

# 740 West Peachtree DRI #2707

City of Atlanta, Georgia

Report Prepared:

September 2017

Prepared for:

Portman Holdings

Prepared by:



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# Transportation Analysis

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### **EXECUTIVE SUMMARY**

This report presents the analysis of the anticipated traffic impacts of the proposed 740 West Peachtree mixed-use development located in the City of Atlanta, Georgia. The approximate 1.73-acre site is located north of 3<sup>rd</sup> Street, south of 4<sup>th</sup> Street, east of Spring Street, and west of West Peachtree Street. The project site currently consists of the occupied one-story SunTrust bank building, the occupied two-story Midtown Bank and Trust bank building, and associated parking. Both buildings will be demolished. The proposed development will be mixed-use, consisting of 765,463 square feet of residential, office, retail, restaurant, and bank land uses.

The project is a Development of Regional Impact (DRI) and is subject to Georgia Regional Transportation Authority (GRTA) and Atlanta Regional Commission (ARC) review due to the project size exceeding 700,000 SF of mixed-use development in a Region Core area type and 600,000 SF of mixed-use development in a Regional Center area type, as determined by the Atlanta Regional Commission's *Unified Growth Policy Map (UGPM)*. The DRI trigger for this development was the submittal of the special administrative permit (SAP) with the City of Atlanta on July 17<sup>th</sup>, 2017. The DRI was formally triggered with the filing of the Initial DRI Information (Form 1) on July 31, 2017 by the City of Atlanta. The DRI Pre-Review/Methodology meeting occurred on July 24, 2017.

The proposed project is expected to be completed by 2022. The proposed site will consist of the following land uses and densities:

Residential: 140 units Office: 610,487 SF

Retail: 9,476 SF (assumed to be 50% retail and 50% restaurant)

Bank: 5,500 SF

The DRI analysis includes an estimation of the overall 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 an office development or people living in the residential development may walk to the retail and restaurants instead of driving off-site. This reduces the number of vehicle trips that will be made on the roadway, thus reducing traffic congestion. These types of interactions are expected at the 740 West Peachtree development – including workers and residents walking to the retail and restaurant land uses.

Alternative mode reductions are taken when a site can be accessed by modes other than vehicles (walking, bicycling, transit, etc.). As the 740 West Peachtree development is located in a region core with close proximity to transit and increased pedestrian facilities, a 25% alternative mode reduction was taken. The project site is located 0.2 miles (2 blocks) from the North Avenue MARTA Rail Station and 0.5 miles (6 blocks) from the Midtown MARTA Rail Station, both of which are served by the Red and Gold lines seven days a week. The project site is adjacent to three bus stops that are served by GRTA Xpress buses, Cobb County Transit buses, and the Georgia Tech Trolley. The project site is also 0.2 miles (two blocks) from MARTA Bus Route 110 which provides service seven days a week. The project site is located next to the Georgia Tech in the heart of Midtown Atlanta in an area with increased pedestrian and bicyclist facilities. Based on knowledge of the area, it is anticipated that there will be limited vehicular trips for the proposed retail and restaurant land uses.

Pass-by reductions are taken for bank, retail and restaurant trips only. Traffic normally traveling along a roadway may choose to visit a bank, retail, or restaurant establishment that is along the vehicle's

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original path. These trips were already on the road and would therefore only be new trips at the driveways. The project site is located next to Georgia Tech in the heart of Midtown Atlanta, an area with increased pedestrian and bicycle facilities. Based on knowledge of the area, it is anticipated that there will be vehicular pass-by trips for the bank only. No pass-by reductions were taken for the retail and restaurant trips, thus providing a more conservative analysis.

Capacity analyses were performed throughout the study network for the Existing 2017 conditions, the Projected 2022 No-Build conditions, and the Projected 2022 Build conditions.

- Existing 2017 conditions represent traffic volumes that were collected in October 2016, November 2016, and August 2017 by performing AM and PM peak hour turning movement counts.
- Projected 2022 No-Build conditions represent the existing traffic volumes grown for five (5) years at 0.5 percent per year throughout the study network. The Projected 2022 No-Build conditions also include the anticipated traffic to be generated by the Georgia Tech HPCC development (DRI #2569) and the Spring @ 8th development (DRI #2634), which are both currently under construction. Additionally, the Projected 2022 No-Build condition will include the two-way conversion of 3<sup>rd</sup> Street and 4<sup>th</sup> Street. Furthermore, Midtown Alliance desires protected pedestrian crossings no more than 600 feet apart, and therefore plans on installing traffic signals at Spring Street at 4<sup>th</sup> Street/Williams Street (Int. #1), West Peachtree Street at 4<sup>th</sup> Street (Int. #2), and Spring Street at 3<sup>rd</sup> Street (Int. #3), which Midtown Alliance expects to be completed prior to 2022.
- Projected 2022 Build conditions represent the Projected 2022 No-Build conditions plus the
  addition of the project trips that are anticipated to be generated by the 740 West Peachtree
  development. Also included are the three (3) site access driveways and existing alley in addition
  to the existing study network intersections. The existing alley is anticipated to provide access
  for the bank drive-thru operation.

Based on the analysis of Existing 2017 conditions (present conditions; i.e. <u>excludes</u> background traffic growth and <u>excludes</u> the 740 West Peachtree project traffic), there are no recommended improvements.

Based on the analysis of Projected 2022 No-Build conditions (<u>includes</u> background traffic growth, Georgia Tech HPCC development (DRI #2569) project traffic and the Spring @ 8th development (DRI #2634) project traffic but <u>excludes</u> the 740 West Peachtree project traffic), there are no recommended improvements. Based on the discussions in the Pre-Review Meeting, the following improvements were assumed to be made by Midtown Alliance and completed by 2022, and were therefore included in the Projected 2022 No-Build conditions.

- Intersection #1: Spring Street at 4<sup>th</sup> Street/Williams Street
  - o Install traffic signal at the intersection.
  - Convert 4<sup>th</sup> Street to a two-way road, which includes the following improvements:
    - Restripe southbound approach to include one shared left-turn/through lane, two exclusive through lanes, and one shared through/right-turn lane.
    - Restripe eastbound approach to include one shared through/right-turn lane and one exclusive egress lane.
    - Restripe westbound approach to include one shared left-turn/through lane and one exclusive egress lane.

- Intersection #2: West Peachtree Street at 4<sup>th</sup> Street
  - o Install traffic signal at the intersection.
  - o Convert 4th Street to a two-way road, which includes the following improvements:
    - Restripe northbound approach to include one shared left-turn/through lane, two exclusive through lanes, and one shared through/right-turn lane.
    - Restripe eastbound approach to include one shared left-turn/through lane and one exclusive egress lane.
    - Restripe westbound approach to include one shared through/right-turn lane and one exclusive egress lane.
- Intersection #3: Spring Street at 3<sup>rd</sup> Street
  - Install traffic signal at the intersection.
  - o Convert 3<sup>rd</sup> Street to a two-way road, which includes the following improvements:
    - Restripe southbound approach to include one shared left-turn/through lane, two exclusive through lanes, and one shared through/right-turn lane.
    - Restripe eastbound approach to include one shared through/right-turn lane and one exclusive egress lane.
    - Restripe westbound approach to include one shared left-turn/through lane and one exclusive egress lane.
- Intersection #4: West Peachtree Street at 3<sup>rd</sup> Street
  - o Convert 3<sup>rd</sup> Street to a two-way road, which includes the following improvements:
    - Restripe northbound approach to include one shared left-turn/through lane, two exclusive through lanes, and one shared through/right-turn lane.
    - Restripe eastbound approach to include one shared left-turn/through lane and one exclusive egress lane.
    - Restripe westbound approach to include one shared through/right-turn lane and one exclusive egress lane.

Based on the analysis of Projected 2022 Build conditions (includes background traffic growth, Georgia Tech HPCC development (DRI #2569) project traffic, Spring @ 8th development (DRI #2634) project traffic, and includes the projected 740 West Peachtree), the following improvements are recommended:

- Intersection #6: 4<sup>th</sup> Street at Driveway 1
  - o On the site, construct one (1) shared northbound left-turn/right-turn lane.
  - o On the site, construct one (1) southbound receiving lane.
  - o Restripe eastbound approach to include one (1) shared through/right-turn lane.
  - o Restripe westbound approach to include one (1) shared left-turn/through lane.
  - Install stop-control on northbound leg.
- Intersection #7: 3<sup>rd</sup> Street at Driveway 2
  - o On the site, construct one (1) shared southbound left-turn/right-turn lane.
  - o On the site, construct one (1) northbound receiving lane.
  - o Restripe eastbound approach to include one (1) shared left-turn/through lane.
  - Restripe westbound approach to include one (1) shared through/right-turn lane.
  - Install stop-control on southbound leg.
- Intersection #8: West Peachtree Street at Driveway 3
  - On the site, construct one (1) exclusive eastbound left-turn lane.
  - Install stop-control on eastbound leg.

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### 1.0 Project Description

### 1.1 Introduction

This report presents the analysis of the anticipated traffic impacts of the proposed 740 West Peachtree mixed-use development located in the City of Atlanta, Georgia. The approximate 1.73-acre site is located north of 3<sup>rd</sup> Street, south of 4<sup>th</sup> Street, east of Spring Street, and west of West Peachtree Street. The proposed development will be mixed-use, consisting of 765,463 square feet of residential, office, retail, restaurant, and bank land uses.

