Transportation Analysis

# Symphony Park Mixed-Use (Buford Highway) DRI #1717 DeKalb County, Georgia

*Prepared for:* Cortland Partners

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# **EXECUTIVE SUMMARY**

This report presents the analysis of the anticipated traffic impacts of a proposed 22.24-acre mixed-use development between Buford Highway and Curtis Drive in DeKalb County, Georgia. This report is being prepared as part of a submittal requesting rezoning from RM-75 to PC-2. Because the project will exceed 400,000 square feet (SF), 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 1,216 apartments, 40,000 SF of office and 65,000 SF of retail. The development is scheduled to be completed in a single phase, by the year 2011.

The results of the detailed intersection analysis for the 2011 No-Build and 2011 Build conditions identified improvements that will be necessary in order to maintain the Level of Service standard (LOS D) within the study network. These improvements are listed below:

2008 No-Build recommended improvements (includes background growth but does not include the Symphony Park DRI project traffic):

N. Druid Hills Road @ Buford Highway

- Add a westbound right-turn lane along N. Druid Hills Road
- Add a northbound right-turn lane along Buford Highway
- Optimize the timing splits (cycle length, yellow and red times remain the same)

N. Druid Hills Road @ I-85 SB Ramps

- Add a second eastbound right-turn lane along N. Druid Hills Road
- Optimize the timing splits (cycle length, yellow and red times remain the same)

2008 Build recommended improvements (includes the Symphony Park DRI project traffic):

Buford Highway @ Proposed Drive A

 Signalize the intersection if warranted and coordinate timings with Buford Highway @ Curtis Drive

# **1.0 PROJECT DESCRIPTION**

#### 1.1 Introduction

This report presents the analysis of the anticipated traffic impacts of a proposed 22.24-acre mixed-use development between Buford Highway and Curtis Drive in DeKalb County, Georgia. This report is being prepared as part of a submittal requesting rezoning from RM-75 to PC-2. Because the project will exceed 400,000 SF, 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 1,216 apartments, 40,000 SF of office and 65,000 SF of retail. The development is scheduled to be completed in a single phase, by the year 2011.

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

Table 1 Proposed Land Uses					
Apartments	1,216 dwelling units				
Office	40,000 SF				
Retail	65,000 SF				

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

#### *1.2 Site Plan Review*

The development plan is included in one phase. The proposed site is surrounded by Curtis Drive to the west and Buford Highway to the east.

**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

Access to the site will be achieved through one full-access curb cut along Buford Highway (Proposed Drive A), one right-in/right-out (RIRO) curb cut along Buford Highway (Proposed Drive B), and two full-access curb cuts along Curtis Drive (Proposed Drives C and D). The curb cuts will connect to a proposed street grid within the site between Buford Highway and Curtis Drive. See the site plan for a visual representation of access to and within the proposed development as well as the above description of access locations.

# 1.4 Bicycle and Pedestrian Facilities

Pedestrian facilities currently exist on the same side of the street as the site along Curtis Drive, and on the opposite side of the street along Buford Highway. The proposed development will connect to the existing sidewalks along Curtis Drive to provide pedestrian access (see Appendix for site photos). Additionally, a bike lane/hiking trail is proposed along the southwest edge of the property. No bike lanes or trails currently exist in the vicinity of the site.





![](_page_8_Figure_0.jpeg)

# 1.5 Transit Facilities

The proposed development is located between Buford Highway and Curtis Road. Currently, two MARTA bus routes access the site: Route 39 and Route 139. Route 39 connects the Lindbergh rail station and the Doraville Station on 12-minute headways. Route 139 connects the Lenox rail station and the Plaza Fiesta Mall on 30-minute headways.

# 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 growth rates of 2.0% per year along all roadways were agreed upon during the methodology meeting with GRTA staff.

