

**DEVELOPMENT OF REGIONAL IMPACT
TRANSPORTATION STUDY
FOR
LOTUS GROVE DRI # 4360
CITY OF DORAVILLE, GEORGIA**



Prepared for:

***Lotus Grove LLC
7130 Buford Highway
Suite A-200
Atlanta, GA 30340***

Prepared By:



A&R Engineering Inc.

2160 Kingston Court, Suite O
Marietta, GA 30067
Tel: (770) 690-9255 Fax: (770) 690-9210
www.areng.com

March 31, 2025
A & R Project # 24-241

EXECUTIVE SUMMARY

Traffic impacts were evaluated for proposed Lotus Grove mixed use development DRI #4360 that will be located in the northeast corner of the intersection of I-285 and US 23 (Buford Highway), south of Longmire Way and north of North DeKalb Drive in City of Doraville, Dekalb County, Georgia. The proposed development will consist of:

- Multifamily Housing (High-Rise): 780 dwelling units
- Hotel: 160 rooms
- Shopping Plaza: 86,323 sf

The development proposes access at the following locations:

- Site Driveway 1: Full-access driveway on North Dekalb Drive
- Site Driveway 2: Right-In/Right-Out/Left-In driveway on US 23 (Buford Highway) aligned with the Farmer's Market driveway
- Site Driveway 3: Full-access driveway on Longmire Way
- Site Driveway 4: Full-access driveway on Longmire Way
- Site Driveway 5: Full-access driveway on Longmire Way
- Site Driveway 6: Full-access driveway on North Dekalb Drive

Existing and future operations during the AM peak hour (7:00 AM – 9:00 AM) and PM peak hour (4:00 PM – 6:00 PM) before and after completion of the project were analyzed at the following intersections:

1. US 23 (Buford Highway) at I-285 WB Ramp
2. US 23 (Buford Highway) at North DeKalb Drive
3. US 23 (Buford Highway) at Site Driveway 2/Farmer's Market Driveway
4. US 23 (Buford Highway) at Longmire Way
5. Longmire Way at Site Driveway 3
6. Longmire Way at Site Driveway 4
7. Longmire Way at Site Driveway 5
8. North DeKalb Drive at Site Driveway 1
9. North DeKalb Drive at Site Driveway 6

Traffic Operations Summary

Table E1 below provides a summary of traffic operations for the “No-Build” and “Build” conditions for the year 2027 with and without system improvements. As per GRTA requirements, all approaches that do not meet the level-of-service (LOS) standard (considered failing) are highlighted in Table E1. Table E1 also includes the project’s total added trip and the respective percentage of overall total “Build” condition approach traffic volume for all failing LOS approaches.

TABLE E1 — FUTURE INTERSECTION OPERATIONS AT FAILING APPROACHES													
Intersection		No-Build Condition: LOS (Delay)				Build Condition: LOS (Delay)							
		NO IMPROVEMENTS		SYSTEM IMPROVEMENTS		NO IMPROVEMENTS		SYSTEM / SITE IMPROVEMENTS		SITE VOLUMES AT FAILING APPROACH		PERCENT SITE TRIPS OF TOTAL APPROACH TRIPS AT FAILING APPROACHES	
		AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
3	Buford Hwy @ Farmer’s Market Drwy -Eastbound Approach	F (94.9) *	D (32.2) *	A (6.5) *	A (6.9) *	F (108.3) *	D (33.6) *	A (8.9) *	A (8.2) *	0 Not Failing	0 Not Failing	0% Not Failing	0% Not Failing

*As Synchro does not produce results for unsignalized intersections with more than three through lanes, SIM Traffic results are reported.

The results of future “No-Build” traffic operations show that eastbound right-in/right-out Farmer’s Market’s driveway approach at the RCUT intersection of Buford Highway will continue to operate at LOS “F” in the AM peak hour as in “Existing” conditions but with increased delays.

The results of future “Build” traffic operations show that without the system improvements implemented, the eastbound right-in/right-out Farmer’s Market’s driveway approach at the RCUT intersection of Buford Highway will continue to operate at LOS “F” in the AM peak hour as in “Existing” conditions with increased delays. After the U-Turns are prohibited as recommended, the approach will operate at LOS “A”. Both the signalized intersections and stop-controlled approaches at other study intersections will be operating at LOS “D” or better in both peak hours.

Recommendations for System Improvements

A summary of the system improvements, which address deficiencies that are found within the existing road network for the “No-Build” conditions, is provided below.

Intersection 3: US 23 (Buford Highway) at Farmer’s Market Driveway

As explained earlier, the eastbound right-turn delays are caused by heavy northbound U-Turns onto southbound Buford Highway. These U-Turns are primarily made by the exiting traffic from N. Dekalb Drive heading towards south on Buford Highway. Additionally, the northbound through traffic at Intersection 1 (US 23/Buford Hwy @ I-285 WB Ramp) is also making U-turns at the RCUT intersection to access the I-285 Westbound On-Ramp. This existing RCUT intersection does not meet GDOT’s spacing requirements for installation of a traffic signal. To improve traffic operations at this intersection, we recommend the following:

- Prohibit Northbound U-turns at this intersection due to long delays and safety concerns.

After the recommended system improvements are implemented, the intersection will be operating at level of service “A” in both the AM and PM peak hours

The table below includes 95th percentile Synchro HCM 6 queue length for failing level-of-service approaches for the build condition with improvements that had site generated traffic. Queue length reports are included in the Appendix.

TABLE E2 — FUTURE 95 TH PERCENTILE SYNCHRO QUEUES (FT) FOR FAILING APPROACHES						
Intersection		Available Storage (ft)	Queue in feet			
			BUILD		BUILD with Improvements	
			AM Peak	PM Peak	AM Peak	PM Peak
3	<u>Buford Hwy @ Farmer’s Market Drwy</u> -Eastbound Approach	-	107’	142’	48’	102’

As reported in Table E2, the projected “Build” condition 95th percentile approach queues will be accommodated by the existing storage available.

Recommendation for Site Access Configuration

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

- Site Driveway 1: Full-access driveway on North Dekalb Drive
 - One entering and one exiting lane.
 - Stop-sign controlled on the driveway approach with North Dekalb Drive remaining free flow.
 - Provide adequate sight distance per AASHTO standards.
- Site Driveway 2: Right-In/Right-Out/Left-In driveway on US 23 (Buford Highway) aligned with the Farmer's Market driveway
 - One entering and one exiting lane.
 - Stop-sign controlled on the driveway approach and Farmer's Market driveway with US 23 (Buford Highway) remaining free flow.
 - A right turn lane for entering traffic.
 - Provide adequate sight distance per AASHTO standards.
- Site Driveway 3: Full-access driveway on Longmire Way
 - One entering and one exiting lane.
 - Stop-sign controlled on the driveway approach with Longmire Way remaining free flow.
 - Provide adequate sight distance per AASHTO standards.
- Site Driveway 4: Full-access driveway on Longmire Way
 - One entering and one exiting lane.
 - Stop-sign controlled on the driveway approach with Longmire Way remaining free flow.
 - Provide adequate sight distance per AASHTO standards.
- Site Driveway 5: Full-access driveway on Longmire Way
 - One entering and one exiting lane.
 - Stop-sign controlled on the driveway approach with Longmire Way remaining free flow.
 - Provide adequate sight distance per AASHTO standards.
- Site Driveway 6: Full access driveway on North Dekalb Drive
 - One entering and one exiting lane.
 - Stop-sign controlled on the driveway approach with North Dekalb Drive remaining free flow.
 - Provide adequate sight distance per AASHTO standards.

TABLE OF CONTENTS

Item	Page
Executive Summary	1
Recommendations for System Improvements	3
Introduction.....	1
Study Network Determination	3
Existing Roadway Facilities.....	5
Existing Bicycle and Pedestrian Facilities	6
Alternative Modes of Access.....	7
Proposed Pedestrian Route to Access Transit	7
Study Methodology	8
Unsignalized Intersections	8
Signalized Intersections	9
Existing 2025 Traffic Analysis	10
Existing Traffic Volumes	10
Existing Traffic Operations	13
Project Description	14
Site Plan.....	15
Planned Bicycle and Pedestrian Facilities	17
Potential Pedestrian and Bicycle Destinations	17
Planned Transit Facilities	18
Transit Stop Ridership	18
Consistency with Adopted Comprehensive Plan	20
Land Use and Zoning.....	20
Project Phasing.....	21
Trip Generation.....	28
Trip Distribution	28
Future 2029 Traffic Analysis	31
Future “No-Build” Conditions	31
Annual Traffic Growth.....	31
Planned and Programmed Improvements in Study Area	32
Transportation Project Interaction with DRI.....	33
Planned Projects	33
Future “No-Build 2029” Traffic Operations	37
Recommendations for System Improvements	37
Shifted Northbound U-turns (No-Build).....	38
Auxiliary Lane Analysis	39
Left Turn Lane Analysis	39
Deceleration Turn Lane Analysis.....	40
Future “Build 2029” Conditions	41
Future “Build 2029” Traffic Operations	45

Conclusions and Recommendations	48
Recommendations for System Improvements	49
Recommendations for Site Access Configuration.....	49
Appendix	

LIST OF TABLES

Item	Page
Table E1 – Future Intersection Operations at Failing Approaches	2
Table E2 – Future 95th Percentile Synchro Queues (ft) for Failing Approaches	3
Table 1 – Level-of-service Criteria for Unsignalized Intersections.....	8
Table 2 – Level-of-service Criteria for Signalized Intersections	9
Table 3 – Existing Intersection Operations	13
Table 4 – Trip Generation	28
Table 5 – Planned and Programmed Improvements	32
Table 6 – Future “No-Build 2029” Intersection Operations.....	37
Table 7 – GDOT Requirements for Left Turn Lanes	39
Table 8 – GDOT Requirements for Deceleration Lanes	40
Table 9 – Future “Build 2029” Intersection Operations	45

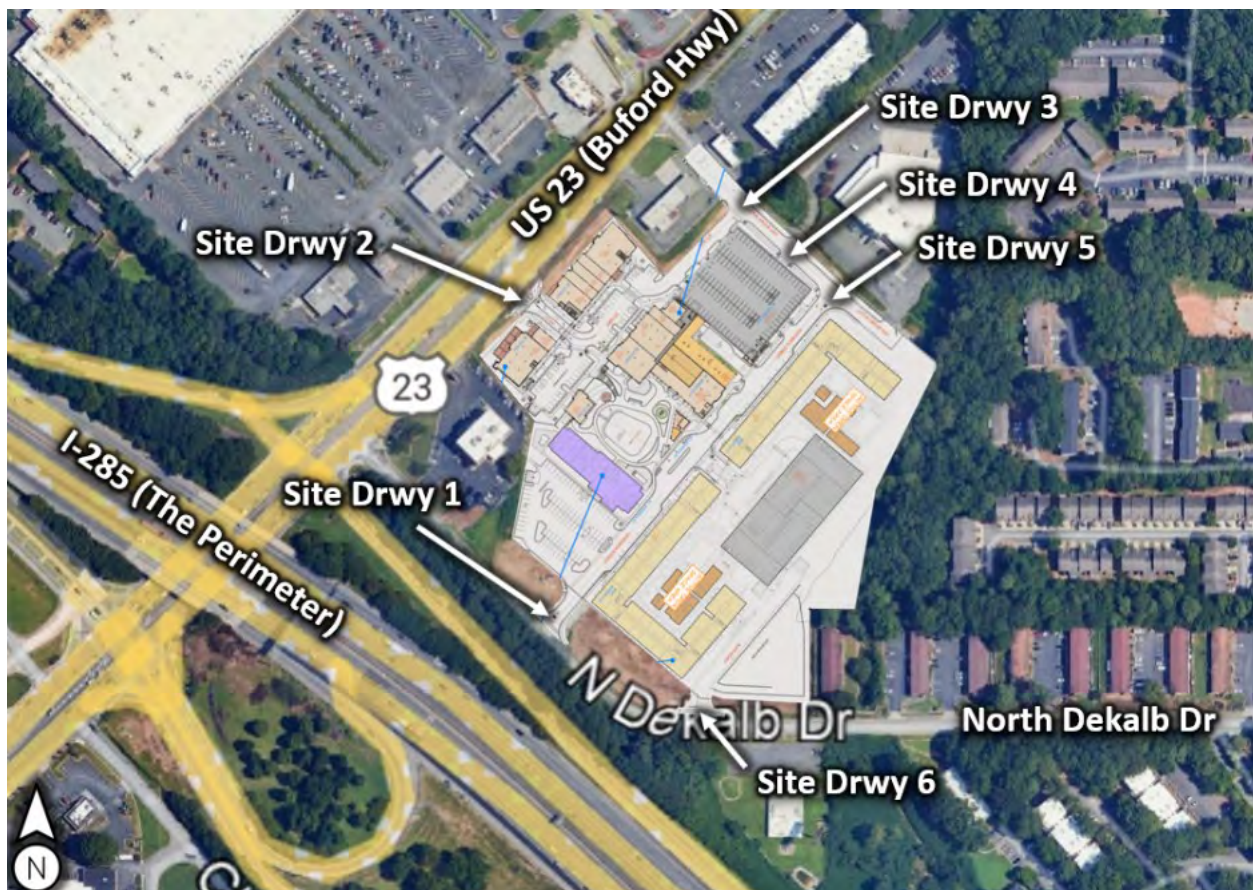
LIST OF FIGURES

Item	Page
Figure 1 – Location Map and Study Intersections.....	4
Figure 2 – Existing Weekday Peak Hour Volumes.....	11
Figure 3 – Existing Traffic Control and Lane Geometry	12
Figure 4 – Site Plan.....	16
Figure 5 – Trip Distribution and Site Generated Peak Hour Volumes	29
Figure 6 – Site Peak Hour Pass-by Volumes.....	30
Figure 7 – Future (No-Build) Peak Hour Volumes.....	34
Figure 8 – Shifted Northbound U-turns (No-Build).....	35
Figure 9- Future (No-Build) Peak Hour Volumes with System Improvements	36
Figure 10 – Future (Build) Peak Hour Volumes.....	42
Figure 11 – Shifted Northbound U-turn (Build)	43
Figure 12 – Future (Build) Peak Hour Volumes with System Improvements	44
Figure 13 – Future Traffic Control and Lane Geometry	47

INTRODUCTION

The purpose of this study is to determine the traffic impact from the proposed Lotus Grove DRI #4360, a mixed-use development located in the northeast corner of the intersection of I-285 and US 23 (Buford Highway), south of Longmire Way and north of North DeKalb Drive in City of Doraville, Dekalb County, Georgia. The traffic analysis evaluates the current operations and the future conditions with the traffic generated by the development. The proposed development will consist of:

- Multifamily Housing (High-Rise) - Close to Rail Transit: 780 dwelling units
- Hotel: 160 rooms
- Shopping Plaza: 86,323 sf



The development proposes access at the following locations:

- Site Driveway 1: Full-access driveway on North Dekalb Drive
- Site Driveway 2: Right-In/Right-Out/Left-In driveway on US 23 (Buford Highway) aligned with the Farmer's Market driveway
- Site Driveway 3: Full-access driveway on Longmire Way
- Site Driveway 4: Full-access driveway on Longmire Way
- Site Driveway 5: Full-access driveway on Longmire Way

Traffic operations for the AM and PM peak hours were analyzed at the intersections of:

1. US 23 (Buford Highway) at I-285 WB Ramp
2. US 23 (Buford Highway) at North DeKalb Drive
3. US 23 (Buford Highway) at Site Driveway 2/Farmer's Market Driveway
4. US 23 (Buford Highway) at Longmire Way
5. Longmire Way at Site Driveway 3
6. Longmire Way at Site Driveway 4
7. Longmire Way at Site Driveway 5
8. North DeKalb Drive at Site Driveway 1
9. North DeKalb Drive at Site Driveway 6

Recommendations to improve traffic operations, if any, have been identified as appropriate and are discussed in detail in the following sections of the report.

STUDY NETWORK DETERMINATION

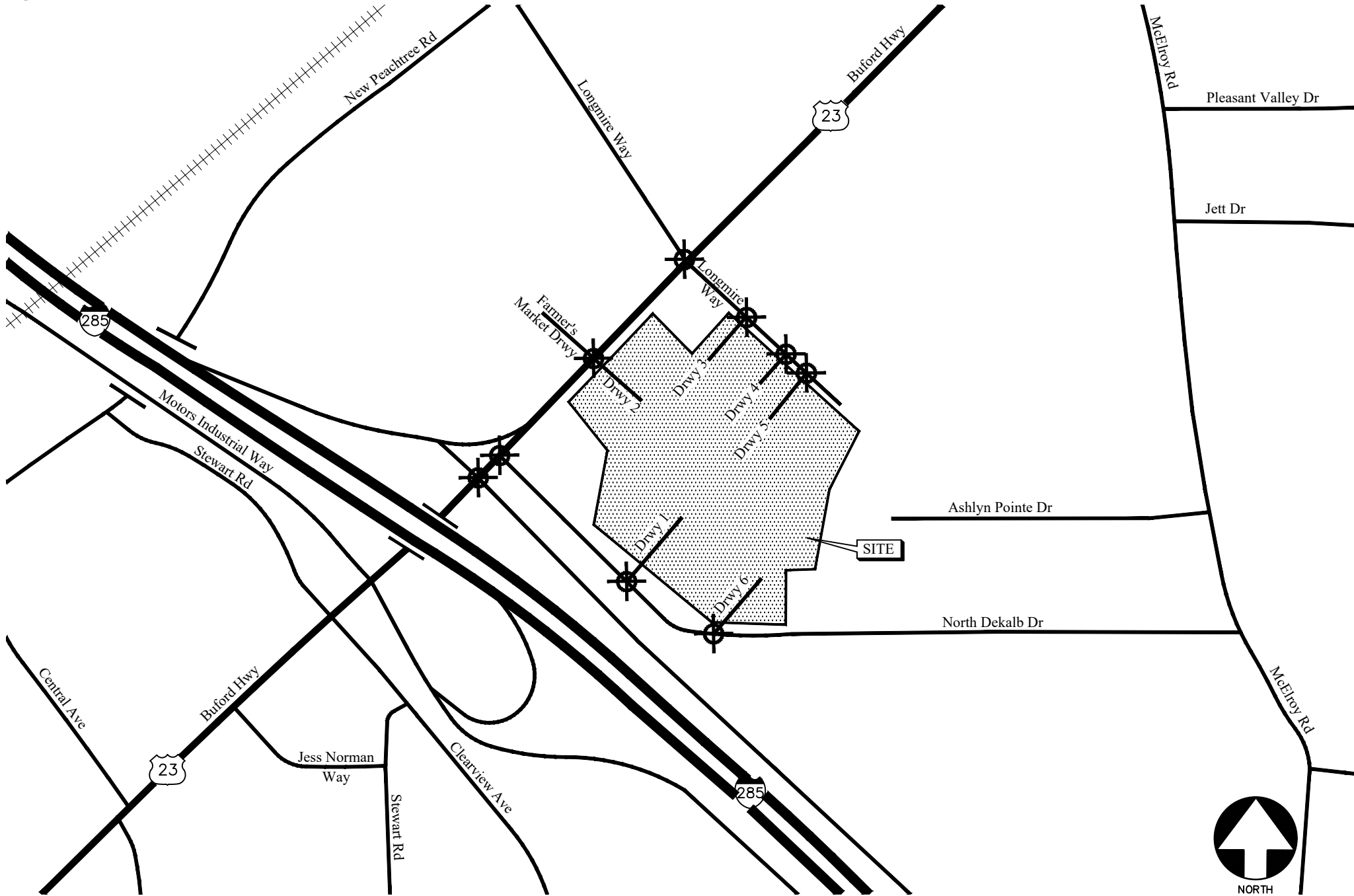
The study network was determined by evaluating the amount of traffic that the proposed development will add to each roadway segment in the area. According to GRTA requirements, a roadway segment carries a “significant” amount of traffic if the project contributes 7% or more trips to the two-way daily service volumes of the roadway at the appropriate level of service standard. Upon agreement with GRTA a level of service standard of “D” was used for determining the study area network.

The traffic generated by the proposed project was then assigned to the area roadways using the trip distribution to determine the site-generated traffic on each roadway segment. The boundaries of the study network extend to the most distant intersections where at least 7% of the service volumes on the segment are attributed to project traffic. The following study intersections including the site driveways fell within the 7% rule and/or have been selected as being suitable for evaluation in discussions with GRTA, ARC, GDOT, City of Doraville and DeKalb County:

1. US 23 (Buford Highway) at I-285 WB Ramp
2. US 23 (Buford Highway) at North DeKalb Drive
3. US 23 (Buford Highway) at Site Driveway 2/Farmer’s Market Driveway
4. US 23 (Buford Highway) at Longmire Way
5. Longmire Way at Site Driveway 3
6. Longmire Way at Site Driveway 4
7. Longmire Way at Site Driveway 5
8. North DeKalb Drive at Site Driveway 1
9. North DeKalb Drive at Site Driveway 6

The location of the development and the surrounding study network is shown in Figure 1. Other intersections within this corridor, such as right-in / right-out driveways or private driveways have not been included in the study network.

 Study Intersections



LOCATION MAP



FIGURE 1

A&R Engineering Inc.

EXISTING ROADWAY FACILITIES

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

US 23 (Buford Highway)

US 23 (Buford Highway) is a north-south, six-lane, median-divided roadway with a two-way left turn lane north of Longmire Way. The posted speed limit in the vicinity of the site is 35 mph. GDOT traffic counts (Station ID 089-3105) indicate that in 2023, the daily traffic volume on US 23 (Buford Highway) north of Longmire Way was 31,800 vehicles per day. GDOT classifies US 23 (Buford Highway) as an Urban Minor Arterial roadway.

Interstate 285 (I-285)

Interstate 285 (I-285) is an east-west, twelve-lane, median-divided roadway with a posted speed limit of 65 mph in the vicinity of the site. GDOT traffic counts (Station ID 089-3367) indicate that the daily traffic volume on Interstate 285 (I-285) in 2023 was 219,000 vehicles per day east of US 23 (Buford Highway).

Longmire Way

Longmire Way is an east-west, two-lane, undivided roadway with a two-way left turn lane between New Peachtree Road and US 23 (Buford Highway), with an assumed speed limit of 25 mph. GDOT traffic counts (Station ID 089-7180) indicate that in 2023, the daily traffic volume on Longmire Way west of US 23 (Buford Highway) was 6,470 vehicles per day. GDOT classifies Longmire Way as an Urban Minor Arterial roadway.

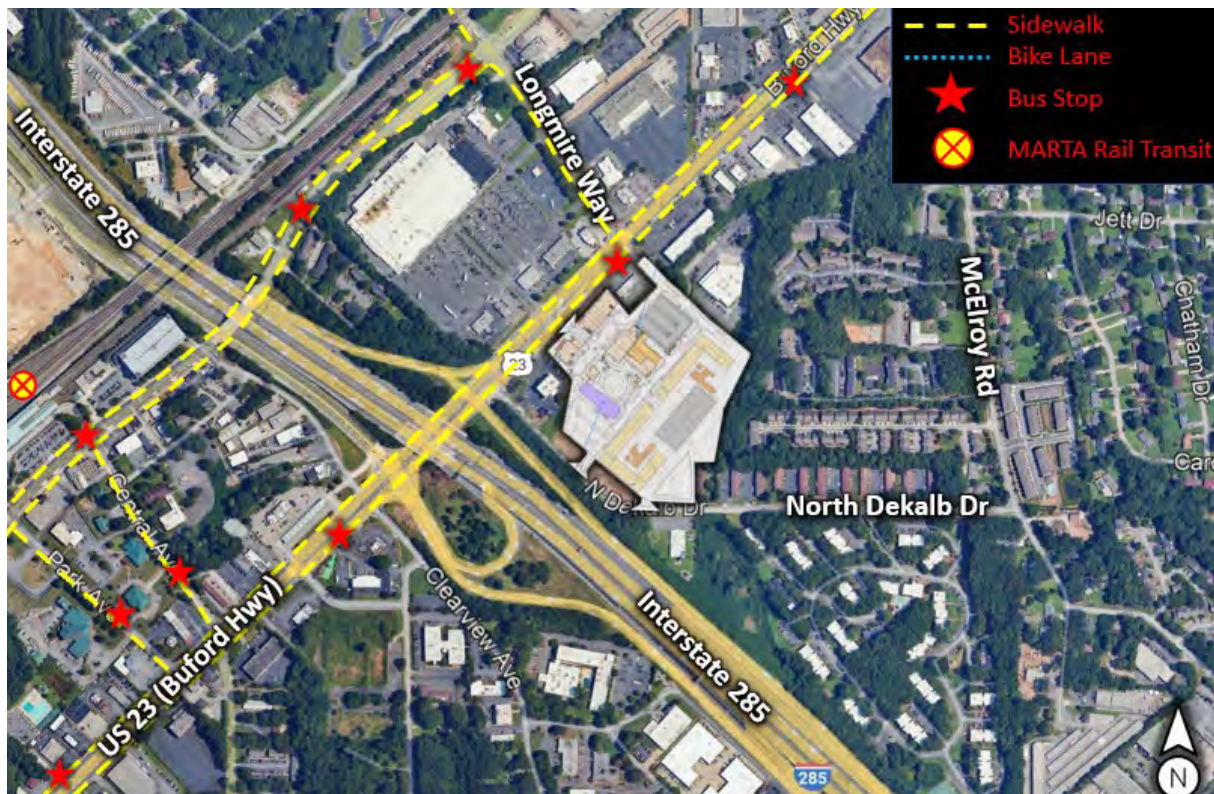
North Dekalb Drive

North Dekalb Drive is an east-west, two-lane, undivided roadway with an assumed speed limit of 25 mph.

Existing Bicycle and Pedestrian Facilities

- Sidewalks identified in the vicinity of the proposed development are shown in below graphic
- Crosswalks are present at the intersections of:
 - US 23 (Buford Highway) and Longmire Way on all approaches
 - US 23 (Buford Highway) and I-285 Westbound Ramps on NB and SB approaches
 - US 23 (Buford Highway) Motors Industrial Way on all approaches
 - Longmire Way and New Peachtree Road on NB, SB and WB approaches.
- Bike paths are not present in the study network
- There is public transit service near the site. The MARTA Bus stop situated on Buford Highway at Longmire Way is located directly in front of the site along MARTA Bus Route 124. The project site is also located 0.6 miles from the Doraville MARTA Rail Station which is served by the Gold rail line seven days a week. The MARTA Rail Station is served by MARTA Bus Route 124 and also Routes 25, 39, 104 and GRTA Xpress Buses. MARTA Bus Route 124 provides service from the Doraville MARTA Rail Station to LaVista Road along Pleasantdale Road and Chamblee Tucker Road. MARTA Bus Route 25 provides service from Doraville MARTA Rail Station to Phipps Plaza along Peachtree Road. MARTA Bus Route 39 provides service from Doraville MARTA Rail Station to Lindbergh Station along Buford Highway. MARTA Bus Route 104 provides service from Doraville MARTA Rail Station to Winters Chapel Road along New Peachtree Road.
- There are streetlights in the vicinity of the site.

Existing Alternative Transportation Map

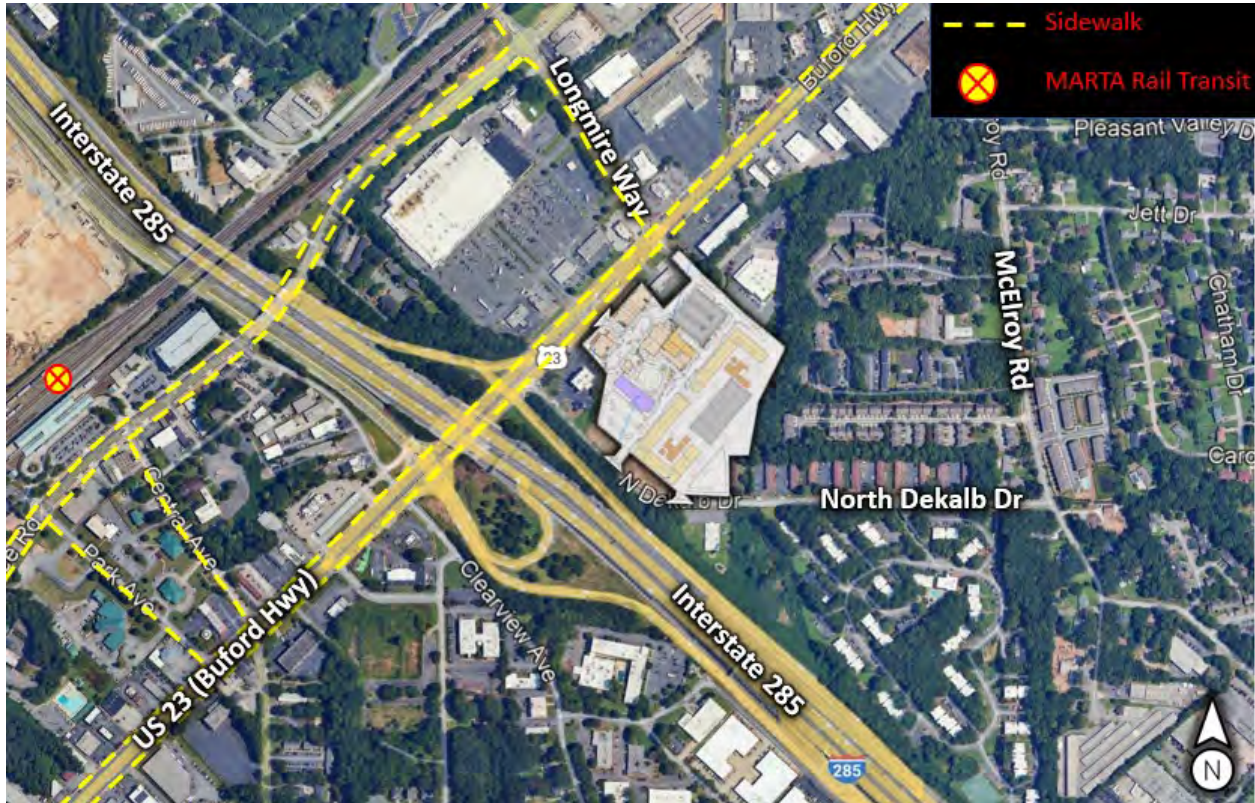


Alternative Modes of Access

- Existing transit routes were identified in the study network.
- High-capacity transit stations were identified in the vicinity of the proposed development.

Proposed Pedestrian Route to Access Transit

As shown in the figure, pedestrians can use the existing sidewalk infrastructure along Buford Highway, Longmire Way, New Peachtree Road, Central Avenue and Park Avenue to access the MARTA Rail Transit.



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, 6th edition (HCM 6). Synchro software, which utilizes the HCM methodology, was used for analysis. The following is a description of the methodology employed for the analysis of unsignalized and signalized intersections.

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 designed 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, 6th edition, Exhibit 20-2 *LOS Criteria: Motorized Vehicle Mode*

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 intersections.

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, 6th 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 favorable, 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.

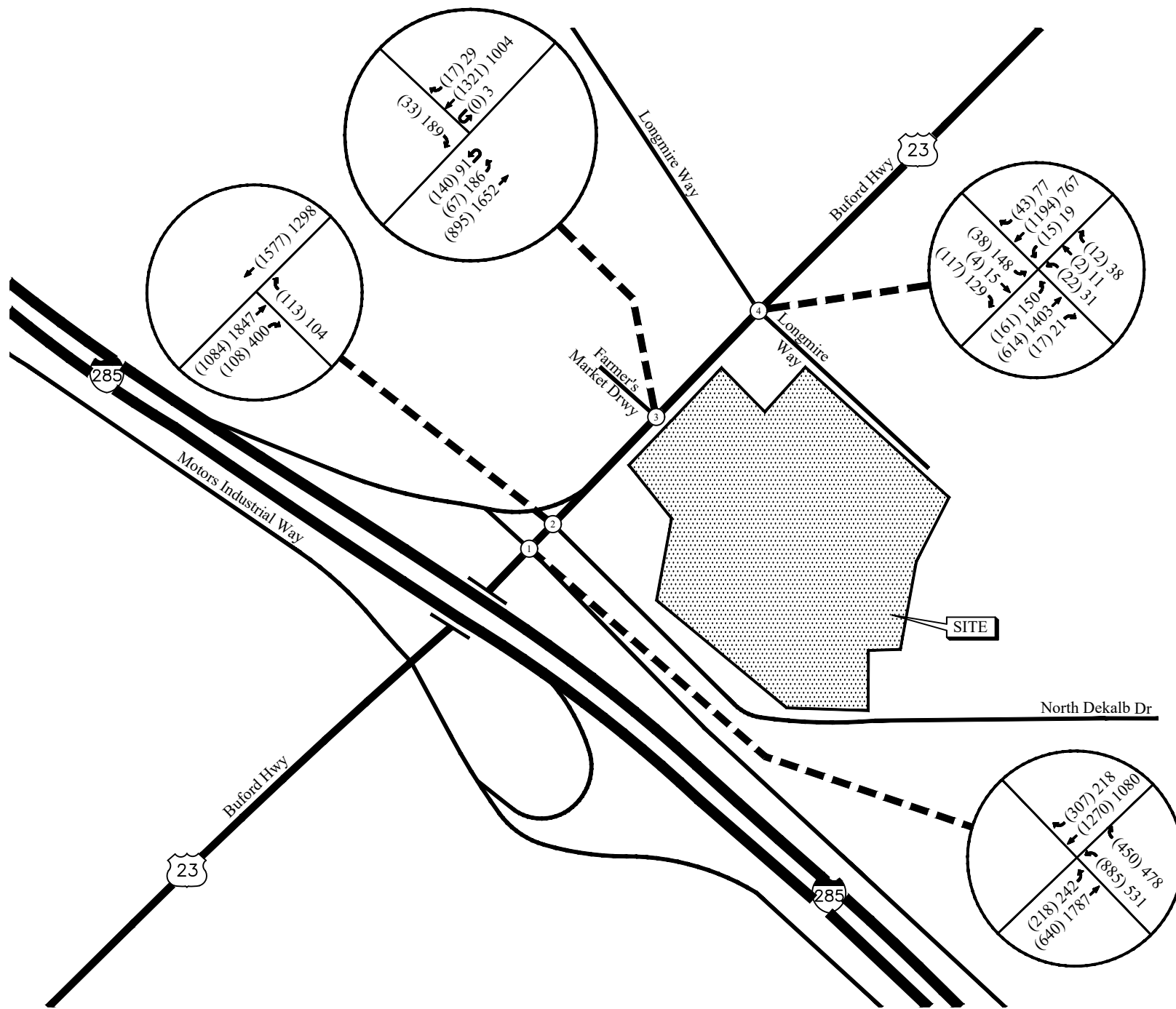
EXISTING 2025 TRAFFIC ANALYSIS

Existing Traffic Volumes

Existing traffic counts were obtained at the following study intersections:

1. US 23 (Buford Highway) at I-285 WB Ramp
2. US 23 (Buford Highway) at North DeKalb Drive
3. US 23 (Buford Highway) at Site Driveway 2/Farmer's Market Driveway
4. US 23 (Buford Highway) at Longmire Way
5. Longmire Way at Gas Station Driveway/Adjacent Retail's rear driveway

Turning movement counts were collected on Tuesday, February 11, 2025. All turning movement counts were recorded during the AM and PM peak hours between 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM, respectively. Truck data was included separately in the counts. The four consecutive 15-minute interval volumes that produced 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.



(AM) PM



EXISTING WEEKDAY PEAK-HOUR VOLUMES

FIGURE 2

A&R Engineering Inc.

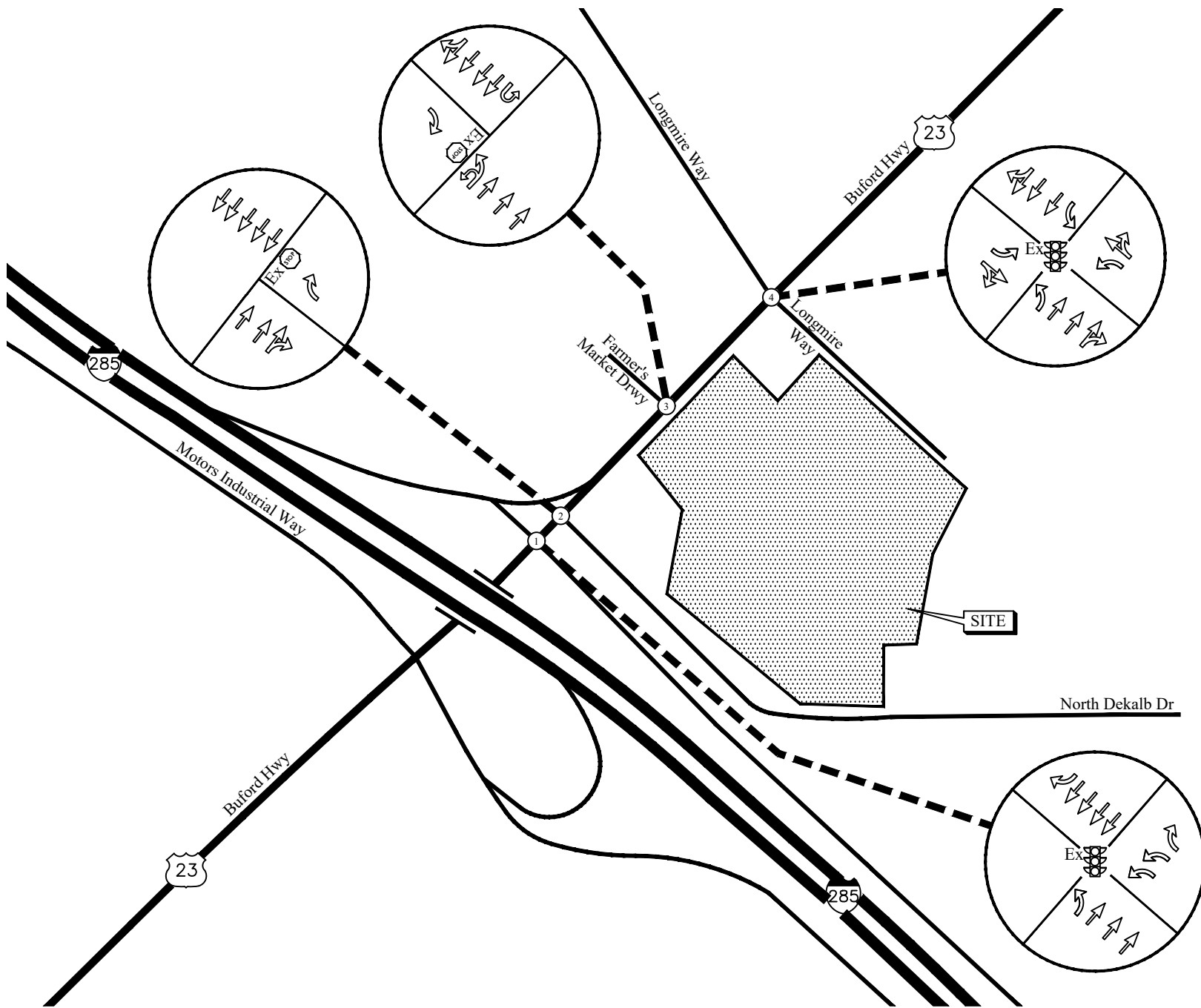


FIGURE 3

A&R Engineering Inc.

Existing Traffic Operations

Existing 2025 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	AM Peak	PM Peak	LOS Standard
1	<u>US 23 (Buford Hwy) @ I-285 WB Ramp</u>	Signalized	<u>C (31.3)</u>	<u>C (26.2)</u>	<u>D/D</u>
	-Westbound Approach		D (43.2)	D (40.6)	D/D
	-Northbound Approach		B (17.4)	B (19.5)	D/D
	-Southbound Approach		C (28.2)	C (25.3)	D/D
2	<u>US 23 (Buford Hwy) @ North DeKalb Dr (RIRO)*</u> -Westbound Approach	Stop Controlled on WB Approach	A (1.5)	A (1.8)	D/D
3	<u>US 23 (Buford Hwy) @ Farmer's Market Drwy*</u>	Stop Controlled on EB Approach	F (78.8)	C (23.9)	E/D
	-Eastbound Approach		B (12.6)	A (6.8)	D/D
	-Northbound Left/U-turn		A (1.7)	A (2.0)	D/D
	-Southbound U-turn				
4	<u>US 23 (Buford Hwy) @ Longmire Way</u>	Signalized	<u>B (11.5)</u>	<u>B (16.1)</u>	<u>D/D</u>
	-Eastbound Approach		D (52.4)	D (46.4)	D/D
	-Westbound Approach		E (55.8)	E (61.4)	D/D
	-Northbound Approach		A (5.9)	B (10.9)	D/D
	-Southbound Approach		A (8.6)	B (11.0)	D/D

*As Synchro does not produce results for unsignalized intersections with more than three through lanes, SIM Traffic results are reported.

The results of existing traffic operations analysis indicate that the un-signalized eastbound right-in/right-out driveway approach of Farmer's Market at Buford Highway is operating at LOS "F" in the AM peak hour. The westbound approaches of Longmire Way will operate at LOS "E" in both AM and PM peak hours. All intersections/approaches are operating at a level of service "D" or better.

There is heavy volume of northbound U-Turn movement at this RCUT intersection with Buford Highway. There are 140 northbound U-Turns in the existing AM peak hour and 91 northbound U-Turns in the PM peak hour. The exiting eastbound Farmer's Market driveway approach is experiencing long delays due to the heavy northbound U-Turn volume on Buford Highway. The intersection does not meet GDOT's spacing requirements for installation of a traffic signal.

