HIGHLANDS PARK GARDENS

Development of Regional Impact # 1532

DEKALB COUNTY, GA

TRAFFIC IMPACT STUDY

Prepared for:

Brach Properties,
3340 Peachtree Road NE, Suite 2050
Atlanta, GA 30326

Prepared by:

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

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September 19, 2007
A&R Project No: 07-097

EXECUTIVE SUMMARY

The purpose of this study is to determine the traffic impact that will result from the Highlands Park Gardens development proposed to the southeast of the intersection of Chamblee Tucker Road / Buckeye Road in DeKalb County, Georgia. The development is proposed to consist of 25,000 s.f. of retail space and 380 apartment units. The site is currently occupied by the Park Gardens Apartments. All the existing buildings within the existing apartment complex will be demolished as part of the new development. The traffic analysis evaluated the following scenarios: existing conditions, the year 2009 without additional traffic generated by the site, and the year 2009 with the traffic generated by the development.

From the existing condition analysis it was found that one of the intersections within the study area is currently not operating at the required LOS standard of D. Analysis of the Base Year 2009 conditions revealed that two of the study intersections being analyzed will not meet the required LOS standard.

The Future 2009 traffic conditions including the site-generated traffic were then evaluated using existing lane geometry. Two study network intersections will not meet the required LOS standard after the project is completed if no roadway improvements are implemented. Improvements were recommended to restore these intersections back to the LOS standard. Additionally, recommendations to allow the site accesses to operate satisfactorily were identified. Details can be found in the site access analysis section of the report.

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1. PROJECT DESCRIPTION

The purpose of this study is to determine the traffic impact that will result from the Highlands Park Gardens development proposed to the southeast of the intersection of Chamblee Tucker Road / Buckeye Road in DeKalb County, Georgia. The development is proposed to consist of 25,000 s.f. of retail space and a 380 unit apartment. An existing Park Gardens Apartments Driveway that aligns across from Big Lots Shopping Center Driveway will serve as the primary access for the site. The existing apartments are proposed to be demolished as part of the redevelopment. The site will also have a right-in / right-out access and an emergency vehicle access along Chamblee Tucker Road. The right in / right out access along Chamblee Tucker Road currently serves the existing Park Gardens Apartments. A location map for the site is shown in Figure 1.

1.1 Site Plan

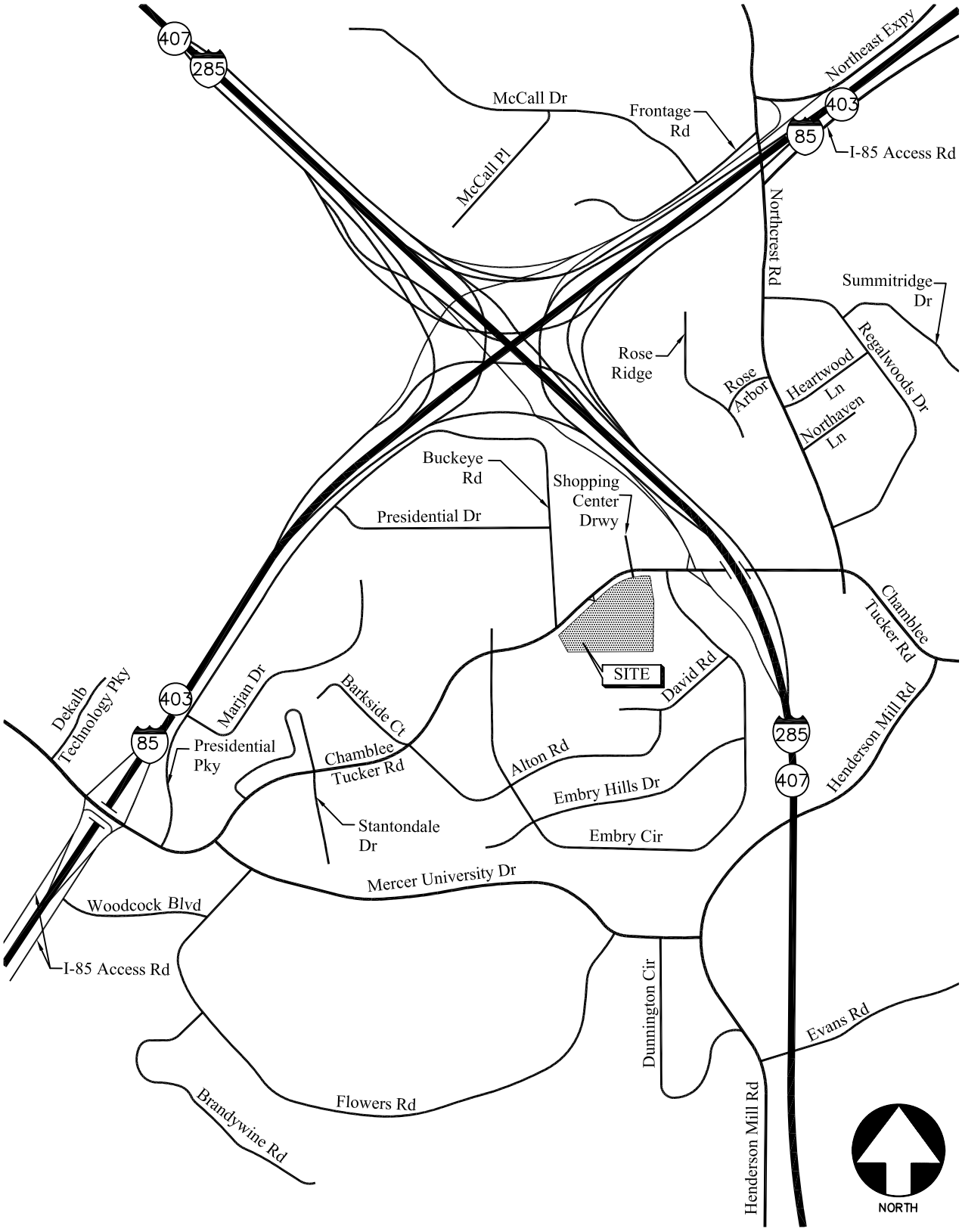
A site plan for this project is shown in Figure 2. A larger size drawing and a digital copy of the site plan are also provided with this report.

1.2 Consistency with Adopted Comprehensive County Plan

The existing zoning is RM100 and the proposed zoning is OCR. The existing future land use plan calls for suburban and is proposed to be changed to town center.

1.3 Project Phasing

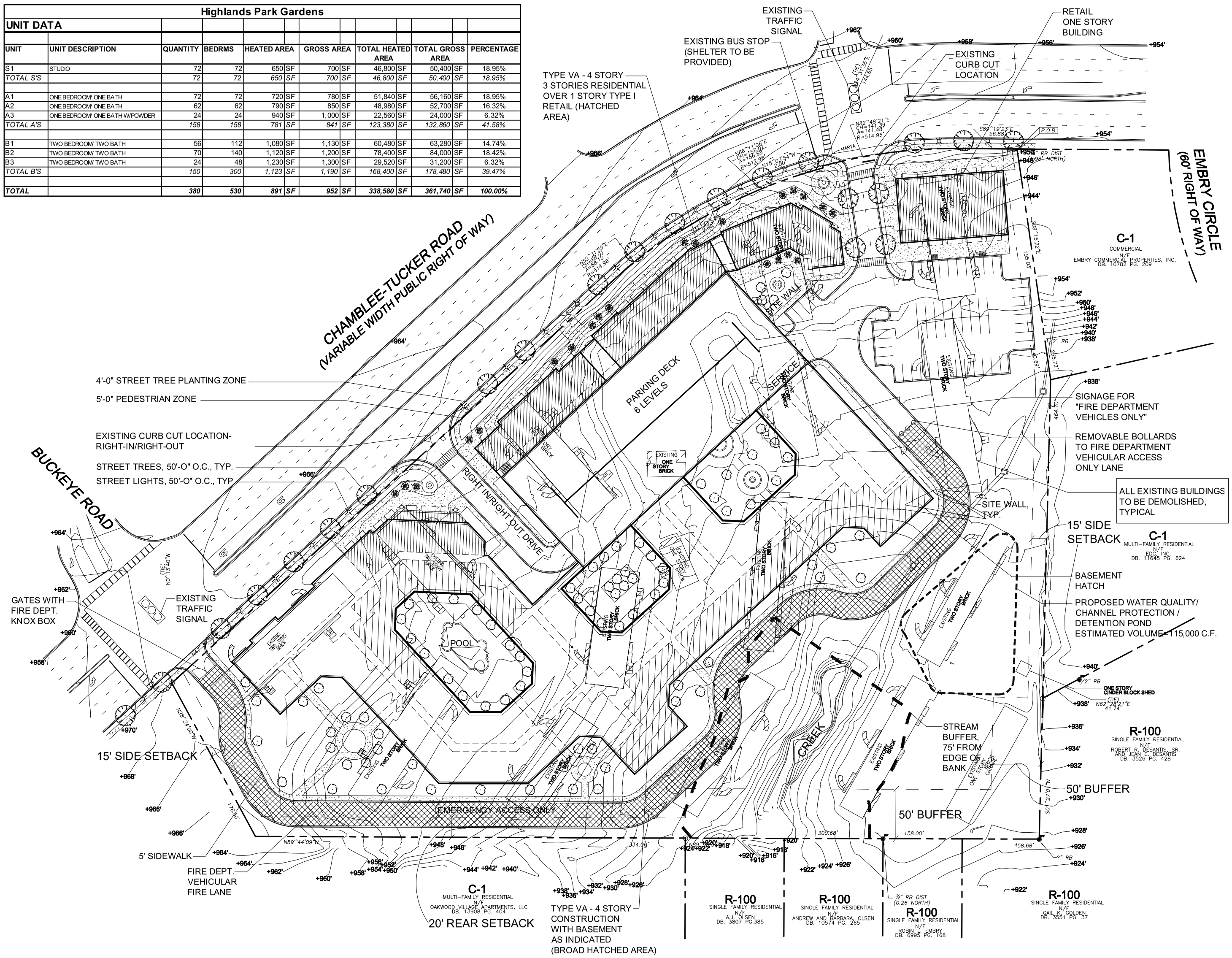
The project's impact will be evaluated in one phase, estimated for completion in the year 2009. This study will evaluate the traffic operations in the vicinity of the site for existing conditions year 2007, the year 2009 without additional traffic generated by the site, and the year 2009 with the additional traffic generated by the development.

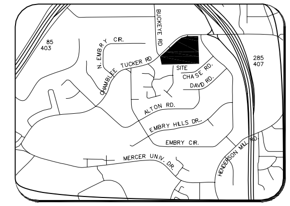


LOCATION MAP FIGURE 1

A&R Engineering Inc.

Highlands Park Gardens													
UNIT DATA													
UNIT	**UNIT DESCRIPTION**	**QUANTITY**	**BEDRMS**	**HEATED AREA**		**GROSS AREA**		**TOTAL HEATED AREA**		**TOTAL GROSS AREA**		**PERCENTAGE**	
S1	STUDIO	72	72	650	SF	700	SF	46,800	SF	50,400	SF	18.95%	
TOTAL S'S		*72*	*72*	*650*	*SF*	*700*	*SF*	*46,800*	*SF*	*50,400*	*SF*	*18.95%*	
A1	ONE BEDROOM/ ONE BATH	72	72	720	SF	780	SF	51,840	SF	56,160	SF	18.95%	
A2	ONE BEDROOM/ ONE BATH	62	62	790	SF	850	SF	48,980	SF	52,700	SF	16.32%	
A3	ONE BEDROOM/ ONE BATH W/POWDER	24	24	940	SF	1,000	SF	22,560	SF	24,000	SF	6.32%	
TOTAL A'S		*158*	*158*	*781*	*SF*	*841*	*SF*	*123,380*	*SF*	*132,860*	*SF*	*41.58%*	
B1	TWO BEDROOM/ TWO BATH	56	112	1,080	SF	1,130	SF	60,480	SF	63,280	SF	14.74%	
B2	TWO BEDROOM/ TWO BATH	70	140	1,120	SF	1,200	SF	78,400	SF	84,000	SF	18.42%	
B3	TWO BEDROOM/ TWO BATH	24	48	1,230	SF	1,300	SF	29,520	SF	31,200	SF	6.32%	
TOTAL B'S		*150*	*300*	*1,123*	*SF*	*1,190*	*SF*	*168,400*	*SF*	*178,480*	*SF*	*39.47%*	
TOTAL		***380***	***530***	***891***	***SF***	***952***	***SF***	***338,580***	***SF***	***361,740***	***SF***	***100.00%***	





LOCATION MAP

SITE DATA:

10.127 Acres or 441,140 sf

Existing Zoning:
RM-100

Proposed Zoning:
PC-2 – Pedestrian Community District
1.50 FAR maximum = 661,710 sf Allowed
(Includes Residential at 60 Units per Acre max. = 600 units)
Lot Coverage: 65% Max; Actual = 37%

Retail/Restaurant: 25,000 sf Gross
75 Retail Parking Spaces required at 3 sp/1,000 sf

Residential: Type VA wood framed construction
4 story on grade and 3 story over retail podium
380 units at 900 s.f. average or
342,000 net rentable s.f.
5,000 s.f. allotted for
Leasing Office and Amenities
Residential Parking: 645 spaces
1 sp/unit plus .5 sp/bedroom

Parking:
Required: 720 spaces
Surface Spaces: 56 spaces
Parking Deck: 6 levels – 664 spaces
Provided: 720 spaces

1 GRTA — GRTA-DRI SITE PLAN
SCALE: 1" = 50'-0"

0 25' 50' 100'
SCALE: 1" = 50'-0"

THE PRESTON PARTNERSHIP, LLC
A MULTI-DISCIPLINARY DESIGN FIRM
1000 ABERNATHY ROAD NE, SUITE 600
ATLANTA, GEORGIA 30328
TELEPHONE: 770 396 7248
FAX: 770 396 2945
WWW.THEPRESTONPARTNERSHIP.COM

CONSULTANT

SEAL

PROJECT
HIGHLANDS PARK GARDENS
DEKALB COUNTY, GEORGIA

FOR
BRANCH
BRANCH PROPERTIES
3340 PEACHTREE RD NE SUITE 2050
ATLANTA, GEORGIA 30326
TEL: 404-832-8900
FAX: 404-892-8898

REVISIONS

DATE 09/18/07
JOB NUMBER 0700201
DRAWN BY
CHECKED BY
SHEET TITLE GRTA-DRI SITE PLAN
SHEET NUMBER **GRTA DRI-1**
COMMENTS
NOT ISSUED FOR CONSTRUCTION

2. TRIP GENERATION

Trip generation estimates for the project were based on the rates and equations published in the 7th edition of the Institute of Transportation Engineers (ITE) Trip Generation report. The ITE Trip Generation report contains traffic volume count data collected at similar facilities nationwide. The development is proposed to consist of 25,000 s.f. of retail space and a 380 unit apartment. Trip generation estimates for the Highlands Park Gardens development are shown in Table 1.

TABLE 1
TRIP GENERATION

Land Use	Total Size	A.M. Peak Hour			P.M. Peak Hour			24-Hour 2-way
		Enter	Exit	Total	Enter	Exit	Total	
220 – Apartment	380 units	38	152	190	148	79	227	2,434
820 – Shopping Center	25,000 s.f.	41	27	68	120	131	251	2,758
Total		**79**	**179**	**258**	**268**	**210**	**478**	**5,192**

2.1 Net Trip Ends

Due to the nature of the development mixed-use and pass-by reductions were applied. Pass-by reductions have been taken for only PM peak hour based on the equations published in ITE Trip Generation Handbook. In addition to the mixed-use and pass-by reductions, as per the GRTA LOU, 2% transit reduction has also been applied since the area is served by MARTA. The redevelopment includes the demolition of the existing Park Gardens Apartments. Accordingly, the volumes being generated by the existing development have been deducted from the trip generation estimates for the project to determine the net trips generated by the site. Trip Generation with the applied reductions is shown in the Table 2.

TABLE 2
TRIP GENERATION WITH REDUCTIONS

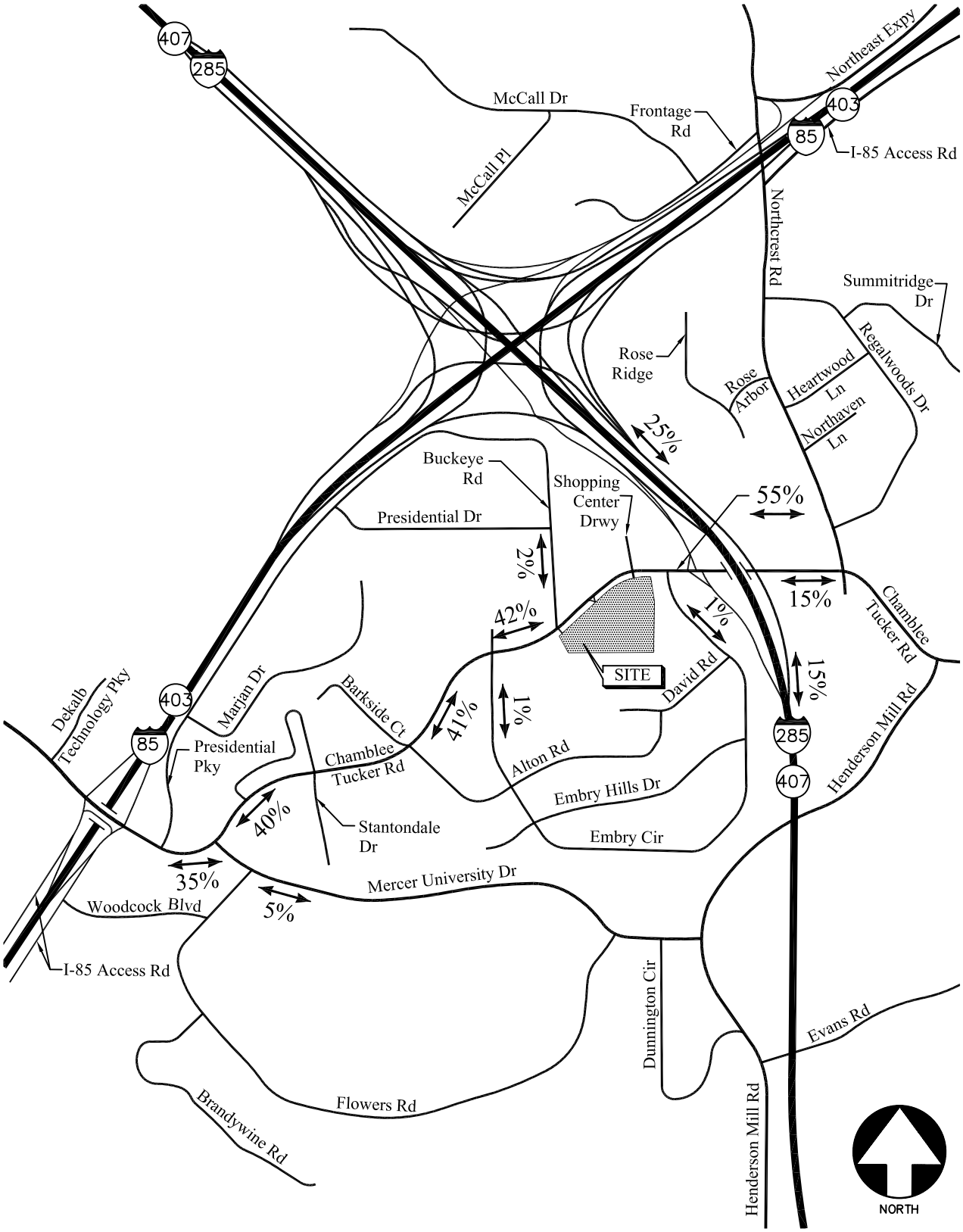
Land Use	Total Size	A.M. Peak Hour			P.M. Peak Hour			24-Hour 2-way
		Enter	Exit	Total	Enter	Exit	Total	
220 – Apartment - 380 units		38	152	190	148	79	227	2,434
- Mixed-use Reduction		*-2*	*-1*	*-3*	*-16*	*-11*	*-27*	*-276*
820 – Shopping Center - 25,000 s.f.		41	27	68	120	131	251	2,758
- Mixed-use Reduction		*-1*	*-2*	*-3*	*-11*	*-16*	*-27*	*-276*
*- Pass-By Reduction (0% / 58%)**		*0*	*0*	*0*	*-63*	*-67*	*-130*	*-1,300***
Transit Reduction 2%		-1	-3	-4	-2	-1	-3	-38
Existing Park Garden Trips		*-29*	*-48*	*-77*	*-75*	*-67*	*-142*	*-1,420***
Total without reductions		**79**	**179**	**258**	**268**	**210**	**478**	**5,192**
Total with reductions		**46**	**125**	**172**	**101**	**48**	**149**	**1,882**

* (AM Pass-by % / PM Pass-by %)

** The 24 hour pass by reduction has been calculated by assuming the total PM peak hour pass by trip reduction is 10% of the total daily pass-by reduction.

3. TRIP DISTRIBUTION & ASSIGNMENT

The trip distribution is the percentage of the traffic generated by the site that travels to and from the site on each segment of the surrounding roadway network. The trip distribution was based on the location of major roadways, highways and residential concentrations that will serve the development. The trip distribution is shown in Figure 3. The distribution was discussed and agreed upon in the methodology meeting. The site-generated volumes were then distributed to the surrounding roadway network based on the driver's destination, and the most easily accessible route.



TRIP DISTRIBUTION FIGURE 3

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4. STUDY NETWORK DETERMINATION

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

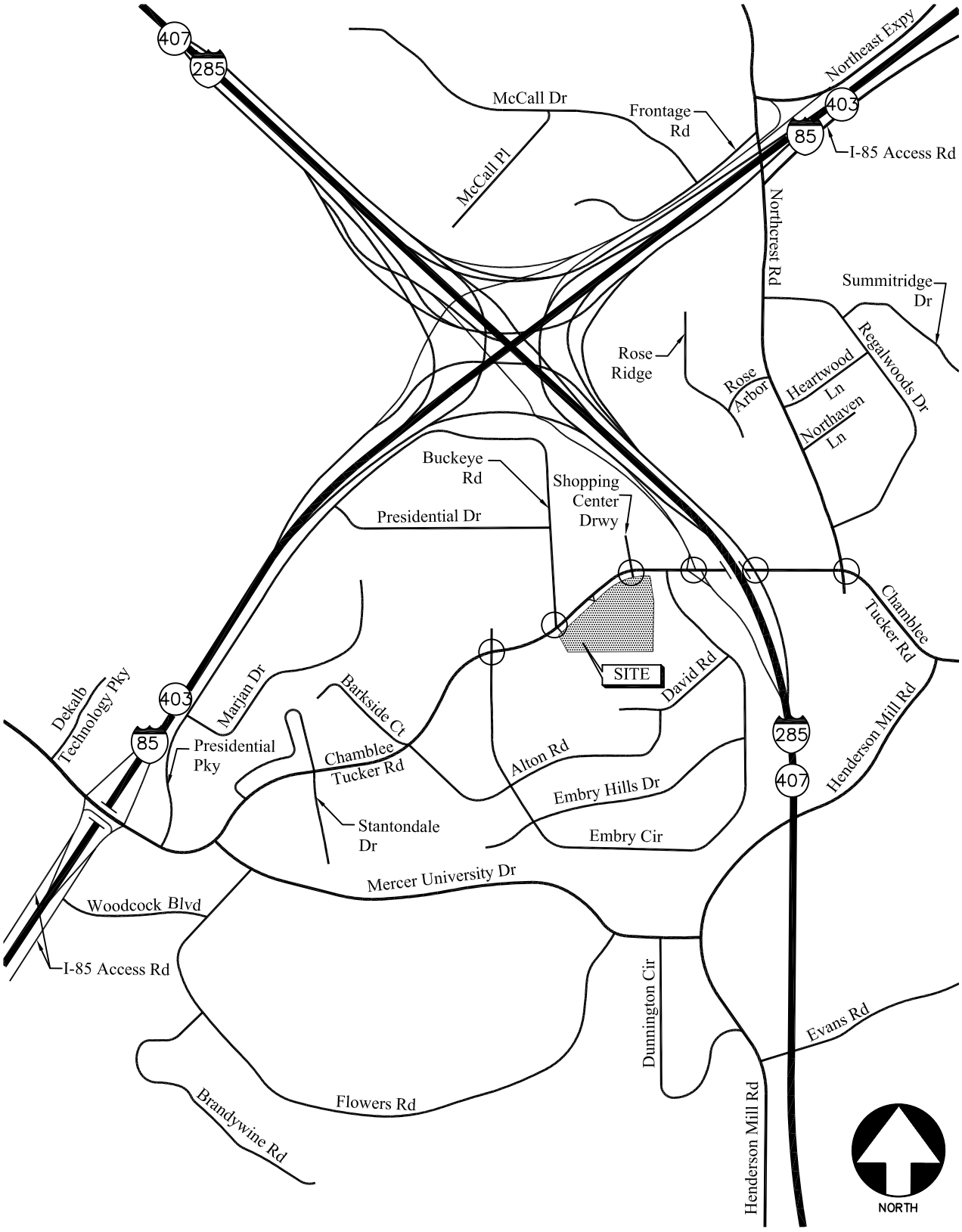
The traffic generated by the proposed project was then assigned to the area roadways using the trip distribution to determine the site-generated traffic on each roadway segment. The boundaries of the study network extend to the most distant intersections where at least 7% of the service volumes on the segment are attributed to project traffic. The following intersections fell within the 7% rule and have been included in the traffic study:

1) Chamblee Tucker Road / Embry Circle / Embry Hills Church Driveway
2) Chamblee Tucker Road / Buckeye Road
3) Chamblee Tucker Road / Big Lots Shopping Center Driveway
4) Chamblee Tucker Road / I-285 Southbound Ramps
5) Chamblee Tucker Road / I-285 Northbound Ramps
6) Chamblee Tucker Road / Northcrest Road / Kroger/Embry Village Driveway

The study intersections are shown graphically in Figure 4. Other intersections within this corridor, such as unsignalized side streets, right-in / right-out driveways or private driveways were viewed as insignificant and have not been included in the study network.

LEGEND

◯ - Intersections to be included in the detailed analysis



STUDY INTERSECTIONS FIGURE 4

A&R Engineering Inc.

5. PLANNED & PROGRAMMED IMPROVEMENTS

The following improvements have been identified in the Atlanta Regional Commission's Transportation Improvement Program (TIP) and Regional Transportation Plan (RTP). These improvements are within the vicinity of the proposed development. Additional improvements for DeKalb County have been identified, but they are not relevant to this project. Details of the planned programs can be found in the Appendix.

- AN-902A: I-285 East Bus Rapid Transit from Doraville Marta Station to I-20 east
  - Includes provision of Bus Rapid Transit facility.

- AR-H-301: I-285 East HOV lanes from I-20 east to I-85 north in DeKalb County
  - Includes addition of one HOV lane in both directions for 13 miles.

- GDOT Project ID 0000294: CR 1563/Flowers Road @ North Fork P'Tree Creek near Mercer U
  - Includes replacement of existing bridge with a new concrete bridge that will also be raised above the 100-year storm elevation.

6. EXISTING CONDITIONS

An inventory was performed of the roadways in the area surrounding the site. The following is a brief description of each of these facilities.

6.1 Description of Transportation Facilities in Study Network

I-285

I-285 is a twelve lane (six lanes in each direction) north-south interstate facility to the east of the proposed development.

Chamblee Tucker Road

Chamblee Tucker Road is an east-west six-lane divided roadway with a posted speed limit of 35 mph in the vicinity of the site.

Embry Circle

Embry Circle is a two-lane undivided roadway with a posted speed limit of 25 mph. It runs south of Chamblee Tucker Road.

Buckeye Road

Buckeye Road is a north-south four-lane undivided roadway that extends between Presidential Drive in the north and Chamblee Tucker Road in the south. Buckeye Road has a speed limit of 35 mph in the vicinity of the site.

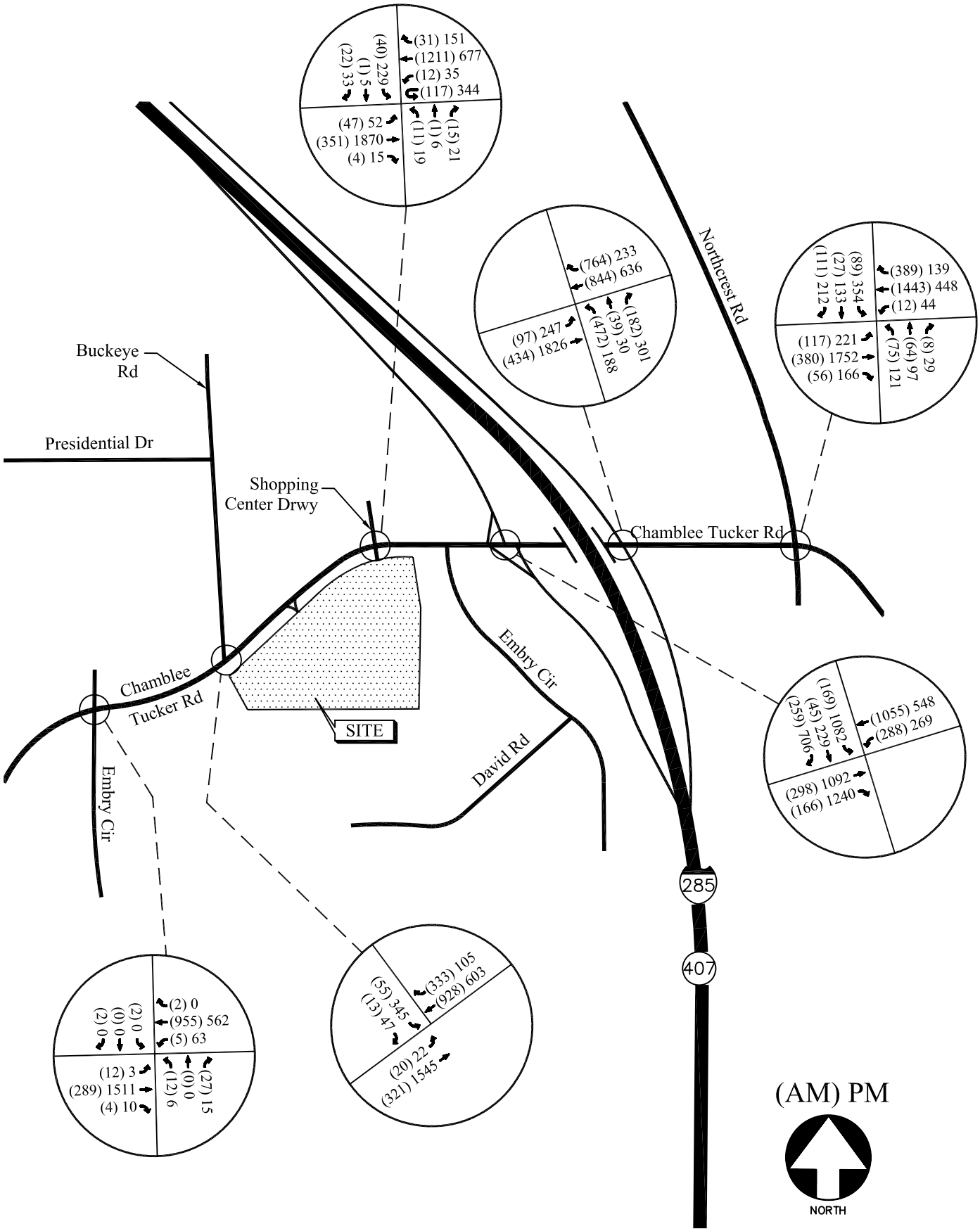
Northcrest Road

Northcrest Road is a north-south two-lane undivided roadway with a speed limit of 35 mph. It extends between Oakcliff Road in the north and Chamblee Tucker Road in the south.

6.2 Analysis Summary

Existing traffic counts were performed at the intersections listed in Section 4 - Study Area Network. In addition to traffic counts, intersection geometry data was also obtained. Turning movement counts were collected during the agreed upon hours of 7:00 AM – 9:00 AM and 4:00 PM - 6:00 PM on weekdays. The four consecutive 15-minute interval volumes that summed to produce the highest volume at each intersection during each two-hour period were then determined. These volumes make up the A.M. and P.M. peak hour traffic volumes for the intersections counted. The existing traffic volumes are shown in Figure 5 and the existing intersections traffic control and lane geometry for the study area network is shown in Figure 6.

The site-generated volumes shown in Table 2 were distributed to the surrounding roadway network in accordance with the trip distribution. The site-generated volumes for the study intersections are shown in Figure 7. Existing traffic operations were analyzed at all the existing intersections in accordance with the HCM methodology using Synchro software. The results of the analysis are shown in Table 3.



