# Transportation Analysis

# 3354 & 3356 Peachtree Road DRI DRI # 2453 City of Atlanta, Fulton County, Georgia

Prepared for: Regent Partners, LLC

Prepared by: Kimley-Horn and Associates, Inc. 817 West Peachtree Street NW, Suite 601 Atlanta, Georgia 30308

# TABLE OF CONTENTS

1.0		Project Description	1
	1.1 1.2 1.3 1.4 1.5	Introduction Site Plan Review Site Access Bicycle and Pedestrian Facilities Transit Facilities	4 4 5
2.0		Traffic Analyses, Methodology and Assumptions	8
	2.1 2.2 2.3	Growth Rate Traffic Data Collection Detailed Intersection Analysis	8
3.0		Study Network	9
	3.1 3.2 3.3 3.4 3.5	Gross Trip Generation	9 9 9
4.0		Trip Generation.	10
5.0		Trip Distribution and Assignment	11
6.0	6.1 6.2 6.3	Traffic Analysis  Existing Traffic  Projected 2017 No-Build Traffic  Projected 2017 Build Traffic	16 16
7.0		Identification of Programmed Projects	21
8.0		Ingress/Egress Analysis	22
9.0		Internal Circulation Analysis	22
10.0	)	Compliance with Comprehensive Plan Analysis	22

# LIST OF TABLES

Table 1: 3354 & 3356 Peachtree Road DRI Proposed Land Uses	·
Table 2: 3354 & 3356 Peachtree Road DRI Peak Hour Summary	
Table 3: 3354 & 3356 Peachtree Road DRI Gross Trip Generation	9
Table 4: 3354 & 3356 Peachtree Road DRI Intersection Control Summary	10
Table 5: 3354 & 3356 Peachtree Road DRI Roadway Classification	10
Table 6: 3354 & 3356 Peachtree Road DRI Net Trip Generation	1
Table 7: 3354 & 3356 Peachtree Road DRI 2014 Existing Intersection Levels-of-Service	16
Table 8: 3354 & 3356 Peachtree Road DRI 2017 No-Build Intersection Levels-of-Service	16
Table 9: 3354 & 3356 Peachtree Road DRI 2017 Build Intersection Levels-of-Service	17
Table 10: 3354 & 3356 Peachtree Road DRI Programmed Improvements	21
LIST OF FIGURES	
Figure 1: Site Location – City of Atlanta, Fulton County, GA	
Figure 2: Site Aerial	
Figure 3: Small-Scale Site Plan	
Figure 4: Site Location Detail	-
Figure 5: Study Intersections and Driveways	12
Figure 6: Office & Retail Traffic Trip Assignment	
Figure 7: Residential Traffic Trip Assignment	14
Figure 8: Projected 2017 Project Trips	15
Figure 9: Existing 2014 Traffic Volumes	18
Figure 10: Projected 2017 No-Build Traffic Volumes	19
Figure 11: Projected 2017 Build Traffic Volumes	20
<b>,</b>	

# LIST OF APPENDICES

Appendix A	Transit Maps
Appendix B	Land Use and Zoning Maps
Appendix C	Trip Generation Analyses
Appendix D	Intersection Volume Worksheets
Appendix E	Programmed Improvement Projects

# Available Upon Request

Raw Traffic Counts (Peak Hour Turning Movements) Synchro Capacity Analyses

#### **EXECUTIVE SUMMARY**

This report presents the analysis of the anticipated traffic impacts of the 3354 & 3356 Peachtree Road development located in the City of Atlanta, Georgia. The approximate 3.24-acre site is bounded to the north by GA 400, to the west by Buckhead Station Shopping Center, to the south by Tower Place, and to the east by the existing Capital City Plaza Building. The proposed development will be a mixed-use development with two high-rise towers. One tower is proposed to have 297 apartment dwelling units with approximately 9,574 square feet of lobby-level retail. The other tower will provide 613,760 gross square feet of office space with 51 condominium dwelling units on the upper floor levels. Because the mixed-use project will exceed 700,000 square feet in the Region Core area as defined by the Unified Growth Policy Map, 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 trigger for this development is a Special Administrative Permit, which was filed with the Buckhead DRC on September 30<sup>th</sup>, 2014.

The project site is within the bounds of a Livable Centers Initiatives (LCI) study completed for the area. The *Buckhead Action Plan – Livable Center Initiative Final Report, January, 8th 2002* and subsequent 5-year updates completed in 2006 and 2011, envision Buckhead with a high-density, mixed-use core that surrounds the Buckhead MARTA Station and Peachtree Road, creating a destination node. The study highlights the proposed location of the 3354 & 3356 Peachtree Road DRI project as part of the High Density Core connecting directly with the prominent 'Peachtree Spine.' According to the *Buckhead Action Plan*, future development surrounding the 'Peachtree Spine' should promote high-rise, high-intensity development with landscaped pedestrian paths and dedicated bicycle routes as well as improved accessibility to the Buckhead and Lenox MARTA stations characterizing the MARTA station areas.

According to GRTA's *Procedures and Principles for GRTA Development of Regional Impact Review*, the proposed DRI complies with the Expedited Review Criteria in Section 3-102, Part F – Livable Centers Initiative (LCI), which states:

...the proposed DRI is located within an area approved for inclusion within the LCI program by the Atlanta Regional Commission and is consistent with the policies, design elements, and overall standards established by the study and any subsequently funded Supplemental Study(s). The local government(s) in which the LCI is located has completed and adopted the initial LCI Study within their Comprehensive Plan. Additionally, the local government(s) must have shown efforts towards implementation of the adopted study, by such methods as, approval of conforming development/redevelopment plan, adopted ordinances and/or codes, and implementation of the LCI's Five (5) Year Plan.

This development is located within and is consistent with the *Buckhead Action Plan – Livable Center Initiative Final Report, January, 8th 2002* and subsequent 5-year updates completed in 2006 and 2011. Therefore, this study is being submitted under expedited review.

The proposed redevelopment project is expected to be completed by 2017, and this analysis will consider the full build-out of the proposed site in 2017. The proposed site consists of the following land uses and densities:

Residential Apartment: 297 dwelling units Luxury Condominium: 51 dwelling units

General Office: 613,760 square feet gross floor area Retail: 9,574 square feet gross leasable area

Capacity analyses were performed throughout the study network for the Existing 2014 conditions, the projected 2017 No-Build conditions, and the projected 2017 Build conditions.

- Existing 2014 conditions represent traffic volumes that were collected in September 2014 by performing AM and PM peak hour turning movement counts.
- Projected 2017 No-Build conditions represent the existing traffic volumes grown for three (3) years at 1.0% per year throughout the study network.
- Projected 2017 Build conditions represent the projected 2017 No-Build conditions with the addition of the project trips that are anticipated to be generated by the 3354 & 3356 Peachtree Road development.

Based on the 2014 Existing conditions (present conditions; i.e. excludes background traffic growth and the 3354 & 3356 Peachtree Road DRI project traffic), all intersections within the study network currently operate at or above the acceptable Level-of-Service standard (LOS D).

Based on the projected 2017 No-Build conditions (includes background traffic growth plus but excludes the 3354 & 3356 Peachtree Road DRI project traffic) no recommended improvements were identified in order to maintain an acceptable Level-of-Service (LOS D) at all intersections within the study network.

Based on the projected 2017 Build conditions (includes background traffic growth and the 3354 & 3356 Peachtree Road DRI project traffic), no improvements are recommended.

