

# Recommendations Report

SR 141/Peachtree Parkway  
From Holcomb Bridge Road  
To Fulton County Line  
Gwinnett County, Georgia

Prepared For:  
City of Peachtree Corners

GDOT P.I. No. 0015086

Wolverton Project No.  
16-TF-028

December 14, 2017



WOLVERTON

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## Executive Summary

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The purpose of this report is to analyze possible improvements for approximately 3.5 miles of SR 141/Peachtree Parkway in Peachtree Corners. The project will provide operational and safety improvements to SR 141/Peachtree Parkway from Holcomb Bridge Road on the southern end of the project to Chattahoochee River Park on the northern end of the project. The project is identified as follows: PI No. 0015086, SR 141 from Chattahoochee River to Holcomb Bridge Road Study.

Traffic projections for the corridor were developed for Opening Year 2022, Opening Year + 2 (2024), Design Year 2042, and Design Year + 2 (2044) and were approved by Georgia Department of Transportation (GDOT) Office of Planning on July 5, 2017. No-Build and Build models were developed and analyzed for the study intersections along the corridor for Existing Year 2017, Opening Year 2022, and Design Year 2042. Improvements were identified for intersections that operated at inadequate levels of service with the proposed improvements.

If no improvements are made between now and the year 2022, 10 of the 19 studied intersections along the corridor will have a failing Level of Service (LOS), and if no improvements are made between now and the year 2042, 18 of the 19 study intersections along the corridor will have a failing LOS. Also by the year 2042, the southbound AM peak hour travel time would increase by a factor of 2.5 and the northbound PM peak hour travel time would increase by a factor of 1.5.

There have been two Public Information Open Houses (PIOHs) held concerning the subject project. The first was held on May 23, 2017 to receive input from the public regarding traffic operations, traffic safety, and pedestrian accommodations along the project corridor. The second PIOH was held on October 4, 2017 to present findings of existing and projected No-Build conditions along the corridor and to present potential innovative intersection improvement alternatives with succinct and sufficient explanation.

The following five alternatives were analyzed for the SR 141/Peachtree Parkway study corridor:

- Alternative 1 – Four-Lane Median Divided, Conventional Intersection Improvements
- Alternative 2 – Six-Lane Median Divided, Conventional Intersection Improvements
- Alternative 3 – Four-Lane Median Divided, Innovative Intersection Improvements
- Alternative 4 – Six-Lane Median Divided, Innovative Intersection Improvements
- Alternative 5 – Four-/Six-Lane Median Divided, Innovative Intersection Improvements

These alternatives were chosen based upon feasibility and potential for future optimal safety and operations. Conventional alternatives consist of keeping the existing conventional operations in place, while adding the necessary mainline turn bays and side street capacity to achieve adequate LOS and to reduce expected future queue lengths. Innovative alternatives, including Median U-Turn (MUT) and Restricted Crossing U-Turn (RCUT), were also considered.

Alternative 4 – Six-Lane Median Divided, Innovative Intersection Improvements, provides the best overall results. However, for select intersections, Alternative 3 provides the best results from a safety standpoint. Therefore, Alternative 5 incorporates the best-case scenarios from Alternatives 3 and 4 by intersection, where feasible. This alternative provides the best value of most acceptable levels of service with minimal impact on adjacent properties.

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# 1. INTRODUCTION

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## 1.1. Study Area

The purpose of this report is to analyze possible improvements for approximately 3.5 miles of SR 141/Peachtree Parkway in Gwinnett County. The project will provide operational and safety improvements to SR 141/Peachtree Parkway from Holcomb Bridge Road on the southern end of the project to Chattahoochee Park Drive on the northern end of the project. The project is identified as follows:

- PI No. 0015086 – SR 141 from Chattahoochee River to Holcomb Bridge Road Study  
This project will provide improvements for SR 141/Peachtree Parkway.

Figure 1 (on Page 4) schematically illustrates the existing roadway facility and the location of the study intersections on SR 141/Peachtree Parkway.

