviewing the growth over the last three years (2022-2024) revealed a traffic volume increase of approximately 1% in the area. This growth factor was applied to the existing traffic volumes between collector and arterial roadways to estimate the future year traffic volumes prior to the addition of site-generated traffic. The resulting future No-Build volumes on the roadway are shown in Figure 7.

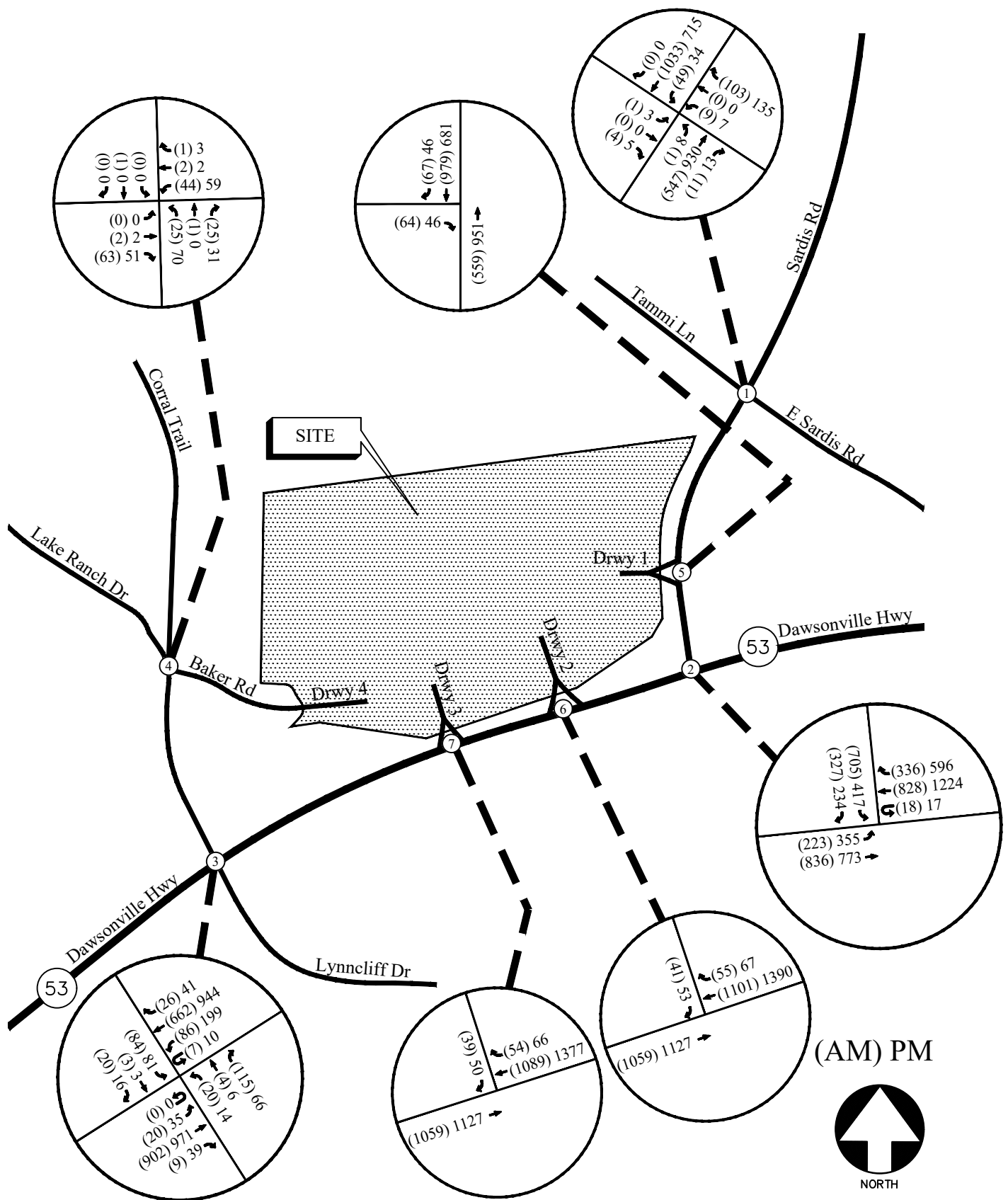
6.2 Future “Build” Conditions

The “Build” or development conditions include the estimated background traffic from the “No-Build” conditions plus the added traffic from the proposed development. In order to evaluate future traffic operations in this area, the additional traffic volumes from the site (Figure 5) and Passby volumes (Figure 6) were added to base traffic volumes (Figure 7) to calculate the future traffic volumes after the construction of the development. These total future “Build” traffic volumes are shown in Figure 8.



FUTURE (NO-BUILD) WEEKDAY PEAK HOUR VOLUMES

FIGURE 7
A&R Engineering Inc.



FUTURE (BUILD) WEEKDAY PEAK HOUR VOLUMES

FIGURE 8
A&R Engineering Inc.

6.3 Auxiliary Lane Analysis

Included below are analyses for turn lanes the proposed site driveways, which are based off the trip distribution included in Section 5.2. According to the project trip generation, the overall 24-hour two-way volume for traffic entering and exiting the site is 4,287 vehicles.

6.3.1 Deceleration Turn Lane Analysis

The projected right turn volume per day at each of the site driveways and GDOT thresholds with the associated roadway characteristics are shown below in Table 5.

Table 5 – GDOT Requirements for Deceleration Lanes					
Intersection	Right-turn traffic (% total entering)	Right-turn Volume (vehicles/day)	Roadway Speed / # of lanes / ADT	GDOT Threshold (vehicles/day)	Warrants met?
Sardis Rd @ Site Driveway 1 (RIRO)	10%	$(\text{Total Trips}) \div 2 \times 0.1$ $= (4,287) \div 2 \times 0.1 =$ 214	35 mph / 4- Lane / $\geq$ 10,000	100	Yes
SR 53 (Dawsonville Hwy) @ Site Driveway 2 (RIRO)	30%	$(\text{Total Trips}) \div 2 \times 0.3$ $= (4,287) \div 2 \times 0.3 =$ 643	55 mph / 4- Lane / $\geq$ 10,000	50	Yes
SR 53 (Dawsonville Hwy) @ Site Driveway 3 (RIRO)	29%	$(\text{Total Trips}) \div 2 \times 0.29$ $= (4,287) \div 2 \times 0.29 =$ 622	55 mph / 4- Lane / $\geq$ 10,000	50	Yes

A right turn lane is warranted at all site driveways per GDOT standards.

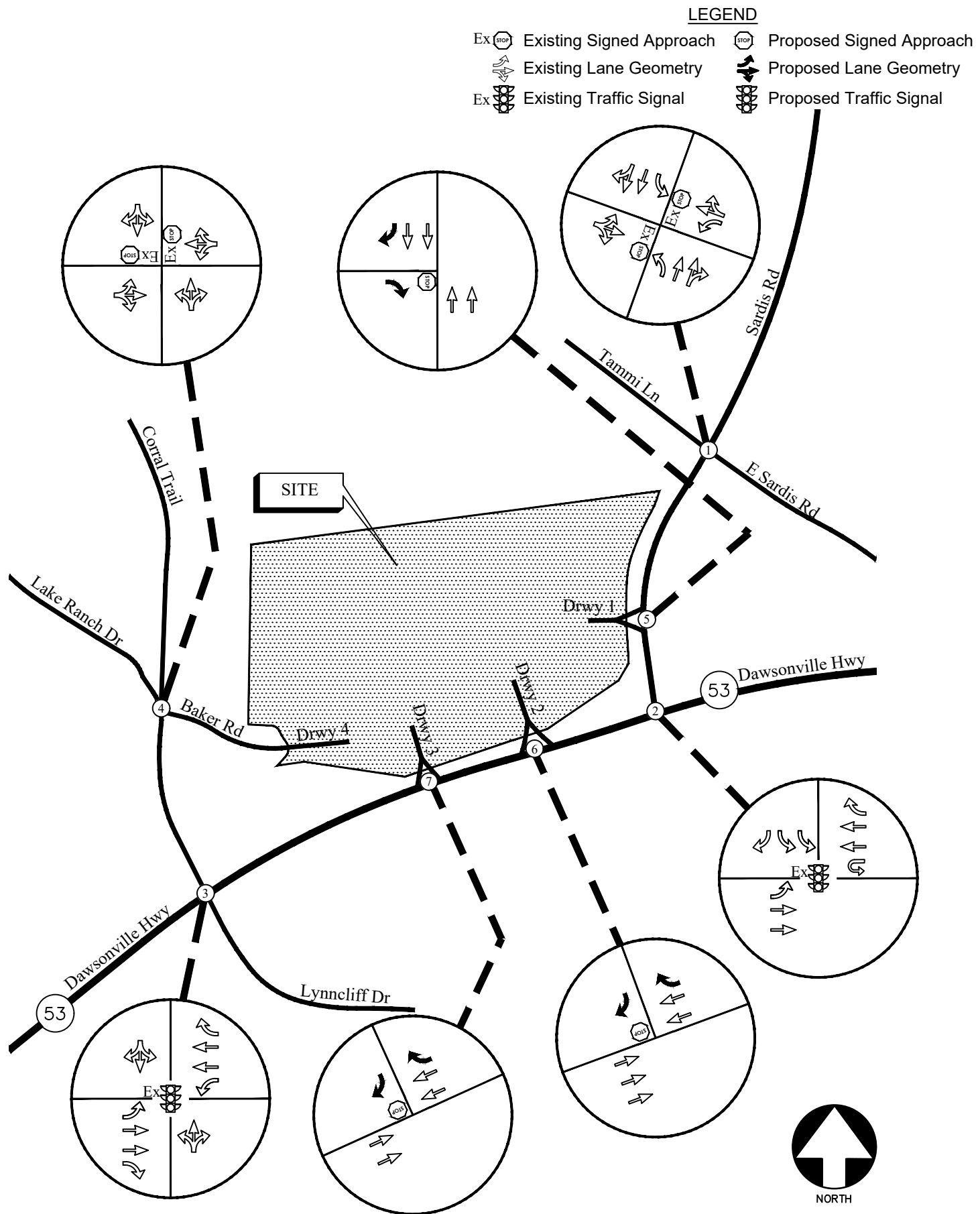
6.4 Future Traffic Operations

The future “No-Build” and “Build” traffic operations were analyzed using the volumes in Figure 7 and Figure 8, respectively. The results of the future traffic operations analysis are shown below in Table 6. Recommendations on traffic control and lane geometry are shown in Figure 9.

Table 6 – Future Intersection Operations					
Intersection		Future Condition: LOS (Delay)			
		NO-BUILD		BUILD	
		AM	PM	AM	PM
1	<u>Sardis Road at Tammi Lane / E. Sardis Road</u>				
	-Eastbound Approach	C (23.6)	D (28.8)	C (23.9)	D (29.5)
	-Westbound Approach	B (13.6)	C (16.8)	B (13.7)	C (17.0)
	-Northbound Left	B (10.9)	A (9.3)	B (11.0)	A (9.4)
	-Southbound Left	A (9.0)	B (10.6)	A (9.0)	B (10.7)
2	<u>SR 53 (Dawsonville Highway) at Sardis Road</u>	<u>C (24.8)</u>	<u>D (44.0)</u>	<u>C (25.0)</u>	<u>D (51.3)</u>
	-Eastbound Approach	B (16.0)	D (37.5)	B (15.8)	D (43.9)
	-Westbound Approach	C (26.1)	D (53.5)	C (26.1)	E (64.1)
	-Southbound Approach	D (36.2)	C (33.8)	D (37.5)	C (34.0)
3	<u>SR 53 (Dawsonville Highway) at Lake Ranch Drive / Lynnclyff Drive</u>	<u>A (5.0)</u>	<u>A (3.8)</u>	<u>A (6.6)</u>	<u>A (6.2)</u>
	-Eastbound Approach	A (4.5)	A (4.8)	A (5.7)	A (6.7)
	-Westbound Approach	A (0.4)	A (0.7)	A (0.6)	A (1.2)
	-Northbound Approach	E (55.6)	E (56.1)	E (52.0)	D (51.7)
	-Southbound Approach	E (58.1)	E (57.7)	E (56.5)	E (56.4)
4	<u>Lake Ranch Drive at Barker Road / Corral Trail*</u>				
	-Westbound Approach	A (4.2)	A (0.0)	A (4.7)	A (5.8)
	-Northbound Left	A (2.8)	A (2.2)	A (2.5)	A (3.7)
	-Southbound Approach	A (5.9)	A (0.0)	A (4.0)	A (0.0)
5	<u>Sardis Road at Site Driveway 1 (RIRO)</u>				
	-Eastbound Approach	-	-	C (15.2)	B (12.4)
6	<u>SR 53 (Dawsonville Highway) at Site Driveway 2 (RIRO)</u>				
	-Southbound Approach	-	-	B (14.0)	C (17.3)
7	<u>SR 53 (Dawsonville Highway) at Site Driveway 3 (RIRO)</u>				
	- Southbound Approach	-	-	B (13.8)	C (17.0)

*Level of service was reported using SimTraffic as HCM cannot analyse a 4-leg intersection with a stop-control on Corral Trail (SB) and Barker Road (WB)

The results of future “No-Build” and “Build” conditions traffic analysis indicate that the signalized study intersections will be operating at an overall level of service “D” or better in both the AM and PM peak hours. The stop-controlled approaches at the unsignalized study intersections will be operating at a level of service “D” or better in both the AM and PM peak hours.



FUTURE TRAFFIC CONTROL AND LANE GEOMETRY

FIGURE 9
A&R Engineering Inc.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Traffic impacts were evaluated from the proposed retail development that will be located at 2714 Barker Road, Hall County, Georgia. The traffic analysis includes evaluation of the current operations and future conditions with the traffic generated by the development. The development will consist of 18,975 SF of retail space and a gas station with 16 fueling positions and 5,282 SF convenience store.

The development proposes access at the following locations:

- Site Driveway 1: Right-In/Right-Out Driveway on Sardis Road
- Site Driveway 2: Right-In/Right-Out Driveway on SR 53 (Dawsonville Highway)
- Site Driveway 3: Right-In/Right-Out Driveway on SR 53 (Dawsonville Highway)
- Site Driveway 4: Site Connection to Barker Road

The AM and PM peak hours have been analyzed in this study. In addition to the site access points, this study includes the evaluation of traffic operations at the intersections of:

1. Sardis Road at Tammi Lane / E. Sardis Road
2. SR 53 (Dawsonville Highway) at Sardis Road
3. SR 53 (Dawsonville Highway) at Lynnclyff Drive / Lake Ranch Drive
4. Lake Ranch Drive at Corral Trail / Barker Road (Site Driveway 4)
5. Sardis Road at Site Driveway 1 (RIRO)
6. SR 53 (Dawsonville Highway) at Site Driveway 2 (RIRO)
7. SR 53 (Dawsonville Highway) at Site Driveway 3 (RIRO)

The analysis included the evaluation of future operations for “No-Build” and “Build” conditions, with the differences between “No-Build” and “Build” accounting for an increase in traffic due to the proposed development.

The results of future “No-Build” and “Build” conditions traffic analysis indicate that the signalized study intersections will continue operating at an overall level of service “D” or better in both the AM and PM peak hours. The stop-controlled approaches at the unsignalized study intersections will continue operating at a level of service “D” or better in both the AM and PM peak hours.

Based on the analysis, the proposed development will have minimal impact on traffic operations in the study network.

7.1 Recommendation for Site Access Configuration

The following access configuration is recommended for the proposed site driveway intersections.

- Site Driveway 1: Right-In/Right-Out Driveway on Sardis Road
 - One entering and one exiting lanes.
 - Stop-sign controlled on the driveway approach with Sardis Road remaining free flow.
 - A right turn lane for entering traffic on Sardis Road.
 - Provide / Confirm adequate sight distance per AASHTO standards.
- Site Driveway 2: Right-In/Right-Out Driveway on SR 53 (Dawsonville Highway)
 - One entering and one exiting lanes.
 - Stop-sign controlled on the driveway approach with SR 53 (Dawsonville Highway) remaining free flow.
 - A right turn lane for entering traffic on SR 53 (Dawsonville Highway).
 - Provide / Confirm adequate sight distance per AASHTO standards.
- Site Driveway 3: Right-In/Right-Out Driveway on SR 53 (Dawsonville Highway)
 - One entering and one exiting lanes.
 - Stop-sign controlled on the driveway approach with SR 53 (Dawsonville Highway) remaining free flow.
 - A right turn lane for entering traffic on SR 53 (Dawsonville Highway).
 - Provide / Confirm adequate sight distance per AASHTO standards.

Appendix

Existing Intersection Traffic Counts	
Linear Regression of Daily Traffic.....	
Existing Intersection Analysis.....	
Future “No-Build” Intersection Analysis	
Future “Build” Intersection Analysis.....	
Traffic Volume Worksheets	

EXISTING INTERSECTION TRAFFIC COUNTS

A & R Engineering, Inc.

