TABLE OF CONTENTS

Exe	cutive	e Summary	. 1
1.0		Project Description	. 4
	1.1 1.2 1.3 1.4 1.5	Introduction Site Plan Review Site Access Bicycle and Pedestrian Facilities Transit Facilities	4 8 8 9
2.0		Traffic Analyses, Methodology and Assumptions	. 9
	2.1 2.2 2.3	Growth Rate1 Traffic Data Collection	. 9 10 10
3.0		Study Network1	11
	3.1 3.2 3.3 3.4 3.5	Gross Trip Generation	11 11 11 11 12
4.0		Trip Generation1	13
5.0		Trip Distribution and Assignment1	14
6.0		Traffic Analysis 1	18
	6.1 6.2 6.3	Existing 2017 Conditions	18 20 22
7.0		Ingress/Egress Analysis	25
8.0		Identification of Programmed Projects2	25
9.0		Internal Circulation Analysis2	26
10.0)	Compliance with Comprehensive Plan Analysis	26

LIST OF TABLES

Table 1	Proposed Land Uses	
Table 2	Peak Hour Summary	10
Table 3	Gross Trip Generation	11
Table 4	Intersection Control Summary	
Table 5	Roadway Classifications	
Table 6	Net New Trip Generation	
Table 7	Existing 2017 Intersection Levels-of-Service	
Table 8	Projected 2028 No-Build Intersection Levels-of-Service	
Table 9	Projected 2028 Build Intersection Levels-of-Service	
Table 10	Programmed Improvements	

LIST OF FIGURES

5
6
7
5
6
7
9
21
24

LIST OF APPENDICES

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

Available Upon Request

Raw Traffic Count Data Synchro Capacity Analyses

EXECUTIVE SUMMARY

This report presents the analysis of the anticipated traffic impacts of the proposed The Park at Perimeter Center East development located in the City of Dunwoody, Georgia. The approximate 19.5-acre site is bordered by Perimeter Center East to the east, west, and south; Abercorn Avenue borders the site to the north. The proposed development will be mixed-use, consisting of residential, office (some of which is existing), and retail land uses. The project will consist of approximately 1.7 million square feet of new construction and will include five new buildings.

The project is a Development of Regional Impact (DRI) and is subject to Georgia Regional Transportation Authority (GRTA) and Atlanta Regional Commission (ARC) review due to the project size exceeding 600,000 SF of mixed-use development in a regional center area type. The DRI trigger for this development is submittal of the Rezoning Application to the City of Dunwoody. The DRI was formally triggered with the filing of the Initial DRI Information (Form 1) on May 18, 2017 by the City of Dunwoody.

The proposed project is expected to be completed by 2028. The project site currently contains three office buildings and extensive surface parking. Two of these buildings, consisting of 192,210 SF of office space, are proposed to remain. The third office building, consisting of 92,686 SF, will be demolished. The development, at full build-out, will consist of the following proposed land uses and densities:

Residential: 1,200 units

Office (proposed): 500,000 SF

Retail: 12,000 SF

It should be noted that the 500,000 SF of proposed office space does not account for the square footage of the demolished property. Additionally, the 12,000 SF of retail space will exist within the 192,210 SF of existing office space to remain (to consist of 12,000 SF of retail space and 180,210 SF of office space). Upon build-out, this site will consist of 1,200 residential units, 12,000 SF of retail, and 587,524 SF of office space. In order to present a more conservative analysis, the demolished land uses were not accounted for in the trip generation analysis for this traffic study.

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

Mixed-use reductions occur when a site has a combination of different land uses that interact with one another. For example, people living in a residential development may walk to work or to the restaurants and retail instead of driving off-site or to the site. This reduces the number of vehicle trips that will be made on the roadway, thus reducing traffic congestion. These types of reductions are expected at The Park at Perimeter Center East development – including residents walking to retail land uses as well as residents working in the office development.

Alternative modes reductions are taken when a site can be accessed by modes other than motor vehicles (i.e. walking, bicycling, transit, etc.). As The Park at Perimeter Center East development is located within regional proximity to transit and increased pedestrian facilities, a 10% alternative mode reduction was taken. The project site is located adjacent to the MARTA Bus Route 150 with service seven days a week, connecting Dunwoody Village to the Dunwoody MARTA Rail Station. Additionally, the project site is located approximately 0.85 miles from the Dunwoody MARTA Rail station, which is served by the MARTA Rail Red Line with service seven days a week.

