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EXECUTIVE SUMMARY

This report presents the analysis of the anticipated traffic impacts of a proposed 12.9959-acre mixed-use development (Buckhead Place) located in the Buckhead Community of the City of Atlanta, Georgia. This report is being prepared as part of a submittal requesting rezoning of the property with the City of Atlanta from C-1-C to PD-OC. Because the 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 development is expected to consist of approximately 355 apartment units, a 300-room hotel, 305,500 SF of office, 60,000 SF of retail, and 21,500 SF of quality restaurant space. The development is scheduled to be completed in multiple phases, with build-out by the year 2014. It should be noted that Phase 1 of the project is currently under construction at the time this report is being prepared. Phase 1 will consist of 155 apartment units and 9,500 SF of office space. Note: The Phase 1 densities are included in the totals listed above.

The results of the detailed intersection analysis for the 2014 No-Build (excluding the Buckhead Place development) and 2014 Build conditions (including the Buckhead Place development) identified improvements that will be necessary in order to maintain the Level of Service standard (LOS D or E) within the study network. These improvements are listed below:

2014 No-Build recommended improvements (includes background traffic growth but does not include the Buckhead Place DRI project traffic):

Intersection #1: Georgia 400 Ramps at Buckhead Loop (It should be noted that these improvements are for informational purposes only, and may not be feasible due to right-of-way constraints.)

- Install an additional eastbound right-turn lane, creating dual right-turn lanes.
- Install an additional westbound through lane, creating four westbound through lanes.
- Install an additional northbound left-turn lane, creating triple left-turn lanes.
- Install two additional northbound right-turn lanes, creating triple right-turn lanes.
- Install an additional southbound left-turn lane, creating triple left-turn lanes.
- Install an additional southbound right-turn lane, creating triple right-turn lanes.

Intersection #3: Piedmont Road at Buckhead Loop

- Remove one of the three westbound right turn lanes and install an additional westbound left-turn lane, creating triple left-turn lanes. (Improvement recommended in preliminary BCID Piedmont Road Corridor Study)
- Restrict eastbound vehicles exiting along Carson Lane to a right-out only movement. (Improvement recommended in preliminary BCID Piedmont Road Corridor Study)
- Install an additional northbound right-turn lane, creating dual right-turn lanes. The outside right-turn lane may operate as a free-flow lane.

Intersection #4: Piedmont Road at Tower Place Drive / Piedmont Peachtree Crossings North Driveway (Driveway #4)

- Install an additional northbound lane and an additional southbound through lane along Piedmont Road from its intersection with Buckhead Loop to the north to Peachtree Road to the south. (Improvement recommended in preliminary BCID Piedmont Road Corridor Study)
- Install an eastbound right-turn lane.
- Install a westbound left-turn lane.

Intersection #5: Piedmont Road at Piedmont Peachtree Crossings South Driveway (Driveway #3)

- Install an additional northbound through lane and an additional southbound through lane along Piedmont Road. (Improvement recommended in preliminary BCID Piedmont Road Corridor Study)
- Provide separate eastbound left-turn and right-turn lanes.

Intersection #6: Piedmont Road at Rooms to Go Driveway (Driveway #2)

- Install an additional northbound through lane and an additional southbound through lane along Piedmont Road. (Improvement recommended in preliminary BCID Piedmont Road Corridor Study)

Intersection #7: Peachtree Road at Highland Drive

- Install two southbound left-turn lanes, creating dual left-turn lanes.

Intersection #8: Peachtree Road at Piedmont Road

- Install an additional northbound through lane by restriping the existing northbound right-turn lane to a through lane and constructing a new right-turn lane.
- Install an additional northbound left-turn lane, creating dual northbound left-turn lanes.
- Install an additional southbound through lane.
- Install an eastbound right-turn lane.

Intersection #14: Piedmont Road at Pharr Road

- Install a northbound left-turn lane. (Improvement recommended in preliminary BCID Piedmont Road Corridor Study)
- Install a southbound right-turn lane.

2014 Build recommended improvements (includes the traffic associated with the Buckhead Place DRI):

NOTE: These improvements are in addition to the improvements listed previously in the 2014 No-Build.

Intersection #2: Buckhead Loop at Tower Place Drive

- Install an additional southbound left-turn lane, creating dual left-turn lanes. (Note: The Buckhead Place DRI does not add traffic to this movement.)

1.0 PROJECT DESCRIPTION

1.1 Introduction

This report presents the analysis of the anticipated traffic impacts of a proposed 12.9959-acre mixed-use development (Buckhead Place) located in the Buckhead Community of the City of Atlanta, Georgia. This report is being prepared as part of a submittal requesting rezoning of the property with the City of Atlanta from C-1-C to PD-OC. Because the 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 development is expected to consist of approximately 355 apartment units, a 300-room hotel, 305,500 SF of office, 60,000 SF of retail, and 21,500 SF of quality restaurant space. The development is scheduled to be completed in multiple phases, with build-out by the year 2014. It should be noted that Phase 1 of the project is currently under construction at the time this report is being prepared. Phase 1 will consist of 155 apartment units and 9,500 SF of office space. Note: The Phase 1 densities are included in the totals listed above.

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

| Table 1 Proposed Land Uses | |
|---------------------------------------|---------------------|
| High-Rise Apartment Units | 355 dwelling units |
| Hotel | 300 rooms |
| General Office Building | 305,500 square feet |
| Retail (Shopping Center) | 60,000 square feet |
| Quality Restaurant | 21,500 square feet |

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

1.2 Site Plan Review

The development is located north of Peachtree Road, at the intersection of Maple Road, and west of Piedmont Road in the heart of the Buckhead Community in the City of Atlanta. The development consists of three phases, with their projected completion dates and descriptions listed below:

Phase 1 (2008) – Phase 1 includes the existing land uses on site, retail development and an existing 8-level hotel, as well as the construction of a new residential/office building. The residential/office building is currently under construction and includes 155 apartment units and 9,500 SF of office space.

Phase 2 (est. 2010) – Construction of a 300-room hotel, a 200 residential dwelling units, 60,000 SF of retail space, 21,500 SF of quality restaurant space, and 21,000 SF of office space

Phase 3 (est. 2014) – Construction of an additional 275,000 SF of office space

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 development will have vehicular access in four locations with one service driveway. All driveways are existing, and all driveways are proposed to serve all portions of the development in the future.

Driveway #1 is located at the signalized intersection of Peachtree Road at Maple Drive and currently serves the southern portion of the Piedmont Peachtree Crossings shopping center, specifically Marshall's, Rock Bottom Brewery, LA Fitness, and the Hyatt hotel. This intersection is located approximately 390 feet southwest of the intersection of Peachtree Road at Piedmont Road (measured from the stop-bar).

