



*Transportation Analysis*

# South Lawn Mixed Use DRI #2727

City of Lawrenceville, Georgia

*Report Prepared:*

October 2017

*Prepared for:*

Novare Group

George Berkow, Inc.

*Prepared by:*

**Kimley»Horn**

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Atlanta, Georgia 30308  
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## TABLE OF CONTENTS

Executive Summary .....	1
1.0 Project Description .....	4
1.1 Introduction .....	4
1.2 Site Plan Review .....	7
1.3 Site Access .....	7
1.4 Bicycle and Pedestrian Facilities .....	8
1.5 Transit Facilities .....	8
2.0 Traffic Analyses, Methodology and Assumptions .....	8
2.1 Growth Rate .....	8
2.2 Traffic Data Collection .....	8
2.3 Detailed Intersection Analysis .....	9
3.0 Study Network .....	10
3.1 Gross Trip Generation .....	10
3.2 Trip Distribution .....	10
3.3 Level-of-Service Standards .....	10
3.4 Study Network Determination .....	10
3.5 Existing Roadway Facilities .....	13
4.0 Trip Generation .....	13
5.0 Trip Distribution and Assignment .....	14
6.0 Traffic Analysis .....	17
6.1 Existing 2017 Conditions .....	17
6.2 Projected 2023 No-Build Conditions .....	19
6.3 Projected 2023 Build Conditions .....	22
7.0 Ingress/Egress Analysis .....	25
8.0 Identification of Programmed Projects .....	25
9.0 Internal Circulation Analysis .....	26
10.0 Compliance with Comprehensive Plan Analysis .....	26



## LIST OF TABLES

Table 1	Proposed Land Uses and Densities.....	4
Table 2	Peak Hour Summary .....	9
Table 3	Gross Trip Generation .....	10
Table 4	Intersection Control Summary .....	11
Table 5	Roadway Classification and ADTs.....	13
Table 6	Net Trip Generation.....	14
Table 7	Existing 2017 Intersection Levels-of-Service .....	17
Table 8	Projected 2023 No-Build Intersection Levels-of-Service .....	19
Table 9	Projected 2023 Build Intersection Levels-of-Service.....	22
Table 10	Programmed Projects.....	25

## LIST OF FIGURES

Figure 1	Location Map.....	5
Figure 2	Site Aerial.....	6
Figure 3	Study Intersections.....	12
Figure 4	Trip Distribution .....	15
Figure 5	Project Trips .....	16
Figure 6	Existing 2017 Traffic Conditions .....	18
Figure 7	Projected 2023 No-Build Traffic Conditions .....	21
Figure 8	Projected 2023 Build Traffic Conditions.....	24

## LIST OF APPENDICES

Appendix A	Site Photo Log
Appendix B	Land Use and Zoning Maps
Appendix C	Proposed Site Plan
Appendix D	Trip Generation Analysis
Appendix E	Intersection Volume Worksheets
Appendix F	Programmed Project Fact Sheets

### *Available Upon Request*

Raw Traffic Count Data  
Synchro Capacity Analyses

## EXECUTIVE SUMMARY

This report presents the analysis of the anticipated traffic impacts of the proposed South Lawn Mixed Use development located in the City of Lawrenceville, Georgia. The approximate 31-acre site is located north of Scenic Highway (SR 124), south of Luckie Street, east of S Clayton Street, and west of Jackson Street. The project site currently consists of several commercial buildings, municipal buildings, industrial buildings, office buildings, residential buildings, one school, and associated surface parking. All current buildings are proposed to be demolished. The proposed development will be mixed-use, consisting of approximately 915,000 square feet of residential and retail land uses (assuming 1,500 SF per unit for residential land uses within the Established Suburbs area type).

The project is a Development of Regional Impact (DRI) and is subject to Georgia Regional Transportation Authority (GRTA) and Atlanta Regional Commission (ARC) review due to the project size exceeding 500,000 SF of mixed-use development and 500 residential units (if considered a residential only development) in an Established Suburbs area type, as determined by the Atlanta Regional Commission's *Unified Growth Policy Map (UGPM)*. The DRI trigger for this development was the submittal of the Overlay Modification and Special Use Application with the City of Lawrenceville on September 19, 2017. The DRI was formally triggered with the filing of the Initial DRI Information (Form 1) on September 19, 2017 by the City of Lawrenceville. The DRI Pre-Review/Methodology meeting occurred at ARC's offices on September 25, 2017.

The proposed project is expected to be completed by 2023. The proposed site will consist of the following land uses and densities:

Residential (Multi-family):	430 units
Residential (Single-family):	170 units
Retail:	15,000 SF

The DRI analysis includes an estimation of the overall trips projected to be generated by the development, also known as gross trips. Reductions to gross trips are also considered in the analysis, including mixed-use reductions, alternative transportation mode reductions, and pass-by trip reductions.

**Mixed-use reductions** occur when a site has a combination of different land uses that interact with one another. For example, people living in the residential development may walk to the retail instead of driving off-site. This reduces the number of vehicle trips that will be made on the roadway, thus reducing traffic congestion. These types of interactions are expected at the South Lawn Mixed Use development – including residents walking to the retail land uses.

**Alternative mode reductions** are taken when a site can be accessed by modes other than vehicles (walking, bicycling, transit, etc.). As the South Lawn Mixed Use development is located adjacent to Downtown Lawrenceville, which provides increased pedestrian facilities and is 0.25 miles from Gwinnett County municipal offices, a 5% alternative mode reduction was taken. The project site is also located 0.15 miles from two bus stops served by Gwinnett County Bus Route #40, which provides service from Sugarloaf Parkway at Five Forks Trickum Road to the Gwinnett Transit Center six days a week.

**Pass-by reductions** are taken for retail trips only. Traffic normally traveling along a roadway may choose to visit a retail establishment that is along the vehicle's original path. These trips were already on the road and would therefore only be new trips at the driveways. Pass-by reductions were taken along S Clayton Street, as the retail is proposed to be located along the road frontage.

Capacity analyses were performed throughout the study network for the Existing 2017 conditions, the Projected 2023 No-Build conditions, and the Projected 2023 Build conditions.

- Existing 2017 conditions represent traffic volumes that were collected in September 2017 by performing AM and PM peak hour turning movement counts at the study intersections.
- Projected 2023 No-Build conditions represent the existing traffic volumes grown for six (6) years at 1.0 percent per year throughout the study network. The Projected 2023 No-Build conditions also include the two-way conversion of S Clayton Street (Project GW-342/PI #0008963) by the City of Lawrenceville and the re-designation of SR 20 from S Clayton Street to Scenic Highway (SR 124), which is anticipated to be completed by 2023.
- Projected 2023 Build conditions represent the Projected 2023 No-Build conditions plus the addition of the project trips that are anticipated to be generated by the South Lawn Mixed Use development. Also included are the seven (7) site access driveways.

*Based on the analysis of Existing 2017 conditions (present conditions; i.e. excludes background traffic growth and excludes the South Lawn Mixed Use project traffic), there are no recommended improvements.*

*Based on the analysis of Projected 2023 No-Build conditions (includes background traffic growth and the two-way conversion of S Clayton Street (Project GW-342/PI #0008963, recently LET for construction) and the re-designation of SR 20 from S Clayton Street to Scenic Highway (SR 124), but excludes the South Lawn Mixed Use project traffic), there are no recommended improvements. However, based on the discussions in the Pre-Review Meeting, the following improvements were assumed to be made by the City of Lawrenceville and completed by 2023, and were therefore included in the Projected 2023 No-Build conditions.*

- Intersection #1: S Clayton Street at Luckie Street
  - Convert S Clayton Street to a two-way road (Project GW-342/PI #0008963), which includes the following improvements:
    - Restripe northbound approach to include one exclusive left-turn lane and one shared through/right-turn lane.
    - Restripe southbound approach to include one exclusive left-turn lane and one shared through/right-turn lane.
    - Restripe eastbound approach to include one shared left-turn/through/right-turn lane.
    - Restripe westbound approach to include one shared left-turn/through/right-turn lane.
- Intersection #3: Scenic Highway at Jackson Street
  - Convert S Clayton Street to a two-way road (Project GW-342/PI #0008963), which includes the following improvements:
    - Construct a second exclusive eastbound left-turn lane.
- Intersection #7: S Clayton Street at Nash Street/Driveway 3
  - Convert S Clayton Street to a two-way road (Project GW-342/PI #0008963), which includes the following improvements:
    - Restripe northbound approach to include one exclusive left-turn lane, one exclusive through lane, and one exclusive right-turn lane.
    - Restripe southbound approach to include one exclusive left-turn lane and one shared through/right-turn lane.

- Restripe eastbound approach to include one exclusive left-turn lane and one shared through/right-turn lane.
- Restripe westbound approach to include one exclusive left-turn lane and one shared through/right-turn lane.
- Intersection #8: S Clayton Street at Church Street/Driveway 4
  - Convert S Clayton Street to a two-way road (Project GW-342/PI #0008963), which includes the following improvements:
    - Restripe northbound approach to include one shared through/right-turn lane.
    - Restripe southbound approach to include one exclusive left-turn lane and one exclusive through lane.
    - Restripe westbound approach to include one shared left-turn/right-turn lane.
- Intersection #9: S Clayton Street at Branson Street/Driveway 5
  - Convert S Clayton Street to a two-way road (Project GW-342/PI #0008963), which includes the following improvements:
    - Restripe northbound approach to include one shared through/right-turn lane.
    - Restripe southbound approach to include one exclusive left-turn lane and one exclusive through lane.
    - Restripe westbound approach to include one shared left-turn/right-turn lane.

*Based on the analysis of Projected 2023 Build conditions (includes background traffic growth and the two-way conversion of S Clayton Street (Project GW-342/PI #0008963, recently LET for construction), the re-designation of SR 20 from S Clayton Street to Scenic Highway (SR 124), and includes the projected South Lawn Mixed Use traffic), the following improvements are recommended:*

- Intersection #10: Jackson Street at Driveway 6
  - Relocate existing driveway located along Jackson Street approximately 430 feet south of the intersection of Jackson Street and Luckie Street approximately 200 feet to the south.
  - Removed existing gated access.
  - On the site, construct one (1) shared eastbound left-turn/right-turn lane.
  - On the site, construct one (1) westbound receiving lane.
  - Install stop-control on eastbound leg.
- Intersection #11: Jackson Street at Driveway 7
  - On the site, construct one (1) shared eastbound left-turn/right-turn lane.
  - On the site, construct one (1) westbound receiving lane.
  - Install stop-control on eastbound leg.

## 1.0 PROJECT DESCRIPTION

### 1.1 Introduction

This report presents the analysis of the anticipated traffic impacts of the proposed South Lawn Mixed Use development located in the City of Lawrenceville, Georgia. The approximate 31-acre site is located north of Scenic Highway (SR 124), south of Luckie Street, east of S Clayton Street, and west of Jackson Street. The proposed development will be mixed-use, consisting of approximately 915,000 square feet of residential and retail land uses (assuming 1,500 SF per unit for residential land uses within the Established Suburbs area type).

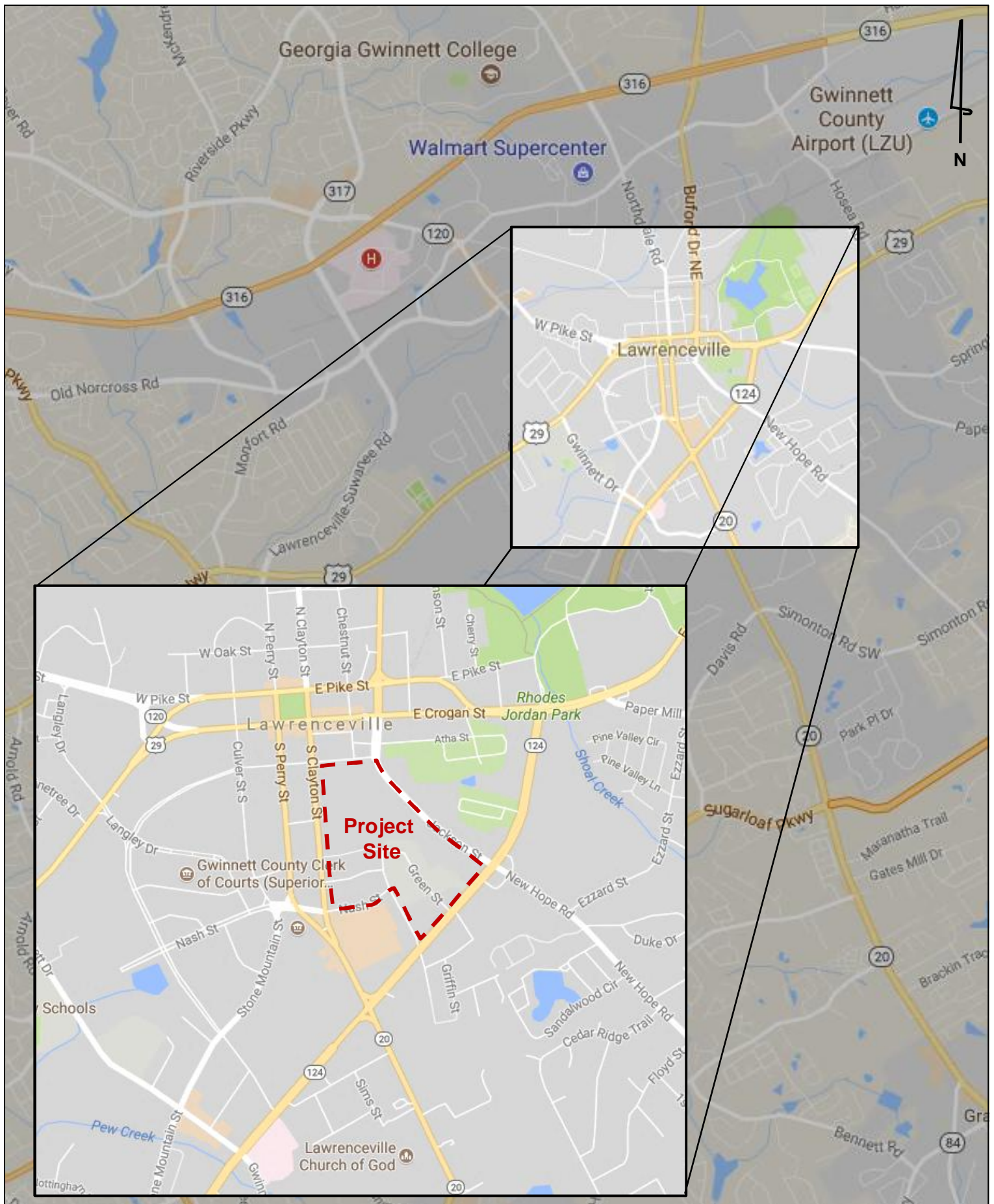
The project will exceed 500,000 square feet of mixed-use development or 500 residential units (if considered a residential only development) in an Established Suburbs area type and therefore, the proposed development is a Development of Regional Impact (DRI) and is subject to Atlanta Regional Commission (ARC) and Georgia Regional Transportation Authority (GRTA) review.