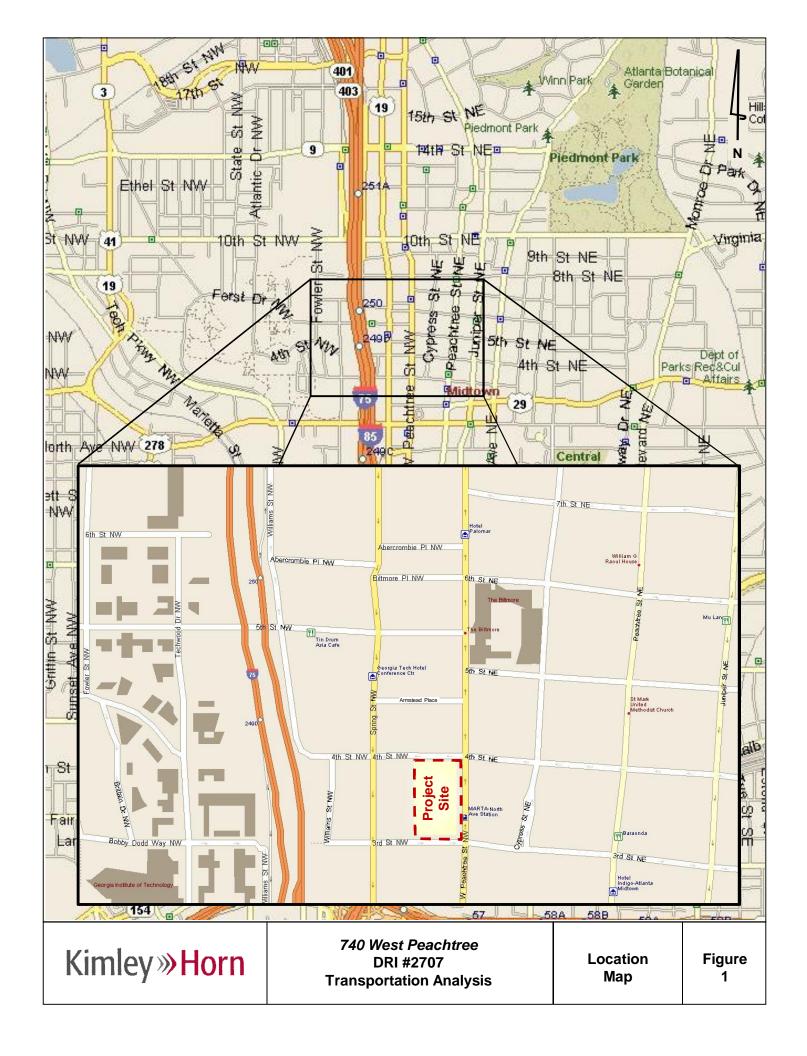
The project will exceed 700,000 square feet of mixed-use development in a Region Core area type and 600,000 SF of mixed-use development in a Regional Center area and therefore, the proposed development is a Development of Regional Impact (DRI) and is subject to Atlanta Regional Commission (ARC) and Georgia Regional Transportation Authority (GRTA) review.

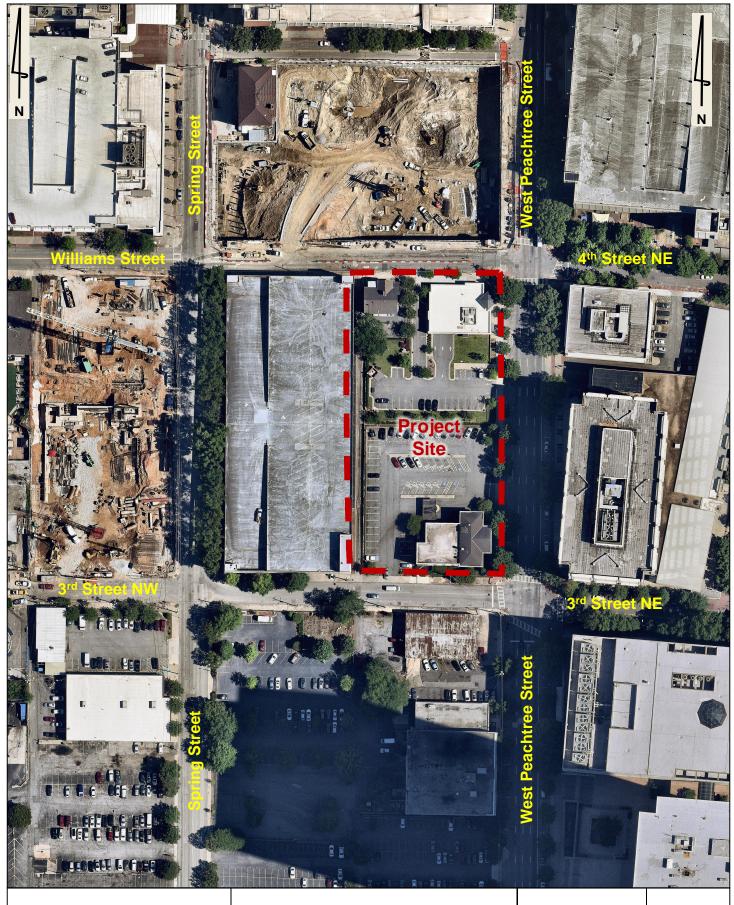
**Figure 1** provides the location map of the 740 West Peachtree development, and **Figure 2** provides a site aerial showing of the project site and surrounding area. Field review photographs taken within the vicinity of the study network are located in the site photo log in Appendix A. The City of Atlanta Zoning Ordinance Map and ARC's *Unified Growth Policy Map (UGPM)* are included in Appendix B.

The proposed project is expected to be completed by 2022, and this analysis will consider the full buildout of the proposed site in 2022. A summary of the proposed land-uses and densities is provided below in **Table 1**.

Table 1 Proposed Land Uses and Densities					
Residential	140 units				
Office	610,487 SF				
Bank	5,500 SF				
Retail	4,738 SF				
Restaurant	4,738 SF				

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740 West Peachtree DRI #2707 Transportation Analysis

Site Aerial

Figure 2

### 1.2 Site Plan Review

The project site currently consists of the occupied one-story SunTrust bank building, the occupied two-story Midtown Bank and Trust bank building, and associated parking. Both buildings will be demolished. The project site is located in Special Public Interest (SPI) Zone 16 according to the *City of Atlanta Zoning Ordinance Map*. The project site is located in a Region Core and Regional Center area type according to ARC's *Unified Growth Policy Map (UGPM)*. Additionally, the project site is within and adheres to the recommendations of the most recent Midtown LCI, which qualifies the 740 West Peachtree development for GRTA's expedited review.

A reference of the proposed site plan is provided in Appendix C. A full-sized site plan consistent with GRTA's Site Plan Guidelines is also being submitted as part of the review package.

### 1.3 Site Access

The site is currently served by two driveways along West Peachtree Street, one driveway along 3rd Street, and two driveways along 4th Street. The proposed site driveways are shown on the site plan and include one proposed driveway along 3rd Street, one proposed driveway along 4th Street, and one proposed exit-only driveway on West Peachtree Street. The alley behind the property will be utilized as a service road for the development and will provide access to the drive-through bank facilities. Therefore, for the purposes of this DRI, the existing alley is considered a site driveway.

Following is a description of each of the proposed driveways:

- 1. Driveway 1 is along 4<sup>th</sup> Street and is a proposed full movement driveway located approximately 150 feet west of the intersection of West Peachtree Street and 4<sup>th</sup> Street. Driveway 1 is proposed to access the site parking deck.
- 2. Driveway 2 is along 3<sup>rd</sup> Street and is a proposed full movement driveway located approximately 175 feet west of the intersection of West Peachtree Street and 3<sup>rd</sup> Street. Driveway 2 is proposed to access the site parking deck.
- 3. Driveway 3 is along West Peachtree Street and is a proposed exit-only driveway approximately 250 feet south of the intersection of West Peachtree Street and 4<sup>th</sup> Street. Driveway 3 is proposed to be a connection from the Existing Alley to West Peachtree Street.
- 4. Existing Alley is proposed to be a single lane southbound only service drive and provide access to the drive-through bank facilities. The Existing Alley currently intersects 4<sup>th</sup> Street to the north and 3<sup>rd</sup> Street to the south and is analyzed as one entry only driveway along 4<sup>th</sup> Street and one exit only driveway along 3<sup>rd</sup> Street.

The site driveways mentioned above provide access to all parking for the site. Parking will be located on-site in a proposed parking deck and on-street where space permits. Currently, approximately 1,039 parking spaces are planned to be provided for in the proposed parking deck and along the associated on-street parking where applicable. The exact number and location of the parking spaces is subject to change during the development of the master plan. Parking ratios as required by SPI-16 zoning is shown below.

Office: 2.5 spaces per 1,000 SF (maximum)

Residential: 1 space per bedroom up to two bedrooms (maximum)

0.5 spaces per bedroom beyond two bedrooms (maximum)

0.33 spaces per dwelling unit for visitors (maximum

Retail & Restaurant: 1 space per 600 SF (minimum)

2.5 spaces per 600 SF (maximum)

As the 740 West Peachtree development is located in a Region Core, shared parking will be utilized on the project site. Based on knowledge of the area's increased pedestrian and bicyclist infrastructure, it is anticipated that there will be limited vehicular trips for the retail and restaurant land uses.

# 1.4 Bicycle and Pedestrian Facilities

The project site is located in the heart of Midtown Atlanta, in an area with increased pedestrian and bicyclist facilities. Pedestrian facilities (sidewalks) currently exist along the project site frontage. There are currently bicycle facilities (bike lanes/paths) along 5<sup>th</sup> Street in the vicinity of the project site. Additional bike facilities are planned as part of project AT-271 (Juniper Street Bicycle/Pedestrian Facilities) and AT-277 (Cycle Atlanta: Phase 1.0 – includes routes on West Peachtree Street and Peachtree Street). More details are provided in Section 8.0.