Pass-by reductions are taken for retail and restaurant trips only. Traffic normally traveling along a roadway may choose to visit a retail or restaurant establishment that is along the vehicle's path. These trips were already on the road and would therefore only be new trips on the driveways. For The Park at Perimeter Center East development, a percentage of the retail/restaurant trips will already be on the adjacent roadways. Therefore, a percentage of these will be considered pass-by. Pass-by reductions were taken for only the retail land uses.

Capacity analyses were performed throughout the study network for the Existing 2017 conditions, the Projected 2028 No-Build conditions, and the Projected 2028 Build conditions.

- Existing 2017 conditions represent traffic volumes that were collected in September 2016 and April 2017 by performing AM and PM peak hour turning movement counts.
- Projected 2028 No-Build conditions represent the existing traffic volumes grown for eleven (11) years at 0.5 percent per year throughout the study network plus project trips from the following already approved DRIs and developments:
 - DRI #2501 Park Center (approved in 2015)
 - o Currently under construction townhomes located directly east of proposed site
- Projected 2028 Build conditions represent the Projected 2028 No-Build conditions with the addition of the project trips that are anticipated to be generated by The Park at Perimeter Center East development. Also included are the seven (7) proposed site access driveways in addition to the existing study network intersections.

Based on the Projected 2028 No-Build conditions (<u>includes</u> background traffic growth and project trips from DRI #2501 and townhomes but <u>excludes</u> The Park at Perimeter Center East project traffic), all of the study intersections operate within the acceptable level-of-service (LOS) standard of E.

Based on the Projected 2028 Build conditions (<u>includes</u> background traffic growth and project trips from DRI #2501, townhomes, and <u>includes</u> The Park at Perimeter Center East project traffic plus the site access driveways), all study intersections are projected to operate within the acceptable level-of-service (LOS) standard of E, with the exception of some unsignalized side-street movements. However, to improve traffic flow, the following improvements at the proposed site driveways are recommended:

- Perimeter Center East @ Driveway #1 (Int. #6)
 - Maintain the existing intersection configuration and laneage.
- Perimeter Center East @ Driveway #2 (Int. #7)
 - Maintain the existing intersection configuration and laneage.
- Perimeter Center East @ Driveway #3 (Int. #8)
 - Maintain the existing intersection configuration and laneage.
- Perimeter Center East @ Driveway #4 (Int. #9)
 - On the site, construct one egress lane exiting the site.
 - On the site, construct one ingress lane entering the site.
 - Restripe the eastbound approach to consist of one exclusive left-turn lane, one exclusive through lane, and one exclusive right-turn lane.
 - Provide adequate sight distance for vehicles exiting the site.
- Perimeter Center East @ Driveway #5 (Int. #10)
 - Restripe the eastbound approach to consist of one exclusive left-turn lane, one exclusive through lane, and one exclusive right-turn lane.
- Perimeter Center East @ Driveway #6 (Int. #11)
 - Maintain the existing intersection configuration and laneage.
- Perimeter Center East @ Driveway #7 (Int. #12)
 - Maintain the existing intersection configuration and laneage.

1.0 PROJECT DESCRIPTION

1.1 Introduction

This report presents the analysis of the anticipated traffic impacts of the proposed The Park at Perimeter Center East development located in the City of Dunwoody, Georgia. The approximate 19.5-acre site is bordered by Perimeter Center East to the east, west, and south; Abercorn Avenue borders the site to the north.

The proposed development will be mixed-use, consisting of residential, office (some of which is existing), and retail land uses. The project will exceed 600,000 square feet of mixed-use development in a regional center area type and therefore, 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.

Figure 1 provides the site location of The Park at Perimeter Center East development, and **Figures 2** and **3** provide an aerial view of the project site and surrounding area. The City of Dunwoody Zoning Map and ARC's *PLAN 2040 Unified Growth Policy Map* are included in Appendix A.