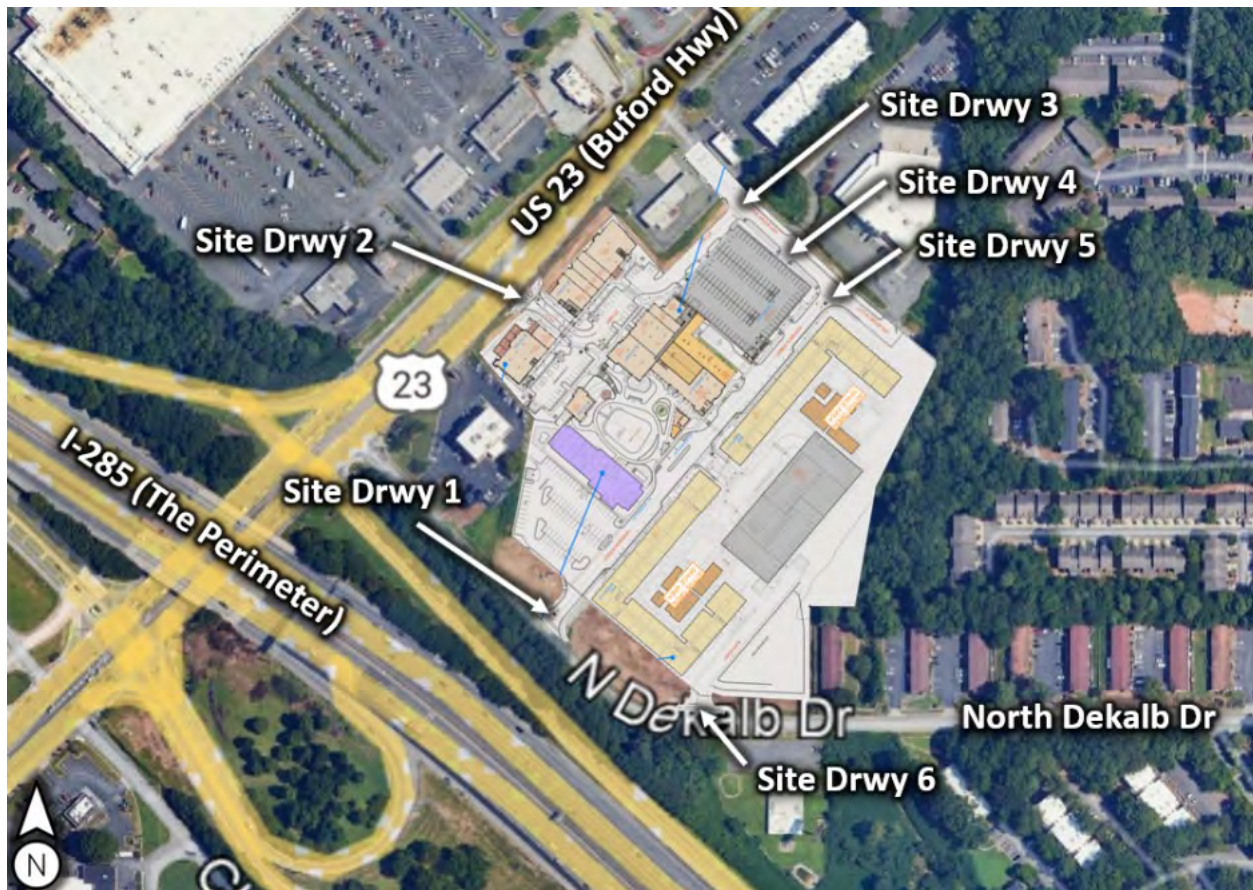
PROJECT DESCRIPTION

The proposed Lotus Grove mixed use development will be located in the northeast corner of the intersection of I-285 and US 23 (Buford Highway), south of Longmire Way and north of North DeKalb Drive in City of Doraville, Dekalb County.

The proposed Lotus Grove project is a redevelopment of a vacant, formerly commercial property which was previously planned as a Mixed-Use development that went through DRI process under DRI # 2635 in 2016. It was approved to consist of 350 multi-family residential units, 175 senior living units, a 125-room hotel, 60,000 sf of retail space, 50,000 sf of office space, and a 12,000-sf school (daycare/pre-K). The previous DRI # 2635 development also had its driveways planned in the same locations as in the now proposed Locust Grove DRI.

The proposed development will consist of:

- Multifamily Housing (High-Rise): 780 dwelling units
- Hotel: 160 rooms
- Shopping Plaza (40-150k): 86,323 sf



The development proposes access at the following locations:

- Site Driveway 1: Full-access driveway on North Dekalb Drive
- Site Driveway 2: Right-In/Right-Out/Left-In driveway on US 23 (Buford Highway) aligned with the Farmer's Market driveway
- Site Driveway 3: Full-access driveway on Longmire Way
- Site Driveway 4: Full-access driveway on Longmire Way
- Site Driveway 5: Full-access driveway on Longmire Way
- Site Driveway 6: Full-access driveway on North Dekalb Drive

Site Plan

A site plan is shown in Figure 4. A digital copy of the site plan is also provided with this report.



LOTUS
GROVE

CITY OF DORAVILLE

PROJECT SUMMARY

RESIDENTIAL		780 UNITS
BLDG. A OFF. LATE	425,000 SF (10,170 GSF)	735,000 GSF
BLDG. B SEA LOBBY	310,000 SF (10,870 GSF)	
110 PARKING SPACES - 140 SPACES (LMT)		
HOTEL		160 ROOMS
74,500 GSF 2 STORY		74,500 GSF
14 PARKING SPACES - 50 SPACES (LMT)		
MIXED USE		86,323 RSF (30,786 GSF)
# 5 ETI WAY RETAIL/REST.	12,446 RSF (TWO STORY) (13,800 GSF)	51,945 RSF (30,786 GSF)
#7 ETI WAY RETAIL/REST.	21,932 RSF (TWO STORY) (24,618 GSF)	
#6 ETI WAY RETAIL/REST.	2,075 RSF (TWO STORY) (2,460 GSF)	
#8 ETI WAY RETAIL/REST.	11,686 RSF (TWO STORY) (13,300 GSF)	
#5 VERONICA ST. RETAIL/REST.	1,134 RSF (ONE STORY) (1,134 GSF)	
#7 VERONICA ST. RETAIL/REST. FOODHALL	35,940 RSF (TWO STORY) (39,960 GSF)	
#9 VERONICA ST. OFF. HALL	1,100 RSF (ONE STORY)	
106 PARKING SPACES - 43 SPACES (LMT) 100/RSF		
TOTAL PROPOSED BLDG. AREA:		900,295 GSF
102 TOTAL PARKING SPACES		

LOTUS GROVE DRI #4360

MIXED USE
51,945 RSF
(3 STORY)

NOTE: THIS DRAWING IS FOR CONCEPTUAL PURPOSES ONLY. SITE INFORMATION WAS OBTAINED FROM CLIENT'S DOCUMENTS. DESIGN MAY VARY, DEPENDING ON ACTUAL TOPOGRAPHY, DRAINAGE, SOILS, SURVEY, ETC. THIS ADDITIONAL DATA AND SITE CONDITIONS COULD CAUSE CHANGES IN PARKING RATES AND SPACE AVAILABLE FOR DEVELOPMENT, AND MAY INCREASE ESTIMATED DEVELOPMENT COSTS.

NOTE: THIS DRAWING IS THE PROPERTY OF ALEX MUNOZ & ASSOC. AND SHALL NOT BE REPRODUCED IN WHOLE OR IN PART. IT SHALL NOT BE USED FOR ANY OTHER PROJECT. THIS DRAWING IS AN INSTRUMENT OF SERVICE ONLY AND SHALL BE RETURNED TO THE ARCHITECT UPON REQUEST.
© 2023, ALEX MUNOZ & ASSOC., INC.

RESIDENTIAL
780 UNITS
+ 735,000 GSF

HOTEL
(7 STORY)
160 ROOMS
74,500 GSF

MIXED USE
34,378 RSF
(2 STORY)



CONCEPTUAL
SITE PLAN

SCALE : 1" = 50'-0"
25' 50' 75' 100' 125' 150'

RESIDE
STUDIOS LLC.

LOTUS GROVE, LLC
SK-24A

LATEST REVISION - APRIL 14, 2025

Planned Bicycle and Pedestrian Facilities

Pedestrian sidewalks are proposed throughout the internal roadway network inside the development.

Potential Pedestrian and Bicycle Destinations



- Food (Within 0.25-mile proximity): Tan-Cha Bubble Tea Store, Baldinos Giant Jersey Subs, Glaze Tea Doraville, Kang Nam Japanese Restaurant, Clover Food Mart, Chick-fil-A, Las Delicia's De La Abuela Restaurant, Marshalls, Buford Highway Farmers Market, El paisano Mexican restaurant & Taqueria, Burger King, Zaxbys Chicken Fingers & Buffalo Wings, Mexico Lindo Heladería, Waffle House.
- Retail (Within 0.25-mile proximity): BP fuel station, TedHair Factory, The Greater Goods, Good Feelings, Inc, HK Jewelry & Pawn, TitleMax Title Pawns, Tienda Katracha, Affordable Auto Insurance Agency, VA Insurance Group Inc, Berrys fashion virgin hair, Dominican Flow Barbershop, El Compadre Trucks, Van Gogh: The Immersive Experience, Monet The Immersive Experience Atlanta, Exhibition Hub Art Center, Caliber Collision, Level Barber & Hairsalon, Preferred Auto Group Inc, QuikTrip, Green Dry Cleaner And Alteration, Pep Boys, Autobuses Adame.
- Medical (Within 0.25-mile proximity): Heaven Eye Care, Buford Highway Family Dental Clinic, Doraville Dental Care.
- Services (Within 0.25-mile proximity): United States Postal Service, Alfaro Tax Services, Innocent Law, LLC, Chase Bank, Buford Coin Laundry, Tahitian Dance Company, SecurCare Self Storage, Saigon Auto Services, Western Union, M&A Tax Group, Inc.

Planned Transit Facilities

There is existing or planned public transit service near the proposed development.

Transit Stop Ridership

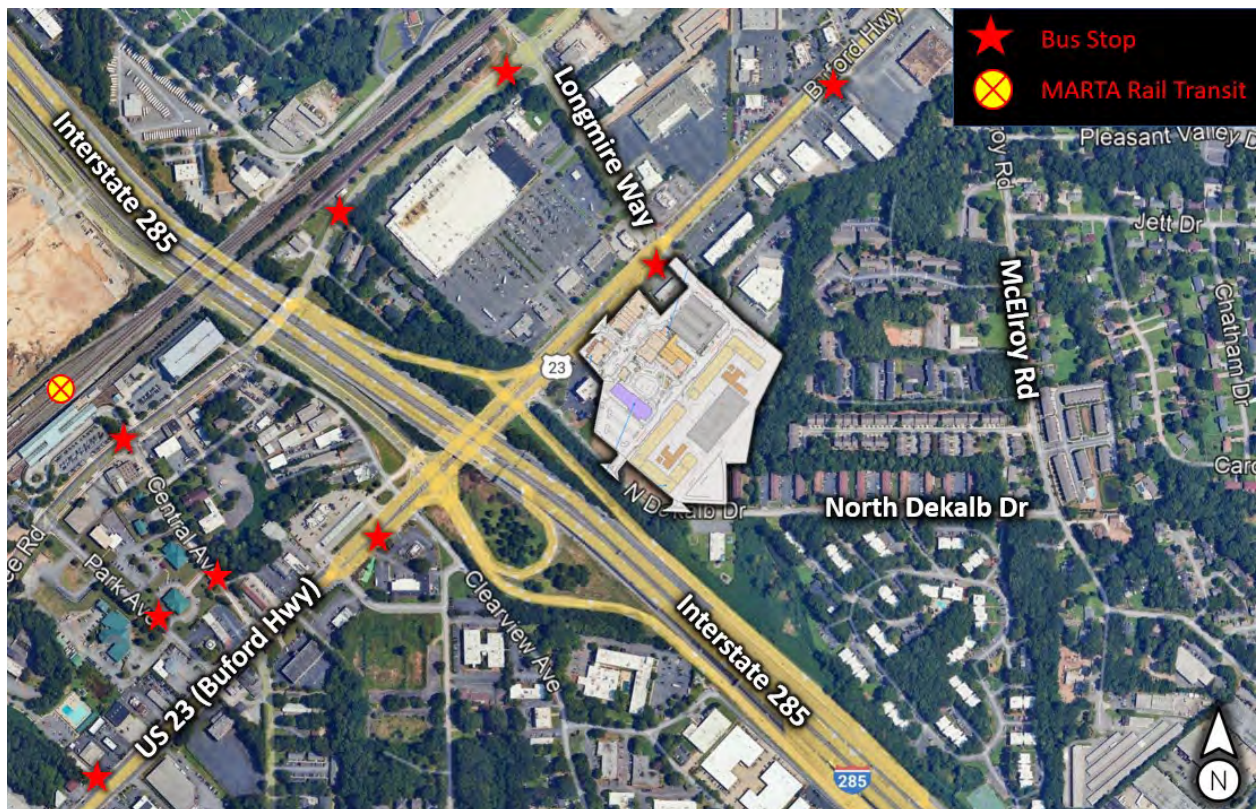
The Doraville Station on the MARTA Gold line in DeKalb County, Georgia has a daily ridership of about 5,403. It's a popular park-and-ride destination for commuters from DeKalb and Gwinnett Counties. Doraville Station is a commuter town center station, which means it's usually located at the end of a line or in an outlying area and is oriented towards auto commuters.

The station has a parking deck with over 1,200 spaces, and parking is free for less than 24 hours. After 24 hours, parking costs \$8 per day. Doraville Station serves local MARTA routes and regional bus connectors. Some of the bus routes that connect to the station include:

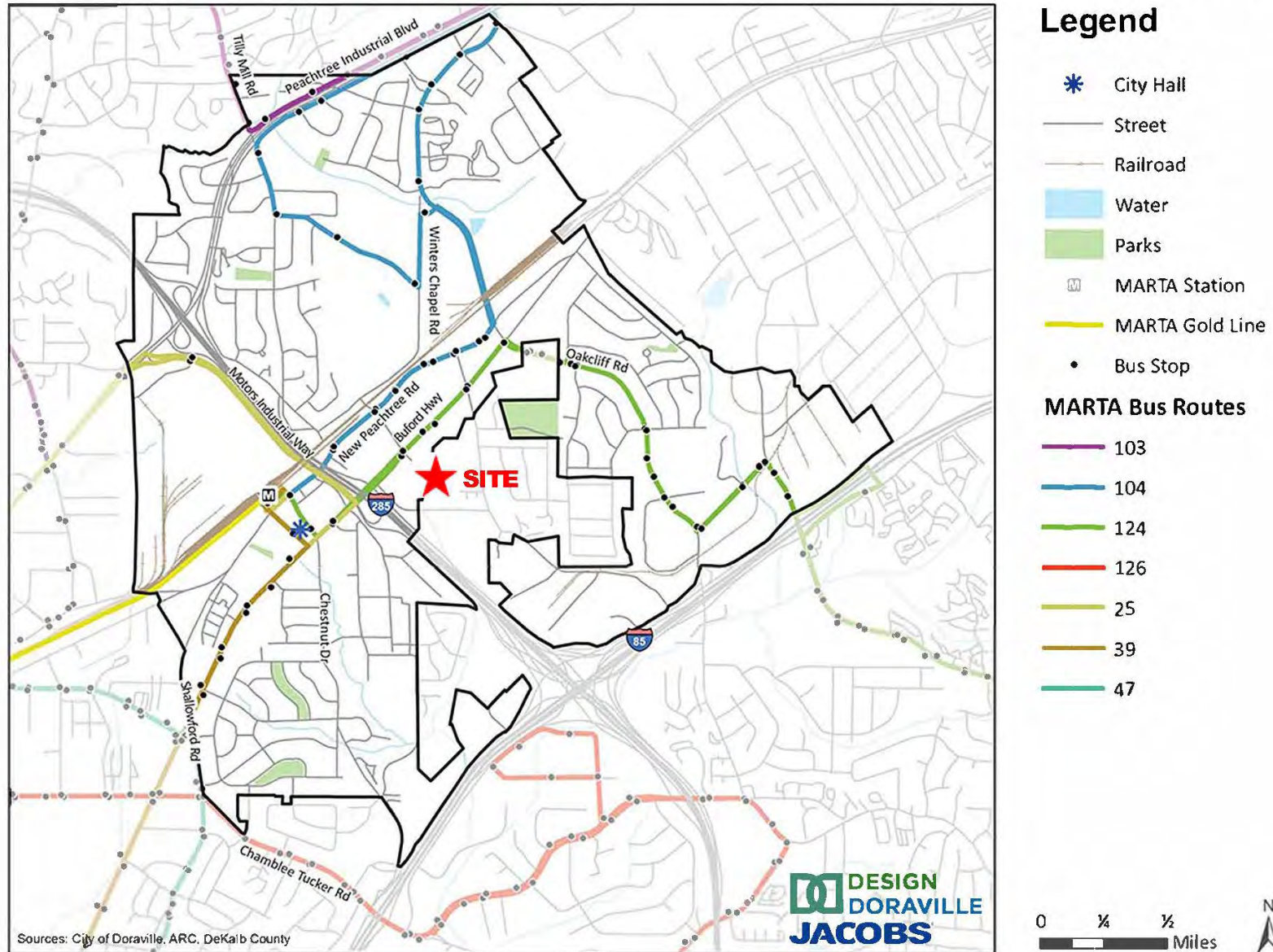
Ride Gwinnett: Routes 10A, 10B, 20, and 35

MARTA Bus: Routes 25, 39, 104, 124, and 133

GRTA: Route 408



Existing MARTA Bus Routes & Stops in Doraville



Consistency with Adopted Comprehensive Plan

The proposed Lotus Grove mixed-use development will include new residential, hotel and retail land uses. The property includes 13.03 acres of land. The project site is located in the Livable Communities Code Transect 6 (T-6-C) within the General Business (C-2) district according to the City of Doraville Official Zoning Map. Additionally, the site is located in Regional Employment Corridor and Regional Established Suburbs areas according to The Atlanta Region's Plan Unified Growth Policy Map. The DRI trigger for this development is a Permit Application (Stream Buffer Variance).

Land Use and Zoning

Future Land Use Code	The development is currently in Livable Communities Code Transect 6 (T-6-C) (Conditionally zoned parcel) land use as per City of Doraville's Zoning 2023. As per City's Comprehensive Plan the development is in Transitional land-use. As per Comprehensive Plan the future land use is BuHi Cultural Corridor
Land Use Vision and Goals of City of Doraville, Dekalb County	Doraville will stand out as a vibrant, multicultural, and open-minded community that offers unique opportunities to live, work, shop, and enjoy the best of what the Atlanta region has to offer – a balanced mix of uses, strong neighborhoods, good schools, family friendliness, a diverse employment sector, and a multimodal transportation network. The future Development Map captures the community's vision for future growth and development in the City of Doraville. Out of the nine-character areas, the city's vision for future development calls for a major change in character in four-character areas: • Doraville Town Center (downtown) • Assembly District. • BuHi Cultural Corridor and • PIB Marketplace. Each of these areas is envisioned as ripe for redevelopment and major new public and private investment. They all consider the opportunity of mixing uses to create a more communal environment where people can access more than one service without traveling to another location. This vision for future development is a key component of the City's path forward. The proposed Lotus Grove mixed-use development comes under BuHi Cultural Corridor character area in the City's Future Development Map, whose vision is as follows: BuHi Cultural Corridor will preserve the international diversity of businesses and new multi-family residents along Buford Highway while becoming a walkable and vibrant district for Doraville residents,

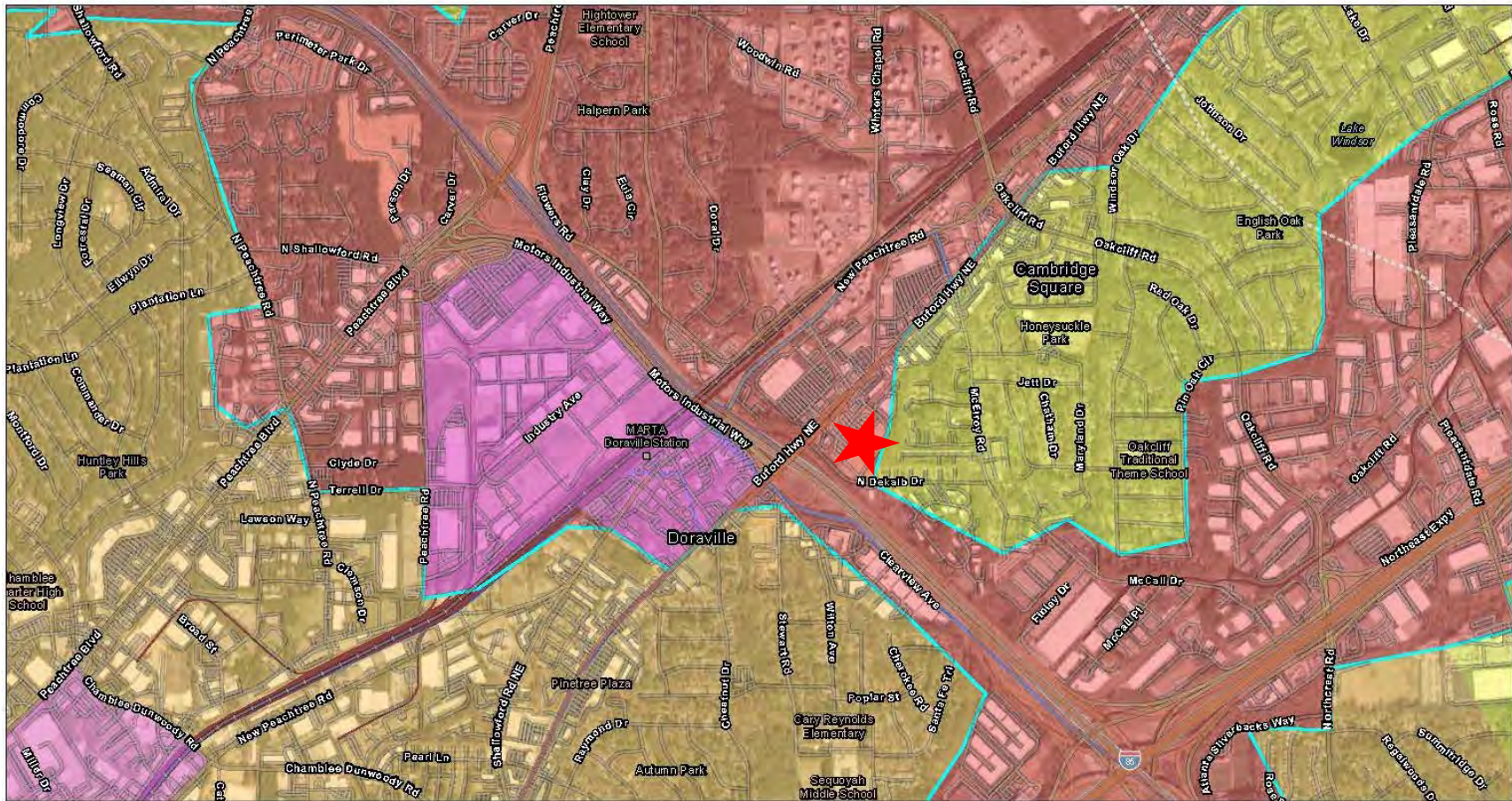
	workers and visitors from around the world. Enhancements to streetscape, signage, and innovative public investments such as public art will make the corridor a popular destination in the greater Atlanta region. Potential Uses for future developments in the BuHi Cultural Corridor as per City of Doraville's Comprehensive Plan 2022-2042 are Mixed-Use, Retail/Commercial, Office, Multi-family residential, Parks & Open Spaces. Potential Building Scale is 3-8 stories (stepping down to 3 stories abutting low-density residential uses). City of Doraville's strategies for BuHi Cultural Corridor are: 1. Implement Buford Highway Livable Centers Initiative (LCI) recommendations to build on the vision for the corridor 2. Build on the "We Love BuHi" initiative. 3. Preserve the cultural diversity of the corridor by working with businesses and business organizations. 4. Improve Buford Highway to enable multimodal transportation access along the corridor. 5. Enhance existing cross streets for bicycle and pedestrian connections. 6. Encourage inter-parcel connections to reduce the abundant driveway curb cuts to improve safety for all travel modes. •
Relation to Existing Land Use Plans	The proposed development is consistent with the land use vision and goals of City of Doraville. The proposed Lotus Grove is a mixed-use development with a significant multi-family high-rise housing component, adjacent to MARTA bus transit, and near MARTA rail transit (half-a-mile to the Doraville station).

The proposed mixed-use development is consistent with the land use vision and goals listed above.

Project Phasing

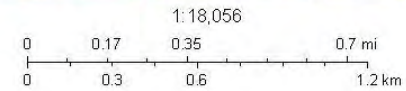
This project has been evaluated for the complete build-out of the development in a single phase, to be completed by 2029.

2021 ARC Unified Growth Policy Map



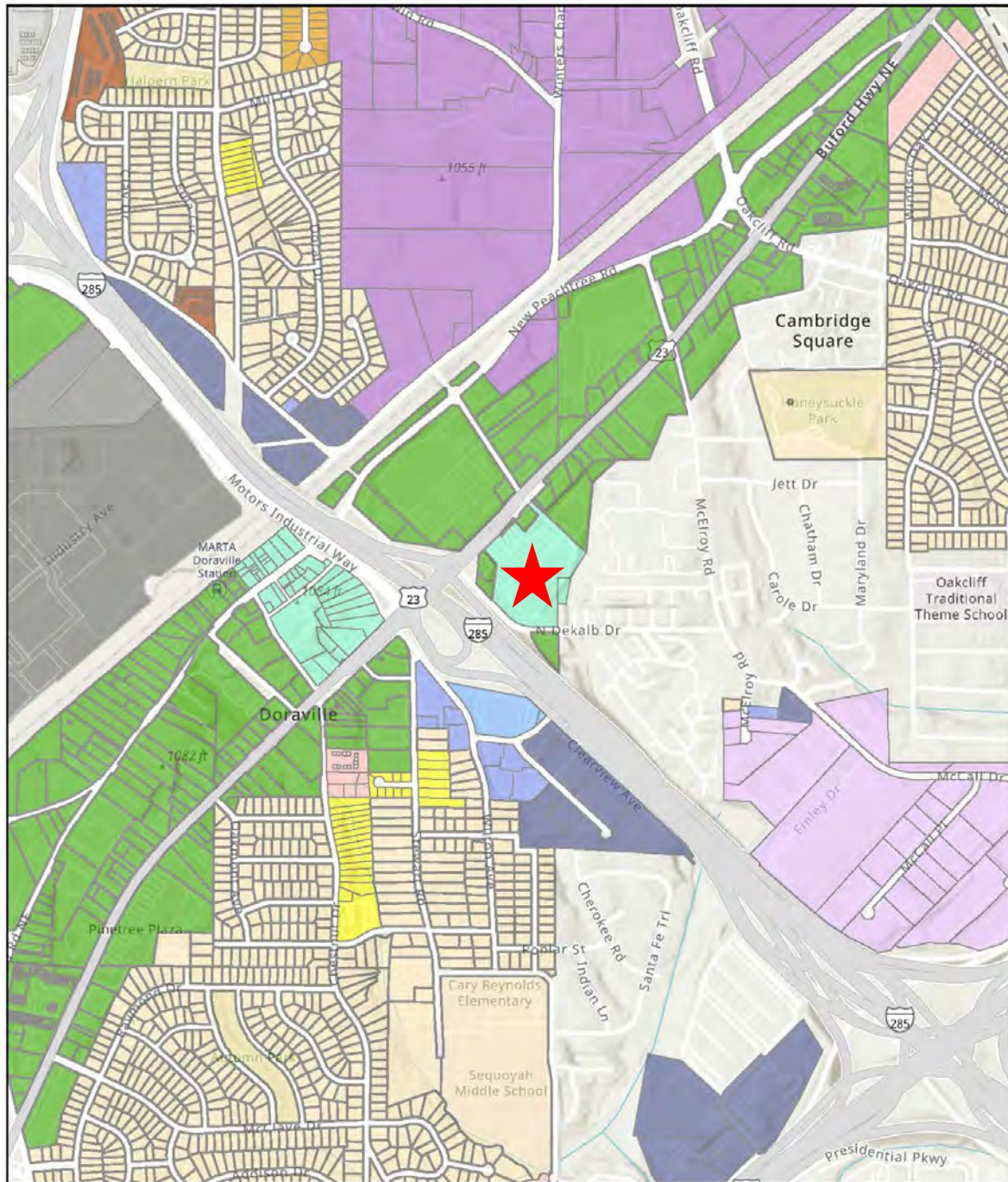
December 27, 2024

- | | | |
|-------------------------|-------------|-----------------------------|
| Town Centers | Counties | Regional Areas - copy |
| Railroads | Major Roads | Established Suburbs |
| MARTA Rail Lines | Expressways | Maturing Neighborhoods |
| Planned Premium Transit | | Region Employment Corridors |



Esri, Community Maps Contributors, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METANASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, NOAA

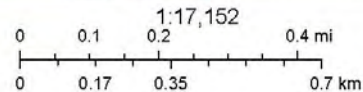
City of Doraville Zoning Map



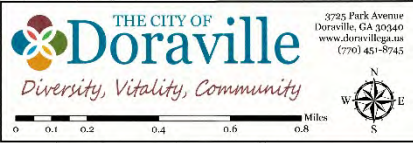
12/28/2024

Doraville Zoning 2023

- | | |
|--|---|
| M-1 Light Manufacturing | R-CH Single-Family Cluster Residential |
| M-2 Heavy Manufacturing | RSFA Single-Family Attached Residential |
| M-2-C | SD-1 Special District: Motors |
| O-I Office-Institutional | SD-2 Special District: Carver Hills |
| O-I-C Office-Institutional Conditional | SD-3 Special District: Assembly |
| O-W Office Warehouse | T-5 Urban Center |
| R-1 Single-Family Residential | T-5-C Urban Center Conditional |
| R-2 General Residential | T-6 Urban Core |
| R-3 Multi-Family Apartments | T-6-C Urban Core Conditional |
| | World Hillshade |



Esri, NASA, NGA, USGS, FEMA, Esri Community Maps Contributors, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, MET/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS



Official Zoning Map City of Doraville, Georgia

Adopted March 21, 2016

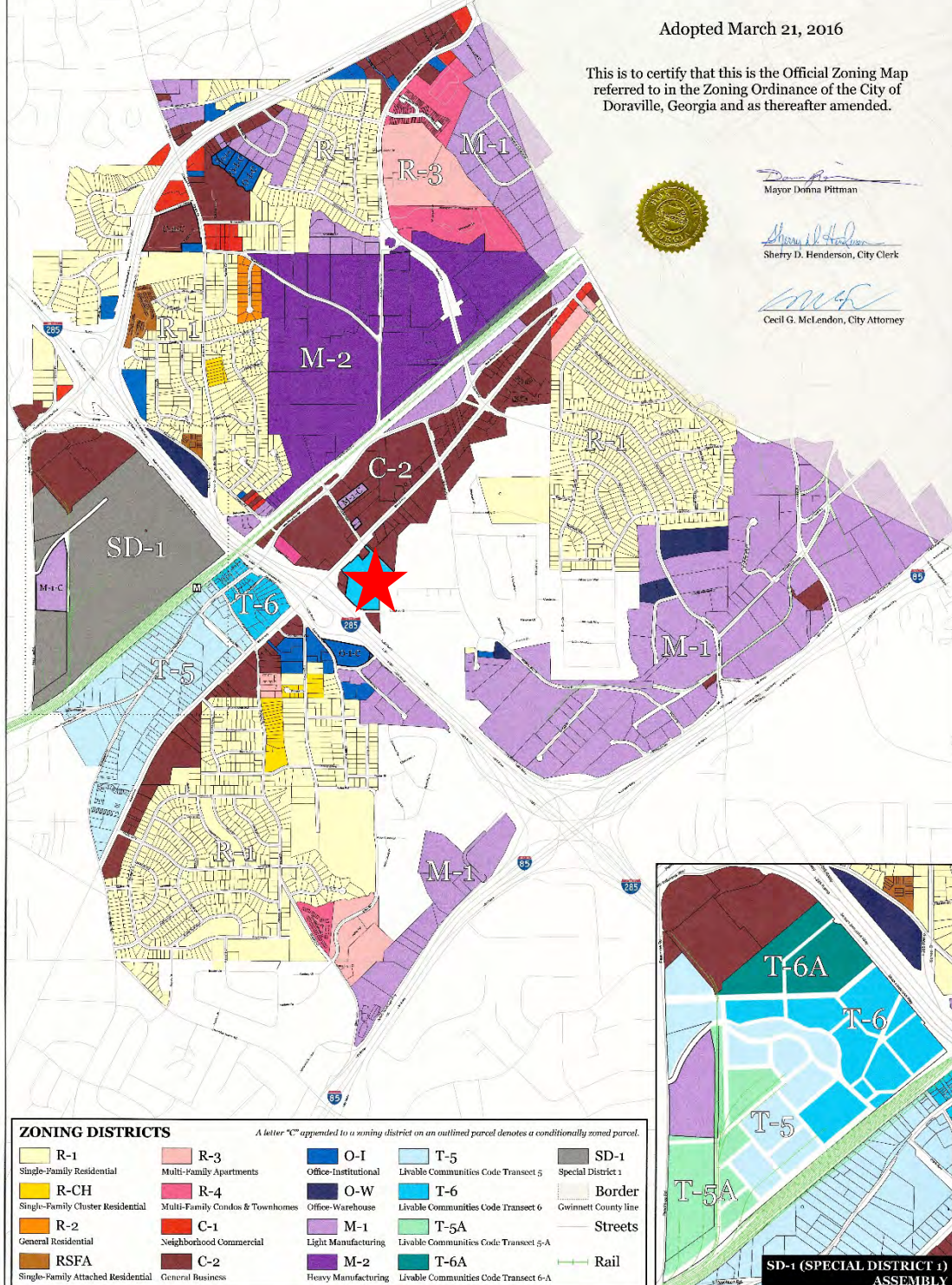
This is to certify that this is the Official Zoning Map referred to in the Zoning Ordinance of the City of Doraville, Georgia and as thereafter amended.



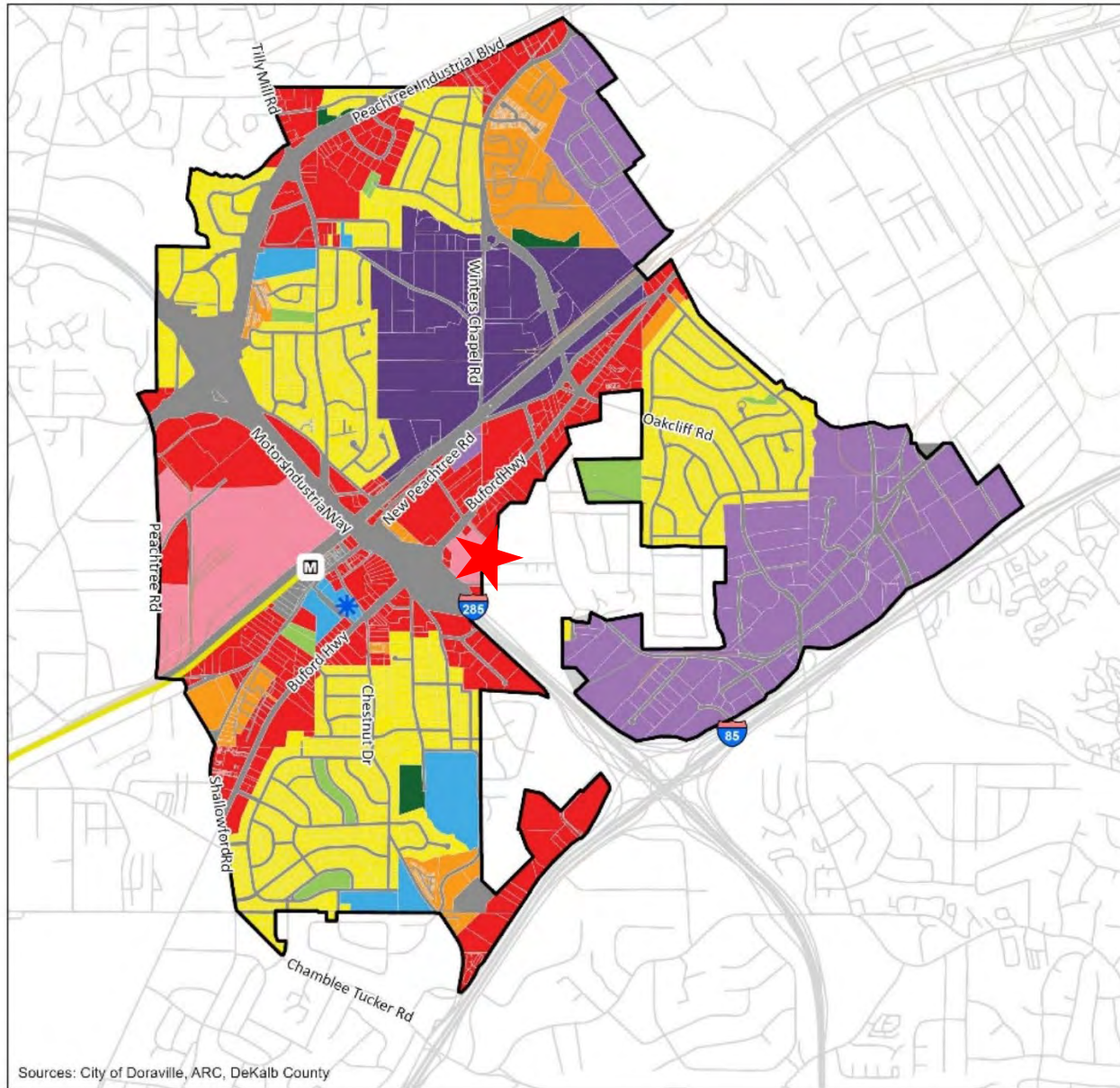
Dorinda Pittman
Mayor Dorinda Pittman

Sherry D. Henderson
Sherry D. Henderson, City Clerk

Cecil G. McLendon
Cecil G. McLendon, City Attorney



Disclaimer: All data is provided as is, with all faults, without warranty of any kind, either expressed or implied. This map is the property of the City of Doraville, Georgia and its assigns. All rights reserved. Zoning districts official as of the date of this map. Districts may change subject to approved recordings and annotations.