### 1.5 Transit Facilities

The project site is located 0.2 miles (2 blocks) from the North Avenue MARTA Rail Station and 0.5 miles (6 blocks) from the Midtown MARTA Rail Station, both of which are served by the Red and Gold lines seven days a week. The project site is adjacent to three bus stops that are served by GRTA Xpress buses, Cobb County Transit buses, and the Georgia Tech Trolley. The project site is also 0.2 miles (two blocks) from MARTA Bus Route 110 which provides service seven days a week.

# 2.0 TRAFFIC ANALYSES, METHODOLOGY AND ASSUMPTIONS

### 2.1 Growth Rate

Background traffic is defined as expected traffic on the roadway network in future year(s) absent the construction and opening of the proposed project. Background traffic can include a base growth rate based on historical count data as well as population growth data and estimates as well as trips anticipated from nearby or adjacent other projects. Based on methodology outlined in the GRTA Letter of Understanding (LOU), a 0.5 percent per year for five (5) years background traffic growth rate was used for all roadways. This background growth rate was used to account for other development activity in the area.

### 2.2 Traffic Data Collection

Weekday peak hour turning movement counts were collected on Tuesday, October 25, 2016, Wednesday, November 9, 2016, Thursday, March 30, 2017, and Tuesday, August 29, 2017 at the study intersections from 7:00 AM – 9:00 AM for the AM peak period and from 3:30 PM to 6:30 PM for the PM peak period. The morning and afternoon peak hours varied slightly between the intersections. Peak hours for all intersections are shown in **Table 2**.

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Table 2 Peak Hour Summary							
Intersection	AM Peak Hour	PM Peak Hour					
Spring Street at 4 <sup>th</sup> Street/Williams Street	8:30 - 9:30	5:30 - 6:30					
2. West Peachtree Street at 4 <sup>th</sup> Street	7:45 – 8:45	5:00 - 6:00					
3. Spring Street at 3 <sup>rd</sup> Street	8:00 - 9:00	4:30 - 5:30					
4. West Peachtree Street at 3 <sup>rd</sup> Street	8:00 – 9:00	5:00 - 6:00					
5. 3 <sup>rd</sup> Street at Cypress Street	8:00 – 9:00	5:00 - 6:00					

The collected peak hour turning movement traffic counts are available upon request.

# 2.3 Detailed Intersection Analysis

Level-of-service (LOS) is used to describe the operating characteristics of a road segment or intersection in relation to its capacity. LOS is defined as a qualitative measure that describes operational conditions and motorists' perceptions within a traffic stream. The *Highway Capacity Manual* defines six levels-of-service, LOS A through LOS F, with A being the best and F being the worst. Level-of-service analyses were conducted at all intersections within the study network using *Synchro Professional, Version 9.0*.

Existing traffic signal phasing and timing data were retrieved from the Midtown Traffic Operations Program (MTOP) for signalized intersections. Existing timing data was used in the Existing 2017 conditions. Signal timings were optimized using *Synchro Professional, Version 9.0* for Projected 2022 No-Build conditions, Projected 2022 Build conditions, and all improved conditions.

Levels-of-service for signalized intersections are reported for the intersection as a whole. One or more movements at an intersection may experience a low level-of-service, while the intersection as a whole may operate acceptably.

Levels-of-service for unsignalized intersections, with stop control on the minor street only, are reported for the side street approaches and the major street left-turn movements. Low levels-of-service for side street approaches are not uncommon, as vehicles may experience significant delays in turning onto a major roadway.

### 3.0 STUDY NETWORK

### 3.1 Gross Trip Generation

Traffic for the proposed land uses and densities were calculated using methodology contained in the *Institute of Transportation Engineers' (ITE) Trip Generation Manual, Ninth Edition.* Gross trips generated are displayed below in **Table 3**. Existing trips generated by the existing land uses on the site are minimal and therefore, were not removed from the network in order to present a more conservative analysis.

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Table 3 Gross Trip Generation										
Land Use	ITE	D	aily Traffi	c	AM	Peak H	our	PM	Peak Ho	our
(Intensity)	Code	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit
High-Rise Apartment (140 units)	222	736	368	368	43	11	32	57	35	22
General Office Building (610,487 SF)	710	5,192	2,596	2,596	814	716	98	762	130	632
Specialty Retail Center (4,738 SF)	826	240	120	120	24	15	9	33	14	18
Drive-In Bank (5,500 SF)	912	815	407	408	66	38	28	134	67	67
High-Turnover (Sit-Down) Restaurant (4,738 SF)	932	602	301	301	51	28	23	47	28	19
Total Gross Trips		7,585	3,792	3,793	998	808	190	1,033	274	<i>7</i> 58

# 3.2 Trip Distribution

The directional distribution and assignment of new project trips was based on the project land uses, a review of the land use densities and road facilities in the area, engineering judgment, and methodology discussions with the Georgia Regional Transportation Authority (GRTA), Atlanta Regional Commission (ARC), Georgia Department of Transportation (GDOT), and the City of Atlanta.

### 3.3 Level-of-Service Standards

For the purposes of this traffic analysis, a level-of-service standard of D was assumed for all intersections and segments within the study network. If, however, an intersection or segment currently operates at LOS E or LOS F during an existing peak period, the LOS standard for that peak period becomes LOS E, consistent with the GRTA Letter of Understanding.

# 3.4 Study Network Determination

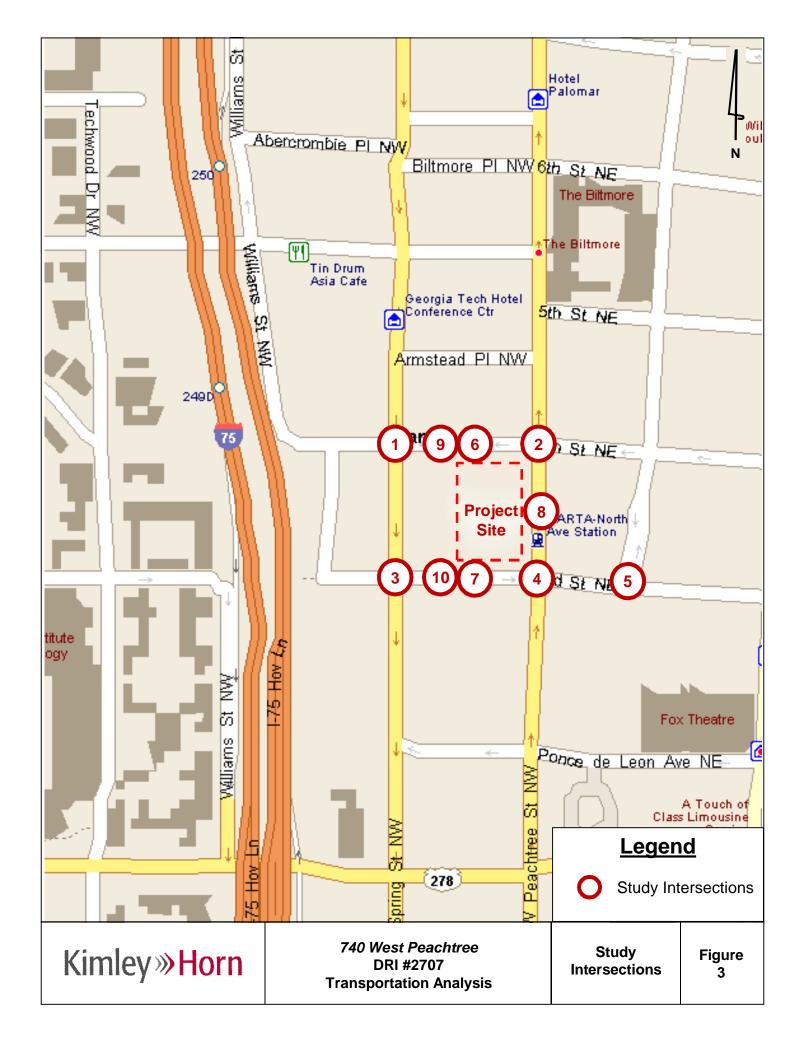
A general study area was determined based on a review of land uses and population densities in the area as well as a review of peak hour traffic counts and engineering judgement. The study area was agreed upon during methodology discussions with GRTA, ARC, GDOT, and City of Atlanta staff, and includes the following five (5) intersections described in **Table 4**.

The study network includes one (1) signalized intersection and four (4) stop controlled intersections as noted in **Table 4**. The study intersections are shown in **Figure 3**.

Table 4 Intersection Control Summary					
Intersection	Control				
Spring Street at 4 <sup>th</sup> Street/Williams Street	Stop Control				
2. West Peachtree Street at 4 <sup>th</sup> Street	Stop Control				
3. Spring Street at 3 <sup>rd</sup> Street	Stop Control				
4. West Peachtree Street at 3 <sup>rd</sup> Street	Signal				
5. 3 <sup>rd</sup> Street at Cypress Street	Stop Control				

Each of the above listed intersections was analyzed for the Existing 2017 conditions, the Projected 2022 No-Build conditions, and the Projected 2022 Build conditions. The Projected 2022 No-Build conditions represent the existing traffic volumes grown for three (3) years at 0.5 percent per year throughout the study network as well as the anticipated traffic generated by the Georgia Tech HPCC development (DRI #2569) and the Spring @ 8th development (DRI #2634), both of which are currently under construction. Additionally, the Projected 2022 No-Build condition will include the two-way conversion of 3<sup>rd</sup> Street and 4<sup>th</sup> Street. Furthermore, Midtown Alliance desires protected pedestrian crossings no more than 600 feet apart, and therefore plans on installing traffic signals at Spring Street at 4<sup>th</sup> Street/Williams Street (Int. #1), West Peachtree Street at 4<sup>th</sup> Street (Int. #2), and Spring Street at 3<sup>rd</sup> Street (Int. #3), which Midtown Alliance expects to be completed prior to 2022.

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# 3.5 Existing Roadway Facilities

Roadway classification descriptions and estimated Average Daily Traffic (ADT) for the entire study area are provided in **Table 5**.