The proposed project is expected to be completed by 2028, and this analysis will consider the full buildout of the proposed site in 2028. A summary of the proposed land-uses and density at full build-out is provided below in **Table 1**.

Table 1 Proposed Land Uses					
Residential	1,200 units				
Office	500,000 SF				
Retail	12,000 SF				

The property currently consists of 192,210 SF of occupied office space in two 6-story office buildings which will remain. The project site contains an additional 92,686 SF office building which will be demolished.

It should be noted that 12,000 SF of retail space will exist within the 192,210 SF of existing office space to remain (to consist of 12,000 SF of retail space and 180,210 SF of office space). Additionally, there will be 500,000 SF of proposed office space that does not account for the square footage of the demolished property. Upon build-out, this site will consist of 1,200 residential units, 12,000 SF of retail, and 587,524 SF of office space.





Kimley **»Horn**

The Park at Perimeter Center East DRI # 2691 Transportation Analysis Site Aerial – Zoomed Out

2 Page 6



Kimley **»Horn**

The Park at Perimeter Center East DRI # 2691 Transportation Analysis Site Aerial – Zoomed In Figure 3 Page 7

1.2 Site Plan Review

The proposed development is located on an approximately 19.5-acre site in the City of Dunwoody. The project site is bordered by Perimeter Center East to the east, west, and south; Abercorn Avenue borders the site to the north. The proposed development will be mixed-use, consisting of approximately 1.7 million square feet of new construction consisting of residential, retail, and office land uses. The project will include five new buildings with two existing buildings to remain.

The property currently consists of 192,210 SF of occupied office space in two 6-story office buildings which will remain. The project site contains an additional 92,686 SF office building which will be demolished.

It should be noted that 12,000 SF of retail space will exist within the 192,210 SF of existing office space to remain (to consist of 12,000 SF of retail space and 180,210 SF of office space). Additionally, there will be 500,000 SF of proposed office space that does not account for the square footage of the demolished property. Upon build-out, this site will consist of 1,200 residential units, 12,000 SF of retail, and 587,524 SF of office space. In order to present a more conservative analysis, the demolished land uses were not accounted for in the trip generation analysis for this traffic study.

The project site is currently zoned Office-Institutional (O-I) and is proposed to be zoned PC-2 (Perimeter Center, Subarea 2). The project site is also located in a Regional Center area and a Regional Employment Corridor area according to *PLAN 2040 Unified Growth Policy Map*. Additionally, the project site is within and adheres to the recommendations in the most recent Perimeter LCI which qualifies The Park at Perimeter Center East development for GRTA's expedited review. A reference of the proposed site plan is provided in Appendix C.

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

1.3 Site Access

The project site is currently served by seven (7) driveways. The proposed development will be served by three (3) right-in/right-out driveways and four (4) full movement driveways, all along Perimeter Center East. A summary of the proposed site access points follows:

- 1. Driveway 1 an existing driveway that serves as the eastbound approach of the Perimeter Center East at Perimeter Center East Extension intersection. Driveway 1 is currently a stop controlled full-movement driveway and is proposed to remain as a stop controlled full-movement driveway.
- Driveway 2 an existing driveway located approximately 600 feet south of the intersection of Perimeter Center East at Perimeter Center East Extension. Driveway 2 is currently a stopcontrolled right-in/right-out driveway. Driveway 2 is proposed to remain as a right-in/right-out driveway.
- Driveway 3 an existing stop-controlled right-in/right-out driveway located on Perimeter Center East, approximately 860 feet south of the intersection of Perimeter Center East at Perimeter Center East Extension to remain.
- 4. Driveway 4 a proposed stop-controlled full-access movement driveway located along Perimeter Center East, approximately 425 feet south of the intersection of Driveway #3. This driveway will provide lower level access to the proposed shared parking facility within the site.
- 5. Driveway 5 an existing full movement driveway located on Perimeter Center East approximately 1,000 feet south of the intersection of Perimeter Center East @ Abercorn Avenue.

- 6. Driveway 6 an existing full movement driveway. Driveway 6 is located on Perimeter Center East, approximately 400 feet south of Abercorn Avenue.
- 7. Driveway 7 an existing stop-controlled right-in/right-out driveway located on Perimeter Center East, approximately 100 feet east of Abercorn Avenue.