Driveway #2 is located at the unsignalized intersection currently serving Rooms to Go along Piedmont Road, approximately 341 feet north of the Peachtree Road / Piedmont Road intersection.

Driveway #3 is located approximately 142 feet north of Driveway #2 along Piedmont Road and currently serves the Piedmont Peachtree Crossings shopping center.

Driveway #4 is located at the signalized intersection of Piedmont Road at Tower Place Drive. The existing driveway currently serves the northern portion of the Piedmont Peachtree Crossings shopping center. Vehicles entering via Driveway #4 would pass through the parking lot area adjacent to Kroger to turn south into the Buckhead Place development.

The service driveway is located at the unsignalized intersection currently serving Priscilla's, 610 feet west of the intersection of Peachtree Road at Piedmont Road along Peachtree Road.

One existing driveway located between Maple Drive and Piedmont Road along Peachtree Road (serving the Hyatt) will be closed upon the completion of Phase 1.

See the referenced conceptual plan for a visual representation of access to the proposed development as well as the above description of driveway locations. Additionally, the driveway distances are illustrated on Figure 2.

1.4 Bicycle and Pedestrian Facilities

Pedestrian facilities (sidewalks) currently exist in the vicinity of the proposed site along both sides of Peachtree Road and Piedmont Road. The sidewalks along Piedmont Road are proposed to be 15 feet with a 5 foot landscaped area along both sides of the road upon completion of the Piedmont Road Corridor Study. Similar improvements are also proposed along Peachtree Road in the vicinity of the project. New pedestrian crosswalks, including newly aligned wheelchair ramps, pedestrian refuge islands, protective fencing, and pedestrian signals were recently added to the intersection of Peachtree Road and Piedmont Road. The proposed development is located in the heart of Buckhead, which has been a focus by many developers for the creation of a walkable community upon its redevelopment.

Sidewalks connect many locations of interest in the area. For example, the Buckhead MARTA station is located approximately 0.40 miles east of the site along Peachtree Road. Additionally, the development is located within the Piedmont Peachtree Crossings shopping center, which contains a grocery store, various retail stores and restaurants, and a large LA Fitness gym. All locations within the Piedmont Peachtree Crossings shopping center will be easily accessible by pedestrians.

Bike lanes are currently in place along Peachtree Road just east of the site. Future streetscape facilities are to include a network of bike lanes to further enhance cyclist experience.

1.5 Transit Facilities

The proposed development is located along three MARTA bus routes: Route 23 – Lenox / Arts Center (5-10-minute headways), Route 5 – Sandy Springs (15-minute headways), and Route 110 – The Peach (30-minute headways).

Route 23 intersects the Lenox MARTA Station, the Buckhead MARTA Station, and the Arts Center Station. Route 5 intersects the Lindbergh MARTA Station and the Dunwoody MARTA Station. Route 110 intersects the Five Points MARTA Station and the Lenox MARTA Station. See the attached route maps for detailed route descriptions.

In addition to the MARTA bus routes listed above, the Buckhead MARTA station is located less than ½ mile from the site. The pedestrian environment in the area between the site and the station has been enhanced with wide sidewalks and store-front retail, promoting alternate modes of transportation.

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 the Georgia DOT was reviewed for the area surrounding the proposed development, and a growth rate of 2% per year along all roadways was agreed upon during the methodology meeting with GRTA staff. Note: this is the standard City of Atlanta growth rate generally used in DRI traffic studies. Additionally, traffic associated with other projects in the area was added to the study network. The DRIs in the surrounding area, along with their location and projected build-out date are listed below.

- DRI Number 1068: The Roxy (Roswell Road @ W. Paces Ferry Road) - 2009
- Terminus (Peachtree Road @ Piedmont Road) - 2008
- DRI Number 1269: Buckhead Avenues (Peachtree Road @ Pharr Road) - 2009
- DRI Number 1435: Buckhead Avenues Parcel I (Peachtree Road @ Pharr Road) – 2010

Additionally, 38,000 SF of currently vacant retail space was added as background traffic as recommended by GRTA staff at the methodology meeting.

2.2 Traffic Data Collection

2007 peak hour turning movement counts were conducted at twelve signalized intersection and two unsignalized intersections between 7:00-9:00 AM and 4:00-6:00 PM. The morning and afternoon peak hours varied between the fourteen intersections:

- | | |
|--|--|
| 1. Georgia 400 Ramps at Buckhead Loop | (AM Peak 8:15-9:15, PM Peak 5:00-6:00) |
| 2. Buckhead Loop at Tower Place Drive | (AM Peak 8:15-9:15, PM Peak 4:30-5:30) |
| 3. Piedmont Road at Buckhead Loop | (AM Peak 8:15-9:15, PM Peak 5:00-6:00) |
| 4. Piedmont Road at Tower Place Drive | (AM Peak 8:30-9:30, PM Peak 5:30-6:30) |
| 5. Piedmont Road at Driveway #3 | (AM Peak 8:00-9:00, PM Peak 5:00-6:00) |
| 6. Piedmont Road at Rooms-to-Go Driveway | (AM Peak 8:00-9:00, PM Peak 5:00-6:00) |
| 7. Peachtree Road at Highland Drive | (AM Peak 7:45-8:45, PM Peak 4:45-5:45) |
| 8. Peachtree Road at Piedmont Road | (AM Peak 8:00-9:00, PM Peak 5:00-6:00) |
| 9. Peachtree Road at Maple Drive | (AM Peak 8:00-9:00, PM Peak 5:00-6:00) |
| 10. Peachtree Road at Shadowlawn Avenue | (AM Peak 8:00-9:00, PM Peak 5:00-6:00) |
| 11. Piedmont Road at East Paces Ferry Road | (AM Peak 8:15-9:15, PM Peak 5:00-6:00) |
| 12. Piedmont Road at East Paces Ferry Road | (AM Peak 8:15-9:15, PM Peak 5:00-6:00) |

13. Piedmont Road at Peachtree Drive

(AM Peak 8:15-9:15, PM Peak 4:45-5:45)

14. Piedmont Road at Pharr Road

(AM Peak 8:15-9:15, PM Peak 4:45-5:45)

All raw 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 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

As stated earlier, the proposed development is expected to consist of approximately 355 apartment units, a 300-room hotel, 305,500 SF of office, 60,000 SF of retail, and 21,500 SF of quality restaurant space. The development is scheduled to be completed in multiple phases, with build-out by the year 2014.