015961007 V October 2014

#### 1.0 PROJECT DESCRIPTION

#### 1.1 Introduction

This report presents the analysis of the anticipated traffic impacts of the 3354 & 3356 Peachtree Road DRI development located in the Buckhead area in the City of Atlanta, Georgia. The approximate 3.24-acre site is bounded to the north by GA 400, to the west by Buckhead Station Shopping Center, to the south by Tower Place, and to the east by the existing Capital City Plaza Building. Because the mixed-use project will exceed 700,000 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 project site is within the bounds of a Livable Centers Initiative (LCI) study that has been completed for the area. The *Buckhead Action Plan – Livable Center Initiative Final Report, January, 8th 2002* and subsequent 5-year updates completed in 2006 and 2011 envision Buckhead with a high-density, mixed-use core that surrounds the Buckhead MARTA Station and Peachtree Road, creating a destination node. The study highlights the proposed location of the 3354 & 3356 Peachtree Road DRI project as part of the High Density Core connecting directly with the prominent 'Peachtree Spine.' According to the *Buckhead Action Plan*, future development surrounding the 'Peachtree Spine' should promote high-rise, high-intensity development with landscaped pedestrian paths and dedicated bicycle routes as well as improved accessibility to the Buckhead and Lenox MARTA stations characterizing the MARTA station areas.

According to GRTA's *Procedures and Principles for GRTA Development of Regional Impact Review*, the proposed changes to the DRI comply with the Expedited Review Criteria in Section 3-102, Part F – Livable Centers Initiative (LCI), which states:

...the proposed DRI is located within an area approved for inclusion within the LCI program by the Atlanta Regional Commission and is consistent with the policies, design elements, and overall standards established by the study and any subsequently funded Supplemental Study(s). The local government(s) in which the LCI is located has completed and adopted the initial LCI Study within their Comprehensive Plan. Additionally, the local government(s) must have shown efforts towards implementation of the adopted study, by such methods as, approval of conforming development/redevelopment plan, adopted ordinances and/or codes, and implementation of the LCI's Five (5) Year Plan.

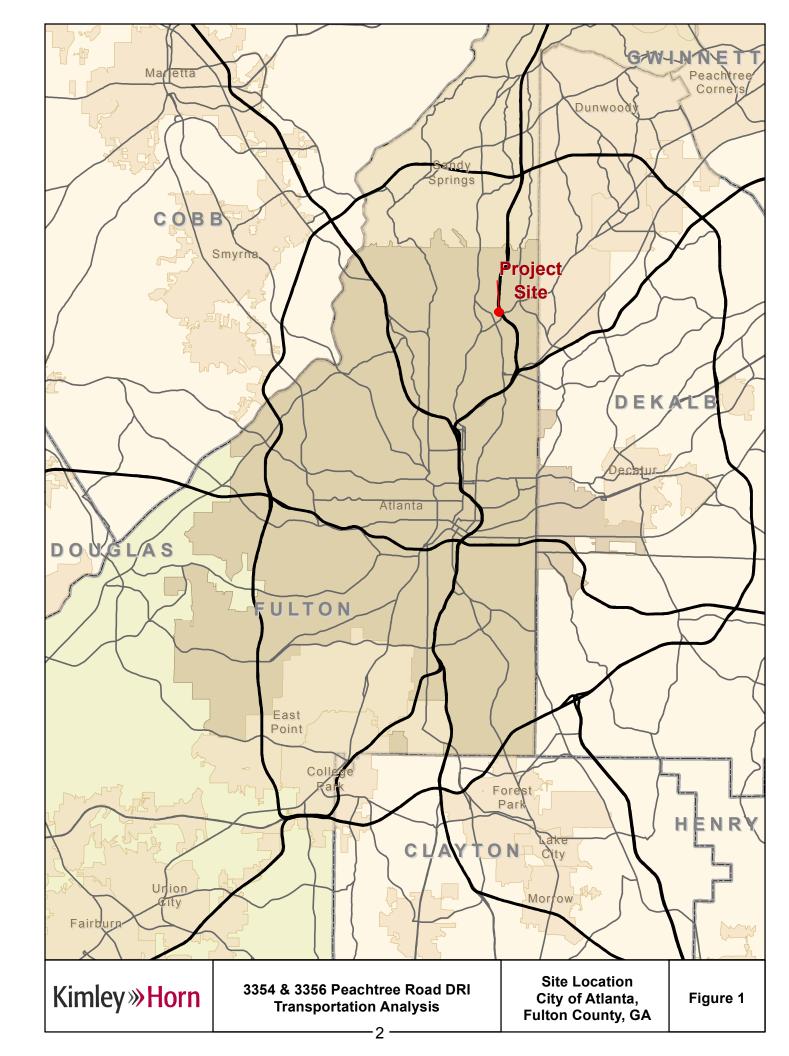
This development is located within and is consistent with the *Buckhead Action Plan – Livable Center Initiative Final Report, January, 8th 2002* and subsequent 5-year updates completed in 2006 and 2011. Therefore, this study is being submitted under expedited review.

Figure 1 is a location map of the 3354 & 3356 Peachtree Road DRI project, and Figure 2 provides an aerial photograph of the site and surrounding properties. The land use maps from the *Buckhead Action Plan*, the 2011 Atlanta Comprehensive Development Plan, and ARC's PLAN 2040 Unified Growth Policy Map are included in Appendix B.

The proposed project is expected to be completed by 2017, and this analysis will consider the full build-out of the proposed site in 2017. A summary of the proposed land-uses and densities can be found below in Table 1.

Table 1: 3354 & 3356 Peachtree Road DRI Proposed Land Uses						
Residential Apartment	297 dwelling units					
Luxury Condominium	51 dwelling units					
General Office	613,760 square feet					
Retail	9,574 square feet					

015961007 1 October 2014





#### 1.2 Site Plan Review

The proposed development is approximately a 3.24-acre site bounded by GA 400 the north, Buckhead Station Shopping Center to the west, a private drive to the south, and the existing Capital City Plaza Building to the east. The project will be a mixed-use development with two high-rise towers. The proposed development will include a mix of offices, apartments, condominium, and retail locations with high-density mixed-use as envisioned in the Buckhead Action Plan and consistent with local zoning included in the Special Public Interest (SPI) Zone 12, the City of Atlanta Zoning Ordinance Map, and the Region Core area as defined by the PLAN 2040 Unified Growth Policy Map. Figure 3 is a small-scale copy of the site plan, and Figure 4 provides additional site-location detail. 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 study will include the intersection of Lenox Road at GA 400, and two (2) existing vehicular site access points on Peachtree Road and Lenox Road. Tower Place Drive intersects Lenox Road (Driveway #1) with a full-movement signalized intersection. The Capital City Plaza building will share its existing right/left-in-right-out private driveway on Peachtree Road directly south of GA 400 (Driveway #2). All access internal to the block bounded by GA 400, Lenox Road, Piedmont Road and Peachtree Road are private roads.

While there are a variety of additional vehicular site access points on Peachtree Road and Piedmont Road, routes to/from the project site are not available during the AM and PM peak periods due to existing operations of the internal roadway network. In particular, a closed gate during the peak hour limits movements that would allow through-traffic to/from the site via the other access roads. There are a total of five additional access locations that will not be studied. These include two full-movement signalized intersections along Peachtree Road at Highland Drive and Tower Place Drive, two right-in-right-out driveways at Peachtree Road and Terminus Drive and Piedmont Road and Terminus Place, and a full-movement signalized intersection on Piedmont Road at Tower Place Drive. These access locations are viable options for site access during off-peak periods.

