Transportation Analysis

Englewood South Development of Regional Impact DRI # 3299

City of Atlanta, Georgia

Date Prepared:

May 2021

Prepared for:
Atlanta Housing Authority

Prepared by:

GRICE CONSULTING GROUP

Terminus Building 100
3280 Peachtree Road, NE
7th Floor
Atlanta, Georgia 30305

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EXECUTIVE SUMMARY

This Transportation Analysis report presents the analysis of the anticipated traffic impacts of the proposed Englewood South development located in the City of Atlanta, Georgia. The Englewood South development site is located and bordered by Englewood Avenue, Boulevard, Hill Street and McDonough Boulevard (SR 42). The development site is approximately 30.43 acres. The proposed Englewood South development will consist of residential, retail, office and restaurant land uses.

This Transportation Analysis report collects data, perform modeling and analysis to identify improvements that are proposed that would significantly improve the traffic conditions along Boulevard, Atlanta Avenue and Englewood Avenue. These identified improvements will require coordination with and cooperation of the City of Atlanta and property owners. These recommendations are presented as standard improvements and described in the 2028 Build scenario.

The project is a Development of Regional Impact (DRI) and is subject to Georgia Regional Transportation Authority (GRTA) and the Atlanta Regional Commission (ARC) review due to the project size exceeding 600,000 square feet of a mixed-use development. The DRI trigger for this development is the Rezoning Permit Application with the City of Atlanta. This DRI was formally triggered with the filing of the Initial DRI Information (Form 1) on May 17, 2021 by the City of Atlanta. The present zoning classification of the project site is Mixed Residential Commercial District (MRC-3-C), Multi-family Residential District (MR-3-C) and Multi-family High Density District (R4-A).

The proposed Englewood South development project is expected to be completed in one phase. Phase 1 is expected to be built by 2028. As currently planned, the development will consist of the following land uses and densities shown below.

Land Use	Proposed Density
Multifamily Residential	600 Dwelling Units
Multifamily Senior Housing	228 Dwelling Units
Single Family Housing	41 Dwelling Units
Townhomes	38 Dwelling Units
Office	17,169 Square Feet
Retail	121,400 Square Feet

The DRI transportation analysis includes an estimation of the overall vehicle trips projected to be generated by the development, also known as gross trips. Reductions to gross trips are also considered in the analysis, including mixed-use reductions, alternative transportation mode reductions, and pass-by trip reductions.

Mixed-use reductions occur when a site has a combination of different land uses that interact with one another. For example, people working in a general office development may walk to the retail or restaurant development instead of driving off-site or to the site. This reduces the number of vehicle trips that will be made on the roadway, thus reducing traffic congestion. It is anticipated that these types of interaction will occur at the Englewood South development.

Alternative modes reductions are taken when a site can be accessed by modes other than vehicles (walking, bicycling, transit, scooters, etc.). The site is served by MARTA Bus Route 9, MARTA Bus Route 49 and MARTA Bus Route 832. It is anticipated that employees may also choose to walk or bike to work given the current and planned development around this site and connections to the larger Atlanta Beltline pedestrian/bicycle network. In addition to the MARTA service, the Atlanta Beltline plans to add transit to the Atlanta Beltline segment. Due to the nature of this existing transit service and the development, as **alternative mode reduction of 15%** is proposed for all land uses per GRTA's Letter of Understanding.

Pass-by reductions are taken for a site when the traffic normally traveling along a roadway may choose to visit a retail or restaurant that is along the designate travel path. These types of trips were already traveling on the road and would therefore only be new trips on the driveways. The retail proposed for the Englewood South development is expected to generate pass-by trips.

Capacity analyses were performed throughout the study network as defined in the GRTA Letter of Understanding for the Existing 2021 conditions, the Projected 2028 No-Build conditions, the Projected 2028 Build conditions and the Projected 2028 Build Alternative conditions.

- Existing 2021 conditions represent traffic volumes that were collected from the Chosewood Development (DRI - # 3206), completed November 2020. The counts collected from the Chosewood Development were grown at 1.7% for one (1) year to account for background traffic growth to 2021. Additional traffic counts were collected in April 2021 for intersections not included in the Chosewood Development DRI.

- Projected 2028 No-Build conditions represent the Existing 2021 traffic volumes grown for seven (7) years at 3.5% for roadways and intersections along and above Englewood Avenue and at 2.0% for roadways and intersections south of Englewood Avenue, plus the addition of project trips anticipated to be generated by the Chosewood development (DRI - # 3206).

- Projected 2028 Build conditions represent the Existing 2021 traffic volumes grown for seven (7) years at 3.5% for roadways and intersections along and above Englewood Avenue and at 2.0% for roadways and intersections south of Englewood Avenue, plus the addition of project trips anticipated to be generated by the Chosewood development (DRI - # 3206), and plus the addition of the project trips that are anticipated to be generated by the Englewood South development.

- Projected 2028 Build Alternative conditions represent the Project 2028 Build conditions, plus the construction of improvements.

Based on the Existing 2021 conditions, all of the study intersections operate at an acceptable overall level-of-service “D” or better during the AM and PM peak hours.

Based on the Projected 2028 No-Build conditions, during the SYNCHRO level of service analyses of the above Projected 2028 No-Build conditions, all of the studied intersections operate at an acceptable overall level-of-service (LOS) standard of “D” or better during the AM and/or PM peak hours.

Based on the Projected 2028 Build conditions, two (2) signalized study intersections are projected to operate below the acceptable overall level-of-service standard during at least one peak period.

Several alternatives were developed and modeled to determine which improvement would improve traffic conditions. Based on the Projected 2028 Build conditions, the following improvements are recommended:

- Intersection # 1 – Boulevard at Atlanta Avenue
  - Construct one (1) southbound right-turn lane along Boulevard.
  - Construct one (1) eastbound left-turn lane along Atlanta Avenue.
  - Construct one (1) westbound left-turn lane along Atlanta Avenue.
  - Install protected / permissive traffic signal phasing for eastbound left turn.
  - Install protected / permissive traffic signal phasing for westbound left turn.

- Intersection # 2 – Boulevard at Englewood Avenue

- Construct one (1) southbound right-turn lane along Boulevard.

- Intersections # 3 – Driveway # 1 at Englewood Avenue
  - Construct one (1) westbound left-turn lane along Englewood Avenue.
  - Construct one (1) westbound lane along Englewood Avenue.
  - Construct one (1) eastbound right-turn lane along Englewood Avenue.
  - Construct one (1) eastbound lane along Englewood Avenue.
  - Construct one (1) shared northbound left and right driveway lane.

- Intersections # 4 – Driveway # 2 at Englewood Avenue
  - Construct one (1) westbound left-turn lane along Englewood Avenue.
  - Construct one (1) westbound lane along Englewood Avenue.
  - Construct one (1) eastbound right-turn lane along Englewood Avenue.
  - Construct one (1) eastbound lane along Englewood Avenue.
  - Construct one (1) shared northbound left and right driveway lane.

- Intersections # 5 – Driveway #3 at Englewood Avenue
  - Construct one (1) westbound left-turn lane along Englewood Avenue.
  - Construct one (1) westbound lane along Englewood Avenue.
  - Construct one (1) eastbound right-turn lane along Englewood Avenue.
  - Construct one (1) eastbound lane along Englewood Avenue.
  - Construct one (1) shared northbound left and right driveway lane.

Based on the Projected 2028 Build conditions with the above improvement included, all of the study intersections operate at an acceptable overall level-of-service “D” or better during the AM and PM peak hours.

1.0 PROJECT DESCRIPTION

1.1 Introduction

This transportation analysis report presents the analysis of the anticipated traffic impacts of the proposed Englewood South development located in the City of Atlanta, Georgia. The proposed Englewood South development is located in southeast Atlanta, Georgia and bordered by Englewood, Boulevard, Hill Street and McDonough Boulevard. The development site is approximately 30.43 acres. The proposed Englewood South development will consist of residential, retail, office and restaurant land uses. The wooded and overgrown site is currently vacant with no existing properties.

The proposed Englewood South development will exceed 600,000 SF for mixed-use developments within a designated Region Employment Corridor area, therefore, 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.

Figure 1 provides the site location map of the Englewood South development. Figure 2 provides an aerial view of the project site and surrounding area. The City of Atlanta Zoning Map and the Atlanta Region's Plan Unified Growth Policy Map are included in Appendix A.

The proposed Englewood South development is expected to be completed in one phase and is expected to the built by 2028. As currently planned, the site will consist of the following land uses and densities as shown below in Table 1.

Table 1: Proposed Land Uses and Densities

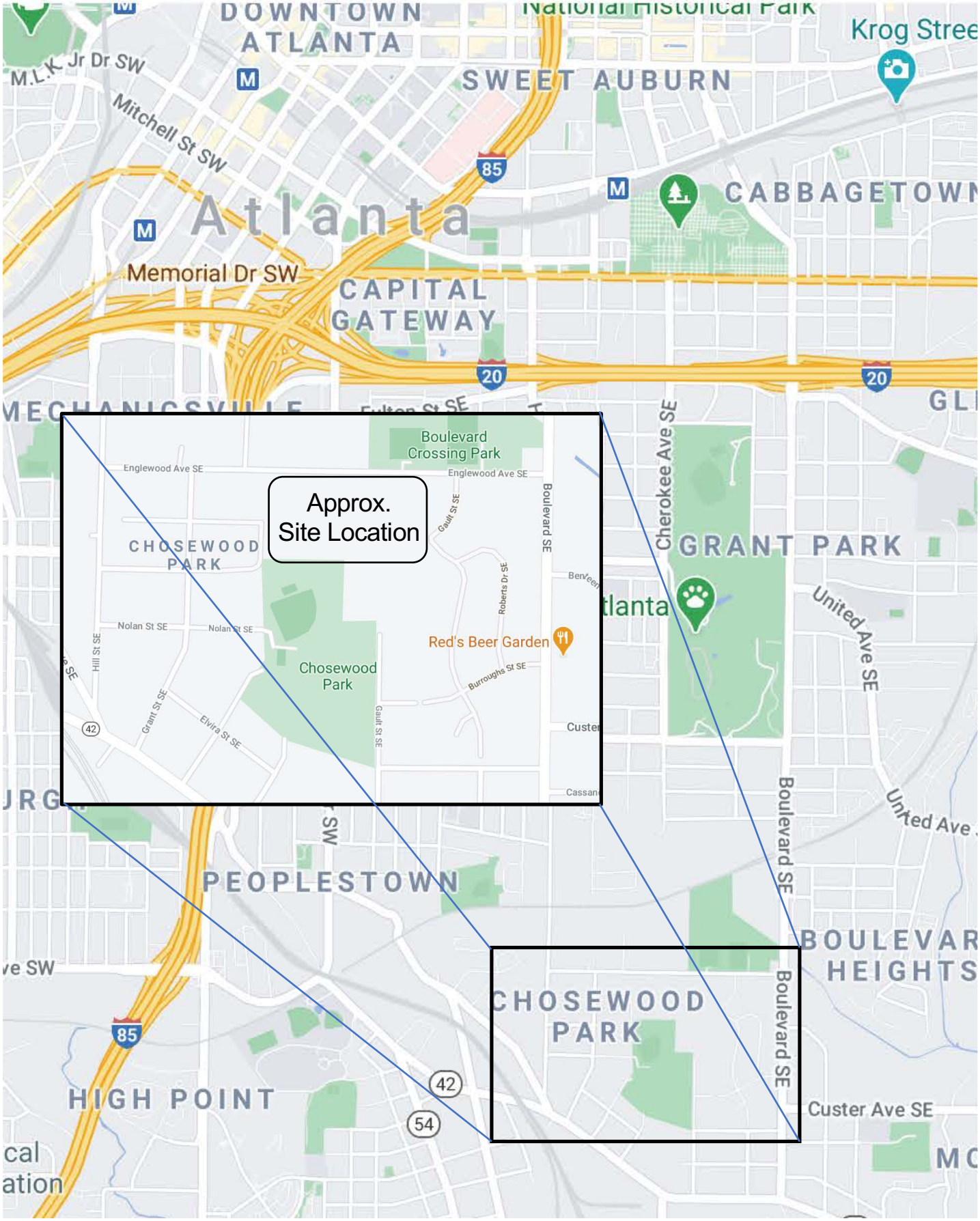
Land Use	Proposed Density
Multifamily Residential	600 Dwelling Units
Multifamily Senior Housing	228 Dwelling Units
Single Family Housing	41 Dwelling Units
Townhomes	38 Dwelling Units
Office	17,169 Square Feet
Retail	121,400 Square Feet

1.2 Site Plan Review

As mentioned previously, the proposed Englewood South development is located in southeast Atlanta, Georgia and bordered by Englewood, Boulevard, Hill Street and McDonough Boulevard. The development site is approximately 30.43 acres. The referenced site plan in Appendix B depicts the illustration of the subject development location.

The project site is currently zoned for MRC-3-C, MR-3-C and R4-A according to the City of Atlanta Zoning Ordinance Map in Appendix A. The project site has a future land uses of High Density Residential, Medium Density Residential, and Single-Family Residential according to the City of Atlanta Future Land Use Map, as shown in Appendix A. Additionally, the project site in located in the BeltLine Overlay as shown in the BeltLine Overlay District in Appendix A.

The Englewood South Rezoning Applications were submitted on February 1, 2021. The proposed new zoning is MRC-3 and MR-2.



GRICE CONSULTING GROUP	**Englewood South DRI # 3299 Transportation Analysis**	**Site Location / Vicinity Map**	**Figure 1**
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GRICE CONSULTING GROUP	Englewood South DRI # 3299 Transportation Analysis	Site Aerial (Zoom In)	Figure 2
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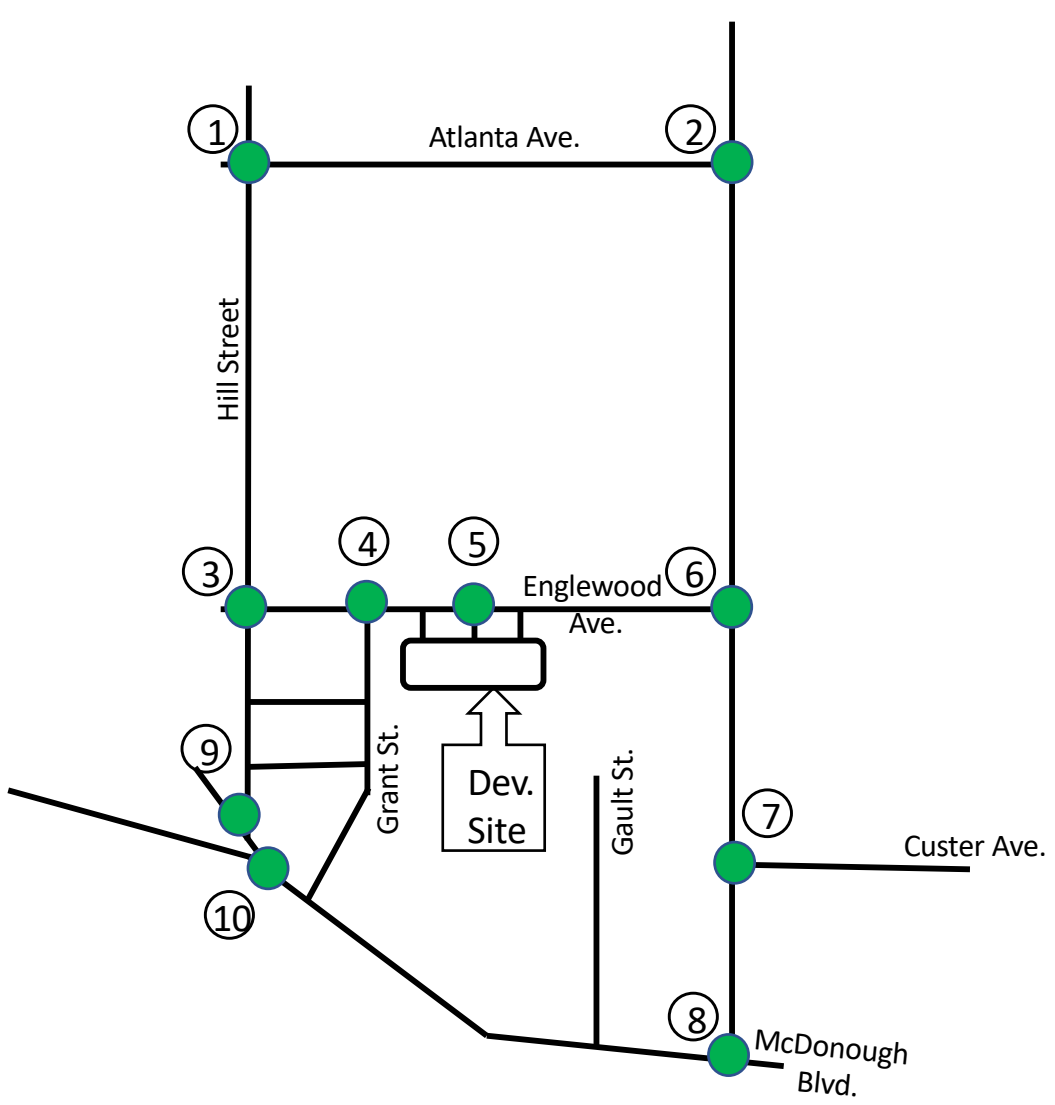

NORTH (NTS)

LEGEND

- Study Intersections

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Englewood South DRI # 3299 Transportation Analysis

Study Intersections

Figure 3

1.3 Site Access

The existing 30.43-acre site is currently served by three (3) driveways / access points. The Englewood South site plan indicates 6 (six) access points proposed for the project site, as shown on the Site Plan – Appendix B.

- Three (3) proposed full movement entrances along Englewood Avenue.
- One (1) proposed connection to Climax Street.
- One (1) proposed connection to Dalton Street.
- One (1) proposed connection to Empire Development

The location of the above-mentioned driveways and access points can be found on the enclosed Site Plan layout.

The Englewood South development project parking will be located on-site in four (4) parking structures and on-street parking internally of the development. There will be no on-street parking along Englewood Avenue.

The Englewood South development four (4) parking structure will provide 1,023 parking spaces to accommodate parking for the residential and non-residential usage. In addition, the development will provide 73 parking spaces in a surface lot located adjacent to Block I, as shown on the Site Plan.

The proposed parking numbers are projected to serve the entire development. The exact number and location of the parking spaces is subject to change during the development of the Master Plan and are proposed to meet the City of Atlanta MRC-3-C and MR-2 parking requirements.

1.4 Bicycle and Pedestrian Facilities

Pedestrian sidewalk and facilities are currently located throughout the study area. There are sidewalks along Boulevard, Grant Street, Hill Street and McDonough Boulevard. Additionally, the proposed Englewood South development will include sidewalks throughout the development.

Additionally, residential and non-residential pedestrians may opt to walk or bike to sites in the immediate project vicinity, to include Boulevard Crossing and Chosewood Parks. The Englewood South development will be collaborating with

the Chosewood development to provide connections to the larger pedestrian/bicycle network to gain access to Boulevard Crossing park.

1.5 Transit Facilities

The Englewood South development project site is not located near a MARTA Transit Station. The closest MARTA Transit Station (King Memorial) is approximately 3.75 miles from the subject development site. However, there are several MARTA bus routes and stops that currently exist and provides access to the development site. The MARTA Bus Routes are as follow:

- MARTA Bus Route # 9 – The MARTA Bus Route # 9 operates North and South from Rainbow Way to King Memorial MARTA Station. The current route runs along Candler Road, Tilson Road, Brannen Road, Eastland Road, Custer Avenue and Boulevard is within 1 mile of the proposed Englewood South development. Major points of interest along this route includes Gallery at South DeKalb and Zoo Atlanta.
- MARTA Bus Route # 49 – The MARTA Bus Route # 49 operates North and South from Five Points MARTA Station to Metro Transition Center. The current route runs
  along McDonough Boulevard and Moreland Avenue is within 1 mile of the proposed Englewood South development. Major points of interest along this route include Georgia State Stadium and Thomasville Recreation Center.
- MARTA Bus Route #832 – The MARTA Bus Route # 832 is a Community Circulator that operates East and West. The current route originates at the West End MARTA Station and extends to Woodland Avenue and Custer Avenue. The route travels along Ralph David Abernathy Boulevard, Georgia Avenue, Cherokee Avenue, Atlanta Avenue, East Confederate (United) Avenue and Moreland Avenue. This bus route is within 1 mile of the Englewood South development. Major points of interest along this route includes Zoo Atlanta, Georgia Department of Public Safety and Moreland Shopping Center.

The Atlanta BeltLine, which is approximately 800 feet from the Englewood Avenue entrance into the Englewood South development will provide a direct and accessible connection to a future transit and trail network.

With the above identified transit options and having direct access to convenient, safe and efficient transit service, an **alternative mode reduction of 15%** has been estimated for the Englewood South development.

2.0 Traffic Analysis, Methodology and Assumptions

2.1 Growth Rate

In order to determine the background traffic growth rate, a collection of the recent traffic volume of roadways in the immediate area was collected from the Traffic Analysis and Data Application (TADA), population forecasts and other developments in the immediate area were analyzed. From these analyses, it is recommended that a growth rate of 1.7% be applied to the 2020 volumes to forecast the 2021 existing year volumes.

From reviewing the adjacent and nearby land uses and zoning, there is ample opportunity for future development, both residential and non-residential within close proximity of Englewood South development site. So, while considering the aforementioned historical growth rate of 1.7%, this study will account for development opportunities in the immediate project area, which will contribute to "new" growth. As used for the adjacent DRI and per the GRTA Letter of Understanding (LOU), this study will use an annual background growth rate of 2.0% for all roadways south of Englewood Avenue and an annual background growth rate of 3.75% for all roadways north of Englewood Avenue.

2.2 Traffic Data Collection

The Weekday peak hour turning movement counts were collected in 2019 at the below identified intersections. Additionally, Weekday peak turning movement counts were collected in 2020 from a recently approved Chosewood DRI # 3206, as shown in Figure 5. The Chosewood DRI # 3206 utilized existing traffic count data and collected new data that was adjusted to account for COVID-19.

The vehicular volumes collected from the year of 2020 and utilized above were grown at 1.7% for one year to account for the background traffic growth to year 2021.

This Englewood DRI transportation analysis utilizes the methodology developed for the Empire DRI # 3206 and approved by GRTA.

This transportation analysis includes the following methodology and assumptions.

The below listed intersections utilizes traffic count data collected from the City of Atlanta's 2019 Boulevard SE Concept Study. The background growth rate of 1.7% has been applied to these intersection traffic count data to develop the existing and future conditions.

1. Boulevard at Englewood Avenue
2. Boulevard at Custer Avenue
3. Boulevard at Atlanta Avenue
4. Boulevard at McDonough Boulevard

Because of COVID-19, traffic counts were impacted by businesses and schools being shuttered. As described in the Empire DRI #3206, "the percentage increase shall be based on the following control counts that extrapolate current reduced traffic counts during COVID to historic count data that is grown with a background growth rate".

- Intersections near Englewood control traffic count (Growth Rate: 54% during the AM Peak and 21% during the PM Peak).
    5. Englewood Avenue at Grant Street
    6. Englewood at Hill Street

- This effort will collect new traffic counts at the following three (3) proposed study intersections and apply the following growth factor as used in the Empire DRI #3206 for intersections near McDonough Boulevard control traffic count (Growth Rate: 130% during the AM Peak and 41% during the PM Peak).
    7. Hill Street at Atlanta Avenue
    8. Hill Street at Milton Avenue
    9. McDonough Boulevard at Milton Avenue

The above traffic data methodology has been accounted for with this transportation analysis. Weekday peak hour turning movement counts were collected at the study intersections during the AM and PM peak periods.

2.3 Detailed Intersection Analysis

Capacity analysis of the study intersections were completed using procedures in the Transportation Research Board's Highway Capacity Manual (HCM). This is the usual methodology for the analysis of traffic conditions. The software program, Synchro

Professional Version 11, was used to perform the capacity analysis for the study intersections.

Operating conditions at intersections are evaluated in terms of Levels of Service (LOS). LOS A through D are generally considered to be adequate peak hour conditions. LOS E and F are generally considered inadequate conditions.

Levels of Service for signalized intersections are based on average control delay. Individual turning movements at a signalized intersection may experience inadequate LOS, particularly where those volumes are relatively low, while the intersection as a whole has an adequate LOS. This is because the major movements on the major roadway are given priority in assigning signal green time.

Level of Service at unsignalized intersections, with stop sign control on the minor street only, are evaluated for the minor street approach(es) and for the left turns from the major street. This is because the major street traffic is assumed to have no delay since there is no control (no stop sign). Inadequate Levels of Service for minor street approaches to unsignalized intersections are not uncommon, as the continuous flow traffic will always get the priority.

The *Highway Capacity Manual* Level of Service criteria for signalized and unsignalized intersections are shown in Table 2.

Table 2. Highway Capacity Manual Intersection Level-of-Service Criteria

LOS	Control Delay (seconds per vehicle)	
	Signalized Intersection	Unsignalized Intersection
A	≤ 10	≤ 10
B	>10 and ≤20	>10 and ≤15
C	>20 and ≤35	>15 and ≤25
D	>35 and ≤55	>25 and ≤35
E	>55 and ≤80	>35 and ≤50
F	> 80	> 50

(Source: Highway Capacity Manual, 2010 Edition)

3.0 Study Network

3.1 Gross Trip Generation

The proposed Englewood South development is located in southeast Atlanta, Georgia and bordered by Englewood, Boulevard, Hill Street and McDonough Boulevard. The proposed development will consist of residential, retail, office and restaurant land uses. The development will have access to the external road network via three (3) driveways along Englewood Avenue, Climax Street, Dalton Street and via connection to the adjacent Chosewood development.

This study will analyze the traffic generated for the proposed development land uses and densities per the rates and equations in the ITE Trip Generation Manual (10th Edition). Gross trips generated are displayed below in Table 3.

Table 3: Gross Trip Generation

Land Use (Intensity)	ITE Code	Daily Traffic	AM Peak Hour			PM Peak Hour		
		Total	Total	Enter	Exit	Total	Enter	Exit
Multifamily Housing (Mid-Rise) (600 Dwelling Units)	221	3,264	216	56	160	264	161	103
Multifamily Housing (Senior Living) (228 Dwelling Units)	252	844	46	16	30	59	32	27
Single Family (79 Dwelling Units)	210	746	58	14	44	78	49	29
Office (17,169 Sq. Ft.)	712	168	20	17	3	20	3	17
Retail (121,400 Sq. Ft.)	820	4,583	114	71	43	463	222	241
Total Trips		**9,605**	**454**	**174**	**280**	**884**	**467**	**417**

3.2 Trip Distribution

The peak hour site-generated trip volumes in Table 3 were based on the project land uses, a review of the land use densities and road facilities in the immediate area, engineering judgment and methodology discussions with the Georgia Regional Transportation Authority (GRTA), Atlanta Regional Commission (ARC), Georgia Department of Transportation and the City of Atlanta. The detail percentages of trip assignment for each movement are shown in Figure 4. Figure 5 shows the volume assignment of the site-generated trips.

3.3. Level-of-Service Standards

For the purpose of this transportation analysis, the level-of-service (LOS) standard of LOS D was assumed for all intersections and segments within the study network. If, however, an intersection or segment currently operates at LOS F during an existing peak period, the LOS standard for the intersection during that peak period becomes LOS E, consistent with the GRTA Letter of Understanding. Additionally, a LOS E is allowable for Boulevard SE given the planned roadway repurposing project will reduce the existing roadway's vehicle capacity.

3.4 Study Network Determination

A general study area was determined based upon a review of land uses and population densities in the area as well as a review of peak hour traffic counts and engineering judgement. The study area was agreed upon during the methodology meeting discussions with project stakeholders, including GRTA, ARC, GDOT and the City of Atlanta, and includes the nine (9) existing intersections and three (3) proposed full movement entrance driveways along Englewood Avenue. The study network under the build-out conditions also includes connection to Climax Street, Dalton Street and Empire Development (Gault Street). The study intersections are also shown in Figure 3.

Each of the study intersections listed was analyzed for the Existing 2021 Conditions, the Projected 2028 No-Build Conditions and the Project 2028 Build Conditions.

The Projected 2028 No-Build Conditions represent the Existing 2021 traffic volumes for seven (7) years at 3.75% for all roadways north of Englewood Avenue and 2.0% for all roadways south of Englewood Avenue, plus the addition of the project trips anticipated to be generated by the Chosewood DRI # 3206.

Projected 2028 Build Conditions represent the Projected 2028 No-Build Conditions, please the addition of project trips that are anticipated to be generated by the Englewood South Development.

3.5 Existing Roadway Facilities

The functional classifications, as approved and documented by Georgia Department of Transportation (GDOT), for the roadways within the vicinity of the proposed Englewood South development are summarized in the table below:

Table 4: Roadway Classifications

Roadway	No. of Lanes	Posted Speed Limit (MPH)	Average Daily Traffic (ADT)	Functional Classification
Englewood Avenue**	2	25		6U – Minor Collector (Urban)
Boulevard	4	35		4U - Minor Arterial (Urban)
McDonough Boulevard	4	35		4U – Minor Arterial (Urban)
Hill Street	2	25		6U – Minor Collector (Urban)
Atlanta Avenue	2	25		6U – Minor Collector (Urban)

** - Roadway adjacent to the development site

4.0 Trip Generation

As stated previously, gross trips associated with the proposed Englewood South development were estimated using the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 10th Edition, 2017, using equations where available. Trip generation for this proposed development is calculated based upon the following land uses: Multifamily Housing (Mid-Rise) (ITE 221), Multifamily (Senior Living) (ITE 252), Single Family (ITE 210), Office (ITE 712) and Retail (ITE 820).

The total development (net) trips generated and analyzed in this report are listed in Table 5 below. A more detailed trip generation analysis summary table is provided in Appendix C.

4.1 Mixed-Use Reductions

While the trip generation rates for individual uses on sites may be the same or similar to what they are for free-standing sites, there is potential for interaction among those uses within the development, particularly where the trip can be made by walking or without using the off-site road system. As a result, the total generation of vehicle trips entering and exiting the multi-use site may be reduced from simply a sum of the individual, discrete trips by each land use. Table 5 shows the calculation of mixed-use reduction of the Englewood South Development.

4.2. Pass-by Trips

Pass-by trips are made as intermediate stops along the way from an origin to a primary trip destination without a route diversion. Based on ITE Trip Generation, the assumptions of Pass-by rate used is 34% of the retail and office trips for both weekday AM and PM peak hour.

