



*Transportation Analysis*

# **DCT Douglas Hill Distribution Center DRI #2701**

Douglas County, Georgia

*Report Prepared:*

August 2017

*Prepared for:*

DCT Industrial

*Prepared by:*

**Kimley»»Horn**

Kimley-Horn and Associates, Inc.  
2 Sun Court, Suite 450  
Peachtree Corners, GA 30092  
018716001

## TABLE OF CONTENTS

Executive Summary .....	3
1.0 Project Description .....	5
1.1 Introduction .....	5
1.2 Site Plan Review .....	9
1.3 Site Access .....	9
1.4 Bicycle and Pedestrian Facilities .....	9
1.5 Transit Facilities .....	9
2.0 Traffic Analyses, Methodology and Assumptions .....	10
2.1 Growth Rate .....	10
2.2 Traffic Data Collection .....	10
2.3 Detailed Intersection Analysis .....	10
3.0 Study Network .....	11
3.1 Gross Trip Generation .....	11
3.2 Trip Distribution .....	11
3.3 Level-of-Service Standards .....	11
3.4 Study Network Determination .....	11
3.5 Existing Roadway Facilities .....	12
4.0 Trip Generation .....	14
5.0 Trip Distribution and Assignment .....	14
6.0 Traffic Analysis .....	18
6.1 Existing 2017 Conditions .....	18
6.2 Projected 2019 No-Build Conditions .....	20
6.3 Projected 2019 Build Conditions .....	22
7.0 Ingress/Egress Analysis .....	24
8.0 Identification of Programmed Projects .....	24
9.0 Internal Circulation Analysis .....	24



## LIST OF TABLES

Table 1: Proposed Land Uses.....	5
Table 2: Peak Hour Summary.....	10
Table 3: Gross Trip Generation.....	11
Table 4: Intersection Control Summary.....	12
Table 5: Roadway Classifications .....	12
Table 6: Net New Trip Generation.....	14
Table 7: Existing 2017 Level-of-Service Summary.....	18
Table 8: Projected 2019 No-Build Level-of-Service Summary.....	20
Table 9: Projected 2019 Build Level-of-Service Summary .....	22
Table 10: Programmed Improvements.....	24

## LIST OF FIGURES

Figure 1: Site Location Map .....	6
Figure 2: Site Aerial (zoomed out).....	7
Figure 3: Site Aerial (zoomed in).....	8
Figure 4: Study Intersections .....	13
Figure 5: Heavy Vehicle (Truck) Trip Distribution & Assignment .....	15
Figure 6: Employee (Car) Trip Distribution & Assignment .....	16
Figure 7: Project Trips.....	17
Figure 8: Existing 2017 Conditions.....	19
Figure 9: Projected 2019 No-Build Conditions .....	21
Figure 10: Projected 2019 Build Conditions .....	23

## LIST OF APPENDICES

Appendix A	Site Photo Log
Appendix B	Land Use and Zoning Maps
Appendix C	Proposed Site Plan
Appendix D	Raw Traffic Count Data
Appendix E	Trip Generation Analysis
Appendix F	Intersection Volume Worksheets
Appendix G	Programmed Project Fact Sheets
Appendix H	Sweetwater Master Plan Concept 1A

***Available Upon Request***

*Synchro Capacity Analyses*

## EXECUTIVE SUMMARY

This report presents the analysis of the anticipated traffic impacts of the proposed *DCT Douglas Hill Distribution Center* development located in Douglas County, Georgia. The approximate 92.6-acre site is located just west of the intersection of Douglas Hill Road and Factory Shoals Road, and is bordered by Douglas Hill Road to the south. The proposed development will be an industrial warehouse facility with approximately 1,036,800 SF of warehousing space. It should be noted that a portion of this acreage was a part of a previous Development of Regional Impact (DRI) called Corporate Ridge Business Park DRI #2477 (123 acres and 1,436,820 SF warehouse).

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 an industrial development. The DRI trigger for this development is the submittal of the rezoning application with Douglas County, combined with the proposed development exceeding 500,000 gross square feet for industrial developments within a developing suburbs area. The DRI was formally triggered with the filing of the Initial DRI Information (Form 1) on June 21, 2017 by Douglas County.

According to GRTA's Procedures and Principles for GRTA Development of Regional Impact Review, the proposed DRI complies with the Expedited Review Criteria in **Section 3-102, Part B – Limited Trip Generation**, which states:

*...the land uses within the proposed DRI are such that the amount of trips generated by the development is likely to have minimal impact on the road network.*

1. *No more than one thousand (1,000) gross daily trips generated by the DRI based on a trip generation memorandum; or,*
2. ***More than one thousand (1,000) but no more than three thousand (3,000) gross daily trips will be generated by the DRI, based on a trip generation memorandum and requires the submittal of an Access Analysis; or,***
3. *The proposed DRI is projected to generate no more than one hundred (100) gross PM peak hour weekday trips based on a trip generation memorandum.*

The present zoning classification of the project site is Residential-Agricultural (R-A). The proposed zoning of the site is Light Industrial (LI-C). The proposed project is expected to be completed by 2019. The proposed development will consist of the following land uses and densities:

Warehouse Square Footage:	1,036,800 SF
---------------------------	--------------

Capacity analyses were performed throughout the study network for the Existing 2017 conditions, the Projected 2019 No-Build conditions, and the Projected 2019 Build conditions.

- Existing 2017 conditions represent traffic volumes that were collected in April 2017 and July 2017 by performing AM and PM peak hour turning movement counts.
- Projected 2019 No-Build conditions represent the existing traffic volumes grown for two (2) years at 1.5 percent per year throughout the study network, plus estimated project trips from *DCT Factory Shoals DRI #2670* development (DRI completed in June 2017).
- Projected 2019 Build conditions represent the Projected 2019 No-Build conditions with the addition of the project trips that are anticipated to be generated by the *DCT Douglas Hill Distribution Center* development.

Based on the **Existing 2017** conditions (*present conditions; i.e. excludes both the background traffic growth, the estimated project trips from the DCT Factory Shoals DRI #2670, and the estimated project trips from the DCT Douglas Hill Distribution Center DRI*), all study intersections are projected to operate within the acceptable level-of-service (LOS) standard of D.

Based on the **Projected 2019 No-Build** conditions (*includes background traffic growth and estimated project traffic from DCT Factory Shoals DRI #2670, but excludes the estimated project trips from the DCT Douglas Hill Distribution Center DRI*), all study intersections are projected to operate within the acceptable level-of-service (LOS) standard of D.

Based on the **Projected 2019 Build** conditions (*includes the background traffic growth, the estimated project trips from DCT Factory Shoals DRI #2670, and the estimated project trips from the DCT Douglas Hill Distribution Center DRI*), all study intersections are projected to operate within the acceptable level-of-service (LOS) standard of D.

The following site-access improvements are recommended to serve the traffic associated with the *DCT Douglas Hill Distribution Center* development:

- Intersection #4: Douglas Hill Road at Proposed Site Driveway
  - On the site, construct one (1) southbound shared left/right-turn lane exiting the site onto Douglas Hill Road and one (1) ingress lane entering the site.
  - Construct one (1) westbound right-turn lane, with a minimum 100 feet of storage and a 50 foot taper, along Douglas Hill Road to serve vehicles turning right into the site.
  - Improve Douglas Hill Road between the current end of improved pavement section to the proposed site driveway (approximately 2,500 feet) via widening and pavement overlay

## 1.0 PROJECT DESCRIPTION

### 1.1 Introduction

This report presents the analysis of the anticipated traffic impacts of the proposed *DCT Douglas Hill Distribution Center* development located in Douglas County, Georgia. The approximate 92.6-acre site is located just west of the intersection of Douglas Hill Road and Factory Shoals Road, and is bordered by Douglas Hill Road to the south. A portion of the proposed site acreage was included in a previous DRI, *Corporate Ridge Business Park DRI #2477* (123 acres and 1,436,820 SF warehouse).

The proposed development will be an industrial warehouse facility with approximately 1,036,800 SF of warehousing space. Because the project will exceed 500,000 square feet for industrial developments within a developing suburbs area, the proposed development is a Development of Regional Impact (DRI) and is subject to Georgia Regional Transportation Authority (GRTA) and Atlanta Regional Commission (ARC) review.

According to GRTA's Procedures and Principles for GRTA Development of Regional Impact Review, the proposed DRI complies with the Expedited Review Criteria in **Section 3-102, Part B – Limited Trip Generation**, which states:

*...the land uses within the proposed DRI are such that the amount of trips generated by the development is likely to have minimal impact on the road network.*

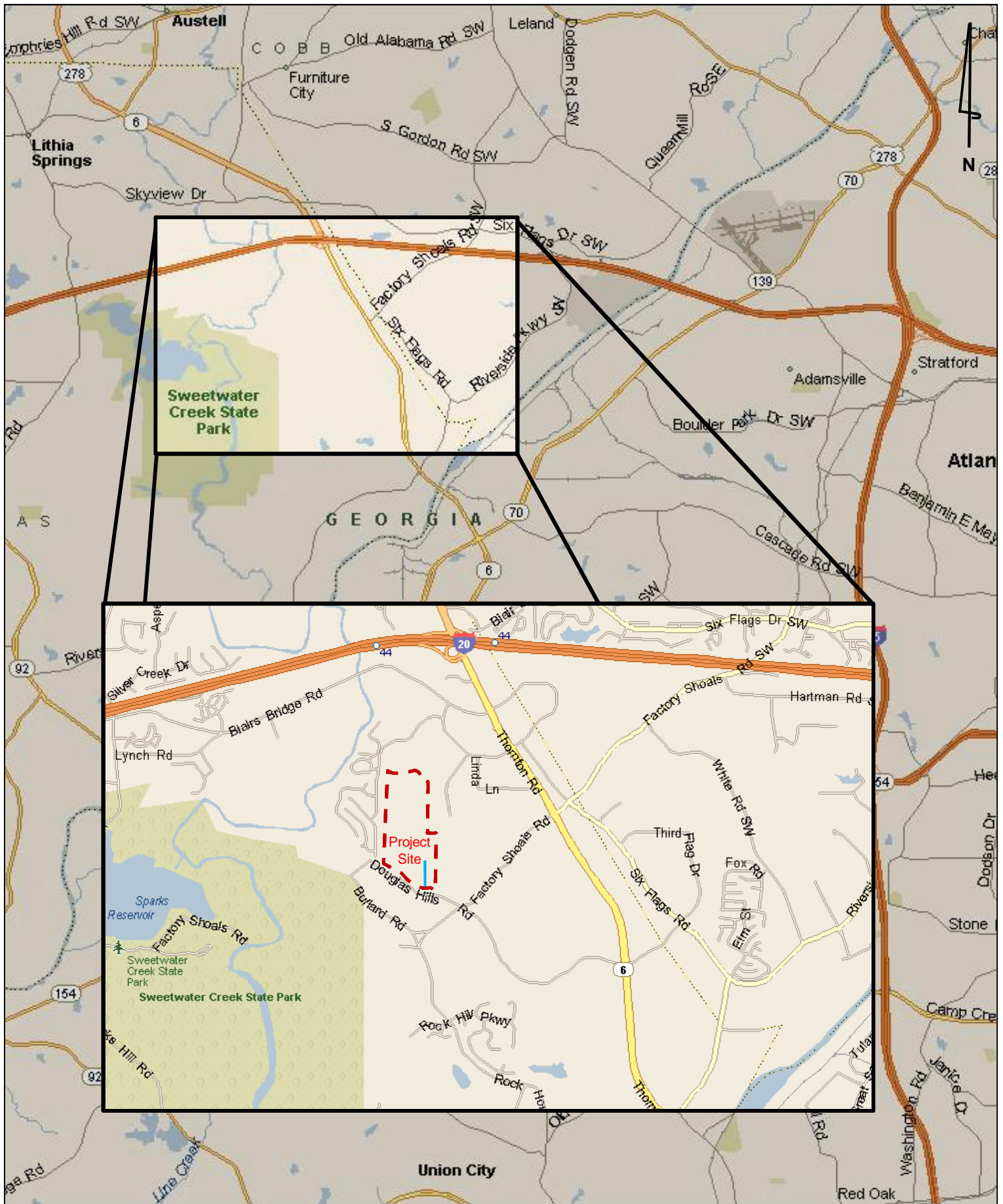
- 1. No more than one thousand (1,000) gross daily trips generated by the DRI based on a trip generation memorandum; or,*
- 2. **More than one thousand (1,000) but no more than three thousand (3,000) gross daily trips will be generated by the DRI, based on a trip generation memorandum and requires the submittal of an Access Analysis;** or,*
- 3. The proposed DRI is projected to generate no more than one hundred (100) gross PM peak hour weekday trips based on a trip generation memorandum.*

**Figure 1** provides the site location of the *DCT Douglas Hill Distribution Center* development. **Figure 2** and **Figure 3** provide an aerial view 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**. Douglas County Zoning Map and the *Atlanta Region's Plan Unified Growth Policy Map* are included in **Appendix B**.

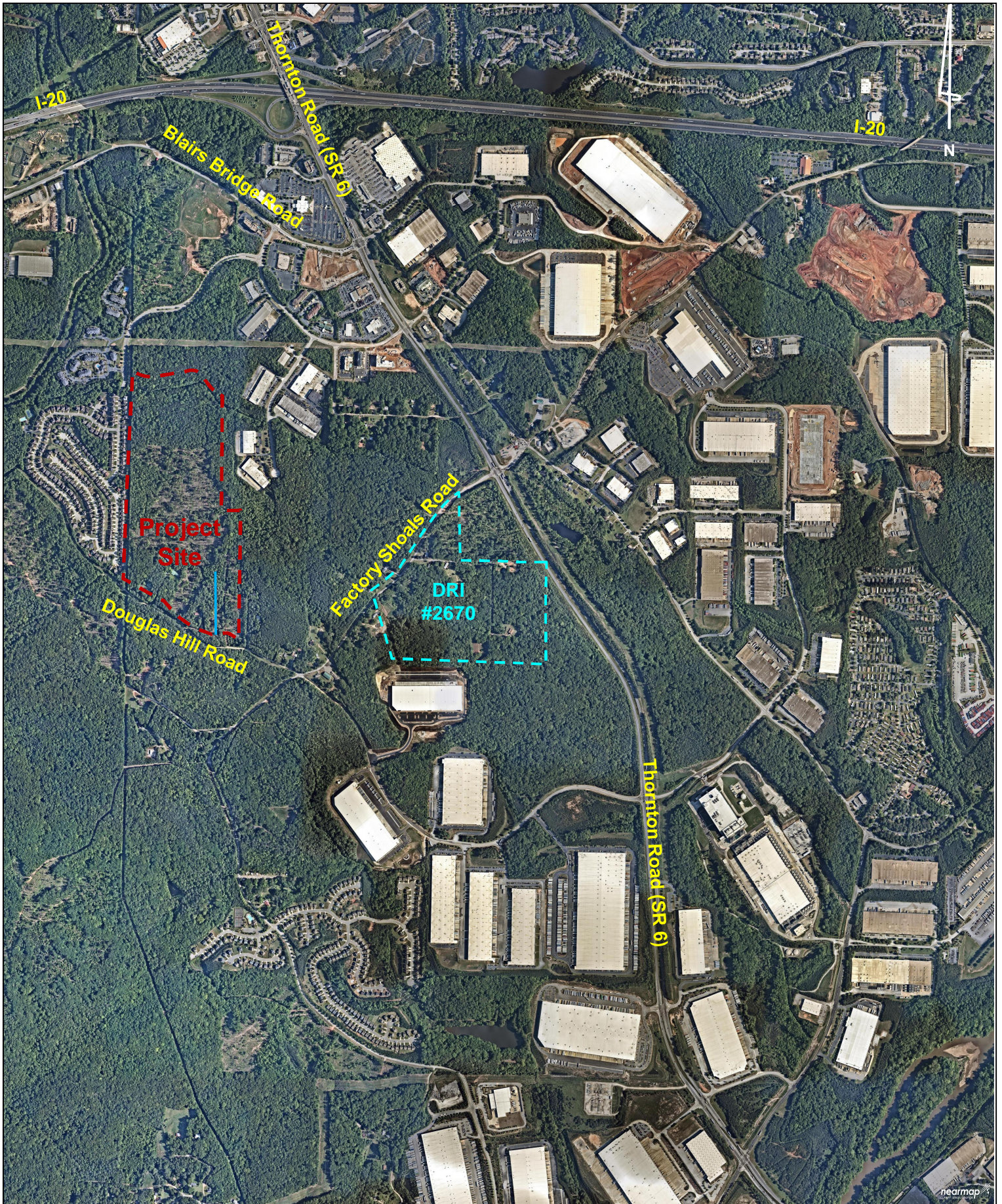
The proposed project is expected to be completed by 2019, and this analysis will consider the full build-out of the proposed site in 2019. A summary of the proposed land-use and density is provided below in **Table 1**.

Table 1: Proposed Land Uses	
152: High-Cube Warehouse/Distribution Center	1,036,800 SF

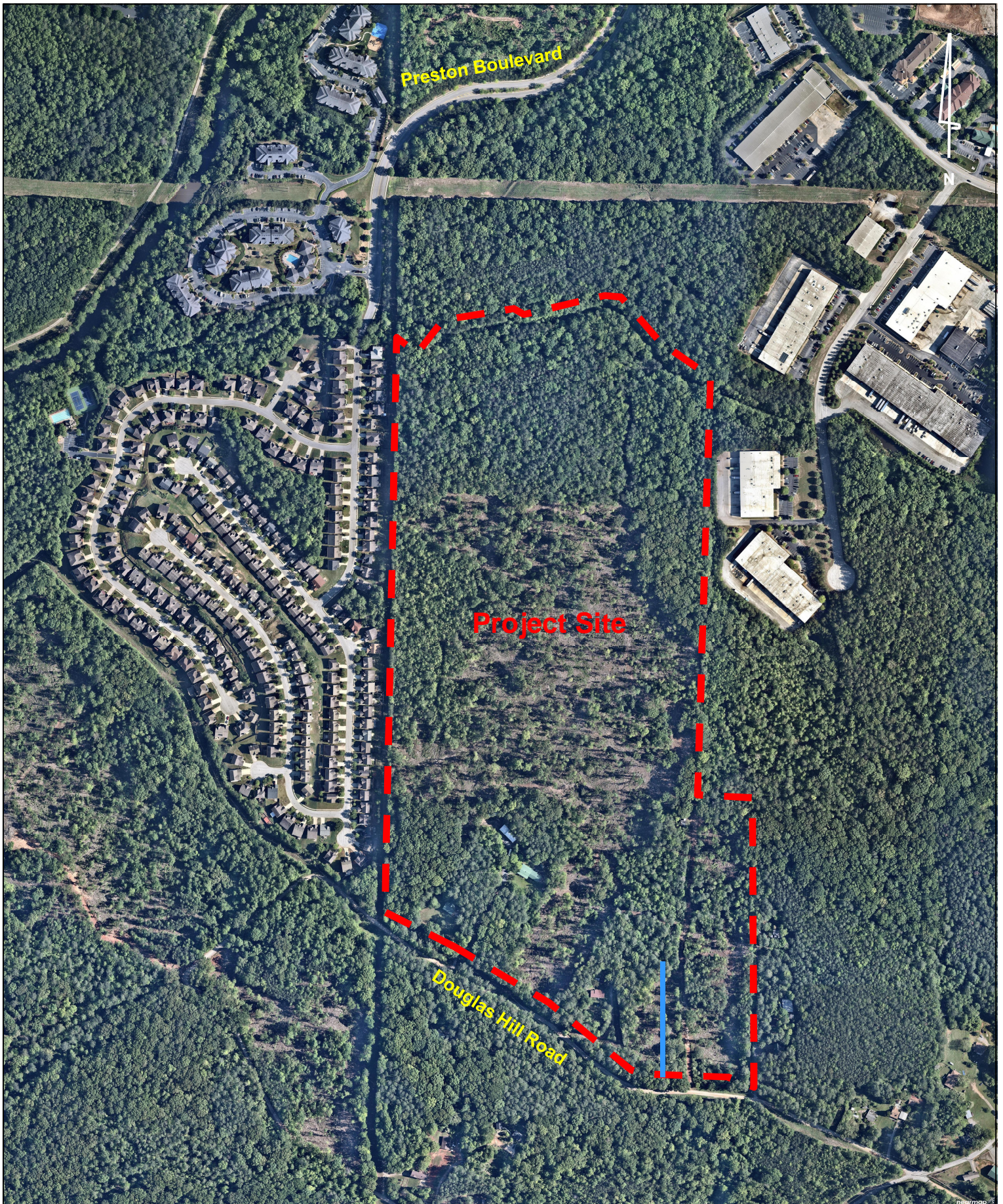














## 1.2 Site Plan Review

The proposed development is located on an approximately 92.6-acre site in Douglas County, Georgia. The project site is bordered by Douglas Hill Road to the south. The proposed development will be an industrial warehouse facility with approximately 1,036,800 SF of warehousing space. The project will include one (1) new warehouse building. The property is currently undeveloped. 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

As currently envisioned, the proposed development will be served by one (1) full-movement driveway along Douglas Hill Road. Douglas Hill Road in the vicinity of the site is a two-lane, undivided, local gravel road with a posted speed limit of 35 mph. A summary of the proposed site access point follows:

1. Proposed Driveway – a proposed, side-street stop-controlled full-movement driveway located on Factory Shoals Road approximately 1,000 feet west of the intersection of Douglas Hill Road at Factory Shoals Road.

The proposed site access point provides vehicular access to the entire development. Internal private roadways throughout the site provide access to all buildings and parking facilities. See referenced site plan in **Appendix C** for a visual representation of vehicular access and circulation throughout the proposed development. The site driveways and internal roadways provide access to all parking on the site. Parking will be provided throughout the development as follows:

Parking Provided: 519

Trailer Space Provided: 269

## 1.4 Bicycle and Pedestrian Facilities

Pedestrian facilities (sidewalks) do not currently exist along the project site frontage or in the vicinity of the project. Bicycle facilities do not currently exist along the project site frontage. There are no pedestrian or bicycle projects programmed in the vicinity of the project site that will be completed prior to the buildout of the *DCT Douglas Hill Distribution Center* development. According to the DRI site plan, no pedestrian or bicycle facilities are proposed.

## 1.5 Transit Facilities

There are no direct transit routes located within the vicinity of the project; therefore, no alternative mode reductions were taken.



## 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 1.5 percent per year background traffic growth rate was used for all roadways. This background growth rate was used to account for other proposed development activity (including surrounding DRIs previously reviewed) in the area.

In addition, to the background growth rate, the project trips associated with the following developments was incorporated into the background traffic:

- *DCT Factory Shoals DRI #2670* (completed in June 2017)

### 2.2 Traffic Data Collection

Weekday peak hour turning movement counts were collected on Tuesday, July 11<sup>th</sup>, 2017 at study intersection 1 during the AM and PM peak periods. Weekday peak hour turning movement counts were collected on Wednesday, April 12, 2017, at the study intersections 2 and 3 during the AM and PM peak periods. Peak hours for all intersections are shown in **Table 2**.

Table 2: Peak Hour Summary			
Intersection	Date Collected	AM Peak Hour	PM Peak Hour
1. Thornton Road (SR 6) at Factory Shoals Road	April 12, 2017	7:00 AM - 8:00 AM	4:45 PM - 5:45 PM
2. Thornton Road (SR 6) at Douglas Hill Road	April 12, 2017	7:00 AM - 8:00 AM	4:45 PM - 5:45 PM
3. Factory Shoals Road at Douglas Hill Road	July 11, 2017	7:15 AM - 8:15 AM	4:45 PM - 5:45 PM

The collected peak hour turning movement traffic counts are shown in **Appendix D**.

The July counts at the intersection of Factory Shoals Road at Douglas Hill Road were increased to match the adjacent intersection of Thornton Road at Factory Shoals Road (counted April 12, 2017) to account for the seasonal variation in traffic during the summer.

### 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*. All intersection signal timings were optimized using *Synchro Professional, Version 9.0*.