EXISTING WEEKDAY PEAK-HOUR VOLUMES FIGURE 5

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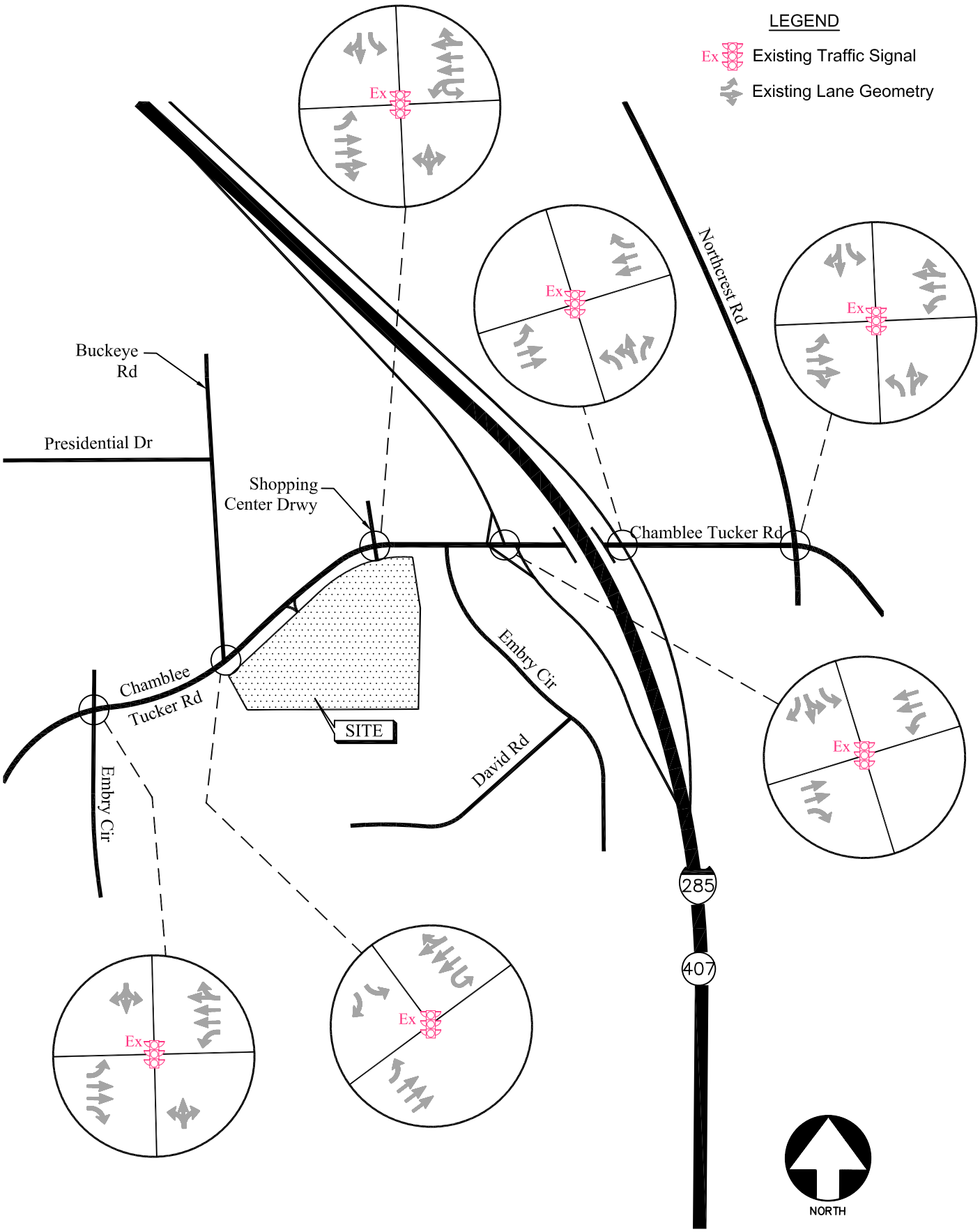

EXISTING TRAFFIC CONTROL AND LANE GEOMETRY FIGURE 6

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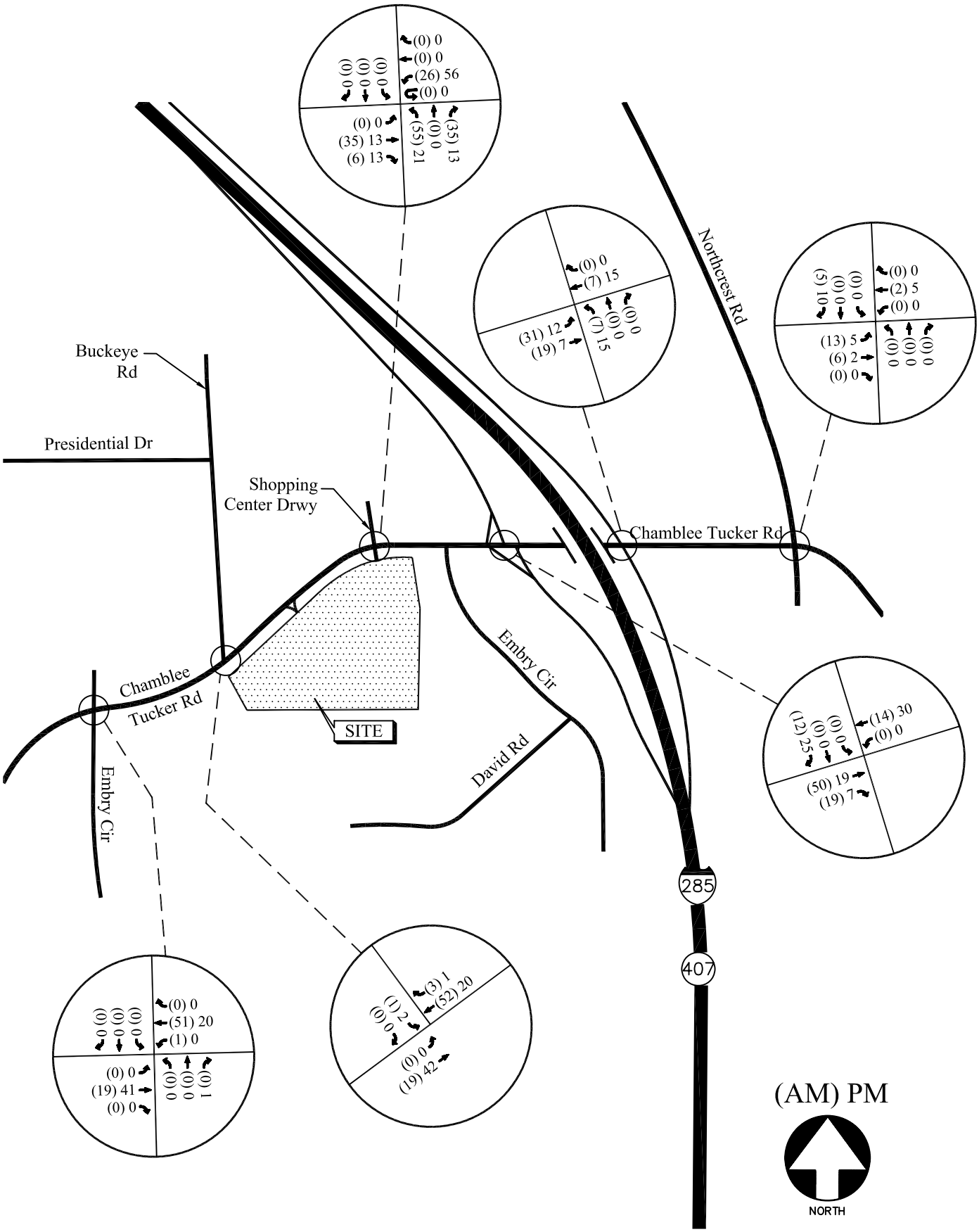
TABLE 3 EXISTING INTERSECTION OPERATIONS						
Intersection	AM/PM LOS Standard	Traffic Control	A.M. Peak Hour		P.M. Peak Hour	
			LOS (Delay)	v/c	LOS (Delay)	v/c
Chamblee Tucker Rd / Embry Cir / Embry Hills Church Drwy	D/D	Signalized	A (5.5)	0.27	B (13.6)	0.53
Chamblee Tucker Rd / Buckeye Rd	D/D	Signalized	A (3.7)	0.34	B (12.1)	0.60
Chamblee Tucker Rd / Big Lots Shopping Center Drwy	D/D	Signalized	A (8.9)	0.34	C (28.0)	0.90
Chamblee Tucker Rd / I-285 Southbound Ramps	D/D	Signalized	A (7.2)	0.42	C (33.6)	1.00
Chamblee Tucker Rd / I-285 Northbound Ramps	D/D	Signalized	C (23.1)	0.52	B (14.0)	0.80
Chamblee Tucker Rd / Northcrest Rd / Kroger/Embry Village Drwy	E/E	Signalized	E (61.4)	0.87	E (74.1)	1.04

As shown in Table 3, one of the study intersections is not operating at the LOS standard.



SITE GENERATED WEEKDAY PEAK HOUR VOLUMES FIGURE 7

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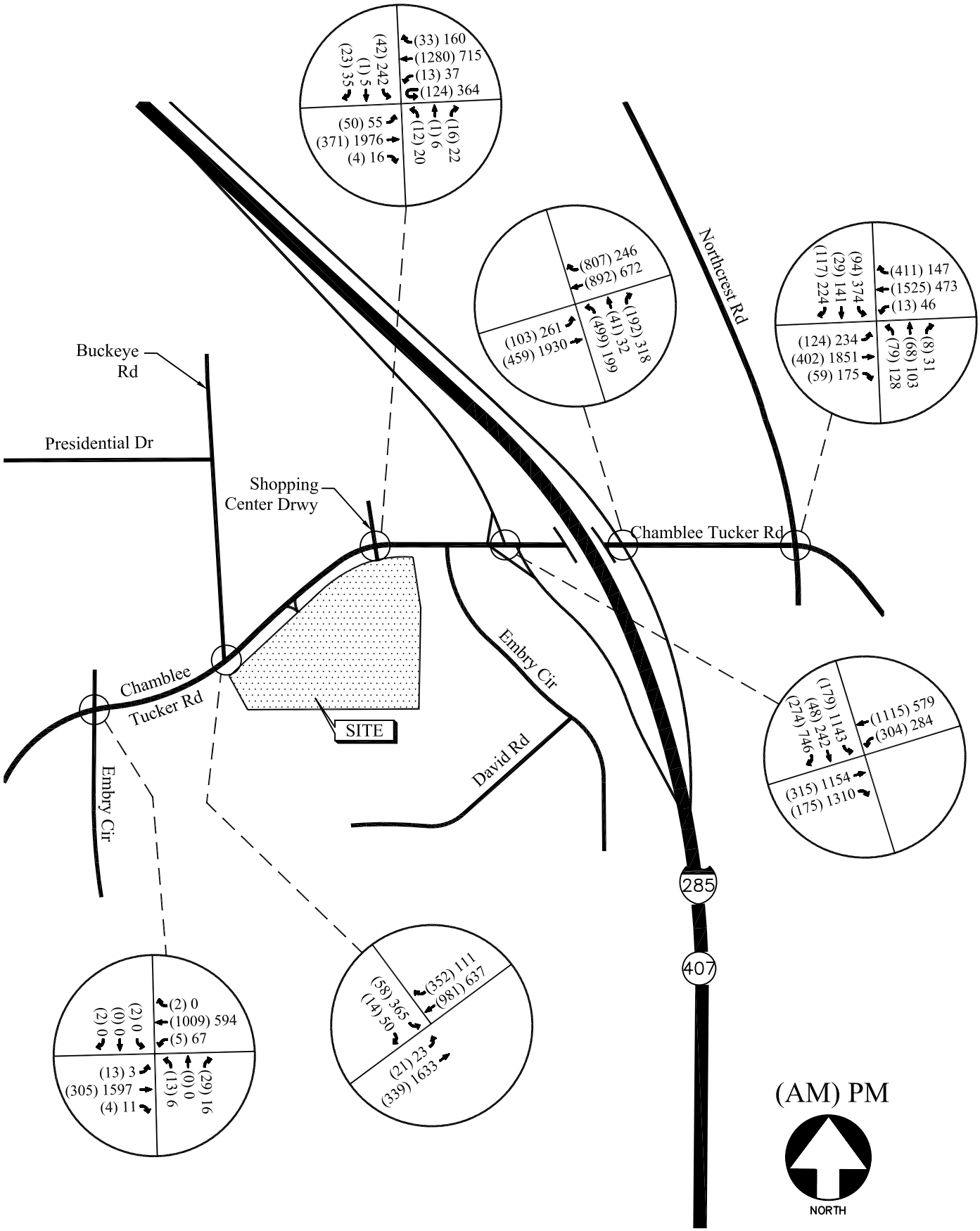
7. FUTURE YEAR BACKGROUND TRAFFIC

In order to evaluate future traffic operations in this area a projection was made of future base year traffic volumes. The Georgia Department of Transportation collected ADT's in the vicinity of the site over the last several years. Using this information, an annual growth factor of 2.8% was calculated. It was agreed upon in the methodology meeting and GRTA letter of understanding to use the calculated growth factor. This growth factor was applied to the existing traffic volumes on the roadways to estimate the future year 2009 traffic volumes prior to the addition of the site-generated volumes. Further details are included in the correspondence section of Appendix. The future year (base) traffic volumes for 2009 at all the study intersections are shown in Figure 8.

A traffic operation analyses for the following Base Scenario was performed:

- Base Year 2009 traffic with existing lane geometry.
- Base Year 2009 traffic with additional recommended improvements to bring all intersections to LOS standard.

Results of the analyses for the above scenarios are shown in Tables 4 and 5. Recommendations to bring the intersections back to the LOS standard are discussed after Table 4.



BASE 2009 WEEKDAY PEAK HOUR VOLUMES FIGURE 8

A&R Engineering Inc.

TABLE 4 BASE INTERSECTION OPERATIONS						
Intersection	AM/PM LOS Standard	Traffic Control	A.M. Peak Hour		P.M. Peak Hour	
			LOS (Delay)	v/c	LOS (Delay)	v/c
Chamblee Tucker Rd / Embry Cir / Embry Hills Church Drwy	D/D	Signalized	A (5.8)	0.28	B (13.5)	0.56
Chamblee Tucker Rd / Buckeye Rd	D/D	Signalized	A (3.8)	0.36	B (13.1)	0.63
Chamblee Tucker Rd / Big Lots Shopping Center Drwy	D/D	Signalized	A (8.6)	0.36	C (31.0)	0.93
Chamblee Tucker Rd / I-285 Southbound Ramps	D/D	Signalized	A (8.3)	0.44	E (57.7)	1.05
Chamblee Tucker Rd / I-285 Northbound Ramps	D/D	Signalized	C (20.8)	0.56	B (14.8)	0.85
Chamblee Tucker Rd / Northcrest Rd / Kroger/Embry Village Drwy	E/E	Signalized	F (90.8)	0.89	F (92.5)	1.11

Analysis of the future year (Base 2009) traffic volumes indicates that two of the study intersections will not operate within the LOS standard of D. The following improvements were identified for those intersections that did not comply with the LOS standard.

- Chamblee Tucker Road / I-285 Southbound Ramps
  - The intersection will operate at LOS E with an average delay of 57.7 seconds / vehicle during the PM peak hour. No feasible improvements can be given at this intersection to improve the LOS without the condemnation of the property to the south (to add a second eastbound right turn lane) or the widening of the bridge over I-285 (to add a second westbound left turn lane to create dual left turn lanes).
  - There is a significant amount of cut through traffic (southbound through) that is using the exit ramp from I-85 / I-285 to go southbound through the intersection to get back onto I-285 and bypass some of the congestion around the Spaghetti Junction Interchange. If this traffic were eliminated from the intersection then the LOS could be improved to the LOS standard. The island to the south of the intersection could be further extended to further hinder the southbound through movement, which would likely decrease the number of southbound through vehicles and improve the LOS.
  - As another alternative, a short southbound through lane could also be added at the intersection by reconfiguring the island on the north side of the intersection and reconfiguring the island on the south side (to receive the southbound through traffic); however, encouraging cut through traffic at an interchange ramp is not typically recommended.

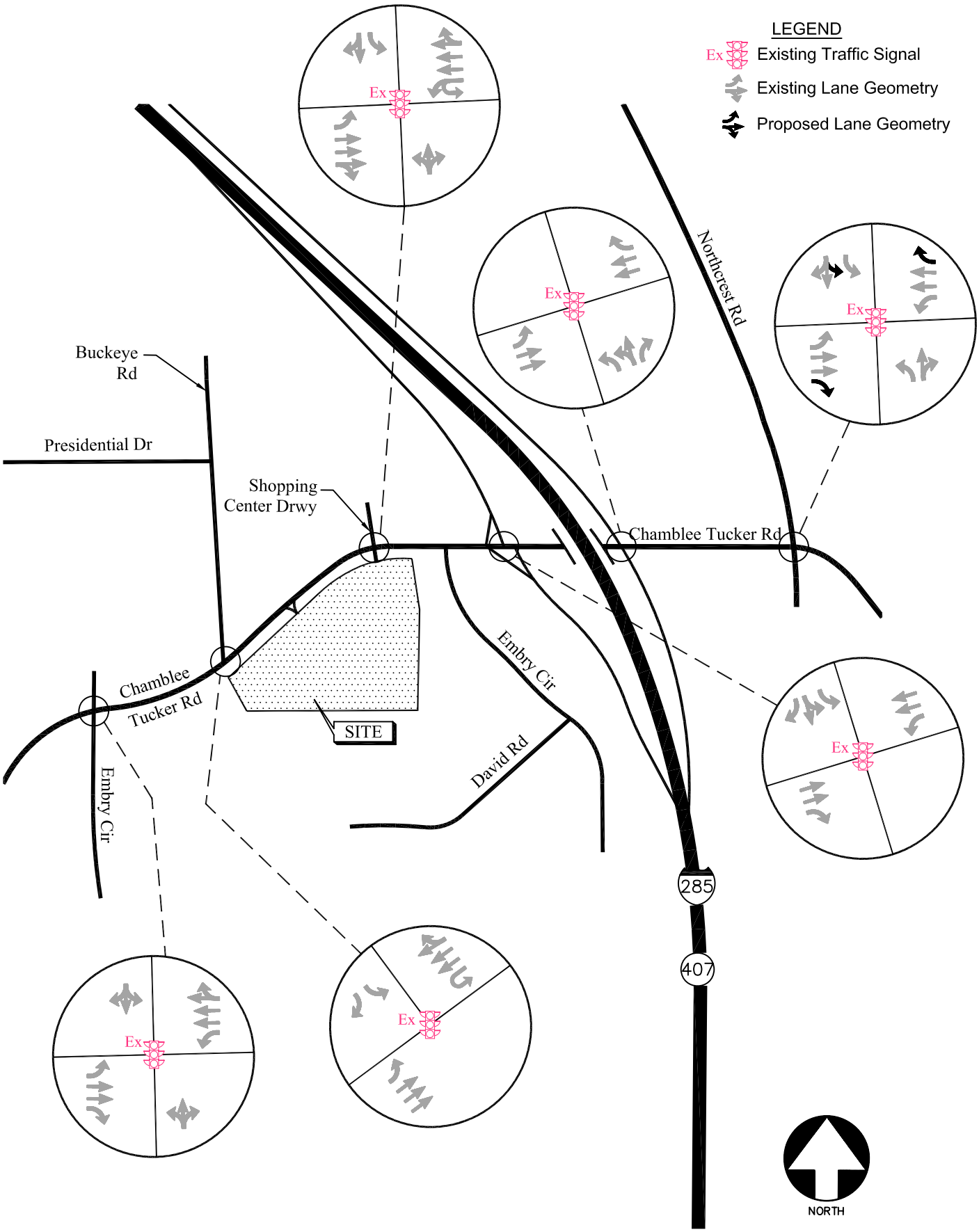
- Chamblee Tucker Road / Northcrest Road / Kroger/Embry Village Driveway
    - Add a dedicated westbound right turn lane on Chamblee Tucker Road.
    - Restripe the existing southbound approach on Northcrest Road to include a dedicated left turn lane and a shared left / through turn lane. The existing right turn flare lane can remain. This restriping will not require any additional pavement.

The LOS at the above intersections in the year 2009 with just background traffic after the above improvements are implemented is shown in Table 5. The recommended base intersections traffic control and lane geometry are shown in Figure 9.

TABLE 5

BASE INTERSECTION OPERATIONS WITH IMPROVEMENTS

Intersection	AM/PM LOS Standard	Traffic Control	A.M. Peak Hour		P.M. Peak Hour	
			LOS (Delay)	v/c	LOS (Delay)	v/c
Chamblee Tucker Rd / Northcrest Rd / Kroger/Embry Village Drwy	E/E	Signalized	C (31.0)	0.70	E (69.0)	0.99



BASE 2009 TRAFFIC CONTROL AND LANE GEOMETRY FIGURE 9

A&R Engineering Inc.

8. FUTURE YEAR TOTAL TRAFFIC

The traffic volumes that will be generated by the proposed development were added to the future base year 2009 traffic volumes in order to determine the traffic volumes that will be on the roadway network after completion of the project. The future traffic volumes for the year 2009 including the site-generated volumes for the study intersections are shown in Figure 10.

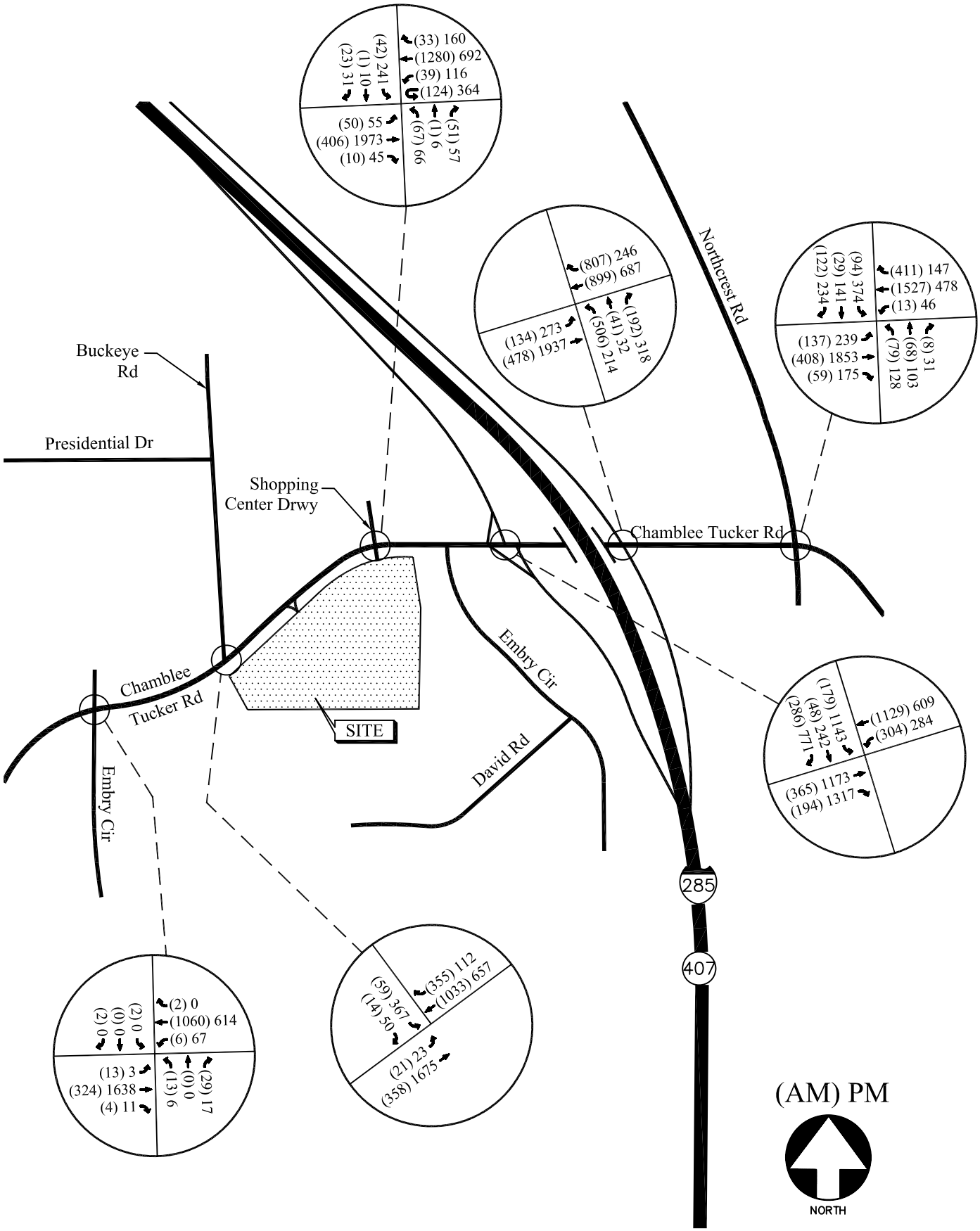
9. FACILITY NEEDS ANALYSIS

9.1 Intersection Analysis

The future year total traffic volumes were used to analyze the study network intersections. Traffic operations analyses for the following scenarios were performed:

- Future Year 2009 Traffic Volumes with site generated traffic and existing lane geometry.
- Future Year 2009 Traffic Volumes with site generated traffic and the recommended improvements to bring all intersections to LOS standard.

The results of the analysis for the above scenarios are shown in Tables 6 and 7. Recommendations to bring the intersections to the LOS standard are discussed after each appropriate section.



FUTURE 2009 WEEKDAY PEAK HOUR VOLUMES FIGURE 10

A&R Engineering Inc.

TABLE 6 FUTURE INTERSECTION OPERATIONS						
Intersection	AM/PM LOS Standard	Traffic Control	A.M. Peak Hour		P.M. Peak Hour	
			LOS (Delay)	v/c	LOS (Delay)	v/c
Chamblee Tucker Rd / Embry Cir / Embry Hills Church Drwy	D/D	Signalized	A (5.8)	0.30	B (13.1)	0.57
Chamblee Tucker Rd / Buckeye Rd	D/D	Signalized	A (4.7)	0.38	B (13.8	0.64
Chamblee Tucker Rd / Big Lots Shopping Center Drwy / Highlands Park Gardens Main Site Drwy	D/D	Signalized	B (12.9)	0.47	D (47.6)	1.02
Chamblee Tucker Rd / I-285 Southbound Ramps	D/D	Signalized	A (7.1)	0.46	E (57.0)	1.06
Chamblee Tucker Rd / I-285 Northbound Ramps	D/D	Signalized	C (24.5)	0.58	B (15.8	0.85
Chamblee Tucker Rd / Northcrest Rd / Kroger/Embry Village Drwy	E/E	Signalized	F (80.8	0.93	F (92.4)	1.11

Analysis of the future year 2009 traffic volumes indicates that two of the study intersections will not operate within the LOS standard. The following lists the improvements needed to restore that intersections back to the LOS standard for the future year 2009 traffic:

- Chamblee Tucker Road / I-285 Southbound Ramps
  - The intersection will operate at LOS E with an average delay of 57.0 seconds / vehicle during the PM peak hour. No feasible improvements can be given at this intersection to improve the LOS without the condemnation of the property to the south (to add a second eastbound right turn lane) or the widening of the bridge over I-285 (to add a second westbound left turn lane to create dual left turn lanes).
  - There is a significant amount of cut through traffic (southbound through) that is using the exit ramp from I-85 / I-285 to go southbound through the intersection to get back onto I-285 and bypass some of the congestion around the Spaghetti Junction Interchange. If this traffic were eliminated from the intersection then the LOS could be improved to the LOS standard. The island to the south of the intersection could be further extended to further hinder the southbound through movement, which would likely decrease the number of southbound through vehicles and improve the LOS.
  - As another alternative, a short southbound through lane could also be added at the intersection by reconfiguring the island on the north side of the intersection and reconfiguring the island on the south side (to receive the southbound through traffic); however, encouraging cut through traffic at an interchange ramp is not typically recommended.

- Chamblee Tucker Road / Northcrest Road / Kroger/Embry Village Driveway
    - Add a dedicated westbound right turn lane on Chamblee Tucker Road.
    - Restripe the existing southbound approach on Northcrest Road to include a dedicated left turn lane and a shared left / through turn lane. The existing right turn flare lane can remain. This restriping will not require any additional pavement.

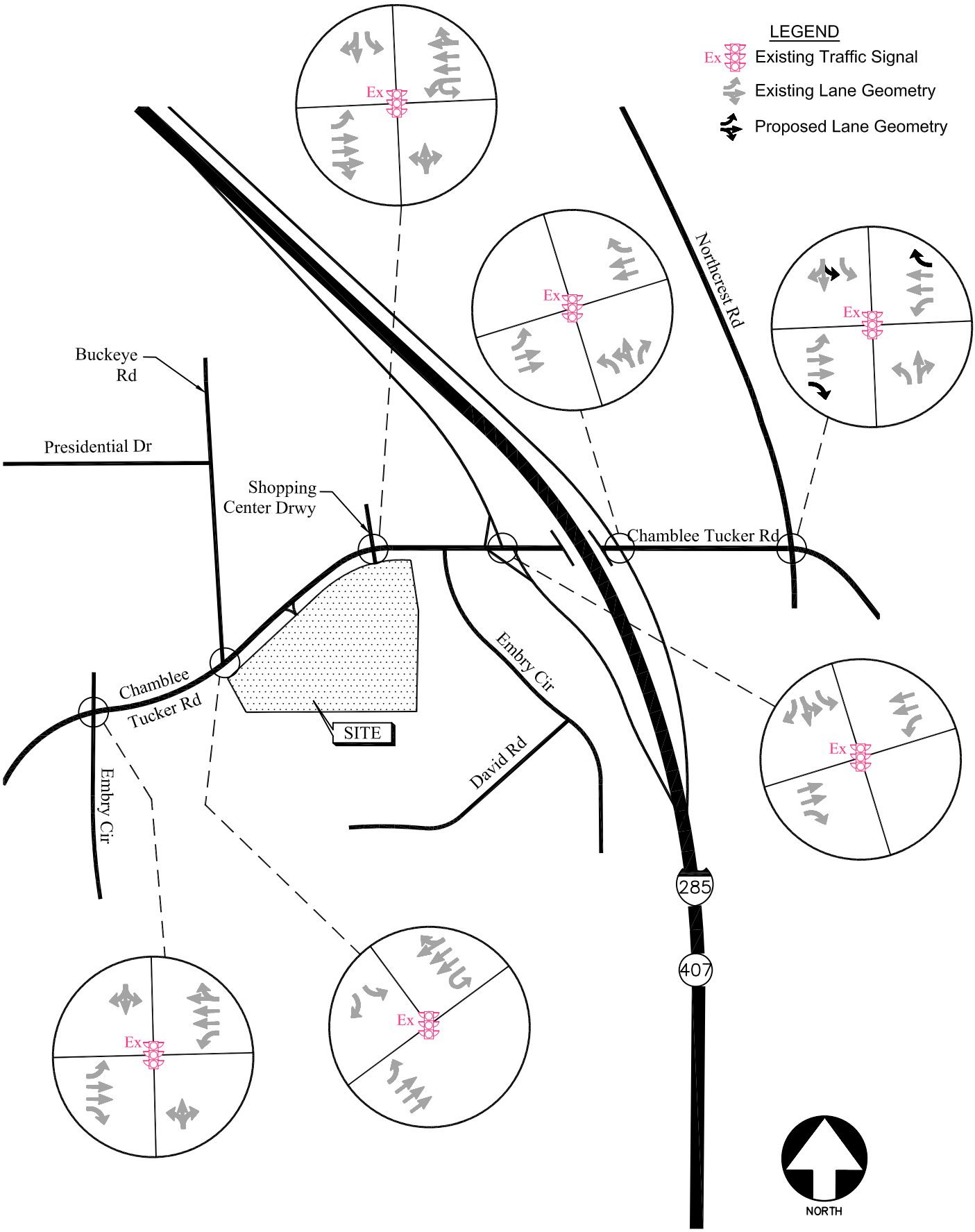
The LOS for the above intersections in the year 2009 with the addition of site-generated traffic after the implementation of above recommended improvement is shown in Table 7.

TABLE 7

FUTURE INTERSECTION OPERATIONS WITH IMPROVEMENTS

Intersection	AM/PM LOS Standard	Traffic Control	A.M. Peak Hour		P.M. Peak Hour	
			LOS (Delay)	v/c	LOS (Delay)	v/c
Chamblee Tucker Rd / Northcrest Rd / Kroger/Embry Village Drwy	E/E	Signalized	C (32.4)	0.71	E (68.9)	1.00

The future intersection traffic control and lane geometry for the study area network needed to bring all intersections to the LOS standard is shown in Figure 11.



FUTURE 2009 TRAFFIC CONTROL AND LANE GEOMETRY FIGURE 11

A&R Engineering Inc.

9.2 Site Access Analysis

The site proposes to have one full access (Main Site Driveway), one right-in / right-out and one emergency access driveways along Chamblee Tucker Road. The full access site driveway along Chamblee Tucker Road will align across from existing street. The future traffic volumes at the site driveways are shown in Figure 12. The recommended traffic control and lane geometry at these driveways are presented in the following sections.

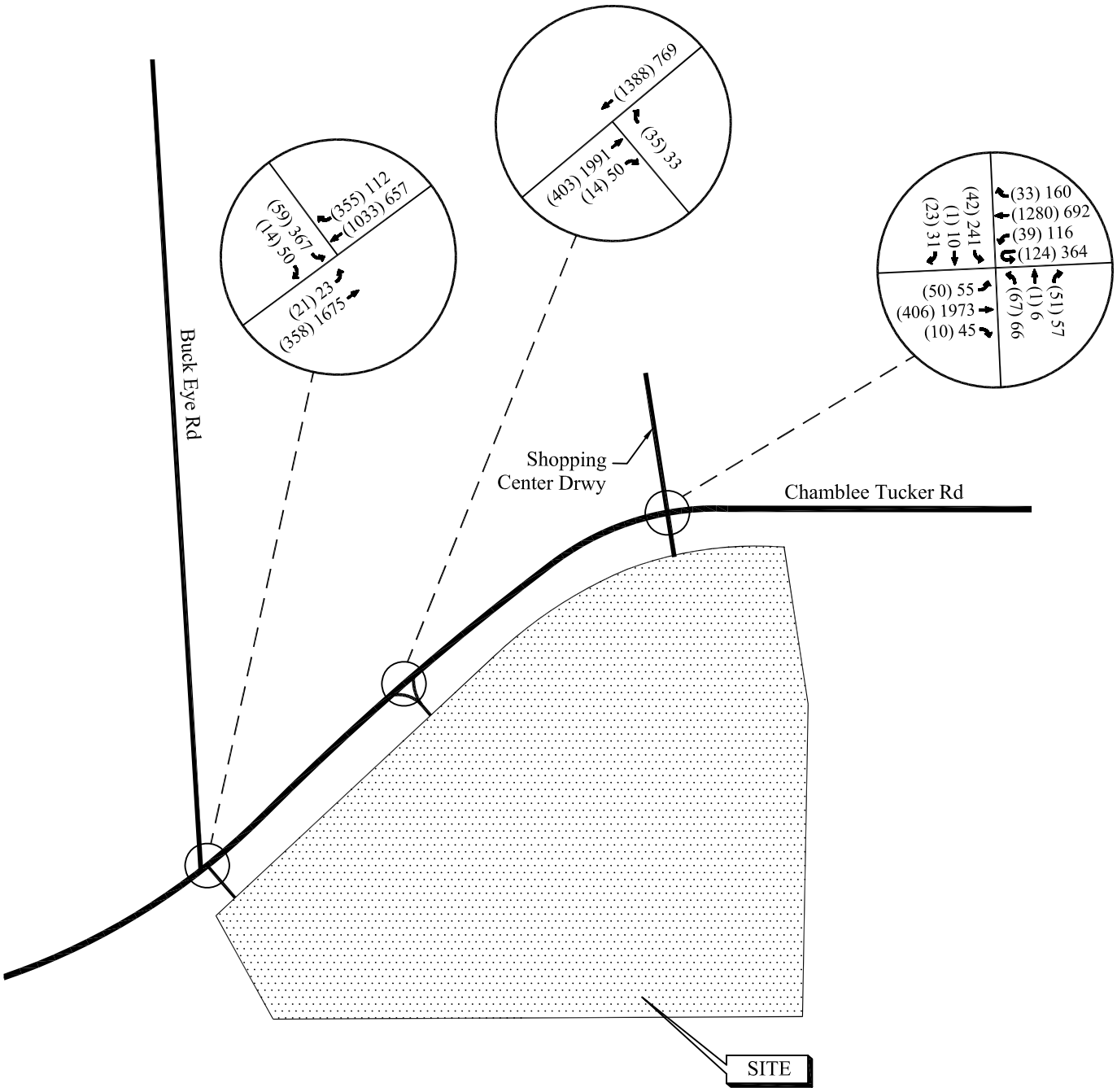
The site access analysis was performed for the Future Year 2009 traffic volumes with recommended lane geometry. Results of the analysis are shown in Table 8. Traffic control and lane geometry adopted to operate the intersections at the LOS standard are discussed in the following pages.