**Figure 1** provides the location map of the South Lawn Mixed Use development, and **Figure 2** provides a site aerial showing of the project site and surrounding area. Field review photographs taken within the vicinity of the study network are located in the site photo log in Appendix A. The City of Atlanta Zoning Ordinance Map and ARC's *Unified Growth Policy Map (UGPM)* are included in Appendix B.

The proposed project is expected to be completed by 2023, and this analysis will consider the full build-out of the proposed site in 2023. A summary of the proposed land-uses and densities is provided below in **Table 1**.

Table 1 Proposed Land Uses and Densities	
Residential	600 units
Retail	15,000 SF











## 1.2 Site Plan Review

The project site currently consists of several commercial buildings, municipal buildings, industrial buildings, office buildings, residential buildings, one school, and associated parking. All current buildings will be demolished. The project site is currently zoned BG (Business-General), RS (Residential-Single), O-I (Office-Institutional), and RM (Residential-Multi) according to the *City of Lawrenceville Zoning Ordinance Map*. The project site is located in an Established Suburb area type according to ARC's *Unified Growth Policy Map (UGPM)*. Additionally, the project site is within and adheres to the recommendations of the most recent Downtown Lawrenceville LCI, which qualifies the South Lawn Mixed Use development for GRTA's expedited review.

A reference of the proposed site plan is provided in Appendix C. A full-sized site plan consistent with GRTA's Site Plan Guidelines is also being submitted as part of the review package.

## 1.3 Site Access

The site is proposed to be served by three driveways along S Clayton Street, two driveways along Scenic Highway (SR 124), and two driveways along Jackson Street.

Following is a description of each of the proposed driveways:

1. Driveway 1 (Green Street) is an existing driveway located along Scenic Highway (SR 124) approximately 730 feet west of the intersection of Scenic Highway (SR 124) and Jackson Street.
2. Driveway 2 (Neal Boulevard) is an existing driveway located along Scenic Highway (SR 124) approximately 1,300 feet west of the intersection of Scenic Highway (SR 124) and Jackson Street.
3. Driveway 3 (Nash Street) is an existing driveway located along S Clayton Street approximately 1,200 feet north of the intersection of Scenic Highway and S Clayton Street.
4. Driveway 4 (Church Street) is an existing driveway located along S Clayton Street approximately 1,500 feet north of the intersection of Scenic Highway (SR 124) and Jackson Street.
5. Driveway 5 (Branson Street) is an existing driveway located along S Clayton Street approximately 1,800 feet north of the intersection of Scenic Highway (SR 124) and Jackson Street.
6. Driveway 6 is an existing driveway to be located along Jackson Street approximately 430 feet south of the intersection of Jackson Street and Luckie Street which will be relocated approximately 200 feet to the south. Driveway 6 is currently gated and not open for public use, and therefore will only be studied for site access in the Proposed 2023 Build conditions (as it will serve the proposed DRI traffic).
7. Driveway 7 is a proposed driveway located along Jackson Street approximately 800 feet south of the intersection of Jackson Street and Luckie Street. Driveway 7 is proposed to be a stop controlled full movement driveway.

Also, one existing driveway along S Clayton Street (across from Seminary Street) will be removed.

The site driveways mentioned above provide access to all parking for the site. Parking will be located on-site in a proposed parking decks, surface lots, and on-street (along S Clayton Street) where space permits. Currently, approximately 640 parking spaces are planned to be provided. The exact number and location of the parking spaces is subject to change during the development of the master plan. Parking ratios as required by the City of Lawrenceville are shown below.



Residential:	2 spaces per unit
Retail:	1 space per 250 SF of gross sales space
Total required by code:	940 spaces

As the South Lawn Mixed Use development is located in a Downtown Overlay District, existing off-site parking facilities will be utilized as necessary.

#### **1.4 *Bicycle and Pedestrian Facilities***

The project site is located adjacent to Downtown Lawrenceville, an area with increased pedestrian facilities. Pedestrian facilities (sidewalks) currently exist along Jackson Street, Scenic Highway (SR 124), S Clayton Street, and Luckie Street. There are currently no bicycle facilities in the vicinity of the project site.

#### **1.5 *Transit Facilities***

The project site is also located 0.15 miles from two bus stops served by Gwinnett County Bus Route #40, which provides service from Sugarloaf Parkway at Five Forks Trickum Road to the Gwinnett Transit Center six days a week.

## **2.0 TRAFFIC ANALYSES, METHODOLOGY AND ASSUMPTIONS**

### **2.1 *Growth Rate***

Background traffic is defined as expected traffic on the roadway network in future year(s) absent the construction and opening of the proposed project. Background traffic can include a base growth rate based on historical count data as well as population growth data and estimates as well as trips anticipated from nearby or adjacent other projects. Based on methodology outlined in the GRTA Letter of Understanding (LOU), a 1.0 percent per year for six (6) years background traffic growth rate was used for all roadways. This background growth rate was used to account for other development activity in the area.

### **2.2 *Traffic Data Collection***

Weekday peak hour turning movement counts were collected on Thursday, September 21<sup>st</sup>, 2017 at the study intersections from 7:00 AM – 9:00 AM for the AM peak period and from 4:00 PM to 6:15 PM for the PM peak period. The morning and afternoon peak hours varied slightly between the intersections. Peak hours for all intersections are shown in **Table 2**.

<b>Table 2 Peak Hour Summary</b>		
Intersection	AM Peak Hour	PM Peak Hour
1. S Clayton Street (SR 20) at Luckie Street	7:00 – 8:00	4:15 – 5:15
2. Jackson Street at Luckie Street	7:00 – 8:00	4:30 – 5:30
3. Scenic Highway (SR 124) at Jackson Street/New Hope Road	7:45 – 8:45	4:15 – 5:15
4. Scenic Highway (SR 124) at Green Street/Driveway 1	7:30 – 8:30	4:30 – 5:30
5. Scenic Highway (SR 124) at Neal Boulevard/Driveway 2	7:30 – 8:30	4:30 – 5:30
6. Scenic Highway (SR 124) at S Clayton Street (SR 20)	7:30 – 8:30	4:45 – 5:45
7. S Clayton Street (SR 20) at Nash Street/Driveway 3	7:15 – 8:15	4:15 – 5:15
8. S Clayton Street (SR 20) at Church Street/Driveway 4	7:00 – 8:00	4:15 – 5:15
9. S Clayton Street (SR 20) at Branson Street/Driveway 5	7:15 – 8:15	4:15 – 5:15

The collected peak hour turning movement traffic counts are available upon request.

### 2.3 Detailed Intersection Analysis

Level-of-service (LOS) is used to describe the operating characteristics of a road segment or intersection in relation to its capacity. LOS is defined as a qualitative measure that describes operational conditions and motorists' perceptions within a traffic stream. The *Highway Capacity Manual* defines six levels-of-service, LOS A through LOS F, with A being the best and F being the worst. Level-of-service analyses were conducted at all intersections within the study network using *Synchro Professional, Version 9.0*.

Existing traffic signal phasing and timing data were retrieved from Gwinnett County for signalized intersections. Existing timing data was used in the Existing 2017 conditions. Signal timings were optimized using *Synchro Professional, Version 9.0* for Projected 2023 No-Build conditions, Projected 2023 Build conditions.

Levels-of-service for signalized intersections are reported for the intersection as a whole. One or more movements at an intersection may experience a low level-of-service, while the intersection as a whole may operate acceptably.

Levels-of-service for unsignalized intersections, with stop control on the minor street only, are reported for the side street approaches and the major street left-turn movements. Low levels-of-service for side street approaches are not uncommon, as vehicles may experience significant delays in turning onto a major roadway.

### 3.0 STUDY NETWORK

#### 3.1 Gross Trip Generation

Traffic for the proposed land uses and densities were calculated using methodology contained in the *Institute of Transportation Engineers' (ITE) Trip Generation Manual, Ninth Edition*. Gross trips generated are displayed below in **Table 3**. Existing trips generated by the existing land uses on the site are minimal and therefore, were not removed from the network in order to present a more conservative analysis.

Table 3 Gross Trip Generation										
Land Use (Intensity)	ITE Code	Daily Traffic			AM Peak Hour			PM Peak Hour		
		Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit
Single-Family Detached Housing (23 units)	210	269	134	135	26	7	19	28	18	10
Apartment (330 units)	220	2,123	1,062	1,061	165	33	132	199	129	70
Residential Condominium/ Townhouse (147 units)	230	899	449	450	70	12	58	82	55	27
Senior Adult Housing – Attached (100 units)	252	319	160	159	20	7	13	26	14	12
Shopping Center (15,000 SF)	820	641	320	321	14	9	5	56	27	29
<b>Total Gross Trips</b>		<b>4,251</b>	<b>2,125</b>	<b>2,126</b>	<b>295</b>	<b>68</b>	<b>227</b>	<b>391</b>	<b>243</b>	<b>148</b>

#### 3.2 Trip Distribution

The directional distribution and assignment of new project trips was based on the project land uses, a review of the land use densities and road facilities in the area, engineering judgment, and methodology discussions with the Georgia Regional Transportation Authority (GRTA), Atlanta Regional Commission (ARC), Georgia Department of Transportation (GDOT), and the City of Atlanta.

#### 3.3 Level-of-Service Standards

For the purposes of this traffic analysis, a level-of-service standard of D was assumed for all intersections and segments within the study network. If, however, an intersection or segment currently operates at LOS E or LOS F during an existing peak period, the LOS standard for that peak period becomes LOS E, consistent with the GRTA Letter of Understanding.

#### 3.4 Study Network Determination

A general study area was determined based on a review of land uses and population densities in the area as well as a review of peak hour traffic counts and engineering judgement. The study area was agreed upon during methodology discussions with GRTA, ARC, GDOT, Gwinnett County, and City of Lawrenceville staff, and includes the following five (5) intersections described in **Table 4**.

The study network includes five (5) signalized intersection and four (4) stop controlled intersections as noted in **Table 4**. The study intersections are shown in **Figure 3**.

<b>Table 4 Intersection Control Summary</b>	
Intersection	Control
1. S Clayton Street at Luckie Street	Signal
2. Jackson Street at Luckie Street	Stop Control
3. Scenic Highway (SR 124) at Jackson Street/New Hope Road	Signal
4. Scenic Highway (SR 124) at Green Street/Driveway 1	Stop Control
5. Scenic Highway (SR 124) at Neal Boulevard/Driveway 2	Signal
6. Scenic Highway (SR 124) at S Clayton Street/Grayson Highway (SR 20)	Signal
7. S Clayton Street at Nash Street/Driveway 3	Signal
8. S Clayton Street at Church Street/Driveway 4	Stop Control
9. S Clayton Street at Branson Street/Driveway 5	Stop Control

Each of the above listed intersections was analyzed for the Existing 2017 conditions, the Projected 2023 No-Build conditions, and the Projected 2023 Build conditions. The Projected 2023 No-Build conditions represent the existing traffic volumes grown for six (6) years at 1.0 percent per year throughout the study network as well as the anticipated traffic generated by the two-way conversion of S Clayton Street (Project GW-342/PI #0008963, recently LET for construction) and the re-designation of SR 20 from S Clayton Street to Scenic Highway (SR 124), both of which the City of Lawrenceville expects to completed by 2023.







### 3.5 Existing Roadway Facilities

Roadway classification descriptions and estimated Average Daily Traffic (ADT) for the entire study area are provided in **Table 5**.

ADTs were estimated for Scenic Highway (SR 124), S Clayton Street, Jackson Street, Luckie Street, New Hope Road, and Grayson Highway (SR 20).

<b>Roadway</b>	<b>No. of Lanes</b>	<b>ADT</b>	<b>Posted Speed Limit (MPH)</b>	<b>GDOT Classification</b>
Scenic Highway (SR 124)	4	25,000	40	Principal Arterial
S Clayton Street	3	8,900	25	Principal Arterial
Jackson Street	4	22,000	35	Major Collector
Luckie Street	2	1,400	35	Local Road
New Hope Road	2	16,000	35	Major Collector
Grayson Highway (SR 20)	5	26,000	45	Minor Arterial

### 4.0 TRIP GENERATION

As stated previously, gross trips associated with the proposed development were estimated using the *Institute of Transportation Engineers' (ITE) Trip Generation Manual, Ninth Edition, 2012*, using equations where available. Trip generation for this proposed development is calculated based upon the following land uses: Single-Family Detached Housing (ITE #210), Apartment (ITE #220), Residential Condominium/Townhouse (ITE #230), Senior Adult Housing – Attached (ITE #252), and Shopping Center (ITE #820)

Mixed-use vehicle trip reductions were taken according to the *ITE Trip Generation Handbook, Third Edition, 2014*. Because the Third Edition does not include guidance on daily internal capture, the Second Edition, 2004 was used for daily. Total internal capture and vehicle trip reduction between the land uses is expected to be 3.0% daily, 1.4% for the AM peak hour and 5.1% for the PM peak hour as a result of the anticipated interaction between the residential and retail land uses within the proposed development.

Due to the South Lawn Mixed Use development being located in proximity to transit and pedestrian facilities, an alternative transportation (walking, bicycle, and transit) reduction was applied for the South Lawn Mixed Use project trips. An alternative transportation mode reduction of 5%, consistent with GRTA's Letter of Understanding, was applied to all land uses for this study.

In accordance with the GRTA LOU, pass-by reductions were taken according to the *ITE Trip Generation Handbook, Third Edition, 2014* for the retail land use.

The total (net) trips generated and analyzed in this report are listed in **Table 6**.

