

Transportation Analysis

Hammond Center DRI DRI #1854 Sandy Springs, Georgia

Prepared for:

Oxford Properties

Prepared by:

Kimley-Horn and Associates, Inc.
Norcross, Georgia

©Kimley-Horn and Associates, Inc.
July 2008
019763000

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

TABLE OF CONTENTS

1.0	Project Description.....	1
1.1	Introduction	1
1.2	Site Plan Review.....	1
1.3	Site Access	2
1.4	Bicycle and Pedestrian Facilities	2
1.5	Transit Facilities	2
2.0	Traffic Analyses Methodology and Assumptions	3
2.1	Growth Rate	3
2.2	Traffic Data Collection	3
2.3	Detailed Intersection Analysis.....	4
3.0	Study Network.....	4
3.1	Gross Trip Generation.....	4
3.2	Trip Distribution	5
3.3	Level of Service Standards.....	5
3.4	Study Network Determination	5
3.5	Existing Facilities.....	5
4.0	Trip Generation.....	6
5.0	Trip Distribution and Assignment.....	6
6.0	Traffic Analysis	7
6.1	Existing Traffic.....	7
6.2	2012 No-Build Traffic.....	7
6.3	2012 Build Traffic	9
7.0	Identification of Programmed Projects.....	12
8.0	Ingress/Egress Analysis.....	13
9.0	Internal Circulation Analysis.....	14
10.0	Compliance with Comprehensive Plan Analysis	14
11.0	Non-Expedited Criteria	14
11.1	Quality, Character, Convenience, and Flexibility of Transportation Options	14
11.2	Vehicle Miles Traveled	14
11.3	Relationship Between Location of Proposed DRI and Regional Mobility	14
11.4	Relationship Between Proposed DRI and Existing or Planned Transit Facilities.....	15
11.5	Transportation Management Area Designation	15
11.6	Offsite Trip Reduction and Trip Reduction Techniques.....	15
11.7	Balance of Land Uses – Jobs/Housing Balance	15
11.8	Relationship Between Proposed DRI and Existing Development and Infrastructure.....	15
12.0	Area of Influence	15
12.1	Criteria	15
12.2	Study Area Determination and Characteristics.....	16
12.3	Development Housing Analysis.....	17
12.4	Affordable Housing Analysis.....	19
13.0	ARC’s Air Quality Benchmark.....	20

LIST OF TABLES

	<u>Page</u>
Table 1: Proposed Land Uses.....	1
Table 2: Gross Trip Generation.....	4
Table 3: Net Trip Generation.....	6
Table 4: 2008 Existing Intersection Levels of Service.....	7
Table 5: 2012 No-Build Intersection Levels of Service.....	8
Table 6: 2012 No-Build with Improvements Intersection Levels of Service.....	9
Table 7: 2012 Build Intersection Levels of Service.....	11
Table 8: Census Tract Information.....	16
Table 9: Estimated Workers per Household.....	16
Table 10: AOI Jobs and Salaries.....	18
Table 11: Expected Workers.....	19
Table 12: ARC VMT Reductions.....	20

LIST OF FIGURES

	<u>Following Page</u>
Figure 1: Location Map.....	1
Figure 2: Site Aerial.....	1
Figure 3: Site Plan.....	2
Figure 4: Residential and Hotel Distribution.....	7
Figure 5: Retail, Office and Restaurant Distribution.....	7
Figure 6: Project Trips.....	7
Figure 7: Existing 2008 Conditions.....	7
Figure 8: No-Build 2012 Conditions.....	8
Figure 9: Build 2012 Conditions.....	10
Figure 10: Area of Influence.....	16

EXECUTIVE SUMMARY

This report presents the analysis of the anticipated traffic impacts of a proposed mixed-use development (Hammond Center) in Sandy Springs, Georgia. This report is being prepared as part of a submittal requesting a rezoning from to O-I (Office / Institutional) to Mixed-Use District with the City of Sandy Springs. Because the mixed-use project will exceed 400,000 square feet, the proposed development is a Development of Regional Impact (DRI) and is subject to Georgia Regional Transportation Authority (GRTA) and Atlanta Regional Commission (ARC) review.

The proposed site is located along the east side of Peachtree-Dunwoody Road and south side of Hammond Drive. The site currently has access via three driveways, a right-in only located along Peachtree-Dunwoody Road and two full movement driveways located along Hammond Drive. Upon buildout, the project is proposed to have vehicular access via three right-in/right-out (RIRO) driveways and one full movement driveway in addition to cross access provided by the Palisades development (DRI #1152), located south of Hammond Center. Note that the RIRO driveway along Peachtree Dunwoody is actually offsite (part of the Palisades development). Additionally, the easternmost driveway along Hammond Drive (currently serving the Fairfield Inn) will be considered an off-site driveway.

The site consists of approximately 90,000 square feet of medical office, office, and restaurant space. This site is currently at 75% occupied. The buildings will be demolished prior to the development of the Hammond Center DRI. The project is proposing 20,000 square feet of restaurant space, 20,000 square feet of office space, 50,000 square feet of retail space, 395 apartments, and will also include the existing 120 room hotel (Fairfield Inn). The development is scheduled to be built-out in a single phase by year 2012.

Based on the existing 2008 conditions, three of the seven study intersections currently operate below the acceptable Level of Service standard (LOS E) during the AM or PM peak hour.

The results of the detailed intersection analysis for the 2012 No-Build (excluding the traffic associated with Hammond Center) and 2012 Build conditions (including the traffic associated with Hammond Center) identified improvements that will be necessary in order to maintain the Level of Service standard within the study network. Per GRTA's Letter of Understanding guidelines, improvements were made to the intersections until the Level of Service was elevated to an appropriate range. These improvements are listed below:

2012 No-Build recommended improvements (includes background traffic growth and the project traffic associated with six nearby DRIs, but excludes the Hammond Center DRI project traffic):

Peachtree-Dunwoody at I-285 Westbound Ramps (*Intersection #2*)

- Install an additional westbound right-turn lane (creating dual right-turn lanes and dual left-turn lanes) along the off-ramp.

Peachtree-Dunwoody Road at Concourse Parkway (*Intersection #3*)

- Install an additional southbound left-turn lane (creating dual left-turn lanes) along Peachtree Dunwoody Road.
 - Provide two receiving lanes along the Palisades Driveway
(Improvement listed in DRI #1152 Notice of Decision (NOD) issued by GRTA.)
- Install an additional westbound left-turn lane (creating dual left-turn lanes) along the Palisades driveway. (Improvement listed in the DRI #1152 NOD)
- Install an additional northbound left-turn lane (creating dual left-turn lanes) along Peachtree Dunwoody Road.
- Install an additional northbound and southbound through lane along Peachtree-Dunwoody Road, creating three through lanes in each direction.

Peachtree-Dunwoody Road at East/West Connector (*Intersection #4*)

- Install an additional northbound through lane along Peachtree-Dunwoody Road, creating three northbound through lanes.

Peachtree-Dunwoody Road at Hammond Drive (*Intersection #5*)

- Install a northbound right-turn lane along Peachtree-Dunwoody Road. (Improvement listed in the NOD for DRI#740, DRI #883, DRI #1152, DRI #1432, and DRI #1520 traffic studies.)
- Install a westbound right-turn lane along Hammond Drive. (Improvement listed in the NOD for DRI#740, DRI #883, DRI #1152, DRI #1432, and DRI #1520 traffic studies.)
- Install an additional northbound left-turn lane (creating dual left-turn lanes) along Peachtree-Dunwoody Road and provide a protected-only northbound left-turn signal phase (green arrow). (Improvement listed in the NOD for DRI #1152, DRI #1432, and DRI #1520 traffic studies.)
- Install an additional eastbound left-turn lane (creating dual-left turn lanes) along Hammond Drive and provide a protected-only eastbound left-turn signal phase (green arrow). (Improvement listed in the NOD for DRI #1432 and DRI #1520 traffic studies.)
- Install additional northbound and southbound through lanes along Peachtree-Dunwoody Road (creating three lanes in each direction).
- Install additional eastbound and westbound through lanes along Hammond Drive (creating three lanes in each direction).
- Install an additional westbound left-turn lane along Hammond Drive, creating dual left-turn lanes.
- Install an additional southbound left-turn lane along Peachtree-Dunwoody Road, creating dual left-turn lanes.

Hammond Drive at Perimeter Center Parkway (*Intersection #7*)

- Change the westbound right-turn lane to a shared through/right-turn lane along Hammond Drive.
- Install a shared through/right-turn lane eastbound along Hammond Drive.
- Install an additional westbound left-turn lane along Hammond Drive, creating dual left-turns.
- Install an additional northbound left-turn lane along Perimeter Center Parkway, creating dual left-turns. (Improvement listed in the NOD for DRI #1582.)

2012 Build recommended improvements (includes background traffic growth and the project traffic associated with six nearby DRIs, and includes the Hammond Center DRI project traffic)

The following intersection geometry and improvements are recommended at the site driveways:

Hammond Drive at Full Movement Driveway #1 (*Intersection #8*)

- Install a signal at this location. (Improvement approved by the City of Sandy Springs and Perimeter CID in the Hammond Drive Corridor Study dated January 2008)
- Install a separate northbound left-turn lane and shared through-right-turn lane exiting the site.
- Install a westbound left-turn lane along Hammond Drive entering the site.
- Install an eastbound right-turn lane along Hammond Drive. (Note: This recommendation is applicable to the existing conditions; when Hammond Drive is widened in the future, the right-turn lane would become the third through lane.)

