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EXECUTIVE SUMMARY

This report presents the analysis of the anticipated traffic impacts of a proposed 5.52-acre mixed-use development located east of Hill Street, to the west of Grant Street and to the north of the proposed Belt-Line Multi-Use Path. 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. This document is being submitted under GRTA's non-expedited review process.

The proposed development is expected to consist of 395 dwelling units, and 26,700 square feet of retail space. See the referenced conceptual plan for a visual representation of the programmed facilities and locations. The development is scheduled to be completed in a single phase, by the year 2010.

The results of the detailed intersection analysis for the 2010 No-Build (excluding the Grant Street development) and 2010 Build conditions (including the Grant Street development) did not identify any improvements necessary in order to maintain the Level of Service standard (LOS D) within the study network. As a part of the prior rezoning on this property, a new road connection will be constructed along the south edge of the site between Grant Street and Hill Street. The proposed roadway and driveway improvements for the project are listed below:

2010 Build recommended improvements (includes the Grant Street DRI project traffic):

Hill Street @ New Road

- The proposed new westbound approach to Hill Street should consist of one approach lane westbound and one lane eastbound with side-street stop control at the intersection.

Grant Street @ Grant Circle/Proposed Driveway 1

- The proposed full-movement driveway should consist of one ingress lane and one egress lane.

Grant Street @ Proposed Driveway 2

- The proposed full-movement driveway should consist of one ingress lane and one egress lane.

New Road @ Proposed Driveway 3

- The proposed full-movement driveway should consist of one ingress lane and one egress lane.

1.0 PROJECT DESCRIPTION

1.1 Introduction

This report presents the analysis of the anticipated traffic impacts of a proposed redevelopment of approximately 5.52 acres located east of Hill Street, to the west of Grant Street, and to the north of the proposed Belt Line Multi-Use Path. 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. This document is being submitted under GRTA's non-expedited review process.

The proposed development is expected to consist of 395 apartment dwelling units, and 26,700 square feet of retail space. See the referenced conceptual plan for a visual representation of the programmed facilities and locations. The development is scheduled to be completed in a single phase, by the year 2010.

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

Table 1
Land Uses

Proposed Land Uses	
Apartments	395 dwelling units
Shopping Center	26,700 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 development is bounded by Hill Street and single-family houses to the west, the Beltline to the south, and Grant Street 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

Three site driveways are currently proposed for the development, two onto Grant Street and one onto a new city street that will connect Grant Street to Hill Street along the south side of the property. Construction of the new city Street was a requirement of a previous rezoning on this property. Parking is provided for each building with a combination of above ground and underground parking decks. Each parking deck can be accessed from all site driveways.

1.4 Bicycle and Pedestrian Facilities

Pedestrian facilities are currently in place along at least one side of the adjacent roadways. The proposed development will connect to the existing sidewalks to provide pedestrian access, and to the proposed Beltline to the south of the site. There are no bicycle facilities existing or proposed near the site.

1.5 Transit Facilities

One MARTA bus route has stops within ¼ of a mile of the project site: Route 49 – McDonough (20-minute headways). The route map and weekday schedule for Route 49 are included in the Appendix.

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

Year 2007 peak hour turning movement counts were conducted at the seven intersections between 7:00-9:00 AM and 4:00-6:00 PM on Tuesday through Thursday, October 16-18th, and on Tuesday, October 23rd. The morning and afternoon peak hours varied between the seven intersections:

- Hill Street @ Georgia Avenue (Signalized) (AM Peak 7:45-8:45, PM Peak 5:00-6:00)
- Grant Street @ Georgia Avenue (Signalized) (AM Peak 7:30-8:30, PM Peak 4:00-5:00)
- Hill Street @ Atlanta Avenue (Signalized) (AM Peak 7:45-8:45, PM Peak 5:00-6:00)
- Grant Street @ Atlanta Avenue (Un-signalized) (AM Peak 7:15-8:15, PM Peak 5:00-6:00)
- Cherokee Avenue @ Atlanta Avenue (Signalized) (AM Peak 7:30-8:30, PM Peak 5:00-6:00)
- Boulevard @ Atlanta Avenue (Signalized) (AM Peak 7:30-8:30, PM Peak 5:00-6:00)
- Grant Street @ Grant Circle (Un-signalized) (AM Peak 7:30-8:30, PM Peak 4:45-5:45)

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 395 apartment units, and 26,700 square feet of retail space. The development is scheduled to be completed in a single phase, by the year 2010

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
Grant Street 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 2010)							
395 Residential Units	*220*	1262	1262	39	158	153	82
26,700 SF Shopping Center	*820*	1440	1440	43	28	126	136
Total		**2702**	**2702**	**82**	**186**	**279**	**218**

3.2 Trip Distribution

The directional distribution and assignment of new project trips was based on a review of land uses in the area (aerial mapping), engineering judgment and methodology discussions with GRTA, and ARC.