ADTs were estimated for Spring Street, West Peachtree Street, 4<sup>th</sup> Street, 3<sup>rd</sup> Street, and Cypress Street.

Table 5 Roadway Classification and ADTs									
Roadway	No. of Lanes	ADT	Posted Speed Limit (MPH)	GDOT Classification					
Spring Street	4	15,100	30	Minor Arterial					
West Peachtree Street	4	10,500	30	Minor Arterial					
4 <sup>th</sup> Street	2	3,100	25	Local Road					
3 <sup>rd</sup> Street	2	1,500	25	Local Road					
Cypress Street	2	900	25	Local Road					

### 4.0 Trip Generation

As stated previously, gross trips associated with the proposed development were estimated using the *Institute of Transportation Engineers' (ITE) Trip Generation Manual, Ninth Edition, 2012*, using equations where available. Trip generation for this proposed development is calculated based upon the following land uses: High-Rise Apartment (ITE #222), General Office Building (ITE #710), Specialty Retail Center (ITE #826), Drive-In Bank (ITE #912), and High-Turnover (Sit-Down) Restaurant (ITE #932)

Mixed-use vehicle trip reductions were taken according to the *ITE Trip Generation Handbook, Third Edition, 2014*. Because the Third Edition does not include guidance on daily internal capture, the Second Edition, 2004 was used for daily. Total internal capture and vehicle trip reduction between the land uses is expected to be 6.2% daily, 11.4% for the AM peak hour and 11.6% for the PM peak hour as a result of the anticipated interaction between the residential, office, bank, retail, and restaurant land uses within the proposed development.

Due to the 740 West Peachtree development being located in close proximity to transit, pedestrian, and bicycle facilities, an alternative transportation (walking, bicycle, and transit) reduction was applied for the 740 West Peachtree project trips. An alternative transportation mode reduction of 25%, consistent with GRTA's Letter of Understanding, was applied to all land uses for this study.

In accordance with the GRTA LOU, pass-by reductions were taken according to the *ITE Trip Generation Handbook, Third Edition, 2014* for the bank land use. Based on knowledge of the area and in order to provide a more conservative analysis, it is expected that there will be limited vehicular pass-by trips for the retail and restaurant land uses.

The total (net) trips generated and analyzed in this report are listed in **Table 6**.

Table 6 Net Trip Generation									
	Daily Traffic AM Peak Hour PM Peak Hour								
Total Enter Exit Total Enter Exit Total Enter E							Exit		
Gross Project Trips 7,585 3,792 3,793 998 808					808	190	1,033	274	758
Mixed-Use Reduction	-470	-235	-235	-114	-57	-57	-120	-60	-60
Alternative Mode Reduction	-1,780	-890	-890	-222	-188	-33	-228	-55	-175
Pass-By Reduction	-140	-70	-70	-12	-6	-6	-20	-10	-10
Net New Trips	5,195	2,597	2,598	650	557	94	665	149	513

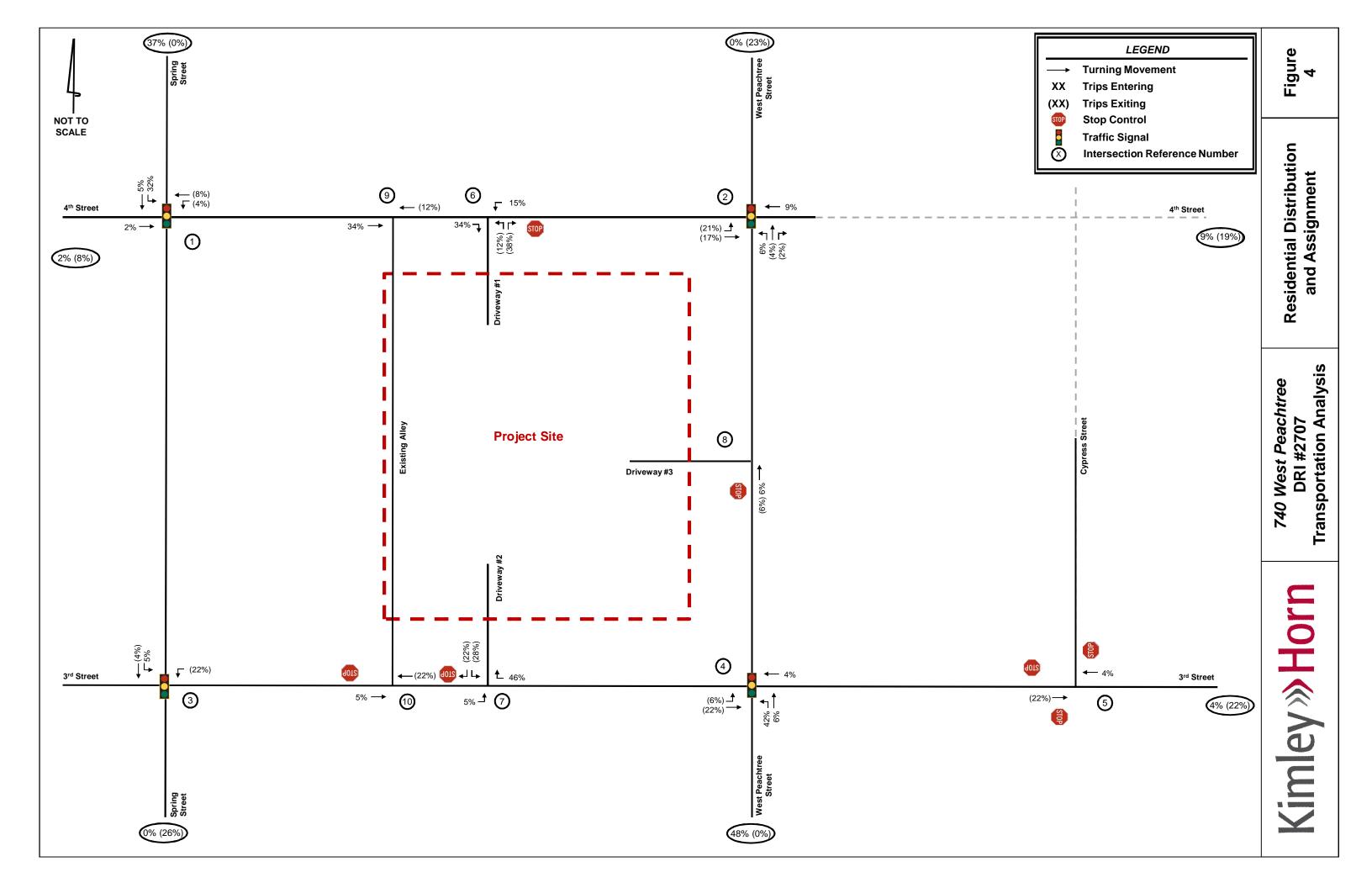
A more detailed trip generation analysis summary table is provided in Appendix D.

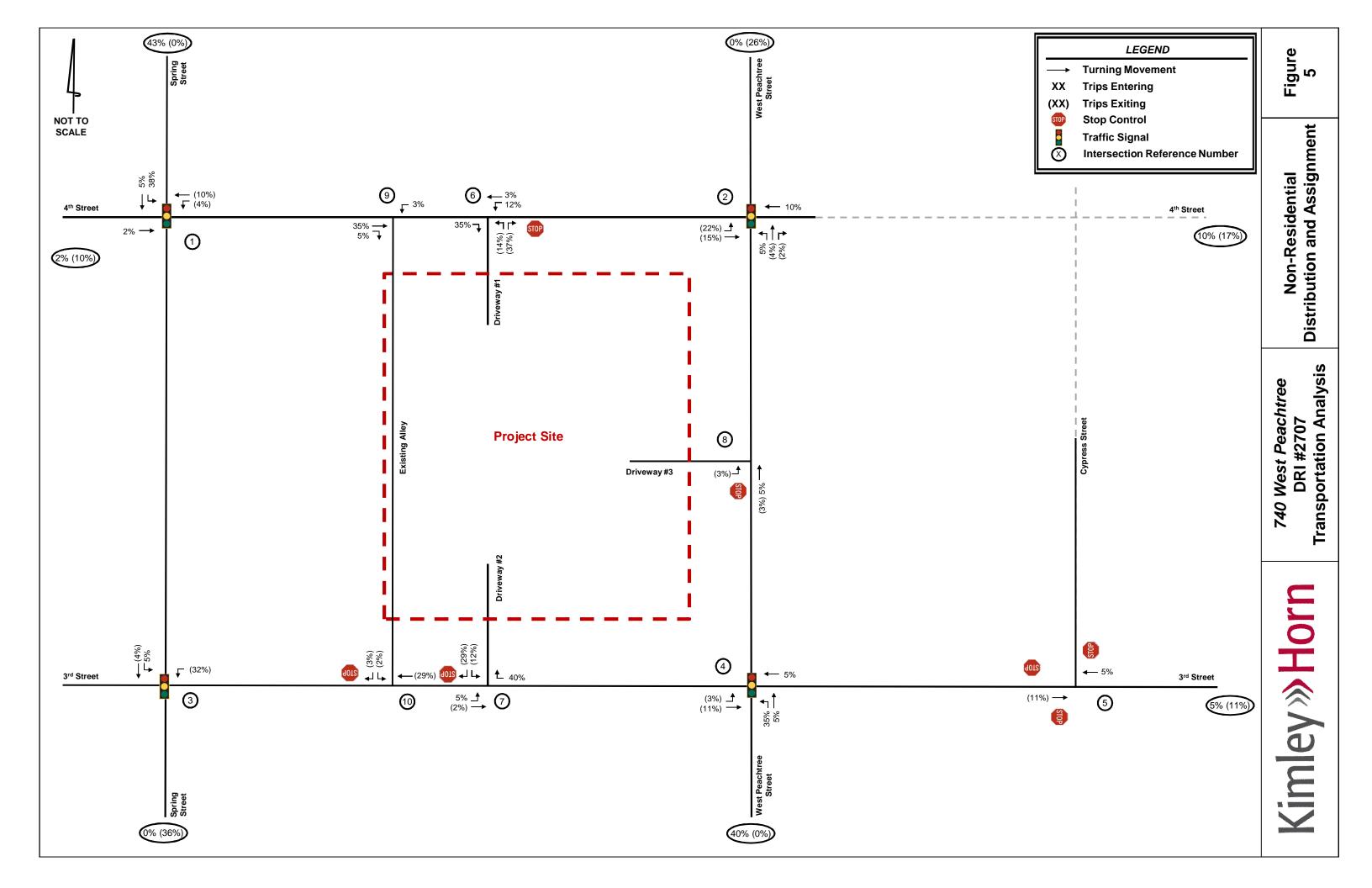
### 5.0 Trip Distribution and Assignment