Hammond Drive at RIRO Driveway #2 (*Intersection #9*)

- Install a right-turn only lane exiting the site.

Hammond Drive at Existing Hotel Driveway/Off-Site Driveway #4 (*Intersection #6*)

- Remove the westbound left-turn lane entering the site, thereby restricting the driveway to unsignalized RIRO operations.

1.0 PROJECT DESCRIPTION

1.1 Introduction

This report presents the analysis of the anticipated traffic impacts of a proposed mixed-use development (Hammond Center) in Sandy Springs, Georgia. This report is being prepared as part of a submittal requesting a rezoning from O-I (Office / Institutional) to Mixed-Use District with the City of Sandy Springs. Because the mixed-use project will exceed 400,000 square feet, the proposed development is a Development of Regional Impact (DRI) and is subject to Georgia Regional Transportation Authority (GRTA) and Atlanta Regional Commission (ARC) review.

The proposed site is located along the east side of Peachtree-Dunwoody Road and south side of Hammond Drive. The site currently has access via three driveways, a right-in only located along Peachtree-Dunwoody Road and two full movement driveways located along Hammond Drive. Upon buildout, the project is proposed to have vehicular access via three right-in/right-out (RIRO) driveways and one full movement driveway in addition to cross access provided by the Palisades development (DRI #1152), located south of Hammond Center. Note that the RIRO driveway along Peachtree Dunwoody is actually offsite (part of the Palisades development). Additionally, the easternmost driveway along Hammond Drive (currently serving the Fairfield Inn) will be considered an off-site driveway.

The site consists of approximately 90,000 square feet of medical office, office, and restaurant space. This site is currently at 75% occupied. The buildings will be demolished prior to the development of the Hammond Center DRI. The project is proposing 20,000 square feet of restaurant space, 20,000 square feet of office space, 50,000 square feet of retail space, 395 apartments, and will also include the existing 120 room hotel (Fairfield Inn). The development is scheduled to be built-out in a single phase by year 2012.

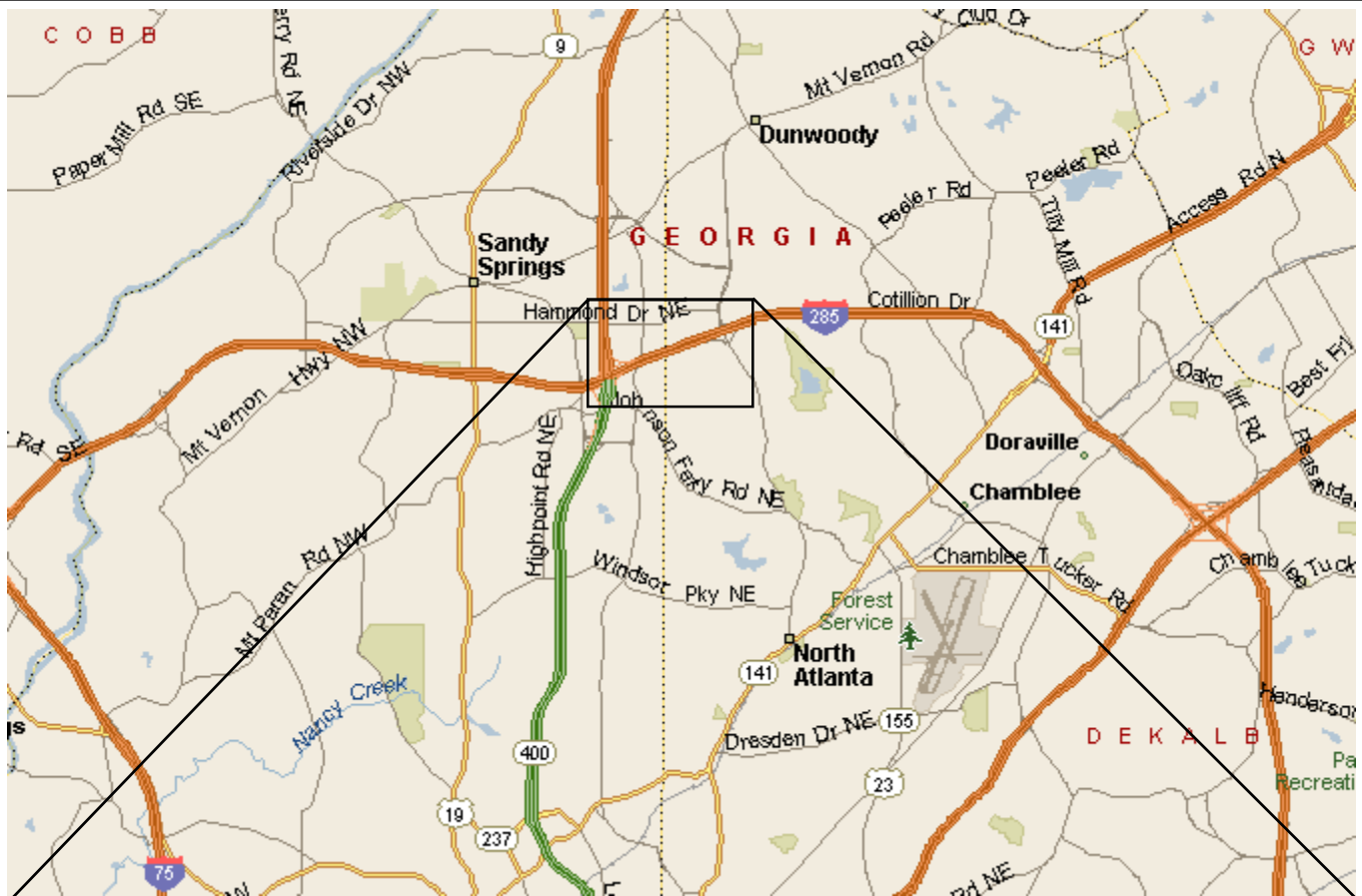
A summary of the proposed land-uses and densities can be found below in **Table 1**.

Table 1 Hammond Center DRI Proposed Land Uses	
Restaurant	20,000 SF
Office Space	20,000 SF
Retail Space	50,000 SF
Apartments	395 Units
Existing Land Uses to Remain	
Hotel	120 rooms

Figure 1 and **Figure 2** provide a location map and an aerial photograph of the site.

1.2 Site Plan Review

The proposed mixed-use development is located along the east side of Peachtree-Dunwoody Road and south side of Hammond Drive. The site currently consists of 90,000 SF of existing buildings (10,000 square feet of medical office space, a 10,000 square feet restaurant, 20,000 square feet of retail space, and 50,000 square feet of office space and a 120-room hotel). The existing buildings, with the exception of the hotel, will be demolished. The project is proposing 20,000 square feet of restaurant space, 20,000 square feet of office space, 50,000 square feet of retail space, 395 apartments, and will also include the existing 120 room hotel. The Hammond Center site plan was developed to be consistent with the Palisades development in that the face of the building along the western



Kimley-Horn
and Associates, Inc.

Hammond Center DRI Transportation Analysis

Location Map

Figure
1



boundary is similar in distance (offset) from Peachtree-Dunwoody Road. The development is scheduled to be built-out in a single phase by year 2012. Please refer to Section 1.3 for a description of site access.

Figure 3 is a small-scale copy of the site plan. A full-size site plan consistent with GRTA's Site Plan Guidelines is also being submitted as part of the Review Package.

1.3 Site Access

The site currently has access via three driveways, a right-in only located along Peachtree-Dunwoody Road and two full movement driveways located along Hammond Drive. Upon buildout, the project is proposed to have vehicular access via three right-in/right-out (RIRO) driveways and one full movement driveway in addition to cross access provided by the Palisades development (DRI #1152), located south of Hammond Center.

The right-in only driveway along Peachtree-Dunwoody Road is an existing driveway that serves the Palisades development (DRI #1152), the development to the south of Hammond Center. This driveway will be shared with the Palisades development in the future. (Note: The existing right-in only driveway along Peachtree Dunwoody Road will be eliminated.)

Three access points are proposed along Hammond Drive. A RIRO driveway is proposed along Hammond Drive approximately 300' east from Peachtree-Dunwoody Road. A full-movement signalized driveway is proposed to be located approximately 650' east of Peachtree-Dunwoody Road. This location is consistent with a proposed median break and signal in the Hammond Drive Corridor Study. Another RIRO driveway (currently an existing full movement driveway serving the hotel) is proposed along Hammond Drive 850' east of Peachtree-Dunwoody Road in the approximate location of the existing driveway providing access to the hotel, the Fairfield Inn.

Additional access is provided to the site through the Palisades development. This cross-access enables the Hammond Center traffic access to the signalized intersection of Peachtree-Dunwoody Road and Concourse Parkway / existing driveway.

See the attached conceptual plan for a visual representation of access to the proposed development.