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**.

Table 3: Gross Trip Generation								
Land Use	Density	ITE Code	Daily Traffic		AM Peak Hour		PM Peak Hour	
			Enter	Exit	Enter	Exit	Enter	Exit
* Heavy Vehicle (Truck) Trips:								
High-Cube Warehouse/Distribution Center	1,036,800 SF	152	332	332	22	10	13	29
Employee (Car) Trips:								
High-Cube Warehouse/Distribution Center	1,036,800 SF	152	539	539	61	27	28	61
Total New Trips			871	871	83	37	41	90

\* Note: Truck percentage per ITE's Trip Generation Manual.

#### 3.2 Trip Distribution

The directional distribution and assignment of new project trips were 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), and Douglas County staff. (See *Section 5.0 Trip Distribution and Assignment*).

#### 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 the intersection during 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, and Douglas County staff, and includes the following four (4) intersections described in **Table 4**.

The study network includes two (2) signalized intersections and two (2) side-street stop-controlled intersections as noted in **Table 4**. The study intersections are shown in **Figure 4**.

<b>Table 4: Intersection Control Summary</b>	
<b>Intersection</b>	<b>Control</b>
1. Thornton Road (SR 6) at Factory Shoals Road	Signal
2. Thornton Road (SR 6) at Douglas Hill Road	Signal
3. Factory Shoals Road at Douglas Hill Road	Stop Control
4. Douglas Hill Road at Proposed Driveway	Stop Control

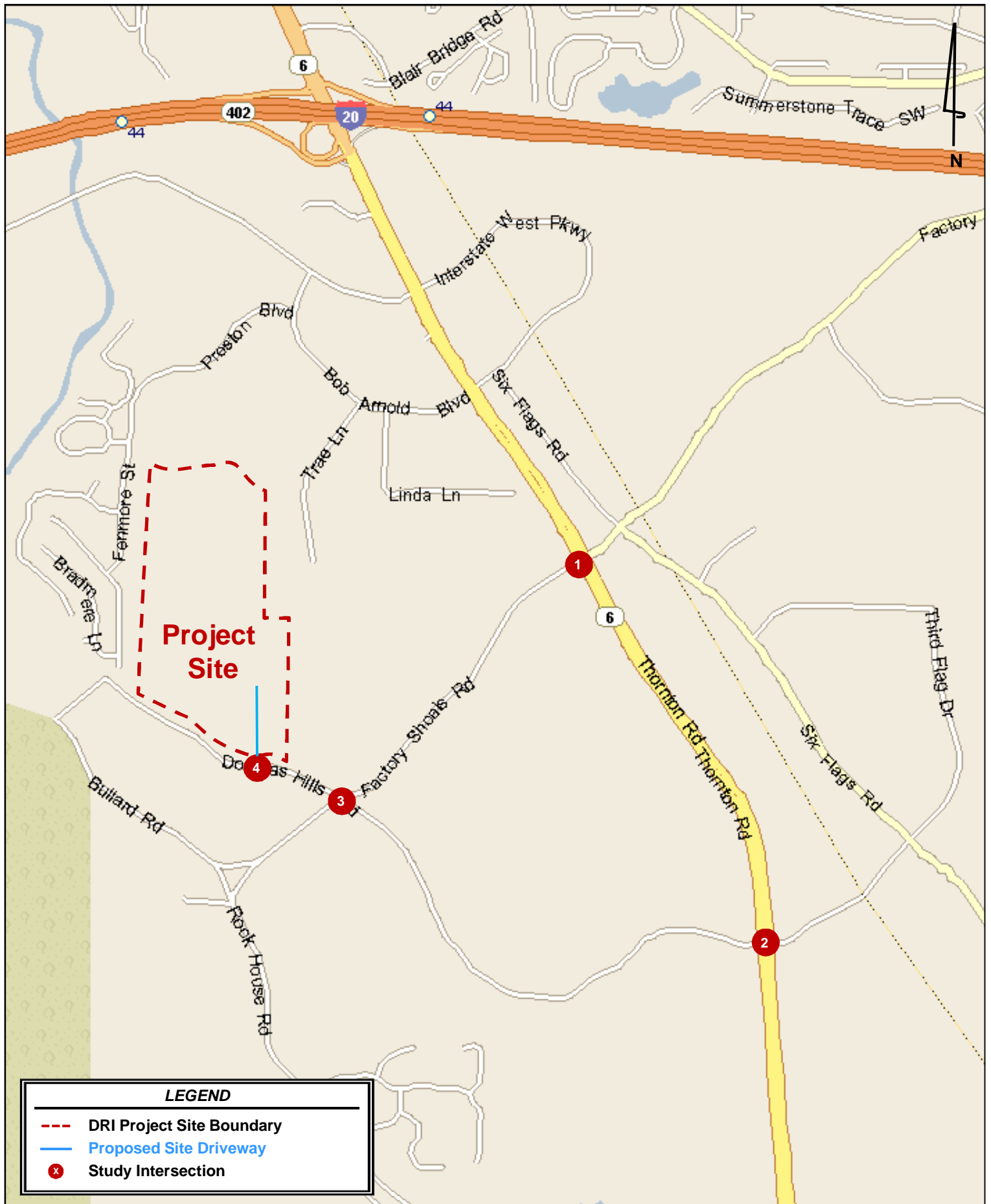
Each of the intersections listed in **Table 4** were analyzed for the Existing 2017 conditions, the Projected 2019 No-Build conditions, and the Projected 2019 Build conditions. The Projected 2019 No-Build conditions represent the existing traffic volumes grown for two (2) years at 1.5 percent per year throughout the study network, plus estimated project trips from *DCT Factory Shoals DRI #2670*.

The Projected 2019 Build conditions add the project trips associated with the *DCT Douglas Hill Distribution Center* development to the Projected 2019 No-Build conditions.

### 3.5 Existing Roadway Facilities

Roadway classification descriptions and estimated Average Annual Daily Traffic (AADT) for the entire study area are provided in **Table 5** (bolded roadway runs adjacent to the site). AADT totals were obtained through GDOT's historical traffic count database.

<b>Table 5: Roadway Classifications</b>				
<b>Roadway</b>	<b>No. of Lanes</b>	<b>Posted Speed Limit (MPH)</b>	<b>Approximate Average Annual Daily Traffic (AADT)</b>	<b>Functional Classification</b>
<b>Douglas Hill Road (west of Thornton Road)</b>	<b>2</b>	<b>35</b>	<b>1,900</b>	<b>Local Road</b>
Factory Shoals Road (west of Douglas Hill Road)	2	35	1,070	Local Road
Thornton Road (SR 6) (south of Douglas Hill Road)	4	55	31,800	Other Principal Arterial
I-20 (east of Thornton Road)	6	70	112,000	Interstate



## 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, 9<sup>th</sup> Edition, 2012*, using equations where available. Trip generation for this proposed development is calculated based upon the following land use: High-Cube Warehouse/Distribution Center (ITE 152). The *ITE Trip Generation Manual, 9<sup>th</sup> Edition, 2012*, also provides the daily and peak hour weighted average truck trip generation rate.

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

Table 6: Net New Trip Generation							
	Daily Traffic			AM Peak Hour		PM Peak Hour	
	Total	Enter	Exit	Enter	Exit	Enter	Exit
<b>Gross Project Trips</b>	<b>1,742</b>	<b>871</b>	<b>871</b>	<b>83</b>	<b>37</b>	<b>41</b>	<b>90</b>
Heavy Vehicle (Truck) Trips*	664	332	332	22	10	13	29
Employee (Car) Trips	1,078	539	539	61	27	28	61
Alternative Mode Reduction	- 0	- 0	- 0	- 0	- 0	- 0	- 0
Pass-by Reduction	- 0	- 0	- 0	- 0	- 0	- 0	- 0
<b>Total Trips</b>	<b>1,742</b>	<b>871</b>	<b>871</b>	<b>83</b>	<b>37</b>	<b>41</b>	<b>90</b>

\* Truck percentage per ITE's Trip Generation Manual.

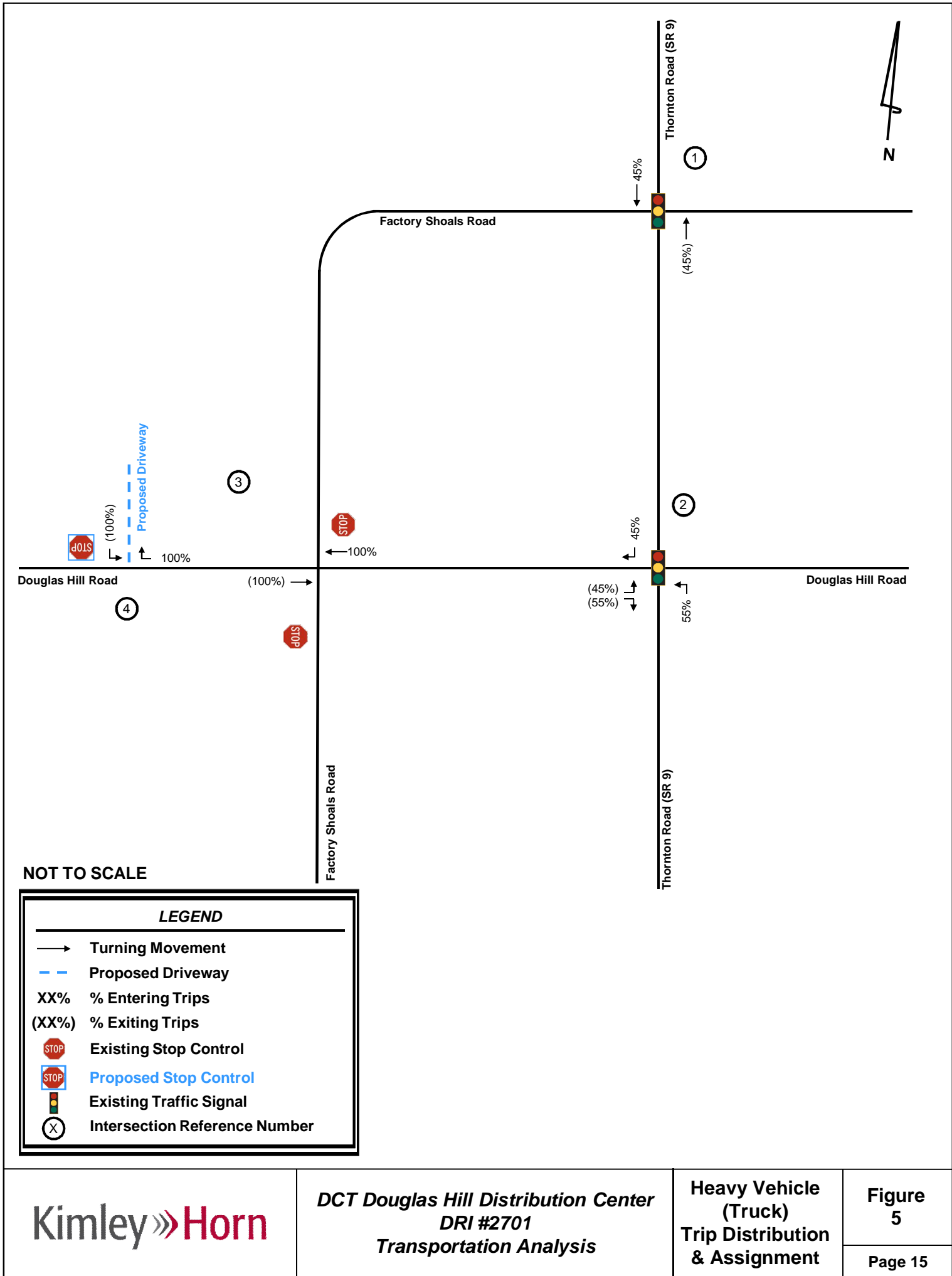
A more detailed trip generation analysis summary table is provided in **Appendix E**.

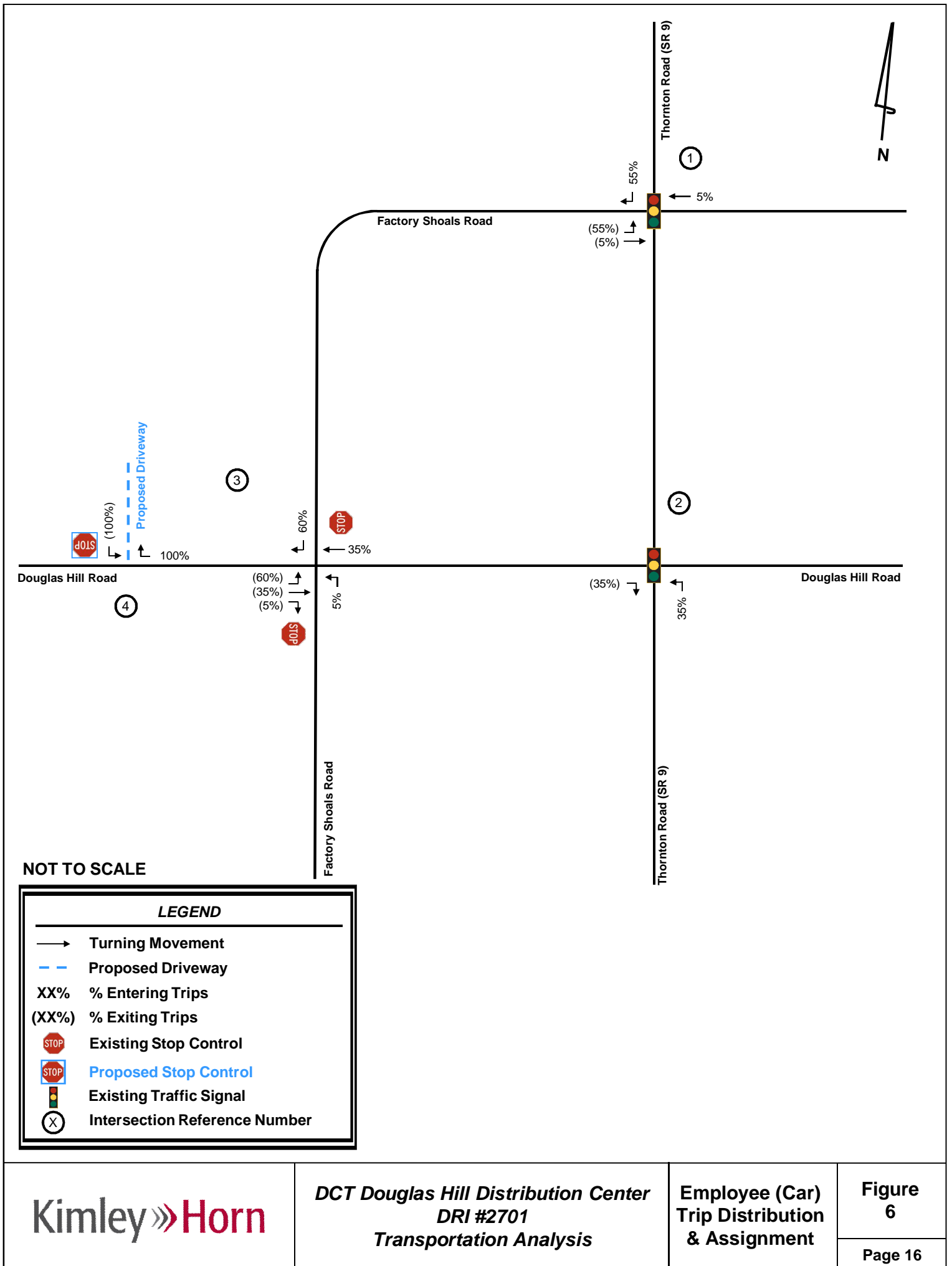
## 5.0 TRIP DISTRIBUTION AND ASSIGNMENT

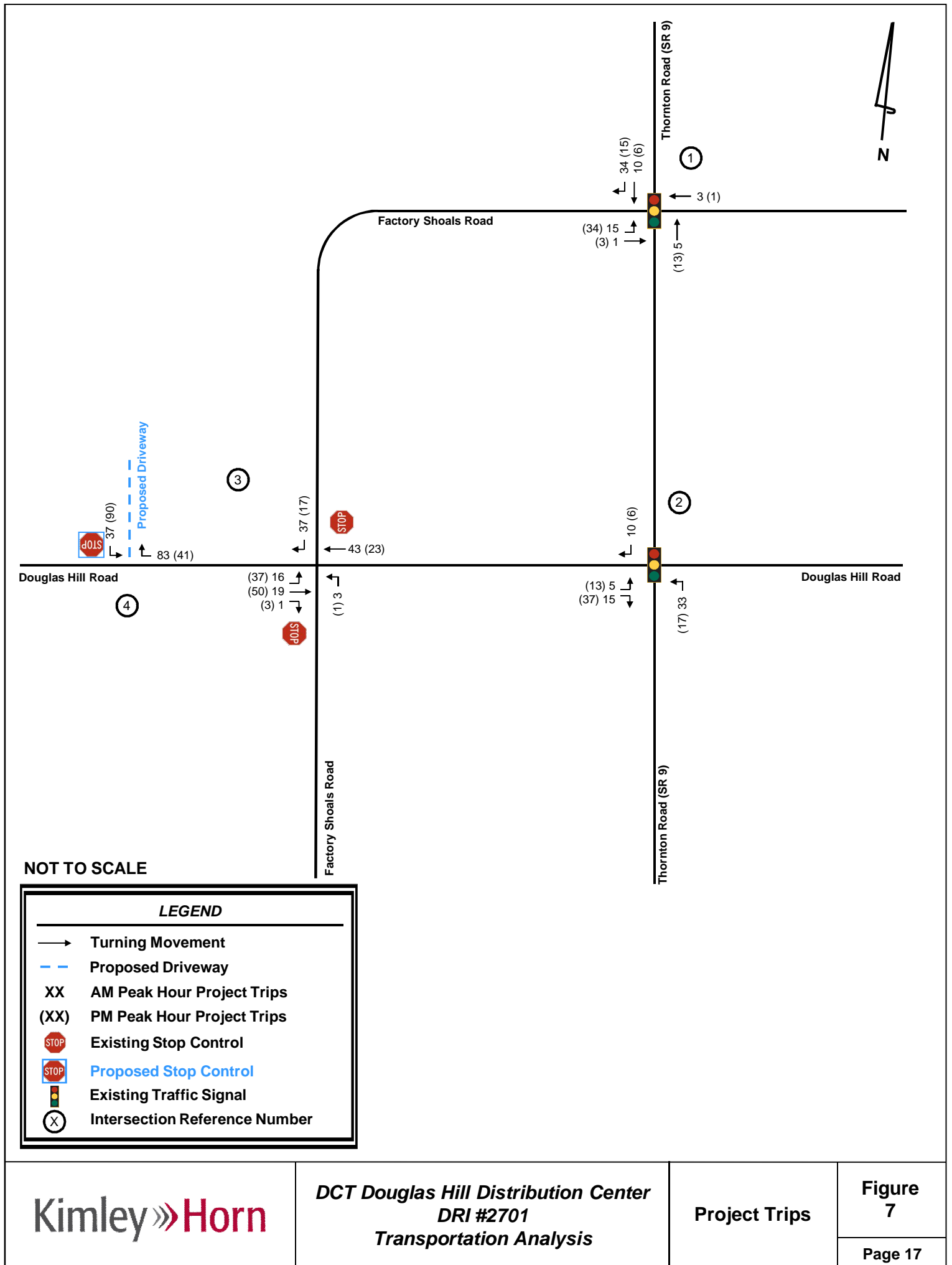
New trips were distributed onto the roadway network using the percentages developed as described in *Section 3.2* of this report, and as agreed to during methodology discussions with GRTA, ARC, and Douglas County staff.

**Figure 5** and **Figure 6** display the anticipated distribution and assignment of heavy vehicle (truck) trips and employee (car) trips throughout the study roadway network. 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 combined peak hour project trips by turning movement throughout the study network, anticipated to be generated by the proposed *DCT Douglas Hill Distribution Center* development, are shown on **Figure 7**.

Detailed intersection volume worksheets are provided in **Appendix F**.









## 6.0 TRAFFIC ANALYSIS

### 6.1 Existing 2017 Conditions

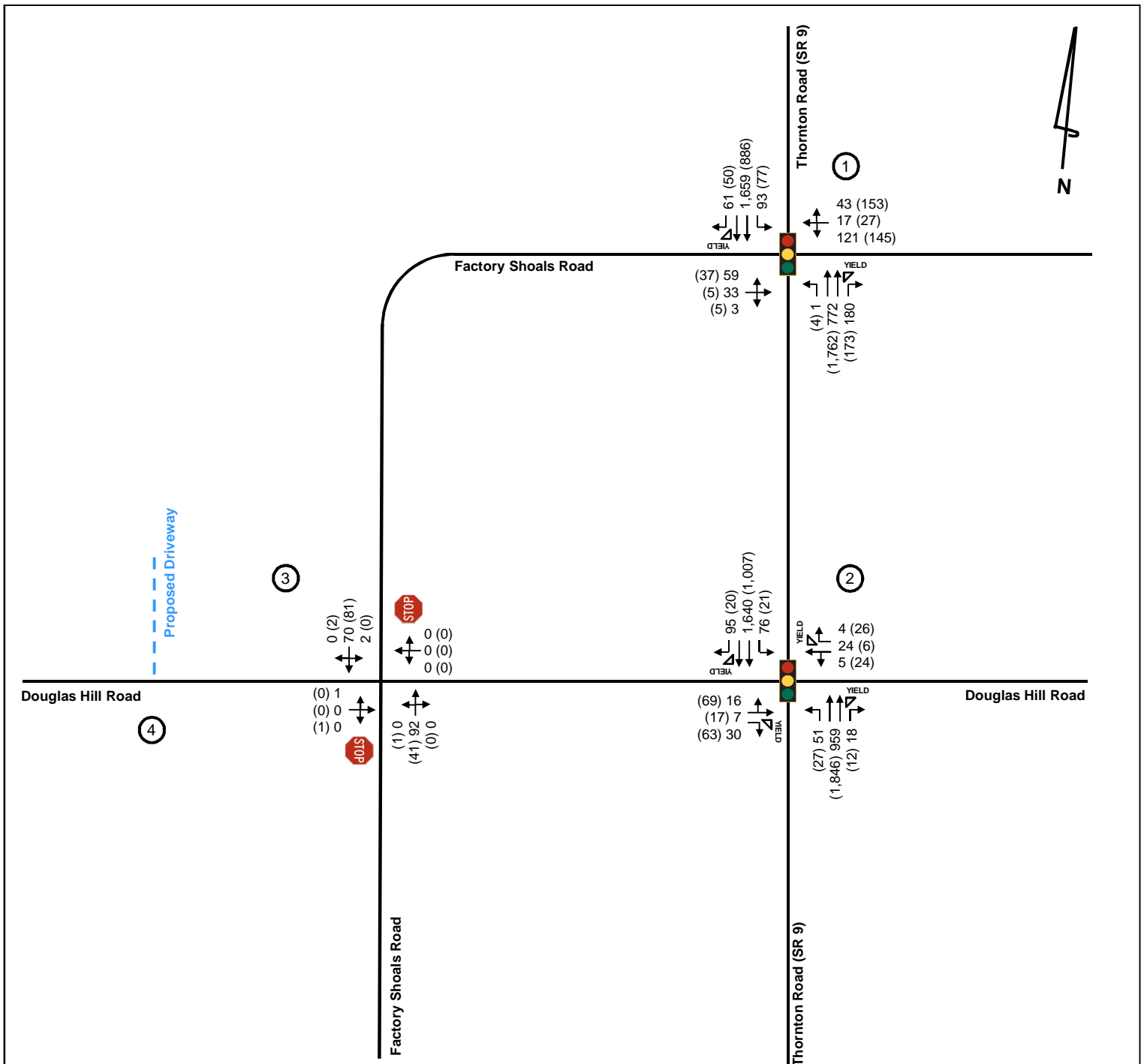
The observed existing peak hour traffic volumes were entered into *Synchro 9.0*, and capacity analyses were performed for the AM and PM peak hours.