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:

- Hill Street @ Georgia Avenue (Signalized)
- Grant Street @ Georgia Avenue (Signalized)
- Hill Street @ Atlanta Avenue (Signalized)
- Grant Street @ Atlanta Avenue (Un-signalized)
- Cherokee Avenue @ Atlanta Avenue (Signalized)
- Boulevard @ Atlanta Avenue (Signalized)
- Grant Street @ Grant Circle/Proposed Driveway 1 (Un-signalized)

Each of the intersections was analyzed for the Existing 2007 Condition, the 2010 No-Build Condition, and the 2010 Build Condition. The 2010 No-Build Condition represents the existing traffic volumes grown at 2.0% per year for 3 years. The 2010 Build Condition adds the projected trips associated with the Grant Street development

to the 2010 No-Build Condition. The additional proposed site access points listed below were only analyzed for the 2010 Build Condition:

- Grant Street @ Proposed Driveway 2
- New Road @ Proposed Driveway 3
- Hill Street @ New Road

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

3.5 Existing Facilities

Grant Street

Grant Street is a north-south oriented roadway that extends from the Beltline to north of Glenwood Avenue. In the vicinity of the project site, Grant Street is a 2-lane undivided roadway. North of Atlanta Avenue, Grant Street is a one-way northbound road with two lanes. Grant Street is classified as an Urban Local Street with a posted speed limit in the vicinity of the proposed development of 30 MPH. No GDOT historical data is available for Grant Street in the vicinity of the proposed development.

Hill Street

Hill Street is a north-south oriented roadway that extends from Milton Avenue to north of Martin Luther King Drive, where it changes to Bell Street. In the vicinity of the project site, Hill Street is a 2-lane undivided roadway. North of Ormond Street, Hill Street is a one-way southbound road with two lanes. Hill Street is classified as an Urban Collector Street with a posted speed limit in the vicinity of the proposed development of 30 MPH. The 2006 daily volume on Hill Street in the vicinity of the proposed development was 3,320 vehicles per hour (VPH), according to GDOT.

Atlanta Avenue

Atlanta Avenue is an east-west oriented roadway that extends from Pulliam Street to Confederate Avenue. In the vicinity of the project site, Atlanta Avenue is a 2-lane undivided roadway. West of Hill Street, Atlanta Avenue is a one-way eastbound road with two lanes. Atlanta Avenue is classified as an Urban Collector Street with a posted speed limit in the vicinity of the proposed development of 30 MPH. The 2006 daily volume on Atlanta Avenue in the vicinity of the proposed development was 2,620 vehicles per hour (VPH), according to GDOT.

Georgia Avenue

Georgia Avenue is an east-west oriented roadway that extends from Cherokee Avenue to Capital Avenue, where it changes to Ralph David Abernathy Boulevard. In the vicinity of the project site, Georgia Avenue is a 4-lane undivided roadway. Georgia Avenue is classified as an Urban Collector Street with a posted speed limit in the vicinity of the proposed development of 30 MPH. The 2006 daily volume on Georgia Avenue in the vicinity of the proposed development was 2,490 vehicles per hour (VPH), according to GDOT.

Cherokee Avenue

Cherokee Avenue is a north-south oriented roadway that extends from the Memorial Drive to south of Mead Street along the west side of Grant Park. In the vicinity of the project site, Cherokee Avenue is a 2-lane undivided roadway. Cherokee Avenue is classified as an Urban Collector Street with a posted speed limit in the vicinity of the proposed development of 30 MPH. The 2006 daily volume on Cherokee Avenue in the vicinity of the proposed development was 6,090 vehicles per hour (VPH), according to GDOT.

Boulevard

Boulevard is a north-south oriented roadway that extends from McDonough Boulevard to Ponce de Leon Avenue, where it changes to Monroe Drive. In the vicinity of the project site, Boulevard is a 4-lane undivided roadway. Boulevard is classified as an Urban Minor Arterial with a posted speed limit in the vicinity of the proposed development of 35 MPH. The 2006 daily volume on Boulevard in the vicinity of the proposed development was 17,140 vehicles per hour (VPH), according to GDOT.