1.4 Bicycle and Pedestrian Facilities

Pedestrian facilities (sidewalks) currently do not exist along the Hammond Drive property frontage, but do exist in locations along the east side of Peachtree Dunwoody Road adjacent to the site. There are projects under design and construction to enhance the pedestrian and bicycle facilities in the area.

There are two GDOT projects along Hammond Drive which propose pedestrian and bicycle facilities. Sidewalks along Hammond Drive between SR 400 and the DeKalb County line are expected to be constructed in 2008. Road widening to six through lanes, and bicycle and sidewalks improvements are expected to be completed along Hammond Drive between the Fulton/DeKalb County line and Ashford-Dunwoody Road in 2012.

The Hammond Center development will provide pedestrian access points along the street frontage to encourage pedestrian movement and will provide pedestrian access along the public street frontage in accordance with Sandy Springs development requirements. Additionally, the proposed street-front retail along Hammond Drive will contribute to the overall experience for pedestrians in the area.

1.5 Transit Facilities

The Dunwoody MARTA transit station and Perimeter Mall are within walking distance of the site (less than 1/3 of a mile). Additionally, there are many local destinations within walking distance for hotel guests, employees, and visitors to the site.

MARTA bus routes #5, #70, #87, #150, and #305 all service the area. GRTA Xpress 428 Route provides service from Panola Road in eastern DeKalb County to the MARTA Dunwoody Station. GRTA Xpress 400 Route provides

service from the Cumming area north of SR 400, and circulates within the immediate area, traveling on Hammond Drive and Peachtree-Dunwoody Road.

Cobb Community Transit (CCT) Route #65 operates from the Marietta Transfer Center to the MARTA Dunwoody Transit Station during the AM and PM peak periods Monday through Friday.

Additionally, in cooperation with the Perimeter Transportation Coalition, many companies in the area operate shuttles that provide transportation between their properties, the MARTA stations, and Perimeter Mall. Some area hotels also provide on-demand shuttle services to/from local destinations.

2.0 TRAFFIC ANALYSES METHODOLOGY AND ASSUMPTIONS

2.1 Growth Rate

Background traffic is defined as expected traffic on the street network in future year(s) absent the construction and opening of the proposed project. Historical traffic count data from the Georgia DOT was reviewed for the area surrounding the proposed development, as well as population growth rates of Fulton County and Fulton County from the 1990 to 2000 Census. A growth rate of 1.0% per year along all public streets was agreed upon during the Pre-Application meeting with GRTA staff. In addition to the background growth rate, project traffic from six DRIs in the vicinity of the project was included in the 2012 No-Build Volumes. All of the traffic associated with the following six DRIs are included in the 2012 No-Build Conditions:

- DRI #740 – Corporate Campus Expansion
- DRI #883 – Concourse Residential Condominiums
- DRI #1152 – Palisades Development
- DRI #1520 – 245 Perimeter Center
- DRI #1432 – High Street development
- DRI #1582 – 236 Perimeter Mixed Use

2.2 Traffic Data Collection

Existing weekday peak hour turning movement counts were conducted at five intersections between 7:00-9:00 AM and 4:00-6:00 PM in May of 2008. These intersection counts were performed while school was in session.

The peak hours varied between the five intersections as follows:

- Intersection #1: Peachtree-Dunwoody Road at I-285 EB Ramp (signalized)
 - (AM Peak 7:45-8:45, PM Peak 5:00-6:00)
- Intersection #2: Peachtree-Dunwoody Road at I-285 WB Ramp (signalized)
 - (AM Peak 7:45-8:45, PM Peak 5:00-6:00)
- Intersection #3: Peachtree-Dunwoody Road at Concourse Parkway (signalized)
 - (AM Peak 8:00-9:00, PM Peak 5:00-6:00)
- Intersection #5: Peachtree-Dunwoody Road at Hammond Drive (signalized)
 - (AM Peak 8:00-9:00, PM Peak 4:30-5:30)
- Intersection #7: Perimeter Center Parkway at Hammond Drive (signalized)
 - (AM Peak 7:45-8:45, PM Peak 5:00-6:00)

All raw count data is included in the Appendix.

2.3 Detailed Intersection Analysis

Level-of-service (LOS) is used to describe the operating characteristics of a road segment or intersection in relation to its capacity. LOS is defined as a qualitative measure that describes operational conditions and motorists perceptions within a traffic stream. The Highway Capacity Manual defines six levels of service, LOS A through LOS F, with A being the best and F being the worst. Level of service analyses were conducted at all intersections within the study network using Synchro Professional, Version 6.0.

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

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

3.0 STUDY NETWORK

3.1 Gross Trip Generation

The proposed development is expected to consist of a 20,000 square foot restaurant, 20,000 square feet of office space, 50,000 square feet of retail space, 395 apartments, and will also include the existing 120 room hotel.

Trips associated with the existing hotel were removed from the study network, and traffic was added back in based upon ITE rates. This removal of trips is due to the fact that the hotel parking lot is shared by some land uses to be demolished, and the trips only associated with the hotel could not be isolated.

Traffic for the project land uses was calculated using equations and rates contained in the *Institute of Transportation Engineers' (ITE) Trip Generation Manual, Seventh Edition, 2003*. Gross trips generated are displayed below in **Table 2**.

Table 2 Hammond Center DRI Gross Trip Generation						
Land Use	ITE Code	Daily Traffic	Weekday AM Peak Hour		Weekday PM Peak Hour	
		Total	Enter	Exit	Enter	Exit
Build-Out (Year 2012)						
395 Apartment Units	220	2,524	39	158	153	82
120 Room Hotel	310	701	31	20	38	33
20,000 SF of General Office Building Space	710	386	46	6	17	84
50,000 SF of Shopping Center	820	4,328	63	40	190	206
20,000 SF of Quality Restaurant Space	931	1,799	N/A	N/A	101	49
Total		9,738	179	224	499	454

3.2 *Trip Distribution*

The directional distribution and assignment of new project trips was based on the project land uses, a review of land use densities in the area, combined with engineering judgment and discussions with GRTA staff at the Pre-Application meeting. Previous DRI traffic studies were also reviewed when determining trip distribution.

The traffic analysis includes the anticipated internal capture between the retail, office, and hotel uses within the proposed development. Internal capture percentages for the project of 14.13% daily and 14.69% PM peak hour were calculated based on ITE's rates.

3.3 *Level of Service Standards*

For the purposes of this traffic impact study, the level of service standard for all analyses is LOS D. The LOS standard is based on the default value of LOS D in urban areas as agreed upon in the GRTA Letter of Understanding.

3.4 *Study Network Determination*

A general study area was determined using the 7% rule. This rule recommends that all intersections and segments be analyzed which are impacted to the extent that the traffic from the proposed site is 7% or more of the Service Volume of the facility (at a previously established LOS standard) be considered for analysis. This general study area was agreed to after the Pre-Application meeting, and includes the following intersections:

- Peachtree-Dunwoody Road at Hammond Drive (signalized)
- Hammond Drive at Perimeter Center Parkway (unsignalized)
- Peachtree-Dunwoody Road at Concourse Parkway (signalized)
- Peachtree-Dunwoody Road at I-285 Westbound Off-Ramp (signalized)
- Peachtree-Dunwoody Road at I-285 Eastbound On-Ramp (signalized)
- Peachtree-Dunwoody Road at Existing Driveway ("East-West Connector"/Site Driveway #3)
- Hammond Drive at Existing Hotel Driveway (Site Driveway #4)

Each of the above listed intersections was analyzed for the Existing 2008 Condition, the 2012 No-Build Condition, and the 2012 Build Condition. The 2012 No-Build condition represents the existing traffic volumes grown at 1.0% per year for four years, plus project traffic from six DRIs in the vicinity of the development. The 2012 Build condition adds the project trips associated with the Hammond Center development to the 2012 No-Build condition. The proposed (not existing) project driveways #1 and #2 were analyzed in the 2012 Build condition only.

3.5 *Existing Facilities*

Peachtree-Dunwoody Road is a four-lane divided north-south oriented roadway. The 2006 Average Daily Traffic (ADT) between Hammond Drive and Concourse Parkway was 32,090 vehicles per day (vpd) (GDOT). The 2006 ADT between Mt. Vernon Highway and Central Parkway was 20,220 vpd (GDOT).

Hammond Drive is a four-lane east-west oriented roadway. The 2007 ADT between Peachtree-Dunwoody Road and Perimeter Center Parkway was 23,508 vpd (three day average; count performed 5/9, 5/10, 5/15).

Concourse Parkway is a four-lane roadway providing access to nearby office complexes. The roadway extends from just east of Peachtree-Dunwoody Road to Hammond Drive, west of Peachtree-Dunwoody Road.

Perimeter Center Parkway is a four-lane divided north-south oriented roadway. The 2007 ADT between Hammond Drive and Perimeter Center West was 11,111 vpd (three day average; performed 5/9, 5/10, 5/15).

Roadway	Road Type	Number of Lanes	Posted Speed Limit (MPH)	GDOT Functional Classification
Peachtree-Dunwoody Road	Two-Way	4	35	Urban Minor Arterial
Hammond Drive	Two-Way	4	35	Urban Collector Street
Concourse Parkway	Two-Way	4	35	Urban Local Street
Perimeter Center Parkway	Two-Way	4	35	Urban Collector Street

4.0 TRIP GENERATION

As stated earlier, trips associated with the proposed development were estimated using the *ITE Trip Generation Manual*, Seventh Edition (2003).