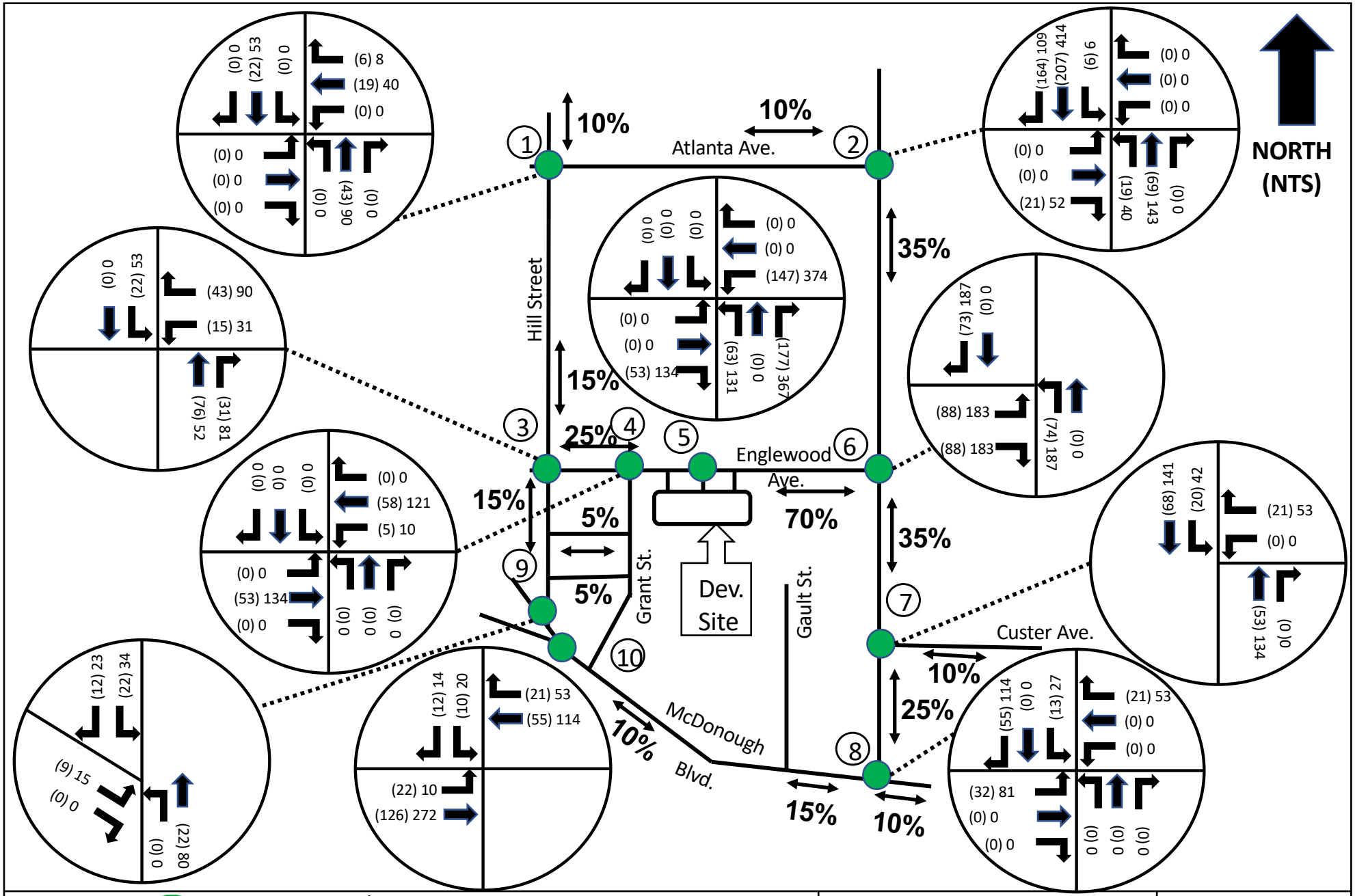
The Pass-by volumes are shown in Appendix C. Table 5 shows the calculation of Pass-by Reduction of the Englewood South development.

Table 5: Net New Trip Generation								
		Daily Traffic	AM Peak Hour			PM Peak Hour		
		Total	Total	Enter	Exit	Total	Enter	Exit
Gross Project Trips		**9,605**	**454**	**174**	**280**	**884**	**467**	**417**
Mixed-Use Reductions		-105	-13	-5	-8	-30	-17	-13
Alternative Mode Reduction		-1,938	-93	-37	-55	-178	-93	-85
Pass-by Reduction		-1,327	-41	-27	-13	-135	-62	-73
Total Trips		**6,235**	**307**	**105**	**204**	**541**	**295**	**246**

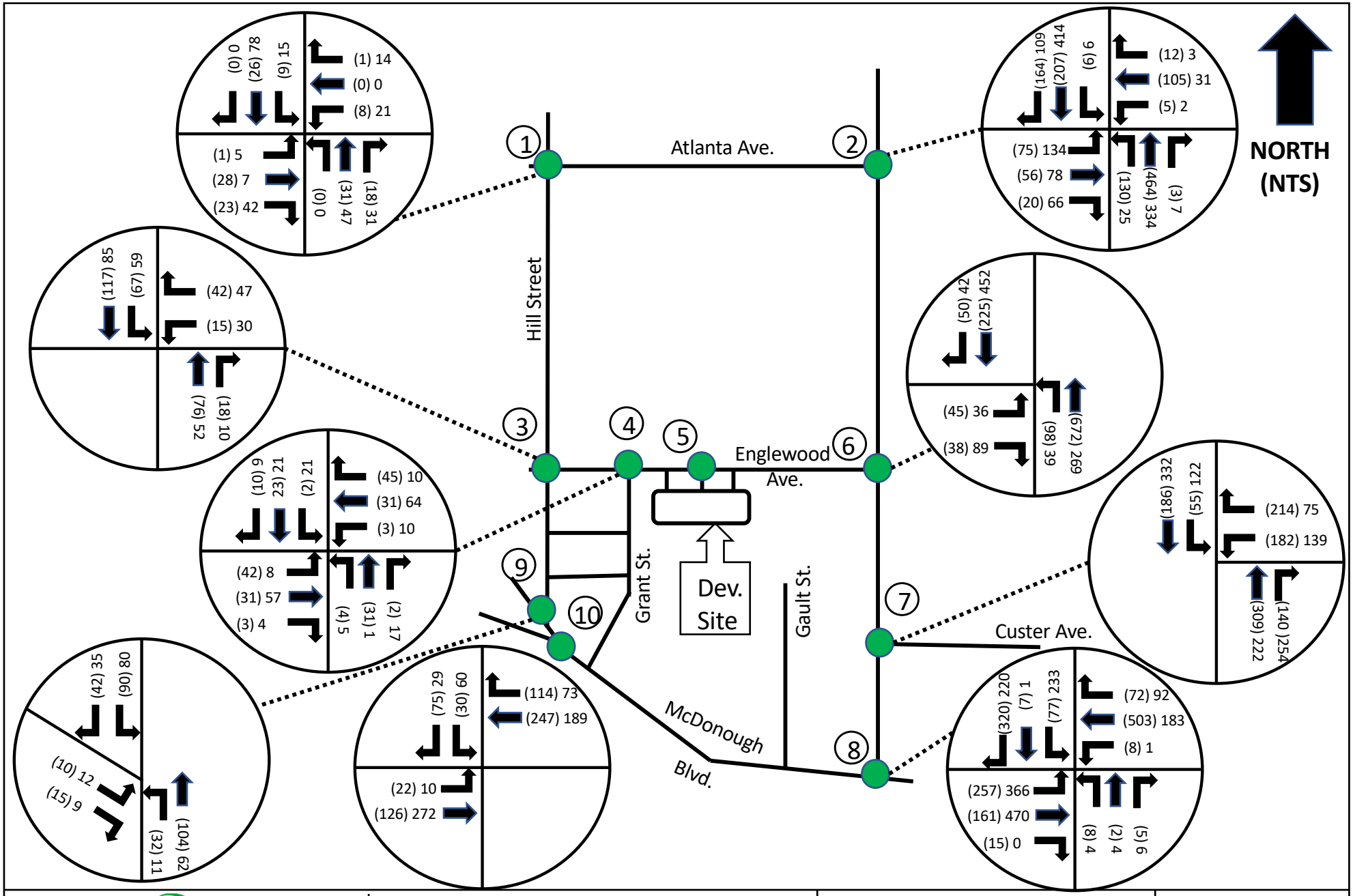
5.0 Trip Distribution and Assignment

The peak hour site-generated trip volumes in Table 5 were assigned to the turning movements and three proposed access driveways from the development, as shown in Figure 4. It is assumed that 20% of the trips will use Development Driveway 1 and 3, and 60% of the trips will use Development Driveway 2, which is considered the main driveway. The detail percentages of trip assignment of each movements are shown in Figure 4. These percentages are decided based on the current peak hour turning movement count patterns at these locations. Figure 5 show the volume assignment of the site-generated trips.

Pass-by trips were also added into network. These trips already exist on the current network; however, after making stop at the new development site, they will exit the site heading to their original destinations.



GRICE CONSULTING GROUP	**Englewood South DRI # 3299 Transportation Analysis**	**Trip Distribution and Site-Generated Weekday Peak-Hour Volumes (AM) PM**	**Figure 4**
			Page 25



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Englewood South
DRI # 3299
Transportation Analysis

2020 Existing Weekday Peak-Hour Volumes (AM) PM

Figure 5

6.0 Traffic Analysis

6.1 Existing 2021 Conditions

The vehicular traffic volumes collected from the Chosewood Park Development - DRI # 3206 completed in 2020 were grown at 1.7% for one year to account for the background traffic growth to the year 2021. In addition, the trips from the Chosewood Park Development was added into the Englewood South DRI 2028 No-Build and Build scenarios. The 2021 peak hour traffic volumes were entered into SYNCHRO 11.0 and a capacity analyses were performed for the AM and PM peak hours.

The existing peak hour traffic volumes are displayed in Figure 6, and the results of the capacity analyses for the Existing 2021 conditions are shown in Table 6 below. The detailed SYNCHRO analysis reports can be found in Appendix G.

Table 6: Existing Year 2021
Level of Service (LOS) Summary

LOS (Delay in Seconds)

					Existing 2021	
Intersection		**Control**	**Approach / Control**	**LOS Std.**	**AM Peak**	**PM Peak**
1. Hill Street at Atlanta Avenue • Eastbound Approach • Westbound Approach • Northbound Approach • Southbound Approach		**AWSC**	**Overall** 	**D**	**A (7.1)** A (7.2) A (7.4) A (7.3) A (6.8)	**A (7.5)** A (7.3) A (7.6) A (7.3) A (7.4)
2. Boulevard at Atlanta Avenue • Eastbound Approach • Westbound Approach • Northbound Approach • Southbound Approach		**Signal**	**Overall** 	**D**	**C (25.8)** E (63.2) E (61.5) C (21.2) A (6.9)	**C (24.3)** D (53.3) E (56.1) B (16.7) B (12.1)
3. Boulevard at Englewood Avenue • Eastbound Approach		**Signal**	**Overall** 	**D**	**A (4.5)** D (41.6)	**A (5.7)** C (30.5)

• Northbound Approach • Southbound Approach					A (1.8) A (1.1)	A (1.5) A (2.0)
4. Englewood Ave. at Grant Street • Northbound Approach • Southbound Approach		**TWSC**	**Overall**	**D**	**A (4.2)** B (11.0) B (10.4)	**A (3.8)** A (9.2) B (10.3)
5. Englewood Avenue at Hill Street • Westbound Approach		**Stop Sign**	**WB**	**D**	**A (3.3)** A (9.8)	**A (4.4)** A 10.0)
6. Hill Street at Milton Avenue • Southbound Approach		**Stop Sign**	**SB**	**D**	**A (8.0)** A (7.8)	**A (7.6)** A (7.1)
7. McDonough Boulevard (SR 42) at Milton Avenue • Eastbound Approach • Westbound Approach • Southbound Approach		**Signal**	**Overall**	**D**	**B (11.1)** A (1.6) A (9.0) C (31.5)	**B (10.3)** A (2.4) A (4.2) D (53.5)
8. McDonough Boulevard (SR 42) at Boulevard • Eastbound Approach • Westbound Approach • Northbound Approach • Southbound Approach		**Signal**	**Overall**	**D**	**B (13.8)** A (4.3) B (12.6) D (49.5) C (24.5)	**B (16.8)** B (10.1) B (20.0) C (23.9) C (27.1)
9. Boulevard at Custer Avenue • Westbound Approach • Northbound Approach • Southbound Approach		**Signal**	**Overall**	**D**	**C (23.6)** D (42.5) B (14.5) A (9.5)	**B (14.2)** D (52.7) A (6.2) A (4.4)

During the SYNCHRO level-of-service analyses of the Existing 2021 conditions, all of the study intersections operate at an overall level-of-service “D” or better during the AM and PM peak hours.

6.2 Projected 2028 No-Build Conditions

The projected vehicular traffic volumes were increased for seven (7) years at 3.75% annual background traffic rate for roadways on or north of Englewood Avenue and 2.0% annual background traffic rate for all roadways south of Englewood Avenue. Additionally, the project trips anticipated to be generated by the Chosewood Park Development - DRI # 3206 was added into the Englewood South DRI 2028 No-Build and Build scenarios. The 2028 peak hour traffic volumes were entered into SYNCHRO 11.0 and a capacity analyses were performed for the AM and PM peak hours.

The Projected 2028 No-Build conditions were analyzed using the existing roadway geometry and existing intersection control types, with the exception of intersections along Boulevard. Based upon the City of Atlanta's Boulevard Improvement project, Boulevard geometry for the projected 2028 No-Build Conditions included a three (3) lane configuration - one (1) northbound lane, one (1) southbound lane and a two way left turn lane.

The Projected 2028 No-Build peak hour traffic volumes are displayed in Appendix D, and the results of the capacity analyses for the Project 2028 No-Build Conditions are shown in Table 7 below. The detailed SYNCHRO analysis reports can be found in Appendix G.

Table 7: Projected 2028 No-Build Level of Service (LOS) Summary

LOS (Delay in Seconds)

					2028 No-Build	
Intersection		**Control**	**Approach / Control**	**LOS Std.**	**AM Peak**	**PM Peak**
1. Hill Street at Atlanta Avenue • Eastbound Approach • Westbound Approach • Northbound Approach • Southbound Approach		**AWSC**	**Overall** 	**D**	**A (7.1)** A (7.0) A (7.5) A (7.4) A (6.8)	**A (7.9)** A (7.7) A (7.9) A (8.1) A (7.8)

2. Boulevard at Atlanta Avenue • Eastbound Approach • Westbound Approach • Northbound Approach • Southbound Approach		**Signal**	**Overall** 	**D**	**C (22.3)** D (49.2) C (34.3) B (16.4) B (18.1)	**C (33.9)** E (70.4) C (31.3) B (13.3) C (30.5)
3. Boulevard at Englewood Avenue • Eastbound Approach • Northbound Approach • Southbound Approach		**Signal**	**Overall** 	**D**	**A (9.7)** D (47.2) A (7.1) A (5.6)	**A (9.5)** C (33.7) A (2.9) A (83)
4. Englewood Ave. at Grant Street • Northbound Approach • Southbound Approach		**TWSC**	**Overall** 	**D**	**A (4.7)** B (12.7) B (12.2)	**A (3.9)** A (9.9) B (12.8)
5. Englewood Avenue at Hill Street • Westbound Approach		**Stop Sign**	**WB** 	**D**	**A (4.8)** B (11.6)	**A (5.3)** B (12.0)
6. Hill Street at Milton Avenue • Southbound Approach		**Stop Sign**	**SB** 	**D**	**A (8.3)** A (8.0)	**A (7.7)** A (7.2)
7. McDonough Boulevard (SR 42) at Milton Avenue • Eastbound Approach • Westbound Approach • Southbound Approach		**Signal**	**Overall** 	**D**	**B (10.1)** A (1.8) A (7.5) C (31.1)	**B (10.2)** A (2.8) A (3.0) D (54.5)
8. McDonough Boulevard (SR 42) at Boulevard • Eastbound Approach • Westbound Approach • Northbound Approach • Southbound Approach		**Signal**	**Overall** 	**D**	**B (19.2)** A (7.4) B (20.0) D (34.4) C (29.3)	**C (24.6)** B (18.7) C (29.9) C (20.6) C (31.7)
9. Boulevard at Custer Avenue • Westbound Approach • Northbound Approach • Southbound Approach		**Signal**	**Overall** 	**D**	**C (31.1)** D (40.3) C (28.4) B (18.4)	**C (21.9)** E (60.0) C (20.2) A (6.5)

As shown in Table 7, during the SYNCHRO level of service analyses of the above Projected 2028 No-Build conditions, all of the studied intersections operate at an

acceptable overall level-of-service (LOS) standard of "D" or better during the AM and/or PM peak hours.

6.3 Projected 2028 Build Conditions

As stated above, the projected vehicular traffic volumes were increased for seven (7) years at 3.75% annual background traffic rate for roadways on or north of Englewood Avenue and 2.0% annual background traffic rate for all roadways south of Englewood Avenue. Additionally, the project trips anticipated to be generated by the Chosewood Park Development - DRI # 3206 was added into the Englewood South DRI 2028 No-Build and Build scenarios.

The traffic associated with the Englewood South Development was added to the Projected 2028 No-Build volumes. The volumes were then entered into SYNCHRO 11.0 and a capacity analyses were performed for the AM and PM peak hours.

The Projected 2028 Build conditions were analyzed using the existing roadway geometry and existing intersection control types, with the exception of intersections along Boulevard. Based upon the City of Atlanta's Boulevard Improvement project, Boulevard geometry for the Projected 2028 Build Conditions includes a three (3) lane configuration - one (1) northbound lane, one (1) southbound lane and a two way left turn lane.

The traffic volumes used for the Projected 2028 Build conditions are included in Appendix D. The results of the capacity analyses for the Project 2028 Build Conditions are shown in Table 8 below. The detailed SYNCHRO analysis reports can be found in Appendix G.

Table 8: Projected 2028 Build
Level of Service (LOS) Summary

LOS (Delay in Seconds)

					2028 Build	
Intersection		**Control**	**Approach / Control**	**LOS Std.**	**AM Peak**	**PM Peak**
1. Hill Street at Atlanta Avenue • Eastbound Approach • Westbound Approach • Northbound Approach		**AWSC**	**Overall** 	**D**	**A (7.5)** A (7.2) A (7.6) A (7.9)	**A (9.5)** A (8.4) A (9.0) A (9.8)

• Southbound Approach					A (7.1)	A (9.9)
2. Boulevard at Atlanta Avenue • Eastbound Approach • Westbound Approach • Northbound Approach • Southbound Approach		**Signal**	**Overall** 	**D**	**E (58.0)** F (113.4) D (45.0) C (31.7) E (70.6)	**F (124.7)** F (94.8) D (36.1) C (20.2) F (197.3)
3. Boulevard at Englewood Avenue • Eastbound Approach • Northbound Approach • Southbound Approach		**Signal**	**Overall** 	**D**	**B (15.9)** D (42.4) B (10.8) B (12.4)	**E (61.0)** C (33.9) C (24.9) F (101.5)
4. Englewood Avenue at Grant Street • Northbound Approach • Southbound Approach		**TWSC**	**Overall** 	**D**	**A (4.2)** B (14.5) B (13.5)	**A (3.1)** B (11.8) C (17.9)
5. Englewood Avenue at Hill Street • Westbound Approach		**Stop Sign**	**WB** 	**D**	**A (5.6)** B (14.5)	**A (8.6)** C (20.1)
6. Hill Street at Milton Avenue • Southbound Approach		**Stop Sign**	**SB** 	**D**	**A (8.8)** A (8.4)	**A (8.4)** A (8.0)
7. McDonough Boulevard (SR 42) at Milton Avenue • Eastbound Approach • Westbound Approach • Southbound Approach		**Signal**	**Overall** 	**D**	**B (12.2)** A (2.5) B (11.1) D (37.7)	**B (12.2)** A (4.7) A (9.0) E (56.3)
8. McDonough Boulevard (SR 42) at Boulevard • Eastbound Approach • Westbound Approach • Northbound Approach • Southbound Approach		**Signal**	**Overall** 	**D**	**C (21.7)** A (9.0) C (22.8) C (33.1) C (31.6)	**D (37.1)** D (43.9) D (38.9) B (19.2) C (26.1)
9. Boulevard at Custer Avenue • Westbound Approach • Northbound Approach • Southbound Approach		**Signal**	**Overall** 	**D**	**D (37.3)** E (58.7) C (34.4) B (15.6)	**C (34.0)** E (69.2) C (31.4) B (18.5)

As shown in Table 8, two (2) signalized study intersections are projected to operate below the acceptable overall level-of-service standard during at least one peak hour for the Projected 2028 Build conditions.

Table 9: Projected 2029 Build Development Driveway Level of Service (LOS) Summary

LOS (Delay in Seconds)

					2028 Build	
Intersection		**Control**	**Approach / Control**	**LOS Std.**	**AM Peak**	**PM Peak**
1. Driveway # 1 at Englewood • Northbound Approach • Westbound Left		**TWSC**	**Stop Sign (NB)**	**D**	**A (4.1)** A (8.9) A (7.4)	**A (2.9)** B (10.3) A (7.7)
2. Driveway # 2 at Englewood • Northbound Approach • Westbound Left		**TWSC**	**Stop Sign (NB)**	**D**	**A (7.1)** A (9.7) A (7.5)	**A (8.7)** B (14.5) A (8.1)
3. Driveway # 3 at Englewood • Northbound Approach • Westbound Approach		**TWSC**	**Stop Sign (NB)**	**D**	**A (2.9)** A (9.4) A (7.5)	**A (2.7)** B (11.8) A (8.0)

As shown in Table 9, during the SYNCHRO level of service analyses of the above Projected 2028 Build Development Driveways condition, all of the studied driveway intersections operate at an acceptable overall level-of-service (LOS) standard of “D” or better during the AM and/or PM peak hours.

Further SYNCHRO 11.0 analyses were completed to identify improvements to improve the intersection level-of-service that experience operation below the acceptable level-of-service. Based on the Project 2028 Build conditions, the following improvements are recommended.

- Intersection # 1 – Boulevard at Atlanta Avenue
  - Construct one (1) southbound right-turn lane along Boulevard.
  - Construct one (1) eastbound left-turn lane along Atlanta Avenue.
  - Construct one (1) westbound left-turn lane along Atlanta Avenue.
  - Install protected / permissive traffic signal phasing for eastbound left turn.
  - Install protected / permissive traffic signal phasing for westbound left turn.

- Intersection # 2 – Boulevard at Englewood Avenue
  - Construct one (1) southbound right-turn lane along Boulevard.

Table 10: Projected 2028 Build with Improvements
Level of Service (LOS) Summary

LOS (Delay in Seconds)

					2028 Build w/ Improvements	
Intersection		**Control**	**Approach / Control**	**LOS Std.**	**AM Peak**	**PM Peak**
1. Boulevard at Atlanta Avenue • Eastbound Approach • Westbound Approach • Northbound Approach • Southbound Approach		**Signal**	**Overall** D E B C	**D**	**C (26.3)** D (41.9) E (68.7) B (19.9) C (20.2)	**D (124.7)** D (50.2) D (49.2) B (14.1) D (44.8)
2. Boulevard at Englewood Avenue • Eastbound Approach • Northbound Approach • Southbound Approach		**Signal**	**Overall** D B B	**D**	**B (15.9)** D (42.4) B (10.8) B (12.4)	**C (31.0)** C (33.9) B (14.9) D (40.7)

Based upon the improvements recommended above, during the SYNCHRO level-of-service analyses of the above Projected 2028 Build conditions, all of the studied intersections operate at an acceptable overall level-of-service (LOS) standard of “D” or better during the AM and/or PM peak hours.

7.0 Site Ingress and Egress Analysis

Vehicular traffic access to the Englewood South development is proposed at the following locations:

The Englewood South development is proposing six (6) access points for the project site, as shown on the Site Plan – Appendix B.

- Three (3) proposed full movement entrances along Englewood Avenue.
  - Driveway # 1 located just east of Grant Street
  - Driveway # 2 (Development Main Driveway) centrally located along Englewood Avenue.
  - Driveway # 3 located just west of Boulevard.
- One (1) proposed connection to Climax Street.
- One (1) proposed connection to Dalton Street.
- One (1) proposed connection to Empire Development

The above access points connects to private roadways for pedestrians and motorists and reduce the project impact to any single roadway.

Capacity analyses were performed for the proposed site driveway intersections using SYNCHRO 11.0. The results of the capacity

The location of the above-mentioned driveways and access points can be found on the enclosed Site Plan layout.

8.0 Identification of Programmed Projects

A thorough review of the Atlanta Regional Commission's (ARC) Transportation Improvement Program, the City of Atlanta programmed projects, GDOT's construction work programs and the Regional Transportation Plan, the following projects are programmed or planned to be completed within the vicinity of the proposed Englewood South development. The identified projects are listed in Table 11 below. Fact sheets that were available can be found in Appendix E.

Table 11: Programmed Projects			
Project #	**Year**	**Project ID**	**Project Description**
1	TBD	0011115	CS 520 / Boulevard Drive from SR 8 to SR 42 SPUR - TIA
2	2022	0009397	BeltLine Corridor from Glenwood Avenue to University Avenue
3	TBD	770408	Communication Conduit Install along RR FM 1-75 to United Avenue
4	2030	0016953	Summerhill BRT Corridor from Georgia State MARTA Station to Atlanta BeltLine (South of Weyman Avenue)

9.0 Compliance with Comprehensive Plan Analysis

Englewood South development is planned and will be constructed at a mixed-used development with office, retail, multi-family residential, multi-family (senior housing) residential, single family residential and townhomes residential. The proposed Englewood South development is located within the jurisdiction of the City of Atlanta, Georgia and complies with the cities' Comprehensive Plan.

Conclusions and Recommendations

In conclusion and as previously stated, this Transportation Analysis report presents the analysis of the anticipated traffic impacts of the proposed Englewood South development located in the City of Atlanta, Georgia. The Englewood South development site is located and bordered by Englewood Avenue, Boulevard, Hill Street and McDonough Boulevard (SR 42). The development site is approximately 30.43 acres. The proposed Englewood South development will consist of residential, retail, office and restaurant land uses.

This Transportation Analysis report collected data, performed modeling and analysis to identify improvements that are proposed that would significantly improve the traffic conditions along Boulevard, Atlanta Avenue and Englewood Avenue.

The following identified improvements will require coordination with and cooperation of the City of Atlanta and property owners. These recommendations are presented as standard improvements and described in the 2028 Build scenario.

Capacity analyses were performed throughout the study network as defined in the GRTA Letter of Understanding for the Existing 2021 conditions, the Projected 2028 No-Build conditions, the Projected 2028 Build conditions and the Projected 2028 Build Alternative conditions.

- Existing 2021 conditions represent traffic volumes that were collected from the Chosewood Development (DRI - # 3206), completed November 2020. The counts collected from the Chosewood Development were grown at 1.7% for one (1) year to account for background traffic growth to 2021. Additional traffic counts were collected in April 2021 for intersections not included in the Chosewood Development DRI.

- Projected 2028 No-Build conditions represent the Existing 2021 traffic volumes grown for seven (7) years at 3.5% for roadways and intersections along and above Englewood Avenue and at 2.0% for roadways and intersections south of Englewood Avenue, plus the addition of project trips anticipated to be generated by the Chosewood development (DRI - # 3206).

- Projected 2028 Build conditions represent the Existing 2021 traffic volumes grown for seven (7) years at 3.5% for roadways and intersections along and above Englewood Avenue and at 2.0% for roadways and intersections south of Englewood Avenue, plus the addition of project trips anticipated to be generated

by the Chosewood development (DRI - # 3206), plus the addition of the project trips that are anticipated to be generated by the Englewood South development.

- Projected 2028 Build Alternative conditions represent the Project 2028 Build conditions, plus the construction of improvements.

Based on the Existing 2021 conditions, all of the study intersections operate at an acceptable overall level-of-service "D" or better during the AM and PM peak hours.

Based on the Projected 2028 No-Build conditions, during the SYNCHRO level of service analyses of the above Projected 2028 No-Build conditions, all of the studied intersections operate at an acceptable overall level-of-service (LOS) standard of "D" or better during the AM and/or PM peak hours.

Based on the Projected 2028 Build conditions, two (2) signalized study intersections are projected to operate below the acceptable overall level-of-service standard during at least one peak period.

Several alternatives were developed and modeled to determine which improvement would improve traffic conditions. Based on the Projected 2028 Build conditions, the following improvements are recommended:

- Intersection # 1 – Boulevard at Atlanta Avenue
  - Construct one (1) southbound right-turn lane along Boulevard.
  - Construct one (1) eastbound left-turn lane along Atlanta Avenue.
  - Construct one (1) westbound left-turn lane along Atlanta Avenue.
  - Install protected / permissive traffic signal phasing for eastbound left turn.
  - Install protected / permissive traffic signal phasing for westbound left turn.

- Intersection # 2 – Boulevard at Englewood Avenue
  - Construct one (1) southbound right-turn lane along Boulevard.

- Intersections # 3 – Driveway # 1 at Englewood Avenue
  - Construct one (1) westbound left-turn lane along Englewood Avenue.
  - Construct one (1) westbound lane along Englewood Avenue.
  - Construct one (1) eastbound right-turn lane along Englewood Avenue.
  - Construct one (1) eastbound lane along Englewood Avenue.
  - Construct one (1) shared northbound left and right driveway lane.

- Intersections # 4 – Driveway # 2 at Englewood Avenue

  - Construct one (1) westbound left-turn lane along Englewood Avenue.
  - Construct one (1) westbound lane along Englewood Avenue.
  - Construct one (1) eastbound right-turn lane along Englewood Avenue.
  - Construct one (1) eastbound lane along Englewood Avenue.
  - Construct one (1) shared northbound left and right driveway lane.

- Intersections # 5 – Driveway #3 at Englewood Avenue
  - Construct one (1) westbound left-turn lane along Englewood Avenue.
  - Construct one (1) westbound lane along Englewood Avenue.
  - Construct one (1) eastbound right-turn lane along Englewood Avenue.
  - Construct one (1) eastbound lane along Englewood Avenue.
  - Construct one (1) shared northbound left and right driveway lane.

Based on the Projected 2028 Build conditions with the above improvement included, all of the study intersections operate at an acceptable overall level-of-service “D” or better during the AM and PM peak hours.