TABLE 8

FUTURE 2009 SITE DRIVEWAY OPERATIONS

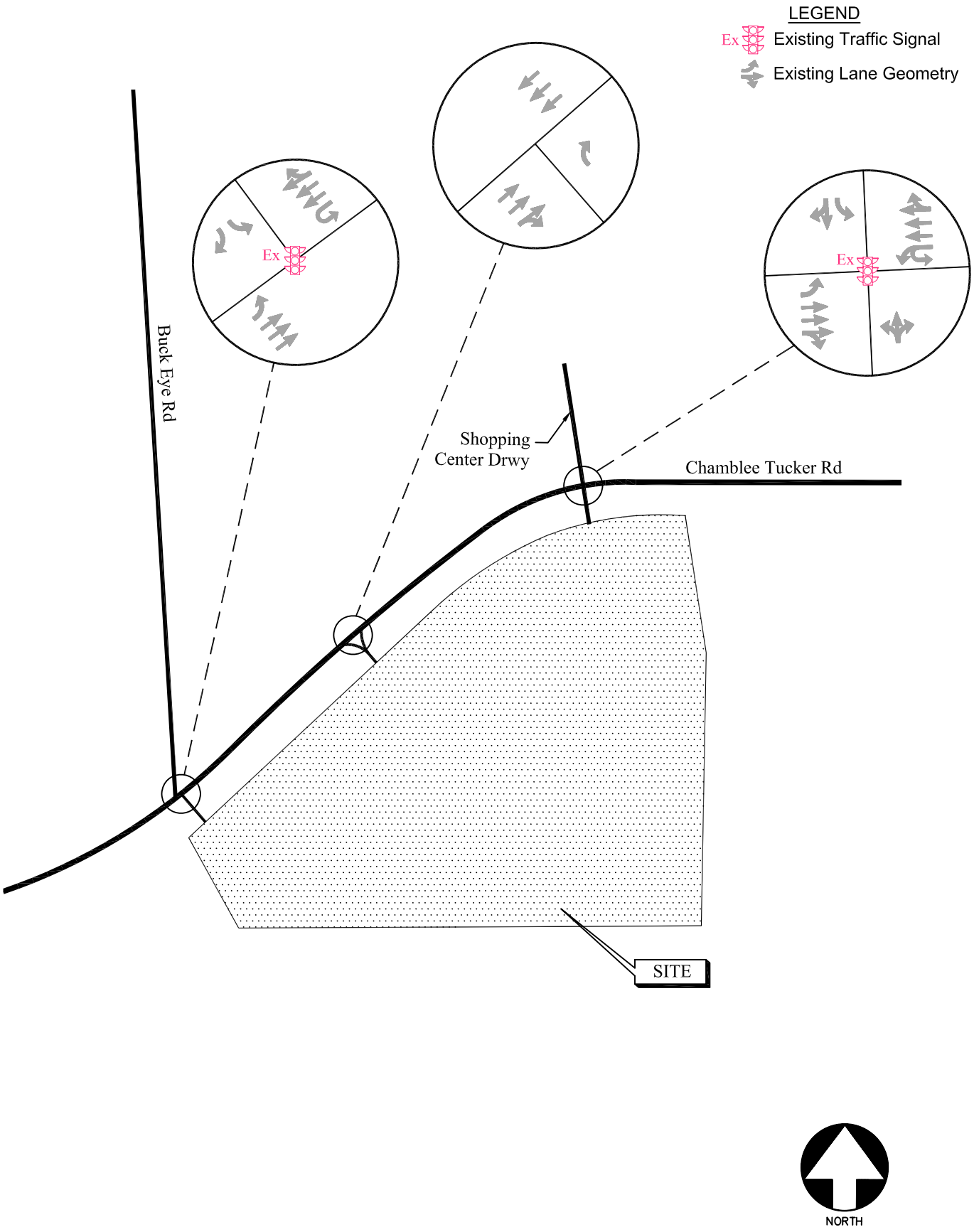
Intersection	AM/PM LOS Standard	Traffic Control	A.M. Peak Hour		P.M. Peak Hour	
			LOS (Delay)	v/c	LOS (Delay)	v/c
Chamblee Tucker Rd / Big Lots Shopping Center Drwy / Highlands Park Gardens Main Site Drwy	D/D	Signalized	B (12.8)	0.47	D (47.7)	1.02

The recommended traffic control and lane geometry for the site driveways is shown in Figure 13.



FUTURE 2009 SITE ACCESS PEAK HOUR VOLUMES FIGURE 12

A&R Engineering Inc.



FUTURE 2009 SITE ACCESS TRAFFIC CONTROL AND LANE GEOMETRY

FIGURE 13

A&R Engineering Inc.

10. NON-EXPEDITED CRITERIA

10.1 Regional Mobility and Location

1. Quality, Character, Convenience, and Flexibility of Transportation Options
The Highlands Park Gardens development is served by MARTA routes 91 and 126. There are existing bus stops located within close proximity to the site and the developer is proposing a new covered bus shelter at the stop located along the site's property frontage on Chamblee Tucker Road.

2. Vehicle Miles Traveled
The table below displays the reductions in trip generation due to pass-by reductions.

24-hour Trip Generation	5,192
- Pass-by Reductions	-1,300
- Mixed-use Reductions	-552
- Transit Reduction	-38
- Existing Apartment Trip Reduction	-1,420
Net Trips:	1,882

3. Relationship between Location of Proposed DRI and Regional Mobility
The proposed DRI is currently served by MARTA bus routes 91 and 126.

4. Relationship between Proposed DRI and Existing or Planned Transit Facilities
The proposed DRI is located in DeKalb County, which has multiple transportation improvement projects planned for this area. The planned improvements are listed in the appropriate section of this report and details regarding those planned projects are included in the Appendix. Also, MARTA routes 91 and 126 in the vicinity of the site. The developer is proposing a covered bus shelter along Chamblee Tucker Road at the stop located along the site's property frontage.

5. Transportation Management Area Designation
The area around the proposed project is not designated as a transportation management area.

6. Offsite Trip Reduction and Trip Reduction Techniques
Due to the nature of the development mixed-use and pass-by reductions are applicable. These reductions are shown in the table at the top of this page.

7. Balance of Land Uses – Jobs/Housing Balance
Please refer to the AOI study submitted along with the DRI package.

8. Relationships between Proposed DRI and Existing Development and Infrastructure
The proposed DRI is located in an area where adequate public facilities will be available to serve the proposed development. Water and waste water services will be available for the development. Regarding transportation, the traffic study has identified transportation improvements relating to the site access, along with improvements to the surrounding roadway network, which will allow traffic in the area to operate at the LOS standard.

10.2 Pedestrian and Internal Circulation
Pedestrian facilities will be available within the development to allow appropriate pedestrian connections within and between land uses. Internal roadways will provide adequate circulation of vehicular traffic as designed in the site plan. Vehicles exiting the site will be able to move internally to the site exits without experiencing excessive delays.

11. Other Pertinent Information
At this time no other pertinent information is available with regards to this development. All significant characteristics of the proposed development are fully discussed within this report. Additionally, an Area of Influence study has been prepared and submitted at the same time as the rest of this package.

12. Significant Impact Analysis
Due to the annual growth in the county in addition to the site generated traffic a number of intersection improvements will be required to bring the intersections in the vicinity of the site to the LOS standard. It should also be noted that the new trips projected to be generated by the site are relatively low (1,882) compared to a development proposed on a vacant site that would not have existing generated trips.

Appendix

Appendix Table of Contents

Existing AM Intersection Analysis

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	3539	1583	1770	5080	0	0	1683	0	0	1694	0
Flt Permitted	0.175			0.525				0.908			0.938	
Satd. Flow (perm)	326	3539	1583	978	5080	0	0	1561	0	0	1628	0
Satd. Flow (RTOR)			8		1			32			4	
Volume (vph)	12	289	4	5	955	2	12	0	27	2	0	2
Lane Group Flow (vph)	24	311	8	8	1053	0	0	56	0	0	8	0
Turn Type	pm+pt		Perm	pm+pt			Perm			Perm		
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Total Split (s)	30.0	52.0	52.0	30.0	52.0	0.0	38.0	38.0	0.0	38.0	38.0	0.0
Act Effct Green (s)	77.5	76.1	76.1	76.0	73.7			34.0			34.0	
Actuated g/C Ratio	0.65	0.63	0.63	0.63	0.61			0.28			0.28	
v/c Ratio	0.08	0.14	0.01	0.01	0.34			0.12			0.02	
Control Delay	8.1	9.4	5.5	1.6	2.3			17.6			24.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay	8.1	9.4	5.5	1.6	2.3			17.6			24.0	
LOS	A	A	A	A	A			B			C	
Approach Delay		9.2			2.3			17.6			24.0	
Approach LOS		A			A			B			C	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 51 (43%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 4.6		Intersection LOS: A	
Intersection Capacity Utilization 28.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Chamblee Tucker Rd & Embry Hills Church Drwy

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91			1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00			0.92			0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1770	3539	1583	1770	5082			1683			1695	
Flt Permitted	0.22	1.00	1.00	0.56	1.00			0.91			0.94	
Satd. Flow (perm)	411	3539	1583	1048	5082			1562			1629	
Volume (vph)	12	289	4	5	955	2	12	0	27	2	0	2
Peak-hour factor, PHF	0.50	0.93	0.50	0.62	0.91	0.50	0.50	0.92	0.84	0.50	0.92	0.50
Adj. Flow (vph)	24	311	8	8	1049	4	24	0	32	4	0	4
RTOR Reduction (vph)	0	0	3	0	0	0	0	23	0	0	3	0
Lane Group Flow (vph)	24	311	5	8	1053	0	0	33	0	0	5	0
Turn Type	pm+pt		Perm	pm+pt			Perm			Perm		
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Actuated Green, G (s)	75.6	72.9	72.9	72.4	71.3			34.0			34.0	
Effective Green, g (s)	75.6	72.9	72.9	72.4	71.3			34.0			34.0	
Actuated g/C Ratio	0.63	0.61	0.61	0.60	0.59			0.28			0.28	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	290	2150	962	639	3020			443			462	
v/s Ratio Prot	c0.00	0.09		0.00	c0.21							
v/s Ratio Perm	0.05		0.00	0.01				c0.02			0.00	
v/c Ratio	0.08	0.14	0.01	0.01	0.35			0.07			0.01	
Uniform Delay, d1	8.8	10.1	9.3	9.5	12.5			31.5			30.9	
Progression Factor	1.00	1.00	1.00	0.20	0.17			1.00			1.00	
Incremental Delay, d2	0.1	0.1	0.0	0.0	0.3			0.3			0.0	
Delay (s)	9.0	10.3	9.3	1.9	2.5			31.8			31.0	
Level of Service	A	B	A	A	A			C			C	
Approach Delay (s)		10.2			2.5			31.8			31.0	
Approach LOS		B			A			C			C	

Intersection Summary					
HCM Average Control Delay	5.5	HCM Level of Service		A	
HCM Volume to Capacity ratio	0.27				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)		16.0	
Intersection Capacity Utilization	28.5%	ICU Level of Service		A	
Analysis Period (min)	15				
c Critical Lane Group					

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	5085	1863	4867	0	1770	1583
Flt Permitted	0.129					0.950	
Satd. Flow (perm)	240	5085	1863	4867	0	1770	1583
Satd. Flow (RTOR)				109			20
Volume (vph)	20	321	0	928	333	55	13
Lane Group Flow (vph)	28	341	0	1340	0	64	20
Turn Type	pm+pt		pm+pt				Perm
Protected Phases	1	6	5	2		8	
Permitted Phases	6		2				8
Total Split (s)	27.0	58.0	27.0	58.0	0.0	35.0	35.0
Act Effct Green (s)	81.0	81.0		74.8		31.0	31.0
Actuated g/C Ratio	0.68	0.68		0.62		0.26	0.26
v/c Ratio	0.12	0.10		0.44		0.14	0.05
Control Delay	7.7	6.2		1.0		35.3	13.5
Queue Delay	0.0	0.0		0.0		0.0	0.0
Total Delay	7.7	6.2		1.0		35.3	13.5
LOS	A	A		A		D	B
Approach Delay		6.3		1.0		30.2	
Approach LOS		A		A		C	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 32 (27%), Referenced to phase 2:WBTU and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay: 3.4		Intersection LOS: A	
Intersection Capacity Utilization 35.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: Chamblee Tucker Rd & Buckeye Rd

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0		4.0	4.0
Lane Util. Factor	1.00	0.91		0.91		1.00	1.00
Frt	1.00	1.00		0.96		1.00	0.85
Flt Protected	0.95	1.00		1.00		0.95	1.00
Satd. Flow (prot)	1770	5085		4867		1770	1583
Flt Permitted	0.15	1.00		1.00		0.95	1.00
Satd. Flow (perm)	276	5085		4867		1770	1583
Volume (vph)	20	321	0	928	333	55	13
Peak-hour factor, PHF	0.71	0.94	0.92	0.97	0.87	0.86	0.65
Adj. Flow (vph)	28	341	0	957	383	64	20
RTOR Reduction (vph)	0	0	0	43	0	0	15
Lane Group Flow (vph)	28	341	0	1297	0	64	5
Turn Type	pm+pt		pm+pt				Perm
Protected Phases	1	6	5	2		8	
Permitted Phases	6		2				8
Actuated Green, G (s)	81.0	81.0		73.2		31.0	31.0
Effective Green, g (s)	81.0	81.0		73.2		31.0	31.0
Actuated g/C Ratio	0.68	0.68		0.61		0.26	0.26
Clearance Time (s)	4.0	4.0		4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	234	3432		2969		457	409
v/s Ratio Prot	0.00	c0.07		c0.27		c0.04	
v/s Ratio Perm	0.08						0.00
v/c Ratio	0.12	0.10		0.44		0.14	0.01
Uniform Delay, d1	7.8	6.8		12.4		34.2	33.1
Progression Factor	1.03	0.90		0.05		1.00	1.00
Incremental Delay, d2	0.2	0.1		0.4		0.6	0.1
Delay (s)	8.3	6.2		1.0		34.9	33.2
Level of Service	A	A		A		C	C
Approach Delay (s)		6.4		1.0		34.5	
Approach LOS		A		A		C	

Intersection Summary			
HCM Average Control Delay	3.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	35.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	5070	0	0	1770	5050	0	0	1711	0	1770	1622
Flt Permitted	0.136				0.453				0.902		0.764	
Satd. Flow (perm)	253	5070	0	0	844	5050	0	0	1578	0	1423	1622
Satd. Flow (RTOR)		3				8			20			24
Volume (vph)	47	351	4	117	12	1211	31	11	1	15	40	1
Lane Group Flow (vph)	56	385	0	0	203	1340	0	0	44	0	52	28
Turn Type	pm+pt			pm+pt	pm+pt			Perm			Perm	
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2			4			8	
Total Split (s)	27.0	51.0	0.0	34.0	34.0	58.0	0.0	35.0	35.0	0.0	35.0	35.0
Act Effct Green (s)	76.8	70.0			77.8	72.0			31.0		31.0	31.0
Actuated g/C Ratio	0.64	0.58			0.65	0.60			0.26		0.26	0.26
v/c Ratio	0.22	0.13			0.34	0.44			0.10		0.14	0.06
Control Delay	12.3	13.0			3.5	6.2			22.4		35.6	14.7
Queue Delay	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Total Delay	12.3	13.0			3.5	6.2			22.4		35.6	14.7
LOS	B	B			A	A			C		D	B
Approach Delay		12.9				5.8			22.4			28.3
Approach LOS		B				A			C			C

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 19 (16%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay: 8.5		Intersection LOS: A	
Intersection Capacity Utilization 45.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Chamblee Tucker Rd & Big Lots Driveway

Lane Group	SBR
Lane Configurations	
Total Lost Time (s)	4.0
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Satd. Flow (RTOR)	
Volume (vph)	22
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0			4.0		4.0	4.0
Lane Util. Factor	1.00	0.91			1.00	0.91			1.00		1.00	1.00
Frt	1.00	1.00			1.00	0.99			0.94		1.00	0.87
Flt Protected	0.95	1.00			0.95	1.00			0.98		0.95	1.00
Satd. Flow (prot)	1770	5069			1770	5048			1710		1770	1623
Flt Permitted	0.16	1.00			0.50	1.00			0.90		0.76	1.00
Satd. Flow (perm)	291	5069			941	5048			1577		1423	1623
Volume (vph)	47	351	4	117	12	1211	31	11	1	15	40	1
Peak-hour factor, PHF	0.84	0.93	0.50	0.64	0.60	0.95	0.48	0.55	0.25	0.75	0.77	0.25
Adj. Flow (vph)	56	377	8	183	20	1275	65	20	4	20	52	4
RTOR Reduction (vph)	0	1	0	0	0	3	0	0	15	0	0	18
Lane Group Flow (vph)	56	384	0	0	203	1337	0	0	29	0	52	10
Turn Type	pm+pt			pm+pt	pm+pt			Perm			Perm	
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2			4			8	
Actuated Green, G (s)	75.8	70.0			78.2	71.2			31.0		31.0	31.0
Effective Green, g (s)	75.8	70.0			78.2	71.2			31.0		31.0	31.0
Actuated g/C Ratio	0.63	0.58			0.65	0.59			0.26		0.26	0.26
Clearance Time (s)	4.0	4.0			4.0	4.0			4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0		3.0	3.0
Lane Grp Cap (vph)	255	2957			662	2995			407		368	419
v/s Ratio Prot	0.01	0.08			c0.02	c0.26						0.01
v/s Ratio Perm	0.13				0.18				0.02		c0.04	
v/c Ratio	0.22	0.13			0.31	0.45			0.07		0.14	0.02
Uniform Delay, d1	9.3	11.3			8.2	13.5			33.6		34.3	33.2
Progression Factor	1.53	1.14			0.28	0.42			1.00		1.00	1.00
Incremental Delay, d2	0.4	0.1			0.2	0.5			0.3		0.8	0.1
Delay (s)	14.6	12.9			2.5	6.2			34.0		35.1	33.3
Level of Service	B	B			A	A			C		D	C
Approach Delay (s)		13.1				5.7			34.0			34.4
Approach LOS		B				A			C			C

Intersection Summary			
HCM Average Control Delay	8.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	22
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	24
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1681	1724	1583
Flt Permitted				0.431						0.950	0.974	
Satd. Flow (perm)	0	3539	1583	803	3539	0	0	0	0	1681	1724	1583
Satd. Flow (RTOR)			180									312
Volume (vph)	0	298	166	288	1055	0	0	0	0	169	45	259
Lane Group Flow (vph)	0	327	180	324	1122	0	0	0	0	121	127	312
Turn Type			Free	pm+pt						Perm		Free
Protected Phases		6		5	2						8	
Permitted Phases			Free	2						8		Free
Total Split (s)	0.0	40.0	0.0	44.0	84.0	0.0	0.0	0.0	0.0	36.0	36.0	0.0
Act Effct Green (s)		67.4	120.0	80.0	80.0					32.0	32.0	120.0
Actuated g/C Ratio		0.56	1.00	0.67	0.67					0.27	0.27	1.00
v/c Ratio		0.16	0.11	0.54	0.48					0.27	0.28	0.20
Control Delay		10.9	0.2	6.0	3.8					36.8	36.8	0.3
Queue Delay		0.0	0.0	0.0	0.2					0.0	0.0	0.0
Total Delay		10.9	0.2	6.0	4.0					36.8	36.8	0.3
LOS		B	A	A	A					D	D	A
Approach Delay		7.1			4.4						16.5	
Approach LOS		A			A						B	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 16 (13%), Referenced to phase 2:WBTL and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 7.6		Intersection LOS: A	
Intersection Capacity Utilization 76.8%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 4: Chamblee Tucker Rd & I-285 SB Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.95	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		3539	1583	1770	3539					1681	1724	1583
Flt Permitted		1.00	1.00	0.51	1.00					0.95	0.97	1.00
Satd. Flow (perm)		3539	1583	952	3539					1681	1724	1583
Volume (vph)	0	298	166	288	1055	0	0	0	0	169	45	259
Peak-hour factor, PHF	0.92	0.91	0.92	0.89	0.94	0.92	0.92	0.92	0.92	0.90	0.75	0.83
Adj. Flow (vph)	0	327	180	324	1122	0	0	0	0	188	60	312
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	327	180	324	1122	0	0	0	0	121	127	312
Turn Type			Free	pm+pt						Perm		Free
Protected Phases		6		5	2						8	
Permitted Phases			Free	2						8		Free
Actuated Green, G (s)		67.4	120.0	80.0	80.0					32.0	32.0	120.0
Effective Green, g (s)		67.4	120.0	80.0	80.0					32.0	32.0	120.0
Actuated g/C Ratio		0.56	1.00	0.67	0.67					0.27	0.27	1.00
Clearance Time (s)		4.0		4.0	4.0					4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0					3.0	3.0	
Lane Grp Cap (vph)		1988	1583	693	2359					448	460	1583
v/s Ratio Prot		0.09		0.03	c0.32							
v/s Ratio Perm			0.11	0.28						0.07	0.07	0.20
v/c Ratio		0.16	0.11	0.47	0.48					0.27	0.28	0.20
Uniform Delay, d1		12.7	0.0	8.5	9.8					34.8	34.8	0.0
Progression Factor		0.83	1.00	0.38	0.33					1.00	1.00	1.00
Incremental Delay, d2		0.2	0.1	0.4	0.6					1.5	1.5	0.3
Delay (s)		10.7	0.1	3.6	3.8					36.3	36.3	0.3
Level of Service		B	A	A	A					D	D	A
Approach Delay (s)		6.9			3.7			0.0			16.2	
Approach LOS		A			A			A			B	

Intersection Summary					
HCM Average Control Delay	7.2	HCM Level of Service		A	
HCM Volume to Capacity ratio	0.42				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)		8.0	
Intersection Capacity Utilization	76.8%	ICU Level of Service		D	
Analysis Period (min)	15				
c Critical Lane Group					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1699	1583	0	0	0
Flt Permitted	0.214						0.950	0.960				
Satd. Flow (perm)	399	3539	0	0	3539	1583	1681	1699	1583	0	0	0
Satd. Flow (RTOR)						780			200			
Volume (vph)	97	434	0	0	844	764	472	39	182	0	0	0
Lane Group Flow (vph)	108	467	0	0	908	780	290	305	200	0	0	0
Turn Type	pm+pt					Perm	Perm		Perm			
Protected Phases	1	6			2			4				
Permitted Phases	6					2	4		4			
Total Split (s)	18.0	78.0	0.0	0.0	60.0	60.0	42.0	42.0	42.0	0.0	0.0	0.0
Act Effct Green (s)	85.2	85.2			67.2	67.2	26.8	26.8	26.8			
Actuated g/C Ratio	0.71	0.71			0.56	0.56	0.22	0.22	0.22			
v/c Ratio	0.24	0.19			0.46	0.63	0.77	0.80	0.39			
Control Delay	5.3	2.7			5.3	3.3	57.0	59.5	6.7			
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0			
Total Delay	5.3	2.7			5.3	3.3	57.0	59.5	6.7			
LOS	A	A			A	A	E	E	A			
Approach Delay		3.2			4.4			45.3				
Approach LOS		A			A			D				

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 4 (3%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 14.8		Intersection LOS: B	
Intersection Capacity Utilization 76.8%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 5: Chamblee Tucker Rd & I-258 NB Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (prot)	1770	3539			3539	1583	1681	1699	1583			
Flt Permitted	0.25	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (perm)	461	3539			3539	1583	1681	1699	1583			
Volume (vph)	97	434	0	0	844	764	472	39	182	0	0	0
Peak-hour factor, PHF	0.90	0.93	0.92	0.92	0.93	0.98	0.87	0.75	0.91	0.92	0.92	0.92
Adj. Flow (vph)	108	467	0	0	908	780	543	52	200	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	343	0	0	155	0	0	0
Lane Group Flow (vph)	108	467	0	0	908	437	290	305	45	0	0	0
Turn Type	pm+pt					Perm	Perm		Perm			
Protected Phases	1	6			2			4				
Permitted Phases	6					2	4		4			
Actuated Green, G (s)	85.2	85.2			67.2	67.2	26.8	26.8	26.8			
Effective Green, g (s)	85.2	85.2			67.2	67.2	26.8	26.8	26.8			
Actuated g/C Ratio	0.71	0.71			0.56	0.56	0.22	0.22	0.22			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	480	2513			1982	886	375	379	354			
v/s Ratio Prot	c0.03	0.13			0.26							
v/s Ratio Perm	0.13					c0.28	0.17	0.18	0.03			
v/c Ratio	0.22	0.19			0.46	0.49	0.77	0.80	0.13			
Uniform Delay, d1	12.7	5.8			15.6	16.0	43.7	44.1	37.2			
Progression Factor	0.41	0.39			0.30	1.93	1.00	1.00	1.00			
Incremental Delay, d2	0.2	0.2			0.2	0.5	9.6	11.7	0.2			
Delay (s)	5.4	2.4			4.9	31.5	53.3	55.9	37.4			
Level of Service	A	A			A	C	D	E	D			
Approach Delay (s)		3.0			17.2			50.3			0.0	
Approach LOS		A			B			D			A	

Intersection Summary			
HCM Average Control Delay	23.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	76.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	3465	0	1770	3412	0	1770	1814	0	1770	1863	1583
Flt Permitted	0.062			0.439			0.950			0.950		
Satd. Flow (perm)	115	3465	0	818	3412	0	1770	1814	0	1770	1863	1583
Satd. Flow (RTOR)		24			55			7				98
Volume (vph)	117	380	56	12	1443	389	75	64	8	89	27	111
Lane Group Flow (vph)	139	481	0	16	2005	0	104	92	0	116	36	141
Turn Type	pm+pt			pm+pt			Split			Split		pm+ov
Protected Phases	1	6		5	2		4	4		8	8	1
Permitted Phases	6			2								8
Total Split (s)	12.0	68.0	0.0	12.0	68.0	0.0	20.0	20.0	0.0	20.0	20.0	12.0
Act Effct Green (s)	75.0	71.8		70.0	64.1		16.0	16.0		16.0	16.0	27.9
Actuated g/C Ratio	0.62	0.60		0.58	0.53		0.13	0.13		0.13	0.13	0.23
v/c Ratio	0.77	0.23		0.03	1.09		0.44	0.37		0.49	0.15	0.32
Control Delay	51.5	11.4		8.5	75.7		54.4	48.6		56.1	47.7	15.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	51.5	11.4		8.5	75.7		54.4	48.6		56.1	47.7	15.5
LOS	D	B		A	E		D	D		E	D	B
Approach Delay		20.4			75.2			51.7			35.5	
Approach LOS		C			E			D			D	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 85 (71%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay: 59.1		Intersection LOS: E	
Intersection Capacity Utilization 80.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 6: Chamblee Tucker Rd & Northcrest Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.96		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3464		1770	3411		1770	1814		1770	1863	1583
Flt Permitted	0.06	1.00		0.48	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	109	3464		889	3411		1770	1814		1770	1863	1583
Volume (vph)	117	380	56	12	1443	389	75	64	8	89	27	111
Peak-hour factor, PHF	0.84	0.92	0.82	0.75	0.95	0.80	0.72	0.84	0.50	0.77	0.75	0.79
Adj. Flow (vph)	139	413	68	16	1519	486	104	76	16	116	36	141
RTOR Reduction (vph)	0	10	0	0	26	0	0	6	0	0	0	78
Lane Group Flow (vph)	139	471	0	16	1979	0	104	86	0	116	36	63
Turn Type	pm+pt			pm+pt			Split			Split		pm+ov
Protected Phases	1	6		5	2		4	4		8	8	1
Permitted Phases	6			2								8
Actuated Green, G (s)	76.0	69.4		66.7	64.1		16.0	16.0		16.0	16.0	23.9
Effective Green, g (s)	76.0	69.4		66.7	64.1		16.0	16.0		16.0	16.0	23.9
Actuated g/C Ratio	0.63	0.58		0.56	0.53		0.13	0.13		0.13	0.13	0.20
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	178	2003		513	1822		236	242		236	248	368
v/s Ratio Prot	c0.05	0.14		0.00	c0.58		c0.06	0.05		c0.07	0.02	0.01
v/s Ratio Perm	0.44			0.02								0.03
v/c Ratio	0.78	0.24		0.03	1.09		0.44	0.36		0.49	0.15	0.17
Uniform Delay, d1	56.8	12.3		11.9	28.0		47.9	47.3		48.2	46.0	39.8
Progression Factor	1.16	0.99		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	19.3	0.3		0.0	48.8		5.9	4.0		7.1	1.2	0.2
Delay (s)	85.1	12.5		12.0	76.7		53.8	51.3		55.4	47.2	40.0
Level of Service	F	B		B	E		D	D		E	D	D
Approach Delay (s)		28.7			76.2			52.6			47.0	
Approach LOS		C			E			D			D	

Intersection Summary					
HCM Average Control Delay	62.6	HCM Level of Service		E	
HCM Volume to Capacity ratio	0.87				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)		16.0	
Intersection Capacity Utilization	80.4%	ICU Level of Service		D	
Analysis Period (min)	15				
c Critical Lane Group					

Existing PM Intersection Analysis

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	3539	1583	1770	5085	0	0	1645	0	0	1863	0
Flt Permitted	0.394			0.078				0.965				
Satd. Flow (perm)	734	3539	1583	145	5085	0	0	1603	0	0	1863	0
Satd. Flow (RTOR)			8					32				
Volume (vph)	3	1511	10	63	562	0	6	0	15	0	0	0
Lane Group Flow (vph)	4	1574	16	72	611	0	0	40	0	0	0	0
Turn Type	pm+pt		Perm	pm+pt			Perm			Perm		
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Total Split (s)	18.0	76.0	76.0	18.0	76.0	0.0	26.0	26.0	0.0	26.0	26.0	0.0
Act Effct Green (s)	84.2	79.7	79.7	90.0	88.0			22.0				
Actuated g/C Ratio	0.70	0.66	0.66	0.75	0.73			0.18				
v/c Ratio	0.01	0.67	0.02	0.33	0.16			0.12				
Control Delay	4.0	14.8	5.9	19.7	5.8			18.1				
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0				
Total Delay	4.0	14.8	5.9	19.7	5.8			18.1				
LOS	A	B	A	B	A			B				
Approach Delay		14.7			7.3			18.1				
Approach LOS		B			A			B				

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 103 (86%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 12.6		Intersection LOS: B	
Intersection Capacity Utilization 58.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Chamblee Tucker Rd & Embry Hills Church Drwy

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0			4.0				
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91			1.00				
Frt	1.00	1.00	0.85	1.00	1.00			0.89				
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.99				
Satd. Flow (prot)	1770	3539	1583	1770	5085			1645				
Flt Permitted	0.41	1.00	1.00	0.09	1.00			0.97				
Satd. Flow (perm)	763	3539	1583	173	5085			1604				
Volume (vph)	3	1511	10	63	562	0	6	0	15	0	0	0
Peak-hour factor, PHF	0.75	0.96	0.62	0.88	0.92	0.92	0.75	0.92	0.47	0.92	0.92	0.92
Adj. Flow (vph)	4	1574	16	72	611	0	8	0	32	0	0	0
RTOR Reduction (vph)	0	0	3	0	0	0	0	26	0	0	0	0
Lane Group Flow (vph)	4	1574	13	72	611	0	0	14	0	0	0	0
Turn Type	pm+pt		Perm	pm+pt			Perm			Perm		
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Actuated Green, G (s)	80.1	78.9	78.9	90.0	84.8			22.0				
Effective Green, g (s)	80.1	78.9	78.9	90.0	84.8			22.0				
Actuated g/C Ratio	0.67	0.66	0.66	0.75	0.71			0.18				
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0			4.0				
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0				
Lane Grp Cap (vph)	519	2327	1041	224	3593			294				
v/s Ratio Prot	0.00	c0.44		c0.02	0.12							
v/s Ratio Perm	0.01		0.01	0.22				c0.01				
v/c Ratio	0.01	0.68	0.01	0.32	0.17			0.05				
Uniform Delay, d1	6.6	12.7	7.1	10.6	5.9			40.4				
Progression Factor	1.00	1.00	1.00	3.99	1.12			1.00				
Incremental Delay, d2	0.0	1.6	0.0	0.8	0.1			0.3				
Delay (s)	6.7	14.3	7.1	43.3	6.6			40.7				
Level of Service	A	B	A	D	A			D				
Approach Delay (s)		14.2			10.5			40.7			0.0	
Approach LOS		B			B			D			A	

Intersection Summary					
HCM Average Control Delay	13.6	HCM Level of Service		B	
HCM Volume to Capacity ratio	0.53				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	58.6%	ICU Level of Service		B	
Analysis Period (min)	15				
c Critical Lane Group					