Roadway classification descriptions are provided in **Table 3**.

Table 3
Grant Street DRI
Roadway Classification

Roadway	Road Type	Number of Lanes	Posted Speed Limit (MPH)	GDOT Functional Classification	Annual Average Daily Traffic (Veh/Day)*
Grant Street	Varies	2	30	Urban Local Street	720
Hill Street	Varies	2	30	Urban Collector Street	3,320
Atlanta Avenue	Varies	2	30	Urban Collector Street	2,620
Georgia Avenue	Two-way	4	30	Urban Collector Street	2,490
Cherokee Avenue	Two-way	2	30	Urban Collector Street	6,090
Boulevard	Two-way	2	35	Urban Minor Arterial	17,140

* Represents 2006 AADT. If no GDOT historical data was available, daily traffic was determined by calculating ten times the PM peak hours of the 2007 turning movement counts

4.0 TRIP GENERATION

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

Mixed-use vehicle trip reductions were taken according to the *ITE Trip Generation Handbook, June 2004*. Total daily internal capture and vehicle trip reduction between the residential and retail land uses is expected to be 10.66% and total PM peak hour internal capture is expected to be 10.87%.

Alternative transportation mode (walking, bicycle, and transit) reductions were applied at 5% for the residential portions of the proposed development, as agreed upon during methodology discussions with GRTA, ARC, GDOT, and City of Atlanta staff.

Pass-by vehicle trip reductions were taken for the proposed retail uses at 34% daily and 34% PM peak hour rates following the internal capture and alternative mode reductions. ITE recommended rates exist for the PM retail scenario only, however the daily reduction rate was calculated using PM pass-by rates. In this case, daily and PM pass-by volumes were capped at 10% of the adjacent street volume.

The total (net) trips generated and analyzed in this report are listed in **Table 4**.

Table 4
Grant Street DRI
Net Trip Generation

Land Use	Daily Traffic		AM Peak Hour		PM Peak Hour	
	Enter	Exit	Enter	Exit	Enter	Exit
Build-Out (Year 2010)						
Gross Trips	**2,702**	**2,702**	**82**	**186**	**279**	**218**
Mixed-Use Reductions	*-288*	*-288*	*0*	*0*	*-27*	*-27*
Alternative Mode Reduction	*-56*	*-56*	*-2*	*-8*	*-7*	*-4*
Pass-by Reductions	*-332*	*-332*	*0*	*0*	*-33*	*-33*
Net New Trips	**2,026**	**2,026**	**80**	**178**	**212**	**154**

5.0 TRIP DISTRIBUTION AND ASSIGNMENT

New trips were distributed onto the roadway network using the percentages agreed to during methodology discussions with GRTA, ARC, GDOT, and City of Atlanta staff. **Figure 4** and **Figure 5** display the expected residential and retail trip percentages for the development throughout the roadway network. These percentages were applied to the new trips generated by the development (see Table 4, above), and the volumes were assigned to the roadway network. The expected peak hour turning movements (project trips) generated by the proposed development are shown in **Figure 6**.

6.0 TRAFFIC ANALYSIS

6.1 Existing Traffic

The observed existing peak hour traffic volumes (as well as pedestrian volumes and heavy vehicle factors) were input in *Synchro 6.0*, along with the existing traffic signal cycle lengths, splits, and offsets, and an Existing 2007 Conditions analysis was performed. The results are displayed in **Table 5**. Approach volumes at the southwest bound approach to Cherokee Avenue and Atlanta Avenue (Police Station driveway) were not observed, and were estimated for the purpose of this analysis based on engineering judgment.

The existing peak hour traffic volumes are shown in **Figure 7**.

Table 5 Grant Street DRI Existing 2007 Intersection Levels of Service (delay in seconds)				
Intersection		**Control**	**AM Peak Hour**	**PM Peak Hour**
1	Hill Street @ Georgia Avenue	Signal	A (9.8)	B (19.0)
2	Grant Street @ Georgia Avenue	Signal	B (15.3)	B (13.5)
3	Hill Street @ Atlanta Avenue	Signal	B (10.8)	B (10.2)
4	Grant Street @ Atlanta Avenue	Side-Street Stop Control	NB – B	NB – B
5	Cherokee Avenue @ Atlanta Avenue	Signal	D (38.9)	D (35.3)
6	Boulevard @ Atlanta Avenue	Signal	A (8.4)	B (15.4)
7	Grant Street @ Grant Circle	Side-Street Stop Control	WB - A	WB - A

As you can see in the table, none of the intersections currently operate below the acceptable Level of Service standard (LOS D).