2160 Kingston Court Suite 'O'

Marletta, GA 30067

TMC Data
SR 53 @ Lake Ranch Rd
7-9 am | 4-6 pm

File Name : 20260289
Site Code : 20260289
Start Date : 08-11-2026
Page No : 1

Groups Printed- Cars, Buses & Trucks

	Lynncliff Dr Northbound				Lake Ranch Rd Southbound				SR 53 Eastbound				SR 53 Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	4	0	36	40	15	1	2	18	0	169	1	170	9	142	1	152	380
07:15 AM	3	0	38	41	9	0	0	9	0	189	2	191	15	153	5	173	414
07:30 AM	5	1	29	35	13	2	6	21	0	247	0	247	18	148	7	173	476
07:45 AM	11	0	20	31	19	0	2	21	0	220	1	221	24	176	6	206	479
Total	23	1	123	147	56	3	10	69	0	825	4	829	66	619	19	704	1749
08:00 AM	1	0	26	27	7	0	5	12	0	228	6	234	26	161	7	194	467
08:15 AM	1	0	13	14	4	0	3	7	0	171	4	175	14	173	6	193	389
08:30 AM	2	0	10	12	4	0	4	8	3	214	2	219	20	183	1	204	443
08:45 AM	0	0	14	14	3	0	4	7	1	177	3	181	18	185	2	205	407
Total	4	0	63	67	18	0	16	34	4	790	15	809	78	702	16	796	1706
*** BREAK ***																	
04:00 PM	5	1	11	17	8	0	4	12	3	206	5	214	46	209	21	276	519
04:15 PM	2	1	13	16	9	0	5	14	6	226	12	244	46	240	10	296	570
04:30 PM	2	2	18	22	8	1	1	10	5	234	7	246	38	236	6	280	558
04:45 PM	6	0	16	22	12	0	2	14	3	197	9	209	51	198	14	263	508
Total	15	4	58	77	37	1	12	50	17	863	33	913	181	883	51	1115	2155
05:00 PM	3	0	15	18	8	0	2	10	1	233	10	244	46	250	7	303	575
05:15 PM	3	0	16	19	4	0	1	5	2	288	12	302	58	227	13	298	624
05:30 PM	2	0	24	26	5	0	2	7	7	173	15	195	54	189	10	253	481
05:45 PM	3	1	10	14	6	0	1	7	5	180	11	196	36	160	7	203	420
Total	11	1	65	77	23	0	6	29	15	874	48	937	194	826	37	1057	2100
Grand Total	53	6	309	368	134	4	44	182	36	3352	100	3488	519	3030	123	3672	7710
Apprch %	14.4	1.6	84		73.6	2.2	24.2		1	96.1	2.9		14.1	82.5	3.3		
Total %	0.7	0.1	4	4.8	1.7	0.1	0.6	2.4	0.5	43.5	1.3	45.2	6.7	39.3	1.6	47.6	

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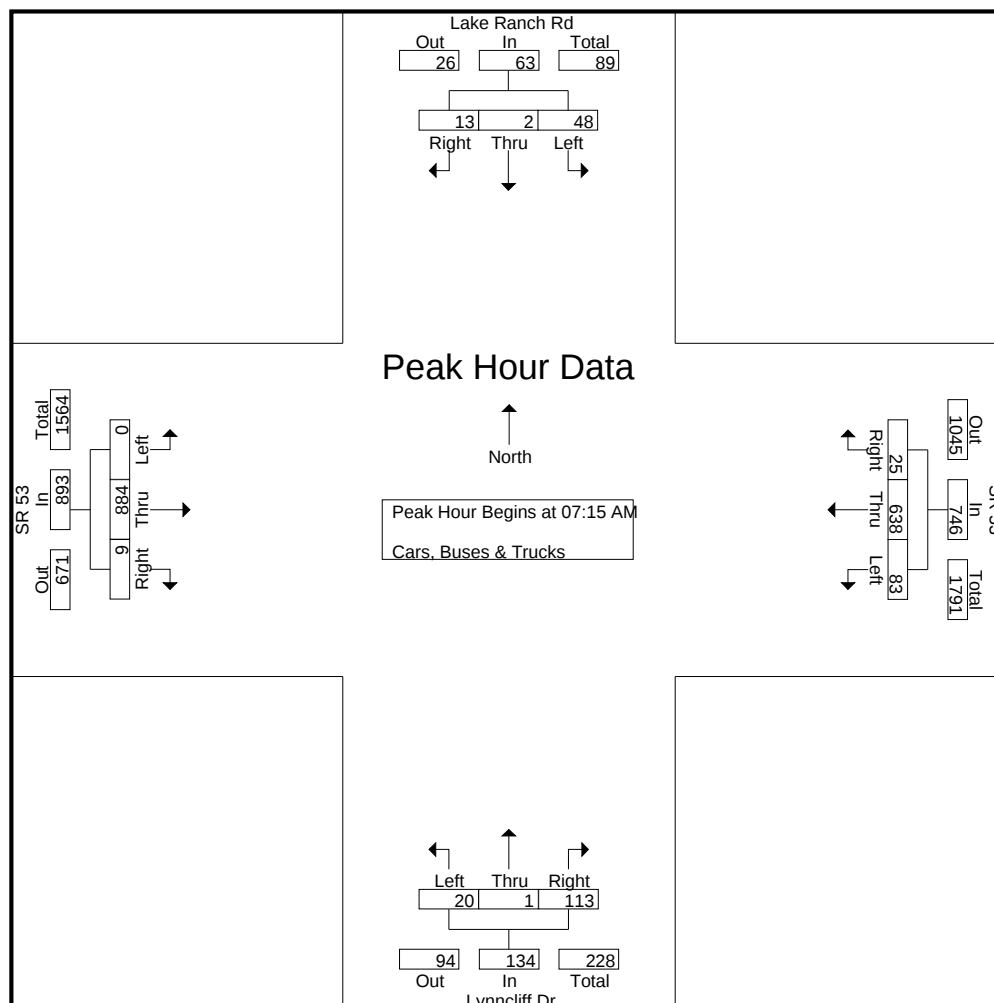
2160 Kingston Court Suite 'O'

Marletta, GA 30067

TMC Data
SR 53 @ Lake Ranch Rd
7-9 am | 4-6 pm

File Name : 20260289
Site Code : 20260289
Start Date : 08-11-2026
Page No : 2

	Lynncliff Dr Northbound				Lake Ranch Rd Southbound				SR 53 Eastbound				SR 53 Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	3	0	38	41	9	0	0	9	0	189	2	191	15	153	5	173	414
07:30 AM	5	1	29	35	13	2	6	21	0	247	0	247	18	148	7	173	476
07:45 AM	11	0	20	31	19	0	2	21	0	220	1	221	24	176	6	206	479
08:00 AM	1	0	26	27	7	0	5	12	0	228	6	234	26	161	7	194	467
Total Volume	20	1	113	134	48	2	13	63	0	884	9	893	83	638	25	746	1836
% App. Total	14.9	0.7	84.3		76.2	3.2	20.6		0	99	1		11.1	85.5	3.4		
PHF	.455	.250	.743	.817	.632	.250	.542	.750	.000	.895	.375	.904	.798	.906	.893	.905	.958



A & R Engineering, Inc.

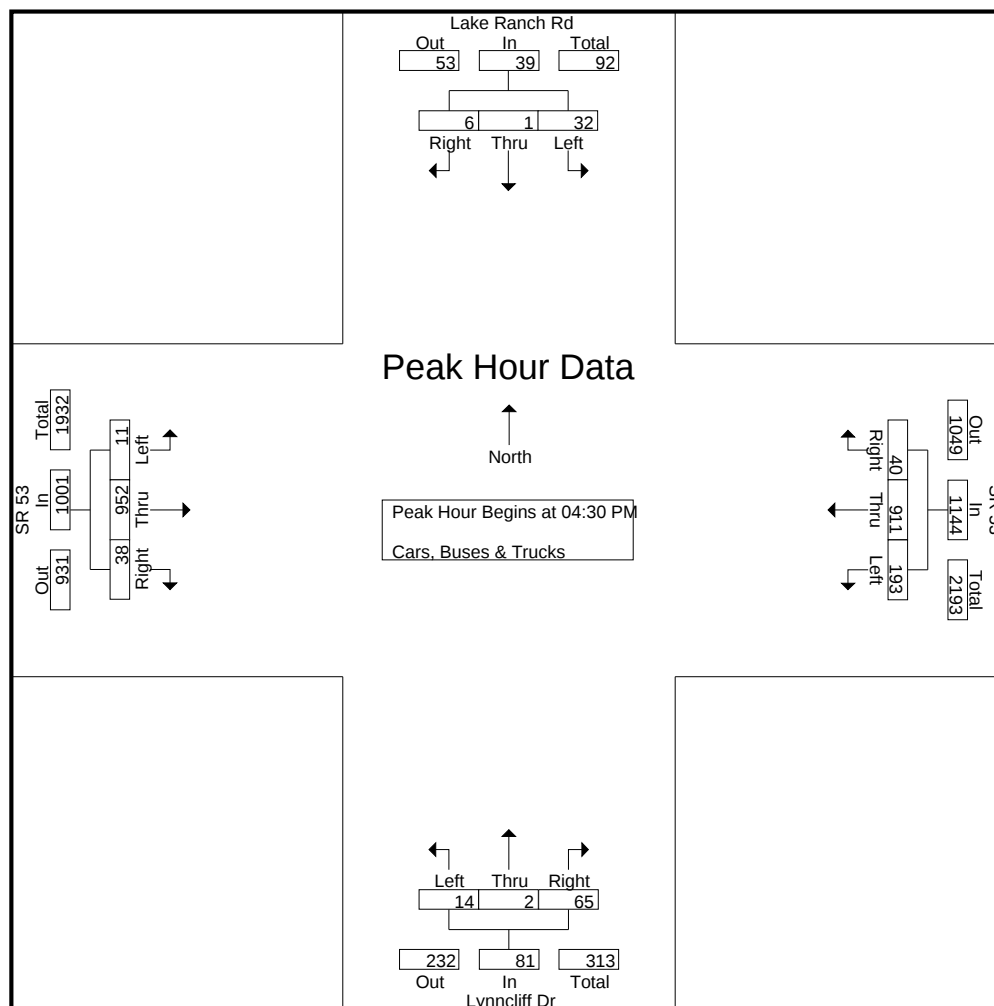
2160 Kingston Court Suite 'O'

Marletta, GA 30067

TMC Data
SR 53 @ Lake Ranch Rd
7-9 am | 4-6 pm

File Name : 20260289
Site Code : 20260289
Start Date : 08-11-2026
Page No : 3

	Lynncliff Dr Northbound				Lake Ranch Rd Southbound				SR 53 Eastbound				SR 53 Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	2	2	18	22	8	1	1	10	5	234	7	246	38	236	6	280	558
04:45 PM	6	0	16	22	12	0	2	14	3	197	9	209	51	198	14	263	508
05:00 PM	3	0	15	18	8	0	2	10	1	233	10	244	46	250	7	303	575
05:15 PM	3	0	16	19	4	0	1	5	2	288	12	302	58	227	13	298	624
Total Volume	14	2	65	81	32	1	6	39	11	952	38	1001	193	911	40	1144	2265
% App. Total	17.3	2.5	80.2		82.1	2.6	15.4		1.1	95.1	3.8		16.9	79.6	3.5		
PHF	.583	.250	.903	.920	.667	.250	.750	.696	.550	.826	.792	.829	.832	.911	.714	.944	.907



A & R Engineering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data
SR 53 @ Sardis Road
7-9 am | 4-6 pm

File Name : 20260290
Site Code : 20260290
Start Date : 08-11-2026
Page No : 1

Groups Printed- Cars, Buses & trucks

Start Time	Northbound				Sardis Road Southbound				SR 53 Eastbound				SR 53 Westbound					Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	U-Turn	App. Total	
07:00 AM	0	0	0	0	139	0	57	196	40	180	0	220	0	152	32	5	189	605
07:15 AM	0	0	0	0	142	0	67	209	67	169	0	236	0	173	70	2	245	690
07:30 AM	0	0	0	0	183	0	76	259	58	231	0	289	0	173	64	5	242	790
07:45 AM	0	0	0	0	174	0	65	239	76	183	0	259	0	206	116	7	329	827
Total	0	0	0	0	638	0	265	903	241	763	0	1004	0	704	282	19	1005	2912
08:00 AM	0	0	0	0	162	0	85	247	42	219	0	261	0	194	93	3	290	798
08:15 AM	0	0	0	0	165	0	95	260	36	152	0	188	0	193	56	3	252	700
08:30 AM	0	0	0	0	101	0	41	142	31	197	0	228	0	204	47	5	256	626
08:45 AM	0	0	0	0	95	0	49	144	46	148	0	194	0	205	52	4	261	599
Total	0	0	0	0	523	0	270	793	155	716	0	871	0	796	248	15	1059	2723
*** BREAK ***																		
04:00 PM	0	0	0	0	141	0	57	198	77	148	0	225	0	276	119	4	399	822
04:15 PM	0	0	0	0	146	0	72	218	75	173	0	248	0	296	124	8	428	894
04:30 PM	0	0	0	0	95	0	57	152	85	175	0	260	0	280	143	2	425	837
04:45 PM	0	0	0	0	105	0	50	155	84	141	0	225	0	263	138	6	407	787
Total	0	0	0	0	487	0	236	723	321	637	0	958	0	1115	524	20	1659	3340
05:00 PM	0	0	0	0	99	0	54	153	76	180	0	256	0	303	131	3	437	846
05:15 PM	0	0	0	0	100	0	68	168	93	215	0	308	0	298	172	6	476	952
05:30 PM	0	0	0	0	149	0	66	215	88	114	0	202	0	253	141	5	399	816
05:45 PM	0	0	0	0	106	0	58	164	64	132	0	196	0	203	119	5	327	687
Total	0	0	0	0	454	0	246	700	321	641	0	962	0	1057	563	19	1639	3301
Grand Total	0	0	0	0	2102	0	1017	3119	1038	2757	0	3795	0	3672	1617	73	5362	12276
Apprch %	0	0	0	0	67.4	0	32.6		27.4	72.6	0		0	68.5	30.2	1.4		
Total %	0	0	0	0	17.1	0	8.3	25.4	8.5	22.5	0	30.9	0	29.9	13.2	0.6	43.7	

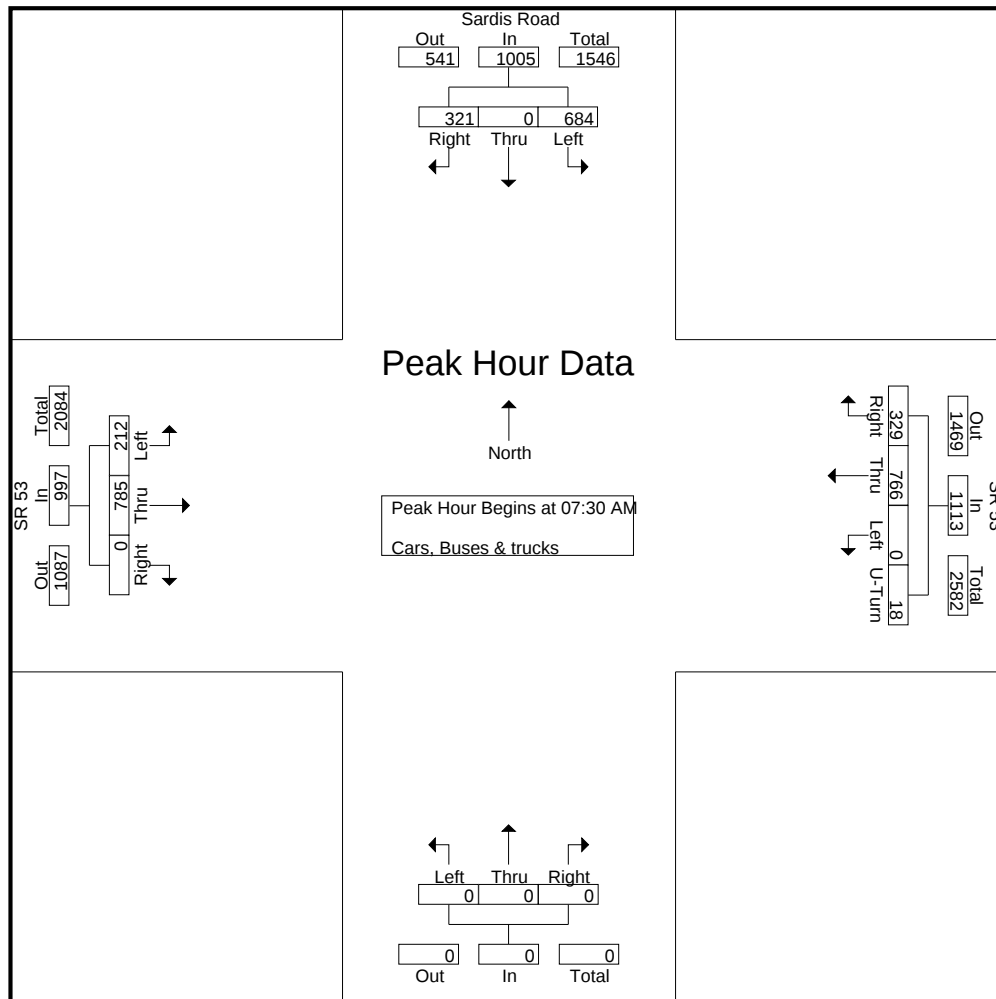
A & R Engineering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data
SR 53 @ Sardis Road
7-9 am | 4-6 pm

File Name : 20260290
Site Code : 20260290
Start Date : 08-11-2026
Page No : 2

	Northbound				Sardis Road Southbound				SR 53 Eastbound				SR 53 Westbound					
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 07:30 AM																		
07:30 AM	0	0	0	0	183	0	76	259	58	231	0	289	0	173	64	5	242	790
07:45 AM	0	0	0	0	174	0	65	239	76	183	0	259	0	206	116	7	329	827
08:00 AM	0	0	0	0	162	0	85	247	42	219	0	261	0	194	93	3	290	798
08:15 AM	0	0	0	0	165	0	95	260	36	152	0	188	0	193	56	3	252	700
Total Volume	0	0	0	0	684	0	321	1005	212	785	0	997	0	766	329	18	1113	3115
% App. Total	0	0	0		68.1	0	31.9		21.3	78.7	0		0	68.8	29.6	1.6		
PHF	.000	.000	.000	.000	.934	.000	.845	.966	.697	.850	.000	.862	.000	.930	.709	.643	.846	.942



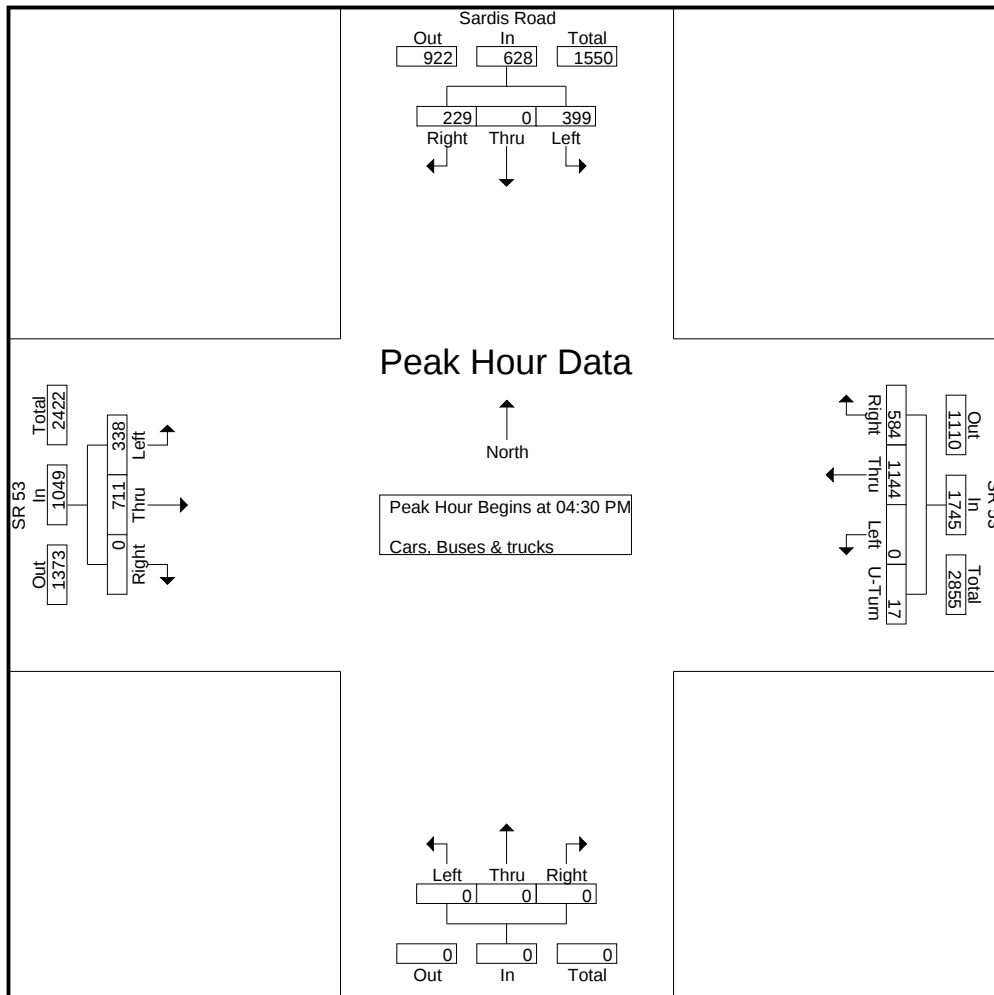
A & R Engineering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data
SR 53 @ Sardis Road
7-9 am | 4-6 pm

File Name : 20260290
Site Code : 20260290
Start Date : 08-11-2026
Page No : 3

	Northbound				Sardis Road Southbound				SR 53 Eastbound				SR 53 Westbound					
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 04:30 PM																		
04:30 PM	0	0	0	0	95	0	57	152	85	175	0	260	0	280	143	2	425	837
04:45 PM	0	0	0	0	105	0	50	155	84	141	0	225	0	263	138	6	407	787
05:00 PM	0	0	0	0	99	0	54	153	76	180	0	256	0	303	131	3	437	846
05:15 PM	0	0	0	0	100	0	68	168	93	215	0	308	0	298	172	6	476	952
Total Volume	0	0	0	0	399	0	229	628	338	711	0	1049	0	1144	584	17	1745	3422
% App. Total	0	0	0	0	63.5	0	36.5		32.2	67.8	0		0	65.6	33.5	1		
PHF	.000	.000	.000	.000	.950	.000	.842	.935	.909	.827	.000	.851	.000	.944	.849	.708	.916	.899