The existing peak hour traffic volumes are displayed in **Figure 8**, 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.

Table 7: Existing 2017 Level-of-Service Summary LOS (delay in seconds)					
Intersection	Control	Approach/ Movement	LOS Std.	AM Peak Hour	PM Peak Hour
1. Thornton Road (SR 6) at Factory Shoals Road	Signal	Overall	D	C (23.1)	C (34.8)
2. Thornton Road (SR 6) at Douglas Hill Road	Signal	Overall	D	A (7.2)	B (11.8)
3. Factory Shoals Road at Douglas Hill Road	TWSC*	NB Left	D	A (0.0)	A (7.4)
		EB	D	A (9.7)	A (8.8)
		WB	D	A (0.0)	A (0.0)
4. Douglas Hill Road at Proposed Site Driveway	TWSC*	SB	D	N/A	N/A

\* Two-Way Stop-Control / Side-Street Stop-Control.

As shown in **Table 7**, all study intersections currently operate at or above their acceptable overall level-of-service standard during the AM and PM peak hours for the Existing 2017 conditions. Therefore, there are no recommended improvements for the Existing 2017 conditions scenario.



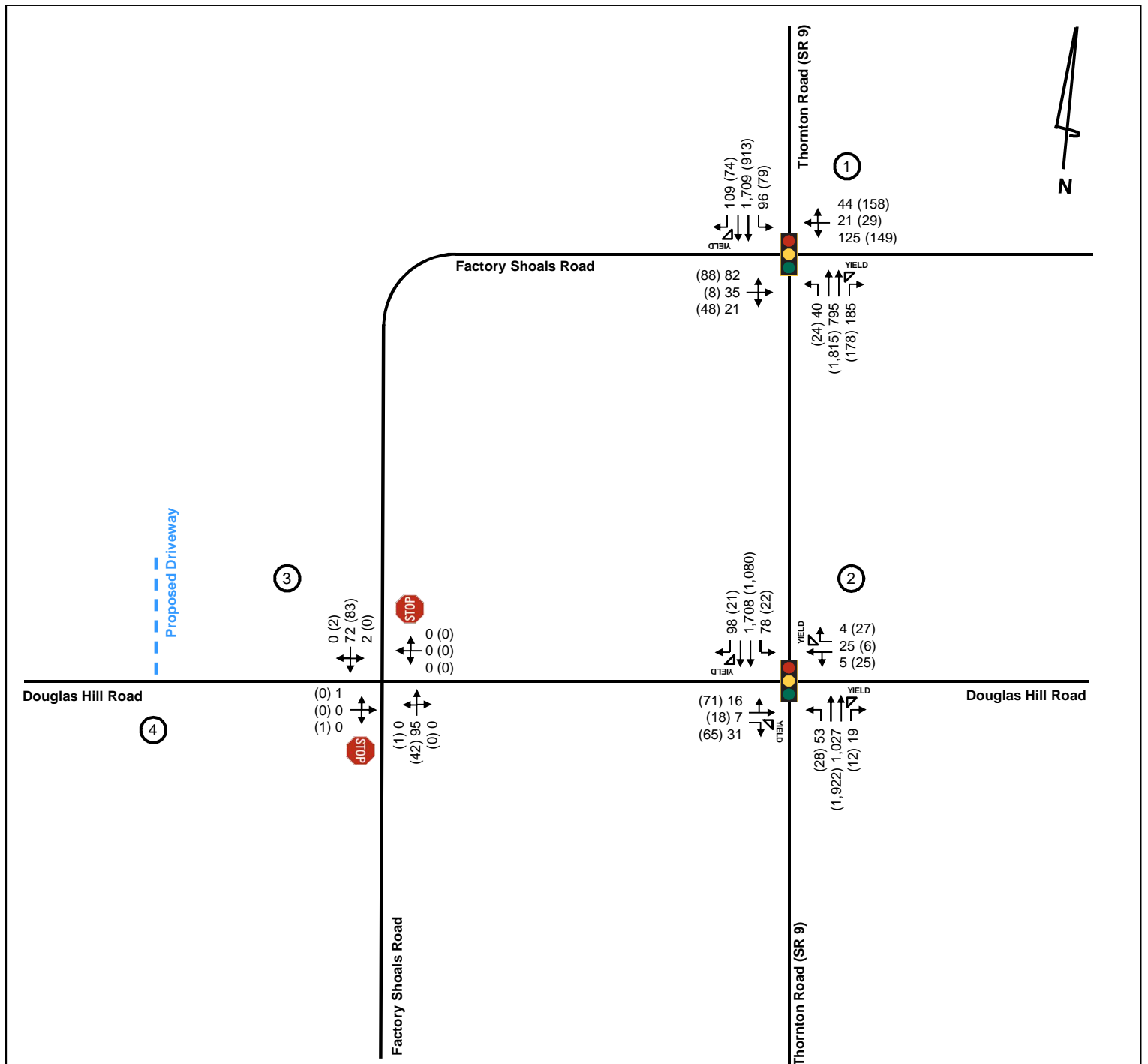
## 6.2 Projected 2019 No-Build Conditions

To account for growth in the vicinity of the proposed development, the existing traffic volumes were increased for two (2) years at 1.5 percent per year throughout the study network. In addition, estimated project trips from the *DCT Factory Shoals DRI #2670* development were added to the study network. These volumes were entered into *Synchro 9.0*, and capacity analyses were performed. The Projected 2019 No-Build conditions were analyzed using existing roadway geometry and existing intersection control types.

The intersection laneage and traffic volumes for the Projected 2019 No-Build conditions are shown in **Figure 9**. The results of the capacity analyses for the Projected 2019 No-Build are shown in **Table 8**. Detailed *Synchro* analysis reports are available upon request.

Table 8: Projected 2019 No-Build Level-of-Service Summary LOS (delay in seconds)					
Intersection	Control	Approach/ Movement	LOS Std.	AM Peak Hour	PM Peak Hour
1. Thornton Road (SR 6) at Factory Shoals Road	Signal	Overall	D	C (27.8)	D (39.7)
2. Thornton Road (SR 6) at Douglas Hill Road	Signal	Overall	D	A (7.5)	B (12.5)
3. Factory Shoals Road at Douglas Hill Road	TWSC*	NB Left	D	A (0.0)	A (7.4)
		EB	D	A (9.8)	A (8.8)
		WB	D	A (0.0)	A (0.0)
4. Douglas Hill Road at Proposed Site Driveway	TWSC*	SB	D	N/A	N/A

As shown in **Table 8**, all study intersections currently operate at or above their acceptable overall level-of-service standard during the AM and PM peak hours for the Projected 2019 No-Build conditions. Therefore, there are no recommended improvements for the Projected 2019 No-Build conditions scenario.



NOT TO SCALE

LEGEND	
	Roadway Laneage
	Proposed Driveway
XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume
	Existing Stop Control
	Existing Traffic Signal
	Intersection Reference Number

### 6.3 Projected 2019 Build Conditions

The traffic associated with the proposed *DCT Douglas Hill Distribution Center* development was added to the Projected 2019 No-Build volumes. These volumes were then entered into *Synchro 9.0*, and capacity analyses were performed. The Projected 2019 Build conditions were analyzed using the existing roadway geometry, existing intersection control types, and proposed site driveways as shown in the DRI site plan.

The intersection laneage and traffic volumes used for the Projected 2019 Build conditions are shown in **Figure 10**. The results of the capacity analyses for the Projected 2019 Build conditions are shown in **Table 9**. Detailed *Synchro* analysis reports are available upon request.

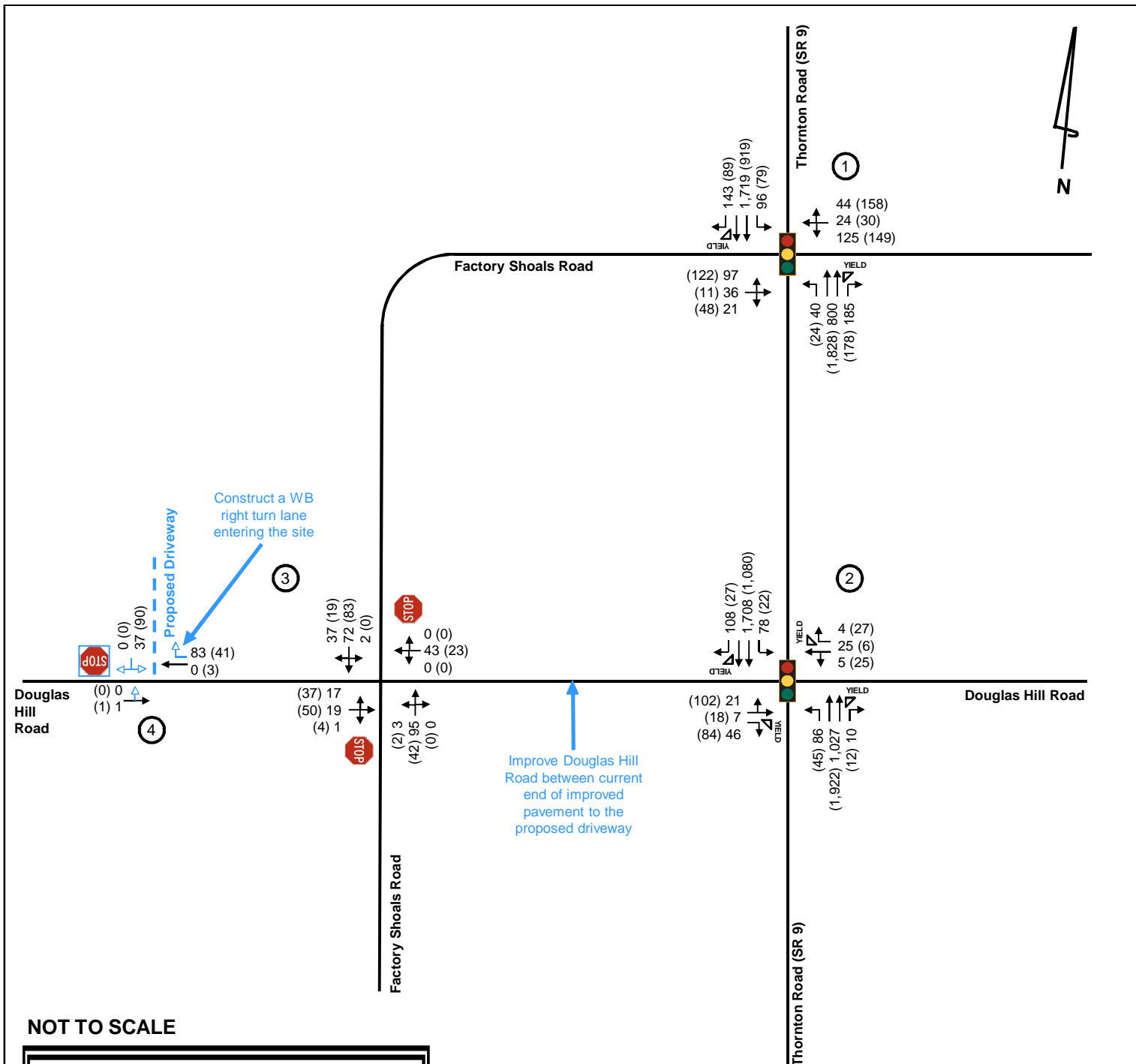
Table 9: Projected 2019 Build Level-of-Service Summary LOS (delay in seconds)					
Intersection	Control	Approach/ Movement	LOS Std.	AM Peak Hour	PM Peak Hour
1. Thornton Road (SR 6) at Factory Shoals Road	Signal	Overall	D	C (28.5)	D (41.8)
2. Thornton Road (SR 6) at Douglas Hill Road	Signal	Overall	D	A (8.2)	B (14.5)
3. Factory Shoals Road at Douglas Hill Road	TWSC*	NB Left	D	A (7.5)	A (7.5)
		EB	D	B (11.3)	B (11.1)
		WB	D	B (12.0)	B (11.0)
4. Douglas Hill Road at Proposed Driveway	TWSC*	SB	D	A (0.0)	A (9.3)

\* Two-Way Stop-Control / Side-Street Stop-Control.

As shown in **Table 9**, all study intersections currently operate at or above their acceptable overall level-of-service standard during the AM and PM peak hours for the Projected 2019 Build conditions. Therefore, there are no recommended improvements for the Projected 2019 Build conditions scenario.

The following site-access improvements are recommended to serve the traffic associated with the *DCT Douglas Hill Distribution Center* development:

- Intersection #4: Douglas Hill Road at Proposed Site Driveway
  - On the site, construct one (1) southbound shared left/right-turn lane exiting the site onto Douglas Hill Road and one (1) ingress lane entering the site.
  - Construct one (1) westbound right-turn lane, with a minimum 100 feet of storage and a 50 foot taper, along Douglas Hill Road to serve vehicles turning right into the site.
  - Improve Douglas Hill Road between the current end of improved pavement section to the proposed site driveway (approximately 2,500 feet) via widening and pavement overlay



NOT TO SCALE

LEGEND	
	Roadway Laneage
	Proposed Roadway Laneage
	Proposed Driveway
XX	AM Peak Hour Volume
(XX)	PM Peak Hour Volume
	Existing Stop Control
	Proposed Stop Control
	Existing Traffic Signal
	Intersection Reference Number

## 7.0 INGRESS/EGRESS ANALYSIS

Vehicular access to the *DCT Douglas Hill Distribution Center* development is proposed at one (1) location. The site driveway location is discussed in *Section 1.3*.

The proposed site driveway provides vehicular access to the entire development. Internal private roadways throughout the site provide access throughout the project site.

Capacity analyses were performed for the proposed site driveway intersections 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 2019 Build conditions, the proposed site driveway intersection is anticipated to operate at an acceptable level-of-service.

## 8.0 IDENTIFICATION OF PROGRAMMED PROJECTS

According to ARC's Transportation Improvement Program, the Regional Transportation Plan (Atlanta Region's Plan), GDOT's construction work programs, Douglas County's programmed projects, and the GA STIP, the following projects are programmed or planned to be completed by the respective years within the vicinity of the proposed development. The identified projects are listed in **Table 10** below.

Table 10: Programmed Improvements			
#	Year	Project ID	Project Description
1	TBD	DO-299	Programmed: Implement truck friendly lanes along SR 6 from I-20 to SR 6 Spur.
2	TBD	FS-003	Long range: Widen SR 70 from SR 6 to James Aldredge Boulevard.
3	TBD	AR-ML-800	Long Range: Construct managed lanes from I-285 West to SR 92 along I-20.
4	*	AR-H-201	Two managed lanes in both directions along I-20 from SR 6 to Bright Star Road.
5	*	CTP-20	Widening of Blairs Bridge Road/Monier Parkway from SR 6 to Mt. Vernon Road from 2 to 3 lanes.

\* Douglas County CTP published in December 2008.

Fact sheets for projects can be found in **Appendix G**.

In addition, the Sweetwater Master Plan, published June 2017, outlines several new roadway projects in the vicinity of the site. These projects are not currently programmed, and therefore not expected to be completed prior to build-out of the development. Please refer to Concept 1A of the Sweetwater Master Plan in **Appendix H** for details about future improvements.

## 9.0 INTERNAL CIRCULATION ANALYSIS

Internal roadways throughout the site provide vehicular access to all buildings and parking on the site. The proposed site driveway will provide access to buildings on the site. A detailed copy of the proposed site plan with internal site roadways is provided in **Appendix C** and a full-sized site plan is attached to the report.

# Appendix A

## Site Photo Log



DCT Industrial  
Photograph Sheet

KHA Job No.: 018716001

KHA Rep.: HDF

Date: July 26th, 2017

Page: 1 of 2

Site Name: Douglas Hill Distribution Center DRI #2701

Photo No. 1



Comments:

Looking east from Proposed Site Driveway

Photo No. 2



Comments:

Looking west from Proposed Site Driveway

DCT Industrial  
Photograph Sheet

KHA Job No.: 018716001

KHA Rep.: HDF

Date: July 26th, 2017

Page: 2 of 2

Site Name: Douglas Hill Distribution Center DRI #2701

Photo No. 3



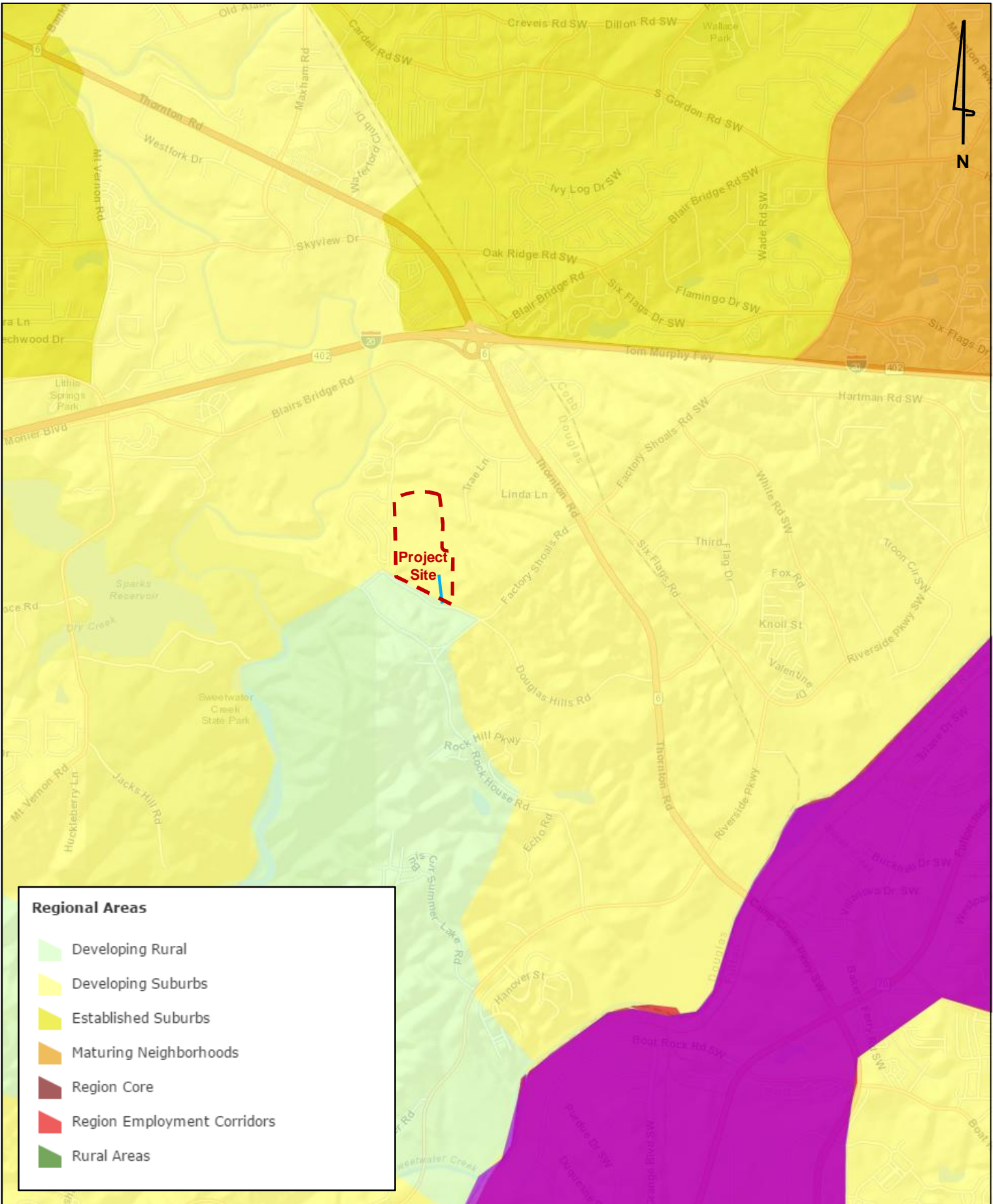
Comments:

Looking south from Proposed Site Driveway #1

## **Appendix B**

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



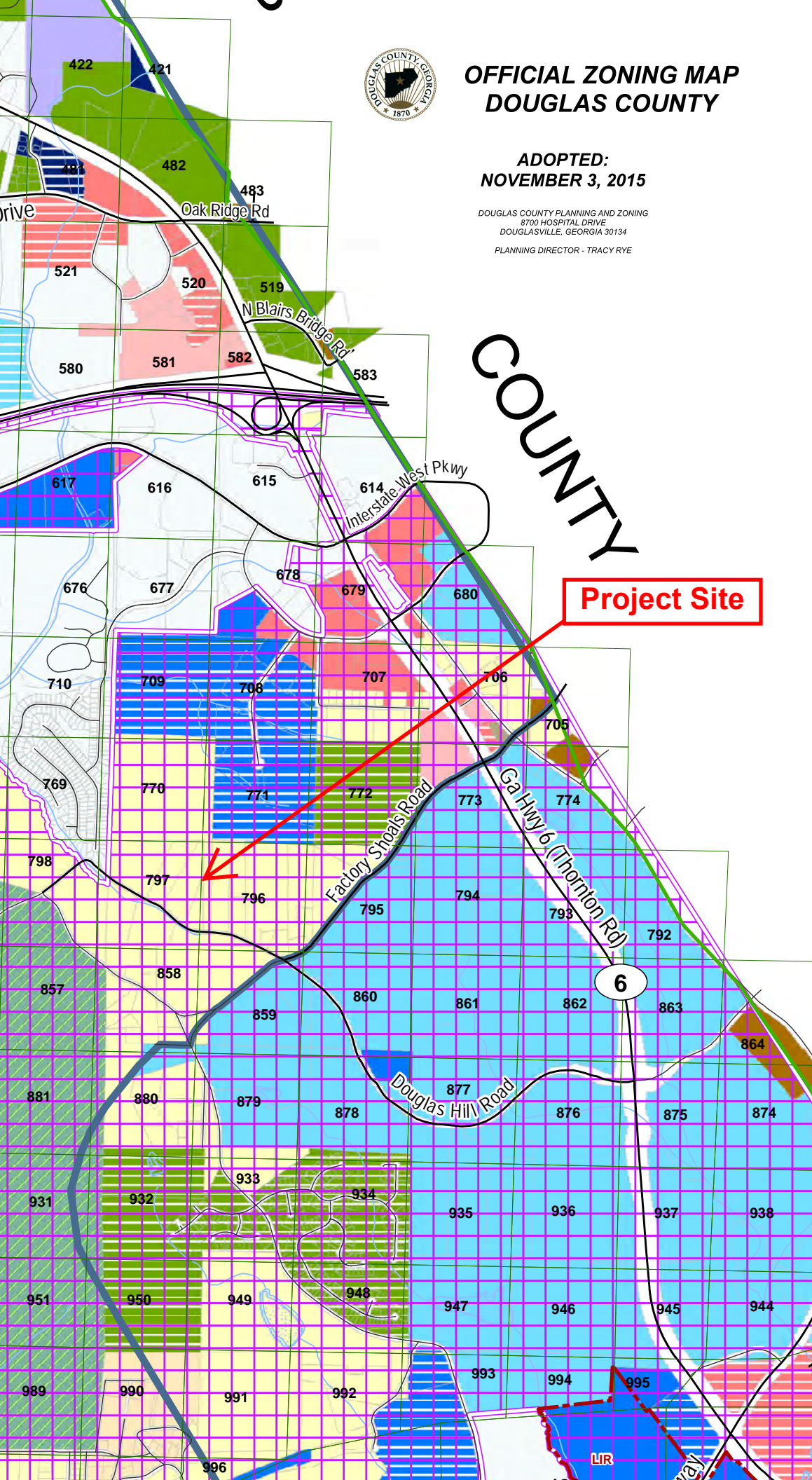
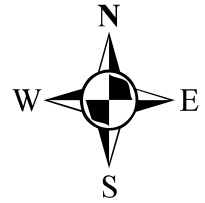