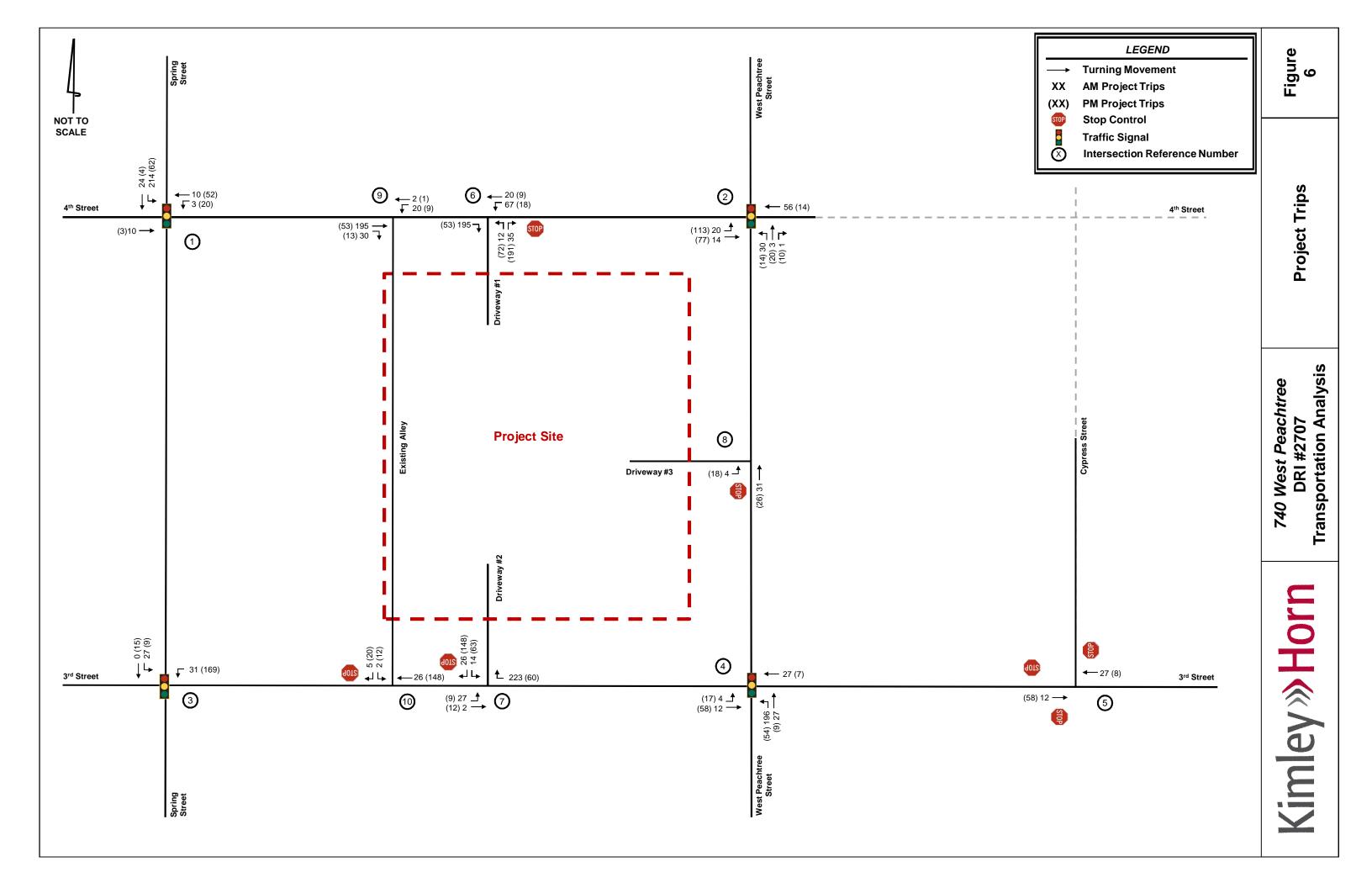
New trips were distributed onto the roadway network using the percentages developed as described in *Section 3.2* of this report, and as agreed to during methodology discussions with GRTA, ARC, GDOT, and City of Atlanta staff.

**Figure 4** displays the anticipated distribution and assignment of the residential project trips and **Figure 5** displays the anticipated distribution and assignment of the office, grocery, retail and restaurant project trips throughout the study roadway network. These trip assignment percentages were applied to the net new trips expected to be generated by the development, and the volumes were assigned to the roadway network. The combined peak hour project trips by turning movement throughout the study network, anticipated to be generated by the proposed 740 West Peachtree development, are shown in **Figure 6**.

Detailed intersection volume worksheets are provided in Appendix E.







# 6.0 TRAFFIC ANALYSIS

# 6.1 Existing 2017 Conditions

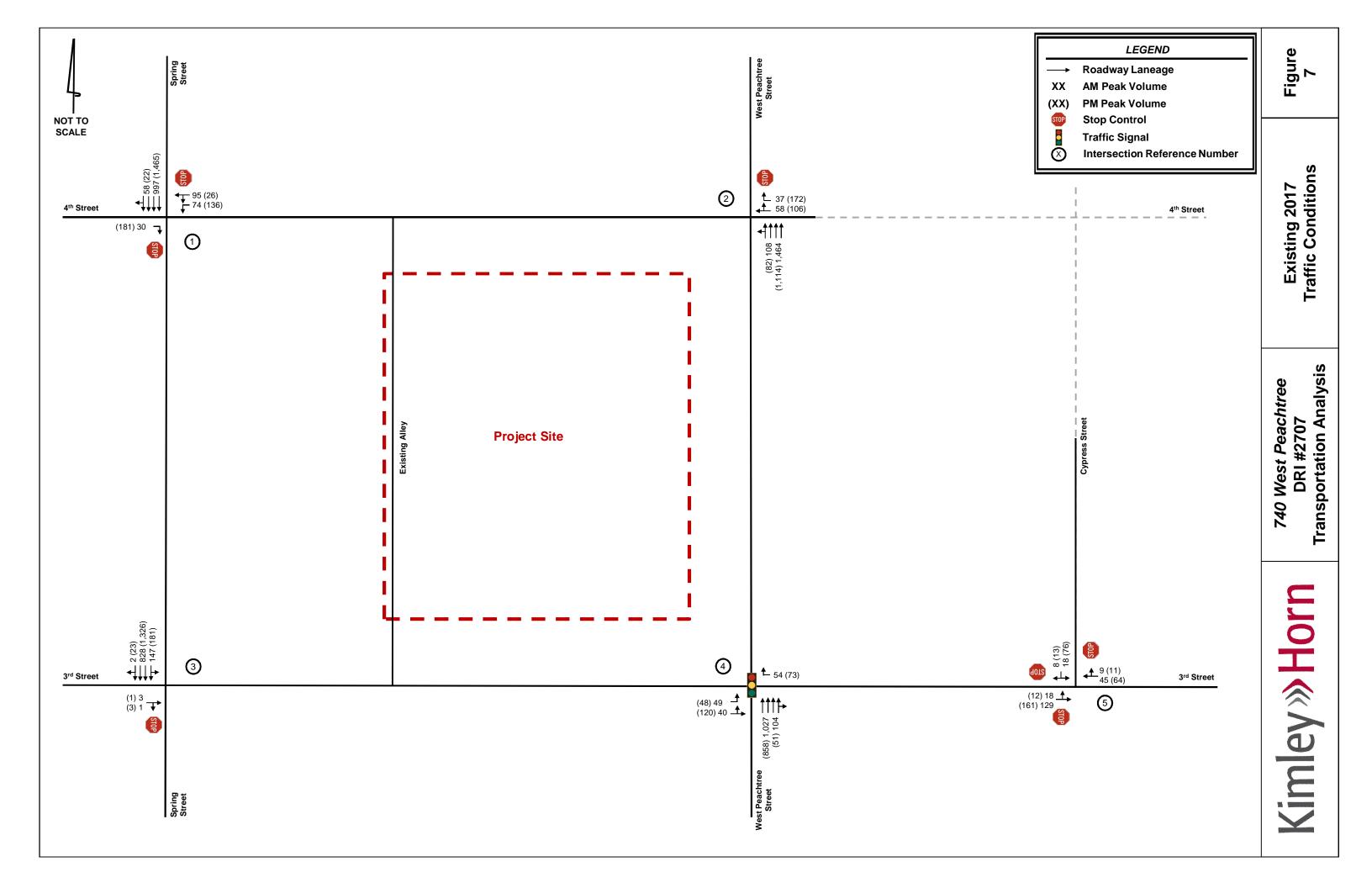
The observed existing peak hour traffic volumes were entered into *Synchro 9.0*, and capacity analyses were performed for the AM and PM peak hours. The existing peak hour traffic volumes are displayed in **Figure 7**, and the results of the capacity analyses for the Existing 2017 conditions are shown in **Table 7**. Detailed *Synchro* analysis reports are available upon request.