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	5085	1863	4958	0	1770	1583
Flt Permitted	0.244					0.950	
Satd. Flow (perm)	455	5085	1863	4958	0	1770	1583
Satd. Flow (RTOR)				45			56
Volume (vph)	22	1545	0	603	105	345	47
Lane Group Flow (vph)	28	1661	0	756	0	411	56
Turn Type	pm+pt		pm+pt				Perm
Protected Phases	1	6	5	2		8	
Permitted Phases	6		2				8
Total Split (s)	16.0	56.0	16.0	56.0	0.0	48.0	48.0
Act Effct Green (s)	68.0	68.0		61.9		44.0	44.0
Actuated g/C Ratio	0.57	0.57		0.52		0.37	0.37
v/c Ratio	0.09	0.58		0.29		0.63	0.09
Control Delay	2.4	6.8		9.5		36.7	6.9
Queue Delay	0.0	0.0		0.0		0.0	0.0
Total Delay	2.4	6.8		9.5		36.7	6.9
LOS	A	A		A		D	A
Approach Delay		6.7		9.5		33.1	
Approach LOS		A		A		C	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 20 (17%), Referenced to phase 2:WBTU and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 11.7		Intersection LOS: B	
Intersection Capacity Utilization 55.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Chamblee Tucker Rd & Buckeye Rd

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0		4.0	4.0
Lane Util. Factor	1.00	0.91		0.91		1.00	1.00
Frt	1.00	1.00		0.97		1.00	0.85
Flt Protected	0.95	1.00		1.00		0.95	1.00
Satd. Flow (prot)	1770	5085		4956		1770	1583
Flt Permitted	0.29	1.00		1.00		0.95	1.00
Satd. Flow (perm)	547	5085		4956		1770	1583
Volume (vph)	22	1545	0	603	105	345	47
Peak-hour factor, PHF	0.79	0.93	0.92	0.96	0.82	0.84	0.84
Adj. Flow (vph)	28	1661	0	628	128	411	56
RTOR Reduction (vph)	0	0	0	22	0	0	35
Lane Group Flow (vph)	28	1661	0	734	0	411	21
Turn Type	pm+pt		pm+pt				Perm
Protected Phases	1	6	5	2		8	
Permitted Phases	6		2				8
Actuated Green, G (s)	68.0	68.0		60.3		44.0	44.0
Effective Green, g (s)	68.0	68.0		60.3		44.0	44.0
Actuated g/C Ratio	0.57	0.57		0.50		0.37	0.37
Clearance Time (s)	4.0	4.0		4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	348	2882		2490		649	580
v/s Ratio Prot	0.00	c0.33		0.15		c0.23	
v/s Ratio Perm	0.04						0.01
v/c Ratio	0.08	0.58		0.29		0.63	0.04
Uniform Delay, d1	12.0	16.7		17.4		31.3	24.4
Progression Factor	0.17	0.36		0.57		1.00	1.00
Incremental Delay, d2	0.1	0.7		0.3		4.7	0.1
Delay (s)	2.1	6.7		10.2		36.0	24.5
Level of Service	A	A		B		D	C
Approach Delay (s)		6.6		10.2		34.6	
Approach LOS		A		B		C	

Intersection Summary			
HCM Average Control Delay	12.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	5080	0	0	1770	4933	0	0	1722	0	1770	1630
Flt Permitted	0.308				0.073				0.860		0.712	
Satd. Flow (perm)	574	5080	0	0	136	4933	0	0	1517	0	1326	1630
Satd. Flow (RTOR)		1				90			25			40
Volume (vph)	52	1870	15	344	35	677	151	19	6	21	229	5
Lane Group Flow (vph)	68	1964	0	0	435	889	0	0	72	0	254	48
Turn Type	pm+pt			pm+pt	pm+pt			Perm			Perm	
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2			4			8	
Total Split (s)	12.0	55.0	0.0	34.0	34.0	77.0	0.0	31.0	31.0	0.0	31.0	31.0
Act Effct Green (s)	59.8	53.4			85.0	76.4			27.0		27.0	27.0
Actuated g/C Ratio	0.50	0.44			0.71	0.64			0.22		0.22	0.22
v/c Ratio	0.19	0.87			0.92	0.28			0.20		0.85	0.12
Control Delay	8.2	24.0			59.5	8.8			27.4		70.8	14.9
Queue Delay	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Total Delay	8.2	24.0			59.5	8.8			27.4		70.8	14.9
LOS	A	C			E	A			C		E	B
Approach Delay		23.5				25.4			27.4			61.9
Approach LOS		C				C			C			E

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 5 (4%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 27.4		Intersection LOS: C	
Intersection Capacity Utilization 86.8%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Chamblee Tucker Rd & Big Lots Driveway

Lane Group	SBR
Lane Configurations	
Total Lost Time (s)	4.0
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Satd. Flow (RTOR)	
Volume (vph)	33
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0			4.0		4.0	4.0
Lane Util. Factor	1.00	0.91			1.00	0.91			1.00		1.00	1.00
Frt	1.00	1.00			1.00	0.97			0.95		1.00	0.88
Flt Protected	0.95	1.00			0.95	1.00			0.98		0.95	1.00
Satd. Flow (prot)	1770	5079			1770	4934			1722		1770	1630
Flt Permitted	0.31	1.00			0.07	1.00			0.86		0.71	1.00
Satd. Flow (perm)	573	5079			130	4934			1517		1327	1630
Volume (vph)	52	1870	15	344	35	677	151	19	6	21	229	5
Peak-hour factor, PHF	0.77	0.96	0.94	0.87	0.88	0.95	0.86	0.53	0.75	0.75	0.90	0.62
Adj. Flow (vph)	68	1948	16	395	40	713	176	36	8	28	254	8
RTOR Reduction (vph)	0	1	0	0	0	33	0	0	19	0	0	31
Lane Group Flow (vph)	68	1963	0	0	435	856	0	0	53	0	254	17
Turn Type	pm+pt			pm+pt	pm+pt			Perm			Perm	
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2			4			8	
Actuated Green, G (s)	58.8	53.4			85.0	75.6			27.0		27.0	27.0
Effective Green, g (s)	58.8	53.4			85.0	75.6			27.0		27.0	27.0
Actuated g/C Ratio	0.49	0.44			0.71	0.63			0.22		0.22	0.22
Clearance Time (s)	4.0	4.0			4.0	4.0			4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0		3.0	3.0
Lane Grp Cap (vph)	335	2260			469	3108			341		299	367
v/s Ratio Prot	0.01	0.39			c0.21	0.17						0.01
v/s Ratio Perm	0.09				c0.44				0.03		c0.19	
v/c Ratio	0.20	0.87			0.93	0.28			0.15		0.85	0.05
Uniform Delay, d1	16.2	30.1			37.3	9.9			37.3		44.6	36.4
Progression Factor	0.81	0.64			1.06	0.96			1.00		1.00	1.00
Incremental Delay, d2	0.2	4.0			22.9	0.2			1.0		24.9	0.2
Delay (s)	13.4	23.2			62.5	9.7			38.3		69.4	36.7
Level of Service	B	C			E	A			D		E	D
Approach Delay (s)		22.9				27.1			38.3			64.2
Approach LOS		C				C			D			E

Intersection Summary			
HCM Average Control Delay	28.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	86.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	33
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	40
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1681	1720	1583
Flt Permitted				0.083						0.950	0.972	
Satd. Flow (perm)	0	3539	1583	155	3539	0	0	0	0	1681	1720	1583
Satd. Flow (RTOR)			570									379
Volume (vph)	0	1092	1240	269	548	0	0	0	0	1082	229	706
Lane Group Flow (vph)	0	1255	1512	277	583	0	0	0	0	693	731	840
Turn Type			Free	pm+pt						Perm		Free
Protected Phases		6		5	2						8	
Permitted Phases			Free	2						8		Free
Total Split (s)	0.0	48.0	0.0	18.0	66.0	0.0	0.0	0.0	0.0	54.0	54.0	0.0
Act Effct Green (s)		44.0	120.0	62.0	62.0					50.0	50.0	120.0
Actuated g/C Ratio		0.37	1.00	0.52	0.52					0.42	0.42	1.00
v/c Ratio		0.97	0.96	1.03	0.32					0.99	1.02	0.53
Control Delay		33.3	26.6	111.2	19.4					67.0	73.9	1.3
Queue Delay		2.5	0.0	0.0	0.0					0.0	0.0	0.0
Total Delay		35.8	26.6	111.2	19.4					67.0	73.9	1.3
LOS		D	C	F	B					E	E	A
Approach Delay		30.8			48.9						44.9	
Approach LOS		C			D						D	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 25 (21%), Referenced to phase 2:WBTL and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.03			
Intersection Signal Delay: 38.8		Intersection LOS: D	
Intersection Capacity Utilization 98.1%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 4: Chamblee Tucker Rd & I-285 SB Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.95	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		3539	1583	1770	3539					1681	1720	1583
Flt Permitted		1.00	1.00	0.08	1.00					0.95	0.97	1.00
Satd. Flow (perm)		3539	1583	155	3539					1681	1720	1583
Volume (vph)	0	1092	1240	269	548	0	0	0	0	1082	229	706
Peak-hour factor, PHF	0.92	0.87	0.82	0.97	0.94	0.92	0.92	0.92	0.92	0.97	0.74	0.84
Adj. Flow (vph)	0	1255	1512	277	583	0	0	0	0	1115	309	840
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1255	1512	277	583	0	0	0	0	693	731	840
Turn Type			Free	pm+pt						Perm		Free
Protected Phases		6		5	2						8	
Permitted Phases			Free	2						8		Free
Actuated Green, G (s)		44.0	120.0	62.0	62.0					50.0	50.0	120.0
Effective Green, g (s)		44.0	120.0	62.0	62.0					50.0	50.0	120.0
Actuated g/C Ratio		0.37	1.00	0.52	0.52					0.42	0.42	1.00
Clearance Time (s)		4.0		4.0	4.0					4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0					3.0	3.0	
Lane Grp Cap (vph)		1298	1583	269	1828					700	717	1583
v/s Ratio Prot		0.35		0.12	0.16							
v/s Ratio Perm			c0.95	c0.41						0.41	0.43	0.53
v/c Ratio		0.97	0.96	1.03	0.32					0.99	1.02	0.53
Uniform Delay, d1		37.3	0.0	47.9	16.8					34.8	35.0	0.0
Progression Factor		0.53	1.00	1.12	1.12					1.00	1.00	1.00
Incremental Delay, d2		12.1	9.0	61.5	0.4					31.7	38.6	1.3
Delay (s)		31.9	9.0	115.1	19.2					66.4	73.6	1.3
Level of Service		C	A	F	B					E	E	A
Approach Delay (s)		19.4			50.1			0.0			44.6	
Approach LOS		B			D			A			D	

Intersection Summary					
HCM Average Control Delay	33.6	HCM Level of Service		C	
HCM Volume to Capacity ratio	1.00				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)		4.0	
Intersection Capacity Utilization	98.1%	ICU Level of Service		F	
Analysis Period (min)	15				
c Critical Lane Group					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1709	1583	0	0	0
Flt Permitted	0.321						0.950	0.966				
Satd. Flow (perm)	598	3539	0	0	3539	1583	1681	1709	1583	0	0	0
Satd. Flow (RTOR)						251			18			
Volume (vph)	247	1826	0	0	636	233	188	30	301	0	0	0
Lane Group Flow (vph)	287	1902	0	0	669	251	117	123	342	0	0	0
Turn Type	pm+pt					Perm	Perm		Perm			
Protected Phases	1	6			2			4				
Permitted Phases	6					2	4		4			
Total Split (s)	20.0	80.0	0.0	0.0	60.0	60.0	40.0	40.0	40.0	0.0	0.0	0.0
Act Effct Green (s)	83.4	83.4			63.4	63.4	28.6	28.6	28.6			
Actuated g/C Ratio	0.70	0.70			0.53	0.53	0.24	0.24	0.24			
v/c Ratio	0.50	0.77			0.36	0.26	0.29	0.30	0.87			
Control Delay	5.6	4.6			14.7	2.0	37.6	37.8	63.8			
Queue Delay	0.0	1.1			0.0	0.0	0.0	0.0	0.0			
Total Delay	5.6	5.7			14.7	2.0	37.6	37.8	63.8			
LOS	A	A			B	A	D	D	E			
Approach Delay		5.7			11.3			53.0				
Approach LOS		A			B			D				

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 4 (3%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 14.6		Intersection LOS: B	
Intersection Capacity Utilization 98.1%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 5: Chamblee Tucker Rd & I-258 NB Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.97	1.00			
Satd. Flow (prot)	1770	3539			3539	1583	1681	1709	1583			
Flt Permitted	0.34	1.00			1.00	1.00	0.95	0.97	1.00			
Satd. Flow (perm)	633	3539			3539	1583	1681	1709	1583			
Volume (vph)	247	1826	0	0	636	233	188	30	301	0	0	0
Peak-hour factor, PHF	0.86	0.96	0.92	0.92	0.95	0.93	0.92	0.83	0.88	0.92	0.92	0.92
Adj. Flow (vph)	287	1902	0	0	669	251	204	36	342	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	118	0	0	14	0	0	0
Lane Group Flow (vph)	287	1902	0	0	669	133	117	123	328	0	0	0
Turn Type	pm+pt					Perm	Perm		Perm			
Protected Phases	1	6			2			4				
Permitted Phases	6					2	4		4			
Actuated Green, G (s)	83.4	83.4			63.4	63.4	28.6	28.6	28.6			
Effective Green, g (s)	83.4	83.4			63.4	63.4	28.6	28.6	28.6			
Actuated g/C Ratio	0.70	0.70			0.53	0.53	0.24	0.24	0.24			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	592	2460			1870	836	401	407	377			
v/s Ratio Prot	0.06	c0.54			0.19							
v/s Ratio Perm	0.27					0.08	0.07	0.07	c0.21			
v/c Ratio	0.48	0.77			0.36	0.16	0.29	0.30	0.87			
Uniform Delay, d1	14.6	12.1			16.5	14.6	37.4	37.5	43.9			
Progression Factor	0.33	0.29			0.81	0.61	1.00	1.00	1.00			
Incremental Delay, d2	0.2	0.6			0.5	0.4	0.4	0.4	19.2			
Delay (s)	5.0	4.2			13.8	9.3	37.8	37.9	63.1			
Level of Service	A	A			B	A	D	D	E			
Approach Delay (s)		4.3			12.6			52.7			0.0	
Approach LOS		A			B			D			A	

Intersection Summary			
HCM Average Control Delay	14.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	98.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	3490	0	1770	3405	0	1770	1799	0	1770	1863	1583
Flt Permitted	0.410			0.089			0.950			0.950		
Satd. Flow (perm)	764	3490	0	166	3405	0	1770	1799	0	1770	1863	1583
Satd. Flow (RTOR)		12			49			10				196
Volume (vph)	221	1752	166	44	448	139	121	97	29	354	133	212
Lane Group Flow (vph)	235	2009	0	68	637	0	155	160	0	373	148	228
Turn Type	pm+pt			pm+pt			Split			Split		pm+ov
Protected Phases	1	6		5	2		4	4		8	8	1
Permitted Phases	6			2								8
Total Split (s)	17.0	62.0	0.0	12.0	57.0	0.0	20.0	20.0	0.0	26.0	26.0	17.0
Act Effct Green (s)	60.6	60.6		53.0	53.0		16.0	16.0		22.0	22.0	35.0
Actuated g/C Ratio	0.50	0.50		0.44	0.44		0.13	0.13		0.18	0.18	0.29
v/c Ratio	0.48	1.14		0.40	0.42		0.66	0.64		1.15	0.43	0.38
Control Delay	17.3	89.4		26.4	22.0		63.6	58.9		140.3	48.0	6.0
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	17.3	89.4		26.4	22.0		63.6	58.9		140.3	48.0	6.0
LOS	B	F		C	C		E	E		F	D	A
Approach Delay		81.9			22.4			61.2			81.2	
Approach LOS		F			C			E			F	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 38 (32%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.15			
Intersection Signal Delay: 69.7		Intersection LOS: E	
Intersection Capacity Utilization 96.9%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 6: Chamblee Tucker Rd & Northcrest Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.96		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3491		1770	3406		1770	1800		1770	1863	1583
Flt Permitted	0.40	1.00		0.09	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	742	3491		162	3406		1770	1800		1770	1863	1583
Volume (vph)	221	1752	166	44	448	139	121	97	29	354	133	212
Peak-hour factor, PHF	0.94	0.96	0.90	0.65	0.94	0.87	0.78	0.78	0.81	0.95	0.90	0.93
Adj. Flow (vph)	235	1825	184	68	477	160	155	124	36	373	148	228
RTOR Reduction (vph)	0	6	0	0	28	0	0	9	0	0	0	138
Lane Group Flow (vph)	235	2003	0	68	609	0	155	151	0	373	148	90
Turn Type	pm+pt			pm+pt			Split			Split		pm+ov
Protected Phases	1	6		5	2		4	4		8	8	1
Permitted Phases	6			2								8
Actuated Green, G (s)	59.8	59.8		52.2	52.2		16.0	16.0		22.0	22.0	35.8
Effective Green, g (s)	59.8	59.8		52.2	52.2		16.0	16.0		22.0	22.0	35.8
Actuated g/C Ratio	0.50	0.50		0.44	0.44		0.13	0.13		0.18	0.18	0.30
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	488	1740		154	1482		236	240		325	342	472
v/s Ratio Prot	0.06	c0.57		0.02	c0.18		c0.09	0.08		c0.21	0.08	0.02
v/s Ratio Perm	0.18			0.17								0.04
v/c Ratio	0.48	1.15		0.44	0.41		0.66	0.63		1.15	0.43	0.19
Uniform Delay, d1	22.8	30.1		56.1	23.3		49.4	49.2		49.0	43.5	31.3
Progression Factor	0.65	0.71		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.4	72.4		2.0	0.8		13.4	11.9		96.2	4.0	0.2
Delay (s)	15.1	93.7		58.1	24.2		62.8	61.1		145.2	47.4	31.5
Level of Service	B	F		E	C		E	E		F	D	C
Approach Delay (s)		85.5			27.4			62.0			91.3	
Approach LOS		F			C			E			F	

Intersection Summary					
HCM Average Control Delay	74.5	HCM Level of Service		E	
HCM Volume to Capacity ratio	1.04				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)		16.0	
Intersection Capacity Utilization	96.9%	ICU Level of Service		F	
Analysis Period (min)	15				
c Critical Lane Group					

Base AM Intersection Analysis

Base 2009 AM

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	3539	1583	1770	5080	0	0	1683	0	0	1694	0
Flt Permitted	0.163			0.516				0.906			0.936	
Satd. Flow (perm)	304	3539	1583	961	5080	0	0	1558	0	0	1625	0
Satd. Flow (RTOR)			8		1			35			4	
Volume (vph)	13	305	4	5	1009	2	13	0	29	2	0	2
Lane Group Flow (vph)	26	328	8	8	1113	0	0	61	0	0	8	0
Turn Type	pm+pt		Perm	pm+pt			Perm			Perm		
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Total Split (s)	29.0	54.0	54.0	29.0	54.0	0.0	37.0	37.0	0.0	37.0	37.0	0.0
Act Effct Green (s)	78.5	77.1	77.1	76.0	72.7			33.0			33.0	
Actuated g/C Ratio	0.65	0.64	0.64	0.63	0.61			0.28			0.28	
v/c Ratio	0.09	0.14	0.01	0.01	0.36			0.13			0.02	
Control Delay	7.8	9.1	5.2	1.8	2.8			17.7			24.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay	7.8	9.1	5.2	1.8	2.8			17.7			24.5	
LOS	A	A	A	A	A			B			C	
Approach Delay		8.9			2.8			17.7			24.5	
Approach LOS		A			A			B			C	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 31 (26%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.36			
Intersection Signal Delay: 4.9		Intersection LOS: A	
Intersection Capacity Utilization 29.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Chamblee Tucker Rd & Embry Hills Church Drwy

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91			1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00			0.92			0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1770	3539	1583	1770	5083			1683			1695	
Flt Permitted	0.20	1.00	1.00	0.55	1.00			0.91			0.94	
Satd. Flow (perm)	374	3539	1583	1031	5083			1557			1626	
Volume (vph)	13	305	4	5	1009	2	13	0	29	2	0	2
Peak-hour factor, PHF	0.50	0.93	0.50	0.62	0.91	0.50	0.50	0.92	0.84	0.50	0.92	0.50
Adj. Flow (vph)	26	328	8	8	1109	4	26	0	35	4	0	4
RTOR Reduction (vph)	0	0	3	0	0	0	0	25	0	0	3	0
Lane Group Flow (vph)	26	328	5	8	1113	0	0	36	0	0	5	0
Turn Type	pm+pt		Perm	pm+pt			Perm			Perm		
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Actuated Green, G (s)	77.8	73.9	73.9	72.2	71.1			33.0			33.0	
Effective Green, g (s)	77.8	73.9	73.9	72.2	71.1			33.0			33.0	
Actuated g/C Ratio	0.65	0.62	0.62	0.60	0.59			0.28			0.28	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	288	2179	975	627	3012			428			447	
v/s Ratio Prot	c0.00	0.09		0.00	c0.22							
v/s Ratio Perm	0.06		0.00	0.01				c0.02			0.00	
v/c Ratio	0.09	0.15	0.01	0.01	0.37			0.08			0.01	
Uniform Delay, d1	8.3	9.8	8.9	9.6	12.8			32.3			31.6	
Progression Factor	1.00	1.00	1.00	0.26	0.20			1.00			1.00	
Incremental Delay, d2	0.1	0.1	0.0	0.0	0.3			0.4			0.0	
Delay (s)	8.4	9.9	8.9	2.5	2.8			32.7			31.7	
Level of Service	A	A	A	A	A			C			C	
Approach Delay (s)		9.8			2.8			32.7			31.7	
Approach LOS		A			A			C			C	

Intersection Summary					
HCM Average Control Delay	5.8	HCM Level of Service		A	
HCM Volume to Capacity ratio	0.28				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)		16.0	
Intersection Capacity Utilization	29.5%	ICU Level of Service		A	
Analysis Period (min)	15				
c Critical Lane Group					

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	5085	1863	4867	0	1770	1583
Flt Permitted	0.118					0.950	
Satd. Flow (perm)	220	5085	1863	4867	0	1770	1583
Satd. Flow (RTOR)				113			22
Volume (vph)	21	339	0	981	352	58	14
Lane Group Flow (vph)	30	361	0	1416	0	67	22
Turn Type	pm+pt		pm+pt				Perm
Protected Phases	1	6	5	2		8	
Permitted Phases	6		2				8
Total Split (s)	26.0	60.0	26.0	60.0	0.0	34.0	34.0
Act Effct Green (s)	82.0	82.0		75.8		30.0	30.0
Actuated g/C Ratio	0.68	0.68		0.63		0.25	0.25
v/c Ratio	0.13	0.10		0.45		0.15	0.05
Control Delay	7.9	6.0		1.1		36.3	13.3
Queue Delay	0.0	0.0		0.0		0.0	0.0
Total Delay	7.9	6.0		1.1		36.3	13.3
LOS	A	A		A		D	B
Approach Delay		6.1		1.1		30.6	
Approach LOS		A		A		C	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 12 (10%), Referenced to phase 2:WBTU and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.45			
Intersection Signal Delay: 3.5		Intersection LOS: A	
Intersection Capacity Utilization 36.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: Chamblee Tucker Rd & Buckeye Rd

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0		4.0	4.0
Lane Util. Factor	1.00	0.91		0.91		1.00	1.00
Frt	1.00	1.00		0.96		1.00	0.85
Flt Protected	0.95	1.00		1.00		0.95	1.00
Satd. Flow (prot)	1770	5085		4867		1770	1583
Flt Permitted	0.14	1.00		1.00		0.95	1.00
Satd. Flow (perm)	252	5085		4867		1770	1583
Volume (vph)	21	339	0	981	352	58	14
Peak-hour factor, PHF	0.71	0.94	0.92	0.97	0.87	0.86	0.65
Adj. Flow (vph)	30	361	0	1011	405	67	22
RTOR Reduction (vph)	0	0	0	43	0	0	17
Lane Group Flow (vph)	30	361	0	1373	0	67	6
Turn Type	pm+pt		pm+pt				Perm
Protected Phases	1	6	5	2		8	
Permitted Phases	6		2				8
Actuated Green, G (s)	82.0	82.0		74.2		30.0	30.0
Effective Green, g (s)	82.0	82.0		74.2		30.0	30.0
Actuated g/C Ratio	0.68	0.68		0.62		0.25	0.25
Clearance Time (s)	4.0	4.0		4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	220	3475		3009		443	396
v/s Ratio Prot	0.00	c0.07		c0.28		c0.04	
v/s Ratio Perm	0.09						0.00
v/c Ratio	0.14	0.10		0.46		0.15	0.01
Uniform Delay, d1	7.7	6.5		12.2		35.1	33.9
Progression Factor	1.08	0.91		0.06		1.00	1.00
Incremental Delay, d2	0.3	0.1		0.5		0.7	0.1
Delay (s)	8.6	6.0		1.2		35.8	33.9
Level of Service	A	A		A		D	C
Approach Delay (s)		6.2		1.2		35.3	
Approach LOS		A		A		D	

Intersection Summary			
HCM Average Control Delay	3.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	36.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	5070	0	0	1770	5050	0	0	1711	0	1770	1622
Flt Permitted	0.123				0.443				0.895		0.758	
Satd. Flow (perm)	229	5070	0	0	825	5050	0	0	1567	0	1412	1622
Satd. Flow (RTOR)		3				9			21			25
Volume (vph)	50	371	4	124	13	1280	33	12	1	16	42	1
Lane Group Flow (vph)	60	407	0	0	216	1416	0	0	47	0	55	29
Turn Type	pm+pt			pm+pt	pm+pt			Perm			Perm	
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2			4			8	
Total Split (s)	26.0	53.0	0.0	33.0	33.0	60.0	0.0	34.0	34.0	0.0	34.0	34.0
Act Effct Green (s)	78.0	71.1			78.7	73.0			30.0		30.0	30.0
Actuated g/C Ratio	0.65	0.59			0.66	0.61			0.25		0.25	0.25
v/c Ratio	0.25	0.14			0.36	0.46			0.12		0.16	0.07
Control Delay	12.2	10.9			4.4	6.1			23.1		36.6	14.8
Queue Delay	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Total Delay	12.2	10.9			4.4	6.1			23.1		36.6	14.8
LOS	B	B			A	A			C		D	B
Approach Delay		11.1				5.9			23.1			29.1
Approach LOS		B				A			C			C

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 1 (1%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay: 8.2		Intersection LOS: A	
Intersection Capacity Utilization 47.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Chamblee Tucker Rd & Big Lots Driveway

Lane Group	SBR
Lane Configurations	
Total Lost Time (s)	4.0
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Satd. Flow (RTOR)	
Volume (vph)	23
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0			4.0		4.0	4.0
Lane Util. Factor	1.00	0.91			1.00	0.91			1.00		1.00	1.00
Frt	1.00	1.00			1.00	0.99			0.94		1.00	0.87
Flt Protected	0.95	1.00			0.95	1.00			0.98		0.95	1.00
Satd. Flow (prot)	1770	5070			1770	5048			1710		1770	1622
Flt Permitted	0.14	1.00			0.49	1.00			0.90		0.76	1.00
Satd. Flow (perm)	264	5070			919	5048			1567		1412	1622
Volume (vph)	50	371	4	124	13	1280	33	12	1	16	42	1
Peak-hour factor, PHF	0.84	0.93	0.50	0.64	0.60	0.95	0.48	0.55	0.25	0.75	0.77	0.25
Adj. Flow (vph)	60	399	8	194	22	1347	69	22	4	21	55	4
RTOR Reduction (vph)	0	1	0	0	0	4	0	0	16	0	0	19
Lane Group Flow (vph)	60	406	0	0	216	1412	0	0	31	0	55	10
Turn Type	pm+pt			pm+pt	pm+pt			Perm			Perm	
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2			4			8	
Actuated Green, G (s)	76.9	71.1			79.1	72.2			30.0		30.0	30.0
Effective Green, g (s)	76.9	71.1			79.1	72.2			30.0		30.0	30.0
Actuated g/C Ratio	0.64	0.59			0.66	0.60			0.25		0.25	0.25
Clearance Time (s)	4.0	4.0			4.0	4.0			4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0		3.0	3.0
Lane Grp Cap (vph)	242	3004			655	3037			392		353	406
v/s Ratio Prot	0.01	0.08			c0.02	c0.28						0.01
v/s Ratio Perm	0.15				0.20				0.02		c0.04	
v/c Ratio	0.25	0.14			0.33	0.47			0.08		0.16	0.03
Uniform Delay, d1	9.0	10.8			8.0	13.2			34.4		35.1	34.0
Progression Factor	1.51	1.00			0.39	0.43			1.00		1.00	1.00
Incremental Delay, d2	0.5	0.1			0.3	0.5			0.4		0.9	0.1
Delay (s)	14.2	10.9			3.4	6.1			34.8		36.1	34.1
Level of Service	B	B			A	A			C		D	C
Approach Delay (s)		11.3				5.8			34.8			35.4
Approach LOS		B				A			C			D

Intersection Summary			
HCM Average Control Delay	8.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	47.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	23
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	25
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1681	1724	1583
Flt Permitted				0.411						0.950	0.974	
Satd. Flow (perm)	0	3539	1583	766	3539	0	0	0	0	1681	1724	1583
Satd. Flow (RTOR)			190									330
Volume (vph)	0	315	175	304	1115	0	0	0	0	179	48	274
Lane Group Flow (vph)	0	346	190	342	1186	0	0	0	0	128	135	330
Turn Type			Free	pm+pt						Perm		Free
Protected Phases		6		5	2						8	
Permitted Phases			Free	2						8		Free
Total Split (s)	0.0	39.0	0.0	45.0	84.0	0.0	0.0	0.0	0.0	36.0	36.0	0.0
Act Effct Green (s)		66.4	120.0	80.0	80.0					32.0	32.0	120.0
Actuated g/C Ratio		0.55	1.00	0.67	0.67					0.27	0.27	1.00
v/c Ratio		0.18	0.12	0.58	0.50					0.29	0.29	0.21
Control Delay		12.9	0.2	8.0	5.3					37.1	37.2	0.3
Queue Delay		0.0	0.0	0.0	0.2					0.0	0.0	0.0
Total Delay		12.9	0.2	8.0	5.5					37.1	37.2	0.3
LOS		B	A	A	A					D	D	A
Approach Delay		8.4			6.0						16.6	
Approach LOS		A			A						B	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 4 (3%), Referenced to phase 2:WBTL and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 8.9		Intersection LOS: A	
Intersection Capacity Utilization 80.6%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 4: Chamblee Tucker Rd & I-285 SB Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.95	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		3539	1583	1770	3539					1681	1724	1583
Flt Permitted		1.00	1.00	0.50	1.00					0.95	0.97	1.00
Satd. Flow (perm)		3539	1583	927	3539					1681	1724	1583
Volume (vph)	0	315	175	304	1115	0	0	0	0	179	48	274
Peak-hour factor, PHF	0.92	0.91	0.92	0.89	0.94	0.92	0.92	0.92	0.92	0.90	0.75	0.83
Adj. Flow (vph)	0	346	190	342	1186	0	0	0	0	199	64	330
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	346	190	342	1186	0	0	0	0	128	135	330
Turn Type			Free	pm+pt						Perm		Free
Protected Phases		6		5	2						8	
Permitted Phases			Free	2						8		Free
Actuated Green, G (s)		66.4	120.0	80.0	80.0					32.0	32.0	120.0
Effective Green, g (s)		66.4	120.0	80.0	80.0					32.0	32.0	120.0
Actuated g/C Ratio		0.55	1.00	0.67	0.67					0.27	0.27	1.00
Clearance Time (s)		4.0		4.0	4.0					4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0					3.0	3.0	
Lane Grp Cap (vph)		1958	1583	685	2359					448	460	1583
v/s Ratio Prot		0.10		0.04	c0.34							
v/s Ratio Perm			0.12	0.29						0.08	0.08	0.21
v/c Ratio		0.18	0.12	0.50	0.50					0.29	0.29	0.21
Uniform Delay, d1		13.3	0.0	8.5	10.0					34.9	35.0	0.0
Progression Factor		0.93	1.00	0.55	0.46					1.00	1.00	1.00
Incremental Delay, d2		0.2	0.2	0.5	0.6					1.6	1.6	0.3
Delay (s)		12.5	0.2	5.2	5.2					36.5	36.6	0.3
Level of Service		B	A	A	A					D	D	A
Approach Delay (s)		8.1			5.2			0.0			16.4	
Approach LOS		A			A			A			B	

Intersection Summary					
HCM Average Control Delay	8.3	HCM Level of Service		A	
HCM Volume to Capacity ratio	0.44				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)		8.0	
Intersection Capacity Utilization	80.6%	ICU Level of Service		D	
Analysis Period (min)	15				
c Critical Lane Group					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1699	1583	0	0	0
Flt Permitted	0.201						0.950	0.960				
Satd. Flow (perm)	374	3539	0	0	3539	1583	1681	1699	1583	0	0	0
Satd. Flow (RTOR)						795			211			
Volume (vph)	103	459	0	0	892	807	499	41	192	0	0	0
Lane Group Flow (vph)	114	494	0	0	959	823	306	323	211	0	0	0
Turn Type	pm+pt					Perm	Perm		Perm			
Protected Phases	1	6			2			4				
Permitted Phases	6					2	4		4			
Total Split (s)	16.0	78.0	0.0	0.0	62.0	62.0	42.0	42.0	42.0	0.0	0.0	0.0
Act Effct Green (s)	84.0	84.0			68.0	68.0	28.0	28.0	28.0			
Actuated g/C Ratio	0.70	0.70			0.57	0.57	0.23	0.23	0.23			
v/c Ratio	0.28	0.20			0.48	0.66	0.78	0.82	0.40			
Control Delay	6.9	2.9			5.9	2.6	56.4	59.3	6.5			
Queue Delay	0.0	0.0			0.0	0.3	0.0	0.0	0.0			
Total Delay	6.9	2.9			5.9	2.9	56.4	59.3	6.5			
LOS	A	A			A	A	E	E	A			
Approach Delay		3.7			4.5			45.0				
Approach LOS		A			A			D				