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

| Table 2 Buckhead Place DRI Gross Trip Generation | | | | | | | |
|--|-------------|---------------|-------|--------------|------|--------------|------|
| Land Use | ITE Code | Daily Traffic | | AM Peak Hour | | PM Peak Hour | |
| | | Enter | Exit | Enter | Exit | Enter | Exit |
| Build-Out (Year 2014) | | | | | | | |
| High-Rise Apartment – 355 dwelling units | 222 | 797 | 797 | 27 | 80 | 77 | 49 |
| Hotel – 300 rooms | 310 | 1,156 | 1,156 | 98 | 62 | 94 | 83 |
| General Office Building –305,500 SF | 710 | 1,576 | 1,576 | 403 | 55 | 72 | 349 |
| Retail (Shopping Center) – 60,000 SF | 820 | 2,436 | 2,436 | 70 | 45 | 215 | 232 |
| Quality Restaurant – 21,500 SF | 931 | 967 | 967 | 14 | 3 | 108 | 53 |
| Total | | 6,932 | 6,932 | 612 | 245 | 566 | 766 |

3.2 *Trip Distribution*

The directional distribution and assignment of new project trips was based on engineering judgment, other traffic studies performed in the area, existing traffic counts, and discussions with GRTA staff at the methodology meeting.

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, consistent with GRTA's 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 refined during the methodology meeting, and includes the following intersections:

1. Georgia 400 Ramps at Buckhead Loop
2. Buckhead Loop at Tower Place Drive
3. Piedmont Road at Buckhead Loop
4. Piedmont Road at Tower Place Drive / Driveway #4
5. Piedmont Road at South Piedmont Peachtree Crossings Driveway / Driveway #3
6. Piedmont Road at Rooms-to-Go Driveway / Driveway #2
7. Peachtree Road at Highland Drive
8. Peachtree Road at Piedmont Road
9. Peachtree Road at Maple Drive / Driveway #1
10. Peachtree Road at Shadowlawn Avenue
11. Piedmont Road at East Paces Ferry Road
12. Piedmont Road at East Paces Ferry Road
13. Piedmont Road at Peachtree Drive
14. Piedmont Road at Pharr Road

Each of the above listed intersections was analyzed for the Existing 2007 Condition, the 2014 No-Build Condition, and the 2014 Build Condition. The 2014 No-Build Condition represents the existing traffic volumes grown at 2% per year for seven (7) years, plus the addition of traffic associated with other developments in the area. The 2014 Build Condition adds the projected trips associated with the Buckhead Place development to the 2014 No-Build Condition. Additionally, since the 6,000 SF bridal store, Priscilla's, is being demolished prior to build-out of the Buckhead Place development, traffic associated with this land use was removed from the Build traffic.

3.5 Existing Facilities

Peachtree Road

- Peachtree Road is an Urban Principal Arterial with three lanes in each direction (northeast to southwest in the vicinity of the project). For the purposes of this study, Peachtree Road will be considered to be an east/west roadway. Peachtree Road is considered to be the primary arterial through Atlanta, running from downtown to Brookhaven, where the road becomes Peachtree Industrial Boulevard. GDOT reported the most recent ADT along Peachtree Road as 45,350 vehicles per day in 2005.

Buckhead Loop

- Buckhead Loop/Lenox Road is a six-lane Urban Minor Arterial (three lanes in each direction) which runs east to west. Buckhead Loop/Lenox Road begins at Piedmont Road on the west and extends to the Peachtree Road on the east where it becomes Lenox Road. Lenox Road continues south to I-85. GDOT reported the most recent ADT along Peachtree Road as 60,820 vehicles per day in 2006.

Piedmont Road

- Piedmont Road is an Urban Minor Arterial which runs north to south. Piedmont Road begins at Roswell Road on the north and extends south of I-85 into downtown. Piedmont Road has two lanes in each direction from Roswell Road until Peachtree Road. From Peachtree Road south to Sidney Marcus Boulevard, Piedmont Road has three lanes in each direction. GDOT reported the most recent ADT along Peachtree Road as 40,600 vehicles per day in 2006.

Tower Place

- Tower Place is a two-lane Urban Local Street which runs northeast to northwest. Tower Place begins at Piedmont Road to the south and runs northeast until it curves to the northwest and extends to Buckhead Loop to the north. GDOT counts are not available along this roadway.

Maple Drive

- Maple Drive is a two-lane Urban Local Street which runs north to south. Maple Drive begins at Piedmont Peachtree Crossings Shopping Center to the north and extends south to Pharr Road. GDOT counts are not available along this roadway.

Shadowlawn Avenue

- Shadowlawn Avenue is a two-lane Urban Local Street which runs north to south. Shadowlawn Avenue begins at Mathieson Drive to the north and extends south to East Paces Ferry Road. GDOT counts are not available along this roadway.

East Paces Ferry Road

- East Paces Ferry Road is a four-lane Urban Collector Street which runs east to west. East Paces Ferry Road begins at Peachtree Road to the west and continues to Piedmont Road on the east. GDOT reported the most recent ADT along Peachtree Road as 8,790 vehicles per day in 2006.

Peachtree Drive

- Peachtree Drive is a two-lane Urban Local Street which runs east to west. Peachtree Drive begins at Piedmont Road to the west and extends east into the Peachtree Park neighborhood. GDOT counts are not available along this roadway.

Pharr Road

- Pharr Road is a five-lane Urban Collector Street which runs east to west (three westbound, two eastbound) near Piedmont Road. Pharr Road connects Peachtree Road to the west with Piedmont Road on the east. GDOT counts are not available along this roadway.

4.0 TRIP GENERATION

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

Mixed-use and pass-by reductions were taken according to the *ITE Trip Generation Handbook, 2004* and GRTA guidelines. An alternate mode transportation reduction was taken at 5% per the agreement made during the methodology meeting with GRTA staff. The total trips generated and analyzed in the report are listed below in **Table 3**.

| Table 3 Buckhead Place DRI Net Trip Generation | | | | | | |
|---|---------------|--------------|--------------|------------|--------------|------------|
| Land Use | Daily Traffic | | AM Peak Hour | | PM Peak Hour | |
| | Enter | Exit | Enter | Exit | Enter | Exit |
| Build-Out (Year 2014) | | | | | | |
| Gross Trips | 6,932 | 6,932 | 612 | 245 | 566 | 766 |
| <i>Internal Capture Reductions</i> | -950 | -950 | - | - | -95 | -88 |
| <i>Pass-By Reductions</i> | -1,030 | -1,030 | - | - | -93 | -92 |
| <i>Alternate Mode Reductions</i> | -300 | -300 | -31 | -12 | -24 | -34 |
| New Trips | 4,652 | 4,652 | 581 | 233 | 354 | 552 |

5.0 TRIP DISTRIBUTION AND ASSIGNMENT

New trips were distributed onto the roadway network using the percentages agreed to during the methodology meeting. **Figure 4 and 5** display the expected percentages for the development throughout the roadway network. These percentages were applied to the new trips generated by the development (see Table 3, above), and the volumes were assigned to 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 traffic volumes are shown in **Figure 7**. These volumes were input in Synchro 6.0 and an Existing Conditions analysis was performed. The results are displayed below in **Table 4**.