**FIGURE 2-3: EXISTING
LAND USE MAP**

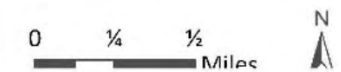


FIGURE 4-2: FUTURE DEVELOPMENT MAP

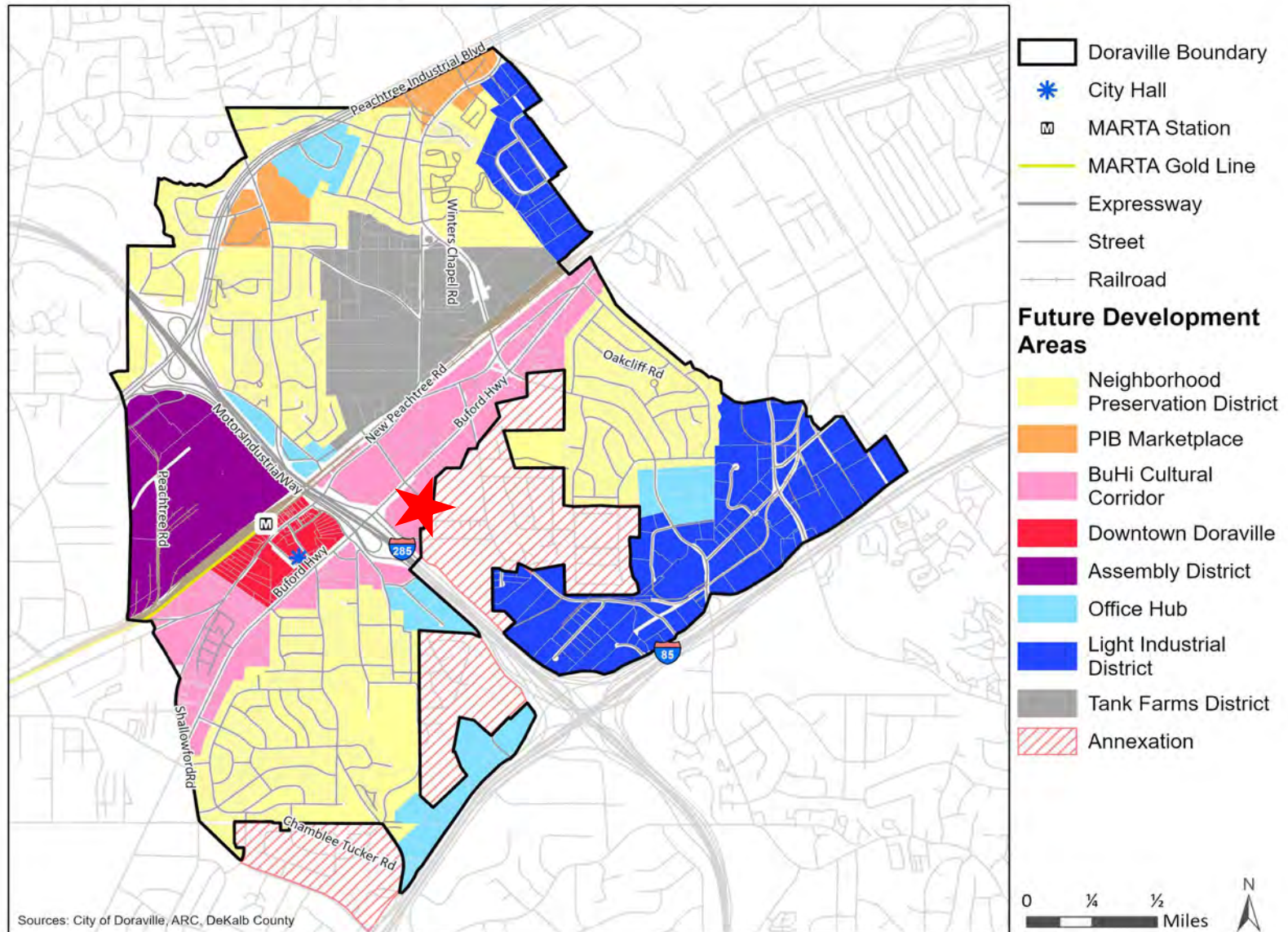
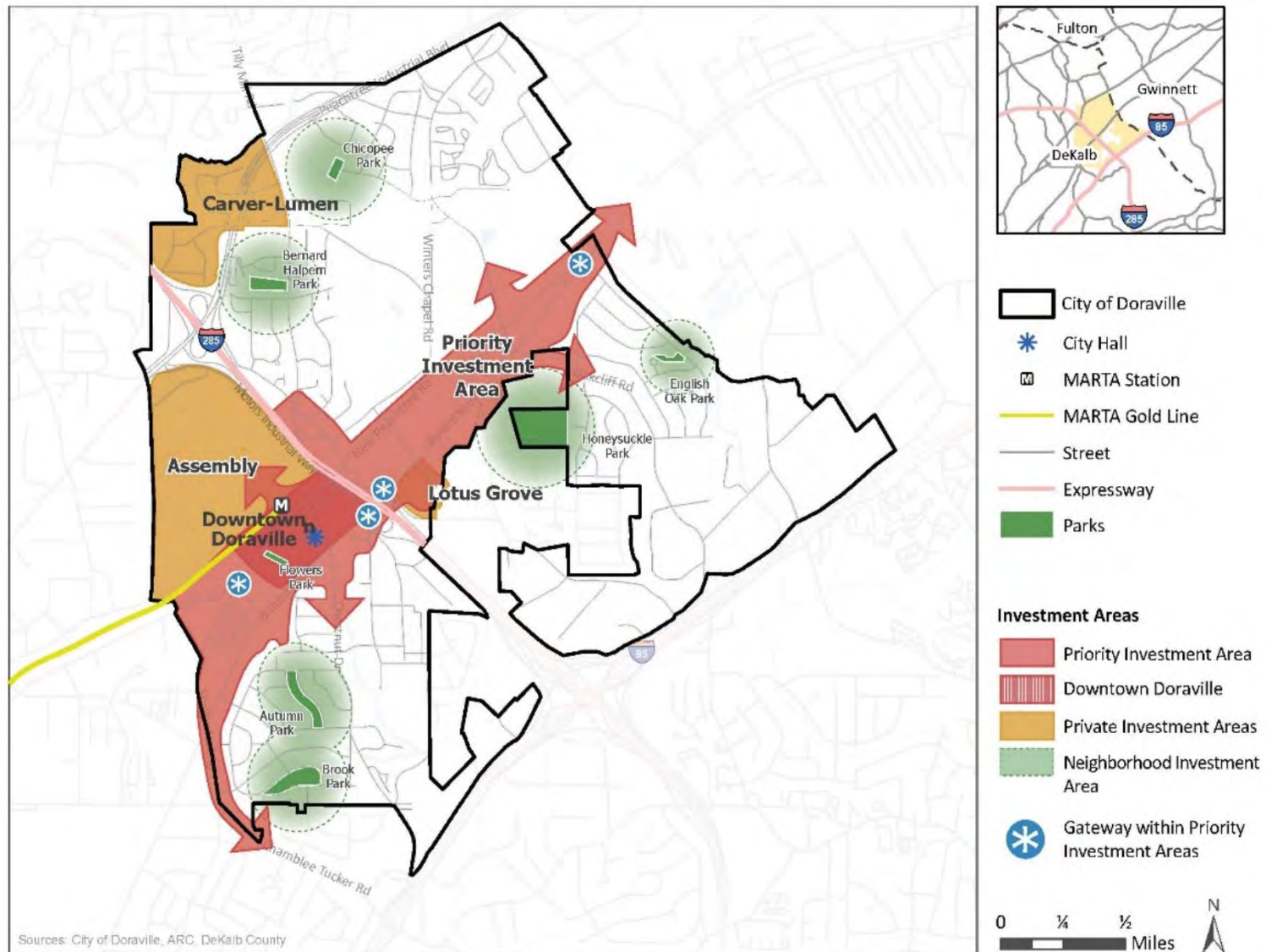


FIGURE 4-1: PRIORITY INVESTMENT AREAS MAP



Trip Generation

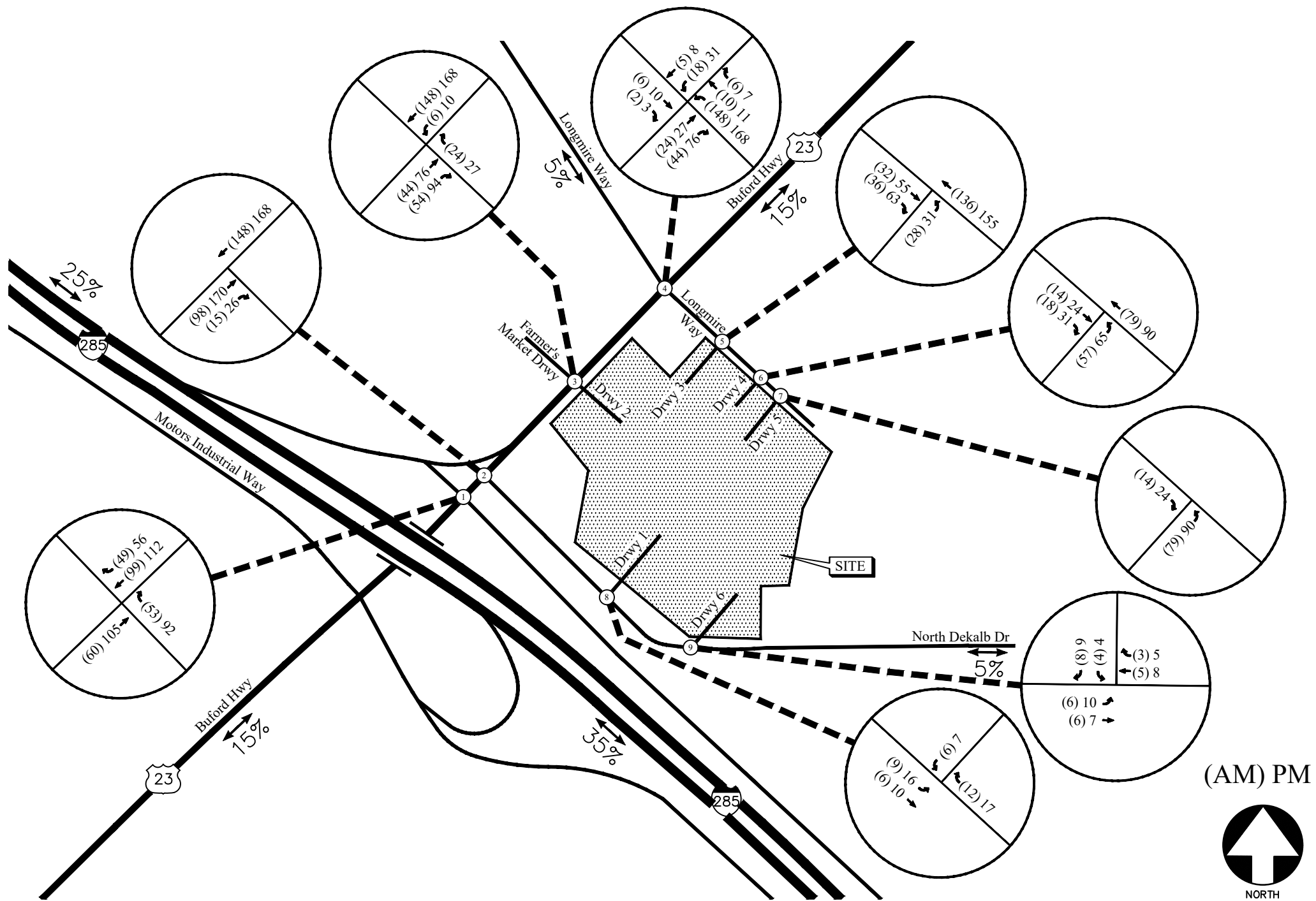
Trip generation estimates for the project were based on the rates and equations published in the 11th edition of the Institute of Transportation Engineers (ITE) Trip Generation report. This reference contains traffic volume count data collected at similar facilities nationwide. The trip generation was based on the following ITE *Land Uses*: 222 – *Multifamily Housing (High-Rise) - Close to Rail Transit*, 310 – *Hotel* and 821 – *Shopping Plaza (40-150k) - Supermarket - No*. Due to the nature of the development, pass-by and mixed-use reductions have been applied per ITE standards. A 6% alternate mode reduction has also been applied. The calculated total trip generation for the proposed development is shown in Table 4.

Land Use	Size	AM Peak Hour			PM Peak Hour			24 Hour
		Enter	Exit	Total	Enter	Exit	Total	2-way
ITE 222 – Multifamily Housing (High-Rise) - Close to Rail Transit	780 units	39	140	179	126	77	203	3,089
Mixed-Use Reduction		-3	-11	-14	-10	-6	-16	-247
Alternate Mode Reduction (6%)		-2	-8	-10	-7	-4	-11	-171
ITE 310 – Hotel	160 rooms	41	32	73	46	45	91	1,311
Mixed-Use Reduction		-3	-3	-6	-4	-4	-8	-105
Alternate Mode Reduction (6%)		-2	-2	-4	-3	-2	-5	-72
ITE 821 – Shopping Plaza (40-150k) - Supermarket - No	86,323 sf	93	56	149	220	228	448	5,829
Mixed-Use Reduction		-7	-4	-11	-18	-18	-36	-466
Alternate Mode Reduction (6%)		-5	-3	-8	-12	-13	-25	-322
Pass-by Trips (0%) 40%		0	0	0	-76	-79	-155	-1,550*
Total Trips (without Reductions)		173	228	401	392	350	742	10,229
New External Trips (with Reductions)		151	197	348	262	224	486	7,296

* Daily pass-by volume reduction estimated to be the lesser of the PM peak hour pass-by rate determined volume or ten times the PM pass-by volume

Trip Distribution

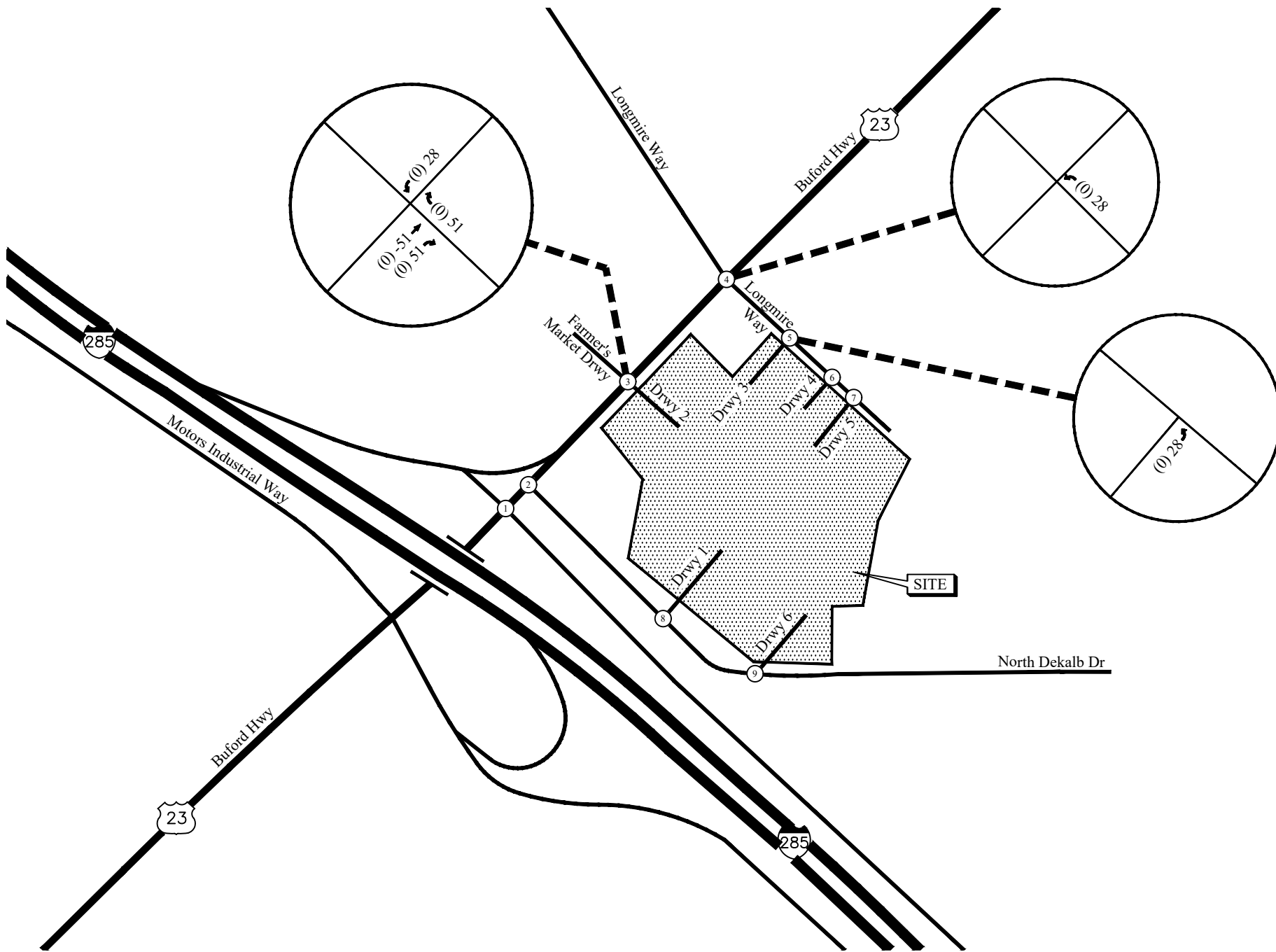
The trip distribution describes how traffic arrives and departs from the site. An overall trip distribution was developed for the site based on the nature of the development and the locations of major roadways and highways that will serve the development and a review of the existing travel patterns in the area. 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 for have also been distributed based on existing travel patterns and are shown in Figure 6.



TRIP DISTRIBUTION AND SITE-GENERATED WEEKDAY PEAK HOUR VOLUMES

FIGURE 5

A&R Engineering Inc.



SITE PEAK HOUR PASS-BY VOLUMES

FIGURE 6

FUTURE 2029 TRAFFIC ANALYSIS

The future 2029 traffic operations are analyzed for the “Build” and “No-Build” conditions. This provides a basis of reference for determining both the contribution of the site to overall traffic conditions and the additional improvements needed to provide sufficient site access and capacity for passing traffic.

Improvements that are identified as “System Improvements” address deficiencies that are found within the existing road network prior to any impacts from the proposed development’s added traffic. Improvements that are identified as “Site Mitigation Improvements” address further impacts that are a result of the proposed development’s added traffic. Note that survey and construction drawings would be needed to verify the feasibility and extent of additional right-of-way required for any recommended improvements.

Future “No-Build” Conditions

The “No-Build” (or background) conditions provide an assessment of how traffic will operate in the study horizon year 2029 without the study site being developed as proposed, with projected increases in through traffic volumes due to normal annual growth. The Future “No-Build 2029” volumes consist of the existing traffic volumes (Figure 2) plus increases for annual growth of traffic.

Annual Traffic Growth

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 five years (2018-2019 & 2021-2023) revealed a traffic volume increase of approximately 2% in the area. This growth factor was applied to the existing traffic volumes 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.

Planned and Programmed Improvements in Study Area

The following improvements have been identified in the Regional Transportation Plan (Plan 2040), GDOT GeoPi, and/or the local comprehensive transportation plan. These improvements are within the vicinity of the proposed development.

TABLE 5 — PLANNED AND PROGRAMMED IMPROVEMENTS

Item #	Project Name	From / To Points	Sponsor	GDOT PI #	ARC ID #	Design FY	ROW / UTL FY	CST FY
1	SR 13/US 23 @ I-285	The proposed project involves several improvements. The I-285 Eastbound Entrance Ramp will be widened to provide two receiving lanes. The Motors Industrial Way eastbound approach will be widened to provide two through lanes. The SR 13 southbound approach will be widened to provide five southbound lanes underneath the I-285 bridge, with two of the lanes used as left turn lanes onto Eastbound I-285. Both the SR 13 northbound and southbound left turns at the I-285 Eastbound Ramps will be changed to protected-only phasing. The I-285 Westbound Exit Ramp will be widened to allow three left turn lanes onto SR 13 southbound.	GDOT	0019705	N/A	N/A	N/A	N/A
2	SR 13 @ i-285; @Oakcliff Road: @ McElroy Rd & @ Longmire Way	This project will improve pedestrian safety and multimodal access at key intersections on the Buford Highway corridor within the City of Doraville. Improvement may include restriping intersections, expanding and elevating sidewalk above curb heights, improving lighting and enhancing stormwater drainage. This project is partially funded by a \$1,529,000 earmark (FY 2023 Congressionally Directed Spending), DEMO ID: GA359	GDOT	0019884	N/A	2024	2027	2029
3	West Avenue Improvements (DK-430)	West Avenue from Peachtree Road to Motors Industrial Way	City of Doraville	N/A	N/A	2030	LR 2022-2030	LR 2022-2030
4	I-285 North Corridor (AR-410A)	Revive 285 - I-285 North Corridor High-Capacity Rail Service Protective Right of Way Acquisition from Perimeter Center to Doraville	GDOT	0013251	N/A	2040	LR 2031-2040	LR 2031-2040

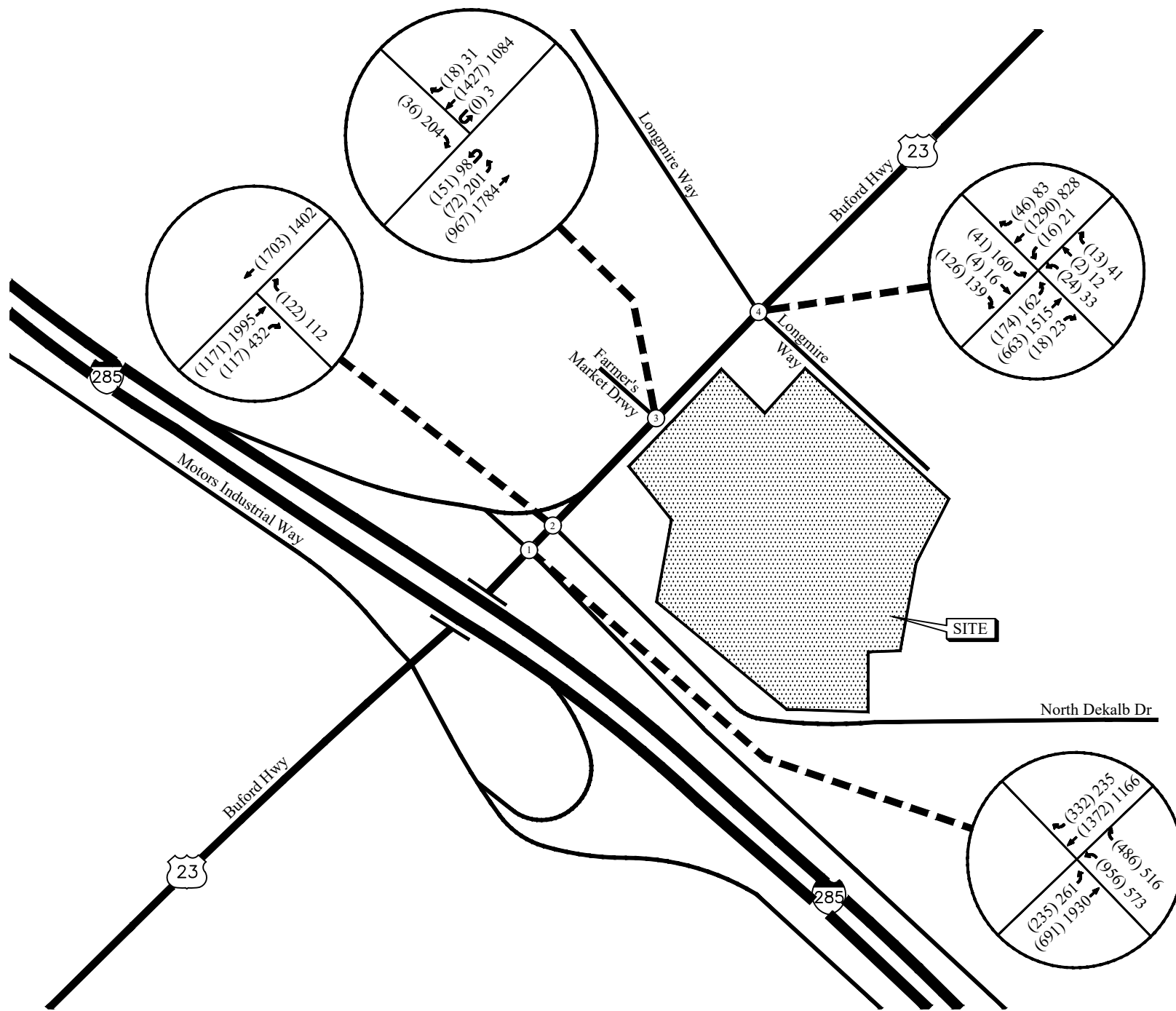
5	I-285 North Corridor (AR-ML-200)	Revive 285 - I-285 North Managed Lanes and Collector/Distributor Lane Improvements from I-75 North to I-85 North	GDOT	0001758	N/A	2030	LR 2022-2030	LR 2022-2030
6	I-285 North Corridor (DK-402)	Revive 285 - I-285 North Collector/Distributor Lanes from Us 23 (Buford Highway) to I-85 North	GDOT	0013256	N/A	2030	LR 2022-2030	LR 2022-2030
7	Park Avenue Extension (DK-429)	Park Avenue Extension from SR 13 (Buford Highway) to SR 141 (Peachtree Boulevard)	City of Doraville	N/A	N/A	2030	LR 2022-2030	LR 2022-2030

Transportation Project Interaction with DRI

The network year for all the programmed projects is 2030 and beyond. Since the proposed development is planned to be completed in 2029 the improvement projects will not be included in the DRI traffic analysis.

Planned Projects

There are no planned projects that will impact the study area before its completion



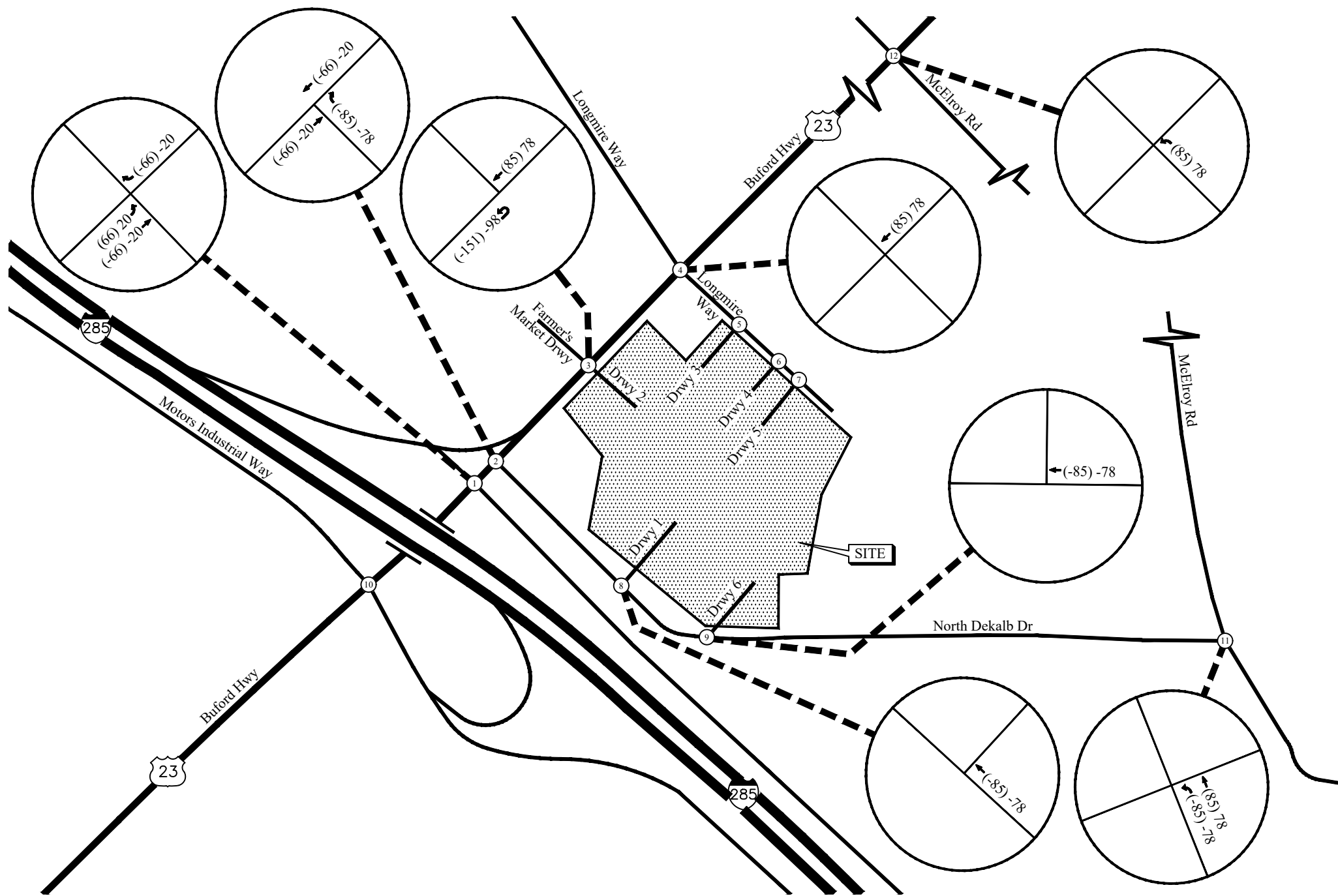
(AM) PM



FUTURE (NO-BUILD) WEEKDAY PEAK HOUR VOLUMES

FIGURE 7

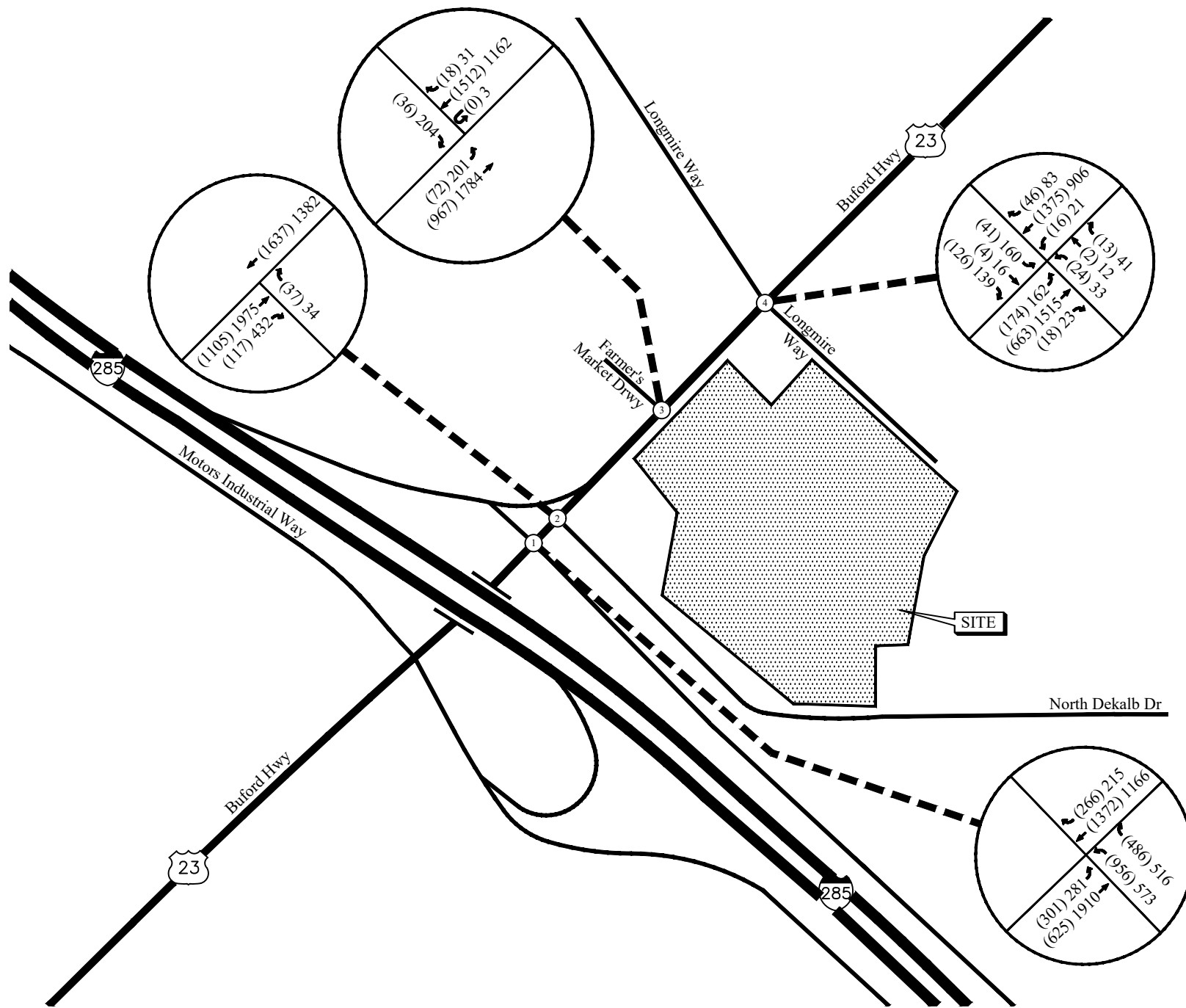
A&R Engineering Inc.



SHIFTED NORTHBOUND U-TURNS (NO-BUILD)

FIGURE 8

A&R Engineering Inc.



(AM) PM



FUTURE (NO-BUILD) WEEKDAY PEAK HOUR VOLUMES
SYSTEM IMPROVEMENTS

FIGURE 9

A&R Engineering Inc.

Future “No-Build 2029” Traffic Operations

The future “No-Build 2029” traffic operations were analyzed using the volumes in Figures 7 and 9 the results are shown in Table 6 below. The analysis included existing roadway conditions and with “System Recommended Improvements” assumed as implemented.

TABLE 6 — FUTURE “NO-BUILD 2029” INTERSECTION OPERATIONS					
Intersection		LOS (Delay)			
		NO IMPROVEMENTS		SYSTEM IMPROVEMENTS	
		AM Peak	PM Peak	AM Peak	PM Peak
1	US 23 (Buford Hwy) @ I-285 WB Ramp	C (33.7)	C (28.9)	D (37.6)	C (29.1)
	-Westbound Approach	D (42.2)	D (40.0)	D (42.2)	D (40.0)
	-Northbound Approach	C (21.4)	C (23.2)	C (29.3)	C (23.3)
	-Southbound Approach	C (32.9)	C (29.1)	D (38.2)	C (29.9)
2	US 23 (Buford Hwy) @ North DeKalb Dr*				
	-Westbound Approach	A (1.7)	A (5.6)	A (1.2)	A (1.5)
3	US 23 (Buford Hwy) @ Farmer’s Market Drwy*				
	-Eastbound Approach	F (94.9)	D (32.2)	A (6.5)	A (6.9)
	-Northbound Left/U-turn	B (14.0)	A (8.4)	A (3.0)	A (4.3)
	-Southbound U-turn	A (2.0)	A (2.1)	A (1.9)	A (2.0)
4	US 23 (Buford Hwy) @ Longmire Way	B (12.0)	B (17.0)	B (12.1)	B (17.0)
	-Eastbound Approach	D (53.0)	D (46.2)	D (53.0)	D (46.2)
	-Westbound Approach	E (56.3)	E (61.3)	E (56.3)	E (61.3)
	-Northbound Approach	A (6.2)	B (12.0)	A (6.4)	B (12.1)
	-Southbound Approach	A (9.1)	B (12.0)	A (9.4)	B (12.3)

*As Synchro does not produce results for unsignalized intersections with more than three through lanes, SIM Traffic results are reported.

The results of future “No-Build” traffic operations show that eastbound right-in/right-out Farmer’s Market’s driveway approach at the RCUT intersection of Buford Highway will continue to operate at LOS “F” in the AM peak hour as in “Existing” conditions but with increased delays.

Recommendations for System Improvements

A summary of the system improvements, which address deficiencies that are found within the existing road network for the “No-Build” conditions, is provided below.

Intersection 3: US 23 (Buford Highway) at Farmer’s Market Driveway

As explained earlier, the eastbound right-turn delays are caused by heavy northbound U-Turns onto southbound Buford Highway. These U-Turns are primarily made by the exiting traffic from N. Dekalb Drive heading towards south on Buford Highway. Additionally, the northbound through traffic at Intersection 1 (US 23/Buford Hwy @ I-285 WB Ramp) is also making U-turns at the RCUT intersection to access the I-285 Westbound On-Ramp. This existing RCUT intersection does not meet GDOT’s spacing requirements for installation of a traffic signal. To improve traffic operations at this intersection, we recommend the following:

- Prohibit Northbound U-turns at this intersection due to long delays and safety concerns.

After the recommended system improvements are implemented, the intersection will be operating at level of service “A” in both the AM and PM peak hours

Shifted Northbound U-turns (No-Build)

The traffic coming from North Dekalb Drive (70% of the westbound right-turn traffic) is rerouted via McElroy Road. This rerouted traffic will turn left at the intersection of Buford Highway and McElroy Road, subsequently being added to the southbound through traffic at the study intersections. Additionally, the northbound through traffic at Intersection 1, which is responsible for some of the U-turns at the RCUT intersection, will be rerouted to take left turns at Intersection 1. The shifted traffic is shown in Figure 8. The No-build traffic volumes with the system improvements is shown in Figure 9.

Auxiliary Lane Analysis

Included below are analyses for left-turn lanes and deceleration lanes for all site driveways per GDOT standards. The analyses below are based off the trip distribution included in Section 5.2. According to the trip distribution, the 24-hour two-way volume entering and exiting the site is 7,296 vehicles (passby trips included). The ADT on North Dekalb Drive and Longmire Way (east of US 23 (Buford Highway)) is assumed to be less than 6,000 vehicles based on the GDOT volumes on the surrounding roadways.

Left Turn Lane Analysis

For six lane roadways with AADT's greater than or equal to 10,000 vehicles and a posted speed limit of 35 mph, the daily site generated traffic left-turn movements threshold to warrant a left-turn lane is 300 left-turning vehicles a day. For two lane roadways with AADT's less than 6,000 vehicles and a posted speed limit of 25 mph, the daily site generated traffic left-turn movements threshold to warrant a left-turn lane is 300 left-turning vehicles a day. The projected left-turn volumes per day for each driveway is included in Table 7.

Intersection	Left turn traffic (% total entering)	Left-turn Volume (vehicles/day)	Roadway Speed/ # lanes / ADT	GDOT Threshold (vehicles/ day)	Warrants met?
North Dekalb Dr @ Site Drwy 1	6%	299 $(\text{Total Trips}) \div 2 \times 0.06 =$ $(9976) \div 2 \times 0.06 = 299$	25 mph / 2-Lane / < 6,000	300	No
US 23 (Buford Hwy) @ Site Driveway 2	4%	200 $(\text{Total Trips}) \div 2 \times 0.04 =$ $(9976) \div 2 \times 0.04 = 200$	35 mph / 6-Lane / $\geq 10,000$	300	No
North Dekalb Dr @ Site Drwy 6	4%	200 $(\text{Total Trips}) \div 2 \times 0.04 =$ $(9976) \div 2 \times 0.04 = 200$	25 mph / 2-Lane / < 6,000	300	No

*Pass-by reductions included, mixed use and alternate mode reductions not included in the total trips

Per GDOT standards, a left turn lane is not warranted at any of the site driveways

Deceleration Turn Lane Analysis

For six lane roadways with AADT's greater than or equal to 10,000 vehicles, for two lane roadways with AADT's greater than or equal to 6,000 vehicles and a posted speed limit of 35 mph, the daily site generated traffic right-turn movements threshold to warrant a deceleration lane is 100 right turning vehicles a day. For two lane roadways with AADT's less than 6,000 vehicles and a posted speed limit of 25 mph, the daily site generated traffic right-turn movements threshold to warrant a deceleration lane is 200 right turning vehicles a day. The projected right-turn volumes per day for each driveway is included in Table 8.

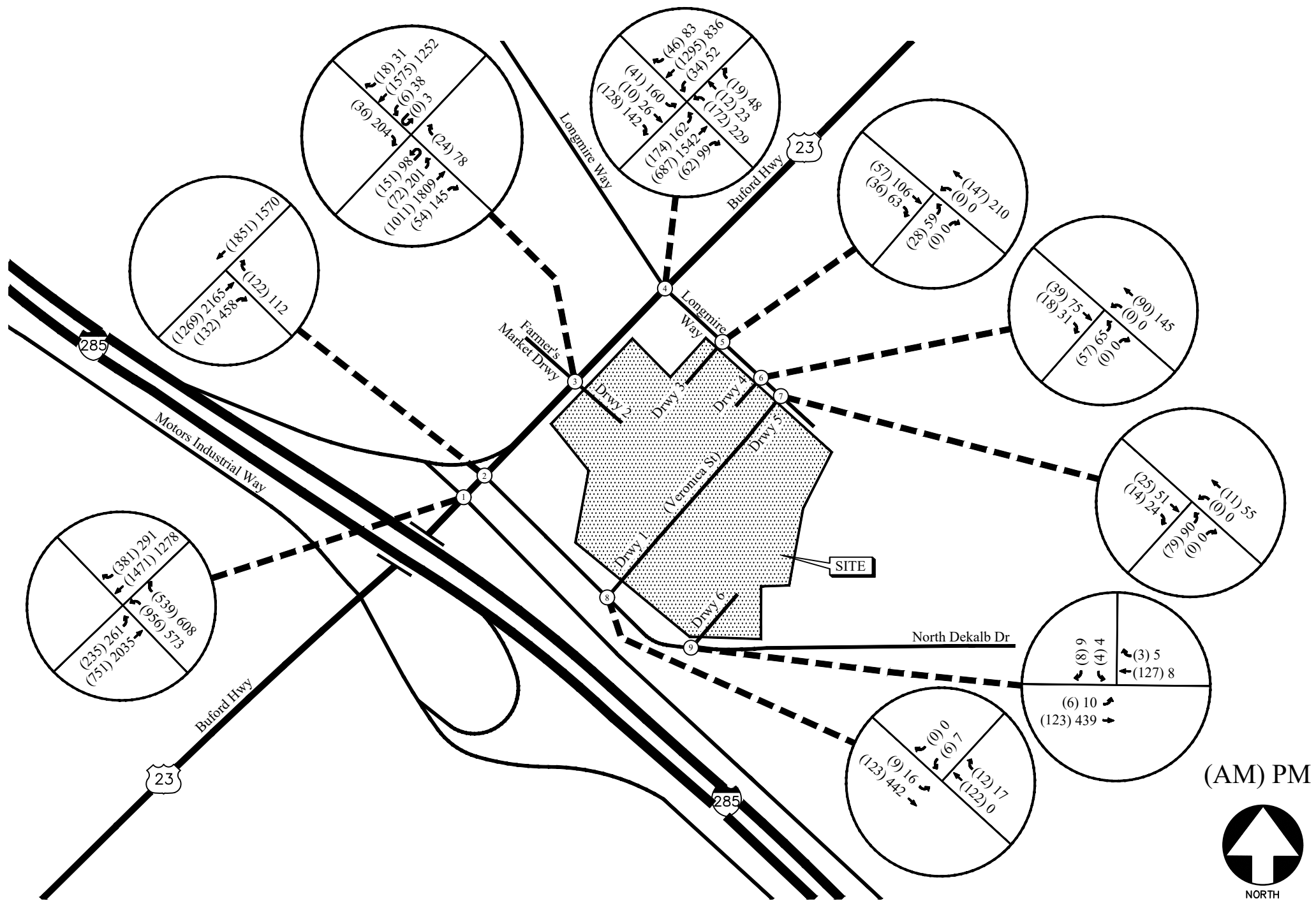
Intersection	Right-turn traffic (% total entering)	Right-turn Volume (vehicles/day)	Roadway Speed/ # lanes / ADT	GDOT Threshold (vehicles/ day)	Warrants met?
North Dekalb Dr @ Site Drwy 1	3%	150 $(\text{Total Trips}) \div 2 \times 0.03 =$ $(9976) \div 2 \times 0.03 = 150$	25 mph / 2-Lane / < 6,000	200	No
US 23 (Buford Hwy) @ Site Driveway 2	36%	1796 $(\text{Total Trips}) \div 2 \times 0.36 =$ $(9976) \div 2 \times 0.36 = 1796$	35 mph / 6-Lane / $\geq 10,000$	100	Yes
North Dekalb Dr @ Site Drwy 6	2%	100 $(\text{Total Trips}) \div 2 \times 0.02 =$ $(9976) \div 2 \times 0.02 = 100$	25 mph / 2-Lane / < 6,000	200	No

*Pass-by reductions included, mixed use and alternate mode reductions not included in the total trips

A right turn lane is warranted at the site driveways 2 per GDOT standards.