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 112 (93%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 14.9		Intersection LOS: B	
Intersection Capacity Utilization 80.6%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 5: Chamblee Tucker Rd & I-258 NB Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (prot)	1770	3539			3539	1583	1681	1699	1583			
Flt Permitted	0.23	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (perm)	430	3539			3539	1583	1681	1699	1583			
Volume (vph)	103	459	0	0	892	807	499	41	192	0	0	0
Peak-hour factor, PHF	0.90	0.93	0.92	0.92	0.93	0.98	0.87	0.75	0.91	0.92	0.92	0.92
Adj. Flow (vph)	114	494	0	0	959	823	574	55	211	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	345	0	0	162	0	0	0
Lane Group Flow (vph)	114	494	0	0	959	479	306	323	49	0	0	0
Turn Type	pm+pt					Perm	Perm		Perm			
Protected Phases	1	6			2			4				
Permitted Phases	6					2	4		4			
Actuated Green, G (s)	84.0	84.0			68.0	68.0	28.0	28.0	28.0			
Effective Green, g (s)	84.0	84.0			68.0	68.0	28.0	28.0	28.0			
Actuated g/C Ratio	0.70	0.70			0.57	0.57	0.23	0.23	0.23			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	435	2477			2005	897	392	396	369			
v/s Ratio Prot	c0.03	0.14			0.27							
v/s Ratio Perm	0.16					c0.30	0.18	0.19	0.03			
v/c Ratio	0.26	0.20			0.48	0.53	0.78	0.82	0.13			
Uniform Delay, d1	14.3	6.3			15.5	16.1	43.1	43.6	36.4			
Progression Factor	0.46	0.38			0.34	1.35	1.00	1.00	1.00			
Incremental Delay, d2	0.3	0.2			0.1	0.2	9.7	12.2	0.2			
Delay (s)	6.9	2.6			5.4	22.1	52.8	55.8	36.6			
Level of Service	A	A			A	C	D	E	D			
Approach Delay (s)		3.4			13.1			49.9			0.0	
Approach LOS		A			B			D			A	

Intersection Summary			
HCM Average Control Delay	20.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	80.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	3465	0	1770	3412	0	1770	1816	0	1770	1863	1583
Flt Permitted	0.071			0.383			0.950			0.950		
Satd. Flow (perm)	132	3465	0	713	3412	0	1770	1816	0	1770	1863	1583
Satd. Flow (RTOR)		24			55			7				93
Volume (vph)	124	402	59	13	1525	411	79	68	8	94	29	117
Lane Group Flow (vph)	148	509	0	17	2119	0	110	97	0	122	39	148
Turn Type	pm+pt			pm+pt			Split			Split		pm+ov
Protected Phases	1	6		5	2		4	4		8	8	1
Permitted Phases	6			2								8
Total Split (s)	12.0	68.0	0.0	12.0	68.0	0.0	20.0	20.0	0.0	20.0	20.0	12.0
Act Effct Green (s)	71.7	71.7		64.0	64.0		16.0	16.0		16.0	16.0	24.0
Actuated g/C Ratio	0.60	0.60		0.53	0.53		0.13	0.13		0.13	0.13	0.20
v/c Ratio	0.79	0.24		0.04	1.15		0.47	0.39		0.52	0.16	0.38
Control Delay	62.9	11.1		13.5	101.0		55.2	49.2		57.0	47.9	13.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	62.9	11.1		13.5	101.0		55.2	49.2		57.0	47.9	13.4
LOS	E	B		B	F		E	D		E	D	B
Approach Delay		22.8			100.3			52.4			35.0	
Approach LOS		C			F			D			C	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 91 (76%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.15			
Intersection Signal Delay: 75.8		Intersection LOS: E	
Intersection Capacity Utilization 84.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 6: Chamblee Tucker Rd & Northcrest Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.96		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3464		1770	3410		1770	1817		1770	1863	1583
Flt Permitted	0.07	1.00		0.39	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	127	3464		735	3410		1770	1817		1770	1863	1583
Volume (vph)	124	402	59	13	1525	411	79	68	8	94	29	117
Peak-hour factor, PHF	0.84	0.92	0.82	0.75	0.95	0.80	0.72	0.84	0.50	0.77	0.75	0.79
Adj. Flow (vph)	148	437	72	17	1605	514	110	81	16	122	39	148
RTOR Reduction (vph)	0	10	0	0	27	0	0	6	0	0	0	73
Lane Group Flow (vph)	148	499	0	17	2092	0	110	91	0	122	39	75
Turn Type	pm+pt			pm+pt			Split			Split		pm+ov
Protected Phases	1	6		5	2		4	4		8	8	1
Permitted Phases	6			2								8
Actuated Green, G (s)	69.3	69.3		61.6	61.6		16.0	16.0		16.0	16.0	26.4
Effective Green, g (s)	69.3	69.3		61.6	61.6		16.0	16.0		16.0	16.0	26.4
Actuated g/C Ratio	0.58	0.58		0.51	0.51		0.13	0.13		0.13	0.13	0.22
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	216	2000		401	1750		236	242		236	248	348
v/s Ratio Prot	c0.06	0.14		0.00	c0.61		c0.06	0.05		c0.07	0.02	0.02
v/s Ratio Perm	0.34			0.02								0.03
v/c Ratio	0.69	0.25		0.04	1.20		0.47	0.38		0.52	0.16	0.22
Uniform Delay, d1	49.6	12.5		14.7	29.2		48.1	47.4		48.4	46.0	38.3
Progression Factor	0.90	0.94		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	8.5	0.3		0.0	93.9		6.5	4.4		7.9	1.3	0.3
Delay (s)	53.4	12.1		14.7	123.1		54.5	51.9		56.3	47.4	38.6
Level of Service	D	B		B	F		D	D		E	D	D
Approach Delay (s)		21.4			122.2			53.3			46.7	
Approach LOS		C			F			D			D	

Intersection Summary					
HCM Average Control Delay	90.8	HCM Level of Service		F	
HCM Volume to Capacity ratio	0.89				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	84.0%	ICU Level of Service		E	
Analysis Period (min)	15				
c Critical Lane Group					

Base 2009 AM Improved

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	3465	0	1770	3539	1583	1770	1816	0	1681	1724	1583
Flt Permitted	0.074			0.380			0.950			0.950	0.974	
Satd. Flow (perm)	138	3465	0	708	3539	1583	1770	1816	0	1681	1724	1583
Satd. Flow (RTOR)		24				264		7				93
Volume (vph)	124	402	59	13	1525	411	79	68	8	94	29	117
Lane Group Flow (vph)	148	509	0	17	1605	514	110	97	0	78	83	148
Turn Type	pm+pt			pm+pt		Perm	Split			Split		pm+ov
Protected Phases	1	6		5	2		4	4		8	8	1
Permitted Phases	6			2		2						8
Total Split (s)	14.0	68.0	0.0	12.0	66.0	66.0	20.0	20.0	0.0	20.0	20.0	14.0
Act Effct Green (s)	71.7	71.7		62.0	62.0	62.0	16.0	16.0		16.0	16.0	26.0
Actuated g/C Ratio	0.60	0.60		0.52	0.52	0.52	0.13	0.13		0.13	0.13	0.22
v/c Ratio	0.68	0.24		0.04	0.88	0.54	0.47	0.39		0.35	0.36	0.36
Control Delay	36.3	6.4		14.5	32.5	11.1	55.2	49.2		52.2	52.4	12.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	36.3	6.4		14.5	32.5	11.1	55.2	49.2		52.2	52.4	12.5
LOS	D	A		B	C	B	E	D		D	D	B
Approach Delay		13.1			27.2			52.4			33.2	
Approach LOS		B			C			D			C	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 31 (26%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 26.6		Intersection LOS: C	
Intersection Capacity Utilization 70.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 6: Chamblee Tucker Rd & Northcrest Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00		0.95	0.95	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	0.97	1.00
Satd. Flow (prot)	1770	3464		1770	3539	1583	1770	1817		1681	1724	1583
Flt Permitted	0.07	1.00		0.39	1.00	1.00	0.95	1.00		0.95	0.97	1.00
Satd. Flow (perm)	131	3464		731	3539	1583	1770	1817		1681	1724	1583
Volume (vph)	124	402	59	13	1525	411	79	68	8	94	29	117
Peak-hour factor, PHF	0.84	0.92	0.82	0.75	0.95	0.80	0.72	0.84	0.50	0.77	0.75	0.79
Adj. Flow (vph)	148	437	72	17	1605	514	110	81	16	122	39	148
RTOR Reduction (vph)	0	10	0	0	0	133	0	6	0	0	0	71
Lane Group Flow (vph)	148	499	0	17	1605	381	110	91	0	78	83	77
Turn Type	pm+pt			pm+pt		Perm	Split			Split		pm+ov
Protected Phases	1	6		5	2		4	4		8	8	1
Permitted Phases	6			2		2						8
Actuated Green, G (s)	69.3	69.3		59.6	59.6	59.6	16.0	16.0		16.0	16.0	28.4
Effective Green, g (s)	69.3	69.3		59.6	59.6	59.6	16.0	16.0		16.0	16.0	28.4
Actuated g/C Ratio	0.58	0.58		0.50	0.50	0.50	0.13	0.13		0.13	0.13	0.24
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	245	2000		386	1758	786	236	242		224	230	375
v/s Ratio Prot	c0.06	0.14		0.00	c0.45		c0.06	0.05		0.05	c0.05	0.02
v/s Ratio Perm	0.29			0.02		0.24						0.03
v/c Ratio	0.60	0.25		0.04	0.91	0.48	0.47	0.38		0.35	0.36	0.21
Uniform Delay, d1	43.2	12.5		15.7	27.8	20.0	48.1	47.4		47.3	47.3	36.7
Progression Factor	0.53	0.53		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	4.1	0.3		0.0	8.8	2.1	6.5	4.4		4.2	4.4	0.3
Delay (s)	27.1	6.9		15.7	36.6	22.2	54.5	51.9		51.5	51.7	37.0
Level of Service	C	A		B	D	C	D	D		D	D	D
Approach Delay (s)		11.4			32.9			53.3			44.6	
Approach LOS		B			C			D			D	

Intersection Summary					
HCM Average Control Delay	31.0	HCM Level of Service		C	
HCM Volume to Capacity ratio	0.70				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	70.1%	ICU Level of Service		C	
Analysis Period (min)	15				
c Critical Lane Group					

Base PM Intersection Analysis

Base 2009 PM

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	3539	1583	1770	5085	0	0	1645	0	0	1863	0
Flt Permitted	0.385			0.064				0.966				
Satd. Flow (perm)	717	3539	1583	119	5085	0	0	1603	0	0	1863	0
Satd. Flow (RTOR)			9					34				
Volume (vph)	3	1597	11	67	594	0	6	0	16	0	0	0
Lane Group Flow (vph)	4	1664	18	76	646	0	0	42	0	0	0	0
Turn Type	pm+pt		Perm	pm+pt			Perm			Perm		
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Total Split (s)	17.0	77.0	77.0	18.0	78.0	0.0	25.0	25.0	0.0	25.0	25.0	0.0
Act Effct Green (s)	84.8	80.3	80.3	91.0	89.1			21.0				
Actuated g/C Ratio	0.71	0.67	0.67	0.76	0.74			0.18				
v/c Ratio	0.01	0.70	0.02	0.36	0.17			0.14				
Control Delay	4.0	15.4	5.6	24.0	4.8			18.4				
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0				
Total Delay	4.0	15.4	5.6	24.0	4.8			18.4				
LOS	A	B	A	C	A			B				
Approach Delay		15.2			6.8			18.4				
Approach LOS		B			A			B				

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 91 (76%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 12.8		Intersection LOS: B	
Intersection Capacity Utilization 61.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Chamblee Tucker Rd & Embry Hills Church Drwy

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0			4.0				
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91			1.00				
Frt	1.00	1.00	0.85	1.00	1.00			0.89				
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.99				
Satd. Flow (prot)	1770	3539	1583	1770	5085			1644				
Flt Permitted	0.40	1.00	1.00	0.08	1.00			0.97				
Satd. Flow (perm)	736	3539	1583	148	5085			1603				
Volume (vph)	3	1597	11	67	594	0	6	0	16	0	0	0
Peak-hour factor, PHF	0.75	0.96	0.62	0.88	0.92	0.92	0.75	0.92	0.47	0.92	0.92	0.92
Adj. Flow (vph)	4	1664	18	76	646	0	8	0	34	0	0	0
RTOR Reduction (vph)	0	0	3	0	0	0	0	28	0	0	0	0
Lane Group Flow (vph)	4	1664	15	76	646	0	0	14	0	0	0	0
Turn Type	pm+pt		Perm	pm+pt			Perm			Perm		
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Actuated Green, G (s)	80.6	79.5	79.5	91.0	85.9			21.0				
Effective Green, g (s)	80.6	79.5	79.5	91.0	85.9			21.0				
Actuated g/C Ratio	0.67	0.66	0.66	0.76	0.72			0.18				
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0			4.0				
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0				
Lane Grp Cap (vph)	504	2345	1049	214	3640			281				
v/s Ratio Prot	0.00	c0.47		c0.02	0.13							
v/s Ratio Perm	0.01		0.01	0.25				c0.01				
v/c Ratio	0.01	0.71	0.01	0.36	0.18			0.05				
Uniform Delay, d1	6.5	12.9	6.9	12.2	5.6			41.2				
Progression Factor	1.00	1.00	1.00	3.27	0.97			1.00				
Incremental Delay, d2	0.0	1.8	0.0	1.0	0.1			0.3				
Delay (s)	6.5	14.7	6.9	40.7	5.5			41.5				
Level of Service	A	B	A	D	A			D				
Approach Delay (s)		14.6			9.2			41.5			0.0	
Approach LOS		B			A			D			A	

Intersection Summary					
HCM Average Control Delay	13.5	HCM Level of Service		B	
HCM Volume to Capacity ratio	0.56				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	61.2%	ICU Level of Service		B	
Analysis Period (min)	15				
c Critical Lane Group					

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	5085	1863	4958	0	1770	1583
Flt Permitted	0.236					0.950	
Satd. Flow (perm)	440	5085	1863	4958	0	1770	1583
Satd. Flow (RTOR)				46			60
Volume (vph)	23	1633	0	637	111	365	50
Lane Group Flow (vph)	29	1756	0	799	0	435	60
Turn Type	pm+pt		pm+pt				Perm
Protected Phases	1	6	5	2		8	
Permitted Phases	6		2				8
Total Split (s)	14.0	57.0	14.0	57.0	0.0	49.0	49.0
Act Effct Green (s)	67.0	67.0		60.8		45.0	45.0
Actuated g/C Ratio	0.56	0.56		0.51		0.38	0.38
v/c Ratio	0.09	0.62		0.31		0.66	0.10
Control Delay	2.6	7.8		11.1		36.8	6.4
Queue Delay	0.0	0.0		0.0		0.0	0.0
Total Delay	2.6	7.8		11.1		36.8	6.4
LOS	A	A		B		D	A
Approach Delay		7.7		11.1		33.1	
Approach LOS		A		B		C	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 8 (7%), Referenced to phase 2:WBTU and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 12.6		Intersection LOS: B	
Intersection Capacity Utilization 58.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Chamblee Tucker Rd & Buckeye Rd

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0		4.0	4.0
Lane Util. Factor	1.00	0.91		0.91		1.00	1.00
Frt	1.00	1.00		0.97		1.00	0.85
Flt Protected	0.95	1.00		1.00		0.95	1.00
Satd. Flow (prot)	1770	5085		4956		1770	1583
Flt Permitted	0.27	1.00		1.00		0.95	1.00
Satd. Flow (perm)	512	5085		4956		1770	1583
Volume (vph)	23	1633	0	637	111	365	50
Peak-hour factor, PHF	0.79	0.93	0.92	0.96	0.82	0.84	0.84
Adj. Flow (vph)	29	1756	0	664	135	435	60
RTOR Reduction (vph)	0	0	0	23	0	0	38
Lane Group Flow (vph)	29	1756	0	776	0	435	23
Turn Type	pm+pt		pm+pt				Perm
Protected Phases	1	6	5	2		8	
Permitted Phases	6		2				8
Actuated Green, G (s)	67.0	67.0		59.2		45.0	45.0
Effective Green, g (s)	67.0	67.0		59.2		45.0	45.0
Actuated g/C Ratio	0.56	0.56		0.49		0.38	0.38
Clearance Time (s)	4.0	4.0		4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	326	2839		2445		664	594
v/s Ratio Prot	0.00	c0.35		0.16		c0.25	
v/s Ratio Perm	0.05						0.01
v/c Ratio	0.09	0.62		0.32		0.66	0.04
Uniform Delay, d1	12.5	17.9		18.3		31.1	23.8
Progression Factor	0.18	0.39		0.64		1.00	1.00
Incremental Delay, d2	0.1	0.8		0.3		5.0	0.1
Delay (s)	2.3	7.7		11.9		36.1	23.9
Level of Service	A	A		B		D	C
Approach Delay (s)		7.6		11.9		34.6	
Approach LOS		A		B		C	

Intersection Summary			
HCM Average Control Delay	13.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	5080	0	0	1770	4933	0	0	1722	0	1770	1628
Flt Permitted	0.292				0.071				0.855		0.708	
Satd. Flow (perm)	544	5080	0	0	132	4933	0	0	1510	0	1319	1628
Satd. Flow (RTOR)		1				90			24			43
Volume (vph)	55	1976	16	364	37	715	160	20	6	22	242	5
Lane Group Flow (vph)	71	2075	0	0	460	939	0	0	75	0	269	51
Turn Type	pm+pt			pm+pt	pm+pt			Perm			Perm	
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2			4			8	
Total Split (s)	12.0	56.0	0.0	33.0	33.0	77.0	0.0	31.0	31.0	0.0	31.0	31.0
Act Effct Green (s)	59.1	52.7			85.0	76.5			27.0		27.0	27.0
Actuated g/C Ratio	0.49	0.44			0.71	0.64			0.22		0.22	0.22
v/c Ratio	0.21	0.93			0.96	0.30			0.21		0.91	0.13
Control Delay	8.0	27.4			66.3	8.3			28.3		79.0	14.5
Queue Delay	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Total Delay	8.0	27.4			66.3	8.3			28.3		79.0	14.5
LOS	A	C			E	A			C		E	B
Approach Delay		26.8				27.4			28.3			68.7
Approach LOS		C				C			C			E

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 117 (98%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 30.4		Intersection LOS: C	
Intersection Capacity Utilization 90.8%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Chamblee Tucker Rd & Big Lots Driveway

Lane Group	SBR
Lane Configurations	
Total Lost Time (s)	4.0
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Satd. Flow (RTOR)	
Volume (vph)	35
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0			4.0		4.0	4.0
Lane Util. Factor	1.00	0.91			1.00	0.91			1.00		1.00	1.00
Frt	1.00	1.00			1.00	0.97			0.95		1.00	0.87
Flt Protected	0.95	1.00			0.95	1.00			0.98		0.95	1.00
Satd. Flow (prot)	1770	5079			1770	4934			1722		1770	1627
Flt Permitted	0.29	1.00			0.07	1.00			0.85		0.71	1.00
Satd. Flow (perm)	544	5079			131	4934			1509		1319	1627
Volume (vph)	55	1976	16	364	37	715	160	20	6	22	242	5
Peak-hour factor, PHF	0.77	0.96	0.94	0.87	0.88	0.95	0.86	0.53	0.75	0.75	0.90	0.62
Adj. Flow (vph)	71	2058	17	418	42	753	186	38	8	29	269	8
RTOR Reduction (vph)	0	1	0	0	0	33	0	0	19	0	0	33
Lane Group Flow (vph)	71	2074	0	0	460	906	0	0	56	0	269	18
Turn Type	pm+pt			pm+pt	pm+pt			Perm			Perm	
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2			4			8	
Actuated Green, G (s)	58.0	52.7			85.0	75.7			27.0		27.0	27.0
Effective Green, g (s)	58.0	52.7			85.0	75.7			27.0		27.0	27.0
Actuated g/C Ratio	0.48	0.44			0.71	0.63			0.22		0.22	0.22
Clearance Time (s)	4.0	4.0			4.0	4.0			4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0		3.0	3.0
Lane Grp Cap (vph)	317	2231			479	3113			340		297	366
v/s Ratio Prot	0.01	0.41			c0.23	0.18						0.01
v/s Ratio Perm	0.10				c0.45				0.04		c0.20	
v/c Ratio	0.22	0.93			0.96	0.29			0.17		0.91	0.05
Uniform Delay, d1	16.7	31.9			38.1	10.0			37.4		45.3	36.4
Progression Factor	0.78	0.62			1.04	0.89			1.00		1.00	1.00
Incremental Delay, d2	0.3	6.9			29.1	0.2			1.0		32.8	0.2
Delay (s)	13.3	26.6			68.7	9.1			38.5		78.1	36.7
Level of Service	B	C			E	A			D		E	D
Approach Delay (s)		26.2				28.7			38.5			71.5
Approach LOS		C				C			D			E

Intersection Summary			
HCM Average Control Delay	31.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	90.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	35
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	43
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1681	1720	1583
Flt Permitted				0.085						0.950	0.972	
Satd. Flow (perm)	0	3539	1583	158	3539	0	0	0	0	1681	1720	1583
Satd. Flow (RTOR)			550									380
Volume (vph)	0	1154	1310	284	579	0	0	0	0	1143	242	746
Lane Group Flow (vph)	0	1326	1598	293	616	0	0	0	0	733	772	888
Turn Type			Free	pm+pt						Perm		Free
Protected Phases		6		5	2						8	
Permitted Phases			Free	2						8		Free
Total Split (s)	0.0	47.0	0.0	18.0	65.0	0.0	0.0	0.0	0.0	55.0	55.0	0.0
Act Effct Green (s)		43.0	120.0	61.0	61.0					51.0	51.0	120.0
Actuated g/C Ratio		0.36	1.00	0.51	0.51					0.42	0.42	1.00
v/c Ratio		1.05	1.01	1.09	0.34					1.03	1.06	0.56
Control Delay		53.5	37.2	120.7	15.6					75.3	83.4	1.4
Queue Delay		0.0	0.0	0.0	0.0					0.9	1.1	0.0
Total Delay		53.5	37.2	120.7	15.6					76.2	84.4	1.4
LOS		D	D	F	B					E	F	A
Approach Delay		44.6			49.4						51.1	
Approach LOS		D			D						D	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 15 (13%), Referenced to phase 2:WBTL and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay: 47.8		Intersection LOS: D	
Intersection Capacity Utilization 103.8%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 4: Chamblee Tucker Rd & I-285 SB Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.95	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		3539	1583	1770	3539					1681	1720	1583
Flt Permitted		1.00	1.00	0.09	1.00					0.95	0.97	1.00
Satd. Flow (perm)		3539	1583	159	3539					1681	1720	1583
Volume (vph)	0	1154	1310	284	579	0	0	0	0	1143	242	746
Peak-hour factor, PHF	0.92	0.87	0.82	0.97	0.94	0.92	0.92	0.92	0.92	0.97	0.74	0.84
Adj. Flow (vph)	0	1326	1598	293	616	0	0	0	0	1178	327	888
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1326	1598	293	616	0	0	0	0	733	772	888
Turn Type			Free	pm+pt						Perm		Free
Protected Phases		6		5	2						8	
Permitted Phases			Free	2						8		Free
Actuated Green, G (s)		43.0	120.0	61.0	61.0					51.0	51.0	120.0
Effective Green, g (s)		43.0	120.0	61.0	61.0					51.0	51.0	120.0
Actuated g/C Ratio		0.36	1.00	0.51	0.51					0.42	0.42	1.00
Clearance Time (s)		4.0		4.0	4.0					4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0					3.0	3.0	
Lane Grp Cap (vph)		1268	1583	269	1799					714	731	1583
v/s Ratio Prot		0.37		0.13	0.17							
v/s Ratio Perm			c1.01	c0.43						0.44	0.45	0.56
v/c Ratio		1.05	1.01	1.09	0.34					1.03	1.06	0.56
Uniform Delay, d1		38.5	60.0	49.6	17.6					34.5	34.5	0.0
Progression Factor		0.55	1.00	0.89	0.85					1.00	1.00	1.00
Incremental Delay, d2		30.5	17.6	79.6	0.5					40.6	49.1	1.4
Delay (s)		51.8	77.6	123.9	15.4					75.1	83.6	1.4
Level of Service		D	E	F	B					E	F	A
Approach Delay (s)		65.9			50.4			0.0			50.5	
Approach LOS		E			D			A			D	

Intersection Summary					
HCM Average Control Delay	57.7	HCM Level of Service		E	
HCM Volume to Capacity ratio	1.05				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)		4.0	
Intersection Capacity Utilization	103.8%	ICU Level of Service		G	
Analysis Period (min)	15				
c Critical Lane Group					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1709	1583	0	0	0
Flt Permitted	0.273						0.950	0.966				
Satd. Flow (perm)	509	3539	0	0	3539	1583	1681	1709	1583	0	0	0
Satd. Flow (RTOR)						265			15			
Volume (vph)	261	1930	0	0	672	246	199	32	318	0	0	0
Lane Group Flow (vph)	303	2010	0	0	707	265	124	131	361	0	0	0
Turn Type	pm+pt					Perm	Perm		Perm			
Protected Phases	1	6			2			4				
Permitted Phases	6					2	4		4			
Total Split (s)	22.0	81.0	0.0	0.0	59.0	59.0	39.0	39.0	39.0	0.0	0.0	0.0
Act Effct Green (s)	82.1	82.1			67.6	67.6	29.9	29.9	29.9			
Actuated g/C Ratio	0.68	0.68			0.56	0.56	0.25	0.25	0.25			
v/c Ratio	0.66	0.83			0.35	0.26	0.30	0.31	0.89			
Control Delay	5.4	5.5			15.5	3.3	37.1	37.3	65.6			
Queue Delay	0.0	3.3			0.0	0.0	0.0	0.0	0.0			
Total Delay	5.4	8.8			15.5	3.3	37.1	37.3	65.6			
LOS	A	A			B	A	D	D	E			
Approach Delay		8.3			12.2			53.8				
Approach LOS		A			B			D				

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 11 (9%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 16.5		Intersection LOS: B	
Intersection Capacity Utilization 103.8%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 5: Chamblee Tucker Rd & I-258 NB Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.97	1.00			
Satd. Flow (prot)	1770	3539			3539	1583	1681	1710	1583			
Flt Permitted	0.31	1.00			1.00	1.00	0.95	0.97	1.00			
Satd. Flow (perm)	577	3539			3539	1583	1681	1710	1583			
Volume (vph)	261	1930	0	0	672	246	199	32	318	0	0	0
Peak-hour factor, PHF	0.86	0.96	0.92	0.92	0.95	0.93	0.92	0.83	0.88	0.92	0.92	0.92
Adj. Flow (vph)	303	2010	0	0	707	265	216	39	361	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	116	0	0	11	0	0	0
Lane Group Flow (vph)	303	2010	0	0	707	149	124	131	350	0	0	0
Turn Type	pm+pt					Perm	Perm		Perm			
Protected Phases	1	6			2			4				
Permitted Phases	6					2	4		4			
Actuated Green, G (s)	82.1	82.1			67.5	67.5	29.9	29.9	29.9			
Effective Green, g (s)	82.1	82.1			67.5	67.5	29.9	29.9	29.9			
Actuated g/C Ratio	0.68	0.68			0.56	0.56	0.25	0.25	0.25			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	500	2421			1991	890	419	426	394			
v/s Ratio Prot	0.05	c0.57			0.20							
v/s Ratio Perm	0.36					0.09	0.07	0.08	c0.22			
v/c Ratio	0.61	0.83			0.36	0.17	0.30	0.31	0.89			
Uniform Delay, d1	8.6	13.9			14.4	12.7	36.5	36.6	43.4			
Progression Factor	0.58	0.32			0.94	1.26	1.00	1.00	1.00			
Incremental Delay, d2	0.2	0.3			0.5	0.4	0.4	0.4	20.7			
Delay (s)	5.2	4.8			14.0	16.3	36.9	37.0	64.1			
Level of Service	A	A			B	B	D	D	E			
Approach Delay (s)		4.8			14.6			52.9			0.0	
Approach LOS		A			B			D			A	

Intersection Summary			
HCM Average Control Delay	14.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	103.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	3490	0	1770	3405	0	1770	1799	0	1770	1863	1583
Flt Permitted	0.262			0.083			0.950			0.950		
Satd. Flow (perm)	488	3490	0	155	3405	0	1770	1799	0	1770	1863	1583
Satd. Flow (RTOR)		12			46			10				213
Volume (vph)	234	1851	175	46	473	147	128	103	31	374	141	224
Lane Group Flow (vph)	249	2122	0	71	672	0	164	170	0	394	157	241
Turn Type	pm+pt			pm+pt			Split			Split		pm+ov
Protected Phases	1	6		5	2		4	4		8	8	1
Permitted Phases	6			2								8
Total Split (s)	21.0	61.0	0.0	12.0	52.0	0.0	20.0	20.0	0.0	27.0	27.0	21.0
Act Effct Green (s)	69.0	59.7		60.3	53.0		16.0	16.0		23.0	23.0	39.0
Actuated g/C Ratio	0.58	0.50		0.50	0.44		0.13	0.13		0.19	0.19	0.32
v/c Ratio	0.61	1.22		0.41	0.44		0.69	0.68		1.16	0.44	0.37
Control Delay	10.8	124.1		19.8	22.8		66.0	61.5		143.8	47.3	7.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	10.8	124.1		19.8	22.8		66.0	61.5		143.8	47.3	7.2
LOS	B	F		B	C		E	E		F	D	A
Approach Delay		112.2			22.5			63.7			83.1	
Approach LOS		F			C			E			F	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 34 (28%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.22			
Intersection Signal Delay: 87.2		Intersection LOS: F	
Intersection Capacity Utilization 101.4%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 6: Chamblee Tucker Rd & Northcrest Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.96		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3491		1770	3406		1770	1800		1770	1863	1583
Flt Permitted	0.28	1.00		0.08	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	526	3491		141	3406		1770	1800		1770	1863	1583
Volume (vph)	234	1851	175	46	473	147	128	103	31	374	141	224
Peak-hour factor, PHF	0.94	0.96	0.90	0.65	0.94	0.87	0.78	0.78	0.81	0.95	0.90	0.93
Adj. Flow (vph)	249	1928	194	71	503	169	164	132	38	394	157	241
RTOR Reduction (vph)	0	6	0	0	26	0	0	9	0	0	0	151
Lane Group Flow (vph)	249	2116	0	71	646	0	164	161	0	394	157	90
Turn Type	pm+pt			pm+pt			Split			Split		pm+ov
Protected Phases	1	6		5	2		4	4		8	8	1
Permitted Phases	6			2								8
Actuated Green, G (s)	69.0	58.9		59.1	53.0		16.0	16.0		23.0	23.0	35.0
Effective Green, g (s)	69.0	58.9		59.1	53.0		16.0	16.0		23.0	23.0	35.0
Actuated g/C Ratio	0.58	0.49		0.49	0.44		0.13	0.13		0.19	0.19	0.29
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	427	1713		152	1504		236	240		339	357	514
v/s Ratio Prot	c0.06	c0.61		0.02	0.19		c0.09	0.09		c0.22	0.08	0.02
v/s Ratio Perm	0.28			0.21								0.04
v/c Ratio	0.58	1.24		0.47	0.43		0.69	0.67		1.16	0.44	0.18
Uniform Delay, d1	14.3	30.6		27.8	23.1		49.7	49.5		48.5	42.8	31.7
Progression Factor	0.57	0.71		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.1	108.6		2.3	0.9		15.6	14.0		100.6	3.9	0.2
Delay (s)	9.2	130.2		30.1	24.0		65.3	63.5		149.1	46.7	31.9
Level of Service	A	F		C	C		E	E		F	D	C
Approach Delay (s)		117.5			24.6			64.4			93.1	
Approach LOS		F			C			E			F	

Intersection Summary					
HCM Average Control Delay	92.5	HCM Level of Service	F		
HCM Volume to Capacity ratio	1.11				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0		
Intersection Capacity Utilization	101.4%	ICU Level of Service	G		
Analysis Period (min)	15				
c Critical Lane Group					

Base 2009 PM Improved

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	3490	0	1770	3539	1583	1770	1799	0	1681	1731	1583
Flt Permitted	0.387			0.069			0.950			0.950	0.978	
Satd. Flow (perm)	721	3490	0	129	3539	1583	1770	1799	0	1681	1731	1583
Satd. Flow (RTOR)		13				169		10				107
Volume (vph)	234	1851	175	46	473	147	128	103	31	374	141	224
Lane Group Flow (vph)	249	2122	0	71	503	169	164	170	0	268	283	241
Turn Type	pm+pt			pm+pt		Perm	Split			Split		pm+ov
Protected Phases	1	6		5	2		4	4		8	8	1
Permitted Phases	6			2		2						8
Total Split (s)	17.0	67.0	0.0	12.0	62.0	62.0	20.0	20.0	0.0	21.0	21.0	17.0
Act Effct Green (s)	74.5	65.8		67.5	60.4	60.4	16.0	16.0		17.0	17.0	31.6
Actuated g/C Ratio	0.62	0.55		0.56	0.50	0.50	0.13	0.13		0.14	0.14	0.26
v/c Ratio	0.46	1.11		0.42	0.28	0.19	0.69	0.68		1.13	1.16	0.49
Control Delay	6.4	73.0		19.5	18.0	3.0	66.0	61.5		143.2	151.6	23.7
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	6.4	73.0		19.5	18.0	3.0	66.0	61.5		143.2	151.6	23.7
LOS	A	E		B	B	A	E	E		F	F	C
Approach Delay		66.0			14.7			63.7			109.8	
Approach LOS		E			B			E			F	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 101 (84%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.16			
Intersection Signal Delay: 65.0		Intersection LOS: E	
Intersection Capacity Utilization 94.8%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 6: Chamblee Tucker Rd & Northcrest Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00		0.95	0.95	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	0.98	1.00
Satd. Flow (prot)	1770	3491		1770	3539	1583	1770	1800		1681	1731	1583
Flt Permitted	0.39	1.00		0.07	1.00	1.00	0.95	1.00		0.95	0.98	1.00
Satd. Flow (perm)	732	3491		123	3539	1583	1770	1800		1681	1731	1583
Volume (vph)	234	1851	175	46	473	147	128	103	31	374	141	224
Peak-hour factor, PHF	0.94	0.96	0.90	0.65	0.94	0.87	0.78	0.78	0.81	0.95	0.90	0.93
Adj. Flow (vph)	249	1928	194	71	503	169	164	132	38	394	157	241
RTOR Reduction (vph)	0	6	0	0	0	84	0	9	0	0	0	82
Lane Group Flow (vph)	249	2116	0	71	503	85	164	161	0	268	283	159
Turn Type	pm+pt			pm+pt		Perm	Split			Split		pm+ov
Protected Phases	1	6		5	2		4	4		8	8	1
Permitted Phases	6			2		2						8
Actuated Green, G (s)	75.0	65.0		66.4	60.4	60.4	16.0	16.0		17.0	17.0	27.6
Effective Green, g (s)	75.0	65.0		66.4	60.4	60.4	16.0	16.0		17.0	17.0	27.6
Actuated g/C Ratio	0.62	0.54		0.55	0.50	0.50	0.13	0.13		0.14	0.14	0.23
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	549	1891		150	1781	797	236	240		238	245	417
v/s Ratio Prot	0.04	c0.61		0.02	0.14		c0.09	0.09		0.16	c0.16	c0.03
v/s Ratio Perm	0.24			0.24		0.05						0.07
v/c Ratio	0.45	1.12		0.47	0.28	0.11	0.69	0.67		1.13	1.16	0.38
Uniform Delay, d1	10.4	27.5		27.7	17.3	15.6	49.7	49.5		51.5	51.5	39.0
Progression Factor	0.50	0.68		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.3	57.8		2.3	0.4	0.3	15.6	14.0		96.5	105.9	0.6
Delay (s)	5.5	76.4		30.0	17.7	15.9	65.3	63.5		148.0	157.4	39.6
Level of Service	A	E		C	B	B	E	E		F	F	D
Approach Delay (s)		69.0			18.4			64.4			118.3	
Approach LOS		E			B			E			F	