Table 4
Buckhead Place DRI
Existing 2007 Intersection Levels of Service
(delay in seconds)

| Intersection | | Control | LOS Standard | AM Peak Hour | PM Peak Hour |
|--------------|--|--------------------------|--------------|--------------|--------------|
| 1 | Georgia 400 Ramps at Buckhead Loop (Lenox Road) | Signal | E | F (86.2) | E (57.5) |
| 2 | Buckhead Loop at Tower Place Drive | Signal | D | C (26.7) | C (32.0) |
| 3 | Piedmont Road at Buckhead Loop / Carson Lane | Signal | E | E (72.2) | E (68.8) |
| 4 | Piedmont Road at Tower Place Drive / Piedmont Peachtree Crossings North Driveway (Driveway #4) | Signal | D | D (38.1) | D (36.2) |
| 5 | Piedmont Road at Piedmont Peachtree Crossings South Driveway (Driveway #3) | Side Street Stop Control | D | C (16.8) | C (21.6) |
| 6 | Piedmont Road at Rooms to Go Driveway (Driveway #2) | Side Street Stop Control | D | C (17.6) | C (19.3) |
| 7 | Peachtree Road at Highland Drive | Signal | D | B (15.5) | B (18.9) |
| 8 | Peachtree Road at Piedmont Road | Signal | D | D (37.3) | D (43.5) |
| 9 | Peachtree Road at Maple Drive (Driveway #1) | Signal | D | A (8.4) | B (11.4) |
| 10 | Peachtree Road at E/W Shadowlawn Avenue | Signal | D | A (9.1) | A (7.1) |
| 11 | Piedmont Road at East Paces Ferry Road (North) | Signal | D | A (3.6) | A (3.2) |
| 12 | Piedmont Road at East Paces Ferry Road (South) | Signal | D | A (7.4) | B (10.7) |
| 13 | Piedmont Road at Peachtree Drive | Signal | D | A (2.0) | A (2.2) |
| 14 | Peachtree Road at Pharr Road | Signal | D | C (24.0) | B (15.0) |

Two of the intersections currently operate below the acceptable Level of Service standard (LOS D) during both of the peak hours. The LOS standard will become LOS E for the failing peak hours at these intersections.

Existing 2007 intersection queues as determined by the Synchro model for the intersections requested in the GRTA issued Letter of Understanding are displayed below, in **Table 5**.

| Table 5 Buckhead Place DRI Existing 2007 Intersection Queues (for informational purposes) | | | | | | | | | |
|--|------------------------------------|------------------------------|-------|-------|-------|------|-----|-----|------|
| Intersection | | Maximum Queue Length in Feet | | | | | | | |
| | | NB | | SB | | EB | | WB | |
| | | L | T | L | T | L | T | L | T |
| 4 | Piedmont Road at Tower Place Drive | | | | | | | | |
| | AM Peak | m90 | #1000 | m#343 | m878 | 224 | 94 | - | 74 |
| | PM Peak | m#163 | #1051 | m73 | 544 | #183 | 140 | - | #342 |
| 8 | Peachtree Road at Piedmont Road | | | | | | | | |
| | AM Peak | 82 | #565 | m#208 | m134 | 219 | 315 | 196 | 341 |
| | PM Peak | #261 | 353 | m#153 | m#478 | 185 | 252 | 250 | #526 |
| 9 | Peachtree Road at Maple Drive | | | | | | | | |
| | AM Peak | - | 28 | - | 62 | - | 80 | - | 56 |
| | PM Peak | - | 216 | - | 114 | - | 147 | - | 60 |

#= 95th percentile volume exceeds capacity, queue may be longer.

m= Volume for 95th percentile queue is metered by upstream signal.

6.2 2014 No-Build Traffic

The existing traffic volumes were grown at 2.0% per year plus the addition of traffic associated with projects in the surrounding area and vacant retail adjacent to the site (refer to Section 2.1) along all roadway links within the study network. These volumes were input in Synchro 6.0 and analyses of the projected 2014 No-Build conditions were performed. The results are displayed below in **Table 6**. The projected volumes for the year 2014 No-Build conditions are shown in **Figure 8**.

Table 6
Buckhead Place DRI
No-Build 2014 Intersection Levels of Service
(delay in seconds)

| Intersection | | Control | LOS Standard | AM Peak Hour | PM Peak Hour |
|--------------|--|--------------------------|--------------|--------------|--------------|
| 1 | Georgia 400 Ramps at Buckhead Loop (Lenox Road) | Signal | E | F (250.3) | F (96.5) |
| 2 | Buckhead Loop at Tower Place Drive | Signal | D | C (23.9) | D (54.3) |
| 3 | Piedmont Road at Buckhead Loop / Carson Lane | Signal | E | F (194.7) | F (222.3) |
| 4 | Piedmont Road at Tower Place Drive / Piedmont Peachtree Crossings North Driveway (Driveway #4) | Signal | D | F (331.4) | F (250.1) |
| 5 | Piedmont Road at Piedmont Peachtree Crossings South Driveway (Driveway #3) | Side Street Stop Control | D | C (21.1) | F (74.4) |
| 6 | Piedmont Road at Rooms to Go Driveway (Driveway #2) | Side Street Stop Control | D | C (19.3) | E (37.7) |
| 7 | Peachtree Road at Highland Drive | Signal | D | D (39.8) | F (80.3) |
| 8 | Peachtree Road at Piedmont Road | Signal | D | D (51.2) | E (75.6) |
| 9 | Peachtree Road at Maple Drive (Driveway #1) | Signal | D | B (10.8) | B (17.6) |
| 10 | Peachtree Road at E/W Shadowlawn Avenue | Signal | D | B (10.6) | A (5.3) |
| 11 | Piedmont Road at East Paces Ferry Road (North) | Signal | D | A (3.6) | A (3.7) |
| 12 | Piedmont Road at East Paces Ferry Road (South) | Signal | D | A (9.7) | B (11.6) |
| 13 | Piedmont Road at Peachtree Drive | Signal | D | A (2.0) | A (2.4) |
| 14 | Peachtree Road at Pharr Road | Signal | D | F (104.3) | B (19.3) |

Eight (8) of the fourteen (14) intersections failed to meet acceptable Level of Service standards for the year 2014 No-Build condition. Per GRTA's Letter of Understanding, improvements were recommended at eight intersections until the Level of Service was elevated to the GRTA standard, or it was noted if the GRTA standard could not be feasibly met. The 2014 No-Build with Improvement intersection Level of Service are displayed below in **Table 7**.