Englewood South
Development of Regional Impact
DRI # 3299

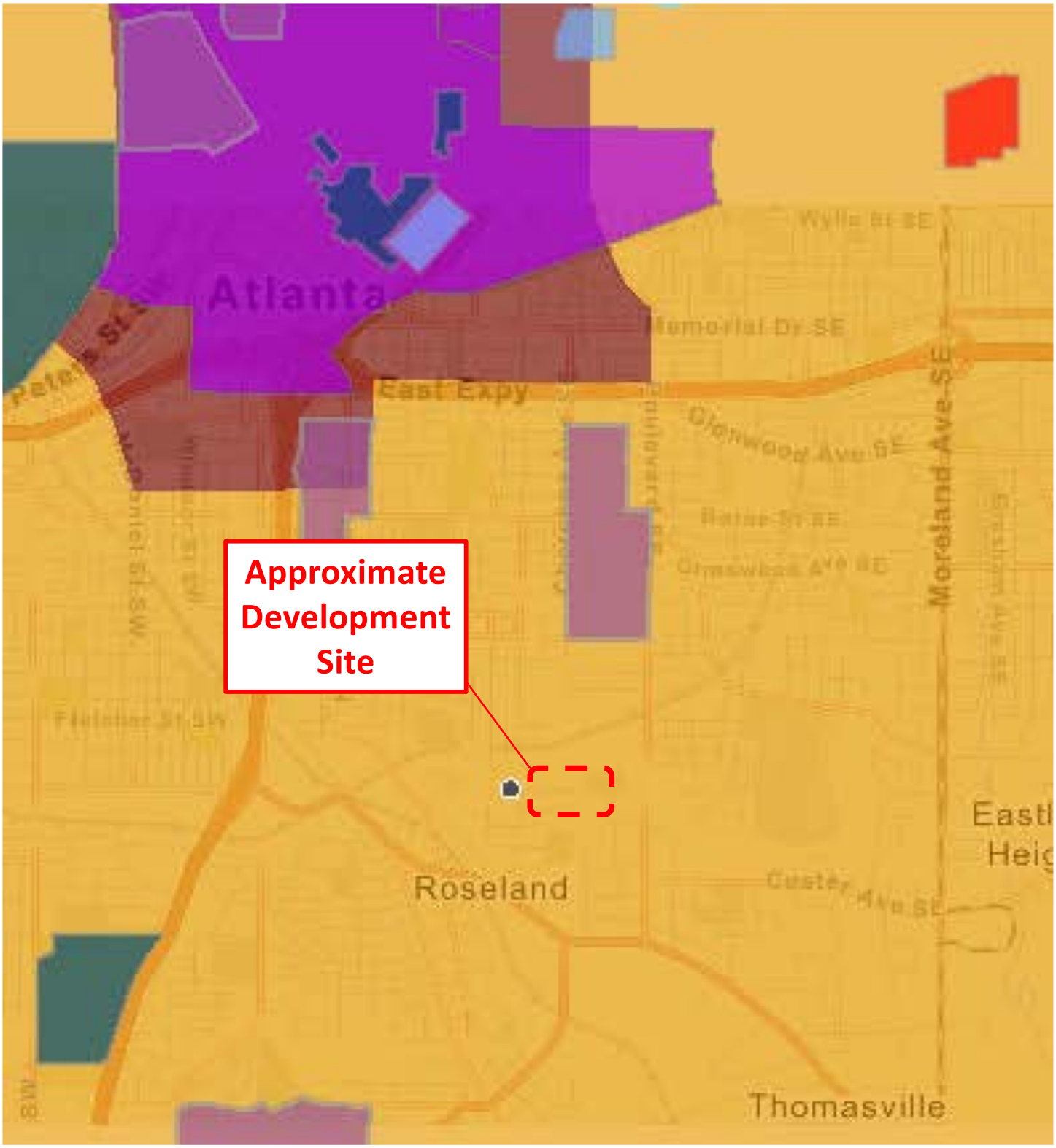
APPENDIX A

LAND USE AND ZONING MAPS

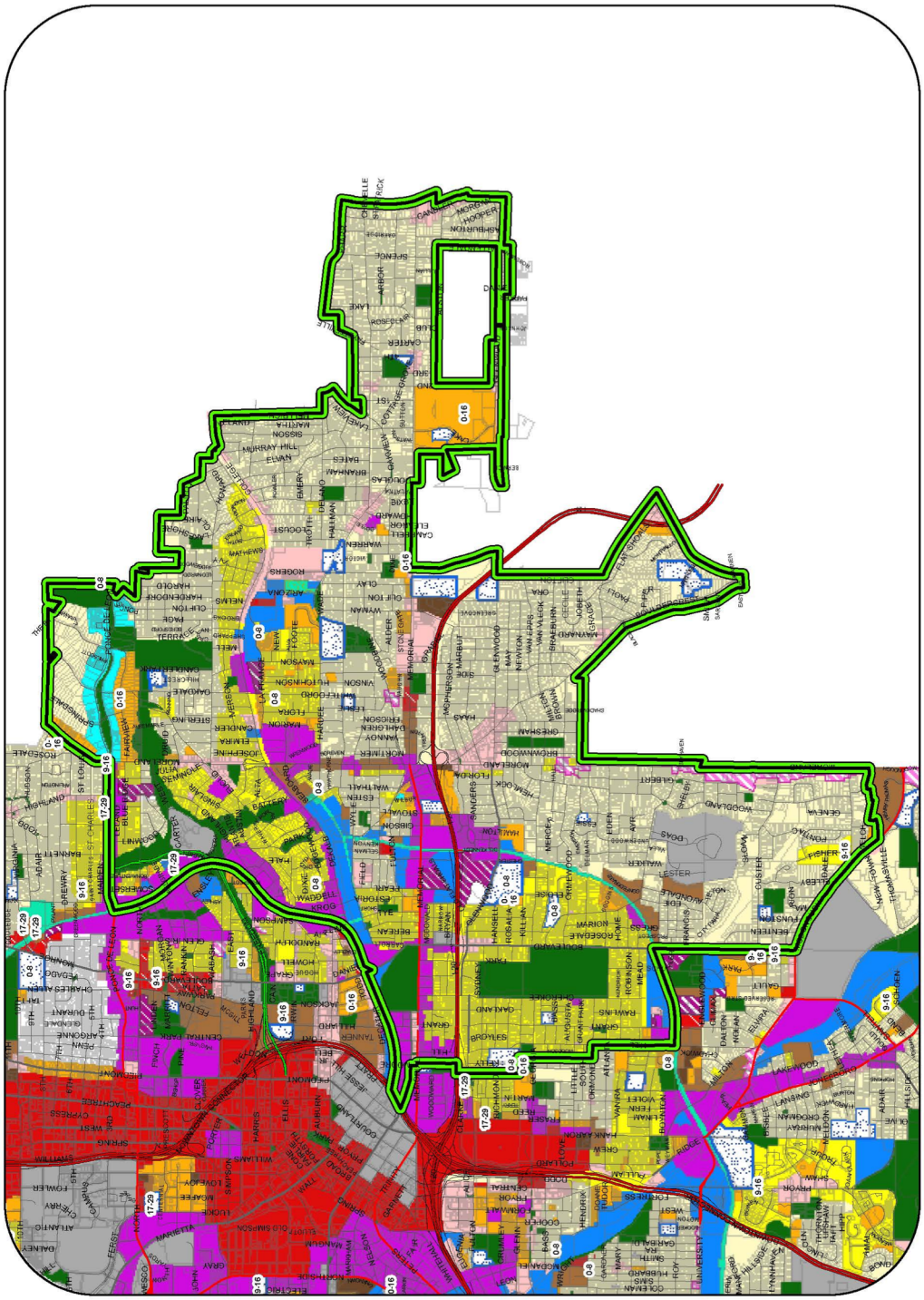
Prepared by:

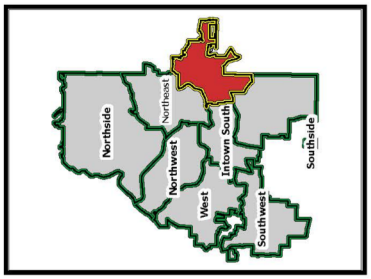
GRICE CONSULTING GROUP

Terminus Building 100
3280 Peachtree Road, NE
7th Floor
Atlanta, Georgia 30305



GRICE CONSULTING GROUP	**Englewood South DRI # 3299 Transportation Analysis**	**ARC Unified Growth Policy Map**	**Appendix** **A - 1**



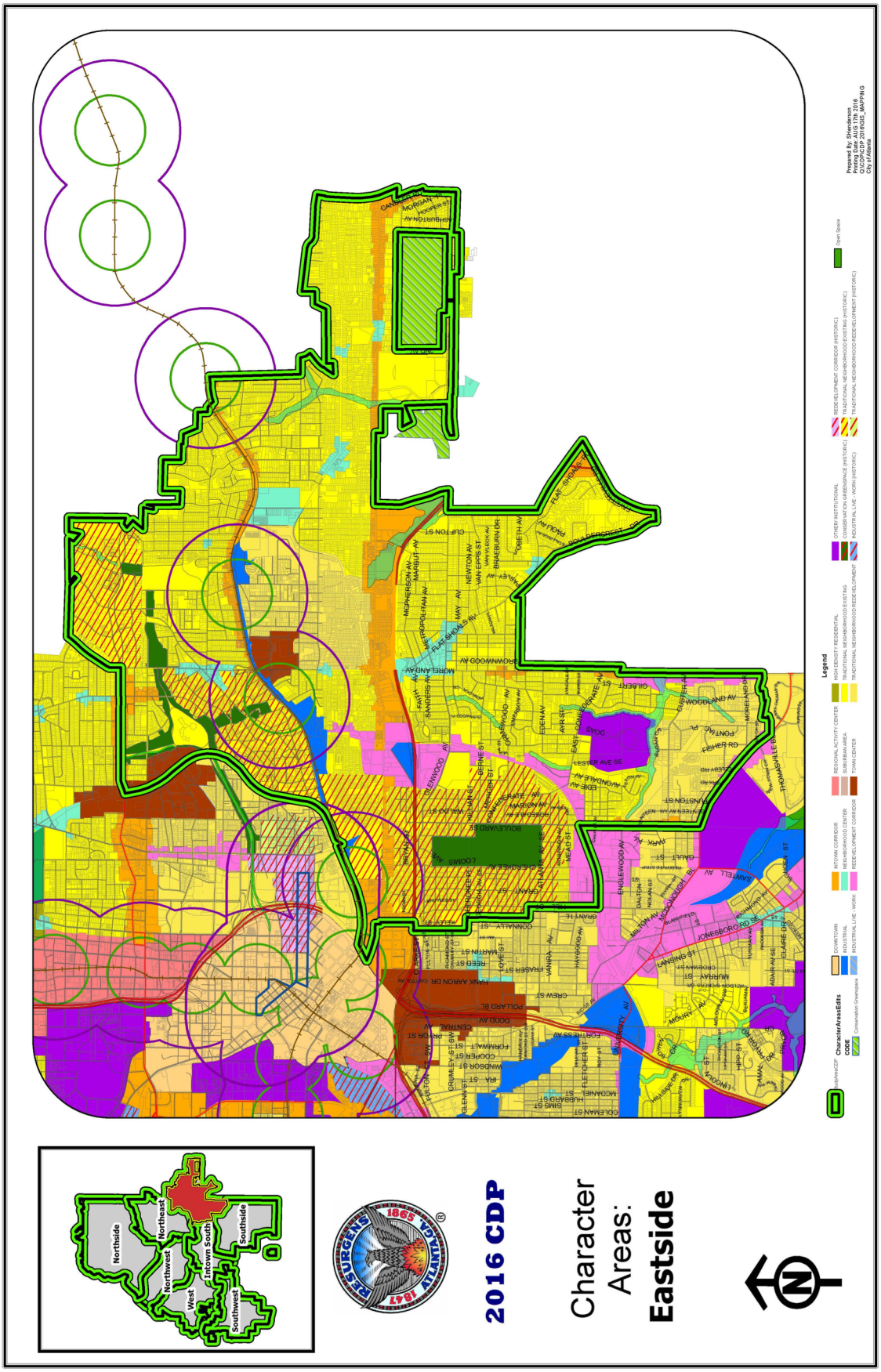


Study Areas:

Land Use

Eastside

GRICE CONSULTING GROUP	**Englewood South DRI # 3299 Transportation Analysis**	**Future Land Use Map**	**Appendix** **A - 2**



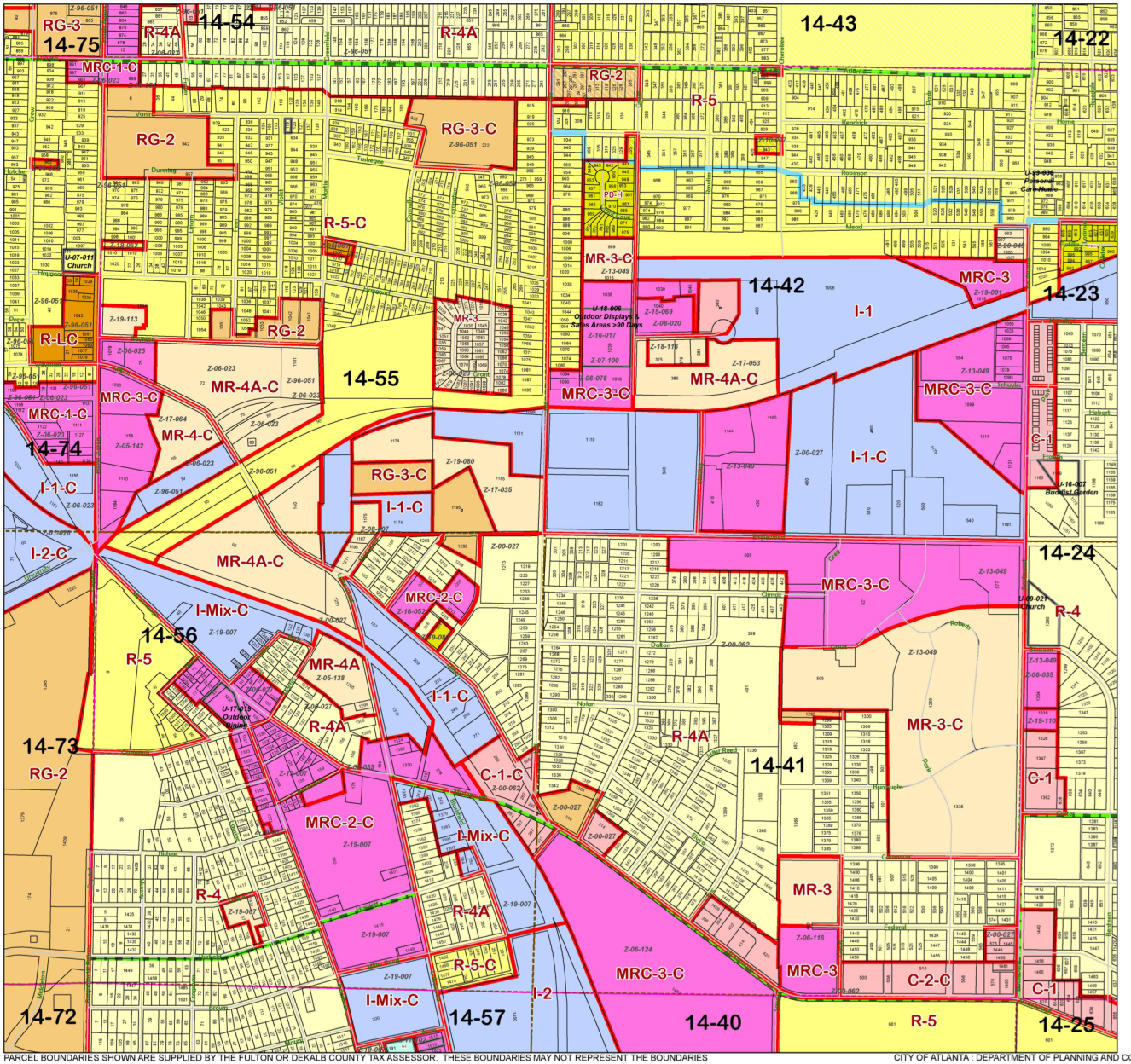
GRICE CONSULTING GROUP	**Englewood South DRI # 3299 Transportation Analysis**	**Character Area Map (Eastside)**	**Appendix** **A - 3**

GRICE CONSULTING GROUP

Englewood South
DRI # 3299
Transportation Analysis

Existing Zoning Map

Appendix
A - 4



SHEET NO. 14-041

ZONING ORDINANCE CITY OF ATLANTA, GEORGIA OFFICIAL ZONING MAP

SHEET 13 OF 136 SHEETS

ORDINANCE Z-78-5

LAND LOTS _____

_____ DISTRICT

_____ COUNTY

CERTIFICATION

THIS SHEET 13 OF 136 SHEETS, IS HEREBY CERTIFIED AS INCLUDED IN THE OFFICIAL ZONING MAPS, ON FILE IN THE DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT, BUREAU OF PLANNING, AND FORMING A PART OF THE CITY OF ATLANTA ZONING ORDINANCE ADOPTED BY CITY COUNCIL ON DECEMBER 15, 1980 AND APPROVED BY THE MAYOR ON DECEMBER 19, 1980, AS AMENDED

DIRECTOR, BUREAU OF PLANNING CITY OF ATLANTA, GEORGIA _____ DATE

MUNICIPAL CLERK, CMC CITY OF ATLANTA, GA _____ DATE

Legend

- Tax Parcels
- Zoning District Outline

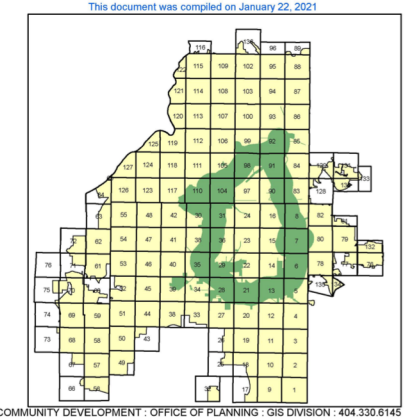
OVERLAY DISTRICTS

- Beltline
- Marietta Street Overlay
- Buckhead Parking Overlay
- Gulch Sign Overlay;
- Arts and Entertainment Sign
- SPI Sign Overlay;
- Fort McPherson Sign Overlay
- All Other;
- Human Service Facilities
- Special Use Permits
- LBS/HBS

Base Zoning

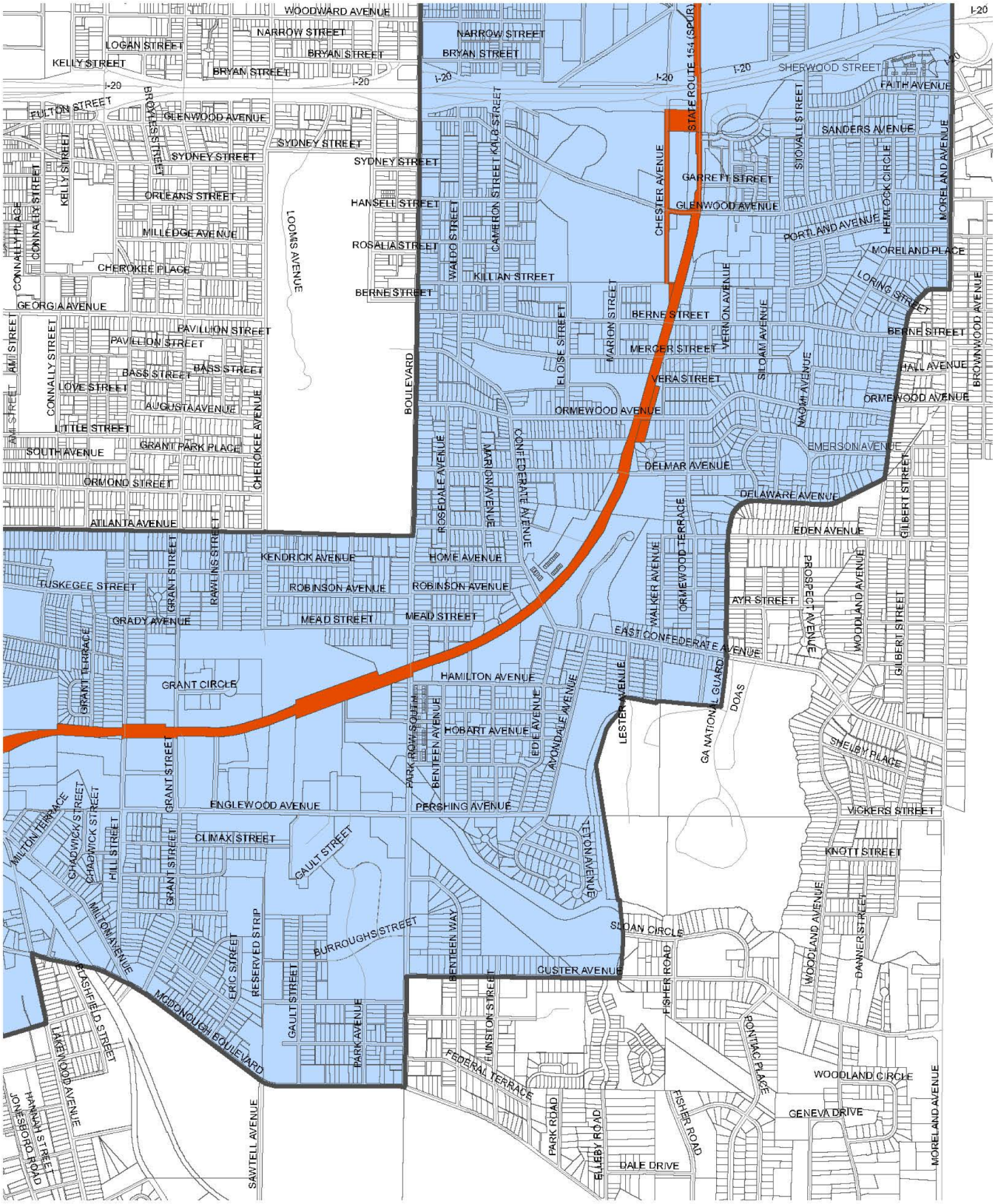
- SPI - Special Public Interest;
- Industrial
- Historic & Cultural;
- Live-Work
- QOL Multi-Family;
- QOL Mixed Use;
- Commercial
- Neighborhood Commercial;
- Residential - Single Family
- Office Institutional
- Planned Development
- Residential - Duplex
- Residential - Multi-Family
- Residential - Limited Commercial

This document was compiled on January 22, 2021



PARCEL BOUNDARIES SHOWN ARE SUPPLIED BY THE FULTON OR DEKALB COUNTY TAX ASSESSOR. THESE BOUNDARIES MAY NOT REPRESENT THE BOUNDARIES RECOGNIZED BY THE CITY OF ATLANTA FOR THE PURPOSES OF ISSUING BUILDING PERMITS.

CITY OF ATLANTA : DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT : OFFICE OF PLANNING : GIS DIVISION : 404.330.6145
1 INCH = 400 FEET



MAP 4 : Beltline Overlay District Boundaries

CITY OF ATLANTA : DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

ATTACHMENT B

13 FEB 2007

GRICE CONSULTING GROUP	**Englewood South DRI # 3299 Transportation Analysis**	**Beltline Overlay District**	**Appendix** **A - 5**

Englewood South
Development of Regional Impact
DRI # 3299

APPENDIX B

PROPOSED SITE PLAN

Prepared by:

GRICE CONSULTING GROUP

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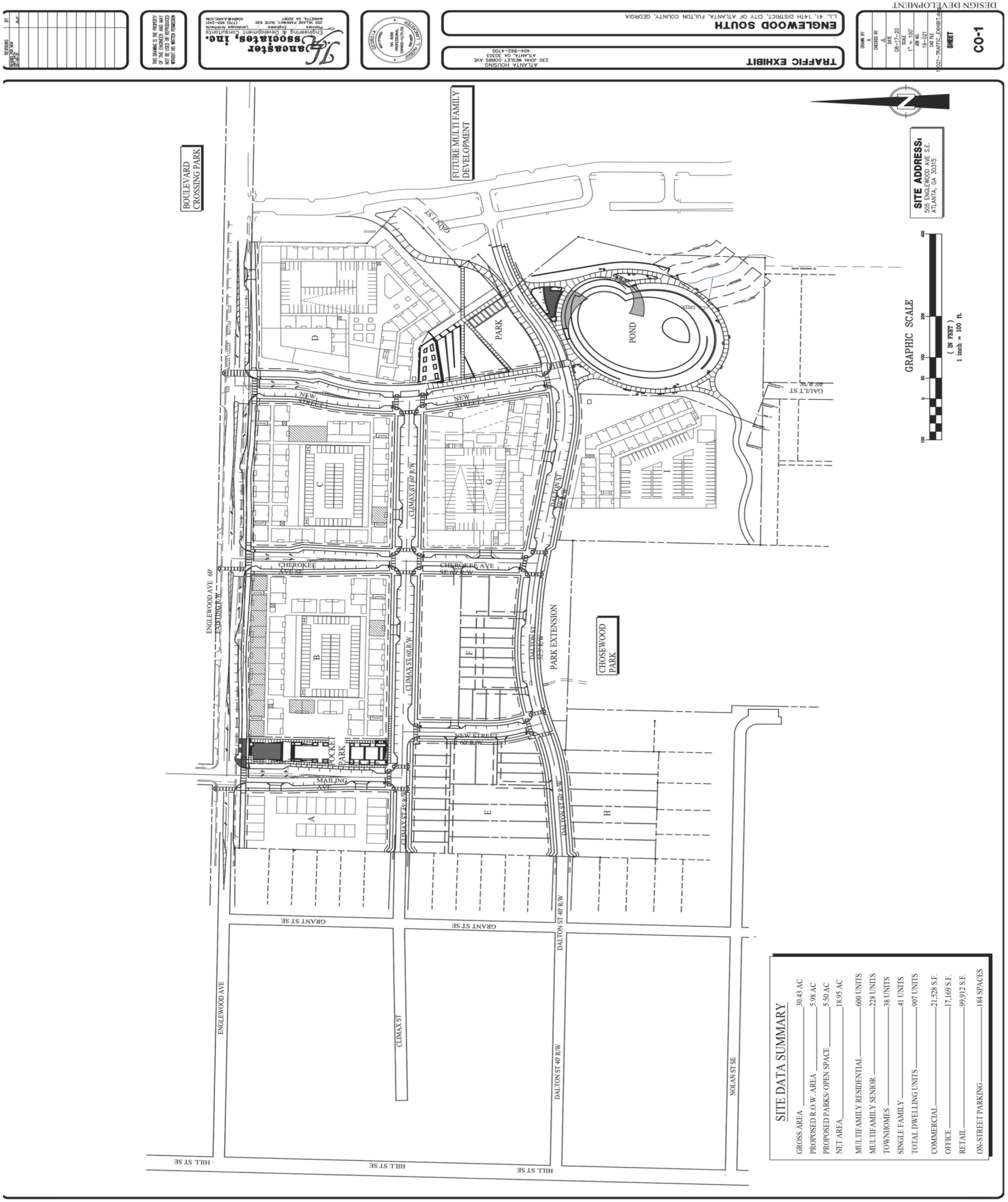
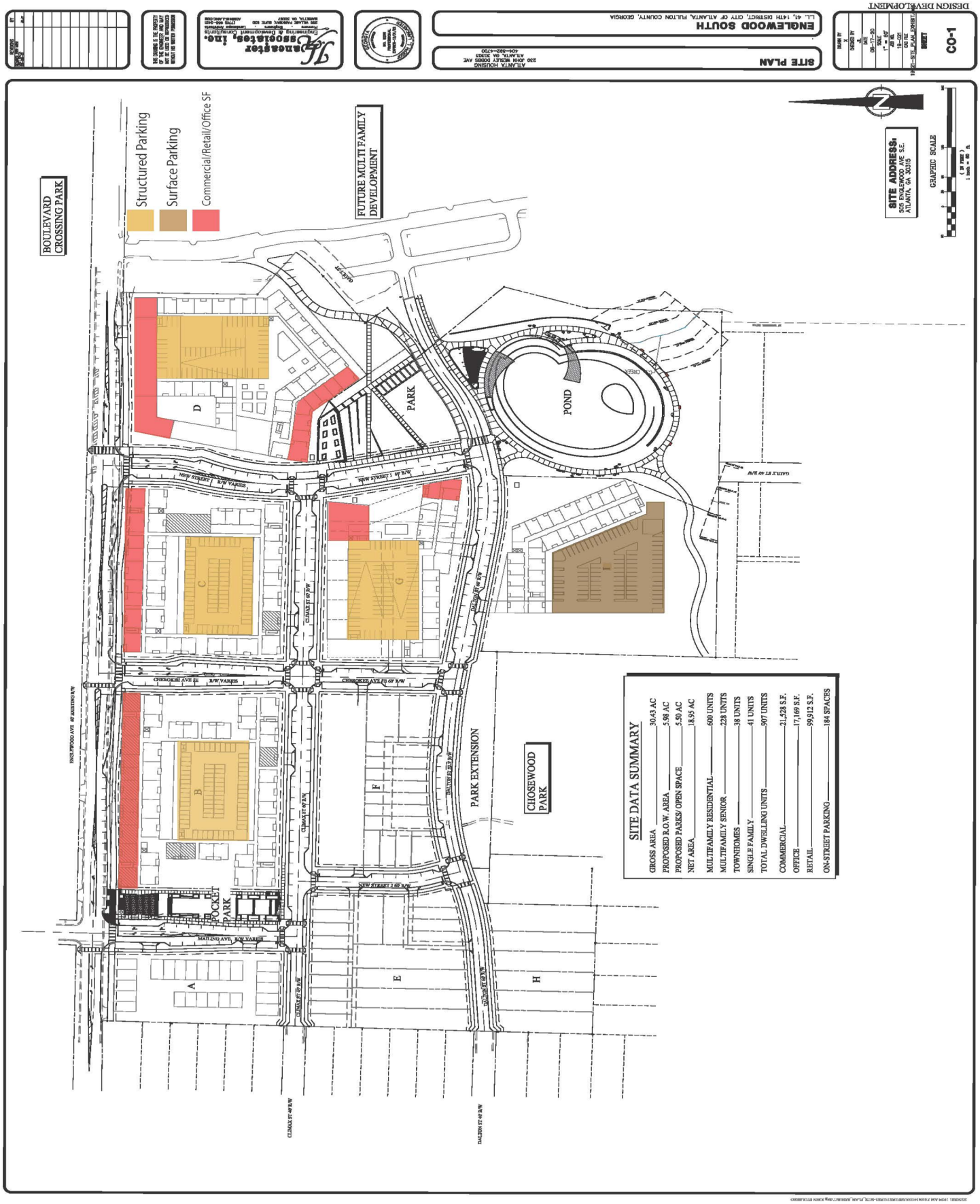
7th Floor
Atlanta, Georgia 30305



GRICE CONSULTING GROUP	**Englewood South DRI # 3299 Transportation Analysis**	**Site Plan**	**Appendix B - 1**



GRICE CONSULTING GROUP	**Englewood South DRI # 3299 Transportation Analysis**	**Site Phasing Plan**	**Appendix B - 2**

GRICE CONSULTING GROUP	**Englewood South DRI # ??? Transportation Analysis**	**Site Phasing Plan**	**Appendix B - 3**