Future “Build 2029” Conditions

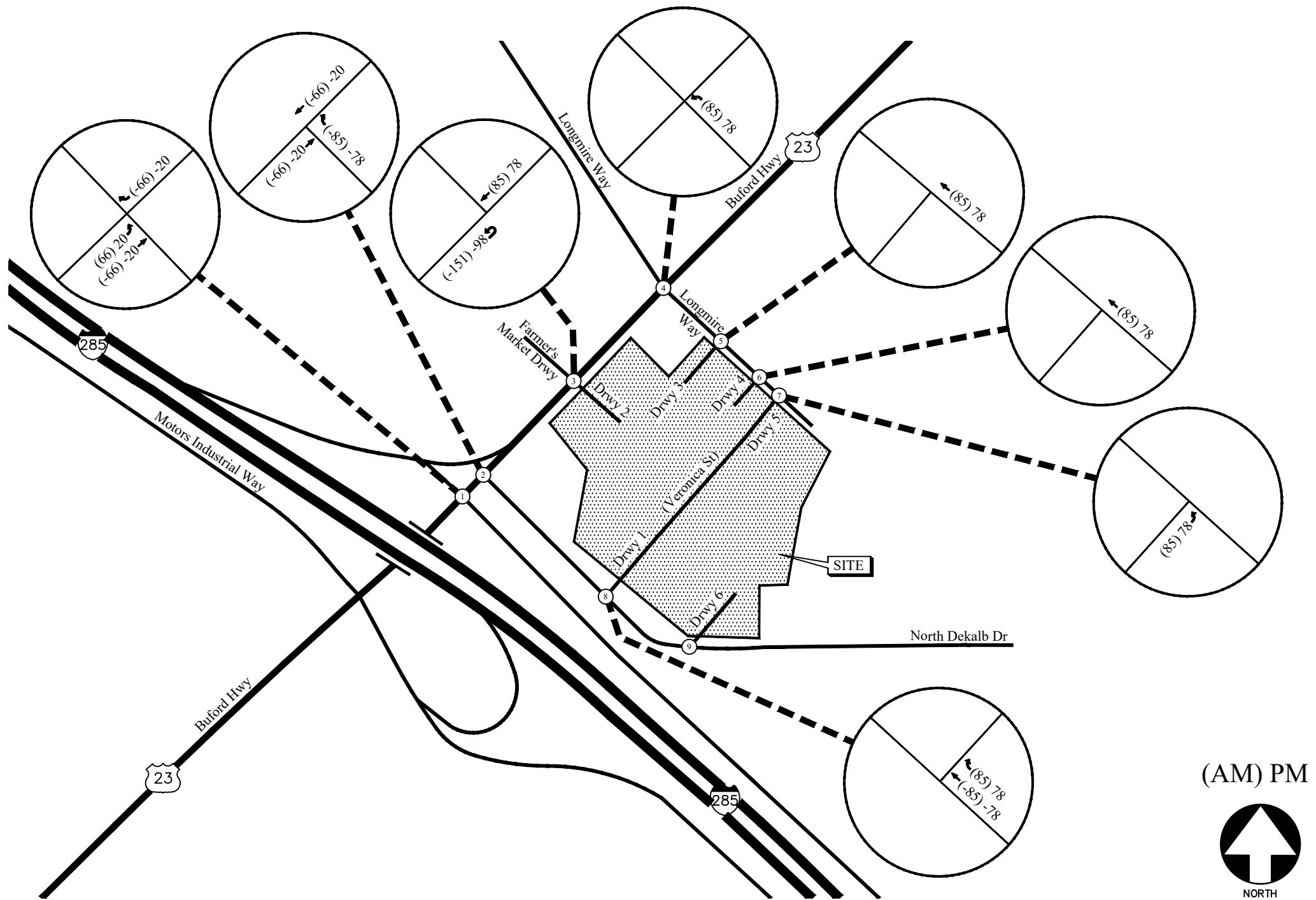
The “Build 2029” or development conditions include the estimated background traffic from the “No-Build” conditions plus the traffic from the proposed development. To evaluate future traffic operations in this area, the additional traffic volumes from the site (Figure 5) and pass-by volumes (Figure 6) 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 10.



FUTURE (BUILD) WEEKDAY PEAK HOUR VOLUMES

FIGURE 10

A&R Engineering Inc.



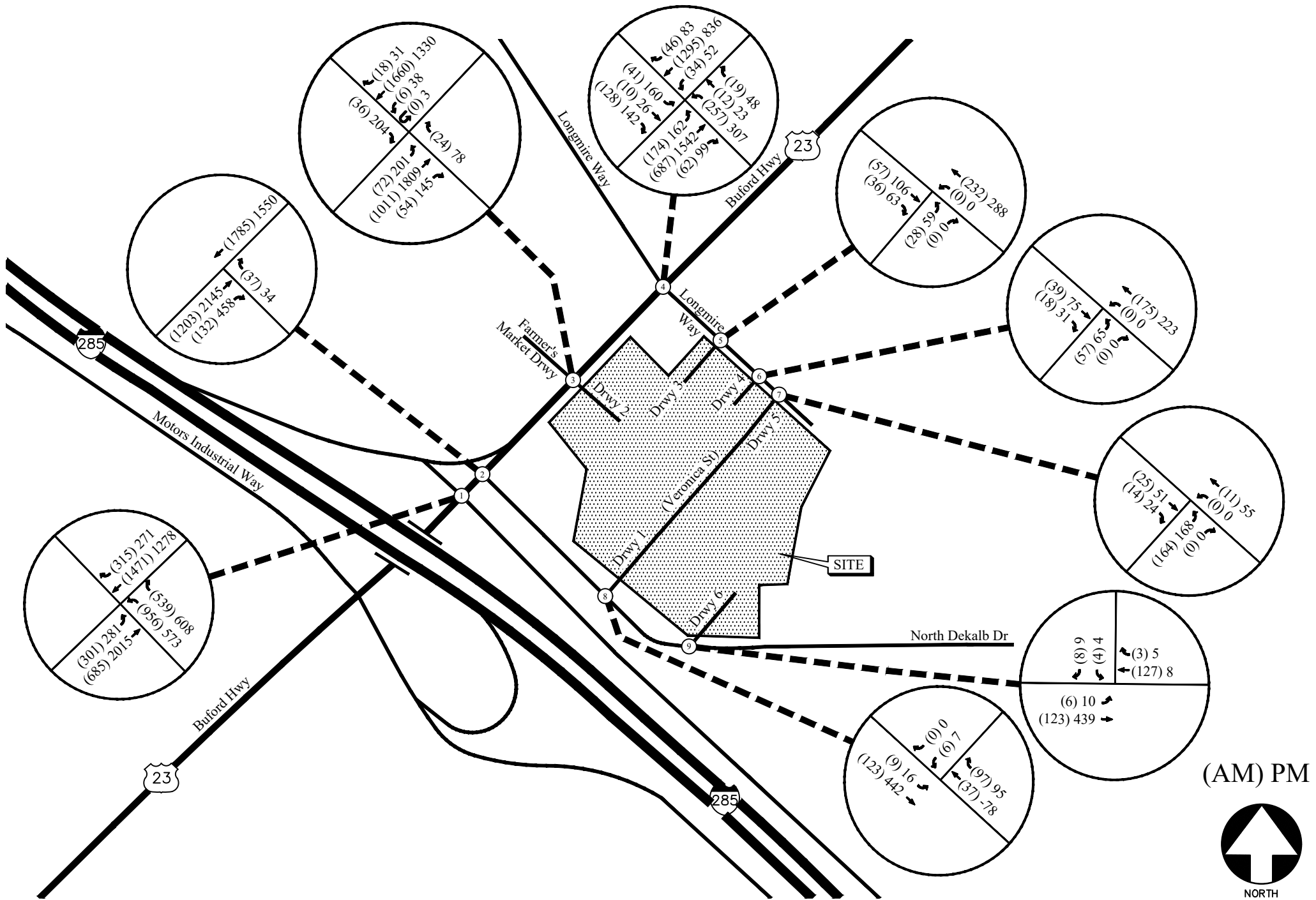
SHIFTED NORTHBOUND U-TURNS (BUILD)

(AM) PM



FIGURE 11

A&R Engineering Inc.



FUTURE (BUILD) WEEKDAY PEAK HOUR VOLUMES
SYSTEM IMPROVEMENTS

FIGURE 12
A&R Engineering Inc.

Future “Build 2029” Traffic Operations

The future “Build” traffic operations were analyzed using the volumes in Figures 10 and 12 and the results are shown in Table 9 below.

TABLE 9 — FUTURE “BUILD 2029” INTERSECTION OPERATIONS					
Intersection		LOS (Delay)			
		NO IMPROVEMENTS		SYSTEM IMPROVEMENTS	
		AM Peak	PM Peak	AM Peak	PM Peak
1	<u>US 23 (Buford Hwy) @ I-285 WB Ramp</u>	<u>D (36.4)</u>	<u>D (35.2)</u>	<u>D (42.3)</u>	<u>D (35.6)</u>
	-Westbound Approach	D (39.0)	D (39.3)	D (39.0)	D (39.3)
	-Northbound Approach	C (26.7)	C (32.2)	D (40.1)	C (32.4)
	-Southbound Approach	D (40.4)	D (36.9)	D (47.2)	D (37.9)
2	<u>US 23 (Buford Hwy) @ North DeKalb Dr*</u>				
	-Westbound Approach	A (2.5)	B (14.8)	A (1.4)	A (1.3)
3	<u>US 23 (Buford Hwy @ Farmer’s Market Drwy*)</u>				
	-Eastbound Approach	F (108.3)	D (33.6)	A (8.9)	A (8.2)
	-Westbound Approach	A (0.9)	A (1.0)	A (1.0)	A (1.0)
	-Northbound Left/U-turn	B (13.9)	A (9.4)	A (2.6)	A (3.8)
	-Southbound Left/U-turn	A (2.8)	A (3.7)	A (2.9)	A (2.8)
4	<u>US 23 (Buford Hwy) @ Longmire Way</u>	<u>C (20.1)</u>	<u>C (28.9)</u>	<u>C (25.9)</u>	<u>C (34.3)</u>
	-Eastbound Approach	D (38.4)	C (29.7)	C (31.6)	C (25.2)
	-Westbound Approach	D (51.8)	D (52.1)	D (53.0)	D (52.8)
	-Northbound Approach	B (12.9)	C (27.2)	B (17.8)	C (34.4)
	-Southbound Approach	B (17.9)	C (24.4)	C (25.0)	C (29.9)
5	<u>Longmire Way @ Site Drwy 3</u>				
	-Westbound Left	A (0.0)	A (0.0)	A (0.0)	A (0.0)
6	<u>Longmire Way @ Site Drwy 4</u>				
	-Westbound Left	A (0.0)	A (0.0)	A (0.0)	A (0.0)
7	<u>Longmire Way @ Site Drwy 5</u>				
	-Westbound Left	A (0.0)	A (0.0)	A (0.0)	A (0.0)
8	<u>N DeKalb Dr @ Site Drwy 1</u>				
	-Eastbound Left	A (7.5)	A (7.3)	A (7.5)	A (7.4)
9	<u>N DeKalb Dr @ Site Drwy 6</u>				
	-Eastbound Left	A (7.5)	A (7.3)	A (7.5)	A (7.3)
	-Southbound Approach	A (9.4)	A (9.6)	A (9.4)	A (9.6)

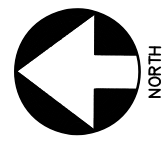
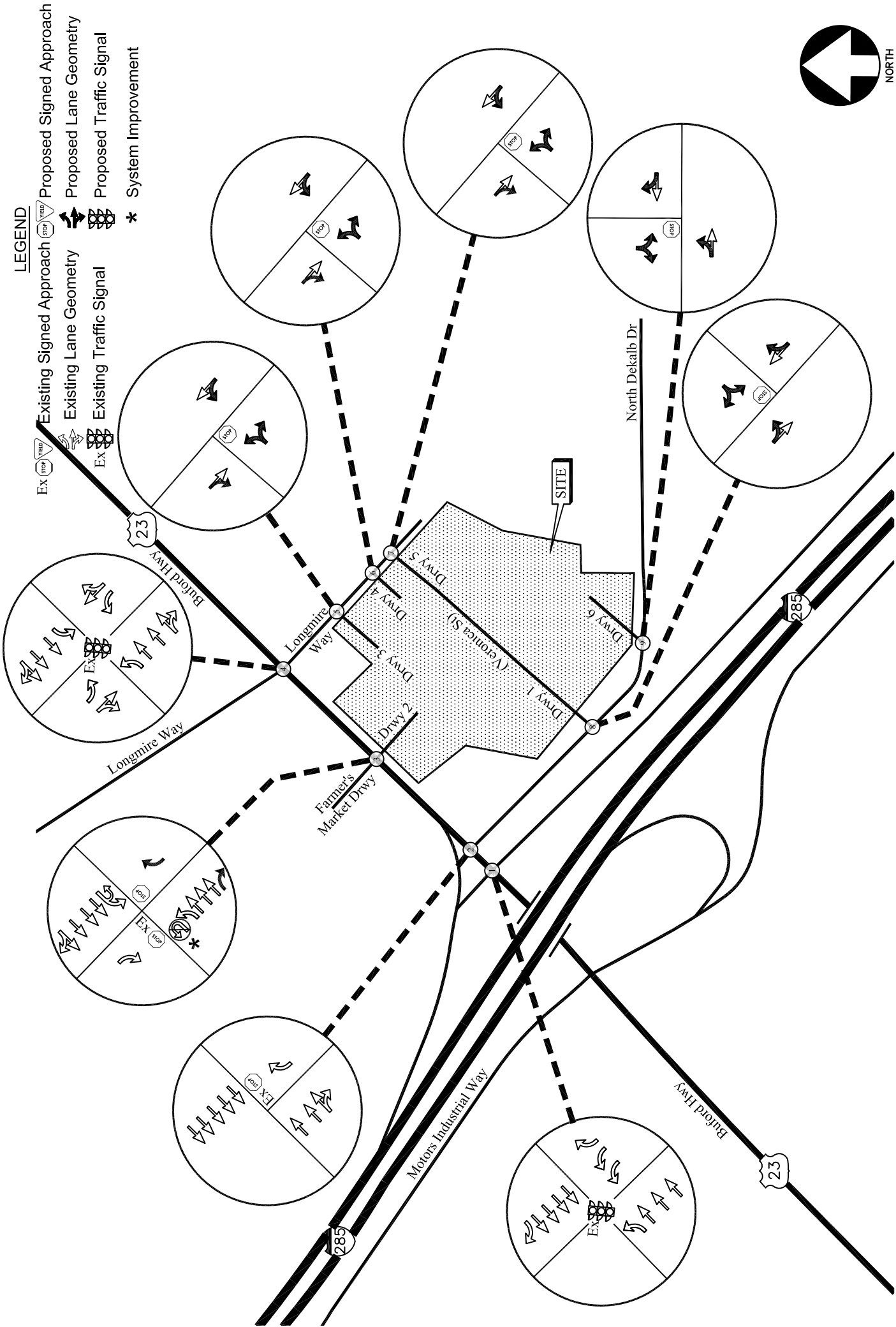
*As Synchro does not produce results for unsignalized intersections with more than three through lanes, SIM Traffic results are reported.

The results of future “Build” traffic operations show that without the system improvements implemented, the eastbound right-in/right-out Farmer’s Market’s driveway approach at the RCUT intersection of Buford Highway will continue to operate at LOS “F” in the AM peak hour as in “Existing”

conditions with increased delays. After the U-Turns are prohibited as recommended, the approach will operate at LOS "A".

Both the signalized intersections and stop-controlled approaches at other study intersections will be operating at LOS "D" or better in both peak hours.

Recommendations for future traffic control and lane geometry are shown in Figure 13.



FUTURE TRAFFIC CONTROL AND LANE GEOMETRY

FIGURE 13
A&R Engineering Inc.

CONCLUSIONS AND RECOMMENDATIONS

Traffic impacts were evaluated for the proposed Lotus Grove mixed use development DRI #4360 will be located in the northeast corner of the intersection of I-285 and US 23 (Buford Highway), south of Longmire Way and north of North DeKalb Drive in City of Doraville, Dekalb County, Georgia. The proposed development will consist of:

- Multifamily Housing (High-Rise): 780 dwelling units
- Hotel: 160 rooms
- Shopping Plaza (40-150k): 86,323 sf

The development proposes access at the following locations:

- Site Driveway 1: Full-access driveway on North Dekalb Drive
- Site Driveway 2: Right-In/Right-Out/Left-In driveway on US 23 (Buford Highway) aligned with the Farmer's Market driveway
- Site Driveway 3: Full-access driveway on Longmire Way
- Site Driveway 4: Full-access driveway on Longmire Way
- Site Driveway 5: Full-access driveway on Longmire Way
- Site Driveway 6: Full-access driveway on North Dekalb Drive

Existing and future operations during the AM peak hour (7:00 AM – 9:00 AM) and PM peak hour (4:00 PM – 6:00 PM) before and after completion of the project were analyzed at the following intersections:

1. US 23 (Buford Highway) at I-285 WB Ramp
2. US 23 (Buford Highway) at North DeKalb Drive
3. US 23 (Buford Highway) at Site Driveway 2/Farmer's Market Driveway
4. US 23 (Buford Highway) at Longmire Way
5. Longmire Way at Site Driveway 3
6. Longmire Way at Site Driveway 4
7. Longmire Way at Site Driveway 5
8. North DeKalb Drive at Site Driveway 1
9. North DeKalb Drive at Site Driveway 6

The analysis included the evaluation of Future operations for “No-Build” and “Build” conditions, both of which account for increases in annual growth of through traffic

The results of future “No-Build” traffic operations show that eastbound right-in/right-out Farmer's Market's driveway approach at the RCUT intersection of Buford Highway will continue to operate at LOS “F” in the AM peak hour as in “Existing” conditions but with increased delays.

The results of future “Build” traffic operations show that without the system improvements implemented, the eastbound right-in/right-out Farmer's Market's driveway approach at the RCUT intersection of Buford Highway will continue to operate at LOS “F” in the AM peak hour as in “Existing”

conditions with increased delays. After the U-Turns are prohibited as recommended, the approach will operate at LOS “A”. Both the signalized intersections and stop-controlled approaches at other study intersections will be operating at LOS “D” or better in both peak hours.

Recommendations for System Improvements

A summary of the system improvements, which address deficiencies that are found within the existing road network for the “No-Build” conditions, is provided below.

Intersection 3: US 23 (Buford Highway) at Farmer’s Market Driveway

As explained earlier, the eastbound right-turn delays are caused by heavy northbound U-Turns onto southbound Buford Highway. These U-Turns are primarily made by the exiting traffic from N. Dekalb Drive heading towards south on Buford Highway. Additionally, the northbound through traffic at Intersection 1 (US 23/Buford Hwy @ I-285 WB Ramp) is also making U-turns at the RCUT intersection to access the I-285 Westbound On-Ramp. This existing RCUT intersection does not meet GDOT’s spacing requirements for installation of a traffic signal. To improve traffic operations at this intersection, we recommend the following:

- Prohibit Northbound U-turns at this intersection due to long delays and safety concerns.

After the recommended system improvements are implemented, the intersection will be operating at level of service “A” in both the AM and PM peak hours

Recommendations for Site Access Configuration

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

- Site Driveway 1: Full-access driveway on North Dekalb Drive
 - o One entering and one exiting lane.
 - o Stop-sign controlled on the driveway approach with North Dekalb Drive remaining free flow.
 - o Provide adequate sight distance per AASHTO standards.
- Site Driveway 2: Right-In/Right-Out/Left-In driveway on US 23 (Buford Highway) aligned with the Farmer’s Market driveway
 - o One entering and one exiting lane.
 - o Stop-sign controlled on the driveway approach and Farmer’s Market driveway with US 23 (Buford Highway) remaining free flow.
 - o A right turn lane for entering traffic.
 - o Provide adequate sight distance per AASHTO standards.
- Site Driveway 3: Full-access driveway on Longmire Way
 - o One entering and one exiting lane.
 - o Stop-sign controlled on the driveway approach with Longmire Way remaining free flow.
 - o Provide adequate sight distance per AASHTO standards.

- Site Driveway 4: Full-access driveway on Longmire Way
 - o One entering and one exiting lane.
 - o Stop-sign controlled on the driveway approach with Longmire Way remaining free flow.
 - o Provide adequate sight distance per AASHTO standards.

- Site Driveway 5: Full-access driveway on Longmire Way
 - o One entering and one exiting lane.
 - o Stop-sign controlled on the driveway approach with Longmire Way remaining free flow.
 - o Provide adequate sight distance per AASHTO standards.

- Site Driveway 6: Full access driveway on North Dekalb Drive
 - o One entering and one exiting lane.
 - o Stop-sign controlled on the driveway approach with North Dekalb Drive remaining free flow.
 - o Provide adequate sight distance per AASHTO standards.

Appendix

Existing Intersection Traffic Counts	
Character Areas.....	
GRTA Letter of Understanding.....	
Linear Regression of Daily Traffic.....	
Fact Sheets for Planned and Programmed Improvements.....	
Existing Intersection Analysis (SIM Traffic Analysis for Intersection 2 and 3)	
Future “No-Build” Intersection Analysis (SIM Traffic Analysis for Intersection 2 and 3).....	
Future “Build” Intersections Analysis (SIM Traffic Analysis for Intersection 2 and 3)	
Traffic Volume Worksheets	

Existing Intersection Traffic Counts

A & R Engineering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data
US 23 (Buford Hwy) @ I-20 Westbound Ramp
7-9am | 4-6pm

File Name : 20250039
Site Code : 20250039
Start Date : 02-11-2025
Page No : 1

Groups Printed- Cars & Buses - Trucks

	US 23 (Buford Hwy) Northbound				US 23 (Buford Hwy) Southbound				I-20 Westbound Ramp Eastbound				I-20 Westbound Ramp 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	33	115	0	148	0	278	85	363	0	0	0	0	173	1	106	280	791
07:15 AM	41	129	0	170	0	303	80	383	0	0	0	0	184	0	89	273	826
07:30 AM	37	141	0	178	0	291	112	403	0	0	0	0	171	0	97	268	849
07:45 AM	46	121	0	167	0	385	100	485	0	0	0	0	241	1	131	373	1025
Total	157	506	0	663	0	1257	377	1634	0	0	0	0	769	2	423	1194	3491
08:00 AM	51	167	0	218	0	304	76	380	0	0	0	0	219	0	113	332	930
08:15 AM	58	157	0	215	0	285	65	350	0	0	0	0	224	0	108	332	897
08:30 AM	63	195	0	258	0	296	66	362	0	0	0	0	199	1	98	298	918
08:45 AM	62	181	0	243	0	267	63	330	0	0	0	0	179	0	78	257	830
Total	234	700	0	934	0	1152	270	1422	0	0	0	0	821	1	397	1219	3575
*** BREAK ***																	
04:00 PM	56	380	0	436	0	232	60	292	0	0	0	0	122	0	156	278	1006
04:15 PM	71	353	0	424	0	215	53	268	0	0	0	0	127	1	151	279	971
04:30 PM	63	428	0	491	0	232	54	286	0	0	0	0	104	0	140	244	1021
04:45 PM	57	496	0	553	0	248	44	292	0	0	0	0	118	0	131	249	1094
Total	247	1657	0	1904	0	927	211	1138	0	0	0	0	471	1	578	1050	4092
05:00 PM	52	410	0	462	0	314	47	361	0	0	0	0	135	1	123	259	1082
05:15 PM	64	448	0	512	0	252	62	314	0	0	0	0	152	0	118	270	1096
05:30 PM	69	433	0	502	0	266	65	331	0	0	0	0	125	0	106	231	1064
05:45 PM	53	407	0	460	0	252	45	297	0	0	0	0	123	0	92	215	972
Total	238	1698	0	1936	0	1084	219	1303	0	0	0	0	535	1	439	975	4214
Grand Total	876	4561	0	5437	0	4420	1077	5497	0	0	0	0	2596	5	1837	4438	15372
Apprch %	16.1	83.9	0		0	80.4	19.6		0	0	0		58.5	0.1	41.4		
Total %	5.7	29.7	0	35.4	0	28.8	7	35.8	0	0	0	0	16.9	0	12	28.9	
Cars & Buses	842	4413	0	5255	0	4145	839	4984	0	0	0	0	2514	5	1663	4182	14421
% Cars & Buses	96.1	96.8	0	96.7	0	93.8	77.9	90.7	0	0	0	0	96.8	100	90.5	94.2	93.8
Trucks	34	148	0	182	0	275	238	513	0	0	0	0	82	0	174	256	951
% Trucks	3.9	3.2	0	3.3	0	6.2	22.1	9.3	0	0	0	0	3.2	0	9.5	5.8	6.2

A & R Engineering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data

US 23 (Buford Hwy) @ I-20 Westbound Ramp

7-9am | 4-6pm

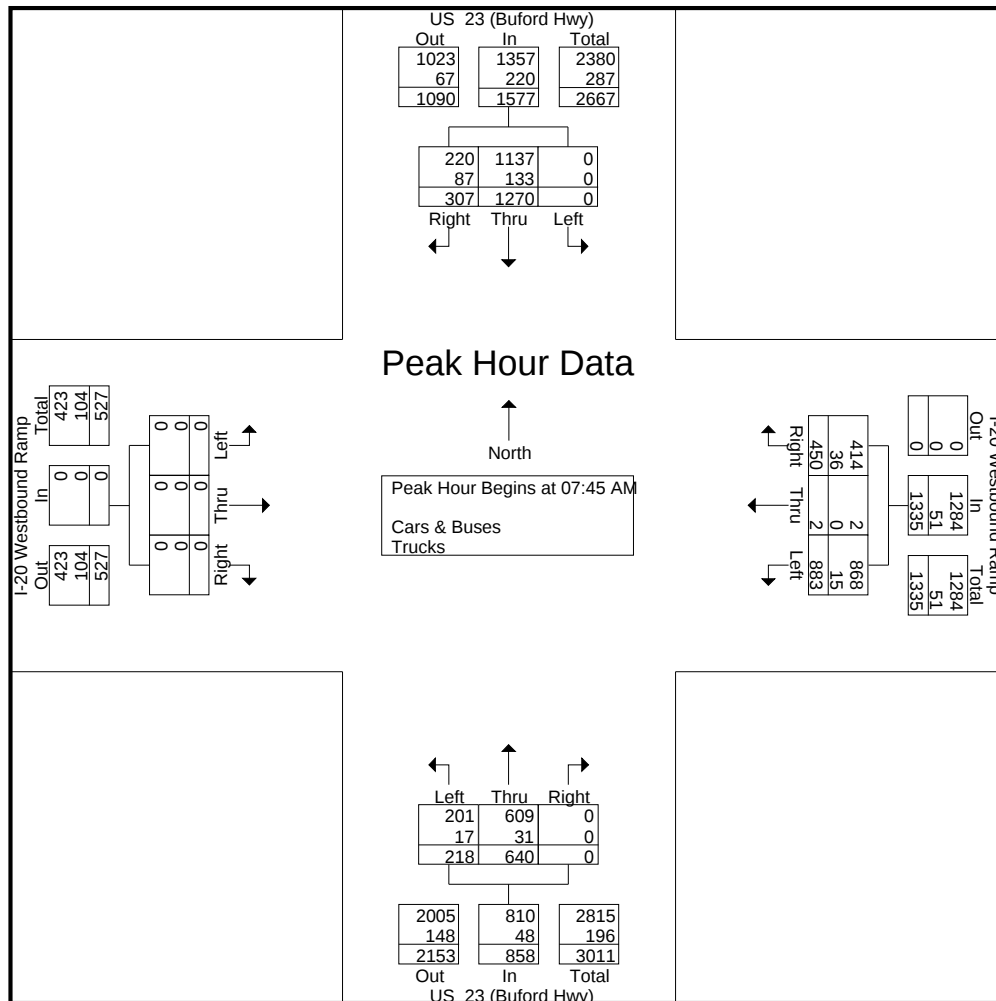
File Name : 20250039

Site Code : 20250039

Start Date : 02-11-2025

Page No : 2

	US 23 (Buford Hwy) Northbound				US 23 (Buford Hwy) Southbound				I-20 Westbound Ramp Eastbound				I-20 Westbound Ramp 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 07:45 AM																	
07:45 AM	46	121	0	167	0	385	100	485	0	0	0	0	241	1	131	373	1025
08:00 AM	51	167	0	218	0	304	76	380	0	0	0	0	219	0	113	332	930
08:15 AM	58	157	0	215	0	285	65	350	0	0	0	0	224	0	108	332	897
08:30 AM	63	195	0	258	0	296	66	362	0	0	0	0	199	1	98	298	918
Total Volume	218	640	0	858	0	1270	307	1577	0	0	0	0	883	2	450	1335	3770
% App. Total	25.4	74.6	0		0	80.5	19.5		0	0	0	0	66.1	0.1	33.7		
PHF	.865	.821	.000	.831	.000	.825	.768	.813	.000	.000	.000	.000	.916	.500	.859	.895	.920
Cars & Buses	201	609	0	810	0	1137	220	1357	0	0	0	0	868	2	414	1284	3451
% Cars & Buses	92.2	95.2	0	94.4	0	89.5	71.7	86.0	0	0	0	0	98.3	100	92.0	96.2	91.5
Trucks	17	31	0	48	0	133	87	220	0	0	0	0	15	0	36	51	319
% Trucks	7.8	4.8	0	5.6	0	10.5	28.3	14.0	0	0	0	0	1.7	0	8.0	3.8	8.5



A & R Engineering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data

US 23 (Buford Hwy) @ I-20 Westbound Ramp

7-9am | 4-6pm

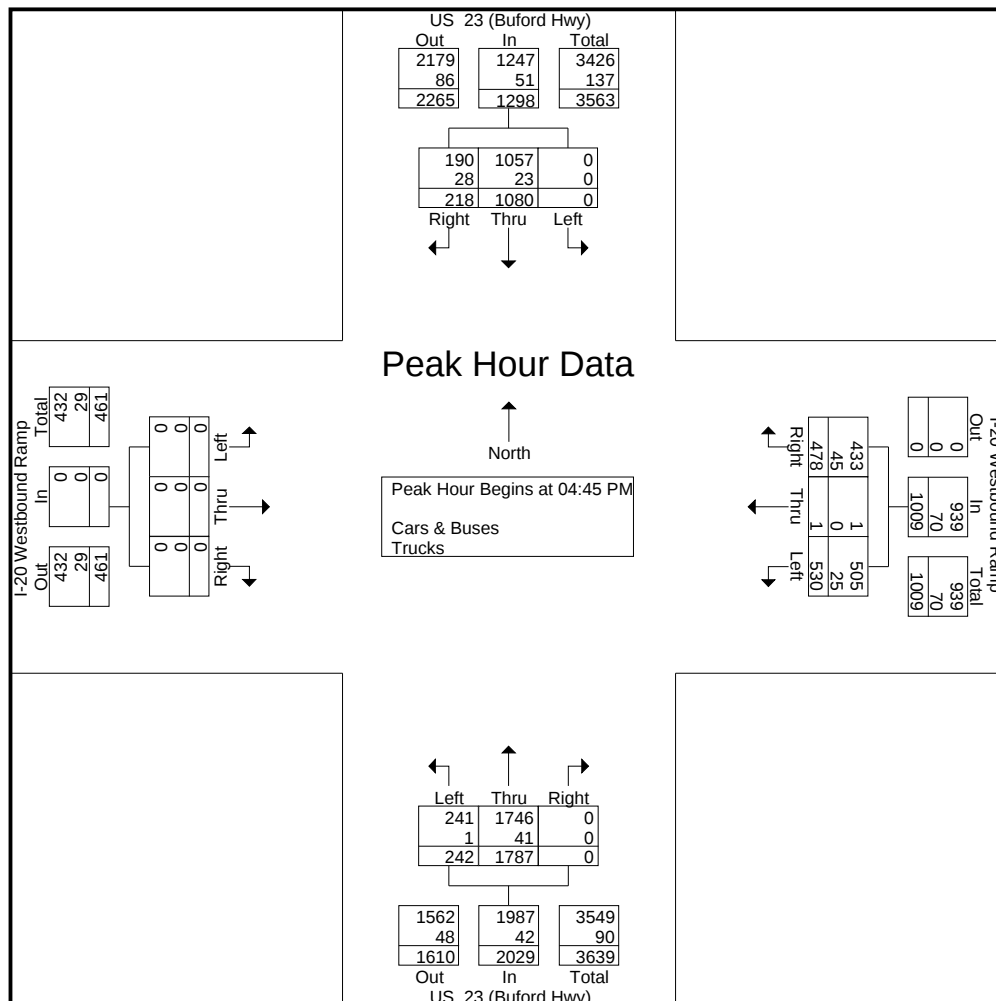
File Name : 20250039

Site Code : 20250039

Start Date : 02-11-2025

Page No : 3

	US 23 (Buford Hwy) Northbound				US 23 (Buford Hwy) Southbound				I-20 Westbound Ramp Eastbound				I-20 Westbound Ramp 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	57	496	0	553	0	248	44	292	0	0	0	0	118	0	131	249	1094
05:00 PM	52	410	0	462	0	314	47	361	0	0	0	0	135	1	123	259	1082
05:15 PM	64	448	0	512	0	252	62	314	0	0	0	0	152	0	118	270	1096
05:30 PM	69	433	0	502	0	266	65	331	0	0	0	0	125	0	106	231	1064
Total Volume	242	1787	0	2029	0	1080	218	1298	0	0	0	0	530	1	478	1009	4336
% App. Total	11.9	88.1	0		0	83.2	16.8		0	0	0		52.5	0.1	47.4		
PHF	.877	.901	.000	.917	.000	.860	.838	.899	.000	.000	.000	.000	.872	.250	.912	.934	.989
Cars & Buses	241	1746	0	1987	0	1057	190	1247	0	0	0	0	505	1	433	939	4173
% Cars & Buses	99.6	97.7	0	97.9	0	97.9	87.2	96.1	0	0	0	0	95.3	100	90.6	93.1	96.2
Trucks	1	41	0	42	0	23	28	51	0	0	0	0	25	0	45	70	163
% Trucks	0.4	2.3	0	2.1	0	2.1	12.8	3.9	0	0	0	0	4.7	0	9.4	6.9	3.8



A & R Engineering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data
Longmire Way @ Existing Gas Station Drwy
Rear Drwy of Adjacent Shopping Centre
7-9 am | 4-6 pm

File Name : 20250040
Site Code : 20250040
Start Date : 02-11-2025
Page No : 1

Groups Printed- Cars, Buses & Trucks

	Existing Gas Station Drwy- Rear Drwy of Adjacent Shopping Center Northbound				Jason Heaven, O.D. Drwy Southbound				Longmire Way Eastbound				Longmire Way 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	3	0	0	3	0	0	0	0	0	2	1	3	0	0	0	0	6
07:15 AM	10	0	0	10	0	0	0	0	0	6	3	9	0	1	0	1	20
07:30 AM	2	0	0	2	0	0	0	0	0	8	6	14	0	5	0	5	21
07:45 AM	11	1	0	12	0	0	0	0	0	5	2	7	0	4	0	4	23
Total	26	1	0	27	0	0	0	0	0	21	12	33	0	10	0	10	70
08:00 AM	5	0	0	5	0	0	1	1	0	4	3	7	0	0	0	0	13
08:15 AM	4	0	0	4	0	0	0	0	0	5	2	7	0	3	0	3	14
08:30 AM	6	0	0	6	0	0	0	0	0	8	2	10	0	3	0	3	19
08:45 AM	4	1	0	5	0	0	1	1	0	8	1	9	0	6	1	7	22
Total	19	1	0	20	0	0	2	2	0	25	8	33	0	12	1	13	68
*** BREAK ***																	
04:00 PM	4	0	0	4	0	0	4	4	2	9	0	11	0	13	0	13	32
04:15 PM	9	0	1	10	0	0	1	1	1	16	3	20	0	11	0	11	42
04:30 PM	9	0	0	9	0	0	0	0	1	15	6	22	0	13	0	13	44
04:45 PM	11	1	1	13	0	1	3	4	1	4	5	10	0	11	0	11	38
Total	33	1	2	36	0	1	8	9	5	44	14	63	0	48	0	48	156
05:00 PM	6	0	1	7	1	1	0	2	0	8	4	12	0	15	1	16	37
05:15 PM	7	1	0	8	0	0	1	1	0	2	5	7	0	4	0	4	20
05:30 PM	12	0	0	12	1	0	1	2	0	3	9	12	0	5	0	5	31
05:45 PM	8	0	0	8	0	0	4	4	1	5	3	9	1	3	0	4	25
Total	33	1	1	35	2	1	6	9	1	18	21	40	1	27	1	29	113
Grand Total	111	4	3	118	2	2	16	20	6	108	55	169	1	97	2	100	407
Apprch %	94.1	3.4	2.5		10	10	80		3.6	63.9	32.5		1	97	2		
Total %	27.3	1	0.7	29	0.5	0.5	3.9	4.9	1.5	26.5	13.5	41.5	0.2	23.8	0.5	24.6	

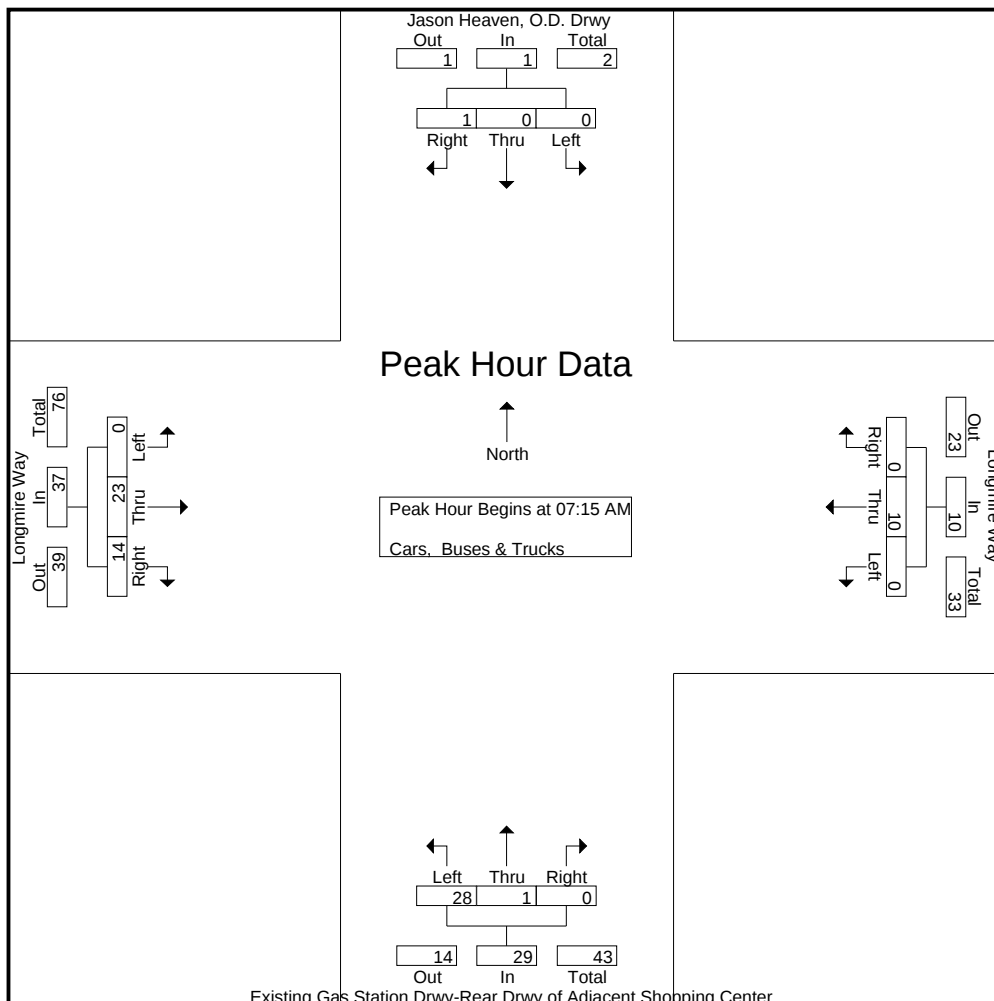
A & R Engineering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data
Longmire Way @ Existing Gas Station Drwy
Rear Drwy of Adjacent Shopping Centre
7-9 am | 4-6 pm

File Name : 20250040
Site Code : 20250040
Start Date : 02-11-2025
Page No : 2

	Existing Gas Station Drwy- Rear Drwy of Adjacent Shopping Center Northbound				Jason Heaven, O.D. Drwy Southbound				Longmire Way Eastbound				Longmire Way 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	10	0	0	10	0	0	0	0	0	6	3	9	0	1	0	1	20
07:30 AM	2	0	0	2	0	0	0	0	0	8	6	14	0	5	0	5	21
07:45 AM	11	1	0	12	0	0	0	0	0	5	2	7	0	4	0	4	23
08:00 AM	5	0	0	5	0	0	1	1	0	4	3	7	0	0	0	0	13
Total Volume	28	1	0	29	0	0	1	1	0	23	14	37	0	10	0	10	77
% App. Total	96.6	3.4	0		0	0	100		0	62.2	37.8		0	100	0		
PHF	.636	.250	.000	.604	.000	.000	.250	.250	.000	.719	.583	.661	.000	.500	.000	.500	.837