A & R Engineering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data
Sardis Rod @ E. Sardis Road
7-9 am | 4-6 pm

File Name : 20260291
Site Code : 20260291
Start Date : 08-11-2026
Page No : 1

Groups Printed- Cars, Buses & Trucks

	Sardis Rod Northbound				Sardis Rod Southbound				Tammi Ln Eastbound				E. Sardis Road Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	65	7	72	7	196	2	205	3	0	0	3	1	0	20	21	301
07:15 AM	1	132	4	137	7	209	3	219	0	0	1	1	0	0	19	19	376
07:30 AM	0	117	5	122	17	259	0	276	0	0	2	2	0	0	38	38	438
07:45 AM	0	190	2	192	9	239	0	248	0	0	1	1	2	0	31	33	474
Total	1	504	18	523	40	903	5	948	3	0	4	7	3	0	108	111	1589
08:00 AM	1	132	2	135	14	247	0	261	1	0	1	2	2	0	16	18	416
08:15 AM	0	90	2	92	8	260	0	268	0	0	0	0	5	0	16	21	381
08:30 AM	0	75	3	78	2	142	0	144	0	0	0	0	1	0	10	11	233
08:45 AM	0	98	0	98	6	144	0	150	0	0	0	0	0	0	17	17	265
Total	1	395	7	403	30	793	0	823	1	0	1	2	8	0	59	67	1295
*** BREAK ***																	
04:00 PM	0	194	2	196	9	198	1	208	0	0	2	2	0	0	35	35	441
04:15 PM	1	197	1	199	8	218	1	227	0	0	0	0	1	0	30	31	457
04:30 PM	0	225	3	228	9	152	1	162	0	0	0	0	2	0	32	34	424
04:45 PM	3	216	3	222	9	155	0	164	0	0	2	2	2	0	23	25	413
Total	4	832	9	845	35	723	3	761	0	0	4	4	5	0	120	125	1735
05:00 PM	1	200	6	207	12	153	0	165	1	0	0	1	1	0	46	47	420
05:15 PM	2	260	3	265	4	168	0	172	0	0	0	0	1	0	35	36	473
05:30 PM	2	226	1	229	8	215	0	223	2	0	3	5	3	0	28	31	488
05:45 PM	0	178	5	183	12	164	1	177	0	0	0	0	0	0	40	40	400
Total	5	864	15	884	36	700	1	737	3	0	3	6	5	0	149	154	1781
Grand Total	11	2595	49	2655	141	3119	9	3269	7	0	12	19	21	0	436	457	6400
Apprch %	0.4	97.7	1.8		4.3	95.4	0.3		36.8	0	63.2		4.6	0	95.4		
Total %	0.2	40.5	0.8	41.5	2.2	48.7	0.1	51.1	0.1	0	0.2	0.3	0.3	0	6.8	7.1	

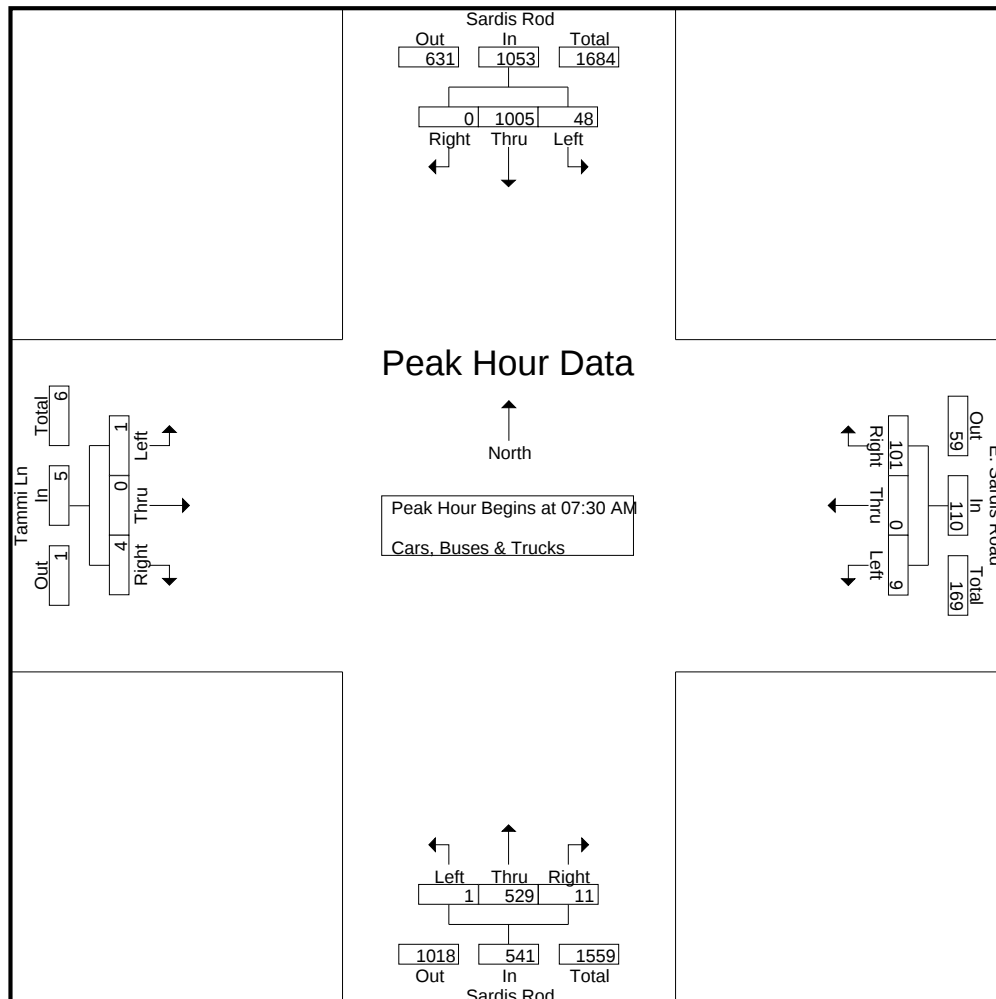
A & R Engineering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data
Sardis Rod @ E. Sardis Road
7-9 am | 4-6 pm

File Name : 20260291
Site Code : 20260291
Start Date : 08-11-2026
Page No : 2

	Sardis Rod Northbound				Sardis Rod Southbound				Tammi Ln Eastbound				E. Sardis Road Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	117	5	122	17	259	0	276	0	0	2	2	0	0	38	38	438
07:45 AM	0	190	2	192	9	239	0	248	0	0	1	1	2	0	31	33	474
08:00 AM	1	132	2	135	14	247	0	261	1	0	1	2	2	0	16	18	416
08:15 AM	0	90	2	92	8	260	0	268	0	0	0	0	5	0	16	21	381
Total Volume	1	529	11	541	48	1005	0	1053	1	0	4	5	9	0	101	110	1709
% App. Total	0.2	97.8	2		4.6	95.4	0		20	0	80		8.2	0	91.8		
PHF	.250	.696	.550	.704	.706	.966	.000	.954	.250	.000	.500	.625	.450	.000	.664	.724	.901



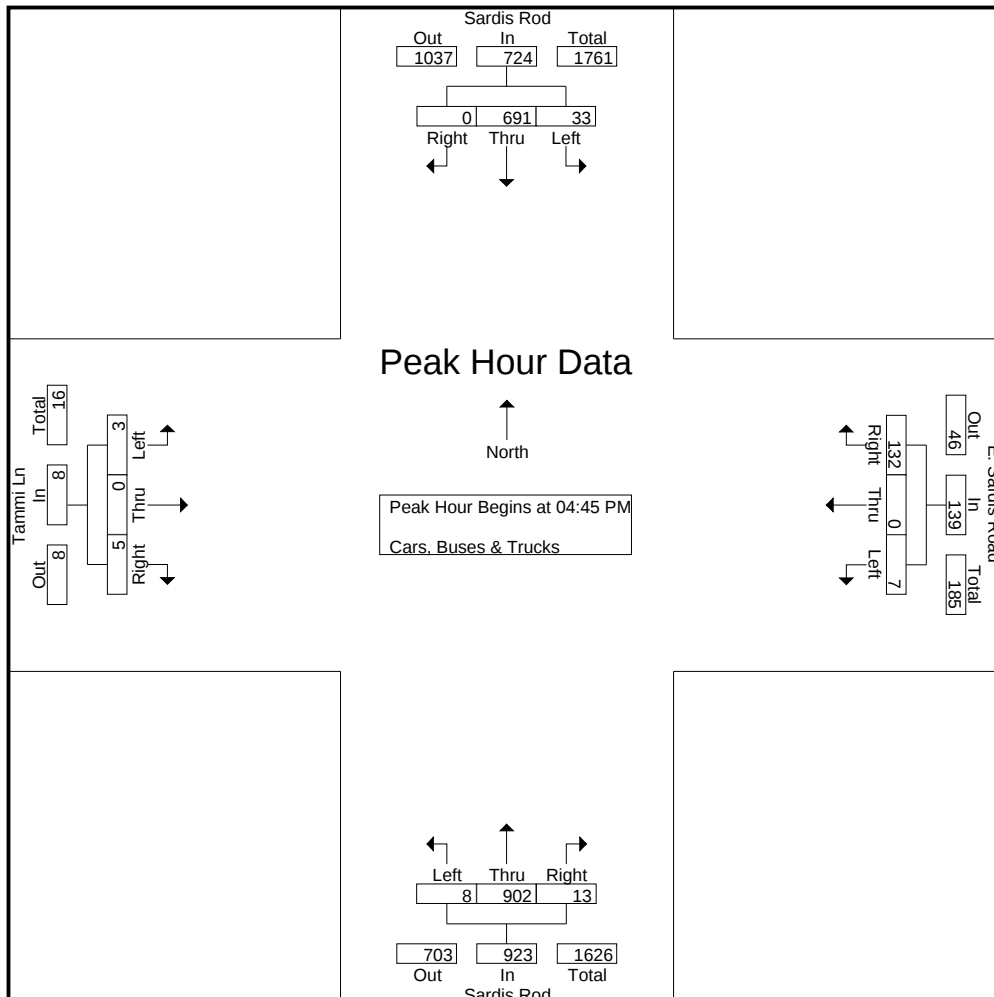
A & R Engineering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data
Sardis Rod @ E. Sardis Road
7-9 am | 4-6 pm

File Name : 20260291
Site Code : 20260291
Start Date : 08-11-2026
Page No : 3

	Sardis Rod Northbound				Sardis Rod Southbound				Tammi Ln Eastbound				E. Sardis Road Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	3	216	3	222	9	155	0	164	0	0	2	2	2	0	23	25	413
05:00 PM	1	200	6	207	12	153	0	165	1	0	0	1	1	0	46	47	420
05:15 PM	2	260	3	265	4	168	0	172	0	0	0	0	1	0	35	36	473
05:30 PM	2	226	1	229	8	215	0	223	2	0	3	5	3	0	28	31	488
Total Volume	8	902	13	923	33	691	0	724	3	0	5	8	7	0	132	139	1794
% App. Total	0.9	97.7	1.4		4.6	95.4	0		37.5	0	62.5		5	0	95		
PHF	.667	.867	.542	.871	.688	.803	.000	.812	.375	.000	.417	.400	.583	.000	.717	.739	.919



A & R Engineering, Inc.

2160 Kingston Court Suite 'O'

Marletta, GA 30067

TMC Data

Lake Ranch Rd @ Barker Rd

7-9 am | 4-6 pm

File Name : 20260292

Site Code : 20260292

Start Date : 08-11-2026

Page No : 1

Groups Printed- Cars, Buses & Trucks

	Lake Ranch Rd Northbound				Corral Trail Southbound				Lake Ranch Rd Eastbound				Barker Rd Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	0	0	1	0	1	0	1	0	0	17	17	0	0	0	0	19
07:15 AM	5	0	0	5	0	0	0	0	0	0	9	9	0	0	0	0	14
07:30 AM	7	1	0	8	0	0	0	0	0	0	21	21	0	1	0	1	30
07:45 AM	6	0	0	6	0	1	0	1	0	0	20	20	0	0	0	0	27
Total	19	1	0	20	0	2	0	2	0	0	67	67	0	1	0	1	90
08:00 AM	7	0	1	8	0	0	0	0	0	0	12	12	0	0	0	0	20
08:15 AM	5	1	0	6	0	0	0	0	0	0	7	7	0	0	0	0	13
08:30 AM	4	0	0	4	0	0	0	0	0	0	8	8	0	0	0	0	12
08:45 AM	3	0	0	3	0	0	0	0	0	0	7	7	0	0	0	0	10
Total	19	1	1	21	0	0	0	0	0	0	34	34	0	0	0	0	55
*** BREAK ***																	
04:00 PM	25	0	0	25	0	0	0	0	0	0	12	12	0	0	0	0	37
04:15 PM	17	0	0	17	0	0	0	0	0	0	14	14	0	0	0	0	31
04:30 PM	13	0	0	13	0	0	0	0	0	0	10	10	0	0	0	0	23
04:45 PM	17	0	0	17	0	0	0	0	0	0	14	14	0	0	0	0	31
Total	72	0	0	72	0	0	0	0	0	0	50	50	0	0	0	0	122
05:00 PM	7	1	0	8	0	0	0	0	0	0	10	10	0	0	0	0	18
05:15 PM	15	0	0	15	0	0	0	0	0	0	5	5	0	0	0	0	20
05:30 PM	17	0	0	17	0	1	0	1	0	0	6	6	0	0	0	0	24
05:45 PM	13	0	0	13	0	0	0	0	0	0	7	7	0	0	0	0	20
Total	52	1	0	53	0	1	0	1	0	0	28	28	0	0	0	0	82
Grand Total	162	3	1	166	0	3	0	3	0	0	179	179	0	1	0	1	349
Apprch %	97.6	1.8	0.6		0	100	0		0	0	100		0	100	0		
Total %	46.4	0.9	0.3	47.6	0	0.9	0	0.9	0	0	51.3	51.3	0	0.3	0	0.3	

A & R Engineering, Inc.

2160 Kingston Court Suite 'O'

Marletta, GA 30067

TMC Data

Lake Ranch Rd @ Barker Rd

7-9 am | 4-6 pm

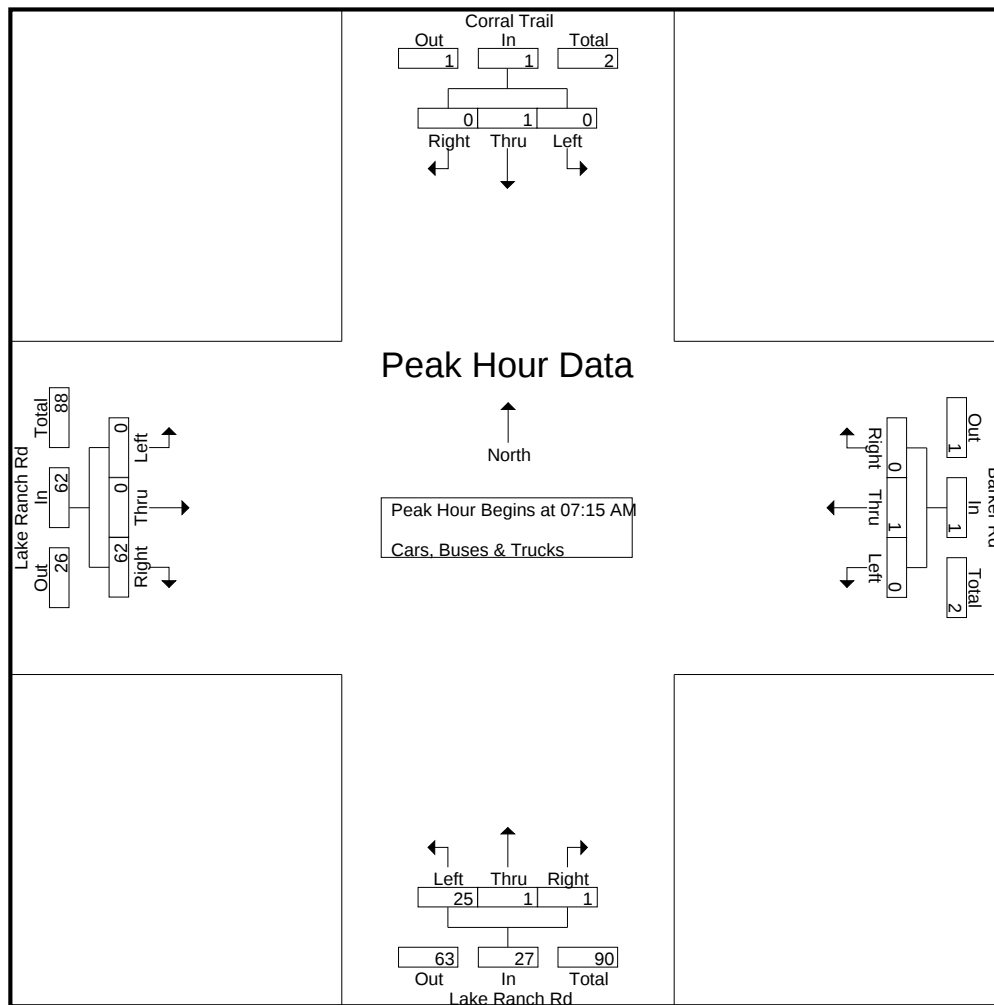
File Name : 20260292

Site Code : 20260292

Start Date : 08-11-2026

Page No : 2

	Lake Ranch Rd Northbound				Corral Trail Southbound				Lake Ranch Rd Eastbound				Barker Rd Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	5	0	0	5	0	0	0	0	0	0	9	9	0	0	0	0	14
07:30 AM	7	1	0	8	0	0	0	0	0	0	21	21	0	1	0	1	30
07:45 AM	6	0	0	6	0	1	0	1	0	0	20	20	0	0	0	0	27
08:00 AM	7	0	1	8	0	0	0	0	0	0	12	12	0	0	0	0	20
Total Volume	25	1	1	27	0	1	0	1	0	0	62	62	0	1	0	1	91
% App. Total	92.6	3.7	3.7		0	100	0		0	0	100		0	100	0		
PHF	.893	.250	.250	.844	.000	.250	.000	.250	.000	.000	.738	.738	.000	.250	.000	.250	.758



A & R Engineering, Inc.