Table 7
Buckhead Place DRI
2014 No-Build Intersection Levels of Service with Improvements
(delay in seconds)

| Intersection | | Control | LOS Standard | AM Peak Hour | PM Peak Hour |
|--------------|--|--------------------------|--------------|------------------------|-----------------------|
| 1 | Georgia 400 Ramps at Buckhead Loop (Lenox Road) | Signal | E | E (62.6) | D (46.9) |
| 3 | Piedmont Road at Buckhead Loop / Carson Lane | Signal | E | E (63.1) | D (46.3) |
| 4 | Piedmont Road at Tower Place Drive / Piedmont Peachtree Crossings North Driveway (Driveway #4) | Signal | D | F (153.5) ¹ | F (99.0) ¹ |
| 5 | Piedmont Road at Piedmont Peachtree Crossings South Driveway (Driveway #3) | Side Street Stop Control | D | C (16.4) | D (27.5) |
| 6 | Piedmont Road at Rooms to Go Driveway (Driveway #2) | Side Street Stop Control | D | C (16.0) | C (16.8) |
| 7 | Peachtree Road at Highland Drive | Signal | D | C (24.2) | D (37.4) |
| 8 | Peachtree Road at Piedmont Road | Signal | D | D (51.7) | D (39.3) |
| 14 | Peachtree Road at Pharr Road | Signal | D | D (49.3) | D (43.6) |

¹ = See Note 1 on the following pages.

The 2014 No-Build improvements made to the intersections are shown in Figure 8, and are listed below by intersection:

Intersection #1: Georgia 400 Ramps at Buckhead Loop (It should be noted that these improvements are for informational purposes only, and may not be feasible due to right-of-way constraints. See Note 2 below.)

- Install an additional eastbound right-turn lane, creating dual right-turn lanes.
- Install an additional westbound through lane, creating four westbound through lanes.
- Install an additional northbound left-turn lane, creating triple left-turn lanes.
- Install two additional northbound right-turn lanes, creating triple right-turn lanes.
- Install an additional southbound left-turn lane, creating triple left-turn lanes.
- Install an additional southbound right-turn lane, creating triple right-turn lanes.

Intersection #3: Piedmont Road at Buckhead Loop

- Remove one of the three westbound right turn lanes and install an additional westbound left-turn lane, creating triple left-turn lanes. (Improvement recommended in preliminary BCID Piedmont Road Corridor Study)
- Restrict eastbound vehicles exiting along Carson Lane to a right-out only movement. (Improvement recommended in preliminary BCID Piedmont Road Corridor Study)

- Install an additional northbound right-turn lane, creating dual right-turn lanes. The outside right-turn lane may operate as a free-flow lane.

Intersection #4: Piedmont Road at Tower Place Drive / Piedmont Peachtree Crossings North Driveway (Driveway #4)

- Install an additional northbound lane and an additional southbound through lane along Piedmont Road from its intersection with Buckhead Loop to the north to Peachtree Road to the south. (Improvement recommended in preliminary BCID Piedmont Road Corridor Study)
- Install an eastbound right-turn lane.
- Install a westbound left-turn lane.

Intersection #5: Piedmont Road at Piedmont Peachtree Crossings South Driveway (Driveway #3)

- Install an additional northbound through lane and an additional southbound through lane along Piedmont Road. (Improvement recommended in preliminary BCID Piedmont Road Corridor Study)
- Provide separate eastbound left-turn and right-turn lanes.

Intersection #6: Piedmont Road at Rooms to Go Driveway (Driveway #2)

- Install an additional northbound through lane and an additional southbound through lane along Piedmont Road. (Improvement recommended in preliminary BCID Piedmont Road Corridor Study)

Intersection #7: Peachtree Road at Highland Drive

- Install two southbound left-turn lanes, creating dual left-turn lanes.

Intersection #8: Peachtree Road at Piedmont Road

- Install an additional northbound through lane by restriping the existing northbound right-turn lane to a through lane and constructing a new right-turn lane.
- Install an additional northbound left-turn lane, creating dual northbound left-turn lanes.
- Install an additional southbound through lane.
- Install an eastbound right-turn lane.

Intersection #14: Piedmont Road at Pharr Road

- Install a northbound left-turn lane. (Improvement recommended in preliminary BCID Piedmont Road Corridor Study)
- Install a southbound right-turn lane.

Note 1: Intersection #4 is expected to operate at an unacceptable LOS during the AM and PM peak hours during the future No-Build condition, even with the above recommended improvements. Additional improvements, including the installation of dual southbound left-turn lanes and addition of a northbound right-turn lane, could improve the level of service at this intersection to an acceptable level. These additional improvements are not recommended for the following reasons:

In order to preserve the pedestrian character of the Buckhead area, it is not recommended that additional turn-lanes be installed at the intersection, which would increase the distance a pedestrian is required to clear the intersection.

If dual left-turn lanes are installed at this intersection, protected (green arrow only) left-turns would be required, thereby prohibiting left-turn movements during gaps in northbound through traffic (if allowed during the green ball phase). For example, during most hours of the day, having a single southbound left-turn lane with protected-permissive (green arrow followed by green ball) appears to be the most practical/feasible.

Additional lanes would be needed primarily during the AM Peak Hour for employees entering the Terminus site via Tower Place Drive. At other hours during the day, the additional lanes would likely not be necessary under standard conditions.

Note 2: Maintaining existing roadway geometry, the intersection of the Georgia 400 Ramps at Buckhead Loop is projected to operate below the acceptable Level of Service standards for the year 2010 No-Build Conditions during both the AM and PM peak hours.

In order to elevate the level of service at this intersection to the appropriate level of service standard, significant improvements, including additional turn lanes and an additional through lane (see above), were made to this intersection per GRTA guidelines. These improvements may be warranted; however, there is a limited amount of right-of-way caused by the existing bridge structure configuration of this intersection. It may be unreasonable to construct additional turn lanes that may not physically fit within the obtainable right-of-way without major reconstruction. While not constructing improvements potentially will create congestion in the vicinity of the proposed development, the overcapacity of this intersection is a larger challenge that calls for improvements (such as alternate access to GA 400) stretching far beyond the scope of this analysis. Therefore, these improvements and the subsequent analysis are for informational purposes only.

No-Build 2014 intersection queues for the intersections requested in the GRTA issued Letter of Understanding are displayed below, in **Table 8**.

| Table 8 Buckhead Place DRI 2014 No-Build Intersection Queues (for informational purposes) | | | | | | | | | |
|--|---|------------------------------|--------|-------|-------|------|-----|-------|------|
| Intersection | | Maximum Queue Length in Feet | | | | | | | |
| | | NB | | SB | | EB | | WB | |
| | | L | T | L | T | L | T | L | T |
| 4 | <i>Piedmont Road at Tower Place Drive</i> | | | | | | | | |
| | AM Peak | m94 | m#1278 | #1281 | m613 | #329 | 106 | - | #234 |
| | PM Peak | m#193 | #1903 | m#733 | m#697 | #414 | 169 | - | #836 |
| 8 | <i>Peachtree Road at Piedmont Road</i> | | | | | | | | |
| | AM Peak | 89 | #781 | m#263 | m154 | 303 | 415 | m#245 | #454 |
| | PM Peak | #400 | #547 | m#288 | m#576 | m246 | 373 | m291 | m347 |
| 9 | <i>Peachtree Road at Maple Drive</i> | | | | | | | | |
| | AM Peak | - | 61 | - | 90 | - | 94 | - | m120 |
| | PM Peak | - | 268 | - | #278 | - | 432 | - | m230 |

#= 95th percentile volume exceeds capacity, queue may be longer.

m= Volume for 95th percentile queue is metered by upstream signal.