6.2 2010 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 below in **Table 6.**

Table 6 Grant Street DRI Projected 2010 No-Build Intersection Levels of Service (delay in seconds)					
Intersection		**Control**	**LOS Standard**	**AM Peak Hour**	**PM Peak Hour**
1	Hill Street @ Georgia Avenue	Signal	D	A (9.8)	B (19.1)
2	Grant Street @ Georgia Avenue	Signal	D	B (15.5)	B (13.6)
3	Hill Street @ Atlanta Avenue	Signal	D	B (10.9)	B (10.2)
4	Grant Street @ Atlanta Avenue	Side-Street Stop Control	D	NB – B	NB – B
5	Cherokee Avenue @ Atlanta Avenue	Signal	D	D (39.3)	D (35.4)
6	Boulevard @ Atlanta Avenue	Signal	D	A (8.9)	B (15.9)
7	Grant Street @ Grant Circle	Side-Street Stop Control	D	WB - A	WB - A

As you can see in the table, none of the intersections are projected to operate below the acceptable Level of Service standard (LOS D) in the 2010 No-Build Condition. It is important to note that while the intersection of

Cherokee Avenue @ Atlanta Avenue is projected to operate at an acceptable LOS, the operation of this intersection would be improved by removing or restricting the southwest bound approach (Police Station driveway). Due to the unique nature of this intersection (the type of use it serves, physical restraints, etc.), further study will be needed to determine potential modifications to this intersection as the area grows in traffic volume. The projected volumes for the year 2010 No-Build condition are shown in **Figure 8**.

6.3 2010 Build Traffic

The traffic associated with the proposed development (Grant Street DRI) was added to the 2010 No-Build volumes. These volumes were then input into Synchro 6.0. Additionally, diverted trips associated with the construction of the new public road along the south edge of the site have been included in this analysis. **Figure 9** shows the potential diverted trips with the construction of "New Road." It was assumed that a percentage of the westbound left-turn volume at Hill Street & Atlanta Avenue would instead turn left at Grant Street and again at Hill Street. Similarly, it was assumed that a percentage of the northbound right-turn volume at Hill Street & Atlanta Avenue would instead turn right at "New Road," and proceed either through or right at Grant Street.

The results of the 2010 Build analyses are displayed in **Table 7**.

Table 7
Grant Street DRI
Projected 2010 Build Intersection Levels of Service
(delay in seconds)

	Intersection	Control	LOS Standard	AM Peak Hour	PM Peak Hour
1	Hill Street @ Georgia Avenue	Signal	D	A (9.6)	B (17.8)
2	Grant Street @ Georgia Avenue	Signal	D	B (16.4)	B (14.3)
3	Hill Street @ Atlanta Avenue	Signal	D	B (11.6)	B (10.6)
4	Grant Street @ Atlanta Avenue	Side-Street Stop Control	D	NB – C	NB – C
5	Cherokee Avenue @ Atlanta Avenue	Signal	D	D (40.0)	D (36.0)
6	Boulevard @ Atlanta Avenue	Signal	D	B (15.1)	B (19.4)
7	Grant Street @ Grant Circle/Site Driveway #1	Side-Street Stop Control	D	EB - A WB - A	EB - B WB - A
8	Hill Street @ New Road	Side-Street Stop Control	D	WB - B	WB - B
9	Grant Street @ Site Driveway #2	Side-Street Stop Control	D	EB - A	EB - B
10	New Road @ Site Driveway #3	Side-Street Stop Control	D	SB - A	SB - A

As shown in **Table 7**, none of the existing and proposed intersections is projected to operate below the acceptable Level of Service standard (LOS D) in the 2010 Build Condition. It is important to note that while the intersection of Cherokee Avenue @ Atlanta Avenue is projected to operate at an acceptable LOS, the operation of this intersection would be improved by removing or restricting the southwest bound approach (Police Station driveway). Due to the unique nature of this intersection (the type of use it serves, physical restraints, etc.), further

study will be needed to determine potential modifications to this intersection as the area grows in traffic volume. Recommended new roadway and driveway laneages are described below. **Figure 10** displays projected 2010 Build Conditions.

Hill Street @ New Road

- The proposed new westbound approach to Hill Street should consist of one approach lane westbound and one lane eastbound with side-street stop control at the intersection.