**Table 6**  
**Net Trip Generation**

	Daily Traffic			AM Peak Hour			PM Peak Hour		
	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit
<b>Gross Project Trips</b>	<b>4,251</b>	<b>2,125</b>	<b>2,126</b>	<b>295</b>	<b>68</b>	<b>227</b>	<b>391</b>	<b>243</b>	<b>148</b>
<i>Mixed-Use Reduction</i>	-128	-64	-64	-2	-1	-1	-10	-5	-5
<i>Alternative Mode Reduction</i>	-206	-103	-103	-15	-3	-11	-20	-12	-7
<i>Pass-By Reduction</i>	-186	-93	-93	-0	-0	-0	-16	-8	-8
<b>Net New Trips</b>	<b>3,731</b>	<b>1,865</b>	<b>1,866</b>	<b>278</b>	<b>64</b>	<b>215</b>	<b>345</b>	<b>218</b>	<b>128</b>

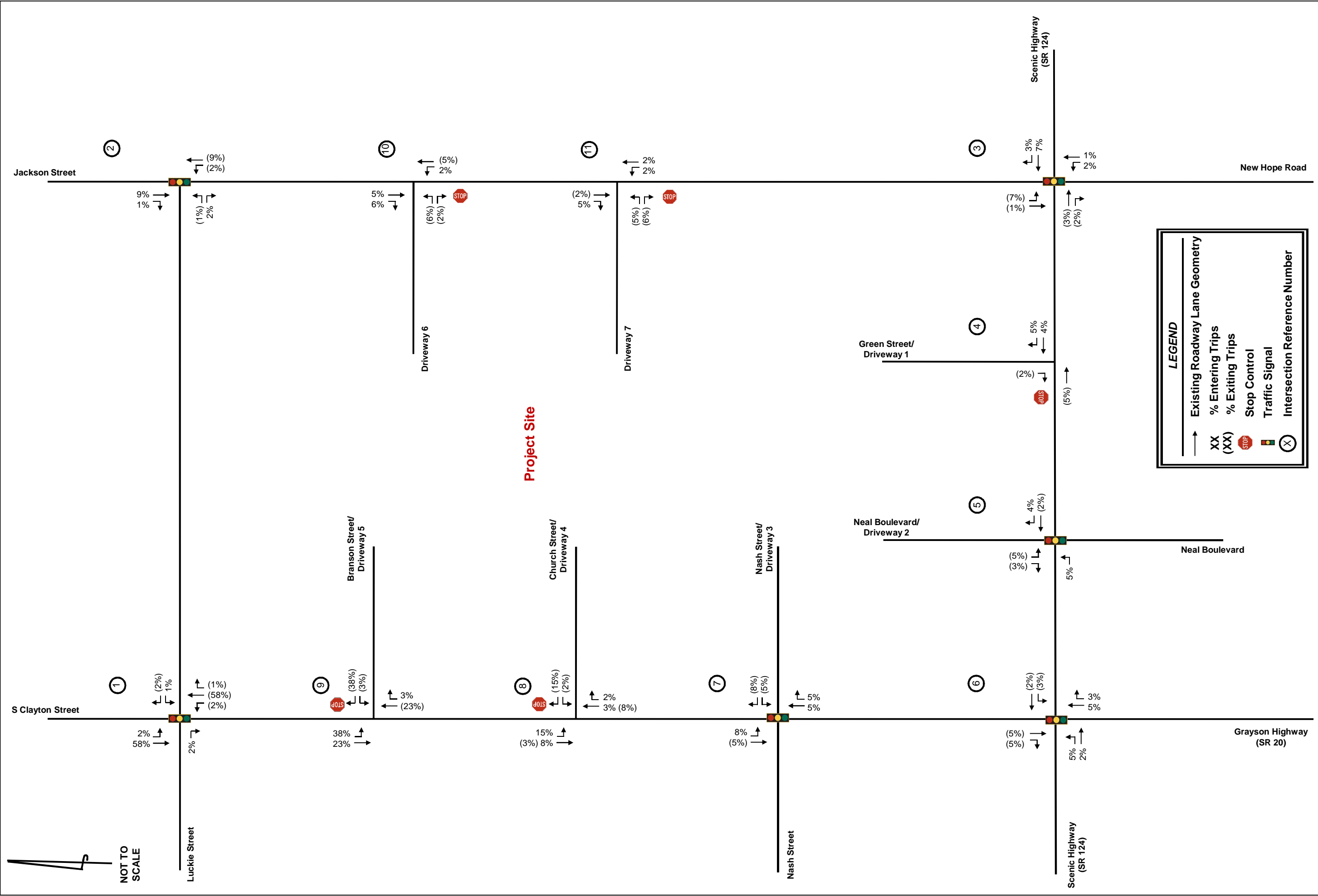
A more detailed trip generation analysis summary table is provided in Appendix D.

## 5.0 TRIP DISTRIBUTION AND ASSIGNMENT

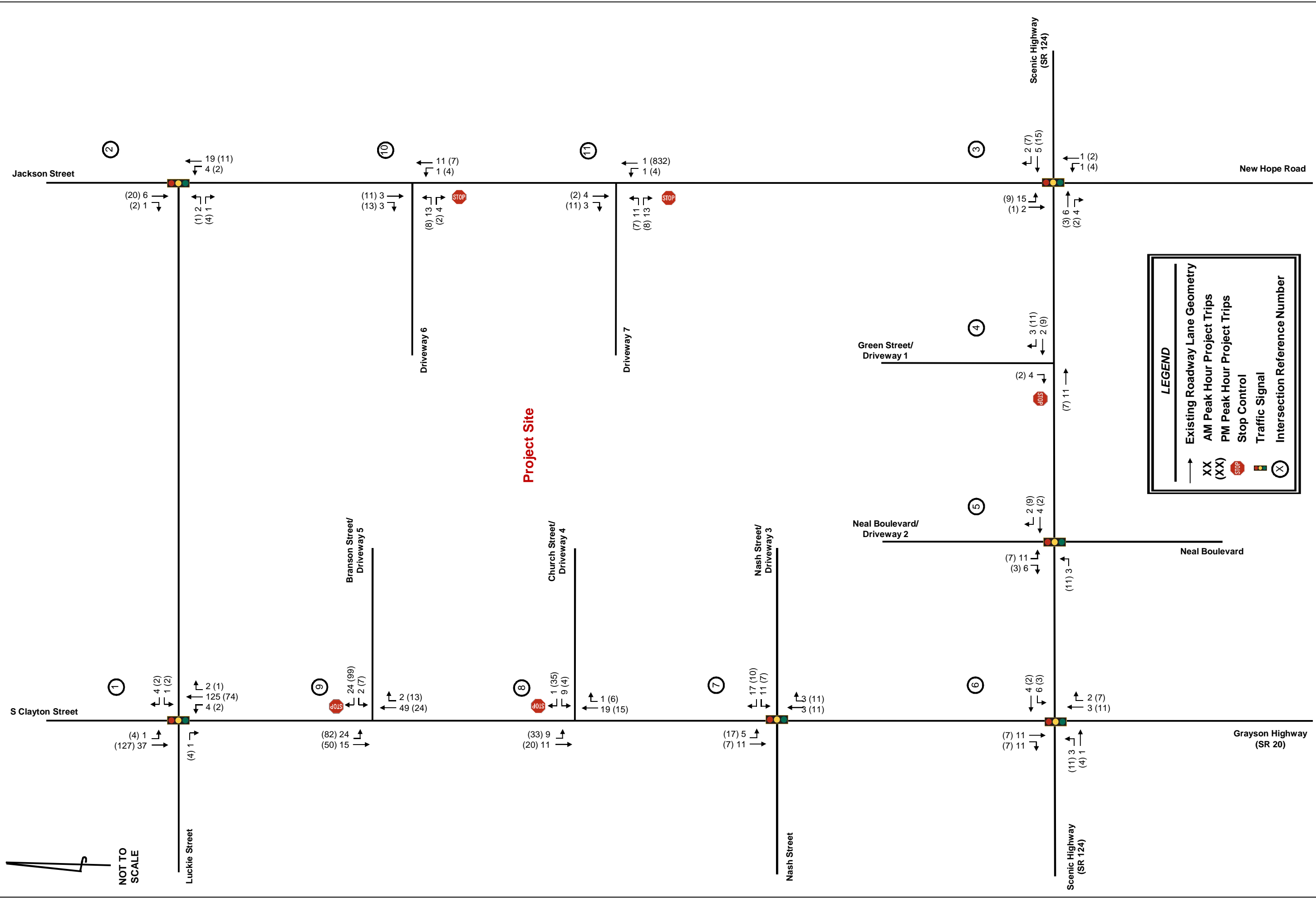
New trips were distributed onto the roadway network using the percentages developed as described in *Section 3.2* of this report, and as agreed to during methodology discussions with GRTA, ARC, GDOT, Gwinnett County, and City of Lawrenceville staff.

**Figure 4** displays the anticipated distribution and assignment of the project trips. These trip assignment percentages were applied to the net new trips expected to be generated by the development, and the volumes were assigned to the roadway network. The peak hour project trips by turning movement throughout the study network, anticipated to be generated by the proposed Lawrenceville South Lawn development, are shown in **Figure 5**.

Detailed intersection volume worksheets are provided in Appendix E.







## 6.0 TRAFFIC ANALYSIS

### 6.1 Existing 2017 Conditions

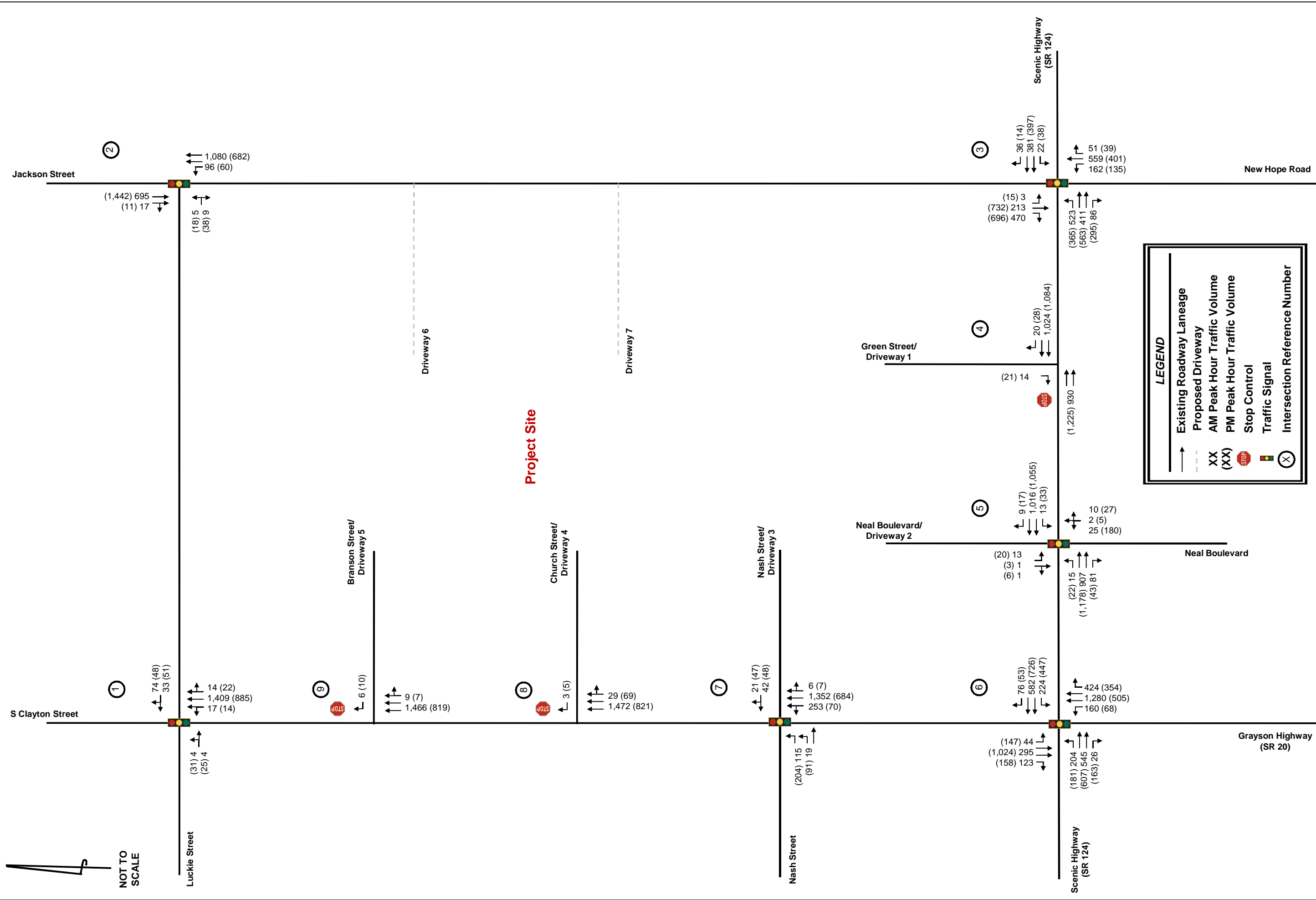
The observed existing peak hour traffic volumes were entered into *Synchro 9.0*, and capacity analyses were performed for the AM and PM peak hours. The existing peak hour traffic volumes are displayed in **Figure 6**, and the results of the capacity analyses for the Existing 2017 conditions are shown in **Table 7**. Detailed *Synchro* analysis reports are available upon request.

<b>Table 7</b> <b>Existing 2017 Intersection Levels-of-Service</b> <b>LOS (delay in seconds)</b>				
Intersection	LOS Std.	Existing 2017 Conditions		
		Control/ Movement	AM Peak Hour	PM Peak Hour
1. S Clayton Street (SR 20) at Luckie Street	D	Signal	B (14.0)	B (11.8)
2. Jackson Street at Luckie Street	D	EB NBL	C (22.3) A (9.7)	F (61.3) B (14.3)
3. Scenic Highway (SR 124) at Jackson Street/New Hope Road	D/E	Signal	D (43.0)	E (57.6)
4. Scenic Highway (SR 124) at Green Street/Driveway 1	D	SB	B (12.4)	B (12.9)
5. Scenic Highway (SR 124) at Neal Boulevard/Driveway 2	D	Signal	A (4.0)	B (13.8)
6. Scenic Highway (SR 124) at S Clayton Street/Grayson Highway (SR 20)	E	Signal	E (57.1)	E (66.8)
7. S Clayton Street (SR 20) at Nash Street/Driveway 3	D	Signal	B (19.1)	B (16.3)
8. S Clayton Street (SR 20) at Church Street/Driveway 4	D	WB	C (17.7)	B (12.9)
9. S Clayton Street (SR 20) at Branson Street/Driveway 5	D	WB	C (17.6)	B (12.6)

As shown in **Table 7**, most of the study intersections currently operate at or above their acceptable overall level-of-service standard during the AM and PM peak hours in the Existing 2017 conditions. At Scenic Highway (SR 124) at Jackson Street/New Hope Road (Int. #3), the intersection operates at LOS E during the PM peak hour and at Scenic Highway (SR 124) at S Clayton Street/Grayson Highway (SR 20) (Int. #6), the intersection operates at LOS E during the AM and PM peak hours. In accordance with the GRTA LOU, the level-of-service standard for those intersections during those peak hours are set to LOS E. Additionally, at Jackson Street at Luckie Street (Int. #2), the eastbound approach operates at LOS F during the PM peak hour. However, low levels-of-service for side street approaches are not uncommon, as vehicles may experience significant delays in turning onto a major roadway.