The proposed site access points provide vehicular access to the entire development. Internal private roadways throughout the site provide access to all buildings and parking facilities. See referenced site plan in Appendix C for a visual representation of vehicular access and circulation throughout the proposed development. The site driveways and internal roadways mentioned above provide access to all parking on the site. Shared parking will be utilized to the greatest extent possible. Some on-street parking will be provided and approximately 2,350 structured parking spaces will be provided.

1.4 Bicycle and Pedestrian Facilities

Pedestrian facilities (sidewalks) currently exist along very little of the project site frontage. There are currently existing bicycle lanes along Perimeter Center East surrounding the site. There are no bicycle or pedestrian projects programmed in the vicinity of the project site that will be completed prior to the build-out of the Park at Perimeter Center East development.

1.5 Transit Facilities

The project site is located adjacent to MARTA Bus Route 150, with service seven days a week, connecting Dunwoody Village to the Dunwoody MARTA Rail Station. Additionally, the project site is located approximately 0.85 miles from the Dunwoody MARTA Rail station, which is served by the MARTA Rail Red Line with service seven days a week.

2.0 TRAFFIC ANALYSES, METHODOLOGY AND ASSUMPTIONS

2.1 Growth Rate

Background traffic is defined as expected traffic on the roadway network in future year(s) absent the construction and opening of the proposed project. Background traffic can include a base growth rate based on historical count data as well as population growth data and estimates as well as trips anticipated from nearby or adjacent other projects. Based on methodology outlined in the GRTA Letter of Understanding (LOU), a 0.5 percent per year background traffic growth rate was used for all roadways. This background growth rate was used to account for other development activity in the area.

In addition to the background traffic growth rate, the addition of the following developments was incorporated into the background traffic:

- DRI #2501 Park Center (approved in 2015)
- Currently under construction townhomes located directly east of proposed site

2.2 Traffic Data Collection

Weekday peak hour turning movement counts were collected in September 2016 and April 2017 at the study intersections during the AM and PM peak periods. Traffic counts were grown eleven years to the projected build-out year of 2028. The morning and afternoon peak hours varied some between the intersections. Peak hours for all intersections are shown in **Table 2**.

	Table 2 Peak Hour Summary					
	Intersection	AM Peak Hour	PM Peak Hour			
1.	Ashford Dunwoody Road at Perimeter Center East/Perimeter Center West	8:00-9:00	5:15-6:15			
2.	Ashford Dunwoody Road at Perimeter Center East/Mall Drive	8:00-9:00	4:15-5:15			
3.	Ashford Dunwoody Road at Hammond Drive	7:45-8:45	4:15-5:15			
4.	Ashford Dunwoody Road at I-285 Westbound Ramps	7:45-8:45	4:15-5:15			
5.	Ashford Dunwoody Road at I-285 Eastbound Ramps	7:45-8:45	4:00-5:00			

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

2.3 Detailed Intersection Analysis

Level-of-service (LOS) is used to describe the operating characteristics of a road segment or intersection in relation to its capacity. LOS is defined as a qualitative measure that describes operational conditions and motorists' perceptions within a traffic stream. The *Highway Capacity Manual* defines six levels-of-service, LOS A through LOS F, with A being the best and F being the worst. Level-of-service analyses were conducted at all intersections within the study network using *Synchro Professional, Version 9.0.* Existing traffic signal phasing and timing data were retrieved from the Perimeter Traffic Operations Program (PTOP) for available intersections. Timing data was measured and verified in the field for all study intersections. All intersection signal timings were optimized using *Synchro Professional, Version 9.0.*

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

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

3.0 STUDY NETWORK

3.1 Gross Trip Generation

Traffic for the proposed land uses and densities were calculated using methodology contained in the *Institute of Transportation Engineers' (ITE) Trip Generation Manual, Ninth Edition*. Gross trips generated are displayed below in **Table 3**.

