

TABLE OF CONTENTS

1.0		Project Description.	1
	1.1 1.2 1.3 1.4 1.5	Introduction Site Plan Review Site Access Bicycle and Pedestrian Facilities Transit Facilities	1 2
2.0		Traffic Analyses Methodology and Assumptions.	2
	2.1 2.2 2.3	Growth Rate Traffic Data Collection Detailed Intersection Analysis	2
3.0		Study Network	3
	3.1 3.2 3.3 3.4 3.5	Gross Trip Generation. Trip Distribution Level of Service Standards Study Network Determination Existing Facilities	3 4
4.0		Trip Generation.	5
5.0		Trip Distribution and Assignment	5
6.0		Traffic Analysis	6
	6.1 6.2 6.3	Existing 2008 Traffic	7
7.0		Identification of Programmed Projects	10
8.0		Ingress/Egress Analysis.	10
9.0		Internal Circulation Analysis	10
10.0	0	Compliance with Comprehensive Plan Analysis	10
11.0	0	Non-Expedited Criteria	11
	11.1 11.2 11.3 11.4	Quality, Character, Convenience, and Flexibility of Transportation Options Vehicle Miles Traveled Relationship Between Location of Proposed DRI and Regional Mobility Relationship Between Proposed DRI and Existing or Planned Transit Facilities	11 11
	11.5	Transportation Management Area Designation	12
	11.6 11.7	Offsite Trip Reduction and Trip Reduction Techniques	
	11.8	Relationship Between Proposed DRI and Existing Development and Infrastructure	



12
12
12
13
15
16

APPENDIX

Site Photos

Alternative Modes

Programmed Improvements

Trip Generation and Volume Worksheets
Peak Hour Turning Movement Counts
Capacity Analyses – Existing 2008 Conditions

Capacity Analyses – Projected 2010 No-Build Conditions
Capacity Analyses – Projected 2010 No-Build Conditions With Improvements
Capacity Analyses – Projected 2010 Build Conditions

LIST OF TARLES

	LIST OF TABLES	Page
Table 1:	Proposed Land Uses	1
Table 2:	Mecaslin Street DRI, Gross Trip Generation	3
Table 3:	Mecaslin Street DRI, Net Trip Generation.	5
Table 4:	Existing 2008 Intersection Levels of Service	6
Table 5:	Projected 2010 No-Build Intersection Levels of Service	7
Table 6:	Projected 2010 No-Build Intersection Levels of Service With Improvements	8
Table 7:	Projected 2010 Build Intersection Levels of Service.	9
Table 8:	Trip Reductions	. 11
Table 9:	Census Tract Information	. 13
Table 10:	Estimated Workers per Household	. 13
Table 11:	AOI Jobs and Average Salaries	. 14
Table 12:	Expected Workers	. 15
Table 13:	ARC VMT Reductions	. 16



LIST OF FIGURES

		Following Page
Figure 1:	Site Location	1
Figure 2:	Aerial Photograph	1
Figure 3:	Land Plan/Site Plan	1
Figure 4:	Project Distribution.	5
Figure 5:	Project Trips	5
Figure 6:	Existing 2008 Conditions.	5
Figure 7:	Projected 2010 No-Build Conditions.	6
Figure 8:	Projected 2010 Build Conditions	7
Figure 9:	Programmed Improvements	9
Figure 10:	Area of Influence	12



EXECUTIVE SUMMARY

This report presents the analysis of the anticipated traffic impacts of a proposed 7.18-acre mixed-use development (Mecaslin Street Site) in the City of Atlanta, Georgia. The project is located south of 16th Street and west of Mecaslin Street, just south of the existing Atlantic Station site. This report is being prepared as part of a rquest for rezoning from I-2 (Industrial) and C-2 (Commercial) to MR-5A with the City of Atlanta. Because the project will exceed 400 residential units, the proposed redevelopment is a Development of Regional Impact (DRI) and is subject to Georgia Regional Transportation Authority (GRTA) and Atlanta Regional Commission (ARC) review.