Therefore, no intersection improvements are recommended in the Existing 2017 conditions.

NOT TO SCALE



## 6.2 Projected 2023 No-Build Conditions

To account for growth in the vicinity of the proposed development, the existing traffic volumes grown for six (6) years at 1.0 percent per year throughout the study network. The Projected 2023 No-Build traffic volumes also include the anticipated traffic generated by the two-way conversion of S Clayton Street (Project GW-342/PI #0008963, recently LET for construction) and the re-designation of SR 20 from S Clayton Street to Scenic Highway (SR 124), both of which the City of Lawrenceville anticipates to be completed by 2023. These volumes were entered into *Synchro* 9.0, and capacity analyses were performed.

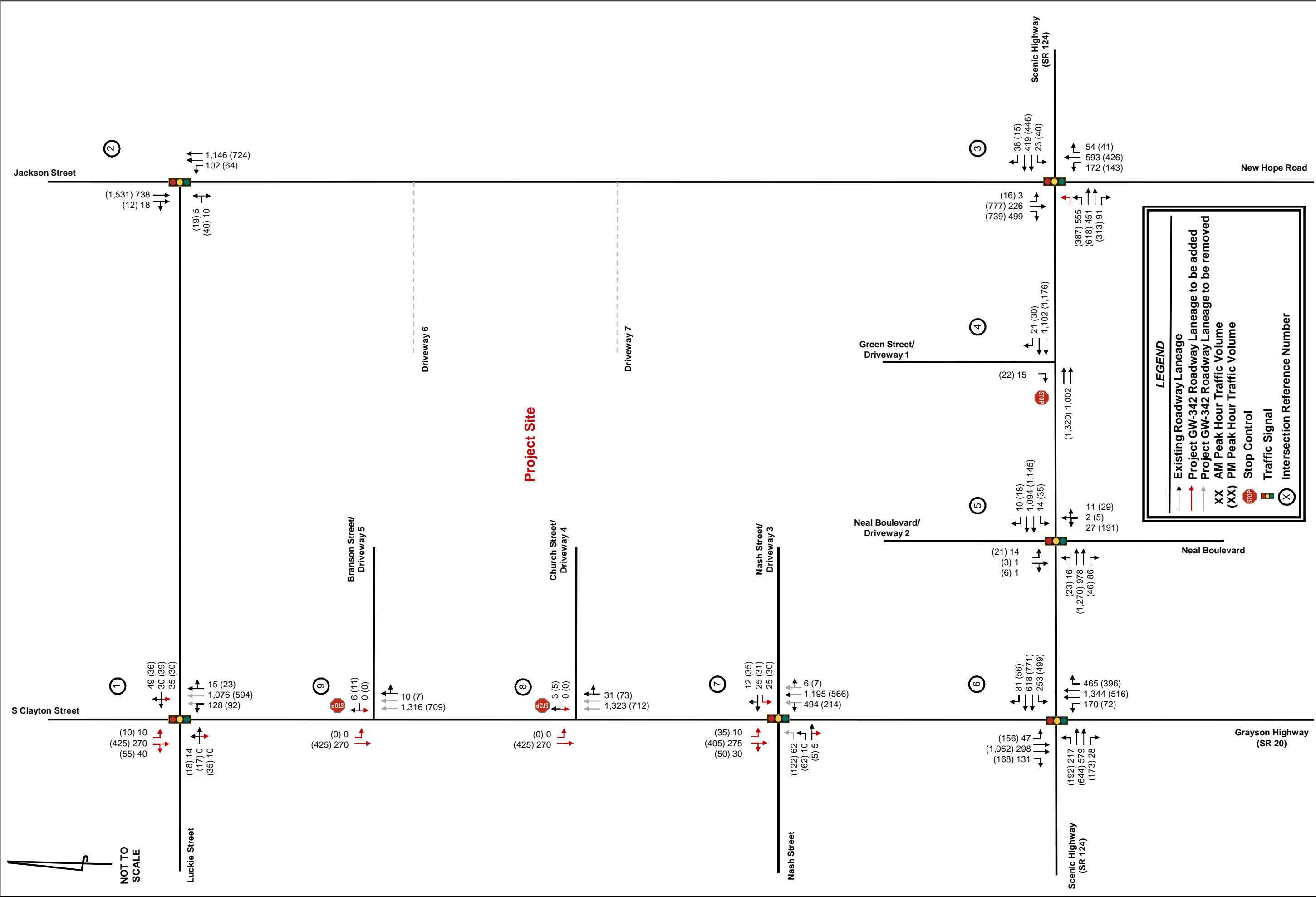
The intersection laneage and traffic volumes for the Projected 2023 No-Build conditions are shown in **Figure 7**. The results of the capacity analyses for the Projected 2023 No-Build conditions with existing laneage and control types are shown in **Table 8**. Detailed *Synchro* analysis reports are available upon request.

<b>Table 8</b> <b>Projected 2023 No-Build Intersection Levels-of-Service</b> <b>LOS (delay in seconds)</b>				
Intersection	LOS Std.	Projected 2023 No-Build Conditions		
		Control/Movement	AM Peak Hour	PM Peak Hour
1. S Clayton Street at Luckie Street	D	Signal	C (22.9)	B (13.0)
2. Jackson Street at Luckie Street	D	EB NBL	C (24.0) A (9.9)	F (86.3) C (15.3)
3. Scenic Highway (SR 124/SR 20) at Jackson Street/New Hope Road	D/E	Signal	D (40.8)	E (64.1)
4. Scenic Highway (SR 124/SR 20) at Green Street/Driveway 1	D	SB	B (12.9)	B (13.5)
5. Scenic Highway (SR 124/SR 20) at Neal Boulevard/Driveway 2	D	Signal	A (4.1)	B (14.2)
6. Scenic Highway (SR 124/SR 20) at S Clayton Street	E	Signal	E (64.1)	E (73.1)
7. S Clayton Street at Nash Street/Driveway 3	D	Signal	C (21.1)	B (13.4)
8. S Clayton Street at Church Street/Driveway 4	D	WB	D (26.6)	B (14.4)
9. S Clayton Street at Branson Street/Driveway 5	D	WB	D (26.5)	B (14.1)

As shown in **Table 8**, most of the study intersections currently operate at or above their acceptable overall level-of-service standard during the AM and PM peak hours in the Projected 2023 No-Build conditions. For the intersection of Jackson Street at Luckie Street (Int. #2), the eastbound approach is projected to operate at LOS F during the PM peak hour. However, low levels-of-service for side street approaches are not uncommon, as vehicles may experience significant delays in turning onto a major roadway.

*Based on the analysis of Projected 2023 No-Build conditions (includes background traffic growth and the two-way conversion of S Clayton Street (Project GW-342/PI #0008963, recently LET for construction) and the re-designation of SR 20 from S Clayton Street to Scenic Highway (SR 124), but excludes the South Lawn Mixed Use project traffic), there are no recommended improvements. However, based on the discussions in the Pre-Review Meeting, the following improvements were assumed to be made by the City of Lawrenceville and completed by 2023, and were therefore included in the Projected 2023 No-Build conditions.*

- Intersection #1: S Clayton Street at Luckie Street
  - Convert S Clayton Street to a two-way road (Project GW-342/PI #0008963), which includes the following improvements:
    - Restripe northbound approach to include one exclusive left-turn lane and one shared through/right-turn lane.
    - Restripe southbound approach to include one exclusive left-turn lane and one shared through/right-turn lane.
    - Restripe eastbound approach to include one shared left-turn/through/right-turn lane.
    - Restripe westbound approach to include one shared left-turn/through/right-turn lane.
- Intersection #3: Scenic Highway at Jackson Street
  - Convert S Clayton Street to a two-way road (Project GW-342/PI #0008963), which includes the following improvements:
    - Construct a second exclusive eastbound left-turn lane.
- Intersection #7: S Clayton Street at Nash Street/Driveway 3
  - Convert S Clayton Street to a two-way road (Project GW-342/PI #0008963), which includes the following improvements:
    - Restripe northbound approach to include one exclusive left-turn lane, one exclusive through lane, and one exclusive right-turn lane.
    - Restripe southbound approach to include one exclusive left-turn lane and one shared through/right-turn lane.
    - Restripe eastbound approach to include one exclusive left-turn lane and one shared through/right-turn lane.
    - Restripe westbound approach to include one exclusive left-turn lane and one shared through/right-turn lane.
- Intersection #8: S Clayton Street at Church Street/Driveway 4
  - Convert S Clayton Street to a two-way road (Project GW-342/PI #0008963), which includes the following improvements:
    - Restripe northbound approach to include one shared through/right-turn lane.
    - Restripe southbound approach to include one exclusive left-turn lane and one exclusive through lane.
    - Restripe westbound approach to include one shared left-turn/right-turn lane.
- Intersection #9: S Clayton Street at Branson Street/Driveway 5
  - Convert S Clayton Street to a two-way road (Project GW-342/PI #0008963), which includes the following improvements:
    - Restripe northbound approach to include one shared through/right-turn lane.
    - Restripe southbound approach to include one exclusive left-turn lane and one exclusive through lane.
    - Restripe westbound approach to include one shared left-turn/right-turn lane.



### 6.3 Projected 2023 Build Conditions

The traffic associated with the proposed South Lawn Mixed Use development was added to the Projected 2023 No-Build volumes. These volumes were then entered into *Synchro* 9.0, and capacity analyses were performed. The Projected 2023 Build conditions were analyzed using the proposed laneage and intersection control types shown in the DRI site plan.

The intersection laneage and traffic volumes used for the Projected 2023 Build conditions are shown in **Figure 8**. The results of the capacity analyses for the Projected 2023 Build conditions with proposed laneage and control types are shown in **Table 9**. Detailed *Synchro* analysis reports are available upon request.

<b>Table 9</b> <b>Projected 2023 Build Intersection Levels-of-Service</b> <b>LOS (delay in seconds)</b>				
Intersection	LOS Std.	Projected 2023 Build Conditions		
		Control/Movement	AM Peak Hour	PM Peak Hour
1. S Clayton Street at Luckie Street	D	Signal	D (38.5)	B (13.1)
2. Jackson Street at Luckie Street	D	EB NBL	D (27.7) B (10.0)	F (101.7) C (15.6)
3. Scenic Highway (SR 124/SR 20) at Jackson Street/New Hope Road	D/E	Signal	D (41.2)	E (64.4)
4. Scenic Highway (SR 124/SR 20) at Green Street/Driveway 1	D	SB	B (13.0)	B (13.6)
5. Scenic Highway (SR 124/SR 20) at Neal Boulevard/Driveway 2	D	Signal	A (4.3)	B (16.7)
6. Scenic Highway (SR 124/SR 20) at S Clayton Street	E	Signal	E (64.4)	E (74.2)
7. S Clayton Street at Nash Street/Driveway 3	D	Signal	C (21.4)	B (13.6)
8. S Clayton Street at Church Street/Driveway 4	D	WB SBL	D (28.6) B (12.8)	C (16.2) A (9.8)
9. S Clayton Street at Branson Street/Driveway 5	D	WB SBL	D (33.0) B (13.2)	C (18.6) A (9.9)
10. Jackson Street at Driveway 6	D	EB NBL	C (17.6) A (9.4)	E (36.0) B (14.7)
11. Jackson Street at Driveway 7	D	EB NBL	C (15.4) A (9.4)	D (28.3) B (14.6)

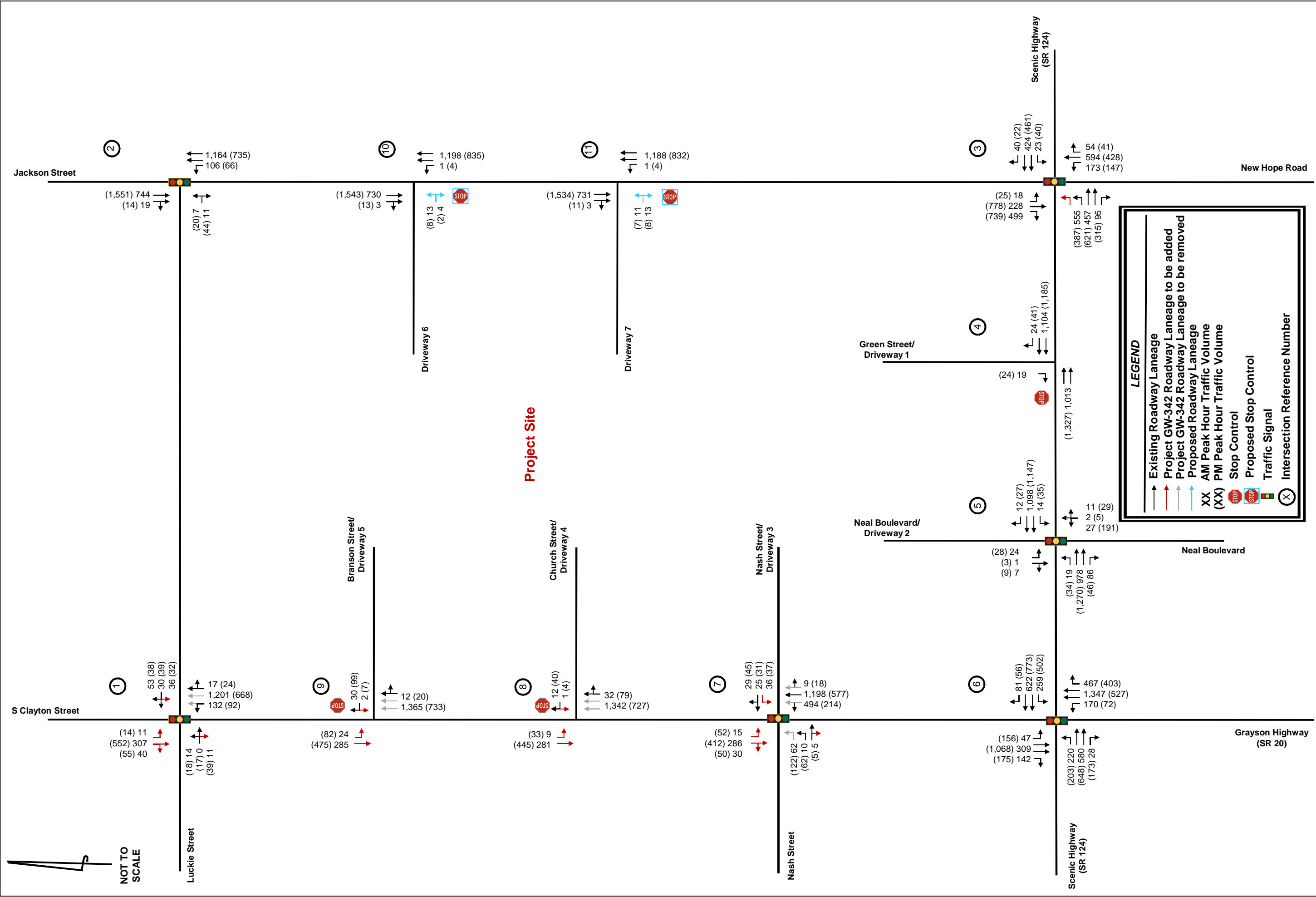
As shown in **Table 9**, most of the study intersections currently operate at or above their acceptable overall level-of-service standard during the AM and PM peak hours in the Projected 2023 Build conditions. For the intersections at Jackson Street at Luckie Street (Int. #2) and Jackson Street at Driveway 6 (Int. #10), the eastbound approach is projected to operate at LOS F and LOS E during the PM peak hour. However, low levels-of-service for side street approaches are not uncommon, as vehicles may experience significant delays in turning onto a major roadway.