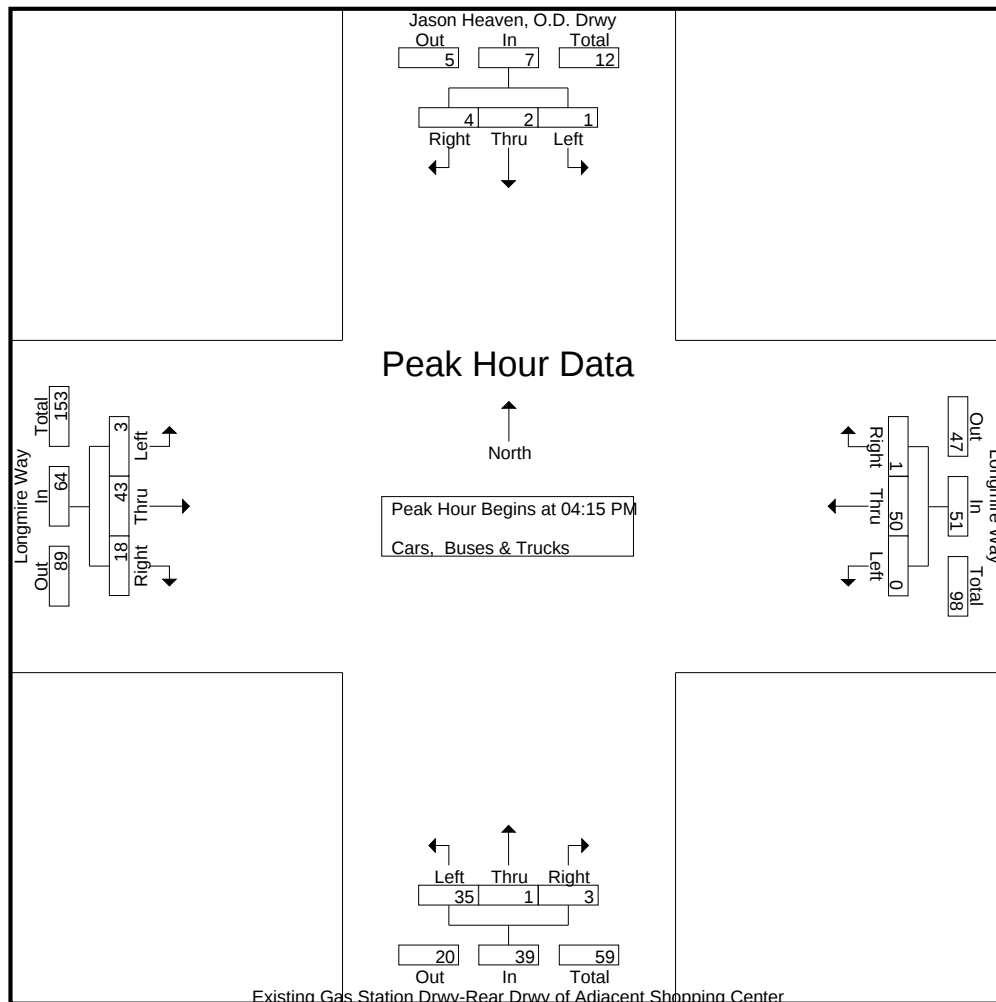
A & R Engineering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data
Longmire Way @ Existing Gas Station Drwy
Rear Drwy of Adjacent Shopping Centre
7-9 am | 4-6 pm

File Name : 20250040
Site Code : 20250040
Start Date : 02-11-2025
Page No : 3

	Existing Gas Station Drwy- Rear Drwy of Adjacent Shopping Center Northbound				Jason Heaven, O.D. Drwy Southbound				Longmire Way Eastbound				Longmire Way 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 04:15 PM																	
04:15 PM	9	0	1	10	0	0	1	1	1	16	3	20	0	11	0	11	42
04:30 PM	9	0	0	9	0	0	0	0	1	15	6	22	0	13	0	13	44
04:45 PM	11	1	1	13	0	1	3	4	1	4	5	10	0	11	0	11	38
05:00 PM	6	0	1	7	1	1	0	2	0	8	4	12	0	15	1	16	37
Total Volume	35	1	3	39	1	2	4	7	3	43	18	64	0	50	1	51	161
% App. Total	89.7	2.6	7.7		14.3	28.6	57.1		4.7	67.2	28.1		0	98	2		
PHF	.795	.250	.750	.750	.250	.500	.333	.438	.750	.672	.750	.727	.000	.833	.250	.797	.915



A & R Engineering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data
US 23 (Buford Hwy) @ Longmire Way
7-9am | 4-6pm

File Name : 20250041
Site Code : 20250041
Start Date : 02-11-2025
Page No : 1

Groups Printed- Cars & Buses - Trucks

	US 23 (Buford Hwy) Northbound				US 23 (Buford Hwy) Southbound				Longmire Way Eastbound				Longmire Way 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	32	124	1	157	1	261	11	273	7	2	17	26	1	0	1	2	458
07:15 AM	29	127	5	161	4	273	6	283	5	1	27	33	4	0	5	9	486
07:30 AM	30	129	4	163	7	326	11	344	13	2	24	39	4	1	5	10	556
07:45 AM	46	154	6	206	3	310	12	325	9	0	28	37	10	0	3	13	581
Total	137	534	16	687	15	1170	40	1225	34	5	96	135	19	1	14	34	2081
08:00 AM	46	150	3	199	2	269	10	281	11	2	32	45	4	1	2	7	532
08:15 AM	39	181	4	224	3	289	10	302	5	0	33	38	4	0	2	6	570
08:30 AM	45	190	3	238	2	221	15	238	13	3	40	56	6	1	2	9	541
08:45 AM	35	185	7	227	6	271	11	288	14	0	25	39	6	1	5	12	566
Total	165	706	17	888	13	1050	46	1109	43	5	130	178	20	3	11	34	2209
*** BREAK ***																	
04:00 PM	37	324	4	365	3	191	8	202	28	2	34	64	6	2	12	20	651
04:15 PM	27	304	7	338	8	157	22	187	38	5	28	71	10	6	9	25	621
04:30 PM	40	348	9	397	6	189	20	215	40	5	30	75	8	2	9	19	706
04:45 PM	35	358	2	395	8	173	20	201	39	5	26	70	10	2	11	23	689
Total	139	1334	22	1495	25	710	70	805	145	17	118	280	34	12	41	87	2667
05:00 PM	37	333	6	376	3	196	19	218	25	3	38	66	8	5	13	26	686
05:15 PM	38	364	4	406	2	209	18	229	44	2	35	81	5	2	5	12	728
05:30 PM	44	301	3	348	5	172	15	192	35	5	27	67	5	4	8	17	624
05:45 PM	30	322	2	354	1	219	16	236	36	5	30	71	5	2	5	12	673
Total	149	1320	15	1484	11	796	68	875	140	15	130	285	23	13	31	67	2711
Grand Total	590	3894	70	4554	64	3726	224	4014	362	42	474	878	96	29	97	222	9668
Apprch %	13	85.5	1.5		1.6	92.8	5.6		41.2	4.8	54		43.2	13.1	43.7		
Total %	6.1	40.3	0.7	47.1	0.7	38.5	2.3	41.5	3.7	0.4	4.9	9.1	1	0.3	1	2.3	
Cars & Buses	487	3720	70	4277	61	3470	214	3745	348	41	353	742	93	28	94	215	8979
% Cars & Buses	82.5	95.5	100	93.9	95.3	93.1	95.5	93.3	96.1	97.6	74.5	84.5	96.9	96.6	96.9	96.8	92.9
Trucks	103	174	0	277	3	256	10	269	14	1	121	136	3	1	3	7	689
% Trucks	17.5	4.5	0	6.1	4.7	6.9	4.5	6.7	3.9	2.4	25.5	15.5	3.1	3.4	3.1	3.2	7.1

A & R Engineering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data

US 23 (Buford Hwy) @ Longmire Way

7-9am | 4-6pm

File Name : 20250041

Site Code : 20250041

Start Date : 02-11-2025

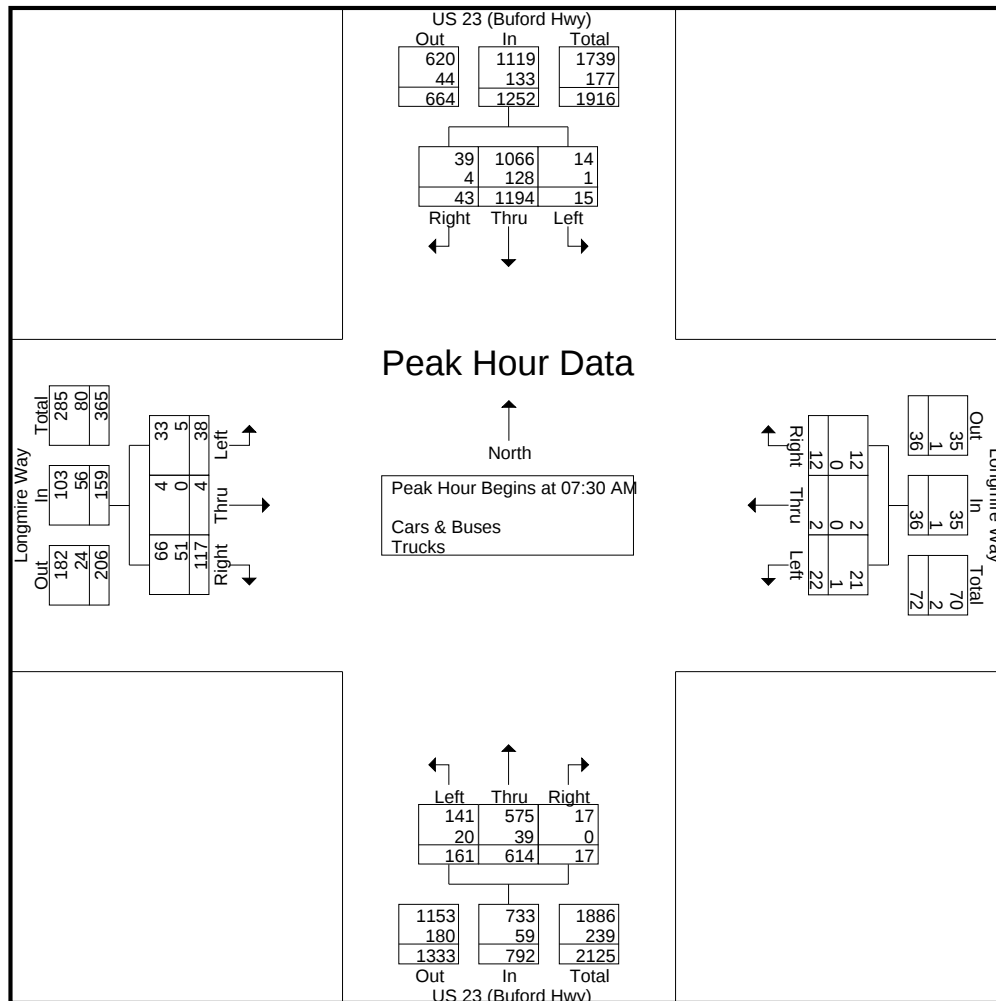
Page No : 2

	US 23 (Buford Hwy) Northbound				US 23 (Buford Hwy) Southbound				Longmire Way Eastbound				Longmire Way 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	30	129	4	163	7	326	11	344	13	2	24	39	4	1	5	10	556
07:45 AM	46	154	6	206	3	310	12	325	9	0	28	37	10	0	3	13	581
08:00 AM	46	150	3	199	2	269	10	281	11	2	32	45	4	1	2	7	532
08:15 AM	39	181	4	224	3	289	10	302	5	0	33	38	4	0	2	6	570
Total Volume	161	614	17	792	15	1194	43	1252	38	4	117	159	22	2	12	36	2239
% App. Total	20.3	77.5	2.1		1.2	95.4	3.4		23.9	2.5	73.6		61.1	5.6	33.3		
PHF	.875	.848	.708	.884	.536	.916	.896	.910	.731	.500	.886	.883	.550	.500	.600	.692	.963
Cars & Buses	141	575	17	733	14	1066	39	1119	33	4	66	103	21	2	12	35	1990
% Cars & Buses	87.6	93.6	100	92.6	93.3	89.3	90.7	89.4	86.8	100	56.4	64.8	95.5	100	100	97.2	88.9
Trucks	20	39	0	59	1	128	4	133	5	0	51	56	1	0	0	1	249
% Trucks	12.4	6.4	0	7.4	6.7	10.7	9.3	10.6	13.2	0	43.6	35.2	4.5	0	0	2.8	11.1



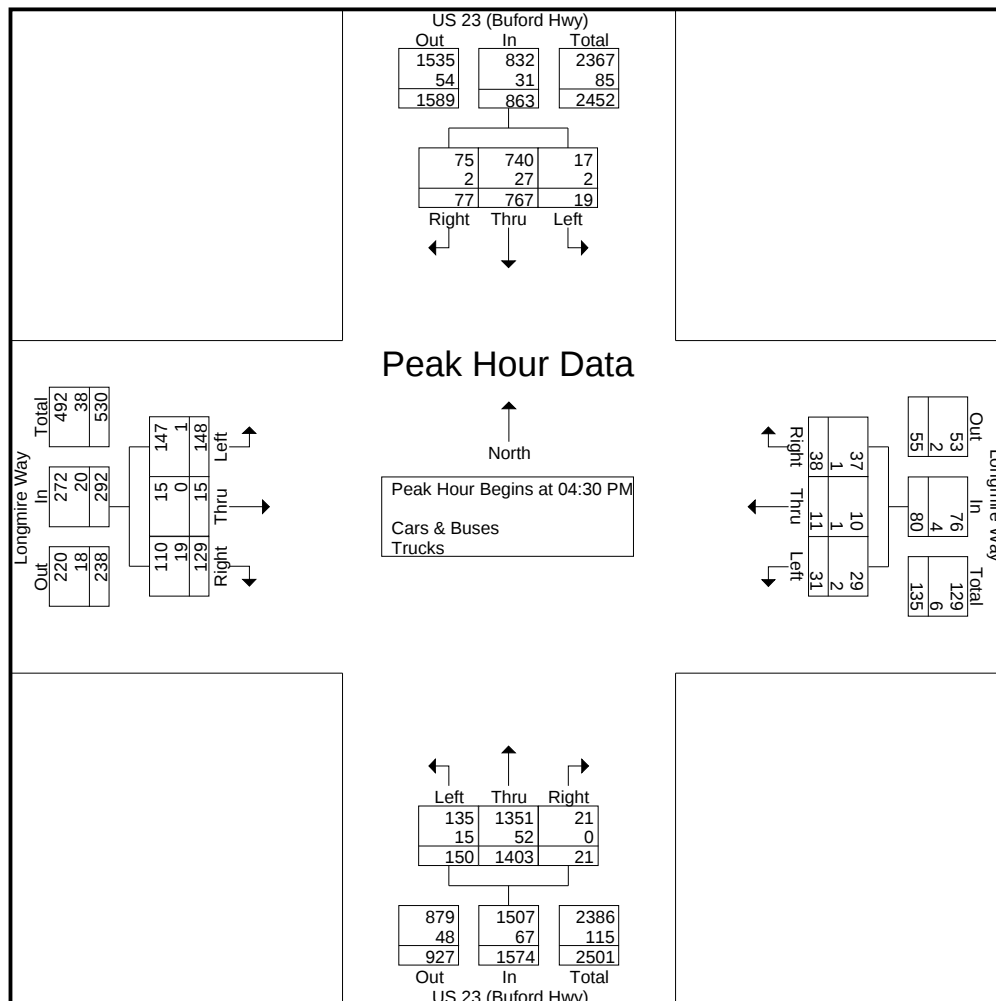
A & R Engineering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data
US 23 (Buford Hwy) @ Longmire Way
7-9am | 4-6pm

File Name : 20250041
Site Code : 20250041
Start Date : 02-11-2025
Page No : 3

	US 23 (Buford Hwy) Northbound				US 23 (Buford Hwy) Southbound				Longmire Way Eastbound				Longmire Way 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	40	348	9	397	6	189	20	215	40	5	30	75	8	2	9	19	706
04:45 PM	35	358	2	395	8	173	20	201	39	5	26	70	10	2	11	23	689
05:00 PM	37	333	6	376	3	196	19	218	25	3	38	66	8	5	13	26	686
05:15 PM	38	364	4	406	2	209	18	229	44	2	35	81	5	2	5	12	728
Total Volume	150	1403	21	1574	19	767	77	863	148	15	129	292	31	11	38	80	2809
% App. Total	9.5	89.1	1.3		2.2	88.9	8.9		50.7	5.1	44.2		38.8	13.8	47.5		
PHF	.938	.964	.583	.969	.594	.917	.963	.942	.841	.750	.849	.901	.775	.550	.731	.769	.965
Cars & Buses	135	1351	21	1507	17	740	75	832	147	15	110	272	29	10	37	76	2687
% Cars & Buses	90.0	96.3	100	95.7	89.5	96.5	97.4	96.4	99.3	100	85.3	93.2	93.5	90.9	97.4	95.0	95.7
Trucks	15	52	0	67	2	27	2	31	1	0	19	20	2	1	1	4	122
% Trucks	10.0	3.7	0	4.3	10.5	3.5	2.6	3.6	0.7	0	14.7	6.8	6.5	9.1	2.6	5.0	4.3



A & R Engineering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data
US 23 (Buford Hwy) @ Farmer's Market
Drwy-Site Driveway 2
7-9 am | 4-6 pm

File Name : 20250042
Site Code : 20250042
Start Date : 02-11-2025
Page No : 1

Groups Printed- Cars & Buses - Trucks

Start Time	US 23 (Buford Hwy) Northbound					US 23 (Buford Hwy) Southbound					Farmer's Market Drwy Eastbound				Site Drwy 2 Westbound				Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	10	180	0	32	222	0	307	2	0	309	0	0	8	8	0	0	0	0	539
07:15 AM	10	170	0	36	216	0	330	0	0	330	0	0	7	7	0	0	0	0	553
07:30 AM	11	179	0	36	226	0	345	5	0	350	0	0	8	8	0	0	0	0	584
07:45 AM	13	216	0	32	261	0	414	3	0	417	0	0	6	6	0	0	0	0	684
Total	44	745	0	136	925	0	1396	10	0	1406	0	0	29	29	0	0	0	0	2360
08:00 AM	15	220	0	51	286	0	297	3	0	300	0	0	8	8	0	0	0	0	594
08:15 AM	22	209	0	30	261	0	298	6	0	304	0	0	5	5	0	0	0	0	570
08:30 AM	17	250	0	27	294	0	312	5	0	317	0	0	14	14	0	0	0	0	625
08:45 AM	13	226	0	20	259	0	286	7	0	293	0	0	13	13	0	0	0	0	565
Total	67	905	0	128	1100	0	1193	21	0	1214	0	0	40	40	0	0	0	0	2354
*** BREAK ***																			
04:00 PM	43	401	0	22	466	0	233	10	0	243	0	0	34	34	0	0	0	0	743
04:15 PM	45	376	0	14	435	0	219	8	0	227	0	0	28	28	0	0	0	0	690
04:30 PM	46	421	0	20	487	0	215	3	0	218	0	0	44	44	0	0	0	0	749
04:45 PM	55	447	0	17	519	0	226	5	0	231	0	0	45	45	0	0	0	0	795
Total	189	1645	0	73	1907	0	893	26	0	919	0	0	151	151	0	0	0	0	2977
05:00 PM	31	405	0	31	467	0	266	8	1	275	0	0	60	60	0	0	0	0	802
05:15 PM	52	417	0	21	490	0	251	8	2	261	0	0	39	39	0	0	0	0	790
05:30 PM	48	383	0	22	453	0	261	8	0	269	0	0	45	45	0	0	0	0	767
05:45 PM	34	370	0	26	430	0	230	6	0	236	0	0	37	37	0	0	0	0	703
Total	165	1575	0	100	1840	0	1008	30	3	1041	0	0	181	181	0	0	0	0	3062
Grand Total	465	4870	0	437	5772	0	4490	87	3	4580	0	0	401	401	0	0	0	0	10753
Apprch %	8.1	84.4	0	7.6		0	98	1.9	0.1		0	0	100		0	0	0		
Total %	4.3	45.3	0	4.1	53.7	0	41.8	0.8	0	42.6	0	0	3.7	3.7	0	0	0	0	
Cars & Buses	455	4626	0	433	5514	0	4152	82	3	4237	0	0	399	399	0	0	0	0	10150
% Cars & Buses	97.8	95	0	99.1	95.5	0	92.5	94.3	100	92.5	0	0	99.5	99.5	0	0	0	0	94.4
Trucks	10	244	0	4	258	0	338	5	0	343	0	0	2	2	0	0	0	0	603
% Trucks	2.2	5	0	0.9	4.5	0	7.5	5.7	0	7.5	0	0	0.5	0.5	0	0	0	0	5.6

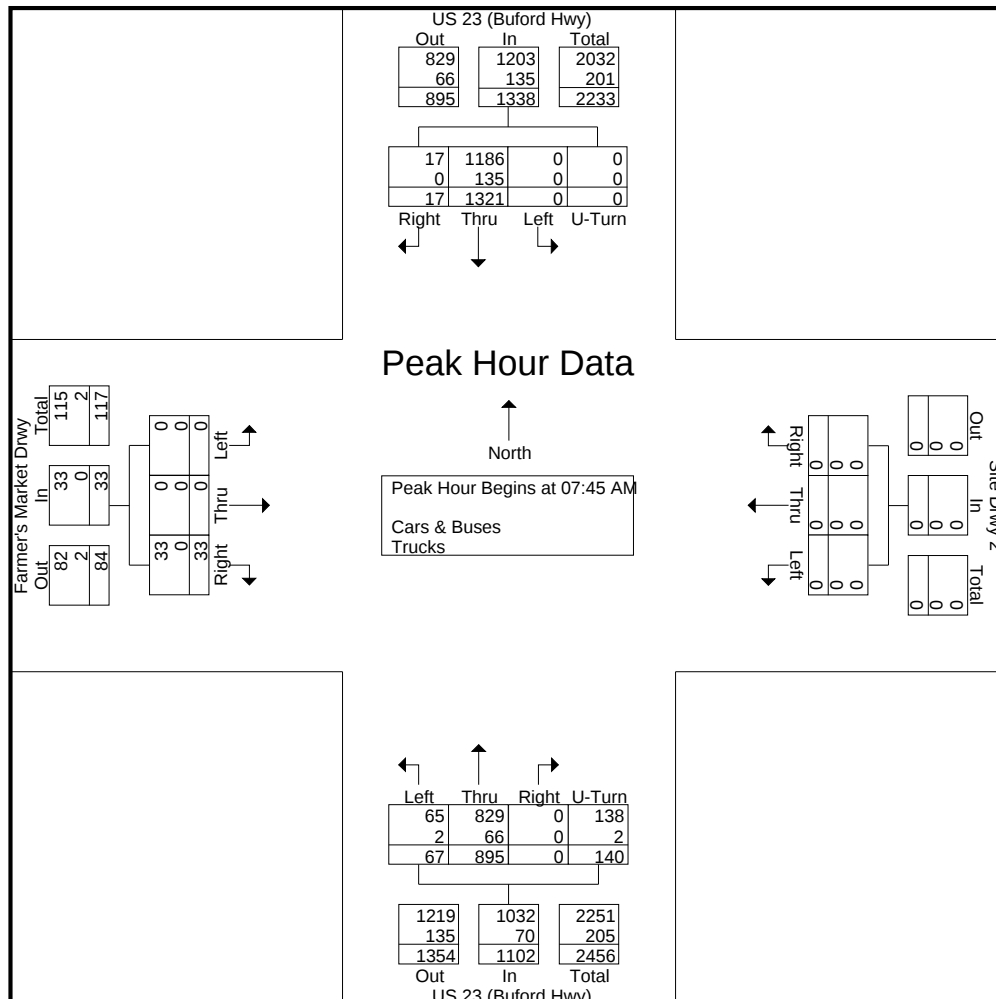
A & R Engineering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data
US 23 (Buford Hwy) @ Farmer's Market
Drwy-Site Driveway 2
7-9 am | 4-6 pm

File Name : 20250042
Site Code : 20250042
Start Date : 02-11-2025
Page No : 2

	US 23 (Buford Hwy) Northbound					US 23 (Buford Hwy) Southbound					Farmer's Market Drwy Eastbound				Site Drwy 2 Westbound				
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	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 07:45 AM																			
07:45 AM	13	216	0	32	261	0	414	3	0	417	0	0	6	6	0	0	0	0	684
08:00 AM	15	220	0	51	286	0	297	3	0	300	0	0	8	8	0	0	0	0	594
08:15 AM	22	209	0	30	261	0	298	6	0	304	0	0	5	5	0	0	0	0	570
08:30 AM	17	250	0	27	294	0	312	5	0	317	0	0	14	14	0	0	0	0	625
Total Volume	67	895	0	140	1102	0	1321	17	0	1338	0	0	33	33	0	0	0	0	2473
% App. Total	6.1	81.2	0	12.7		0	98.7	1.3	0		0	0	100		0	0	0		
PHF	.761	.895	.000	.686	.937	.000	.798	.708	.000	.802	.000	.000	.589	.589	.000	.000	.000	.000	.904
Cars & Buses	65	829	0	138	1032	0	1186	17	0	1203	0	0	33	33	0	0	0	0	2268
% Cars & Buses	97.0	92.6	0	98.6	93.6	0	89.8	100	0	89.9	0	0	100	100	0	0	0	0	91.7
Trucks	2	66	0	2	70	0	135	0	0	135	0	0	0	0	0	0	0	0	205
% Trucks	3.0	7.4	0	1.4	6.4	0	10.2	0	0	10.1	0	0	0	0	0	0	0	0	8.3



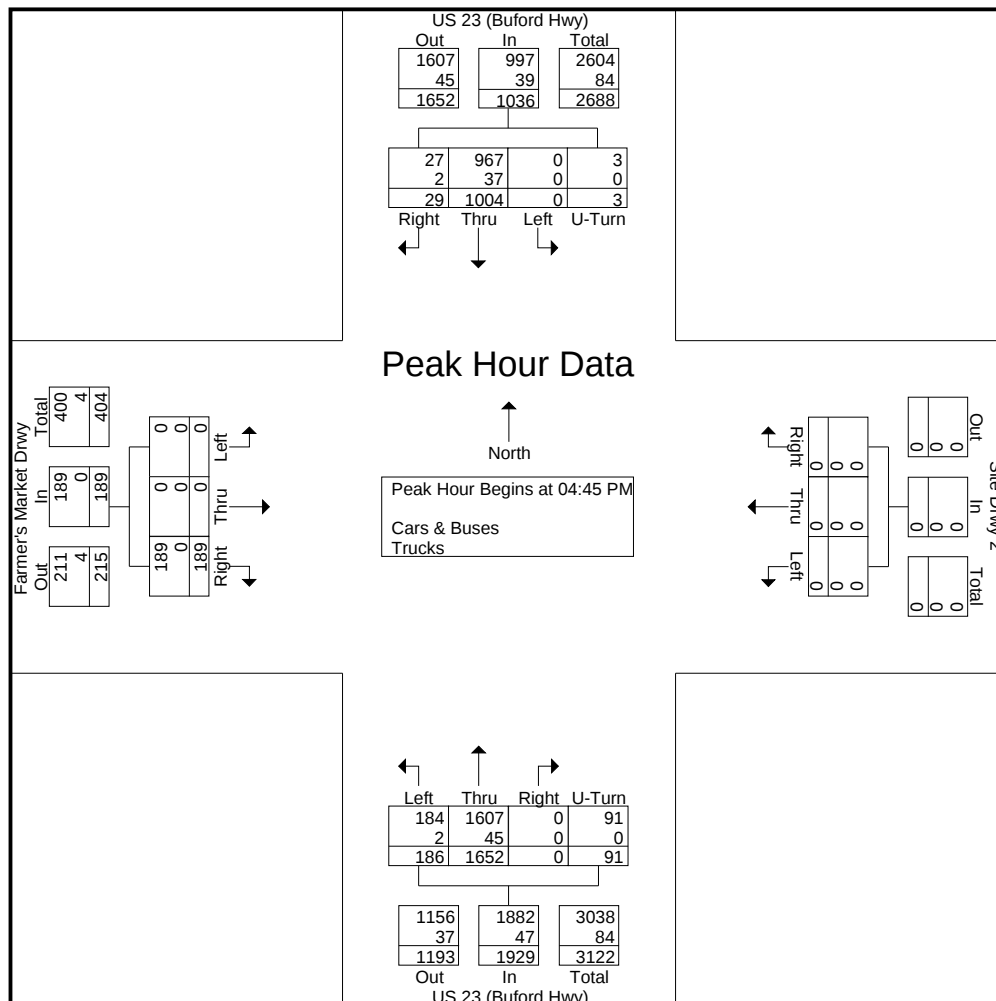
A & R Engineering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data
US 23 (Buford Hwy) @ Farmer's Market
Drwy-Site Driveway 2
7-9 am | 4-6 pm

File Name : 20250042
Site Code : 20250042
Start Date : 02-11-2025
Page No : 3

	US 23 (Buford Hwy) Northbound					US 23 (Buford Hwy) Southbound					Farmer's Market Drwy Eastbound				Site Drwy 2 Westbound				
Start Time	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	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	55	447	0	17	519	0	226	5	0	231	0	0	45	45	0	0	0	0	795
05:00 PM	31	405	0	31	467	0	266	8	1	275	0	0	60	60	0	0	0	0	802
05:15 PM	52	417	0	21	490	0	251	8	2	261	0	0	39	39	0	0	0	0	790
05:30 PM	48	383	0	22	453	0	261	8	0	269	0	0	45	45	0	0	0	0	767
Total Volume	186	1652	0	91	1929	0	1004	29	3	1036	0	0	189	189	0	0	0	0	3154
% App. Total	9.6	85.6	0	4.7		0	96.9	2.8	0.3		0	0	100		0	0	0		
PHF	.845	.924	.000	.734	.929	.000	.944	.906	.375	.942	.000	.000	.788	.788	.000	.000	.000	.000	.983
Cars & Buses	184	1607	0	91	1882	0	967	27	3	997	0	0	189	189	0	0	0	0	3068
% Cars & Buses	98.9	97.3	0	100	97.6	0	96.3	93.1	100	96.2	0	0	100	100	0	0	0	0	97.3
Trucks	2	45	0	0	47	0	37	2	0	39	0	0	0	0	0	0	0	0	86
% Trucks	1.1	2.7	0	0	2.4	0	3.7	6.9	0	3.8	0	0	0	0	0	0	0	0	2.7



2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data

US 23 (Buford Hwy) @ North Dekalb Drive

7-9 am | 4-6 pm

File Name : 20250043

Site Code : 20250043

Start Date : 02-11-2025

Page No : 1

Groups Printed- Cars & Buses - Trucks

[illegible]

A & R Engineering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data

US 23 (Buford Hwy) @ North Dekalb Drive

7-9 am | 4-6 pm

File Name : 20250043

Site Code : 20250043

Start Date : 02-11-2025

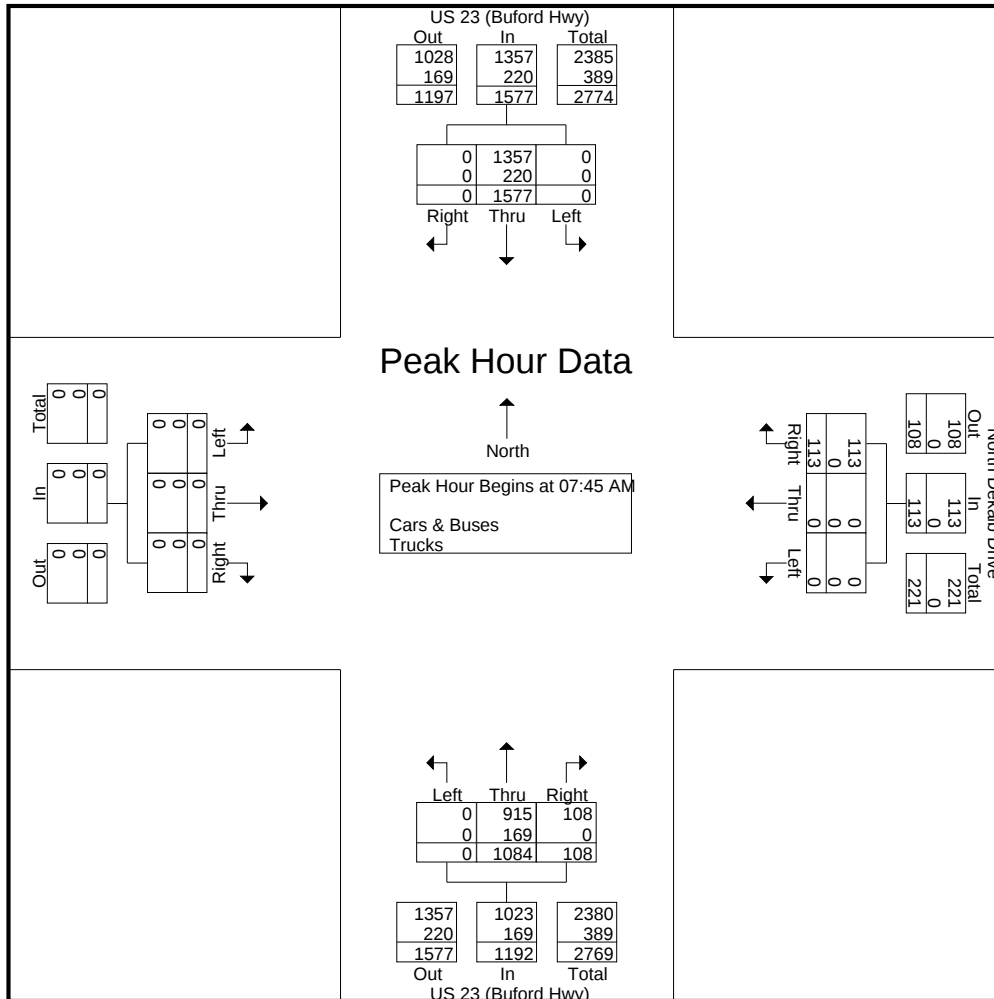
Page No : 2

	US 23 (Buford Hwy) Northbound				US 23 (Buford Hwy) Southbound				Eastbound				North Dekalb Drive 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 07:45 AM

07:45 AM	0	266	22	288	0	485	0	485	0	0	0	0	0	0	33	33	806
08:00 AM	0	277	30	307	0	380	0	380	0	0	0	0	0	0	30	30	717
08:15 AM	0	259	26	285	0	350	0	350	0	0	0	0	0	0	27	27	662
08:30 AM	0	282	30	312	0	362	0	362	0	0	0	0	0	0	23	23	697
Total Volume	0	1084	108	1192	0	1577	0	1577	0	0	0	0	0	0	113	113	2882
% App. Total	0	90.9	9.1		0	100	0		0	0	0		0	0	100		
PHF	.000	.961	.900	.955	.000	.813	.000	.813	.000	.000	.000	.000	.000	.000	.856	.856	.894
Cars & Buses	0	915	108	1023	0	1357	0	1357	0	0	0	0	0	0	113	113	2493
% Cars & Buses	0	84.4	100	85.8	0	86.0	0	86.0	0	0	0	0	0	0	100	100	86.5
Trucks	0	169	0	169	0	220	0	220	0	0	0	0	0	0	0	0	389
% Trucks	0	15.6	0	14.2	0	14.0	0	14.0	0	0	0	0	0	0	0	0	13.5



A & R Engineering, Inc.

2160 Kingston Court Suite 'O'
Marietta, GA 30067

TMC Data

US 23 (Buford Hwy) @ North Dekalb Drive

7-9 am | 4-6 pm

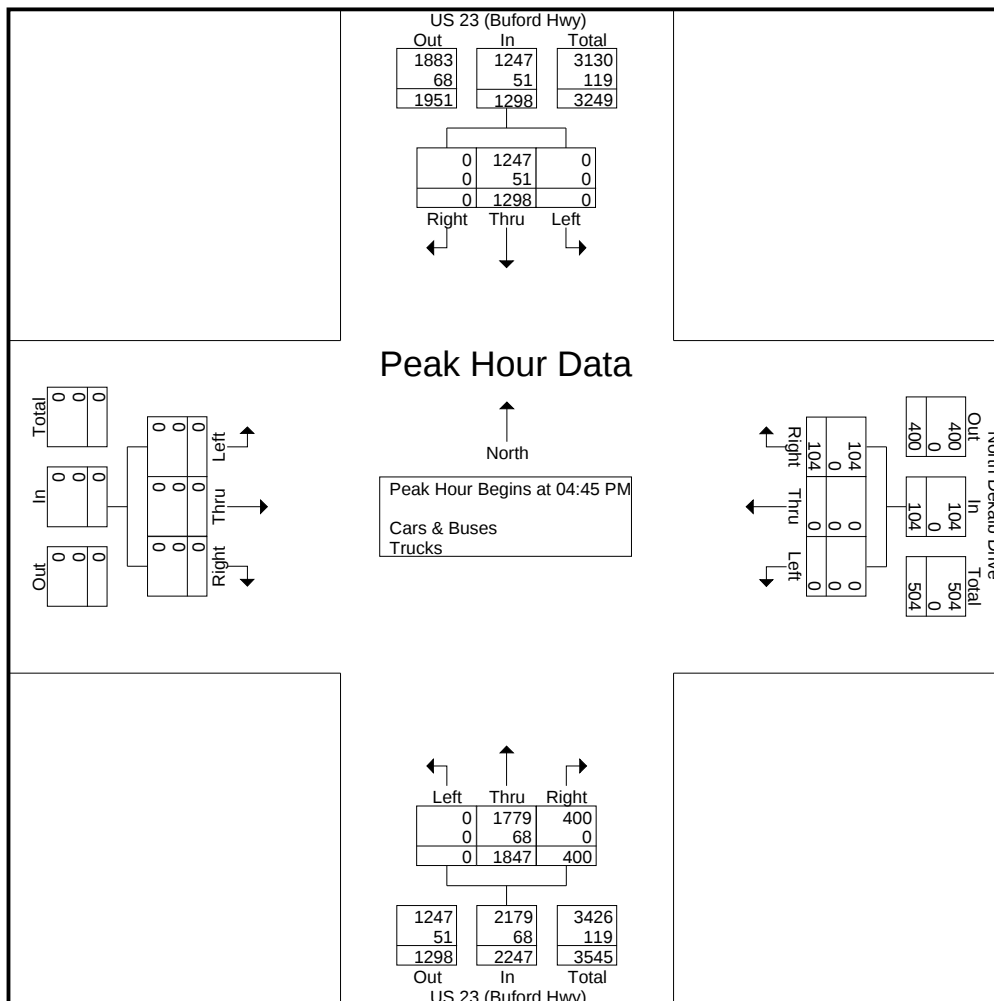
File Name : 20250043

Site Code : 20250043

Start Date : 02-11-2025

Page No : 3

	US 23 (Buford Hwy) Northbound				US 23 (Buford Hwy) Southbound				Eastbound				North Dekalb Drive 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	0	498	123	621	0	292	0	292	0	0	0	0	0	0	27	27	940
05:00 PM	0	445	84	529	0	361	0	361	0	0	0	0	0	0	29	29	919
05:15 PM	0	473	88	561	0	314	0	314	0	0	0	0	0	0	19	19	894
05:30 PM	0	431	105	536	0	331	0	331	0	0	0	0	0	0	29	29	896
Total Volume	0	1847	400	2247	0	1298	0	1298	0	0	0	0	0	0	104	104	3649
% App. Total	0	82.2	17.8		0	100	0		0	0	0		0	0	100		
PHF	.000	.927	.813	.905	.000	.899	.000	.899	.000	.000	.000	.000	.000	.000	.897	.897	.970
Cars & Buses	0	1779	400	2179	0	1247	0	1247	0	0	0	0	0	0	104	104	3530
% Cars & Buses	0	96.3	100	97.0	0	96.1	0	96.1	0	0	0	0	0	0	100	100	96.7
Trucks	0	68	0	68	0	51	0	51	0	0	0	0	0	0	0	0	119
% Trucks	0	3.7	0	3.0	0	3.9	0	3.9	0	0	0	0	0	0	0	0	3.3



GRTA Letter of Understanding



LETTER OF UNDERSTANDING

February 5th, 2025

Chaz Y. Lazarian, Esq.
Lotus Grove LLC
7130 Buford Highway, Suite A 200
Atlanta, GA 30340

RE: **Lotus Grove (DRI#: 4360)**

Dear Mr. Lazarian:

The purpose of this Letter of Understanding is to document the discussions during the Methodology Meeting held virtually on January 13th, 2025 regarding **Lotus Grove (DRI # 4360)** Development of Regional Impact (DRI). The *GRTA DRI Review Procedures*, as well as the inputs and parameters documented in this Letter of Understanding and the revised Methodology Meeting Packet, shall be adhered to in preparing the GRTA required Transportation Study.