No-Build 2014 with Improvements intersection queues for the intersections requested in the GRTA issued Letter of Understanding are displayed below, in **Table 9**.

| Table 9 Buckhead Place DRI 2014 No-Build Intersection Queues with Improvements (for informational purposes) | | | | | | | | | |
|--|---|------------------------------|-------|-------|-----|------|------|-------|-------|
| Intersection | | Maximum Queue Length in Feet | | | | | | | |
| | | NB | | SB | | EB | | WB | |
| | | L | T | L | T | L | T | L | T |
| 4 | <i>Piedmont Road at Tower Place Drive</i> | | | | | | | | |
| | AM Peak | m99 | #1069 | #1604 | 563 | #347 | 81 | 178 | 39 |
| | PM Peak | 150 | #1186 | #752 | 613 | #400 | 97 | #595 | 103 |
| 8 | <i>Peachtree Road at Piedmont Road</i> | | | | | | | | |
| | AM Peak | 65 | #465 | #367 | 217 | #316 | 372 | #243 | 388 |
| | PM Peak | #112 | 198 | #272 | 252 | #234 | #334 | m#162 | m#372 |

#= 95th percentile volume exceeds capacity, queue may be longer.

m= Volume for 95th percentile queue is metered by upstream signal.

6.3 2014 Build Traffic

The traffic associated with the proposed development (Buckhead Place) was added to the 2014 No-Build volumes. These volumes were then input into Synchro 6.0 with the recommended No-Build geometry improvements from the previous section. The results of the analyses are displayed in **Table 10**. The projected volumes, laneage, and recommended intersection control for the year 2014 Build condition are illustrated in **Figure 9**.

Table 10
Buckhead Place DRI
Build 2014 Intersection Levels of Service
(delay in seconds)

| Intersection | | Control | LOS Standard | AM Peak Hour | PM Peak Hour |
|--------------|--|--------------------------|--------------|--------------|------------------------|
| 1 | Georgia 400 Ramps at Buckhead Loop (Lenox Road) | Signal | D | E (75.9) | E (71.4) |
| 2 | Buckhead Loop at Tower Place Drive | Signal | D | C (26.8) | E (64.5) |
| 3 | Piedmont Road at Buckhead Loop / Carson Lane | Signal | E | E (77.2) | E (56.8) |
| 4 | Piedmont Road at Tower Place Drive / Piedmont Peachtree Crossings North Driveway (Driveway #4) | Signal | D | F (164.6) | F (128.9) |
| 5 | Piedmont Road at Piedmont Peachtree Crossings South Driveway (Driveway #3) | Side Street Stop Control | D | C (22.5) | F (124.1) ³ |
| 6 | Piedmont Road at Rooms to Go Driveway (Driveway #2) | Side Street Stop Control | D | C (17.3) | D (31.7) |
| 7 | Peachtree Road at Highland Drive | Signal | D | C (26.0) | D (44.3) |
| 8 | Peachtree Road at Piedmont Road | Signal | D | D (48.6) | D (50.1) |
| 9 | Peachtree Road at Maple Drive (Driveway #1) | Signal | D | B (17.8) | D (35.3) |
| 10 | Peachtree Road at E/W Shadowlawn Avenue | Signal | D | B (10.8) | A (8.8) |
| 11 | Piedmont Road at East Paces Ferry Road (North) | Signal | D | A (3.5) | A (3.8) |
| 12 | Piedmont Road at East Paces Ferry Road (South) | Signal | D | B (10.6) | B (12.0) |
| 13 | Piedmont Road at Peachtree Drive | Signal | D | A (3.3) | A (2.8) |
| 14 | Peachtree Road at Pharr Road | Signal | D | D (53.1) | D (50.1) |

³= See Note 3 on the following page.

As shown in Table 7, three intersections failed to meet the acceptable Level of Service standard. Improvements were made to the 2014 Build Conditions to obtain the appropriate LOS Standard at Intersection #2. The other two intersections were not improved (see Note 1 in Section 6.2 and Note 3 below).

The 2014 Build with Improvements intersection analysis Level of Service are displayed below in **Table 11**.

Table 11
Buckhead Place DRI
2014 Build Intersection Levels of Service with Improvements
(delay in seconds)

| Intersection | | Control | LOS Standard | AM Peak Hour | PM Peak Hour |
|--------------|------------------------------------|---------|--------------|--------------|--------------|
| 2 | Buckhead Loop at Tower Place Drive | Signal | D | C (26.5) | D (51.4) |

The 2014 Build improvements made to the intersection are shown in Figure 9, and are listed below:

Intersection #2: Buckhead Loop at Tower Place Drive

- Install an additional southbound left-turn lane, creating dual left-turn lanes. (Note: The Buckhead Place DRI does not add traffic to this movement)

Note 3: A signal at the location of Intersection #5 (Driveway #3) would improve its level of service to an acceptable level; however, a signal might not meet signal warrant guidelines at this location due to the proximity of other signals and peak-hour signal requirements. Nevertheless, a signal at this location is worth considering due to limited turning movements and the need for a mid-block pedestrian signal.

Build 2014 intersection queues for the intersections requested in the GRTA issued Letter of Understanding are displayed below, in **Table 12**.

| Table 12 Buckhead Place DRI 2014 Build Intersection Queues (for informational purposes) | | | | | | | | | |
|--|------------------------------------|------------------------------|-------|-------|------|------|-----|------|------|
| Intersection | | Maximum Queue Length in Feet | | | | | | | |
| | | NB | | SB | | EB | | WB | |
| | | L | T | L | T | L | T | L | T |
| 4 | Piedmont Road at Tower Place Drive | | | | | | | | |
| | AM Peak | m79 | #1114 | #1629 | 746 | #467 | 80 | 178 | 39 |
| | PM Peak | 150 | #1335 | m#650 | m406 | #668 | 99 | #445 | 102 |
| 8 | Peachtree Road at Piedmont Road | | | | | | | | |
| | AM Peak | 79 | #519 | m#337 | m104 | #355 | 349 | #243 | #425 |
| | PM Peak | #139 | #283 | #344 | #329 | #285 | 331 | #302 | #480 |
| 9 | Peachtree Road at Maple Drive | | | | | | | | |
| | AM Peak | - | 40 | - | 191 | - | 131 | - | 273 |
| | PM Peak | - | 122 | - | #474 | - | 506 | - | #802 |

#= 95th percentile volume exceeds capacity, queue may be longer.

m= Volume for 95th percentile queue is metered by upstream signal.