## 1.2. Proposed Development

In addition to the proposed project, there are other confirmed projects currently progressing in the planning stages that will affect the study area. These projects are identified as follows:

- GDOT P.I. No. 0007839 CR 119/CR 3273 [State Bridge Road] from SR 141 to CR 1954/Peachtree Industrial Boulevard is a 1.51-mile long widening project. Its project status is Long Range Program.
- GDOT P.I. No. 0010877 SR 141 at Peachtree Industrial Boulevard. The project proposes to widen the SR 141 southbound ramp onto Peachtree Industrial Boulevard southbound by constructing a new lane to the left of the existing SR 141 ramp. This new lane will merge with two existing lanes at Peachtree Industrial Boulevard to become a re-striped four-lane 11-foot lane section southbound over the Jimmy Carter Boulevard overpass, and dropping the new fourth outside lane before the slip on-ramp from the southbound collector-distributor roadway just south for the Jimmy Carter Boulevard overpass to tie into the existing three-lane section of SR 141 southbound. Based on GDOT's June 22, 2015 *Approved Concept Report* for the project, the Opening Year and the Design Year of the project are 2016 and 2036, respectively, and the compounded growth rate per year from 2016 to 2036 was 1.00%. It was completed in September 2017.
- GDOT P.I. No. 0012788 SR 120 from CS 79/Parsons Road [West] to SR 141 is a project to add a sixteen-foot raised median with three-foot inside shoulders, four-foot bicycle lanes, and eight- to ten-foot enhanced sidewalks on both sides of SR 120/Abbotts Bridge Road from Parsons Road West to SR 141/Medlock Bridge Road. This project is located between two other GDOT projects: P.I. No. 0007310 is to the west of P.I. No. 0012788 and overlaps P.I. No. 0012788 at the intersection of SR 120 and Parsons Road West, and P.I. No. 721000 is to the east of P.I. No. 0012788 and overlaps P.I. No. 00012788 at the intersection of SR 120 and SR 141. GDOT P.I. No. 0007310 SR 120 from CS 65/Jones Bridge Road to CS 79/Parsons Road [West] – Phase II will provide operational and safety improvements as well as pedestrian connectivity. P.I. No. 0007310 will provide left turn lanes to the subdivisions and install a trail on the north side of SR 120/Abbotts Bridge Road and will connect Abbotts Hill Elementary School

with Robert E. Fulton Regional Library at Ocee. P.I. No. 0007310 was completed in September 2017. Based on GDOT's October 16, 2013 *Approved Revised Concept Report* for P.I. No. 0007310, the Opening Year and the Design Year of the project are 2015 and 2035, respectively, and the compounded growth rate per year from 2015 to 2035 was 0.50%. GDOT P.I. No. 721000 SR 120 from SR 141/Fulton to Peachtree Industrial Boulevard/Gwinnett is discussed below. Based on the September 30, 2014 *Project Growth Rate* letter for P.I. No. 0012788, prepared for GDOT, prepared by Wolverton, the Opening Year and the Design Year of the project are 2018 and 2038, respectively. A fixed growth rate was not used for P.I. No. 0012788; instead, the growth rate at each intersection fluctuated to account for the varying growth rates utilized by the two adjacent projects. P.I. No. 0012788's project status is Long Range Program.