PROJECT OVERVIEW

- The proposed site is located in the City of Doraville, in Dekalb County, in GDOT District 7 at GPS Coordinate 33°54'14.84"N, 84°16'17.85"W. The development is bounded by North Dekalb Drive on the south, US 23 (Buford Highway) on the west, and Longmire Way Extension on the north – just north of the I-285/Buford Highway interchange.
- The proposed mixed-use development includes 780 Units of new (High Rise) multi-family housing (close to Rail Transit), 160 Hotel Rooms, and 86,323 Square Feet of Retail Space. The property includes 13.03 acres of land. The property is located in the Livable Communities Code Transect 6 (T-6-C) within the General Business (C-2) district.
- The projected build-out is one phase to be completed by 2029.
- The proposed development includes (6) site accesses to include (2) full access driveways on North Dekalb Drive, (3) full site accesses along Longmire Way Extension and (1) Right-In/Right-Out/Left-In (RIROLI) driveway on US 23 (Buford Highway).
- The DRI trigger for this development is a Permit Application (Stream Buffer Variance).
- The vehicular trip generation is estimated to be 7,296 net daily trips based on the *ITE Trip Generation Manual 11th edition*.
- The applicant is applying for approval under GRTA's non-expedited Traffic Impact Study review process.

STUDY NETWORK

1. US 23 (Buford Highway) at I-285 WB Ramp
2. US 23 (Buford Highway) at North Dekalb Drive
3. US 23 (Buford Highway) at Site Driveway 2/Farmer's Market Driveway
4. US 23 (Buford Highway) at Longmire Way
5. Longmire Way at Site Driveway 3
6. Longmire Way at Site Driveway 4
7. Longmire Way at Site Driveway 5
8. North Dekalb Drive at Site Driveway 1
9. North Dekalb Drive at Site Driveway 6

METHODOLOGY MEETING PACKET INPUTS & PARAMETERS

- The Site Plan shall meet all the applicable requirements in Section 7.1 of the *GRTA DRI Review Procedures*.
- All Study Network intersections shall be analyzed during the AM and PM peak hours for (1) existing conditions, (2) future “no-build” conditions, and (3) future “build” conditions as specified in the *GRTA DRI Review Procedures*.
- This DRI shall be modeled and reviewed in one phase to be completed by 2029.
- The Level of Service (LOS) standard for all analysis shall be LOS D unless specified otherwise in Section 3.2.2.1. For example, a LOS E standard is allowed if the existing LOS for the intersection or approach is a LOS F.
- Default values should not be assumed in the traffic modeling. Existing conditions shall be taken into account as required in Section 3.2.2.
- The trip generation calculations in the revised Methodology Meeting Packet shall be used in the Transportation Study. Mixed-use (8%), Alt. Mode (6%), and Pass-by reductions are allowed for this site. Pass-by reductions shall not exceed 15% of a roadway’s traffic volume standard established in Appendix 7.2.
- The trip assignment approach in the revised Methodology Meeting Packet shall be utilized for all Study Network intersection movements.
- The applicant shall research TIP, STIP, RTP and GDOT’s construction work program, as well as any local government and transit operator plans (SPLOST, CIP, etc.), to determine the open date, sponsor, cost of the project, funding source(s), for future roadway projects in the project vicinity. Programmed transportation projects anticipated to open on or before the Build Out year of the DRI Project shall be modeled as completed in the No-Build and Build conditions unless approved otherwise.
- A 2.0% annual traffic Background Growth Rate shall be used for all roadways.
- Capacity analysis shall be based on turning movement counts collected not more than 12-months prior to the date of the actual DRI submittal to GRTA, unless specified otherwise. As specified in Section 2.3, turning movement counts shall be collected while local schools are in session, on a Tuesday, Wednesday or Thursday (unless approved otherwise) and not during holiday periods (weeks of July 4th, Thanksgiving and +/- 5 days of Christmas).
- If the *GRTA DRI Review Procedures* requires an Enhanced Focus Area for Heavy Vehicles or an Enhanced Focus Area for Dense Urban Environments, the Transportation Study shall incorporate the inputs and parameters agreed to at the Methodology Meeting and documented in the revised Methodology Meeting Packet. These inputs may include a Heavy Vehicle modeling percentages, a Heavy Vehicle route map, a pedestrian crosswalk delay adjustment and a bus blockage adjustment factor.

ADDITIONAL REQUIREMENTS

All applicable requirements of the *GRTA DRI Review Procedures* must be met for the Transportation Study to be considered complete. The *GRTA DRI Review Procedures* are located on GRTA’s DRI website: <https://www.srta.ga.gov/programs-projects/dev-of-regional-impact/> Contact GRTA staff if you have any questions on these requirements.

The Transportation Study shall also include as attachments the native LOS modeling file (i.e., Synchro modeling files) as well as the modeling reports (PDFs) for all Study Network intersections for the Existing, No-Build and Build conditions for all phases. The PDF reports shall be numbered (in page headers) and organized in order according to the Study Network numbering sequence in this Letter of Understanding. The reports shall also be organized in the following sequence: *Existing condition AM, Existing condition PM, No-build condition AM, No-Build condition*

PM, Build condition AM, Build condition PM. If improvements are modeled, those PDFs shall be labeled as such and follow the appropriate condition's applicable peak period.

The Transportation Study appendices shall also include all turning movement count data, regardless of if using historic data or newly collected turning movement counts.

When documenting any Queue Length impacts required in Section 3.2.3.6, the TIS Executive Summary shall also note any individual *movements* not meeting the LOS standard where the DRI Project adds trips in the Build condition and exceeds available storage capacity for that movement.

When identifying mitigations in the existing, no-build and build conditions, the mitigations identified in preceding conditions shall not be modeled as complete when conducting the LOS analysis. The same mitigation may still be proposed as mitigation in the subsequent condition but it shall not be included as completed in the default analysis. For example, a turn lane may be identified as a needed improvement in the no-build condition. The turn lane should not be modeled as completed in the build condition. The turn lane should only be modeled as complete in the no-build with improvements condition and the build with improvements condition.

DRI REVIEW PACKAGE SUBMITTAL

GRTA will begin reviewing the DRI once the DRI Review Package is submitted and deemed complete. The DRI Review Package includes: the permitting Local Government inputting both Department of Community Affairs (DCA) forms into the DCA DRI website; and the **Traffic Engineer submittal of the GRTA Transportation Study (including LOS appendices, traffic count data and any other required attachments) and Site Plan to GRTA staff and ALL stakeholders included in the CC list of this Letter of Understanding.**

All DRI Review Packages shall be submitted electronically via email to all stakeholders in the CC list of the Letter of Understanding. If the DRI Review Package total file size is greater than 10 MB, the DRI Review Package shall be submitted via email with a FTP link provided for downloading the files.

Please contact me if you have any questions about the Letter of Understanding or the *GRTA DRI Review Procedures*.

Sincerely,

Brittany Williams
Program Manager

Cc:

Zane Grennell, DCA
Brittany Williams, GRTA/SRTA
Derrick Peevy, GRTA/SRTA
Donald Shockey, ARC
Austin Shelton, City of Doraville
Larry Washington, Dekalb County
A. Chappell, Dekalb County
Megan Wilson, GDOT D7
Landon Perry, GDOT D7

Chaz Y. Lazarian, Esq. Lotus Grove LLC, Developer
Abdul Amer, A & R Engineering, Traffic Engineer
Naser Omar, A & R Engineering, Traffic Engineer
Kenneth Wood, PEC +, Site planner

Linear Regression of Daily Traffic

Weighted Average		2018	2019	2021	2022	2023
Sum of Count Stations		54,680	54,550	54,220	59,250	57,940

Trend Line

Growth Rate		2018	2019	2021	2022	2023
Trend Line		53,975	54,803	56,459	57,288	58,116

**Fact Sheets for Planned and Programmed
Improvements**

Short Title

REVIVE 285 - I-285 NORTH CORRIDOR HIGH CAPACITY RAIL SERVICE - PROTECTIVE RIGHT OF WAY ACQUISITION FROM PERIMETER CENTER TO DORAVILLE

GDOT Project No.

0013251

Federal ID No.

N/A

Status

Long Range

Service Type

Transit / Facilities Capital

Sponsor

GDOT

Jurisdiction

Regional - Perimeter

Analysis Level

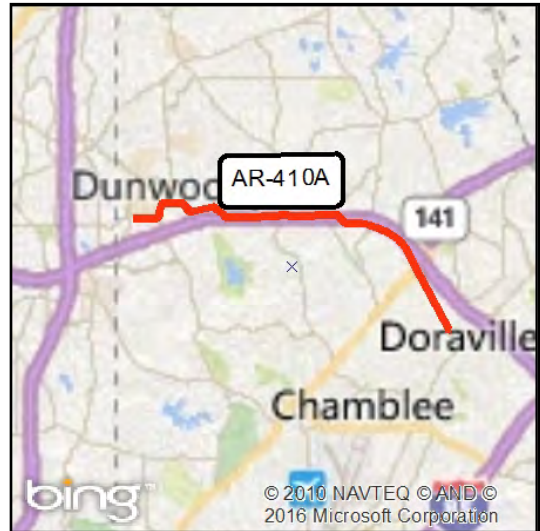
Exempt from Air Quality Analysis (40 CFR 93)

Existing Thru Lane

N/A

Planned Thru Lane

N/A



Network Year

2040

Corridor Length

4.5 miles

Detailed Description and Justification

This line item provides the funds set aside for protective right-of-way acquisition for the I-285 North corridor which will include transit. Build alternatives for light rail transit (LRT), bus rapid transit (BRT), and express bus from Perimeter Center to Doraville.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
ROW	State of Georgia		LR 2031-2040	\$144,000,000	\$0,000	\$144,000,000	\$0,000	\$0,000
				\$144,000,000	\$0,000	\$144,000,000	\$0,000	\$0,000

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquisition
 UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases



For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.



Short Title

REVIVE 285 - I-285 NORTH MANAGED LANES AND COLLECTOR/DISTRIBUTOR LANE IMPROVEMENTS FROM I-75 NORTH TO I-85 NORTH

GDOT Project No.

0001758

Federal ID No.

N/A

Status

Long Range

Service Type

Roadway / Managed Lanes

Sponsor

GDOT

Jurisdiction

Regional - Perimeter

Analysis Level

In the Region's Air Quality Conformity Analysis

Existing Thru Lane

0

Planned Thru Lane

4



Network Year

2030

Corridor Length

13.1 miles

Detailed Description and Justification

Revive 285 is the name given to the improvement project on I-285 North from I-75 to I-85. Revive 285 will serve as an umbrella for a number of isolated but critical near-term fixes in the project corridor, guiding these efforts in a way that provides the most benefit for the corridor and anticipates the transportation needs of future generations. This project will identify, evaluate, and possibly enhance the most appropriate projects and programs that provide safe and efficient travel along the I-285 corridor from the I-75/I-285 interchange in Cobb County to the I-285/I-85 interchange in DeKalb County. It will also develop and advance concepts through the environmental phase of Georgia DOT's PDP, including completion of an environmental document and receipt of a Record of Decision.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
PE	National Highway System	AUTH	2003	\$1,000,000	\$800,000	\$200,000	\$0,000	\$0,000
PE	National Highway System	AUTH	2006	\$19,933,151	\$15,946,521	\$3,986,630	\$0,000	\$0,000
PE	Interstate Maintenance	AUTH	2007	\$1,250,000	\$1,125,000	\$125,000	\$0,000	\$0,000
PE	National Highway Performance Program (NHPP)	AUTH	2015	\$5,000,000	\$4,500,000	\$500,000	\$0,000	\$0,000
PE	General Federal Aid 2022-2040		LR 2022-2030	\$38,000,000	\$30,400,000	\$7,600,000	\$0,000	\$0,000
ALL	General Federal Aid 2022-2040		LR 2022-2030	\$888,280,000	\$799,452,000	\$88,828,000	\$0,000	\$0,000
ALL	Toll Revenue Bonds		LR 2022-2030	\$733,320,000	\$0,000	\$0,000	\$733,320,000	\$0,000
				\$1,686,783,151	\$852,223,521	\$101,239,630	\$733,320,000	\$0,000

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquisition
 UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases



For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.



Short Title

REVIVE 285 - I-285 NORTH COLLECTOR/DISTRIBUTOR LANES FROM US 23 (BUFORD HIGHWAY) TO I-85 NORTH

GDOT Project No.

0013256

Federal ID No.

N/A

Status

Long Range

Service Type

Roadway / Interchange Capacity

Sponsor

GDOT

Jurisdiction

Regional - Perimeter

Analysis Level

In the Region's Air Quality Conformity Analysis

Existing Thru Lane

0

Planned Thru Lane

2

Network Year

2030

Corridor Length

1.1 miles



Detailed Description and Justification

This project will construct collector/distributor lanes from US 23 (Buford Highway) to I-85 North.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
ALL	General Federal Aid 2022-2040		LR 2022-2030	\$46,000,000	\$36,800,000	\$9,200,000	\$0,000	\$0,000
				\$46,000,000	\$36,800,000	\$9,200,000	\$0,000	\$0,000

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquisition
 UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases



For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.



Short Title

PARK AVENUE EXTENSION FROM SR 13 (BUFORD HIGHWAY) TO SR 141 (PEACHTREE BOULEVARD)

GDOT Project No.

N/A

Federal ID No.

N/A

Status

Long Range

Service Type

Roadway / General Purpose Capacity

Sponsor

City of Doraville

Jurisdiction

DeKalb County

Analysis Level

In the Region's Air Quality Conformity Analysis

Existing Thru Lane

0

Planned Thru Lane

2



Network Year

2030

Corridor Length

0.3 miles

Detailed Description and Justification

The City of Doraville will extend Park Avenue for 0.3 of a mile between SR 13 (Buford Highway) to SR 141 (Peachtree Boulevard).

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
ALL	Local Jurisdiction/Municipality Funds		LR 2022-2030	\$90,000,000	\$0,000	\$0,000	\$0,000	\$90,000,000
				\$90,000,000	\$0,000	\$0,000	\$0,000	\$90,000,000

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquisition
 UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases



For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.



Short Title

WEST AVENUE FROM PEACHTREE ROAD TO MOTORS INDUSTRIAL WAY

GDOT Project No.

N/A

Federal ID No.

N/A

Status

Long Range

Service Type

Roadway / General Purpose Capacity

Sponsor

City of Doraville

Jurisdiction

DeKalb County

Analysis Level

In the Region's Air Quality Conformity Analysis

Existing Thru Lane

0

Planned Thru Lane

4



Network Year

2030

Corridor Length

0.5 miles

Detailed Description and Justification

The City of Doraville will improve West Avenue for 0.5 of mile from Peachtree Road to Motors Industrial Way.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
ALL	Local Jurisdiction/Municipality Funds		LR 2022-2030	\$12,700,000	\$0,000	\$0,000	\$0,000	\$12,700,000
				\$12,700,000	\$0,000	\$0,000	\$0,000	\$12,700,000

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquisition
 UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases



For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.



**Existing Intersection Analysis (SIM Traffic
Analysis for Intersection 2 and 3)**

Timings

1: US 23 (Buford Hwy) & I-285 WB Ramp

1a. Existing AM 2025

03/19/2025

	WBL	WBR	NBL	NBT	SBT	SBR
Lane Group	WBL	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↰↰	↰	↰	↑↑↑	↑↑↑	↰
Traffic Volume (vph)	885	450	218	640	1270	307
Future Volume (vph)	885	450	218	640	1270	307
Lane Group Flow (vph)	962	489	237	696	1380	334
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	3		1	6	2	
Permitted Phases		8	6			2
Detector Phase	3	8	1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	15.0	23.5	15.0	23.5	23.5	23.5
Total Split (s)	52.0	52.0	25.0	68.0	43.0	43.0
Total Split (%)	43.3%	43.3%	20.8%	56.7%	35.8%	35.8%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.84	0.78	0.78	0.24	0.59	0.48
Control Delay	44.3	30.7	41.8	13.5	23.6	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.3	30.7	41.8	13.5	23.6	3.8
Queue Length 50th (ft)	353	217	110	93	141	0
Queue Length 95th (ft)	400	331	#212	132	189	38
Internal Link Dist (ft)				304	55	
Turn Bay Length (ft)						
Base Capacity (vph)	1330	695	349	2841	2331	701
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.70	0.68	0.24	0.59	0.48

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

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

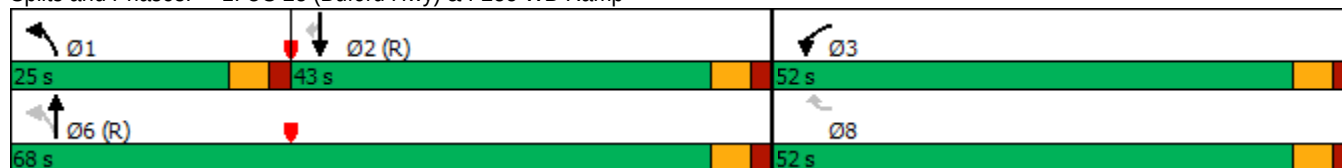
Natural Cycle: 65

Control Type: Actuated-Coordinated

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

Queue shown is maximum after two cycles.

Splits and Phases: 1: US 23 (Buford Hwy) & I-285 WB Ramp

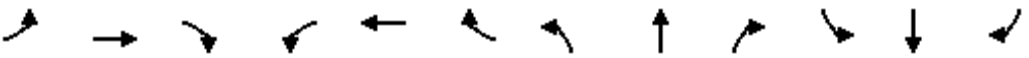


HCM 6th Signalized Intersection Summary

1: US 23 (Buford Hwy) & I-285 WB Ramp

1a. Existing AM 2025

03/19/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↔		↗	↖	↑↑↑			↑↑↑	↗
Traffic Volume (veh/h)	0	0	0	885	0	450	218	640	0	0	1270	307
Future Volume (veh/h)	0	0	0	885	0	450	218	640	0	0	1270	307
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	0	1781	1781	1826	0	0	1737	1485
Adj Flow Rate, veh/h				962	0	489	237	696	0	0	1380	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	0	8	8	5	0	0	11	28
Cap, veh/h				1229	0	537	312	2756	0	0	2447	
Arrive On Green				0.36	0.00	0.36	0.10	0.55	0.00	0.00	0.41	0.00
Sat Flow, veh/h				3456	0	1510	1697	5149	0	0	6218	1259
Grp Volume(v), veh/h				962	0	489	237	696	0	0	1380	0
Grp Sat Flow(s),veh/h/ln				1728	0	1510	1697	1662	0	0	1494	1259
Q Serve(g_s), s				29.8	0.0	37.1	9.3	8.7	0.0	0.0	21.3	0.0
Cycle Q Clear(g_c), s				29.8	0.0	37.1	9.3	8.7	0.0	0.0	21.3	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1229	0	537	312	2756	0	0	2447	
V/C Ratio(X)				0.78	0.00	0.91	0.76	0.25	0.00	0.00	0.56	
Avail Cap(c_a), veh/h				1339	0	585	423	2756	0	0	2447	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				34.5	0.0	36.9	21.6	13.9	0.0	0.0	27.2	0.0
Incr Delay (d2), s/veh				2.9	0.0	17.7	5.4	0.2	0.0	0.0	0.9	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
%ile BackOfQ(50%),veh/ln				12.7	0.0	15.9	4.0	3.2	0.0	0.0	7.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				37.4	0.0	54.6	27.0	14.2	0.0	0.0	28.2	0.0
LnGrp LOS				D	A	D	C	B	A	A	C	
Approach Vol, veh/h					1451			933			1380	
Approach Delay, s/veh					43.2			17.4			28.2	
Approach LOS					D			B			C	
Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	17.2	54.6				71.8		48.2				
Change Period (Y+Rc), s	5.5	5.5				5.5		5.5				
Max Green Setting (Gmax), s	19.5	37.5				62.5		46.5				
Max Q Clear Time (g_c+I1), s	11.3	23.3				10.7		39.1				
Green Ext Time (p_c), s	0.4	11.1				11.0		3.6				
Intersection Summary												
HCM 6th Ctrl Delay				31.3								
HCM 6th LOS				C								
Notes												
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.												

2: US 23 (Buford Hwy) & N Dekalb Dr Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.0	0.0	0.0
Total Del/Veh (s)	1.5	1.4	4.8	3.3

3: US 23 (Buford Hwy) & Farmers Market Drwy Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	3.6	0.0	0.0	0.1
Total Del/Veh (s)	78.8	12.6	1.7	7.8

Total Zone Performance

Denied Del/Veh (s)	0.6
Total Del/Veh (s)	142.4

Intersection: 2: US 23 (Buford Hwy) & N Dekalb Dr

Movement	NB	NB	NB	SB	SB	SB	SB
Directions Served	T	T	TR	T	T	T	T
Maximum Queue (ft)	69	32	38	187	208	182	139
Average Queue (ft)	11	1	1	44	71	50	46
95th Queue (ft)	48	16	17	137	158	130	113
Link Distance (ft)	61	61	61		328	328	328
Upstream Blk Time (%)	1	0	0				
Queuing Penalty (veh)	5	0	0				
Storage Bay Dist (ft)				265			
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3: US 23 (Buford Hwy) & Farmers Market Drwy

Movement	EB	NB	NB	NB	SB	SB	SB
Directions Served	R	UL	T	T	T	T	TR
Maximum Queue (ft)	110	288	283	187	30	24	34
Average Queue (ft)	42	153	45	21	4	1	3
95th Queue (ft)	97	266	218	139	19	12	17
Link Distance (ft)	105		328	328	392	392	
Upstream Blk Time (%)	4	0	2	0			
Queuing Penalty (veh)	0	0	8	0			
Storage Bay Dist (ft)		225					85
Storage Blk Time (%)		7	3			0	
Queuing Penalty (veh)		22	7			0	

Zone Summary

Zone wide Queuing Penalty: 42

Timings 4: US 23 (Buford Hwy) & Longmire Way

1a. Existing AM 2025
03/19/2025

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	38	4	22	2	161	614	15	1194
Future Volume (vph)	38	4	22	2	161	614	15	1194
Lane Group Flow (vph)	40	126	23	15	168	658	16	1289
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4		8	1	6	5	2
Permitted Phases	4		8		6		2	
Detector Phase	7	4	8	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	5.0	15.0
Minimum Split (s)	15.0	39.5	37.5	37.5	15.0	31.5	15.0	29.5
Total Split (s)	15.0	40.0	25.0	25.0	20.0	65.0	15.0	60.0
Total Split (%)	12.5%	33.3%	20.8%	20.8%	16.7%	54.2%	12.5%	50.0%
Yellow Time (s)	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
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	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
v/c Ratio	0.25	0.48	0.28	0.12	0.50	0.19	0.03	0.44
Control Delay	45.2	13.8	61.3	27.9	14.1	5.8	6.1	14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.2	13.8	61.3	27.9	14.1	5.8	6.1	14.0
Queue Length 50th (ft)	26	3	17	1	35	52	3	197
Queue Length 95th (ft)	56	55	44	23	m70	86	10	282
Internal Link Dist (ft)		446		262		374		409
Turn Bay Length (ft)	155		35		75		100	
Base Capacity (vph)	175	414	198	274	373	3555	565	2902
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	0.23	0.30	0.12	0.05	0.45	0.19	0.03	0.44

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

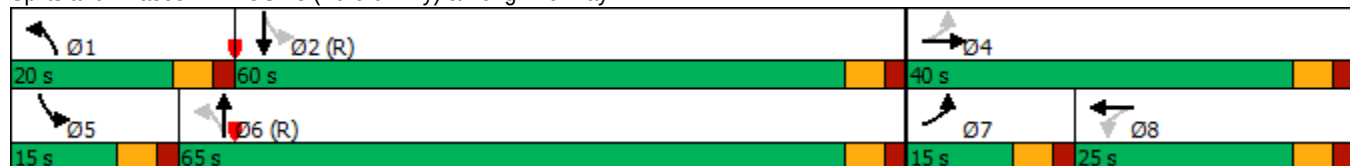
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

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

Splits and Phases: 4: US 23 (Buford Hwy) & Longmire Way



HCM 6th Signalized Intersection Summary

4: US 23 (Buford Hwy) & Longmire Way

1a. Existing AM 2025

03/19/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								 			 	
Traffic Volume (veh/h)	38	4	117	22	2	12	161	614	17	15	1194	43
Future Volume (veh/h)	38	4	117	22	2	12	161	614	17	15	1194	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1707	1870	1248	1826	1870	1870	1722	1811	1870	1796	1737	1767
Adj Flow Rate, veh/h	40	4	122	23	2	12	168	640	18	16	1244	45
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, %	13	2	44	5	2	2	12	6	2	7	11	9
Cap, veh/h	163	6	195	121	12	69	367	3554	100	594	3230	117
Arrive On Green	0.03	0.13	0.13	0.05	0.05	0.05	0.05	0.72	0.72	0.02	0.69	0.69
Sat Flow, veh/h	1626	51	1542	1235	231	1389	1640	4944	139	1711	4698	170
Grp Volume(v), veh/h	40	0	126	23	0	14	168	426	232	16	837	452
Grp Sat Flow(s),veh/h/ln	1626	0	1593	1235	0	1620	1640	1648	1786	1711	1581	1706
Q Serve(g_s), s	2.7	0.0	9.0	2.2	0.0	1.0	3.6	5.0	5.0	0.3	13.5	13.5
Cycle Q Clear(g_c), s	2.7	0.0	9.0	2.2	0.0	1.0	3.6	5.0	5.0	0.3	13.5	13.5
Prop In Lane	1.00		0.97	1.00		0.86	1.00		0.08	1.00		0.10
Lane Grp Cap(c), veh/h	163	0	201	121	0	81	367	2370	1284	594	2174	1173
V/C Ratio(X)	0.25	0.00	0.63	0.19	0.00	0.17	0.46	0.18	0.18	0.03	0.39	0.39
Avail Cap(c_a), veh/h	242	0	458	261	0	263	485	2370	1284	700	2174	1173
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.2	0.0	49.7	55.2	0.0	54.6	6.0	5.4	5.4	5.3	8.0	8.0
Incr Delay (d2), s/veh	0.8	0.0	3.2	0.7	0.0	1.0	0.9	0.2	0.3	0.0	0.5	1.0
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	1.2	0.0	3.8	0.7	0.0	0.4	1.1	1.6	1.8	0.1	4.3	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.0	0.0	52.9	55.9	0.0	55.7	6.8	5.6	5.8	5.3	8.5	8.9
LnGrp LOS	D	A	D	E	A	E	A	A	A	A	A	A
Approach Vol, veh/h	166		37			826			1305			
Approach Delay, s/veh	52.4		55.8			5.9			8.6			
Approach LOS	D		E			A			A			
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.3	88.0		20.7	7.6	91.8	9.2	11.5				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	14.5	54.5		34.5	9.5	59.5	9.5	19.5				
Max Q Clear Time (g_c+I1), s	5.6	15.5		11.0	2.3	7.0	4.7	4.2				
Green Ext Time (p_c), s	0.3	21.3		0.7	0.0	9.8	0.0	0.1				
Intersection Summary												
HCM 6th Ctrl Delay			11.5									
HCM 6th LOS			B									
Notes												

Timings

1: US 23 (Buford Hwy) & I-285 WB Ramp

1b. Existing PM 2025

03/19/2025

	WBL	WBR	NBL	NBT	SBT	SBR
Lane Group	WBL	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↔↔	↔	↔	↑↑↑	↑↑↑	↔
Traffic Volume (vph)	531	478	242	1787	1080	218
Future Volume (vph)	531	478	242	1787	1080	218
Lane Group Flow (vph)	536	483	244	1805	1091	220
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	3		1	6	2	
Permitted Phases		8	6			2
Detector Phase	3	8	1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	15.0	23.5	15.0	23.5	23.5	23.5
Total Split (s)	58.0	58.0	27.0	62.0	35.0	35.0
Total Split (%)	48.3%	48.3%	22.5%	51.7%	29.2%	29.2%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.47	0.87	0.68	0.63	0.43	0.32
Control Delay	31.4	47.3	26.1	20.1	23.0	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.4	47.3	26.1	20.1	23.0	2.7
Queue Length 50th (ft)	165	301	92	332	122	0
Queue Length 95th (ft)	185	389	185	469	163	m19
Internal Link Dist (ft)				304	55	
Turn Bay Length (ft)						
Base Capacity (vph)	1459	689	435	2881	2515	694
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.70	0.56	0.63	0.43	0.32

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

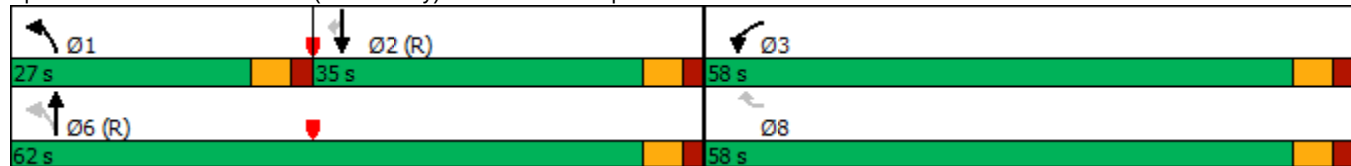
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

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

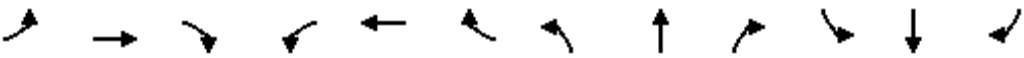
Splits and Phases: 1: US 23 (Buford Hwy) & I-285 WB Ramp



HCM 6th Signalized Intersection Summary
1: US 23 (Buford Hwy) & I-285 WB Ramp

1b. Existing PM 2025

03/19/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↰↱		↰	↰	↰↰↰			↰↰↰	↰
Traffic Volume (veh/h)	0	0	0	531	0	478	242	1787	0	0	1080	218
Future Volume (veh/h)	0	0	0	531	0	478	242	1787	0	0	1080	218
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1826	0	1767	1870	1870	0	0	1870	1707
Adj Flow Rate, veh/h				536	0	483	244	1805	0	0	1091	0
Peak Hour Factor				0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %				5	0	9	2	2	0	0	2	13
Cap, veh/h				1192	0	529	383	2835	0	0	2659	
Arrive On Green				0.35	0.00	0.35	0.10	0.56	0.00	0.00	0.41	0.00
Sat Flow, veh/h				3374	0	1497	1781	5274	0	0	6696	1447
Grp Volume(v), veh/h				536	0	483	244	1805	0	0	1091	0
Grp Sat Flow(s),veh/h/ln				1687	0	1497	1781	1702	0	0	1609	1447
Q Serve(g_s), s				14.7	0.0	37.0	9.0	29.2	0.0	0.0	14.4	0.0
Cycle Q Clear(g_c), s				14.7	0.0	37.0	9.0	29.2	0.0	0.0	14.4	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1192	0	529	383	2835	0	0	2659	
V/C Ratio(X)				0.45	0.00	0.91	0.64	0.64	0.00	0.00	0.41	
Avail Cap(c_a), veh/h				1476	0	655	531	2835	0	0	2659	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				29.8	0.0	37.1	17.7	18.4	0.0	0.0	24.9	0.0
Incr Delay (d2), s/veh				0.3	0.0	15.2	1.8	1.1	0.0	0.0	0.5	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
%ile BackOfQ(50%),veh/ln				5.9	0.0	15.4	3.8	11.2	0.0	0.0	5.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				30.1	0.0	52.3	19.5	19.5	0.0	0.0	25.3	0.0
LnGrp LOS				C	A	D	B	B	A	A	C	
Approach Vol, veh/h					1019			2049			1091	
Approach Delay, s/veh					40.6			19.5			25.3	
Approach LOS					D			B			C	
Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	17.0	55.1				72.1		47.9				
Change Period (Y+Rc), s	5.5	5.5				5.5		5.5				
Max Green Setting (Gmax), s	21.5	29.5				56.5		52.5				
Max Q Clear Time (g_c+I1), s	11.0	16.4				31.2		39.0				
Green Ext Time (p_c), s	0.5	8.8				21.3		3.4				
Intersection Summary												
HCM 6th Ctrl Delay				26.2								
HCM 6th LOS				C								
Notes												
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.												

2: US 23 (Buford Hwy) & N Dekalb Dr Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	1.8	1.9	4.1	2.7

3: US 23 (Buford Hwy) & Farmers Market Drwy Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	4.6	0.0	0.1	0.3
Total Del/Veh (s)	23.9	6.8	2.0	6.2

Total Zone Performance

Denied Del/Veh (s)	2.3
Total Del/Veh (s)	402.3

Intersection: 2: US 23 (Buford Hwy) & N Dekalb Dr

Movement	WB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	R	T	T	TR	T	T	T	T	T
Maximum Queue (ft)	28	28	8	32	112	126	129	132	15
Average Queue (ft)	1	2	0	3	12	44	30	39	1
95th Queue (ft)	20	18	6	22	62	110	90	104	11
Link Distance (ft)	201	61	61	61		328	328	328	328
Upstream Blk Time (%)		0		0					
Queuing Penalty (veh)		2		0					
Storage Bay Dist (ft)					265				
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 3: US 23 (Buford Hwy) & Farmers Market Drwy

Movement	EB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	UL	T	T	U	T	T	TR
Maximum Queue (ft)	129	288	261	97	34	30	6	31
Average Queue (ft)	82	143	18	4	3	5	0	3
95th Queue (ft)	137	240	128	54	17	24	4	18
Link Distance (ft)	105		328	328		392	392	
Upstream Blk Time (%)	13	0	0					
Queuing Penalty (veh)	0	0	2					
Storage Bay Dist (ft)		225			85			85
Storage Blk Time (%)		2	0					
Queuing Penalty (veh)		13	1					

Zone Summary

Zone wide Queuing Penalty: 18

Timings 4: US 23 (Buford Hwy) & Longmire Way

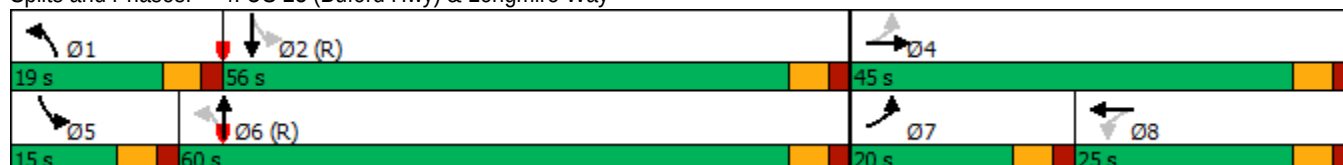
1b. Existing PM 2025
03/19/2025

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	148	15	31	11	150	1403	19	767
Future Volume (vph)	148	15	31	11	150	1403	19	767
Lane Group Flow (vph)	154	150	32	51	156	1483	20	879
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4		8	1	6	5	2
Permitted Phases	4		8		6		2	
Detector Phase	7	4	8	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	5.0	15.0
Minimum Split (s)	15.0	39.5	37.5	37.5	15.0	31.5	15.0	29.5
Total Split (s)	20.0	45.0	25.0	25.0	19.0	60.0	15.0	56.0
Total Split (%)	16.7%	37.5%	20.8%	20.8%	15.8%	50.0%	12.5%	46.7%
Yellow Time (s)	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
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	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
v/c Ratio	0.56	0.36	0.37	0.33	0.38	0.45	0.09	0.31
Control Delay	47.0	10.3	63.9	26.2	5.8	5.7	8.8	15.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.0	10.3	63.9	26.2	5.8	5.7	8.8	15.2
Queue Length 50th (ft)	100	10	24	8	24	87	5	130
Queue Length 95th (ft)	156	61	56	47	m33	109	15	183
Internal Link Dist (ft)		446		262		374		409
Turn Bay Length (ft)	155		35		75		100	
Base Capacity (vph)	291	566	191	294	448	3266	272	2791
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	0.53	0.27	0.17	0.17	0.35	0.45	0.07	0.31

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: US 23 (Buford Hwy) & Longmire Way



HCM 6th Signalized Intersection Summary 4: US 23 (Buford Hwy) & Longmire Way

1b. Existing PM 2025

03/19/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								 			 	
Traffic Volume (veh/h)	148	15	129	31	11	38	150	1403	21	19	767	77
Future Volume (veh/h)	148	15	129	31	11	38	150	1403	21	19	767	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1678	1796	1767	1856	1752	1841	1870	1737	1841	1856
Adj Flow Rate, veh/h	154	16	134	32	11	40	156	1461	22	20	799	80
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	15	7	9	3	10	4	2	11	4	3
Cap, veh/h	257	33	278	121	17	62	465	3311	50	261	2868	286
Arrive On Green	0.10	0.19	0.19	0.05	0.05	0.05	0.05	0.65	0.65	0.02	0.62	0.62
Sat Flow, veh/h	1781	172	1439	1188	334	1214	1668	5100	77	1654	4645	463
Grp Volume(v), veh/h	154	0	150	32	0	51	156	960	523	20	575	304
Grp Sat Flow(s),veh/h/ln	1781	0	1611	1188	0	1548	1668	1675	1827	1654	1675	1757
Q Serve(g_s), s	9.5	0.0	9.9	3.2	0.0	3.9	4.1	16.9	16.9	0.5	9.5	9.6
Cycle Q Clear(g_c), s	9.5	0.0	9.9	3.2	0.0	3.9	4.1	16.9	16.9	0.5	9.5	9.6
Prop In Lane	1.00		0.89	1.00		0.78	1.00		0.04	1.00		0.26
Lane Grp Cap(c), veh/h	257	0	311	121	0	79	465	2175	1186	261	2069	1085
V/C Ratio(X)	0.60	0.00	0.48	0.27	0.00	0.65	0.34	0.44	0.44	0.08	0.28	0.28
Avail Cap(c_a), veh/h	301	0	530	253	0	252	565	2175	1186	359	2069	1085
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.1	0.0	43.1	55.5	0.0	55.9	7.7	10.3	10.3	8.7	10.6	10.6
Incr Delay (d2), s/veh	2.4	0.0	1.2	1.2	0.0	8.5	0.4	0.7	1.2	0.1	0.3	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.0	4.1	1.0	0.0	1.7	1.4	6.0	6.7	0.2	3.5	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.5	0.0	44.2	56.7	0.0	64.4	8.1	11.0	11.5	8.9	10.9	11.3
LnGrp LOS	D	A	D	E	A	E	A	B	B	A	B	B
Approach Vol, veh/h	304		83			1639			899			
Approach Delay, s/veh	46.4		61.4			10.9			11.0			
Approach LOS	D		E			B			B			
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.7	79.6		28.7	7.9	83.4	17.0	11.6				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	13.5	50.5		39.5	9.5	54.5	14.5	19.5				
Max Q Clear Time (g_c+I1), s	6.1	11.6		11.9	2.5	18.9	11.5	5.9				
Green Ext Time (p_c), s	0.2	13.2		1.0	0.0	23.4	0.1	0.2				
Intersection Summary												
HCM 6th Ctrl Delay	16.1											
HCM 6th LOS	B											
Notes												

**Future “No-Build” Intersection Analysis (SIM
Traffic Analysis for Intersection 2 and 3)**

Timings

2a. No Build AM 2029

03/19/2025

1: US 23 (Buford Hwy) & I-285 WB Ramp

	WBL	WBR	NBL	NBT	SBT	SBR
Lane Group	WBL	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↰↰	↰	↰	↑↑↑	↑↑↑	↰
Traffic Volume (vph)	956	486	235	691	1372	332
Future Volume (vph)	956	486	235	691	1372	332
Lane Group Flow (vph)	1039	528	255	751	1491	361
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	3		1	6	2	
Permitted Phases		8	6			2
Detector Phase	3	8	1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	15.0	23.5	15.0	23.5	23.5	23.5
Total Split (s)	54.0	54.0	25.0	66.0	41.0	41.0
Total Split (%)	45.0%	45.0%	20.8%	55.0%	34.2%	34.2%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.85	0.84	0.86	0.27	0.70	0.52
Control Delay	43.1	37.2	56.5	15.1	29.5	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.1	37.2	56.5	15.1	29.5	6.2
Queue Length 50th (ft)	376	274	144	109	163	0
Queue Length 95th (ft)	430	404	#281	149	254	m82
Internal Link Dist (ft)				304	55	
Turn Bay Length (ft)						
Base Capacity (vph)	1387	695	333	2731	2145	689
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.76	0.77	0.27	0.70	0.52

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

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

Natural Cycle: 75

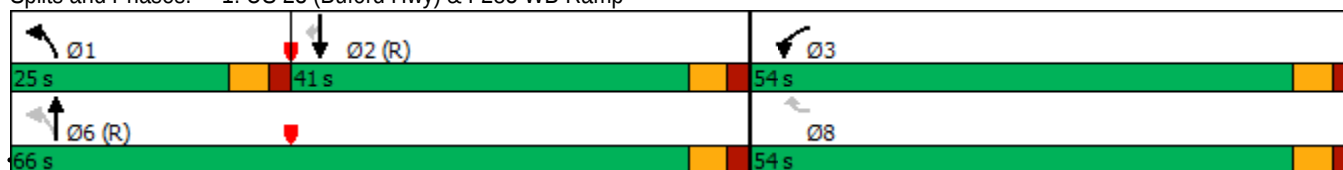
Control Type: Actuated-Coordinated

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: 1: US 23 (Buford Hwy) & I-285 WB Ramp

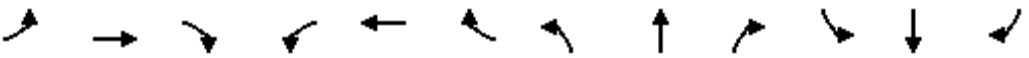


HCM 6th Signalized Intersection Summary

1: US 23 (Buford Hwy) & I-285 WB Ramp

2a. No Build AM 2029

03/19/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↰↱		↰	↰	↰↰↰			↰↰↰	↰
Traffic Volume (veh/h)	0	0	0	956	0	486	235	691	0	0	1372	332
Future Volume (veh/h)	0	0	0	956	0	486	235	691	0	0	1372	332
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	0	1781	1781	1826	0	0	1737	1485
Adj Flow Rate, veh/h				1039	0	528	255	751	0	0	1491	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	0	8	8	5	0	0	11	28
Cap, veh/h				1312	0	573	300	2635	0	0	2236	
Arrive On Green				0.38	0.00	0.38	0.11	0.53	0.00	0.00	0.37	0.00
Sat Flow, veh/h				3456	0	1510	1697	5149	0	0	6218	1259
Grp Volume(v), veh/h				1039	0	528	255	751	0	0	1491	0
Grp Sat Flow(s),veh/h/ln				1728	0	1510	1697	1662	0	0	1494	1259
Q Serve(g_s), s				32.0	0.0	40.0	10.6	10.0	0.0	0.0	25.0	0.0
Cycle Q Clear(g_c), s				32.0	0.0	40.0	10.6	10.0	0.0	0.0	25.0	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1312	0	573	300	2635	0	0	2236	
V/C Ratio(X)				0.79	0.00	0.92	0.85	0.28	0.00	0.00	0.67	
Avail Cap(c_a), veh/h				1397	0	610	392	2635	0	0	2236	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				33.0	0.0	35.5	24.7	15.7	0.0	0.0	31.3	0.0
Incr Delay (d2), s/veh				3.0	0.0	18.9	12.9	0.3	0.0	0.0	1.6	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
%ile BackOfQ(50%),veh/ln				13.6	0.0	17.3	5.1	3.8	0.0	0.0	9.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				36.0	0.0	54.4	37.6	16.0	0.0	0.0	32.9	0.0
LnGrp LOS				D	A	D	D	B	A	A	C	
Approach Vol, veh/h					1567			1006			1491	
Approach Delay, s/veh					42.2			21.4			32.9	
Approach LOS					D			C			C	
Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	18.5	50.4				68.9		51.1				
Change Period (Y+Rc), s	5.5	5.5				5.5		5.5				
Max Green Setting (Gmax), s	19.5	35.5				60.5		48.5				
Max Q Clear Time (g_c+I1), s	12.6	27.0				12.0		42.0				
Green Ext Time (p_c), s	0.4	7.4				12.0		3.5				
Intersection Summary												
HCM 6th Ctrl Delay				33.7								
HCM 6th LOS				C								
Notes												
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.												