7.0 IDENTIFICATION OF PROGRAMMED PROJECTS

The *Mobility 2030 RTP, TIP, STIP, GDOT's Construction Work Program*, and the *Buckhead CID* website 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. Information on the projects is included in the Appendix.

| | | |
|-------|---------|---|
| 2009: | AT-215C | Peachtree Road Ped/Bike Upgrades (Shadowlawn Avenue to Maple Drive) Turn lanes (additional eastbound and westbound left-turn lanes) along Peachtree Road at Maple Drive are incorporated into this project. |
| 2010: | | Buckhead Village Streetscape Improvements (along East Paces Ferry Road and Pharr Road) |

Buckhead Area Transportation Management Association (BATMA) and Buckhead CID Improvements:

Intersection Improvements:

East Paces Ferry Road/Roswell Road/Peachtree Road

Improvements include the construction of wheelchair ramps, a pedestrian refuge island, the relocation of traffic signals for better traffic flow and new pedestrian crosswalks. The changes allow pedestrians to cross the five-point intersection with more ease and safety while improving traffic flow and wheelchair accessibility.

Peachtree Road/Piedmont Road

Improvements include new pedestrian crosswalks and newly aligned wheelchair ramps, along with the addition of left turn lanes from Peachtree onto Piedmont and Piedmont onto Peachtree. Improvements include two new pedestrian refuge islands, crosswalks, protective fencing and pedestrian signals.

Piedmont Road Corridor Study:

Piedmont Road from Roswell Road to Interstate 85 is being studied in five segments to improve conditions along this roadway for vehicles, bicycles, and pedestrians. Recommended improvements are currently being investigated. Concept studies to implementation will likely take more than five years.

Peachtree Boulevard:

The **Peachtree Boulevard** transformation is a major enhancement of a stretch of Peachtree Road in Buckhead into a more livable, walkable, bikable and drivable promenade. The project is ongoing, but a major portion of the project was recently completed along Peachtree Road adjacent to the site.

8.0 INGRESS/EGRESS ANALYSIS

The development will have vehicular access in four locations with one service driveway. All driveways are existing, and all driveways are proposed to serve all portions of the development in the future.

Driveway #1 is located at the signalized intersection of Peachtree Road at Maple Drive and currently serves the southern portion of the Piedmont Peachtree Crossings shopping center, specifically Marshall's, Rock Bottom Brewery, LA Fitness, and the Hyatt hotel. This intersection is located approximately 390 feet southwest of the intersection of Peachtree Road at Piedmont Road.

Driveway #2 is located at the unsignalized intersection currently serving Rooms to Go along Piedmont Road, approximately 341 feet north of the Peachtree Road / Piedmont Road intersection.

Driveway #3 is located approximately 142 feet north of Driveway #2 along Piedmont Road and currently serves the Piedmont Peachtree Crossings shopping center.

Driveway #4 is located at the signalized intersection of Piedmont Road at Tower Place Drive. The existing driveway currently serves the northern portion of the Piedmont Peachtree Crossings shopping center. Vehicles entering via Driveway #4 would pass through the parking lot area adjacent to Kroger to turn south into the Buckhead Place development.

The service driveway is located at the unsignalized intersection currently serving Priscilla's, 610 feet west of the intersection of Peachtree Road at Piedmont Road along Peachtree Road.

One existing driveway located between Maple Drive and Piedmont Road along Peachtree Road (serving the Hyatt) will be closed upon the completion of Phase 1.

9.0 INTERNAL CIRCULATION ANALYSIS

The proposed development will generate trips between the residential and non-residential uses. The internal roadway network connects the residential units with the office space and the retail / restaurant. Using the *ITE Trip Generation Handbook, 2004* as a reference, approximately 13.70% of the gross daily trips will be internal and approximately 12.16% of the gross PM peak hour trips will be internal.

10.0 COMPLIANCE WITH COMPREHENSIVE PLAN ANALYSIS

The Future Land Use Plan for the City of Atlanta designates the area as high density commercial.

11.0 NON-EXPEDITED CRITERIA

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

The proposed development is located along three MARTA bus routes: Route 23 – Lenox / Arts Center (5-10-minute headways), Route 5 – Sandy Springs (15-minute headways), and Route 110 – The Peach (30-minute headways). Route 23 intersects the Lenox MARTA Station, the Buckhead MARTA Station, and the Arts Center Station. Route 5 intersects the Lindbergh MARTA Station and the Dunwoody MARTA Station. Route 110 intersects the Five Points MARTA Station and the Lenox MARTA Station. See the attached route maps for detailed route descriptions.

In addition to the MARTA bus routes listed above, the Buckhead MARTA station is located less than ½ mile from the site. The pedestrian environment in the area between the site and the station has been enhanced with wide sidewalks and store-front retail, promoting alternate modes of transportation.

Pedestrian facilities (sidewalks) currently exist in the vicinity of the proposed site along both sides of Peachtree Road and Piedmont Road. The sidewalks along Piedmont Road are proposed to be 15 feet with a 5 foot landscaped area along both sides of the road upon completion of the Piedmont Road Corridor Study. Similar improvements are also proposed along Peachtree Road in the vicinity of the project. New pedestrian crosswalks, including newly aligned wheelchair ramps, pedestrian refuge islands, protective fencing, and pedestrian signals were recently added to the intersection of Peachtree Road and Piedmont Road. The development is located in the heart of Buckhead, which has been a focus by developers for the creation of a walkable community upon its redevelopment.

Sidewalks connect many locations of interest in the area. For example, the Buckhead Marta station is located approximately 0.40 miles from the site along Peachtree Road to the east. Additionally, the development is located within the Piedmont Peachtree Crossings shopping center, which contains a grocery store, various retail stores and restaurants, and a large LA Fitness gym. All locations within the Piedmont Peachtree Crossings shopping center will be easily accessible by pedestrians.

Bike lanes are currently in place along Peachtree Road just east of the site. Future streetscape facilities are to include a network of bike lanes to further enhance cyclist experience.

11.2 Vehicle Miles Traveled

The following table displays the reduction in traffic generation due to internal capture and pass-by trips.

| | Build-out Total |
|--|-----------------|
| Daily Gross Trip Generation: | 13,864 |
| (-)Mixed-use reductions (internal capture) | -1900 |
| (-)Pass-by trips | -599 |
| (-)Alternative modes | -2,060 |
| Net Trips: | 9,305 |

11.3 Relationship Between Location of Proposed DRI and Regional Mobility

The proposed development is located near a major full-access facility, SR 400, at the Buckhead Loop interchange. Additionally, Piedmont Road and Peachtree Road are major arterials connecting Buckhead to Roswell and Sandy Springs to the north and Midtown and Downtown to the south.