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Marletta, GA 30067

TMC Data

Lake Ranch Rd @ Barker Rd

7-9 am | 4-6 pm

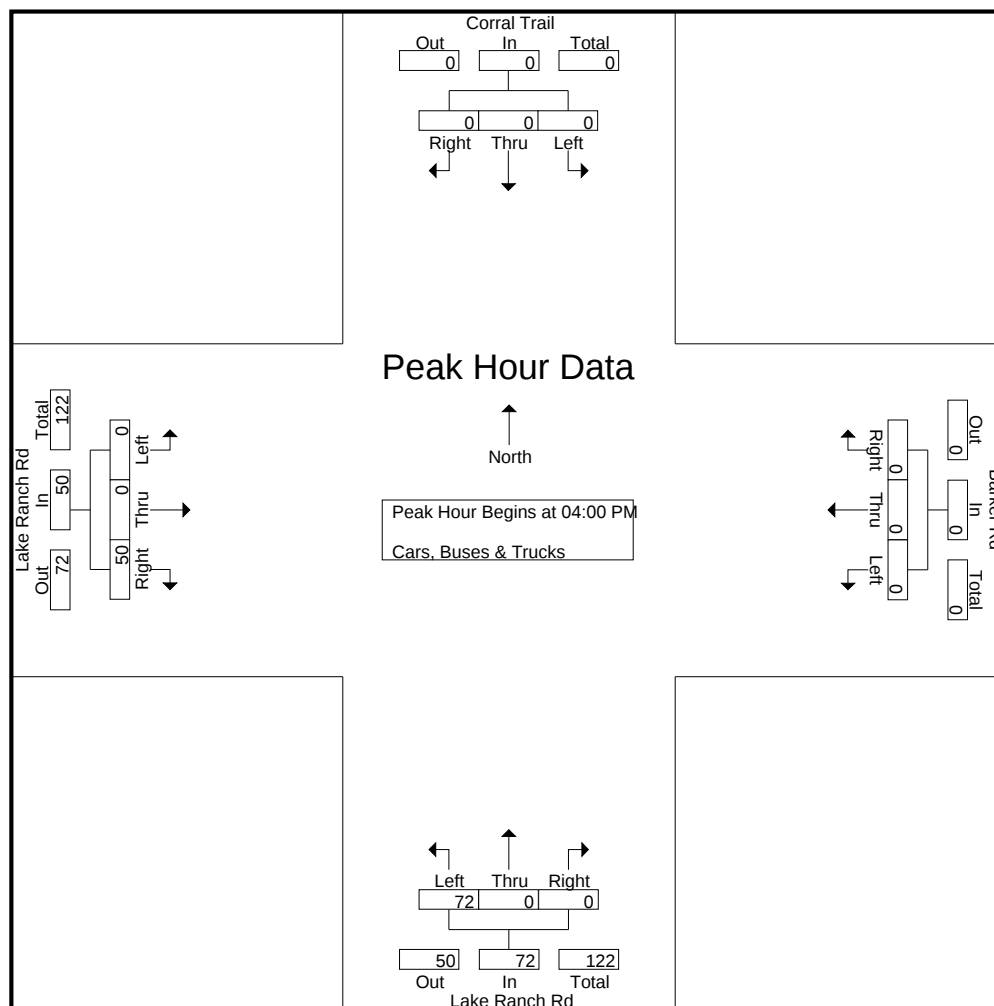
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Site Code : 20260292

Start Date : 08-11-2026

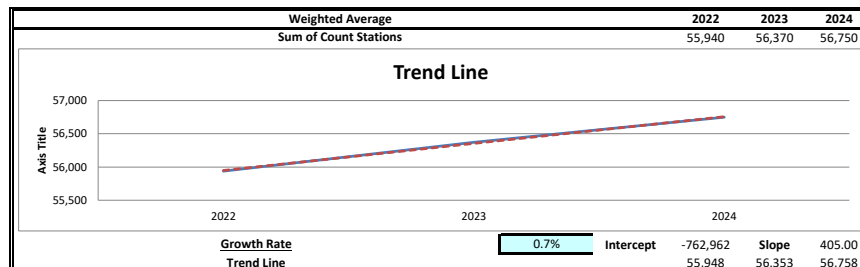
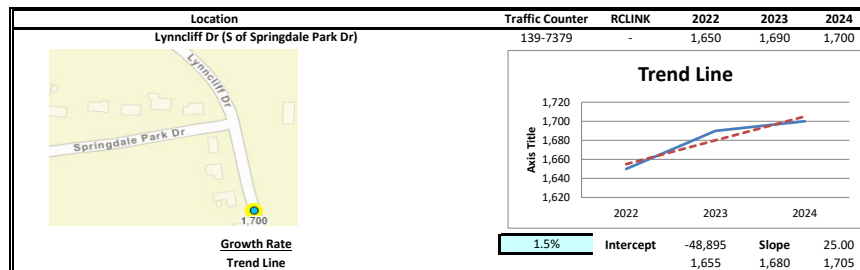
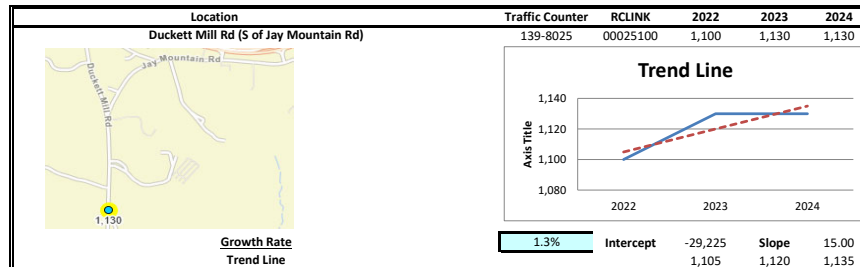
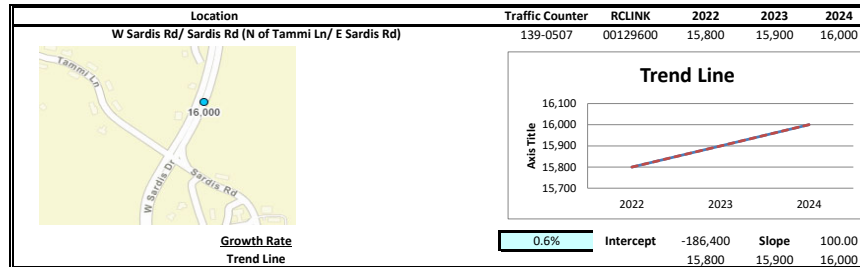
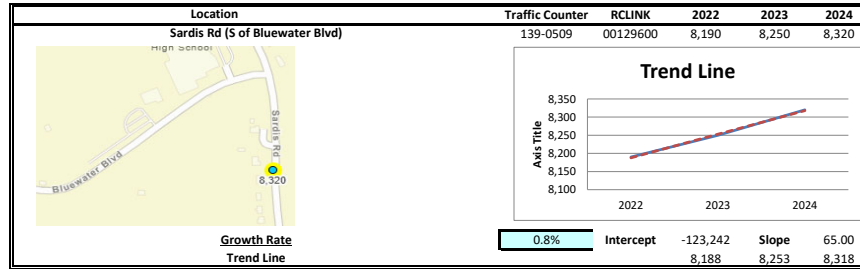
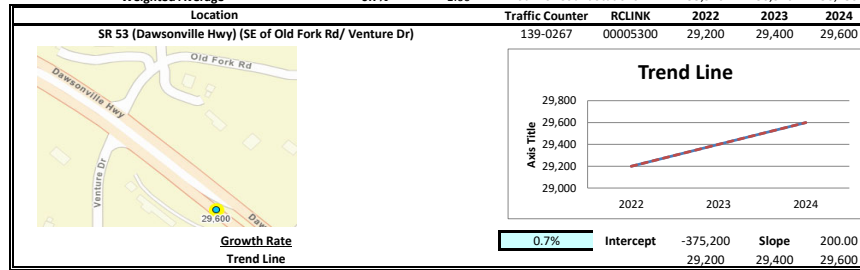
Page No : 3

	Lake Ranch Rd Northbound				Corral Trail Southbound				Lake Ranch Rd Eastbound				Barker Rd Westbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	25	0	0	25	0	0	0	0	0	0	12	12	0	0	0	0	37
04:15 PM	17	0	0	17	0	0	0	0	0	0	14	14	0	0	0	0	31
04:30 PM	13	0	0	13	0	0	0	0	0	0	10	10	0	0	0	0	23
04:45 PM	17	0	0	17	0	0	0	0	0	0	14	14	0	0	0	0	31
Total Volume	72	0	0	72	0	0	0	0	0	0	50	50	0	0	0	0	122
% App. Total	100	0	0		0	0	0		0	0	100		0	0	0		
PHF	.720	.000	.000	.720	.000	.000	.000	.000	.000	.000	.893	.893	.000	.000	.000	.000	.824



LINEAR REGRESSION OF DAILY TRAFFIC

Location	Growth Rate	R Squared	Station ID	Route	2022	2023	2024
SR 53 (Dawsonville Hwy) (SE of Old Fork Rd/ Venture Dr)	0.7%	1.00	139-0267	00005300	29,200	29,400	29,600
Sardis Rd (S of Bluewater Blvd)	0.8%	1.00	139-0509	00129600	8,190	8,250	8,320
W Sardis Rd/ Sardis Rd (N of Tammi Ln/ E Sardis Rd)	0.6%	1.00	139-0507	00129600	15,800	15,900	16,000
Duckett Mill Rd (S of Jay Mountain Rd)	1.3%	0.75	139-8025	00025100	1,100	1,130	1,130
Lynnciff Dr (S of Springdale Park Dr)	1.5%	0.89	139-7379	-	1,650	1,690	1,700
Weighted Average	0.7%	1.00	Sum of Count Stations =		55,940	56,370	56,750



EXISTING INTERSECTION ANALYSIS

Intersection

Int Delay, s/veh 1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↗	↗	↗	↕	↗	↕	
Traffic Vol, veh/h	1	0	4	9	0	101	1	529	11	48	1005	0
Future Vol, veh/h	1	0	4	9	0	101	1	529	11	48	1005	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Yield	-	-	None	-	-	None
Storage Length	-	-	-	-	-	450	185	-	-	185	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	4	10	0	112	1	588	12	53	1117	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1519	1826	558	1261	1819	300	1117	0	0	600	0	0
Stage 1	1223	1223	-	596	596	-	-	-	-	-	-	-
Stage 2	296	602	-	665	1223	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	81	76	473	127	77	696	621	-	-	973	-	-
Stage 1	190	250	-	457	490	-	-	-	-	-	-	-
Stage 2	688	487	-	416	250	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	64	72	473	119	72	696	621	-	-	973	-	-
Mov Cap-2 Maneuver	64	72	-	119	72	-	-	-	-	-	-	-
Stage 1	180	236	-	456	489	-	-	-	-	-	-	-
Stage 2	576	486	-	389	236	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	22.73		13.37		0.02		0.41	
HCM LOS	C		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	621	-	-	209 119 696	973	-	-
HCM Lane V/C Ratio	0.002	-	-	0.027 0.084 0.161	0.055	-	-
HCM Ctrl Dly (s/v)	10.8	-	-	22.7 38.1 11.2	8.9	-	-
HCM Lane LOS	B	-	-	C E B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1 0.3 0.6	0.2	-	-



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	212	785	18	766	329	684	321
Future Volume (vph)	212	785	18	766	329	684	321
Lane Group Flow (vph)	226	835	19	815	350	728	341
Turn Type	pm+pt	NA	Perm	NA	Perm	Prot	Perm
Protected Phases	1	6		2		4	
Permitted Phases	6		2		2		4
Detector Phase	1	6	2	2	2	4	4
Switch Phase							
Minimum Initial (s)	5.0	15.0	15.0	15.0	15.0	6.0	6.0
Minimum Split (s)	15.0	25.5	25.5	25.5	25.5	42.5	42.5
Total Split (s)	25.0	74.0	49.0	49.0	49.0	46.0	46.0
Total Split (%)	20.8%	61.7%	40.8%	40.8%	40.8%	38.3%	38.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		
Recall Mode	None	C-Min	C-Min	C-Min	C-Min	Max	Max
v/c Ratio	0.60	0.41	0.07	0.56	0.41	0.63	0.45
Control Delay (s/veh)	20.0	11.1	24.0	29.4	4.1	36.4	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.0	11.1	24.0	29.4	4.1	36.4	5.0
Queue Length 50th (ft)	50	98	9	254	0	246	0
Queue Length 95th (ft)	101	125	27	337	61	313	64
Internal Link Dist (ft)		1248		786		689	
Turn Bay Length (ft)	430		400		280		330
Base Capacity (vph)	443	2020	258	1451	855	1158	760
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.41	0.07	0.56	0.41	0.63	0.45

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:WBTU and 6:EBTL, Start of Green

Natural Cycle: 85

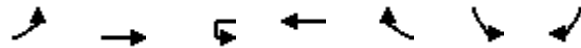
Control Type: Actuated-Coordinated

Splits and Phases: 2: SR 53 (Dawsonville Hwy) & Sardis Rd

#2 	#2 	#2
Ø1	Ø2 (R)	Ø4
25 s	49 s	46 s
#2 		
Ø6 (R)		
74 s		

HCM 7th Signalized Intersection Summary
2: SR 53 (Dawsonville Hwy) & Sardis Rd

1a. Existing 2026 AM
08/14/2026



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	212	785	18	766	329	684	321
Future Volume (veh/h)	212	785	18	766	329	684	321
Initial Q (Qb), veh	0	0		0	0	0	0
Lane Width Adj.	1.00	1.00		1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1870	1870		1870	1870	1870	1870
Adj Flow Rate, veh/h	226	835		815	0	728	0
Peak Hour Factor	0.94	0.94		0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	396	2029		1558		1166	
Arrive On Green	0.09	0.57		0.44	0.00	0.34	0.00
Sat Flow, veh/h	1781	3647		3647	1585	3456	1585
Grp Volume(v), veh/h	226	835		815	0	728	0
Grp Sat Flow(s),veh/h/ln	1781	1777		1777	1585	1728	1585
Q Serve(g_s), s	8.0	15.8		20.1	0.0	21.2	0.0
Cycle Q Clear(g_c), s	8.0	15.8		20.1	0.0	21.2	0.0
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	396	2029		1558		1166	
V/C Ratio(X)	0.57	0.41		0.52		0.62	
Avail Cap(c_a), veh/h	531	2029		1558		1166	
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94		1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	17.5	14.4		24.5	0.0	33.4	0.0
Incr Delay (d2), s/veh	1.2	0.6		1.3	0.0	2.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	5.8		8.0	0.0	9.2	0.0
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	18.7	15.0		25.8	0.0	35.9	0.0
LnGrp LOS	B	B		C		D	
Approach Vol, veh/h		1061		815		728	
Approach Delay, s/veh		15.8		25.8		35.9	
Approach LOS		B		C		D	
Timer - Assigned Phs	1	2		4		6	
Phs Duration (G+Y+Rc), s	15.9	58.1		46.0		74.0	
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5	
Max Green Setting (Gmax), s	19.5	43.5		40.5		68.5	
Max Q Clear Time (g_c+I1), s	10.0	22.1		23.2		17.8	
Green Ext Time (p_c), s	0.4	8.9		2.6		12.6	

Intersection Summary

HCM 7th Control Delay, s/veh	24.6
HCM 7th LOS	C

Notes

User approved ignoring U-Turning movement.

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

Timings

3: Lynnclyff Dr/Lake Ranch Rd & SR 53 (Dawsonville Hwy)

1a. Existing 2026 AM

08/14/2026

	→	↘	↙	←	↖	↗	↑	↘	↓	
Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	Ø1
Lane Configurations	↑↑	↑	↘	↑↑	↑		↕		↕	
Traffic Volume (vph)	884	9	83	638	25	20	1	48	2	
Future Volume (vph)	884	9	83	638	25	20	1	48	2	
Lane Group Flow (vph)	921	9	86	665	26	0	140	0	66	
Turn Type	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	NA	
Protected Phases	6		5	2			8		4	1
Permitted Phases		6	2		2	8		4		
Detector Phase	6	6	5	2	2	8	8	4	4	
Switch Phase										
Minimum Initial (s)	15.0	15.0	5.0	15.0	15.0	6.0	6.0	6.0	6.0	5.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	45.5	45.5	45.5	45.5	15.0
Total Split (s)	56.0	56.0	17.0	58.0	58.0	47.0	47.0	47.0	47.0	15.0
Total Split (%)	46.7%	46.7%	14.2%	48.3%	48.3%	39.2%	39.2%	39.2%	39.2%	13%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5		5.5		5.5	
Lead/Lag	Lag	Lag	Lead	Lag	Lag					Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes					Yes
Recall Mode	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None
v/c Ratio	0.35	0.01	0.18	0.23	0.02		0.58		0.92	
Control Delay (s/veh)	6.8	0.0	2.6	2.0	0.0		22.6		127.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0	
Total Delay (s/veh)	6.8	0.0	2.6	2.0	0.0		22.6		127.8	
Queue Length 50th (ft)	126	0	7	29	0		16		43	
Queue Length 95th (ft)	193	0	18	57	m0		79		#113	
Internal Link Dist (ft)	618			1248			337		449	
Turn Bay Length (ft)		340	380		295					
Base Capacity (vph)	2614	1188	534	2906	1313		617		254	
Starvation Cap Reductn	0	0	0	0	0		0		0	
Spillback Cap Reductn	0	0	0	0	0		0		0	
Storage Cap Reductn	0	0	0	0	0		0		0	
Reduced v/c Ratio	0.35	0.01	0.16	0.23	0.02		0.23		0.26	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Lynnclyff Dr/Lake Ranch Rd & SR 53 (Dawsonville Hwy)

#3 Ø1	#3 Ø2 (R)	#3 Ø4
15 s	58 s	47 s
#3 Ø5	#3 Ø6 (R)	#3 Ø8
17 s	56 s	47 s

HCM 7th Signalized Intersection Summary
3: Lynnclyff Dr/Lake Ranch Rd & SR 53 (Dawsonville Hwy)

1a. Existing 2026 AM
08/14/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	884	9	83	638	25	20	1	113	48	2	13
Future Volume (veh/h)	0	884	9	83	638	25	20	1	113	48	2	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	921	0	86	665	0	21	1	0	50	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	660	2757		553	3060		133	5		128	3	
Arrive On Green	0.00	0.78	0.00	0.08	1.00	0.00	0.05	0.05	0.00	0.05	0.05	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1573	106	0	1460	58	0
Grp Volume(v), veh/h	0	921	0	86	665	0	22	0	0	52	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1679	0	0	1519	0	0
Q Serve(g_s), s	0.0	9.4	0.0	1.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0
Cycle Q Clear(g_c), s	0.0	9.4	0.0	1.0	0.0	0.0	1.4	0.0	0.0	3.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.95		0.00	0.96		0.00
Lane Grp Cap(c), veh/h	660	2757		553	3060		138	0		131	0	
V/C Ratio(X)	0.00	0.33		0.16	0.22		0.16	0.00		0.40	0.00	
Avail Cap(c_a), veh/h	799	2757		654	3060		565	0		557	0	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.84	0.84	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	4.1	0.0	2.3	0.0	0.0	55.1	0.0	0.0	56.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.1	0.1	0.0	0.5	0.0	0.0	2.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.3	0.0	0.1	0.1	0.0	0.7	0.0	0.0	1.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	4.4	0.0	2.4	0.1	0.0	55.7	0.0	0.0	58.2	0.0	0.0
LnGrp LOS	A			A			E			E		
Approach Vol, veh/h	921				751				22		52	
Approach Delay, s/veh	4.4				0.4				55.7		58.2	
Approach LOS	A				A				E		E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	108.8		11.2	10.2	98.6		11.2				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	52.5		41.5	11.5	50.5		41.5				
Max Q Clear Time (g_c+I1), s	0.0	2.0		5.9	3.0	11.4		3.4				
Green Ext Time (p_c), s	0.0	9.3		0.3	0.1	13.5		0.1				

Intersection Summary

HCM 7th Control Delay, s/veh 4.9
HCM 7th LOS A

Notes

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

1: Sardis Rd & Tammi Ln/E Sardis Rd Performance by movement

Movement	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)		0.1	0.2	4.1	0.0	0.0	0.0	2.6	0.3	0.5
Total Del/Veh (s)		6.7	25.2	1.6	5.7	4.1	5.2	4.9	0.3	1.8

2: SR 53 (Dawsonville Hwy) & Sardis Rd Performance by movement

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	2.5	0.4	2.7	0.0	0.0	0.0	0.4
Total Del/Veh (s)	40.6	13.2	41.3	27.9	4.9	35.9	1.2	3.7	21.8

3: Lynnclyff Dr/Lake Ranch Rd & SR 53 (Dawsonville Hwy) Performance by movement

Movement	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.2	2.0	0.0	0.0	0.0	0.2	0.1	0.2	0.0	0.0	0.0	0.1
Total Del/Veh (s)	5.3	2.4	16.8	7.9	8.2	49.0	53.1	3.1	50.3	9.2	2.9	8.2