Internal capture reductions were applied to trips between the office, residential and hotel, and retail and restaurant portions of the development based on ITE rates. The internal capture worksheets are included in the Appendix.

An 8% alternative mode reduction was applied for all land uses due to the development's proximity to the Dunwoody MARTA transit station, the existing MARTA, CCT, and GRTA bus routes, and the Perimeter Coalition TMA programs. The Dunwoody MARTA transit station and Perimeter mall are within walking distance of the site. Additionally, there are many local destinations within walking distance for residents, employees, and visitors to the site.

Pass-by reductions were taken according to the *ITE Trip Generation Handbook*, 2004 and GRTA guidelines for the retail portion of the development. GRTA's 10% limit test was not applied for the weekday PM peak hour because the ITE calculated pass-by trips were less than 10% of the adjacent roadway volumes.

The total trips generated and analyzed in the report are listed on the following page in **Table 3**.

Table 3 Hammond Center DRI Net Trip Generation					
Land Use	Daily Traffic	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Total	Enter	Exit	Enter	Exit
Build-Out (Year 2012)					
Gross Trips	9,738	179	224	499	454
Mixed Use Reductions	-1,376	-	-	-83	-76
Alternate Mode Reductions	-669	-14	-18	-33	-30
Driveway Volumes	7,693	165	206	383	348
Pass-by Trips	-1,850	-	-	-81	-81
New Trips	5,843	165	206	302	267

5.0 TRIP DISTRIBUTION AND ASSIGNMENT

New trips were distributed onto the roadway network using the percentages agreed to during the Pre-Application meeting. Separate distributions were developed for the hotel and residential land uses and the

office/retail/restaurant land uses. These percentages were applied to the new trips generated by the development (see Table 3, above), and the volumes were assigned to the street network. **Figures 4 and 5** display the expected trip percentages for the development throughout the roadway network. The expected peak hour turning movements generated by the proposed development are shown in **Figure 6**.

6.0 TRAFFIC ANALYSIS

6.1 Existing Traffic

The existing weekday traffic volumes are shown in **Figure 7**. These volumes were input in Synchro 6.0 along with existing signal timings and the Existing Conditions analysis was performed. The results are displayed below in **Table 4**.

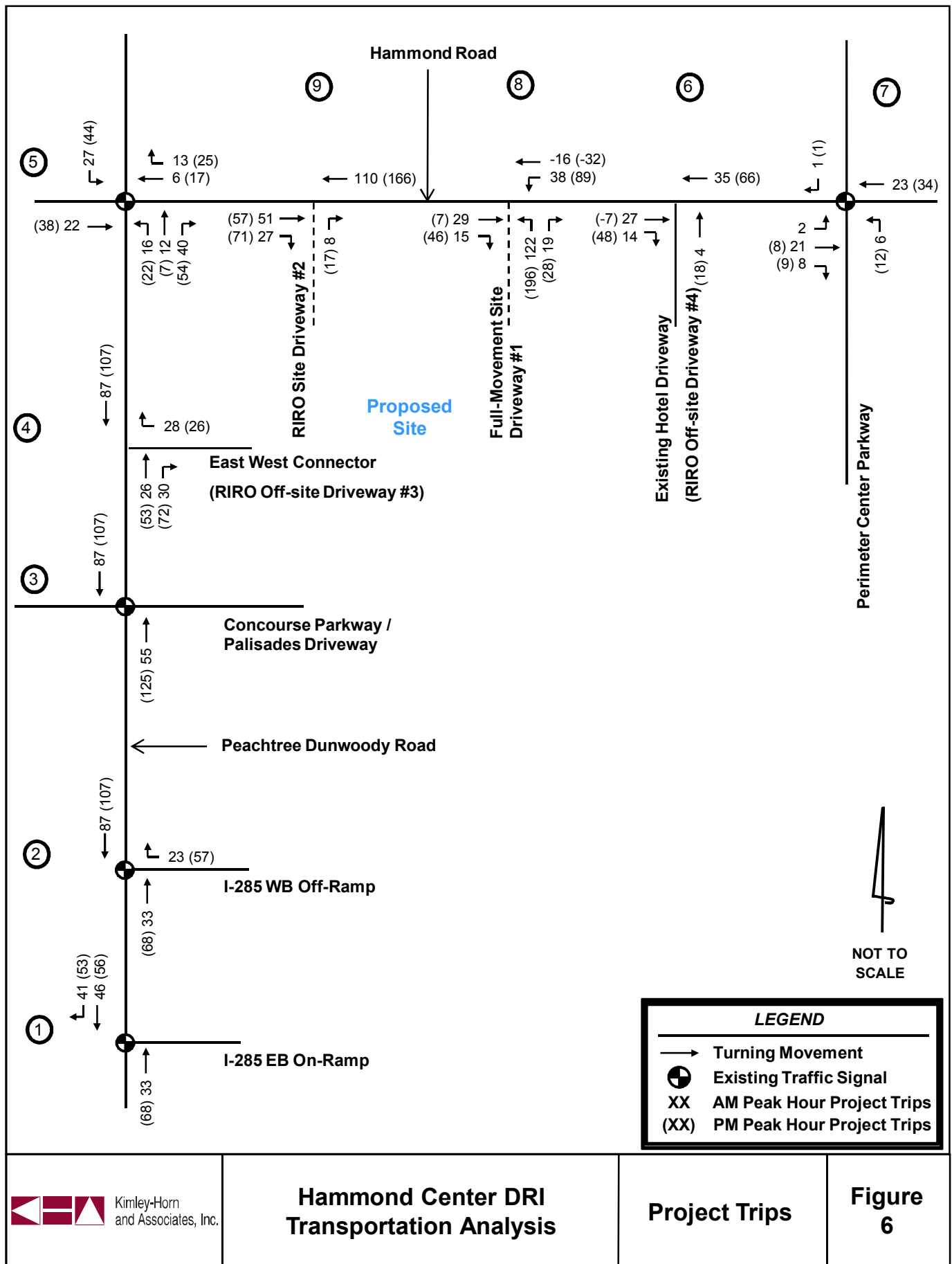
Table 4 Hammond Center DRI 2008 Existing Intersection Levels of Service (delay in seconds)				
Intersection		Control	AM Peak Hour	PM Peak Hour
1	Peachtree-Dunwoody Road at I-285 Eastbound Ramps	Signalized	A (0.8)	B (15.2)
2	Peachtree-Dunwoody Road at I-285 Westbound Ramps	Signalized	D (42.8)	B (13.5)
3	Peachtree-Dunwoody Road at Concourse Parkway/Palisades Driveway	Signalized	B (17.0)	F (111.9)
4	Peachtree-Dunwoody Road at East-West Connector Driveway	Unsignalized	C (18.7)	C (20.9)
5	Peachtree Dunwoody Road at Hammond Drive	Signalized	F (92.2)	F (92.4)
6	Hammond Drive at Existing Hotel Driveway	Unsignalized	C (18.4)	C (21.4)
7	Hammond Drive at Perimeter Center Parkway	Signalized	C (24.5)	C (31.8)

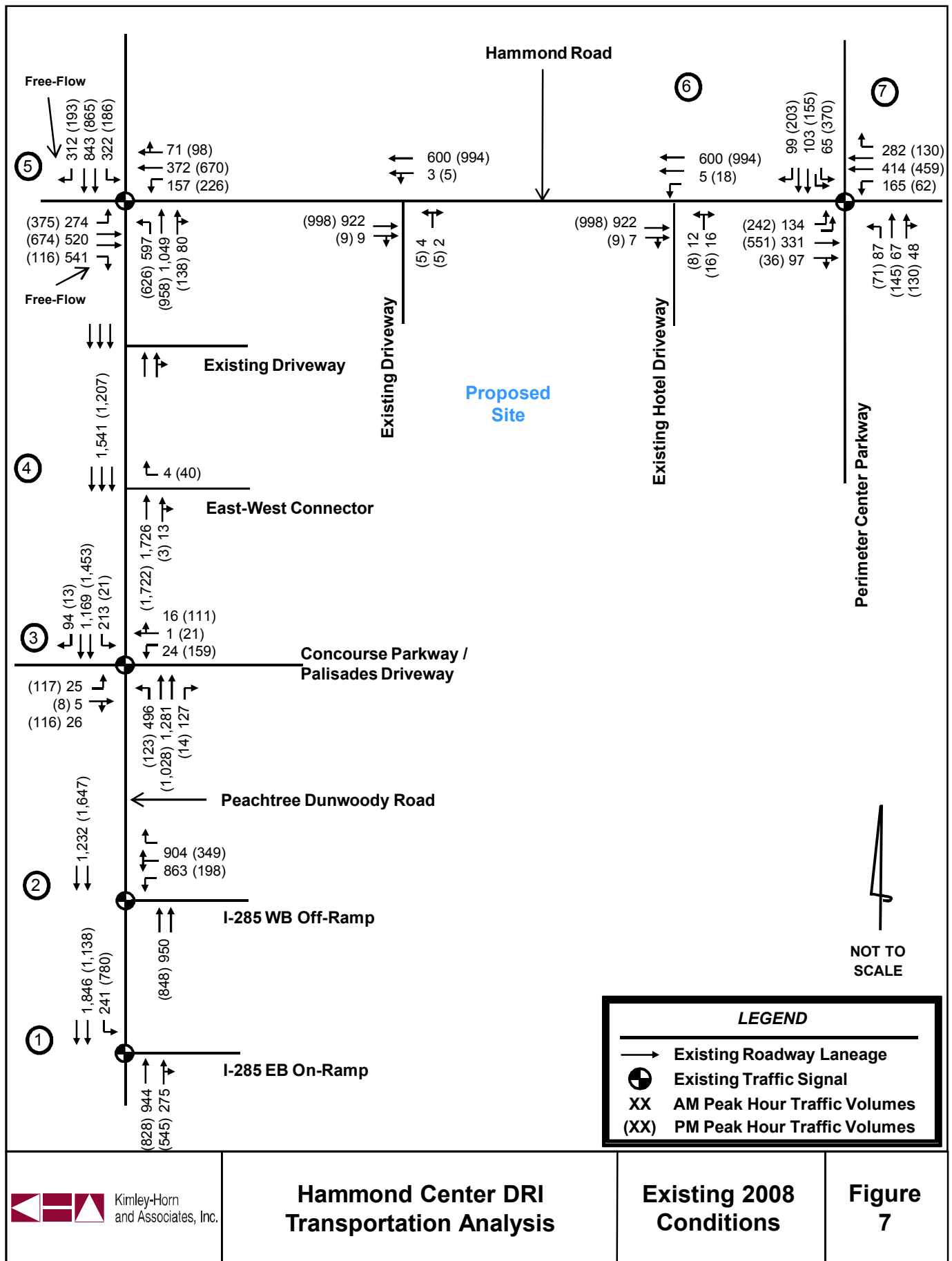
As you can see in Table 4, two of the study intersections currently operate at or below the acceptable Level of Service standard (LOS D).