# 2.2 Traffic Data Collection

Peak hour turning movement counts were conducted at six signalized intersections in the area and three unsignalized existing driveways along Buford Highway. The morning and afternoon peak hours varied between the six intersections:

0	Buford Highway @ Curtis Drive	(AM Peak 7:45-8:45, PM Peak 5:00-6:00)
0	Buford Highway @ N. Druid Hills Road	(AM Peak 8:00-9:00, PM Peak 5:30-6:30)
0	N. Druid Hills Road @ I-85 Southbound Ramps	(AM Peak 7:30-8:30, PM Peak 5:00-6:00)
0	N. Druid Hills Road @ I-85 Northbound Ramps	(AM Peak 7:45-8:45, PM Peak 4:45-5:45)
0	Curtis Drive @ N. Druid Hills Road	(AM Peak 7:30-8:30, PM Peak 5:00-6:00)
0	N. Cliff Valley Way NE @ N. Druid Hills Road	(AM Peak 7:45-8:45, PM Peak 5:00-6:00)

All raw count data is included in the Appendix.

# 2.3 Detailed Intersection Analysis

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

Levels of service for signalized intersections are reported for individual movements as well as 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 1,216 apartments, 40,000 SF of office and 65,000 SF of retail space. The development is scheduled to be completed in a single phase, by the year 2011.

Traffic for these land uses was calculated using equations contained in the *Institute of Transportation Engineers'* (*ITE*) *Trip Generation Manual, Seventh Edition, 2003*. Average rates were used only when equations were not provided. Gross trips generated are displayed below in **Table 2**.

Table 2 Symphony Park Mixed-Use DRI Gross Trip Generation							
		Daily Daily	Traffic	AM Pea	k Hour	PM Pea	k Hour
Land Use	ITE Code	Enter	Exit	Enter	Exit	Enter	Exit
	В	uild-Out (Y	'ear 2011)				
1,216 Apartments	220	3,730	3,729	120	480	446	240
40,000 SF General Office	710	330	329	79	11	21	103
65,000 SF Shopping Center	820	2,566	2,567	74	47	226	245
Total 6,626 6,625 273 538 693 588						588	

## 3.2 Trip Distribution

The directional distribution and assignment of new project trips was based on engineering judgment 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:

- Buford Highway @ Curtis Drive (Signalized)
- Buford Highway @ N. Druid Hills Road (Signalized)
- N. Druid Hills Road @ I-85 Southbound Ramps (Signalized)
- N. Druid Hills Road @ I-85 Northbound Ramps (Signalized)
- o Curtis Drive @ N. Druid Hills Road (Signalized)
- N. Cliff Valley Way NE @ N. Druid Hills Road (Signalized)
- Buford Highway @ Existing Driveway #1 (Unsignalized)

- Buford Highway @ Existing Driveway #2 (Unsignalized)
- Buford Highway @ Existing Driveway #3 (Unsignalized)

Each of the above listed intersections was analyzed for the Existing 2008 Condition, the 2011 No-Build Condition, and the 2011 Build Condition, with the exception of the three existing driveways. The existing site driveways were only analyzed for the Existing and No-Build Conditions because they are proposed to be removed in the Build Condition. The 2011 No-Build condition represents the existing traffic volumes grown at 2.0% per year for three years. The 2011 Build condition adds the projected trips associated with the development to the 2011 No-Build condition. The additional proposed site access points listed below were only analyzed for the 2011 Build Condition:

- Buford Highway @ Proposed Drive A
- o Buford Highway @ Proposed Drive B
- o Curtis Drive @ Proposed Drive C
- Curtis Drive @ Proposed Drive D

These intersections were analyzed during the AM and PM peak periods.

## 3.5 Existing Facilities

#### Buford Highway (GA-13)

• Buford Highway is a north-south oriented roadway that starts as a limited access highway at W. Peachtree Street. It changes to full-access principal arterial at Lenox Road and extends north to Buford, GA, generally paralleling I-85. At the project site, Buford Highway is a 6-lane facility divided by a left-turn lane.