- GDOT P.I. No. 0015148 Atlanta Regional Traffic Operations Program [RTOP] - Phases I and II - Fiscal Year 2017 is a multi-jurisdictional, cutting-edge signal timing program with the goal of improving traffic flow and reducing vehicle emissions through improved signal timing. GDOT has provided additional signal timing experts focused solely on Atlanta's busiest arterial roadways. RTOP also assists local jurisdictions to quickly find and repair problems. Once completed RTOP will be able to remotely monitor all corridors which will allow quicker response times to repair signal problems. Wolverton is the RTOP corridor manager for SR 141 from SR 140 to SR 9.
- GDOT P.I. No. 721000 SR 120 from SR 141/Fulton to Peachtree Industrial Boulevard/Gwinnett is a project to widen SR 120/Abbotts Bridge Road from SR 141/Medlock Bridge Road to Peachtree Industrial Boulevard from two to four through lanes. The total project length is approximately 2.5 miles, which includes a 1500-foot tie-in to SR 120 west of SR 141 and a 1000-foot tie-in east of Peachtree Industrial Boulevard. Both SR 141 and Peachtree Industrial Boulevard would be improved and widened for approximately 1000 feet in each direction approaching SR 120. Parsons Road East would also be improved and widened for 1250 feet south of SR 120, and Boles Road would be improved for 1000 feet north of SR 120. The existing SR 120 bridge would be widened and/or reconstructed across the Chattahoochee River. All signalized intersections would be modified. Existing right-of-way (ROW) within the project corridor are approximately 60 to 130 feet. Proposed ROW would be approximately 104 to 140 feet. The project overlaps the study which is currently being performed at the intersections of SR 141 at Wilson Road, SR 141 at Parsons Road, and SR 141 at SR 120. Based on GDOT's July 23, 2015 *Approved Concept Report* for the project, the Existing Year, Opening Year, and Design Year of the project were 2013, 2022, and 2042, respectively. For No-Build conditions, the compounded growth rate per year was 1.20% from 2013 to 2022 and 1.00% from 2022 to 2042. For Build conditions, the compounded growth rate per year was 2.00% from 2013 to 2022 and 1.50% from 2022 to 2042. Its project status is Construction Work Program.
- Based on the February 24, 2015 report for *Traffic Impact and Signal Warrant Study for SR 141 at Engineering Drive*, prepared for TPA Realty Services, prepared by Foresite Group, Inc., a development consisting of an 8,000-square foot (sf) restaurant, a 20,000-sf grocery store, and a 2,750-sf donut shop with a drive-through window is proposed on the southwest corner of the intersection of SR 141 and Engineering Drive. The western development is proposed to have a full access driveway onto Engineering Drive and a right-in/right-out (RIRO) driveway onto SR 141. A separate development is proposed on the east side of SR 141. As part of the eastern development, Engineering Drive would be extended from SR 141 to Technology Parkway. The eastern development would consist of a gas station and convenience store with 24 vehicle fueling positions and 3,250 sf of specialty retail on the south side of Engineering Drive Extension and a 10,450-sf restaurant on the north side. The portion

of the eastern development on the south side of Engineering Drive Extension would have a full access driveway onto Engineering Drive Extension and a RIRO driveway onto SR 141. The portion of the eastern development on the north side of Engineering Drive Extension would have a full access driveway onto Engineering Drive Extension. The study used a 1% growth rate to grow the traffic counts collected in 2013 to the then expected Opening Year of 2014 for the two developments. The study showed that the two proposed developments will add 490 vehicles during the AM peak hour and 544 vehicles during the PM peak hour at the intersection of SR 141 and Engineering Drive. The study concluded that a traffic signal would be warranted at the intersection of SR 141 and Engineering Drive when the two proposed developments are opened. According to the City of Peachtree Corners, the traffic signal has been permitted, but the two proposed developments, the Engineering Drive Extension, and the traffic signal are not progressing at this time.

### 1.3. Methodology

#### Traffic

Initial evaluations were made to assess the current conditions along the corridor. Peak hour turning movement counts (TMCs) were collected at each of the study intersections along the corridor. In addition to the TMCs, 24-hour directional counts were taken at select locations along the corridor. The counts were taken per Georgia Department of Transportation (GDOT) Office of Planning methodology. Traffic projections for the corridor were developed for Opening Year 2022, Opening Year + 2 (2024), Design Year 2042, and Design Year + 2 (2044) and were approved by GDOT Office of Planning on July 5, 2017. No-Build and Build models were developed and analyzed for the study intersections along the corridor for Existing Year 2017, Opening Year 2022, and Design Year 2042. Improvements were identified for intersections that operated at inadequate levels of service with the proposed improvements. The Traffic Data Report and projected DHV and ADT for Existing Year 2017, Opening Year 2022, Opening Year + 2 (2024), Design Year 2042, and Design Year + 2 (2044) are illustrated in Appendix A for the identical No-Build/Build Scenario.