6.2 2012 No-Build Traffic

The existing traffic volumes were grown at 1.0% per year along all roadways within the study network. In addition to background traffic growth, the project traffic at full build-out from six DRIs (#740, #883, #1152, #1482, #1520, and #1582) in the vicinity of the project was included in the 2012 No-Build Volumes. The project traffic associated with the six DRIs was taken from the previous DRI traffic studies.

These volumes were input in Synchro 6.0 and analyses of the projected No-Build conditions were performed. The No-Build conditions analysis included updating the traffic signal timing in the corridors. The results are displayed below in **Table 5**. The projected volumes for the year 2012 No-Build weekday conditions are shown in **Figure 8**.





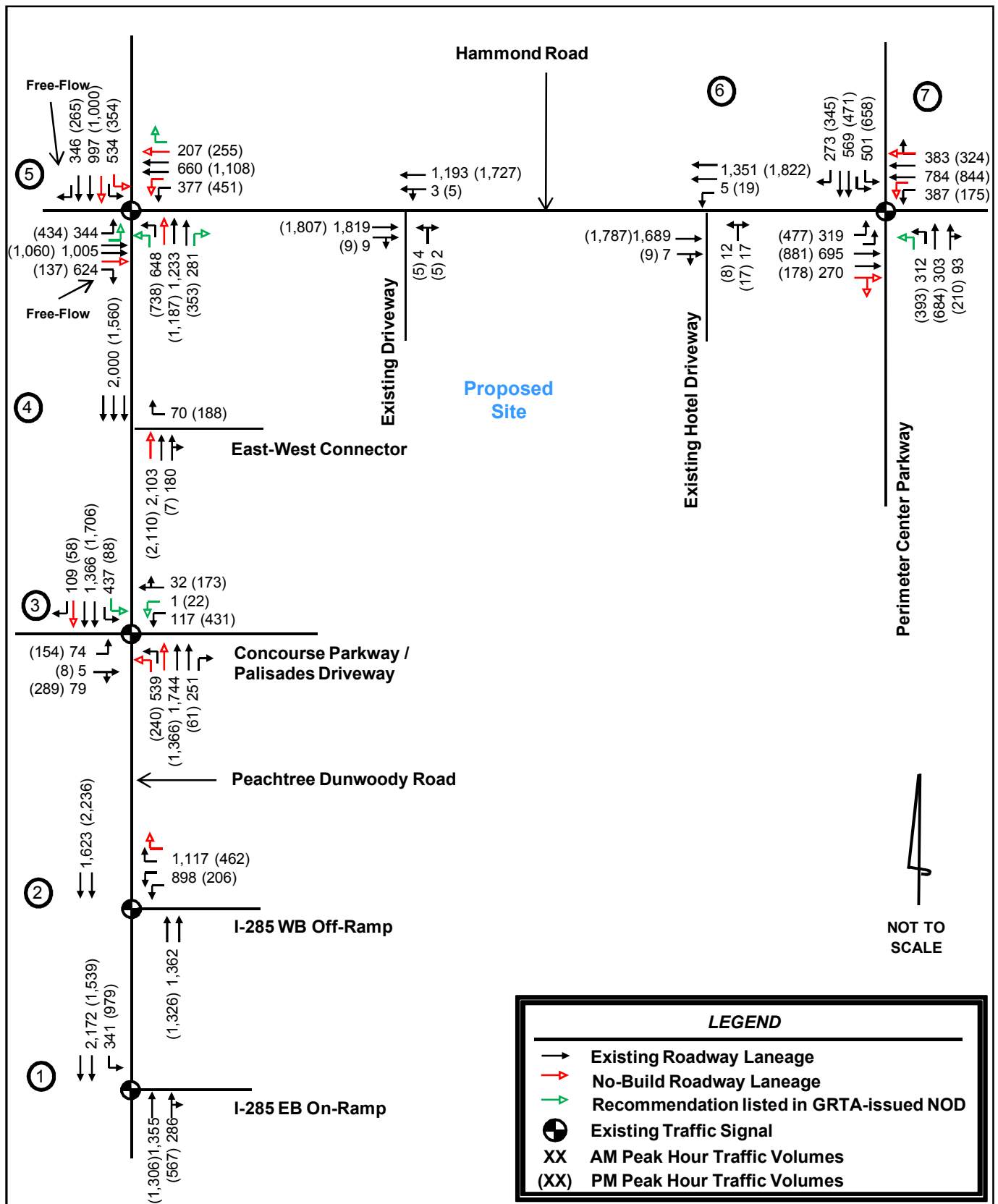


Table 5 Hammond Center DRI 2012 No-Build Intersection Levels of Service (delay in seconds)				
Intersection		Control	AM Peak Hour	PM Peak Hour
1	Peachtree-Dunwoody Road at I-285 Eastbound Ramps	Signalized	A (4.2)	D (37.2)
2	Peachtree-Dunwoody Road at I-285 Westbound Ramps	Signalized	F (120.7)	D (35.0)
3	Peachtree-Dunwoody Road at Concourse Parkway/Palisades Driveway	Signalized	E (72.2)	F (37.6)
4	Peachtree-Dunwoody Road at East-West Connector Driveway	Unsignalized	E (42.6)	F (239.2)
5	Peachtree Dunwoody Road at Hammond Drive	Signalized	F (228.4)	F (230.1)
6	Hammond Drive at Existing Hotel Driveway	Unsignalized	F (402.4)	F (916.7)
7	Hammond Drive at Perimeter Center Parkway	Signalized	F (91.6)	F (80.1)

Six of the intersections failed to meet acceptable Level of Service standards for the year 2012 No-Build condition. Per GRTA's Letter of Understanding guidelines, improvements were made to these intersections until the Level of Service was elevated to the Level of Service standard.

The 2012 No-Build with Improvements intersection analysis Levels of Service are displayed below in **Table 6**.

Table 6 Hammond Center DRI 2012 No-Build with Improvements Intersection Levels of Service (delay in seconds)					
Intersection		Control	LOS Standard	AM Peak Hour	PM Peak Hour
2	Peachtree-Dunwoody Road at I-285 Westbound Ramps	Signalized	D	C (35.0)	B (15.5)
3	Peachtree-Dunwoody Road at Concourse Parkway/Palisades Driveway	Signalized	D AM E PM	C (25.6)	E (58.1)
4	Peachtree-Dunwoody Road at East-West Connector Driveway	Unsignalized	D	B (11.8)	C (20.5)
5	Peachtree Dunwoody Road at Hammond Drive	Signalized	E	D (53.3)	E (58.9)
6	Hammond Drive at Existing Hotel Driveway	Unsignalized	D	F (162.7)*	D (33.9)
7	Hammond Drive at Perimeter Center Parkway	Signalized	D	C (33.1)	D (42.9)

The 2012 No-Build improvements made to the intersections are shown in Figure 8, and are listed below:

Peachtree-Dunwoody at I-285 Westbound Ramps (*Intersection #2*)

- Install an additional westbound right-turn lane (creating dual right-turn lanes and dual left-turn lanes) along the off-ramp.