4: Lake Ranch Rd & Barker Rd & Corral Trail Performance by movement

Movement	EBR	WBT	NBL	NBT	NBR	SBT	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0	0.1	0.1
Total Del/Veh (s)	0.2	7.1	2.6	2.8	2.7	4.7	1.0

Total Network Performance

Movement	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)					0.7						
Total Del/Veh (s)					28.1						

Intersection

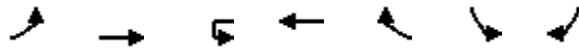
Int Delay, s/veh 1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↗	↖	↕		↖	↕	
Traffic Vol, veh/h	3	0	5	7	0	132	8	902	13	33	691	0
Future Vol, veh/h	3	0	5	7	0	132	8	902	13	33	691	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Yield	-	-	None	-	-	None
Storage Length	-	-	-	-	-	450	185	-	-	185	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	0	5	8	0	143	9	980	14	36	751	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1330	1835	376	1452	1828	497	751	0	0	995	0	0
Stage 1	823	823	-	1005	1005	-	-	-	-	-	-	-
Stage 2	508	1012	-	447	823	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	113	75	622	91	76	518	854	-	-	691	-	-
Stage 1	334	386	-	259	317	-	-	-	-	-	-	-
Stage 2	516	315	-	560	386	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	76	71	622	85	71	518	854	-	-	691	-	-
Mov Cap-2 Maneuver	76	71	-	85	71	-	-	-	-	-	-	-
Stage 1	317	366	-	256	314	-	-	-	-	-	-	-
Stage 2	369	312	-	527	366	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	27.42		16.44		0.08		0.48	
HCM LOS	D		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	854	-	-	169 85 518 691	-	-	-
HCM Lane V/C Ratio	0.01	-	-	0.051 0.089 0.277 0.052	-	-	-
HCM Ctrl Dly (s/v)	9.3	-	-	27.4 51.4 14.6 10.5	-	-	-
HCM Lane LOS	A	-	-	D F B B	-	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2 0.3 1.1 0.2	-	-	-



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	338	711	17	1144	584	399	229
Future Volume (vph)	338	711	17	1144	584	399	229
Lane Group Flow (vph)	376	790	19	1271	649	443	254
Turn Type	pm+pt	NA	Perm	NA	Perm	Prot	Perm
Protected Phases	1	6		2		4	
Permitted Phases	6		2		2		4
Detector Phase	1	6	2	2	2	4	4
Switch Phase							
Minimum Initial (s)	5.0	15.0	15.0	15.0	15.0	6.0	6.0
Minimum Split (s)	15.0	25.5	25.5	25.5	25.5	42.5	42.5
Total Split (s)	26.0	77.0	51.0	51.0	51.0	43.0	43.0
Total Split (%)	21.7%	64.2%	42.5%	42.5%	42.5%	35.8%	35.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		
Recall Mode	None	C-Min	C-Min	C-Min	C-Min	Max	Max
v/c Ratio	1.03	0.37	0.08	0.95	0.68	0.41	0.38
Control Delay (s/veh)	91.5	8.2	25.1	51.4	8.2	34.0	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	91.5	8.2	25.1	51.4	8.2	34.0	5.4
Queue Length 50th (ft)	~263	71	9	504	39	141	0
Queue Length 95th (ft)	#445	90	27	#656	163	190	60
Internal Link Dist (ft)		1248		786		689	
Turn Bay Length (ft)	430		400		280		330
Base Capacity (vph)	364	2108	249	1341	955	1072	669
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.03	0.37	0.08	0.95	0.68	0.41	0.38

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:WBTU and 6:EBTL, Start of Green

Natural Cycle: 115

Control Type: Actuated-Coordinated

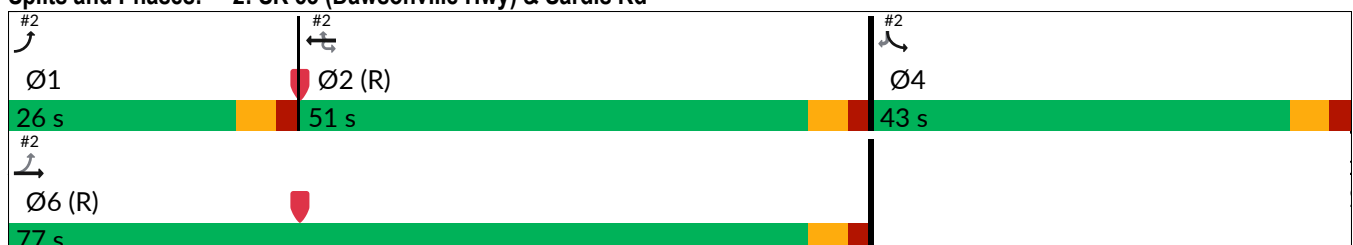
~ Volume exceeds capacity, queue is theoretically infinite.

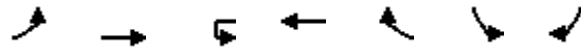
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: SR 53 (Dawsonville Hwy) & Sardis Rd





Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	338	711	17	1144	584	399	229
Future Volume (veh/h)	338	711	17	1144	584	399	229
Initial Q (Qb), veh	0	0		0	0	0	0
Lane Width Adj.	1.00	1.00		1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1870	1870		1870	1870	1870	1870
Adj Flow Rate, veh/h	376	790		1271	0	443	0
Peak Hour Factor	0.90	0.90		0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	379	2117		1347		1080	
Arrive On Green	0.17	0.60		0.38	0.00	0.31	0.00
Sat Flow, veh/h	1781	3647		3647	1585	3456	1585
Grp Volume(v), veh/h	376	790		1271	0	443	0
Grp Sat Flow(s),veh/h/ln	1781	1777		1777	1585	1728	1585
Q Serve(g_s), s	20.3	13.9		41.5	0.0	12.1	0.0
Cycle Q Clear(g_c), s	20.3	13.9		41.5	0.0	12.1	0.0
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	379	2117		1347		1080	
V/C Ratio(X)	0.99	0.37		0.94		0.41	
Avail Cap(c_a), veh/h	379	2117		1347		1080	
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91		1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	37.2	12.6		36.0	0.0	32.5	0.0
Incr Delay (d2), s/veh	42.0	0.5		14.3	0.0	1.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.0	4.9		19.2	0.0	5.2	0.0
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	79.2	13.1		50.3	0.0	33.7	0.0
LnGrp LOS	E	B		D		C	
Approach Vol, veh/h		1166		1271		443	
Approach Delay, s/veh		34.4		50.3		33.7	
Approach LOS		C		D		C	
Timer - Assigned Phs	1	2		4		6	
Phs Duration (G+Y+Rc), s	26.0	51.0		43.0		77.0	
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5	
Max Green Setting (Gmax), s	20.5	45.5		37.5		71.5	
Max Q Clear Time (g_c+l1), s	22.3	43.5		14.1		15.9	
Green Ext Time (p_c), s	0.0	1.7		1.6		11.9	

Intersection Summary

HCM 7th Control Delay, s/veh	41.3
HCM 7th LOS	D

Notes

User approved ignoring U-Turning movement.

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

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	11	952	38	193	911	40	14	2	32	1
Future Volume (vph)	11	952	38	193	911	40	14	2	32	1
Lane Group Flow (vph)	12	1046	42	212	1001	44	0	88	0	43
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	NA
Protected Phases	1	6		5	2			8		4
Permitted Phases	6		6	2		2	8		4	
Detector Phase	1	6	6	5	2	2	8	8	4	4
Switch Phase										
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	6.0	6.0
Minimum Split (s)	15.0	23.5	23.5	15.0	23.5	23.5	45.5	45.5	45.5	45.5
Total Split (s)	15.0	53.0	53.0	21.0	59.0	59.0	46.0	46.0	46.0	46.0
Total Split (%)	12.5%	44.2%	44.2%	17.5%	49.2%	49.2%	38.3%	38.3%	38.3%	38.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5		5.5		5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None
v/c Ratio	0.03	0.42	0.04	0.45	0.35	0.03		0.49		0.50
Control Delay (s/veh)	2.9	8.8	0.1	12.6	6.6	2.7		26.2		65.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	2.9	8.8	0.1	12.6	6.6	2.7		26.2		65.4
Queue Length 50th (ft)	1	152	0	70	117	1		13		28
Queue Length 95th (ft)	5	265	0	m91	m167	m3		65		66
Internal Link Dist (ft)		618			1248			337		449
Turn Bay Length (ft)	420		340	380		295				
Base Capacity (vph)	515	2493	1151	527	2822	1277		573		375
Starvation Cap Reductn	0	0	0	0	0	0		0		0
Spillback Cap Reductn	0	0	0	0	0	0		0		0
Storage Cap Reductn	0	0	0	0	0	0		0		0
Reduced v/c Ratio	0.02	0.42	0.04	0.40	0.35	0.03		0.15		0.11

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Lynnclyff Dr/Lake Ranch Rd & SR 53 (Dawsonville Hwy)

#3 	#3 	#3 
Ø1	Ø2 (R)	Ø4
15 s	59 s	46 s
#3 	#3 	#3 
Ø5	Ø6 (R)	Ø8
21 s	53 s	46 s

HCM 7th Signalized Intersection Summary
3: Lynnclyff Dr/Lake Ranch Rd & SR 53 (Dawsonville Hwy)

1b. Existing 2026 PM
08/14/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	952	38	193	911	40	14	2	65	32	1	6
Future Volume (veh/h)	11	952	38	193	911	40	14	2	65	32	1	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	1046	0	212	1001	0	15	2	0	35	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	521	2754		509	2869		113	12		120	2	
Arrive On Green	0.01	0.78	0.00	0.09	1.00	0.00	0.04	0.04	0.00	0.04	0.04	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1362	281	0	1462	42	0
Grp Volume(v), veh/h	12	1046	0	212	1001	0	17	0	0	36	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1643	0	0	1503	0	0
Q Serve(g_s), s	0.2	11.3	0.0	3.1	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0
Cycle Q Clear(g_c), s	0.2	11.3	0.0	3.1	0.0	0.0	1.1	0.0	0.0	2.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.88		0.00	0.97		0.00
Lane Grp Cap(c), veh/h	521	2754		509	2869		125	0		121	0	
V/C Ratio(X)	0.02	0.38		0.42	0.35		0.14	0.00		0.30	0.00	
Avail Cap(c_a), veh/h	637	2754		658	2869		556	0		543	0	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.41	0.41	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	2.7	4.3	0.0	2.9	0.0	0.0	55.6	0.0	0.0	56.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.2	0.1	0.0	0.5	0.0	0.0	1.3	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.7	0.0	0.4	0.1	0.0	0.5	0.0	0.0	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	2.7	4.7	0.0	3.1	0.1	0.0	56.1	0.0	0.0	57.7	0.0	0.0
LnGrp LOS	A	A		A	A		E			E		
Approach Vol, veh/h	1058			1213			17			36		
Approach Delay, s/veh	4.7			0.7			56.1			57.7		
Approach LOS	A			A			E			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	102.4		10.5	11.0	98.5		10.5				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	53.5		40.5	15.5	47.5		40.5				
Max Q Clear Time (g_c+I1), s	2.2	2.0		4.7	5.1	13.3		3.1				
Green Ext Time (p_c), s	0.0	16.5		0.2	0.4	15.0		0.1				

Intersection Summary

HCM 7th Control Delay, s/veh 3.8
HCM 7th LOS A

Notes

User approved pedestrian interval to be less than phase max green.
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

1: Sardis Rd & Tammi Ln/E Sardis Rd Performance by movement

Movement	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.1	0.1	0.7	3.9	0.0	0.0	0.0	2.8	0.2	0.4
Total Del/Veh (s)	15.3	4.8	33.5	1.9	11.1	5.5	5.4	8.3	0.2	3.4

2: SR 53 (Dawsonville Hwy) & Sardis Rd Performance by movement

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.0	4.9	3.8	5.2	0.0	0.0	0.0	2.1
Total Del/Veh (s)	65.4	12.3	63.5	67.2	16.8	34.8	0.5	4.7	38.4

3: Lynnclyff Dr/Lake Ranch Rd & SR 53 (Dawsonville Hwy) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	2.9	0.3	2.5	0.0	0.0	0.0	0.2	0.3	0.1	0.0	0.0	0.0
Total Del/Veh (s)	10.4	8.7	2.5	23.1	12.5	10.6	53.4	76.0	2.8	59.5	4.4	2.5

3: Lynnclyff Dr/Lake Ranch Rd & SR 53 (Dawsonville Hwy) Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	12.3

4: Lake Ranch Rd & Barker Rd & Corral Trail Performance by movement

Movement	EBR	NBL	All
Denied Del/Veh (s)	0.1	0.0	0.1
Total Del/Veh (s)	0.1	1.9	1.1

Total Network Performance

Movement	All
Denied Del/Veh (s)	2.3
Total Del/Veh (s)	46.6

**FUTURE “NO-BUILD” INTERSECTION
ANALYSIS**

Intersection

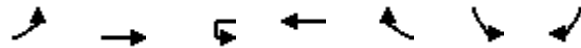
Int Delay, s/veh 1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	4	9	0	103	1	540	11	49	1025	0
Future Vol, veh/h	1	0	4	9	0	103	1	540	11	49	1025	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Yield	-	-	None	-	-	None
Storage Length	-	-	-	-	-	450	185	-	-	185	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	4	10	0	114	1	600	12	54	1139	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1550	1862	569	1287	1856	306	1139	0	0	612	0	0
Stage 1	1248	1248	-	608	608	-	-	-	-	-	-	-
Stage 2	302	614	-	678	1248	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	77	72	465	121	73	690	609	-	-	963	-	-
Stage 1	183	243	-	449	484	-	-	-	-	-	-	-
Stage 2	682	481	-	408	243	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	61	68	465	113	69	690	609	-	-	963	-	-
Mov Cap-2 Maneuver	61	68	-	113	69	-	-	-	-	-	-	-
Stage 1	173	230	-	449	483	-	-	-	-	-	-	-
Stage 2	568	480	-	381	230	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	23.57		13.55		0.02		0.41	
HCM LOS	C		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	609	-	-	199 113 690	963	-	-
HCM Lane V/C Ratio	0.002	-	-	0.028 0.088 0.166	0.057	-	-
HCM Ctrl Dly (s/v)	10.9	-	-	23.6 39.8 11.3	9	-	-
HCM Lane LOS	B	-	-	C E B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1 0.3 0.6	0.2	-	-



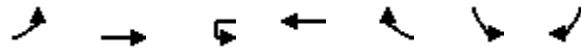
Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	216	801	18	781	336	698	327
Future Volume (vph)	216	801	18	781	336	698	327
Lane Group Flow (vph)	230	852	19	831	357	743	348
Turn Type	pm+pt	NA	Perm	NA	Perm	Prot	Perm
Protected Phases	1	6		2		4	
Permitted Phases	6		2		2		4
Detector Phase	1	6	2	2	2	4	4
Switch Phase							
Minimum Initial (s)	5.0	15.0	15.0	15.0	15.0	6.0	6.0
Minimum Split (s)	15.0	25.5	25.5	25.5	25.5	42.5	42.5
Total Split (s)	25.0	74.0	49.0	49.0	49.0	46.0	46.0
Total Split (%)	20.8%	61.7%	40.8%	40.8%	40.8%	38.3%	38.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		
Recall Mode	None	C-Min	C-Min	C-Min	C-Min	Max	Max
v/c Ratio	0.62	0.42	0.08	0.58	0.42	0.64	0.46
Control Delay (s/veh)	20.9	10.8	24.3	29.9	4.1	36.7	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.9	10.8	24.3	29.9	4.1	36.7	5.0
Queue Length 50th (ft)	51	100	9	260	0	253	0
Queue Length 95th (ft)	110	128	28	350	62	321	65
Internal Link Dist (ft)		1248		786		689	
Turn Bay Length (ft)	430		400		280		330
Base Capacity (vph)	437	2020	252	1445	857	1158	764
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.42	0.08	0.58	0.42	0.64	0.46

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:WBTU and 6:EBTL, Start of Green
 Natural Cycle: 85
 Control Type: Actuated-Coordinated

Splits and Phases: 2: SR 53 (Dawsonville Hwy) & Sardis Rd

#2 	#2 	#2
Ø1	Ø2 (R)	Ø4
25 s	49 s	46 s
#2 		
Ø6 (R)		
74 s		



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	216	801	18	781	336	698	327
Future Volume (veh/h)	216	801	18	781	336	698	327
Initial Q (Qb), veh	0	0		0	0	0	0
Lane Width Adj.	1.00	1.00		1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1870	1870		1870	1870	1870	1870
Adj Flow Rate, veh/h	230	852		831	0	743	0
Peak Hour Factor	0.94	0.94		0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	392	2029		1553		1166	
Arrive On Green	0.09	0.57		0.44	0.00	0.34	0.00
Sat Flow, veh/h	1781	3647		3647	1585	3456	1585
Grp Volume(v), veh/h	230	852		831	0	743	0
Grp Sat Flow(s),veh/h/ln	1781	1777		1777	1585	1728	1585
Q Serve(g_s), s	8.2	16.2		20.6	0.0	21.8	0.0
Cycle Q Clear(g_c), s	8.2	16.2		20.6	0.0	21.8	0.0
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	392	2029		1553		1166	
V/C Ratio(X)	0.59	0.42		0.54		0.64	
Avail Cap(c_a), veh/h	525	2029		1553		1166	
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94		1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	17.7	14.5		24.8	0.0	33.5	0.0
Incr Delay (d2), s/veh	1.3	0.6		1.3	0.0	2.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	5.9		8.3	0.0	9.4	0.0
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	19.1	15.1		26.1	0.0	36.2	0.0
LnGrp LOS	B	B		C		D	
Approach Vol, veh/h		1082		831		743	
Approach Delay, s/veh		16.0		26.1		36.2	
Approach LOS		B		C		D	
Timer - Assigned Phs	1	2		4		6	
Phs Duration (G+Y+Rc), s	16.1	57.9		46.0		74.0	
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5	
Max Green Setting (Gmax), s	19.5	43.5		40.5		68.5	
Max Q Clear Time (g_c+l1), s	10.2	22.6		23.8		18.2	
Green Ext Time (p_c), s	0.4	9.0		2.6		13.0	

Intersection Summary

HCM 7th Control Delay, s/veh	24.8
HCM 7th LOS	C

Notes

User approved ignoring U-Turning movement.