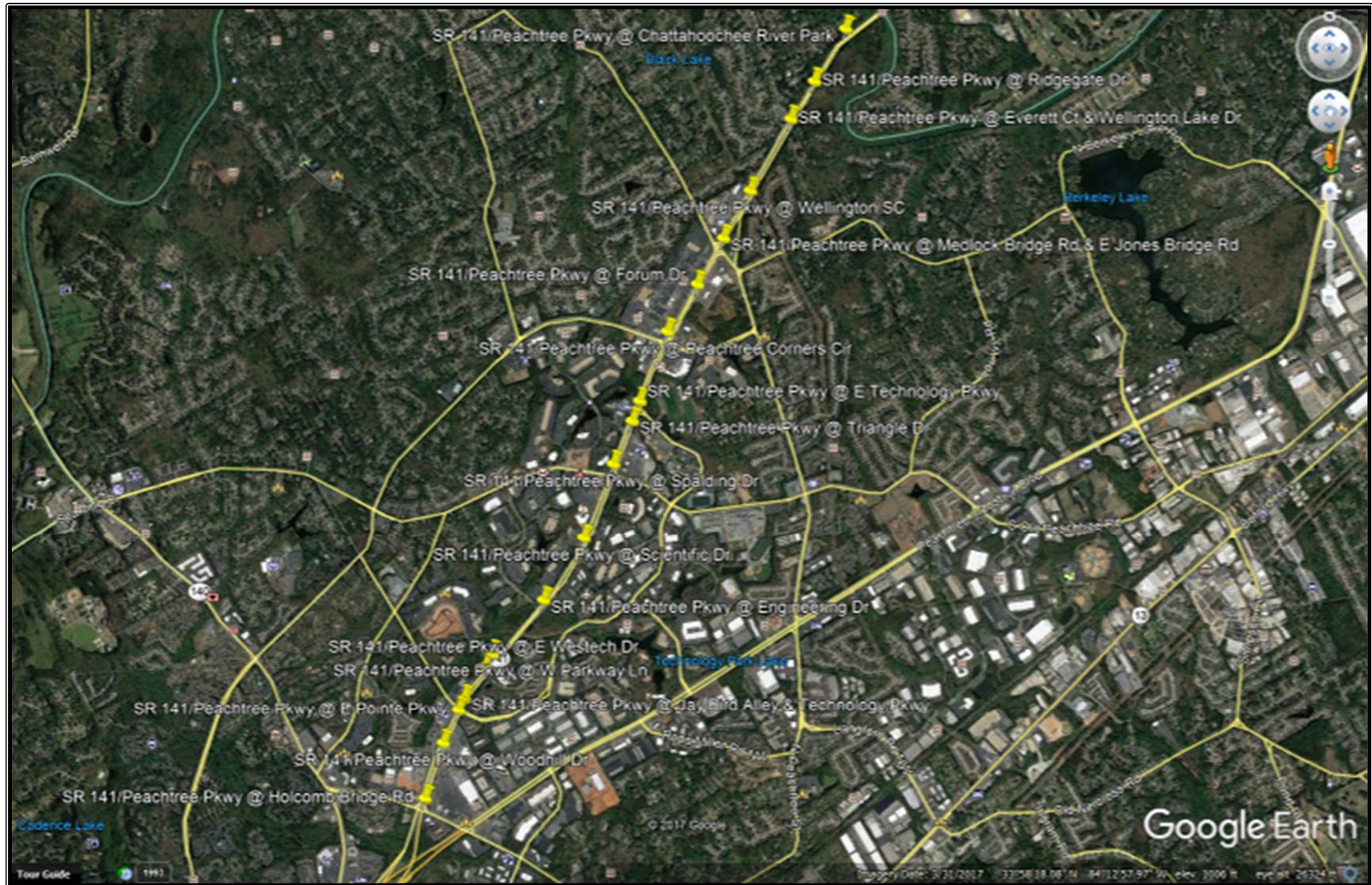
#### Environmental

An Environmental Screening Memorandum was provided to Wolverton on July 20, 2017 by Vanasse Hangen Brustlin, Inc. (VHB). There are not currently any environmentally sensitive areas near enough to the project corridor that may present significant concerns or limitations. There are streams and waters that will need to be considered should any proposed widening improvements move forward into design and construction. The Environmental Screening Memo is contained in Appendix B.

#### Public Information Open House (PIOH)

There have been two PIOHs held concerning the subject project. The first was held on May 23, 2017 to receive input from the public regarding traffic operations, traffic safety, and pedestrian accommodations along the project corridor. The second PIOH was held on October 4, 2017 to present findings of existing and projected No-Build conditions along the corridor and to present potential innovative intersection improvement alternatives with succinct and sufficient explanation. The public input and other information from both PIOHs are contained in Appendix C.

Figure 1 - Study Area



## 2. EXISTING CONDITIONS

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### 2.1. Roadways

**SR 141/Peachtree Parkway** is a four-lane median divided highway that runs primarily north-south and serves commercial, office, and residential development within the vicinity of the project. SR 141/Peachtree Parkway is classified as an Urban Principal Arterial and has a posted speed limit of 55 mph within the vicinity of the project. SR 141 originates in Buckhead, Fulton County, Georgia at its intersection with SR 9/US 19/Peachtree Road and runs primarily north. It is a limited access freeway for approximately four miles north of Interstate 285 until its split with Peachtree Industrial Boulevard just south of Holcomb Bridge Road in Gwinnett County. SR 141 then runs for 16 miles north until its terminus with SR 9/Atlanta Highway in Cumming, Forsyth County, Georgia.