Table 3 Gross Trip Generation										
Land Use	ITE	D	aily Traff	ic	AM Peak Hour			PM Peak Hour		
(Intensity) Code		Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit
High-Rise Apartment (1,200 dwelling units)	222	7,396	3,698	3,698	592	118	474	678	441	237
General Office Building (500,000 SF)	710	4,461	2,230	2,231	693	610	83	638	108	530
Shopping Center (12,000 SF)	820	512	256	256	12	7	5	45	22	23
Total Gross Trips		12,369	6,184	6,185	1,297	735	562	1,361	571	790

3.2 Trip Distribution

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

3.3 Level-of-Service Standards

For the purposes of this traffic analysis, a level-of-service standard of E was assumed for all intersections along Ashford Dunwoody Road, due to the DRI location adjacent to a fixed transit guideway facility (as defined by regional policies per GRTA Technical Guidelines Section 3-102.E. Transportation Analysis). The level-of-service standard of D was assumed for all other intersections, none of which are along Ashford Dunwoody Road.

3.4 Study Network Determination

A general study area was determined based on a review of land uses and population densities in the area as well as a review of peak hour traffic counts and engineering judgement. As the Park at Perimeter Center East development is located in the Perimeter LCI, it qualifies for GRTA Expedited Review, consistent with the GRTA Letter of Understanding. The study area was agreed upon during methodology discussions with GRTA, ARC, GDOT, and City of Dunwoody staff, and includes the following twelve (12) intersections described in **Table 4**.

The study network includes five (5) signalized intersections as noted in **Table 4**, as well as all site driveways.

Table 4 Intersection Control Summary				
Intersection	Control			
1. Ashford Dunwoody Road at Perimeter Center East/Perimeter Center West	Signal			
2. Ashford Dunwoody Road at Perimeter Center East/Mall Drive	Signal			
3. Ashford Dunwoody Road at Hammond Drive	Signal			
4. Ashford Dunwoody Road at I-285 Westbound Ramps	Signal			
5. Ashford Dunwoody Road at I-285 Eastbound Ramps	Signal			

Each of the above listed intersections was analyzed for the Existing 2017 conditions, the Projected 2028 No-Build conditions, and the Projected 2028 Build conditions. The Projected 2028 No-Build conditions represent the existing traffic volumes grown for eleven (11) years at 0.5 percent per year throughout the study network plus the addition of the following developments:

- DRI #2501 Park Center (approved in 2015)
- Currently under construction townhomes located directly east of proposed site

The Projected 2028 Build conditions add the project trips associated with the Park at Perimeter Center East development to the Projected 2028 No-Build conditions.

3.5 Existing Roadway Facilities

Roadway classification descriptions for the entire study area are provided in Table 5.

Table 5 Roadway Classifications							
RoadwayNo. of LanesPosted Speed Limit (MPH)GDOT Classification							
Perimeter Center East	2	35	Local Road				
Abercorn Avenue East	2	35	Local Road				
Ashford Dunwoody Road	4	35	Minor Arterial				
Perimeter Center West	2	35	Minor Arterial				
Hammond Drive	6	45	Minor Arterial-Regional Thoroughfares Network				

4.0 TRIP GENERATION

As stated previously, gross trips associated with the proposed development were estimated using the *Institute of Transportation Engineers' (ITE) Trip Generation Manual, Ninth Edition, 2012*, using equations where available. Trip generation for this proposed development is calculated based upon the following land uses: High-Rise Apartment (ITE 222), General Office Building (ITE 710), Shopping Center (ITE 820).

Mixed-use vehicle trip reductions were taken according to the *ITE Trip Generation Handbook, Third Edition, 2012.* Because the Third Edition does not include guidance on daily internal capture, the *ITE Trip Generation Handbook, Second Edition, 2004* was used for daily volumes. Total internal capture and vehicle trip reduction between the land uses is expected to be 1.86% daily, 2.20% for the AM peak hour, and 4.40% for the PM peak hour as a result of the anticipated interaction between the residential, office, retail, and restaurant land uses within the proposed development.

Due to the Park at Perimeter Center East development being located in a regional center and the adjacent land uses in the area, an alternative transportation (walking, bicycle, and transit) reduction was applied for the project trips. An alternative transportation mode reduction of 10%, consistent with GRTA's Letter of Understanding, was applied to all land uses for this study.