Tower Place Drive at Lenox Road (Driveway #1) and the Capital City Plaza driveway on Peachtree Road (Driveway #2) provide vehicular access to the entire development. Internal private roadways throughout the site provide access to all buildings and parking decks. See the referenced land plan in Appendix E for a visual representation of driveway locations and access points throughout the proposed development.

There are three (3) total parking garage entrances internal to the site that provide access to all parking on the site. There are two (2) parking garage entrances internal to the site in addition to the Capital City Plaza driveway, which is a direct parking garage entrance. The proposed parking facility for the 3354 & 3356 Peachtree Road development is intended to be shared with the Capital City Plaza building and will interconnect on more than one parking level to allow additional flexibility with site access and parking for both properties. The development will replace an existing surface parking lot that currently serves the Capital City Plaza building, and will ensure that the number of spaces provided replace the previously available parking as well as provide new parking for the additional residences, offices, and retail. Parking will be provided throughout the development as follows and will be shared with the existing Capital City Plaza development:

TOTAL Parking Provided (approx.):	3,036
Surface Lot Parking Replaced (approx.):	436
Total New Parking Provided (approx.):	2,600
Maximum New Parking Allowed:	2,769

In addition to vehicular access, access points on Lenox Road, Piedmont Road and Peachtree Road have sidewalks that allow ample opportunity for pedestrian access to the site. Pedestrian facilities are unimpeded by the gate that restricts vehicular access during the AM and PM peak periods. The site is additionally very well connected and has direct access to the Buckhead MARTA Rail station, bus stops for two different MARTA bus routes, and bus

stops for the BUC Shuttle (Buckhead Uptown Connection). Bicycle, pedestrian, and transit access will be discussed further in the sections below.

## 1.4 Bicycle and Pedestrian Facilities

There will be direct access to the Buckhead MARTA station via the newly completed MARTA pedestrian way, which passes over GA 400 and immediately adjacent to the northern edge of the project site. Additionally, the project proposes a pedestrian way that will connect the site with Peachtree Road via walkways that connect from the MARTA pedestrian way, through the proposed project site, and through the Capital City Plaza property. Additional pedestrian facilities (sidewalks) currently exist along Tower Place Drive adjacent to the site. The proposed PATH400 Greenway Trail (multi-use path) is anticipated to pass the project site on the south side of Tower Place Drive and will provide enhanced pedestrian and bicycle connections with the surrounding trail system and roadway network.

#### 1.5 Transit Facilities

The project site is well connected with a variety of existing transit routes. The Buckhead MARTA Rail station connects directly with the new pedestrian way along the northern edge of the project site. The BUC Shuttle utilizes Tower Place Drive to carry passengers to/from employment centers and connecting to the Lenox and Buckhead MARTA rail stations. Additionally, MARTA bus routes 5 and 110 have stops near the site on Piedmont Road and Peachtree Road, respectively. Bus maps for the BUC Shuttle and MARTA bus routes as well as a MARTA rail route map relevant to the project site can be found in Appendix A.

015961007 5 October 2014

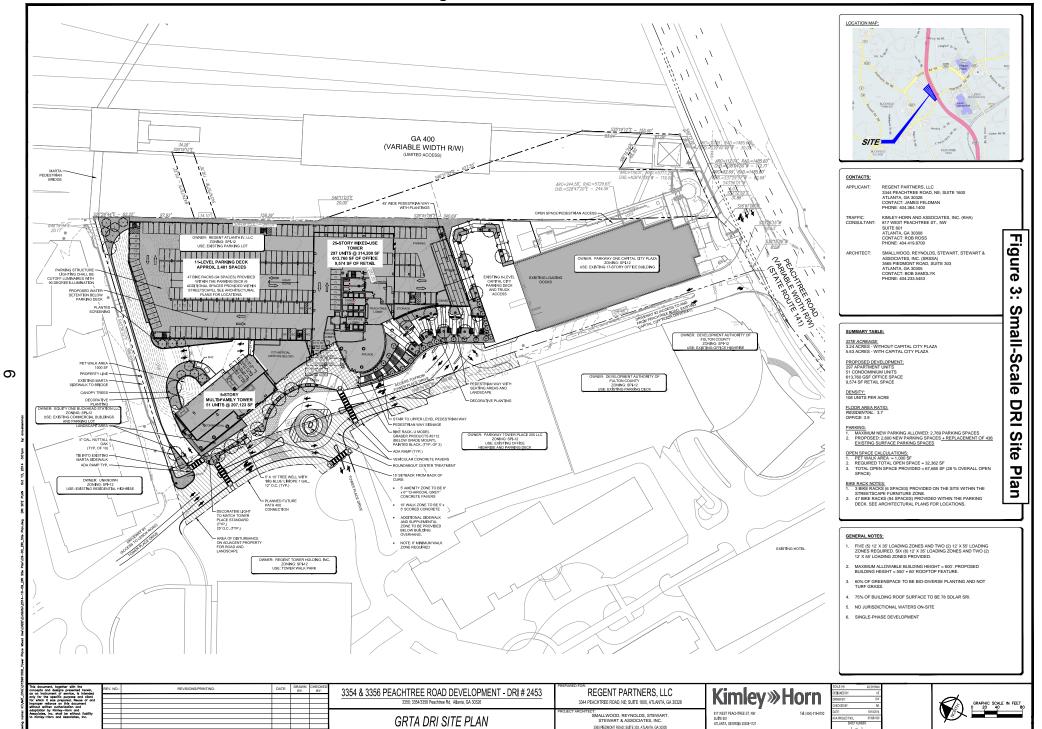


Figure 4 - Site Location Detail

Project Site PIEDMONT ROAD NOT TO SCALE

Figure 4 - Site Location Detail

# 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. Historical traffic count data from Georgia's State Traffic and Report Statistics (STARS) database, population growth rates of Fulton County from the 2010 U.S. Census, and ARC and DCA population forecasts, we recommend a background growth rate of 1% per year for 4 years (2017 build-out year). The growth rate spreadsheet in Appendix C provides the average annual daily traffic (AADT) volumes for the past six years as provided by GDOT's STARS database.

# 2.2 Traffic Data Collection

Weekday peak hour turning movement counts were collected in September 2014 at three (3) intersections during the AM and PM peak periods. The morning and afternoon peak hours were the same for all three intersections studied and are shown in Table 2.

Table 2: 3354 & 3356 Peachtree Road DRI Peak Hour Summary							
<u>Intersection</u> <u>AM Peak Hour</u> <u>PM Peak Hour</u>							
1. State Route 400 at Lenox Road (SPUI*)							
Driveway #1 (existing full-movement) Tower Place     Drive at Lenox Road	8:00-9:00 AM	5:30-6:30 PM					
3. Driveway #2 (existing right-in/left-in/right-out) Capital City Plaza existing driveway on Peachtree Street							

<sup>\*</sup> Single-Point urban interchange (SPUI)

All raw traffic count data is 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 8.0*.

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 significant delays in turning onto a major roadway.