#### N. Druid Hills Road

 N. Druid Hills Road is an east-west oriented roadway that extends from Lawrenceville Highway to Peachtree Road. At the Curtis Road intersection, N. Druid Hills Road is a 2-lane undivided roadway. The roadway then adds approximately two lanes in each direction before it gets to the Buford Highway intersection and the I-85 ramps. N. Druid Hills Road is classified as an urban collector.

#### Curtis Road

• Curtis Road is a north-south oriented roadway that extends from Buford Highway to N. Druid Hills Road. Curtis Road is an undivided 2-lane roadway, and is classified as a local road.

#### N. Cliff Valley Way

• N. Cliff Valley Way is an east-west oriented roadway that extends from Buford Highway to N. Druid Hills Road. N. Cliff Valley Way is an undivided 2-lane roadway, and is classified as a local road.

Roadway	Road Type	Number of Lanes	GDOT Functional Classification
Buford Hwy (GA-13)	Two-Way	6	Urban Major Arterial
N. Druid Hills Road	Two-Way	2-6	Urban Collector
Curtis Drive	Two-Way	2	Urban Local Road
N. Cliff Valley Way	Two-Way	4	Urban Local Road

# 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, alternate mode, and pass-by reductions were taken according to the *ITE Trip Generation Handbook*, 1998 and GRTA guidelines. The total trips generated and analyzed in the report are listed below in **Table 3**.

Table 3 Symphony Park Mixed-Use DRI Net Trip Generation							
	Daily	Traffic	AM Pea	ak Hour	PM Pea	k Hour	
Land Use	Enter	Exit	Enter	Exit	Enter	Exit	
В	Build-Out (Year 2011)						
Gross Trips	6,626	6,625	273	538	693	588	
Internal Capture Reductions	-513	-513	-	-	-49	-49	
Alternative Mode Reductions	-305	-306	-14	-27	-32	-27	
Pass-by Reductions	-898	-897	-	-	-93	-93	
New Trips	4,910	4,909	259	511	519	419	

# 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 Figure 5** displays 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**.

![](_page_13_Figure_0.jpeg)

![](_page_14_Figure_0.jpeg)

![](_page_15_Figure_0.jpeg)

# 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 in **Table 4**.

	Table 4 Symphony Park Mixed-Use DRI Existing 2008 Intersection Levels of Service (delay in seconds)							
	Intersection Control AM Peak Hour PM Peak Hour							
1	N. Druid Hills Road @ Buford Highway	Signalized	F (86.6)	E (69.4)				
2	N. Druid Hills Road @ I-85 SB Ramps	Signalized	F (130.0)	D (46.6)				
3	N. Druid Hills Road @ I-85 NB Ramps	Signalized	D (41.8)	E (55.9)				
4	N. Druid Hills Road @ N. Cliff Valley Way	Signalized	D (37.3)	C (27.6)				
5	N. Druid Hills Road @ Curtis Drive	Signalized	B (10.2)	A (7.5)				
6	Buford Highway @ Curtis Drive	Signalized	B (19.5)	B (15.2)				
7	Buford Highway @ Existing Driveway #1	Side-Street Stop-Control	EB: C	EB: E				
8	Buford Highway @ Existing Driveway #2	Side-Street Stop-Control	EB: D	EB: D				
9	Buford Highway @ Existing Driveway #3	Side-Street Stop-Control	EB: C	EB: C				

Currently, four intersections operate below the level of service standard (LOS D). North Druid Hills @ Buford Highway operates below the standard during both AM and PM peak hours. North Druid Hills @ I-85 SB Ramps operates below the standard during the AM peak hour. North Druid Hills @ I-85 NB Ramps and Buford Highway @ Existing Driveway #1 both operate below the standard during the PM peak hour. Therefore, the LOS standard for these four intersections during these time periods will be lowered to LOS E for the No-Build and Build conditions.