Pass-by reductions were determined according to the *ITE Trip Generation Handbook, Third Edition,* 2014. Per ITE guidance, the pass-by trip reduction rate for the proposed retail land use is 34% for the PM peak hour. Per GRTA's DRI Technical Guidelines, the total pass-by trips associated with the development may be limited to 15% of the adjacent roadway's traffic volume. Based on traffic count data, 15% of the adjacent roadway's traffic volume is not the limiting factor for pass-by trip reduction (results in a pass-by trip reduction rate of 15% for the PM peak hour). It should be noted that pass-by trips are not new trips to the roadway network, rather, they are vehicles already traveling along the existing roadway network that stop to visit the retail and restaurant land uses. No pass-by reductions were taken for the AM peak hour as pass-by trips are minimal in the morning for retail and restaurant land uses.

Table 6 Net New Trip Generation									
	D	aily Traff	ic	AM	l Peak Ho	our	PM	Peak Ho	our
	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit
Gross Project Trips	12,369	6,184	6,185	1,297	735	562	1,361	571	790
Mixed-Use Reduction	-230	-115	-115	-28	-14	-14	-60	-30	-30
Alternative Mode Reduction	-1,214	-607	-607	-126	-72	-54	-131	-54	-77
Driveway Volumes	10,925	5,462	5,463	1,143	649	494	1,170	487	683
Pass-By Reduction	-136	-68	-68	0	0	0	-10	-5	-5
Net New Trips	10,789	5,394	5,395	1,143	649	494	1,160	482	678

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

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

5.0 TRIP DISTRIBUTION AND ASSIGNMENT

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

Figures 4A and **4B** display the anticipated distribution and assignment of residential and non-residential project trips, respectively, throughout the study roadway network. These trip assignment percentages were applied to the net new trips expected to be generated by the development, and the volumes were assigned to the roadway network. The combined peak hour project trips by turning movement throughout the study network, anticipated to be generated by the proposed The Park at Perimeter Center East development, are shown on **Figure 5**.

Detailed intersection volume worksheets are provided in Appendix E.







6.0 TRAFFIC ANALYSIS

6.1 Existing 2017 Conditions

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

	Table 7Existing 2017 Intersection Levels-of-ServiceLOS (delay in seconds)							
Intersection Control LOS AM Peak PM Peak Std. Hour Hour								
1.	Ashford Dunwoody Road @ Perimeter Center West/Perimeter Center East	Signal	Е	D (44.3)	D (49.1)			
2.	Ashford Dunwoody Road @ Perimeter Center East/Mall Drive	Signal	Е	B (13.1)	D (37.3)			
3.	Ashford Dunwoody Road @ Hammond Drive	Signal	Е	C (32.4)	D (43.8)			
4.	Ashford Dunwoody Road @ I-285 Westbound Ramps	Signal	Е	C (24.7)	C (26.0)			
5.	Ashford Dunwoody Road @ I-285 Eastbound Ramps	Signal	E	B (16.3)	B (16.3)			

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



6.2 Projected 2028 No-Build Conditions

To account for growth in the vicinity of the proposed development, the existing traffic volumes were increased for eleven (11) years at 0.5 percent per year throughout the study network. These volumes were entered into *Synchro 9.0*, and capacity analyses were performed. The Projected 2028 No-Build conditions were analyzed using existing roadway geometry and existing intersection control types, plus the projected trips from DRI #2501 and the townhomes development which are scheduled to be completed by 2020.

The Projected 2028 No-Build conditions incorporate the addition of the following developments:

- DRI #2501 Park Center (approved in 2015)
- Currently under construction townhomes located directly east of proposed site

The intersection laneage and traffic volumes for the Projected 2028 No-Build conditions are shown in **Figure 7**. The results of the capacity analyses for the Projected 2028 No-Build are shown in **Table 8**. Detailed *Synchro* analysis reports are available upon request.