Transportation Analysis

Englewood South
Development of Regional Impact
DRI # 3299

APPENDIX C

TRIP GENERATION ANALYSIS

Prepared by:

GRICE CONSULTING GROUP

Terminus Building 100
3280 Peachtree Road, NE
7th Floor
Atlanta, Georgia 30305

Englewood South Development															
City of Atlanta, Georgia															
Trip Generation Analysis (Ref. 10th Edition / 3rd Edition Handbook)															
Prepared by: Grice Consulting Group															
Land Use							**Density**		**Daily**	**AM PEAK HOUR**			**PM PEAK HOUR**		
									Trips	**Total**	**In**	**Out**	**Total**	**In**	**Out**
Proposed Development Traffic															
	221	Multi-Family (Mid Rise)					600	Dwelling Units	3,264	216	56	160	264	161	103
	252	Multi-Family (Senior Living)					228	Dwelling Units	844	46	16	30	59	32	27
	210	Single-Family					79	Dwelling Units	746	58	14	44	78	49	29
	712	Office					17,169	SQ FT	168	20	17	3	20	3	17
	820	Retail					121,400	SQ FT	4,583	114	71	43	463	222	241
	Gross Trips								**9,605**	**454**	**174**	**280**	**884**	**467**	**417**
	Residential Trips								4,854	320	86	234	401	242	159
		Mixed-use Reductions							-42	-6	0	-6	-8	-6	-2
		Alternative Mode Reductions (20%)							-962	-63	-17	-46	-79	-47	-31
		Adjusted Residential Trips							3,850	251	69	182	314	189	126
	Retail Trips								4,583	114	71	43	463	222	241
		Mixed-use Reductions							-31	0	0	0	-12	-6	-6
		Alternative Mode Reductions (20%)							-910	-23	-14	-9	-90	-43	-47
		Pass By Reductions - 34% (Based on ITE Rates)							-1238	-31	-19	-12	-123	-59	-64
		Adjusted Retail Trips							2,403	60	37	23	238	114	124
	Office Trips								358	42	35	7	54	17	37
		Mixed-use Reductions							-32	-7	-5	-2	-10	-5	-5
		Alternative Mode Reductions (20%)							-65	-7	-6	-1	-9	-2	-6
		Pass By Reductions - 34% (Based on ITE Rates)							-89	-10	-8	-1	-12	-3	-9
		Adjusted Office Trips							172	18	16	3	23	6	17
	Mixed-use Reductions - TOTAL								-105	-13	-5	-8	-30	-17	-13
	Alternative Mode Reduction - TOTAL								-1938	-93	-37	-55	-178	-93	-85
	Pass-by Reductions - TOTAL								-1327	-41	-27	-13	-135	-62	-73
	TOTAL DEVELOPMENT TRIPS without REDUCTIONS								**9,795**	**476**	**192**	**284**	**918**	**481**	**437**
	TOTAL DEVELOPMENT TRIPS with REDUCTIONS								**6,425**	**330**	**122**	**208**	**576**	**309**	**267**

Transportation Analysis

Englewood South
Development of Regional Impact
DRI # 3299

APPENDIX D

INTERSECTION VOLUME WORKSHEETS

Prepared by:

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Englewood South Development
Atlanta Housing Authority

Intersection Traffic Volume Worksheet

GRICE CONSULTING GROUP

Intersection: Hill Street at Atlanta Avenue

AM PEAK	Hill Street Northbound				Hill Street Southbound				Atlanta Avenue Eastbound				Atlanta Avenue Westbound			
Traffic Volume Period	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	0	31	18	49	9	26	0	35	1	28	23	52	8	0	1	9
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	0	32	18	50	9	26	0	36	1	28	23	53	8	0	1	9
Growth Factor (%)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	
Future 2028 No-Build Volumes	0	40	23	63	12	34	0	45	1	36	30	67	10	0	1	12
Development New Trips	0	43	0	43	0	22	0	22	0	0	0	0	0	19	6	25
Choosewood Dev. Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2028 Build Volumes	0	83	23	106	12	56	0	67	1	36	30	67	10	19	7	37

PM PEAK	Hill Street Northbound				Hill Street Southbound				Atlanta Avenue Eastbound				Atlanta Avenue Westbound			
Traffic Volume Period	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	0	47	31	78	15	78	0	93	5	7	42	54	21	0	14	35
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	0	48	32	79	15	79	0	95	5	7	43	55	21	0	14	36
Growth Factor (%)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	
Future 2028 No-Build Volumes	0	61	40	101	19	101	0	120	6	9	54	70	27	0	18	45
Development New Trips	0	90	0	90	0	53	0	53	0	0	0	0	0	40	8	48
Choosewood Dev. Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2028 Build Volumes	0	151	40	191	19	154	0	173	6	9	54	70	27	40	26	93

Englewood South Development
Atlanta Housing Authority

Intersection Traffic Volume Worksheet

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Intersection: Boulevard at Atlanta Avenue

AM PEAK	Boulevard Northbound				Boulevard Southbound				Atlanta Avenue Eastbound				Atlanta Avenue Westbound			
Traffic Volume Period	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	130	464	3	597	6	207	164	377	75	56	20	151	5	105	12	122
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	132	472	3	607	6	211	167	383	76	57	20	154	5	107	12	124
Growth Factor (%)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	
Future 2028 No-Build Volumes	168	600	4	772	8	268	212	488	97	72	26	195	6	136	16	158
Development New Trips	19	69	0	88	0	53	0	53	0	0	21	21	0	0	0	0
Choosewood Dev. Volumes	14	46	9	69	0	38	0	38	0	0	11	11	8	0	0	8
Future 2028 Build Volumes	201	715	13	929	8	359	212	579	97	72	58	227	14	136	16	166

PM PEAK	Boulevard Northbound				Boulevard Southbound				Atlanta Avenue Eastbound				Atlanta Avenue Westbound			
Traffic Volume Period	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	25	334	7	366	6	414	109	529	134	78	66	278	2	31	3	36
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	25	340	7	372	6	421	111	538	136	79	67	283	2	32	3	37
Growth Factor (%)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	
Future 2028 No-Build Volumes	32	432	9	474	8	536	141	684	173	101	85	360	3	40	4	47
Development New Trips	40	143	0	183	0	135	0	135	0	0	52	52	0	0	0	0
Choosewood Dev. Volumes	14	46	9	69	0	71	0	71	0	0	21	21	14	0	0	14
Future 2028 Build Volumes	86	621	18	726	8	742	141	890	173	101	158	433	17	40	4	61

Englewood South Development
Atlanta Housing Authority

Intersection Traffic Volume Worksheet

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Intersection: Hill Street at Englewood

AM PEAK	Hill Street Northbound				Hill Street Southbound				Englewood Avenue Eastbound				Englewood Avenue Westbound			
Traffic Volume Period	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	0	76	18	94	67	117	0	184	0	0	0	0	15	0	42	57
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	0	77	18	96	68	119	0	187	0	0	0	0	15	0	43	58
Growth Factor (%)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	
Future 2028 No-Build Volumes	0	98	23	122	87	151	0	238	0	0	0	0	19	0	54	74
Development New Trips	0	76	31	107	22	0	0	22	0	0	0	0	15	0	43	58
Choosewood Dev. Volumes	0	0	10	10	19	0	0	19	0	0	0	0	21	0	41	62
Future 2028 Build Volumes	0	174	64	239	128	151	0	279	0	0	0	0	55	0	138	194

PM PEAK	Hill Street Northbound				Hill Street Southbound				Englewood Avenue Eastbound				Englewood Avenue Westbound			
Traffic Volume Period	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	0	52	10	62	59	85	0	144	0	0	0	0	30	0	47	77
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	0	53	10	63	60	86	0	146	0	0	0	0	31	0	48	78
Growth Factor (%)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	
Future 2028 No-Build Volumes	0	67	13	80	76	110	0	186	0	0	0	0	39	0	61	100
Development New Trips	0	52	81	133	53	0	0	53	0	0	0	0	31	0	90	121
Choosewood Dev. Volumes	0	0	18	18	36	0	0	36	0	0	0	0	12	0	23	35
Future 2028 Build Volumes	0	119	112	231	165	110	0	275	0	0	0	0	82	0	174	256

Englewood South Development
Atlanta Housing Authority

Intersection Traffic Volume Worksheet

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Intersection: Grant Street at Englewood Avenu

AM PEAK	Grant Street Northbound				Grant Street Southbound				Englewood Avenue Eastbound				Englewood Avenue Westbound			
Traffic Volume Period	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	4	31	2	37	2	23	10	35	42	31	3	76	3	31	45	79
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	4	32	2	38	2	23	10	36	43	32	3	77	3	32	46	80
Growth Factor (%)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	
Future 2028 No-Build Volumes	5	40	3	48	3	30	13	45	54	40	4	98	4	40	58	102
Development New Trips	0	0	0	0	0	0	0	0	0	53	0	53	5	58	0	63
Choosewood Dev. Volumes	0	0	10	10	0	0	0	0	0	29	0	29	21	62	0	83
Future 2028 Build Volumes	5	40	13	58	3	30	13	45	54	122	4	180	30	160	58	248

PM PEAK	Grant Street Northbound				Grant Street Southbound				Englewood Avenue Eastbound				Englewood Avenue Westbound			
Traffic Volume Period	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	5	1	17	23	21	21	9	51	8	57	4	69	10	64	10	84
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	5	1	17	23	21	21	9	52	8	58	4	70	10	65	10	85
Growth Factor (%)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	
Future 2028 No-Build Volumes	6	1	22	30	27	27	12	66	10	74	5	89	13	83	13	109
Development New Trips	0	52	81	133	53	0	0	53	0	0	0	0	31	0	90	121
Choosewood Dev. Volumes	0	0	18	18	0	0	0	0	0	54	0	54	12	35	0	47
Future 2028 Build Volumes	6	53	121	181	80	27	12	119	10	128	5	143	56	118	103	277

Englewood South Development
Atlanta Housing Authority

Intersection Traffic Volume Worksheet

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Intersection: Boulevard at Englewood Avenue

AM PEAK	Boulevard Northbound				Boulevard Southbound				Englewood Avenue Eastbound				Englewood Avenue Westbound			
Traffic Volume Period	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	98	672	0	770	0	225	50	275	45	0	38	83	0	0	0	0
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	100	683	0	783	0	229	51	280	46	0	39	84	0	0	0	0
Growth Factor (%)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	
Future 2028 No-Build Volumes	127	870	0	996	0	291	65	356	58	0	49	107	0	0	0	0
Development New Trips	74	0	0	74	0	0	73	73	88	0	88	176	0	0	0	0
Choosewood Dev. Volumes	21	128	0	149	0	59	8	67	17	0	0	17	0	0	0	0
Future 2028 Build Volumes	222	998	0	1219	0	350	146	496	163	0	137	300	0	0	0	0

PM PEAK	Boulevard Northbound				Boulevard Southbound				Englewood Avenue Eastbound				Englewood Avenue Westbound			
Traffic Volume Period	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	39	269	0	308	0	452	42	494	36	0	89	125	0	0	0	0
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	40	274	0	313	0	460	43	502	37	0	91	127	0	0	0	0
Growth Factor (%)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	
Future 2028 No-Build Volumes	50	348	0	399	0	585	54	639	47	0	115	162	0	0	0	0
Development New Trips	187	0	0	187	0	0	187	187	183	0	183	366	0	0	0	0
Choosewood Dev. Volumes	12	71	0	83	0	111	14	125	9	0	0	9	0	0	0	0
Future 2028 Build Volumes	249	419	0	669	0	696	255	951	239	0	298	537	0	0	0	0

Englewood South Development
Atlanta Housing Authority

Intersection Traffic Volume Worksheet

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Intersection: Boulevard at Custer Avenue

AM PEAK	Boulevard Northbound				Boulevard Southbound				Eastbound				Custer Avenue Westbound			
Traffic Volume Period	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	0	309	140	449	55	186	0	241	0	0	0	0	182	0	214	396
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	0	314	142	457	56	189	0	245	0	0	0	0	185	0	218	403
Growth Factor (%)	2	2	2		2	2	2		2	2	2		2	2	2	
Future 2028 No-Build Volumes	0	361	164	525	64	217	0	282	0	0	0	0	213	0	250	463
Development New Trips	0	53	0	53	20	68	0	88	0	0	0	0	0	0	21	21
Choosewood Dev. Volumes	25	10	0	35	0	33	18	51	81	62	41	184	0	29	0	29
Future 2028 Build Volumes	25	424	164	613	84	318	18	421	81	62	41	184	213	29	271	513

PM PEAK	Boulevard Northbound				Boulevard Southbound				Eastbound				Custer Avenue Westbound			
Traffic Volume Period	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	0	222	254	476	122	332	0	454	0	0	0	0	139	0	75	214
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	0	226	258	484	124	338	0	462	0	0	0	0	141	0	76	218
Growth Factor (%)	2	2	2		2	2	2		2	2	2		2	2	2	
Future 2028 No-Build Volumes	0	259	297	556	143	388	0	530	0	0	0	0	162	0	88	250
Development New Trips	0	134	0	134	42	141	0	183	0	0	0	0	0	0	53	53
Choosewood Dev. Volumes	46	18	0	64	0	18	34	52	45	35	23	103	0	54	0	54
Future 2028 Build Volumes	46	411	297	754	185	547	34	765	45	35	23	103	162	54	141	357

Englewood South Development
Atlanta Housing Authority

Intersection Traffic Volume Worksheet

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Intersection: Boulevard at McDonough Blvd.

AM PEAK	Driveway Northbound				Boulevard Southbound				McDonough Boulevard Eastbound				McDonough Boulevard Westbound			
Traffic Volume Period	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	8	2	5	15	77	7	320	404	257	161	15	433	8	503	72	583
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	8	2	5	15	78	7	325	411	261	164	15	440	8	512	73	593
Growth Factor (%)	2	2	2		2	2	2		2	2	2		2	2	2	
Future 2028 No-Build Volumes	9	2	6	18	90	8	374	472	300	188	18	506	9	588	84	681
Development New Trips	0	0	0	0	13	0	55	68	32	0	0	32	0	0	21	21
Choosewood Dev. Volumes	0	0	0	0	41	0	41	82	19	0	0	19	0	0	19	19
Future 2028 Build Volumes	9	2	6	18	144	8	470	622	351	188	18	557	9	588	124	721

PM PEAK	Driveway Northbound				Boulevard Southbound				McDonough Boulevard Eastbound				McDonough Boulevard Westbound			
Traffic Volume Period	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	4	4	6	14	233	1	220	454	366	470	0	836	1	183	92	276
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	4	4	6	14	237	1	224	462	372	478	0	850	1	186	94	281
Growth Factor (%)	2	2	2		2	2	2		2	2	2		2	2	2	
Future 2028 No-Build Volumes	5	5	7	16	272	1	257	530	428	549	0	977	1	214	107	322
Development New Trips	0	0	0	0	27	0	114	141	81	0	0	81	0	0	53	53
Choosewood Dev. Volumes	0	0	0	0	23	0	23	46	36	0	0	36	0	0	36	36
Future 2028 Build Volumes	5	5	7	16	322	1	394	717	545	549	0	1094	1	214	196	411

Englewood South Development
Atlanta Housing Authority

Intersection Traffic Volume Worksheet

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Intersection: Milton Avenue at Hill Street

AM PEAK Traffic Volume Period	Northbound				**Hill Street** Southbound				**Milton Avenue** Eastbound				**Milton Avenue** Westbound			
	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	0	0	0	0	90	0	42	132	10	15	0	25	0	32	104	136
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	0	0	0	0	92	0	43	134	10	15	0	25	0	33	106	138
Growth Factor (%)	2	2	2		2	2	2		2	2	2		2	2	2	
Future 2028 No-Build Volumes	0	0	0	0	105	0	49	154	12	18	0	29	0	37	121	159
Development New Trips	0	0	0	0	22	0	12	34	10	0	0	10	0	0	22	22
Choosewood Dev. Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2028 Build Volumes	0	0	0	0	127	0	61	188	22	18	0	39	0	37	143	181

PM PEAK Traffic Volume Period	Northbound				**Hill Street** Southbound				**Milton Avenue** Eastbound				**Milton Avenue** Westbound			
	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	0	0	0	0	80	0	35	115	12	9	0	21	0	11	62	73
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	0	0	0	0	81	0	36	117	12	9	0	21	0	11	63	74
Growth Factor (%)	2	2	2		2	2	2		2	2	2		2	2	2	
Future 2028 No-Build Volumes	0	0	0	0	93	0	41	134	14	11	0	25	0	13	72	85
Development New Trips	0	0	0	0	34	0	23	57	9	0	0	9	0	0	80	80
Choosewood Dev. Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2028 Build Volumes	0	0	0	0	127	0	64	191	23	11	0	34	0	13	152	165

Englewood South Development
Atlanta Housing Authority

Intersection Traffic Volume Worksheet

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Intersection: Milton Avenue at McDonough Blv

AM PEAK	Northbound				**Milton Avenue** Southbound				**McDonough Boulevard** Eastbound				**McDonough Boulevard** Westbound			
Traffic Volume Period	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	0	0	0	0	30	0	75	105	22	126	0	148	0	247	114	361
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	0	0	0	0	31	0	76	107	22	128	0	151	0	251	116	367
Growth Factor (%)	2	2	2		2	2	2		2	2	2		2	2	2	
Future 2028 No-Build Volumes	0	0	0	0	35	0	88	123	26	147	0	173	0	289	133	422
Development New Trips	0	0	0	0	10	0	12	22	10	0	172	182	0	55	21	76
Choosewood Dev. Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2028 Build Volumes	0	0	0	0	45	0	100	145	36	147	172	355	0	344	154	498

PM PEAK	Northbound				**Hill Street** Southbound				**Milton Avenue** Eastbound				**Milton Avenue** Westbound			
Traffic Volume Period	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	0	0	0	0	60	0	29	89	10	272	0	282	0	189	73	262
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	0	0	0	0	61	0	29	91	10	277	0	287	0	192	74	266
Growth Factor (%)	2	2	2		2	2	2		2	2	2		2	2	2	
Future 2028 No-Build Volumes	0	0	0	0	70	0	34	104	12	318	0	329	0	221	85	306
Development New Trips	0	0	0	0	20	0	14	34	10	272	0	282	0	114	53	167
Choosewood Dev. Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2028 Build Volumes	0	0	0	0	90	0	48	138	22	590	0	611	0	335	138	473

Englewood South Development
Atlanta Housing Authority

Intersection Traffic Volume Worksheet

GRICE CONSULTING GROUP

Intersection: Dev. Dwy. #1 at Englewood Ave.

AM PEAK	**Driveway #1** Northbound				Southbound				**Englewood Avenue** Eastbound				**Englewood Avenue** Westbound			
Traffic Volume Period	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Growth Factor (%)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	
Future 2028 No-Build Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Development New Trips	13	0	35	48	0	0	0	0	0	0	11	11	29	0	0	29
Choosewood Dev. Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2028 Build Volumes	13	0	35	48	0	0	0	0	0	0	11	11	29	0	0	29

PM PEAK	**Driveway #1** Northbound				Southbound				**Englewood Avenue** Eastbound				**Englewood Avenue** Westbound			
Traffic Volume Period	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Growth Factor (%)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	
Future 2028 No-Build Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Development New Trips	26	0	73	99	0	0	0	0	0	0	27	27	75	0	0	75
Choosewood Dev. Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2028 Build Volumes	26	0	73	99	0	0	0	0	0	0	27	27	75	0	0	75

Englewood South Development
Atlanta Housing Authority

Intersection Traffic Volume Worksheet

GRICE CONSULTING GROUP

Intersection: Dev. Dwy. #2 at Englewood Ave.

AM PEAK	**Driveway #2** Northbound				Southbound				**Englewood Avenue** Eastbound				**Englewood Avenue** Westbound			
Traffic Volume Period	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Growth Factor (%)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	
Future 2028 No-Build Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Development New Trips	38	0	106	144	0	0	0	0	0	0	32	32	88	0	0	88
Choosewood Dev. Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2028 Build Volumes	38	0	106	144	0	0	0	0	0	0	32	32	88	0	0	88

PM PEAK	**Driveway #2** Northbound				Southbound				**Englewood Avenue** Eastbound				**Englewood Avenue** Westbound			
Traffic Volume Period	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Growth Factor (%)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	
Future 2028 No-Build Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Development New Trips	79	0	220	299	0	0	0	0	0	0	80	80	224	0	0	224
Choosewood Dev. Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2028 Build Volumes	79	0	220	299	0	0	0	0	0	0	80	80	224	0	0	224

Englewood South Development
Atlanta Housing Authority

Intersection Traffic Volume Worksheet

GRICE CONSULTING GROUP

Intersection: Dev. Dwy. #3 at Englewood Ave.

AM PEAK	**Driveway #3** Northbound				Southbound				**Englewood Avenue** Eastbound				**Englewood Avenue** Westbound			
Traffic Volume Period	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Growth Factor (%)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	
Future 2028 No-Build Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Development New Trips	13	0	35	48	0	0	0	0	0	0	11	11	29	0	0	29
Choosewood Dev. Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2028 Build Volumes	13	0	35	48	0	0	0	0	0	0	11	11	29	0	0	29

PM PEAK	**Driveway #3** Northbound				Southbound				**Englewood Avenue** Eastbound				**Englewood Avenue** Westbound			
Traffic Volume Period	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT	L	T	R	TOT
2020 Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Growth Factor (%)	1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7		1.7	1.7	1.7	
2021 Existing / Projected Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Growth Factor (%)	3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5		3.5	3.5	3.5	
Future 2028 No-Build Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Development New Trips	26	0	73	99	0	0	0	0	0	0	27	27	75	0	0	75
Choosewood Dev. Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future 2028 Build Volumes	26	0	73	99	0	0	0	0	0	0	27	27	75	0	0	75

Transportation Analysis

Englewood South
Development of Regional Impact
DRI # 3299

APPENDIX E

PROGRAMMED PROJECT FACTS SHEETS

Prepared by:

GRICE CONSULTING GROUP

Terminus Building 100
3280 Peachtree Road, NE
7th Floor
Atlanta, Georgia 30305

AR-450C

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	BELTLINE CORRIDOR MULTI-USE TRAIL AND STREETSCAPES FROM GLENWOOD AVENUE TO UNIVERSITY AVENUE
GDOT Project No.	0009397
Federal ID No.	CSSTP000900397
Status	Programmed
Service Type	Last Mile Connectivity / Sidepaths and Trails
Sponsor	Atlanta Development Authority
Jurisdiction	City of Atlanta
Analysis Level	Exempt from Air Quality Analysis (40 CFR 93)

Existing Thru Lane	N/A	**LCI**		**Network Year**	TBD
Planned Thru Lane	N/A	**Flex**		**Corridor Length**	3.8 miles

Detailed Description and Justification

The BeltLine SE Trail, Glenwood Park to Allene Avenue is 3.8 miles long and located within the Southeast and Southwest Zones of the BeltLine project. The project would run within the CSX owned Atlanta - Westpoint railroad corridor. The project would include a concrete trail up to 16' wide and associated access stairs and ramps and amenities including seating areas and landscaping. The project would connect neighborhoods, retail areas, existing and new greenspaces, schools, MARTA bus routes and several proposed BeltLine stations.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
PE	STP - Urban (>200K) (ARC)	AUTH	2011	**$1,261,126**	~~$1,008,901~~	~~$0,000~~	~~$0,000~~	~~$252,225~~
PE	TAP - Urban (>200K) (ARC)	AUTH	2014	**$898,750**	~~$719,000~~	~~$0,000~~	~~$0,000~~	~~$179,750~~
PE	STP - Urban (>200K) (ARC)	AUTH	2016	**$925,000**	~~$740,000~~	~~$0,000~~	~~$0,000~~	~~$185,000~~
PE	Transportation Alternatives (Section 133(h)) - Urban (>200K) (ARC)	AUTH	2016	**$1,875,000**	~~$1,500,000~~	~~$0,000~~	~~$0,000~~	~~$375,000~~
PE	Transportation Alternatives (Section 133(h)) - Urban (>200K) (ARC)	AUTH	2018	**$3,000,000**	~~$2,400,000~~	~~$0,000~~	~~$0,000~~	~~$600,000~~
ROW	Local Jurisdiction/Municipality Funds	AUTH	2021	**$41,531,000**	~~$0,000~~	~~$0,000~~	~~$0,000~~	~~$41,531,000~~
UTL	Local Jurisdiction/Municipality Funds		2022	**$1,225,500**	$0,000	$0,000	$0,000	$1,225,500
CST	Local Jurisdiction/Municipality Funds		2022	**$67,186,290**	$0,000	$0,000	$0,000	$67,186,290
				$117,902,666	**$6,367,901**	**$0,000**	**$0,000**	**$111,534,765**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

Report Generated: 10/6/2020

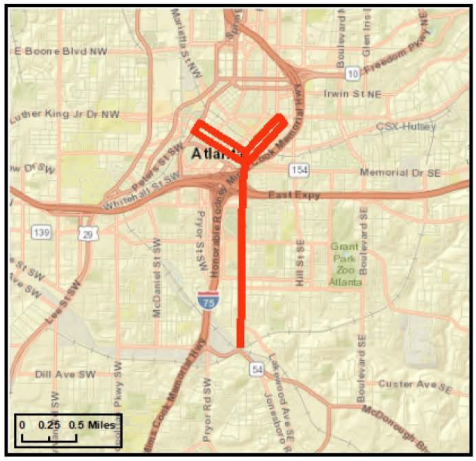
AR-454

Atlanta Region's Plan RTP (2020) PROJECT FACT SHEET

Short Title	SUMMERHILL BRT CORRIDOR FROM GEORGIA STATE MARTA STATION TO ATLANTA BELTLINE (SOUTH OF WEYMAN AVENUE)
GDOT Project No.	0016953
Federal ID No.	0016953
Status	Completed
Service Type	Transit / BRT Capital
Sponsor	MARTA
Jurisdiction	Regional - Central
Analysis Level	In the Region's Air Quality Conformity Analysis
Existing Thru Lane	N/A
Planned Thru Lane	N/A

LCI ☐

Flex ☐



Network Year 2030

Corridor Length 4.8 miles

Detailed Description and Justification

The proposed Summerhill BRT route would travel approximately 4.8 miles roundtrip serving the Atlanta BeltLine on the south and connecting to the existing MARTA Georgia State rail station in the north. The Locally Preferred Alternative (LPA) serves the Summerhill/Georgia State University development and connects to MARTA heavy rail in the downtown area, while serving several major institutions and employment centers along the route. The LPA will improve job access, university connectivity, transit travel time, and enhance regional connections with better access to MARTA rail. The LPA provides high quality transit service and access to previously underserved portions of Atlanta that have had few and low-frequency transit options. By focusing on connecting the portion of the alignment south of Memorial Drive to the existing MARTA rail infrastructure at Georgia State, a seamless transit link can be established that quickly and reliably provides access without duplicating existing rail infrastructure. Travel times will be greatly improved for residents, employees, and students in the greater Summerhill and downtown areas. The LPA focuses on providing high quality transit to connect the historically underserved Peoplestown and Summerhill communities.

Phase Status & Funding Information		Status	FISCAL YEAR	TOTAL PHASE COST	BREAKDOWN OF TOTAL PHASE COST BY FUNDING SOURCE			
					FEDERAL	STATE	BONDS	LOCAL/PRIVATE
CST	TIGER Discretionary Grants	AUTH	2020	**$48,576,000**	~~$12,629,760~~	~~$0,000~~	~~$0,000~~	~~$35,946,240~~
				$48,576,000	**$12,629,760**	**$0,000**	**$0,000**	**$35,946,240**

SCP: Scoping PE: Preliminary engineering / engineering / design / planning PE-OV: GDOT oversight services for engineering ROW: Right-of-way Acquistion
UTL: Utility relocation CST: Construction / Implementation ALL: Total estimated cost, inclusive of all phases

? For additional information about this project, please call (404) 463-3100 or email transportation@atlantaregional.com.

Report Generated: 10/6/2020

Transportation Analysis

Englewood South
Development of Regional Impact
DRI # 3299

APPENDIX F

GRTA
LETTER OF
UNDERSTANDING

Prepared by:

GRICE CONSULTING
GROUP

Terminus Building 100
3280 Peachtree Road, NE
7th Floor
Atlanta, Georgia 30305

REVISED LETTER OF UNDERSTANDING

March 22, 2021

Kenwin Hayes
Atlanta Housing Authority
230 John Wesley Dobbs Avenue, Atlanta, GA 30303

RE: **DRI Englewood South #TBD**

Dear Mr. Hayes:

The purpose of this letter is to inform you of the GRTA staff recommendation regarding your request for expedited review of DRI #TBD Englewood South Development of Regional Impact (DRI). Based on the information presented during the Pre-Review Meeting held virtually on February 16, 2021 and the post-methodology meeting packet received from Grice Consulting on March 17, 2021, the DRI will be approved for expedited review under the DRI Procedures and Principles for GRTA Development of Regional Impact Review Section 3-102.F., Livable Centers Initiative. A Trip Generation and Access Analysis are required as part of the review under these criteria. Some of the following items were discussed in the meeting and should assist you and your team in preparing the DRI Review Package. Additional information may be requested for submittal in conjunction with DRI Review Package. Please see the notes below for this basic information.

Project Overview

- This proposed project is located in the City of Atlanta, south of Englewood Drive, east of Grant St SE, west of Gault St SE, and north Choosewood Park.

- The proposed development consists of approximately 1,180 multi-family units and 20,000 SF of retail, 600 Multifamily Residential Dwelling Units, 228 Multifamily Senior Housing Dwelling Units, 41 Single Family Housing Dwelling Units, 38 Townhomes Dwelling Units, 17,169 Sq Ft Office and 121,400 Sq Ft Retail.

- The infill site site is currently served by three (3) driveways / access points. The Englewood South site plan indicates 6 (six) access points proposed for the project site:
    - Three (3) proposed full movement entrances along Englewood Avenue.
    - One (1) proposed connection to Climax Street
    - One (1) proposed connection to Dalton Street
    - One (1) proposed connection to Empire Development (Gault St SE)

- Trip generation is estimated at 9,795 gross daily trips based on the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 10th Edition, 2017.*

- The project will be built in one phase, to be completed by 2028.

Methodology for Analysis

- All intersections identified as within the study network shall be analyzed during the AM and PM peak period for (1) existing conditions, (2) future “no-build” conditions and (3) future “build” conditions. This DRI shall be reviewed in one phase completed by 2028.

- A 3.75% annual background traffic rate shall be used for all roadways on or north of Engelwood Avenue and a 2% annual background traffic rate shall be used for all roadways south of Englewood Avenue. During the COVID19 response, all counts if older than a year old, shall be grown by the background growth traffic rate annually unless otherwise specified. The trips from the adjacent DRI # 3206 Choosewood Park Development shall also be added into the no-build and build conditions.