**Holcomb Bridge Road** is a five-lane undivided roadway with a center turn lane that runs east-west and serves commercial, office, and residential development within the vicinity of the project. Holcomb Bridge Road is classified as an Urban Minor Arterial and has a posted speed limit of 40 mph. Holcomb Bridge Road originates west of SR 141/Peachtree Parkway at its intersection with SR 9/120 in Roswell, Fulton County and runs east in common with SR 140 until its intersection with Jimmy Carter Boulevard, where it doglegs to the east and runs through downtown Norcross before its terminus at SR 13/US 23/Buford Highway.

**Woodhill Drive** is a three-lane undivided roadway with a center turn lane that runs east-west and serves commercial, office, and residential development within the vicinity of the project. Woodhill Drive is classified as a Local Road and has a posted speed limit of 30 mph. Woodhill Drive originates at its intersection with The Corners Parkway and runs east for less than one mile until its terminus at its intersection with SR 141/Peachtree Parkway.

**Pointe Parkway** is a two-lane undivided roadway that runs east-west and serves commercial and office development within the vicinity of the project. Pointe Parkway is unclassified and has no posted speed limit. Pointe Parkway originates at its intersection with SR 141/Peachtree Parkway as a right-in/right-out driveway and runs east for less than one mile until its terminus at its intersection with Peachtree Industrial Boulevard.

**Jay Bird Alley** is a two-lane undivided roadway that runs east-west and serves commercial and heavy residential development within the vicinity of the project. Jay Bird Alley is classified as a Local Road and has a posted speed limit of 40 mph. Jay Bird Alley originates at its intersection with Spalding Drive and runs east for approximately one mile until its terminus at its intersection with SR 141/Peachtree Parkway and Technology Parkway.

**Technology Parkway** is a three-lane undivided roadway with a center turn lane that runs north-south and serves residential and office development within the vicinity of the project. Technology Parkway is classified as a Local Road and has a posted speed limit of 35 mph. Technology Parkway originates at its intersection with SR 141/Peachtree Parkway and Jay Bird Alley and runs east/northeast until its terminus at its northern intersection with SR 141/Peachtree Parkway as a right-in/right-out driveway.