Peachtree-Dunwoody Road at Concourse Parkway/Palisades Driveway (*Intersection #3*)

- Install an additional southbound left-turn lane (creating dual left-turn lanes) along Peachtree Dunwoody Road.
 - Provide two receiving lanes along the Palisades Driveway
(Improvement listed in DRI #1152 Notice of Decision (NOD) issued by GRTA.)
- Install an additional westbound left-turn lane (creating dual left-turn lanes) along the Palisades driveway. (Improvement listed in the DRI #1152 NOD)
- Install an additional northbound left-turn lane (creating dual left-turn lanes) along Peachtree Dunwoody Road.
- Install an additional northbound and southbound through lane along Peachtree-Dunwoody Road, creating three through lanes in each direction.

Peachtree-Dunwoody Road at East/West Connector (*Intersection #4*)

- Install an additional northbound through lane along Peachtree-Dunwoody Road, creating three northbound through lanes.

Peachtree-Dunwoody Road at Hammond Drive (*Intersection #5*)

- Install a northbound right-turn lane along Peachtree-Dunwoody Road. (Improvement listed in the NOD for DRI#740, DRI #883, DRI #1152, DRI #1432, and DRI #1520 traffic studies.)
- Install a westbound right-turn lane along Hammond Drive. (Improvement listed in the NOD for DRI#740, DRI #883, DRI #1152, DRI #1432, and DRI #1520 traffic studies.)
- Install an additional northbound left-turn lane (creating dual left-turn lanes) along Peachtree-Dunwoody Road and provide a protected-only northbound left-turn signal phase (green arrow). (Improvement listed in the NOD for DRI #1152, DRI #1432, and DRI #1520 traffic studies.)
- Install an additional eastbound left-turn lane (creating dual-left turn lanes) along Hammond Drive and provide a protected-only eastbound left-turn signal phase (green arrow). (Improvement listed in the NOD for DRI #1432 and DRI #1520 traffic studies.)
- Install additional northbound and southbound through lanes along Peachtree-Dunwoody Road (creating three lanes in each direction).
- Install additional eastbound and westbound through lanes along Hammond Drive (creating three lanes in each direction).
- Install an additional westbound left-turn lane along Hammond Drive, creating dual left-turn lanes.
- Install an additional southbound left-turn lane along Peachtree-Dunwoody Road, creating dual left-turn lanes.

Hammond Drive at Perimeter Center Parkway (*Intersection #7*)

- Change the westbound right-turn lane to a shared through/right-turn lane along Hammond Drive.
- Install a shared through/right-turn lane eastbound along Hammond Drive.
- Install an additional westbound left-turn lane along Hammond Drive, creating dual left-turns.
- Install an additional northbound left-turn lane along Perimeter Center Parkway, creating dual left-turns. (Improvement listed in the NOD for DRI #1582.)

* Because of the relatively low volume of turning vehicles from the side-street at Hammond Drive at the Existing Hotel Driveway (Intersection #6), signal warrants are not expected to be met. This, combined with the fact that it is not uncommon for side street traffic to experience low Levels of Service, a signal is not recommended.

6.3 2012 Build Traffic

The traffic associated with the proposed development (Hammond Center) was added to the 2012 No-Build volumes and analyzed with Synchro 6.0. Additionally, existing trips associated with the land uses to be demolished prior to development of the site were removed from the site driveways and external intersections. The results of the analyses are displayed in **Table 7**. The projected volumes for the year 2012 Build conditions are shown in **Figure 9**.

Table 7
Hammond Center DRI
2012 Build Intersection Levels of Service
(delay in seconds)

Intersection		Control	LOS Standard	AM Peak Hour	PM Peak Hour
1	Peachtree-Dunwoody Road at I-285 Eastbound Ramps	Signalized	D	A (4.6)	D (42.9)
2	Peachtree-Dunwoody Road at I-285 Westbound Ramps	Signalized	D	D (38.8)	B (18.8)
3	Peachtree-Dunwoody Road at Concourse Parkway/Palisades Driveway	Signalized	D AM E PM	C (25.6)	E (71.2)
4	Peachtree-Dunwoody Road at East-West Connector Driveway (Off-Site Driveway #3)	Unsignalized	D	B (12.2)	C (24.8)
5	Peachtree Dunwoody Road at Hammond Drive	Signalized	E	E (57.6)	E (67.9)
6	Hammond Drive at Off-Site Driveway #4	Unsignalized	D	C (19.7)	C (22.3)
7	Hammond Drive at Perimeter Center Parkway	Signalized	D	C (33.6)	D (44.8)
8	Hammond Drive at Site Driveway #1 (Full Movement)	Signalized	D	C (25.1)	C (22.1)
9	Hammond Drive at Site Driveway #2 (RIRO)	Signalized	D	C (18.4)	C (20.1)

As shown in Table 7, all of the intersections are expected to operate at an acceptable Level of Service for the year 2012 Build condition.

The following intersection geometry and improvements are recommended at the proposed site driveways in the proposed scenario:

Hammond Drive at Full Movement Driveway #1 (Intersection #8)

- Install a signal at this location. (Improvement approved by the City of Sandy Springs and Perimeter CID in the Hammond Drive Corridor Study dated January 2008)
- Install a separate northbound left-turn lane and shared through-right-turn lane exiting the site.
- Install a westbound left-turn lane along Hammond Drive entering the site.

- Install an eastbound right-turn lane along Hammond Drive. (Note: This recommendation is applicable to the existing conditions; when Hammond Drive is widened in the future, the right-turn lane would become the third through lane.)

Hammond Drive at RIRO Driveway #2 (*Intersection #9*)

- Install a right-turn only lane exiting the site.

Hammond Drive at Existing Hotel Driveway/Off-Site Driveway #4 (*Intersection #6*)

- Remove the westbound left-turn lane entering the site, thereby restricting the driveway to unsignalized RIRO operations.

7.0 IDENTIFICATION OF PROGRAMMED PROJECTS

The *TIP*, *STIP*, *RTP*, and *GDOT's Construction Work Program* were searched for currently programmed transportation projects within the vicinity of the proposed development. Several projects are programmed for the area surrounding the study network. The project construction plans are included in the appendix. Information on all of the programmed projects is included in the Appendix.

1. <i>ARC# DK-217</i> <i>GDOT# 0006883</i>	Road widening along Hammond Drive from Fulton County line to Ashford-Dunwoody Road. The project will widen Hammond Drive from 4 to 6 lanes, including bicycle lanes and other pedestrian features. The expected completion year is 2011.
2. <i>ARC# AR-900A, AR-900B</i> <i>GDOT# 0003534</i>	Fixed guideway Bus Rapid Transit along I-285 from Cumberland/Galleria area to Perimeter Center. The expected completion year is 2012.
3. <i>ARC# AR-901A, AR-901B</i>	Fixed guideway Bus Rapid Transit along I-285 from Perimeter Center to Doraville MARTA Station. The expected completion year is 2020.
4. <i>ARC# DK-307</i> <i>GDOT# 0004415</i>	Intersection improvement at Perimeter Center Parkway and Perimeter Mall Entrance. This improvement includes signal and crosswalk upgrades. The expected completion year is 2008 and this project is currently under construction.
5. <i>ARC# DK-308</i> <i>GDOT# 0004416</i>	Intersection improvement at Perimeter Center West and Perimeter Center Parkway. This improvement includes signal and crosswalk upgrades. The expected completion year is 2008.
6. <i>ARC# DK-311</i> <i>GDOT# 0004419</i>	Intersection improvement at Perimeter Center West and Meadow Lane/Crown Pointe Parkway. This improvement includes signal and crosswalk upgrades. The expected completion year is 2008.
7. <i>ARC# DK-315</i> <i>GDOT# 0004423</i>	Intersection improvement at Hammond Drive and Perimeter Mall Entrance. This improvement includes signal and crosswalk upgrades. The expected completion year is 2008.
8. <i>ARC# DK-316</i> <i>GDOT# 0004424</i>	Pedestrian improvements along Perimeter Center Parkway from Hammond Drive to Perimeter Center West. This project includes the creation of a streetscape/sidewalk system that will complement intersection improvements along the corridor. The expected completion year is 2008 and this project is currently under construction.
9. <i>ARC# DK-323</i> <i>GDOT# 0004831</i>	Pedestrian improvements along Perimeter Center West from Mount Vernon Highway to Ashford-Dunwoody Road. These streetscape improvements will include new sidewalks, new street lights, and other

	improvements that will enhance the streetscape. The expected completion year is 2008.
10. ARC# DK-334 GDOT# 0006807	Addition of fiber optic cable along several corridors in the Perimeter Center Area to support the ITS program. The expected completion year is 2007.
11. ARC# DK-AR-231 GDOT# 0004480	Streetscape and safety improvements near the Dunwoody MARTA station at the Hammond Drive/Perimeter Center Parkway. This project will include new sidewalks, new street lights, and other improvements that will enhance the streetscape. The expected completion year is 2008 and this project is currently under construction.
12. ARC# FN-200 GDOT# 0006817	Fiber optic signal interconnection along several corridors in the Perimeter Center Area in Fulton County. The expected completion year is 2008.
13. ARC# FN-AR-144 GDOT# 0006984	Pedestrian improvements along Peachtree-Dunwoody Road from I-285 to Abernathy Road. This includes a comprehensive streetscape/sidewalk system, including new and improved sidewalks and crosswalks along Peachtree-Dunwoody Road. The expected completion year is 2009.
14. ARC# FN-AR-206 GDOT# 006267	Pedestrian improvements along Peachtree-Dunwoody Road from I-285 to Glenridge Connector. This includes sidewalks and crosswalks around the Medical Center MARTA station. The expected completion year is 2007.
15. ARC# FN-AR-BP083 GDOT# 753300-	Sidewalk construction along Hammond Drive from SR 400 to DeKalb County line. The expected completion year is 2008 and this project is currently under design.