- The transportation analysis shall utilize existing count data when available during COVID. If new counts are taken, a control count location where existing count data is available shall be used for developing traffic growth extrapolation rates. The traffic engineer shall submit the proposed growth rates to GRTA, GDOT and local government stakeholders for approval before submitting the transportation study submittal. The transportation analysis shall use the proposed trip assignment and traffic count approach outlined in the final revised methodology meeting packet unless specified otherwise in the Letter of Understanding. *Note: The Englewood DRI will utilize the traffic count approach and COVID adjustment approach of the neighboring Choosewood Park Development DRI.*

- The Level of Service (LOS) standard for all analysis shall be LOS D unless the existing LOS if F in which the LOS standard shall be LOS E. A LOS E is allowable for Boulevard SE given the planned roadway repurposing project will reduce the existing roadway's vehicle capacity.

- Default values should not be assumed in the traffic modeling. Existing conditions shall be taken into account.

- The applicant shall research TIP, STIP, RTP, and GDOT's construction work program, as well as any local government plans (SPLOST, CIP, etc.), to determine the open-to-traffic date, sponsor, cost of the project, funding source(s), for future roadway projects in the project vicinity. This information shall be included within the traffic analysis. This information shall also be included in the site plan analysis. Programmed projects to be included in the analysis include the road diet project for Boulevard SE which shall be included as completed by the build out year in the transportation analysis.

STUDY NETWORK

1. Boulevard at Englewood Avenue
2. Boulevard at McDonough Boulevard
3. Boulevard at Custer Avenue
4. Boulevard at Atlanta Avenue
5. Englewood Avenue at New Empire N/S Street
6. Englewood Avenue at Grant Street
7. Englewood Avenue at Hill Street
8. Hill Street at Atlanta Avenue
9. Hill Street at Milton Avenue
10. McDonough Boulevard at Milton Avenue

ADDITIONAL INFORMATION

Every roadway segment and intersection listed above will be analyzed for "required improvements." If the existing LOS for the segment or intersection is below the applicable level of service for a particular time period (e.g., A.M. peak period, P.M. peak period, etc.), then the measured LOS service for that segment and time periods is the standard by which the "base" and "future" traffic conditions will be designed. For example, if the City's LOS standard is LOS D, but an intersection or segment currently operates at LOS E for a certain peak period, then the LOS standard for that intersection or segment for "base" and "future" conditions becomes LOS E (only for that intersection and only for that peak period). The "base" is the phase year traffic without the development traffic (also called future "no-build" conditions) and the "future" is the phase year with the development traffic (also called future "build" conditions). As required in the technical guidelines, specific "required improvements" will be identified to bring the "base" LOS and "future" LOS for every roadway segment and intersection up to the applicable LOS standard. If the existing LOS for the segment or intersection is LOS F, then the future "no-build' and future "build" LOS standard will be LOS E. The improvements required to achieve the desired LOS standard will be provided in a table and graphic within the study. The traffic study should indicate the existing roadway laneage at each studied intersection as well as the laneage required (to meet the LOS standard) for future "no-build" and future "build" conditions. The improvements may include both programmed improvements and improvements identified in the study.

The planned and programmed improvement should indicate the project sponsor, the anticipated funding by source (federal, state, city/county, developer, CID, etc.), the year open-to-traffic, and estimate of the total project cost. All other required improvements identified in the study should, to the extent known, identify the cost, sponsor, funding, and timing. If any of these elements are not known, please state as "unknown."

The future "no-build" and the future "build" analyses should NOT automatically include/assume the additional lanes/capacity associated with planned and programmed improvement projects unless those roadway projects are currently under construction. Instead, the traffic consultant should recommend the additional laneage required to satisfy the level of service standard.

DRI REVIEW PACKAGE CHECKLIST

Please use the DRI Review Package Checklist to help you prepare your GRTA DRI Review Package for expedited review of your application. The Checklist reflects the understandings set forth in this letter, and is incorporated into this letter by reference.

The site plan shall be prepared in accordance with Section 4-104 of the DRI Review Package Technical Guidelines and it shall be dated, and shall be at a scale of 1"= 200' or larger (showing more detail). The site plan shall be consistent with GRTA's Site Plan Information Guidelines, which represents the minimum required information on site plans.

The applicant shall indicate on the site plans all adjacent land uses, current zoning, and future land use as indicated on the future land use map. Additionally, all existing and proposed sidewalks, existing and proposed pedestrian trails, and existing and proposed roadway laneage should be indicated on the site plan.

DRI REVIEW PACKAGE SUBMITTAL

At the time you are ready to submit your DRI Review Package to GRTA, please submit the Transportation Study electronically to all individuals on the CC list of this Letter of Understanding. Additionally, electronically submit all GRTA DRI Review Package information (Site Plan, Transportation Study, Transportation Study's traffic analysis data) to those listed in the table below. The DRI Review Package submittal to the staff in the table below shall include the following:

- Provide a PDF of each document
- Provide the native format for each document
  - .dwg is the preferred CAD format (AutoCAD)
  - .doc is the preferred word processing format (Word)
  - .xls is the preferred spreadsheet format (Excel)
  - .sy8, .sy9, sy10 are the preferred capacity analysis format (Synchro)

GRTA	ATLANTA REGIONAL COMMISSION	CITY OF ATLANTA	CITY OF ATLANTA	GDOT DISTRICT 7
Andrew Spiliotis	Greg Giuffrida	Monique Forte	Mark Tai	Justin Hatch

If you have any questions, please feel free to contact me (404) 893-6171 or by email at aspiliotis@srta.ga.gov.

Sincerely,

Andrew Spiliotis, Transportation Planner
GRTA

cc: Jon West, DCA
Andrew Smith, ARC
Greg Giuffrida, ARC
Marquitrice Mangum, ARC
Aries Little, ARC
Cain Williamson, GRTA/ATL
Hichard Hathcock, GRTA/ATL
Greg Floyd, MARTA
Charles Rosa, MARTA
Corentin Auguin, MARTA
Paul DeNard, GDOT
Justin Hatch, GDOT
Josh Montefusco, GDOT
Megan Wilson, GDOT
Daniel Parker, GDOT
Monique Forte, City of Atlanta
Lenise Lyons, City of Atlanta
Nathaniel Hoelzel, City of Atlanta
Betty Smoot Madison, City of Atlanta
Nursef Kedir, City of Atlanta
Mark Tai, City of Atlanta
Desmond Cole, City of Atlanta
Nathan Brown, City of Atlanta
Curtis Tyger, City of Atlanta
Sushmita Arjyal, City of Atlanta
Shaun Green, Atlanta Beltline
Lynette Reid, Atlanta Beltline
Trish O'Connell, Atlanta Housing
Tiffany Wills, Atlanta Housing
Nicole Wesley Smith, Atlanta Housing
John Skach, Atlanta Housing
Cortez Carter, Benoit Group
Radhika Dharanipalan, KEI
John Funny, Grice Consulting Group
Granvel Tate, Michaels Development Team
Mike Green, Michaels Development Team
Pamela Smith, Smith Real Estate Services

Transportation Analysis

Englewood South
Development of Regional Impact
DRI # 3299

APPENDIX G

SYNCHRO CAPACITY ANALYSES

Prepared by:

GRICE CONSULTING GROUP

Terminus Building 100
3280 Peachtree Road, NE
7th Floor
Atlanta, Georgia 30305

Transportation Analysis

Englewood South
Development of Regional Impact
DRI # 3299

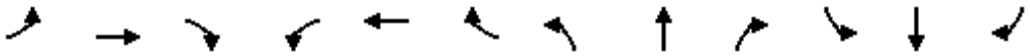
SYNCHRO (Version 11)
Model Analysis

EXISTING AM
PEAK PERIOD

Prepared by:

GRICE CONSULTING
GROUP

Terminus Building 100
3280 Peachtree Road, NE
7th Floor
Atlanta, Georgia 30305

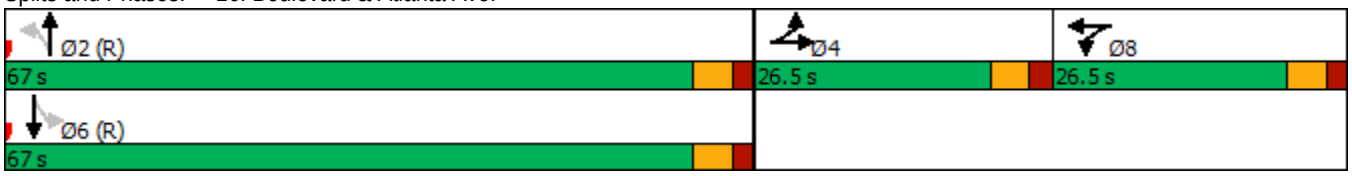


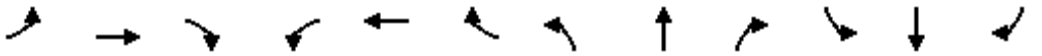
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	57	20	5	107	12	132	472	3	6	211	167
Future Volume (vph)	76	57	20	5	107	12	132	472	3	6	211	167
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Frt		0.983			0.987			0.999			0.935	
Flt Protected		0.976			0.998			0.989			0.999	
Satd. Flow (prot)	0	1787	0	0	1835	0	0	1840	0	0	3306	0
Flt Permitted		0.976			0.998			0.798			0.945	
Satd. Flow (perm)	0	1787	0	0	1835	0	0	1485	0	0	3127	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			4						188	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2923			504			3040			1134	
Travel Time (s)		66.4			11.5			69.1			25.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	85	64	22	6	120	13	148	530	3	7	237	188
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	171	0	0	139	0	0	681	0	0	432	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	0	0		0	0		0	0		0	0	
Detector Template	Thru	Thru		Thru	Thru		Thru	Thru		Thru	Thru	
Leading Detector (ft)	50	0		50	0		50	0		50	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turn Type	Split	NA		Split	NA		Perm	NA		Perm	NA	
Protected Phases	4	4		8	8			2			6	
Permitted Phases							2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	21.5	21.5		21.5	21.5		21.5	21.5		21.5	21.5	
Total Split (s)	26.5	26.5		26.5	26.5		67.0	67.0		67.0	67.0	
Total Split (%)	22.1%	22.1%		22.1%	22.1%		55.8%	55.8%		55.8%	55.8%	
Maximum Green (s)	21.0	21.0		21.0	21.0		61.5	61.5		61.5	61.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.5			5.5			5.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		16.1			14.1			73.3			73.3	
Actuated g/C Ratio		0.13			0.12			0.61			0.61	
v/c Ratio		0.70			0.63			0.75			0.22	
Control Delay		63.2			61.5			21.2			6.9	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		63.2			61.5			21.2			6.9	
LOS		E			E			C			A	
Approach Delay		63.2			61.5			21.2			6.9	
Approach LOS		E			E			C			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 25.8		Intersection LOS: C	
Intersection Capacity Utilization 73.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 16: Boulevard & Atlanta Ave.



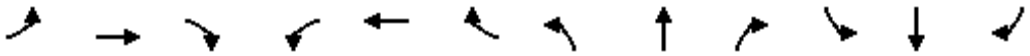


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	28	23	8	0	1	0	32	18	9	26	0
Future Volume (vph)	1	28	23	8	0	1	0	32	18	9	26	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	60		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.941			0.986			0.952				
Flt Protected		0.999			0.957					0.950		
Satd. Flow (prot)	0	1751	0	0	1758	0	0	1773	0	1770	1863	0
Flt Permitted		0.999			0.957					0.950		
Satd. Flow (perm)	0	1751	0	0	1758	0	0	1773	0	1770	1863	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		668			2923			3045			987	
Travel Time (s)		15.2			66.4			69.2			22.4	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	1	32	26	9	0	1	0	36	20	10	30	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	59	0	0	10	0	0	56	0	10	30	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 19.2%		ICU Level of Service A	
Analysis Period (min) 15			

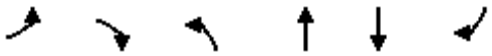
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	15	43	77	18	68	119
Future Volume (vph)	15	43	77	18	68	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.900		0.975			
Flt Protected	0.987					0.982
Satd. Flow (prot)	1655	0	1816	0	0	1829
Flt Permitted	0.987					0.982
Satd. Flow (perm)	1655	0	1816	0	0	1829
Link Speed (mph)	30		30			30
Link Distance (ft)	713		1598			3045
Travel Time (s)	16.2		36.3			69.2
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	17	49	88	20	77	135
Shared Lane Traffic (%)						
Lane Group Flow (vph)	66	0	108	0	0	212
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.8%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	32	43	3	32	46	4	32	2	2	23	10
Future Volume (vph)	43	32	43	3	32	46	4	32	2	2	23	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.951			0.923			0.994			0.962	
Flt Protected		0.982			0.998			0.994			0.997	
Satd. Flow (prot)	0	1740	0	0	1716	0	0	1840	0	0	1787	0
Flt Permitted		0.982			0.998			0.994			0.997	
Satd. Flow (perm)	0	1740	0	0	1716	0	0	1840	0	0	1787	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		713			2160			971			301	
Travel Time (s)		16.2			49.1			22.1			6.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	49	36	49	3	36	52	5	36	2	2	26	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	134	0	0	91	0	0	43	0	0	39	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 23.4%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	46	39	100	683	229	51
Future Volume (vph)	46	39	100	683	229	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt		0.850			0.972	
Flt Protected	0.950			0.994		
Satd. Flow (prot)	1770	1583	0	3518	3440	0
Flt Permitted	0.950			0.846		
Satd. Flow (perm)	1770	1583	0	2994	3440	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		40			53	
Link Speed (mph)	30			30	30	
Link Distance (ft)	2160			1200	3040	
Travel Time (s)	49.1			27.3	69.1	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	47	40	103	704	236	53
Shared Lane Traffic (%)						
Lane Group Flow (vph)	47	40	0	807	289	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	
Detector Template	Left	Right	Left	Thru	Thru	
Leading Detector (ft)	20	20	20	100	100	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	20	20	20	6	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4	2			
Detector Phase	4	4	2	2	6	
Switch Phase						
Minimum Initial (s)	6.0	6.0	15.0	15.0	15.0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Split (s)	21.5	21.5	21.5	21.5	21.5	
Total Split (s)	31.0	31.0	89.0	89.0	89.0	
Total Split (%)	25.8%	25.8%	74.2%	74.2%	74.2%	
Maximum Green (s)	25.5	25.5	83.5	83.5	83.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.5		5.5	5.5	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	C-Min	C-Min	C-Min	
Walk Time (s)	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	
Act Effct Green (s)	8.7	8.7		103.7	103.7	
Actuated g/C Ratio	0.07	0.07		0.86	0.86	
v/c Ratio	0.37	0.26		0.31	0.10	
Control Delay	60.3	19.5		1.8	1.1	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	60.3	19.5		1.8	1.1	
LOS	E	B		A	A	
Approach Delay	41.6			1.8	1.1	
Approach LOS	D			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.37			
Intersection Signal Delay: 4.5		Intersection LOS: A	
Intersection Capacity Utilization 53.0%		ICU Level of Service A	
Analysis Period (min) 15			

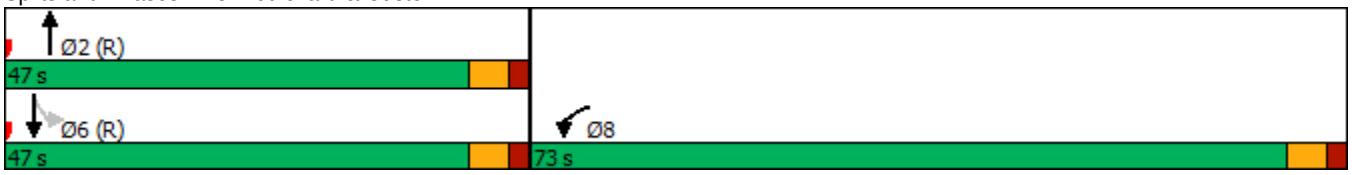
Splits and Phases: 5: Boulevard & Englewood Ave.

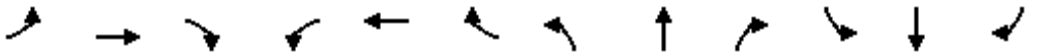
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	185	218	314	142	56	189
Future Volume (vph)	185	218	314	142	56	189
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.927		0.953			
Flt Protected	0.978					0.989
Satd. Flow (prot)	1689	0	3373	0	0	3500
Flt Permitted	0.978					0.758
Satd. Flow (perm)	1689	0	3373	0	0	2683
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	81		66			
Link Speed (mph)	30		30			30
Link Distance (ft)	1778		924			1200
Travel Time (s)	40.4		21.0			27.3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	206	242	349	158	62	210
Shared Lane Traffic (%)						
Lane Group Flow (vph)	448	0	507	0	0	272
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2		1	2
Detector Template	Left		Thru		Left	Thru
Leading Detector (ft)	20		100		20	100
Trailing Detector (ft)	0		0		0	0
Detector 1 Position(ft)	0		0		0	0
Detector 1 Size(ft)	20		6		20	6
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases					6	
Detector Phase	8		2		6	6
Switch Phase						
Minimum Initial (s)	6.0		15.0		15.0	15.0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Minimum Split (s)	21.5		21.5		21.5	21.5
Total Split (s)	73.0		47.0		47.0	47.0
Total Split (%)	60.8%		39.2%		39.2%	39.2%
Maximum Green (s)	67.5		41.5		41.5	41.5
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	5.5		5.5			5.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		C-Min		C-Min	C-Min
Walk Time (s)	5.0		5.0		5.0	5.0
Flash Dont Walk (s)	11.0		11.0		11.0	11.0
Pedestrian Calls (#/hr)	0		0		0	0
Act Effct Green (s)	35.4		73.6			73.6
Actuated g/C Ratio	0.30		0.61			0.61
v/c Ratio	0.81		0.24			0.17
Control Delay	42.5		14.5			9.5
Queue Delay	0.0		0.0			0.0
Total Delay	42.5		14.5			9.5
LOS	D		B			A
Approach Delay	42.5		14.5			9.5
Approach LOS	D		B			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 23.6		Intersection LOS: C	
Intersection Capacity Utilization 63.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: Boulevard & Custer



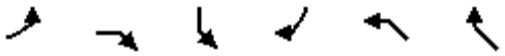


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	261	163	15	8	512	73	8	2	5	78	7	325
Future Volume (vph)	261	163	15	8	512	73	8	2	5	78	7	325
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.987			0.983			0.955			0.853	
Flt Protected	0.950				0.999			0.974		0.950		
Satd. Flow (prot)	1770	1839	0	0	1829	0	0	1733	0	1770	1589	0
Flt Permitted	0.379				0.997			0.258		0.748		
Satd. Flow (perm)	706	1839	0	0	1826	0	0	459	0	1393	1589	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			9			5			339	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2461			884			265			924	
Travel Time (s)		55.9			20.1			6.0			21.0	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	272	170	16	8	533	76	8	2	5	81	7	339
Shared Lane Traffic (%)												
Lane Group Flow (vph)	272	186	0	0	617	0	0	15	0	81	346	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	6.0	15.0		15.0	15.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	15.0	23.5		23.5	23.5		21.5	21.5		23.5	23.5	
Total Split (s)	21.0	88.0		67.0	67.0		32.0	32.0		32.0	32.0	
Total Split (%)	17.5%	73.3%		55.8%	55.8%		26.7%	26.7%		26.7%	26.7%	
Maximum Green (s)	15.5	82.5		61.5	61.5		26.5	26.5		26.5	26.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.5			5.5			5.5		5.5	5.5	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0	
Act Effct Green (s)	96.2	96.2			80.5			12.8		12.8	12.8	
Actuated g/C Ratio	0.80	0.80			0.67			0.11		0.11	0.11	
v/c Ratio	0.42	0.13			0.50			0.28		0.54	0.73	
Control Delay	5.2	3.1			12.6			49.5		59.4	16.3	
Queue Delay	0.0	0.0			0.0			0.0		0.0	0.0	
Total Delay	5.2	3.1			12.6			49.5		59.4	16.3	
LOS	A	A			B			D		E	B	
Approach Delay		4.3			12.6			49.5			24.5	
Approach LOS		A			B			D			C	

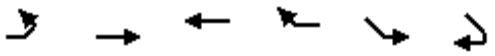
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 40 (33%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 13.8		Intersection LOS: B	
Intersection Capacity Utilization 80.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 7: Dwy/Boulevard & McDonough



Lane Group	EBL	EBR	SBL	SBR	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	10	15	92	43	33	105
Future Volume (vph)	10	15	92	43	33	105
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.919		0.957		0.897	
Flt Protected	0.980		0.967		0.988	
Satd. Flow (prot)	1678	0	1724	0	1651	0
Flt Permitted	0.980		0.967		0.988	
Satd. Flow (perm)	1678	0	1724	0	1651	0
Link Speed (mph)	30		30		30	
Link Distance (ft)	1344		1598		510	
Travel Time (s)	30.5		36.3		11.6	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	12	18	112	52	40	128
Shared Lane Traffic (%)						
Lane Group Flow (vph)	30	0	164	0	168	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right
Median Width(ft)	12		12		12	
Link Offset(ft)	0		0		0	
Crosswalk Width(ft)	16		16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15	9	15	9
Sign Control	Stop		Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 29.4%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	22	128	251	116	31	76
Future Volume (vph)	22	128	251	116	31	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.957		0.904	
Flt Protected	0.950				0.986	
Satd. Flow (prot)	1770	1863	1783	0	1660	0
Flt Permitted	0.472				0.986	
Satd. Flow (perm)	879	1863	1783	0	1660	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			24		85	
Link Speed (mph)		30	30		30	
Link Distance (ft)		390	2461		510	
Travel Time (s)		8.9	55.9		11.6	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	25	144	282	130	35	85
Shared Lane Traffic (%)						
Lane Group Flow (vph)	25	144	412	0	120	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	0	0	0		0	
Detector Template	Thru	Thru	Thru		Thru	
Leading Detector (ft)	0	0	0		0	
Trailing Detector (ft)	0	0	0		0	
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2					
Detector Phase	5	2	6		4	
Switch Phase						
Minimum Initial (s)	15.0	15.0	15.0		4.0	
Minimum Split (s)	19.0	20.0	20.0		19.0	
Total Split (s)	24.0	80.0	56.0		40.0	
Total Split (%)	20.0%	66.7%	46.7%		33.3%	
Maximum Green (s)	20.0	76.0	52.0		36.0	
Yellow Time (s)	3.5	3.5	3.5		3.5	
All-Red Time (s)	0.5	0.5	0.5		0.5	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0	4.0		4.0	
Lead/Lag	Lead		Lag			

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	C-Min	C-Min		None	
Walk Time (s)		5.0	5.0			
Flash Dont Walk (s)		11.0	11.0			
Pedestrian Calls (#/hr)		0	0			
Act Effct Green (s)	103.3	103.3	91.9		8.7	
Actuated g/C Ratio	0.86	0.86	0.77		0.07	
v/c Ratio	0.03	0.09	0.30		0.60	
Control Delay	1.7	1.6	9.0		31.5	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	1.7	1.6	9.0		31.5	
LOS	A	A	A		C	
Approach Delay		1.6	9.0		31.5	
Approach LOS		A	A		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 32 (27%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 11.1		Intersection LOS: B	
Intersection Capacity Utilization 33.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 13: McDonough & Milton Ave.

Transportation Analysis

Englewood South
Development of Regional Impact
DRI # 3299

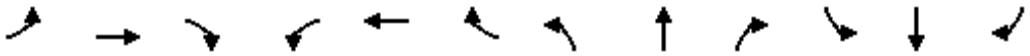
SYNCHRO (Version 11)
Model Analysis

EXISTING PM
PEAK PERIOD

Prepared by:

GRICE CONSULTING
GROUP

Terminus Building 100
3280 Peachtree Road, NE
7th Floor
Atlanta, Georgia 30305

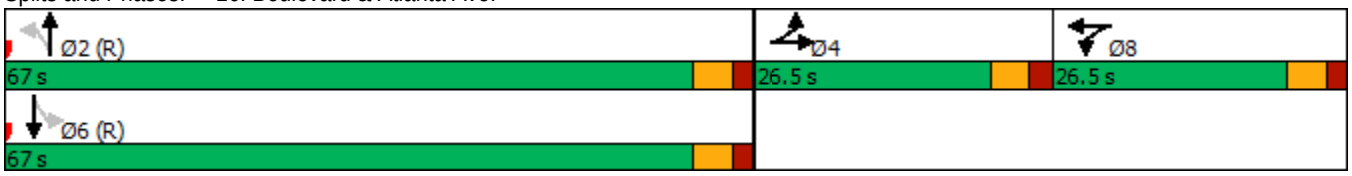


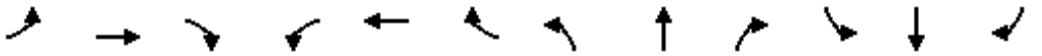
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	136	79	67	2	32	3	25	340	7	6	421	111
Future Volume (vph)	136	79	67	2	32	3	25	340	7	6	421	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Frt		0.968			0.990			0.998			0.969	
Flt Protected		0.976			0.997			0.997			0.999	
Satd. Flow (prot)	0	1760	0	0	1839	0	0	1853	0	0	3426	0
Flt Permitted		0.976			0.997			0.943			0.951	
Satd. Flow (perm)	0	1760	0	0	1839	0	0	1753	0	0	3261	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			3			1			40	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2923			504			3040			1134	
Travel Time (s)		66.4			11.5			69.1			25.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	143	83	71	2	34	3	26	358	7	6	443	117
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	297	0	0	39	0	0	391	0	0	566	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	0	0		0	0		0	0		0	0	
Detector Template	Thru	Thru		Thru	Thru		Thru	Thru		Thru	Thru	
Leading Detector (ft)	50	0		50	0		50	0		50	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turn Type	Split	NA		Split	NA		Perm	NA		Perm	NA	
Protected Phases	4	4		8	8			2			6	
Permitted Phases							2			6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		15.0	15.0		15.0	15.0	
Minimum Split (s)	21.5	21.5		21.5	21.5		21.5	21.5		21.5	21.5	
Total Split (s)	26.5	26.5		26.5	26.5		67.0	67.0		67.0	67.0	
Total Split (%)	22.1%	22.1%		22.1%	22.1%		55.8%	55.8%		55.8%	55.8%	
Maximum Green (s)	21.0	21.0		21.0	21.0		61.5	61.5		61.5	61.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.5			5.5			5.5			5.5	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		C-Min	C-Min		C-Min	C-Min	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		26.7			8.0			73.6			73.6	
Actuated g/C Ratio		0.22			0.07			0.61			0.61	
v/c Ratio		0.74			0.31			0.36			0.28	
Control Delay		53.3			56.1			16.7			12.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		53.3			56.1			16.7			12.1	
LOS		D			E			B			B	
Approach Delay		53.3			56.1			16.7			12.1	
Approach LOS		D			E			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 24.3		Intersection LOS: C	
Intersection Capacity Utilization 70.5%		ICU Level of Service C	
Analysis Period (min) 15			

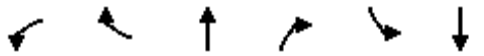
Splits and Phases: 16: Boulevard & Atlanta Ave.





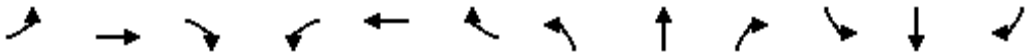
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	7	42	21	0	14	0	48	32	15	79	0
Future Volume (vph)	5	7	42	21	0	14	0	48	32	15	79	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	60		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.896			0.947			0.946				
Flt Protected		0.995			0.971					0.950		
Satd. Flow (prot)	0	1661	0	0	1713	0	0	1762	0	1770	1863	0
Flt Permitted		0.995			0.971					0.950		
Satd. Flow (perm)	0	1661	0	0	1713	0	0	1762	0	1770	1863	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		668			2923			3045			987	
Travel Time (s)		15.2			66.4			69.2			22.4	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	6	9	51	26	0	17	0	59	39	18	96	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	66	0	0	43	0	0	98	0	18	96	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 22.2%		ICU Level of Service A	
Analysis Period (min) 15			



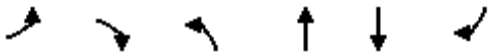
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	31	48	53	10	60	86
Future Volume (vph)	31	48	53	10	60	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.918		0.979			
Flt Protected	0.981					0.980
Satd. Flow (prot)	1678	0	1824	0	0	1825
Flt Permitted	0.981					0.980
Satd. Flow (perm)	1678	0	1824	0	0	1825
Link Speed (mph)	30		30			30
Link Distance (ft)	713		1598			3045
Travel Time (s)	16.2		36.3			69.2
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	37	58	64	12	72	104
Shared Lane Traffic (%)						
Lane Group Flow (vph)	95	0	76	0	0	176
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.8%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	58	4	10	65	10	5	1	17	21	21	9
Future Volume (vph)	8	58	4	10	65	10	5	1	17	21	21	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.992			0.984			0.900			0.976	
Flt Protected		0.994			0.994			0.989			0.980	
Satd. Flow (prot)	0	1837	0	0	1822	0	0	1658	0	0	1782	0
Flt Permitted		0.994			0.994			0.989			0.980	
Satd. Flow (perm)	0	1837	0	0	1822	0	0	1658	0	0	1782	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		713			2160			971			301	
Travel Time (s)		16.2			49.1			22.1			6.8	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	10	70	5	12	78	12	6	1	20	25	25	11
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	85	0	0	102	0	0	27	0	0	61	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 17.9%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	37	91	40	274	460	43
Future Volume (vph)	37	91	40	274	460	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt		0.850			0.987	
Flt Protected	0.950			0.994		
Satd. Flow (prot)	1770	1583	0	3518	3493	0
Flt Permitted	0.950			0.830		
Satd. Flow (perm)	1770	1583	0	2938	3493	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		100			19	
Link Speed (mph)	30			30	30	
Link Distance (ft)	2160			1200	3040	
Travel Time (s)	49.1			27.3	69.1	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	41	100	44	301	505	47
Shared Lane Traffic (%)						
Lane Group Flow (vph)	41	100	0	345	552	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	
Detector Template	Left	Right	Left	Thru	Thru	
Leading Detector (ft)	20	20	20	100	100	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	20	20	20	6	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases		4	2			
Detector Phase	4	4	2	2	6	
Switch Phase						
Minimum Initial (s)	6.0	6.0	15.0	15.0	15.0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Split (s)	21.5	21.5	21.5	21.5	21.5	
Total Split (s)	31.0	31.0	89.0	89.0	89.0	
Total Split (%)	25.8%	25.8%	74.2%	74.2%	74.2%	
Maximum Green (s)	25.5	25.5	83.5	83.5	83.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.5		5.5	5.5	
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	C-Min	C-Min	C-Min	
Walk Time (s)	5.0	5.0	5.0	5.0	5.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	
Act Effct Green (s)	8.4	8.4		100.6	100.6	
Actuated g/C Ratio	0.07	0.07		0.84	0.84	
v/c Ratio	0.33	0.49		0.14	0.19	
Control Delay	59.8	18.6		1.5	2.0	
Queue Delay	0.0	0.0		0.0	0.0	
Total Delay	59.8	18.6		1.5	2.0	
LOS	E	B		A	A	
Approach Delay	30.5			1.5	2.0	
Approach LOS	C			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay: 5.7		Intersection LOS: A	
Intersection Capacity Utilization 45.3%		ICU Level of Service A	
Analysis Period (min) 15			

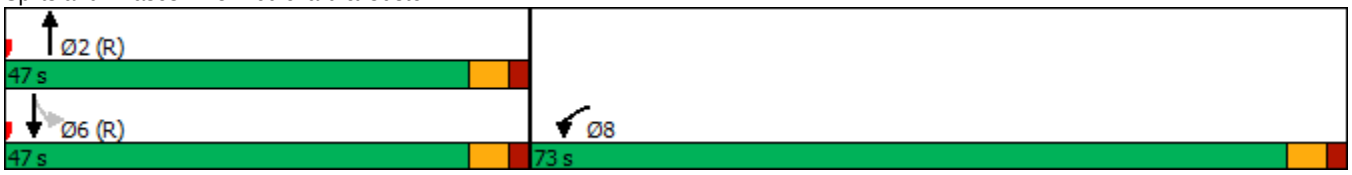
Splits and Phases: 5: Boulevard & Englewood Ave.