![](_page_17_Figure_0.jpeg)

# 6.2 2011 No-Build Traffic

The existing traffic volumes were grown at 2.0% per year along all roadway links within the study network. These volumes were input in Synchro 6.0 and analyses of the projected No-Build conditions were performed. The results are displayed in **Table 5**.

	Table 5 Symphony Park Mixed-Use DRI 2011 No-Build Intersection Levels of Service (delay in seconds)						
	Intersection Control LOS AM Peak PM Peak Standard Hour Hour						
1	N. Druid Hills Road @ Buford Highway	Signalized	Е	F (108.4)	F (81.8)		
2	N. Druid Hills Road @ I-85 SB Ramps	Signalized	E/D	F (153.1)	D (52.5)		
3	N. Druid Hills Road @ I-85 NB Ramps	Signalized	D/E	D (46.7)	E (64.6)		
4	N. Druid Hills Road @ N. Cliff Valley Way	Signalized	D	D (45.3)	C (29.1)		
5	N. Druid Hills Road @ Curtis Drive	Signalized	D	B (11.0)	A (7.7)		
6	Buford Highway @ Curtis Drive	Signalized	D	C (21.2)	B (16.3)		
7	Buford Highway @ Existing Driveway #1	Side-Street Stop-Control	D/E	EB: C	EB: E		
8	Buford Highway @ Existing Driveway #2	Side-Street Stop-Control	D	EB: D	EB: D		
9	Buford Highway @ Existing Driveway #3	Side-Street Stop-Control	D	EB: D	EB: D		

Two of the intersections failed to meet the level of service standard for the year 2011 No-Build condition. North Druid Hills @ Buford Highway is projected to operate at LOS F during both peak hours, and North Druid Hills @ I-85 SB Ramps is projected to operate at LOS F during the AM peak hour. Modifications to these two intersections are recommended in order to improve the levels of service. These modifications are listed below:

N. Druid Hills Road @ Buford Highway

- Add a westbound right-turn lane along N. Druid Hills Road
- Add a northbound right-turn lane along Buford Highway
- Optimize the timing splits (cycle length, yellow and red times remain the same)

N. Druid Hills Road @ I-85 SB Ramps

- Add a second eastbound right-turn lane along N. Druid Hills Road
- Optimize the timing splits (cycle length, yellow and red times remain the same)

The projected levels of service for these two intersections with these modifications are shown in **Table 6.** The North Druid Hills @ I-85 NB Ramps intersection is also shown in the table because it is coordinated with the I-85 SB Ramps intersection, and is slightly affected by the modifications to that intersection. The projected volumes for the year 2011 No-Build condition are shown in **Figure 8**.

![](_page_19_Figure_0.jpeg)

	Table 6 Symphony Park Mixed-Use DRI 2011 No-Build IMPROVED Intersection Levels of Service (delay in seconds)					
	Intersection	Control	LOS Standard	AM Peak Hour	PM Peak Hour	
1	N. Druid Hills Road @ Buford Highway	Signalized	Е	E (73.8)	D (53.6)	
2	N. Druid Hills Road @ I-85 SB Ramps	Signalized	E/D	D (53.7)	D (51.1)	
3	N. Druid Hills Road @ I-85 NB Ramps	Signalized	D/E	D (45.1)	E (64.2)	

# 6.3 2011 Build Traffic

The traffic associated with the proposed development (Symphony Park Mixed-Use) was added to the 2011 No-Build volumes. These volumes were then input into Synchro 6.0. The results of the analyses are displayed in **Table 7**.