*Based on the analysis of Projected 2023 Build conditions (includes background traffic growth and the two-way conversion of S Clayton Street (Project GW-342/PI #0008963, recently LET for construction), the re-designation of SR 20 from S Clayton Street to Scenic Highway (SR 124), and includes the projected South Lawn Mixed Use traffic), the following site access improvements are recommended:*

- Intersection #10: Jackson Street at Driveway 6
  - Relocate existing driveway located along Jackson Street approximately 430 feet south of the intersection of Jackson Street and Luckie Street approximately 200 feet to the south.
  - Removed existing gated access.
  - On the site, construct one (1) shared eastbound left-turn/right-turn lane.
  - On the site, construct one (1) westbound receiving lane.
  - Install stop-control on eastbound leg.
- Intersection #11: Jackson Street at Driveway 7
  - On the site, construct one (1) shared eastbound left-turn/right-turn lane.
  - On the site, construct one (1) westbound receiving lane.
  - Install stop-control on eastbound leg.





## 7.0 INGRESS/EGRESS ANALYSIS

Vehicular access to the Lawrenceville South Lawn development is proposed at seven (7) locations. Site driveway locations are discussed in Section 1.3. Capacity analyses were performed for the proposed site driveway intersections (Int. #4, #5, #7, #8, #9, #10, #11) using *Synchro 9.0*. The results of the capacity analyses for this intersection (LOS, delay, and recommended laneage) are reported in Section 6.3 of this report. Based on the Projected 2023 Build conditions, the proposed site driveway intersections are anticipated to operate at an acceptably, assuming implementation of the recommended laneage, signalization, and roadway improvements listed in this report.

## 8.0 IDENTIFICATION OF PROGRAMMED PROJECTS

According to ARC's Transportation Improvement Program, Regional Transportation Improvement Program, GDOT's Construction Work Program, and the GA STIP the following projects are programmed or planned to be completed by the respective years: The identified projects are listed in **Table 10** below.

Table 10 Programmed Projects			
#	Completion Date	Project ID	Description
1	2020	GW-342	Downtown Lawrenceville Pedestrian Improvements and One-Way Pair Conversion of S Clayton Street (SR 20) and Perry Street.
2	2020	GW-407	SR 20 Northbound Improvements from Reynolds Road to SR 124
3	2030	GW-364	SR 20 (Buford Drive) Widening from SR 124 (Braselton Highway) to Hurricane Shoals Road

Fact sheets for projects 1-3 are provided in Appendix F.

## 9.0 INTERNAL CIRCULATION ANALYSIS

The proposed site driveways will provide access to buildings on the site. A detailed copy of the proposed site plan is provided in Appendix C and a full-sized site plan is included in the report submittal.

Mixed-use vehicle trip reductions were taken according to the *ITE Trip Generation Handbook, Third Edition, 2014*. Because the Third Edition does not include guidance on daily internal capture, the Second Edition, 2004 was used for daily. Total internal capture and vehicle trip reduction between the land uses is expected to be 3.0% daily, 1.4% for the AM peak hour and 5.1% for the PM peak hour as a result of the anticipated interaction between the residential and retail land uses within the proposed development.

## 10.0 COMPLIANCE WITH COMPREHENSIVE PLAN ANALYSIS

The project site currently consists of several commercial buildings, municipal buildings, industrial buildings, office buildings, residential buildings, one school, and associated parking. All current buildings will be demolished. The project site is currently zoned BG (Business-General), RS (Residential-Single), O-I (Office-Institutional), and RM (Residential-Multi) according to the *City of Lawrenceville Zoning Ordinance Map*.

The project site is located within the most recent Downtown Lawrenceville Master Plan: 5 Year LCI Update (2011), and is consistent with the recommendations listed in the LCI. The Downtown Lawrenceville LCI focuses on the development of mixed-use communities, providing a mix of transportation options, improving connections between the square and nearby areas, and expanding open space options. The South Lawn Mixed Use development aligns with the goals and visions of the LCI study by creating a vibrant community adjacent to downtown Lawrenceville, with a town green, a mix of residential units, and supporting retail establishments. Additionally, the proposed development will improve the existing streetscape of the project site. The project site is located in a Established Suburbs area type according to *Plan 2040 Unified Growth Policy Map*. The Lawrenceville South Lawn development plan is consistent with the area type and future land use identified. The land use maps are provided in Appendix B.

## **Appendix A**

### **Site Photo Log**

Scenic Highway (SR 124) at Green Street/Driveway 1

Photo No. 1



Comments: Driveway 1 looking east

Photo No. 2



Comments: Driveway 1 looking west



Scenic Highway (SR 124) at Neal Boulevard/Driveway 2

Photo No. 1



Comments: Driveway 2 looking east

Photo No. 2



Comments: Driveway 2 looking west

S Clayton Street at Nash Street/Driveway 3

Photo No. 1



Comments: Driveway 3 looking south

Photo No. 2



Comments: Driveway 3 looking north



S Clayton Street at Church Street/Driveway 4

Photo No. 1



Comments: Driveway 4 looking south

Photo No. 2



Comments: Driveway 4 looking north



S Clayton Street at Branson Street/Driveway 5

Photo No. 1



Comments: Driveway 5 looking south

Photo No. 2



Comments: Driveway 5 looking north



Jackson Street at Driveway 6

Photo No. 1



Comments: Driveway 6 looking north

Photo No. 2



Comments: Driveway 6 looking south



Jackson Street at Driveway 7

Photo No. 1



Comments: Driveway 7 looking north

Photo No. 2

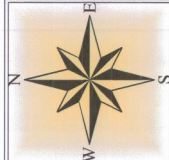


Comments: Driveway 7 looking south

## **Appendix B**

### **Land Use and Zoning Maps**





**Legend**

City Limits

**Tax Parcels**

**ZONING**

AR	BG	BGC	BN	HM	HSB	LM	OI	ON	RM-12	RM-4-C	RM-M	RMHR	RS150	RS180	RS60
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1 inch = 1,250 feet



Official Zoning Map  
Of The City of Lawrenceville, Georgia

This is to certify that this official zoning map  
supersedes and replaces the official zoning map  
adopted on March 7, 2016, as amended,  
as part of the Lawrenceville Zoning Ordinance.  
IT IS SO ORDAINED, this 4. day of April, 2016

*Judy Johnson*  
Mayor Judy Johnson  
*Debra Sime*  
Attest: Debra Sime  
City Clerk

## **Appendix C**

### **Site Plan**



PROJECT					
SOUTH LAWN MIXED USE 50 S CLAYTON ST., LAWRENCEVILLE, GEORGIA 30046 LAND LOT 146 & 147, 5TH DISTRICT					
GSWCC CERT. (LEVEL II)		0000021723			
DRAWN BY		JTR			
DESIGNED BY		BRM			
REVIEWED BY		JRH			
DATE		10/10/2017			
PROJECT NO.		019308024			
TITLE		DRI SITE PLAN			
SHEET NUMBER					
DRI #2727					



## **Appendix D**

### **Trip Generation Analysis**



Trip Generation Analysis (9th Ed. with <i>2nd Edition Handbook</i> Daily IC & <i>3rd Edition</i> AM/PM IC) Lawrenceville South Lawn City of Lawrenceville, Georgia									
Land Use	Intensity	Alternate Independent Variables Available	Daily Trips	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
<b>Proposed Site Traffic</b>									
210 Single-Family Detached Housing	23 d.u.	persons, vehicles, acres	269	26	7	19	28	18	10
220 Apartment	330 d.u.	persons, vehicles	2,123	165	33	132	199	129	70
230 Residential Condominium/Townhouse	147 d.u.	persons, vehicles	899	70	12	58	82	55	27
252 Senior Adult Housing - Attached	100 occ. d.u.		319	20	7	13	26	14	12
820 Shopping Center	15,000 s.f. gross leasable area		641	14	9	5	56	27	29
<b>Gross Trips</b>			<b>4,251</b>	<b>295</b>	<b>68</b>	<b>227</b>	<b>391</b>	<b>243</b>	<b>148</b>
Residential Trips			3,610	281	59	222	335	216	119
<i>Mixed-Use Reductions</i>			-64	-1	0	-1	-5	-4	-1
<i>Alternative Mode Reductions</i>			-177	-14	-3	-11	-17	-11	-6
Adjusted Residential Trips			3,369	266	56	210	313	201	112
Hotel Trips			0	0	0	0	0	0	0
<i>Mixed-Use Reductions</i>			0	0	0	0	0	0	0
<i>Alternative Mode Reductions</i>			0	0	0	0	0	0	0
Adjusted Hotel Trips			0	0	0	0	0	0	0
Office Trips			0	0	0	0	0	0	0
<i>Mixed-Use Reductions</i>			0	0	0	0	0	0	0
<i>Alternative Mode Reductions</i>			0	0	0	0	0	0	0
Adjusted Office Trips			0	0	0	0	0	0	0
Retail Trips			641	14	9	5	56	27	29
<i>Mixed-Use Reductions</i>			-64	-1	-1	0	-5	-1	-4
<i>Alternative Mode Reductions</i>			-29	-1	0	0	-3	-1	-1
<i>Pass By Reductions (Based on ITE Rates)</i>			-186	0	0	0	-16	-8	-8
Adjusted Retail Trips			362	12	8	5	32	17	16
Restaurant Trips			0	0	0	0	0	0	0
<i>Mixed-Use Reductions</i>			0	0	0	0	0	0	0
<i>Alternative Mode Reductions</i>			0	0	0	0	0	0	0
<i>Pass By Reductions (Based on ITE Rates)</i>			0	0	0	0	0	0	0
Adjusted Restaurant Trips			0	0	0	0	0	0	0
Other Non-Residential Trips			0	0	0	0	0	0	0
<i>Mixed-Use Reductions</i>									
<i>Alternative Mode Reductions</i>			0	0	0	0	0	0	0
Adjusted Other Non-Residential Trips			0	0	0	0	0	0	0
<i>Mixed-Use Reductions - TOTAL</i>			-128	-2	-1	-1	-10	-5	-5
<i>Alternative Mode Reductions - TOTAL</i>			-206	-15	-3	-11	-20	-12	-7
<i>Pass-By Reductions - TOTAL</i>			-186	0	0	0	-16	-8	-8
<b>New Trips</b>			<b>3,731</b>	<b>278</b>	<b>64</b>	<b>215</b>	<b>345</b>	<b>218</b>	<b>128</b>
<b>Driveway Volumes</b>			<b>3,917</b>	<b>278</b>	<b>64</b>	<b>215</b>	<b>361</b>	<b>226</b>	<b>136</b>

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## **Appendix E**

### **Intersection Volume Sheets**

# **INTERSECTION VOLUME DEVELOPMENT**

## **S Clayton Street (SR 20) at Luckie Street AM PEAK HOUR**

Description	S Clayton Street (SR 20)			Southbound			Luckie Street Eastbound			Luckie Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	17	1,409	14				4	4	0	0	33	74
Pedestrians		0			0			0			1	
Conflicting Pedestrians	0		1	1		0	0		0	0		0
Heavy Vehicles	1	7	0				0	0	0	0	0	0
Heavy Vehicle %	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor		0.94			0.94			0.94			0.94	
Adjustment												
Adjusted 2017 Volumes	17	1409	14	0	0	0	4	4	0	0	33	74
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
Two-Way Conversion Adjustment	110	-410		10	275	40	10	-4	10	35	-5	-30
Redesignation of SR 20 Adjustment		-10			-5							
2023 Background Traffic	128	1,076	15	10	270	40	14	0	10	35	30	49
<b>Project Trips</b>												
Trip Distribution IN				2%	58%				2%	1%		
Trip Distribution OUT	2%	58%	1%									2%
Residential Trips	4	122	2	1	32	0	0	0	1	1	0	4
Trip Distribution IN				2%	58%				2%	1%		
Trip Distribution OUT	2%	58%	1%									2%
Hotel Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN				2%	58%				2%	1%		
Trip Distribution OUT	2%	58%	1%									2%
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN				2%	58%				2%	1%		
Trip Distribution OUT	2%	58%	1%									2%
Retail Trips	0	3	0	0	5	0	0	0	0	0	0	0
Trip Distribution IN				2%	58%				2%	1%		
Trip Distribution OUT	2%	58%	1%									2%
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN				2%	58%				2%	1%		
Trip Distribution OUT	2%	58%	1%									2%
Other Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	4	125	2	1	37	0	0	0	1	1	0	4
<b>2023 Buildout Total</b>	<b>132</b>	<b>1,201</b>	<b>17</b>	<b>11</b>	<b>307</b>	<b>40</b>	<b>14</b>	<b>0</b>	<b>11</b>	<b>36</b>	<b>30</b>	<b>53</b>