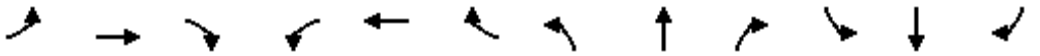
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	141	76	226	258	124	338
Future Volume (vph)	141	76	226	258	124	338
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.953		0.920			
Flt Protected	0.969					0.987
Satd. Flow (prot)	1720	0	3256	0	0	3493
Flt Permitted	0.969					0.688
Satd. Flow (perm)	1720	0	3256	0	0	2435
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	37		265			
Link Speed (mph)	30		30			30
Link Distance (ft)	1778		924			1200
Travel Time (s)	40.4		21.0			27.3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	152	82	243	277	133	363
Shared Lane Traffic (%)						
Lane Group Flow (vph)	234	0	520	0	0	496
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2		1	2
Detector Template	Left		Thru		Left	Thru
Leading Detector (ft)	20		100		20	100
Trailing Detector (ft)	0		0		0	0
Detector 1 Position(ft)	0		0		0	0
Detector 1 Size(ft)	20		6		20	6
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA		Perm	NA
Protected Phases	8		2			6
Permitted Phases					6	
Detector Phase	8		2		6	6
Switch Phase						
Minimum Initial (s)	6.0		15.0		15.0	15.0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Minimum Split (s)	21.5		21.5		21.5	21.5
Total Split (s)	73.0		47.0		47.0	47.0
Total Split (%)	60.8%		39.2%		39.2%	39.2%
Maximum Green (s)	67.5		41.5		41.5	41.5
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	5.5		5.5			5.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		C-Min		C-Min	C-Min
Walk Time (s)	5.0		5.0		5.0	5.0
Flash Dont Walk (s)	11.0		11.0		11.0	11.0
Pedestrian Calls (#/hr)	0		0		0	0
Act Effct Green (s)	20.1		88.9			88.9
Actuated g/C Ratio	0.17		0.74			0.74
v/c Ratio	0.73		0.21			0.28
Control Delay	52.7		6.2			4.4
Queue Delay	0.0		0.0			0.0
Total Delay	52.7		6.2			4.4
LOS	D		A			A
Approach Delay	52.7		6.2			4.4
Approach LOS	D		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 14.2		Intersection LOS: B	
Intersection Capacity Utilization 53.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: Boulevard & Custer



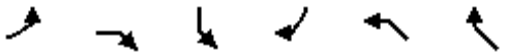


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	372	478	0	1	186	94	4	4	6	237	1	224
Future Volume (vph)	372	478	0	1	186	94	4	4	6	237	1	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.955			0.942			0.851	
Flt Protected	0.950							0.986		0.950		
Satd. Flow (prot)	1770	1863	0	0	1779	0	0	1730	0	1770	1585	0
Flt Permitted	0.493				0.999			0.926		0.748		
Satd. Flow (perm)	918	1863	0	0	1777	0	0	1625	0	1393	1585	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					31			6			231	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2461			884			265			924	
Travel Time (s)		55.9			20.1			6.0			21.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	384	493	0	1	192	97	4	4	6	244	1	231
Shared Lane Traffic (%)												
Lane Group Flow (vph)	384	493	0	0	290	0	0	14	0	244	232	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	6.0	15.0		15.0	15.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	15.0	23.5		23.5	23.5		21.5	21.5		23.5	23.5	
Total Split (s)	21.0	88.0		67.0	67.0		32.0	32.0		32.0	32.0	
Total Split (%)	17.5%	73.3%		55.8%	55.8%		26.7%	26.7%		26.7%	26.7%	
Maximum Green (s)	15.5	82.5		61.5	61.5		26.5	26.5		26.5	26.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.5			5.5			5.5		5.5	5.5	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0	
Act Effct Green (s)	81.9	81.9			59.6			27.1		27.1	27.1	
Actuated g/C Ratio	0.68	0.68			0.50			0.23		0.23	0.23	
v/c Ratio	0.52	0.39			0.32			0.04		0.78	0.43	
Control Delay	10.8	9.6			20.0			23.9		48.6	4.6	
Queue Delay	0.0	0.0			0.0			0.0		0.0	0.0	
Total Delay	10.8	9.6			20.0			23.9		48.6	4.6	
LOS	B	A			B			C		D	A	
Approach Delay		10.1			20.0			23.9			27.1	
Approach LOS		B			B			C			C	

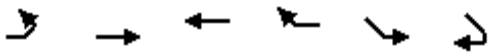
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 40 (33%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 16.8		Intersection LOS: B	
Intersection Capacity Utilization 74.3%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 7: Dwy/Boulevard & McDonough



Lane Group	EBL	EBR	SBL	SBR	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	12	9	81	36	11	63
Future Volume (vph)	12	9	81	36	11	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.944		0.958		0.886	
Flt Protected	0.972		0.967		0.992	
Satd. Flow (prot)	1709	0	1726	0	1637	0
Flt Permitted	0.972		0.967		0.992	
Satd. Flow (perm)	1709	0	1726	0	1637	0
Link Speed (mph)	30		30		30	
Link Distance (ft)	1344		1598		510	
Travel Time (s)	30.5		36.3		11.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	14	10	92	41	13	72
Shared Lane Traffic (%)						
Lane Group Flow (vph)	24	0	133	0	85	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right
Median Width(ft)	12		12		12	
Link Offset(ft)	0		0		0	
Crosswalk Width(ft)	16		16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15	9	15	9
Sign Control	Stop		Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 24.5%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	10	277	192	74	61	29
Future Volume (vph)	10	277	192	74	61	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.962		0.957	
Flt Protected	0.950				0.967	
Satd. Flow (prot)	1770	1863	1792	0	1724	0
Flt Permitted	0.550				0.967	
Satd. Flow (perm)	1025	1863	1792	0	1724	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			20		20	
Link Speed (mph)		30	30		30	
Link Distance (ft)		390	2461		510	
Travel Time (s)		8.9	55.9		11.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	11	308	213	82	68	32
Shared Lane Traffic (%)						
Lane Group Flow (vph)	11	308	295	0	100	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	0	0	0		0	
Detector Template	Thru	Thru	Thru		Thru	
Leading Detector (ft)	0	0	0		0	
Trailing Detector (ft)	0	0	0		0	
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2					
Detector Phase	5	2	6		4	
Switch Phase						
Minimum Initial (s)	15.0	15.0	15.0		4.0	
Minimum Split (s)	19.0	20.0	20.0		19.0	
Total Split (s)	24.0	80.0	56.0		40.0	
Total Split (%)	20.0%	66.7%	46.7%		33.3%	
Maximum Green (s)	20.0	76.0	52.0		36.0	
Yellow Time (s)	3.5	3.5	3.5		3.5	
All-Red Time (s)	0.5	0.5	0.5		0.5	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0	4.0		4.0	
Lead/Lag	Lead		Lag			

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	C-Min	C-Min		None	
Walk Time (s)		5.0	5.0			
Flash Dont Walk (s)		11.0	11.0			
Pedestrian Calls (#/hr)		0	0			
Act Effct Green (s)	101.0	101.0	97.2		11.0	
Actuated g/C Ratio	0.84	0.84	0.81		0.09	
v/c Ratio	0.01	0.20	0.20		0.57	
Control Delay	2.1	2.4	4.2		53.5	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	2.1	2.4	4.2		53.5	
LOS	A	A	A		D	
Approach Delay		2.4	4.2		53.5	
Approach LOS		A	A		D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 32 (27%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 10.3		Intersection LOS: B	
Intersection Capacity Utilization 26.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 13: McDonough & Milton Ave.

Transportation Analysis

Englewood South
Development of Regional Impact
DRI # 3299

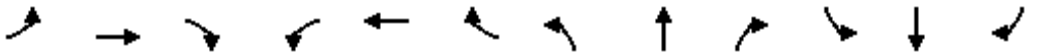
SYNCHRO (Version 11)
Model Analysis

FUTURE 2028
NO-BUILD AM PEAK

Prepared by:

GRICE CONSULTING
GROUP

Terminus Building 100
3280 Peachtree Road, NE
7th Floor
Atlanta, Georgia 30305

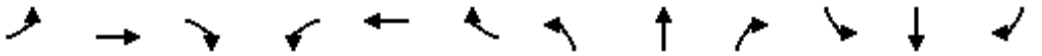


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	74	37	15	138	16	196	694	21	8	310	216
Future Volume (vph)	99	74	37	15	138	16	196	694	21	8	310	216
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.976			0.987			0.996			0.938	
Flt Protected		0.977			0.996		0.950			0.950		
Satd. Flow (prot)	0	1776	0	0	1831	0	1770	1855	0	1770	1747	0
Flt Permitted		0.676			0.962		0.273			0.217		
Satd. Flow (perm)	0	1229	0	0	1769	0	509	1855	0	404	1747	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			5			3			63	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2923			504			3040			1134	
Travel Time (s)		66.4			11.5			69.1			25.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	111	83	42	17	155	18	220	780	24	9	348	243
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	236	0	0	190	0	220	804	0	9	591	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	0	0		0	0		0	0		0	0	
Detector Template	Thru	Thru		Thru	Thru		Thru	Thru		Thru	Thru	
Leading Detector (ft)	50	0		50	0		0	0		0	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		4.0	15.0		4.0	15.0	
Minimum Split (s)	21.5	21.5		21.5	21.5		8.0	21.5		8.0	21.5	
Total Split (s)	26.5	26.5		26.5	26.5		8.0	67.0		8.0	67.0	
Total Split (%)	26.1%	26.1%		26.1%	26.1%		7.9%	66.0%		7.9%	66.0%	
Maximum Green (s)	21.0	21.0		21.0	21.0		4.0	61.5		4.0	61.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		0.5	2.0		0.5	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.5			5.5		4.0	5.5		4.0	5.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)		25.7			25.7		65.5	63.2		60.0	53.4	
Actuated g/C Ratio		0.25			0.25		0.65	0.62		0.59	0.53	
v/c Ratio		0.74			0.42		0.53	0.70		0.03	0.62	
Control Delay		49.2			34.3		13.0	17.4		6.4	18.3	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		49.2			34.3		13.0	17.4		6.4	18.3	
LOS		D			C		B	B		A	B	
Approach Delay		49.2			34.3			16.4			18.1	
Approach LOS		D			C			B			B	

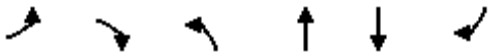
Intersection Summary			
Area Type:	Other		
Cycle Length: 101.5			
Actuated Cycle Length: 101.5			
Offset: 18.5 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 22.3		Intersection LOS: C	
Intersection Capacity Utilization 78.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 16: Boulevard & Atlanta Ave.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	9	30	11	0	1	0	41	24	12	34	0
Future Volume (vph)	1	9	30	11	0	1	0	41	24	12	34	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	60		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.898			0.990			0.951				
Flt Protected		0.999			0.956					0.950		
Satd. Flow (prot)	0	1671	0	0	1763	0	0	1771	0	1770	1863	0
Flt Permitted		0.999			0.956					0.950		
Satd. Flow (perm)	0	1671	0	0	1763	0	0	1771	0	1770	1863	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		668			2923			3045			987	
Travel Time (s)		15.2			66.4			69.2			22.4	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	1	10	34	13	0	1	0	47	27	14	39	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	45	0	0	14	0	0	74	0	14	39	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 20.8%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	76	50	150	1012	355	74
Future Volume (vph)	76	50	150	1012	355	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	1863	1863	1583
Flt Permitted	0.950		0.504			
Satd. Flow (perm)	1770	1583	939	1863	1863	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		52				76
Link Speed (mph)	30			30	30	
Link Distance (ft)	2160			1200	3040	
Travel Time (s)	49.1			27.3	69.1	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	78	52	155	1043	366	76
Shared Lane Traffic (%)						
Lane Group Flow (vph)	78	52	155	1043	366	76
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	4.0	15.0	15.0	15.0

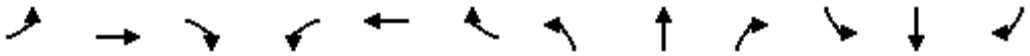
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Split (s)	21.5	21.5	8.0	21.5	21.5	21.5
Total Split (s)	31.0	31.0	20.0	89.0	77.0	77.0
Total Split (%)	24.2%	24.2%	15.6%	69.5%	60.2%	60.2%
Maximum Green (s)	25.5	25.5	16.0	83.5	71.5	71.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	0.5	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	4.0	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Walk Time (s)	5.0	5.0		5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	11.0	11.0	107.5	106.0	94.5	94.5
Actuated g/C Ratio	0.09	0.09	0.84	0.83	0.74	0.74
v/c Ratio	0.51	0.28	0.19	0.68	0.27	0.06
Control Delay	67.0	17.5	2.6	7.5	6.5	1.4
Queue Delay	0.0	0.0	0.0	0.3	0.0	0.0
Total Delay	67.0	17.5	2.6	7.7	6.5	1.4
LOS	E	B	A	A	A	A
Approach Delay	47.2			7.1	5.6	
Approach LOS	D			A	A	

Intersection Summary	
Area Type:	Other
Cycle Length: 128	
Actuated Cycle Length: 128	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 9.7	Intersection LOS: A
Intersection Capacity Utilization 67.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 5: Boulevard & Englewood Ave.

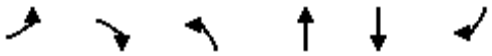
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	41	96	100	34	107	154
Future Volume (vph)	41	96	100	34	107	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.906		0.966			
Flt Protected	0.985					0.980
Satd. Flow (prot)	1662	0	1799	0	0	1825
Flt Permitted	0.985					0.980
Satd. Flow (perm)	1662	0	1799	0	0	1825
Link Speed (mph)	30		30			30
Link Distance (ft)	713		1598			3045
Travel Time (s)	16.2		36.3			69.2
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	47	109	114	39	122	175
Shared Lane Traffic (%)						
Lane Group Flow (vph)	156	0	153	0	0	297
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.5%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	70	4	24	103	59	5	41	13	3	30	13
Future Volume (vph)	55	70	4	24	103	59	5	41	13	3	30	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.957			0.970			0.961	
Flt Protected		0.979			0.994			0.996			0.997	
Satd. Flow (prot)	0	1815	0	0	1772	0	0	1800	0	0	1785	0
Flt Permitted		0.979			0.994			0.996			0.997	
Satd. Flow (perm)	0	1815	0	0	1772	0	0	1800	0	0	1785	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		713			2160			971			301	
Travel Time (s)		16.2			49.1			22.1			6.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	63	80	5	27	117	67	6	47	15	3	34	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	148	0	0	211	0	0	68	0	0	52	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.4%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	76	50	150	1012	355	74
Future Volume (vph)	76	50	150	1012	355	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	1863	1863	1583
Flt Permitted	0.950		0.504			
Satd. Flow (perm)	1770	1583	939	1863	1863	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		52				76
Link Speed (mph)	30			30	30	
Link Distance (ft)	2160			1200	3040	
Travel Time (s)	49.1			27.3	69.1	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	78	52	155	1043	366	76
Shared Lane Traffic (%)						
Lane Group Flow (vph)	78	52	155	1043	366	76
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	4.0	15.0	15.0	15.0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Split (s)	21.5	21.5	8.0	21.5	21.5	21.5
Total Split (s)	31.0	31.0	20.0	89.0	77.0	77.0
Total Split (%)	24.2%	24.2%	15.6%	69.5%	60.2%	60.2%
Maximum Green (s)	25.5	25.5	16.0	83.5	71.5	71.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	0.5	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	4.0	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Walk Time (s)	5.0	5.0		5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	11.0	11.0	107.5	106.0	94.5	94.5
Actuated g/C Ratio	0.09	0.09	0.84	0.83	0.74	0.74
v/c Ratio	0.51	0.28	0.19	0.68	0.27	0.06
Control Delay	67.0	17.5	2.6	7.5	6.5	1.4
Queue Delay	0.0	0.0	0.0	0.3	0.0	0.0
Total Delay	67.0	17.5	2.6	7.7	6.5	1.4
LOS	E	B	A	A	A	A
Approach Delay	47.2			7.1	5.6	
Approach LOS	D			A	A	

Intersection Summary	
Area Type:	Other
Cycle Length: 128	
Actuated Cycle Length: 128	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 9.7	Intersection LOS: A
Intersection Capacity Utilization 67.4%	ICU Level of Service C
Analysis Period (min) 15	

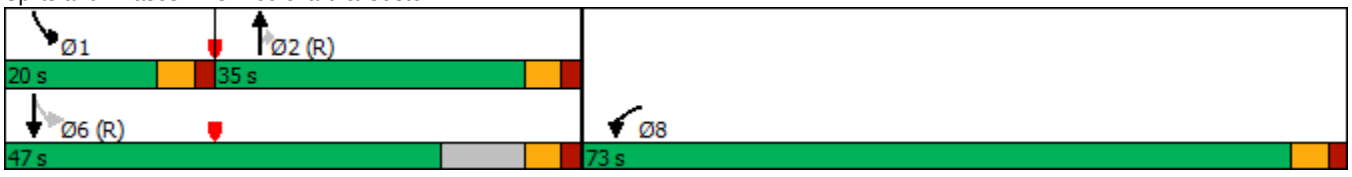
Splits and Phases: 5: Boulevard & Englewood Ave.

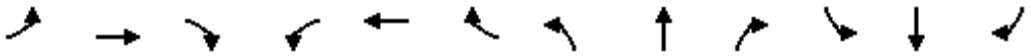
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	294	291	371	164	64	250
Future Volume (vph)	294	291	371	164	64	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.933			0.850		
Flt Protected	0.975				0.950	
Satd. Flow (prot)	1694	0	1863	1583	1770	1863
Flt Permitted	0.975				0.297	
Satd. Flow (perm)	1694	0	1863	1583	553	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	59			178		
Link Speed (mph)	30		30			30
Link Distance (ft)	1778		924			1200
Travel Time (s)	40.4		21.0			27.3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	327	323	412	182	71	278
Shared Lane Traffic (%)						
Lane Group Flow (vph)	650	0	412	182	71	278
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2	1	1	2
Detector Template	Left		Thru	Right	Left	Thru
Leading Detector (ft)	20		100	20	20	100
Trailing Detector (ft)	0		0	0	0	0
Detector 1 Position(ft)	0		0	0	0	0
Detector 1 Size(ft)	20		6	20	20	6
Detector 1 Type	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0		0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0		0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA	Perm	pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases				2	6	
Detector Phase	8		2	2	1	6
Switch Phase						
Minimum Initial (s)	6.0		15.0	15.0	4.0	15.0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Minimum Split (s)	21.5		21.5	21.5	9.5	21.5
Total Split (s)	73.0		35.0	35.0	20.0	47.0
Total Split (%)	57.0%		27.3%	27.3%	15.6%	36.7%
Maximum Green (s)	67.5		29.5	29.5	14.5	41.5
Yellow Time (s)	3.5		3.5	3.5	3.5	3.5
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5		5.5	5.5	5.5	5.5
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Recall Mode	None		C-Min	C-Min	None	C-Min
Walk Time (s)	5.0		5.0	5.0		5.0
Flash Dont Walk (s)	11.0		11.0	11.0		11.0
Pedestrian Calls (#/hr)	0		0	0		0
Act Effct Green (s)	55.1		50.2	50.2	61.9	61.9
Actuated g/C Ratio	0.43		0.39	0.39	0.48	0.48
v/c Ratio	0.85		0.56	0.25	0.20	0.31
Control Delay	40.3		38.1	6.3	18.2	18.5
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	40.3		38.1	6.3	18.2	18.5
LOS	D		D	A	B	B
Approach Delay	40.3		28.4			18.4
Approach LOS	D		C			B

Intersection Summary			
Area Type:	Other		
Cycle Length: 128			
Actuated Cycle Length: 128			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 31.1		Intersection LOS: C	
Intersection Capacity Utilization 71.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Boulevard & Custer



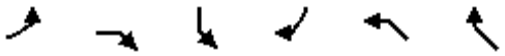


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	319	188	37	8	588	84	9	2	6	131	8	415
Future Volume (vph)	319	188	37	8	588	84	9	2	6	131	8	415
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.975			0.983			0.952			0.853	
Flt Protected	0.950				0.999			0.974		0.950		
Satd. Flow (prot)	1770	1816	0	0	1829	0	0	1727	0	1770	1589	0
Flt Permitted	0.320				0.997			0.366		0.746		
Satd. Flow (perm)	596	1816	0	0	1826	0	0	649	0	1390	1589	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			9			6			402	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2461			884			265			924	
Travel Time (s)		55.9			20.1			6.0			21.0	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	332	196	39	8	613	88	9	2	6	136	8	432
Shared Lane Traffic (%)												
Lane Group Flow (vph)	332	235	0	0	709	0	0	17	0	136	440	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	6.0	15.0		15.0	15.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	15.0	23.5		23.5	23.5		21.5	21.5		23.5	23.5	
Total Split (s)	21.0	88.0		67.0	67.0		32.0	32.0		32.0	32.0	
Total Split (%)	17.5%	73.3%		55.8%	55.8%		26.7%	26.7%		26.7%	26.7%	
Maximum Green (s)	15.5	82.5		61.5	61.5		26.5	26.5		26.5	26.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.5			5.5			5.5		5.5	5.5	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0	
Act Effct Green (s)	90.8	90.8			73.2			18.2		18.2	18.2	
Actuated g/C Ratio	0.76	0.76			0.61			0.15		0.15	0.15	
v/c Ratio	0.58	0.17			0.63			0.17		0.65	0.76	
Control Delay	9.4	4.6			20.0			34.4		62.3	19.1	
Queue Delay	0.0	0.0			0.0			0.0		0.0	0.0	
Total Delay	9.4	4.6			20.0			34.4		62.3	19.1	
LOS	A	A			B			C		E	B	
Approach Delay		7.4			20.0			34.4			29.3	
Approach LOS		A			B			C			C	

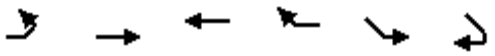
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 40 (33%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 19.2		Intersection LOS: B	
Intersection Capacity Utilization 94.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 7: Dwy/Boulevard & McDonough



Lane Group	EBL	EBR	SBL	SBR	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	12	18	105	49	37	121
Future Volume (vph)	12	18	105	49	37	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.920		0.957		0.896	
Flt Protected	0.980		0.967		0.988	
Satd. Flow (prot)	1679	0	1724	0	1649	0
Flt Permitted	0.980		0.967		0.988	
Satd. Flow (perm)	1679	0	1724	0	1649	0
Link Speed (mph)	30		30		30	
Link Distance (ft)	1344		1598		510	
Travel Time (s)	30.5		36.3		11.6	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	15	22	128	60	45	148
Shared Lane Traffic (%)						
Lane Group Flow (vph)	37	0	188	0	193	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right
Median Width(ft)	12		12		12	
Link Offset(ft)	0		0		0	
Crosswalk Width(ft)	16		16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15	9	15	9
Sign Control	Stop		Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.7%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	26	147	289	133	35	88
Future Volume (vph)	26	147	289	133	35	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.958		0.903	
Flt Protected	0.950				0.986	
Satd. Flow (prot)	1770	1863	1785	0	1659	0
Flt Permitted	0.435				0.986	
Satd. Flow (perm)	810	1863	1785	0	1659	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			24		99	
Link Speed (mph)		30	30		30	
Link Distance (ft)		390	2461		510	
Travel Time (s)		8.9	55.9		11.6	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	29	165	325	149	39	99
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	165	474	0	138	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	0	0	0		0	
Detector Template	Thru	Thru	Thru		Thru	
Leading Detector (ft)	0	0	0		0	
Trailing Detector (ft)	0	0	0		0	
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2					
Detector Phase	5	2	6		4	
Switch Phase						
Minimum Initial (s)	15.0	15.0	15.0		4.0	
Minimum Split (s)	19.0	20.0	20.0		19.0	
Total Split (s)	24.0	80.0	56.0		40.0	
Total Split (%)	20.0%	66.7%	46.7%		33.3%	
Maximum Green (s)	20.0	76.0	52.0		36.0	
Yellow Time (s)	3.5	3.5	3.5		3.5	
All-Red Time (s)	0.5	0.5	0.5		0.5	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0	4.0		4.0	
Lead/Lag	Lead		Lag			

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	C-Min	C-Min		None	
Walk Time (s)		5.0	5.0			
Flash Dont Walk (s)		11.0	11.0			
Pedestrian Calls (#/hr)		0	0			
Act Effct Green (s)	102.9	102.9	91.5		9.1	
Actuated g/C Ratio	0.86	0.86	0.76		0.08	
v/c Ratio	0.04	0.10	0.35		0.64	
Control Delay	1.8	1.8	6.3		31.1	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	1.8	1.8	6.3		31.1	
LOS	A	A	A		C	
Approach Delay		1.8	6.3		31.1	
Approach LOS		A	A		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 32 (27%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 9.4		Intersection LOS: A	
Intersection Capacity Utilization 37.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 13: McDonough & Milton Ave.

Transportation Analysis

Englewood South
Development of Regional Impact
DRI # 3299

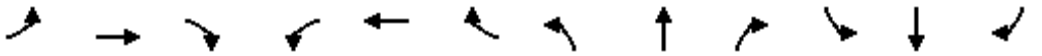
SYNCHRO (Version 11)
Model Analysis

FUTURE 2028
NO-BUILD PM PEAK

Prepared by:

GRICE CONSULTING
GROUP

Terminus Building 100
3280 Peachtree Road, NE
7th Floor
Atlanta, Georgia 30305

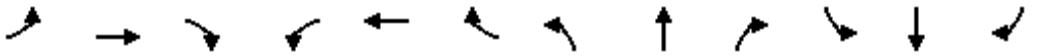


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	176	103	108	16	41	4	47	486	18	8	616	143
Future Volume (vph)	176	103	108	16	41	4	47	486	18	8	616	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.962			0.992			0.995			0.972	
Flt Protected		0.978			0.987		0.950			0.950		
Satd. Flow (prot)	0	1753	0	0	1824	0	1770	1853	0	1770	1811	0
Flt Permitted		0.824			0.872		0.109			0.378		
Satd. Flow (perm)	0	1477	0	0	1611	0	203	1853	0	704	1811	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17			3			3			16	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2923			504			3040			1134	
Travel Time (s)		66.4			11.5			69.1			25.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	185	108	114	17	43	4	49	512	19	8	648	151
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	407	0	0	64	0	49	531	0	8	799	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	0	0		0	0		0	0		0	0	
Detector Template	Thru	Thru		Thru	Thru		Thru	Thru		Thru	Thru	
Leading Detector (ft)	50	0		50	0		0	0		0	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		4.0	15.0		4.0	15.0	
Minimum Split (s)	21.5	21.5		21.5	21.5		9.5	21.5		9.5	21.5	
Total Split (s)	26.5	26.5		26.5	26.5		20.0	56.5		20.0	56.5	
Total Split (%)	25.7%	25.7%		25.7%	25.7%		19.4%	54.9%		19.4%	54.9%	
Maximum Green (s)	21.0	21.0		21.0	21.0		14.5	51.0		14.5	51.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.5			5.5		5.5	5.5		5.5	5.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)		29.1			29.1		62.0	60.6		57.7	53.1	
Actuated g/C Ratio		0.28			0.28		0.60	0.59		0.56	0.52	
v/c Ratio		0.95			0.14		0.22	0.49		0.02	0.85	
Control Delay		70.4			31.3		8.7	13.7		5.6	30.7	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		70.4			31.3		8.7	13.7		5.6	30.7	
LOS		E			C		A	B		A	C	
Approach Delay		70.4			31.3			13.3			30.5	
Approach LOS		E			C			B			C	

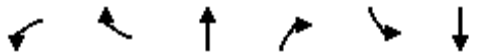
Intersection Summary			
Area Type:	Other		
Cycle Length: 103			
Actuated Cycle Length: 103			
Offset: 93.5 (91%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 33.9		Intersection LOS: C	
Intersection Capacity Utilization 78.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 16: Boulevard & Atlanta Ave.