The proposed redevelopment is expected to consist of a 600 total residential apartment units. 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 Mecaslin Street development) and 2010 Build conditions (including Mecaslin Street development) identifies the following improvements are necessary in order to maintain the Level of Service standard within the study network.

2010 No-Build recommended improvements (includes background growth but does not include Mecaslin Street DRI project traffic):

Northside Drive at 17th Street

• Install a westbound left-turn lane along 17th Street.

Mecaslin Street at 14th Street

• Install a southbound right-turn lane along Mecaslin Street.

Additionally, the northbound right-turn volume at the unsignalized intersection of Northside Drive and 16th Street warrants a separate right-turn lane; however, a separate northbound right-turn lane here may not fit with the overall character of Northside Drive. Therefore, this improvement may not be an appropriate change to the current intersection geometry at Northside Drive and 16th Street.

2010 Build recommended driveway improvements (includes Mecaslin Street DRI project traffic):

16th Street at Driveway #1

• One ingress lane and one egress lane on Driveway #1, and shared turn lanes on 16th Street.

Laurent Street Extension at Driveway #2

• One ingress lane and one egress lane on Driveway #2, and shared turn lanes on 16th Street.



1.0 PROJECT DESCRIPTION

1.1 Introduction

This report presents the analysis of the anticipated traffic impacts of a proposed 7.18-acre mixed-use development (Mecaslin Street Site) in the City of Atlanta, Georgia. The project is located south of 16th Street and west of Mecaslin Street, just south of the existing Atlantic Station site. This report is being prepared as part of a rquest for rezoning from I-2 (Industrial) and C-2 (Commercial) to MR-5A with the City of Atlanta. Because the project will exceed 400 residential units, the proposed redevelopment is a Development of Regional Impact (DRI) and is subject to Georgia Regional Transportation Authority (GRTA) and Atlanta Regional Commission (ARC) review.

The proposed redevelopment is expected to consist of a 600 total residential apartment units. 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 Proposed Land Uses					
Apartments	600 dwelling units				

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

1.2 Site Plan Review

The redevelopment plan is scheduled to be completed in one phase. The proposed site is located south of 16th Street and west of Mecaslin Street. The residential buildings are proposed to be located along the east and west sides of the site, separated by a 7-level parking deck.

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

Two new roads are proposed to be constructed in conjunction with this project and a proposed future project by The Sembler Company located to the south and west of this DRI. In conjunction with that future project, Village Street is proposed to be extended from its current termination at 16th Street to 14th Street, aligning with the currently unsignalized intersection of 14th Street and Flynn Street; however, this new road has not been included in this analysis because the proposed Sembler project has not been submitted to the City of Atlanta for review at this time. For this DRI, Laurent Street is proposed to be extended from its current termination at Mecaslin Street west to the future Village Street extension. For this analysis, a 2-lane extension of Village Street from 16th Street to the new Laurent Street extension has been assumed.

The project is proposed to have vehicular access at two locations: one full-movement driveway along 16th Street between Mecaslin Street and Village Street and one full-movement driveway along the Laurent Street extension between Mecaslin Street and Village Street. Both driveways will have direct access to the parking deck proposed in the center of the site.

The City of Atlanta will be the permitting agency for the roadway extensions and driveways proposed in this area.



1.4 Bicycle and Pedestrian Facilities

Pedestrian facilities are currently in place along the following roads: 14th Street, 16th Street, 17th Street, Village Street, State Street, and Northside Drive. Sidewalks are also proposed along Mecaslin Street and the Village Street / Laurent Street extension in the vicinity of this project. Additionally, a network of bike lanes currently exists in the Atlantic Station area, especially along 17th Street where a lane has been dedicated to bus and bike traffic.

1.5 Transit Facilities

The proposed development is serviced by four MARTA bus routes including the following: Route 12 – Howell Mill / Cumberland (30-minute headways), Route 23 – Peachtree Road / Buckhead (20-minute headways), Route 37 – Loring Heights (60-minute headways), and Route 98 – West End / Arts Center (39-minute headways). See the attached route maps for detailed route descriptions.