## **PM PEAK HOUR**

Description	S Clayton Street (SR 20)			Southbound			Luckie Street Eastbound			Luckie Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	14	885	22				31	25	0	0	51	48
Pedestrians		4			2			1			3	
Conflicting Pedestrians	1		3	3		1	2		4	4		2
Heavy Vehicles	0	3	0				0	0	0	0	0	0
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor		0.91			0.91			0.91			0.91	
Adjustment												
Adjusted 2017 Volumes	14	885	22	0	0	0	31	25	0	0	51	48
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
Two-Way Conversion Adjustment	75	-335		10	435	55	-15	-10	35	30	-15	-15
Redesignation of SR 20 Adjustment		-10			-10							
2023 Background Traffic	90	594	23	10	425	55	18	17	35	30	39	36
<b>Project Trips</b>												
Trip Distribution IN				2%	58%				2%	1%		
Trip Distribution OUT	2%	58%	1%									2%
Residential Trips	2	65	1	4	117	0	0	0	4	2	0	2
Trip Distribution IN				2%	58%				2%	1%		
Trip Distribution OUT	2%	58%	1%									2%
Hotel Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN				2%	58%				2%	1%		
Trip Distribution OUT	2%	58%	1%									2%
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN				2%	58%				2%	1%		
Trip Distribution OUT	2%	58%	1%									2%
Retail Trips	0	9	0	0	10	0	0	0	0	0	0	0
Trip Distribution IN				2%	58%				2%	1%		
Trip Distribution OUT	2%	58%	1%									2%
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN				2%	58%				2%	1%		
Trip Distribution OUT	2%	58%	1%									2%
Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	2	74	1	4	127	0	0	0	4	2	0	2
<b>2023 Buildout Total</b>	<b>92</b>	<b>668</b>	<b>24</b>	<b>14</b>	<b>552</b>	<b>55</b>	<b>18</b>	<b>17</b>	<b>39</b>	<b>32</b>	<b>39</b>	<b>38</b>

# INTERSECTION VOLUME DEVELOPMENT

## Jackson Street at Luckie Street AM PEAK HOUR

Description	Jackson Street Northbound			Jackson Street Southbound			Luckie Street Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	96	1,080	0	0	695	17	5	0	9			
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0
Heavy Vehicles	0	2	0	0	9	0	0	0	0			
Heavy Vehicle %	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.97			0.97			0.97					
Adjustment												
Adjusted 2017 Volumes	96	1080	0	0	695	17	5	0	9	0	0	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
Two-Way Conversion Adjustment												
Redesignation of SR 20 Adjustment												
2023 Background Traffic	102	1,146	0	0	738	18	5	0	10	0	0	0
<b>Project Trips</b>												
Trip Distribution IN				9%			1%			2%		
Trip Distribution OUT	2%	9%					1%					
Residential Trips	4	19	0	0	5	1	2	0	1	0	0	0
Trip Distribution IN				9%			1%			2%		
Trip Distribution OUT	2%	9%					1%					
Hotel Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN				9%			1%			2%		
Trip Distribution OUT	2%	9%					1%					
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN				9%			1%			2%		
Trip Distribution OUT	2%	9%					1%					
Retail Trips	0	0	0	0	1	0	0	0	0	0	0	0
Trip Distribution IN				9%			1%			2%		
Trip Distribution OUT	2%	9%					1%					
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN				9%			1%			2%		
Trip Distribution OUT	2%	9%					1%					
Other Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	4	19	0	0	6	1	2	0	1	0	0	0
<b>2023 Buildout Total</b>	<b>106</b>	<b>1,165</b>	<b>0</b>	<b>0</b>	<b>744</b>	<b>19</b>	<b>7</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>0</b>

## PM PEAK HOUR

Description	Jackson Street Northbound			Jackson Street Southbound			Luckie Street Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	60	682	0	0	1,442	11	18	0	38			
Pedestrians	0			0			1			0		
Conflicting Pedestrians	1	0	0	0	1	0	0	0	0	0	0	0
Heavy Vehicles	0	2	0	0	8	0	0	0	0			
Heavy Vehicle %	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.98			0.98			0.98					
Adjustment												
Adjusted 2017 Volumes	60	682	0	0	1442	11	18	0	38	0	0	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
Two-Way Conversion Adjustment												
Redesignation of SR 20 Adjustment												
2023 Background Traffic	64	724	0	0	1,531	12	19	0	40	0	0	0
<b>Project Trips</b>												
Trip Distribution IN				9%			1%			2%		
Trip Distribution OUT	2%	9%					1%					
Residential Trips	2	10	0	0	18	2	1	0	4	0	0	0
Trip Distribution IN				9%			1%			2%		
Trip Distribution OUT	2%	9%					1%					
Hotel Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN				9%			1%			2%		
Trip Distribution OUT	2%	9%					1%					
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN				9%			1%			2%		
Trip Distribution OUT	2%	9%					1%					
Retail Trips	0	1	0	0	2	0	0	0	0	0	0	0
Trip Distribution IN				9%			1%			2%		
Trip Distribution OUT	2%	9%					1%					
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN				9%			1%			2%		
Trip Distribution OUT	2%	9%					1%					
Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	2	11	0	0	20	2	1	0	4	0	0	0
<b>2023 Buildout Total</b>	<b>66</b>	<b>735</b>	<b>0</b>	<b>0</b>	<b>1,551</b>	<b>14</b>	<b>20</b>	<b>0</b>	<b>44</b>	<b>0</b>	<b>0</b>	<b>0</b>



# INTERSECTION VOLUME DEVELOPMENT

## Scenic Highway (SR 124) at Jackson Street/New Hope Road AM PEAK HOUR

Description	New Hope Road			Jackson Street			Scenic Highway (SR 124)			Scenic Highway (SR 124)		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	162	559	51	3	213	470	523	411	86	22	381	36
Pedestrians	0			1			0			2		
Conflicting Pedestrians	0	2	2	2		0	1		0	0		1
Heavy Vehicles	0	2	4	0	6	1	4	24	0	1	29	0
Heavy Vehicle %	0%	0%	8%	0%	3%	0%	1%	6%	0%	5%	8%	0%
Peak Hour Factor	0.98			0.98			0.98			0.98		
Adjustment												
Adjusted 2017 Volumes	162	559	51	3	213	470	523	411	86	22	381	36
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
Two-Way Conversion Adjustment												
Redesignation of SR 20 Adjustment								15			15	
2023 Background Traffic	172	593	54	3	226	499	555	451	91	23	419	38
<b>Project Trips</b>												
Trip Distribution IN	2%	1%									7%	3%
Trip Distribution OUT				7%	1%			3%	2%			
Residential Trips	1	1	0	15	2	0	0	6	4	0	4	2
Trip Distribution IN	2%	1%									7%	3%
Trip Distribution OUT				7%	1%			3%	2%			
Hotel Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN	2%	1%									7%	3%
Trip Distribution OUT				7%	1%			3%	2%			
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN	2%	1%									7%	3%
Trip Distribution OUT				7%	1%			3%	2%			
Retail Trips	0	0	0	0	0	0	0	0	0	0	1	0
Trip Distribution IN	2%	1%									7%	3%
Trip Distribution OUT				7%	1%			3%	2%			
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN	2%	1%									7%	3%
Trip Distribution OUT				7%	1%			3%	2%			
Other Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	1	1	0	15	2	0	0	6	4	0	5	2
<b>2023 Buildout Total</b>	<b>173</b>	<b>594</b>	<b>54</b>	<b>18</b>	<b>228</b>	<b>499</b>	<b>555</b>	<b>457</b>	<b>95</b>	<b>23</b>	<b>424</b>	<b>40</b>

## PM PEAK HOUR

Description	New Hope Road			Jackson Street			Scenic Highway (SR 124)			Scenic Highway (SR 124)		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	135	401	39	15	732	696	365	563	295	38	397	14
Pedestrians	2			0			0			0		
Conflicting Pedestrians	0		0	0		0	0		2	2		0
Heavy Vehicles	0	1	1	0	1	8	1	15	0	0	7	0
Heavy Vehicle %	0%	0%	3%	0%	0%	1%	0%	3%	0%	0%	2%	0%
Peak Hour Factor	0.97			0.97			0.97			0.97		
Adjustment												
Adjusted 2017 Volumes	135	401	39	15	732	696	365	563	295	38	397	14
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
Two-Way Conversion Adjustment												
Redesignation of SR 20 Adjustment								20			25	
2023 Background Traffic	143	426	41	16	777	739	387	618	313	40	446	15
<b>Project Trips</b>												
Trip Distribution IN	2%	1%									7%	3%
Trip Distribution OUT				7%	1%			3%	2%			
Residential Trips	4	2	0	8	1	0	0	3	2	0	14	6
Trip Distribution IN	2%	1%									7%	3%
Trip Distribution OUT				7%	1%			3%	2%			
Hotel Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN	2%	1%									7%	3%
Trip Distribution OUT				7%	1%			3%	2%			
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN	2%	1%									7%	3%
Trip Distribution OUT				7%	1%			3%	2%			
Retail Trips	0	0	0	1	0	0	0	0	0	0	1	1
Trip Distribution IN	2%	1%									7%	3%
Trip Distribution OUT				7%	1%			3%	2%			
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN	2%	1%									7%	3%
Trip Distribution OUT				7%	1%			3%	2%			
Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	4	2	0	9	1	0	0	3	2	0	15	7
<b>2023 Buildout Total</b>	<b>147</b>	<b>428</b>	<b>41</b>	<b>25</b>	<b>778</b>	<b>739</b>	<b>387</b>	<b>621</b>	<b>315</b>	<b>40</b>	<b>461</b>	<b>22</b>

# **INTERSECTION VOLUME DEVELOPMENT**

## **Scenic Highway (SR 124) at Green Street/Driveway 1 AM PEAK HOUR**

Description	Northbound			Green Street/Driveway 1			Scenic Highway (SR 124)			Scenic Highway (SR 124)		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes				0	0	14	0	930	0	0	1,024	20
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles				0	0	0	0	0	0	0	0	0
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.98			0.98			0.98			0.98		
Adjustment												
Adjusted 2017 Volumes	0	0	0	0	0	14	0	930	0	0	1024	20
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
Two-Way Conversion Adjustment												
Redesignation of SR 20 Adjustment								15			15	
2023 Background Traffic	0	0	0	0	0	15	0	1,002	0	0	1,102	21
Project Trips												
Trip Distribution IN											4%	5%
Trip Distribution OUT						2%		5%				
Residential Trips	0	0	0	0	0	4	0	11	0	0	2	3
Trip Distribution IN											4%	5%
Trip Distribution OUT						2%		5%				
Hotel Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN											4%	5%
Trip Distribution OUT						2%		5%				
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN											4%	5%
Trip Distribution OUT						2%		5%				
Retail Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN											4%	5%
Trip Distribution OUT						2%		5%				
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN											4%	5%
Trip Distribution OUT						2%		5%				
Other Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	0	0	4	0	11	0	0	2	3
2023 Buildout Total	0	0	0	0	0	19	0	1,013	0	0	1,104	24

## **PM PEAK HOUR**

Description	Northbound			Green Street/Driveway 1			Scenic Highway (SR 124)			Scenic Highway (SR 124)		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes				0	0	21	0	1,225	0	0	1,084	28
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor	0.98			0.98			0.98			0.98		
Adjustment												
Adjusted 2017 Volumes	0	0	0	0	0	21	0	1225	0	0	1084	28
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
Two-Way Conversion Adjustment												
Redesignation of SR 20 Adjustment								20			25	
2023 Background Traffic	0	0	0	0	0	22	0	1,320	0	0	1,176	30
Project Trips												
Trip Distribution IN											4%	5%
Trip Distribution OUT						2%		5%				
Residential Trips	0	0	0	0	0	2	0	6	0	0	8	10
Trip Distribution IN											4%	5%
Trip Distribution OUT						2%		5%				
Hotel Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN											4%	5%
Trip Distribution OUT						2%		5%				
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN											4%	5%
Trip Distribution OUT						2%		5%				
Retail Trips	0	0	0	0	0	0	0	1	0	0	1	1
Trip Distribution IN											4%	5%
Trip Distribution OUT						2%		5%				
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN											4%	5%
Trip Distribution OUT						2%		5%				
Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	0	0	2	0	7	0	0	9	11
2023 Buildout Total	0	0	0	0	0	24	0	1,327	0	0	1,185	41

# INTERSECTION VOLUME DEVELOPMENT

Scenic Highway (SR 124) at Neal Boulevard/Driveway 2  
AM PEAK HOUR

Description	Neal Boulevard Northbound			Neal Boulevard/Driveway 2 Southbound			Scenic Highway (SR 124) Eastbound			Scenic Highway (SR 124) Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	25	2	10	13	1	1	15	907	81	13	1,016	9
Pedestrians	0			1			3			1		
Conflicting Pedestrians	3	0	1	1	0	3	1	0	0	0	0	1
Heavy Vehicles	0	0	0	1	0	0	0	23	0	0	31	0
Heavy Vehicle %	0%	0%	0%	8%	0%	0%	0%	3%	0%	0%	3%	0%
Peak Hour Factor	0.98			0.98			0.98			0.98		
Adjustment												
Adjusted 2017 Volumes	25	2	10	13	1	1	15	907	81	13	1016	9
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
Two-Way Conversion Adjustment												
Redesignation of SR 20 Adjustment							15			15		
2023 Background Traffic	27	2	11	14	1	1	16	978	86	14	1,094	10
<b>Project Trips</b>												
Trip Distribution IN							5%					
Trip Distribution OUT				5%			3%			2%		
Residential Trips	0	0	0	11	0	6	3	0	0	0	4	2
Trip Distribution IN							5%					
Trip Distribution OUT				5%			3%			2%		
Hotel Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN							5%					
Trip Distribution OUT				5%			3%			2%		
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN							5%					
Trip Distribution OUT				5%			3%			2%		
Retail Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN							5%					
Trip Distribution OUT				5%			3%			2%		
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN							5%					
Trip Distribution OUT				5%			3%			2%		
Other Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	11	0	6	3	0	0	0	4	2
<b>2023 Buildout Total</b>	<b>27</b>	<b>2</b>	<b>11</b>	<b>25</b>	<b>1</b>	<b>7</b>	<b>19</b>	<b>978</b>	<b>86</b>	<b>14</b>	<b>1,098</b>	<b>12</b>