Intersection Summary					
HCM Average Control Delay	69.0	HCM Level of Service	E		
HCM Volume to Capacity ratio	0.99				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0		
Intersection Capacity Utilization	94.8%	ICU Level of Service	F		
Analysis Period (min)	15				
c Critical Lane Group					

Future AM Intersection Analysis

Future 2009 AM

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	3539	1583	1770	5080	0	0	1683	0	0	1694	0
Flt Permitted	0.148			0.500				0.906			0.936	
Satd. Flow (perm)	276	3539	1583	931	5080	0	0	1558	0	0	1625	0
Satd. Flow (RTOR)			8					35			4	
Volume (vph)	13	324	4	6	1060	2	13	0	29	2	0	2
Lane Group Flow (vph)	26	348	8	10	1169	0	0	61	0	0	8	0
Turn Type	pm+pt		Perm	pm+pt			Perm			Perm		
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Total Split (s)	29.0	54.0	54.0	29.0	54.0	0.0	37.0	37.0	0.0	37.0	37.0	0.0
Act Effct Green (s)	78.5	77.1	77.1	76.0	72.7			33.0			33.0	
Actuated g/C Ratio	0.65	0.64	0.64	0.63	0.61			0.28			0.28	
v/c Ratio	0.10	0.15	0.01	0.02	0.38			0.13			0.02	
Control Delay	8.0	9.1	5.2	1.8	2.9			17.7			24.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Total Delay	8.0	9.1	5.2	1.8	2.9			17.7			24.5	
LOS	A	A	A	A	A			B			C	
Approach Delay		9.0			2.9			17.7			24.5	
Approach LOS		A			A			B			C	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 31 (26%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.38			
Intersection Signal Delay: 5.0		Intersection LOS: A	
Intersection Capacity Utilization 30.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: Chamblee Tucker Rd & Embry Hills Church Drwy

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91			1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00			0.92			0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1770	3539	1583	1770	5083			1683			1695	
Flt Permitted	0.19	1.00	1.00	0.54	1.00			0.91			0.94	
Satd. Flow (perm)	347	3539	1583	1012	5083			1557			1626	
Volume (vph)	13	324	4	6	1060	2	13	0	29	2	0	2
Peak-hour factor, PHF	0.50	0.93	0.50	0.62	0.91	0.50	0.50	0.92	0.84	0.50	0.92	0.50
Adj. Flow (vph)	26	348	8	10	1165	4	26	0	35	4	0	4
RTOR Reduction (vph)	0	0	3	0	0	0	0	25	0	0	3	0
Lane Group Flow (vph)	26	348	5	10	1169	0	0	36	0	0	5	0
Turn Type	pm+pt		Perm	pm+pt			Perm			Perm		
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Actuated Green, G (s)	77.8	73.9	73.9	72.2	71.1			33.0			33.0	
Effective Green, g (s)	77.8	73.9	73.9	72.2	71.1			33.0			33.0	
Actuated g/C Ratio	0.65	0.62	0.62	0.60	0.59			0.28			0.28	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	271	2179	975	616	3012			428			447	
v/s Ratio Prot	c0.00	0.10		0.00	c0.23							
v/s Ratio Perm	0.06		0.00	0.01				c0.02			0.00	
v/c Ratio	0.10	0.16	0.01	0.02	0.39			0.08			0.01	
Uniform Delay, d1	8.4	9.8	8.9	9.6	12.9			32.3			31.6	
Progression Factor	1.00	1.00	1.00	0.26	0.20			1.00			1.00	
Incremental Delay, d2	0.2	0.2	0.0	0.0	0.3			0.4			0.0	
Delay (s)	8.6	10.0	8.9	2.5	3.0			32.7			31.7	
Level of Service	A	A	A	A	A			C			C	
Approach Delay (s)		9.9			3.0			32.7			31.7	
Approach LOS		A			A			C			C	

Intersection Summary					
HCM Average Control Delay	5.8	HCM Level of Service		A	
HCM Volume to Capacity ratio	0.30				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)		16.0	
Intersection Capacity Utilization	30.5%	ICU Level of Service		A	
Analysis Period (min)	15				
c Critical Lane Group					

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	5085	1863	4872	0	1770	1583
Flt Permitted	0.118					0.950	
Satd. Flow (perm)	220	5085	1863	4872	0	1770	1583
Satd. Flow (RTOR)				108			22
Volume (vph)	21	358	0	1033	355	59	14
Lane Group Flow (vph)	30	381	0	1473	0	69	22
Turn Type	pm+pt		pm+pt				Perm
Protected Phases	1	6	5	2		8	
Permitted Phases	6		2				8
Total Split (s)	26.0	60.0	26.0	60.0	0.0	34.0	34.0
Act Effct Green (s)	82.0	82.0		75.9		30.0	30.0
Actuated g/C Ratio	0.68	0.68		0.63		0.25	0.25
v/c Ratio	0.13	0.11		0.47		0.16	0.05
Control Delay	7.6	5.5		2.4		36.3	13.3
Queue Delay	0.0	0.0		0.0		0.0	0.0
Total Delay	7.6	5.5		2.4		36.3	13.3
LOS	A	A		A		D	B
Approach Delay		5.7		2.4		30.8	
Approach LOS		A		A		C	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 18 (15%), Referenced to phase 2:WBTU and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay: 4.4		Intersection LOS: A	
Intersection Capacity Utilization 37.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: Chamblee Tucker Rd & Buckeye Rd

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0		4.0	4.0
Lane Util. Factor	1.00	0.91		0.91		1.00	1.00
Frt	1.00	1.00		0.96		1.00	0.85
Flt Protected	0.95	1.00		1.00		0.95	1.00
Satd. Flow (prot)	1770	5085		4874		1770	1583
Flt Permitted	0.13	1.00		1.00		0.95	1.00
Satd. Flow (perm)	233	5085		4874		1770	1583
Volume (vph)	21	358	0	1033	355	59	14
Peak-hour factor, PHF	0.71	0.94	0.92	0.97	0.87	0.86	0.65
Adj. Flow (vph)	30	381	0	1065	408	69	22
RTOR Reduction (vph)	0	0	0	41	0	0	17
Lane Group Flow (vph)	30	381	0	1432	0	69	6
Turn Type	pm+pt		pm+pt				Perm
Protected Phases	1	6	5	2		8	
Permitted Phases	6		2				8
Actuated Green, G (s)	82.0	82.0		74.3		30.0	30.0
Effective Green, g (s)	82.0	82.0		74.3		30.0	30.0
Actuated g/C Ratio	0.68	0.68		0.62		0.25	0.25
Clearance Time (s)	4.0	4.0		4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	207	3475		3018		443	396
v/s Ratio Prot	0.00	c0.07		c0.29		c0.04	
v/s Ratio Perm	0.09						0.00
v/c Ratio	0.14	0.11		0.47		0.16	0.01
Uniform Delay, d1	7.9	6.5		12.3		35.1	33.9
Progression Factor	1.03	0.84		0.17		1.00	1.00
Incremental Delay, d2	0.3	0.1		0.5		0.7	0.1
Delay (s)	8.5	5.5		2.6		35.9	33.9
Level of Service	A	A		A		D	C
Approach Delay (s)		5.7		2.6		35.4	
Approach LOS		A		A		D	

Intersection Summary			
HCM Average Control Delay	4.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	37.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	5050	0	0	1770	5050	0	0	1722	0	1770	1622
Flt Permitted	0.123				0.393				0.795		0.635	
Satd. Flow (perm)	229	5050	0	0	732	5050	0	0	1411	0	1183	1622
Satd. Flow (RTOR)		6				8			23			25
Volume (vph)	50	406	10	124	39	1280	33	67	1	51	42	1
Lane Group Flow (vph)	60	457	0	0	259	1416	0	0	194	0	55	29
Turn Type	pm+pt			pm+pt	pm+pt			Perm			Perm	
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2			4			8	
Total Split (s)	23.0	45.0	0.0	34.0	34.0	56.0	0.0	41.0	41.0	0.0	41.0	41.0
Act Effct Green (s)	67.3	60.1			74.8	65.8			37.0		37.0	37.0
Actuated g/C Ratio	0.56	0.50			0.62	0.55			0.31		0.31	0.31
v/c Ratio	0.27	0.18			0.47	0.51			0.43		0.15	0.06
Control Delay	15.2	16.8			5.8	9.0			32.5		31.6	12.6
Queue Delay	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Total Delay	15.2	16.8			5.8	9.0			32.5		31.6	12.6
LOS	B	B			A	A			C		C	B
Approach Delay		16.6				8.5			32.5			25.0
Approach LOS		B				A			C			C

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 8 (7%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay: 12.7		Intersection LOS: B	
Intersection Capacity Utilization 52.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Chamblee Tucker Rd & Big Lots Driveway

Lane Group	SBR
Lane Configurations	
Total Lost Time (s)	4.0
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Satd. Flow (RTOR)	
Volume (vph)	23
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0			4.0		4.0	4.0
Lane Util. Factor	1.00	0.91			1.00	0.91			1.00		1.00	1.00
Frt	1.00	0.99			1.00	0.99			0.95		1.00	0.87
Flt Protected	0.95	1.00			0.95	1.00			0.97		0.95	1.00
Satd. Flow (prot)	1770	5052			1770	5048			1721		1770	1622
Flt Permitted	0.14	1.00			0.43	1.00			0.80		0.64	1.00
Satd. Flow (perm)	257	5052			807	5048			1411		1183	1622
Volume (vph)	50	406	10	124	39	1280	33	67	1	51	42	1
Peak-hour factor, PHF	0.84	0.93	0.50	0.64	0.60	0.95	0.48	0.55	0.25	0.75	0.77	0.25
Adj. Flow (vph)	60	437	20	194	65	1347	69	122	4	68	55	4
RTOR Reduction (vph)	0	3	0	0	0	4	0	0	16	0	0	17
Lane Group Flow (vph)	60	454	0	0	259	1412	0	0	178	0	55	12
Turn Type	pm+pt			pm+pt	pm+pt			Perm			Perm	
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2			4			8	
Actuated Green, G (s)	66.1	60.1			75.0	65.0			37.0		37.0	37.0
Effective Green, g (s)	66.1	60.1			75.0	65.0			37.0		37.0	37.0
Actuated g/C Ratio	0.55	0.50			0.62	0.54			0.31		0.31	0.31
Clearance Time (s)	4.0	4.0			4.0	4.0			4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0		3.0	3.0
Lane Grp Cap (vph)	217	2530			592	2734			435		365	500
v/s Ratio Prot	0.01	0.09			c0.04	c0.28						0.01
v/s Ratio Perm	0.14				0.23				c0.13		0.05	
v/c Ratio	0.28	0.18			0.44	0.52			0.41		0.15	0.02
Uniform Delay, d1	13.4	16.4			10.1	17.5			32.9		30.1	28.9
Progression Factor	1.32	1.01			0.31	0.48			1.00		1.00	1.00
Incremental Delay, d2	0.7	0.2			0.5	0.7			2.8		0.9	0.1
Delay (s)	18.4	16.7			3.7	9.0			35.7		31.0	29.0
Level of Service	B	B			A	A			D		C	C
Approach Delay (s)		16.9				8.2			35.7			30.3
Approach LOS		B				A			D			C

Intersection Summary			
HCM Average Control Delay	12.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	23
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	25
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1681	1724	1583
Flt Permitted				0.361						0.950	0.974	
Satd. Flow (perm)	0	3539	1583	672	3539	0	0	0	0	1681	1724	1583
Satd. Flow (RTOR)			211									345
Volume (vph)	0	365	194	304	1129	0	0	0	0	179	48	286
Lane Group Flow (vph)	0	401	211	342	1201	0	0	0	0	128	135	345
Turn Type			Free	pm+pt						Perm		Free
Protected Phases		6		5	2						8	
Permitted Phases			Free	2						8		Free
Total Split (s)	0.0	38.0	0.0	46.0	84.0	0.0	0.0	0.0	0.0	36.0	36.0	0.0
Act Effct Green (s)		67.3	120.0	80.0	80.0					32.0	32.0	120.0
Actuated g/C Ratio		0.56	1.00	0.67	0.67					0.27	0.27	1.00
v/c Ratio		0.20	0.13	0.65	0.51					0.29	0.29	0.22
Control Delay		12.1	0.2	9.4	2.8					37.1	37.2	0.3
Queue Delay		0.0	0.0	0.0	0.2					0.0	0.0	0.0
Total Delay		12.1	0.2	9.4	2.9					37.1	37.2	0.3
LOS		B	A	A	A					D	D	A
Approach Delay		8.0			4.4						16.2	
Approach LOS		A			A						B	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 1 (1%), Referenced to phase 2:WBTL and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 7.8		Intersection LOS: A	
Intersection Capacity Utilization 82.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 4: Chamblee Tucker Rd & I-285 SB Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.95	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		3539	1583	1770	3539					1681	1724	1583
Flt Permitted		1.00	1.00	0.47	1.00					0.95	0.97	1.00
Satd. Flow (perm)		3539	1583	867	3539					1681	1724	1583
Volume (vph)	0	365	194	304	1129	0	0	0	0	179	48	286
Peak-hour factor, PHF	0.92	0.91	0.92	0.89	0.94	0.92	0.92	0.92	0.92	0.90	0.75	0.83
Adj. Flow (vph)	0	401	211	342	1201	0	0	0	0	199	64	345
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	401	211	342	1201	0	0	0	0	128	135	345
Turn Type			Free	pm+pt						Perm		Free
Protected Phases		6		5	2						8	
Permitted Phases			Free	2						8		Free
Actuated Green, G (s)		67.3	120.0	80.0	80.0					32.0	32.0	120.0
Effective Green, g (s)		67.3	120.0	80.0	80.0					32.0	32.0	120.0
Actuated g/C Ratio		0.56	1.00	0.67	0.67					0.27	0.27	1.00
Clearance Time (s)		4.0		4.0	4.0					4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0					3.0	3.0	
Lane Grp Cap (vph)		1985	1583	643	2359					448	460	1583
v/s Ratio Prot		0.11		0.04	c0.34							
v/s Ratio Perm			0.13	c0.32						0.08	0.08	0.22
v/c Ratio		0.20	0.13	0.53	0.51					0.29	0.29	0.22
Uniform Delay, d1		13.1	0.0	8.9	10.1					34.9	35.0	0.0
Progression Factor		0.88	1.00	0.52	0.21					1.00	1.00	1.00
Incremental Delay, d2		0.2	0.2	0.7	0.6					1.6	1.6	0.3
Delay (s)		11.7	0.2	5.3	2.7					36.5	36.6	0.3
Level of Service		B	A	A	A					D	D	A
Approach Delay (s)		7.7			3.3			0.0			16.0	
Approach LOS		A			A			A			B	

Intersection Summary					
HCM Average Control Delay	7.1	HCM Level of Service		A	
HCM Volume to Capacity ratio	0.46				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)		8.0	
Intersection Capacity Utilization	82.5%	ICU Level of Service		E	
Analysis Period (min)	15				
c Critical Lane Group					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1699	1583	0	0	0
Flt Permitted	0.199						0.950	0.960				
Satd. Flow (perm)	371	3539	0	0	3539	1583	1681	1699	1583	0	0	0
Satd. Flow (RTOR)						761			211			
Volume (vph)	134	478	0	0	899	807	506	41	192	0	0	0
Lane Group Flow (vph)	149	514	0	0	967	823	310	327	211	0	0	0
Turn Type	pm+pt					Perm	Perm		Perm			
Protected Phases	1	6			2			4				
Permitted Phases	6					2	4		4			
Total Split (s)	17.0	79.0	0.0	0.0	62.0	62.0	41.0	41.0	41.0	0.0	0.0	0.0
Act Effct Green (s)	84.0	84.0			67.0	67.0	28.0	28.0	28.0			
Actuated g/C Ratio	0.70	0.70			0.56	0.56	0.23	0.23	0.23			
v/c Ratio	0.36	0.21			0.49	0.67	0.79	0.82	0.40			
Control Delay	8.2	2.9			7.2	5.0	57.1	60.1	6.5			
Queue Delay	0.0	0.0			0.0	0.3	0.0	0.0	0.0			
Total Delay	8.2	2.9			7.2	5.3	57.1	60.1	6.5			
LOS	A	A			A	A	E	E	A			
Approach Delay		4.1			6.3			45.7				
Approach LOS		A			A			D				

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 106 (88%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 16.0		Intersection LOS: B	
Intersection Capacity Utilization 82.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 5: Chamblee Tucker Rd & I-258 NB Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (prot)	1770	3539			3539	1583	1681	1699	1583			
Flt Permitted	0.23	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (perm)	420	3539			3539	1583	1681	1699	1583			
Volume (vph)	134	478	0	0	899	807	506	41	192	0	0	0
Peak-hour factor, PHF	0.90	0.93	0.92	0.92	0.93	0.98	0.87	0.75	0.91	0.92	0.92	0.92
Adj. Flow (vph)	149	514	0	0	967	823	582	55	211	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	336	0	0	162	0	0	0
Lane Group Flow (vph)	149	514	0	0	967	487	310	327	49	0	0	0
Turn Type	pm+pt					Perm	Perm		Perm			
Protected Phases	1	6			2			4				
Permitted Phases	6					2	4		4			
Actuated Green, G (s)	84.0	84.0			67.0	67.0	28.0	28.0	28.0			
Effective Green, g (s)	84.0	84.0			67.0	67.0	28.0	28.0	28.0			
Actuated g/C Ratio	0.70	0.70			0.56	0.56	0.23	0.23	0.23			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	440	2477			1976	884	392	396	369			
v/s Ratio Prot	c0.04	0.15			0.27							
v/s Ratio Perm	0.20					c0.31	0.18	0.19	0.03			
v/c Ratio	0.34	0.21			0.49	0.55	0.79	0.83	0.13			
Uniform Delay, d1	16.0	6.3			16.1	16.9	43.2	43.7	36.4			
Progression Factor	0.42	0.39			0.41	2.08	1.00	1.00	1.00			
Incremental Delay, d2	0.5	0.2			0.1	0.2	10.4	13.1	0.2			
Delay (s)	7.2	2.6			6.7	35.4	53.7	56.8	36.6			
Level of Service	A	A			A	D	D	E	D			
Approach Delay (s)		3.7			19.9			50.6			0.0	
Approach LOS		A			B			D			A	

Intersection Summary			
HCM Average Control Delay	24.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	3465	0	1770	3412	0	1770	1816	0	1770	1863	1583
Flt Permitted	0.071			0.462			0.950			0.950		
Satd. Flow (perm)	132	3465	0	861	3412	0	1770	1816	0	1770	1863	1583
Satd. Flow (RTOR)		23			55			7				93
Volume (vph)	137	408	59	13	1527	411	79	68	8	94	29	122
Lane Group Flow (vph)	163	515	0	17	2121	0	110	97	0	122	39	154
Turn Type	pm+pt			pm+pt			Split			Split		pm+ov
Protected Phases	1	6		5	2		4	4		8	8	1
Permitted Phases	6			2								8
Total Split (s)	12.0	68.0	0.0	12.0	68.0	0.0	20.0	20.0	0.0	20.0	20.0	12.0
Act Effct Green (s)	71.2	71.2		64.0	64.0		16.0	16.0		16.0	16.0	28.0
Actuated g/C Ratio	0.59	0.59		0.53	0.53		0.13	0.13		0.13	0.13	0.23
v/c Ratio	0.87	0.25		0.03	1.15		0.47	0.39		0.52	0.16	0.35
Control Delay	63.2	13.9		13.7	101.5		55.2	49.2		57.0	47.9	18.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	63.2	13.9		13.7	101.5		55.2	49.2		57.0	47.9	18.5
LOS	E	B		B	F		E	D		E	D	B
Approach Delay		25.8			100.8			52.4			37.1	
Approach LOS		C			F			D			D	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 64 (53%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.15			
Intersection Signal Delay: 76.5		Intersection LOS: E	
Intersection Capacity Utilization 84.8%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 6: Chamblee Tucker Rd & Northcrest Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.96		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3465		1770	3411		1770	1817		1770	1863	1583
Flt Permitted	0.07	1.00		0.46	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	123	3465		860	3411		1770	1817		1770	1863	1583
Volume (vph)	137	408	59	13	1527	411	79	68	8	94	29	122
Peak-hour factor, PHF	0.84	0.92	0.82	0.75	0.95	0.80	0.72	0.84	0.50	0.77	0.75	0.79
Adj. Flow (vph)	163	443	72	17	1607	514	110	81	16	122	39	154
RTOR Reduction (vph)	0	10	0	0	26	0	0	6	0	0	0	74
Lane Group Flow (vph)	163	505	0	17	2095	0	110	91	0	122	39	80
Turn Type	pm+pt			pm+pt			Split			Split		pm+ov
Protected Phases	1	6		5	2		4	4		8	8	1
Permitted Phases	6			2								8
Actuated Green, G (s)	68.8	68.8		64.0	64.0		16.0	16.0		16.0	16.0	24.0
Effective Green, g (s)	68.8	68.8		64.0	64.0		16.0	16.0		16.0	16.0	24.0
Actuated g/C Ratio	0.57	0.57		0.53	0.53		0.13	0.13		0.13	0.13	0.20
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	180	1987		483	1819		236	242		236	248	369
v/s Ratio Prot	c0.06	0.15		0.00	c0.61		c0.06	0.05		c0.07	0.02	0.01
v/s Ratio Perm	0.46			0.02								0.04
v/c Ratio	0.91	0.25		0.04	1.15		0.47	0.38		0.52	0.16	0.22
Uniform Delay, d1	57.6	12.8		13.3	28.0		48.1	47.4		48.4	46.0	40.1
Progression Factor	1.09	1.14		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	40.4	0.3		0.0	75.2		6.5	4.4		7.9	1.3	0.3
Delay (s)	103.2	14.9		13.4	103.2		54.5	51.9		56.3	47.4	40.4
Level of Service	F	B		B	F		D	D		E	D	D
Approach Delay (s)		36.1			102.5			53.3			47.4	
Approach LOS		D			F			D			D	

Intersection Summary					
HCM Average Control Delay	80.8	HCM Level of Service		F	
HCM Volume to Capacity ratio	0.93				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)		16.0	
Intersection Capacity Utilization	84.8%	ICU Level of Service		E	
Analysis Period (min)	15				
c Critical Lane Group					

Future 2009 AM Improved

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	3465	0	1770	3539	1583	1770	1816	0	1681	1724	1583
Flt Permitted	0.075			0.375			0.950			0.950	0.974	
Satd. Flow (perm)	140	3465	0	699	3539	1583	1770	1816	0	1681	1724	1583
Satd. Flow (RTOR)		23				260		7				94
Volume (vph)	137	408	59	13	1527	411	79	68	8	94	29	122
Lane Group Flow (vph)	163	515	0	17	1607	514	110	97	0	78	83	154
Turn Type	pm+pt			pm+pt		Perm	Split			Split		pm+ov
Protected Phases	1	6		5	2		4	4		8	8	1
Permitted Phases	6			2		2						8
Total Split (s)	15.0	68.0	0.0	12.0	65.0	65.0	20.0	20.0	0.0	20.0	20.0	15.0
Act Effct Green (s)	71.7	71.7		61.0	61.0	61.0	16.0	16.0		16.0	16.0	27.0
Actuated g/C Ratio	0.60	0.60		0.51	0.51	0.51	0.13	0.13		0.13	0.13	0.22
v/c Ratio	0.70	0.25		0.04	0.89	0.55	0.47	0.39		0.35	0.36	0.36
Control Delay	37.3	6.9		15.0	34.4	11.7	55.2	49.2		52.2	52.4	12.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	37.3	6.9		15.0	34.4	11.7	55.2	49.2		52.2	52.4	12.5
LOS	D	A		B	C	B	E	D		D	D	B
Approach Delay		14.2			28.8			52.4			32.8	
Approach LOS		B			C			D			C	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 117 (98%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 27.7		Intersection LOS: C	
Intersection Capacity Utilization 70.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 6: Chamblee Tucker Rd & Northcrest Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00		0.95	0.95	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	0.97	1.00
Satd. Flow (prot)	1770	3465		1770	3539	1583	1770	1817		1681	1724	1583
Flt Permitted	0.07	1.00		0.39	1.00	1.00	0.95	1.00		0.95	0.97	1.00
Satd. Flow (perm)	133	3465		722	3539	1583	1770	1817		1681	1724	1583
Volume (vph)	137	408	59	13	1527	411	79	68	8	94	29	122
Peak-hour factor, PHF	0.84	0.92	0.82	0.75	0.95	0.80	0.72	0.84	0.50	0.77	0.75	0.79
Adj. Flow (vph)	163	443	72	17	1607	514	110	81	16	122	39	154
RTOR Reduction (vph)	0	10	0	0	0	133	0	6	0	0	0	71
Lane Group Flow (vph)	163	505	0	17	1607	381	110	91	0	78	83	83
Turn Type	pm+pt			pm+pt		Perm	Split			Split		pm+ov
Protected Phases	1	6		5	2		4	4		8	8	1
Permitted Phases	6			2		2						8
Actuated Green, G (s)	69.3	69.3		58.6	58.6	58.6	16.0	16.0		16.0	16.0	29.4
Effective Green, g (s)	69.3	69.3		58.6	58.6	58.6	16.0	16.0		16.0	16.0	29.4
Actuated g/C Ratio	0.58	0.58		0.49	0.49	0.49	0.13	0.13		0.13	0.13	0.24
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	260	2001		376	1728	773	236	242		224	230	388
v/s Ratio Prot	c0.07	0.15		0.00	c0.45		c0.06	0.05		0.05	c0.05	0.02
v/s Ratio Perm	0.29			0.02		0.24						0.03
v/c Ratio	0.63	0.25		0.05	0.93	0.49	0.47	0.38		0.35	0.36	0.21
Uniform Delay, d1	43.6	12.5		16.2	28.8	20.7	48.1	47.4		47.3	47.3	36.1
Progression Factor	0.53	0.57		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	4.6	0.3		0.0	10.4	2.2	6.5	4.4		4.2	4.4	0.3
Delay (s)	27.8	7.4		16.3	39.2	22.9	54.5	51.9		51.5	51.7	36.4
Level of Service	C	A		B	D	C	D	D		D	D	D
Approach Delay (s)		12.3			35.1			53.3			44.2	
Approach LOS		B			D			D			D	

Intersection Summary					
HCM Average Control Delay	32.4	HCM Level of Service		C	
HCM Volume to Capacity ratio	0.71				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	70.8%	ICU Level of Service		C	
Analysis Period (min)	15				
c Critical Lane Group					

Future PM Intersection Analysis

Future 2009 PM

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	3539	1583	1770	5085	0	0	1643	0	0	1863	0
Flt Permitted	0.377			0.063				0.967				
Satd. Flow (perm)	702	3539	1583	117	5085	0	0	1603	0	0	1863	0
Satd. Flow (RTOR)			9					36				
Volume (vph)	3	1638	11	67	614	0	6	0	17	0	0	0
Lane Group Flow (vph)	4	1706	18	76	667	0	0	44	0	0	0	0
Turn Type	pm+pt		Perm	pm+pt			Perm			Perm		
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Total Split (s)	16.0	79.0	79.0	17.0	80.0	0.0	24.0	24.0	0.0	24.0	24.0	0.0
Act Effct Green (s)	85.8	81.4	81.4	92.0	90.1			20.0				
Actuated g/C Ratio	0.72	0.68	0.68	0.77	0.75			0.17				
v/c Ratio	0.01	0.71	0.02	0.37	0.17			0.15				
Control Delay	3.7	15.1	5.4	25.9	3.9			18.3				
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0				
Total Delay	3.7	15.1	5.4	25.9	3.9			18.3				
LOS	A	B	A	C	A			B				
Approach Delay		14.9			6.2			18.3				
Approach LOS		B			A			B				

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 87 (73%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 12.4		Intersection LOS: B	
Intersection Capacity Utilization 62.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Chamblee Tucker Rd & Embry Hills Church Drwy

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0			4.0				
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91			1.00				
Frt	1.00	1.00	0.85	1.00	1.00			0.89				
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.99				
Satd. Flow (prot)	1770	3539	1583	1770	5085			1642				
Flt Permitted	0.39	1.00	1.00	0.08	1.00			0.97				
Satd. Flow (perm)	721	3539	1583	140	5085			1603				
Volume (vph)	3	1638	11	67	614	0	6	0	17	0	0	0
Peak-hour factor, PHF	0.75	0.96	0.62	0.88	0.92	0.92	0.75	0.92	0.47	0.92	0.92	0.92
Adj. Flow (vph)	4	1706	18	76	667	0	8	0	36	0	0	0
RTOR Reduction (vph)	0	0	3	0	0	0	0	30	0	0	0	0
Lane Group Flow (vph)	4	1706	15	76	667	0	0	14	0	0	0	0
Turn Type	pm+pt		Perm	pm+pt			Perm			Perm		
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6		6	2			4			8		
Actuated Green, G (s)	81.7	80.6	80.6	92.0	86.9			20.0				
Effective Green, g (s)	81.7	80.6	80.6	92.0	86.9			20.0				
Actuated g/C Ratio	0.68	0.67	0.67	0.77	0.72			0.17				
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0			4.0				
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0				
Lane Grp Cap (vph)	500	2377	1063	208	3682			267				
v/s Ratio Prot	0.00	c0.48		c0.02	0.13							
v/s Ratio Perm	0.01		0.01	0.26				c0.01				
v/c Ratio	0.01	0.72	0.01	0.37	0.18			0.05				
Uniform Delay, d1	6.1	12.5	6.5	12.4	5.3			42.0				
Progression Factor	1.00	1.00	1.00	3.57	0.84			1.00				
Incremental Delay, d2	0.0	1.9	0.0	1.1	0.1			0.4				
Delay (s)	6.1	14.4	6.6	45.5	4.5			42.4				
Level of Service	A	B	A	D	A			D				
Approach Delay (s)		14.3			8.7			42.4			0.0	
Approach LOS		B			A			D			A	

Intersection Summary					
HCM Average Control Delay	13.1	HCM Level of Service		B	
HCM Volume to Capacity ratio	0.57				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	62.3%	ICU Level of Service		B	
Analysis Period (min)	15				
c Critical Lane Group					

Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	5085	1863	4958	0	1770	1583
Flt Permitted	0.227					0.950	
Satd. Flow (perm)	423	5085	1863	4958	0	1770	1583
Satd. Flow (RTOR)				45			60
Volume (vph)	23	1675	0	657	112	367	50
Lane Group Flow (vph)	29	1801	0	821	0	437	60
Turn Type	pm+pt		pm+pt				Perm
Protected Phases	1	6	5	2		8	
Permitted Phases	6		2				8
Total Split (s)	14.0	57.0	14.0	57.0	0.0	49.0	49.0
Act Effct Green (s)	67.0	67.0		60.9		45.0	45.0
Actuated g/C Ratio	0.56	0.56		0.51		0.38	0.38
v/c Ratio	0.10	0.63		0.32		0.66	0.10
Control Delay	2.5	7.2		15.2		36.9	6.4
Queue Delay	0.0	0.0		0.0		0.0	0.0
Total Delay	2.5	7.2		15.2		36.9	6.4
LOS	A	A		B		D	A
Approach Delay		7.1		15.2		33.2	
Approach LOS		A		B		C	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 4 (3%), Referenced to phase 2:WBTU and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 13.4		Intersection LOS: B	
Intersection Capacity Utilization 59.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Chamblee Tucker Rd & Buckeye Rd

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0		4.0	4.0
Lane Util. Factor	1.00	0.91		0.91		1.00	1.00
Frt	1.00	1.00		0.97		1.00	0.85
Flt Protected	0.95	1.00		1.00		0.95	1.00
Satd. Flow (prot)	1770	5085		4958		1770	1583
Flt Permitted	0.27	1.00		1.00		0.95	1.00
Satd. Flow (perm)	497	5085		4958		1770	1583
Volume (vph)	23	1675	0	657	112	367	50
Peak-hour factor, PHF	0.79	0.93	0.92	0.96	0.82	0.84	0.84
Adj. Flow (vph)	29	1801	0	684	137	437	60
RTOR Reduction (vph)	0	0	0	23	0	0	38
Lane Group Flow (vph)	29	1801	0	798	0	437	23
Turn Type	pm+pt		pm+pt				Perm
Protected Phases	1	6	5	2		8	
Permitted Phases	6		2				8
Actuated Green, G (s)	67.0	67.0		59.3		45.0	45.0
Effective Green, g (s)	67.0	67.0		59.3		45.0	45.0
Actuated g/C Ratio	0.56	0.56		0.49		0.38	0.38
Clearance Time (s)	4.0	4.0		4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	317	2839		2450		664	594
v/s Ratio Prot	0.00	c0.35		0.16		c0.25	
v/s Ratio Perm	0.05						0.01
v/c Ratio	0.09	0.63		0.33		0.66	0.04
Uniform Delay, d1	12.5	18.1		18.3		31.1	23.8
Progression Factor	0.17	0.35		0.87		1.00	1.00
Incremental Delay, d2	0.1	0.8		0.3		5.1	0.1
Delay (s)	2.2	7.2		16.3		36.2	23.9
Level of Service	A	A		B		D	C
Approach Delay (s)		7.1		16.3		34.7	
Approach LOS		A		B		C	