	Table 7 Symphony Park Mixed-Use DRI 2011 Build Intersection Levels of Service (delay in seconds)						
	Intersection Control LOS AM Peak PM Peak Standard Hour Hour						
1	N. Druid Hills Road @ Buford Highway	Signalized	Е	Е (79.9)	E (73.2)		
2	N. Druid Hills Road @ I-85 SB Ramps	Signalized	E/D	E (71.4)	D (53.4)		
3	N. Druid Hills Road @ I-85 NB Ramps	Signalized	D/E	D (48.8)	E (67.0)		
4	N. Druid Hills Road @ N. Cliff Valley Way	Signalized	D	D (49.7)	C (31.1)		
5	N. Druid Hills Road @ Curtis Drive	Signalized	D	B (15.2)	A (9.2)		
6	Buford Highway @ Curtis Drive	Signalized	D	C (27.6)	C (21.1)		
10	Buford Highway @ Proposed Drive A	Side-Street Stop-Control	D	EB: F	EB: F		
11	Buford Highway @ Proposed Drive B	Side-Street Stop-Control	D	EB: B	EB: C		
12	Curtis Drive @ Proposed Drive C	Side-Street Stop-Control	D	WB: B	WB: B		
12	Curtis Drive @ Proposed Drive D	Side-Street Stop-Control	D	WB: B	WB: B		

As shown in **Table 7**, one of the intersections failed to meet the acceptable Level of Service standard for the AM and PM peak hours. Constructing a signal at the intersection of Proposed Drive A @ Buford Highway, if MUTCD warrants are met, would improve the level of service at this location. The results of this improvement are shown in **Table 8**.

Buford Highway @ Proposed Drive A

• Signalize the intersection if warranted and coordinate timings with Buford Highway @ Curtis Drive

Figure 9 displays projected 2011 Build Conditions.

	Table 8 Symphony Park Mixed-Use DRI 2011 Build IMPROVED Intersection Levels of Service (delay in seconds)					
	Intersection	Control	LOS Standard	AM Peak Hour	PM Peak Hour	
10	Buford Highway @ Proposed Drive A	Signalized	D	A (9.5)	B (16.8)	

# 7.0 IDENTIFICATION OF PROGRAMMED PROJECTS

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

2007:	AR-439	I-85 ramp meters from Buford Hwy to Pleasant Hill		
2008:	DK-336	North Druid Hills traffic signal upgrade		
2009:	DK-AR-BP055	Clairmont Rd pedestrian facility from Buford Hwy to North Druid Hills Road		
2009:	DK-AR-BP059	Briarcliff Rd pedestrian facility from Ponce De Leon Avenue to North Druid Hills Road		
2010:	DK-269	Corridor study of Briarcliff Road		
2010:	DK-324C	Buford Hwy improved streetscape and pedestrian facility from North Druid Hills Rd to Chamblee Tucker Rd		
2012:	DK-324D	Buford Hwy improved streetscape and pedestrian facility from Lenox Rd to Shallowford Terrace		
2013:	DK-320C	Sidewalks along 18 corridors, including Briarcliff Rd from Henderson Mill Rd to North Druid Hills Road		
2013:	DK-AR-BP068	Briarcliff Rd pedestrian facility from Henderson Mill Rd to North Druid Hills Road		
2020:	DK-076	Widen East Roxboro Road from 2 to 4 lanes divided between West Roxboro Road and North Druid Hills Road		
2026:	AR-910	Buford Hwy BRT from Lindbergh MARTA to Pleasant Hill Road		

## 8.0 INGRESS/EGRESS ANALYSIS

Access to the development is proposed at two locations along Buford Highway and two locations along Curtis Drive. Proposed Drive A along Buford Highway is a full-movement driveway located approximately 1,140 feet north of Curtis Drive. Proposed Drive B along Buford Highway is a right-in/right-out driveway located approximately 380 feet north of Proposed Drive A. Proposed Drive C along Curtis Drive is a full-movement

![](_page_22_Figure_0.jpeg)

driveway located approximately 380 feet north of the southwestern property line of the site. Proposed Drive D along Curtis Drive is a full-movement driveway located approximately 300 feet north of Proposed Drive C.