## PM PEAK HOUR

Description	Neal Boulevard Northbound			Neal Boulevard/Driveway 2 Southbound			Scenic Highway (SR 124) Eastbound			Scenic Highway (SR 124) Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	180	5	27	20	3	6	22	1,178	43	33	1,055	17
Pedestrians	5			3			2			1		
Conflicting Pedestrians	2	0	1	1	0	2	3	0	5	5	0	3
Heavy Vehicles	0	0	0	0	0	0	0	12	0	0	15	0
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%
Peak Hour Factor	0.98			0.98			0.98			0.98		
Adjustment												
Adjusted 2017 Volumes	180	5	27	20	3	6	22	1,178	43	33	1,055	17
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
Two-Way Conversion Adjustment												
Redesignation of SR 20 Adjustment							20			25		
2023 Background Traffic	191	5	29	21	3	6	23	1,270	46	35	1,145	18
<b>Project Trips</b>												
Trip Distribution IN							5%					
Trip Distribution OUT				5%			3%			2%		
Residential Trips	0	0	0	6	0	3	10	0	0	0	2	8
Trip Distribution IN							5%					
Trip Distribution OUT				5%			3%			2%		
Hotel Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN							5%					
Trip Distribution OUT				5%			3%			2%		
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN							5%					
Trip Distribution OUT				5%			3%			2%		
Retail Trips	0	0	0	1	0	0	1	0	0	0	0	1
Trip Distribution IN							5%					
Trip Distribution OUT				5%			3%			2%		
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN							5%					
Trip Distribution OUT				5%			3%			2%		
Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	0	7	0	3	11	0	0	0	2	9
<b>2023 Buildout Total</b>	<b>191</b>	<b>5</b>	<b>29</b>	<b>28</b>	<b>3</b>	<b>9</b>	<b>34</b>	<b>1,270</b>	<b>46</b>	<b>35</b>	<b>1,147</b>	<b>27</b>

# **INTERSECTION VOLUME DEVELOPMENT**

**Scenic Highway (SR 124) at S Clayton Street (SR 20)/Grayson Highway (SR 20)**  
**AM PEAK HOUR**

Description	Grayson Highway (SR 20)			S Clayton Street (SR 20)			Scenic Highway (SR 124)			Scenic Highway (SR 124)		
	Left	Northbound Through	Right	Left	Southbound Through	Right	Left	Eastbound Through	Right	Left	Westbound Through	Right
Observed 2017 Traffic Volumes	160	1,280	424	44	295	123	204	545	26	224	582	76
Pedestrians		0			1			0			4	
Conflicting Pedestrians	0	4	4	4		0	1		0	0		1
Heavy Vehicles	0	4	12	0	2	1	4	13	2	14	19	0
Heavy Vehicle %	0%	0%	3%	0%	1%	1%	2%	2%	8%	6%	3%	0%
Peak Hour Factor		0.99			0.99			0.99			0.99	
Adjustment												
Adjusted 2017 Volumes	160	1280	424	44	295	123	204	545	26	224	582	76
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
Two-Way Conversion Adjustment												
Redesignation of SR 20 Adjustment		-15	15		-15					15		
2023 Background Traffic	170	1,344	465	47	298	131	217	579	28	253	618	81
<b>Project Trips</b>												
Trip Distribution IN		5%	3%				5%	2%				
Trip Distribution OUT					5%	5%				3%	2%	
Residential Trips	0	3	2	0	11	11	3	1	0	6	4	0
Trip Distribution IN		5%	3%				5%	2%				
Trip Distribution OUT					5%	5%				3%	2%	
Hotel Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN		5%	3%				5%	2%				
Trip Distribution OUT					5%	5%				3%	2%	
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN		5%	3%				5%	2%				
Trip Distribution OUT					5%	5%				3%	2%	
Retail Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN		5%	3%				5%	2%				
Trip Distribution OUT					5%	5%				3%	2%	
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN		5%	3%				5%	2%				
Trip Distribution OUT					5%	5%				3%	2%	
Other Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	3	2	0	11	11	3	1	0	6	4	0
<b>2023 Buildout Total</b>	<b>170</b>	<b>1,347</b>	<b>467</b>	<b>47</b>	<b>309</b>	<b>142</b>	<b>220</b>	<b>580</b>	<b>28</b>	<b>259</b>	<b>622</b>	<b>81</b>

## **PM PEAK HOUR**

Description	Grayson Highway (SR 20)			S Clayton Street (SR 20)			Scenic Highway (SR 124)			Scenic Highway (SR 124)		
	Left	Northbound Through	Right	Left	Southbound Through	Right	Left	Eastbound Through	Right	Left	Westbound Through	Right
Observed 2017 Traffic Volumes	68	505	354	147	1,024	158	181	607	163	447	726	53
Pedestrians		0			0			3			3	
Conflicting Pedestrians	3		3	3		3	0		0	0		0
Heavy Vehicles	0	1	5	0	2	0	0	4	1	4	9	0
Heavy Vehicle %	0%	0%	1%	0%	0%	0%	0%	1%	1%	1%	1%	0%
Peak Hour Factor		0.98			0.98			0.98			0.98	
Adjustment												
Adjusted 2017 Volumes	68	505	354	147	1024	158	181	607	163	447	726	53
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
Two-Way Conversion Adjustment												
Redesignation of SR 20 Adjustment		-20	20		-25					25		
2023 Background Traffic	72	516	396	156	1,062	168	192	644	173	499	771	56
<b>Project Trips</b>												
Trip Distribution IN		5%	3%				5%	2%				
Trip Distribution OUT					5%	5%				3%	2%	
Residential Trips	0	10	6	0	6	6	10	4	0	3	2	0
Trip Distribution IN		5%	3%				5%	2%				
Trip Distribution OUT					5%	5%				3%	2%	
Hotel Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN		5%	3%				5%	2%				
Trip Distribution OUT					5%	5%				3%	2%	
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN		5%	3%				5%	2%				
Trip Distribution OUT					5%	5%				3%	2%	
Retail Trips	0	1	1	0	1	1	1	0	0	0	0	0
Trip Distribution IN		5%	3%				5%	2%				
Trip Distribution OUT					5%	5%				3%	2%	
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN		5%	3%				5%	2%				
Trip Distribution OUT					5%	5%				3%	2%	
Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	11	7	0	7	7	11	4	0	3	2	0
<b>2023 Buildout Total</b>	<b>72</b>	<b>527</b>	<b>403</b>	<b>156</b>	<b>1,069</b>	<b>175</b>	<b>203</b>	<b>648</b>	<b>173</b>	<b>502</b>	<b>773</b>	<b>56</b>

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# **INTERSECTION VOLUME DEVELOPMENT**

## **S Clayton Street at Nash Street/Driveway 3 AM PEAK HOUR**

Description	S Clayton Street			Southbound			Nash Street			Nash Street/Driveway 3		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	253	1,352	6				115	19	0	0	42	21
Pedestrians		1			0			0			2	
Conflicting Pedestrians	0		2	2		0	0		1	1		0
Heavy Vehicles	0	6	0				1	1	0	0	0	0
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	1%	5%	0%	0%	0%	0%
Peak Hour Factor		0.99			0.99			0.99			0.99	
Adjustment												
Adjusted 2017 Volumes	253	1352	6	0	0	0	115	19	0	0	42	21
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
Two-Way Conversion Adjustment	230	-230		10	275	35	-60	-10	5	25	-20	-10
Redesignation of SR 20 Adjustment	-5	-10				-5						
2023 Background Traffic	494	1,195	6	10	275	30	62	10	5	25	25	12
<b>Project Trips</b>												
Trip Distribution IN		5%	5%	8%								
Trip Distribution OUT					5%					5%		8%
Residential Trips	0	3	3	4	11	0	0	0	0	11	0	17
Trip Distribution IN		5%	5%	8%								
Trip Distribution OUT					5%					5%		8%
Hotel Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN		5%	5%	8%								
Trip Distribution OUT					5%					5%		8%
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN		5%	5%	8%								
Trip Distribution OUT					5%					5%		8%
Retail Trips	0	0	0	1	0	0	0	0	0	0	0	0
Trip Distribution IN		5%	5%	8%								
Trip Distribution OUT					5%					5%		8%
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN		5%	5%	8%								
Trip Distribution OUT					5%					5%		8%
Other Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	3	3	5	11	0	0	0	0	11	0	17
<b>2023 Buildout Total</b>	<b>494</b>	<b>1,198</b>	<b>9</b>	<b>15</b>	<b>286</b>	<b>30</b>	<b>62</b>	<b>10</b>	<b>5</b>	<b>36</b>	<b>25</b>	<b>29</b>

## **PM PEAK HOUR**

Description	S Clayton Street			Southbound			Nash Street			Nash Street/Driveway 3		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	70	684	7				204	91	0	0	48	47
Pedestrians		1			0			2			2	
Conflicting Pedestrians	2		2	2		2	0		1	1		0
Heavy Vehicles	0	2	0				1	0	0	0	0	0
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor		0.91			0.91			0.91			0.91	
Adjustment												
Adjusted 2017 Volumes	70	684	7	0	0	0	204	91	0	0	48	47
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
Two-Way Conversion Adjustment	150	-150		35	405	60	-95	-35	5	30	-20	-15
Redesignation of SR 20 Adjustment	-10	-10				-10						
2023 Background Traffic	214	566	7	35	405	50	122	62	5	30	31	35
<b>Project Trips</b>												
Trip Distribution IN		5%	5%	8%								
Trip Distribution OUT					5%					5%		8%
Residential Trips	0	10	10	16	6	0	0	0	0	6	0	9
Trip Distribution IN		5%	5%	8%								
Trip Distribution OUT					5%					5%		8%
Hotel Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN		5%	5%	8%								
Trip Distribution OUT					5%					5%		8%
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN		5%	5%	8%								
Trip Distribution OUT					5%					5%		8%
Retail Trips	0	1	1	1	1	0	0	0	0	1	0	1
Trip Distribution IN		5%	5%	8%								
Trip Distribution OUT					5%					5%		8%
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN		5%	5%	8%								
Trip Distribution OUT					5%					5%		8%
Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	11	11	17	7	0	0	0	0	7	0	10
<b>2023 Buildout Total</b>	<b>214</b>	<b>577</b>	<b>18</b>	<b>52</b>	<b>412</b>	<b>50</b>	<b>122</b>	<b>62</b>	<b>5</b>	<b>37</b>	<b>31</b>	<b>45</b>

# **INTERSECTION VOLUME DEVELOPMENT**

**S Clayton Street (SR 20) at Church Street/Driveway 4  
AM PEAK HOUR**

Description	S Clayton Street			Southbound			Eastbound			Church Street/Driveway 4		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	0	1,472	29							0	0	3
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	7	0							0	0	0
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor		0.95			0.95			0.95			0.95	
Adjustment												
Adjusted 2017 Volumes	0	1472	29	0	0	0	0	0	0	0	0	3
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
Two-Way Conversion Adjustment		-230			275							
Redesignation of SR 20 Adjustment		-10			-5							
2023 Background Traffic	0	1,323	31	0	270	0	0	0	0	0	0	3
<b>Project Trips</b>												
Trip Distribution IN		3%	2%	15%	8%					2%		15%
Trip Distribution OUT		8%			3%							
Residential Trips	0	19	1	8	10	0	0	0	0	1	0	8
Trip Distribution IN		3%	2%	15%	8%					2%		15%
Trip Distribution OUT		8%			3%							
Hotel Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN		3%	2%	15%	8%					2%		15%
Trip Distribution OUT		8%			3%							
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN		3%	2%	15%	8%					2%		15%
Trip Distribution OUT		8%			3%							
Retail Trips	0	0	0	1	1	0	0	0	0	0	0	1
Trip Distribution IN		3%	2%	15%	8%					2%		15%
Trip Distribution OUT		8%			3%							
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN		3%	2%	15%	8%					2%		15%
Trip Distribution OUT		8%			3%							
Other Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	19	1	9	11	0	0	0	0	1	0	9
<b>2023 Buildout Total</b>	<b>0</b>	<b>1,342</b>	<b>32</b>	<b>9</b>	<b>281</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>12</b>

## **PM PEAK HOUR**

Description	S Clayton Street			Southbound			Eastbound			Church Street/Driveway 4		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	0	821	69							0	0	5
Pedestrians		0			0			3			0	
Conflicting Pedestrians	3		0	0		3	0		0	0		0
Heavy Vehicles	0	4	0							0	0	0
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor		0.94			0.94			0.94			0.94	
Adjustment												
Adjusted 2017 Volumes	0	821	69	0	0	0	0	0	0	0	0	5
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
Two-Way Conversion Adjustment		-150			435							
Redesignation of SR 20 Adjustment		-10			-10							
2023 Background Traffic	0	712	73	0	425	0	0	0	0	0	0	5
<b>Project Trips</b>												
Trip Distribution IN		3%	2%	15%	8%					2%		15%
Trip Distribution OUT		8%			3%							
Residential Trips	0	15	4	30	19	0	0	0	0	4	0	30
Trip Distribution IN		3%	2%	15%	8%					2%		15%
Trip Distribution OUT		8%			3%							
Hotel Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN		3%	2%	15%	8%					2%		15%
Trip Distribution OUT		8%			3%							
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN		3%	2%	15%	8%					2%		15%
Trip Distribution OUT		8%			3%							
Retail Trips	0	2	0	3	1	0	0	0	0	0	0	3
Trip Distribution IN		3%	2%	15%	8%					2%		15%
Trip Distribution OUT		8%			3%							
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN		3%	2%	15%	8%					2%		15%
Trip Distribution OUT		8%			3%							
Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	-2	2	0	0	0	0	0	0	0	0	2
Total Project Trips	0	15	6	33	20	0	0	0	0	4	0	35
<b>2023 Buildout Total</b>	<b>0</b>	<b>727</b>	<b>79</b>	<b>33</b>	<b>445</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>40</b>

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# **INTERSECTION VOLUME DEVELOPMENT**

**S Clayton Street (SR 20) at Branson Street/Driveway 5**  
**AM PEAK HOUR**

Description	S Clayton Street (SR 20)			Southbound			Eastbound			Branson Street/Driveway 5		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	0	1,466	9							0	0	6
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	0	0							0	0	0
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor		0.95			0.95			0.95			0.95	
Adjustment												
Adjusted 2017 Volumes	0	1466	9	0	0	0	0	0	0	0	0	6
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
Two-Way Conversion Adjustment		-230			275							
Redesignation of SR 20 Adjustment		-10			-5							
2023 Background Traffic	0	1,316	10	0	270	0	0	0	0	0	0	6
<b>Project Trips</b>												
Trip Distribution IN			3%	38%	23%					3%		38%
Trip Distribution OUT		23%										
Residential Trips	0	48	2	21	13	0	0	0	0	2	0	21
Trip Distribution IN			3%	38%	23%					3%		38%
Trip Distribution OUT		23%										
Hotel Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN			3%	38%	23%					3%		38%
Trip Distribution OUT		23%										
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN			3%	38%	23%					3%		38%
Trip Distribution OUT		23%										
Retail Trips	0	1	0	3	2	0	0	0	0	0	0	3
Trip Distribution IN			3%	38%	23%					3%		38%
Trip Distribution OUT		23%										
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN			3%	38%	23%					3%		38%
Trip Distribution OUT		23%										
Other Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	49	2	24	15	0	0	0	0	2	0	24
<b>2023 Buildout Total</b>	<b>0</b>	<b>1,365</b>	<b>12</b>	<b>24</b>	<b>285</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>30</b>