015961007 8 October 2014

#### 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: 3354 & 3356 Peachtree Road DRI Gross Trip Generation								
Land Use	ITE	Daily Traffic		AM Peak Hour		PM Peak Hour		
(Intensity)	Code	Enter	Exit	Enter	Exit	Enter	Exit	
High-Rise Apartment (297 units)	222	687	687	23	67	65	42	
Residential Condominium (51 Units)	230	179	179	5	25	23	12	
General Office Building (613,760 GSF)	710	2,607	2,606	719	98	130	636	
Shopping Center (4,787 SF)	820	102	102	3	2	9	9	
Quality Restaurant (4,787 SF)	931	215	216			24	12	
Total Gross Trips	3,790	3,790	750	192	251	711		

# 3.2 Trip Distribution

The directional distribution and assignment of new project trips was based on the project land use, a review of the land use densities and road facilities in the area, engineering judgment, and methodology discussions with GRTA, ARC, GDOT, and City of Atlanta staff.

# 3.3 Level-of-Service Standards

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

# 3.4 Study Network Determination

Per Expedited Review criteria, GRTA requires the evaluation of site driveways plus the adjacent intersections. The development site plan proposed four (4) access points on Peachtree Street, Lenox Road, and Piedmont Road. Internal to Tower Place on the private driveways a gate is closed limiting project trips during both morning and evening peak hours. As a result, only two (2) of the site driveways will provide access during peak hours and only those two (2) driveways will be studied as the DRI study network. This was confirmed with GRTA staff prior to starting this study.

Therefore, this study includes two (2) site driveways plus one (1) intersection:

- State Route 400 at Lenox Road
- Site Driveways:
  - o Driveway #1 Tower Place Drive at Lenox Road
  - o Driveway #2 Capital City Plaza existing building right-in/left-in/right-out onto Peachtree Street

015961007 9 October 2014

The study network includes two signalized intersection, and one stop-controlled driveway as noted in Table 4.

Table 4: 3354 & 3356 Peachtree Road DRI Intersection Control Summary						
<u>Intersection</u> <u>Control</u>						
1. State Route 400 at Lenox Road (SPUI*)	Signalized					
Driveway #1 (existing full-movement) Tower Place Drive at Lenox Road	Signalized					
3. Driveway #2 (existing right-in/left-in/right-out) Capital City Plaza existing driveway on Peachtree Street	TWSC*					

\*Notes: SPUI = Single-Point Urban Interchange

TWSC = Two-Way Stop Control (Peachtree Street is free-flow and driveway is stop-controlled)

Each of the above listed intersections was analyzed for the Existing 2014 conditions, the projected 2017 No-Build conditions, and the projected 2017 Build conditions. The projected 2017 No-Build conditions represent the existing traffic volumes grown for three (3) years at 1.0% per year throughout the study network. The projected 2017 Build conditions add the project trips associated with the 3354 & 3356 Peachtree Road development to the projected 2017 No-Build conditions.

#### 3.5 Existing Facilities

Roadway classification descriptions for the entire study area are provided in Table 5 (bolded roadways run adjacent to the site).

Table 5: 3354 & 3356 Peachtree Road DRI Roadway Classification									
Roadway	No. of Lanes	Posted Speed Limit (MPH)	Fulton County Functional Classification	GDOT Functional Classification					
Lenox Road (SR 141 Conn.)	6	45	State Highway	Urban Minor Arterial					
SR 237 (Piedmont Road)	4	35	State Highway	Urban Minor Arterial					
SR 400	6	55	State Highway	Urban Freeway and Expressway					
SR 141 (Peachtree Road)	6	35	State Highway	Urban Principal Arterial					
US 19 / SR 9 (Roswell Road)	4	35	State Highway	Urban Principal Arterial					

## 4.0 Trip Generation

As stated previously, trips associated with the proposed development were estimated using the *Institute of Transportation Engineers' (ITE) Trip Generation Manual, Ninth Edition, 2012.* Trip generation for this proposed development is calculated based upon the following land uses: high rise apartment dwelling units (ITE Code 222), residential condominiums (ITE Code 230), general office building square footage (ITE Code 710), retail shopping square footage (ITE Code 820), and restaurant square footage (ITE Code 931).

Mixed-use vehicle trip reductions were taken according to the *ITE Trip Generation Handbook, an ITE Proposed Recommended Practice, Second Edition, June 2004.* Total internal capture and vehicle trip reduction between the proposed land uses is expected to be 2.98% for the weekday and 2.08% for the PM peak hour as a result of the anticipated interaction between all varying land uses within the proposed development. More detailed information for

the internal capture analyses is provided in Appendix C, including 2008-20012 American Community Survey (ACS) 5-Year Estimates by block group for alternative commute mode share, and commuting pattern heat maps from OnTheMap (also ACS 2008-2012 data) are shown for Buckhead Area residents and workers.

Due to the accessibility of transit (the BUC shuttle, MARTA bus system, direct site connection to MARTA rail), and pedestrian sidewalks, an alternative transportation mode reduction was taken for the projected 3354 & 3356 Peachtree Road project trips (walking, bicycle, and public transit). This is consistent with the Expedited Review criteria found in *Procedures and Principles for GRTA Development of Regional Impact Review* in **Section 3-102**, **Part E – Alternative Modes of Transportation**, which states:

...as a result of the location, character or design of the proposed DRI, the DRI is reasonably anticipated to be served by modes of transportation other than single occupant vehicles, and: (1) at least twenty-five (25%) of the trips generated by the proposed DRI are likely to be by way of modes of transportation other than the single occupant vehicle.

According to sample data provided by the 2008-2012 American Community Survey (ACS) 5-Year Estimates (see Figure C3 in Appendix C), the census block group in which the proposed development is located has approximately 21.3% of commuters who utilized modes alternative to vehicular use (Census Tract-Block Group 0100.01-1, Fulton County, Georgia). Alternative modes considered in this value solely account for commuters using public transit, walking, biking, or any other non-vehicular mode. Carpooling, van-pooling, and other forms of high occupant vehicular modes were not considered, but would be additional to the 21.3% value. Surrounding the site, 25.1% of commuters utilized alternative modes in the block group immediately across GA 400, while across Lenox Road, 29.8% of commuters utilized alternative non-vehicular modes. Noting that these values were collected through the year 2012, it is likely that with the new addition of the MARTA pedestrian bridge in 2014, it is likely that transit participation will rise and will increase the alternative mode share in the area and project site.

An alternative transportation mode reduction of 25%, consistent with GRTA's Letter of Understanding, was therefore applied to all land uses for this study.

Pass-by trip reductions were not applied for this project.