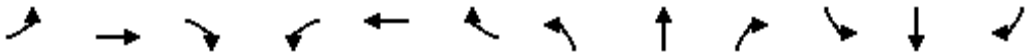
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	9	55	28	0	18	0	62	41	20	103	0
Future Volume (vph)	7	9	55	28	0	18	0	62	41	20	103	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	60		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.896			0.947			0.946				
Flt Protected		0.995			0.971					0.950		
Satd. Flow (prot)	0	1661	0	0	1713	0	0	1762	0	1770	1863	0
Flt Permitted		0.995			0.971					0.950		
Satd. Flow (perm)	0	1661	0	0	1713	0	0	1762	0	1770	1863	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		668			2923			3045			987	
Travel Time (s)		15.2			66.4			69.2			22.4	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	9	11	67	34	0	22	0	76	50	24	126	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	87	0	0	56	0	0	126	0	24	126	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 23.8%		ICU Level of Service A	
Analysis Period (min) 15			



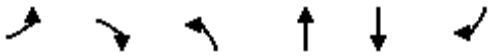
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	52	62	68	31	114	112
Future Volume (vph)	52	62	68	31	114	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.927		0.958			
Flt Protected	0.978					0.975
Satd. Flow (prot)	1689	0	1785	0	0	1816
Flt Permitted	0.978					0.975
Satd. Flow (perm)	1689	0	1785	0	0	1816
Link Speed (mph)	30		30			30
Link Distance (ft)	713		1598			3045
Travel Time (s)	16.2		36.3			69.2
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	63	75	82	37	137	135
Shared Lane Traffic (%)						
Lane Group Flow (vph)	138	0	119	0	0	272
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.2%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	130	5	25	119	13	7	1	40	28	28	12
Future Volume (vph)	11	130	5	25	119	13	7	1	40	28	28	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.989			0.886			0.977	
Flt Protected		0.996			0.992			0.993			0.980	
Satd. Flow (prot)	0	1846	0	0	1828	0	0	1639	0	0	1784	0
Flt Permitted		0.996			0.992			0.993			0.980	
Satd. Flow (perm)	0	1846	0	0	1828	0	0	1639	0	0	1784	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		713			2160			971			301	
Travel Time (s)		16.2			49.1			22.1			6.8	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	13	157	6	30	143	16	8	1	48	34	34	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	176	0	0	189	0	0	57	0	0	82	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 29.5%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	56	117	63	425	706	69
Future Volume (vph)	56	117	63	425	706	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	1863	1863	1583
Flt Permitted	0.950		0.285			
Satd. Flow (perm)	1770	1583	531	1863	1863	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		129				59
Link Speed (mph)	30			30	30	
Link Distance (ft)	2160			1200	3040	
Travel Time (s)	49.1			27.3	69.1	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	62	129	69	467	776	76
Shared Lane Traffic (%)						
Lane Group Flow (vph)	62	129	69	467	776	76
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	4.0	15.0	15.0	15.0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Split (s)	21.5	21.5	9.5	21.5	21.5	21.5
Total Split (s)	40.5	40.5	20.0	89.0	69.0	69.0
Total Split (%)	31.3%	31.3%	15.4%	68.7%	53.3%	53.3%
Maximum Green (s)	35.0	35.0	14.5	83.5	63.5	63.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Walk Time (s)	5.0	5.0		5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	9.9	9.9	108.6	108.6	98.9	98.9
Actuated g/C Ratio	0.08	0.08	0.84	0.84	0.76	0.76
v/c Ratio	0.46	0.54	0.14	0.30	0.55	0.06
Control Delay	67.2	17.5	2.6	3.0	8.9	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.2	17.5	2.6	3.0	8.9	1.9
LOS	E	B	A	A	A	A
Approach Delay	33.7			2.9	8.3	
Approach LOS	C			A	A	

Intersection Summary	
Area Type:	Other
Cycle Length: 129.5	
Actuated Cycle Length: 129.5	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.55	
Intersection Signal Delay: 9.5	Intersection LOS: A
Intersection Capacity Utilization 59.4%	ICU Level of Service B
Analysis Period (min) 15	

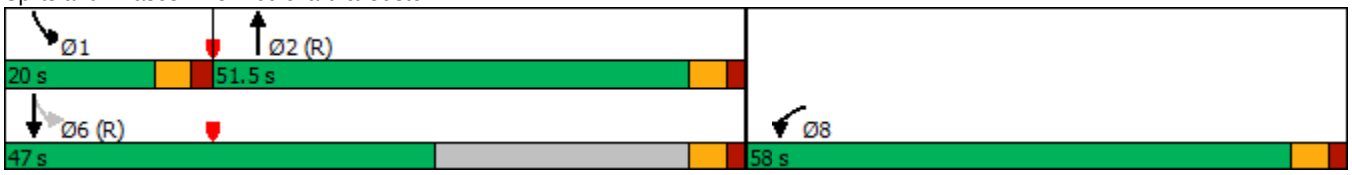
Splits and Phases: 5: Boulevard & Englewood Ave.

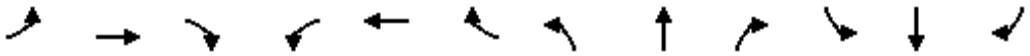
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	162	88	277	297	143	406
Future Volume (vph)	162	88	277	297	143	406
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.952		0.930			
Flt Protected	0.969				0.950	
Satd. Flow (prot)	1718	0	1732	0	1770	1863
Flt Permitted	0.969				0.287	
Satd. Flow (perm)	1718	0	1732	0	535	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	26		46			
Link Speed (mph)	30		30			30
Link Distance (ft)	1778		924			1200
Travel Time (s)	40.4		21.0			27.3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	174	95	298	319	154	437
Shared Lane Traffic (%)						
Lane Group Flow (vph)	269	0	617	0	154	437
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2		1	2
Detector Template	Left		Thru		Left	Thru
Leading Detector (ft)	20		100		20	100
Trailing Detector (ft)	0		0		0	0
Detector 1 Position(ft)	0		0		0	0
Detector 1 Size(ft)	20		6		20	6
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases					6	
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	6.0		15.0		4.0	15.0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Minimum Split (s)	21.5		21.5		9.5	21.5
Total Split (s)	58.0		51.5		20.0	47.0
Total Split (%)	44.8%		39.8%		15.4%	36.3%
Maximum Green (s)	52.5		46.0		14.5	41.5
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	5.5		5.5		5.5	5.5
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		C-Min		None	C-Min
Walk Time (s)	5.0		5.0			5.0
Flash Dont Walk (s)	11.0		11.0			11.0
Pedestrian Calls (#/hr)	0		0			0
Act Effct Green (s)	24.5		76.7		94.0	94.0
Actuated g/C Ratio	0.19		0.59		0.73	0.73
v/c Ratio	0.78		0.59		0.31	0.32
Control Delay	60.0		20.2		6.9	6.3
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	60.0		20.2		6.9	6.3
LOS	E		C		A	A
Approach Delay	60.0		20.2			6.5
Approach LOS	E		C			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 129.5			
Actuated Cycle Length: 129.5			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 21.9		Intersection LOS: C	
Intersection Capacity Utilization 68.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Boulevard & Custer



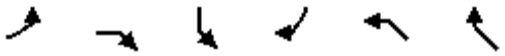


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	464	549	0	1	214	143	5	5	7	295	1	280
Future Volume (vph)	464	549	0	1	214	143	5	5	7	295	1	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.946			0.944			0.851	
Flt Protected	0.950							0.986		0.950		
Satd. Flow (prot)	1770	1863	0	0	1762	0	0	1734	0	1770	1585	0
Flt Permitted	0.372				0.999			0.920		0.746		
Satd. Flow (perm)	693	1863	0	0	1760	0	0	1618	0	1390	1585	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					41			7			289	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2461			884			265			924	
Travel Time (s)		55.9			20.1			6.0			21.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	478	566	0	1	221	147	5	5	7	304	1	289
Shared Lane Traffic (%)												
Lane Group Flow (vph)	478	566	0	0	369	0	0	17	0	304	290	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	6.0	15.0		15.0	15.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	15.0	23.5		23.5	23.5		21.5	21.5		23.5	23.5	
Total Split (s)	21.0	88.0		67.0	67.0		32.0	32.0		32.0	32.0	
Total Split (%)	17.5%	73.3%		55.8%	55.8%		26.7%	26.7%		26.7%	26.7%	
Maximum Green (s)	15.5	82.5		61.5	61.5		26.5	26.5		26.5	26.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.5			5.5			5.5		5.5	5.5	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0	
Act Effct Green (s)	73.2	73.2			46.3			35.8		35.8	35.8	
Actuated g/C Ratio	0.61	0.61			0.39			0.30		0.30	0.30	
v/c Ratio	0.78	0.50			0.52			0.03		0.73	0.43	
Control Delay	23.0	15.1			29.9			20.6		53.4	8.9	
Queue Delay	0.0	0.0			0.0			0.0		0.0	0.0	
Total Delay	23.0	15.1			29.9			20.6		53.4	8.9	
LOS	C	B			C			C		D	A	
Approach Delay		18.7			29.9			20.6			31.7	
Approach LOS		B			C			C			C	

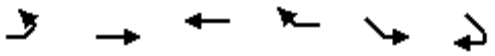
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 40 (33%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 24.6		Intersection LOS: C	
Intersection Capacity Utilization 85.7%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 7: Dwy/Boulevard & McDonough



Lane Group	EBL	EBR	SBL	SBR	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	14	11	93	41	13	72
Future Volume (vph)	14	11	93	41	13	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.939		0.959		0.886	
Flt Protected	0.973		0.967		0.992	
Satd. Flow (prot)	1702	0	1727	0	1637	0
Flt Permitted	0.973		0.967		0.992	
Satd. Flow (perm)	1702	0	1727	0	1637	0
Link Speed (mph)	30		30		30	
Link Distance (ft)	1344		1598		510	
Travel Time (s)	30.5		36.3		11.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	16	13	106	47	15	82
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	0	153	0	97	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right
Median Width(ft)	12		12		12	
Link Offset(ft)	0		0		0	
Crosswalk Width(ft)	16		16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15	9	15	9
Sign Control	Stop		Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.2%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	12	318	221	85	70	34
Future Volume (vph)	12	318	221	85	70	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.963		0.956	
Flt Protected	0.950				0.967	
Satd. Flow (prot)	1770	1863	1794	0	1722	0
Flt Permitted	0.520				0.967	
Satd. Flow (perm)	969	1863	1794	0	1722	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			20		21	
Link Speed (mph)		30	30		30	
Link Distance (ft)		390	2461		510	
Travel Time (s)		8.9	55.9		11.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	13	353	246	94	78	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	13	353	340	0	116	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	0	0	0		0	
Detector Template	Thru	Thru	Thru		Thru	
Leading Detector (ft)	0	0	0		0	
Trailing Detector (ft)	0	0	0		0	
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2					
Detector Phase	5	2	6		4	
Switch Phase						
Minimum Initial (s)	15.0	15.0	15.0		4.0	
Minimum Split (s)	19.0	20.0	20.0		19.0	
Total Split (s)	24.0	80.0	56.0		40.0	
Total Split (%)	20.0%	66.7%	46.7%		33.3%	
Maximum Green (s)	20.0	76.0	52.0		36.0	
Yellow Time (s)	3.5	3.5	3.5		3.5	
All-Red Time (s)	0.5	0.5	0.5		0.5	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0	4.0		4.0	
Lead/Lag	Lead		Lag			

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	C-Min	C-Min		None	
Walk Time (s)		5.0	5.0			
Flash Dont Walk (s)		11.0	11.0			
Pedestrian Calls (#/hr)		0	0			
Act Effct Green (s)	99.9	99.9	96.1		12.1	
Actuated g/C Ratio	0.83	0.83	0.80		0.10	
v/c Ratio	0.01	0.23	0.24		0.60	
Control Delay	2.3	2.8	3.0		54.5	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	2.3	2.8	3.0		54.5	
LOS	A	A	A		D	
Approach Delay		2.8	3.0		54.5	
Approach LOS		A	A		D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 32 (27%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 10.2		Intersection LOS: B	
Intersection Capacity Utilization 29.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 13: McDonough & Milton Ave.

Transportation Analysis

Englewood South
Development of Regional Impact
DRI # 3299

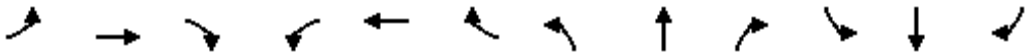
SYNCHRO (Version 11)
Model Analysis

FUTURE 2028
BUILD AM PEAK

Prepared by:

GRICE CONSULTING
GROUP

Terminus Building 100
3280 Peachtree Road, NE
7th Floor
Atlanta, Georgia 30305

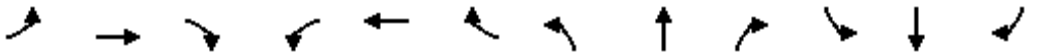


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	74	89	15	138	16	215	663	21	14	517	380
Future Volume (vph)	99	74	89	15	138	16	215	663	21	14	517	380
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.954			0.987			0.995			0.936	
Flt Protected		0.981			0.996		0.950			0.950		
Satd. Flow (prot)	0	1743	0	0	1831	0	1770	1853	0	1770	1744	0
Flt Permitted		0.667			0.947		0.057			0.268		
Satd. Flow (perm)	0	1185	0	0	1741	0	106	1853	0	499	1744	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			4			2			48	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2923			504			3040			1134	
Travel Time (s)		66.4			11.5			69.1			25.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	111	83	100	17	155	18	242	745	24	16	581	427
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	294	0	0	190	0	242	769	0	16	1008	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	0	0		0	0		0	0		0	0	
Detector Template	Thru	Thru		Thru	Thru		Thru	Thru		Thru	Thru	
Leading Detector (ft)	50	0		50	0		0	0		0	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		4.0	15.0		4.0	15.0	
Minimum Split (s)	21.5	21.5		21.5	21.5		9.5	21.5		9.5	21.5	
Total Split (s)	32.0	32.0		32.0	32.0		18.2	70.0		18.0	69.8	
Total Split (%)	26.7%	26.7%		26.7%	26.7%		15.2%	58.3%		15.0%	58.2%	
Maximum Green (s)	26.5	26.5		26.5	26.5		12.7	64.5		12.5	64.3	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.5			5.5		5.5	5.5		5.5	5.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)		26.5			26.5		82.5	77.8		70.2	64.3	
Actuated g/C Ratio		0.22			0.22		0.69	0.65		0.58	0.54	
v/c Ratio		1.06			0.49		0.98	0.64		0.05	1.05	
Control Delay		113.4			45.0		80.9	16.2		6.9	71.6	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		113.4			45.0		80.9	16.2		6.9	71.6	
LOS		F			D		F	B		A	E	
Approach Delay		113.4			45.0			31.7			70.6	
Approach LOS		F			D			C			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.06			
Intersection Signal Delay: 58.0		Intersection LOS: E	
Intersection Capacity Utilization 104.5%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 16: Boulevard & Atlanta Ave.

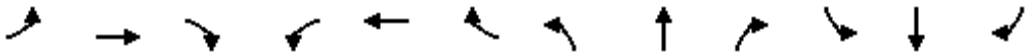


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	9	30	11	19	7	0	84	24	12	56	0
Future Volume (vph)	1	9	30	11	19	7	0	84	24	12	56	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	60		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.898			0.975			0.970				
Flt Protected		0.999			0.985					0.950		
Satd. Flow (prot)	0	1671	0	0	1789	0	0	1807	0	1770	1863	0
Flt Permitted		0.999			0.985					0.950		
Satd. Flow (perm)	0	1671	0	0	1789	0	0	1807	0	1770	1863	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		668			2923			3045			987	
Travel Time (s)		15.2			66.4			69.2			22.4	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Parking (#/hr)									0			
Adj. Flow (vph)	1	10	34	13	22	8	0	95	27	14	64	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	45	0	0	43	0	0	122	0	14	64	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.7%		ICU Level of Service A	
Analysis Period (min) 15			

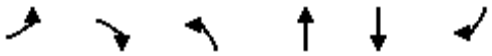
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	56	139	176	65	121	154
Future Volume (vph)	56	139	176	65	121	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.904		0.964			
Flt Protected	0.986					0.978
Satd. Flow (prot)	1660	0	1796	0	0	1822
Flt Permitted	0.986					0.978
Satd. Flow (perm)	1660	0	1796	0	0	1822
Link Speed (mph)	30		30			30
Link Distance (ft)	713		1598			3045
Travel Time (s)	16.2		36.3			69.2
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	64	158	200	74	138	175
Shared Lane Traffic (%)						
Lane Group Flow (vph)	222	0	274	0	0	313
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 49.7%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	123	4	29	161	59	5	41	13	3	30	13
Future Volume (vph)	55	123	4	29	161	59	5	41	13	3	30	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.997			0.968			0.970			0.961	
Flt Protected		0.985			0.994			0.996			0.997	
Satd. Flow (prot)	0	1829	0	0	1792	0	0	1800	0	0	1785	0
Flt Permitted		0.985			0.994			0.996			0.997	
Satd. Flow (perm)	0	1829	0	0	1792	0	0	1800	0	0	1785	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		713			2160			971			301	
Travel Time (s)		16.2			49.1			22.1			6.8	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	63	140	5	33	183	67	6	47	15	3	34	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	208	0	0	283	0	0	68	0	0	52	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.1%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	164	138	224	1012	355	147
Future Volume (vph)	164	138	224	1012	355	147
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.960	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	1863	1788	0
Flt Permitted	0.950		0.380			
Satd. Flow (perm)	1770	1583	708	1863	1788	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		142			26	
Link Speed (mph)	30			30	30	
Link Distance (ft)	2160			1200	3040	
Travel Time (s)	49.1			27.3	69.1	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	169	142	231	1043	366	152
Shared Lane Traffic (%)						
Lane Group Flow (vph)	169	142	231	1043	518	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	
Detector Template	Left	Right	Left	Thru	Thru	
Leading Detector (ft)	20	20	20	100	100	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	20	20	20	6	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	6.0	6.0	4.0	15.0	15.0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Split (s)	21.5	21.5	15.0	35.0	21.5	
Total Split (s)	31.0	31.0	20.0	89.0	78.5	
Total Split (%)	23.9%	23.9%	15.4%	68.7%	60.6%	
Maximum Green (s)	25.5	25.5	14.5	83.5	73.0	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	None	C-Min	C-Min	
Walk Time (s)	5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	17.6	17.6	100.9	100.9	85.4	
Actuated g/C Ratio	0.14	0.14	0.78	0.78	0.66	
v/c Ratio	0.70	0.42	0.36	0.72	0.44	
Control Delay	68.6	11.2	5.8	11.6	12.4	
Queue Delay	0.0	0.0	0.0	0.3	0.0	
Total Delay	68.6	11.2	5.8	11.9	12.4	
LOS	E	B	A	B	B	
Approach Delay	42.4			10.8	12.4	
Approach LOS	D			B	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 129.5			
Actuated Cycle Length: 129.5			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 15.9		Intersection LOS: B	
Intersection Capacity Utilization 71.5%		ICU Level of Service C	
Analysis Period (min) 15			

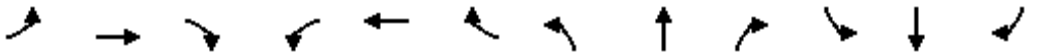
Splits and Phases: 5: Boulevard & Englewood Ave.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	213	271	424	164	84	318
Future Volume (vph)	213	271	424	164	84	318
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.924		0.962			
Flt Protected	0.978				0.950	
Satd. Flow (prot)	1683	0	1792	0	1770	1863
Flt Permitted	0.978				0.183	
Satd. Flow (perm)	1683	0	1792	0	341	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	55		19			
Link Speed (mph)	30		30			30
Link Distance (ft)	1778		924			1200
Travel Time (s)	40.4		21.0			27.3
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	237	301	471	182	93	353
Shared Lane Traffic (%)						
Lane Group Flow (vph)	538	0	653	0	93	353
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2		1	2
Detector Template	Left		Thru		Left	Thru
Leading Detector (ft)	20		100		20	100
Trailing Detector (ft)	0		0		0	0
Detector 1 Position(ft)	0		0		0	0
Detector 1 Size(ft)	20		6		20	6
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases					6	
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	6.0		15.0		6.0	15.0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Minimum Split (s)	21.5		21.5		15.0	21.5
Total Split (s)	53.0		62.0		15.0	77.0
Total Split (%)	40.8%		47.7%		11.5%	59.2%
Maximum Green (s)	47.5		56.5		9.5	71.5
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	5.5		5.5		5.5	5.5
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		C-Min		None	C-Min
Walk Time (s)	5.0		5.0			5.0
Flash Dont Walk (s)	11.0		11.0			11.0
Pedestrian Calls (#/hr)	0		0			0
Act Effct Green (s)	42.5		62.7		76.5	76.5
Actuated g/C Ratio	0.33		0.48		0.59	0.59
v/c Ratio	0.92		0.75		0.32	0.32
Control Delay	58.7		34.4		15.9	15.5
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	58.7		34.4		15.9	15.5
LOS	E		C		B	B
Approach Delay	58.7		34.4			15.6
Approach LOS	E		C			B

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 37.3		Intersection LOS: D	
Intersection Capacity Utilization 79.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Boulevard & Custer

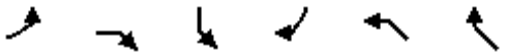


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	351	188	18	8	588	120	9	2	6	144	8	470
Future Volume (vph)	351	188	18	8	588	120	9	2	6	144	8	470
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.987			0.977			0.952			0.852	
Flt Protected	0.950				0.999			0.974		0.950		
Satd. Flow (prot)	1770	1839	0	0	1818	0	0	1727	0	1770	1587	0
Flt Permitted	0.300				0.997			0.383		0.746		
Satd. Flow (perm)	559	1839	0	0	1814	0	0	679	0	1390	1587	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			12			6			402	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2461			884			265			924	
Travel Time (s)		55.9			20.1			6.0			21.0	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	366	196	19	8	613	125	9	2	6	150	8	490
Shared Lane Traffic (%)												
Lane Group Flow (vph)	366	215	0	0	746	0	0	17	0	150	498	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	6.0	15.0		15.0	15.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	15.0	23.5		23.5	23.5		21.5	21.5		23.5	23.5	
Total Split (s)	21.0	88.0		67.0	67.0		32.0	32.0		32.0	32.0	
Total Split (%)	17.5%	73.3%		55.8%	55.8%		26.7%	26.7%		26.7%	26.7%	
Maximum Green (s)	15.5	82.5		61.5	61.5		26.5	26.5		26.5	26.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.5			5.5			5.5		5.5	5.5	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0	
Act Effct Green (s)	89.7	89.7			71.2			19.3		19.3	19.3	
Actuated g/C Ratio	0.75	0.75			0.59			0.16		0.16	0.16	
v/c Ratio	0.67	0.16			0.69			0.15		0.67	0.84	
Control Delay	11.5	4.7			22.8			33.1		56.9	24.0	
Queue Delay	0.0	0.0			0.0			0.0		0.0	0.0	
Total Delay	11.5	4.7			22.8			33.1		56.9	24.0	
LOS	B	A			C			C		E	C	
Approach Delay		9.0			22.8			33.1			31.6	
Approach LOS		A			C			C			C	

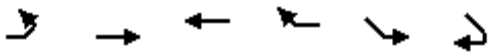
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 40 (33%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 21.7		Intersection LOS: C	
Intersection Capacity Utilization 101.4%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 7: Dwy/Boulevard & McDonough



Lane Group	EBL	EBR	SBL	SBR	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	27	18	127	61	37	143
Future Volume (vph)	27	18	127	61	37	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.946		0.956		0.893	
Flt Protected	0.971		0.967		0.990	
Satd. Flow (prot)	1711	0	1722	0	1647	0
Flt Permitted	0.971		0.967		0.990	
Satd. Flow (perm)	1711	0	1722	0	1647	0
Link Speed (mph)	30		30		30	
Link Distance (ft)	1344		1598		510	
Travel Time (s)	30.5		36.3		11.6	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	33	22	155	74	45	174
Shared Lane Traffic (%)						
Lane Group Flow (vph)	55	0	229	0	219	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right
Median Width(ft)	12		12		12	
Link Offset(ft)	0		0		0	
Crosswalk Width(ft)	16		16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15	9	15	9
Sign Control	Stop		Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.0%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	48	273	344	154	45	100
Future Volume (vph)	48	273	344	154	45	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.958		0.907	
Flt Protected	0.950				0.985	
Satd. Flow (prot)	1770	1863	1785	0	1664	0
Flt Permitted	0.374				0.985	
Satd. Flow (perm)	697	1863	1785	0	1664	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			24		94	
Link Speed (mph)		30	30		30	
Link Distance (ft)		390	2461		510	
Travel Time (s)		8.9	55.9		11.6	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	54	307	387	173	51	112
Shared Lane Traffic (%)						
Lane Group Flow (vph)	54	307	560	0	163	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	0	0	0		0	
Detector Template	Thru	Thru	Thru		Thru	
Leading Detector (ft)	0	0	0		0	
Trailing Detector (ft)	0	0	0		0	
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2					
Detector Phase	5	2	6		4	
Switch Phase						
Minimum Initial (s)	15.0	15.0	15.0		4.0	
Minimum Split (s)	19.0	20.0	20.0		19.0	
Total Split (s)	24.0	80.0	56.0		40.0	
Total Split (%)	20.0%	66.7%	46.7%		33.3%	
Maximum Green (s)	20.0	76.0	52.0		36.0	
Yellow Time (s)	3.5	3.5	3.5		3.5	
All-Red Time (s)	0.5	0.5	0.5		0.5	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0	4.0		4.0	
Lead/Lag	Lead		Lag			

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	C-Min	C-Min		None	
Walk Time (s)		5.0	5.0			
Flash Dont Walk (s)		11.0	11.0			
Pedestrian Calls (#/hr)		0	0			
Act Effct Green (s)	101.0	101.0	85.8		11.0	
Actuated g/C Ratio	0.84	0.84	0.72		0.09	
v/c Ratio	0.07	0.20	0.44		0.69	
Control Delay	2.3	2.5	11.1		37.7	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	2.3	2.5	11.1		37.7	
LOS	A	A	B		D	
Approach Delay		2.4	11.1		37.7	
Approach LOS		A	B		D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 32 (27%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 12.2		Intersection LOS: B	
Intersection Capacity Utilization 55.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 13: McDonough & Milton Ave.

Transportation Analysis

Englewood South
Development of Regional Impact
DRI # 3299

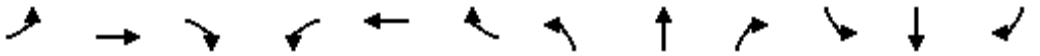
SYNCHRO (Version 11)
Model Analysis

FUTURE 2028
BUILD PM PEAK

Prepared by:

GRICE CONSULTING
GROUP

Terminus Building 100
3280 Peachtree Road, NE
7th Floor
Atlanta, Georgia 30305

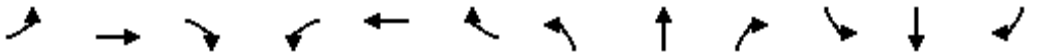


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	176	103	119	16	41	4	87	629	18	14	1030	252
Future Volume (vph)	176	103	119	16	41	4	87	629	18	14	1030	252
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.960			0.992			0.996			0.971	
Flt Protected		0.978			0.987		0.950			0.950		
Satd. Flow (prot)	0	1749	0	0	1824	0	1770	1855	0	1770	1809	0
Flt Permitted		0.840			0.855		0.053			0.285		
Satd. Flow (perm)	0	1502	0	0	1580	0	99	1855	0	531	1809	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			3			2			13	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2923			504			3040			1134	
Travel Time (s)		66.4			11.5			69.1			25.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	185	108	125	17	43	4	92	662	19	15	1084	265
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	418	0	0	64	0	92	681	0	15	1349	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	0	0		0	0		0	0		0	0	
Detector Template	Thru	Thru		Thru	Thru		Thru	Thru		Thru	Thru	
Leading Detector (ft)	50	0		50	0		0	0		0	0	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		6.0	15.0		6.0	15.0	
Minimum Split (s)	21.5	21.5		21.5	21.5		15.0	21.5		15.0	21.5	
Total Split (s)	40.0	40.0		40.0	40.0		20.0	70.0		20.0	70.0	
Total Split (%)	30.8%	30.8%		30.8%	30.8%		15.4%	53.8%		15.4%	53.8%	
Maximum Green (s)	34.5	34.5		34.5	34.5		14.5	64.5		14.5	64.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		5.5			5.5		5.5	5.5		5.5	5.5	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)	5.0	5.0		5.0	5.0			5.0			5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0			11.0			11.0	
Pedestrian Calls (#/hr)	0	0		0	0			0			0	
Act Effct Green (s)		34.5			34.5		84.0	79.8		76.6	70.5	
Actuated g/C Ratio		0.27			0.27		0.65	0.61		0.59	0.54	
v/c Ratio		1.02			0.15		0.53	0.60		0.04	1.37	
Control Delay		94.8			36.1		28.5	19.1		8.6	199.4	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		94.8			36.1		28.5	19.1		8.6	199.4	
LOS		F			D		C	B		A	F	
Approach Delay		94.8			36.1			20.2			197.3	
Approach LOS		F			D			C			F	

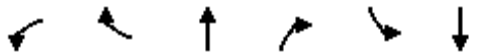
Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.37			
Intersection Signal Delay: 124.7		Intersection LOS: F	
Intersection Capacity Utilization 110.6%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 16: Boulevard & Atlanta Ave.



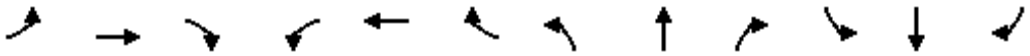
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	9	55	28	40	26	0	152	41	20	156	0
Future Volume (vph)	7	9	55	28	40	26	0	152	41	20	156	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	60		0
Storage Lanes	0		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.896			0.962			0.971				
Flt Protected		0.995			0.985					0.950		
Satd. Flow (prot)	0	1661	0	0	1765	0	0	1809	0	1770	1863	0
Flt Permitted		0.995			0.985					0.950		
Satd. Flow (perm)	0	1661	0	0	1765	0	0	1809	0	1770	1863	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		668			2923			3045			987	
Travel Time (s)		15.2			66.4			69.2			22.4	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	9	11	67	34	49	32	0	185	50	24	190	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	87	0	0	115	0	0	235	0	24	190	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.8%		ICU Level of Service A	
Analysis Period (min) 15			



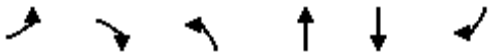
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	83	175	120	112	167	112
Future Volume (vph)	83	175	120	112	167	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.908		0.935			
Flt Protected	0.984					0.971
Satd. Flow (prot)	1664	0	1742	0	0	1809
Flt Permitted	0.984					0.971
Satd. Flow (perm)	1664	0	1742	0	0	1809
Link Speed (mph)	30		30			30
Link Distance (ft)	713		1598			3045
Travel Time (s)	16.2		36.3			69.2
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	100	211	145	135	201	135
Shared Lane Traffic (%)						
Lane Group Flow (vph)	311	0	280	0	0	336
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 53.7%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	264	5	25	240	13	7	1	40	28	28	12
Future Volume (vph)	11	264	5	25	240	13	7	1	40	28	28	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.998			0.994			0.886			0.977	
Flt Protected		0.998			0.996			0.993			0.980	
Satd. Flow (prot)	0	1855	0	0	1844	0	0	1639	0	0	1784	0
Flt Permitted		0.998			0.996			0.993			0.980	
Satd. Flow (perm)	0	1855	0	0	1844	0	0	1639	0	0	1784	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		713			2160			971			301	
Travel Time (s)		16.2			49.1			22.1			6.8	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	13	318	6	30	289	16	8	1	48	34	34	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	337	0	0	335	0	0	57	0	0	82	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.6%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	239	300	250	425	706	256
Future Volume (vph)	239	300	250	425	706	256
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.964	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	1863	1796	0
Flt Permitted	0.950		0.055			
Satd. Flow (perm)	1770	1583	102	1863	1796	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		330			19	
Link Speed (mph)	30			30	30	
Link Distance (ft)	2160			1200	3040	
Travel Time (s)	49.1			27.3	69.1	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	263	330	275	467	776	281
Shared Lane Traffic (%)						
Lane Group Flow (vph)	263	330	275	467	1057	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	
Detector Template	Left	Right	Left	Thru	Thru	
Leading Detector (ft)	20	20	20	100	100	
Trailing Detector (ft)	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	
Detector 1 Size(ft)	20	20	20	6	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Detector Phase	4	4	5	2	6	
Switch Phase						
Minimum Initial (s)	6.0	6.0	6.0	15.0	15.0	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Split (s)	21.5	21.5	15.0	21.5	21.5	
Total Split (s)	40.0	40.0	22.0	90.0	68.0	
Total Split (%)	30.8%	30.8%	16.9%	69.2%	52.3%	
Maximum Green (s)	34.5	34.5	16.5	84.5	62.5	
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	None	C-Min	C-Min	
Walk Time (s)	5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0	
Act Effct Green (s)	24.7	24.7	94.3	94.3	67.8	
Actuated g/C Ratio	0.19	0.19	0.73	0.73	0.52	
v/c Ratio	0.78	0.58	0.80	0.35	1.12	
Control Delay	65.7	8.5	53.5	8.1	101.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	65.7	8.5	53.5	8.1	101.5	
LOS	E	A	D	A	F	
Approach Delay	33.9			24.9	101.5	
Approach LOS	C			C	F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.12			
Intersection Signal Delay: 61.0		Intersection LOS: E	
Intersection Capacity Utilization 93.6%		ICU Level of Service F	
Analysis Period (min) 15			

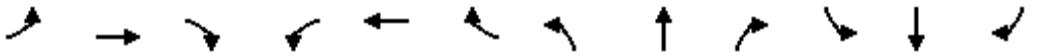
Splits and Phases: 5: Boulevard & Englewood Ave.