**Westech Drive** is a three-lane undivided roadway with a center turn lane that runs east-west and serves primarily office development within the vicinity of the project. Westech Drive is classified as a Local Road and has a posted speed limit of 35 mph. Westech Drive originates at its intersection with SR 141/Peachtree Parkway as a right-in/right-out driveway and runs east for less than one mile until its terminus at its intersection with Technology Parkway.

**Parkway Lane** is a three-lane undivided roadway with a center turn lane that runs east-west and serves primarily office development within the vicinity of the project. Parkway Lane is classified as a Local Road and has a posted speed limit of 30 mph. Parkway Lane originates at its intersection with The Corners Parkway and runs east for less than one mile until its terminus at its intersection with SR 141/Peachtree Parkway as a right-in/right-out driveway.

**Engineering Drive** is a three-lane undivided roadway with a center turn lane that runs east-west and serves primarily office development within the vicinity of the project. Engineering Drive is classified as a Local Road and has a posted speed limit of 35 mph. Engineering Drive originates at its intersection with Spalding Drive and runs east for less than one mile until its terminus at its intersection with SR 141/Peachtree Parkway.

**Scientific Drive** is a three-lane undivided roadway with a center turn lane that runs east-west and serves primarily office development within the vicinity of the project. Scientific Drive is classified as a Local Road and has a posted speed limit of 35 mph. Scientific Drive originates at its intersection with SR 141/Peachtree Parkway and runs east for approximately a quarter of a mile until its terminus at its intersection with Technology Parkway.

**Spalding Drive** is a three-lane undivided roadway with a center turn lane that runs east-west and serves commercial, office, residential, and institutional development within the vicinity of the project. Spalding Drive is classified as an Urban Minor Arterial and has a posted speed limit of 40 mph. Spalding Drive originates at its intersection with SR 9/Roswell Road in Sandy Springs, Fulton County and runs in a sinuous fashion in a generally east direction for approximately 11 miles toward SR 141/Peachtree Parkway, at which intersection there are multiple turn lanes on both Spalding Drive approaches. Spalding Drive continues east for approximately one mile until it becomes South Old Peachtree Road at its intersection with Medlock Bridge Road.

**Triangle Drive** is a short four-lane divided highway that connects to Triangle Parkway approximately one tenth of a mile west of SR 141/Peachtree Parkway. Triangle Parkway runs primarily north-south and Triangle Drive runs east-west; both serve office and institutional development within the vicinity of the project. Triangle Drive is classified as a Local Road and has a posted speed limit of 35 mph.

**Peachtree Corners Circle** is a five-lane roadway with a center turn lane west of its intersection with SR 141/Peachtree Parkway and is a four-lane median divided highway east of its intersection with SR 141/Peachtree Parkway. Peachtree Corners Circle serves commercial, office, and residential development within the vicinity of the project. Peachtree Corners Circle is classified as an Urban Major Collector and has a posted speed limit of 40 mph. Peachtree Corners Circle originates south of the project at the SR 141/Peachtree Industrial Boulevard

access road and runs generally north for approximately 4 miles toward SR 141/Peachtree Parkway, where it intersects. Peachtree Corners Circle continues east for approximately half of a mile until its terminus at its intersection with Medlock Bridge Road.

**Forum Drive** is a two-lane divided roadway that runs east-west and serves commercial and institutional development within the vicinity of the project. Forum Drive is unclassified and has no posted speed limit. Forum Drive exclusively serves The Forum on Peachtree Parkway shopping center to the west of SR 141/Peachtree Parkway and the future Peachtree Corners Town Center, currently under construction, to the east of SR 141/Peachtree Parkway.

**East Jones Bridge Road** is a two-lane undivided roadway that runs east-west and serves residential and some commercial and residential development within the vicinity of the project. East Jones Bridge Road is classified as a Local Road and has a posted speed limit of 40 mph. East Jones Bridge Road originates at Jones Bridge Park and runs east/southeast for approximately 2 miles toward SR 141/Peachtree Parkway, where it intersects and becomes Medlock Bridge Road east of SR 141/Peachtree Parkway.