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

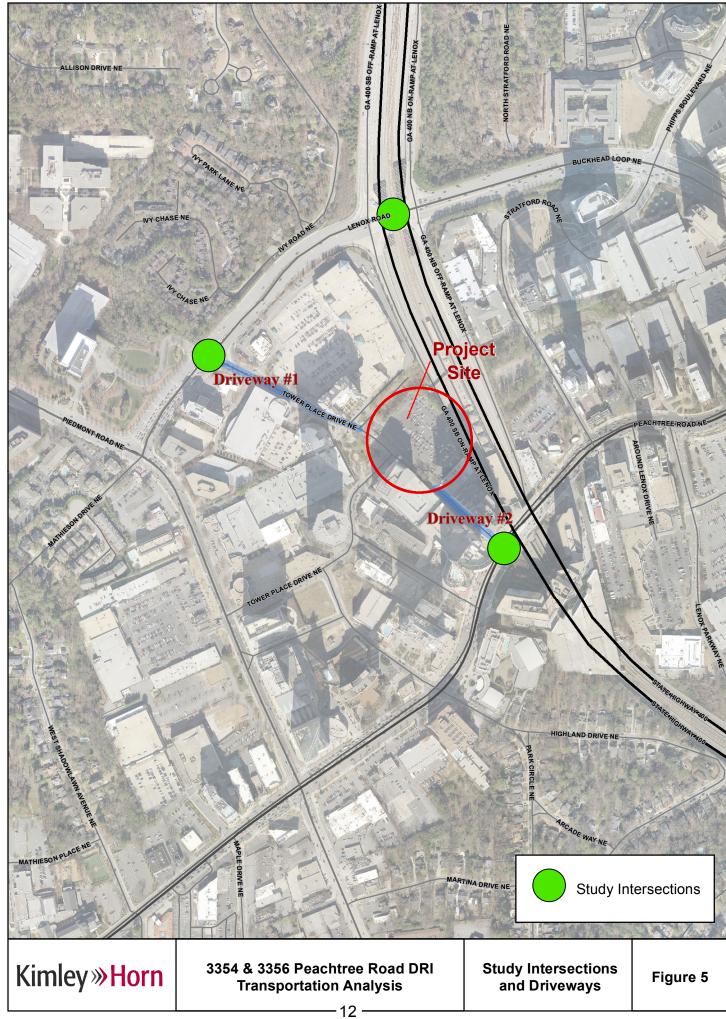
Table 6: 3354 & 3356 Peachtree Road DRI Net Trip Generation								
	Da	Daily Traffic AM Peak Hour PM Peak Ho					ak Hour	
	TOTAL	TOTAL Enter Exit Ent				Enter	Exit	
Gross Project Trips	7,580	3,790	3,790	750	192	251	711	
Mixed-Use Reduction	-226	-113	-113	0	0	-10	-10	
Alternative Mode Reduction	-1,838	-919	-919	-188	-49	-60	-176	
Pass-By Reduction	0	0	0	0	0	0	0	
Net New Trips	5,516	2,758	2,758	562	143	181	525	

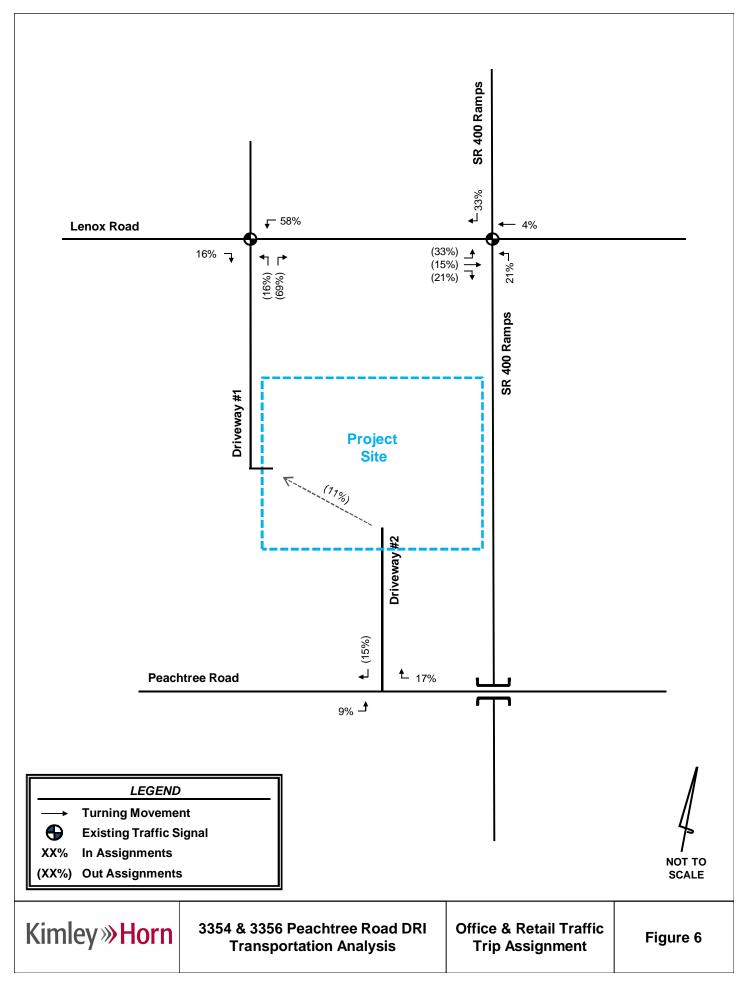
A more detailed trip generation analysis summary table is provided in Appendix C.