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

	→	↘	↙	←	↖	↗	↑	↘	↓	
Lane Group	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	Ø1
Lane Configurations	↑↑	↑	↘	↑↑	↑		↕		↕	
Traffic Volume (vph)	902	9	85	651	26	20	1	49	2	
Future Volume (vph)	902	9	85	651	26	20	1	49	2	
Lane Group Flow (vph)	940	9	89	678	27	0	142	0	67	
Turn Type	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	NA	
Protected Phases	6		5	2			8		4	1
Permitted Phases		6	2		2	8		4		
Detector Phase	6	6	5	2	2	8	8	4	4	
Switch Phase										
Minimum Initial (s)	15.0	15.0	5.0	15.0	15.0	6.0	6.0	6.0	6.0	5.0
Minimum Split (s)	23.5	23.5	15.0	23.5	23.5	45.5	45.5	45.5	45.5	15.0
Total Split (s)	56.0	56.0	17.0	58.0	58.0	47.0	47.0	47.0	47.0	15.0
Total Split (%)	46.7%	46.7%	14.2%	48.3%	48.3%	39.2%	39.2%	39.2%	39.2%	13%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5		5.5		5.5	
Lead/Lag	Lag	Lag	Lead	Lag	Lag					Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes					Yes
Recall Mode	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None
v/c Ratio	0.37	0.01	0.19	0.23	0.02		0.58		0.93	
Control Delay (s/veh)	7.4	0.0	2.6	2.0	0.0		22.4		133.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		0.0	
Total Delay (s/veh)	7.4	0.0	2.6	2.0	0.0		22.4		133.4	
Queue Length 50th (ft)	131	0	7	30	0		16		44	
Queue Length 95th (ft)	200	0	m18	58	m0		79		#117	
Internal Link Dist (ft)	618			1248			337		449	
Turn Bay Length (ft)		340	380		295					
Base Capacity (vph)	2544	1158	523	2904	1312		618		250	
Starvation Cap Reductn	0	0	0	0	0		0		0	
Spillback Cap Reductn	0	0	0	0	0		0		0	
Storage Cap Reductn	0	0	0	0	0		0		0	
Reduced v/c Ratio	0.37	0.01	0.17	0.23	0.02		0.23		0.27	

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Lynnclyff Dr/Lake Ranch Rd & SR 53 (Dawsonville Hwy)

#3 Ø1	#3 Ø2 (R)	#3 Ø4
15 s	58 s	47 s
#3 Ø5	#3 Ø6 (R)	#3 Ø8
17 s	56 s	47 s

HCM 7th Signalized Intersection Summary
3: Lynnclyff Dr/Lake Ranch Rd & SR 53 (Dawsonville Hwy)

2a. No Build 2028 AM
08/14/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	902	9	85	651	26	20	1	115	49	2	13
Future Volume (veh/h)	0	902	9	85	651	26	20	1	115	49	2	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	940	0	89	678	0	21	1	0	51	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	652	2754		544	3057		134	5		129	3	
Arrive On Green	0.00	0.77	0.00	0.08	1.00	0.00	0.05	0.05	0.00	0.05	0.05	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1574	106	0	1460	57	0
Grp Volume(v), veh/h	0	940	0	89	678	0	22	0	0	53	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1680	0	0	1517	0	0
Q Serve(g_s), s	0.0	9.7	0.0	1.1	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0
Cycle Q Clear(g_c), s	0.0	9.7	0.0	1.1	0.0	0.0	1.4	0.0	0.0	4.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.95		0.00	0.96		0.00
Lane Grp Cap(c), veh/h	652	2754		544	3057		139	0		132	0	
V/C Ratio(X)	0.00	0.34		0.16	0.22		0.16	0.00		0.40	0.00	
Avail Cap(c_a), veh/h	791	2754		644	3057		565	0		557	0	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	0.83	0.83	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	4.1	0.0	2.4	0.0	0.0	55.0	0.0	0.0	56.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.1	0.1	0.0	0.5	0.0	0.0	2.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.4	0.0	0.2	0.1	0.0	0.7	0.0	0.0	1.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	4.5	0.0	2.5	0.1	0.0	55.6	0.0	0.0	58.1	0.0	0.0
LnGrp LOS	A			A			E			E		
Approach Vol, veh/h	940				767				22			
Approach Delay, s/veh	4.5				0.4				55.6			
Approach LOS	A				A				E			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	108.7		11.3	10.2	98.5		11.3				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	52.5		41.5	11.5	50.5		41.5				
Max Q Clear Time (g_c+l1), s	0.0	2.0		6.0	3.1	11.7		3.4				
Green Ext Time (p_c), s	0.0	9.5		0.3	0.1	13.8		0.1				

Intersection Summary

HCM 7th Control Delay, s/veh	5.0
HCM 7th LOS	A

Notes

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

1: Sardis Rd & Tammi Ln/E Sardis Rd Performance by movement

Movement	EBL	EBR	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)		0.1	0.3	4.1	0.0	0.0	2.4	0.3	0.5
Total Del/Veh (s)		3.6	32.5	1.7	4.0	4.1	4.8	0.4	1.9

2: SR 53 (Dawsonville Hwy) & Sardis Rd Performance by movement

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	2.6	0.4	2.7	0.0	0.0	0.0	0.4
Total Del/Veh (s)	41.4	13.1	49.9	29.1	5.0	35.7	1.3	3.7	22.3

3: Lynnclyff Dr/Lake Ranch Rd & SR 53 (Dawsonville Hwy) Performance by movement

Movement	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.2	3.1	0.0	0.0	0.0	0.2	0.1	0.2	0.0	0.0	0.0	0.1
Total Del/Veh (s)	5.3	2.5	18.0	8.0	7.9	50.1	38.4	3.3	50.1	16.5	3.9	8.4

4: Lake Ranch Rd & Barker Rd & Corral Trail Performance by movement

Movement	EBR	WBT	NBL	NBT	NBR	SBT	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0	0.1	0.1
Total Del/Veh (s)	0.1	4.2	2.8	2.8	1.7	5.9	1.1

Total Network Performance

Movement	EBL	EBR	WBL	WBR	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)										0.7
Total Del/Veh (s)										28.6

Intersection

Int Delay, s/veh 1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↗	↗	↕		↗	↕	
Traffic Vol, veh/h	3	0	5	7	0	135	8	920	13	34	705	0
Future Vol, veh/h	3	0	5	7	0	135	8	920	13	34	705	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Yield	-	-	None	-	-	None
Storage Length	-	-	-	-	-	450	185	-	-	185	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	0	5	8	0	147	9	1000	14	37	766	0

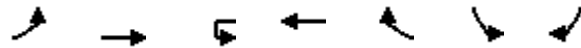
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1358	1872	383	1482	1865	507	766	0	0	1014	0	0
Stage 1	840	840	-	1024	1024	-	-	-	-	-	-	-
Stage 2	517	1032	-	457	840	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	108	71	615	87	72	511	843	-	-	680	-	-
Stage 1	326	379	-	252	311	-	-	-	-	-	-	-
Stage 2	509	308	-	553	379	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	72	67	615	81	67	511	843	-	-	680	-	-
Mov Cap-2 Maneuver	72	67	-	81	67	-	-	-	-	-	-	-
Stage 1	308	358	-	249	308	-	-	-	-	-	-	-
Stage 2	359	305	-	518	358	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	28.76		16.8		0.08		0.49	
HCM LOS	D		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	843	-	-	160 81 511 680	-	-	
HCM Lane V/C Ratio	0.01	-	-	0.054 0.094 0.287 0.054	-	-	
HCM Ctrl Dly (s/v)	9.3	-	-	28.8 54.2 14.9 10.6	-	-	
HCM Lane LOS	A	-	-	D F B B	-	-	
HCM 95th %tile Q(veh)	0	-	-	0.2 0.3 1.2 0.2	-	-	

Timings
2: SR 53 (Dawsonville Hwy) & Sardis Rd

2b. No Build 2028 PM
08/14/2026



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	345	725	17	1167	596	407	234
Future Volume (vph)	345	725	17	1167	596	407	234
Lane Group Flow (vph)	383	806	19	1297	662	452	260
Turn Type	pm+pt	NA	Perm	NA	Perm	Prot	Perm
Protected Phases	1	6		2		4	
Permitted Phases	6		2		2		4
Detector Phase	1	6	2	2	2	4	4
Switch Phase							
Minimum Initial (s)	5.0	15.0	15.0	15.0	15.0	6.0	6.0
Minimum Split (s)	15.0	25.5	25.5	25.5	25.5	42.5	42.5
Total Split (s)	26.0	77.0	51.0	51.0	51.0	43.0	43.0
Total Split (%)	21.7%	64.2%	42.5%	42.5%	42.5%	35.8%	35.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		
Recall Mode	None	C-Min	C-Min	C-Min	C-Min	Max	Max
v/c Ratio	1.05	0.38	0.08	0.97	0.69	0.42	0.39
Control Delay (s/veh)	97.6	8.2	25.1	54.8	8.9	34.2	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	97.6	8.2	25.1	54.8	8.9	34.2	5.4
Queue Length 50th (ft)	~261	72	9	521	47	144	0
Queue Length 95th (ft)	#454	92	27	#679	181	194	61
Internal Link Dist (ft)		1248		786		689	
Turn Bay Length (ft)	430		400		280		330
Base Capacity (vph)	364	2108	244	1341	954	1072	673
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.05	0.38	0.08	0.97	0.69	0.42	0.39

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:WBTU and 6:EBTL, Start of Green

Natural Cycle: 115

Control Type: Actuated-Coordinated

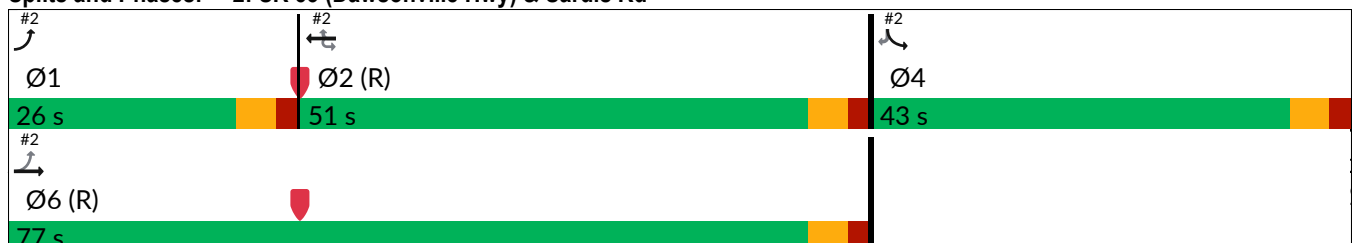
~ Volume exceeds capacity, queue is theoretically infinite.

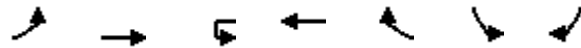
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: SR 53 (Dawsonville Hwy) & Sardis Rd





Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	345	725	17	1167	596	407	234
Future Volume (veh/h)	345	725	17	1167	596	407	234
Initial Q (Qb), veh	0	0		0	0	0	0
Lane Width Adj.	1.00	1.00		1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1870	1870		1870	1870	1870	1870
Adj Flow Rate, veh/h	383	806		1297	0	452	0
Peak Hour Factor	0.90	0.90		0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	374	2117		1347		1080	
Arrive On Green	0.17	0.60		0.38	0.00	0.31	0.00
Sat Flow, veh/h	1781	3647		3647	1585	3456	1585
Grp Volume(v), veh/h	383	806		1297	0	452	0
Grp Sat Flow(s),veh/h/ln	1781	1777		1777	1585	1728	1585
Q Serve(g_s), s	20.5	14.2		42.8	0.0	12.4	0.0
Cycle Q Clear(g_c), s	20.5	14.2		42.8	0.0	12.4	0.0
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	374	2117		1347		1080	
V/C Ratio(X)	1.02	0.38		0.96		0.42	
Avail Cap(c_a), veh/h	374	2117		1347		1080	
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90		1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	38.1	12.7		36.4	0.0	32.6	0.0
Incr Delay (d2), s/veh	50.6	0.5		17.1	0.0	1.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.0	5.1		20.2	0.0	5.3	0.0
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	88.7	13.1		53.5	0.0	33.8	0.0
LnGrp LOS	F	B		D		C	
Approach Vol, veh/h		1189		1297		452	
Approach Delay, s/veh		37.5		53.5		33.8	
Approach LOS		D		D		C	
Timer - Assigned Phs	1	2		4		6	
Phs Duration (G+Y+Rc), s	26.0	51.0		43.0		77.0	
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5	
Max Green Setting (Gmax), s	20.5	45.5		37.5		71.5	
Max Q Clear Time (g_c+I1), s	22.5	44.8		14.4		16.2	
Green Ext Time (p_c), s	0.0	0.6		1.6		12.2	

Intersection Summary

HCM 7th Control Delay, s/veh	44.0
HCM 7th LOS	D

Notes

User approved ignoring U-Turning movement.

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

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	11	971	39	197	929	41	14	2	33	1
Future Volume (vph)	11	971	39	197	929	41	14	2	33	1
Lane Group Flow (vph)	12	1067	43	216	1021	45	0	90	0	44
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Perm	NA	Perm	NA
Protected Phases	1	6		5	2			8		4
Permitted Phases	6		6	2		2	8		4	
Detector Phase	1	6	6	5	2	2	8	8	4	4
Switch Phase										
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	6.0	6.0
Minimum Split (s)	15.0	23.5	23.5	15.0	23.5	23.5	45.5	45.5	45.5	45.5
Total Split (s)	15.0	53.0	53.0	21.0	59.0	59.0	46.0	46.0	46.0	46.0
Total Split (%)	12.5%	44.2%	44.2%	17.5%	49.2%	49.2%	38.3%	38.3%	38.3%	38.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5		5.5		5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None
v/c Ratio	0.03	0.43	0.04	0.47	0.36	0.04		0.49		0.52
Control Delay (s/veh)	3.1	9.3	0.1	13.4	6.7	2.7		25.8		66.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	3.1	9.3	0.1	13.4	6.7	2.7		25.8		66.9
Queue Length 50th (ft)	1	163	0	76	126	2		13		29
Queue Length 95th (ft)	5	281	0	m95	m167	m3		64		68
Internal Link Dist (ft)		618			1248			337		449
Turn Bay Length (ft)	420		340	380		295				
Base Capacity (vph)	505	2470	1141	520	2819	1276		575		367
Starvation Cap Reductn	0	0	0	0	0	0		0		0
Spillback Cap Reductn	0	0	0	0	0	0		0		0
Storage Cap Reductn	0	0	0	0	0	0		0		0
Reduced v/c Ratio	0.02	0.43	0.04	0.42	0.36	0.04		0.16		0.12

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Lynnclyff Dr/Lake Ranch Rd & SR 53 (Dawsonville Hwy)

#3 	#3 	#3 
Ø1	Ø2 (R)	Ø4
15 s	59 s	46 s
#3 	#3 	#3 
Ø5	Ø6 (R)	Ø8
21 s	53 s	46 s

HCM 7th Signalized Intersection Summary
3: Lynncliff Dr/Lake Ranch Rd & SR 53 (Dawsonville Hwy)

2b. No Build 2028 PM
08/14/2026

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	971	39	197	929	41	14	2	66	33	1	6
Future Volume (veh/h)	11	971	39	197	929	41	14	2	66	33	1	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	1067	0	216	1021	0	15	2	0	36	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	512	2751		501	2868		113	12		120	2	
Arrive On Green	0.01	0.77	0.00	0.09	1.00	0.00	0.04	0.04	0.00	0.04	0.04	0.00
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1366	281	0	1462	41	0
Grp Volume(v), veh/h	12	1067	0	216	1021	0	17	0	0	37	0	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1647	0	0	1503	0	0
Q Serve(g_s), s	0.2	11.6	0.0	3.2	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0
Cycle Q Clear(g_c), s	0.2	11.6	0.0	3.2	0.0	0.0	1.1	0.0	0.0	2.8	0.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	0.88		0.00	0.97		0.00
Lane Grp Cap(c), veh/h	512	2751		501	2868		125	0		122	0	
V/C Ratio(X)	0.02	0.39		0.43	0.36		0.14	0.00		0.30	0.00	
Avail Cap(c_a), veh/h	629	2751		648	2868		556	0		543	0	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.37	0.37	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	2.7	4.4	0.0	3.0	0.0	0.0	55.6	0.0	0.0	56.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0	0.2	0.1	0.0	0.5	0.0	0.0	1.4	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.8	0.0	0.5	0.1	0.0	0.5	0.0	0.0	1.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	2.7	4.8	0.0	3.2	0.1	0.0	56.1	0.0	0.0	57.7	0.0	0.0
LnGrp LOS	A	A		A	A		E			E		
Approach Vol, veh/h	1079			1237			17			37		
Approach Delay, s/veh	4.8			0.7			56.1			57.7		
Approach LOS	A			A			E			E		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	102.3		10.5	11.1	98.4		10.5				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	53.5		40.5	15.5	47.5		40.5				
Max Q Clear Time (g_c+I1), s	2.2	2.0		4.8	5.2	13.6		3.1				
Green Ext Time (p_c), s	0.0	17.0		0.2	0.4	15.3		0.1				

Intersection Summary

HCM 7th Control Delay, s/veh 3.8
HCM 7th LOS A

Notes

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

1: Sardis Rd & Tammi Ln/E Sardis Rd Performance by movement

Movement	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.1	0.1	0.5	3.9	0.0	0.0	0.0	3.0	0.2	0.4
Total Del/Veh (s)	11.4	5.3	54.3	1.9	10.0	5.3	4.7	8.1	0.2	3.4

2: SR 53 (Dawsonville Hwy) & Sardis Rd Performance by movement

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.0	7.8	5.0	6.9	0.0	0.0	0.0	2.9
Total Del/Veh (s)	70.3	12.3	61.6	69.8	18.6	34.0	0.4	4.8	40.0

3: Lynnclyff Dr/Lake Ranch Rd & SR 53 (Dawsonville Hwy) Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	2.3	0.3	2.5	0.0	0.0	0.0	0.2	0.3	0.1	0.0	0.0	0.0
Total Del/Veh (s)	9.8	9.3	2.6	23.0	12.8	10.3	52.7	59.9	2.3	54.4	4.3	4.4

3: Lynnclyff Dr/Lake Ranch Rd & SR 53 (Dawsonville Hwy) Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	12.6

4: Lake Ranch Rd & Barker Rd & Corral Trail Performance by movement

Movement	EBR	NBL	All
Denied Del/Veh (s)	0.1	0.0	0.1
Total Del/Veh (s)	0.2	2.2	1.3

Total Network Performance

Movement	All
Denied Del/Veh (s)	3.0
Total Del/Veh (s)	48.3

FUTURE “BUILD” INTERSECTION ANALYSIS

Intersection

Int Delay, s/veh 1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↗	↗	↗	↗	↗	↗	
Traffic Vol, veh/h	1	0	4	9	0	103	1	547	11	49	1033	0
Future Vol, veh/h	1	0	4	9	0	103	1	547	11	49	1033	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Yield	-	-	None	-	-	None
Storage Length	-	-	-	-	-	450	185	-	-	185	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	4	10	0	114	1	608	12	54	1148	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1563	1879	574	1299	1873	310	1148	0	0	620	0	0
Stage 1	1257	1257	-	616	616	-	-	-	-	-	-	-
Stage 2	306	622	-	683	1257	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	76	71	462	119	71	686	604	-	-	956	-	-
Stage 1	181	241	-	445	480	-	-	-	-	-	-	-
Stage 2	679	477	-	406	241	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	59	66	462	111	67	686	604	-	-	956	-	-
Mov Cap-2 Maneuver	59	66	-	111	67	-	-	-	-	-	-	-
Stage 1	171	227	-	444	479	-	-	-	-	-	-	-
Stage 2	564	476	-	379	227	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	23.91		13.66		0.02		0.41	
HCM LOS	C		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	604	-	-	196 111 686	956	-	-
HCM Lane V/C Ratio	0.002	-	-	0.028 0.09 0.167	0.057	-	-
HCM Ctrl Dly (s/v)	11	-	-	23.9 40.7 11.3	9	-	-
HCM Lane LOS	B	-	-	C E B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1 0.3 0.6	0.2	-	-