The Georgia Technology Institute Transit system includes a bus route that has service along 14th Street between Techwood Drive and State Street. The shuttle currently has headways ranging from 6 minutes during peak hours to 20 minutes during off-peak hours. See the attached route map for detailed route descriptions.

The Atlantic Station Shuttle, which transports riders from Atlantic Station residential areas and points of interest, terminates at the Arts Center MARTA station. The shuttle currently has headways ranging from 15 minutes during peak hours to 30 minutes during off-peak hours. Headways may become shorter as the entire development reaches build out and demand for the shuttle increases.

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 redevelopment, and growth rates of 2.0% per year along all roadways were agreed upon during the methodology meeting with GRTA staff. Additionally, traffic associated with the following two DRIs was added to build-out traffic:

- 643 Tenth Street (DRI #1273)
- o 166 16th Street (DRI #873)

2.2 Traffic Data Collection

2008 weekday peak hour turning movement counts were conducted on January 15, 2008 and January 18, 2008 at the study intersections between 7:00-9:00 AM and 4:00-6:00 PM. The morning and afternoon peak hours varied between the eight intersections:

- o 16th Street @ Northside Drive (8:00-9:00 AM, 4:45-5:45 PM)
- o 16th Street @ Village Street (8:00-9:00 AM, 5:00-6:00 PM)
- o 16th Street @ Mecaslin Street (8:00-9:00 AM, 4:45-5:45 PM)
- o 16th Street @ State Street (8:00-9:00 AM, 5:00-6:00 PM))
- o 17th Street @ Village Street (8:00-9:00 AM, 5:00-6:00 PM)
- o 17th Street @ Northside Drive (8:00-9:00 AM, 5:00-6:00 PM)
- o 14th Street @ Mecaslin Street (8:00-9:00 AM, 4:45-5:45 PM)
- o Laurent Street @ Mecaslin Street (8:00-9:00 AM, 5:00-6:00 PM)



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 redevelopment is expected to consist of a 600 residential apartment units. 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 Mecaslin Street DRI Gross Trip Generation							
		Daily Traffic		AM Peak Hour		PM Peak Hour	
Land Use	ITE Code	Enter	Exit	Enter	Exit	Enter	Exit
	В	uild-Out (Y	'ear 2010)				
600 Apartment Units	220	1,878	1,878	60	238	226	122
Total	•	1,878	1,878	60	238	226	122

3.2 Trip Distribution

The directional distribution and assignment of new project trips was based on a review of existing counts, engineering judgment, and discussions with GRTA, GDOT, ARC, and City of Atlanta 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 includes the following intersections:

- o 16th Street @ Northside Drive (right-in/right-out)
- 16th Street @ Village Street (unsignalized)
- o 16th Street @ Mecaslin Street (unsignalized)
- 16th Street @ State Street (signalized)
- o 17th Street @ Village Street (signalized)
- o 17th Street @ Northside Drive (signalized)
- o 14th Street @ Mecaslin Street (unsignalized)
- Laurent Street @ Mecaslin Street (unsignalized)

Each of the above listed intersections was analyzed for the AM and PM peak periods under Existing 2008 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 two years. The 2010 Build condition adds the projected trips associated with Mecaslin Street redevelopment to the 2010 No-Build condition.

3.5 Existing Facilities

16th Street

o 16th Street is an east-west oriented roadway that extends from Northside Drive (US 41) to Techwood Drive, also known as the off-ramp for I-75/85. 16th Street starts again on the east side of the interstate and extends to Peachtree Street. 16th Street is a two-lane urban local street in the vicinity of the project site.

Mecaslin Street

 Mecaslin Street is a north-south oriented roadway that extends from Richards Street in the Home Park neighborhood to 17th Street in Atlantic Station. Mecaslin Street starts again on the north side of the CSX Railroad at Bishop Street and ends at Deering Road. Mecaslin Street is a two-lane urban local street in the vicinity of the project site.