Table 7 Existing 2017 Intersection Levels-of-Service  LOS (delay in seconds)							
	LOS	Existing	<b>2017 Cond</b>	itions			
Intersection	Std.	Control/ Movement	AM Peak Hour	PM Peak Hour			
Spring Street at 4 <sup>th</sup> Street/Williams Street	D	EB WB	B (10.5) D (33.5)	C (15.0) E (40.9)			
2. West Peachtree Street at 4 <sup>th</sup> Street	D	WB NBL	F (63.4) A (2.9)	D (26.8) A (2.8)			
3. Spring Street at 3 <sup>rd</sup> Street	D	EB SBL	D (26.8) A (4.2)	C (21.7) A (3.9)			
4. West Peachtree Street at 3 <sup>rd</sup> Street	D	Signal	B (13.3)	B (17.3)			
5. 3 <sup>rd</sup> Street at Cypress Street	D	EB WB SB	A (9.2) A (7.5) A (7.8)	A (8.6) A (7.8) A (8.4)			

As shown in **Table 7**, most of the study intersections currently operate at or above their acceptable overall level-of-service standard during the AM and PM peak hours in the Existing 2017 conditions. At Spring Street at 4<sup>th</sup> Street/Williams Street (Int. #1), the westbound movement operates at LOS E during the PM peak hour and at West Peachtree Street and 4<sup>th</sup> Street (Int. #2), the westbound movement operates at LOS F during the AM peak hour. However, low levels-of-service for side street approaches are not uncommon, as vehicles may experience significant delays in turning onto a major roadway. Therefore, no intersection improvements are recommended in the Existing 2017 conditions.

Based on the GRTA LOU, a queue analysis of the eastbound approach to 3<sup>rd</sup> Street at Cypress Street (Int. #5) was performed for informational purposes only. For the AM peak period, the 95<sup>th</sup> percentile queue is 35 feet. For the PM peak period, the 95<sup>th</sup> percentile queue is expected to be less than one car length, therefore assumed to be 25 feet.

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# 6.2 Projected 2022 No-Build Conditions

To account for growth in the vicinity of the proposed development, the existing traffic volumes grown for five (5) years at 0.5 percent per year throughout the study network. The Projected 2022 No-Build traffic volumes also include the anticipated traffic generated by the Georgia Tech HPCC development (DRI #2569) and the Spring @ 8th development (DRI #2634), both of which are currently under construction. Additionally, the Projected 2022 No-Build condition will include the two-way conversion of 3<sup>rd</sup> Street and 4<sup>th</sup> Street. Furthermore, Midtown Alliance desires protected pedestrian crossings no more than 600 feet apart, and therefore plans on installing traffic signals at Spring Street at 4<sup>th</sup> Street/Williams Street (Int. #1), West Peachtree Street at 4<sup>th</sup> Street (Int. #2), and Spring Street at 3<sup>rd</sup> Street (Int. #3), which Midtown Alliance expects to be completed prior to 2022. These volumes were entered into *Synchro 9.0*, and capacity analyses were performed.

The intersection laneage and traffic volumes for the Projected 2022 No-Build conditions are shown in **Figure 8**. The results of the capacity analyses for the Projected 2022 No-Build conditions with existing laneage and control types are shown in **Table 8**. Detailed *Synchro* analysis reports are available upon request.

Table 8 Projected 2022 No-Build Intersection Levels-of-Service  LOS (delay in seconds)								
Interpretion	LOS		ojected 2022 uild Condition					
Intersection	Std.	Control/ Movement	AM Peak Hour	PM Peak Hour				
Spring Street at 4 <sup>th</sup> Street/Williams Street	D	Proposed Signal*	B (17.5)	C (28.2)				
2. West Peachtree Street at 4 <sup>th</sup> Street	D	Proposed Signal*	B (12.3)	D (35.1)				
3. Spring Street at 3 <sup>rd</sup> Street	D	Proposed Signal*	B (13.0)	A (7.8)				
4. West Peachtree Street at 3 <sup>rd</sup> Street	D	Existing Signal	B (14.0)	B (17.5)				
5. 3 <sup>rd</sup> Street at Cypress Street	D	EB WB SB	A (8.0) A (7.9) A (7.6)	A (8.4) A (8.9) A (8.6)				

<sup>\*</sup> New traffic signals proposed by Midtown Alliance to ensure protected pedestrian crossings are no more than 600 feet apart.

As shown in **Table 8**, all study intersections are projected to operate at or above their acceptable overall level-of-service standard during the AM and PM peak hours in the Projected 2022 No-Build conditions. Therefore, no intersection improvements are recommended in the Projected 2022 No-Build conditions.

Based on the GRTA LOU, a queue analysis of the eastbound approach to 3<sup>rd</sup> Street at Cypress Street (Int. #5) was performed for informational purposes only. For the AM peak period, the 95<sup>th</sup> percentile queue is expected to be less than one car length, therefore assumed to be 25 feet. For the PM peak period, the 95<sup>th</sup> percentile queue is expected to be less than one car length, therefore assumed to be 25 feet.

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Based on the discussions in the Pre-Review Meeting, the following improvements were assumed to be made by Midtown Alliance and completed by 2022, and were therefore included in the Projected 2022 No-Build conditions.

- Intersection #1: Spring Street at 4<sup>th</sup> Street/Williams Street
  - o Install traffic signal at the intersection.
  - o Convert 4<sup>th</sup> Street to a two-way road, which includes the following improvements:
    - Restripe southbound approach to include one shared left-turn/through lane, two exclusive through lanes, and one shared through/right-turn lane.
    - Restripe eastbound approach to include one shared through/right-turn lane and one exclusive egress lane.
    - Restripe westbound approach to include one shared left-turn/through lane and one exclusive egress lane.
- Intersection #2: West Peachtree Street at 4<sup>th</sup> Street
  - Install traffic signal at the intersection.
  - o Convert 4<sup>th</sup> Street to a two-way road, which includes the following improvements:
    - Restripe northbound approach to include one shared left-turn/through lane, two exclusive through lanes, and one shared through/right-turn lane.
    - Restripe eastbound approach to include one shared left-turn/through lane and one exclusive egress lane.
    - Restripe westbound approach to include one shared through/right-turn lane and one exclusive egress lane.
- Intersection #3: Spring Street at 3<sup>rd</sup> Street
  - Install traffic signal at the intersection.
  - o Convert 3<sup>rd</sup> Street to a two-way road, which includes the following improvements:
    - Restripe southbound approach to include one shared left-turn/through lane, two exclusive through lanes, and one shared through/right-turn lane.
    - Restripe eastbound approach to include one shared through/right-turn lane and one exclusive egress lane.
    - Restripe westbound approach to include one shared left-turn/through lane and one exclusive egress lane.
- Intersection #4: West Peachtree Street at 3<sup>rd</sup> Street
  - Convert 3<sup>rd</sup> Street to a two-way road, which includes the following improvements:
    - Restripe northbound approach to include one shared left-turn/through lane, two exclusive through lanes, and one shared through/right-turn lane.
    - Restripe eastbound approach to include one shared left-turn/through lane and one exclusive egress lane.
    - Restripe westbound approach to include one shared through/right-turn lane and one exclusive egress lane.

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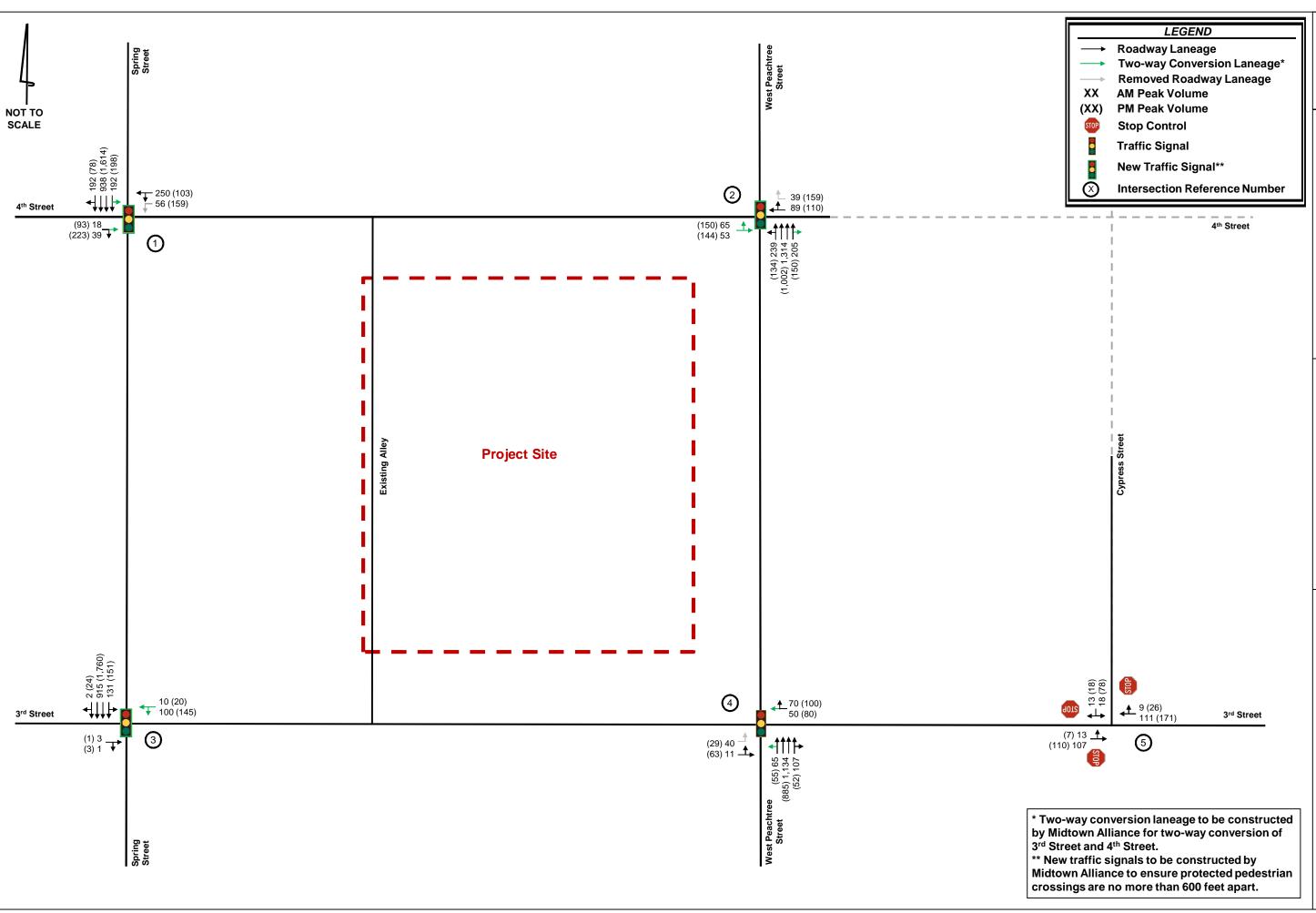