# 9.0 INTERNAL CIRCULATION ANALYSIS

The proposed development will generate trips between the residential and non-residential uses. The proposed parking decks and internal roadway and pedestrian network connect the mixed uses and will provide connectivity for internal trips. Using the *ITE Trip Generation Handbook, 1998* as a reference, approximately 8.15% of the gross daily trips will be internal and approximately 8.47% of the gross PM peak hour trips will be internal.

# **10.0** COMPLIANCE WITH COMPREHENSIVE PLAN ANALYSIS

The DeKalb County Land Use Plan designates this area as High Density Residential.

# **11.0 NON-EXPEDITED CRITERIA**

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

There is a MARTA bus stop within 0.25 miles of the development along Buford Highway. A route map for Bus Route 139 is included in the Appendix.

# 11.2 Vehicle Miles Traveled

The following table displays the reduction in traffic generation due to anticipated internal capture, pass-by trips and alternative modes of travel.

	Build-out Total
Daily Gross Trip Generation:	13,251
(-)Mixed-use reductions (internal capture)	-1,026
(-)Pass-by trips	-1,795
(-)Alternative modes	-611
Net Trips:	9,819

# 11.3 Relationship Between Location of Proposed DRI and Regional Mobility

The proposed development is also located along Buford Highway, which leads both into the City of Atlanta as well as north to I-285 and beyond. Additionally, access to the eastern portion of DeKalb County, such as Decatur, is obtained via North Druid Hills Road just to the south of the development. Interstate 85 (the North Druid Hills Road interchange) is located just over half a mile from the development, via Corporate Boulevard or North Druid Hills Road, and State Road 400 is accessed south along Buford Highway to Sidney Marcus Boulevard, approximately 2 miles from the site.

# 11.4 Relationship Between Proposed DRI and Existing or Planned Transit Facilities

The proposed DRI is within walking distance to a MARTA bus stop along bus route 139, which travels along Buford Highway. A route map is included in the Appendix.

## 11.5 Transportation Management Area Designation

The proposed development is not located within an established TMA.

# 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, 1998.* Approximately 8.15% of the gross daily trips will be internal and approximately 8.47% of the gross PM peak hour trips will be internal. For the projected new PM peak hour trips, a 34% pass-by reduction was used for the proposed retail area.

# 11.7 Balance of Land Uses – Jobs/Housing Balance

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

# 11.8 Relationship Between Proposed DRI and Existing Development and Infrastructure

The development is located in an area where the existing infrastructure is adequate to serve the needs of the development upon build-out (2011).

# **12.0** Area of Influence

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

# 12.1 Criteria

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

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

#### 7. The proposed DRI:

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

# 12.2 Study Area Determination and Characteristics

The Area of Influence is comprised of the area within six road-miles of the proposed development. To determine the AOI, *TransCAD* was used to measure six road miles from the nearest intersection to the project (Buford Highway at Curtis Drive). 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 and DeKalb Counties) can be seen in **Figure 10**. Information obtained from the census tracts can be seen in **Table 9**.

![](_page_25_Figure_0.jpeg)

Table 9 Census Tract Information		
Total Households	126,982	
Population in Households	260,927	
Average household size	2.05	
Workers per Household	1.28	
Owner Occupied	46.41%	
Rental Occupied	53.59%	

As can be seen from the table above, the total population within the Area of Influence is 260,927, residing within 126,982 households (an average of 2.05 people per household). The AOI area totals 72,611 acres.

Using the above calculated average of 2.05 persons per household, it can be anticipated that the proposed DRI will house approximately 2,493 people (1,216 proposed dwelling units multiplied by 2.05). Based on information obtained from the Census Tracts, it is estimated that approximately 1,556 of these expected 2,493 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 30329) at the time of this report.