17th Street

o 17th Street is an east-west oriented roadway that extends from Howell Mill Road to east of Peachtree Street. 17th Street is a four-lane urban collector street in the vicinity of the project site with one additional lane in each direction for bus-transit use only.

Northside Drive/U.S. 41

Northside Drive is a north-south oriented roadway that extends from I-20 to just south of Moores Mill Road in Buckhead. Northside Drive forks right and continues north to I-285 while U.S. 41 (Northside Parkway) continues north into Cobb County, where it is renamed Cobb Parkway. U.S. 41 also continues south past I-20, named Metropolitan Parkway. Northside Drive is a four-lane



urban principal arterial in the vicinity of the project site.

14th Street/U.S. 19

o 14th Street is an east-west oriented roadway that extends from Howell Mill Road to Piedmont Road. 14th Street is a four-lane urban minor arterial in the vicinity of the project site.

Roadway	Road Type	Number of Lanes	Posted Speed Limit (MPH)	GDOT Functional Classification
16 th Street	Two-Way, Undivided	2	30/35	Urban Local Street
Mecaslin Street	Two-Way, Undivided	2	N/P	Urban Local Street
17 th Street	Two-Way, Divided	4, plus Bus lanes	25	Urban Collector Street
Northside Drive/U.S. 41	Two-Way, Divided	4	35	Urban Principal Arterial
14 th Street/U.S. 19	Two-Way, Undivided	4	35	Urban Minor Arterial

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.

Alternate modes of transportation reductions of 5% were taken, per the Letter of Understanding. The total trips generated and analyzed in the report are listed below in **Table 3**.

Table 3 Mecaslin Street DRI Net Trip Generation							
Daily Traffic AM Peak Hour PM Peak H						k Hour	
Land Use	Land Use Enter Exit				Enter	Exit	
E	Build-Out (Y	ear 2010)					
Gross Trips	1,878	1,878	60	238	226	122	
Alternative Mode Reductions	-94	-94	-3	-12	-11	-6	
New Trips	1,784	1,784	57	226	215	116	

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** 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 5**.

6.0 TRAFFIC ANALYSIS

6.1 Existing 2008 Traffic

These observed existing peak hour traffic volumes (as well as pedestrian volumes and heavy vehicle percentages) were input in Synchro 6.0, along with the existing cycle lengths, splits, and offsets, and an Existing 2008 Conditions analysis was performed. The results are displayed below in **Table 4**.

The existing traffic volumes are shown in **Figure 6**.

Table 4 Mecaslin Street DRI Existing 2008 Intersection Levels of Service (delay in seconds)								
	Intersection	Control	AM Peak Hour	PM Peak Hour				
1	16th Street @ Northside Drive	RIRO	C (27.9)	D (53.4)				
2	16th Street @ Village Street	Side Street STOP Control	C (22.6)	C (29.7)				
3	16th Street @ Mecaslin Street	Side Street STOP Control	WB - B (13.1)	WB - C (24.6)				
4	16th Street @ State Street	Signal	SB - B (10.7)	SB - B (11.9)				
5	17th Street @ William Street	Cional	NB - B (10.4)	NB - B (20.6)				
3	17th Street @ Village Street	Signal	SB - B (11.6)	SB - B (16.7)				
6	17th Street @ Northside Drive	Signal	C (27.5)	C (31.6)				
7	14th Street @ Mecaslin Street	Side Street STOP Control	A (0.2)	A (0.1)				
8	Laurent Street @ Mecaslin Street	Side Street	NB - B (13.2)	NB - C (17.9)				
0	Laurent Sueet (w Mecasini Street	STOP Control	SB - B (14.4)	SB - D (32.0)				

As shown in the table, all intersections currently operate above the acceptable Level of Service standard (LOS D) during both the AM the PM peak hours.