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	223	836	18	828	336	705	327
Future Volume (vph)	223	836	18	828	336	705	327
Lane Group Flow (vph)	237	889	19	881	357	750	348
Turn Type	pm+pt	NA	Perm	NA	Perm	Prot	Perm
Protected Phases	1	6		2		4	
Permitted Phases	6		2		2		4
Detector Phase	1	6	2	2	2	4	4
Switch Phase							
Minimum Initial (s)	5.0	15.0	15.0	15.0	15.0	6.0	6.0
Minimum Split (s)	15.0	25.5	25.5	25.5	25.5	42.5	42.5
Total Split (s)	24.0	75.0	51.0	51.0	51.0	45.0	45.0
Total Split (%)	20.0%	62.5%	42.5%	42.5%	42.5%	37.5%	37.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		
Recall Mode	None	C-Min	C-Min	C-Min	C-Min	Max	Max
v/c Ratio	0.65	0.43	0.08	0.60	0.41	0.66	0.46
Control Delay (s/veh)	29.8	10.4	23.8	29.9	4.0	38.0	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	29.8	10.4	23.8	29.9	4.0	38.0	5.2
Queue Length 50th (ft)	55	108	9	276	0	260	0
Queue Length 95th (ft)	163	137	28	371	61	328	66
Internal Link Dist (ft)		244		786		253	
Turn Bay Length (ft)			400		280		
Base Capacity (vph)	416	2049	247	1470	866	1130	754
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.43	0.08	0.60	0.41	0.66	0.46

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

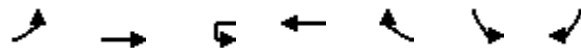
Offset: 0 (0%), Referenced to phase 2:WBTU and 6:EBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Splits and Phases: 2: SR 53 (Dawsonville Hwy) & Sardis Rd

#2 	#2 	#2
Ø1	Ø2 (R)	Ø4
24 s	51 s	45 s
#2 		
Ø6 (R)		
75 s		



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	223	836	18	828	336	705	327
Future Volume (veh/h)	223	836	18	828	336	705	327
Initial Q (Qb), veh	0	0		0	0	0	0
Lane Width Adj.	1.00	1.00		1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1870	1870		1870	1870	1870	1870
Adj Flow Rate, veh/h	237	889		881	0	750	0
Peak Hour Factor	0.94	0.94		0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	383	2058		1579		1138	
Arrive On Green	0.09	0.58		0.44	0.00	0.33	0.00
Sat Flow, veh/h	1781	3647		3647	1585	3456	1585
Grp Volume(v), veh/h	237	889		881	0	750	0
Grp Sat Flow(s),veh/h/ln	1781	1777		1777	1585	1728	1585
Q Serve(g_s), s	8.3	16.8		22.0	0.0	22.3	0.0
Cycle Q Clear(g_c), s	8.3	16.8		22.0	0.0	22.3	0.0
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	383	2058		1579		1138	
V/C Ratio(X)	0.62	0.43		0.56		0.66	
Avail Cap(c_a), veh/h	499	2058		1579		1138	
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	17.9	14.2		24.6	0.0	34.5	0.0
Incr Delay (d2), s/veh	1.6	0.7		1.4	0.0	3.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	6.1		8.8	0.0	9.7	0.0
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	19.5	14.8		26.1	0.0	37.5	0.0
LnGrp LOS	B	B		C		D	
Approach Vol, veh/h		1126		881		750	
Approach Delay, s/veh		15.8		26.1		37.5	
Approach LOS		B		C		D	
Timer - Assigned Phs	1	2		4		6	
Phs Duration (G+Y+Rc), s	16.2	58.8		45.0		75.0	
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5	
Max Green Setting (Gmax), s	18.5	45.5		39.5		69.5	
Max Q Clear Time (g_c+l1), s	10.3	24.0		24.3		18.8	
Green Ext Time (p_c), s	0.4	9.7		2.6		13.8	

Intersection Summary

HCM 7th Control Delay, s/veh	25.0
HCM 7th LOS	C

Notes

User approved ignoring U-Turning movement.

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

Timings

3: Lynnclyff Dr/Lake Ranch Rd & SR 53 (Dawsonville Hwy)

3a. Future Build 2028 AM

08/14/2026

											
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	20	902	9	7	86	662	26	20	4	84	3
Future Volume (vph)	20	902	9	7	86	662	26	20	4	84	3
Lane Group Flow (vph)	21	940	9	0	97	690	27	0	145	0	112
Turn Type	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	Perm	NA	Perm	NA
Protected Phases	1	6			5	2			8		4
Permitted Phases	6		6	5	2		2	8		4	
Detector Phase	1	6	6	5	5	2	2	8	8	4	4
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	5.0	15.0	15.0	6.0	6.0	6.0	6.0
Minimum Split (s)	15.0	23.5	23.5	15.0	15.0	23.5	23.5	45.5	45.5	45.5	45.5
Total Split (s)	15.0	56.0	56.0	17.0	17.0	58.0	58.0	47.0	47.0	47.0	47.0
Total Split (%)	12.5%	46.7%	46.7%	14.2%	14.2%	48.3%	48.3%	39.2%	39.2%	39.2%	39.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	5.5	5.5	5.5		5.5	5.5	5.5		5.5		5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	C-Min	C-Min	None	None	C-Min	C-Min	None	None	None	None
v/c Ratio	0.04	0.39	0.01		0.22	0.26	0.02		0.48		0.94
Control Delay (s/veh)	4.2	9.8	0.0		3.9	4.3	0.0		17.3		113.7
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	4.2	9.8	0.0		3.9	4.3	0.0		17.3		113.7
Queue Length 50th (ft)	3	154	0		10	39	0		18		80
Queue Length 95th (ft)	11	244	0		m25	86	m0		76		#157
Internal Link Dist (ft)		618				607			337		449
Turn Bay Length (ft)	420		340		380		295				
Base Capacity (vph)	631	2398	1096		496	2628	1194		620		310
Starvation Cap Reductn	0	0	0		0	0	0		0		0
Spillback Cap Reductn	0	0	0		0	0	0		0		0
Storage Cap Reductn	0	0	0		0	0	0		0		0
Reduced v/c Ratio	0.03	0.39	0.01		0.20	0.26	0.02		0.23		0.36

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Lynnclyff Dr/Lake Ranch Rd & SR 53 (Dawsonville Hwy)

#3 	#3 	#3 
Ø1	Ø2 (R)	Ø4
15 s	58 s	47 s
#3 	#3 	#3 
Ø5	Ø6 (R)	Ø8
17 s	56 s	47 s

HCM 7th Signalized Intersection Summary
3: Lynnclyff Dr/Lake Ranch Rd & SR 53 (Dawsonville Hwy)

3a. Future Build 2028 AM
08/14/2026

												
Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	20	902	9	7	86	662	26	20	4	115	84	3
Future Volume (veh/h)	20	902	9	7	86	662	26	20	4	115	84	3
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No				No			No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870		1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	21	940	0		90	690	0	21	4	0	88	3
Peak Hour Factor	0.96	0.96	0.96		0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2		2	2	2	2	2	2	2	2
Cap, veh/h	658	2645			519	2711		164	27		172	4
Arrive On Green	0.02	0.74	0.00		0.08	1.00	0.00	0.08	0.08	0.00	0.08	0.08
Sat Flow, veh/h	1781	3554	1585		1781	3554	1585	1381	339	0	1434	49
Grp Volume(v), veh/h	21	940	0		90	690	0	25	0	0	91	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585		1781	1777	1585	1719	0	0	1483	0
Q Serve(g_s), s	0.3	11.0	0.0		1.4	0.0	0.0	0.0	0.0	0.0	5.6	0.0
Cycle Q Clear(g_c), s	0.3	11.0	0.0		1.4	0.0	0.0	1.5	0.0	0.0	7.1	0.0
Prop In Lane	1.00		1.00		1.00		1.00	0.84		0.00	0.97	
Lane Grp Cap(c), veh/h	658	2645			519	2711		190	0		175	0
V/C Ratio(X)	0.03	0.36			0.17	0.25		0.13	0.00		0.52	0.00
Avail Cap(c_a), veh/h	762	2645			620	2711		583	0		556	0
HCM Platoon Ratio	1.00	1.00	1.00		2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00		1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	3.3	5.3	0.0		3.4	0.0	0.0	51.7	0.0	0.0	54.1	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.0		0.2	0.2	0.0	0.3	0.0	0.0	2.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	3.0	0.0		0.3	0.1	0.0	0.7	0.0	0.0	2.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.4	5.7	0.0		3.6	0.2	0.0	52.0	0.0	0.0	56.5	0.0
LnGrp LOS	A	A			A	A		D			E	
Approach Vol, veh/h		961				780			25			91
Approach Delay, s/veh		5.7				0.6			52.0			56.5
Approach LOS		A				A			D			E
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.0	97.1		14.9	10.3	94.8		14.9				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	52.5		41.5	11.5	50.5		41.5				
Max Q Clear Time (g_c+I1), s	2.3	2.0		9.1	3.4	13.0		3.5				
Green Ext Time (p_c), s	0.0	9.8		0.5	0.1	13.6		0.1				

Intersection Summary

HCM 7th Control Delay, s/veh 6.6
HCM 7th LOS A

Notes

User approved ignoring U-Turning movement.

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

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	20
Future Volume (veh/h)	20
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	0
Peak Hour Factor	0.96
Percent Heavy Veh, %	2
Cap, veh/h	
Arrive On Green	0.00
Sat Flow, veh/h	0
Grp Volume(v), veh/h	0
Grp Sat Flow(s),veh/h/ln	0
Q Serve(g_s), s	0.0
Cycle Q Clear(g_c), s	0.0
Prop In Lane	0.00
Lane Grp Cap(c), veh/h	
V/C Ratio(X)	
Avail Cap(c_a), veh/h	
HCM Platoon Ratio	1.00
Upstream Filter(l)	0.00
Uniform Delay (d), s/veh	0.0
Incr Delay (d2), s/veh	0.0
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	0.0
LnGrp LOS	
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	

4: Lake Ranch Rd & Barker Rd & Corral Trail Performance by movement

Movement	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBT	All
Denied Del/Veh (s)	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.3	0.1	0.1
Total Del/Veh (s)	0.7	0.2	4.7	4.6	3.1	1.7	2.5	1.9	4.0	2.1

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑	↑↑↑	↗
Traffic Vol, veh/h	0	64	0	559	979	67
Future Vol, veh/h	0	64	0	559	979	67
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Free
Storage Length	-	0	-	-	-	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	70	0	608	1064	73
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	532	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	421	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	-	421	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB	SB			
HCM Ctrl Dly, s/v	15.23	0	0			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	EBLn1	SBT			
Capacity (veh/h)	-	421	-			
HCM Lane V/C Ratio	-	0.165	-			
HCM Ctrl Dly (s/v)	-	15.2	-			
HCM Lane LOS	-	C	-			
HCM 95th %tile Q(veh)	-	0.6	-			

Intersection

Int Delay, s/veh 0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1059	1101	55	0	41
Future Vol, veh/h	0	1059	1101	55	0	41
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Yield
Storage Length	-	-	-	150	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1151	1197	60	0	45

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	0	-	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	13.98
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	445
HCM Lane V/C Ratio	-	-	0.1
HCM Ctrl Dly (s/v)	-	-	14
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.3

Intersection

Int Delay, s/veh 0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1059	1089	54	0	39
Future Vol, veh/h	0	1059	1089	54	0	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Yield
Storage Length	-	-	-	150	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1151	1184	59	0	42

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	0	-	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	13.84
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	450
HCM Lane V/C Ratio	-	-	0.094
HCM Ctrl Dly (s/v)	-	-	13.8
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.3

Intersection

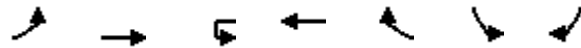
Int Delay, s/veh 1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↗	↗	↗	↗	↗	↗	
Traffic Vol, veh/h	3	0	5	7	0	135	8	930	13	34	715	0
Future Vol, veh/h	3	0	5	7	0	135	8	930	13	34	715	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Yield	-	-	None	-	-	None
Storage Length	-	-	-	-	-	450	185	-	-	185	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	0	5	8	0	147	9	1011	14	37	777	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1374	1893	389	1498	1886	513	777	0	0	1025	0	0
Stage 1	851	851	-	1035	1035	-	-	-	-	-	-	-
Stage 2	523	1042	-	463	851	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	105	69	610	85	70	507	835	-	-	673	-	-
Stage 1	321	374	-	248	307	-	-	-	-	-	-	-
Stage 2	505	305	-	549	374	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	69	65	610	78	65	507	835	-	-	673	-	-
Mov Cap-2 Maneuver	69	65	-	78	65	-	-	-	-	-	-	-
Stage 1	303	354	-	245	304	-	-	-	-	-	-	-
Stage 2	355	302	-	514	354	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Ctrl Dly, s/v	29.48		16.99		0.08		0.48	
HCM LOS	D		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1WBLn2	SBL	SBT	SBR
Capacity (veh/h)	835	-	-	156 78 507 673	-	-	-
HCM Lane V/C Ratio	0.01	-	-	0.056 0.097 0.29 0.055	-	-	-
HCM Ctrl Dly (s/v)	9.4	-	-	29.5 55.8 15 10.7	-	-	-
HCM Lane LOS	A	-	-	D F B B	-	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2 0.3 1.2 0.2	-	-	-



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	355	773	17	1224	596	417	234
Future Volume (vph)	355	773	17	1224	596	417	234
Lane Group Flow (vph)	394	859	19	1360	662	463	260
Turn Type	pm+pt	NA	Perm	NA	Perm	Prot	Perm
Protected Phases	1	6		2		4	
Permitted Phases	6		2		2		4
Detector Phase	1	6	2	2	2	4	4
Switch Phase							
Minimum Initial (s)	5.0	15.0	15.0	15.0	15.0	6.0	6.0
Minimum Split (s)	15.0	25.5	25.5	25.5	25.5	42.5	42.5
Total Split (s)	26.0	77.0	51.0	51.0	51.0	43.0	43.0
Total Split (%)	21.7%	64.2%	42.5%	42.5%	42.5%	35.8%	35.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag	Lead		Lag	Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		
Recall Mode	None	C-Min	C-Min	C-Min	C-Min	Max	Max
v/c Ratio	1.08	0.41	0.08	1.01	0.71	0.43	0.39
Control Delay (s/veh)	111.6	8.6	25.2	65.4	10.2	34.3	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	111.6	8.6	25.2	65.4	10.2	34.3	5.4
Queue Length 50th (ft)	~276	86	10	~574	61	148	0
Queue Length 95th (ft)	#513	107	27	#734	209	198	61
Internal Link Dist (ft)		244		786		253	
Turn Bay Length (ft)			400		280		
Base Capacity (vph)	364	2108	233	1341	938	1072	673
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.08	0.41	0.08	1.01	0.71	0.43	0.39

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:WBTU and 6:EBTL, Start of Green

Natural Cycle: 125

Control Type: Actuated-Coordinated

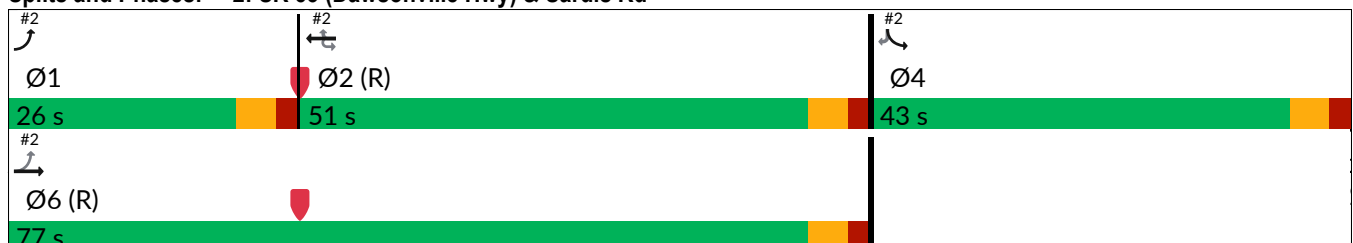
~ Volume exceeds capacity, queue is theoretically infinite.

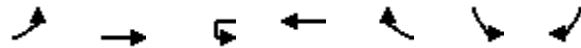
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: SR 53 (Dawsonville Hwy) & Sardis Rd





Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	355	773	17	1224	596	417	234
Future Volume (veh/h)	355	773	17	1224	596	417	234
Initial Q (Qb), veh	0	0		0	0	0	0
Lane Width Adj.	1.00	1.00		1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1870	1870		1870	1870	1870	1870
Adj Flow Rate, veh/h	394	859		1360	0	463	0
Peak Hour Factor	0.90	0.90		0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	364	2117		1347		1080	
Arrive On Green	0.17	0.60		0.38	0.00	0.31	0.00
Sat Flow, veh/h	1781	3647		3647	1585	3456	1585
Grp Volume(v), veh/h	394	859		1360	0	463	0
Grp Sat Flow(s),veh/h/ln	1781	1777		1777	1585	1728	1585
Q Serve(g_s), s	20.5	15.5		45.5	0.0	12.8	0.0
Cycle Q Clear(g_c), s	20.5	15.5		45.5	0.0	12.8	0.0
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	364	2117		1347		1080	
V/C Ratio(X)	1.08	0.41		1.01		0.43	
Avail Cap(c_a), veh/h	364	2117		1347		1080	
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	39.5	12.9		37.3	0.0	32.7	0.0
Incr Delay (d2), s/veh	70.7	0.6		26.8	0.0	1.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.9	5.5		23.1	0.0	5.5	0.0
Unsig. Movement Delay, s/veh							
LnGrp Delay(d), s/veh	110.2	13.5		64.1	0.0	34.0	0.0
LnGrp LOS	F	B		F		C	
Approach Vol, veh/h		1253		1360		463	
Approach Delay, s/veh		43.9		64.1		34.0	
Approach LOS		D		E		C	
Timer - Assigned Phs	1	2		4		6	
Phs Duration (G+Y+Rc), s	26.0	51.0		43.0		77.0	
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5	
Max Green Setting (Gmax), s	20.5	45.5		37.5		71.5	
Max Q Clear Time (g_c+l1), s	22.5	47.5		14.8		17.5	
Green Ext Time (p_c), s	0.0	0.0		1.6		13.3	

Intersection Summary

HCM 7th Control Delay, s/veh	51.3
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

Timings

3: Lynnclyff Dr/Lake Ranch Rd & SR 53 (Dawsonville Hwy)

3b. Future Build 2028 PM

08/14/2026

											
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	35	971	39	10	199	944	41	14	6	81	3
Future Volume (vph)	35	971	39	10	199	944	41	14	6	81	3
Lane Group Flow (vph)	38	1067	43	0	230	1037	45	0	95	0	110
Turn Type	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	Perm	NA	Perm	NA
Protected Phases	1	6			5	2			8		4
Permitted Phases	6		6	5	2		2	8		4	
Detector Phase	1	6	6	5	5	2	2	8	8	4	4
Switch Phase											
Minimum Initial (s)	5.0	15.0	15.0	5.0	5.0	15.0	15.0	6.0	6.0	6.0	6.0
Minimum Split (s)	15.0	23.5	23.5	15.0	15.0	23.5	23.5	45.5	45.5	45.5	45.5
Total Split (s)	15.0	51.0	51.0	23.0	23.0	59.0	59.0	46.0	46.0	46.0	46.0
Total Split (%)	12.5%	42.5%	42.5%	19.2%	19.2%	49.2%	49.2%	38.3%	38.3%	38.3%	38.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	5.5	5.5	5.5		5.5	5.5	5.5		5.5		5.5
Lead/Lag	Lead	Lag	Lag	Lead	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	C-Min	C-Min	None	None	C-Min	C-Min	None	None	None	None
v/c Ratio	0.09	0.48	0.04		0.51	0.40	0.04		0.37		0.74
Control Delay (s/veh)	5.3	14.1	0.1		18.4	10.9	3.4		19.2		73.5
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0		0.0		0.0
Total Delay (s/veh)	5.3	14.1	0.1		18.4	10.9	3.4		19.2		73.5
Queue Length 50th (ft)	5	213	0		95	166	2		16		78
Queue Length 95th (ft)	17	365	0		m115	m189	m4		64		135
Internal Link Dist (ft)		618				607			337		449
Turn Bay Length (ft)	420		340		380		295				
Base Capacity (vph)	462	2237	1046		506	2572	1170		582		399
Starvation Cap Reductn	0	0	0		0	0	0		0		0
Spillback Cap Reductn	0	0	0		0	0	0		0		0
Storage Cap Reductn	0	0	0		0	0	0		0		0
Reduced v/c Ratio	0.08	0.48	0.04		0.45	0.40	0.04		0.16		0.28