The *Hammond Drive Corridor Study* dated January 2008 recommends that the typical roadway section for Hammond Drive in the study area results in a six-lane divided roadway with a 30' median (wide enough to accommodate dual 11' left-turn lanes and maintain an 8' concrete median). Additionally, curb and gutter is proposed along both sides of Hammond Drive. The study recommends a signal to be located 610 feet west of the High Street/Novare traffic signal (consistent with the improvements listed for Hammond Drive at Driveway #1, Intersection #8).

8.0 INGRESS/EGRESS ANALYSIS

The site currently has access via three driveways, a right-in only located along Peachtree-Dunwoody Road and two full movement driveways located along Hammond Drive. Upon buildout, the project is proposed to have vehicular access via three right-in/right-out (RIRO) driveways and one full movement driveway in addition to cross access provided by the Palisades development (DRI #1152), located south of Hammond Center.

A RIRO driveway will be maintained along Peachtree-Dunwoody Road in the location of an existing driveway (Palisades Driveway). This driveway will be shared with the Palisades development (DRI #1152), the development to the south of Hammond Center. (Note: The existing right-in only driveway on-site will be closed.)

Three access points are proposed along Hammond Drive. A RIRO driveway is proposed along Hammond Drive approximately 300' east from Peachtree-Dunwoody Road. A full-movement signalized driveway is proposed to be located approximately 650' east of Peachtree-Dunwoody Road. This location and configuration shown in Figure 9 are consistent with a proposed median break and signal in the *Hammond Drive Corridor Study* dated January 2008. Another RIRO driveway (existing full movement) is proposed along Hammond Drive 850' east of Peachtree-Dunwoody Road in the approximate location of the existing driveway providing access to the hotel, the Fairfield Inn.

Additional access is provided to the site through the Palisades development. This cross-access enables the Hammond Center traffic access to the signalized intersection of Peachtree-Dunwoody Road and Concourse Parkway / existing driveway.

9.0 INTERNAL CIRCULATION ANALYSIS

The proposed development will generate trips between the residential, hotel and residential, office, and restaurant and retail uses of the development. Using the *ITE Trip Generation Handbook, 2004* as a reference, 14.13% of the gross daily trips would be internal, 14.69% of the PM peak hour trips would be internal.

10.0 COMPLIANCE WITH COMPREHENSIVE PLAN ANALYSIS

ARC's Atlanta Regional Unified Growth Policy Map identifies this area as a Regional Center.

11.0 NON-EXPEDITED CRITERIA

11.1 *Quality, Character, Convenience, and Flexibility of Transportation Options*

The Dunwoody MARTA transit station and Perimeter mall are within walking distance of the site (less than 1/3 of a mile). Additionally, there are many local destinations within walking distance for hotel guests, employees, and visitors to the site.

MARTA bus routes #5, #70, #87, #150, and #305 all service the area. GRTA Xpress 428 Route provides service from Panola Road in eastern DeKalb County to the MARTA Dunwoody Station. GRTA Xpress 400 Route provides service from the Cumming area north of SR 400, and circulates within the immediate area, traveling on Hammond Drive and Peachtree-Dunwoody Road.

Cobb Community Transit (CCT) Route #65 operates from the Marietta Transfer Center to the MARTA Dunwoody Transit Station during the AM and PM peak periods Monday through Friday.

Additionally, in cooperation with the Perimeter Transportation Coalition, many companies in the area operate shuttles that provide transportation between their properties, the MARTA stations, and Perimeter Mall. Some area hotels also provide on-demand shuttle services to/from local destinations.

11.2 *Vehicle Miles Traveled*

The following table displays the reduction in traffic generation due to mixed-use, pass-by trips, and alternative mode reductions.

	Build-out Total
Weekday Daily Gross Trip Generation:	9,738
(-)Mixed-use reductions (internal capture)	-1,376
(-)Pass-by trips	-1,850
(-)Alternative modes	-669
Net Trips:	5,843

11.3 *Relationship Between Location of Proposed DRI and Regional Mobility*

The proposed development is located within a developing urban core. The site is located within the Perimeter Center Community Improvement Districts (CID). The development is within walking distance of transit bus

routes and the Dunwoody MARTA rail station. The development is located on major county streets with access to Interstate 285 and SR 400.

11.4 Relationship Between Proposed DRI and Existing or Planned Transit Facilities

The proposed DRI is located near existing transit facilities and bus stops as previously mentioned.

A planned transit facility is the fixed guideway Bus Rapid Transit along I-285 from the Cumberland/Galleria area to Perimeter Center. The project completion is expected in year 2012.

11.5 Transportation Management Area Designation

The proposed development is located within the Perimeter Transportation Coalition TMA. The developer intends to work with all necessary parties to encourage public transportation, bicycle and pedestrian traffic, and any other means to mitigate automotive traffic.

11.6 Offsite Trip Reduction and Trip Reduction Techniques

The proposed development will generate trips between the residential, hotel, office, and retail uses of the development. Using the *ITE Trip Generation Handbook, 2004* as a reference, 14.13% of the gross daily trips would be internal, 14.69% of the PM peak hour trips would be internal.

Pass-by reductions were taken according to the *ITE Trip Generation Handbook, 2004* and GRTA guidelines for the retail and restaurant portions of the development. The GRTA's 10% limit test was not applied for the weekday PM peak hour since the total pass-by trips were expected to be less than 10% of the adjacent street traffic.

An 8% alternative mode reduction was applied for all land uses due to the development's proximity to the Dunwoody MARTA transit station, the existing MARTA, CCT, and GRTA bus routes, and the Perimeter Coalition TMA programs. Additionally, there are many local destinations within walking distance for residents, employees, and patrons of the development.

11.7 Balance of Land Uses – Jobs/Housing Balance

Please refer to the Area of Influence Analysis, located in Section 12.0 of the report.

11.8 Relationship Between Proposed DRI and Existing Development and Infrastructure

The development is located in an area where the existing infrastructure is expected to adequately serve the needs of the development upon build-out (2012).

12.0 AREA OF INFLUENCE

This section will describe the Area of Influence (AOI) demographics, AOI average wage levels, expected DRI housing costs, and the availability of jobs within the AOI that would reasonably position employees to purchase housing within the proposed DRI.

12.1 Criteria

As part of the non-expedited review process for a DRI, an Area of Influence Analysis must be performed to determine the impact of the proposed development on the balance of housing and jobs within the immediate area surrounding the proposed development. For this proposed development expansion, the non-expedited review criterion is as follows:

This section is included to satisfy the following GRTA Non-expedited review criteria:

7. The proposed DRI:

- (c) Is located in an area of influence with employment opportunities which are such that at least twenty-five percent (25%) of the persons that are reasonably anticipated to live in the proposed DRI and are reasonably expected to be employed will have an opportunity to find employment appropriate to such persons' qualifications and experience within the Area of Influence.