T:\ 019573001 6 February 2008



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 in **Table 5.**

Table 5						
Mecaslin Street DRI						
Projected 2010 No-Build Intersection Levels of Service						
(delay in seconds)						

	Intersection	Control	LOS Standard	AM Peak Hour	PM Peak Hour
1	17th Street @ Northside Drive	Signal	D	C (29.4)	E (60.7)
2	17th Street @ Village Street	Signal	D	C (23.0)	C (30.1)
3	16th Street @ Northside Drive	RIRO	D	WB - C (15.8)	WB - D (32.7)
4	16th Street @ Village Street	Side Street STOP Control	D	SB - B (11.7)	SB - B (12.6)
5	16th Street @ Mecaslin Street	Side Street STOP Control	D	NB - B (11.7) SB - B (12.8)	NB - B (24.8) SB - B (18.8)
6	16th Street @ State Street	Signal	D	C (25.4)	C (30.9)
7	Laurent Street @ Mecaslin Street	Side Street STOP Control	D	A (0.2)	A (0.1)
8	14th Street @ Mecaslin Street	Side Street STOP Control	D	NB - B (13.6) SB - B (14.9)	NB - C (18.7) SB - E (37.9)

As shown in the table, two of the intersections failed to meet the acceptable Level of Service standards for the year 2010 No-Build condition. To obtain an acceptable level of service at these two intersections, the following improvements are recommended:

Northside Drive at 17th Street

• Install a westbound left-turn lane along 17th Street.

Mecaslin Street at 14th Street

• Install a southbound right-turn lane along Mecaslin Street.

Additionally, the northbound right-turn volume at the unsignalized intersection of Northside Drive and 16th Street warrants a separate right-turn lane. This improvement has been incorporated into the following table and into

T:\ 019573001 7 February 2008



2010 Build conditions; however, a separate northbound right-turn lane here may not fit with the overall character of Northside Drive. Therefore, this improvement may not be an appropriate change to the current intersection geometry at Northside Drive and 16^{th} Street.

With the improvements listed above, all intersections in the study network are expected to operate acceptably, as shown in **Table 6**. The projected intersection laneage and traffic volumes for the year 2010 No-Build Conditions are shown in **Figure 7**.

Table 6 Mecaslin Street DRI Projected 2010 No-Build Intersection Levels of Service With Improvements (delay in seconds)								
	Intersection	Control	LOS Standard	AM Peak Hour	PM Peak Hour			
1	17th Street @ Northside Drive	Signal	D	C (26.0)	D (45.1)			
3	16th Street @ Northside Drive	Side Street STOP Control	D	WB - B (13.9)	WB - C (22.4)			
8	14th Street @ Mecaslin Street	Side Street STOP Control	D	NB - B (13.6) SB - B (13.6)	NB - C (18.7) SB - C (23.9)			

A geometry and signal modification is currently planned for the intersection of 16th Street @ State Street, as approved recently by the City of Atlanta. These improvements have not been included in this analysis because the plans have not been implemented in the field; however, further analysis can be performed at this intersection if requested.

6.3 2010 Build Traffic

The traffic associated with the proposed development (Mecaslin Street) was added to the 2010 No-Build volumes. These volumes were then input into Synchro 6.0. The results of the analyses are displayed in **Table 7**.

T:\ 019573001 8 February 2008



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

	Intersection	Control	LOS Standard	AM Peak Hour	PM Peak Hour
1	17th Street @ Northside Drive	Signal	D	C (27.5)	D (54.3)
2	17th Street @ Village Street	Signal	D	C (25.7)	C (32.3)
3	16th Street @ Northside Drive	RIRO	D	WB - C (15.7)	WB - D (25.4)
4	101 grade O IVIII and a	Side Street	Б.	NB - C (15.4)	NB - C (24.8)
4	16th Street @ Village Street	STOP Control	D	SB - B (13.2)	SB - C (19.0)
5	16th Street @ Mecaslin Street	Side Street	D	NB - B (13.9)	NB - B (34.3)
3	Tour Street @ Mecasiii Street	STOP Control	D	SB - B (13.0)	SB - C (16.0)
6	16th Street @ State Street	Signal	D	C (24.8)	C (31.0)
7	Laurent Street @ Mecaslin Street	Side Street STOP Control	D	A (9.5)	B (10.3)
	141 9 0 14 17 9	Side Street	Б.	NB - B (13.7)	NB - C (19.4)
8	14th Street @ Mecaslin Street	STOP Control	D	SB - C (15.6)	SB - D (30.5)
9	16 th Street at Driveway #1	Side Street STOP Control	D	NB - B (12.3)	NB - B (12.3)
10	Laurent Street Extension at Driveway #2	Side Street STOP Control	D	SB - A (9.0)	SB - A (9.2)