	Table 8Projected 2028 No-Build Intersection Levels-of-ServiceLOS (delay in seconds)							
	Intersection Control LOS AM Peak PM Peak Std. Hour Hour							
1.	Ashford Dunwoody Road @ Perimeter Center West/Perimeter Center East	Signal	Е	D (44.4)	D (50.3)			
2.	Ashford Dunwoody Road @ Perimeter Center East/Mall Drive	Signal	Е	B (14.2)	D (38.6)			
3.	Ashford Dunwoody Road @ Hammond Drive	Signal	Е	C (34.1)	D (55.0)			
4.	Ashford Dunwoody Road @ I-285 Westbound Ramps	Signal	Е	E (56.4)	C (34.6)			
5.	Ashford Dunwoody Road @ I-285 Eastbound Ramps	Signal	E	B (16.7)	B (16.6)			

As shown in Table 8, all intersections operate acceptably in the Projected 2028 No-Build conditions.



6.3 Projected 2028 Build Conditions

The traffic associated with the proposed The Park at Perimeter Center East development was added to the Projected 2028 No-Build volumes. These volumes were then entered into *Synchro 9.0*, and capacity analyses were performed. The Projected 2028 Build conditions were analyzed using the proposed laneage and intersection control types shown in the DRI site plan.

The intersection laneage and traffic volumes used for the Projected 2028 Build conditions are shown in **Figure 8**. The results of the capacity analyses for the Projected 2028 Build conditions with proposed laneage and control types are shown in **Table 9**. Detailed *Synchro* analysis reports are available upon request.

Table 9Projected 2028 Build Intersection Levels-of-ServiceLOS (delay in seconds)							
	Intersection	Control	LOS Std.	AM Peak Hour	PM Peak Hour		
1.	Ashford Dunwoody Road @ Perimeter Center West/Perimeter Center East	Signal	E	D (53.0)	E (59.0)		
2.	Ashford Dunwoody Road @ Perimeter Center East/Mall Drive	Signal	Е	C (25.3)	E (68.9)		
3.	Ashford Dunwoody Road @ Hammond Drive	Signal	Е	D (41.8)	E (59.6)		
4.	Ashford Dunwoody Road @ I-285 Westbound Ramps	Signal	Е	E (59.2)	E (67.5)		
5.	Ashford Dunwoody Road @ I-285 Eastbound Ramps	Signal	Е	B (18.1)	B (16.9)		
6.	Perimeter Center East @ Perimeter Center East Extension/ Driveway #1	EB Stop	D	C (18.4)	E (45.5)		
7.	Perimeter Center East @ Driveway #2	EB Stop	D	B (11.1)	A (9.7)		
8.	Perimeter Center East @ Driveway #3	EB Stop	D	B (10.8)	A (9.8)		
0	Desimator Contor Foot @ Driveney #4	NB Stop	D	E (20.2)	B (15.0)		
9.	Perimeter Center East @ Driveway #4	SB Stop	D	B (14.5)	B (12.1)		
10	Perimeter Center East @ Driveway #5	NB Stop	D	C (22.6)	C (16.7)		
10.	renneter Center Last @ Diveway #3	SB Stop	D	B (13.4)	B (14.9)		
11.	Perimeter Center East @ Driveway #6	WB Stop	D	C (17.5)	C (17.6)		
12.	Perimeter Center East @ Driveway #7	WB Stop	D	B (11.9)	B (11.6)		

As shown in **Table 9**, all intersections are projected to operate at or above their acceptable level-ofservice standard during the AM and PM Peak Hours in the Projected 2028 Build conditions, with the exception of some unsignalized side-street movements. However, to improve traffic operations, the following improvements at the proposed site driveways are recommended:

- Perimeter Center East @ Driveway #1 (Int. #6)
 - Maintain the existing intersection configuration and laneage.
- Perimeter Center East @ Driveway #2 (Int. #7)
 - Maintain the existing intersection configuration and laneage.
- Perimeter Center East @ Driveway #3 (Int. #8)
 - Maintain the existing intersection configuration and laneage.
- Perimeter Center East @ Driveway #4 (Int. #9)
 - On the site, construct one egress lane exiting the site.
 - On the site, construct one ingress lane entering the site.
 - Restripe the eastbound approach to consist of one exclusive left-turn lane, one exclusive through lane, and one exclusive right-turn lane.
 - Provide adequate sight distance for vehicles exiting the site.
- Perimeter Center East @ Driveway #5 (Int. #10)
 - Restripe the eastbound approach to consist of one exclusive left-turn lane, one exclusive through lane, and one exclusive right-turn lane.
- Perimeter Center East @ Driveway #6 (Int. #11)
 - Maintain the existing intersection configuration and laneage.
- Perimeter Center East @ Driveway #7 (Int. #12)
 - Maintain the existing intersection configuration and laneage.