## 12.3 Development Housing Analysis

The development plan provides for apartments for rent in four price ranges within the proposed development. **Table 10**, 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 10 Estimated Workers per Household					
Tier Description Number of Units		Average Price	Number of Workers			
A 1 bedroom 6		668	\$1,200/month	855		
В	2 bedrooms	414	\$1,500/month	530		
С	3 bedrooms	134	\$1,800/month	171		

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 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 11**, on the following page.

Table 11 AQL Jobs and Average Salaries					
Industry / Business Type	# Businesses	# Employees	Average Salary		
Retail Trade	3,994	61,698	\$27,630		
Building Materials and Garden Supply	141	3,463	-		
General Merchandise Stores	82	4,376	-		
Food Stores	252	4,658	-		
Auto Dealers and Gas Stations	232	3,403	-		
Apparel and Accessory Stores	446	3,243	-		
Home Furniture, Furnishings, and Equipment	564	9,038	-		
Eating and Drinking Places	1,222	24,748	-		
Miscellaneous Retail Stores	1,055	8,769	-		
Finance	2,671	36,936	\$57,616		
Banks, Savings and Lending Institutions	530	8,276	-		
Securities and Commodity Brokers	457	6,924	-		
Insurance Carriers and Agencies	337	8,031	-		
Real Estate	1,267	12,178			
Trusts, Holdings, and Other Investments	80	1,527	_		
Services	11,567	176,452	-		
Hotels and Other Lodging	111	5,632	\$17,347		
Personal Services	1,647	8,064	-		
Business Services	3,016	39,604	\$68,436		
Motion Picture and Amusement	498	6,729	\$39,252		
Health Services	2,099	48,142	\$41,920		
Legal Services	1,558	14,760	\$68,436		
Education Services	282	24,738	\$40,393		
Social Services	368	6,729	\$41,920		
Miscellaneous, Membership	1,988	22.054	_		
Organizations and Nonclassified	.,	,001			
Agriculture	256	2,157	\$6,477		
Mining	9	55	\$24,563		
Construction	869	7,518	\$47,168		
Manufacturing	625	11,155	\$55,499		
Transportation, Communication/Public Utilities	703	16,716	\$94,965		
Wholesale Trade	540	5,292	\$61,767		
Public Administration	330	20,474	\$45,071		
Total	21,564	338,453	-		

# 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 12**. Because there is an average of 1.28 workers expected per household, the required income was divided by 1.28 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 12** 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 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 12 Expected Workers					
	Average Rent Price	Jobs at or above Necessary Income				
А	\$1,200/month	\$33,763	855	238,793		
В	\$1,500/month	\$42,204	530	152,455		
С	\$1,800/month	\$50,645	171	124,463		
Per	cent of expected wo	100%				

# **13.0** ARC'S AIR QUALITY BENCHMARK

The development is a mixed-use development, containing 1,216 residential units, 40,000 SF of office and 65,000 SF of retail on 22.24 acres. Because residential is the dominant use and the dwelling units per acre ratio is approximately 54 units per acre, the development meets the ARC criteria (1b) for a 6% reduction.

Additionally, the proposed development will connect with the existing sidewalks along Curtis Drive. Pedestrians will also be able to access other uses within the proposed development via an internal pedestrian network. These pedestrian facilities meet the ARC criteria (6e) for a 5% reduction.

Two MARTA bus routes access the site with bus stops within  $\frac{1}{4}$  mile of the project. Therefore, the project meets the ARC criteria (4) for a 3% reduction.

The proposed development meets the ARC criteria for a total 14% VMT reduction. These reductions are displayed below in **Table 13**.

Table 13 ARC VMT Reductions		
Mixed-Use Projects where Residential is the dominant use		
Greater than 15 dwelling units/acre	-6%	
Bike/ped networks in development that meet one density 'target' and connect to adjoining uses	-5%	
Project is located within ¼ mile of a bus stop	-3%	
Total Reductions	14%	