As shown in the table, all of the intersections are expected to meet the acceptable Level of Service standards for the year 2010 Build condition. The projected 2010 Build traffic volumes and recommended driveway configurations are shown in **Figure 8**, and are listed below.

16th Street at Driveway #1

• One ingress lane and one egress lane on Driveway #1, and shared turn lanes on 16th Street.

Laurent Street Extension at Driveway #2

• One ingress lane and one egress lane on Driveway #2, and shared turn lanes on 16th Street.

Additionally, this analysis assumed one-lane approaches and shared turn lanes on existing approaches at the intersections of the proposed Village Street extension and 16th Street and the Laurent Street extension and Mecaslin Street. No separate turn lanes are currently proposed at either intersection with this project.

T:\ 019573001 9 February 2008



7.0 IDENTIFICATION OF PROGRAMMED PROJECTS

The TIP, STIP, RTP, ARC's Draft Envision 6 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.

2007	AT-200	Peachtree Street from 10 th Street to I-85 North
2011	AR-450A	Belt Line Multi-use path – Phase 1
2012	AR 450B	Belt Line Multi-use path – Phase 2
2015	AT-187	US 41 (Northside Drive) at CSX Rail Line south of Bellemeade Avenue
2016	AR909B	Northwest Corridor Arterial Bus Rapid Transit (BRT) – Phase II from Cumberland Galleria transfer center to MARTA Arts Center station in city of Atlanta
2020	AR-H-600	I-75/85 Bridge and HOV Interchange at 15 th Street in city of Atlanta
	AR-450D	Belt Line Multi-use path – Phase 4

These projects are displayed in **Figure 9** and project fact sheets are included in the Appendix.

8.0 INGRESS/EGRESS ANALYSIS

Two new roads are proposed to be constructed in conjunction with this project and a proposed future project by The Sembler Company located to the south and west of this DRI. In conjunction with that future project, Village Street is proposed to be extended from its current termination at 16th Street to 14th Street, aligning with the currently unsignalized intersection of 14th Street and Flynn Street; however, this new road was not included in this analysis because the proposed Sembler project has not been submitted to the City of Atlanta for review at this time. For this DRI, Laurent Street is proposed to be extended from its current termination at Mecaslin Street west to the future Village Street extension. For this analysis, a 2-lane extension of Village Street from 16th Street to the new Laurent Street extension was assumed.

The project is proposed to have vehicular access at two locations: one full-movement driveway along 16th Street between Mecaslin Street and Village Street and one full-movement driveway along the Laurent Street extension between Mecaslin Street and Village Street. Both driveways will have direct access to the parking deck proposed in the center of the site.

The City of Atlanta will be the permitting agency for the roadway extensions and driveways proposed in this area.

9.0 Internal Circulation Analysis

The proposed redevelopment will not have any internal capture; however, the two residential buildings will be connected by a single parking deck as shown on the site plan.

10.0 COMPLIANCE WITH COMPREHENSIVE PLAN ANALYSIS

The 15-year (2019) Future Land Use Plan for the City of Atlanta designates the area as Industrial and Low-Density Commercial. Therefore, a land use amendment has been requested to change the area to mixed-use.



11.0 Non-Expedited Criteria

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

Pedestrian facilities are currently in place along the following roads: 14th Street, 16th Street, 17th Street, Village Street, State Street, and Northside Drive. Sidewalks are also proposed along Mecaslin Street and the Village Street / Laurent Street extension in the vicinity of this project. Additionally, a network of bike lanes currently exists in the Atlantic Station area, especially along 17th Street where a lane has been dedicated to bus and bike traffic.