**Medlock Bridge Road** is a three-lane undivided roadway with a center turn lane that runs east-west and serves commercial, residential, and institutional development within the vicinity of the project. Medlock Bridge Road is classified as an Urban Minor Arterial and has a posted speed limit of 40 mph. Medlock Bridge Road originates at its intersection with SR 141/Peachtree Parkway and runs east/southeast for approximately 2 miles until its terminus at its intersection with North Peachtree Street and Langford Road.

**Wellington Lake Drive** is a short two-lane divided roadway that connects to Riverlake Drive approximately one tenth of a mile west of SR 141/Peachtree Parkway. Riverlake Drive runs primarily north-south and Wellington Lake Drive runs east-west; both serve exclusively residential development within the vicinity of the project. Wellington Lake Drive is classified as a Local Road and has a posted speed limit of 25 mph.

**Everett Court** is a short two-lane undivided roadway that runs east/southeast and forms the east leg of a four-leg intersection with SR 141/Peachtree Parkway and Wellington Lake Drive. Everett Court serves exclusively residential development within the vicinity of the project. Everett Court is classified as a Local Road and has a posted speed limit of 25 mph. Everett Court runs east/southeast from SR 141/Peachtree Parkway for approximately half a mile and terminates as a cul-de-sac.

**Ridgegate Drive** is a two-lane undivided roadway that serves exclusively residential development within the vicinity of the project. Ridgegate Drive is classified as a Local Road and has no posted speed limit. Ridgegate Drive originates at its intersection with SR 141/Peachtree Parkway and initially runs west, but then takes a circuitous and sinuous route for approximately half a mile, ultimately terminating at its second intersection with River Court.

## 2.2. Intersections

The following are the study intersections along the corridor:

1. Holcomb Bridge Road and SR 141/Peachtree Parkway (signalized)
2. Woodhill Drive and SR 141/Peachtree Parkway (signalized)
3. Pointe Parkway and SR 141/Peachtree Parkway (right-in/right-out)
4. Jay Bird Alley/Technology Parkway and SR 141/Peachtree Parkway (signalized)
5. Westech Drive and SR 141/Peachtree Parkway (right-in/right-out)
6. Parkway Lane and SR 141/Peachtree Parkway (right-in/right-out)
7. Engineering Drive and SR 141/Peachtree Parkway (full access, unsignalized)
8. Scientific Drive and SR 141/Peachtree Parkway (full access, unsignalized)
9. Spalding Drive and SR 141/Peachtree Parkway (signalized)
10. Triangle Drive and SR 141/Peachtree Parkway (full access, unsignalized)
11. Technology Parkway and SR 141/Peachtree Parkway (right-in/right-out)
12. U-turn median break and SR 141/Peachtree Parkway (unsignalized)
13. Peachtree Corners Circle and SR 141/Peachtree Parkway (signalized)
14. Forum Drive and SR 141/Peachtree Parkway (signalized)
15. E Jones Bridge Road/Medlock Bridge Road and SR 141/Peachtree Parkway (signalized)
16. Wellington shopping center and SR 141/Peachtree Parkway (full access, unsignalized)
17. Wellington Lake Drive/Everett Court and SR 141/Peachtree Parkway (signalized)
18. Ridgeway Drive and SR 141/Peachtree Parkway (full access, unsignalized)
19. Chattahoochee River Park and SR 141/Peachtree Parkway (full access, unsignalized)

Figures 2 and 3 illustrate the associated geometry and operation control of the study intersections.

## 2.3. Needs Identification

An initial Needs Identification Memorandum was prepared and submitted to the City of Peachtree Corners on August 8, 2017. The Needs Identification Memo presented the current level of traffic operations and safety, environmental findings, and public input that was provided during the first PIOH on May 23, 2017. The Needs Identification Memo is contained in Appendix D.