11.4 Relationship Between Proposed DRI and Existing or Planned Transit Facilities

The proposed DRI is within walking distance to the Buckhead MARTA station on Peachtree Road.

11.5 Transportation Management Area Designation

The proposed development located within the Buckhead Area Transportation Management Association (BATMA).

11.6 Offsite Trip Reduction and Trip Reduction Techniques

Mixed-use and pass-by trip reductions were taken according to the *ITE Trip Generation Handbook, 2004*. Approximately 13.70% of the gross daily trips will be internal and approximately 12.16% of the gross PM peak hour trips will be internal.

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 No-Build improvements to the existing infrastructure listed in this report will be necessary to support traffic volumes in build-out year (2014). The Piedmont Road Corridor Study is currently in its planning stages, and many of the No-Build improvements associated with the DRI are contained in recommendations listed in the corridor study.

12.0 AREA OF INFLUENCE

The proposed development is expected to consist of approximately 355 apartment units, a 300-room hotel, 305,500 SF of office, 60,000 SF of retail, and 21,500 SF of quality restaurant space.

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 (Peachtree Road at Piedmont 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 13**.

| Table 13 Census Tract Information | |
|--|---------|
| Total Households | 120,927 |
| Population in Households | 246,594 |
| Average household size | 2.04 |
| Workers per Household | 1.27 |
| Owner Occupied | 44.59% |
| Rental Occupied | 55.41% |

As can be seen from the table above, the total population within the Area of Influence is 246,594, residing within 120,927 households (an average of 2.04 people per household). The AOI area totals 51,493 acres.

Using the above calculated average of 2.04 persons per household, it can be anticipated that the proposed DRI will house approximately 724 people (355 proposed dwelling units multiplied by 2.04). Based on information obtained from the Census Tracts, it is estimated that approximately 451 of these expected 724 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 30305) at the time of this report.

12.3 Development Housing Analysis

The development plan provides for apartments for rent in two price ranges within the proposed development. **Table 14**, 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 14 Estimated Workers per Household | | | | |
|---|--------------------|------------------------|----------------------|--------------------------|
| Tier | Description | Number of Units | Average Price | Number of Workers |
| A1 | Phase 1 Apartment | 155 | \$2,476/month | 197 |
| A2 | Phase 2 Apartment | 200 | \$1,930/month | 254 |

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 15**, on the following page.

Table 15
AOI Jobs and Salaries

| Industry / Business Type | # Businesses | # Employees | Average Salary |
|---|--------------|-------------|----------------|
| Retail Trade | 4,146 | 68,346 | \$27,890 |
| Building Materials and Garden Supply | 146 | 6,627 | - |
| General Merchandise Stores | 90 | 4,451 | - |
| Food Stores | 245 | 5,062 | - |
| Auto Dealers and Gas Stations | 191 | 2,565 | - |
| Apparel and Accessory Stores | 473 | 3,529 | - |
| Home Furniture, Furnishings, and Equipment | 604 | 9,689 | - |
| Eating and Drinking Places | 1,292 | 27,215 | - |
| Miscellaneous Retail Stores | 1,105 | 9,209 | - |
| Finance | 3,147 | 48,354 | \$58,575 |
| Banks, Savings and Lending Institutions | 607 | 9,759 | - |
| Securities and Commodity Brokers | 529 | 8,253 | - |
| Insurance Carriers and Agencies | 387 | 11,540 | - |
| Real Estate | 1,624 | 18,802 | - |
| Trusts, Holdings, and Other Investments | | | |
| Services | 13,006 | 207,605 | - |
| Hotels and Other Lodging | 132 | 8,998 | \$17,731 |
| Personal Services | 1,743 | 8,638 | - |
| Business Services | 3,464 | 52,505 | \$69,328 |
| Motion Picture and Amusement | 532 | 6,916 | \$40,824 |
| Health Services | 2,267 | 54,729 | \$42,604 |
| Legal Services | 1,932 | 17,929 | \$69,328 |
| Education Services | 292 | 25,787 | \$39,537 |
| Social Services | 385 | 7,161 | \$42,604 |
| Miscellaneous, Membership Organizations and Nonclassified | 2,260 | 24,942 | - |
| Agriculture | 263 | 2,274 | \$5,313 |
| Mining | 10 | 83 | \$19,898 |
| Construction | 902 | 7,237 | \$47,680 |
| Manufacturing | 765 | 21,994 | \$56,438 |
| Transportation, Communication/Public Utilities | 737 | 19,482 | \$93,766 |
| Wholesale Trade | 681 | 7,905 | \$62,185 |
| Public Administration | 259 | 18,858 | \$44,925 |
| Total | 23,916 | 402,138 | - |

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 16**. Because there is an average of 1.27 workers expected per household, the required income was divided by 1.27 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 14 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 four levels of pricing within the development, thus satisfying the GRTA requirement of 25%.

| Table 16 | | | | |
|---|---------------------------|---|--|--|
| Expected Workers | | | | |
| | Average Rent Price | Necessary Income per Expected Worker | Expected Worker per Price Range | Jobs at or above Necessary Income |
| A1 | \$2,476/month | \$69,994 | 197 | 19,482 |
| A2 | \$1,930/month | \$54,559 | 254 | 168,169 |
| Percent of expected workers likely to find necessary employment within the AOI | | | | 100% |

13.0 ARC'S AIR QUALITY BENCHMARK

The proposed development is expected to consist of approximately 355 apartment units, a 300-room hotel, 305,500 SF of office, 60,000 SF of retail, and 21,500 SF of quality restaurant space. Assuming each residence is the ARC-accepted average of 1,800 SF, residential is the dominant use and the dwelling units per acre ratio is greater than 15 units / acre. Based on this density, the development is projected to meet a density target for a 4% reduction.

The mixed-use proposed development contains more than 10% of floor area for office space. Thus, the proposed site may receive a 4% VMT reduction.

Since the development is located within a Transportation Management Area (BATMA) and that provides a shuttle system (The BUC), the development may receive a 5% reduction.

The proposed development will provide connections between the residential and non-residential uses within the site. Thus, the proposed site may receive a 4% VMT reduction.

The proposed development meets the ARC criteria for a total 19% VMT reduction. These reductions are displayed below in **Table 13**.

| Table 17 ARC VMT Reductions | |
|--|------------|
| Mixed-Use Projects where Residential is the dominant use | |
| More than 15 units per acre | -6% |
| Residential dominant use with more than 10% office floor area | -4% |
| TMA that includes shuttle service | -5% |
| Bike/ped networks in developments that meet one density 'target' | -4% |
| Total Reductions | 19% |