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	5070	0	0	1770	4928	0	0	1720	0	1770	1665
Flt Permitted	0.300				0.075				0.785		0.614	
Satd. Flow (perm)	559	5070	0	0	140	4928	0	0	1391	0	1144	1665
Satd. Flow (RTOR)		3				96			22			38
Volume (vph)	55	1973	45	364	116	692	160	66	6	57	241	10
Lane Group Flow (vph)	71	2103	0	0	550	914	0	0	209	0	268	54
Turn Type	pm+pt			pm+pt	pm+pt			Perm			Perm	
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2			4			8	
Total Split (s)	12.0	53.0	0.0	36.0	36.0	77.0	0.0	31.0	31.0	0.0	31.0	31.0
Act Effct Green (s)	55.6	49.0			85.0	76.3			27.0		27.0	27.0
Actuated g/C Ratio	0.46	0.41			0.71	0.64			0.22		0.22	0.22
v/c Ratio	0.22	1.01			1.03	0.29			0.63		1.04	0.13
Control Delay	8.8	45.8			80.7	8.8			47.2		113.4	17.4
Queue Delay	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Total Delay	8.8	45.8			80.7	8.8			47.2		113.4	17.4
LOS	A	D			F	A			D		F	B
Approach Delay		44.6				35.8			47.2			97.3
Approach LOS		D				D			D			F

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 114 (95%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay: 45.7		Intersection LOS: D	
Intersection Capacity Utilization 95.7%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 3: Chamblee Tucker Rd & Big Lots Driveway

Lane Group	SBR
Lane Configurations	
Total Lost Time (s)	4.0
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Satd. Flow (RTOR)	
Volume (vph)	31
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0			4.0		4.0	4.0
Lane Util. Factor	1.00	0.91			1.00	0.91			1.00		1.00	1.00
Frt	1.00	1.00			1.00	0.97			0.95		1.00	0.89
Flt Protected	0.95	1.00			0.95	1.00			0.97		0.95	1.00
Satd. Flow (prot)	1770	5068			1770	4930			1720		1770	1666
Flt Permitted	0.30	1.00			0.08	1.00			0.79		0.61	1.00
Satd. Flow (perm)	559	5068			141	4930			1391		1145	1666
Volume (vph)	55	1973	45	364	116	692	160	66	6	57	241	10
Peak-hour factor, PHF	0.77	0.96	0.94	0.87	0.88	0.95	0.86	0.53	0.75	0.75	0.90	0.62
Adj. Flow (vph)	71	2055	48	418	132	728	186	125	8	76	268	16
RTOR Reduction (vph)	0	2	0	0	0	36	0	0	17	0	0	29
Lane Group Flow (vph)	71	2101	0	0	550	878	0	0	192	0	268	25
Turn Type	pm+pt			pm+pt	pm+pt			Perm			Perm	
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2			4			8	
Actuated Green, G (s)	54.5	49.0			85.0	75.5			27.0		27.0	27.0
Effective Green, g (s)	54.5	49.0			85.0	75.5			27.0		27.0	27.0
Actuated g/C Ratio	0.45	0.41			0.71	0.63			0.22		0.22	0.22
Clearance Time (s)	4.0	4.0			4.0	4.0			4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0		3.0	3.0
Lane Grp Cap (vph)	309	2069			534	3102			313		258	375
v/s Ratio Prot	0.01	0.41			c0.27	0.18						0.01
v/s Ratio Perm	0.09				c0.46				0.14		c0.23	
v/c Ratio	0.23	1.02			1.03	0.28			0.61		1.04	0.07
Uniform Delay, d1	18.6	35.5			46.2	10.0			41.8		46.5	36.6
Progression Factor	0.79	0.66			1.04	0.96			1.00		1.00	1.00
Incremental Delay, d2	0.3	21.4			44.6	0.2			8.7		66.5	0.3
Delay (s)	15.1	45.0			92.4	9.9			50.5		113.0	36.9
Level of Service	B	D			F	A			D		F	D
Approach Delay (s)		44.1				40.9			50.5			100.2
Approach LOS		D				D			D			F

Intersection Summary			
HCM Average Control Delay	47.6	HCM Level of Service	D
HCM Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	95.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	31
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	38
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	0	3539	1583	1770	3539	0	0	0	0	1681	1720	1583
Flt Permitted				0.083						0.950	0.972	
Satd. Flow (perm)	0	3539	1583	155	3539	0	0	0	0	1681	1720	1583
Satd. Flow (RTOR)			553									392
Volume (vph)	0	1173	1317	284	609	0	0	0	0	1143	242	771
Lane Group Flow (vph)	0	1348	1606	293	648	0	0	0	0	733	772	918
Turn Type			Free	pm+pt						Perm		Free
Protected Phases		6		5	2						8	
Permitted Phases			Free	2						8		Free
Total Split (s)	0.0	48.0	0.0	18.0	66.0	0.0	0.0	0.0	0.0	54.0	54.0	0.0
Act Effct Green (s)		44.0	120.0	62.0	62.0					50.0	50.0	120.0
Actuated g/C Ratio		0.37	1.00	0.52	0.52					0.42	0.42	1.00
v/c Ratio		1.04	1.01	1.09	0.35					1.05	1.08	0.58
Control Delay		46.4	36.3	119.3	15.5					81.8	90.6	1.6
Queue Delay		1.7	0.0	0.0	0.0					0.5	0.6	0.0
Total Delay		48.1	36.3	119.3	15.5					82.4	91.2	1.6
LOS		D	D	F	B					F	F	A
Approach Delay		41.7			47.8						54.6	
Approach LOS		D			D						D	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 12 (10%), Referenced to phase 2:WBTL and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay: 47.5		Intersection LOS: D	
Intersection Capacity Utilization 104.8%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 4: Chamblee Tucker Rd & I-285 SB Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.95	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		3539	1583	1770	3539					1681	1720	1583
Flt Permitted		1.00	1.00	0.08	1.00					0.95	0.97	1.00
Satd. Flow (perm)		3539	1583	155	3539					1681	1720	1583
Volume (vph)	0	1173	1317	284	609	0	0	0	0	1143	242	771
Peak-hour factor, PHF	0.92	0.87	0.82	0.97	0.94	0.92	0.92	0.92	0.92	0.97	0.74	0.84
Adj. Flow (vph)	0	1348	1606	293	648	0	0	0	0	1178	327	918
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1348	1606	293	648	0	0	0	0	733	772	918
Turn Type			Free	pm+pt						Perm		Free
Protected Phases		6		5	2						8	
Permitted Phases			Free	2						8		Free
Actuated Green, G (s)		44.0	120.0	62.0	62.0					50.0	50.0	120.0
Effective Green, g (s)		44.0	120.0	62.0	62.0					50.0	50.0	120.0
Actuated g/C Ratio		0.37	1.00	0.52	0.52					0.42	0.42	1.00
Clearance Time (s)		4.0		4.0	4.0					4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0					3.0	3.0	
Lane Grp Cap (vph)		1298	1583	269	1828					700	717	1583
v/s Ratio Prot		0.38		0.13	0.18							
v/s Ratio Perm			c1.01	c0.44						0.44	0.45	0.58
v/c Ratio		1.04	1.01	1.09	0.35					1.05	1.08	0.58
Uniform Delay, d1		38.0	60.0	49.6	17.2					35.0	35.0	0.0
Progression Factor		0.51	1.00	0.90	0.86					1.00	1.00	1.00
Incremental Delay, d2		25.1	16.1	79.4	0.5					47.0	56.2	1.6
Delay (s)		44.4	76.1	123.9	15.3					82.0	91.2	1.6
Level of Service		D	E	F	B					F	F	A
Approach Delay (s)		61.7			49.2			0.0			54.4	
Approach LOS		E			D			A			D	

Intersection Summary					
HCM Average Control Delay	57.0	HCM Level of Service		E	
HCM Volume to Capacity ratio	1.06				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)		4.0	
Intersection Capacity Utilization	104.8%	ICU Level of Service		G	
Analysis Period (min)	15				
c Critical Lane Group					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	3539	0	0	3539	1583	1681	1708	1583	0	0	0
Flt Permitted	0.258						0.950	0.965				
Satd. Flow (perm)	481	3539	0	0	3539	1583	1681	1708	1583	0	0	0
Satd. Flow (RTOR)						265			15			
Volume (vph)	273	1937	0	0	687	246	214	32	318	0	0	0
Lane Group Flow (vph)	317	2018	0	0	723	265	132	140	361	0	0	0
Turn Type	pm+pt					Perm	Perm		Perm			
Protected Phases	1	6			2			4				
Permitted Phases	6					2	4		4			
Total Split (s)	24.0	81.0	0.0	0.0	57.0	57.0	39.0	39.0	39.0	0.0	0.0	0.0
Act Effct Green (s)	82.1	82.1			66.7	66.7	29.9	29.9	29.9			
Actuated g/C Ratio	0.68	0.68			0.56	0.56	0.25	0.25	0.25			
v/c Ratio	0.70	0.83			0.37	0.27	0.32	0.33	0.89			
Control Delay	6.9	5.6			16.2	3.5	37.5	37.8	65.6			
Queue Delay	0.0	3.1			0.0	0.0	0.0	0.0	0.0			
Total Delay	6.9	8.7			16.2	3.5	37.5	37.8	65.6			
LOS	A	A			B	A	D	D	E			
Approach Delay		8.5			12.8			53.6				
Approach LOS		A			B			D				

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 11 (9%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 16.8		Intersection LOS: B	
Intersection Capacity Utilization 104.8%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 5: Chamblee Tucker Rd & I-258 NB Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.97	1.00			
Satd. Flow (prot)	1770	3539			3539	1583	1681	1708	1583			
Flt Permitted	0.30	1.00			1.00	1.00	0.95	0.97	1.00			
Satd. Flow (perm)	560	3539			3539	1583	1681	1708	1583			
Volume (vph)	273	1937	0	0	687	246	214	32	318	0	0	0
Peak-hour factor, PHF	0.86	0.96	0.92	0.92	0.95	0.93	0.92	0.83	0.88	0.92	0.92	0.92
Adj. Flow (vph)	317	2018	0	0	723	265	233	39	361	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	118	0	0	11	0	0	0
Lane Group Flow (vph)	317	2018	0	0	723	147	132	140	350	0	0	0
Turn Type	pm+pt					Perm	Perm		Perm			
Protected Phases	1	6			2			4				
Permitted Phases	6					2	4		4			
Actuated Green, G (s)	82.1	82.1			66.7	66.7	29.9	29.9	29.9			
Effective Green, g (s)	82.1	82.1			66.7	66.7	29.9	29.9	29.9			
Actuated g/C Ratio	0.68	0.68			0.56	0.56	0.25	0.25	0.25			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	498	2421			1967	880	419	426	394			
v/s Ratio Prot	0.06	c0.57			0.20							
v/s Ratio Perm	0.37					0.09	0.08	0.08	c0.22			
v/c Ratio	0.64	0.83			0.37	0.17	0.32	0.33	0.89			
Uniform Delay, d1	8.8	13.9			14.9	13.1	36.7	36.8	43.4			
Progression Factor	0.74	0.32			0.94	1.27	1.00	1.00	1.00			
Incremental Delay, d2	0.2	0.3			0.5	0.4	0.4	0.5	20.7			
Delay (s)	6.8	4.8			14.5	17.0	37.1	37.3	64.1			
Level of Service	A	A			B	B	D	D	E			
Approach Delay (s)		5.1			15.2			52.6			0.0	
Approach LOS		A			B			D			A	

Intersection Summary			
HCM Average Control Delay	15.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	104.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	3490	0	1770	3408	0	1770	1799	0	1770	1863	1583
Flt Permitted	0.259			0.083			0.950			0.950		
Satd. Flow (perm)	482	3490	0	155	3408	0	1770	1799	0	1770	1863	1583
Satd. Flow (RTOR)		12			45			10				209
Volume (vph)	239	1853	175	46	478	147	128	103	31	374	141	234
Lane Group Flow (vph)	254	2124	0	71	678	0	164	170	0	394	157	252
Turn Type	pm+pt			pm+pt			Split			Split		pm+ov
Protected Phases	1	6		5	2		4	4		8	8	1
Permitted Phases	6			2								8
Total Split (s)	21.0	61.0	0.0	12.0	52.0	0.0	20.0	20.0	0.0	27.0	27.0	21.0
Act Effct Green (s)	69.0	59.7		60.0	52.7		16.0	16.0		23.0	23.0	39.3
Actuated g/C Ratio	0.58	0.50		0.50	0.44		0.13	0.13		0.19	0.19	0.33
v/c Ratio	0.62	1.22		0.41	0.45		0.69	0.68		1.16	0.44	0.38
Control Delay	11.0	124.6		20.0	23.1		66.0	61.5		143.8	47.3	8.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	11.0	124.6		20.0	23.1		66.0	61.5		143.8	47.3	8.2
LOS	B	F		B	C		E	E		F	D	A
Approach Delay		112.4			22.8			63.7			82.4	
Approach LOS		F			C			E			F	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 32 (27%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.22			
Intersection Signal Delay: 87.2		Intersection LOS: F	
Intersection Capacity Utilization 101.5%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 6: Chamblee Tucker Rd & Northcrest Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.96		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3491		1770	3407		1770	1800		1770	1863	1583
Flt Permitted	0.28	1.00		0.08	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	518	3491		141	3407		1770	1800		1770	1863	1583
Volume (vph)	239	1853	175	46	478	147	128	103	31	374	141	234
Peak-hour factor, PHF	0.94	0.96	0.90	0.65	0.94	0.87	0.78	0.78	0.81	0.95	0.90	0.93
Adj. Flow (vph)	254	1930	194	71	509	169	164	132	38	394	157	252
RTOR Reduction (vph)	0	6	0	0	25	0	0	9	0	0	0	148
Lane Group Flow (vph)	254	2118	0	71	653	0	164	161	0	394	157	104
Turn Type	pm+pt			pm+pt			Split			Split		pm+ov
Protected Phases	1	6		5	2		4	4		8	8	1
Permitted Phases	6			2								8
Actuated Green, G (s)	69.0	58.9		58.8	52.7		16.0	16.0		23.0	23.0	35.3
Effective Green, g (s)	69.0	58.9		58.8	52.7		16.0	16.0		23.0	23.0	35.3
Actuated g/C Ratio	0.58	0.49		0.49	0.44		0.13	0.13		0.19	0.19	0.29
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	426	1713		152	1496		236	240		339	357	518
v/s Ratio Prot	c0.06	c0.61		0.02	0.19		c0.09	0.09		c0.22	0.08	0.02
v/s Ratio Perm	0.28			0.20								0.05
v/c Ratio	0.60	1.24		0.47	0.44		0.69	0.67		1.16	0.44	0.20
Uniform Delay, d1	14.4	30.6		27.8	23.3		49.7	49.5		48.5	42.8	31.8
Progression Factor	0.58	0.71		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.2	109.1		2.3	0.9		15.6	14.0		100.6	3.9	0.2
Delay (s)	9.5	130.7		30.1	24.3		65.3	63.5		149.1	46.7	32.0
Level of Service	A	F		C	C		E	E		F	D	C
Approach Delay (s)		117.7			24.8			64.4			92.3	
Approach LOS		F			C			E			F	

Intersection Summary					
HCM Average Control Delay	92.4	HCM Level of Service	F		
HCM Volume to Capacity ratio	1.11				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0		
Intersection Capacity Utilization	101.5%	ICU Level of Service	G		
Analysis Period (min)	15				
c Critical Lane Group					

Future 2009 PM Improved

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	3490	0	1770	3539	1583	1770	1799	0	1681	1731	1583
Flt Permitted	0.383			0.069			0.950			0.950	0.978	
Satd. Flow (perm)	713	3490	0	129	3539	1583	1770	1799	0	1681	1731	1583
Satd. Flow (RTOR)		13				169		10				112
Volume (vph)	239	1853	175	46	478	147	128	103	31	374	141	234
Lane Group Flow (vph)	254	2124	0	71	509	169	164	170	0	268	283	252
Turn Type	pm+pt			pm+pt		Perm	Split			Split		pm+ov
Protected Phases	1	6		5	2		4	4		8	8	1
Permitted Phases	6			2		2						8
Total Split (s)	17.0	67.0	0.0	12.0	62.0	62.0	20.0	20.0	0.0	21.0	21.0	17.0
Act Effct Green (s)	74.8	65.8		67.3	60.1	60.1	16.0	16.0		17.0	17.0	31.9
Actuated g/C Ratio	0.62	0.55		0.56	0.50	0.50	0.13	0.13		0.14	0.14	0.27
v/c Ratio	0.47	1.11		0.42	0.29	0.19	0.69	0.68		1.13	1.16	0.50
Control Delay	6.4	73.3		19.6	18.2	3.0	66.0	61.5		143.2	151.6	23.8
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	6.4	73.3		19.6	18.2	3.0	66.0	61.5		143.2	151.6	23.8
LOS	A	E		B	B	A	E	E		F	F	C
Approach Delay		66.2			14.9			63.7			108.7	
Approach LOS		E			B			E			F	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 113 (94%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.16			
Intersection Signal Delay: 65.0		Intersection LOS: E	
Intersection Capacity Utilization 94.8%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 6: Chamblee Tucker Rd & Northcrest Rd

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00		0.95	0.95	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	0.98	1.00
Satd. Flow (prot)	1770	3491		1770	3539	1583	1770	1800		1681	1731	1583
Flt Permitted	0.39	1.00		0.07	1.00	1.00	0.95	1.00		0.95	0.98	1.00
Satd. Flow (perm)	724	3491		124	3539	1583	1770	1800		1681	1731	1583
Volume (vph)	239	1853	175	46	478	147	128	103	31	374	141	234
Peak-hour factor, PHF	0.94	0.96	0.90	0.65	0.94	0.87	0.78	0.78	0.81	0.95	0.90	0.93
Adj. Flow (vph)	254	1930	194	71	509	169	164	132	38	394	157	252
RTOR Reduction (vph)	0	6	0	0	0	84	0	9	0	0	0	86
Lane Group Flow (vph)	254	2118	0	71	509	85	164	161	0	268	283	166
Turn Type	pm+pt			pm+pt		Perm	Split			Split		pm+ov
Protected Phases	1	6		5	2		4	4		8	8	1
Permitted Phases	6			2		2						8
Actuated Green, G (s)	75.0	65.0		66.1	60.1	60.1	16.0	16.0		17.0	17.0	27.9
Effective Green, g (s)	75.0	65.0		66.1	60.1	60.1	16.0	16.0		17.0	17.0	27.9
Actuated g/C Ratio	0.62	0.54		0.55	0.50	0.50	0.13	0.13		0.14	0.14	0.23
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	548	1891		151	1772	793	236	240		238	245	421
v/s Ratio Prot	0.04	c0.61		0.02	0.14		c0.09	0.09		0.16	c0.16	c0.04
v/s Ratio Perm	0.25			0.24		0.05						0.07
v/c Ratio	0.46	1.12		0.47	0.29	0.11	0.69	0.67		1.13	1.16	0.39
Uniform Delay, d1	10.5	27.5		27.7	17.5	15.8	49.7	49.5		51.5	51.5	38.9
Progression Factor	0.49	0.67		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.3	58.2		2.3	0.4	0.3	15.6	14.0		96.5	105.9	0.6
Delay (s)	5.5	76.7		30.0	17.9	16.1	65.3	63.5		148.0	157.4	39.5
Level of Service	A	E		C	B	B	E	E		F	F	D
Approach Delay (s)		69.1			18.6			64.4			117.2	
Approach LOS		E			B			E			F	

Intersection Summary					
HCM Average Control Delay	68.9	HCM Level of Service		E	
HCM Volume to Capacity ratio	1.00				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	94.8%	ICU Level of Service		F	
Analysis Period (min)	15				
c Critical Lane Group					

Future Site Access Analysis

Future 2009 AM Site Access Analysis

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	5050	0	0	1770	5050	0	0	1722	0	1770	1622
Flt Permitted	0.123				0.393				0.795		0.635	
Satd. Flow (perm)	229	5050	0	0	732	5050	0	0	1411	0	1183	1622
Satd. Flow (RTOR)		6				8			23			25
Volume (vph)	50	406	10	124	39	1280	33	67	1	51	42	1
Lane Group Flow (vph)	60	457	0	0	259	1416	0	0	194	0	55	29
Turn Type	pm+pt			pm+pt	pm+pt			Perm			Perm	
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2			4			8	
Total Split (s)	23.0	45.0	0.0	34.0	34.0	56.0	0.0	41.0	41.0	0.0	41.0	41.0
Act Effct Green (s)	66.7	59.6			74.9	65.9			37.0		37.0	37.0
Actuated g/C Ratio	0.56	0.50			0.62	0.55			0.31		0.31	0.31
v/c Ratio	0.28	0.18			0.47	0.51			0.43		0.15	0.06
Control Delay	14.7	14.5			5.8	9.6			32.5		31.6	12.6
Queue Delay	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Total Delay	14.7	14.5			5.8	9.6			32.5		31.6	12.6
LOS	B	B			A	A			C		C	B
Approach Delay		14.5				9.0			32.5			25.0
Approach LOS		B				A			C			C

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 72 (60%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay: 12.6		Intersection LOS: B	
Intersection Capacity Utilization 52.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Chamblee Tucker Rd & Big Lots Driveway

Lane Group	SBR
Lane Configurations	
Total Lost Time (s)	4.0
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Satd. Flow (RTOR)	
Volume (vph)	23
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0			4.0		4.0	4.0
Lane Util. Factor	1.00	0.91			1.00	0.91			1.00		1.00	1.00
Frt	1.00	0.99			1.00	0.99			0.95		1.00	0.87
Flt Protected	0.95	1.00			0.95	1.00			0.97		0.95	1.00
Satd. Flow (prot)	1770	5052			1770	5048			1721		1770	1622
Flt Permitted	0.14	1.00			0.43	1.00			0.80		0.64	1.00
Satd. Flow (perm)	260	5052			806	5048			1411		1183	1622
Volume (vph)	50	406	10	124	39	1280	33	67	1	51	42	1
Peak-hour factor, PHF	0.84	0.93	0.50	0.64	0.60	0.95	0.48	0.55	0.25	0.75	0.77	0.25
Adj. Flow (vph)	60	437	20	194	65	1347	69	122	4	68	55	4
RTOR Reduction (vph)	0	3	0	0	0	4	0	0	16	0	0	17
Lane Group Flow (vph)	60	454	0	0	259	1412	0	0	178	0	55	12
Turn Type	pm+pt			pm+pt	pm+pt			Perm			Perm	
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2			4			8	
Actuated Green, G (s)	65.5	59.6			75.0	65.1			37.0		37.0	37.0
Effective Green, g (s)	65.5	59.6			75.0	65.1			37.0		37.0	37.0
Actuated g/C Ratio	0.55	0.50			0.62	0.54			0.31		0.31	0.31
Clearance Time (s)	4.0	4.0			4.0	4.0			4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0		3.0	3.0
Lane Grp Cap (vph)	216	2509			595	2739			435		365	500
v/s Ratio Prot	0.01	0.09			c0.04	c0.28						0.01
v/s Ratio Perm	0.14				0.23				c0.13		0.05	
v/c Ratio	0.28	0.18			0.44	0.52			0.41		0.15	0.02
Uniform Delay, d1	13.6	16.7			10.1	17.4			32.9		30.1	28.9
Progression Factor	1.24	0.85			0.32	0.51			1.00		1.00	1.00
Incremental Delay, d2	0.7	0.2			0.5	0.6			2.8		0.9	0.1
Delay (s)	17.6	14.4			3.7	9.6			35.7		31.0	29.0
Level of Service	B	B			A	A			D		C	C
Approach Delay (s)		14.8				8.7			35.7			30.3
Approach LOS		B				A			D			C

Intersection Summary			
HCM Average Control Delay	12.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	23
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	25
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Satd. Flow (prot)	5055	0	0	5085	0	1611
Flt Permitted						
Satd. Flow (perm)	5055	0	0	5085	0	1611
Volume (vph)	403	14	0	1388	0	35
Lane Group Flow (vph)	457	0	0	1509	0	47
Sign Control	Free			Free	Yield	

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization	30.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	403	14	0	1388	0	35
Peak Hour Factor	0.92	0.75	0.92	0.92	0.92	0.75
Hourly flow rate (vph)	438	19	0	1509	0	47
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	388			578		
pX, platoon unblocked			0.99		0.83	0.99
vC, conflicting volume			457		950	155
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			442		510	139
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	95
cM capacity (veh/h)			1108		411	879

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	175	175	106	503	503	503	47
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	19	0	0	0	47
cSH	1700	1700	1700	1700	1700	1700	879
Volume to Capacity	0.10	0.10	0.06	0.30	0.30	0.30	0.05
Queue Length 95th (ft)	0	0	0	0	0	0	4
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.3
Lane LOS							A
Approach Delay (s)	0.0			0.0			9.3
Approach LOS							A

Intersection Summary				
Average Delay	0.2			
Intersection Capacity Utilization	30.2%	ICU Level of Service		A
Analysis Period (min)	15			

Future 2009 PM Site Access Analysis

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Satd. Flow (prot)	1770	5070	0	0	1770	4928	0	0	1720	0	1770	1665
Flt Permitted	0.300				0.075				0.785		0.614	
Satd. Flow (perm)	559	5070	0	0	140	4928	0	0	1391	0	1144	1665
Satd. Flow (RTOR)		3				96			22			38
Volume (vph)	55	1973	45	364	116	692	160	66	6	57	241	10
Lane Group Flow (vph)	71	2103	0	0	550	914	0	0	209	0	268	54
Turn Type	pm+pt			pm+pt	pm+pt			Perm			Perm	
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2			4			8	
Total Split (s)	12.0	53.0	0.0	36.0	36.0	77.0	0.0	31.0	31.0	0.0	31.0	31.0
Act Effct Green (s)	55.6	49.0			85.0	76.3			27.0		27.0	27.0
Actuated g/C Ratio	0.46	0.41			0.71	0.64			0.22		0.22	0.22
v/c Ratio	0.22	1.01			1.03	0.29			0.63		1.04	0.13
Control Delay	8.8	45.8			81.0	9.0			47.2		113.4	17.4
Queue Delay	0.0	0.0			0.0	0.0			0.0		0.0	0.0
Total Delay	8.8	45.8			81.0	9.0			47.2		113.4	17.4
LOS	A	D			F	A			D		F	B
Approach Delay		44.6				36.0			47.2			97.3
Approach LOS		D				D			D			F

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 82 (68%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay: 45.8		Intersection LOS: D	
Intersection Capacity Utilization 95.7%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 3: Chamblee Tucker Rd & Big Lots Driveway

Lane Group	SBR
Lane Configurations	
Total Lost Time (s)	4.0
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Satd. Flow (RTOR)	
Volume (vph)	31
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0			4.0		4.0	4.0
Lane Util. Factor	1.00	0.91			1.00	0.91			1.00		1.00	1.00
Frt	1.00	1.00			1.00	0.97			0.95		1.00	0.89
Flt Protected	0.95	1.00			0.95	1.00			0.97		0.95	1.00
Satd. Flow (prot)	1770	5068			1770	4930			1720		1770	1666
Flt Permitted	0.30	1.00			0.08	1.00			0.79		0.61	1.00
Satd. Flow (perm)	559	5068			141	4930			1391		1145	1666
Volume (vph)	55	1973	45	364	116	692	160	66	6	57	241	10
Peak-hour factor, PHF	0.77	0.96	0.94	0.87	0.88	0.95	0.86	0.53	0.75	0.75	0.90	0.62
Adj. Flow (vph)	71	2055	48	418	132	728	186	125	8	76	268	16
RTOR Reduction (vph)	0	2	0	0	0	36	0	0	17	0	0	29
Lane Group Flow (vph)	71	2101	0	0	550	878	0	0	192	0	268	25
Turn Type	pm+pt			pm+pt	pm+pt			Perm			Perm	
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2			4			8	
Actuated Green, G (s)	54.5	49.0			85.0	75.5			27.0		27.0	27.0
Effective Green, g (s)	54.5	49.0			85.0	75.5			27.0		27.0	27.0
Actuated g/C Ratio	0.45	0.41			0.71	0.63			0.22		0.22	0.22
Clearance Time (s)	4.0	4.0			4.0	4.0			4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0			3.0		3.0	3.0
Lane Grp Cap (vph)	309	2069			534	3102			313		258	375
v/s Ratio Prot	0.01	0.41			c0.27	0.18						0.01
v/s Ratio Perm	0.09				c0.46				0.14		c0.23	
v/c Ratio	0.23	1.02			1.03	0.28			0.61		1.04	0.07
Uniform Delay, d1	18.6	35.5			46.2	10.0			41.8		46.5	36.6
Progression Factor	0.79	0.66			1.04	0.98			1.00		1.00	1.00
Incremental Delay, d2	0.3	21.4			44.6	0.2			8.7		66.5	0.3
Delay (s)	15.1	45.0			92.8	10.0			50.5		113.0	36.9
Level of Service	B	D			F	B			D		F	D
Approach Delay (s)		44.1				41.1			50.5			100.2
Approach LOS		D				D			D			F

Intersection Summary			
HCM Average Control Delay	47.7	HCM Level of Service	D
HCM Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	95.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1900
Total Lost time (s)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Volume (vph)	31
Peak-hour factor, PHF	0.82
Adj. Flow (vph)	38
RTOR Reduction (vph)	0
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Actuated Green, G (s)	
Effective Green, g (s)	
Actuated g/C Ratio	
Clearance Time (s)	
Vehicle Extension (s)	
Lane Grp Cap (vph)	
v/s Ratio Prot	
v/s Ratio Perm	
v/c Ratio	
Uniform Delay, d1	
Progression Factor	
Incremental Delay, d2	
Delay (s)	
Level of Service	
Approach Delay (s)	
Approach LOS	

Intersection Summary

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Satd. Flow (prot)	5065	0	0	5085	0	1611
Flt Permitted						
Satd. Flow (perm)	5065	0	0	5085	0	1611
Volume (vph)	1991	50	0	769	0	33
Lane Group Flow (vph)	2224	0	0	836	0	38
Sign Control	Free			Free	Yield	

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization	49.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Yield	
Grade	0%			0%	0%	
Volume (veh/h)	1991	50	0	769	0	33
Peak Hour Factor	0.92	0.83	0.92	0.92	0.92	0.88
Hourly flow rate (vph)	2164	60	0	836	0	38
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)	388			578		
pX, platoon unblocked			0.76		0.77	0.76
vC, conflicting volume			2224		2473	751
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1973		2142	24
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	95
cM capacity (veh/h)			219		32	791

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	866	866	493	279	279	279	38
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	60	0	0	0	38
cSH	1700	1700	1700	1700	1700	1700	791
Volume to Capacity	0.51	0.51	0.29	0.16	0.16	0.16	0.05
Queue Length 95th (ft)	0	0	0	0	0	0	4
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.8
Lane LOS							A
Approach Delay (s)	0.0			0.0			9.8
Approach LOS							A

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	49.6%	ICU Level of Service		A
Analysis Period (min)	15			

Traffic Volume Worksheets

07-097 Highlands Park Gardens DRI

Traffic Volumes
Future Conditions

A&R Engineering
September-07

Chamblee Tucker Road / Embry Circle / Embry Hills Church Driveway

A.M. Peak Hour

Condition	Northbound				Southbound				Eastbound				Westbound			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing:	12	0	27	39	2	0	2	4	12	289	4	305	5	955	2	962
Growth Factor (%):	2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8	
Base Condition:	13	0	29	41	2	0	2	4	13	305	4	322	5	1009	2	1017
Total New Trips	0	0	0	0	0	0	0	0	0	19	0	19	1	51	0	52
Future Traffic Volumes:	13	0	29	41	2	0	2	4	13	324	4	341	6	1060	2	1069

P.M. Peak Hour

Condition	Northbound				Southbound				Eastbound				Westbound			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing:	6	0	15	21	0	0	0	0	3	1511	10	1524	63	562	0	625
Growth Factor (%):	2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8	
Base Condition:	6	0	16	22	0	0	0	0	3	1597	11	1611	67	594	0	660
Total New Trips	0	0	1	1	0	0	0	0	0	41	0	41	0	20	0	20
Future Traffic Volumes:	6	0	17	23	0	0	0	0	3	1638	11	1652	67	614	0	680

07-097 Highlands Park Gardens DRI

Traffic Volumes
Future Conditions

A&R Engineering
September-07

Chamblee Tucker Road / Buckeye Road / Highlands Park West Site Driveway

A.M. Peak Hour

	Northbound				Southbound				Eastbound				Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing:	0	0	0	0	55	0	13	68	20	321	0	341	0	928	333	1261
Growth Factor (%):	2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8	
Base Condition:	0	0	0	0	58	0	14	72	21	339	0	360	0	981	352	1333
Total New Trips	0	0	0	0	1	0	0	1	0	19	0	19	0	52	3	55
Future Traffic Volumes:	0	0	0	0	59	0	14	73	21	358	0	379	0	1033	355	1388

P.M. Peak Hour

	Northbound				Southbound				Eastbound				Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing:	0	0	0	0	345	0	47	392	22	1545	0	1567	0	603	105	708
Growth Factor (%):	2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8	
Base Condition:	0	0	0	0	365	0	50	414	23	1633	0	1656	0	637	111	748
Total New Trips	0	0	0	0	2	0	0	2	0	42	0	42	0	20	1	21
Future Traffic Volumes:	0	0	0	0	367	0	50	416	23	1675	0	1698	0	657	112	769

07-097 Highlands Park Gardens DRI

Traffic Volumes
Future Conditions

A&R Engineering
September-07

Chamblee Tucker Road / Big Lots Shopping Center Driveway/ Highlands Park Gardens Main Site Driveway