# OFFICIAL ZONING MAP DOUGLAS COUNTY

ADOPTED:  
NOVEMBER 3, 2015

DOUGLAS COUNTY PLANNING AND ZONING  
8700 HOSPITAL DRIVE  
DOUGLASVILLE, GEORGIA 30134  
PLANNING DIRECTOR - TRACY RYE



**Project Site**

## Legend

- Street**
  - Minor
  - Major
  - Railroad
  - Parcel
  - Landlot
  - County Boundary
  - Stream/River
  - Lake
  - Anneewakee Creek Basin
  - Bear Creek Basin
  - Dog River Basin
  - Sweetwater Creek Basin
  - Anneewakee Sub-Watershed A
  - Anneewakee Sub-Watershed B
  - Beaver Run Creek Sub-Watershed
  - Gothards Creek Sub-Watershed
  - Master Planned Community
  - Mixed Master Planned Community
- Airport Hazard Overlay**
  - O-AH
  - O-AH-C
  - Quality Growth Overlay
  - O-ED (Estate Density Overlay)
  - Corridor Overlay
  - Hwy 78 Corridor Overlay
  - Hwy 92 Village Overlay
  - Post Rd Village Overlay
- Zoning**
  - C-C (Community Commercial)
  - C-C-C (Community Commercial - Conditions)
  - C-G (General Commercial)
  - C-G-C (General Commercial - Conditions)
  - C-H (Heavy Commercial)
  - C-H-C (Heavy Commercial - Conditions)
  - C-N (Neighborhood Commercial)
  - C-N-C (Neighborhood Commercial - Conditions)
  - C-R (Regional Commercial)
  - C-R-C (Regional Commercial - Conditions)
  - HI (Heavy Industrial)
  - LI (Light Industrial)
  - LI-C (Light Industrial - Conditions)
  - LI-R (Restricted Light Industrial)
  - LI-R-C (Restricted Light Industrial - Conditions)
  - OI-L (Low Density Office/Institutional)
  - OI-L-C (Low Density Office/Institutional - Conditions)
  - PUD (Planned Unit Development)
  - PUD-C (Planned Unit Development - Conditions)
  - R-A (Residential-Agricultural)
  - R-A-C (Residential-Agricultural - Conditions)
  - R-D (Duplex Two-Family Residential)
  - R-D-C (Duplex Two-Family Residential - Conditions)
  - R-LD (Low Density Single-Family Residential)
  - R-LD-C (Low Density Single-Family Residential - Conditions)
  - R-MD (Medium Density Single-Family Residential)
  - R-MD-C (Medium Density Single-Family Residential - Conditions)
  - R-MF (Multi-Family Residential)
  - R-MF-C (Multi-Family Residential - Conditions)
  - R-MH (Manufactured Home Residential)
  - R-TC (Townhouse Condominium Residential)
  - R-TC-C (Townhouse Condominium Residential - Conditions)
  - City
  - State Park
  - Split Zoned

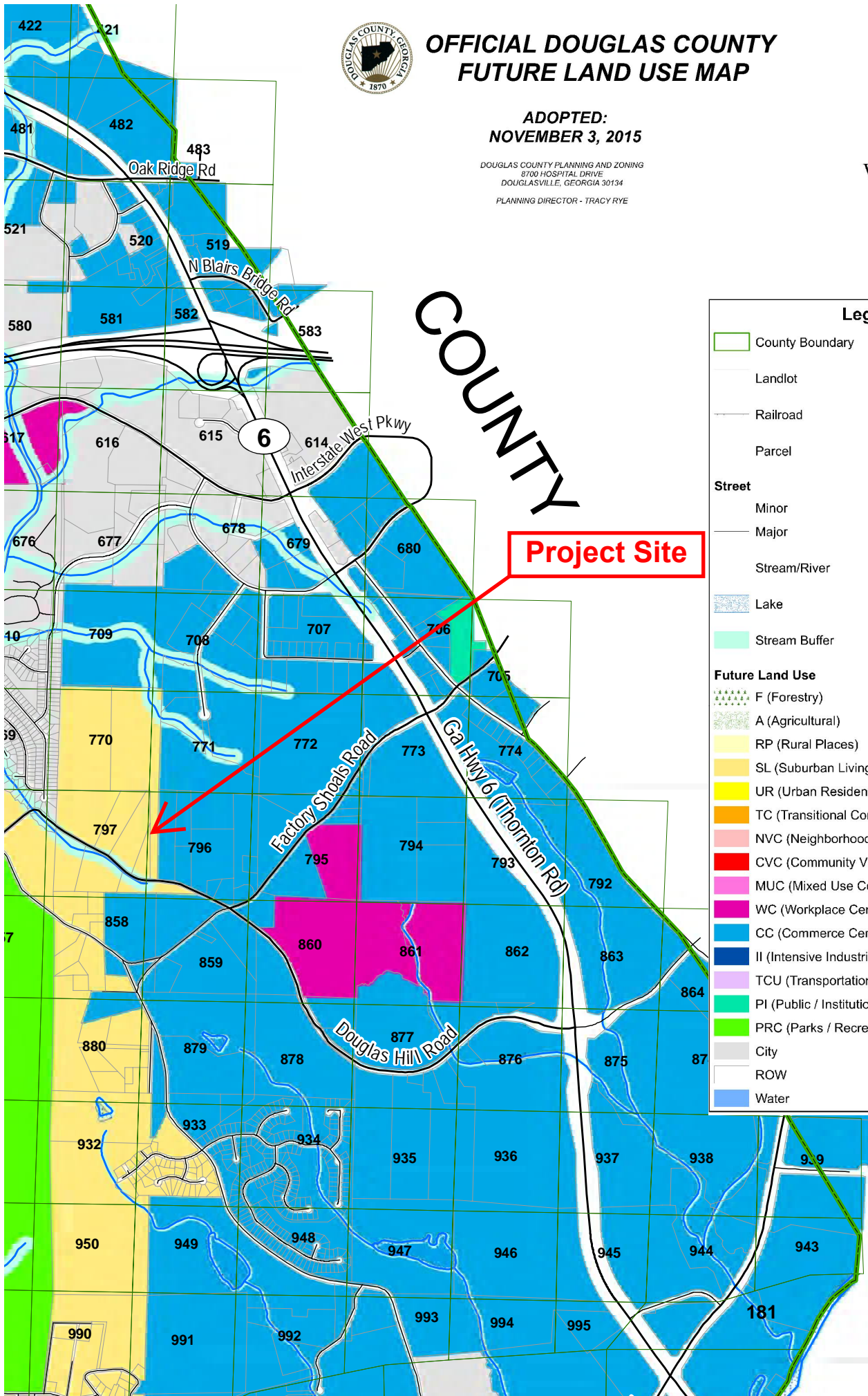
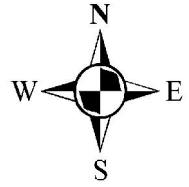




# OFFICIAL DOUGLAS COUNTY FUTURE LAND USE MAP

ADOPTED:  
NOVEMBER 3, 2015

DOUGLAS COUNTY PLANNING AND ZONING  
8700 HOSPITAL DRIVE  
DOUGLASVILLE, GEORGIA 30134  
PLANNING DIRECTOR - TRACY RYE



Legend	
	County Boundary
	Landlot
	Railroad
	Parcel
<b>Street</b>	
	Minor
	Major
	Stream/River
	Lake
	Stream Buffer
<b>Future Land Use</b>	
	F (Forestry)
	A (Agricultural)
	RP (Rural Places)
	SL (Suburban Living)
	UR (Urban Residential)
	TC (Transitional Corridor)
	NVC (Neighborhood Village Center)
	CVC (Community Village Center)
	MUC (Mixed Use Corridor)
	WC (Workplace Center)
	CC (Commerce Center)
	II (Intensive Industrial)
	TCU (Transportation / Communication / Utilities)
	PI (Public / Institutional)
	PRC (Parks / Recreation / Conservation)
	City
	ROW
	Water

## **Appendix C**

### **Proposed Site Plan**







## **Appendix D**

### **Raw Traffic Count Data**

# ITM Peak Hour Summary

Prepared by:

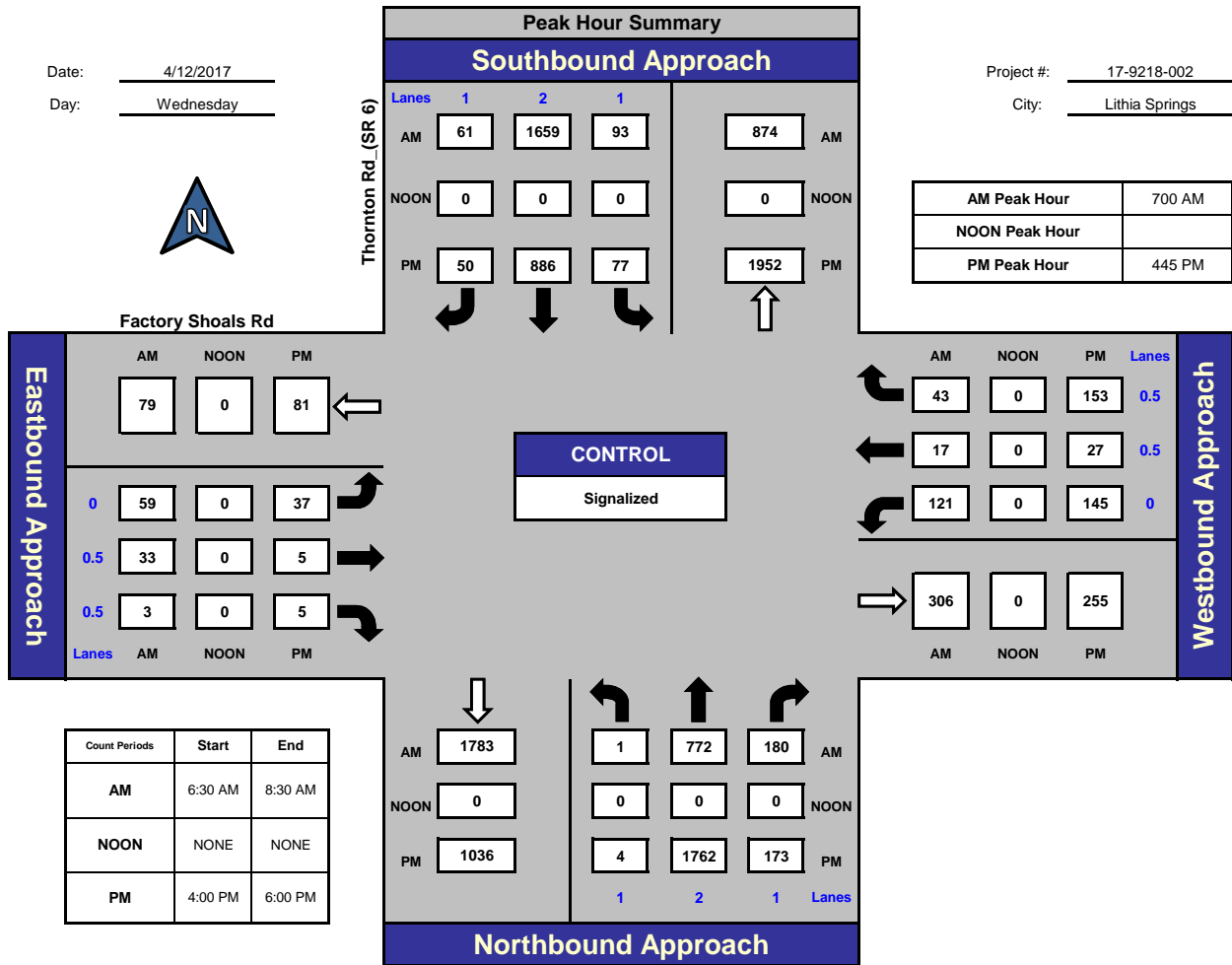


National Data & Surveying Services

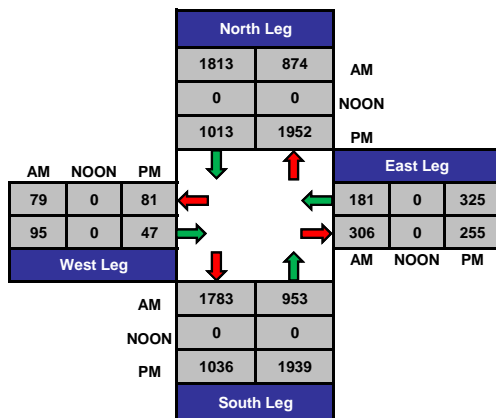
## Thornton Rd (SR 6) and Factory Shoals Rd, Lithia Springs

Date: 4/12/2017  
Day: Wednesday

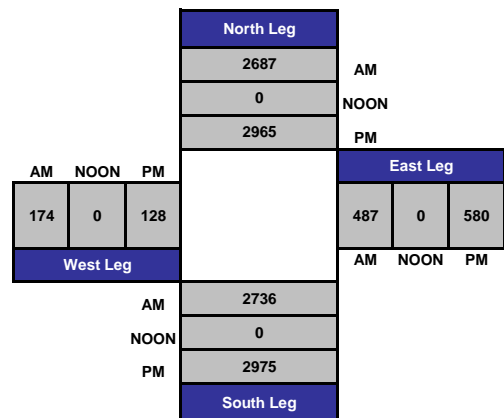
Project #: 17-9218-002  
City: Lithia Springs



### Total Ins & Outs



### Total Volume Per Leg



Project ID: 17-9218-002  
Location: Thornton Rd (SR 6) & Factory Shoals Rd  
City: Lithia Springs

Day: Wednesday  
Date: 4/12/2017

Peak Start Times	
AM	6:30 AM
MD	12:00 AM
PM	4:00 PM

Groups Printed - Cars, PU, Vans - Heavy Trucks

Start Time	Thornton Rd (SR 6) Northbound					Thornton Rd (SR 6) Southbound					Factory Shoals Rd Eastbound					Factory Shoals Rd Westbound					Int. Total
	Left	Thru	Rgt	Peds	App. Total	Left	Thru	Rgt	Peds	App. Total	Left	Thru	Rgt	Peds	App. Total	Left	Thru	Rgt	Peds	App. Total	
6:30 AM	0	150	27	0	177	16	350	8	0	374	9	7	0	0	16	21	3	9	0	33	600
6:45 AM	0	134	38	0	172	20	371	7	0	398	14	17	1	0	32	26	4	15	0	45	647
7:00 AM	0	193	36	0	229	24	403	18	0	445	8	6	0	0	14	23	5	18	0	46	734
7:15 AM	1	194	66	0	261	19	428	11	0	458	28	7	1	0	36	26	2	4	0	32	787
Total	1	671	167	0	839	79	1552	44	0	1675	59	37	2	0	98	96	14	46	0	156	2768
7:30 AM	0	196	44	0	240	20	434	13	0	467	10	10	0	0	20	35	1	7	0	43	770
7:45 AM	0	189	34	0	223	30	394	19	0	443	13	10	2	0	25	37	9	14	0	60	751
8:00 AM	0	207	32	0	239	25	310	13	0	348	11	6	1	0	18	28	5	21	0	54	659
8:15 AM	0	162	29	0	191	20	335	18	0	373	5	5	0	0	10	31	7	15	0	53	627
Total	0	754	139	0	893	95	1473	63	0	1631	39	31	3	0	73	131	22	57	0	210	2807

\*\*\*BREAK\*\*\*

4:00 PM	0	346	29	0	375	6	221	5	0	232	7	2	0	0	9	30	3	29	0	62	678
4:15 PM	0	350	23	0	373	22	192	10	0	224	7	2	0	0	9	32	4	29	0	65	671
4:30 PM	0	444	47	0	491	10	206	11	0	227	6	4	0	0	10	25	4	24	0	53	781
4:45 PM	1	442	37	0	480	18	209	20	0	247	12	0	1	0	13	32	5	34	0	71	811
Total	1	1582	136	0	1719	56	828	46	0	930	32	8	1	0	41	119	16	116	0	251	2941
5:00 PM	1	413	36	0	450	22	242	10	0	274	7	1	0	0	8	35	8	44	0	87	819
5:15 PM	1	451	52	0	504	15	217	7	0	239	8	2	2	0	12	40	7	42	0	89	844
5:30 PM	1	456	48	0	505	22	218	13	0	253	10	2	2	0	14	38	7	33	1	78	850
5:45 PM	1	324	37	0	362	14	213	15	0	242	7	5	0	0	12	46	3	34	0	83	699
Total	4	1644	173	0	1821	73	890	45	0	1008	32	10	4	0	46	159	25	153	1	337	3212

Grand Total	6	4651	615	0	5272	303	4743	198	0	5244	162	86	10	0	258	505	77	372	1	954	11728
Apprch %	0.1	88.2	11.7	0.0		5.8	90.4	3.8	0.0		62.8	33.3	3.9	0.0		52.9	8.1	39.0	0.1		
Total %	0.1	39.7	5.2	0.0	45.0	2.6	40.4	1.7	0.0	44.7	1.4	0.7	0.1	0.0	2.2	4.3	0.7	3.2	0.0	8.1	
Cars, PU, Vans	6	4317	591	0	4914	272	4386	198	0	4856	161	85	10	0	256	475	77	341	1	893	10919
% Cars, PU, Vans	100.0	92.8	96.1	0.0	93.2	89.8	92.5	100.0	0.0	92.6	99.4	98.8	100.0	0.0	99.2	94.1	100.0	91.7	100.0	93.6	93.1
Heavy Trucks	0	334	24	0	358	31	357	0	0	388	1	1	0	0	2	30	0	31	0	61	809
%Heavy Trucks	0.0	7.2	3.9	0.0	6.8	10.2	7.5	0.0	0.0	7.4	0.6	1.2	0.0	0.0	0.8	5.9	0.0	8.3	0.0	6.4	6.9

Project ID: 17-9218-002  
Location: Thornton Rd (SR 6) & Factory  
City: Lithia Springs

PEAK HOURS

Day: Wednesday  
Date: 4/12/2017

AM

Start Time	Thornton Rd (SR 6) Northbound				Thornton Rd (SR 6) Southbound				Factory Shoals Rd Eastbound				Factory Shoals Rd Westbound				Int. Total
	Left	Thru	Rgt	App. Total	Left	Thru	Rgt	App. Total	Left	Thru	Rgt	App. Total	Left	Thru	Rgt	App. Total	

Peak Hour Analysis from 06:30 AM to 08:30 AM

Peak Hour for Entire Intersection Begins at 07:00 AM

7:00 AM	0	193	36	229	24	403	18	445	8	6	0	14	23	5	18	46	734
7:15 AM	1	194	66	261	19	428	11	458	28	7	1	36	26	2	4	32	787
7:30 AM	0	196	44	240	20	434	13	467	10	10	0	20	35	1	7	43	770
7:45 AM	0	189	34	223	30	394	19	443	13	10	2	25	37	9	14	60	751
Total Volume	1	772	180	953	93	1659	61	1813	59	33	3	95	121	17	43	181	3042
% App. Total	0.1	81.0	18.9	100	5.1	91.5	3.4	100	62.1	34.7	3.2	100	66.9	9.4	23.8	100	
PHF				0.913				0.971				0.660				0.754	
Cars, PU, Vans	1	699	176	876	77	1553	61	1691	59	32	3	94	112	17	36	165	2826
% Cars, PU, Vans	100.0	90.5	97.8	91.9	82.8	93.6	100.0	93.3	100.0	97.0	100.0	98.9	92.6	100.0	83.7	91.2	92.9
Heavy Trucks	0	73	4	77	16	106	0	122	0	1	0	1	9	0	7	16	216
%Heavy Trucks	0.0	9.5	2.2	8.1	17.2	6.4	0.0	6.7	0.0	3.0	0.0	1.1	7.4	0.0	16.3	8.8	7.1

PM

Start Time	Thornton Rd (SR 6) Northbound				Thornton Rd (SR 6) Southbound				Factory Shoals Rd Eastbound				Factory Shoals Rd Westbound				Int. Total
	Left	Thru	Rgt	App. Total	Left	Thru	Rgt	App. Total	Left	Thru	Rgt	App. Total	Left	Thru	Rgt	App. Total	

Peak Hour Analysis from 04:00 PM to 06:00 PM

Peak Hour for Entire Intersection Begins at 04:45 PM

4:45 PM	1	442	37	480	18	209	20	247	12	0	1	13	32	5	34	71	811
5:00 PM	1	413	36	450	22	242	10	274	7	1	0	8	35	8	44	87	819
5:15 PM	1	451	52	504	15	217	7	239	8	2	2	12	40	7	42	89	844
5:30 PM	1	456	48	505	22	218	13	253	10	2	2	14	38	7	33	78	850
Total Volume	4	1762	173	1939	77	886	50	1013	37	5	5	47	145	27	153	325	3324
% App. Total	0.2	90.9	8.9	100	7.6	87.5	4.9	100	78.7	10.6	10.6	100	44.6	8.3	47.1	100	
PHF				0.960				0.924				0.839				0.913	
Cars, PU, Vans	4	1662	165	1831	72	799	50	921	37	5	5	47	137	27	145	309	3108
% Cars, PU, Vans	100.0	94.3	95.4	94.4	93.5	90.2	100.0	90.9	100.0	100.0	100.0	100.0	94.5	100.0	94.8	95.1	93.5
Heavy Trucks	0	100	8	108	5	87	0	92	0	0	0	0	8	0	8	16	216
%Heavy Trucks	0.0	5.7	4.6	5.6	6.5	9.8	0.0	9.1	0.0	0.0	0.0	0.0	5.5	0.0	5.2	4.9	6.5

# ITM Peak Hour Summary

Prepared by:

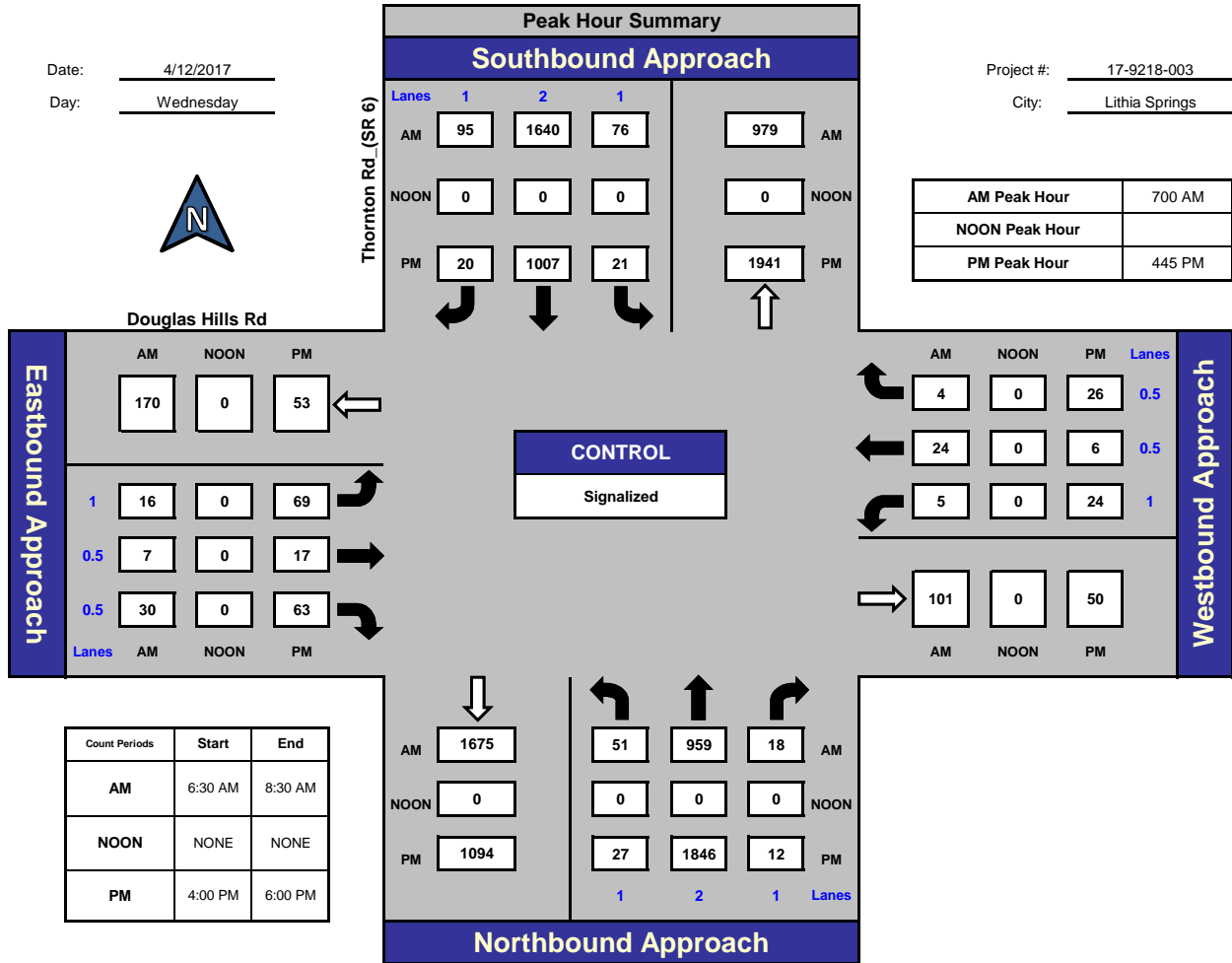


National Data & Surveying Services

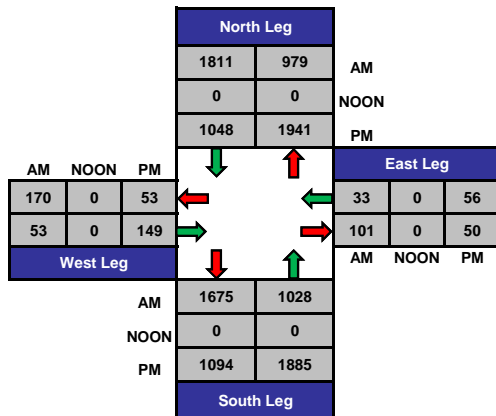
## Thornton Rd (SR 6) and Douglas Hills Rd, Lithia Springs