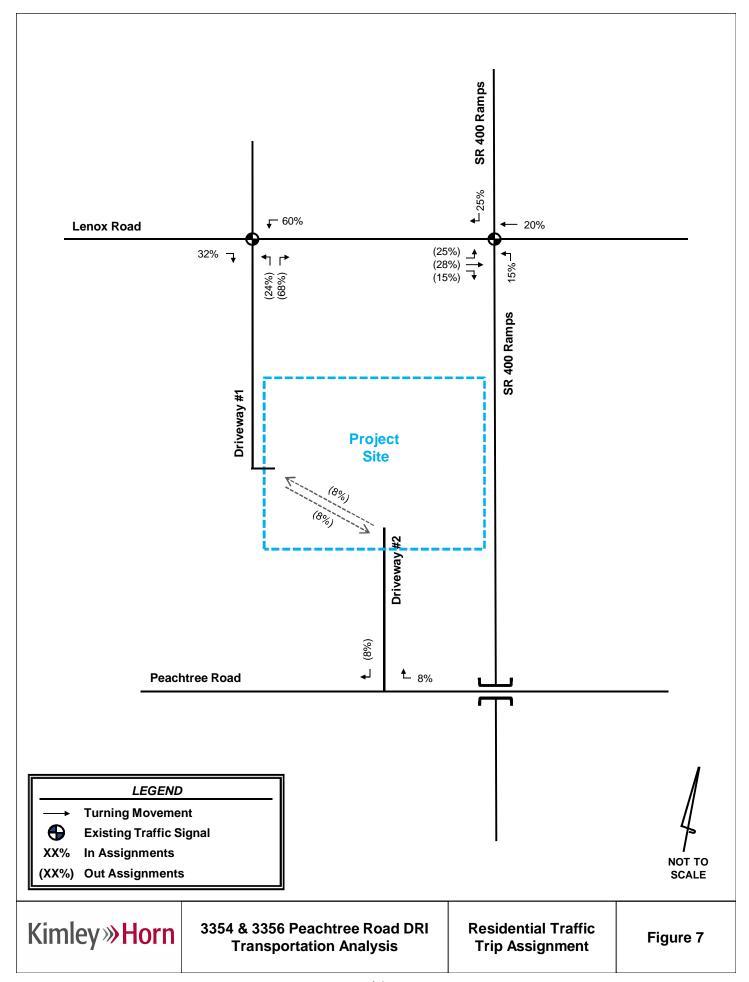
## 5.0 TRIP DISTRIBUTION AND ASSIGNMENT

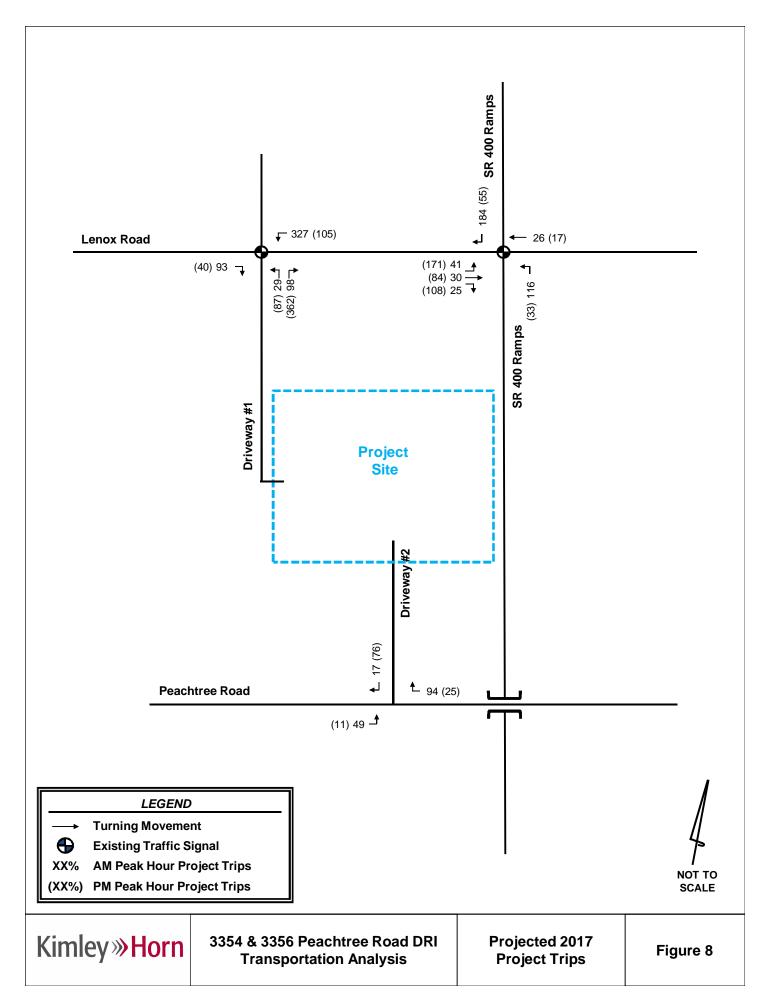
New trips were distributed onto the roadway network using the percentages agreed to during methodology discussions with GRTA, ARC, GDOT, and City of Atlanta staff. The study intersections are shown in Figure 5. Figure 6 displays the expected trip assignment for the office and retail trips, while Figure 7 provides the trip assignment for residential project trips throughout the roadway network. These percentages were applied to the new trips generated by the development, and the volumes were assigned to the roadway network. The expected peak hour turning movement volumes are shown for all trips (office, retail, and residential) for the proposed 3354 & 3356 Peachtree Road mixed-use development Figure 8.

015961007 11 October 2014









# 6.0 TRAFFIC ANALYSIS

# 6.1 Existing Traffic

The observed existing peak hour traffic volumes were entered into *Synchro 8.0*, and capacity analyses were performed for the AM and PM peak hours. The existing peak hour traffic volumes are displayed in Figure 9, and the results of the capacity analyses for the 2014 Existing conditions are shown in Table 7.

Table 7: 3354 & 3356 Peachtree Road DRI 2014 Existing Intersection Levels-of-Service  LOS (delay in seconds)									
Intersection	Control	LOS Std.	AM Peak Hour	PM Peak Hour					
1. State Route 400 at Lenox Road (SPUI)	Signalized	Е	E (65.5)	D (46.7)					
2. Driveway #1 (existing full-movement) Tower Place Drive at Lenox Road	Signalized	D	C (21.7)	C (27.8)					
3. Driveway #2 (existing right-in/left-in/right-out) Capital City Plaza existing driveway on Peachtree Street*	EB Stop Approach	D	C (18.7)	D (26.7)					

<sup>\*</sup> Stop-controlled right-out only exit approach lane LOS and delay shown.

As shown in Table 7, all intersections within the study network currently operate at or above the acceptable Level-of-Service standard during both the AM and PM peak hours. Therefore, no recommended improvements were required for the 2014 Existing conditions.

#### 6.2 Projected 2017 No-Build Traffic

To account for growth in the vicinity of the proposed development, the existing traffic volumes were increased for three (3) years at 1.0% per year throughout the study network. These volumes were entered into *Synchro 8.0*, and capacity analyses were performed. The intersection laneage and traffic volumes for the projected 2017 No-Build conditions are shown in Figure 10, and the results of the capacity analyses are shown in Table 8.

Table 8: 3354 & 3356 Peachtree Road DRI 2017 No-Build Intersection Levels-of-Service LOS (delay in seconds)									
Intersection	Control	LOS Std.	AM Peak Hour	PM Peak Hour					
1. State Route 400 at Lenox Road (SPUI)	Signalized	E	E (72.9)	D (48.7)					
2. Driveway #1 (existing full-movement) Tower Place Drive at Lenox Road	Signalized	D	C (22.2)	C (32.5)					
3. Driveway #2 (existing right-in/left-in/right-out) Capital City Plaza existing driveway on Peachtree Street*	EB Stop Approach	D	C (19.3)	D (28.5)					

<sup>\*</sup> Stop-controlled right-out only exit approach lane LOS and delay shown.

As shown in Table 8, all intersections within the study network are projected to operate at or above the acceptable Level-of-Service standard during both the AM and PM peak hours. Therefore, no recommended improvements were required for the projected 2017 No-Build conditions.