Grant Street @ Grant Circle/Proposed Driveway 1

- The proposed full-movement driveway at Grant Circle should consist of one ingress lane and one egress lane with side-street stop control.

Grant Street @ Proposed Driveway 2

- The proposed full-movement driveway should consist of one ingress lane and one egress lane with side-street stop control.

New Road @ Proposed Driveway 3

- The proposed full-movement driveway should consist of one ingress lane and one egress lane with side-street stop control.

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. In addition, ARC's Draft *Envision6 Regional Transportation Plan* was reviewed for projects in the area. Several projects are programmed for the area surrounding the study network. A figure showing ARC's aerial map of the programmed improvements is included in the Appendix, along with information on the improvements.

1.	**GDOT # 0006841** **ARC # AR-450A** **Envision 6 RTP (Draft)**	Belt Line Multi-Use Bike/Pedestrian Facility – Phase 1 (2011)
2.	**GDOT #0007683** **ARC # AR-450B** **Envision 6 RTP (Draft)**	Belt Line Multi-Use Bike/Pedestrian Facility – Phase 2 (2012)
3.	**GDOT # N/A** **ARC # AR-450D** **Envision 6 RTP (Draft)**	Belt Line Multi-Use Bike/Pedestrian Facility – Phase 4 (2020)
4.	**GDOT # N/A** **ARC # AR-451B1** **Envision 6 RTP (Draft)**	Inner Core Transportation Corridor – Phase 2, Segment 2 - Transit Service in the Southeast Corridor of the Belt Line (2025)
5.	**GDOT # N/A** **ARC #AR-451B2** **Envision 6 RTP (Draft)**	Inner Core Transportation Corridor – Phase 2, Segment 2 - Transit Service in the Southeast Corridor of the Belt Line (2025)

8.0 INGRESS/EGRESS ANALYSIS

Access to the development is proposed at two locations along Grant Street and one location along "New Road," which is to be constructed between Grant Street and Hill Street north of the Beltline. Driveway 1 along Grant Street is a full-movement driveway located at the existing intersection with Grant Circle. Driveway 2 along Grant

Street is a full-movement driveway located approximately 240' north of Grant Circle. Driveway 3 along "New Road" is a full-movement driveway located approximately 220' east of Hill Street.

9.0 INTERNAL CIRCULATION ANALYSIS

The proposed site plan consists of three driveways along the two roadways adjacent to the site (Grant Street and "New Road"). Several internal roadways and parking areas will provide vehicular circulation within the site, as well as pedestrian circulation via internal sidewalks and crosswalks on internal roadways.

10.0 COMPLIANCE WITH COMPREHENSIVE PLAN ANALYSIS

The City of Atlanta Land Use Plan designates this area as a mixture of Industrial and Mixed-Use. A land use plan amendment is proposed to designate this site as Mixed-Use.

11.0 NON-EXPEDITED CRITERIA

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

One MARTA bus route has stops within ¼ of a mile of the project site: Route 49 – McDonough (20-minute headways). The route map and weekday schedule are included in the Appendix. Pedestrian facilities are also in place throughout the area and will be rebuilt along the property line of the proposed project.

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:	5,403
(-)Mixed-use reductions (internal capture)	-576
(-)Pass-by trips	-664
(-)Alternative modes	-112
Net Trips:	4,051

11.3 Relationship Between Location of Proposed DRI and Regional Mobility

The proposed development will have access to major roadways and interstates via Boulevard and Hank Aaron Drive. Interstate 20 is accessible just over a mile from the site via Boulevard. Interstate 75/85 is accessible traveling northwest approximately 1.5 miles to Hank Aaron Drive or west to University Boulevard. Downtown Atlanta is also accessible traveling north approximately 2 miles along Hank Aaron Drive or Boulevard.

11.4 Relationship Between Proposed DRI and Existing or Planned Transit Facilities

MARTA bus route 49 (McDonough) provides public transit bus service along Hill Street adjacent to the proposed project. The bus route provides service to the Five Points MARTA rail station. In addition, the proposed Beltline project as listed in the Programmed Improvements section is located directly south of the project and is proposed to include multiple modes of transportation.

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 10.66% of the gross daily trips will be internal and approximately 10.87% of the gross PM peak hour trips will be internal. For the projected new daily and PM peak hour trips, a 34% pass-by reduction was used for the proposed retail area, capped at 10% of the adjacent street volume.

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 (2010).

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 (Lindbergh Drive 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 and DeKalb Counties) can be seen in **Figure 11**. Information obtained from the census tracts can be seen in **Table 8**.