Date: 4/12/2017  
Day: Wednesday

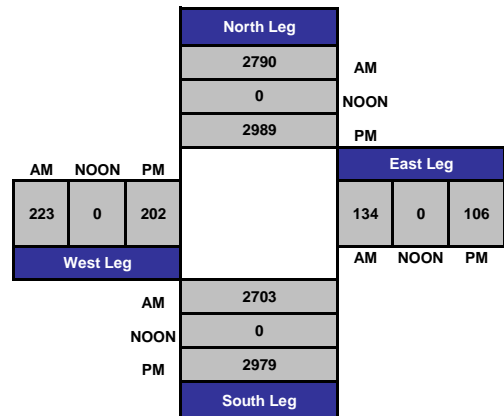
Project #: 17-9218-003  
City: Lithia Springs



### Total Ins & Outs



### Total Volume Per Leg





Project ID: 17-9218-003  
Location: Thornton Rd (SR 6) & Douglas Hills Rd  
City: Lithia Springs

Day: Wednesday  
Date: 4/12/2017

Peak Start Times	
AM	6:30 AM
MD	12:00 AM
PM	4:00 PM

Groups Printed - Cars, PU, Vans - Heavy Trucks																								
Start Time	Thornton Rd (SR 6) Northbound					Thornton Rd (SR 6) Southbound					Douglas Hills Rd Eastbound					Douglas Hills Rd Westbound					Int. Total			
	Left	Thru	Rgt	Peds	App.Total	Left	Thru	Rgt	Peds	App.Total	Left	Thru	Rgt	Peds	App.Total	Left	Thru	Rgt	Peds	App.Total				
6:30 AM	7	169	5	0	181	6	349	8	0	363	5	0	5	0	10	1	3	4	0	8	562			
6:45 AM	13	188	2	0	203	26	366	15	0	407	4	2	2	0	8	1	7	4	0	12	630			
7:00 AM	9	206	5	0	220	13	431	14	0	458	6	1	9	0	16	1	6	3	0	10	704			
7:15 AM	15	261	4	0	280	12	395	14	0	421	4	2	4	0	10	2	2	1	0	5	716			
Total	44	824	16	0	884	57	1541	51	0	1649	19	5	20	0	44	5	18	12	0	35	2612			
7:30 AM	8	250	3	0	261	11	436	29	0	476	2	4	6	0	12	1	6	0	0	7	756			
7:45 AM	19	242	6	0	267	40	378	38	0	456	4	0	11	0	15	1	10	0	0	11	749			
8:00 AM	17	203	5	0	225	18	289	22	0	329	10	2	5	0	17	0	2	2	0	4	575			
8:15 AM	11	179	2	0	192	10	336	7	0	353	5	3	6	0	14	2	7	3	0	12	571			
Total	55	874	16	0	945	79	1439	96	0	1614	21	9	28	0	58	4	25	5	0	34	2651			
***BREAK***																								
4:00 PM	10	358	3	0	371	8	228	10	0	246	13	3	12	0	28	1	3	3	0	7	652			
4:15 PM	6	365	3	0	374	6	211	11	0	228	18	4	20	0	42	2	2	5	0	9	653			
4:30 PM	9	423	3	0	435	2	229	8	0	239	34	11	27	0	72	4	2	5	0	11	757			
4:45 PM	4	450	3	0	457	3	229	8	0	240	11	7	20	0	38	3	2	9	0	14	749			
Total	29	1596	12	0	1637	19	897	37	0	953	76	25	79	0	180	10	9	22	0	41	2811			
5:00 PM	9	437	4	0	450	5	279	3	0	287	22	2	15	0	39	9	1	7	0	17	793			
5:15 PM	9	484	4	0	497	1	256	5	0	262	15	4	15	0	34	8	2	3	0	13	806			
5:30 PM	5	475	1	0	481	12	243	4	0	259	21	4	13	0	38	4	1	7	0	12	790			
5:45 PM	2	355	1	0	358	3	244	5	0	252	5	1	7	0	13	5	1	3	0	9	632			
Total	25	1751	10	0	1786	21	1022	17	0	1060	63	11	50	0	124	26	5	20	0	51	3021			
Grand Total	153	5045	54	0	5252	176	4899	201	0	5276	179	50	177	0	406	45	57	59	0	161	11095			
Apprch %	2.9	96.1	1.0	0.0		3.3	92.9	3.8	0.0		44.1	12.3	43.6	0.0		28.0	35.4	36.6	0.0					
Total %	1.4	45.5	0.5	0.0	47.3	1.6	44.2	1.8	0.0	47.6	1.6	0.5	1.6	0.0	3.7	0.4	0.5	0.5	0.0	1.5				
Cars, PU, Vans	109	4731	42	0	4882	163	4558	169	0	4890	144	44	116	0	304	38	48	50	0	136	10212			
% Cars, PU, Vans	71.2	93.8	77.8	0.0	93.0	92.6	93.0	84.1	0.0	92.7	80.4	88.0	65.5	0.0	74.9	84.4	84.2	84.7	0.0	84.5	92.0			
Heavy Trucks	44	314	12		370	13	341	32		386	35	6	61		102	7	9	9		25	883			
%Heavy Trucks	28.8	6.2	22.2	0.0	7.0	7.4	7.0	15.9	0.0	7.3	19.6	12.0	34.5	0.0	25.1	15.6	15.8	15.3	0.0	15.5	8.0			

Project ID: 17-9218-003  
Location: Thornton Rd (SR 6) & Douglas  
City: Lithia Springs

## PEAK HOURS

Day: Wednesday  
Date: 4/12/2017

AM																	
	Thornton Rd. (SR 6) Northbound				Thornton Rd. (SR 6) Southbound				Douglas Hills Rd Eastbound				Douglas Hills Rd Westbound				
Start Time	Left	Thru	Rgt	App. Total	Left	Thru	Rgt	App. Total	Left	Thru	Rgt	App. Total	Left	Thru	Rgt	App. Total	Int. Total
Peak Hour Analysis from 06:30 AM to 08:30 AM																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
7:00 AM	9	206	5	220	13	431	14	458	6	1	9	16	1	6	3	10	704
7:15 AM	15	261	4	280	12	395	14	421	4	2	4	10	2	2	1	5	716
7:30 AM	8	250	3	261	11	436	29	476	2	4	6	12	1	6	0	7	756
7:45 AM	19	242	6	267	40	378	38	456	4	0	11	15	1	10	0	11	749
Total Volume	51	959	18	1028	76	1640	95	1811	16	7	30	53	5	24	4	33	2925
% App. Total	5.0	93.3	1.8	100	4.2	90.6	5.2	100	30.2	13.2	56.6	100	15.2	72.7	12.1	100	
PHF	0.918				0.951				0.828				0.750				
Cars, PU, Vans	40	887	15	942	70	1541	85	1696	11	6	24	41	3	23	2	28	2707
% Cars, PU, Vans	78.4	92.5	83.3	91.6	92.1	94.0	89.5	93.6	68.8	85.7	80.0	77.4	60.0	95.8	50.0	84.8	92.5
Heavy Trucks	11	72	3	86	6	99	10	115	5	1	6	12	2	1	2	5	218
%Heavy Trucks	21.6	7.5	16.7	8.4	7.9	6.0	10.5	6.4	31.3	14.3	20.0	22.6	40.0	4.2	50.0	15.2	7.5

PM																	
	Thornton Rd. (SR 6) Northbound				Thornton Rd. (SR 6) Southbound				Douglas Hills Rd Eastbound				Douglas Hills Rd Westbound				
Start Time	Left	Thru	Rgt	App. Total	Left	Thru	Rgt	App. Total	Left	Thru	Rgt	App. Total	Left	Thru	Rgt	App. Total	Int. Total
Peak Hour Analysis from 04:00 PM to 06:00 PM																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
4:45 PM	4	450	3	457	3	229	8	240	11	7	20	38	3	2	9	14	749
5:00 PM	9	437	4	450	5	279	3	287	22	2	15	39	9	1	7	17	793
5:15 PM	9	484	4	497	1	256	5	262	15	4	15	34	8	2	3	13	806
5:30 PM	5	475	1	481	12	243	4	259	21	4	13	38	4	1	7	12	790
Total Volume	27	1846	12	1885	21	1007	20	1048	69	17	63	149	24	6	26	56	3138
% App. Total	1.4	97.9	0.6	100	2.0	96.1	1.9	100	46.3	11.4	42.3	100	42.9	10.7	46.4	100	
PHF	0.948				0.913				0.955				0.824				
Cars, PU, Vans	11	1752	11	1774	19	915	10	944	55	14	35	104	24	4	25	53	2875
% Cars, PU, Vans	40.7	94.9	91.7	94.1	90.5	90.9	50.0	90.1	79.7	82.4	55.6	69.8	100.0	66.7	96.2	94.6	91.6
Heavy Trucks	16	94	1	111	2	92	10	104	14	3	28	45	0	2	1	3	263
%Heavy Trucks	59.3	5.1	8.3	5.9	9.5	9.1	50.0	9.9	20.3	17.6	44.4	30.2	0	33.3	3.8	5.4	8.4

# ITM Peak Hour Summary

Prepared by:



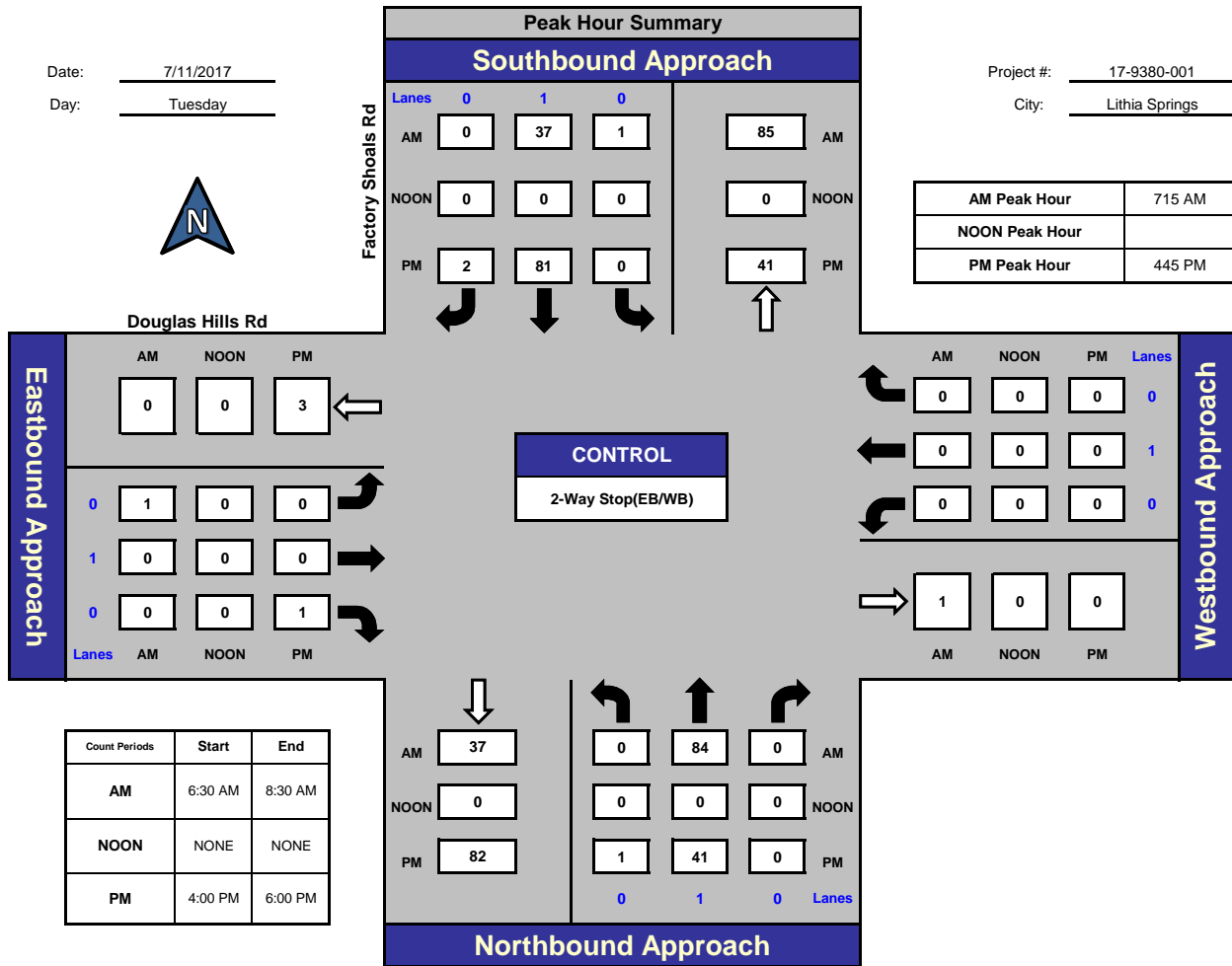
National Data & Surveying Services

## Factory Shoals Rd and Douglas Hills Rd, Lithia Springs

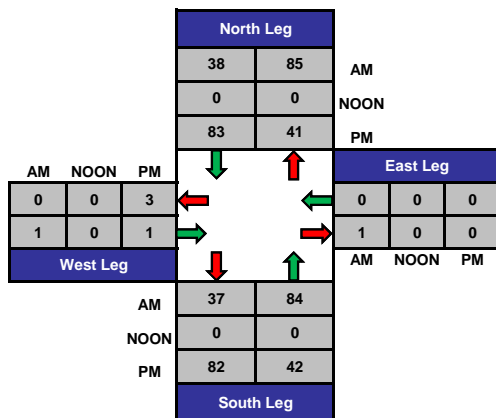
Date: 7/11/2017  
Day: Tuesday



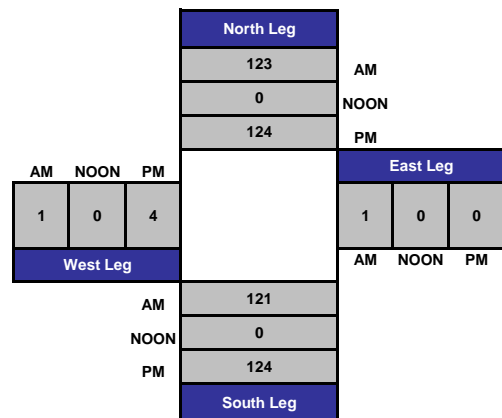
Project #: 17-9380-001  
City: Lithia Springs



### Total Ins & Outs



### Total Volume Per Leg





## **Appendix E**

### **Trip Generation Analysis**



Trip Generation Analysis (9th Ed.) DCT Douglas Hill Distribution Center DRI #2701 Douglas County, Georgia								
Land Use	Intensity	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
<b>Proposed Site Traffic</b>								
152 High-Cube Warehouse/Distribution Center	1,036,800 gross s.f.	1,742	120	83	37	131	41	90
<b>Gross Trips</b>		<b>1,742</b>	<b>120</b>	<b>83</b>	<b>37</b>	<b>131</b>	<b>41</b>	<b>90</b>
Truck Trips (per ITE Weighted Average Truck Trip Generation)		664	32	22	10	42	13	29
Mixed-Use Reductions		0				0	0	0
Alternative Mode Reductions		0	0	0	0	0	0	0
Adjusted Trips		664	32	22	10	42	13	29
Employee Trips		1,078	88	61	27	89	28	61
Mixed-Use Reductions		0				0	0	0
Alternative Mode Reductions		0	0	0	0	0	0	0
Adjusted Trips		1,078	88	61	27	89	28	61
Mixed-Use Reductions - TOTAL		0	0	0	0	0	0	0
Alternative Mode Reductions - TOTAL		0	0	0	0	0	0	0
<b>New Trips</b>		<b>1,742</b>	<b>120</b>	<b>83</b>	<b>37</b>	<b>131</b>	<b>41</b>	<b>90</b>
<b>Driveway Volumes</b>		<b>1,742</b>	<b>120</b>	<b>83</b>	<b>37</b>	<b>131</b>	<b>41</b>	<b>90</b>

k:\atl\_tpto\018716001 douglas hill distribution center dri, may 2017, douglas county\phase ii\analysis\dct douglas hill distribution center dri\_analysis.xls\trip generation

# **Appendix F**

## **Intersection Volume Worksheets**

## INTERSECTION VOLUME DEVELOPMENT

### Intersection #1: Thornton Rd (SR 6) @ Factory Shoals Rd AM PEAK HOUR

Description	Thornton Rd (SR 6) <u>Northbound</u>			Thornton Rd (SR 6) <u>Southbound</u>			Factory Shoals Rd <u>Eastbound</u>			Factory Shoals Rd <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	1	772	180	93	1,659	61	59	33	3	121	17	43
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	73	4	16	106	0	0	1	0	9	0	7
Heavy Vehicle %	2%	9%	2%	17%	6%	2%	2%	3%	2%	7%	2%	16%
Peak Hour Factor	0.97			0.97			0.97			0.97		
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
DCT Factory Shoals DRI#2670 (Truck Trips)	13					10	5	0	6		0	
DCT Factory Shoals DRI#2670 (Car Trips)	26					36	16	1	12		3	
2019 Background Traffic	40	795	185	96	1,709	109	82	35	21	125	21	44
2019 Background Heavy Vehicle %	33%	9%	2%	17%	6%	9%	6%	3%	29%	7%	2%	16%
<b>Project Trips (Future Development Only)</b>												
Trip Distribution IN					45%							
Trip Distribution OUT		45%										
Truck Trips	0	5	0	0	10	0	0	0	0	0	0	0
Trip Distribution IN						55%					5%	
Trip Distribution OUT							55%	5%				
Car Trips	0	0	0	0	0	34	15	1	0	0	3	0
Total Project Trips	0	5	0	0	10	34	15	1	0	0	3	0
<b>2019 Buildout Total</b>	<b>40</b>	<b>800</b>	<b>185</b>	<b>96</b>	<b>1,719</b>	<b>143</b>	<b>97</b>	<b>36</b>	<b>21</b>	<b>125</b>	<b>24</b>	<b>44</b>
<b>2019 Heavy Vehicle %</b>	<b>33%</b>	<b>10%</b>	<b>2%</b>	<b>17%</b>	<b>7%</b>	<b>7%</b>	<b>5%</b>	<b>3%</b>	<b>29%</b>	<b>7%</b>	<b>2%</b>	<b>16%</b>

### PM PEAK HOUR

Description	Thornton Rd (SR 6) <u>Northbound</u>			Thornton Rd (SR 6) <u>Southbound</u>			Factory Shoals Rd <u>Eastbound</u>			Factory Shoals Rd <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	4	1,762	173	77	886	50	37	5	5	145	27	153
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	100	8	5	87	0	0	0	0	8	0	8
Heavy Vehicle %	2%	6%	5%	6%	10%	2%	2%	2%	2%	6%	2%	5%
Peak Hour Factor	0.98			0.98			0.98			0.98		
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
DCT Factory Shoals DRI#2670 (Truck Trips)	8					6	14	0	17		0	
DCT Factory Shoals DRI#2670 (Car Trips)	12					16	36	3	26		1	
2019 Background Traffic	24	1,815	178	79	913	74	88	8	48	149	29	158
2019 Background Heavy Vehicle %	33%	6%	5%	7%	10%	8%	16%	2%	35%	6%	2%	5%
<b>Project Trips (Future Development Only)</b>												
Trip Distribution IN					45%							
Trip Distribution OUT		45%										
Truck Trips	0	13	0	0	6	0	0	0	0	0	0	0
Trip Distribution IN						55%					5%	
Trip Distribution OUT							55%	5%				
Car Trips	0	0	0	0	0	15	34	3	0	0	1	0
Total Project Trips	0	13	0	0	6	15	34	3	0	0	1	0
<b>2019 Buildout Total</b>	<b>24</b>	<b>1,828</b>	<b>178</b>	<b>79</b>	<b>919</b>	<b>89</b>	<b>122</b>	<b>11</b>	<b>48</b>	<b>149</b>	<b>30</b>	<b>158</b>
<b>2019 Heavy Vehicle %</b>	<b>33%</b>	<b>6%</b>	<b>5%</b>	<b>7%</b>	<b>10%</b>	<b>7%</b>	<b>11%</b>	<b>2%</b>	<b>35%</b>	<b>6%</b>	<b>2%</b>	<b>5%</b>

## INTERSECTION VOLUME DEVELOPMENT

### Intersection #2: Thornton Rd (SR 6) @ Douglas Hill Rd AM PEAK HOUR

Description	Thornton Rd (SR 6) <u>Northbound</u>			Thornton Rd (SR 6) <u>Southbound</u>			Douglas Hill Rd <u>Eastbound</u>			Douglas Hill Rd <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	51	959	18	76	1,640	95	16	7	30	5	24	4
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	11	72	3	6	99	10	5	1	6	2	1	2
Heavy Vehicle %	22%	8%	17%	8%	6%	11%	31%	14%	20%	40%	4%	50%
Peak Hour Factor	0.97			0.97			0.97			0.97		
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
DCT Factory Shoals DRI#2670 (Truck Trips)	13			6								
DCT Factory Shoals DRI#2670 (Car Trips)	26			12								
2019 Background Traffic	53	1,027	19	78	1,708	98	16	7	31	5	25	4
2019 Background Heavy Vehicle %	21%	8%	16%	8%	6%	11%	32%	15%	20%	41%	4%	52%
<b>Project Trips (Future Development Only)</b>												
Trip Distribution IN	55%					45%						
Trip Distribution OUT							45%		55%			
Truck Trips	12	0	0	0	0	10	5	0	6	0	0	0
Trip Distribution IN	35%											
Trip Distribution OUT									35%			
Car Trips	21	0	0	0	0	0	0	0	9	0	0	0
Total Project Trips	33	0	0	0	0	10	5	0	15	0	0	0
<b>2019 Buildout Total</b>	<b>86</b>	<b>1,027</b>	<b>19</b>	<b>78</b>	<b>1,708</b>	<b>108</b>	<b>21</b>	<b>7</b>	<b>46</b>	<b>5</b>	<b>25</b>	<b>4</b>
<b>2019 Heavy Vehicle %</b>	<b>27%</b>	<b>8%</b>	<b>16%</b>	<b>8%</b>	<b>6%</b>	<b>19%</b>	<b>48%</b>	<b>15%</b>	<b>26%</b>	<b>41%</b>	<b>4%</b>	<b>52%</b>