12.2 Study Area Determination and Characteristics

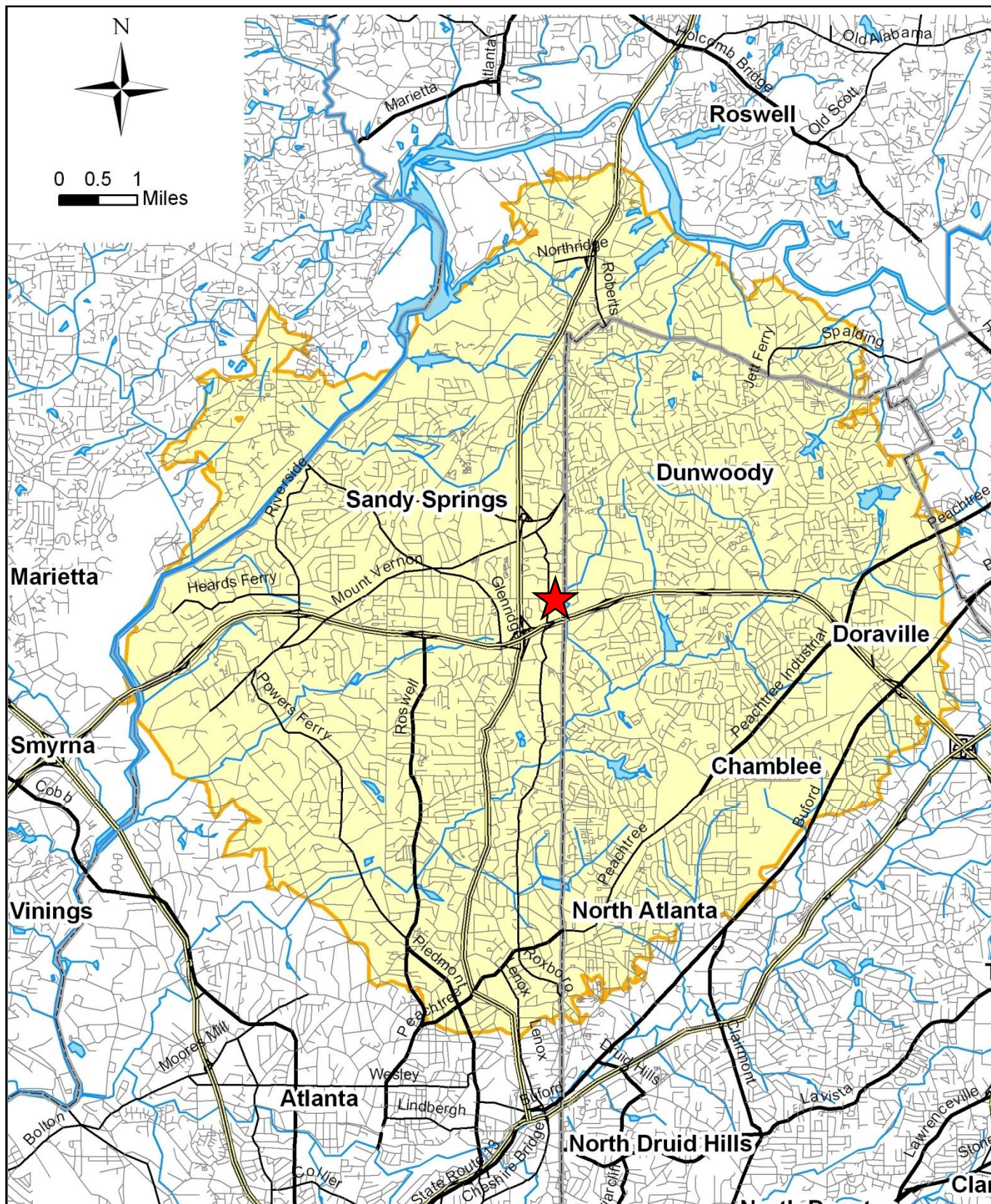
The Area of Influence is comprised of the area within six road-miles of the proposed development. To determine the AOI, *TransCAD* was used to measure six road miles from the nearest intersection to the project (Hammond Drive at Peachtree-Dunwoody Road). The population and housing statistics for the AOI were determined by taking the area outlined in *TransCAD*, creating a boundary in GIS format, and overlaying the boundary with a GIS layer containing census tract information. The Area of Influence (located within Fulton, Cobb, and DeKalb Counties) can be seen in **Figure 10**. Information obtained from the census tracts can be seen in **Table 8**.

Table 8	
Census Tract Information	
Total Households	77,628
Population in Households	177,088
Average household size	2.28
Workers per Household	103,251
Owner Occupied	51.50%
Rental Occupied	48.50%

As can be seen from the table above, the total population within the Area of Influence is 177,088, residing within 77,628 households (an average of 2.28 people per household). The AOI area totals 48,282 acres.

Using the above calculated average of 2.28 persons per household, it can be anticipated that the proposed DRI will house approximately 901 people (395 proposed dwelling units multiplied by 2.28). Based on information obtained from the Census Tracts, it is estimated that approximately 525 of these expected 901 residents would be workers. The remainder of this section will demonstrate the availability of jobs for these expected workers within the development at or above the necessary income level to afford housing within the DRI.

It is expected that many apartments are available in the vicinity of the project (Zip code 30328) at the time of this report.



Kimley-Horn
and Associates, Inc.

Hammond Center DRI Transportation Analysis

Area of
Influence

Figure
10

12.3 Development Housing Analysis

The development plan provides for apartments for rent in one price range within the proposed development. **Table 9**, below, displays the number of units for rent, the average rent price for those units, and the number of workers expected to reside in the homes.

Table 9 Estimated Workers per Household				
Tier	Description	Number of Units	Average Price	Number of Workers
1	Apartment	395	\$1,510/month	525

In order to determine the number of jobs available within the AOI that would provide adequate income, information about the types of jobs within the AOI and the average salaries for these positions was collected first. Information about the types of jobs available within the AOI was obtained from Claritas, a data solutions company. A map with the boundary of the AOI was sent to Claritas, and a report containing the types of employment opportunities and number of each type of job was compiled. The Claritas report is included in the Appendix of this report. Next, the Georgia Department of Labor website was researched to obtain average salary information for the positions available within the AOI. Average salary information for jobs in Fulton, Cobb, and DeKalb counties was matched to the jobs existing within the AOI. This information (also available in the Appendix), along with the information provided by Claritas, is included in the **Table 10**, on the following page.

Table 10 AOI Jobs and Average Salaries			
Industry / Business Type	# Businesses	# Employees	Average Salary
Retail Trade	2,985	57,474	\$27,472
Building Materials and Garden Supply	114	2,867	-
General Merchandise Stores	82	5,779	-
Food Stores	208	4,315	-
Auto Dealers and Gas Stations	202	7,476	-
Apparel and Accessory Stores	329	2,760	-
Home Furniture, Furnishings, and Equipment	490	10,376	-
Eating and Drinking Places	820	17,209	-
Miscellaneous Retail Stores	740	6,692	-
Finance	2,748	47,730	\$56,981
Banks, Savings and Lending Institutions	590	10,819	-
Securities and Commodity Brokers	476	6,579	-
Insurance Carriers and Agencies	488	15,514	-
Real Estate	1,195	14,818	-
Trusts, Holdings, and Other Investments			
Services	8,681	123,631	-
Hotels and Other Lodging	91	8,010	\$17,090
Personal Services	1,355	12,147	-
Business Services	2,698	38,769	\$67,922
Motion Picture and Amusement	285	2,808	\$37,818
Health Services	1,347	25,776	\$41,626
Legal Services	799	5,590	\$67,922
Education Services	243	10,336	\$40,088
Social Services	233	3,294	\$41,626
Miscellaneous, Membership	1,631	16,901	-
Organizations and Nonclassified			
Agriculture	216	1,445	\$7,895
Mining	6	57	\$26,898
Construction	816	7,696	\$46,782
Manufacturing	563	20,644	\$55,068
Transportation, Communication/Public Utilities	605	13,192	\$93,678
Wholesale Trade	537	8,528	\$61,583
Public Administration	114	1,433	\$44,655
Total	17,271	281,830	-

12.4 Affordable Housing Analysis

Various mortgage calculators are available online to aid in determining affordable housing based on given incomes and income ranges. These calculators were used to determine the minimum income necessary to afford housing within the proposed Morningside development. It was assumed that no more than one third of an individual's income would be used for mortgage costs (principal + interest), that a 6.10% interest rate on a 30-year conventional loan could be obtained, and that a 10% down payment would be made. The income required to purchase a home at the approximate price range was calculated and is displayed in **Table 11**. Because there is an average of 1.33 workers expected per household, the required income was divided by 1.33 to determine the average salary each worker within the development would be expected to earn in order to provide their "fair share" of the housing costs. This methodology assumes an equal burden on all workers within the development, and is considered to be a conservative approach since it eliminates the lower paying positions within the AOI from consideration in the analysis. Table 11 also displays the number of workers expected in each price range, as well as the number of jobs available at the necessary average income level to afford housing within that price range. As can be seen in the table, there are more than enough positions available within the AOI for expected workers within the proposed development to find employment at the required income level for the one level of pricing within the development, thus satisfying the GRTA requirement of 25%.

Table 11 Expected Workers				
	Average Rent Price	Necessary Income per Expected Worker	Expected Worker per Price Range	Jobs at or above Necessary Income
1	\$1,510/month	\$40,870	525	172,652
Percent of expected workers likely to find necessary employment within the AOI				100%

13.0 ARC'S AIR QUALITY BENCHMARK

The proposed development is proposing 20,000 square feet of restaurant space, 20,000 square feet of office space, 50,000 square feet of retail space, 395 apartments, and will also include the existing 120 room hotel. The +/-7.2-acre site currently consists of approximately 90,000 square feet of medical office, office, and restaurant space. All buildings except the hotel will be demolished prior to the development. The project meets the following ARC air quality VMT reductions:

ARC density target ARC criteria (1 a) for a 4% reduction because the residential component is the dominant use and there is a floor area ratio greater than 0.6. The development proposes approximately a 2.26 floor area ratio.

Public transportation is within walking distance, and the project is located within ½ mile of the Dunwoody MARTA transit station. The development meets the ARC criteria (4) for a 5% reduction.

The development is expected to participate with the Perimeter Transportation Coalition TMA to provide commuter and transit incentives and programs. Additionally, the TMA provides a variety of shuttles to nearby locations. The development meets the ARC criteria (5 c) for a 5% reduction.

The development will provide connections between the residential and hotel, office and retail and restaurant uses within the development. Pedestrians will also be able to access other developments located along Hammond Drive and Perimeter Center Parkway, such as Perimeter Mall. This pedestrian network meets the ARC criteria (6 e) for a 5% reduction.

The proposed development meets the ARC criteria for a total 19% VMT reduction. These reductions are displayed below in **Table 12**.

Table 12 ARC VMT Reductions	
Mixed-Use Projects where Residential is the dominant use	
Greater than 0.8 floor area ratio	-6%
Within ½ mile of a MARTA transit station	-5%
Transportation Management Association participant with shuttle	-5%
Bike/ped networks in development that meet one Density 'target' and connect to adjoining uses	-5%
Total Reductions	21%