## **PM PEAK HOUR**

Description	S Clayton Street (SR 20)			Southbound			Eastbound			Branson Street/Driveway 5		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	0	819	7							0	0	10
Pedestrians		0			0			0			0	
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	0	0							0	0	0
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor		0.94			0.94			0.94			0.94	
Adjustment												
Adjusted 2017 Volumes	0	819	7	0	0	0	0	0	0	0	0	10
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
Two-Way Conversion Adjustment		-150			435							
Redesignation of SR 20 Adjustment		-10			-10							
2023 Background Traffic	0	709	7	0	425	0	0	0	0	0	0	11
<b>Project Trips</b>												
Trip Distribution IN			3%	38%	23%					3%		38%
Trip Distribution OUT		23%										
Residential Trips	0	26	6	76	46	0	0	0	0	6	0	76
Trip Distribution IN			3%	38%	23%					3%		38%
Trip Distribution OUT		23%										
Hotel Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN			3%	38%	23%					3%		38%
Trip Distribution OUT		23%										
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN			3%	38%	23%					3%		38%
Trip Distribution OUT		23%										
Retail Trips	0	4	1	6	4	0	0	0	0	1	0	6
Trip Distribution IN			3%	38%	23%					3%		38%
Trip Distribution OUT		23%										
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN			3%	38%	23%					3%		38%
Trip Distribution OUT		23%										
Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	-6	6	0	0	0	0	0	0	0	0	6
Total Project Trips	0	24	13	82	50	0	0	0	0	7	0	88
<b>2023 Buildout Total</b>	<b>0</b>	<b>733</b>	<b>20</b>	<b>82</b>	<b>475</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>99</b>

# INTERSECTION VOLUME DEVELOPMENT

## Jackson Street at Driveway 6 AM PEAK HOUR

Description	Jackson Street Northbound			Jackson Street Southbound			Driveway 6 Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes		1,118			685							
Pedestrians												
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles												
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor												
Adjustment												
Adjusted 2017 Volumes	0	1118	0	0	685	0	0	0	0	0	0	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
Two-Way Conversion Adjustment												
Redesignation of SR 20 Adjustment												
2023 Background Traffic	0	1,187	0	0	727	0	0	0	0	0	0	0
<b>Project Trips</b>												
Trip Distribution IN	2%				5%	6%						
Trip Distribution OUT		5%					6%		2%			
Residential Trips	1	11	0	0	3	3	13	0	4	0	0	0
Trip Distribution IN	2%				5%	6%						
Trip Distribution OUT		5%					6%		2%			
Hotel Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN	2%				5%	6%						
Trip Distribution OUT		5%					6%		2%			
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN	2%				5%	6%						
Trip Distribution OUT		5%					6%		2%			
Retail Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN	2%				5%	6%						
Trip Distribution OUT		5%					6%		2%			
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN	2%				5%	6%						
Trip Distribution OUT		5%					6%		2%			
Other Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	1	11	0	0	3	3	13	0	4	0	0	0
<b>2023 Buildout Total</b>	<b>1</b>	<b>1,198</b>	<b>0</b>	<b>0</b>	<b>730</b>	<b>3</b>	<b>13</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>

## PM PEAK HOUR

Description	Jackson Street Northbound			Jackson Street Southbound			Driveway 6 Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes		780			1,443							
Pedestrians												
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles												
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor												
Adjustment												
Adjusted 2017 Volumes	0	780	0	0	1443	0	0	0	0	0	0	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
Two-Way Conversion Adjustment												
Redesignation of SR 20 Adjustment												
2023 Background Traffic	0	828	0	0	1,532	0	0	0	0	0	0	0
<b>Project Trips</b>												
Trip Distribution IN	2%				5%	6%						
Trip Distribution OUT		5%					6%		2%			
Residential Trips	4	6	0	0	10	12	7	0	2	0	0	0
Trip Distribution IN	2%				5%	6%						
Trip Distribution OUT		5%					6%		2%			
Hotel Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN	2%				5%	6%						
Trip Distribution OUT		5%					6%		2%			
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN	2%				5%	6%						
Trip Distribution OUT		5%					6%		2%			
Retail Trips	0	1	0	0	1	1	1	0	0	0	0	0
Trip Distribution IN	2%				5%	6%						
Trip Distribution OUT		5%					6%		2%			
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN	2%				5%	6%						
Trip Distribution OUT		5%					6%		2%			
Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	4	7	0	0	11	13	8	0	2	0	0	0
<b>2023 Buildout Total</b>	<b>4</b>	<b>835</b>	<b>0</b>	<b>0</b>	<b>1,543</b>	<b>13</b>	<b>8</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>



# INTERSECTION VOLUME DEVELOPMENT

## Jackson Street at Driveway 7 AM PEAK HOUR

Description	Jackson Street Northbound			Jackson Street Southbound			Driveway 7 Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes		1,118			685							
Pedestrians												
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles												
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor												
Adjustment												
Adjusted 2017 Volumes	0	1118	0	0	685	0	0	0	0	0	0	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
Two-Way Conversion Adjustment												
Redesignation of SR 20 Adjustment												
2023 Background Traffic	0	1,187	0	0	727	0	0	0	0	0	0	0
<b>Project Trips</b>												
Trip Distribution IN	2%	2%			5%							
Trip Distribution OUT				2%						5%		6%
Residential Trips	1	1	0	0	4	3	0	0	0	11	0	13
Trip Distribution IN	2%	2%			5%							
Trip Distribution OUT				2%						5%		6%
Hotel Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN	2%	2%			5%							
Trip Distribution OUT				2%						5%		6%
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN	2%	2%			5%							
Trip Distribution OUT				2%						5%		6%
Retail Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN	2%	2%			5%							
Trip Distribution OUT				2%						5%		6%
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN	2%	2%			5%							
Trip Distribution OUT				2%						5%		6%
Other Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	1	1	0	0	4	3	0	0	0	11	0	13
<b>2023 Buildout Total</b>	<b>1</b>	<b>1,188</b>	<b>0</b>	<b>0</b>	<b>731</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>13</b>

## PM PEAK HOUR

Description	Jackson Street Northbound			Jackson Street Southbound			Driveway 7 Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes		780			1,443							
Pedestrians												
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles												
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Peak Hour Factor												
Adjustment												
Adjusted 2017 Volumes	0	780	0	0	1443	0	0	0	0	0	0	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Growth Factor	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062	1.062
Two-Way Conversion Adjustment												
Redesignation of SR 20 Adjustment												
2023 Background Traffic	0	828	0	0	1,532	0	0	0	0	0	0	0
<b>Project Trips</b>												
Trip Distribution IN	2%	2%			5%							
Trip Distribution OUT				2%						5%		6%
Residential Trips	4	4	0	0	2	10	0	0	0	6	0	7
Trip Distribution IN	2%	2%			5%							
Trip Distribution OUT				2%						5%		6%
Hotel Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN	2%	2%			5%							
Trip Distribution OUT				2%						5%		6%
Office Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN	2%	2%			5%							
Trip Distribution OUT				2%						5%		6%
Retail Trips	0	0	0	0	0	1	0	0	0	1	0	1
Trip Distribution IN	2%	2%			5%							
Trip Distribution OUT				2%						5%		6%
Restaurant Trips	0	0	0	0	0	0	0	0	0	0	0	0
Trip Distribution IN	2%	2%			5%							
Trip Distribution OUT				2%						5%		6%
Non-Residential Trips	0	0	0	0	0	0	0	0	0	0	0	0
Pass-By Trips	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	4	4	0	0	2	11	0	0	0	7	0	8
<b>2023 Buildout Total</b>	<b>4</b>	<b>832</b>	<b>0</b>	<b>0</b>	<b>1,534</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>8</b>

## **Appendix F**

### **Programmed Projects**

## Short Title

DOWNTOWN LAWRENCEVILLE PEDESTRIAN  
IMPROVEMENTS & ONE-WAY PAIR CONVERSION

## GDOT Project No.

0008963

## Federal ID No.

CSSTP-0008-00(963)

## Status

Programmed

## Service Type

Last Mile Connectivity / Complete Street Retrofit

## Sponsor

City of Lawrenceville

## Jurisdiction

Gwinnett County

## Analysis Level

In the Region's Air Quality Conformity Analysis

## Existing Thru Lane

N/A

LCI

X

## Planned Thru Lane

N/A

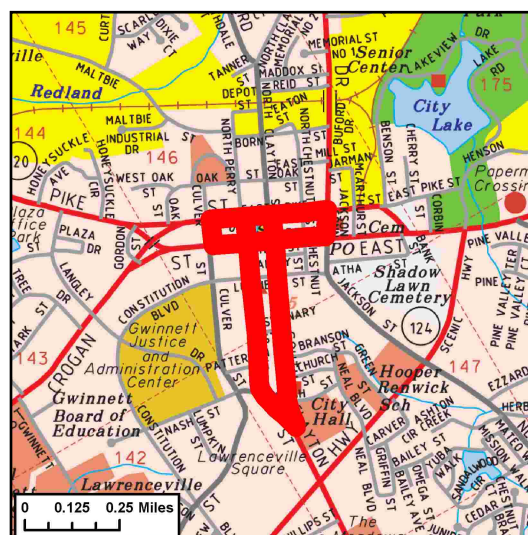
Flex

## Network Year

2020

## Corridor Length

TBD miles



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## Detailed Description and Justification

This project will provide for pedestrian improvements in downtown Lawrenceville and will also include the conversion of SR 20/Clayton Street and SR 20/Perry Street to a two-way operation. Clayton Street and Perry Street exist as a north-south one-way pair that is currently designated as SR 20. Clayton Street consists of three (3) northbound travel lanes and Perry Street consists of three (3) southbound travel lanes. The proposed project will convert Perry Street and Clayton Street from three (3) one-way travel lanes to two-way operation. The typical section for two-way operation will consist of one (1) through-lane in each direction and one (1) center two-way left-turn lane. Existing signals along Perry and Clayton will be re-configured at Nash Street, Luckie Street, Crogan Street, and Pike Street to accommodate the two-way operation. In order to convert Perry Street and Clayton Street, these two facilities will need to be removed from the state system. GDOT has committed to re-designating SR 20 around the Downtown area by using SR 124/Scenic Highway to SR 8/124/East Crogan Street as the re-designated SR 20 route. These re-designations will occur separate from this project and be conducted by GDOT staff prior to project implementation.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
PE	STP - Urban (>200K) (ARC)	AUTH	2009	\$577,500	\$461,960	\$0,000	\$0,000	\$115,540
ROW	Local Jurisdiction/Municipality Funds	AUTH	2015	\$1,867,000	\$0,000	\$0,000	\$0,000	\$1,867,000
CST	Surface Transportation Block Grant (STBG) Program - Urban (>200K) (ARC)	AUTH	2017	\$4,666,373	\$3,512,126	\$0,000	\$0,000	\$1,154,247
				\$7,110,873	\$3,974,086	\$0,000	\$0,000	\$3,136,787

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](mailto:transportation@atlantaregional.com).



## Short Title

SR 20 (BUFORD DRIVE) WIDENING FROM SR 124 (BRASELTON HIGHWAY) TO HURRICANE SHOALS ROAD

## GDOT Project No.

TBD

## Federal ID No.

N/A

## Status

Long Range

## Service Type

Roadway / General Purpose Capacity

## Sponsor

GDOT

## Jurisdiction

Gwinnett County

## Analysis Level

In the Region's Air Quality Conformity Analysis

## Existing Thru Lane

4

## LCI

☐

## Planned Thru Lane

6

## Flex

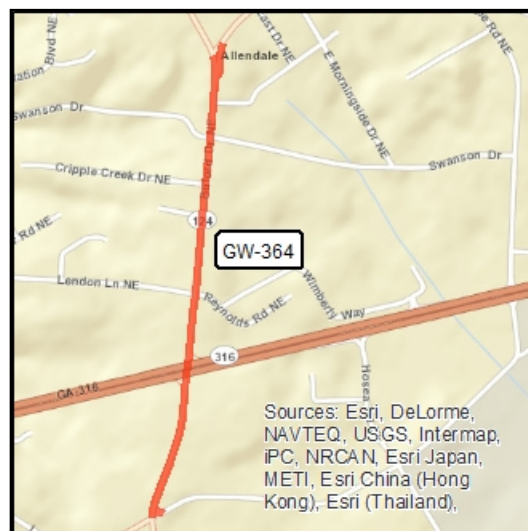
☐

## Network Year

2030

## Corridor Length

1.2 miles



## Detailed Description and Justification

This project will widen SR 20 (Buford Drive) from SR 124 (Braselton Highway) to Hurricane Shoals Road from 4 to 6 lanes.

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	<b>\$16,400,000</b>	\$13,100,000	\$3,300,000	\$0,000	\$0,000
				<b>\$16,400,000</b>	<b>\$13,100,000</b>	<b>\$3,300,000</b>	<b>\$0,000</b>	<b>\$0,000</b>

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](mailto:transportation@atlantaregional.com).





## Short Title

SR 20 NORTHBOUND IMPROVEMENTS FROM REYNOLDS ROAD TO SR 124

## GDOT Project No.

TBD

## Federal ID No.

N/A

## Status

Programmed

## Service Type

Roadway / General Purpose Capacity

## Sponsor

Gwinnett County

## Jurisdiction

Gwinnett County

## Analysis Level

In the Region's Air Quality Conformity Analysis

## Existing Thru Lane

2

LCI

☐

## Planned Thru Lane

3

Flex

☐

## Network Year

2020

## Corridor Length

0.5 miles



## Detailed Description and Justification

This project will provide one additional Northbound lane along SR 20 (Buford Drive) from Reynolds Road to SR 124.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
PE	Local Jurisdiction/Municipality Funds	AUTH	2016	\$150,000	\$0,000	\$0,000	\$0,000	\$150,000
ROW	Local Jurisdiction/Municipality Funds		2017	\$450,000	\$0,000	\$0,000	\$0,000	\$450,000
CST	Local Jurisdiction/Municipality Funds		2017	\$1,500,000	\$0,000	\$0,000	\$0,000	\$1,500,000
				\$2,100,000	\$0,000	\$0,000	\$0,000	\$2,100,000

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](mailto:transportation@atlantaregional.com).