### PM PEAK HOUR

Description	Thornton Rd (SR 6) <u>Northbound</u>			Thornton Rd (SR 6) <u>Southbound</u>			Douglas Hill Rd <u>Eastbound</u>			Douglas Hill Rd <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	27	1,846	12	21	1,007	20	69	17	63	24	6	26
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	16	94	1	2	92	10	14	3	28	0	2	1
Heavy Vehicle %	59%	5%	8%	10%	9%	50%	20%	18%	44%	2%	33%	4%
Peak Hour Factor	0.97			0.97			0.97			0.97		
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
DCT Factory Shoals DRI#2670 (Truck Trips)	8			17								
DCT Factory Shoals DRI#2670 (Car Trips)	12			26								
2019 Background Traffic	28	1,922	12	22	1,080	21	71	18	65	25	6	27
2019 Background Heavy Vehicle %	59%	5%	9%	9%	10%	49%	20%	17%	44%	2%	34%	4%
<b>Project Trips (Future Development Only)</b>												
Trip Distribution IN	55%					45%						
Trip Distribution OUT							45%		55%			
Truck Trips	7	0	0	0	0	6	13	0	16	0	0	0
Trip Distribution IN	35%											
Trip Distribution OUT									35%			
Car Trips	10	0	0	0	0	0	0	0	21	0	0	0
Total Project Trips	17	0	0	0	0	6	13	0	37	0	0	0
<b>2019 Buildout Total</b>	<b>45</b>	<b>1,922</b>	<b>12</b>	<b>22</b>	<b>1,080</b>	<b>27</b>	<b>84</b>	<b>18</b>	<b>102</b>	<b>25</b>	<b>6</b>	<b>27</b>
<b>2019 Heavy Vehicle %</b>	<b>52%</b>	<b>5%</b>	<b>9%</b>	<b>9%</b>	<b>10%</b>	<b>60%</b>	<b>33%</b>	<b>17%</b>	<b>44%</b>	<b>2%</b>	<b>34%</b>	<b>4%</b>

## INTERSECTION VOLUME DEVELOPMENT

### Intersection #3: Factory Shoals Road @ Douglas Hill Road AM PEAK HOUR

Description	Factory Shoals Road <u>Northbound</u>			Factory Shoals Road <u>Southbound</u>			Douglas Hill Road <u>Eastbound</u>			Douglas Hill Road <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	0	92	0	2	70	0	1	0	0	0	0	0
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	2	0	0	1	0	0	0	0	0	0	0
Heavy Vehicle %	0%	2%	0%	2%	2%	0%	2%	0%	0%	0%	0%	0%
Peak Hour Factor	0.83			0.83			0.83			0.83		
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
DCT Factory Shoals DRI#2670 (Truck Trips)	0	0	0	0	0	0	0	0	0	0	0	0
DCT Factory Shoals DRI#2670 (Car Trips)	0	0	0	0	0	0	0	0	0	0	0	0
2019 Background Traffic	0	95	0	2	72	0	1	0	0	0	0	0
2019 Background Heavy Vehicle %	0%	2%	0%	2%	2%	0%	2%	0%	0%	0%	0%	0%
<b>Project Trips (Future Development Only)</b>												
Trip Distribution IN											100%	
Trip Distribution OUT								100%				
Truck Trips	0	0	0	0	0	0	0	10	0	0	22	0
Trip Distribution IN	5%					60%					35%	
Trip Distribution OUT							60%	35%	5%			
Car Trips	3	0	0	0	0	37	16	9	1	0	21	0
Total Project Trips	3	0	0	0	0	37	16	19	1	0	43	0
<b>2019 Buildout Total</b>	<b>3</b>	<b>95</b>	<b>0</b>	<b>2</b>	<b>72</b>	<b>37</b>	<b>17</b>	<b>19</b>	<b>1</b>	<b>0</b>	<b>43</b>	<b>0</b>
<b>2019 Heavy Vehicle %</b>	<b>2%</b>	<b>2%</b>	<b>0%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>53%</b>	<b>2%</b>	<b>0%</b>	<b>51%</b>	<b>0%</b>

### PM PEAK HOUR

Description	Factory Shoals Road <u>Northbound</u>			Factory Shoals Road <u>Southbound</u>			Douglas Hill Road <u>Eastbound</u>			Douglas Hill Road <u>Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes	1	41	0	0	81	2	0	0	1	0	0	0
Pedestrians	0			0			0			0		
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles	0	1	0	0	0	0	0	0	0	0	0	0
Heavy Vehicle %	2%	2%	0%	0%	2%	2%	0%	0%	2%	0%	0%	0%
Peak Hour Factor	0.85			0.85			0.85			0.85		
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
DCT Factory Shoals DRI#2670 (Truck Trips)	0	0	0	0	0	0	0	0	0	0	0	0
DCT Factory Shoals DRI#2670 (Car Trips)	0	0	0	0	0	0	0	0	0	0	0	0
2019 Background Traffic	1	42	0	0	83	2	0	0	1	0	0	0
2019 Background Heavy Vehicle %	2%	2%	0%	0%	2%	2%	0%	0%	2%	0%	0%	0%
<b>Project Trips (Future Development Only)</b>												
Trip Distribution IN											100%	
Trip Distribution OUT								100%				
Truck Trips	0	0	0	0	0	0	0	29	0	0	13	0
Trip Distribution IN	5%					60%					35%	
Trip Distribution OUT							60%	35%	5%			
Car Trips	1	0	0	0	0	17	37	21	3	0	10	0
Total Project Trips	1	0	0	0	0	17	37	50	3	0	23	0
<b>2019 Buildout Total</b>	<b>2</b>	<b>42</b>	<b>0</b>	<b>0</b>	<b>83</b>	<b>19</b>	<b>37</b>	<b>50</b>	<b>4</b>	<b>0</b>	<b>23</b>	<b>0</b>
<b>2019 Heavy Vehicle %</b>	<b>2%</b>	<b>2%</b>	<b>0%</b>	<b>0%</b>	<b>2%</b>	<b>2%</b>	<b>2%</b>	<b>58%</b>	<b>2%</b>	<b>0%</b>	<b>57%</b>	<b>0%</b>



## INTERSECTION VOLUME DEVELOPMENT

### Intersection #4: Douglas Hill Road @ Proposed Site Driveway AM PEAK HOUR

Description	<u>Northbound</u>			<u>Proposed Site Driveway Southbound</u>			<u>Douglas Hill Road Eastbound</u>			<u>Douglas Hill Road Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes								1			0	
Pedestrians		0			0			0				
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles								0			0	
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%
Peak Hour Factor		0.82			0.82			0.82			0.82	
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
DCT Factory Shoals DRI#2670 (Truck Trips)	0	0	0	0	0	0	0	0	0	0	0	0
DCT Factory Shoals DRI#2670 (Car Trips)	0	0	0	0	0	0	0	0	0	0	0	0
2019 Background Traffic	0	0	0	0	0	0	0	1	0	0	0	0
2019 Background Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%
<b>Project Trips (Future Development Only)</b>												
Trip Distribution IN												100%
Trip Distribution OUT				100%								
Truck Trips	0	0	0	10	0	0	0	0	0	0	0	22
Trip Distribution IN												100%
Trip Distribution OUT				100%								
Car Trips	0	0	0	27	0	0	0	0	0	0	0	61
Total Project Trips	0	0	0	37	0	0	0	0	0	0	0	83
<b>2019 Buildout Total</b>	0	0	0	37	0	0	0	1	0	0	0	83
<b>2019 Heavy Vehicle %</b>	0%	0%	0%	27%	0%	0%	0%	2%	0%	0%	0%	27%

### PM PEAK HOUR

Description	<u>Northbound</u>			<u>Proposed Site Driveway Southbound</u>			<u>Douglas Hill Road Eastbound</u>			<u>Douglas Hill Road Westbound</u>		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Observed 2017 Traffic Volumes								1			3	
Pedestrians												
Conflicting Pedestrians	0		0	0		0	0		0	0		0
Heavy Vehicles								0			0	
Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	2%	0%
Peak Hour Factor		0.82			0.82			0.82			0.82	
Annual Growth Rate	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Growth Factor	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030	1.030
DCT Factory Shoals DRI#2670 (Truck Trips)												
DCT Factory Shoals DRI#2670 (Car Trips)												
2019 Background Traffic	0	0	0	0	0	0	0	1	0	0	3	0
2019 Background Heavy Vehicle %	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	2%	0%
<b>Project Trips (Future Development Only)</b>												
Trip Distribution IN												100%
Trip Distribution OUT				100%								
Truck Trips	0	0	0	29	0	0	0	0	0	0	0	13
Trip Distribution IN												100%
Trip Distribution OUT				100%								
Car Trips	0	0	0	61	0	0	0	0	0	0	0	28
Total Project Trips	0	0	0	90	0	0	0	0	0	0	0	41
<b>2019 Buildout Total</b>	0	0	0	90	0	0	0	1	0	0	3	41
<b>2019 Heavy Vehicle %</b>	0%	0%	0%	32%	0%	0%	0%	2%	0%	0%	2%	32%

## **Appendix G**

### **Programmed Project Fact Sheets**

## Short Title

SR 6 (THORNTON ROAD) TRUCK FRIENDLY LANES  
FROM I-20 WEST IN DOUGLAS COUNTY TO SR 6 SPUR  
(GARRETT ROAD) IN COBB COUNTY

## GDOT Project No.

0010821

## Federal ID No.

N/A

## Status

Programmed

## Service Type

Roadway / Operations &amp; Safety

## Sponsor

GDOT

## Jurisdiction

Cobb County, Douglas County

## Analysis Level

Exempt from Air Quality Analysis (40 CFR 93)

## Existing Thru Lane

6

## LCI

☐

## Planned Thru Lane

6

## Flex

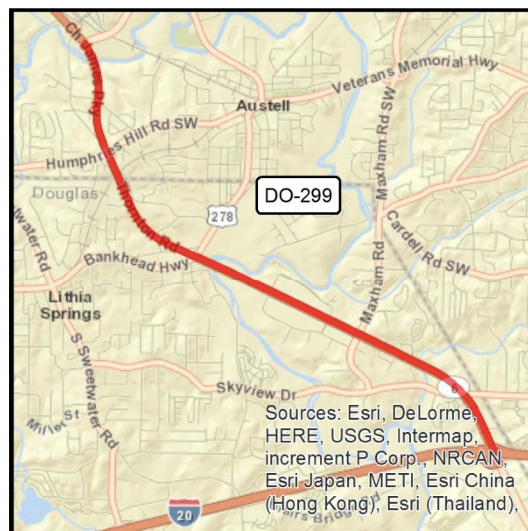
☐

## Network Year

TBD

## Corridor Length

TBD miles



## Detailed Description and Justification

This project will implement truck friendly lanes along SR 6 (Thornton Road). The project will begin at I-20 West in Douglas County and terminate at the SR 6 Spur (Garrett Road) in Cobb County.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
SCP	National Highway Performance Program (NHPP)	AUTH	2015	\$1,000,000	\$800,000	\$200,000	\$0,000	\$0,000
PE	National Highway Performance Program (NHPP)	AUTH	2017	\$1,649,794	\$1,319,835	\$329,959	\$0,000	\$0,000
ROW	National Highway Performance Program (NHPP)		2019	\$6,367,248	\$5,093,798	\$1,273,450	\$0,000	\$0,000
UTL	National Highway Performance Program (NHPP)		2021	\$2,252,325	\$1,801,860	\$450,465	\$0,000	\$0,000
CST	National Highway Performance Program (NHPP)		2021	\$40,153,152	\$32,122,522	\$8,030,630	\$0,000	\$0,000
				\$51,422,519	\$41,138,015	\$10,284,504	\$0,000	\$0,000

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



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

## Short Title

SR 70 (FULTON INDUSTRIAL BOULEVARD) WIDENING  
FROM SR 6 (CAMP CREEK PARKWAY) TO JAMES  
ALDREDGE BOULEVARD

## GDOT Project No.

720960-

## Federal ID No.

STP00-0021-01(023)

## Status

Long Range

## Service Type

Roadway / General Purpose Capacity

## Sponsor

GDOT

## Jurisdiction

Fulton County (South)

## Analysis Level

In the Region's Air Quality Conformity Analysis

## Existing Thru Lane

4

## LCI

☐

## Planned Thru Lane

6

## Flex

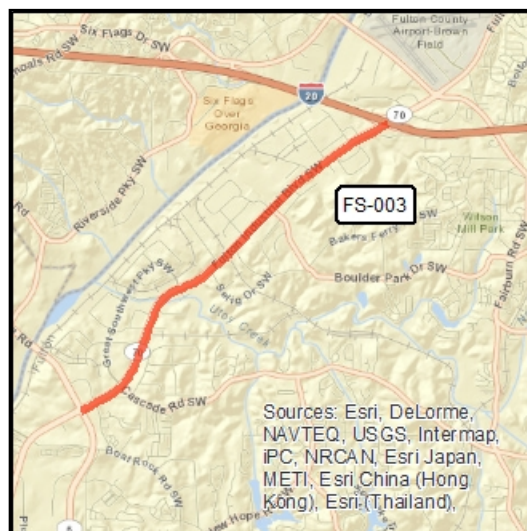
☐

## Network Year

2030

## Corridor Length

2.3 miles



## Detailed Description and Justification

This project involves adding one general purpose lane in each direction along SR 70 (Fulton Industrial Boulevard) between SR 6 (Camp Creek Parkway) and James Aldredge Boulevard.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
ALL	General Federal Aid 2022-2040		LR 2022-2030	\$3,770,000	\$3,016,000	\$754,000	\$0,000	\$0,000
				\$3,770,000	\$3,016,000	\$754,000	\$0,000	\$0,000

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



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

<b>Short Title</b>	I-20 WEST MANAGED LANES FROM I-285 WEST TO SR 92 (FAIRBURN ROAD)
<b>GDOT Project No.</b>	TBD
<b>Federal ID No.</b>	N/A
<b>Status</b>	Long Range
<b>Service Type</b>	Roadway / Managed Lanes
<b>Sponsor</b>	GDOT
<b>Jurisdiction</b>	Regional - West
<b>Analysis Level</b>	In the Region's Air Quality Conformity Analysis



<b>Existing Thru Lane</b>	<input type="text" value="0"/>	<b>LCI</b>	<input type="checkbox"/>	<b>Network Year</b>	<input type="text" value="2040"/>
<b>Planned Thru Lane</b>	<input type="text" value="2"/>	<b>Flex</b>	<input type="checkbox"/>	<b>Corridor Length</b>	<input type="text" value="11.0"/> miles

**Detailed Description and Justification**

This is a managed lanes project along I-20 West from I-285 West to SR 92 (Fairburn Road).

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 2031-2040	<b>\$201,000,000</b>	\$160,800,000	\$40,200,000	\$0,000	\$0,000
ALL	Toll Revenue Bonds		LR 2031-2040	<b>\$165,000,000</b>	\$0,000	\$0,000	\$165,000,000	\$0,000
				<b>\$366,000,000</b>	<b>\$160,800,000</b>	<b>\$40,200,000</b>	<b>\$165,000,000</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).



Douglas County Comprehensive Transportation Plan  
Roadway Project Prioritization DRAFT

GDOT PI	ID	Project Number	Project	From/At	To	Detailed Description	Status	Type	Exist Lane	Plan Lane	Length	Network Year	Open Year	Congestion	Safety	Land Use	Multimodal	Economic Dev.	Public/PAT	Access Mgt.	Freight	Environment	RSTS	UGPM	Weighted Total
0006900	129	DO-282A	Metro Arterial Connector - SR 92 Realignment Phase I - Underpass	US 78/Broad Street and NS R/R		This project grade separates SR 92 (on new alignment) from US 78 and the railroad to facilitate better flow along the SR 92 corridor. The Metro Arterial Connector (MAC) is a network of state highways approximately 180 miles in length encircling the Atlanta region. Roadways comprising the MAC (primarily SR 20 and SR 92) are proposed to have a minimum of four travel lanes along its entire length. At least 30 capacity projects are already planned along the MAC over the timeframe of the RTP. A study will be conducted in 2009 to determine how these individual projects can be engineered and constructed in a holistic and logical manner to maximize the multimodal mobility, safety, accessibility and growth management benefits of the project.	Program	Roadway Capacity	0	6	0.25	2020	2020	1.5	0.45	0.3	0.15	0.15	0.15	0.09	0.09	0.06	0.03	0.03	3
0006901	130	DO-282B	Metro Arterial Connector - SR 92 Realignment Phase II	SR 92/Fairburn Road south of Hospital Drive	US 78/Broad Street	This project combines widening and new alignment to equal a 6 lane facility connecting the new grade separation at US 78 and the railroad to the existing SR 92 immediately south of the intersection with Hospital Drive. The Metro Arterial Connector (MAC) is a network of state highways approximately 180 miles in length encircling the Atlanta region. Roadways comprising the MAC (primarily SR 20 and SR 92) are proposed to have a minimum of four travel lanes along its entire length. At least 30 capacity projects are already planned along the MAC over the timeframe of the RTP. A study will be conducted in 2009 to determine how these individual projects can be engineered and constructed in a holistic and logical manner to maximize the mobility, safety, accessibility and growth management benefits which would best serve multimodal needs (auto, truck, transit, bicycling, walking) and include land use policies, access management regulations, and ITS components to ensure network uniformity.	Program	Roadway Capacity	0	6	0.6	2020	2020	1.5	0.45	0.3	0.15	0.15	0.15	0.09	0.09	0.06	0.03	0.03	3
720970	131	DO-282C	Metro Arterial Connector - SR 92 Realignment Phase III	US 78/Broad Street	SR 92/Dallas Highway	This project combines widening and new alignment to equal a 6 lane facility connecting the new grade separation at US 78 and the railroad to the existing SR 92 near the intersection with Malone Street in northern Douglasville. The Metro Arterial Connector (MAC) is a network of state highways approximately 180 miles in length encircling the Atlanta region. Roadways comprising the MAC (primarily SR 20 and SR 92) are proposed to have a minimum of four travel lanes along its entire length. At least 30 capacity projects are already planned along the MAC over the timeframe of the RTP. Refer to AR-941 in the ARC's RTP/TIP for more information on the MAC concept.	Program	Roadway Capacity	0	6	0.9	2020	2020	1.5	0.45	0.3	0.15	0.15	0.15	0.09	0.09	0.06	0.03	0.03	3
3165	162	AR-H-201	I-20 West Managed Lanes (SR 6 to Bright Star)	SR 6	Bright Star Road	Addition of two managed lanes in both directions for 9.9 miles between SR 6 and Bright Star Road. Dedicated ramps serving these lanes will be provided but locations have not been determined at this time. It is anticipated that all future managed lanes constructed in the Atlanta Region will be barrier separated, but engineering and design will determine the most appropriate configuration. Operating characteristics such as occupancy restrictions and tolling levels will also be established during concept development in accordance with regional and state managed lane policies.	Program	Interstate Improvements	0	4	10.8			1.5	0.45	0.3	0.15	0.15	0.15	0.09	0.09	0.06	0.03	0.03	3
0001917	155	DO-220B	Lee Road (including bridge over I-20 West)	Monier Boulevard	Vulcan Drive	Upgrades existing substandard bridge at I-20 West. Improves turn radii for tractor-trailer trucks. Project would improve overall flow in the area by improving signals and turn lanes as well.	Program	Bridge Upgrade	2	4	N/A	2020	2012	1.5	0.45	0.3	0.15	0.15	0.15	0.09	0.09	0.04	0.03	0.03	2.98
N/A	4	CTP-4	I-20 West@ SR 6	SR 6/Thornton Road		This project would add and augment signage and striping at and around the I-20/Thornton Road interchange. This could include freeway grade cantilever signs, channelization striping, improved signal timing, raised medians, etc.	TBD	Operational Improvements	N/A	N/A	N/A	TBD	TBD	1.5	0.45	0.3	0.15	0.15	0.1	0.09	0.09	0.06	0.03	0.03	2.95
N/A	6	CTP-6A	I-20 West @ SR 5 interchange modification and CD system concept	SR 5/Bill Arp Road		This project, partnered with Project 6B and 9A, would modify the SR 5 interchange to accept inside/managed lanes exit ramps and remove the general purpose ramps. Includes collector-distributor system concept.	TBD	Modify Interchange	4	4	N/A	TBD	TBD	1.5	0.45	0.3	0.15	0.15	0.1	0.09	0.09	0.06	0.03	0.03	2.95
N/A	7	CTP-6B	I-20 West @ Bright Star Road interchange modification and CD system concept	Bright Star Road		This project, partnered with Project 6A and 9A, would modify the Bright Star Road interchange to accept new general purpose lanes. Includes collector-distributor system concept.	TBD	New Interchange	2	4	0.2	TBD	TBD	1.5	0.45	0.3	0.15	0.15	0.1	0.09	0.09	0.06	0.03	0.03	2.95
N/A	64	DO-252A	Chapel Hill Road	Central Church Road	Stewarts Mill Road	This project involves adding one general purpose lane in each direction along Chapel Hill Road between Central Church Road and Stewarts Mill Road.	Long Range	Roadway Capacity	2	4	2.4	2030	2030	1.5	0.45	0.3	0.15	0.15	0.1	0.09	0.06	0.06	0.02	0.03	2.91
N/A	3	CTP-3	Inner Southern Arc-four phases	North County Line Road	Kings Highway	By upgrading existing roadways and providing some new alignment, this connector roadway would allow county motorists to avoid using I-20 as a local road. Phase 1- Improving Bomar Connector to extended Bomar. Phase 2- Improving extended Bomar to Chapel Hill. Phase 3- Improving Central Church from Chapel Hill to SR 5. Phase 4- Realigning and improving Bright Star from Bankhead Hwy to Central Church and improving Central Church to SR 5. Include improvements extended to I-20. This project will perform a alternatives and alignment analysis as well as an environmental assessment for the Bomar Road Connector. In advance of Outer Arc.	TBD	Roadway Capacity	0/2	4	8.3	TBD	TBD	1.5	0.45	0.3	0.05	0.15	0.15	0.09	0.03	0.06	0.02	0.03	2.83
N/A	45	CTP-15	Adaptive Traffic Signal Pilot Program - Chapel Hill Road/SR 5/CBD area	I-20	SR 166	High crash rates have been identified at locations along this corridor. A safety audit should be completed to determine operational upgrades to improve safety conditions. Implementation of an adaptive signal program along this corridor would improve safety and mobility and improve travel times on this vital north-south corridor. Will relieve delay and congestion at the Douglas Blvd intersection.	TBD	Operational Improvements	N/A	N/A	6.7	TBD	TBD	1.5	0.45	0.3	0.05	0.15	0.1	0.09	0.09	0.04	0.02	0.02	2.81
N/A	90	CTP-21	SR 5/Bill Arp Road	Douglas Boulevard		This project will modify the intersection of SR 5/Bill Arp Road and Douglas Boulevard. Interim project in advance of interchange. Dual left turn lanes from SR 5 north to Douglas Blvd east. Right turn lanes on all approaches.	TBD	Modify Intersection	4	4	0.2	TBD	TBD	1.5	0.45	0.3	0.05	0.15	0.1	0.09	0.09	0.04	0.02	0.02	2.81
N/A	163	CTP-44	Chapel Hill Road operational improvements	I-20	Stewarts Mill Road	Short-term operational improvements as recommended in the 2005 Chapel Hill Road and Stewart Mill Road Transportation Corridor Study	TBD	Operational Improvements						1.5	0.45	0.2	0.15	0.15	0.1	0.06	0.09	0.06	0.03	0.01	2.8
N/A	171	CTP-52	Chapel Hill Road	I-20	Stewarts Mill Road	Widen to eight lanes from I-20 to Douglas Boulevard, widen to six lanes from Douglas Boulevard to Stewarts Mill Road.	TBD	Roadway Capacity	4	8 or 6				1.5	0.45	0.2	0.15	0.15	0.1	0.06	0.09	0.06	0.03	0.01	2.8
0004427	153	DO-022	Lee Road - Widening - Bankhead to I-20 and Bankhead to County Line	Vulcan Drive to Skyview Drive and Operational Improvements from Skyview Drive to US 78 to I-20 West		Adds two additional lanes to a major north-south route as a parallel commuter route to SR 6 from Paulding County. Also, improves the rural geometries of the corridor by upgrading the road to urban design standards. Provides an alternative to the Fairburn Road corridor. Part of SR 6 study.	Program	Roadway Capacity	2	2/4	1.9	2010	2009	1.5	0.3	0.3	0.15	0.15	0.1	0.09	0.06	0.06	0.03	0.03	2.77
0004428	154	DO-220A	Lee Road: Segment 2	SR 92/Fairburn Road	Monier Boulevard	Adds two additional lanes to a major north-south route from I-20 west to SR 92 used by freight handlers accessing I-20 West. Also, improves the rural geometries of the corridor by upgrading the road to urban design standards. Provides an alternative to the Fairburn Road corridor. Part of GRTA's arterial improvements program. Will provide connectivity and higher capacity to Lee Rd, Inner Arc, and SR 6.	Program	Roadway Capacity	2	4	2.7	2020	2013	1.5	0.3	0.3	0.15	0.15	0.1	0.09	0.06	0.06	0.03	0.03	2.77
N/A	8	CTP-7	SR 5/Kings Highway/Central Church Road	SR5/Kings Hwy/Central Church Road		This project will realign the intersection of SR 5, Kings Highway and Central Church Road to provide better mobility through the area and make the area safer for motorists and pedestrians. Short range/interim operational improvement in advance of inner arc project.	TBD	Modify Intersection	4	4	0.2	TBD	TBD	1.5	0.45	0.2	0.05	0.15	0.1	0.09	0.09	0.06	0.02	0.02	2.73
N/A	166	CTP-47	Liberty Road @ I-20 improvements	Liberty Road @ I-20		Operational improvements on Liberty Road between Connors Road and Poole Road.	TBD	Operational Improvements	N/A	N/A				1.5	0.45	0.2	0.05	0.15	0.15	0.06	0.06	0.06	0.03	0.02	2.73
N/A	9	CTP-8	US 78 @ Post Road/Mann Road	US 78 at Post Road/Mann Road		This project will remove a skewed intersection at US 78 and Post Road by realigning Post Road to "T" into US 78. Provides better north-south connectivity to I-20. Improves skew at Bankhead Hwy.	TBD	Modify Intersection	2	2	0.2	TBD	TBD	1.5	0.45	0.2	0.05	0.05	0.1	0.09	0.09	0.06	0.02	0.02	2.63