The proposed development is serviced by four MARTA bus routes including the following: Route 12 – Howell Mill / Cumberland (30-minute headways), Route 23 – Peachtree Road / Buckhead (20-minute headways), Route 37 – Loring Heights (60-minute headways), and Route 98 – West End / Arts Center (39-minute headways). See the attached route maps for detailed route descriptions.

The Georgia Technology Institute Transit system includes a bus route that has service along 14th Street between Techwood Drive and State Street. The shuttle currently has headways ranging from 6 minutes during peak hours to 20 minutes during off-peak hours. See the attached route map for detailed route descriptions.

The Atlantic Station Shuttle, which transports riders from Atlantic Station residential areas and points of interest, terminates at the Arts Center MARTA station. The shuttle currently has headways ranging from 15 minutes during peak hours to 30 minutes during off-peak hours. Headways may become shorter as the entire development reaches build out and demand for the shuttle increases.

11.2 Vehicle Miles Traveled

The following table displays the reduction in traffic generation due to alternative modes of transportation.

Table 8 Mecaslin Street DRI Trip Reductions		
	Build-out Total	
Daily Gross Trip Generation	3,756	
(-) Alternative modes	-188	
Net Trips	3,568	

11.3 Relationship Between Location of Proposed DRI and Regional Mobility

The proposed development is located downtown approximately 0.5 miles from I-75 / I-85. The ease of access to and from the interstate will contribute to the regional mobility of the Mecaslin Street development. Many of the residents of this development will likely work in town, so vehicular commuting trips have the potential to be short (or even a reverse commute).

11.4 Relationship Between Proposed DRI and Existing or Planned Transit Facilities

The proposed development is serviced by four MARTA bus routes including the following: Route 12 – Howell Mill / Cumberland (30-minute headways), Route 23 – Peachtree Road / Buckhead (20-minute headways), Route 37 – Loring Heights (60-minute headways), and Route 98 – West End / Arts Center (39-minute headways). See the attached route maps for detailed route descriptions.

The Georgia Technology Institute Transit system includes a bus route that has service along 14th Street between Techwood Drive and State Street. The shuttle currently has headways ranging from 6 minutes during peak hours to 20 minutes during off-peak hours. See the attached route map for detailed route descriptions.

The Atlantic Station Shuttle, which transports riders from Atlantic Station residential areas and points of interest, terminates at the Arts Center MARTA station. The shuttle currently has headways ranging from 15 minutes during



peak hours to 30 minutes during off-peak hours. Headways may become shorter as the entire development reaches build out and demand for the shuttle increases.

11.5 Transportation Management Area Designation

The proposed development is located within the Midtown Transportation Solutions Transportation Management Association (MTS) jurisdiction. MTS is an affiliate of the Midtown Community Improvement District (Midtown Alliance) and focuses on promoting a balanced transportation system to improve mobility and is charged with changing commuter habits and providing transportation options that are convenient, safe and cost-effective.

11.6 Offsite Trip Reduction and Trip Reduction Techniques

A 5% alternative mode reduction (those using transportation modes such as walking, bicycling, transit, etc.) was taken for the residential and office land uses.

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 (16th Street at Mecaslin Street). 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, DeKalb, and Cobb Counties) can be seen in **Figure 10**. Information obtained from the census tracts can be seen in **Table 9**.



Table 9 Census Tract Information		
Total Households	122,031	
Population in Households	255,719	
Average household size	2.10	
Total Workers	135,449	
Workers per Household	1.11	
Owner Occupied	40.20%	
Rental Occupied	59.80%	

As can be seen from the table above, the total population within the Area of Influence is 255,719, residing within 122,031 households (an average of 2.10 people per household). The AOI area totals 46,665 acres.

Using the above calculated average of 2.10 persons per household, it can be anticipated that the proposed DRI will house approximately 1,260 people (600 proposed dwelling units multiplied by 2.10). Based on information obtained from the Census Tracts, it is estimated that approximately 666 of these expected 1,260 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.