2: US 23 (Buford Hwy) & N Dekalb Dr Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.1
Total Del/Veh (s)	1.7	1.8	6.9	4.6

3: US 23 (Buford Hwy) & Farmers Market Drwy Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	4.0	0.0	0.0	0.1
Total Del/Veh (s)	94.9	14.0	2.0	8.7

Total Zone Performance

Denied Del/Veh (s)	1.0
Total Del/Veh (s)	181.6

Intersection: 2: US 23 (Buford Hwy) & N Dekalb Dr

Movement	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	T	T	TR	T	T	T	T
Maximum Queue (ft)	69	102	82	38	188	205	200	192
Average Queue (ft)	2	18	5	2	64	80	68	64
95th Queue (ft)	30	71	37	23	162	166	161	155
Link Distance (ft)	201	61	61	61		328	328	328
Upstream Blk Time (%)		5	1	0				
Queuing Penalty (veh)		21	4	0				
Storage Bay Dist (ft)					265			
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 3: US 23 (Buford Hwy) & Farmers Market Drwy

Movement	EB	NB	NB	NB	NB	SB	SB	SB
Directions Served	R	UL	T	T	T	T	T	TR
Maximum Queue (ft)	111	297	327	269	173	30	6	31
Average Queue (ft)	42	157	61	34	16	3	0	2
95th Queue (ft)	98	276	262	194	134	19	4	15
Link Distance (ft)	105		328	328	328	392	392	
Upstream Blk Time (%)	6	0	6	1	1			
Queuing Penalty (veh)	0	0	24	5	5			
Storage Bay Dist (ft)		225						85
Storage Blk Time (%)		11	6					
Queuing Penalty (veh)		36	14					

Zone Summary

Zone wide Queuing Penalty: 109

Timings 4: US 23 (Buford Hwy) & Longmire Way

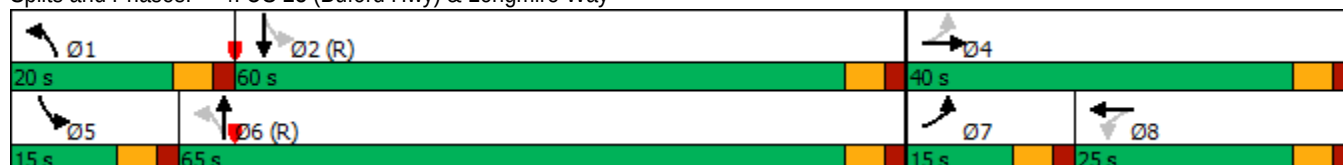
2a. No Build AM 2029
03/19/2025

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	41	4	24	2	174	663	16	1290
Future Volume (vph)	41	4	24	2	174	663	16	1290
Lane Group Flow (vph)	43	135	25	16	181	710	17	1392
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4		8	1	6	5	2
Permitted Phases	4		8		6		2	
Detector Phase	7	4	8	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	5.0	15.0
Minimum Split (s)	15.0	39.5	37.5	37.5	15.0	31.5	15.0	29.5
Total Split (s)	15.0	40.0	25.0	25.0	20.0	65.0	15.0	60.0
Total Split (%)	12.5%	33.3%	20.8%	20.8%	16.7%	54.2%	12.5%	50.0%
Yellow Time (s)	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
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	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
v/c Ratio	0.27	0.49	0.30	0.13	0.55	0.20	0.04	0.49
Control Delay	45.2	13.7	61.9	27.5	20.0	5.8	6.5	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.2	13.7	61.9	27.5	20.0	5.8	6.5	15.7
Queue Length 50th (ft)	28	3	19	1	38	56	3	227
Queue Length 95th (ft)	59	57	47	24	m95	93	11	328
Internal Link Dist (ft)		446		262		374		409
Turn Bay Length (ft)	155		35		75		100	
Base Capacity (vph)	177	420	197	274	354	3544	534	2841
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	0.24	0.32	0.13	0.06	0.51	0.20	0.03	0.49

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: US 23 (Buford Hwy) & Longmire Way



HCM 6th Signalized Intersection Summary 4: US 23 (Buford Hwy) & Longmire Way

2a. No Build AM 2029

03/19/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	4	126	24	2	13	174	663	18	16	1290	46
Future Volume (veh/h)	41	4	126	24	2	13	174	663	18	16	1290	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1707	1870	1248	1826	1870	1870	1722	1811	1870	1796	1737	1767
Adj Flow Rate, veh/h	43	4	131	25	2	14	181	691	19	17	1344	48
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, %	13	2	44	5	2	2	12	6	2	7	11	9
Cap, veh/h	163	6	197	117	10	70	343	3547	97	567	3213	115
Arrive On Green	0.03	0.13	0.13	0.05	0.05	0.05	0.05	0.72	0.72	0.02	0.68	0.68
Sat Flow, veh/h	1626	47	1545	1225	202	1414	1640	4947	136	1711	4700	168
Grp Volume(v), veh/h	43	0	135	25	0	16	181	460	250	17	904	488
Grp Sat Flow(s),veh/h/ln	1626	0	1592	1225	0	1616	1640	1648	1787	1711	1581	1707
Q Serve(g_s), s	2.9	0.0	9.7	2.4	0.0	1.1	3.9	5.5	5.5	0.4	15.2	15.2
Cycle Q Clear(g_c), s	2.9	0.0	9.7	2.8	0.0	1.1	3.9	5.5	5.5	0.4	15.2	15.2
Prop In Lane	1.00		0.97	1.00		0.88	1.00		0.08	1.00		0.10
Lane Grp Cap(c), veh/h	163	0	203	117	0	81	343	2364	1281	567	2161	1167
V/C Ratio(X)	0.26	0.00	0.67	0.21	0.00	0.20	0.53	0.19	0.20	0.03	0.42	0.42
Avail Cap(c_a), veh/h	240	0	458	255	0	263	457	2364	1281	672	2161	1167
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.2	0.0	49.9	55.7	0.0	54.7	6.7	5.6	5.6	5.4	8.4	8.4
Incr Delay (d2), s/veh	0.9	0.0	3.7	0.9	0.0	1.2	1.3	0.2	0.3	0.0	0.6	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	4.1	0.8	0.0	0.5	1.2	1.7	2.0	0.1	4.9	5.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.0	0.0	53.6	56.6	0.0	55.9	7.9	5.8	5.9	5.4	9.0	9.5
LnGrp LOS	D	A	D	E	A	E	A	A	A	A	A	A
Approach Vol, veh/h	178			41			891			1409		
Approach Delay, s/veh	53.0			56.3			6.2			9.1		
Approach LOS	D			E			A			A		
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.7	87.5		20.8	7.7	91.5	9.3	11.5				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	14.5	54.5		34.5	9.5	59.5	9.5	19.5				
Max Q Clear Time (g_c+I1), s	5.9	17.2		11.7	2.4	7.5	4.9	4.8				
Green Ext Time (p_c), s	0.3	22.7		0.8	0.0	10.8	0.0	0.1				
Intersection Summary												
HCM 6th Ctrl Delay	12.0											
HCM 6th LOS	B											
Notes												

Timings

1: US 23 (Buford Hwy) & I-285 WB Ramp

2b. No Build PM 2029

03/19/2025

	WBL	WBR	NBL	NBT	SBT	SBR
Lane Group	WBL	WBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	573	516	261	1930	1166	235
Future Volume (vph)	573	516	261	1930	1166	235
Lane Group Flow (vph)	579	521	264	1949	1178	237
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	3		1	6	2	
Permitted Phases		8	6			2
Detector Phase	3	8	1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	15.0	23.5	15.0	23.5	23.5	23.5
Total Split (s)	58.0	58.0	26.0	62.0	36.0	36.0
Total Split (%)	48.3%	48.3%	21.7%	51.7%	30.0%	30.0%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.48	0.90	0.76	0.70	0.51	0.35
Control Delay	30.1	49.0	35.8	23.1	24.7	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.1	49.0	35.8	23.1	24.7	2.7
Queue Length 50th (ft)	173	328	113	400	134	1
Queue Length 95th (ft)	201	439	224	528	170	m19
Internal Link Dist (ft)				304	55	
Turn Bay Length (ft)						
Base Capacity (vph)	1459	689	399	2779	2325	669
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.76	0.66	0.70	0.51	0.35

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

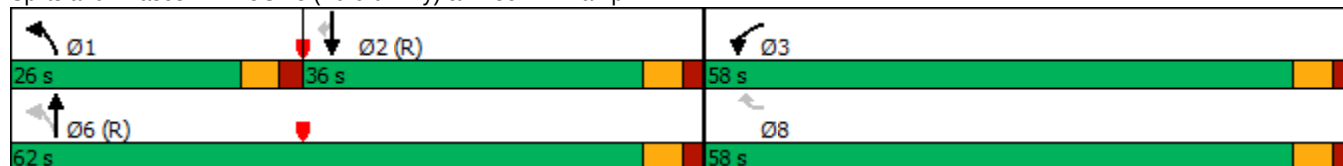
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

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

Splits and Phases: 1: US 23 (Buford Hwy) & I-285 WB Ramp



HCM 6th Signalized Intersection Summary
1: US 23 (Buford Hwy) & I-285 WB Ramp

2b. No Build PM 2029

03/19/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↰↱		↰	↰	↰↰↰			↰↰↰	↰
Traffic Volume (veh/h)	0	0	0	573	0	516	261	1930	0	0	1166	235
Future Volume (veh/h)	0	0	0	573	0	516	261	1930	0	0	1166	235
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1826	0	1767	1870	1870	0	0	1870	1707
Adj Flow Rate, veh/h				579	0	521	264	1949	0	0	1178	0
Peak Hour Factor				0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %				5	0	9	2	2	0	0	2	13
Cap, veh/h				1272	0	564	365	2713	0	0	2433	
Arrive On Green				0.38	0.00	0.38	0.11	0.53	0.00	0.00	0.38	0.00
Sat Flow, veh/h				3374	0	1497	1781	5274	0	0	6696	1447
Grp Volume(v), veh/h				579	0	521	264	1949	0	0	1178	0
Grp Sat Flow(s),veh/h/ln				1687	0	1497	1781	1702	0	0	1609	1447
Q Serve(g_s), s				15.5	0.0	39.9	10.4	34.7	0.0	0.0	16.7	0.0
Cycle Q Clear(g_c), s				15.5	0.0	39.9	10.4	34.7	0.0	0.0	16.7	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1272	0	564	365	2713	0	0	2433	
V/C Ratio(X)				0.46	0.00	0.92	0.72	0.72	0.00	0.00	0.48	
Avail Cap(c_a), veh/h				1476	0	655	478	2713	0	0	2433	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				28.1	0.0	35.7	20.7	21.3	0.0	0.0	28.4	0.0
Incr Delay (d2), s/veh				0.3	0.0	17.3	3.7	1.7	0.0	0.0	0.7	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
%ile BackOfQ(50%),veh/ln				6.2	0.0	16.8	4.6	13.6	0.0	0.0	6.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				28.4	0.0	53.0	24.5	23.0	0.0	0.0	29.1	0.0
LnGrp LOS				C	A	D	C	C	A	A	C	
Approach Vol, veh/h					1100			2213			1178	
Approach Delay, s/veh					40.0			23.2			29.1	
Approach LOS					D			C			C	
Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	18.4	50.9				69.3		50.7				
Change Period (Y+Rc), s	5.5	5.5				5.5		5.5				
Max Green Setting (Gmax), s	20.5	30.5				56.5		52.5				
Max Q Clear Time (g_c+I1), s	12.4	18.7				36.7		41.9				
Green Ext Time (p_c), s	0.5	8.5				17.8		3.3				
Intersection Summary												
HCM 6th Ctrl Delay				28.9								
HCM 6th LOS				C								
Notes												
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.												

2: US 23 (Buford Hwy) & N Dekalb Dr Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.0	0.0	0.0
Total Del/Veh (s)	5.6	2.2	5.0	3.3

3: US 23 (Buford Hwy) & Farmers Market Drwy Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	11.6	0.0	0.1	0.7
Total Del/Veh (s)	32.2	8.4	2.1	7.7

Total Zone Performance

Denied Del/Veh (s)	5.2
Total Del/Veh (s)	465.8

Intersection: 2: US 23 (Buford Hwy) & N Dekalb Dr

Movement	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	T	T	TR	T	T	T	T
Maximum Queue (ft)	137	54	24	32	112	143	151	177
Average Queue (ft)	13	3	1	2	12	46	46	62
95th Queue (ft)	83	27	11	20	63	114	122	146
Link Distance (ft)	201	61	61	61		328	328	328
Upstream Blk Time (%)	0	0	0	0				
Queuing Penalty (veh)	0	3	0	0				
Storage Bay Dist (ft)					265			
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 3: US 23 (Buford Hwy) & Farmers Market Drwy

Movement	EB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	R	UL	T	T	T	U	T	T	T	TR
Maximum Queue (ft)	141	311	348	253	50	29	30	6	33	43
Average Queue (ft)	91	150	31	18	2	4	7	0	1	5
95th Queue (ft)	147	260	182	131	37	19	28	4	15	25
Link Distance (ft)	105		328	328	328		392	392	392	
Upstream Blk Time (%)	24	0	1	0						
Queuing Penalty (veh)	0	0	8	0						
Storage Bay Dist (ft)		225				85				85
Storage Blk Time (%)		5	1					0	0	
Queuing Penalty (veh)		32	2					0	0	

Zone Summary

Zone wide Queuing Penalty: 44

Timings 4: US 23 (Buford Hwy) & Longmire Way

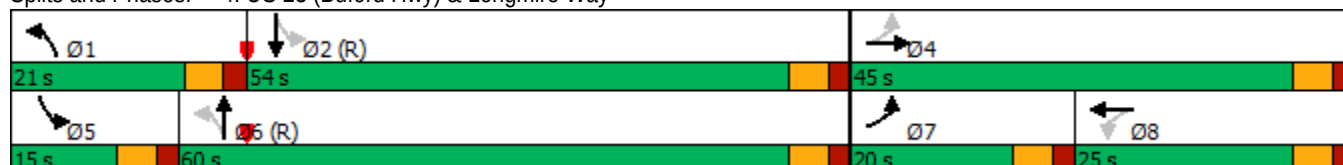
2b. No Build PM 2029
03/19/2025

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	160	16	33	12	162	1515	21	828
Future Volume (vph)	160	16	33	12	162	1515	21	828
Lane Group Flow (vph)	167	162	34	56	169	1602	22	949
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4		8	1	6	5	2
Permitted Phases	4		8		6		2	
Detector Phase	7	4	8	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	5.0	15.0
Minimum Split (s)	15.0	39.5	37.5	37.5	15.0	31.5	15.0	29.5
Total Split (s)	20.0	45.0	25.0	25.0	21.0	60.0	15.0	54.0
Total Split (%)	16.7%	37.5%	20.8%	20.8%	17.5%	50.0%	12.5%	45.0%
Yellow Time (s)	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
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	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
v/c Ratio	0.59	0.38	0.39	0.35	0.44	0.51	0.11	0.34
Control Delay	47.9	10.1	64.3	26.3	7.3	5.9	9.4	15.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.9	10.1	64.3	26.3	7.3	5.9	9.4	15.9
Queue Length 50th (ft)	109	10	26	10	23	106	5	144
Queue Length 95th (ft)	168	64	59	50	m30	121	16	203
Internal Link Dist (ft)		446		262		374		409
Turn Bay Length (ft)	155		35		75		100	
Base Capacity (vph)	294	573	188	297	442	3147	244	2761
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	0.57	0.28	0.18	0.19	0.38	0.51	0.09	0.34

Intersection Summary

Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
 Natural Cycle: 100
 Control Type: Actuated-Coordinated
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: US 23 (Buford Hwy) & Longmire Way



HCM 6th Signalized Intersection Summary

4: US 23 (Buford Hwy) & Longmire Way

2b. No Build PM 2029

03/19/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								 			 	
Traffic Volume (veh/h)	160	16	139	33	12	41	162	1515	23	21	828	83
Future Volume (veh/h)	160	16	139	33	12	41	162	1515	23	21	828	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1678	1796	1767	1856	1752	1841	1870	1737	1841	1856
Adj Flow Rate, veh/h	167	17	145	34	12	43	169	1578	24	22	862	86
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	15	7	9	3	10	4	2	11	4	3
Cap, veh/h	268	34	292	123	18	65	439	3257	50	236	2805	279
Arrive On Green	0.10	0.20	0.20	0.05	0.05	0.05	0.06	0.64	0.64	0.02	0.60	0.60
Sat Flow, veh/h	1781	169	1442	1176	338	1211	1668	5099	78	1654	4646	462
Grp Volume(v), veh/h	167	0	162	34	0	55	169	1037	565	22	621	327
Grp Sat Flow(s),veh/h/ln	1781	0	1611	1176	0	1549	1668	1675	1827	1654	1675	1758
Q Serve(g_s), s	10.3	0.0	10.7	3.4	0.0	4.2	4.5	19.4	19.4	0.6	10.8	10.9
Cycle Q Clear(g_c), s	10.3	0.0	10.7	3.4	0.0	4.2	4.5	19.4	19.4	0.6	10.8	10.9
Prop In Lane	1.00		0.90	1.00		0.78	1.00		0.04	1.00		0.26
Lane Grp Cap(c), veh/h	268	0	326	123	0	83	439	2140	1167	236	2023	1061
V/C Ratio(X)	0.62	0.00	0.50	0.28	0.00	0.66	0.39	0.48	0.48	0.09	0.31	0.31
Avail Cap(c_a), veh/h	301	0	530	251	0	252	560	2140	1167	331	2023	1061
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.5	0.0	42.5	55.3	0.0	55.7	8.3	11.3	11.3	9.6	11.6	11.6
Incr Delay (d2), s/veh	3.3	0.0	1.2	1.2	0.0	8.6	0.6	0.8	1.4	0.2	0.4	0.8
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	4.8	0.0	4.4	1.1	0.0	1.8	1.6	6.9	7.8	0.2	4.0	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.7	0.0	43.6	56.5	0.0	64.3	8.8	12.1	12.8	9.7	12.0	12.3
LnGrp LOS	D	A	D	E	A	E	A	B	B	A	B	B
Approach Vol, veh/h	329		89			1771			970			
Approach Delay, s/veh	46.2		61.3			12.0			12.0			
Approach LOS	D		E			B			B			
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.3	78.0		29.8	8.1	82.1	17.8	12.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	15.5	48.5		39.5	9.5	54.5	14.5	19.5				
Max Q Clear Time (g_c+I1), s	6.5	12.9		12.7	2.6	21.4	12.3	6.2				
Green Ext Time (p_c), s	0.3	14.0		1.0	0.0	23.9	0.1	0.3				
Intersection Summary												
HCM 6th Ctrl Delay			17.0									
HCM 6th LOS			B									
Notes												

2: US 23 (Buford Hwy) & N Dekalb Dr Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	1.2	1.2	8.1	5.1

3: US 23 (Buford Hwy) & Farmers Market Drwy Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	6.5	3.0	1.9	2.4

Total Zone Performance

Denied Del/Veh (s)	0.3
Total Del/Veh (s)	109.2

Intersection: 2: US 23 (Buford Hwy) & N Dekalb Dr

Movement	NB	NB	NB	SB	SB	SB	SB
Directions Served	T	T	TR	T	T	T	T
Maximum Queue (ft)	61	43	22	185	226	201	221
Average Queue (ft)	7	2	1	81	100	72	58
95th Queue (ft)	36	17	12	178	186	170	161
Link Distance (ft)	61	61	61		328	328	328
Upstream Blk Time (%)	0	0	0				
Queuing Penalty (veh)	0	0	0				
Storage Bay Dist (ft)				265			
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3: US 23 (Buford Hwy) & Farmers Market Drwy

Movement	EB	NB	SB	SB
Directions Served	R	L	T	TR
Maximum Queue (ft)	65	108	6	9
Average Queue (ft)	24	49	0	0
95th Queue (ft)	52	92	4	6
Link Distance (ft)	105		392	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		225		85
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 0

2: US 23 (Buford Hwy) & N Dekalb Dr Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	1.5	2.1	5.4	3.3

3: US 23 (Buford Hwy) & Farmers Market Drwy Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.4	0.0	0.1	0.1
Total Del/Veh (s)	6.9	4.3	2.0	3.6

Total Zone Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	344.6

Intersection: 2: US 23 (Buford Hwy) & N Dekalb Dr

Movement	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	TR	T	T	T	T	T
Maximum Queue (ft)	29	70	102	133	151	153	5
Average Queue (ft)	1	5	15	59	39	55	0
95th Queue (ft)	10	34	67	118	111	125	0
Link Distance (ft)	61	61		328	328	328	328
Upstream Blk Time (%)	0	0					
Queuing Penalty (veh)	0	0					
Storage Bay Dist (ft)			265				
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 3: US 23 (Buford Hwy) & Farmers Market Drwy

Movement	EB	NB	NB	SB	SB	SB	SB
Directions Served	R	L	T	U	T	T	TR
Maximum Queue (ft)	116	217	55	34	18	10	30
Average Queue (ft)	59	95	3	3	1	0	2
95th Queue (ft)	99	177	45	19	11	6	16
Link Distance (ft)	105		328		392	392	
Upstream Blk Time (%)	1						
Queuing Penalty (veh)	0						
Storage Bay Dist (ft)		225		85			85
Storage Blk Time (%)		1	0				
Queuing Penalty (veh)		6	0				

Zone Summary

Zone wide Queuing Penalty: 6

**Future “Build” Intersections Analysis (SIM
Traffic Analysis for Intersection 2 and 3)**

Timings

4a. Build AM 2029

04/03/2025

1: US 23 (Buford Hwy) & I-285 WB Ramp



Lane Group	WBL	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↰↰	↰	↰	↑↑↑	↑↑↑	↰
Traffic Volume (vph)	956	539	235	751	1471	381
Future Volume (vph)	956	539	235	751	1471	381
Lane Group Flow (vph)	1039	586	255	816	1599	414
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	3		1	6	2	
Permitted Phases		8	6			2
Detector Phase	3	8	1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	15.0	23.5	15.0	23.5	23.5	23.5
Total Split (s)	58.0	58.0	23.0	62.0	39.0	39.0
Total Split (%)	48.3%	48.3%	19.2%	51.7%	32.5%	32.5%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.78	0.91	0.89	0.32	0.80	0.59
Control Delay	36.7	47.0	61.3	17.7	40.3	12.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.7	47.0	61.3	17.7	40.3	12.0
Queue Length 50th (ft)	351	350	145	132	242	32
Queue Length 95th (ft)	404	#513	#303	175	#427	m135
Internal Link Dist (ft)				304	55	
Turn Bay Length (ft)						
Base Capacity (vph)	1501	715	308	2580	1995	697
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.82	0.83	0.32	0.80	0.59

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

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

Natural Cycle: 80

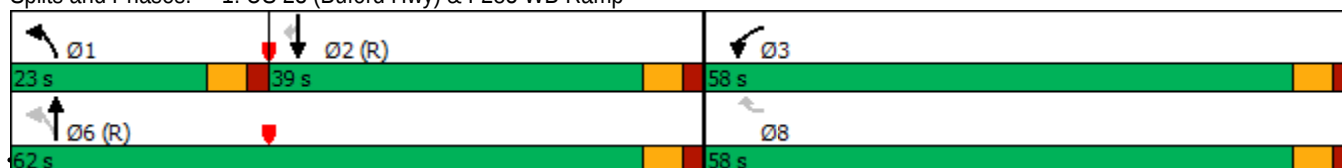
Control Type: Actuated-Coordinated

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: 1: US 23 (Buford Hwy) & I-285 WB Ramp



A&R Engineering Inc

24-241 - Lotus Grove on Buford Highway, City of Doraville

Synchro 11 Report

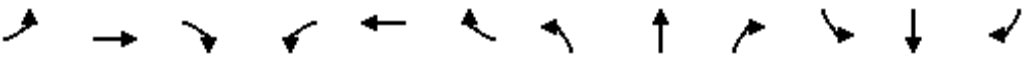
Page 1

HCM 6th Signalized Intersection Summary

1: US 23 (Buford Hwy) & I-285 WB Ramp

4a. Build AM 2029

04/03/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	956	0	539	235	751	0	0	1471	381
Future Volume (veh/h)	0	0	0	956	0	539	235	751	0	0	1471	381
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1870	0	1781	1781	1826	0	0	1737	1485
Adj Flow Rate, veh/h				1039	0	586	255	816	0	0	1599	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	0	8	8	5	0	0	11	28
Cap, veh/h				1438	0	628	282	2454	0	0	1977	
Arrive On Green				0.42	0.00	0.42	0.12	0.49	0.00	0.00	0.33	0.00
Sat Flow, veh/h				3456	0	1510	1697	5149	0	0	6218	1259
Grp Volume(v), veh/h				1039	0	586	255	816	0	0	1599	0
Grp Sat Flow(s),veh/h/ln				1728	0	1510	1697	1662	0	0	1494	1259
Q Serve(g_s), s				30.1	0.0	44.5	11.6	11.9	0.0	0.0	29.3	0.0
Cycle Q Clear(g_c), s				30.1	0.0	44.5	11.6	11.9	0.0	0.0	29.3	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1438	0	628	282	2454	0	0	1977	
V/C Ratio(X)				0.72	0.00	0.93	0.90	0.33	0.00	0.00	0.81	
Avail Cap(c_a), veh/h				1512	0	660	334	2454	0	0	1977	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				29.3	0.0	33.4	27.8	18.5	0.0	0.0	36.7	0.0
Incr Delay (d2), s/veh				1.6	0.0	19.8	24.2	0.4	0.0	0.0	3.7	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
%ile BackOfQ(50%),veh/ln				12.5	0.0	19.1	6.4	4.6	0.0	0.0	11.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				30.9	0.0	53.3	52.0	18.9	0.0	0.0	40.4	0.0
LnGrp LOS				C	A	D	D	B	A	A	D	
Approach Vol, veh/h					1625			1071			1599	
Approach Delay, s/veh					39.0			26.7			40.4	
Approach LOS					D			C			D	
Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	19.4	45.2				64.6		55.4				
Change Period (Y+Rc), s	5.5	5.5				5.5		5.5				
Max Green Setting (Gmax), s	17.5	33.5				56.5		52.5				
Max Q Clear Time (g_c+I1), s	13.6	31.3				13.9		46.5				
Green Ext Time (p_c), s	0.3	2.0				12.9		3.5				
Intersection Summary												
HCM 6th Ctrl Delay				36.4								
HCM 6th LOS				D								
Notes												
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.												

2: US 23 (Buford Hwy) & N Dekalb Dr Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.1	0.1	0.1
Total Del/Veh (s)	2.5	1.7	10.9	6.8

3: US 23 (Buford Hwy) & Farmers Market Drwy/Site Drwy 2 Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	4.5	0.2	0.0	0.0	0.1
Total Del/Veh (s)	108.3	0.9	13.9	2.8	9.1

Total Zone Performance

Denied Del/Veh (s)	1.7
Total Del/Veh (s)	217.7

Intersection: 2: US 23 (Buford Hwy) & N Dekalb Dr

Movement	WB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	R	T	T	TR	T	T	T	T	T
Maximum Queue (ft)	112	83	58	67	238	266	292	303	29
Average Queue (ft)	3	17	3	2	80	100	116	122	2
95th Queue (ft)	35	66	27	22	203	215	246	254	26
Link Distance (ft)	472	62	62	62		327	327	327	327
Upstream Blk Time (%)		5	0	0		0	0	0	
Queuing Penalty (veh)		21	0	0		0	1	2	
Storage Bay Dist (ft)					265				
Storage Blk Time (%)					0	1			
Queuing Penalty (veh)					1	3			

Intersection: 3: US 23 (Buford Hwy) & Farmers Market Drwy/Site Drwy 2

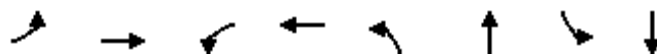
Movement	EB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	R	UL	T	T	T	L	T	T	T	TR
Maximum Queue (ft)	124	271	268	194	53	29	48	19	14	25
Average Queue (ft)	49	155	66	36	4	4	3	1	1	2
95th Queue (ft)	107	291	274	192	55	19	24	16	14	14
Link Distance (ft)	105		327	327	327		394	394	394	
Upstream Blk Time (%)	7	1	5	0						
Queuing Penalty (veh)	0	0	25	0						
Storage Bay Dist (ft)		225				85				85
Storage Blk Time (%)		10	6				0		0	0
Queuing Penalty (veh)		35	15				0		0	0

Zone Summary

Zone wide Queuing Penalty: 104

Timings 4: US 23 (Buford Hwy) & Longmire Way

4a. Build AM 2029
04/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	41	10	172	12	174	687	34	1295
Future Volume (vph)	41	10	172	12	174	687	34	1295
Lane Group Flow (vph)	43	143	179	33	181	781	35	1397
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4		8	1	6	5	2
Permitted Phases	4		8		6		2	
Detector Phase	7	4	8	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	5.0	15.0
Minimum Split (s)	15.0	39.5	37.5	37.5	15.0	31.5	15.0	29.5
Total Split (s)	15.0	47.0	32.0	32.0	20.0	58.0	15.0	53.0
Total Split (%)	12.5%	39.2%	26.7%	26.7%	16.7%	48.3%	12.5%	44.2%
Yellow Time (s)	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
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	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
v/c Ratio	0.14	0.34	0.82	0.10	0.68	0.28	0.09	0.63
Control Delay	29.0	8.0	73.9	21.7	38.4	13.0	12.3	27.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.0	8.0	73.9	21.7	38.4	13.0	12.3	27.1
Queue Length 50th (ft)	24	5	133	8	71	99	10	314
Queue Length 95th (ft)	49	51	#216	36	m139	142	27	395
Internal Link Dist (ft)		446		183		374		409
Turn Bay Length (ft)	155		35		75		100	
Base Capacity (vph)	322	487	266	389	287	2759	426	2229
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	0.13	0.29	0.67	0.08	0.63	0.28	0.08	0.63

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

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

Natural Cycle: 100

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: 4: US 23 (Buford Hwy) & Longmire Way



HCM 6th Signalized Intersection Summary 4: US 23 (Buford Hwy) & Longmire Way

4a. Build AM 2029

04/03/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								 			 	
Traffic Volume (veh/h)	41	10	128	172	12	19	174	687	62	34	1295	46
Future Volume (veh/h)	41	10	128	172	12	19	174	687	62	34	1295	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1707	1870	1248	1826	1870	1870	1722	1811	1870	1796	1737	1767
Adj Flow Rate, veh/h	43	10	133	179	12	20	181	716	65	35	1349	48
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, %	13	2	44	5	2	2	12	6	2	7	11	9
Cap, veh/h	298	27	361	260	104	173	300	2731	246	452	2611	93
Arrive On Green	0.03	0.24	0.24	0.16	0.16	0.16	0.06	0.59	0.59	0.03	0.56	0.56
Sat Flow, veh/h	1626	112	1490	1216	630	1051	1640	4616	416	1711	4701	167
Grp Volume(v), veh/h	43	0	143	179	0	32	181	510	271	35	907	490
Grp Sat Flow(s),veh/h/ln	1626	0	1602	1216	0	1681	1640	1648	1736	1711	1581	1707
Q Serve(g_s), s	2.6	0.0	8.9	17.3	0.0	1.9	5.5	9.0	9.1	1.0	21.5	21.5
Cycle Q Clear(g_c), s	2.6	0.0	8.9	17.3	0.0	1.9	5.5	9.0	9.1	1.0	21.5	21.5
Prop In Lane	1.00		0.93	1.00		0.63	1.00		0.24	1.00		0.10
Lane Grp Cap(c), veh/h	298	0	388	260	0	277	300	1950	1027	452	1756	948
V/C Ratio(X)	0.14	0.00	0.37	0.69	0.00	0.12	0.60	0.26	0.26	0.08	0.52	0.52
Avail Cap(c_a), veh/h	375	0	554	328	0	371	392	1950	1027	538	1756	948
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.2	0.0	37.8	49.1	0.0	42.7	13.6	11.8	11.9	10.7	16.6	16.6
Incr Delay (d2), s/veh	0.2	0.0	0.6	4.2	0.0	0.2	1.9	0.3	0.6	0.1	1.1	2.0
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	1.1	0.0	3.6	5.6	0.0	0.8	2.0	3.3	3.5	0.4	7.7	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.5	0.0	38.4	53.4	0.0	42.9	15.5	12.2	12.5	10.8	17.7	18.6
LnGrp LOS	D	A	D	D	A	D	B	B	B	B	B	B
Approach Vol, veh/h	186		211				962		1432			
Approach Delay, s/veh	38.4		51.8				12.9		17.9			
Approach LOS	D		D				B		B			
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.3	72.2		34.6	8.9	76.5	9.3	25.2				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	14.5	47.5		41.5	9.5	52.5	9.5	26.5				
Max Q Clear Time (g_c+I1), s	7.5	23.5		10.9	3.0	11.1	4.6	19.3				
Green Ext Time (p_c), s	0.3	16.8		0.9	0.0	11.6	0.0	0.4				
Intersection Summary												
HCM 6th Ctrl Delay	20.1											
HCM 6th LOS	C											
Notes												

Intersection						
Int Delay, s/veh	1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	57	36	0	147	28	0
Future Vol, veh/h	57	36	0	147	28	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	62	39	0	160	30	0
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	101	0	242	82
Stage 1	-	-	-	-	82	-
Stage 2	-	-	-	-	160	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1491	-	746	978
Stage 1	-	-	-	-	941	-
Stage 2	-	-	-	-	869	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1491	-	746	978
Mov Cap-2 Maneuver	-	-	-	-	746	-
Stage 1	-	-	-	-	941	-
Stage 2	-	-	-	-	869	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		10	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	746	-	-	1491	-	
HCM Lane V/C Ratio	0.041	-	-	-	-	
HCM Control Delay (s)	10	-	-	0	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile O(veh)	0.1	-	-	0	-	

Intersection						
Int Delay, s/veh	2.7					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	39	18	0	90	57	0
Future Vol, veh/h	39	18	0	90	57	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	42	20	0	98	62	0
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	62	0	150	52
Stage 1	-	-	-	-	52	-
Stage 2	-	-	-	-	98	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1541	-	842	1016
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	926	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1541	-	842	1016
Mov Cap-2 Maneuver	-	-	-	-	842	-
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	926	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		9.6	
HCM LOS					A	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	842	-	-	1541	-	
HCM Lane V/C Ratio	0.074	-	-	-	-	
HCM Control Delay (s)	9.6	-	-	0	-	
HCM Lane LOS	A	-	-	A	-	
HCM 95th %tile Q(veh)	0.2	-	-	0	-	

Intersection						
Int Delay, s/veh	5.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	25	14	0	11	79	0
Future Vol, veh/h	25	14	0	11	79	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	27	15	0	12	86	0
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	42	0	47	35
Stage 1	-	-	-	-	35	-
Stage 2	-	-	-	-	12	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1567	-	963	1038
Stage 1	-	-	-	-	987	-
Stage 2	-	-	-	-	1011	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1567	-	963	1038
Mov Cap-2 Maneuver	-	-	-	-	963	-
Stage 1	-	-	-	-	987	-
Stage 2	-	-	-	-	1011	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		9.1	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	963	-	-	1567	-	
HCM Lane V/C Ratio	0.089	-	-	-	-	
HCM Control Delay (s)	9.1	-	-	0	-	
HCM Lane LOS	A	-	-	A	-	
HCM 95th %tile O(veh)	0.3	-	-	0	-	

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	123	122	12	6	0
Future Vol, veh/h	9	123	122	12	6	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	10	134	133	13	7	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	146	0	-	0	294	140
Stage 1	-	-	-	-	140	-
Stage 2	-	-	-	-	154	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1436	-	-	-	697	908
Stage 1	-	-	-	-	887	-
Stage 2	-	-	-	-	874	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1436	-	-	-	691	908
Mov Cap-2 Maneuver	-	-	-	-	691	-
Stage 1	-	-	-	-	880	-
Stage 2	-	-	-	-	874	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.5	0		10.3		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1436	-	-	-	691	
HCM Lane V/C Ratio	0.007	-	-	-	0.009	
HCM Control Delay (s)	7.5	0	-	-	10.3	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0	

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	123	127	3	4	8
Future Vol, veh/h	6	123	127	3	4	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	7	134	138	3	4	9
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	141	0	-	0	288	140
Stage 1	-	-	-	-	140	-
Stage 2	-	-	-	-	148	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1442	-	-	-	702	908
Stage 1	-	-	-	-	887	-
Stage 2	-	-	-	-	880	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1442	-	-	-	698	908
Mov Cap-2 Maneuver	-	-	-	-	698	-
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	880	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.3	0		9.4		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1442	-	-	-	825	
HCM Lane V/C Ratio	0.005	-	-	-	0.016	
HCM Control Delay (s)	7.5	0	-	-	9.4	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0	

Timings

1: US 23 (Buford Hwy) & I-285 WB Ramp

4b. Build PM 2029

04/03/2025



Lane Group	WBL	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↰↰	↰	↰	↑↑↑	↑↑↑	↰
Traffic Volume (vph)	573	608	261	2035	1278	291
Future Volume (vph)	573	608	261	2035	1278	291
Lane Group Flow (vph)	579	614	264	2056	1291	294
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	3		1	6	2	
Permitted Phases		8	6			2
Detector Phase	3	8	1	6	2	2
Switch Phase						
Minimum Initial (s)	5.0	6.0	5.0	15.0	15.0	15.0
Minimum Split (s)	15.0	23.5	15.0	23.5	23.5	23.5
Total Split (s)	61.0	61.0	23.0	59.0	36.0	36.0
Total Split (%)	50.8%	50.8%	19.2%	49.2%	30.0%	30.0%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Min	C-Min	C-Min
v/c Ratio	0.41	0.92	0.88	0.83	0.66	0.46
Control Delay	24.8	49.4	59.4	31.1	33.6	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.8	49.4	59.4	31.1	33.6	7.5
Queue Length 50th (ft)	152	385	152	511	179	0
Queue Length 95th (ft)	191	#598	#302	605	m259	m61
Internal Link Dist (ft)				304	55	
Turn Bay Length (ft)						
Base Capacity (vph)	1542	724	323	2482	1968	642
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.85	0.82	0.83	0.66	0.46

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

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

Natural Cycle: 70

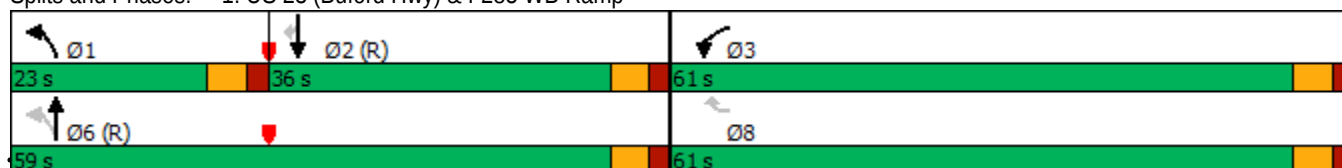
Control Type: Actuated-Coordinated

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: 1: US 23 (Buford Hwy) & I-285 WB Ramp



A&R Engineering Inc

24-241 - Lotus Grove on Buford Highway, City of Doraville

Synchro 11 Report

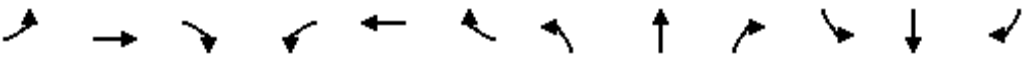
Page 1

HCM 6th Signalized Intersection Summary

1: US 23 (Buford Hwy) & I-285 WB Ramp

4b. Build PM 2029

04/03/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↰↱		↰	↰	↰↰↰			↰↰↰	↰
Traffic Volume (veh/h)	0	0	0	573	0	608	261	2035	0	0	1278	291
Future Volume (veh/h)	0	0	0	573	0	608	261	2035	0	0	1278	291
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1826	0	1767	1870	1870	0	0	1870	1707
Adj Flow Rate, veh/h				579	0	614	264	2056	0	0	1291	0
Peak Hour Factor				0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %				5	0	9	2	2	0	0	2	13
Cap, veh/h				1461	0	648	326	2427	0	0	2021	
Arrive On Green				0.43	0.00	0.43	0.12	0.48	0.00	0.00	0.31	0.00
Sat Flow, veh/h				3374	0	1497	1781	5274	0	0	6696	1447
Grp Volume(v), veh/h				579	0	614	264	2056	0	0	1291	0
Grp Sat Flow(s),veh/h/ln				1687	0	1497	1781	1702	0	0	1609	1447
Q Serve(g_s), s				14.1	0.0	47.3	11.6	42.4	0.0	0.0	20.7	0.0
Cycle Q Clear(g_c), s				14.1	0.0	47.3	11.6	42.4	0.0	0.0	20.7	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1461	0	648	326	2427	0	0	2021	
V/C Ratio(X)				0.40	0.00	0.95	0.81	0.85	0.00	0.00	0.64	
Avail Cap(c_a), veh/h				1560	0	692	380	2427	0	0	2021	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				23.3	0.0	32.7	26.2	27.7	0.0	0.0	35.3	0.0
Incr Delay (d2), s/veh				0.2	0.0	21.5	10.8	3.9	0.0	0.0	1.6	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
%ile BackOfQ(50%),veh/ln				5.6	0.0	20.3	5.7	17.4	0.0	0.0	8.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				23.5	0.0	54.2	37.0	31.5	0.0	0.0	36.9	0.0
LnGrp LOS				C	A	D	D	C	A	A	D	
Approach Vol, veh/h					1193			2320			1291	
Approach Delay, s/veh					39.3			32.2			36.9	
Approach LOS					D			C			D	
Timer - Assigned Phs	1	2				6		8				
Phs Duration (G+Y+Rc), s	19.3	43.2				62.5		57.5				
Change Period (Y+Rc), s	5.5	5.5				5.5		5.5				
Max Green Setting (Gmax), s	17.5	30.5				53.5		55.5				
Max Q Clear Time (g_c+I1), s	13.6	22.7				44.4		49.3				
Green Ext Time (p_c), s	0.3	6.3				8.6		2.7				
Intersection Summary												
HCM 6th Ctrl Delay				35.2								
HCM 6th LOS				D								
Notes												
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.												