GDOT PI	ID	Project Number	Project	From/At	To	Detailed Description	Status	Type	Exist Lane	Plan Lane	Length	Network Year	Open Year	Congestion	Safety	Land Use	Multimodal	Economic Dev.	Public/PAT	Access Mgt.	Freight	Environment	RSTS	UGPM	Weighted Total
N/A	10	CTP-9A	Relocate SR 5 to Post Road	Tyree	US 78	Working with GDOT, this project will reassign the state route 5 marker from Bill Arp Road to a new alignment on Tyree Road and Post Road. The northern terminus will remain US 78/Veterans Memorial Highway. The overall mileage of SR 5 will remain fairly equal. (See project 9B)	TBD	Operational Improvements	N/A	N/A	N/A	TBD	TBD	1.5	0.45	0.2	0.05	0.1	0.05	0.09	0.09	0.04	0.02	0.02	2.61
N/A	2	CTP-2	Outer Southern Arc-Four Phases	Mount Vernon	Pool Road	By upgrading existing roadways and providing some new alignment, this east-west connector roadway would provide inner-county access between I-20 and SR 166. Includes four phases. Phase 1- Mt Vernon Road from I-20 to SR 92. Phase 2- Anneewakee Road from SR 92 to Chapel Hill Road. Phase 3- Anneewakee Road from Chapel Hill Road to Dorsett Shoals Rd then to SR 5. Phase 4- Pool Road from SR 5 to Post Road.	TBD	Roadway Capacity	0/2	4	17	TBD	TBD	1.5	0.45	0.1	0.15	0.15	0.05	0.09	0.03	0.04	0.02	0.02	2.6
N/A	46	CTP-16	Unconventional intersection design at SR 166 and Chapel Hill Road	SR 166 at Chapel Hill Road		Traffic counts at this intersection qualifies under GDOT regulations to be considered for a roundabout or other unconventional/continuous flow design. This project in association with the new Chapel Hill Road Extension (see Project 1) provides an opportunity for context sensitive design keeping with the scenic byway nature of SR 166.	TBD	Modify Intersection	N/A	N/A	N/A	TBD	TBD	1.5	0.3	0.2	0.1	0.1	0.1	0.09	0.09	0.06	0.02	0.02	2.58
N/A	48	CTP-18	Unconventional intersection design at SR 166 and SR 92	SR 166 at SR 92		Based on traffic conditions, this unconventional/continuous flow design may be suitable for this intersection improving the flow between two state routes.	TBD	Modify Intersection	N/A	N/A	N/A	TBD	TBD	1.5	0.3	0.2	0.1	0.1	0.1	0.09	0.09	0.06	0.02	0.02	2.58
721770	152	DO-019	SR 166/Fairburn Road/Campbellton Road	SR 92 (Douglas County)	SR 70 (Fulton County)	Adds two additional lanes to a major freight corridor used to access the airport and the South Fulton industrial district. Includes a new bridge across the Chattahoochee River.	Long Range	Roadway Capacity	2	4	2.9	2030	2030	1.5	0.3	0.3	0.05	0.05	0.1	0.09	0.06	0.04	0.02	0.03	2.54
N/A	12	CTP-10	Burnt Hickory Road	Near McKown Road	North County Line Road	By upgrading the existing roadway and providing some new alignment, this roadway would relieve congestion of the SR 92 and SR 6 corridors by channeling Paulding County residents directly to I-20 via the new North County Line Road interchange (see Project 5). Includes new location from McKown Drive to S. County Line Rd @ I-20.	TBD	Roadway Capacity	0/2	4	1.5	TBD	TBD	1.5	0.15	0.3	0.05	0.15	0.15	0.09	0.03	0.06	0.02	0.02	2.52
N/A	14	CTP-12	Dorris Road	Dorris Road/South Flat Rock Road		By upgrading existing roadways and providing some new alignment, this roadway would relieve congestion of the SR 92 and SR 6 corridors by channeling Paulding County residents directly to I-20 via SR 5. Includes grade separation railroad crossing and new alignment from Cedar Mountain Rd to Bankhead Hwy to intersect with Bright Star Rd. Relieves safety and congestion at busy rail crossing (33 trains per day).	TBD	Roadway Capacity	0/2	4	2.84	TBD	TBD	1.5	0.15	0.3	0.05	0.15	0.15	0.09	0.03	0.06	0.02	0.02	2.52
N/A	65	DO-252B	Chapel Hill Road	Dorsett Shoals Road	Central Church Road	This project involves adding one general purpose lane in each direction along Chapel Hill Road between Dorsett Shoals Road and Central Church Road.	Long Range	Roadway Capacity	2	4	0.9	2030	2030	1.5	0.15	0.3	0.15	0.15	0.05	0.09	0.03	0.06	0.02	0.02	2.52
N/A	66	DO-252C	Chapel Hill Road	SR 166 (Ebb Duncan Memorial Highway)	Dorsett Shoals Road	This project involves adding one general purpose lane in each direction along Chapel Hill Road between SR 166 (Ebb Duncan Memorial Highway) and Dorsett Shoals Road.	Long Range	Roadway Capacity	2	4	2.8	2030	2030	1.5	0.15	0.3	0.15	0.15	0.05	0.09	0.03	0.06	0.02	0.02	2.52
N/A	161	CTP-43	Chicago Avenue/Cedar Mountain Road	Cedar Mountain Road	West Strickland	Roadway upgrade to urban section from Bankhead Hwy to Dorris Rd project. Includes sidewalk and curb and gutter.		Operational Improvements	N/A	N/A	N/A			1.5	0.15	0.3	0.05	0.15	0.1	0.06	0.03	0.06	0.01	0.03	2.44
N/A	89	CTP-20	Blairs Bridge Road	SR 6/Thornton Road	North County Line Road	This project will widen Blairs Bridge Road/Monier Parkway from Thornton Road to Mount Vernon Road from 2 to 3 lanes and construct a new roadway extending Monier Parkway to North County Line Road.	TBD	Roadway Capacity	0/2	4	4.4	TBD	TBD	1.5	0.15	0.3	0.05	0.15	0.1	0.06	0.03	0.02	0.02	0.02	2.4
N/A	105	CTP-35	Mount Vernon Road Bridge	Sparks Reservoir		This project will reconstruct the bridge on Mount Vernon Road over Sparks Reservoir.	TBD	Bridge Upgrade	2	2	N/A	TBD	TBD	1.5	0.15	0.3	0.05	0.05	0.1	0.06	0.03	0.04	0.02	0.02	2.32
N/A	103	CTP-34	Skyview Drive Bridge	Sweetwater Creek		This project will reconstruct the bridge on Skyview Drive over Sweetwater Creek.	TBD	Bridge Upgrade	2	2	0.2	TBD	TBD	1.5	0.15	0.3	0.05	0.05	0.1	0.03	0.03	0.06	0.02	0.02	2.31
N/A	93	CTP-24	Bright Star Road @ Cowan Mill Road	Cowan Mill Road		This project will reconstruct the intersection of Bright Star Road and Cowan Mill Road. Based on traffic conditions, an unconventional/continuous flow design may be suitable for this intersection.	TBD	Modify Intersection	2	2	0.2	TBD	TBD	1	0.3	0.3	0.15	0.15	0.15	0.09	0.03	0.06	0.02	0.03	2.28
N/A	102	CTP-33	US 78 @ S. Baggett Road and John West Road	Baggett Road		This project will reconstruct the intersection of US 78 and Baggett Road.	TBD	Modify Intersection	2	2	0.2	TBD	TBD	1	0.45	0.3	0.05	0.05	0.1	0.09	0.09	0.06	0.02	0.02	2.23
N/A	11	CTP-9B	Post Road/Tyree Road	SR 5/Tyree Road	US 78/Post Road	Upgrade the entire length of Tyree Road and Post Road to GDOT standards to accept designation as a state route (see project 9A).	TBD	Operational Improvements	2	4	11	TBD	TBD	1.5	0.15	0.2	0.05	0.05	0.05	0.09	0.06	0.04	0.02	0.01	2.22
N/A	5	CTP-5	New interchange-N. County Line Rd @ I-20W	North County Line Road		This project would add a new interchange at North County Line Road incorporating an existing bridge. This new interchange will serve as a alternate for county motorists wishing to enter/exit I-20 between exits 41 (Lee Road) and 37 (SR 92/Fairburn Road). Project includes improvements to S. County Line Rd between the interchange and Lee Rd.	TBD	New Interchange	0	4	0.2	TBD	TBD	1	0.45	0.2	0.1	0.15	0.1	0.06	0.06	0.04	0.03	0.02	2.21
751825	68	DO-031A	Douglas Boulevard Extension: Segment 1	Prestley Mill Road	Midway Road	Extends existing Douglas Boulevard from Prestley Mill Road to Midway Road. New two lane roadway would provide an alternate to I-20 west for intra-county access. Will be considered for removal from long range plan.	Long Range	Roadway Capacity	2	4	1.9	2030	2030	1	0.15	0.3	0.15	0.15	0.05	0.09	0.06	0.02	0.02	0.02	2.01
751820	69	DO-031B	Douglas Boulevard Extension: Segment 2	Midway Road	North County Line Road	Extends existing Douglas Boulevard from Midway Road to North County Line Road. New two lane roadway would provide an alternate to I-20 west for intra-county access. Will be considered for removal from long range plan.	Long Range	Roadway Capacity	0	2	1.9	2010	2010	1	0.15	0.3	0.15	0.15	0.05	0.09	0.06	0.02	0.02	0.02	2.01
742800	67	DO-021	Riverside Drive	SR 92 (Fairburn Road)	SR 6 (Thornton Road)	This project involves adding one general purpose lane in each direction along Riverside Parkway between SR 92 (Fairburn Road) and SR 6 (Thornton Road).	Long Range	Roadway Capacity	2	4	5.6	2030	2030	1	0.15	0.3	0.15	0.1	0.1	0.09	0.03	0.04	0.02	0.02	2
N/A	1	CTP-1	Chapel Hill Road Extension (including new Chattahoochee River crossing)	Chapel Hill Road at SR 166	Cedar Grove Road (Fulton County)	This new roadway would provide an additional river crossing to residents and commuters travelling to/from Douglas County. Additionally, a new connection to South Fulton Parkway would provide access to HJAJA for Douglas County and west metropolitan Atlanta residents. Includes context sensitive solutions.	TBD	Roadway Capacity	0	4	1.5	TBD	TBD	1	0.15	0.3	0.15	0.05	0.05	0.09	0.03	0.06	0.02	0.02	1.92
N/A	47	CTP-17	Roundabout at SR 166 and Post Road	SR 166 at Post Road		Traffic counts at this location qualifies under GDOT regulations to be considered for a roundabout. If Post Road is redesignated as SR 5, this would mirror the existing roundabout on existing SR 5 at SR 166.	TBD	Modify Intersection	N/A	N/A	N/A	TBD	TBD	1	0.15	0.2	0.05	0.05	0.1	0.09	0.06	0.04	0.02	0.01	1.77
N/A	165	CTP-46	Mann Road/Brewer/Stockmar	US 78	Brewer Road	This project would upgrade Mann Road from US 78 to Brewer Road. Brewer and Stockmar Road would be upgraded between Mann Road and SR 61. The proposed improvements would be a minimum widening from two to four lanes. This would provide an alternate route for Villa Rica residents to I-20, allowing additional access to I-20 and improved distribution between I-20 and Liberty Road interchange.	TBD	Roadway Capacity	2	3 or 4				1	0.15	0.2	0.05	0.1	0.1	0.03	0.03	0.06	0.01	0.01	1.74
N/A	157	CTP-39	Prestley Mill Road	Hospital Drive	Timber Ridge Road	Widen to three lane between Hospital Drive and Timber Ridge Road. Improve intersections at Frank Lane and Saddlebrook Way (roundabouts)		Roadway Capacity	N/A	N/A	N/A			1	0.15	0.2	0.1	0.01	0.1	0.06	0.03	0.04	0.01	0.02	1.72
N/A	13	CTP-11	Ragan Road/Friendship Church Road Connector	High Point Road/Brittain Road/Mann Road		By upgrading existing roadways and providing some new alignment, this roadway would relieve congestion of the SR 92 and SR 6 corridors by channeling Paulding County residents directly to I-20 via the Mann Rd/Brewer/Stockmar (project 165).	TBD	Roadway Capacity	0/2	4	4.4	TBD	TBD	0.5	0.15	0.3	0.05	0.15	0.15	0.09	0.03	0.06	0.02	0.02	1.52
N/A	97	CTP-28	Groovers Lake Road @ Vulcan Drive	Vulcan Drive		This project will reconstruct the intersection of Groovers Lake Road and Vulcan Drive. Accommodates significant freight movements.	TBD	Modify Intersection	2	2	0.2	TBD	TBD	0.5	0.15	0.3	0.05	0.15	0.1	0.03	0.09	0.06	0.02	0.02	1.47
N/A	88	CTP-19	Stewart Mill Road	Central Church Road	Chapel Hill Road	This project will widen Stewart Mill Road from Chapel Hill Road to Yancey Road from 2 to 4 lanes. Sidewalks will also be constructed along this east-west corridor. Includes turn lanes, median, and context sensitive solutions.	TBD	Roadway Capacity	2	4	2.5	TBD	TBD	0.5	0.15	0.3	0.05	0.15	0.1	0.06	0.03	0.06	0.02	0.03	1.45
N/A	172	CTP-53	Stewarts Mill Road operational	Chapel Hill Road	SR 5	Short-term improvements	TBD	Operational Improvements						0.5	0.15	0.3	0.05	0.15	0.1	0.06	0.03	0.06	0.02	0.03	1.45
N/A	95	CTP-26	East County Line Road @ N. County Line Road	North County Line Road		This project will reconstruct the intersection of East County Line Road and North County Line Road. Upgrades due to poor geometry.	TBD	Modify Intersection	2	2	0.2	TBD	TBD	0.5	0.15	0.3	0.05	0.15	0.1	0.06	0.03	0.06	0.02	0.02	1.44
N/A	98	CTP-29	Central Church Road @ Yancey Road	Yancey Road		This project will reconstruct the intersection of Central Church Road and Yancey Road. Upgrades due to poor geometry.	TBD	Modify Intersection	2	2	0.2	TBD	TBD	0.5	0.15	0.3	0.05	0.05	0.1	0.06	0.03	0.06	0.02	0.02	1.34

# **Appendix H**

## **Sweetwater Master Plan – Concept 1A**

# MASTER PLAN

Proximity to Hartsfield-Jackson Atlanta International Airport and efficient Interstate access makes the Southwest Thornton Activity Center attractive to industrial/business uses while the adjacency to Sweetwater Creek State Park and short drive to Downtown Atlanta creates an appealing environment for residential uses. After a decade of development without a well-established plan, shifting economic circumstances and a lack of clarity regarding future growth expectations have created tension between residential and business land owners and uses. Thus, the Southwest Thornton Activity Center Sweetwater Master Plan was developed to define future growth patterns related to business versus residential land uses, necessary transportation improvements, and zoning enhancements needed to promote quality development.

Concept A creates two truck loops—one off Thornton Road/Highway 6 and another off Riverside Parkway—to support future industrial development while envisioning a new residential roadway that connects existing neighborhoods and future residential development.

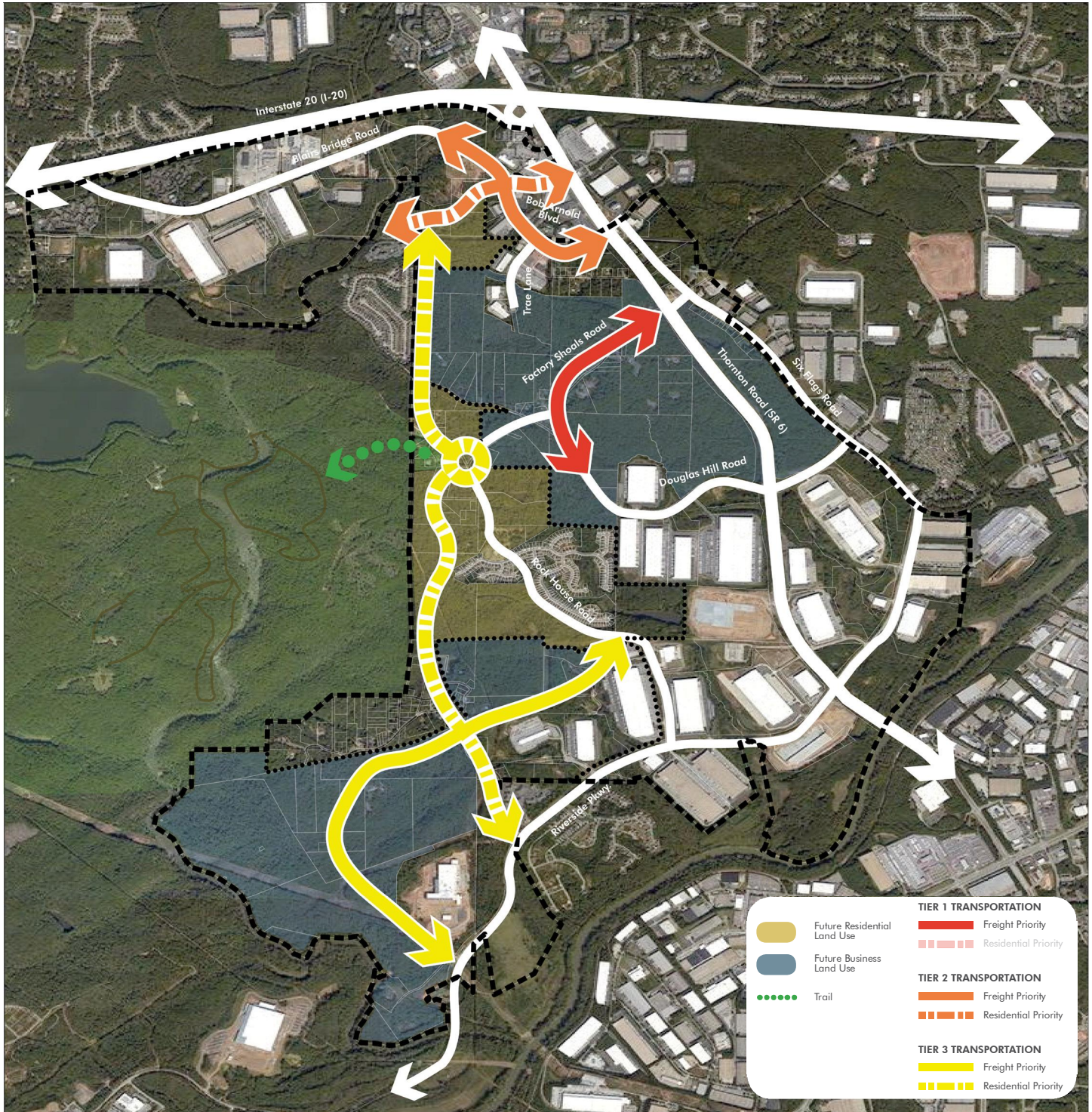
The key roadway improvement to guide future growth in Concept A is an enhancement and realignment of Factory Shoals Road from Thornton Road/SR 6 to Douglas Hill Road. This improvement is intended to enhance truck access off Thornton Road and extend water and sewer infrastructure to the area between Bob Arnold Boulevard and Douglas Hill Road. While this area has excellent proximity to SR 6 and I-20, a lack of utilities and roadway infrastructure has generally prevented economic development activity from occurring. Projected investment in this area, with direct access along Factory Shoals and Douglas Hill will serve multiple purposes:

- Provide access to undeveloped properties from Factory Shoals and Douglas Hill Roads for economic development purposes
- Limit the number of access points/curb cuts along Thornton Road to maintain traffic operations along SR 6
- Close a development gap between businesses and industrial uses along Bob Arnold Boulevard and those along Douglas Hill Road
- Provide an opportunity to restrict truck access and preserve land to the west of Factory Shoals and Douglas Hill near Sweetwater Creek State Park for future residential investment

As economic development continues, a new commercial roadway should be considered in the southern portion of the study area to connect Rock House Road to the west to Riverside Parkway. This commercial-oriented road would provide truck access parallel to Riverside Parkway and enhance access to commercial center parcels south of the Summer Lake area. Utility/infrastructure enhancements may be needed. GPS suggests the most direct route despite other factors, such as signage. To physically limit trucks to freight routes, standards narrower residential routes should be considered. These streets, designed for personal vehicles, should prioritize narrower lanes, smaller radii, and sidewalks. Collectively, these measures create a safer environment for all, protect residential areas, and increase freight efficiency.



# CONCEPT A





## MASTER PLAN

# CONCEPT A

The resulting land use plan concentrates future business development along Thornton Road/SR 6 and along the north side of Riverside Parkway west of Rock House Road and maintains areas along and generally west of the proposed north-south connector road for residential development. The definition of “Business” and “Residential” land uses takes into account the County’s current land use categories within the study area. The existing descriptions and corresponding zoning for each of these character areas remains applicable to the study area, with slight modifications as outlined below.