Figure 8

Projected 2022 No-Build Traffic Conditions

**Transportation Analysis** 740 West Peachtree DRI #2707

# 6.3 Projected 2022 Build Conditions

The traffic associated with the proposed 740 West Peachtree development was added to the Projected 2022 No-Build volumes. These volumes were then entered into *Synchro 9.0*, and capacity analyses were performed. The Projected 2022 Build conditions were analyzed using the proposed laneage and intersection control types shown in the DRI site plan.

The intersection laneage and traffic volumes used for the Projected 2022 Build conditions are shown in **Figure 9**. The results of the capacity analyses for the Projected 2022 Build conditions with proposed laneage and control types are shown in **Table 9**. Detailed *Synchro* analysis reports are available upon request.

Table 9 Projected 2022 Build Intersection Levels-of-Service LOS (delay in seconds)							
	LOS	Projected	d 2022 Build	Conditions			
Intersection	Std.	Control	AM Peak Hour	PM Peak Hour			
Spring Street at 4 <sup>th</sup> Street/Williams Street	D	Proposed Signal*	B (18.7)	C (29.6)			
2. West Peachtree Street at 4 <sup>th</sup> Street	D	Proposed Signal*	C (20.2)	D (36.1)			
3. Spring Street at 3 <sup>rd</sup> Street	D	Proposed Signal*	B (16.9)	B (12.8)			
4. West Peachtree Street at 3 <sup>rd</sup> Street	D	Existing Signal	B (15.1)	B (18.3)			
5. 3 <sup>rd</sup> Street at Cypress Street	D	EB WB SB	A (8.1) A (8.1) A (7.7)	A (9.0) A (9.1) A (8.9)			
6. 4 <sup>th</sup> Street at Driveway 1	D	NB WBL	B (12.7) A (1.8)	C (16.0) A (0.8)			
7. 3 <sup>rd</sup> Street at Driveway 2	D	SB EBL	B (10.4) A (2.1)	B (11.4) A (0.6)			
8. West Peachtree Street at Driveway 3	D	EB	A (9.0)	A (8.9)			
9. 4 <sup>th</sup> Street at Existing Alley	D	WBL	A (0.6)	A (0.4)			
10. 3 <sup>rd</sup> Street at Existing Alley	D	SB	A (9.3)	B (10.8)			

<sup>\*</sup> New traffic signals proposed by Midtown Alliance to ensure protected pedestrian crossings are no more than 600 feet apart.

As shown in **Table 9**, all study intersections are projected to operate at or above their acceptable level-of-service standard during the AM and PM peak hours in the Projected 2022 Build conditions. Therefore, there are no recommended off-site improvements for the Projected 2022 Build conditions.

Based on the GRTA LOU, a queue analysis of the eastbound approach to 3<sup>rd</sup> Street at Cypress Street (Int. #5) was performed for informational purposes only. For the AM peak period, the 95<sup>th</sup> percentile

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queue is expected to be less than one car length, therefore assumed to be 25 feet. For the PM peak period, the 95<sup>th</sup> percentile queue is 25 feet.

Based on the Projected 2022 Build conditions, the following site access improvements <u>are recommended</u> to serve the traffic associated with the *740 West Peachtree* development:

- Intersection #6: 4<sup>th</sup> Street at Driveway 1
  - o On the site, construct one (1) shared northbound left-turn/right-turn lane.
  - o On the site, construct one (1) southbound receiving lane.
  - o Restripe eastbound approach to include one (1) shared through/right-turn lane.
  - o Restripe westbound approach to include one (1) shared left-turn/through lane.
  - Install stop-control on northbound leg.
- Intersection #7: 3<sup>rd</sup> Street at Driveway 2
  - o On the site, construct one (1) shared southbound left-turn/right-turn lane.
  - o On the site, construct one (1) northbound receiving lane.
  - Restripe eastbound approach to include one (1) shared left-turn/through lane.
  - o Restripe westbound approach to include one (1) shared through/right-turn lane.
  - o Install stop-control on southbound leg.
- Intersection #8: West Peachtree Street at Driveway 3
  - o On the site, construct one (1) exclusive eastbound left-turn lane.
  - Install stop-control on eastbound leg.

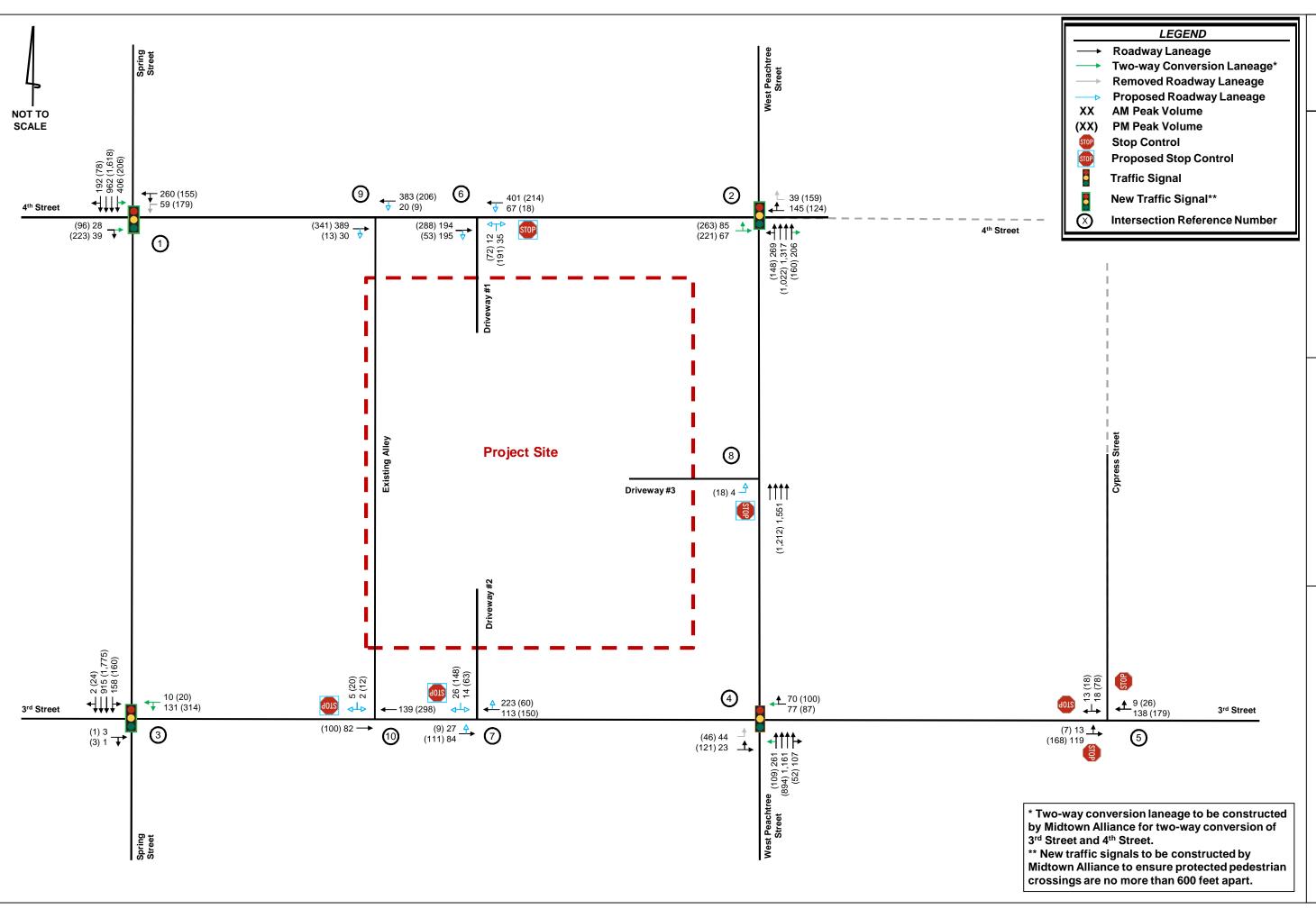


Figure 9

Projected 2022 Build Traffic Conditions

**Transportation Analysis** 740 West Peachtree DRI #2707

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# 6.4 Projected 2022 Build Conditions – Alternative Analysis

An alternative analysis was performed to show the impacts of the programmed bicycle facility improvements in the area. This analysis assumes that one existing travel lane along Spring Street and one existing travel lane along West Peachtree Street will be converted into a bicycle facility.