2: US 23 (Buford Hwy) & N Dekalb Dr Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.2	0.0	0.0	0.0
Total Del/Veh (s)	14.8	2.1	6.5	4.4

3: US 23 (Buford Hwy) & Farmers Market Drwy/Site Drwy 2 Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	25.8	0.1	0.0	0.1	1.6
Total Del/Veh (s)	33.6	1.0	9.4	3.7	8.4

Total Zone Performance

Denied Del/Veh (s)	9.5
Total Del/Veh (s)	521.1

Intersection: 2: US 23 (Buford Hwy) & N Dekalb Dr

Movement	WB	NB	NB	NB	SB	SB	SB	SB
Directions Served	R	T	T	TR	T	T	T	T
Maximum Queue (ft)	205	34	12	27	109	140	183	200
Average Queue (ft)	31	2	0	1	15	55	78	94
95th Queue (ft)	137	17	9	14	67	128	164	181
Link Distance (ft)		62	62	62		327	327	327
Upstream Blk Time (%)		0	0	0				
Queuing Penalty (veh)		2	0	0				
Storage Bay Dist (ft)					265			
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 3: US 23 (Buford Hwy) & Farmers Market Drwy/Site Drwy 2

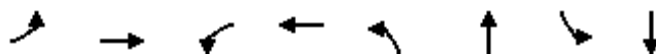
Movement	EB	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	R	R	UL	T	T	T	R	UL	T	T	T	TR
Maximum Queue (ft)	135	33	286	231	137	71	16	99	123	28	6	47
Average Queue (ft)	88	2	117	15	9	3	1	33	9	1	0	4
95th Queue (ft)	142	17	231	118	93	46	7	73	53	12	4	24
Link Distance (ft)	105	141		327	327	327			394	394	394	
Upstream Blk Time (%)	28		0	0	0	0						
Queuing Penalty (veh)	0		0	3	2	0						
Storage Bay Dist (ft)			225				100	85				85
Storage Blk Time (%)			4	1				3	0			0
Queuing Penalty (veh)			22	2				8	0			0

Zone Summary

Zone wide Queuing Penalty: 38

Timings 4: US 23 (Buford Hwy) & Longmire Way

4b. Build PM 2029
04/03/2025



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	160	26	229	23	162	1542	52	836
Future Volume (vph)	160	26	229	23	162	1542	52	836
Lane Group Flow (vph)	167	175	239	74	169	1709	54	957
Turn Type	pm+pt	NA	Perm	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4		8	1	6	5	2
Permitted Phases	4		8		6		2	
Detector Phase	7	4	8	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	5.0	6.0	6.0	6.0	5.0	15.0	5.0	15.0
Minimum Split (s)	15.0	39.5	37.5	37.5	15.0	31.5	15.0	29.5
Total Split (s)	19.0	51.0	32.0	32.0	22.0	54.0	15.0	47.0
Total Split (%)	15.8%	42.5%	26.7%	26.7%	18.3%	45.0%	12.5%	39.2%
Yellow Time (s)	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
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	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Min	None	C-Min
v/c Ratio	0.35	0.27	0.96	0.19	0.55	0.77	0.35	0.49
Control Delay	28.3	7.1	94.4	17.2	19.5	18.6	21.3	28.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.3	7.1	94.4	17.2	19.5	18.6	21.3	28.8
Queue Length 50th (ft)	88	13	183	15	37	237	20	201
Queue Length 95th (ft)	142	61	#344	56	m59	367	41	259
Internal Link Dist (ft)		446		183		374		409
Turn Bay Length (ft)	155		35		75		100	
Base Capacity (vph)	480	648	253	398	357	2222	185	1938
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	0.35	0.27	0.94	0.19	0.47	0.77	0.29	0.49

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

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

Natural Cycle: 110

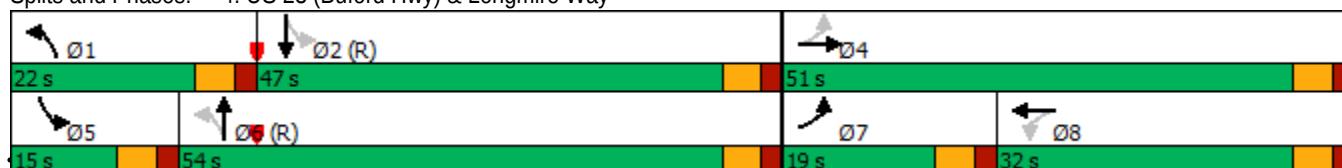
Control Type: Actuated-Coordinated

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: 4: US 23 (Buford Hwy) & Longmire Way



HCM 6th Signalized Intersection Summary 4: US 23 (Buford Hwy) & Longmire Way

4b. Build PM 2029

04/03/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								 			 	
Traffic Volume (veh/h)	160	26	142	229	23	48	162	1542	99	52	836	83
Future Volume (veh/h)	160	26	142	229	23	48	162	1542	99	52	836	83
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
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	1678	1796	1767	1856	1752	1841	1870	1737	1841	1856
Adj Flow Rate, veh/h	167	27	148	239	24	50	169	1606	103	54	871	86
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	15	7	9	3	10	4	2	11	4	3
Cap, veh/h	455	88	484	315	112	233	350	2294	147	174	2034	200
Arrive On Green	0.09	0.35	0.35	0.22	0.22	0.22	0.07	0.48	0.48	0.03	0.44	0.44
Sat Flow, veh/h	1781	250	1373	1162	511	1064	1668	4826	309	1654	4651	457
Grp Volume(v), veh/h	167	0	175	239	0	74	169	1115	594	54	626	331
Grp Sat Flow(s),veh/h/ln	1781	0	1623	1162	0	1575	1668	1675	1785	1654	1675	1758
Q Serve(g_s), s	8.4	0.0	9.4	24.3	0.0	4.6	6.5	31.4	31.4	2.1	15.5	15.6
Cycle Q Clear(g_c), s	8.4	0.0	9.4	24.3	0.0	4.6	6.5	31.4	31.4	2.1	15.5	15.6
Prop In Lane	1.00		0.85	1.00		0.68	1.00		0.17	1.00		0.26
Lane Grp Cap(c), veh/h	455	0	572	315	0	345	350	1592	848	174	1465	769
V/C Ratio(X)	0.37	0.00	0.31	0.76	0.00	0.21	0.48	0.70	0.70	0.31	0.43	0.43
Avail Cap(c_a), veh/h	500	0	615	317	0	348	458	1592	848	248	1465	769
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	0.0	28.2	46.1	0.0	38.4	17.1	24.8	24.8	21.1	23.4	23.4
Incr Delay (d2), s/veh	0.5	0.0	0.3	10.2	0.0	0.3	1.0	2.6	4.8	1.0	0.9	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	3.8	7.9	0.0	1.8	2.5	12.6	13.9	0.9	6.2	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.0	0.0	28.5	56.2	0.0	38.7	18.2	27.3	29.6	22.1	24.3	25.2
LnGrp LOS	C	A	C	E	A	D	B	C	C	C	C	C
Approach Vol, veh/h	342		313			1878			1011			
Approach Delay, s/veh	29.7		52.1			27.2			24.4			
Approach LOS	C		D			C			C			
Timer - Assigned Phs	1	2		4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.2	58.0		47.8	9.7	62.5	16.0	31.8				
Change Period (Y+Rc), s	5.5	5.5		5.5	5.5	5.5	5.5	5.5				
Max Green Setting (Gmax), s	16.5	41.5		45.5	9.5	48.5	13.5	26.5				
Max Q Clear Time (g_c+I1), s	8.5	17.6		11.4	4.1	33.4	10.4	26.3				
Green Ext Time (p_c), s	0.3	11.6		1.2	0.0	13.0	0.1	0.0				
Intersection Summary												
HCM 6th Ctrl Delay	28.9											
HCM 6th LOS	C											
Notes												

Intersection						
Int Delay, s/veh	1.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	106	63	0	210	59	0
Future Vol, veh/h	106	63	0	210	59	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	115	68	0	228	64	0
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	183	0	377	149
Stage 1	-	-	-	-	149	-
Stage 2	-	-	-	-	228	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1392	-	625	898
Stage 1	-	-	-	-	879	-
Stage 2	-	-	-	-	810	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1392	-	625	898
Mov Cap-2 Maneuver	-	-	-	-	625	-
Stage 1	-	-	-	-	879	-
Stage 2	-	-	-	-	810	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		11.4	
HCM LOS	B					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	625	-	-	1392	-	
HCM Lane V/C Ratio	0.103	-	-	-	-	
HCM Control Delay (s)	11.4	-	-	0	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile O(veh)	0.3	-	-	0	-	

Intersection						
Int Delay, s/veh	2.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	75	31	0	145	65	0
Future Vol, veh/h	75	31	0	145	65	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	82	34	0	158	71	0
Major/Minor	Major1	Major2		Minor1		
Conflicting Flow All	0	0	116	0	257	99
Stage 1	-	-	-	-	99	-
Stage 2	-	-	-	-	158	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1473	-	732	957
Stage 1	-	-	-	-	925	-
Stage 2	-	-	-	-	871	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1473	-	732	957
Mov Cap-2 Maneuver	-	-	-	-	732	-
Stage 1	-	-	-	-	925	-
Stage 2	-	-	-	-	871	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		10.4	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	732	-	-	1473	-	
HCM Lane V/C Ratio	0.097	-	-	-	-	
HCM Control Delay (s)	10.4	-	-	0	-	
HCM Lane LOS	B	-	-	A	-	
HCM 95th %tile Q(veh)	0.3	-	-	0	-	

Intersection						
Int Delay, s/veh	4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	51	24	0	55	90	0
Future Vol, veh/h	51	24	0	55	90	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	55	26	0	60	98	0
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	81	0	128	68
Stage 1	-	-	-	-	68	-
Stage 2	-	-	-	-	60	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1517	-	866	995
Stage 1	-	-	-	-	955	-
Stage 2	-	-	-	-	963	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1517	-	866	995
Mov Cap-2 Maneuver	-	-	-	-	866	-
Stage 1	-	-	-	-	955	-
Stage 2	-	-	-	-	963	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		9.7	
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT	
Capacity (veh/h)	866	-	-	1517	-	
HCM Lane V/C Ratio	0.113	-	-	-	-	
HCM Control Delay (s)	9.7	-	-	0	-	
HCM Lane LOS	A	-	-	A	-	
HCM 95th %tile O(veh)	0.4	-	-	0	-	

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	16	442	0	17	7	0
Future Vol, veh/h	16	442	0	17	7	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	17	480	0	18	8	0
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	18	0	-	0	523	9
Stage 1	-	-	-	-	9	-
Stage 2	-	-	-	-	514	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1599	-	-	-	514	1073
Stage 1	-	-	-	-	1014	-
Stage 2	-	-	-	-	600	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1599	-	-	-	506	1073
Mov Cap-2 Maneuver	-	-	-	-	506	-
Stage 1	-	-	-	-	999	-
Stage 2	-	-	-	-	600	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.3	0		12.2		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1599	-	-	-	506	
HCM Lane V/C Ratio	0.011	-	-	-	0.015	
HCM Control Delay (s)	7.3	0	-	-	12.2	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0	

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	439	8	5	4	9
Future Vol, veh/h	10	439	8	5	4	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	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	11	477	9	5	4	10

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	14	0	0 511 12
Stage 1	-	-	- 12 -
Stage 2	-	-	- 499 -
Critical Hdwy	4.12	-	- 6.42 6.22
Critical Hdwy Stg 1	-	-	- 5.42 -
Critical Hdwy Stg 2	-	-	- 5.42 -
Follow-up Hdwy	2.218	-	- 3.518 3.318
Pot Cap-1 Maneuver	1604	-	- 523 1069
Stage 1	-	-	- 1011 -
Stage 2	-	-	- 610 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1604	-	- 518 1069
Mov Cap-2 Maneuver	-	-	- 518 -
Stage 1	-	-	- 1002 -
Stage 2	-	-	- 610 -

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1604	-	-	-	805
HCM Lane V/C Ratio	0.007	-	-	-	0.018
HCM Control Delay (s)	7.3	0	-	-	9.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

2: US 23 (Buford Hwy) & N Dekalb Dr Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.1
Total Del/Veh (s)	1.4	1.3	15.5	9.3

3: US 23 (Buford Hwy) & Farmers Market Drwy/Site Drwy 2 Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0
Total Del/Veh (s)	8.9	1.0	2.6	2.9	2.8

Total Zone Performance

Denied Del/Veh (s)	1.1
Total Del/Veh (s)	174.1

Intersection: 2: US 23 (Buford Hwy) & N Dekalb Dr

Movement	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	T	TR	T	T	T	T	T
Maximum Queue (ft)	75	46	23	279	282	294	282	25
Average Queue (ft)	8	2	1	103	126	135	138	2
95th Queue (ft)	41	20	14	248	264	282	285	24
Link Distance (ft)	62	62	62		327	327	327	327
Upstream Blk Time (%)	0	0	0	0	0	1	1	
Queuing Penalty (veh)	1	0	0	0	2	3	4	
Storage Bay Dist (ft)				265				
Storage Blk Time (%)				1	2			
Queuing Penalty (veh)				3	6			

Intersection: 3: US 23 (Buford Hwy) & Farmers Market Drwy/Site Drwy 2

Movement	EB	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	T	TR
Maximum Queue (ft)	59	109	23	51	58	30	10
Average Queue (ft)	21	30	3	3	3	2	1
95th Queue (ft)	48	78	16	30	30	21	7
Link Distance (ft)	105			394	394	394	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		225	85				85
Storage Blk Time (%)				0		0	
Queuing Penalty (veh)				0		0	

Zone Summary

Zone wide Queuing Penalty: 19

2: US 23 (Buford Hwy) & N Dekalb Dr Performance by approach

Approach	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	1.3	2.0	6.7	4.0

3: US 23 (Buford Hwy) & Farmers Market Drwy/Site Drwy 2 Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.3	0.1	0.0	0.1	0.1
Total Del/Veh (s)	8.2	1.0	3.8	2.8	3.6

Total Zone Performance

Denied Del/Veh (s)	0.4
Total Del/Veh (s)	344.6

Intersection: 2: US 23 (Buford Hwy) & N Dekalb Dr

Movement	NB	NB	SB	SB	SB	SB
Directions Served	T	TR	T	T	T	T
Maximum Queue (ft)	14	61	102	136	169	202
Average Queue (ft)	0	3	12	57	75	94
95th Queue (ft)	7	26	60	121	153	176
Link Distance (ft)	62	62		327	327	327
Upstream Blk Time (%)		0				
Queuing Penalty (veh)		0				
Storage Bay Dist (ft)			265			
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 3: US 23 (Buford Hwy) & Farmers Market Drwy/Site Drwy 2

Movement	EB	WB	NB	NB	SB	SB	SB
Directions Served	R	R	L	R	UL	T	TR
Maximum Queue (ft)	120	33	168	16	86	6	13
Average Queue (ft)	62	1	55	1	27	0	1
95th Queue (ft)	102	14	122	7	63	4	6
Link Distance (ft)	105	141				394	
Upstream Blk Time (%)	1						
Queuing Penalty (veh)	0						
Storage Bay Dist (ft)			225	100	85		85
Storage Blk Time (%)					1		
Queuing Penalty (veh)					2		

Zone Summary

Zone wide Queuing Penalty: 2

Traffic Volume Worksheets

24-241 - Lotus Grove on Buford Highway, City of Doraville (DRI # 4360)
Traffic Volumes

A&R Engineering
March 2025

1. US 23 @ I-285 WB Ramp

A.M. Peak Hour

Condition	US 23 (Buford Highway)					US 23 (Buford Highway)					I-285 WB On-Ramp					I-285 WB Off-Ramp				
	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 2025 Traffic Counts:	0	218	640	0	858	0	0	1270	307	1577	0	0	0	0	0	0	885	0	450	1335
Growth Factor (%):	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
No-Build 2029 Volumes:	0	235	691	0	926	0	0	1372	332	1704	0	0	0	0	0	0	956	0	486	1442
Shifted Farmers Market NBU Traffic via McElroy Road:	0	66	-66	0	0	0	0	0	-66	-66	0	0	0	0	0	0	0	0	0	0
No-Build 2029 Volumes (System Improvements):	0	301	625	0	926	0	0	1372	266	1638	0	0	0	0	0	0	956	0	486	1442
Shifted Farmers Market NBU Traffic via Veronica Street:	0	66	-66	0	0	0	0	0	-66	-66	0	0	0	0	0	0	0	0	0	0
Total New Trips:	0	0	60	0	60	0	0	99	49	148	0	0	0	0	0	0	0	0	53	53
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2029 Traffic Volumes:	0	235	751	0	986	0	0	1471	381	1852	0	0	0	0	0	0	956	0	539	1495
Future 2029 Traffic Volumes (System Improvements):	0	301	685	0	986	0	0	1471	315	1786	0	0	0	0	0	0	956	0	539	1495

P.M. Peak Hour

Condition	US 23 (Buford Highway)					US 23 (Buford Highway)					I-285 WB On-Ramp					I-285 WB Off-Ramp				
	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 2025 Traffic Counts:	0	242	1787	0	2029	0	0	1080	218	1298	0	0	0	0	0	0	531	0	478	1009
Growth Factor (%):	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
No-Build 2029 Volumes:	0	261	1930	0	2191	0	0	1166	235	1401	0	0	0	0	0	0	573	0	516	1089
Shifted Farmers Market NBU Traffic via McElroy Road:	0	20	-20	0	0	0	0	0	-20	-20	0	0	0	0	0	0	0	0	0	0
No-Build 2029 Volumes (System Improvements):	0	281	1910	0	2191	0	0	1166	215	1381	0	0	0	0	0	0	573	0	516	1089
Shifted Farmers Market NBU Traffic via Veronica Street:	0	20	-20	0	0	0	0	0	-20	-20	0	0	0	0	0	0	0	0	0	0
Total New Trips:	0	0	105	0	105	0	0	112	56	168	0	0	0	0	0	0	0	0	92	92
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2029 Traffic Volumes:	0	261	2035	0	2296	0	0	1278	291	1569	0	0	0	0	0	0	573	0	608	1181
Future 2029 Traffic Volumes (System Improvements):	0	281	2015	0	2296	0	0	1278	271	1549	0	0	0	0	0	0	573	0	608	1181

A.M. Peak Hour

P.M. Peak Hour

Condition	US 23 (Buford Highway)						US 23 (Buford Highway)						North Dekalb Drive Westbound					
	Northbound			Southbound			Eastbound			Westbound								
	U	L	Tot	U	L	Tot	U	L	Tot	U	L	Tot						
Existing 2025 Traffic Counts:	0	0	1847	400	2247		0	0	1298	0	0	0	0	0	0	104	104	
Growth Factor (%):	2	2	2	2	2		2	2	2	2	2	2	2	2	2	2	2	
No-Build 2029 Volumes:	0	0	1995	432	2427		0	0	1402	0	0	0	0	0	0	112	112	
Shifted Farmers Market NBU Traffic via McElroy Road:	0	0	-20	0	-20		0	0	-20	0	0	0	0	0	0	-78	-78	
No-Build 2029 Volumes (System Improvements):	0	0	1975	432	2407		0	0	1382	0	0	0	0	0	0	34	34	
Shifted Farmers Market NBU Traffic via Veronica Street:	0	0	-20	0	-20		0	0	-20	0	0	0	0	0	0	-78	-78	
Total New Trips:	0	0	170	26	196		0	0	168	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	
Future 2029 Traffic Volumes:	0	0	2165	458	2623		0	0	1570	0	0	0	0	0	0	112	112	
Future 2029 Traffic Volumes (System Improvements):	0	0	2145	458	2603		0	0	1550	0	0	0	0	0	0	34	34	

24-241 - Lotus Grove on Buford Highway, City of Doraville (DRI # 4360)

Traffic Volumes

A&R Engineering
March 2025

3. US 23 @ Farmers Market Drwy

A.M. Peak Hour

Condition	US 23 (Buford Highway)						US 23 (Buford Highway)						Farmer's Market Driveway (Right-In/Right-Out/Left-In)						Site Driveway 2 (Right-In/Right-Out/Left-In)					
	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 2025 Traffic Counts:	140	67	895	0	1102		0	0	1321	17	1338		0	0	0	33	33		0	0	0	0	0	
Growth Factor (%):	2	2	2	2			2	2	2	2			2	2	2	2			2	2	2	2		
No-Build 2029 Volumes:	151	72	967	0	1190		0	0	1427	18	1445		0	0	0	36	36		0	0	0	0	0	
Shifted Farmers Market NBU Traffic via McElroy Road:	-151	0	0	0	-151		0	0	85	0	85		0	0	0	0	0		0	0	0	0	0	
No-Build 2029 Volumes (System Improvements):	0	72	967	0	1039		0	0	1512	18	1530		0	0	0	36	36		0	0	0	0	0	
Shifted Farmers Market NBU Traffic via Veronica Street:	-151	0	0	0	-151		0	0	85	0	85		0	0	0	0	0		0	0	0	0	0	
Total New Trips:	0	0	44	54	98		0	6	148	0	154		0	0	0	0	0		0	0	0	0	24	
Pass-by Trips:	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0		0	0	0	0	0	
Future 2029 Traffic Volumes:	151	72	1011	54	1288		0	6	1575	18	1599		0	0	0	36	36		0	0	0	0	24	
Future 2029 Traffic Volumes (System Improvements):	0	72	1011	54	1137		0	6	1660	18	1684		0	0	0	36	36		0	0	0	0	24	

P.M. Peak Hour

Condition	US 23 (Buford Highway)						US 23 (Buford Highway)						Farmer's Market Driveway (Right-In/Right-Out/Left-In)						Site Driveway 2 (Right-In/Right-Out/Left-In)					
	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 2025 Traffic Counts:	91	186	1652	0	1929		3	0	1004	29	1036		0	0	0	189	189		0	0	0	0	0	
Growth Factor (%):	2	2	2	2			2	2	2	2			2	2	2	2			2	2	2	2		
No-Build 2029 Volumes:	98	201	1784	0	2083		3	0	1084	31	1118		0	0	0	204	204		0	0	0	0	0	
Shifted Farmers Market NBU Traffic via McElroy Road:	-98	0	0	0	-98		0	0	78	0	78		0	0	0	0	0		0	0	0	0	0	
No-Build 2029 Volumes (System Improvements):	0	201	1784	0	1985		3	0	1162	31	1196		0	0	0	204	204		0	0	0	0	0	
Shifted Farmers Market NBU Traffic via Veronica Street:	-98	0	0	0	-98		0	0	78	0	78		0	0	0	0	0		0	0	0	0	0	
Total New Trips:	0	0	76	94	170		0	10	168	0	178		0	0	0	0	0		0	0	0	0	27	
Pass-by Trips:	0	0	-51	51	0		0	28	0	0	28		0	0	0	0	0		0	0	0	0	51	
Future 2029 Traffic Volumes:	98	201	1809	145	2253		3	38	1252	31	1324		0	0	0	204	204		0	0	0	0	78	
Future 2029 Traffic Volumes (System Improvements):	0	201	1809	145	2155		3	38	1330	31	1402		0	0	0	204	204		0	0	0	0	78	

24-241 - Lotus Grove on Buford Highway, City of Doraville (DRI # 4360)
Traffic Volumes

A&R Engineering
March 2025

4. US 23 @ Longmire Way
A.M. Peak Hour

Condition	US 23 (Buford Highway)					US 23 (Buford Highway)					Longmire Way Eastbound					Longmire Way Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2025 Traffic Counts:	0	161	614	17	792	0	15	1194	43	1252	0	38	4	117	159	0	22	2	12	36
Growth Factor (%):	2	2	2	2		2	2	2	2		2	2	2	2		2	2	2	2	
No-Build 2029 Volumes:	0	174	663	18	855	0	16	1290	46	1352	0	41	4	126	171	0	24	2	13	39
Shifted Farmers Market NBU Traffic via McElroy Road:	0	0	0	0	0	0	0	85	0	85	0	0	0	0	0	0	0	0	0	0
No-Build 2029 Volumes (System Improvements):	0	174	663	18	855	0	16	1375	46	1437	0	41	4	126	171	0	24	2	13	39
Shifted Farmers Market NBU Traffic via Veronica Street:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85	0	0	85
Total New Trips:	0	0	24	44	68	0	18	5	0	23	0	0	6	2	8	0	148	10	6	164
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2029 Traffic Volumes:	0	174	687	62	923	0	34	1295	46	1375	0	41	10	128	179	0	172	12	19	203
Future 2029 Traffic Volumes (System Improvements):	0	174	687	62	923	0	34	1295	46	1375	0	41	10	128	179	0	257	12	19	288

P.M. Peak Hour

Condition	US 23 (Buford Highway)					US 23 (Buford Highway)					Longmire Way Eastbound					Longmire Way Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2025 Traffic Counts:	0	150	1403	21	1574	0	19	767	77	863	0	148	15	129	292	0	31	11	38	80
Growth Factor (%):	2	2	2	2		2	2	2	2		2	2	2	2		2	2	2	2	
No-Build 2029 Volumes:	0	162	1515	23	1700	0	21	828	83	932	0	160	16	139	315	0	33	12	41	86
Shifted Farmers Market NBU Traffic via McElroy Road:	0	0	0	0	0	0	0	78	0	78	0	0	0	0	0	0	0	0	0	0
No-Build 2029 Volumes (System Improvements):	0	162	1515	23	1700	0	21	906	83	1010	0	160	16	139	315	0	33	12	41	86
Shifted Farmers Market NBU Traffic via Veronica Street:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	0	0	78
Total New Trips:	0	0	27	76	103	0	31	8	0	39	0	0	10	3	13	0	168	11	7	186
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	0	0	28
Future 2029 Traffic Volumes:	0	162	1542	99	1803	0	52	836	83	971	0	160	26	142	328	0	229	23	48	300
Future 2029 Traffic Volumes (System Improvements):	0	162	1542	99	1803	0	52	836	83	971	0	160	26	142	328	0	307	23	48	378

24-241 - Lotus Grove on Buford Highway, City of Doraville (DRI # 4360)
Traffic Volumes

A&R Engineering
March 2025

5. Longmire Way @ Site Drwy 3

A.M. Peak Hour

Condition	Site Driveway 3 Northbound					- Southbound					Longmire Way Eastbound					Longmire Way Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2025 Traffic Counts:	0	0	0	0	0	0	0	0	0	0	0	0	23	0	23	0	0	10	0	10
Growth Factor (%):	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
No-Build 2029 Volumes:	0	0	0	0	0	0	0	0	0	0	0	0	25	0	25	0	0	11	0	11
Shifted Farmers Market NBU Traffic via McElroy Road:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No-Build 2029 Volumes (System Improvements):	0	0	0	0	0	0	0	0	0	0	0	0	25	0	25	0	0	11	0	11
Shifted Farmers Market NBU Traffic via Veronica Street:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85	0	85
Total New Trips:	0	28	0	0	28	0	0	0	0	0	0	0	32	36	68	0	0	136	0	136
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2029 Traffic Volumes:	0	28	0	0	28	0	0	0	0	0	0	0	57	36	93	0	0	147	0	147
Future 2029 Traffic Volumes (System Improvements):	0	28	0	0	28	0	0	0	0	0	0	0	57	36	93	0	0	232	0	232

P.M. Peak Hour

Condition	Site Driveway 3 Northbound					- Southbound					Longmire Way Eastbound					Longmire Way Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2025 Traffic Counts:	0	0	0	0	0	0	0	0	0	0	0	0	47	0	47	0	0	51	0	51
Growth Factor (%):	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
No-Build 2029 Volumes:	0	0	0	0	0	0	0	0	0	0	0	0	51	0	51	0	0	55	0	55
Shifted Farmers Market NBU Traffic via McElroy Road:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No-Build 2029 Volumes (System Improvements):	0	0	0	0	0	0	0	0	0	0	0	0	51	0	51	0	0	55	0	55
Shifted Farmers Market NBU Traffic via Veronica Street:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	0	78
Total New Trips:	0	31	0	0	31	0	0	0	0	0	0	0	55	63	118	0	0	155	0	155
Pass-by Trips:	0	28	0	0	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2029 Traffic Volumes:	0	59	0	0	59	0	0	0	0	0	0	0	106	63	169	0	0	210	0	210
Future 2029 Traffic Volumes (System Improvements):	0	59	0	0	59	0	0	0	0	0	0	0	106	63	169	0	0	288	0	288

24-241 - Lotus Grove on Buford Highway, City of Doraville (DRI # 4360)
Traffic Volumes

A&R Engineering
March 2025

6. Longmire Way @ Site Drwy 4

A.M. Peak Hour

Condition	Site Driveway 4 Northbound					- Southbound					Longmire Way Eastbound					Longmire Way Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
	0	0	0	0	0	0	0	0	0	0	0	0	23	0	23	0	0	10	0	10
Existing 2025 Traffic Counts:	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Growth Factor (%):	0	0	0	0	0	0	0	0	0	0	0	0	25	0	25	0	0	11	0	11
No-Build 2029 Volumes:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shifted Farmers Market NBU Traffic via McElroy Road:	0	0	0	0	0	0	0	0	0	0	0	0	25	0	25	0	0	11	0	11
No-Build 2029 Volumes (System Improvements):	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	11
Shifted Farmers Market NBU Traffic via Veronica Street:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85	0	85
Total New Trips:	0	57	0	0	57	0	0	0	0	0	0	0	14	18	32	0	0	79	0	79
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2029 Traffic Volumes:	0	57	0	0	57	0	0	0	0	0	0	0	39	18	57	0	0	90	0	90
Future 2029 Traffic Volumes (System Improvements):	0	57	0	0	57	0	0	0	0	0	0	0	39	18	57	0	0	175	0	175

P.M. Peak Hour

Condition	Site Driveway 4 Northbound					- Southbound					Longmire Way Eastbound					Longmire Way Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
	0	0	0	0	0	0	0	0	0	0	0	0	47	0	47	0	0	51	0	51
Existing 2025 Traffic Counts:	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Growth Factor (%):	0	0	0	0	0	0	0	0	0	0	0	0	51	0	51	0	0	55	0	55
No-Build 2029 Volumes:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shifted Farmers Market NBU Traffic via McElroy Road:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No-Build 2029 Volumes (System Improvements):	0	0	0	0	0	0	0	0	0	0	0	0	51	0	51	0	0	55	0	55
Shifted Farmers Market NBU Traffic via Veronica Street:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	0	78
Total New Trips:	0	65	0	0	65	0	0	0	0	0	0	0	24	31	55	0	0	90	0	90
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2029 Traffic Volumes:	0	65	0	0	65	0	0	0	0	0	0	0	75	31	106	0	0	145	0	145
Future 2029 Traffic Volumes (System Improvements):	0	65	0	0	65	0	0	0	0	0	0	0	75	31	106	0	0	223	0	223

24-241 - Lotus Grove on Buford Highway, City of Doraville (DRI # 4360)
Traffic Volumes

A&R Engineering
 March 2025

7. Longmire Way @ Site Drwy 5

A.M. Peak Hour

Condition	Site Driveway 5 Northbound					- Southbound					Longmire Way Eastbound					Longmire Way Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
	0	0	0	0	0	0	0	0	0	0	0	0	23	0	23	0	0	10	0	10
Existing 2025 Traffic Counts:	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Growth Factor (%):	0	0	0	0	0	0	0	0	0	0	0	0	25	0	25	0	0	11	0	11
No-Build 2029 Volumes:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shifted Farmers Market NBU Traffic via McElroy Road:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No-Build 2029 Volumes (System Improvements):	0	0	0	0	0	0	0	0	0	0	0	0	25	0	25	0	0	11	0	11
Shifted Farmers Market NBU Traffic via Veronica Street:	0	85	0	0	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total New Trips:	0	79	0	0	79	0	0	0	0	0	0	0	14	14	14	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 2029 Traffic Volumes:	0	79	0	0	79	0	0	0	0	0	0	0	25	14	39	0	0	11	0	11
Future 2029 Traffic Volumes (System Improvements):	0	164	0	0	164	0	0	0	0	0	0	0	25	14	39	0	0	11	0	11

P.M. Peak Hour

Condition	Site Driveway 5 Northbound					- Southbound					Longmire Way Eastbound					Longmire Way Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
	0	0	0	0	0	0	0	0	0	0	0	0	47	0	47	0	0	51	0	51
Existing 2025 Traffic Counts:	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Growth Factor (%):	0	0	0	0	0	0	0	0	0	0	0	0	51	0	51	0	0	55	0	55
No-Build 2029 Volumes:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shifted Farmers Market NBU Traffic via McElroy Road:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No-Build 2029 Volumes (System Improvements):	0	0	0	0	0	0	0	0	0	0	0	0	51	0	51	0	0	55	0	55
Shifted Farmers Market NBU Traffic via Veronica Street:	0	78	0	0	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total New Trips:	0	90	0	0	90	0	0	0	0	0	0	0	24	24	24	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 2029 Traffic Volumes:	0	90	0	0	90	0	0	0	0	0	0	0	51	24	75	0	0	55	0	55
Future 2029 Traffic Volumes (System Improvements):	0	168	0	0	168	0	0	0	0	0	0	0	51	24	75	0	0	55	0	55

24-241 - Lotus Grove on Buford Highway, City of Doraville (DRI # 4360)
Traffic Volumes

A&R Engineering
March 2025

8. N Dekalb Dr @ Site Drwy 1

A.M. Peak Hour

Condition	Northbound					Site Driveway 1 Southbound					North Dekalb Drive Eastbound					North Dekalb Drive Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
	0	0	0	0	0	0	0	0	0	0	0	0	108	0	108	0	0	113	0	113
Existing 2025 Traffic Counts:	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Growth Factor (%):	0	0	0	0	0	0	0	0	0	0	0	0	117	0	117	0	0	122	0	122
No-Build 2029 Volumes:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-85	0	-85
Shifted Farmers Market NBU Traffic via McElroy Road:	0	0	0	0	0	0	0	0	0	0	0	0	117	0	117	0	0	37	0	37
No-Build 2029 Volumes (System Improvements):	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-85	0	-85
Shifted Farmers Market NBU Traffic via Veronica Street:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-85	85	0
Total New Trips:	0	0	0	0	0	0	6	0	0	6	0	9	6	0	15	0	0	0	12	12
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2029 Traffic Volumes:	0	0	0	0	0	0	6	0	0	6	0	9	123	0	132	0	0	122	12	134
Future 2029 Traffic Volumes (System Improvements):	0	0	0	0	0	0	6	0	0	6	0	9	123	0	132	0	0	37	97	134

P.M. Peak Hour

Condition	Northbound					Site Driveway 1 Southbound					North Dekalb Drive Eastbound					North Dekalb Drive Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2025 Traffic Counts:	0	0	0	0	0	0	0	0	0	0	0	0	400	0	400	0	0	0	0	0
Growth Factor (%):	2	2	2	2		2	2	2	2		2	2	2	2		2	2	2	2	
No-Build 2029 Volumes:	0	0	0	0	0	0	0	0	0	0	0	0	432	0	432	0	0	0	0	0
Shifted Farmers Market NBU Traffic via McElroy Road:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-78	0	-78
No-Build 2029 Volumes (System Improvements):	0	0	0	0	0	0	0	0	0	0	0	0	432	0	432	0	0	-78	0	-78
Shifted Farmers Market NBU Traffic via Veronica Street:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-78	78	0
Total New Trips:	0	0	0	0	0	0	7	0	0	7	0	16	10	0	26	0	0	0	17	17
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2029 Traffic Volumes:	0	0	0	0	0	0	7	0	0	7	0	16	442	0	458	0	0	0	17	17
Future 2029 Traffic Volumes (System Improvements):	0	0	0	0	0	0	7	0	0	7	0	16	442	0	458	0	0	-78	95	17

24-241 - Lotus Grove on Buford Highway, City of Doraville (DRI # 4360)
Traffic Volumes

A&R Engineering
March 2025

9. N Dekalb Dr @ Site Drwy 6

A.M. Peak Hour

Condition	Northbound					Site Driveway 6 Southbound					North Dekalb Drive Eastbound					North Dekalb Drive Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
	0	0	0	0	0	0	0	0	0	0	0	0	108	0	108	0	0	113	0	113
Existing 2025 Traffic Counts:	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Growth Factor (%):	0	0	0	0	0	0	0	0	0	0	0	0	117	0	117	0	0	122	0	122
No-Build 2029 Volumes:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-85	0	-85
Shifted Farmers Market NBU Traffic via McElroy Road:	0	0	0	0	0	0	0	0	0	0	0	0	117	0	117	0	0	37	0	37
No-Build 2029 Volumes (System Improvements):	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shifted Farmers Market NBU Traffic via Veronica Street:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total New Trips:	0	0	0	0	0	0	4	0	8	12	0	6	6	0	12	0	0	5	3	8
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2029 Traffic Volumes:	0	0	0	0	0	0	4	0	8	12	0	6	123	0	129	0	0	127	3	130
Future 2029 Traffic Volumes (System Improvements):	0	0	0	0	0	0	4	0	8	12	0	6	123	0	129	0	0	127	3	130

P.M. Peak Hour

Condition	Northbound					Site Driveway 6 Southbound					North Dekalb Drive Eastbound					North Dekalb Drive Westbound				
	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot	U	L	T	R	Tot
Existing 2025 Traffic Counts:	0	0	0	0	0	0	0	0	0	0	0	0	400	0	400	0	0	0	0	0
Growth Factor (%):	2	2	2	2		2	2	2	2		2	2	2	2		2	2	2	2	
No-Build 2029 Volumes:	0	0	0	0	0	0	0	0	0	0	0	0	432	0	432	0	0	0	0	0
Shifted Farmers Market NBU Traffic via McElroy Road:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-78	0	-78
No-Build 2029 Volumes (System Improvements):	0	0	0	0	0	0	0	0	0	0	0	0	432	0	432	0	0	-78	0	-78
Shifted Farmers Market NBU Traffic via Veronica Street:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total New Trips:	0	0	0	0	0	0	4	0	9	13	0	10	7	0	17	0	0	8	5	13
Pass-by Trips:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2029 Traffic Volumes:	0	0	0	0	0	0	4	0	9	13	0	10	439	0	449	0	0	8	5	13
Future 2029 Traffic Volumes (System Improvements):	0	0	0	0	0	0	4	0	9	13	0	10	439	0	449	0	0	8	5	13