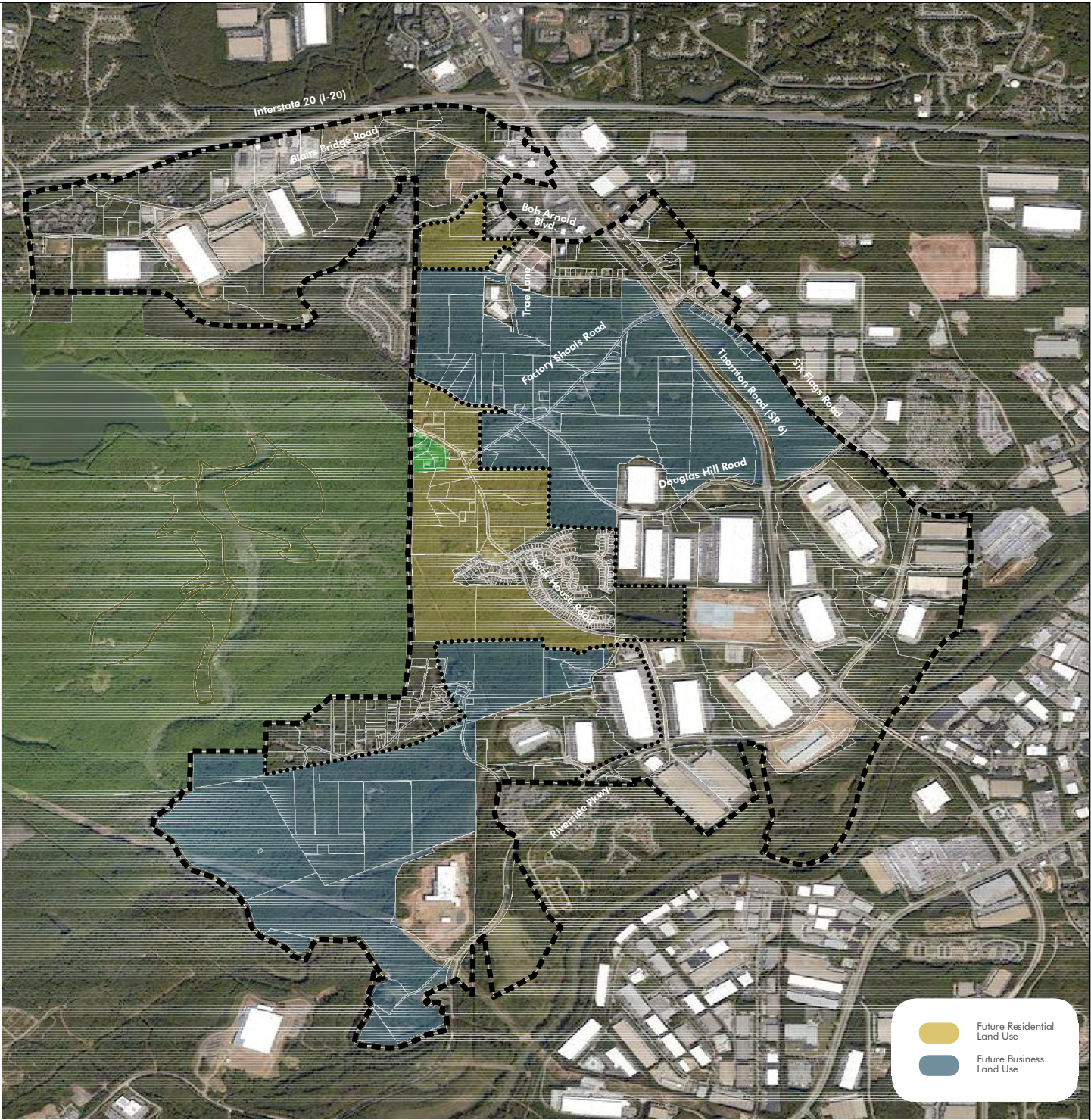
Commercial uses generally north of and at Factory Shoals Road should reflect the “Workplace Center” character area, while properties south of Factory Shoals Road should be defined by the “Commerce Center” character area. Both categories allow for retail goods and services; however, based on limitations identified in the market analysis, retail and entertainment uses should be limited to areas identified as Workplace Center and located around the interchange of I-20 and Thornton Road/SR 6. Leakage of retail and entertainment uses away from the interchange and/or south of Factory Shoals Road limits the potential to create a sustained, higher quality commercial activity center that meets the needs and expectations of area stakeholders.

Undeveloped properties along the edge of Sweetwater Creek State Park and fronting Rock House Road were determined to be best suited for future residential uses because of their adjacency to existing subdivisions, area topographic and environmental features, and access to the State Park. Properties south of Preston Boulevard also were included as future residential land use opportunities due to their environmental limitations and proximity to the Sweetwater Creek Apartments and Sweetwater subdivision.

Residential land uses in the study area coincide with the Urban Residential character area. The market analysis determined that there is capacity for additional quality multifamily development within the study area; however, none of the current land use designations in the Sweetwater area allow for Residential-Multifamily (R-MF) zoning. The planning team recommends that within the master plan study area, multifamily zoning should be allowed within the Workplace Center character area. Residential-Multifamily zoning could be complementary in the Urban Residential character area, but should be allowed only to serve as a transition or buffer between single-family residential subdivisions and business/industrial uses. In the Workplace Center character area, multifamily should follow the same pattern of concentration around I-20 and Thornton Road/SR 6 as recommended for retail and entertainment uses.



# CONCEPT A LAND USE



## MASTER PLAN

The public improvements recommended in Concept A are divided into short term (Tier 1 and Tier 2 projects that should be completed in the next 5 years) and longer term (Tier 3 projects that are expected to be 10 to 15 year investments). To implement Concept A, approximately \$13.5 to 18.5 million will be needed for roadway and utility construction. Longer-term improvements are projected to be between \$43 and \$57 million. Compared to Concept B, Concept A has a lower short-term cost, but requires a larger long-term investment, which may limit the County and City's ability to implement the complete plan. In general, private development will be required to contribute to roadway improvements during the development phase of their projects development while SPLOST funds will be used to leverage other funding possibilities.

### Tier 1 and Tier 2 Projects

- New commercial-oriented "loop" to SR 6 (Douglas Hill Road to Factory Shoals Road)
- SR 6 at Factory Shoals intersection improvement
- Douglas Hill at Factory Shoals intersection improvements
- Bob Arnold Boulevard at Blairs Bridge Road/Preston Boulevard intersection improvement/realignment
- SR 6 at Bob Arnold Boulevard intersection improvement

### Tier 3 Projects

- New residential-oriented north-south road between Preston Boulevard connecting Factory Shoals/Rock House and Summer Lake Road
- New commercial-oriented road from Riverside Parkway to Rock House
- Trail connecting new north-south roadway into the Park

In addition to the tiered projects, a number of Transportation Projects were identified, including a series of intersection, paving, and path improvements.

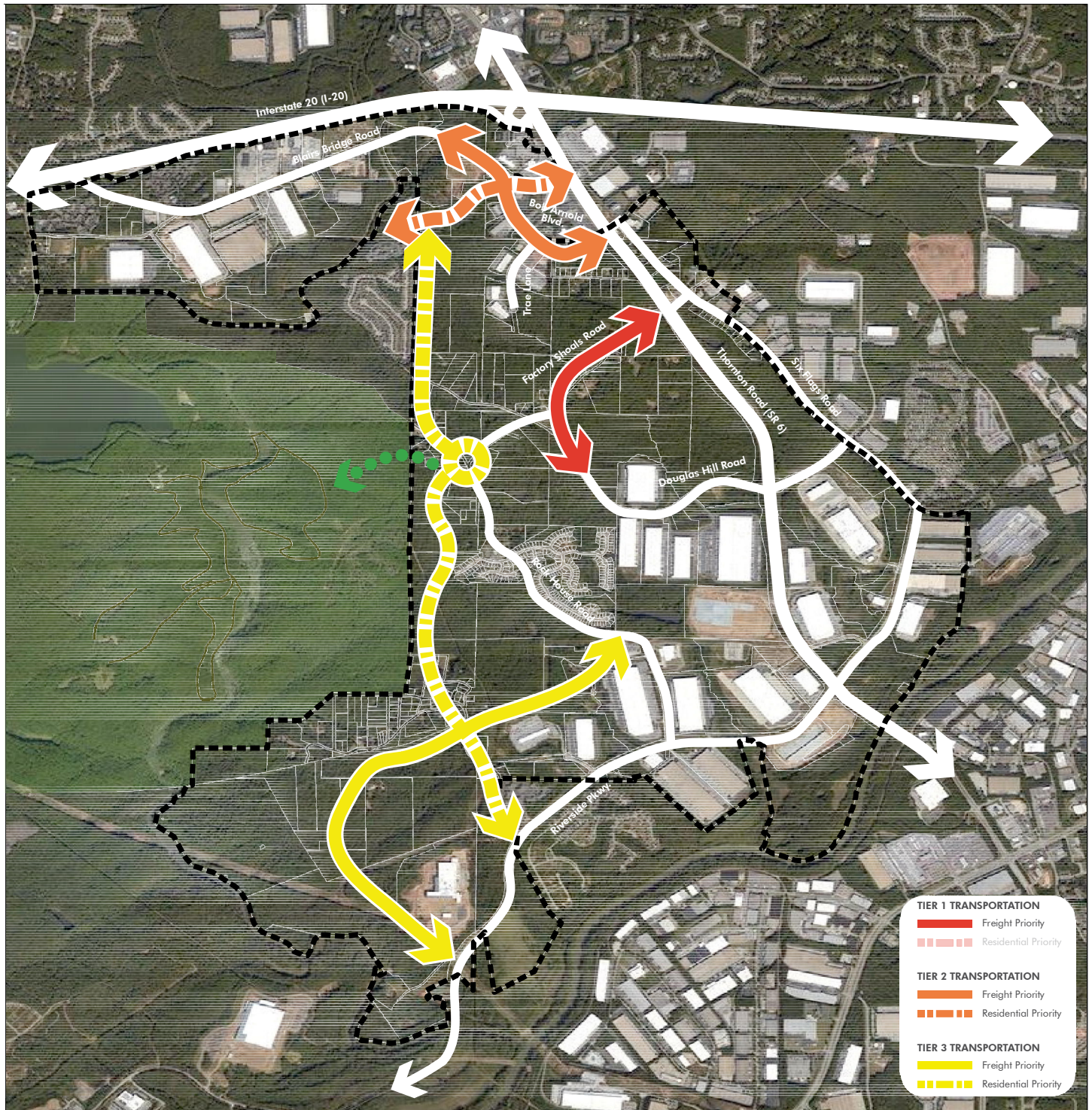
### Other Projects\*

- SR 6 at Douglas Hill intersection improvement
- SR 6 Multiple unsignalized intersections between Douglas Hill and Riverside
- SR 6 at Riverside intersection improvement
- Road improvements/construction on Factory Shoals, Douglas Hill, and Rock House
- Multiuse path following transmission lines
- SR 6 sidewalks for the full extent of the study area

*\*Projects to advance when feasible*



# CONCEPT A TRANSPORTATION PROJECTS





## MASTER PLAN

### PROPOSED INTERSECTION REALIGNMENT

Concept A contemplates realignment of Blairs Bridge Road at Bob Arnold and Preston Boulevards. A significant number of turning movements and limited spacing between intersections creates congestion and safety concerns at these intersections. Realignment into a single intersection would reduce confusion, the number of conflict points, and the number of turning movements. For this enhancement to occur, right-of-way will be needed from the northwest corner of Preston Boulevard and Bob Arnold Boulevard (Hampton Inn), the southeast corner of Blairs Bridge Road at Bob Arnold Boulevard (Mercer University Douglas), and north of Blairs Bridge Road (Autonation Toyota). Additionally, to support realignment and traffic operations, a traffic signal will be needed at the intersection of Bob Arnold Boulevard and Thornton Road/SR 6.

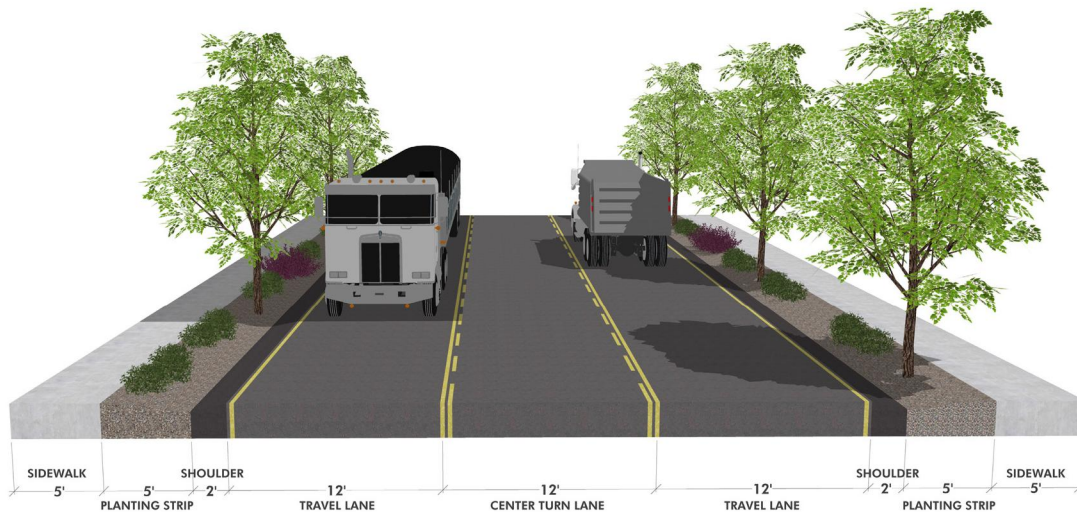




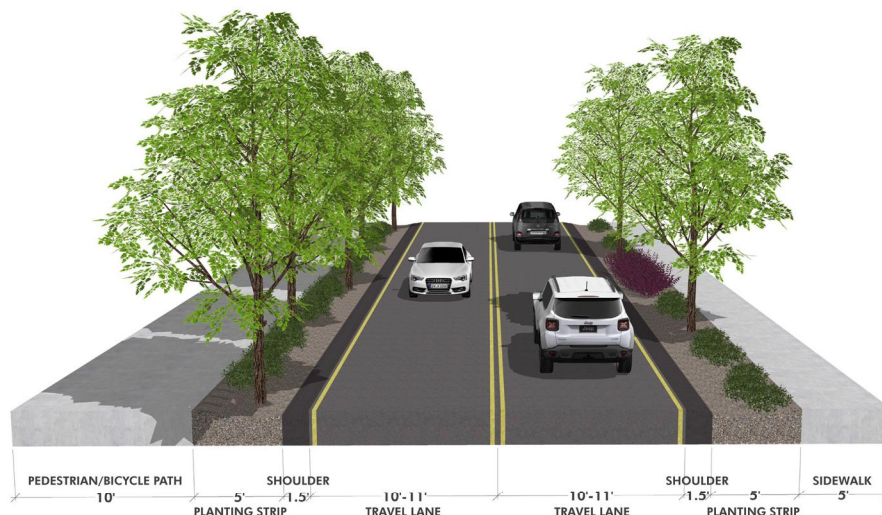
## PROPOSED ROADWAY IMPROVEMENTS

Concept A recommends the creation of truck routes on Factory Shoals, Douglas Hill, and the southern portion of the study area and the creation of a residential north to south connector road between Preston Boulevard and Riverside Parkway. With truck access limited to Douglas Hill, Factory Shoals, and Blairs Bridge Roads, a local, neighborhood street with dedicated pedestrian/bicycle facilities is needed to connect existing neighborhoods and future residents. The north-south roadway would connect Preston Boulevard to Rock House Road, and as a second phase connect Summer Lake Road. As part of this improvement, roundabouts are proposed at key intersections to limit truck access and a pedestrian/bicycle path or greenway should be provided along the roadway to connect neighborhood areas to a new eastern access point into Sweetwater Creek State Park.

- Factory Shoals and Douglas Hill Roads
- New Roadway West of Rock House Road to Riverside Parkway



- New N/S Roadway from Preston Boulevard to Riverside Parkway



## MASTER PLAN

### Concept A

### Transportation Projects Implementation Recommendations

	Project	Project Type	Cost Range
<b>TIER 1</b> <b>\$10-12M</b>	<b>New commercial-oriented "loop" to Thornton Road (SR 6) (Douglas Hill Road to Factory Shoals Road)</b>	New Road (Commercial)	\$5M
	<b>Douglas Hill Road at Factory Shoals Road intersection improvements</b>	Intersection	\$3-4M
	<b>Thornton Road (SR 6) at Factory Shoals Road intersection improvements</b>	Intersection	\$2-3M
<b>TIER 2</b> <b>\$3.5-6.5M</b>	<b>Bob Arnold Boulevard at Blairs Bridge Road/Preston Boulevard intersection improvements/realignment</b>	Intersection	\$3-5M
	<b>Thornton Road (SR 6) at Bob Arnold Boulevard intersection improvements</b>	Intersection	\$0.5-1.5M

Description	Funding Opportunities	Responsible Parties
The new commercial-oriented loop to SR 6 is proposed to improve roadway infrastructure and connectivity between Douglas Hill Road and Factory Shoals Road. Improvements include roadway infrastructure upgrades and utility extensions along Factory Shoals Road with the intentions of connecting existing commercial areas and encouraging commercial growth and truck traffic within the new loop as opposed to nearby residential streets.	2017 SPLOST, LMIG, CMAQ, GDOT Operations/ Safety Funds	Douglas County, Douglas County Economic Development Authority
Realignment and improvements to the Douglas Hill Road at Factory Shoals Road intersection to improve the continuity of the new commercial-oriented loop connecting these two roadways. The intersection would be realigned to a T-intersection to allow continuity between the sections of Factory Shoals Road and Douglas Hill Road that connect with SR 6, and a T-intersection to continue Factory Shoals Road west toward Sweetwater Creek State Park.	2017 SPLOST, LMIG	Douglas County, Douglas County Economic Development Authority
Thornton Road (SR 6) at Factory Shoals Road improvements to include capacity enhancements, particularly for the northern section. Additional improvements to include modifications to the closely spaced four-way stop intersection of Factory Shoals Road at Six Flags Road. May consider signaling the intersection of Factory Shoals Road at Six Flags Road with timings coordinated with the intersection of Factory Shoals Road with SR 6.	CMAQ, Future SPLOST, GDOT Operations/ Safety Funds	Douglas County, Douglas County Economic Development Authority, GDOT
Proposed modifications to the closely spaced intersections of Bob Arnold Boulevard at Blairs Bridge Road and at Preston Boulevard include reconstruction and realignment into a single intersection to simplify turning movements required for existing commercial and residential vehicular travel. The realigned intersection would divert Blairs Bridge Road south to the existing Bob Arnold Boulevard intersection with SR 6, and Preston Boulevard would realign to connect with the existing Blairs Bridge Road intersection with SR 6.	Future SPLOST, LMIG	City of Douglasville, Douglas County, Douglas County Economic Development Authority
Intersection improvements of SR 6 at Bob Arnold Boulevard to complement the realignment of the Bob Arnold Boulevard at Blairs Bridge Road/Preston Boulevard intersections. Improvements may include signalization or consideration for median closure with "Michigan lefts." The nearby intersection of Bob Arnold Boulevard with Six Flags Road also would be considered to improve operations of the two closely-spaced intersections.	CMAQ, Future SPLOST, GDOT Operations/ Safety Funds	Douglas County, Douglas County Economic Development Authority, GDOT

## MASTER PLAN

### Concept A

#### Transportation Projects Implementation Recommendations (cont'd)

#### **TIER 3** **\$43-57M**

Project	Project Type	Cost Range
<b>New residential-oriented north-south road connecting Preston Boulevard, Factory Shoals Road/ Rock House Road, and Summer Lake Road</b>	New Road (Residential)	\$28-32M
<b>New commercial-oriented road from Riverside Parkway to Rock House Road</b>	New Road (Commercial)	\$12-20M
<b>Trail connecting new north-south roadway into the State Park</b>	Paths/Trails	\$3-5M

Description	Funding Opportunities	Responsible Parties
The new north-south residential-oriented roadway would connect Preston Boulevard to Factory Shoals, Rock House, and Summer Lake Roads. Roadway design considerations would emphasize vehicular and pedestrian travel as opposed to commercial vehicle traffic and include sidewalks along the length of the corridor. Roundabouts are proposed at intersections to discourage truck traffic.	Future SPLOST, LMIG	City of Douglasville, Douglas County, Douglas County Development Authority
The new east-west commercial-oriented roadway connection between Riverside Parkway and Rock House Road would provide improved commercial access and connectivity in the southeast portion of the study area. Additional improvements may include utility extension (as appropriate), barriers to left-turns onto Rock House Road from this road, and "Trucks Prohibited" signage on Rock House Road north of this access point.	Future SPLOST, Public-Private Partnerships	Douglas County, Douglas County Economic Development Authority, Private Property Owners
The proposed trail would connect the new proposed North-South residential-oriented roadway to provide a new pedestrian entry into Sweetwater Creek State Park.	Future SPLOST, Georgia TE Program, Georgia Natural Resources Foundation	Douglas County, Douglas County Economic Development Authority, Georgia State Parks

TOTAL CONCEPT TIERS COST ESTIMATE: \$56.5 - 75.5M

## MASTER PLAN

### Concept A

#### Transportation Projects Implementation Recommendations (cont'd)

#### OTHER \$17.8-29M

Project	Project Type	Cost Range
Thornton Road (SR 6) at Douglas Hill Road intersection improvements	Intersection	\$0.3-0.5M
Multiple unsignalized intersections along Thornton Road (SR 6) between Douglas Hill Road and Riverside Parkway	Intersection	\$1.5-2.5M
Thornton Road (SR 6) at Riverside Parkway intersection improvements	Intersection	\$1-4M
Road improvements/paving on Factory Shoals Road, Douglas Hill Road, and Rock House Road	Road Improvement	\$3-4M
Multiuse path following power transmission lines	Paths/Trails	\$5-8M
Sidewalks along Thornton Road (SR 6) for the full extent of the study area	Sidewalks	\$7-10M



Description	Funding Opportunities	Responsible Parties
SR 6 at Douglas Hill Road improvements may include minor infrastructure upgrades and wayfinding to encourage traffic from the study area to flow through this signal as opposed to Riverside Parkway. Proposed near-term roadway network improvements may encourage changes in traffic patterns in advance of this project's implementation.	CMAQ, Future SPLOST, GDOT Operations/Safety Funds	Douglas County, Douglas County Economic Development Authority, GDOT
Study safety and operational improvements for the unsignalized intersections between Douglas Hill Road and Riverside Parkway. Intersection improvements may consider modifying the existing full-access intersections to closing medians or turning movement restrictions, pending future operations and roadway needs.	CMAQ, Future SPLOST, GDOT Operations/Safety Funds	Douglas County, Douglas County Economic Development Authority, GDOT
Study to consider intersection capacity and operational improvements at SR 6 at Riverside Parkway. Alternatives would consider capacity improvements, such as additional capacity along Riverside Parkway or the potential for a non-traditional intersection design, such as Michigan-style lefts or a continuous flow intersection (CFI).	CMAQ, Future SPLOST, GDOT Operations/Safety Funds	Douglas County, Douglas County Economic Development Authority, GDOT
Spot road improvements/paving proposed on Factory Shoals Road, Douglas Hill Road, and Rock House Road west of the intersection of Douglas Hill Road at Factory Shoals Road.	Future SPLOST, Public-Private Partnerships	Douglas County, Douglas County Economic Development Authority, Private Property Owners
Multiuse path following power transmission lines to connect neighborhoods to Sweetwater Creek State Park.	Future SPLOST, Georgia TE Program	City of Douglasville, Douglas County, Georgia Power, Georgia State Parks
Sidewalks are proposed for the entire length of SR 6 in the study area to improve the pedestrian network. Crosswalks and pedestrian-crossing infrastructure upgrades proposed for intersections along the corridor. Streetscaping improvements could be incorporated with funding assistance through the Roadside Enhancement and Beautification Council (REBC) Grant Program.	Future SPLOST, Georgia TE Program, REBC Grant Program	Douglas County, GDOT

TOTAL NON-TIERED PROJECTS COST ESTIMATE: \$17.8 - 29M