Table 8 Census Tract Information	
Total Households	137,061
Population in Households	276,900
Average household size	2.02
Workers per Household	1.22
Owner Occupied	43.11%
Rental Occupied	56.89%

As can be seen from the table above, the total population within the Area of Influence is 276,900, residing within 137,061 households (an average of 2.02 people per household). The AOI area totals 52,636 acres.

Using the above calculated average of 2.02 persons per household, it can be anticipated that the proposed DRI will house approximately 798 people (395 proposed dwelling units multiplied by 2.02). Based on information obtained from the Census Tracts, it is estimated that approximately 481 of these expected 798 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 30324) at the time of this report.

12.3 Development Housing Analysis

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

Table 9 Estimated Workers per Household			
Description	**Number of Units**	**Average Price**	**Number of Workers**
A	75	$289,000	91
B	245	$309,000	299
C	75	$329,000	91

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 10**, on the following page.

Table 10
AOI Jobs and Average Salaries

Industry / Business Type	# Businesses	# Employees	Average Salary
Retail Trade	4,745	67,571	$27,738
Building Materials and Garden Supply	153	3,706	-
General Merchandise Stores	86	4,030	-
Food Stores	315	5,742	-
Auto Dealers and Gas Stations	205	1,933	-
Apparel and Accessory Stores	576	3,838	-
Home Furniture, Furnishings, and Equipment	621	9,036	-
Eating and Drinking Places	1,517	29,491	-
Miscellaneous Retail Stores	1,272	9,794	-
Finance	2,782	39,389	$58,018
Banks, Savings and Lending Institutions	572	9,341	-
Securities and Commodity Brokers	438	7,227	-
Insurance Carriers and Agencies	313	7,883	-
Real Estate Trusts, Holdings, and Other Investments	1,458	14,938	-
Services	12,070	198,819	-
Hotels and Other Lodging	11930	197,548	$17,508
Personal Services	145	11,146	-
Business Services	1,946	9,905	$68,806
Motion Picture and Amusement	3,709	52,223	$39,926
Health Services	596	5,763	$42,201
Legal Services	1,889	49,015	$68,806
Education Services	1,641	16,871	$40,063
Social Services	313	31,846	$42,201
Miscellaneous, Membership Organizations and Nonclassified	495	8,832	-
Agriculture	316	2,651	$5,969
Mining	8	58	$22,637
Construction	1172	9,663	$47,384
Manufacturing	831	22,963	$55,885
Transportation, Communication/Public Utilities	755	27,539	$94,532
Wholesale Trade	893	17,407	$61,939
Public Administration	1,096	64,000	$45,027
Total	24,668	450,060	-

12.4 Affordable Housing Analysis

Various mortgage calculators are available online to aid in determining affordable housing based on given incomes and income ranges. These calculators were used to determine the minimum income necessary to afford housing within the proposed Morningside development. It was assumed that no more than one third of an individual's income would be used for mortgage costs (principal + interest), that a 6.10% interest rate on a 30-year conventional loan could be obtained, and that a 10% down payment would be made. The income required to purchase a home at the approximate price range was calculated and is displayed in **Table 11**. Because there is an average of 1.22 workers expected per household, the required income was divided by 1.22 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 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 11
Expected Workers

	Average Price	Necessary Income per Expected Worker	Expected Worker per Price Range	Jobs at or above Necessary Income
A	$289,000	$52,970	91	123,810
B	$309,000	$56,633	299	123,810
C	$329,000	$60,297	91	86,815
Percent of expected workers likely to find necessary employment within the AOI				**100%**

13.0 ARC'S AIR QUALITY BENCHMARK

The development is a mixed-use development, containing 395 residential units and 26,700 SF of retail on approximately 5.5 acres. Because residential is the dominant use and the dwelling units per acre ratio is approximately 72 units per acre, the development meets the ARC criteria (1 b) for a 6% reduction.

A MARTA bus route stops within ¼ mile of the project; therefore, the development meets the ARC criteria (4) for a 3% reduction.

Additionally, the proposed development will connect with the existing sidewalks along Grant Street and Hill Street. Pedestrians will also be able to access other uses within the proposed development. This pedestrian network meets the ARC criteria (6e) for a 5% reduction.

The proposed development is just short of meeting the ARC criteria of 15% VMT reductions for a total of 14% VMT reductions. These reductions are displayed below in **Table 12**.

Table 12
ARC VMT Reductions

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