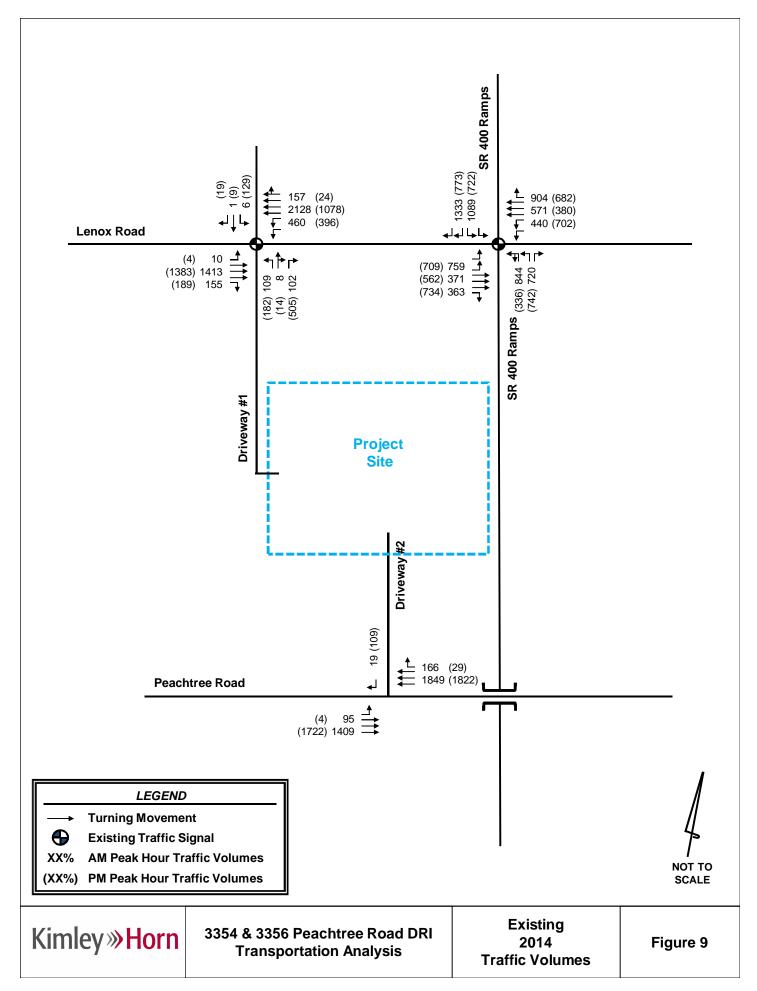
# 6.3 Projected 2017 Build Traffic

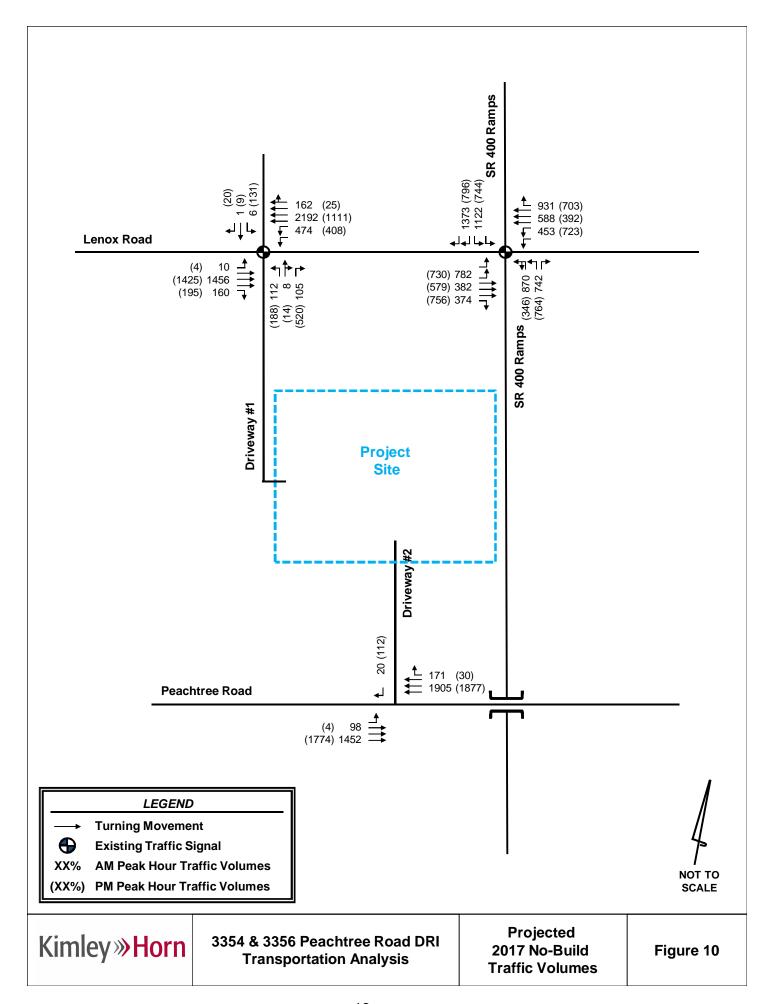
The traffic associated with the proposed 3354 & 3356 Peachtree Road development was added to the projected 2017 No-Build volumes, and these volumes were then entered into the projected 2017 No-Build roadway network and analyzed with *Synchro 8.0*. The intersection laneage and traffic volumes for the projected 2017 Build conditions are shown in Figure 11, and the results of the capacity analyses are shown in Table 9.

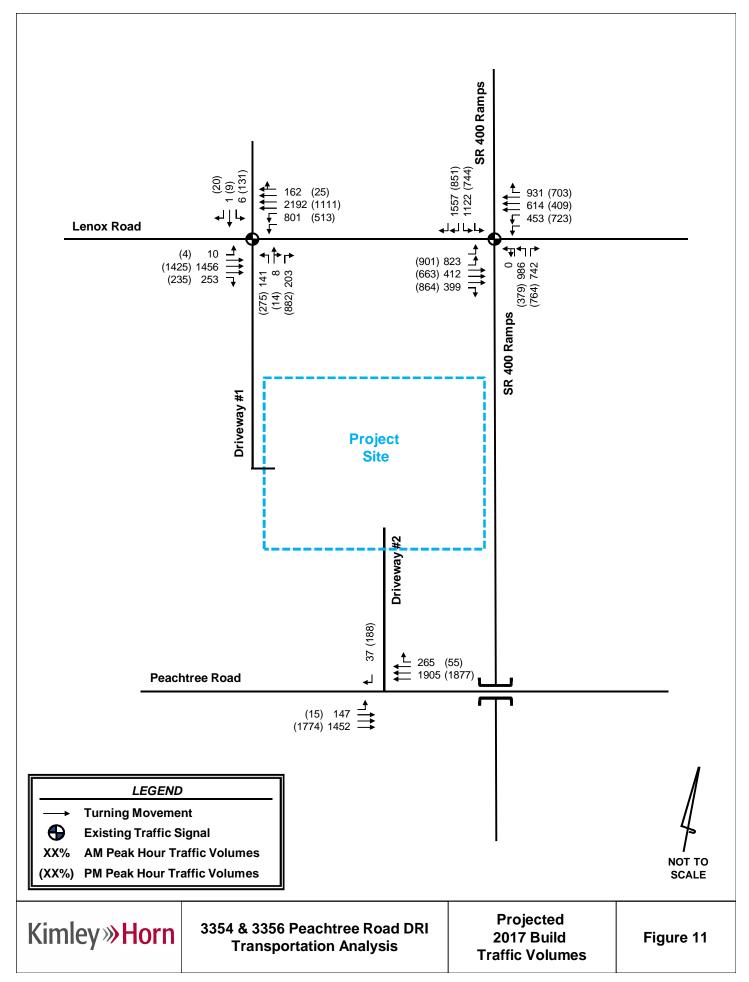
Table 9: 3354 & 3356 Peachtree Road DRI 2017 Build Intersection Levels-of-Service  LOS (delay in seconds)						
Intersection	Control	LOS Std.	AM Peak Hour	PM Peak Hour		
1. State Route 400 at Lenox Road (SPUI)	Signalized	E	E (77.0)	D (48.7)		
2. Driveway #1 (existing full-movement) Tower Place Drive at Lenox Road	Signalized	D	D (39.5)	D (46.8)		
3. Driveway #2 (existing right-in/left-in/right-out) Capital City Plaza existing driveway on Peachtree Street*	EB Stop Approach	D	C (22.8)	F (64.7)		

<sup>\*</sup> Stop-controlled right-out only exit approach lane LOS and delay shown.

As shown in Table 9, both signalized intersections within the study network are projected to operate at or above the acceptable Level-of-Service standard during both the AM and PM peak hours. The unsignalized intersection of the Capital City Plaza driveway with Peachtree Road is projected to operate with long delays on EB right-out approach, which is stop-controlled. It is not uncommon for unsignalized intersections on major roadways to have approaches that experience long delays. While the Capital City Plaza driveway may experience delay in the peak period, Peachtree Road will remain at free-flow operating conditions.







# 7.0 IDENTIFICATION OF PROGRAMMED PROJECTS

The ARC's Transportation Improvement Plan (TIP), GDOT's Statewide TIP (STIP), *Plan 2040* Regional Transportation Plan (RTP), GDOT's Construction Work Program, Fulton County Comprehensive Transportation Plan, and Connect Atlanta, were researched for currently programmed transportation projects within the vicinity of the proposed development. Several projects are programmed for the area surrounding the study network. The identified projects are listed in Table 10 below, and fact sheets identifying characteristics of these projects has been included in Appendix D.