A.M. Peak Hour

	Northbound				Southbound				Eastbound				Westbound				
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	U	Tot
Existing:	11	1	15	27	40	1	22	63	47	351	4	402	12	1211	31	117	1371
Growth Factor (%):	2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8	2.8	
Base Condition:	12	1	16	29	42	1	23	67	50	371	4	425	13	1280	33	124	1449
Total New Trips	55	0	35	90	0	0	0	0	0	35	6	41	26	0	0	0	26
Future Traffic Volumes:	67	1	51	119	42	1	23	67	50	406	10	466	39	1280	33	124	1475

P.M. Peak Hour

	Northbound				Southbound				Eastbound				Westbound				
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	U	Tot
Existing:	19	6	21	46	229	5	33	267	52	1870	15	1937	35	677	151	344	1207
Growth Factor (%):	2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8	2.8	
Base Condition:	20	6	22	49	242	5	35	282	55	1976	16	2047	37	715	160	364	1276
Pass-by Trips	25	0	22	47	-1	5	-4	0	0	-16	16	0	23	-23	0	0	0
Total New Trips	21	0	13	34	0	0	0	0	0	13	13	26	56	0	0	0	56
Future Traffic Volumes:	66	6	57	130	241	10	31	282	55	1973	45	2073	116	692	160	364	1332

07-097 Highlands Park Gardens DRI
Traffic Volumes
Future Conditions

A&R Engineering
September-07

Chamblee Tucker Road / I-285 Southbound Ramps

A.M. Peak Hour

	Northbound				Southbound				Eastbound				Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing:	0	0	0	0	169	45	259	473	0	298	166	464	288	1055	0	1343
Growth Factor (%):	2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8	
Base Condition:	0	0	0	0	179	48	274	500	0	315	175	490	304	1115	0	1419
Total New Trips	0	0	0	0	0	0	12	12	0	50	19	69	0	14	0	14
Future Traffic Volumes:	0	0	0	0	179	48	286	512	0	365	194	559	304	1129	0	1433

P.M. Peak Hour

	Northbound				Southbound				Eastbound				Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing:	0	0	0	0	1082	229	706	2017	0	1092	1240	2332	269	548	0	817
Growth Factor (%):	2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8	
Base Condition:	0	0	0	0	1143	242	746	2132	0	1154	1310	2464	284	579	0	863
Total New Trips	0	0	0	0	0	0	25	25	0	19	7	26	0	30	0	30
Future Traffic Volumes:	0	0	0	0	1143	242	771	2157	0	1173	1317	2490	284	609	0	893

07-097 Highlands Park Gardens DRI

Traffic Volumes
Future Conditions

A&R Engineering
September-07

Chamblee Tucker Road / I-285 Northbound Ramps

A.M. Peak Hour

	Northbound				Southbound				Eastbound				Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing:	472	39	182	693	0	0	0	0	97	434	0	531	0	844	764	1608
Growth Factor (%):	2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8	
Base Condition:	499	41	192	732	0	0	0	0	103	459	0	561	0	892	807	1699
Total New Trips	7	0	0	7	0	0	0	0	31	19	0	50	0	7	0	7
Future Traffic Volumes:	506	41	192	739	0	0	0	0	134	478	0	611	0	899	807	1706

P.M. Peak Hour

	Northbound				Southbound				Eastbound				Westbound			
Condition	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing:	188	30	301	519	0	0	0	0	247	1826	0	2073	0	636	233	869
Growth Factor (%):	2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8	
Base Condition:	199	32	318	548	0	0	0	0	261	1930	0	2191	0	672	246	918
Total New Trips	15	0	0	15	0	0	0	0	12	7	0	19	0	15	0	15
Future Traffic Volumes:	214	32	318	563	0	0	0	0	273	1937	0	2210	0	687	246	933

07-097 Highlands Park Gardens DRI

Traffic Volumes
Future Conditions

A&R Engineering
September-07

Chamblee Tucker Road / Northcrest Road / Kroger/Embry Village Driveway

A.M. Peak Hour

Condition	Northbound				Southbound				Eastbound				Westbound			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing:	75	64	8	147	89	27	111	227	117	380	56	553	12	1443	389	1844
Growth Factor (%):	2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8	
Base Condition:	79	68	8	155	94	29	117	240	124	402	59	584	13	1525	411	1949
Total New Trips	0	0	0	0	0	0	5	5	13	6	0	19	0	2	0	2
Future Traffic Volumes:	79	68	8	155	94	29	122	245	137	408	59	603	13	1527	411	1951

P.M. Peak Hour

Condition	Northbound				Southbound				Eastbound				Westbound			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing:	121	97	29	247	354	133	212	699	221	1752	166	2139	44	448	139	631
Growth Factor (%):	2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8	
Base Condition:	128	103	31	261	374	141	224	739	234	1851	175	2260	46	473	147	667
Total New Trips	0	0	0	0	0	0	10	10	5	2	0	7	0	5	0	5
Future Traffic Volumes:	128	103	31	261	374	141	234	749	239	1853	175	2267	46	478	147	672

07-097 Highlands Park Gardens DRI

Traffic Volumes
Future Conditions

A&R Engineering
September-07

Chamblee Tucker Road / Highlands Park Gardens Right-in / Right-out Driveway

A.M. Peak Hour

Condition	Northbound				Southbound				Eastbound				Westbound			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing:	0	0	21	21	0	0	0	0	0	376	12	388	0	1261	0	1261
Growth Factor (%):	2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8	
Base Condition:	0	0	22	22	0	0	0	0	0	397	13	410	0	1333	0	1333
Total New Trips	0	0	35	35	0	0	0	0	0	6	14	20	0	55	0	55
Future Traffic Volumes:	0	0	35	35	0	0	0	0	0	403	14	417	0	1388	0	1388

P.M. Peak Hour

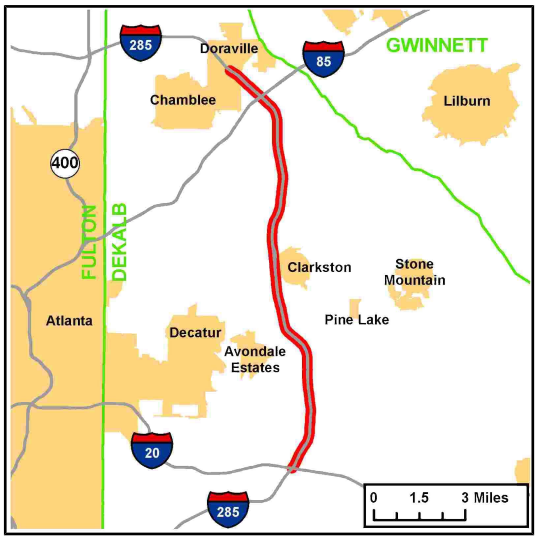
Condition	Northbound				Southbound				Eastbound				Westbound			
	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot	L	T	R	Tot
Existing:	0	0	21	21	0	0	0	0	0	1890	20	1910	0	708	0	708
Growth Factor (%):	2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8		2.8	2.8	2.8	
Base Condition:	0	0	22	22	0	0	0	0	0	1997	21	2018	0	748	0	748
Pass-by Trips	0	0	20	20	0	0	0	0	0	-19	19	0	0	0	0	0
Total New Trips	0	0	13	13	0	0	0	0	0	13	31	44	0	21	0	21
Future Traffic Volumes:	0	0	33	33	0	0	0	0	0	1991	50	2041	0	769	0	769

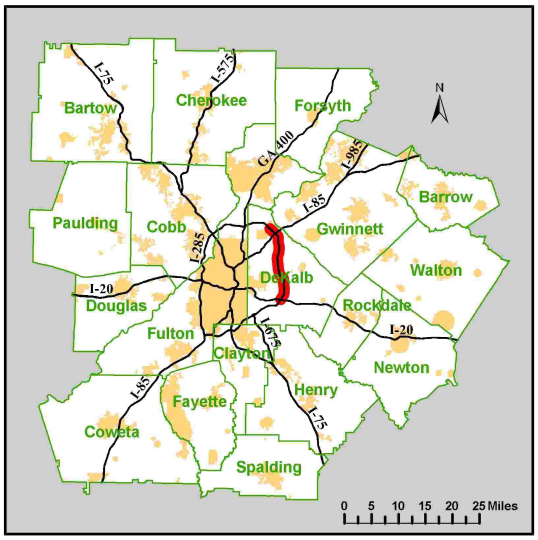
Planned and Programmed Improvements

AR-902A

Atlanta Region - Mobility2030 Transportation Plan
PROJECT FACT SHEET

Short Title	I-285 EAST BUS RAPID TRANSIT (BRT) FROM DORAVILLE MARTA STATION TO I-20 EAST [SPLIT FUNDED - SEE ALSO AR-902B]
GDOT Project No.	N/A
Federal ID No.	
Status	Long Range
Detailed Description and Justification	None
Service Type	Fixed Guideway Transit Capital
Sponsor	GRTA
Jurisdiction	DeKalb County
Existing Thru Lane	N/A *(applicable for road projects only)*
Planned Thru Lane	N/A *(applicable for road projects only)*
Corridor Length	14.26 miles *(not applicable for all project types)*
Network Year	2030 *(required if modeled for conformity)*
Completion Date	2030
Analysis Level	In the Region's Air Quality Conformity Analysis





Phase Status & Funding Information for 06-11 TIP		FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
				FEDERAL	STATE	BONDS	LOCAL/OTHER
CST	New Starts (50/50)	LR 2021-2030	**$386,200,000**	$186,200,000	$0,000	$0,000	$200,000,000
				$186,200,000	**$0,000**	**$0,000**	**$200,000,000**

PE: Preliminary Engineering / Design / Study ROW: Right-of-way Acquistion CST: Construction / Implementation

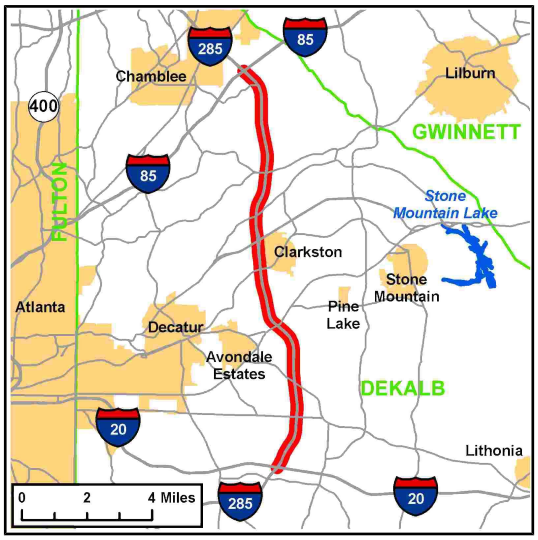
? For additional information about this project, please visit the Atlanta Regional Commission at www.atlantaregional.com or call (404) 463-3100.

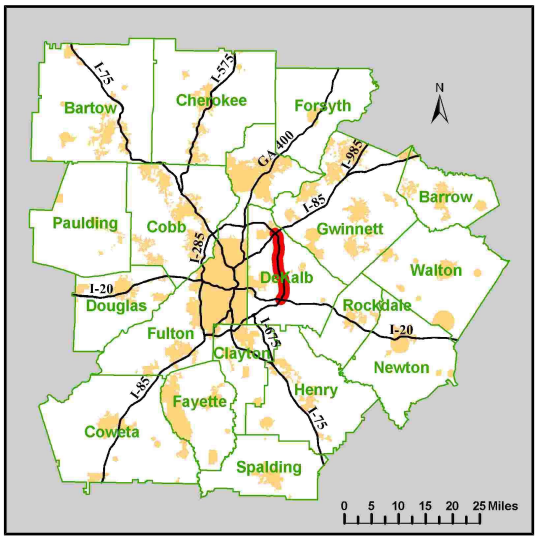
Report Generated: 6/12/2007

AR-H-301

Atlanta Region - Mobility2030 Transportation Plan
PROJECT FACT SHEET

Short Title	I-285 EAST HOV LANES FROM I-20 EAST TO I-85 NORTH IN DEKALB COUNTY
GDOT Project No.	0003432
Federal ID No.	MSL-0003-00(432)
Status	Programmed
Detailed Description and Justification	Addition of 1 HOV lane in both directions for 13 miles from I-20 to I-85. Dedicated HOV-only ramps will be provided but have not been determined at this time. The HOV lanes will be barrier-separated with median breaks in certain locations to allow for ingress and egress from the HOV lanes as well as emergency vehicle access.
Service Type	HOV Lanes
Sponsor	GDOT
Jurisdiction	DeKalb County
Existing Thru Lane	0 *(applicable for road projects only)*
Planned Thru Lane	2/4 *(applicable for road projects only)*
Corridor Length	13 miles *(not applicable for all project types)*
Network Year	2020 *(required if modeled for conformity)*
Completion Date	2020
Analysis Level	In the Region's Air Quality Conformity Analysis





Phase Status & Funding Information for 06-11 TIP		FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
				FEDERAL	STATE	BONDS	LOCAL/OTHER
PE	GRV BONDS (GARVEE Bond Program)	2007	**$5,000,000**	$0,000	$0,000	$5,000,000	$0,000
PE	National Highway System	LR 2012-2020	**$29,000,000**	$23,200,000	$5,800,000	$0,000	$0,000
ROW	National Highway System	LR 2012-2020	**$59,000,000**	$47,200,000	$11,800,000	$0,000	$0,000
CST	National Highway System	LR 2012-2020	**$394,000,000**	$315,200,000	$78,800,000	$0,000	$0,000
				$385,600,000	**$96,400,000**	**$5,000,000**	**$0,000**

PE: Preliminary Engineering / Design / Study ROW: Right-of-way Acquistion CST: Construction / Implementation

? For additional information about this project, please visit the Atlanta Regional Commission at www.atlantaregional.com or call (404) 463-3100.

Report Generated: 6/12/2007

Project ID	771190-
Project Type	Replacement
STIP Code	Yes
Construction Status Code	Under Construction
Corridor	
Project Manager Office	Urban Design
County	Dekalb
Project Accounting Number	BRZLB-0089-00(008)
Primary Work Type	Bridges
Description	CR 1563/FLOWERS ROAD @ NORTH FORK P'TREE CREEK NEAR MERCER U
RCLink:	0892156300

Begin Mile Point	1.09
Prop Length	0.40
End Mile Point	1.49

Let Status	LET
Priority Code	

Preconstruction Status Report

Proj ID	County	Description
771190-	Dekalb	CR 1563/FLOWERS ROAD @ NORTH FORK P'TREE CREEK NEAR MERCER U
BRZLB-0089-00(008)		Replacement of a structurally deficient bridge on Flowers road/CR 1563 over North Fork Peachtree Creek. It is load limited in that the bridge cannot support school buses, fire trucks and such. This project proposes to replace the existing bridge with a new concrete bridge that will also be raised above the 100-year storm elevation. The proposed typical section is 2-12' lanes with curb & gutter with 5' sidewalks on the roadway & 6' sidewalks on the bridge. Traffic will be detoured during construction on the signed detour route.

MPO TIP #:	DK-257
MPO:	Atlanta TMA
Proj Length (miles):	0.21

Phase	Fiscal Year Approved	Estimated Phase Cost	Fund	Phase Status

Program Type:	Replacement	Engineering	1999	$26,040.00	Q11	AUTHORIZED
Type Work:	Bridges	Right of Way	LOCL	$540,000.00	LOC	AUTHORIZED
Let Responsibility:	GDOT Let	Construction	2005	$1,510,381.89	Q11	AUTHORIZED
		Construction	2005	$618,327.04	Q24	AUTHORIZED

Bike Provisions Included? No

Activity	Actual Start	Actual/Estimated Finish	Percent Complete
Define Project Concept	8/26/2002	12/8/2002	82
Management Concept Approval	1/26/2004	2/5/2004	100
Complete	1/20/2005	1/20/2005	100
Public Information Open House Held	10/1/2002	7/7/2003	100
Environmental Approval			0
Field Surveys/SDE	1/12/2004	3/25/2004	100
Preliminary Plans	3/15/2004	3/21/2004	100
Preliminary Bridge Design	10/15/2004	10/15/2004	100
PFPR Inspection	3/25/2005	6/8/2005	41
R/W Acquisition	11/1/2003	12/31/2003	100
Bridge Foundation Investigation	1/11/2005	4/1/2005	100
Final Design	1/11/2005	5/2/2005	100
Final Bridge Plans Preparation	5/10/2005	5/10/2005	100
FFPR Inspection			

Right of Way Acquisition Information

Preliminary Parcel Count: **Total Parcel Count:** 4 **Acquired By:** LOC

Right of Way Certification Date: 6/8/2005 **Acquired Count:** 4

MARTA Information

Route 91 - Henderson Mill - Description

Return to Route 91 home page

Void links have been placed on all headings in this description, use the tab key to navigate between sections.

FROM BROOKHAVEN STATIONTO DORAVILLE STATION

1. VIA:
2. Right onto North Druid Hills Rd.
3. Right onto Peachtree Rd.
4. Right onto Dresden Dr.
5. Right onto Plaster Rd.
6. Left onto Johnson Rd.
7. Right onto Shallowford Rd.
8. Left onto Briarcliff Rd.
9. Left onto Fielding Dr.
10. Left onto Henderson Mill Rd.
11. Left onto Chamblee Tucker Rd.
12. Right onto Northcrest Rd.
13. Left onto Frontage Rd.
14. Right onto McCall Dr.
15. Continue Honeysuckle La.
16. Right onto McElroy Rd.
17. Left onto Buford Hwy.
18. Right onto Central Ave.
19. Continue Into Doraville Station

back to top

FROM BROOKHAVEN STATIONTO DORAVILLE STATION

1. VIA:PRESIDENTIAL PKWY.
2. Right onto North Druid Hills Rd.
3. Right onto Peachtree Rd.
4. Right onto Dresden Dr.
5. Right onto Plaster Rd.
6. Left onto Johnson Rd.
7. Right onto Shallowford Rd.
8. Left onto Briarcliff Rd.
9. Left onto Fielding Dr.
10. Left onto Henderson Mill Rd.
11. Left onto Chamblee Tucker Rd.

12. Right onto Buckeye Rd.
13. Left onto Presidential Dr.
14. Right onto Presidential Pkwy.
15. (Do not arrive at this point before scheduled time on run card).
16. Continue onto Buckeye Rd.
17. Left onto Chamblee Tucker Rd.
18. Left onto Northcrest Rd.
19. Left onto Frontage Rd.
20. Right onto McCall Dr.
21. Continue onto Honeysuckle La.
22. Right onto McElroy Rd.
23. Left onto Buford Hwy.
24. Right onto Central Ave.
25. Continue Into Doraville Station

back to top

FROM BROOKHAVEN STATIONTO DORAVILLE STATION VIA:

1. Right onto North Driud Hills Rd.
2. Right onto Peachtree Rd.
3. Right onto Dresden Rd.
4. Right onto Plaster Dr.
5. Left onto Johnson Rd.
6. Right onto Shalloford Rd.
7. Left onto Braicliff Rd.
8. Left onto Fielding Dr.
9. Left onto Henderson Mill Rd.
10. Left onto Chamblee Tucker Rd.
11. Right onto Northcrest Rd.
12. Left onto Frontage Rd.
13. Right onto McCall Dr.
14. Continue onto Honeysuckle.
15. Right onto McElroy Rd.
16. Left onto Buford Hwy.
17. Right onto Central Ave.
18. Continue onto to Doraville Station.

back to top

FROM BROOKHAVEN STATIONTO DORAVILLE STATION

1. VIA:PRESIDENTIAL PKWY.
2. Right onto North Druid Hills Rd.
3. Right onto Peachtree Rd.
4. Right onto Dresden Dr.
5. Right onto Plaster Rd.
6. Left onto Johnson Rd.
7. Right onto Shallowford Rd.
8. Left onto Briarcliff Rd.
9. Left onto Fielding Dr.
10. Left onto Henderson Mill Rd.
11. Left onto Chamblee Tucker Rd.
12. Right onto Buckeye Rd.
13. Left onto Presidential Dr.

14. Right onto Presidential Pkwy.
15. (Do not arrive at this point before scheduled time on run card).
16. Continue onto Buckeye Rd.
17. Left onto Chamblee Tucker Rd.
18. Left onto Northcrest Rd.
19. Left onto Frontage Rd.
20. Right onto McCall Dr.
21. Continue Honeysuckle La.
22. Right onto McElroy Rd.
23. Left onto Buford Hwy.
24. Right onto Central Ave.
25. Continue Into Doraville Station

back to top

FROM DORAVILLE STATIONTO BROOKHAVEN VIA:

1. Right onto New Peachtree Rd.
2. Left onto Park Ave.
3. Left onto Buford Hwy.
4. Right onto McElroy Rd.
5. Left onto Honeysuckle La.
6. Continue McCall Dr.
7. Left onto McCall Dr.
8. Left onto Frontage Rd.
9. Right onto Northcrest Rd.
10. Left onto Chamblee/Tucker Rd.
11. Right onto Henderson Mill Rd.
12. Right onto Fielding Rd.
13. Right onto Briarcliff Rd.
14. Right onto Shallowford Rd.
15. Cross I-85
16. Left onto South Acess Rd.
17. Right onto Plaster Rd.
18. Left onto Dresden Dr.
19. Left onto Driveway Into Brookhaven Station

back to top

FROM DORAVILLE STATIONTO BROOKHAVEN STATION

1. VIA:PRESIDENTIAL PKWY.
2. Lv. Doraville Station Via
3. Right onto New Peachtree Rd.
4. Left onto Park Ave.
5. Left onto Buford Hwy.
6. Right onto McElroy Rd.
7. Left onto Honeysuckle La.
8. Continue McCall Dr.
9. Left onto Frontage Rd.
10. Right onto Northcrest Rd.
11. Right onto Chamblee/Tucker Rd.
12. Right onto Buckeye Rd.
13. Left onto Presidential Dr.
14. Right onto Presidential Pkwy.

15. (DO NOT LAYOVER)
16. Continue onto right Buckeye Rd.
17. Left onto Chamblee-Tucker Rd.
18. Right onto Henderson Mill Rd.
19. Right onto Fielding Rd.
20. Right onto Briarcliff Rd.
21. Right onto Shallowford Rd.
22. Cross I-85 Left onto South Acess Rd.
23. Right onto Plaster Rd.
24. Left onto Dresden Dr.
25. Left onto Driveway To Brookhaven Station

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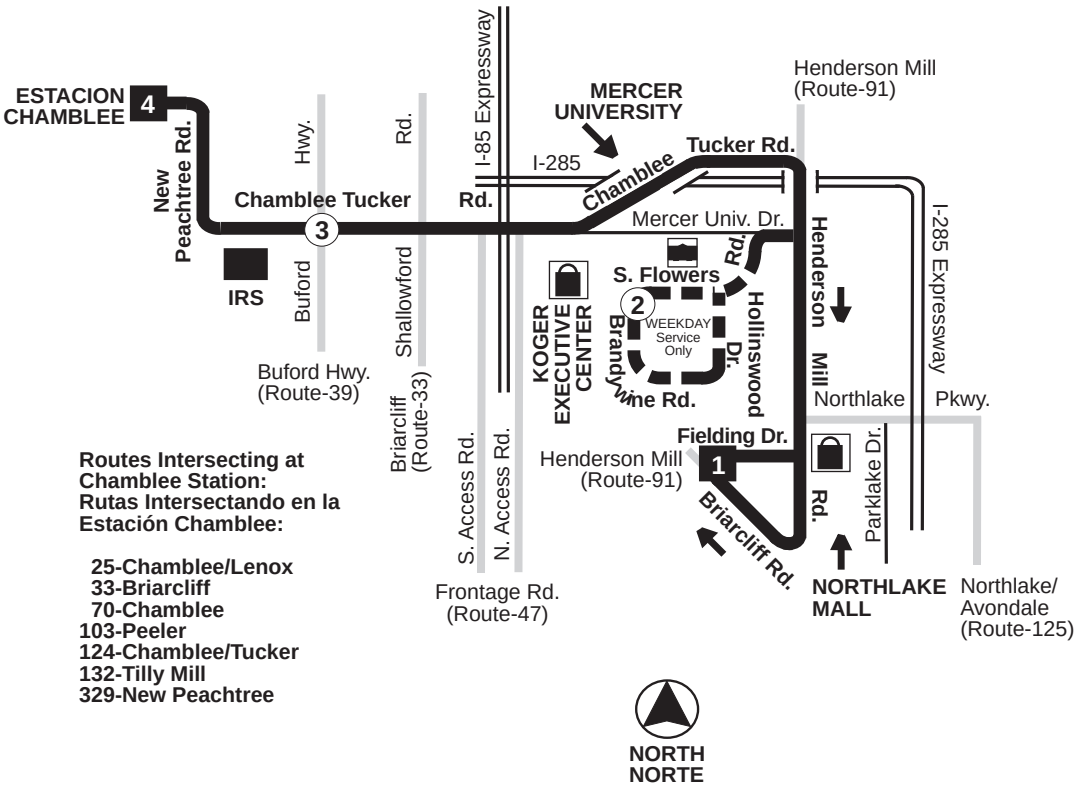
ESTACION CHAMBLEE
4
New Peachtree Rd.
IRS
Buford Hwy. (Route-39)
Hwy.
Buford
Chamblee Tucker Rd.
3
Shallowford Rd.
Briarcliff (Route-33)
I-85 Expressway
S. Access Rd.
N. Access Rd.
Frontage Rd. (Route-47)
MERCER UNIVERSITY
I-285
Chamblee Tucker Rd.
Mercer Univ. Dr.
KOGER EXECUTIVE CENTER
S. Flowers Rd.
2
WEEKDAY Service Only
Brandywine Rd.
Hollinswood Dr.
Henderson Mill (Route-91)
Fielding Dr.
1
Briarcliff Rd.
Henderson Mill Rd.
Northlake Pkwy.
Parklake Dr.
NORTHLAKE MALL
I-285 Expressway
Northlake/ Avondale (Route-125)
Routes Intersecting at Chamblee Station:
Rutas Intersectando en la Estación Chamblee:
25-Chamblee/Lenox
33-Briarcliff
70-Chamblee
103-Peeler
124-Chamblee/Tucker
132-Tilly Mill
329-New Peachtree
NORTH
NORTE
INTERSECTING ROUTES
RUTAS INTERSECTANDO
Dash Line Indicates Selective Trips
Los quiones indicán viajes selectivos

Route 126 - NorthLake / Chamblee - Description

Return to Route 126 home page

Void links have been placed on all headings in this description, use the tab key to navigate between sections.

FROM BRIARCLIFF & FIELDINGTO CHAMBLEE STATION

1. VIA:
2. Left onto Henderson Mill Rd.
3. Left onto Chamblee Tucker Rd.
4. Continue onto Right Chamblee Tucker Rd.
5. Right onto New Peachtree Rd.
6. Left onto Into Chamblee Station
7. End of Line

back to top

FROM BRIARCLIFF & FIELDINGTO CHAMBLEE STATION

1. VIA:MERCER UNIVERSITY
2. Left onto Henderson Mill Rd.
3. Left onto Mercer Univ. Dr.
4. Left onto South Flowers Rd.
5. Left onto Hollinswood Dr.
6. Right onto Brandywine Rd.
7. Right onto S.Flowers Rd.
8. Right onto Mercer Univ. Dr.
9. Left onto Henderson Mill Rd.
10. Left onto Chamblee Tucker Rd.
11. Continue onto Right Chamblee Tucker Rd.
12. Right onto New Peachtree Rd.
13. Left onto Driveway to Chamblee Station
14. Miles 21.12

back to top

FROM CHAMBLEE STATIONTO BRIARCLIFF AND FIELDING

1. VIA:
2. Right onto New Peachtree Rd.
3. Left onto Chamblee Tucker Rd.
4. Continue onto Left Chamblee Tucker Rd.

5. After crossing I-85
6. Right onto Henderson Mill Rd.
7. Right onto Briarcliff Rd.
8. Right onto Fielding Dr.
9. End of Line

back to top

FROM CHAMBLEE STATIONTO BRIARCLIFF & FIELDING

1. VIA:MERCER UNIVERSITY
2. Right onto New Peachtree Rd.
3. Left onto Chamblee Tucker Rd.
4. Continue onto Left Chamblee Tucker Rd
5. After crossing I-85
6. Right onto Henderson Mill Rd.
7. Right onto Mercer Univ. Dr.
8. Left onto South Flowers Rd.
9. Left onto Hollinswood Dr.
10. Right onto Brandywine Rd.
11. Right onto S.Flowers Rd.
12. Right onto Mercer Univ. Dr.
13. Right onto Henderson Mill Rd.
14. Right onto Briarcliff Rd.
15. Right onto Fielding Dr.
16. End of Line

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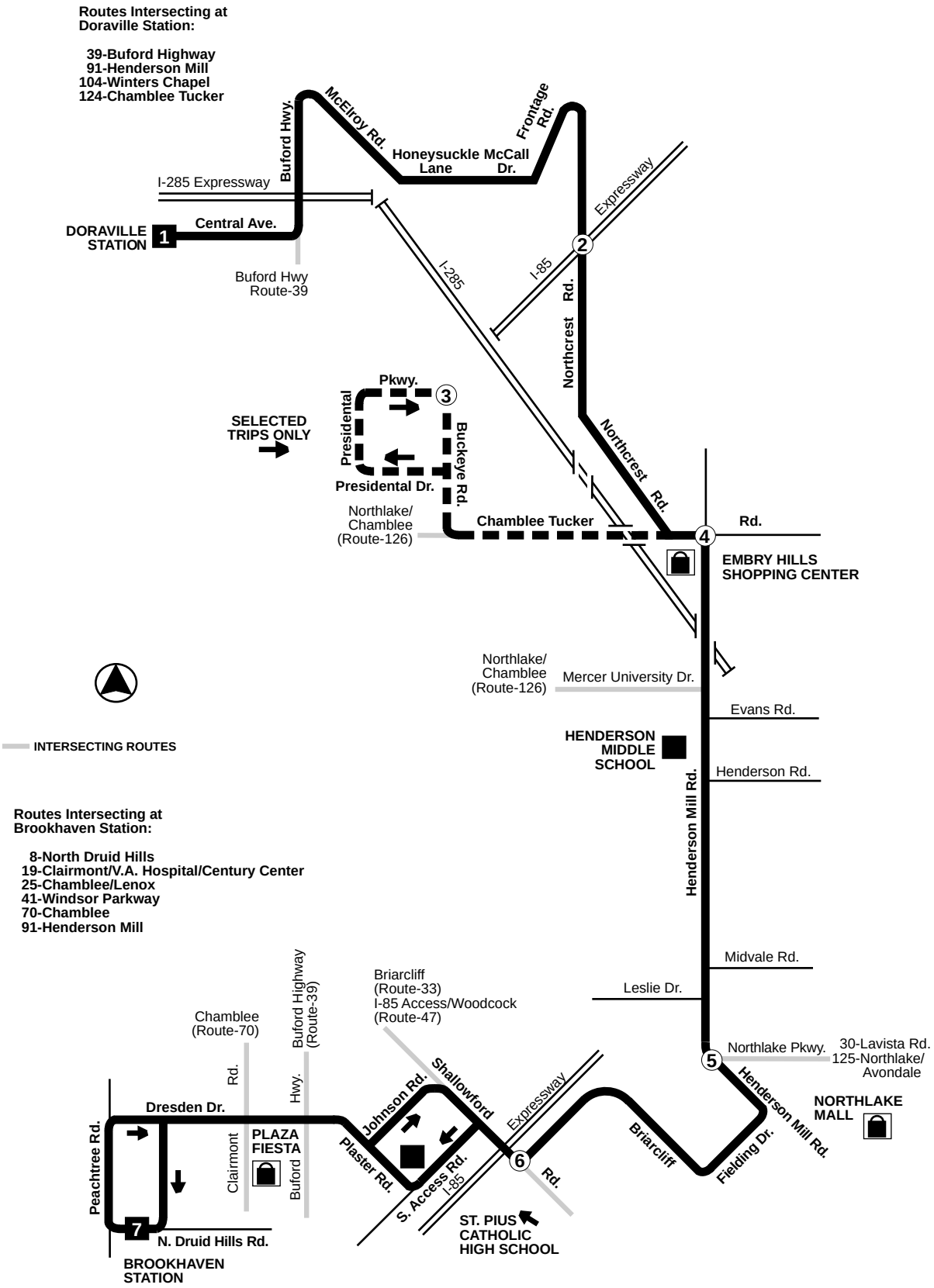
Routes Intersecting at Doraville Station:
39-Buford Highway
91-Henderson Mill
104-Winters Chapel
124-Chamblee Tucker
McElroy Rd.
Buford Hwy.
Honeysuckle Lane
McCall Dr.
Frontage Rd.
I-285 Expressway
Expressway
DORAVILLE STATION
1
Central Ave.
Buford Hwy Route-39
I-285
I-85
2
Northcrest Rd.
Pkwy.
3
Presidental
Buckeye Rd.
SELECTED TRIPS ONLY
Presidental Dr.
Northcrest Rd.
Northlake/ Chamblee (Route-126)
Chamblee Tucker
Rd.
4
EMBRY HILLS SHOPPING CENTER
Northlake/ Chamblee (Route-126)
Mercer University Dr.
Evans Rd.
HENDERSON MIDDLE SCHOOL
Henderson Rd.
Henderson Mill Rd.
INTERSECTING ROUTES
Routes Intersecting at Brookhaven Station:
8-North Druid Hills
19-Clairmont/V.A. Hospital/Century Center
25-Chamblee/Lenox
41-Windsor Parkway
70-Chamblee
91-Henderson Mill
Midvale Rd.
Leslie Dr.
Briarcliff (Route-33) I-85 Access/Woodcock (Route-47)
Chamblee (Route-70)
Buford Highway (Route-39)
Rd.
Hwy.
Northlake Pkwy.
30-Lavista Rd.
125-Northlake/ Avondale
5
Shallowford
Johnson Rd.
Expressway
Henderson Mill Rd.
NORTHLAKE MALL
Dresden Dr.
PLAZA FIESTA
Clairmont
Buford
Plaster Rd.
Briarcliff
Fielding Dr.
Peachtree Rd.
S. Access Rd.
I-85
6
Rd.
7
N. Druid Hills Rd.
ST. PIUS CATHOLIC HIGH SCHOOL
BROOKHAVEN STATION

Proposed Facility Site Plan