7.0 INGRESS/EGRESS ANALYSIS

Vehicular access to the Park at Perimeter Center East development is proposed at seven (7) locations. Site driveway locations are discussed in Section 1.3. Six driveways are currently stop-controlled and are proposed to remain as such in the Projected 2028 Build conditions. There is one additional proposed driveway which will also operate as stop-controlled.

The proposed site driveways provide vehicular access to the entire development. Internal private roadways throughout the site provide access to all buildings and parking facilities.

Capacity analyses were performed for the proposed site driveway intersections (Int. #6, #7, #8, #9, #10, #11, and #12) using *Synchro 9.0*. The results of the capacity analyses for this intersection (LOS, delay, and recommended laneage) are reported in *Section 6.3* of this report. Based on the Projected 2028 Build conditions, the proposed site driveway intersections are anticipated to operate at an acceptable level-of-service.

8.0 IDENTIFICATION OF PROGRAMMED PROJECTS

According to ARC's Transportation Improvement Program, the Regional Transportation Improvement Program, GDOT's Construction Work Program (none at this time), City of Dunwoody's programmed projects, and the GA STIP, the following projects are programmed or planned to be completed by the respective years within the vicinity of the proposed development. The identified projects are listed in **Table 10** below.

Table 10 Programmed Improvements			
#	Year	Project ID	Description
1	2030	AR-409A	Revive 285 – I-285 North Corridor High Capacity Rail Service – Protective Right-of-Way Acquisition from Cumberland/Galleria Area to Perimeter Center
2	2030	AR-ML-200	Revive 285 – I-285 North Managed Lanes and Collector/Distributor Lane Improvements from I-75 North to I-85 North
3	2030	DK-401	Revive 285 – I-285 North Collector Distributor Lanes from Ashford Dunwoody Road to SR 141 (Peachtree Industrial Boulevard)
4	2040	DK-400	Revive 285 – I-285 North Bridge Replacement and Interchange Improvements at Ashford Dunwoody Road
5	2040	AR-410A	Revive 285 – I-285 North Corridor High Capacity Rail Service – Protective Right-of-Way Acquisition from Perimeter Center to Doraville
6	TBD	DK-440	Medical Center to Dunwoody MARTA Pedestrian/Bicycle and Transit Connectivity Improvements

Fact sheets for projects 1-6 can be found in Appendix F.

9.0 INTERNAL CIRCULATION ANALYSIS

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

Mixed-use vehicle trip reductions were taken according to the *ITE Trip Generation Handbook, Third Edition, 2012.* Because the Third Edition does not include guidance on daily internal capture, the *ITE Trip Generation Handbook, Second Edition, 2004* was used for daily volumes. Total internal capture and vehicle trip reduction between the land uses is expected to be 1.86% daily, 2.20% for the AM peak hour, and 4.40% for the PM peak hour as a result of the anticipated interaction between the residential, office, retail, and restaurant land uses within the proposed development.

10.0 COMPLIANCE WITH COMPREHENSIVE PLAN ANALYSIS

The project site currently consists of approximately 284,896 SF of occupied office space. 92,686 SF of this office space will be demolished and 192,210 SF will remain. The project site is currently zoned Office-Institutional (O-I) and is proposed to be zoned PC-2 (Perimeter Center, Subarea 2). The project site is also located in a Regional Center area and a Regional Employment Corridor area according to *PLAN 2040 Unified Growth Policy Map*.

The most recent LCI study for Perimeter CID, *Perimeter @ The Center – Future Focus* focuses on creating high density mixed-use transit villages surrounding MARTA stations that promote connectivity, specifically via pedestrian walkways. The Park at Perimeter Center development is consistent with the goals of the LCI as it consists of approximately 1.7 million square feet of mixed-use development. The land use maps are provided in Appendix B.