Many apartments are expected to be available for rent in the vicinity of the project.

12.3 Development Housing Analysis

The development plan provides for houses for sale in six price ranges within the proposed development. **Table 10**, below, displays the number of units for sale, the average sale 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
1	Apartment Type 1	160	\$1,417/month	176
2	Apartment Type 2	160	\$1,658/month	176
3	Apartment Type 3	130	\$1,879/month	143
4	Condominium Type 3	150	\$2,550/month	165

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, DeKalb, and Cobb 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						
AOI Jobs and Average Salaries						
Industry / Business Type# Businesses# EmployeesAverage Salary						
Retail Trade	4,540	64,181	\$28,526			
Building Materials and Garden Supply	157	4,483	-			
General Merchandise Stores	109	3,844	-			
Food Stores	328	4,792	-			
Auto Dealers and Gas Stations	221	1,742	-			
Apparel and Accessory Stores	570	4,072	-			
Home Furniture, Furnishings, and Equipment	571	6,342	-			
Eating and Drinking Places	1,396	27,863	-			
Miscellaneous Retail Stores	1188	11,043	-			
Finance	2,637	36,548	\$60,925			
Banks, Savings and Lending Institutions	516	7,255	-			
Securities and Commodity Brokers	412	6,626	-			
Insurance Carriers and Agencies	278	6,051	-			
Real Estate	1 421	16 616				
Trusts, Holdings, and Other Investments	1,431	16,616	-			
Services	13,148	217,919	-			
Hotels and Other Lodging	132	12,708	\$18,671			
Personal Services	1,909	9,416	-			
Business Services	3,269	51,738	\$71,497			
Motion Picture and Amusement	573	10,320	\$44,771			
Health Services	1,577	42,050	\$44,245			
Legal Services	2,043	17,785	\$71,497			
Education Services	343	36,013	\$37,621			
Social Services	520	8,376	\$44,245			
Miscellaneous, Membership	2,782	29,513				
Organizations and Nonclassified	2,782	29,313	-			
Agriculture	318	2,407	\$2,333			
Mining	13	100	\$8,637			
Construction	1206	11,449	\$48,943			
Manufacturing	842	25,178	\$58,695			
Transportation, Communication/Public Utilities	794	30,636	\$91,258			
Wholesale Trade	780	9,788	\$63,191			
Public Administration	1,036	57,913	\$44,675			
Total	25,314	456,119	-			



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 Mecaslin Street 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 6.1% 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 1.11 workers expected per household, the required income was divided by 1.11 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 one level of pricing within the development, thus satisfying the GRTA requirement of 25%.

	Table 12 Expected Workers					
	Average Rent Price	Necessary Income per Expected Worker	Expected Worker per Price Range	Jobs at or above Necessary Income		
1	\$1,417/month	\$45,959	176	183,122		
2	\$1,658/month	\$53,775	176	171,673		
3	\$1,879/month	\$60,943	143	109,947		
4	\$2,550/month	\$82,706	165	30,636		
Per	cent of expected wo	100%				



13.0 ARC'S AIR QUALITY BENCHMARK

The 7.18-acre development is expected to consist of 600 residential units. Because residential is the dominant use and the dwelling units per acre ratio is approximately 84 units per acre, the development meets the ARC criteria (1 b) for a 6% reduction.

Additionally, the proposed redevelopment will connect with the existing sidewalks along 16th Street and may walk to Atlantis Station. Pedestrians will also be able to access other uses within the proposed development via the parking decks and lots. This pedestrian network meets the ARC criteria (6 e) for a 5% reduction.

There are bus stops are within ¼ mile of the project and meet the ARC criteria (4) for a 3% reduction.

Since the Atlantic Station shuttle service can be utilized by the residents of the Mecaslin development, the project may receive a 3% reduction.

The proposed development meets the ARC criteria for a total 17% 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 1/4 mile of a bus stop	-3%		
Shuttle service to employment/activity centers/transit facilities	-3%		
Total Reductions	17%		