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	207	164	411	297	185	536
Future Volume (vph)	207	164	411	297	185	536
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.940		0.943			
Flt Protected	0.973				0.950	
Satd. Flow (prot)	1704	0	1757	0	1770	1863
Flt Permitted	0.973				0.158	
Satd. Flow (perm)	1704	0	1757	0	294	1863
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	30		39			
Link Speed (mph)	30		30			30
Link Distance (ft)	1778		924			1200
Travel Time (s)	40.4		21.0			27.3
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	223	176	442	319	199	576
Shared Lane Traffic (%)						
Lane Group Flow (vph)	399	0	761	0	199	576
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2		1	2
Detector Template	Left		Thru		Left	Thru
Leading Detector (ft)	20		100		20	100
Trailing Detector (ft)	0		0		0	0
Detector 1 Position(ft)	0		0		0	0
Detector 1 Size(ft)	20		6		20	6
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA		pm+pt	NA
Protected Phases	8		2		1	6
Permitted Phases					6	
Detector Phase	8		2		1	6
Switch Phase						
Minimum Initial (s)	6.0		15.0		6.0	15.0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Minimum Split (s)	21.5		21.5		15.0	21.5
Total Split (s)	40.0		69.0		21.0	90.0
Total Split (%)	30.8%		53.1%		16.2%	69.2%
Maximum Green (s)	34.5		63.5		15.5	84.5
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.0		2.0		2.0	2.0
Lost Time Adjust (s)	0.0		0.0		0.0	0.0
Total Lost Time (s)	5.5		5.5		5.5	5.5
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Recall Mode	None		C-Min		None	C-Min
Walk Time (s)	5.0		5.0			5.0
Flash Dont Walk (s)	11.0		11.0			11.0
Pedestrian Calls (#/hr)	0		0			0
Act Effct Green (s)	31.8		70.1		87.2	87.2
Actuated g/C Ratio	0.24		0.54		0.67	0.67
v/c Ratio	0.91		0.79		0.60	0.46
Control Delay	69.2		31.4		23.3	16.9
Queue Delay	0.0		0.0		0.0	0.0
Total Delay	69.2		31.4		23.3	16.9
LOS	E		C		C	B
Approach Delay	69.2		31.4			18.5
Approach LOS	E		C			B

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 34.0		Intersection LOS: C	
Intersection Capacity Utilization 85.3%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Boulevard & Custer

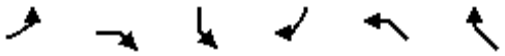


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	545	549	0	1	214	196	5	5	7	322	1	394
Future Volume (vph)	545	549	0	1	214	196	5	5	7	322	1	394
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	160		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt					0.936			0.944			0.850	
Flt Protected	0.950							0.986		0.950		
Satd. Flow (prot)	1770	1863	0	0	1744	0	0	1734	0	1770	1583	0
Flt Permitted	0.267				0.999			0.908		0.746		
Satd. Flow (perm)	497	1863	0	0	1742	0	0	1597	0	1390	1583	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					56			7			406	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2461			884			265			924	
Travel Time (s)		55.9			20.1			6.0			21.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	562	566	0	1	221	202	5	5	7	332	1	406
Shared Lane Traffic (%)												
Lane Group Flow (vph)	562	566	0	0	424	0	0	17	0	332	407	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	6.0	15.0		15.0	15.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	15.0	23.5		23.5	23.5		21.5	21.5		23.5	23.5	
Total Split (s)	21.0	88.0		67.0	67.0		32.0	32.0		32.0	32.0	
Total Split (%)	17.5%	73.3%		55.8%	55.8%		26.7%	26.7%		26.7%	26.7%	
Maximum Green (s)	15.5	82.5		61.5	61.5		26.5	26.5		26.5	26.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0			0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.5			5.5			5.5		5.5	5.5	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0	
Act Effct Green (s)	67.7	67.7			37.9			41.3		41.3	41.3	
Actuated g/C Ratio	0.56	0.56			0.32			0.34		0.34	0.34	
v/c Ratio	1.04	0.54			0.72			0.03		0.69	0.50	
Control Delay	71.1	16.9			38.9			19.2		46.5	9.5	
Queue Delay	0.0	0.0			0.0			0.0		0.0	0.0	
Total Delay	71.1	16.9			38.9			19.2		46.5	9.5	
LOS	E	B			D			B		D	A	
Approach Delay		43.9			38.9			19.2			26.1	
Approach LOS		D			D			B			C	

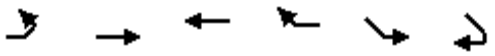
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 40 (33%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay: 37.1		Intersection LOS: D	
Intersection Capacity Utilization 91.8%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 7: Dwy/Boulevard & McDonough



Lane Group	EBL	EBR	SBL	SBR	NWL	NWR
Lane Configurations						
Traffic Volume (vph)	29	11	127	64	13	152
Future Volume (vph)	29	11	127	64	13	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.962		0.955		0.876	
Flt Protected	0.965		0.968		0.996	
Satd. Flow (prot)	1729	0	1722	0	1625	0
Flt Permitted	0.965		0.968		0.996	
Satd. Flow (perm)	1729	0	1722	0	1625	0
Link Speed (mph)	30		30		30	
Link Distance (ft)	1344		1598		510	
Travel Time (s)	30.5		36.3		11.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	33	13	144	73	15	173
Shared Lane Traffic (%)						
Lane Group Flow (vph)	46	0	217	0	188	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Right
Median Width(ft)	12		12		12	
Link Offset(ft)	0		0		0	
Crosswalk Width(ft)	16		16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15	9	15	9
Sign Control	Stop		Stop		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.4%		ICU Level of Service A	
Analysis Period (min) 15			



Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	22	590	335	138	90	48
Future Volume (vph)	22	590	335	138	90	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	0
Storage Lanes	1			0	1	0
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.961		0.953	
Flt Protected	0.950				0.968	
Satd. Flow (prot)	1770	1863	1790	0	1718	0
Flt Permitted	0.391				0.968	
Satd. Flow (perm)	728	1863	1790	0	1718	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			22		23	
Link Speed (mph)		30	30		30	
Link Distance (ft)		390	2461		510	
Travel Time (s)		8.9	55.9		11.6	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	24	656	372	153	100	53
Shared Lane Traffic (%)						
Lane Group Flow (vph)	24	656	525	0	153	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Number of Detectors	0	0	0		0	
Detector Template	Thru	Thru	Thru		Thru	
Leading Detector (ft)	0	0	0		0	
Trailing Detector (ft)	0	0	0		0	
Turn Type	pm+pt	NA	NA		Prot	
Protected Phases	5	2	6		4	
Permitted Phases	2					
Detector Phase	5	2	6		4	
Switch Phase						
Minimum Initial (s)	15.0	15.0	15.0		4.0	
Minimum Split (s)	19.0	20.0	20.0		19.0	
Total Split (s)	24.0	80.0	56.0		40.0	
Total Split (%)	20.0%	66.7%	46.7%		33.3%	
Maximum Green (s)	20.0	76.0	52.0		36.0	
Yellow Time (s)	3.5	3.5	3.5		3.5	
All-Red Time (s)	0.5	0.5	0.5		0.5	
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	
Total Lost Time (s)	4.0	4.0	4.0		4.0	
Lead/Lag	Lead		Lag			

Lane Group	EBL	EBT	WBT	WBR	SEL	SER
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Recall Mode	None	C-Min	C-Min		None	
Walk Time (s)		5.0	5.0			
Flash Dont Walk (s)		11.0	11.0			
Pedestrian Calls (#/hr)		0	0			
Act Effct Green (s)	97.4	97.4	86.0		14.6	
Actuated g/C Ratio	0.81	0.81	0.72		0.12	
v/c Ratio	0.03	0.43	0.41		0.67	
Control Delay	3.0	4.8	9.0		56.3	
Queue Delay	0.0	0.0	0.0		0.0	
Total Delay	3.0	4.8	9.0		56.3	
LOS	A	A	A		E	
Approach Delay		4.7	9.0		56.3	
Approach LOS		A	A		E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 32 (27%), Referenced to phase 2:EBTL and 6:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 12.2		Intersection LOS: B	
Intersection Capacity Utilization 45.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 13: McDonough & Milton Ave.

Transportation Analysis

Englewood South
Development of Regional Impact
DRI # 3299

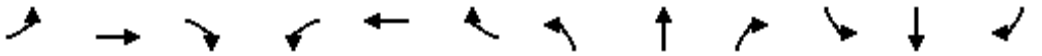
SYNCHRO (Version 11)
Model Analysis

FUTURE 2028
BUILD AM PEAK
With Improvements

Prepared by:

GRICE CONSULTING GROUP

Terminus Building 100
3280 Peachtree Road, NE
7th Floor
Atlanta, Georgia 30305



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	74	89	15	138	16	215	663	21	14	517	380
Future Volume (vph)	99	74	89	15	138	16	215	663	21	14	517	380
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.918			0.984			0.995				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1710	0	1770	1833	0	1770	1853	0	1770	1863	1583
Flt Permitted	0.369			0.642			0.244			0.244		
Satd. Flow (perm)	687	1710	0	1196	1833	0	455	1853	0	455	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		40			4			1				329
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2923			504			3040			1134	
Travel Time (s)		66.4			11.5			69.1			25.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	111	83	100	17	155	18	242	745	24	16	581	427
Shared Lane Traffic (%)												
Lane Group Flow (vph)	111	183	0	17	173	0	242	769	0	16	581	427
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	0	0		0	0		0	0		0	0	0
Detector Template	Thru	Thru		Thru	Thru		Thru	Thru		Thru	Thru	Thru
Leading Detector (ft)	0	0		0	0		0	0		0	0	0
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		6
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	4.0	6.0		4.0	6.0		4.0	15.0		4.0	15.0	15.0
Minimum Split (s)	8.0	21.5		9.5	32.0		9.5	21.5		9.5	21.5	21.5
Total Split (s)	18.0	35.0		18.0	35.0		30.0	62.0		23.0	55.0	55.0
Total Split (%)	13.0%	25.4%		13.0%	25.4%		21.7%	44.9%		16.7%	39.9%	39.9%
Maximum Green (s)	14.0	29.5		12.5	29.5		24.5	56.5		17.5	49.5	49.5
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	5.5		5.5	5.5		5.5	5.5		5.5	5.5	5.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	C-Min

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		5.0			5.0			5.0			5.0	5.0
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	11.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	35.8	29.1		24.6	18.0		92.7	87.9		77.4	71.4	71.4
Actuated g/C Ratio	0.26	0.21		0.18	0.13		0.67	0.64		0.56	0.52	0.52
v/c Ratio	0.41	0.47		0.07	0.71		0.53	0.65		0.05	0.60	0.44
Control Delay	43.1	41.1		36.9	71.8		14.1	21.7		11.4	29.7	7.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	43.1	41.1		36.9	71.8		14.1	21.7		11.4	29.7	7.5
LOS	D	D		D	E		B	C		B	C	A
Approach Delay		41.9			68.7			19.9			20.2	
Approach LOS		D			E			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 138			
Actuated Cycle Length: 138			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 26.3		Intersection LOS: C	
Intersection Capacity Utilization 70.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 16: Boulevard & Atlanta Ave.

Transportation Analysis

Englewood South
Development of Regional Impact
DRI # 3299

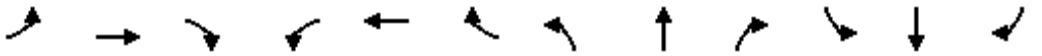
SYNCHRO (Version 11)
Model Analysis

FUTURE 2028
BUILD PM PEAK
With Improvements

Prepared by:

GRICE CONSULTING
GROUP

Terminus Building 100
3280 Peachtree Road, NE
7th Floor
Atlanta, Georgia 30305

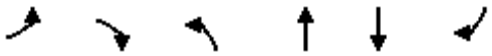


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	176	103	119	16	41	4	87	629	18	14	1030	252
Future Volume (vph)	176	103	119	16	41	4	87	629	18	14	1030	252
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.920			0.987			0.996				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1714	0	1770	1839	0	1770	1855	0	1770	1863	1583
Flt Permitted	0.504			0.613			0.051			0.292		
Satd. Flow (perm)	939	1714	0	1142	1839	0	95	1855	0	544	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		39			3			2				141
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2923			504			3040			1134	
Travel Time (s)		66.4			11.5			69.1			25.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	185	108	125	17	43	4	92	662	19	15	1084	265
Shared Lane Traffic (%)												
Lane Group Flow (vph)	185	233	0	17	47	0	92	681	0	15	1084	265
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	0	0		0	0		0	0		0	0	0
Detector Template	Thru	Thru		Thru	Thru		Thru	Thru		Thru	Thru	Thru
Leading Detector (ft)	0	0		0	0		0	0		0	0	0
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		6
Detector Phase	7	4		3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		6.0	15.0		6.0	15.0	15.0
Minimum Split (s)	18.0	28.0		11.5	21.5		15.0	21.5		15.0	21.5	21.5
Total Split (s)	20.5	28.0		20.0	27.5		15.0	67.0		15.0	67.0	67.0
Total Split (%)	15.8%	21.5%		15.4%	21.2%		11.5%	51.5%		11.5%	51.5%	51.5%
Maximum Green (s)	15.0	22.5		14.5	22.0		9.5	61.5		9.5	61.5	61.5
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5		5.5	5.5		5.5	5.5		5.5	5.5	5.5
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	C-Min

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Walk Time (s)		5.0			5.0			5.0			5.0	5.0
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	11.0
Pedestrian Calls (#/hr)		0			0			0			0	0
Act Effct Green (s)	29.2	24.1		16.9	11.5		89.0	85.0		82.3	76.2	76.2
Actuated g/C Ratio	0.22	0.19		0.13	0.09		0.68	0.65		0.63	0.59	0.59
v/c Ratio	0.61	0.67		0.09	0.28		0.54	0.56		0.04	0.99	0.27
Control Delay	50.4	50.1		36.0	54.0		36.9	11.0		9.5	54.2	8.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	50.4	50.1		36.0	54.0		36.9	11.0		9.5	54.2	8.4
LOS	D	D		D	D		D	B		A	D	A
Approach Delay		50.2			49.2			14.1			44.8	
Approach LOS		D			D			B			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay: 36.7		Intersection LOS: D	
Intersection Capacity Utilization 89.4%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 16: Boulevard & Atlanta Ave.



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	239	300	250	425	706	256
Future Volume (vph)	239	300	250	425	706	256
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	1863	1863	1583
Flt Permitted	0.950		0.133			
Satd. Flow (perm)	1770	1583	248	1863	1863	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)		330				212
Link Speed (mph)	30			30	30	
Link Distance (ft)	2160			1200	3040	
Travel Time (s)	49.1			27.3	69.1	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	263	330	275	467	776	281
Shared Lane Traffic (%)						
Lane Group Flow (vph)	263	330	275	467	776	281
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type				Cl+Ex	Cl+Ex	
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	6.0	6.0	6.0	15.0	15.0	15.0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Minimum Split (s)	21.5	21.5	15.0	21.5	21.5	21.5
Total Split (s)	40.0	40.0	22.0	90.0	68.0	68.0
Total Split (%)	30.8%	30.8%	16.9%	69.2%	52.3%	52.3%
Maximum Green (s)	34.5	34.5	16.5	84.5	62.5	62.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	C-Min	C-Min	C-Min
Walk Time (s)	5.0	5.0		5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0
Act Effct Green (s)	24.7	24.7	94.3	94.3	67.8	67.8
Actuated g/C Ratio	0.19	0.19	0.73	0.73	0.52	0.52
v/c Ratio	0.78	0.58	0.65	0.35	0.80	0.30
Control Delay	65.7	8.5	25.7	8.6	48.9	18.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.7	8.5	25.7	8.6	48.9	18.2
LOS	E	A	C	A	D	B
Approach Delay	33.9			14.9	40.7	
Approach LOS	C			B	D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 31.0		Intersection LOS: C	
Intersection Capacity Utilization 78.0%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 5: Boulevard & Englewood Ave.

Transportation Analysis

Englewood South
Development of Regional Impact
DRI # 3299

SYNCHRO (Version 11)
Model Analysis

FUTURE 2028
BUILD Development
Driveway – AM Peak Period

Prepared by:

GRICE CONSULTING GROUP

Terminus Building 100
3280 Peachtree Road, NE
7th Floor
Atlanta, Georgia 30305

Intersection	
Int Delay, s/veh	4.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	32	11	29	38	13	35
Future Vol, veh/h	32	11	29	38	13	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	12	32	41	14	38

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	47	0	140	35
Stage 1	-	-	-	-	35	-
Stage 2	-	-	-	-	105	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1560	-	853	1038
Stage 1	-	-	-	-	987	-
Stage 2	-	-	-	-	919	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1560	-	835	1038
Mov Cap-2 Maneuver	-	-	-	-	835	-
Stage 1	-	-	-	-	987	-
Stage 2	-	-	-	-	900	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.2	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	974	-	-	1560	-
HCM Lane V/C Ratio	0.054	-	-	0.02	-
HCM Control Delay (s)	8.9	-	-	7.4	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	7.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	35	11	88	13	38	106
Future Vol, veh/h	35	11	88	13	38	106
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	12	96	14	41	115

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	50	0	244	38
Stage 1	-	-	-	-	38	-
Stage 2	-	-	-	-	206	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1557	-	744	1034
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	829	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1557	-	698	1034
Mov Cap-2 Maneuver	-	-	-	-	698	-
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	778	-

Approach	EB	WB	NB
HCM Control Delay, s	0	6.5	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	917	-	-	1557	-
HCM Lane V/C Ratio	0.171	-	-	0.061	-
HCM Control Delay (s)	9.7	-	-	7.5	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.6	-	-	0.2	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	106	11	29	38	13	35
Future Vol, veh/h	106	11	29	38	13	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	115	12	32	41	14	38

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	127	0	220	115
Stage 1	-	-	-	-	115	-
Stage 2	-	-	-	-	105	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1459	-	768	937
Stage 1	-	-	-	-	910	-
Stage 2	-	-	-	-	919	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1459	-	751	937
Mov Cap-2 Maneuver	-	-	-	-	751	-
Stage 1	-	-	-	-	910	-
Stage 2	-	-	-	-	899	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.3	9.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	878	-	-	1459	-
HCM Lane V/C Ratio	0.059	-	-	0.022	-
HCM Control Delay (s)	9.4	-	-	7.5	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Transportation Analysis

Englewood South
Development of Regional Impact
DRI # 3299

SYNCHRO (Version 11)
Model Analysis

FUTURE 2028
BUILD Development
Driveway – PM Peak Period

Prepared by:

GRICE CONSULTING GROUP

Terminus Building 100
3280 Peachtree Road, NE
7th Floor
Atlanta, Georgia 30305

Intersection	
Int Delay, s/veh	2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	79	80	75	224	26	73
Future Vol, veh/h	79	80	75	224	26	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	86	87	82	243	28	79

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	173	0	493	86
Stage 1	-	-	-	-	86	-
Stage 2	-	-	-	-	407	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1404	-	535	973
Stage 1	-	-	-	-	937	-
Stage 2	-	-	-	-	672	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1404	-	504	973
Mov Cap-2 Maneuver	-	-	-	-	504	-
Stage 1	-	-	-	-	937	-
Stage 2	-	-	-	-	633	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	782	-	-	1404	-
HCM Lane V/C Ratio	0.138	-	-	0.058	-
HCM Control Delay (s)	10.3	-	-	7.7	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.5	-	-	0.2	-

Intersection	
Int Delay, s/veh	8.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	73	80	224	26	79	220
Future Vol, veh/h	73	80	224	26	79	220
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	79	87	243	28	86	239

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	166	0	593	79
Stage 1	-	-	-	-	79	-
Stage 2	-	-	-	-	514	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1412	-	468	981
Stage 1	-	-	-	-	944	-
Stage 2	-	-	-	-	600	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1412	-	388	981
Mov Cap-2 Maneuver	-	-	-	-	388	-
Stage 1	-	-	-	-	944	-
Stage 2	-	-	-	-	497	-

Approach	EB	WB	NB
HCM Control Delay, s	0	7.2	14.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	699	-	-	1412	-
HCM Lane V/C Ratio	0.465	-	-	0.172	-
HCM Control Delay (s)	14.5	-	-	8.1	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	2.5	-	-	0.6	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	220	27	75	224	26	73
Future Vol, veh/h	220	27	75	224	26	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	0	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	239	29	82	243	28	79

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	268	0	646	239
Stage 1	-	-	-	-	239	-
Stage 2	-	-	-	-	407	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1296	-	436	800
Stage 1	-	-	-	-	801	-
Stage 2	-	-	-	-	672	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1296	-	409	800
Mov Cap-2 Maneuver	-	-	-	-	409	-
Stage 1	-	-	-	-	801	-
Stage 2	-	-	-	-	630	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2	11.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	639	-	-	1296	-
HCM Lane V/C Ratio	0.168	-	-	0.063	-
HCM Control Delay (s)	11.8	-	-	8	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.6	-	-	0.2	-

Transportation Analysis

Englewood South
Development of Regional Impact
DRI # 3299

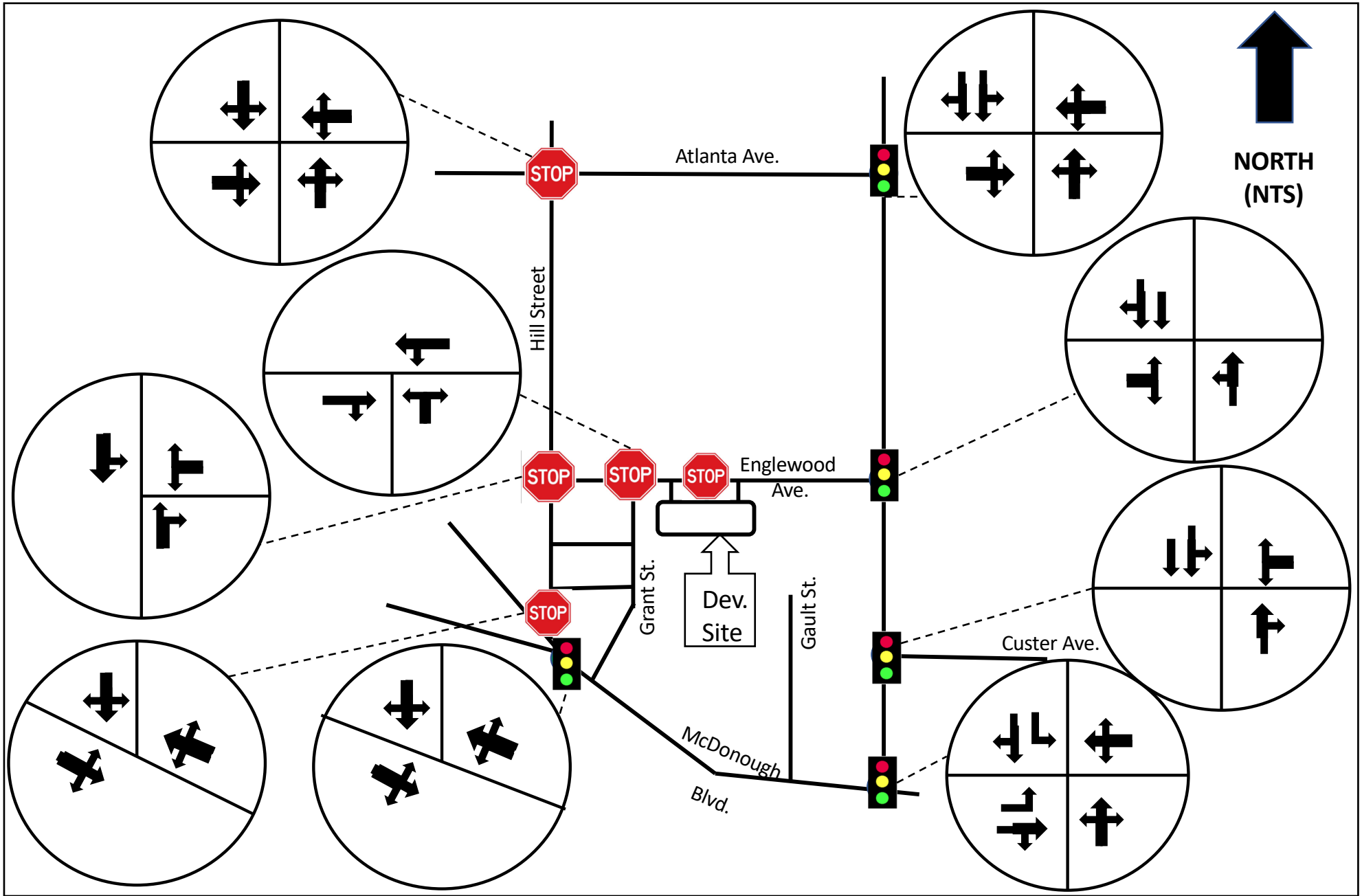
APPENDIX H

EXISTING AND PROPOSED INTERSECTION LANEAGE

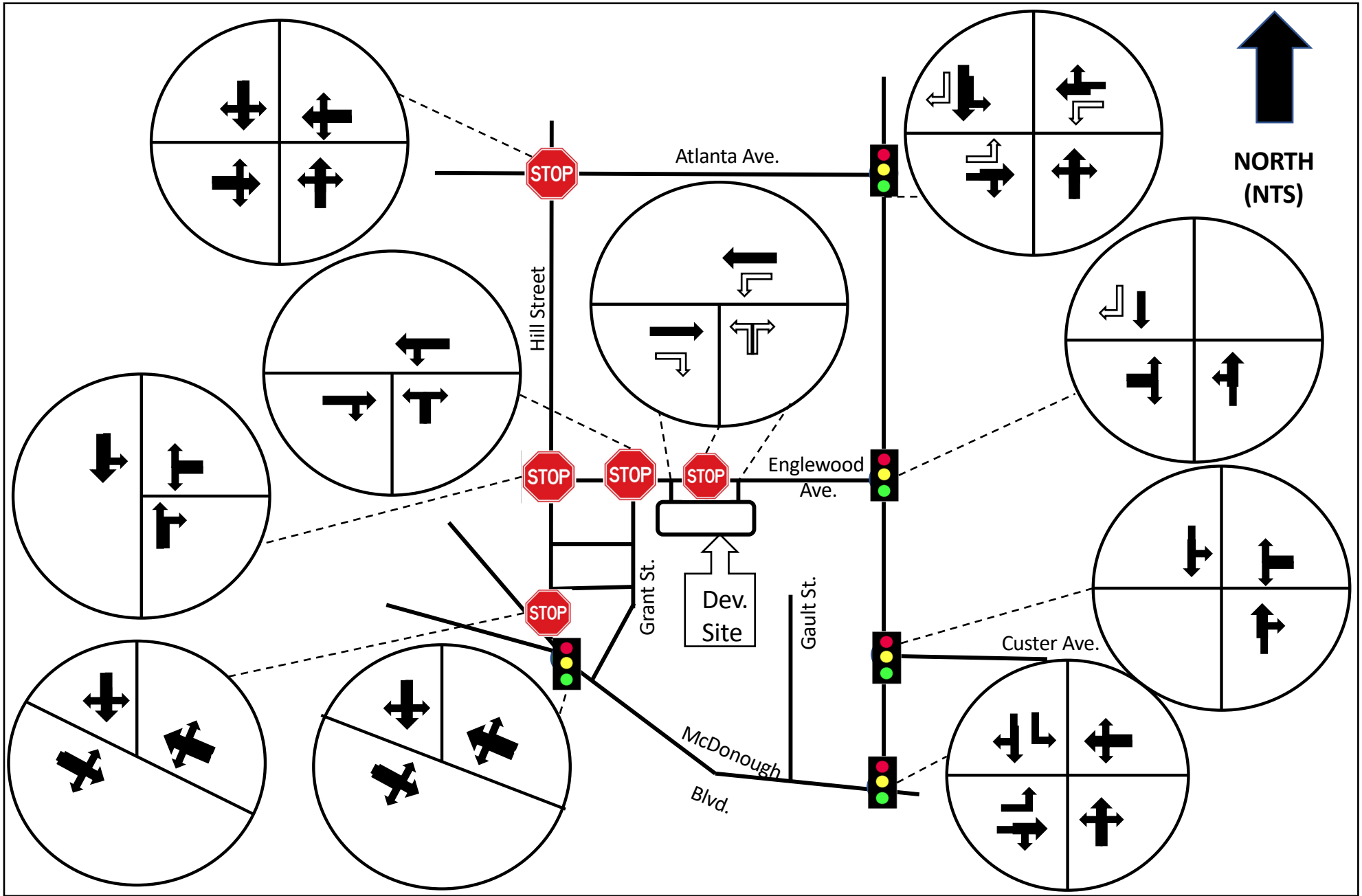
Prepared by:

GRICE CONSULTING GROUP

Terminus Building 100
3280 Peachtree Road, NE
7th Floor
Atlanta, Georgia 30305



GRICE CONSULTING GROUP	**Englewood South DRI # 3299 Transportation Analysis**	**Intersection Laneage (Existing)**	**Exhibit H1**



GRICE CONSULTING GROUP	**Englewood South DRI # 3299 Transportation Analysis**	**Intersection Laneage (Proposed)**	**Exhibit H2**