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Lynnclyff Dr/Lake Ranch Rd & SR 53 (Dawsonville Hwy)

#3 	#3 	#3 
Ø1	Ø2 (R)	Ø4
15 s	59 s	46 s
#3 	#3 	#3 
Ø5	Ø6 (R)	Ø8
23 s	51 s	46 s

A&R Engineering, Inc

26-145 Retail Dev at 2714 Barker Rd, Gainesville, GA

Synchro 12 Report

Page 5

HCM 7th Signalized Intersection Summary
3: Lynnclyff Dr/Lake Ranch Rd & SR 53 (Dawsonville Hwy)

3b. Future Build 2028 PM
08/14/2026

												
Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations		 				 			 			
Traffic Volume (veh/h)	35	971	39	10	199	944	41	14	6	66	81	3
Future Volume (veh/h)	35	971	39	10	199	944	41	14	6	66	81	3
Initial Q (Qb), veh	0	0	0		0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00		1.00		1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No				No			No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870		1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	38	1067	0		219	1037	0	15	7	0	89	3
Peak Hour Factor	0.91	0.91	0.91		0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2		2	2	2	2	2	2	2	2
Cap, veh/h	510	2592			480	2676		136	54		172	4
Arrive On Green	0.03	0.73	0.00		0.11	1.00	0.00	0.08	0.08	0.00	0.08	0.08
Sat Flow, veh/h	1781	3554	1585		1781	3554	1585	1069	680	0	1423	48
Grp Volume(v), veh/h	38	1067	0		219	1037	0	22	0	0	92	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585		1781	1777	1585	1749	0	0	1471	0
Q Serve(g_s), s	0.6	13.9	0.0		4.0	0.0	0.0	0.0	0.0	0.0	6.0	0.0
Cycle Q Clear(g_c), s	0.6	13.9	0.0		4.0	0.0	0.0	1.3	0.0	0.0	7.3	0.0
Prop In Lane	1.00		1.00		1.00		1.00	0.68		0.00	0.97	
Lane Grp Cap(c), veh/h	510	2592			480	2676		190	0		176	0
V/C Ratio(X)	0.07	0.41			0.46	0.39		0.12	0.00		0.52	0.00
Avail Cap(c_a), veh/h	598	2592			644	2676		585	0		542	0
HCM Platoon Ratio	1.00	1.00	1.00		2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00		1.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	3.6	6.3	0.0		4.3	0.0	0.0	51.4	0.0	0.0	54.0	0.0
Incr Delay (d2), s/veh	0.1	0.5	0.0		0.7	0.4	0.0	0.3	0.0	0.0	2.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	4.0	0.0		0.8	0.2	0.0	0.6	0.0	0.0	2.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	3.6	6.8	0.0		5.0	0.4	0.0	51.7	0.0	0.0	56.4	0.0
LnGrp LOS	A	A			A	A		D			E	
Approach Vol, veh/h		1105				1256			22			92
Approach Delay, s/veh		6.7				1.2			51.7			56.4
Approach LOS		A				A			D			E
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.1	95.8		15.1	11.9	93.0		15.1				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5		5.5				
Max Green Setting (Gmax), s	9.5	53.5		40.5	17.5	45.5		40.5				
Max Q Clear Time (g_c+I1), s	2.6	2.0		9.3	6.0	15.9		3.3				
Green Ext Time (p_c), s	0.0	17.3		0.5	0.4	14.3		0.1				

Intersection Summary

HCM 7th Control Delay, s/veh 6.2
HCM 7th LOS A

Notes

User approved pedestrian interval to be less than phase max green.
User approved ignoring U-Turning movement.

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	16
Future Volume (veh/h)	16
Initial Q (Qb), veh	0
Lane Width Adj.	1.00
Ped-Bike Adj(A_pbT)	1.00
Parking Bus, Adj	1.00
Work Zone On Approach	
Adj Sat Flow, veh/h/ln	1870
Adj Flow Rate, veh/h	0
Peak Hour Factor	0.91
Percent Heavy Veh, %	2
Cap, veh/h	
Arrive On Green	0.00
Sat Flow, veh/h	0
Grp Volume(v), veh/h	0
Grp Sat Flow(s),veh/h/ln	0
Q Serve(g_s), s	0.0
Cycle Q Clear(g_c), s	0.0
Prop In Lane	0.00
Lane Grp Cap(c), veh/h	
V/C Ratio(X)	
Avail Cap(c_a), veh/h	
HCM Platoon Ratio	1.00
Upstream Filter(I)	0.00
Uniform Delay (d), s/veh	0.0
Incr Delay (d2), s/veh	0.0
Initial Q Delay(d3), s/veh	0.0
%ile BackOfQ(50%),veh/ln	0.0
Unsig. Movement Delay, s/veh	
LnGrp Delay(d), s/veh	0.0
LnGrp LOS	
Approach Vol, veh/h	
Approach Delay, s/veh	
Approach LOS	
Timer - Assigned Phs	
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.	

4: Lake Ranch Rd & Barker Rd & Corral Trail Performance by movement

Movement	EBT	EBR	WBL	WBT	WBR	NBL	NBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.2	0.1	0.7	0.2
Total Del/Veh (s)	0.7	0.2	5.8	5.1	3.7	1.7	1.8	2.7

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗		↑↑	↑↑↑	↗
Traffic Vol, veh/h	0	46	0	951	681	46
Future Vol, veh/h	0	46	0	951	681	46
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Free
Storage Length	-	0	-	-	-	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	50	0	1034	740	50
Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	-	370	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	536	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	-	536	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB	SB			
HCM Ctrl Dly, s/v	12.41	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT EBLn1		SBT			
Capacity (veh/h)	- 536		-			
HCM Lane V/C Ratio	- 0.093		-			
HCM Ctrl Dly (s/v)	- 12.4		-			
HCM Lane LOS	- B		-			
HCM 95th %tile Q(veh)	- 0.3		-			

Intersection

Int Delay, s/veh 0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1127	1390	67	0	53
Future Vol, veh/h	0	1127	1390	67	0	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Yield
Storage Length	-	-	-	150	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1225	1511	73	0	58

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	0	-	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	17.26
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	351
HCM Lane V/C Ratio	-	-	0.164
HCM Ctrl Dly (s/v)	-	-	17.3
HCM Lane LOS	-	-	C
HCM 95th %tile Q(veh)	-	-	0.6

Intersection

Int Delay, s/veh 0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↑		↑
Traffic Vol, veh/h	0	1127	1377	66	0	50
Future Vol, veh/h	0	1127	1377	66	0	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	Free	-	Yield
Storage Length	-	-	-	150	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1225	1497	72	0	54

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	0	-	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Ctrl Dly, s/v	0	0	16.98
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	SBLn1
Capacity (veh/h)	-	-	355
HCM Lane V/C Ratio	-	-	0.153
HCM Ctrl Dly (s/v)	-	-	17
HCM Lane LOS	-	-	C
HCM 95th %tile Q(veh)	-	-	0.5

TRAFFIC VOLUME WORKSHEETS

26-145 Retail Dev at 2714 Barker Rd, Gainesville, GA
Traffic Volumes

A&R Engineering
August 2026

1.Sardis Rd @ E Sardis Rd

A.M. Peak Hour

Condition	Sardis Road Northbound					Sardis Road Southbound					Tammi Lane Eastbound					E. Sardis Road Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2026 Traffic Counts:	0	1	529	11	541	0	48	1005	0	1053	0	1	0	4	5	0	9	0	101	110
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2028 Volumes:	0	1	540	11	552	0	49	1025	0	1074	0	1	0	4	5	0	9	0	103	112
Total New Trips:	0	0	7	0	7	0	0	8	0	8	0	0	0	0	0	0	0	0	0	0
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2028 Traffic Volumes:	0	1	547	11	559	0	49	1033	0	1082	0	1	0	4	5	0	9	0	103	112

P.M. Peak Hour

Condition	Sardis Road Northbound					Sardis Road Southbound					Tammi Lane Eastbound					E. Sardis Road Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2026 Traffic Counts:	0	8	902	13	923	0	33	691	0	724	0	3	0	5	8	0	7	0	132	139
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2028 Volumes:	0	8	920	13	941	0	34	705	0	739	0	3	0	5	8	0	7	0	135	142
Total New Trips:	0	0	10	0	10	0	0	10	0	10	0	0	0	0	0	0	0	0	0	0
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2028 Traffic Volumes:	0	8	930	13	951	0	34	715	0	749	0	3	0	5	8	0	7	0	135	142

Number of Years = 2 (2026 to 2028)
Growth Factor (%) = 1

26-145 Retail Dev at 2714 Barker Rd, Gainesville, GA
Traffic Volumes

A&R Engineering
August 2026

2.SR 53 @ Sardis Rd

A.M. Peak Hour

Condition	-					Sardis Road					SR 53 (Dawsonville Highway)					SR 53 (Dawsonville Highway)				
	Northbound					Southbound					Eastbound					Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2026 Traffic Counts:	0	0	0	0	0	0	684	0	321	1005	0	212	785	0	997	18	0	766	329	1113
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2028 Volumes:	0	0	0	0	0	0	698	0	327	1025	0	216	801	0	1017	18	0	781	336	1135
Total New Trips:	0	0	0	0	0	0	7	0	0	7	0	7	35	0	42	0	0	47	0	47
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2028 Traffic Volumes:	0	0	0	0	0	0	705	0	327	1032	0	223	836	0	1059	18	0	828	336	1182

P.M. Peak Hour

Condition	-					Sardis Road					SR 53 (Dawsonville Highway)					SR 53 (Dawsonville Highway)				
	Northbound					Southbound					Eastbound					Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2026 Traffic Counts:	0	0	0	0	0	0	399	0	229	628	0	338	711	0	1049	17	0	1144	584	1745
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2028 Volumes:	0	0	0	0	0	0	407	0	234	641	0	345	725	0	1070	17	0	1167	596	1780
Total New Trips:	0	0	0	0	0	0	10	0	0	10	0	10	48	0	58	0	0	57	0	57
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2028 Traffic Volumes:	0	0	0	0	0	0	417	0	234	651	0	355	773	0	1128	17	0	1224	596	1837

Number of Years = 2 (2026 to 2028)
Growth Factor (%) = 1

26-145 Retail Dev at 2714 Barker Rd, Gainesville, GA
Traffic Volumes

A&R Engineering
August 2026

3.SR 53 @ Lake Ranch Dr

A.M. Peak Hour

Condition	Lynncliff Dr Northbound					Lake Ranch Drive Southbound					SR 53 (Dawsonville Highway) Eastbound					SR 53 (Dawsonville Highway) Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2026 Traffic Counts:	0	20	1	113	134	0	48	2	13	63	0	0	884	9	893	0	83	638	25	746
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2028 Volumes:	0	20	1	115	136	0	49	2	13	64	0	0	902	9	911	0	85	651	26	762
Total New Trips:	0	0	3	0	3	0	35	1	7	43	0	20	0	0	20	7	1	11	0	19
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2028 Traffic Volumes:	0	20	4	115	139	0	84	3	20	107	0	20	902	9	931	7	86	662	26	781

P.M. Peak Hour

Condition	Lynncliff Dr Northbound					Lake Ranch Drive Southbound					SR 53 (Dawsonville Highway) Eastbound					SR 53 (Dawsonville Highway) Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2026 Traffic Counts:	0	14	2	65	81	0	32	1	6	39	0	11	952	38	1001	0	193	911	40	1144
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2028 Volumes:	0	14	2	66	82	0	33	1	6	40	0	11	971	39	1021	0	197	929	41	1167
Total New Trips:	0	0	4	0	4	0	48	2	10	60	0	24	0	0	24	10	2	15	0	27
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2028 Traffic Volumes:	0	14	6	66	86	0	81	3	16	100	0	35	971	39	1045	10	199	944	41	1194

Number of Years = 2 (2026 to 2028)
Growth Factor (%) = 1

26-145 Retail Dev at 2714 Barker Rd, Gainesville, GA
Traffic Volumes

A&R Engineering
August 2026

4.Lake Ranch Dr @ Barker Rd

A.M. Peak Hour

Condition	Lake Ranch Drive Northbound					Corral Trail Southbound					Lake Ranch Drive Eastbound					Barker Road Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2026 Traffic Counts:	0	25	1	1	27	0	0	1	0	1	0	0	0	62	62	0	0	1	0	1
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2028 Volumes:	0	26	1	1	28	0	0	1	0	1	0	0	0	63	63	0	0	1	0	1
Total New Trips:	0	0	0	23	23	0	0	0	0	0	0	0	2	0	2	0	44	1	0	45
Pass-by Trips:	0	-1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Future 2028 Traffic Volumes:	0	25	1	25	51	0	0	1	0	1	0	0	2	63	65	0	44	2	1	47

P.M. Peak Hour

Condition	Lake Ranch Drive Northbound					Corral Trail Southbound					Lake Ranch Drive Eastbound					Barker Road Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2026 Traffic Counts:	0	72	0	0	72	0	0	0	0	0	0	0	0	50	50	0	0	0	0	0
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2028 Volumes:	0	73	0	0	73	0	0	0	0	0	0	0	0	51	51	0	0	0	0	0
Total New Trips:	0	0	0	28	28	0	0	0	0	0	0	0	2	0	2	0	59	2	0	61
Pass-by Trips:	0	-3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
Future 2028 Traffic Volumes:	0	70	0	31	101	0	0	0	0	0	0	0	2	51	53	0	59	2	3	64

Number of Years = 2 (2026 to 2028)
Growth Factor (%) = 1

26-145 Retail Dev at 2714 Barker Rd, Gainesville, GA
Traffic Volumes

A&R Engineering
August 2026

5.Sardis Rd @ Drwy 1 (RIRO)

A.M. Peak Hour

Condition	Sardis Road Northbound					Sardis Road Southbound					Site Driveway 1 (Righ-In/ Right-Out) Eastbound					- Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2026 Traffic Counts:	0	0	541	0	541	0	0	1018	0	1018	0	0	0	0	0	0	0	0	0	0
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2028 Volumes:	0	0	552	0	552	0	0	1038	0	1038	0	0	0	0	0	0	0	0	0	0
Total New Trips:	0	0	7	0	7	0	0	0	8	8	0	0	0	7	7	0	0	0	0	0
Pass-by Trips:	0	0	0	0	0	0	0	-59	59	0	0	0	0	57	57	0	0	0	0	0
Future 2028 Traffic Volumes:	0	0	559	0	559	0	0	979	67	1046	0	0	0	64	64	0	0	0	0	0

P.M. Peak Hour

Condition	Sardis Road Northbound					Sardis Road Southbound					Site Driveway 1 (Righ-In/ Right-Out) Eastbound					- Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2026 Traffic Counts:	0	0	923	0	923	0	0	703	0	703	0	0	0	0	0	0	0	0	0	0
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2028 Volumes:	0	0	941	0	941	0	0	717	0	717	0	0	0	0	0	0	0	0	0	0
Total New Trips:	0	0	10	0	10	0	0	0	10	10	0	0	0	10	10	0	0	0	0	0
Pass-by Trips:	0	0	0	0	0	0	0	-36	36	0	0	0	0	36	36	0	0	0	0	0
Future 2028 Traffic Volumes:	0	0	951	0	951	0	0	681	46	727	0	0	0	46	46	0	0	0	0	0

Number of Years = 2 (2026 to 2028)
Growth Factor (%) = 1

26-145 Retail Dev at 2714 Barker Rd, Gainesville, GA
Traffic Volumes

A&R Engineering
August 2026

6.SR 53 @ Drwy 2 (RIRO)

A.M. Peak Hour

Condition	-					Site Driveway 2 (Righ-In/ Right-Out)					SR 53 (Dawsonville Highway)					SR 53 (Dawsonville Highway)				
	Northbound					Southbound					Eastbound					Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2026 Traffic Counts:	0	0	0	0	0	0	0	0	0	0	0	0	997	0	997	0	0	1087	0	1087
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2028 Volumes:	0	0	0	0	0	0	0	0	0	0	0	0	1017	0	1017	0	0	1109	0	1109
Total New Trips:	0	0	0	0	0	0	0	0	11	11	0	0	42	0	42	0	0	23	24	47
Pass-by Trips:	0	0	0	0	0	0	0	0	30	30	0	0	0	0	0	0	0	-31	31	0
Future 2028 Traffic Volumes:	0	0	0	0	0	0	0	0	41	41	0	0	1059	0	1059	0	0	1101	55	1156

P.M. Peak Hour

Condition	-					Site Driveway 2 (Righ-In/ Right-Out)					SR 53 (Dawsonville Highway)					SR 53 (Dawsonville Highway)				
	Northbound					Southbound					Eastbound					Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2026 Traffic Counts:	0	0	0	0	0	0	0	0	0	0	0	0	1049	0	1049	0	0	1373	0	1373
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2028 Volumes:	0	0	0	0	0	0	0	0	0	0	0	0	1070	0	1070	0	0	1400	0	1400
Total New Trips:	0	0	0	0	0	0	0	0	15	15	0	0	57	0	57	0	0	28	29	57
Pass-by Trips:	0	0	0	0	0	0	0	0	38	38	0	0	0	0	0	0	0	-38	38	0
Future 2028 Traffic Volumes:	0	0	0	0	0	0	0	0	53	53	0	0	1127	0	1127	0	0	1390	67	1457

Number of Years = 2 (2026 to 2028)
Growth Factor (%) = 1

26-145 Retail Dev at 2714 Barker Rd, Gainesville, GA
Traffic Volumes

A&R Engineering
August 2026

7.SR 53 @ Drwy 3 (RIRO)

A.M. Peak Hour

Condition	-					Site Driveway 3 (Righ-In/ Right-Out)					SR 53 (Dawsonville Highway)					SR 53 (Dawsonville Highway)				
	Northbound					Southbound					Eastbound					Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2026 Traffic Counts:	0	0	0	0	0	0	0	0	0	0	0	0	997	0	997	0	0	1087	0	1087
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2028 Volumes:	0	0	0	0	0	0	0	0	0	0	0	0	1017	0	1017	0	0	1109	0	1109
Total New Trips:	0	0	0	0	0	0	0	0	9	9	0	0	42	0	42	0	0	11	23	34
Pass-by Trips:	0	0	0	0	0	0	0	0	30	30	0	0	0	0	0	0	0	-31	31	0
Future 2028 Traffic Volumes:	0	0	0	0	0	0	0	0	39	39	0	0	1059	0	1059	0	0	1089	54	1143

P.M. Peak Hour

Condition	-					Site Driveway 3 (Righ-In/ Right-Out)					SR 53 (Dawsonville Highway)					SR 53 (Dawsonville Highway)				
	Northbound					Southbound					Eastbound					Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2026 Traffic Counts:	0	0	0	0	0	0	0	0	0	0	0	0	1049	0	1049	0	0	1373	0	1373
Growth Factor (%):	1	1	1	1		1	1	1	1		1	1	1	1		1	1	1	1	
No-Build 2028 Volumes:	0	0	0	0	0	0	0	0	0	0	0	0	1070	0	1070	0	0	1400	0	1400
Total New Trips:	0	0	0	0	0	0	0	0	12	12	0	0	57	0	57	0	0	15	28	43
Pass-by Trips:	0	0	0	0	0	0	0	0	38	38	0	0	0	0	0	0	0	-38	38	0
Future 2028 Traffic Volumes:	0	0	0	0	0	0	0	0	50	50	0	0	1127	0	1127	0	0	1377	66	1443

Number of Years = 2 (2026 to 2028)
Growth Factor (%) = 1