The intersection laneage and traffic volumes used for the Projected 2022 Build Alternative conditions are shown in **Figure 10**. The results of the capacity analyses for the Projected 2022 Build Alternative conditions with proposed laneage and control types are shown in **Table 10**. Detailed *Synchro* analysis reports are available upon request.

Table 10 Projected 2022 Build Alternative Intersection Levels-of-Service LOS (delay in seconds)							
	LOS	Projected 2022 Build Alternative Conditions					
Intersection	Std.	Control	AM Peak Hour	PM Peak Hour			
Spring Street at 4 <sup>th</sup> Street/Williams Street	D	Proposed Signal*	B (19.0)	C (34.1)			
2. West Peachtree Street at 4 <sup>th</sup> Street	D	Proposed Signal*	B (20.6)	D (40.4)			
3. Spring Street at 3 <sup>rd</sup> Street	D	Proposed Signal*	B (17.6)	B (14.2)			
4. West Peachtree Street at 3 <sup>rd</sup> Street	D	Existing Signal	B (16.5)	B (19.6)			
5. 3 <sup>rd</sup> Street at Cypress Street	D	EB WB SB	A (8.1) A (8.1) A (7.7)	A (9.0) A (9.1) A (8.9)			
6. 4 <sup>th</sup> Street at Driveway 1	D	NB WBL	B (12.7) A (1.8)	C (16.0) A (0.8)			
7. 3 <sup>rd</sup> Street at Driveway 2	D	SB EBL	B (10.4) A (2.1)	B (11.4) A (0.6)			
8. West Peachtree Street at Driveway 3	D	EB	A (9.3)	A (9.1)			
9. 4 <sup>th</sup> Street at Existing Alley	D	WBL	A (0.6)	A (0.4)			
10. 3 <sup>rd</sup> Street at Existing Alley	D	SB	A (9.3)	B (10.8)			

<sup>\*</sup> New traffic signals proposed by Midtown Alliance to ensure protected pedestrian crossings are no more than 600 feet apart.

As shown in **Table 10**, all study intersections are projected to operate at or above their acceptable level-of-service standard during the AM and PM peak hours in the Projected 2022 Build Alternative conditions. Therefore, there are no recommended improvements for the Projected 2022 Build Alternative conditions.

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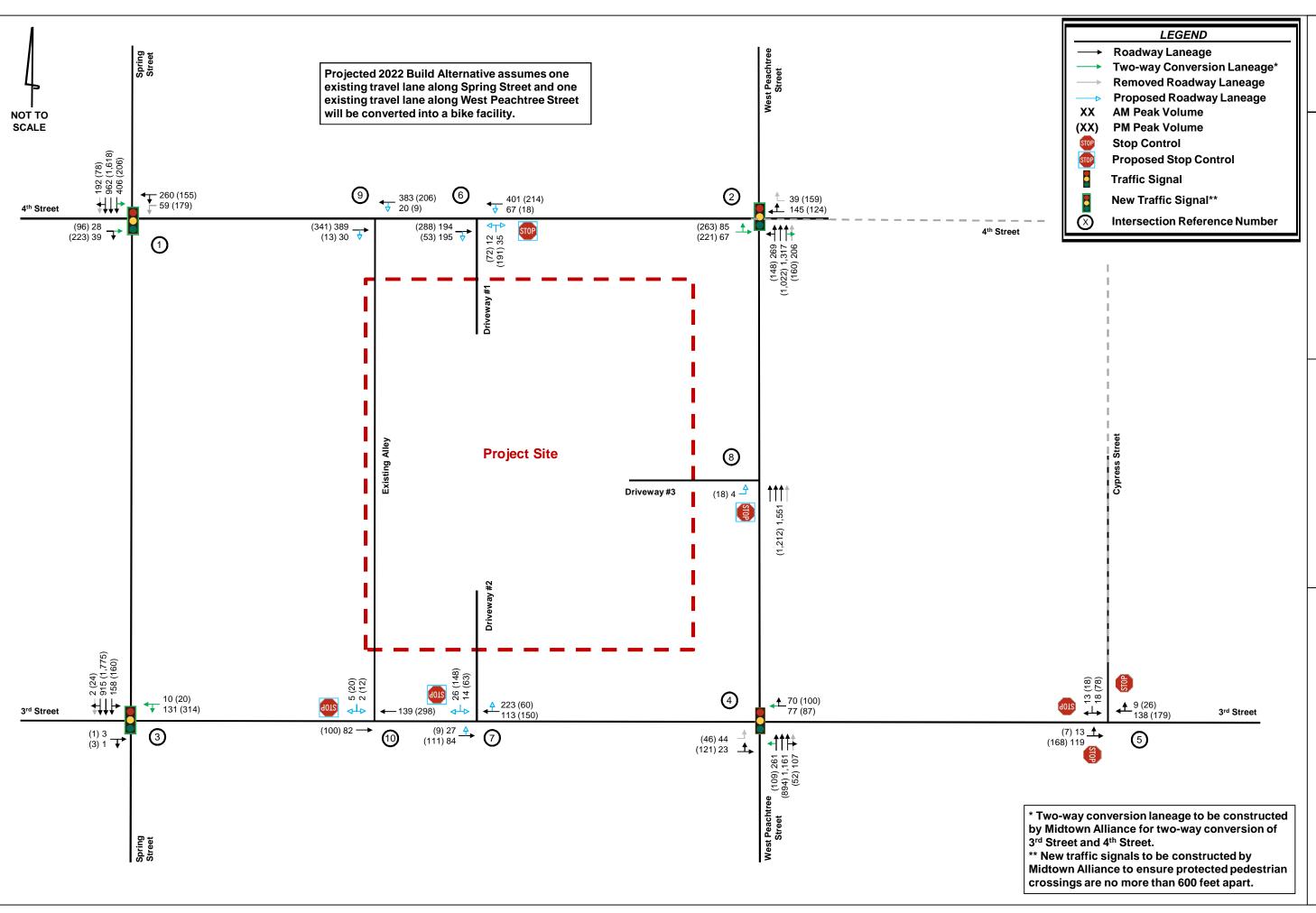


Figure 10

Projected 2022 Build Alternative Traffic Conditions

740 West Peachtree DRI #2707 Transportation Analysis

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# 7.0 INGRESS/EGRESS ANALYSIS

Vehicular access to the 740 West Peachtree development is proposed at five (5) locations. Site driveway locations are discussed in Section 1.3. Capacity analyses were performed for the proposed site driveway intersections (Int. #6, #7, #8, #9, #10) using *Synchro 9.0*. The results of the capacity analyses for this intersection (LOS, delay, and recommended laneage) are reported in *Section 6.3* of this report. Based on the Projected 2022 Build conditions, the proposed site driveway intersections are anticipated to operate at an acceptably, assuming implementation of the recommended laneage, signalization, and roadway improvements listed in this report.

## 8.0 IDENTIFICATION OF PROGRAMMED PROJECTS

According to ARC's Transportation Improvement Program, Regional Transportation Improvement Program, GDOT's Construction Work Program, and the GA STIP the following projects are programmed or planned to be completed by the respective years: The identified projects are listed in **Table 11** below.

Table 11 Programmed Projects			
#	Completion Date	Project ID	Description
1	2022	AT-271	Juniper Street Bicycle/Pedestrian Facilities – from Ponce de Leon Avenue to 14th Street
2	2022	AT-277	Cycle Atlanta: Phase 1.0 – Bicycle Mobility Improvements – Includes a route on West Peachtree Street and Peachtree Street
3	2040	AR-490C	Atlanta Streetcar Expansion – Phase 1 – Includes a route on North Avenue
4	2040	AR-490E	Atlanta Streetcar Expansion – Phase 1 – Includes a route on Peachtree Street
5	TBD	AT-278	Midtown Atlanta Regional Activity Center – Pedestrian Mobility and Safety Improvements
6	TBD	AR-317	SR 8 Connected Vehicle Pilot Program – Install roadside units for connected vehicle applications along Ponce de Leon Avenue

Fact sheets for projects 1-6 are provided in Appendix F.

## 9.0 Internal Circulation Analysis

The proposed site driveways will provide access to buildings on the site. A detailed copy of the proposed site plan is provided in Appendix C and a full-sized site plan is included in the report submittal.

Mixed-use vehicle trip reductions were taken according to the *ITE Trip Generation Handbook, Third Edition, 2014*. Because the Third Edition does not include guidance on daily internal capture, the Second Edition, 2004 was used for daily. Total internal capture and vehicle trip reduction between the proposed land uses is expected to be 6.2% daily, 11.4% for the AM peak hour, and 11.6% for the PM peak hour as a result of the anticipated interaction between the various land uses within the proposed development.

### 10.0 COMPLIANCE WITH COMPREHENSIVE PLAN ANALYSIS

The project site currently consists of the occupied one-story SunTrust bank building, the occupied two-story Midtown Bank and Trust bank building, and associated parking. Both buildings will be demolished. The project site is located in Special Public Interest (SPI) Zone 16 according to the *City of Atlanta Zoning Ordinance Map* and requires review by the SPI-16 Development Review Committee (DRC).

The most recent 10-Year update to the LCI study for Midtown Atlanta *Greenprint Midtown* focuses on a sustainable approach to the original *Blueprint Midtown* vision. The LCI study discusses decreasing single occupancy vehicle trips and increasing streetscape programs, bicycle plans, and transit/coordinated shuttle services. The LCI focuses on building on a high number of commuters being residents using transit, walking, or bicycling. The 740 West Peachtree development aligns with the goals and visions of the LCI study by reducing parking, creating a walkable environment, and improving the existing streetscape of the project site. The project site is located in the heart of Midtown in an area that already experiences high pedestrian and bicyclist volumes. Additionally, the project site is located in a Region Core and Regional Center area type according to *Plan 2040 Unified Growth Policy Map*. The 740 West Peachtree development plan is consistent with the area type and future land use identified. The land use maps are provided in Appendix B.