	Table 10: 3354 & 3356 Peachtree Road DRI Programmed Improvements				
No.	Year	Project Number	Project Description		
1	2014- 2017	AT-270 [PLAN 2040]	SR 141 (Peachtree Road) – complete streets retrofit including wider sidewalks, bike lanes, medians, lighting and crosswalks to improve access to bus routes and Buckhead MARTA station between Shadowlawn Avenue and Maple Drive.		
2	2015- 2017	AT-289 [PLAN 2040]	SR 237 (Piedmont Road) operations and safety improvements at 10 locations along Piedmont Road between GA 400 and East Paces Ferry Road.		
3	2014- 2017	AT-292 [PLAN 2040]	SR 141 (Peachtree Road) and Lenox Road signal upgrades at six locations.		
4	2013- 2014	[Buckhead CID]	PATH400 Greenway Trail – approximately 5 mile paved greenway from Loridans Drive to the Atlanta Beltline Peachtree Creek spur trail via Peachtree Park, Lindmont LaVista neighborhoods and generally along GA 400.		
5	Tier 1	PS-IC-007 [Connect Atlanta]	Piedmont Road/Tower Place Drive – intersection capacity – add westbound left-turn lane from Tower Place Drive onto southbound Piedmont Road.		
6	Tier 2	RA-001-02 [Connect Atlanta]	Roswell Road Re-Build – realignment – Roswell Road reconstruction from 5 lanes to 3 lanes, from Habersham Road to the New Piedmont Road, approximately 1,800 ft.		
7	Tier 2	TR-007 [Connect Atlanta]	Peachtree Streetcar – Buckhead to Midtown Segment will include 5.8 miles of streetcar operating in mixed traffic in the outside travel lane of Peachtree Road.		
8	Tier 2	TR-013 [Connect Atlanta]	Piedmont / Roswell Road Transit – 4.3 miles of high frequency bus transit (10-minute headways with appropriate physical pedestrian streetscape improvements and permanent transit amenities along Roswell Road and Piedmont Road).		
9	Tier 3	PS-NS-028 [Connect Atlanta]	Roswell to Piedmont Connection – new street – add new two-lane street connecting Roswell and Piedmont Roads, intersecting with Piedmont generally halfway between the intersections of Habersham Road and Buckhead Loop.		
10	Tier 3	RA-001-04 [Connect Atlanta]	Powers Ferry Extension – realignment – extend Powers Ferry Road to the New Piedmont Road, a 3-lane street, approximately 500 feet.		
11	Tier 5	PS-RW-009 [Connect Atlanta]	Piedmont Road Capacity Improvement 3 – roadway widening – add left turn lanes at intersections along Piedmont Road between Peachtree Road and Pharr Road. Widen to provide 5-foot bike lanes on both sides. Current through lane configuration (3 northbound, 3 southbound) does not change.		
12	Tier 5	PS-RD-004 [Connect Atlanta]	Piedmont Road Diet 1 – road diet – Reconfigure lanes on Piedmont Road from Pharr Road to Sidney Marcus Boulevard. This project converts the existing six-lane section to two northbound lanes and three southbound lanes with exclusive left turn lanes.		
13	Tier 6	NS-007 [Connect Atlanta]	Phipps Boulevard Extension – extend Phipps Boulevard from the Buckhead Loop over GA 400 to Tower Place Drive as a 2-lane street		
14	Tier 6	RA-001-03 [Connect Atlanta]	Old Ivy Road/Blackland Road Reconnection and Widening – realignment – reconnection of Old Ivy Road to Blackland Road and widening of roadway from 2 lanes to 3 lanes between Roswell Road and the New Piedmont Road, approximately 500 feet.		
15	Tier 7	PS-RW-007 [Connect Atlanta]	Piedmont Road Capacity Improvement 1 – widen Piedmont Road from existing five- lane section (two lanes northbound, two southbound and left turns at intersections) to a seven-lane section (three lanes northbound and southbound, and left-turn lanes at intersections) between Buckhead Loop and Peachtree Road.		

#### 8.0 INGRESS/EGRESS ANALYSIS

Vehicular access to the 3354 & 3356 Peachtree Road development during the AM and PM peak periods includes the intersection of Lenox Road at GA 400, and two (2) existing vehicular site access points. Site access includes the full-movement signalized intersection of Tower Place Drive at Lenox Road (Driveway #1) and the Capital City Plaza driveway that exists as a right/left-in-right-out private driveway on Peachtree Road directly south of GA 400 (Driveway #2). All access internal to the block bounded by GA 400, Lenox Road, Piedmont Road and Peachtree Road are private roads and internal private roadways throughout the site provide access to all buildings and parking decks.

There are a variety of additional vehicular site access points on Peachtree Road and Piedmont Road that are available for site access outside of the AM and PM peak periods, during which a gate restricts access. These include two full-movement signalized intersections along Peachtree Road at Highland Drive and Tower Place Drive, two right-in-right-out driveways at Peachtree Road and Terminus Drive and Piedmont Road and Terminus Place, and a full-movement signalized intersection on Piedmont Road at Tower Place Drive.

Capacity analyses were performed for Lenox Road at GA 400, Tower Place Drive at Lenox Road (Driveway #1) and for the Capital City Plaza Driveway on Peachtree Road (Driveway #2) for the 2014 Existing conditions, Projected 2017 No-Build conditions, and Projected 2017 Build conditions; the intersection laneage (geometry) and traffic volumes for the site driveway intersections are shown in Figure 9, Figure 10, and Figure 11, respectively. The Levels-of-Service determined using existing geometry for Lenox Road at GA 400, Tower Place Drive at Lenox Road and for the Capital City Plaza Driveway on Peachtree Road can be found in Table 7, Table 8, and Table 9 for the 2014 Existing conditions, projected 2017 No-Build conditions, and projected 2017 Build conditions, respectively.

Based on the 2014 Existing conditions, projected 2017 No-Build conditions, and projected 2017 Build conditions, all project driveways will operate acceptably.

## 9.0 Internal Circulation Analysis

Internal roadways throughout the site provide vehicular access to all land uses and parking on the site. A more detailed layout of the internal roadways is shown in Figure 4. In addition to vehicular access, sidewalks throughout the internal roadway network allow ample opportunity for pedestrian access to the site from Lenox Road, Piedmont Road, and Peachtree Road. The site is additionally very well connected and has direct access to the Buckhead MARTA Rail station, bus stops for two different MARTA bus routes, and bus stops for the BUC Shuttle.

Mixed-use vehicle trip reductions were calculated according to the *ITE Trip Generation Handbook, an ITE Proposed Recommended Practice, Second Edition, June 2004.* Total internal capture and vehicle trip reduction between the all the land uses is expected to be 2.98% for the weekday and 2.08% for the PM peak hour as a result of the anticipated interaction between the varying land uses within the proposed development. Alternative transportation mode reduction was taken at 25%, consistent with GRTA's Letter of Understanding, was therefore applied to all land uses for this study.

#### 10.0 COMPLIANCE WITH COMPREHENSIVE PLAN ANALYSIS

The proposed development is high-density mixed-use with its variety of offices, residential apartments and condominium, and retail locations. This is consistent not only with the *Buckhead Action Plan – Livable Center Initiative Final Report, January, 8th 2002* and subsequent 5-year updates completed in 2006 and 2011, but also with local zoning included in the Special Public Interest (SPI) Zone 12, the *City of Atlanta Zoning Ordinance Map*, and the Region Core area and Station Community as defined by the *PLAN 2040 Unified Growth Policy Map*. As such, the proposed 3354 & 3356 Peachtree Road redevelopment project fulfills the need for a mixed-use development in this region as directly stated in the LCI studies.

015961007 22 October 2014