Figure 2 - Existing Lane Configurations and Traffic Control: Part I

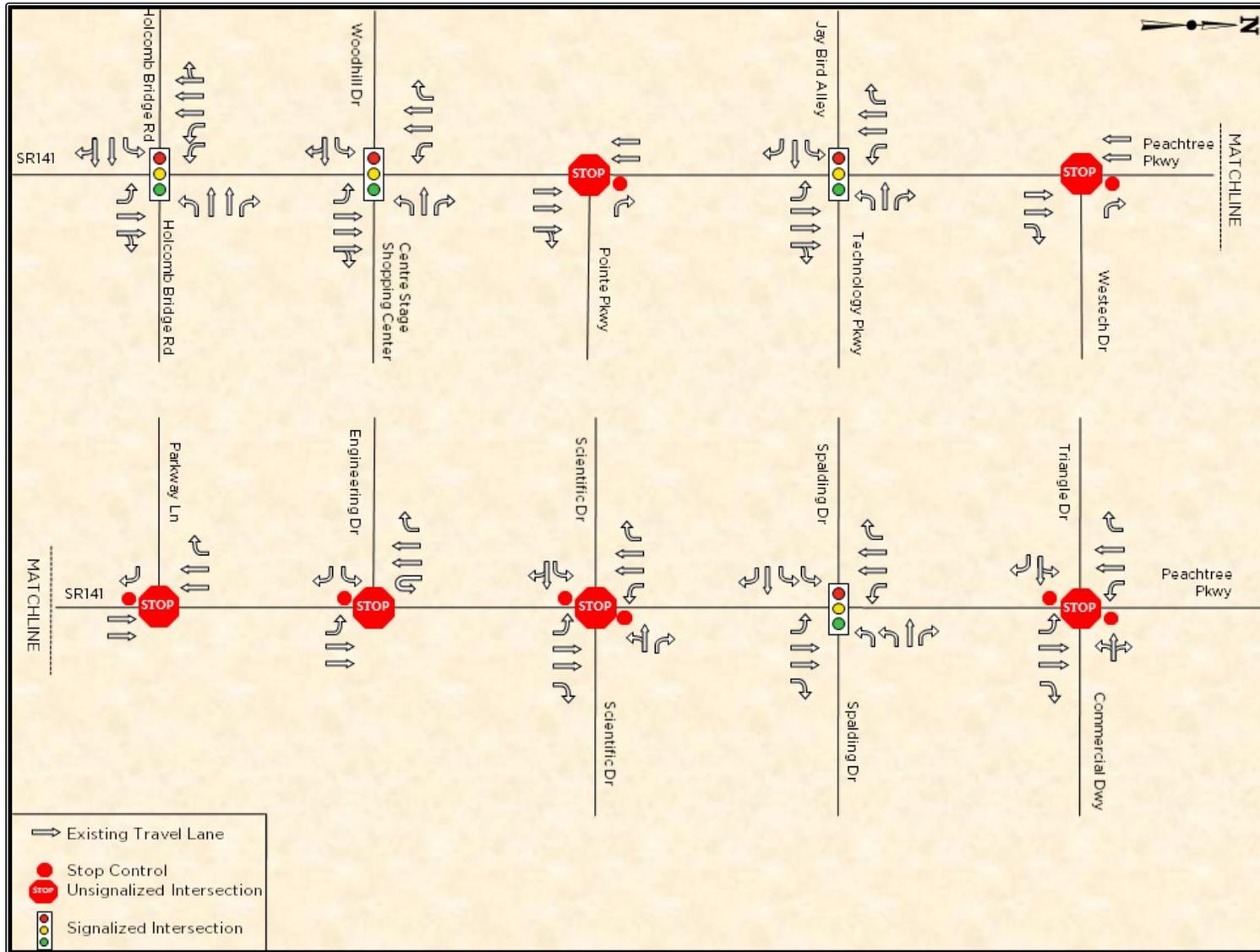
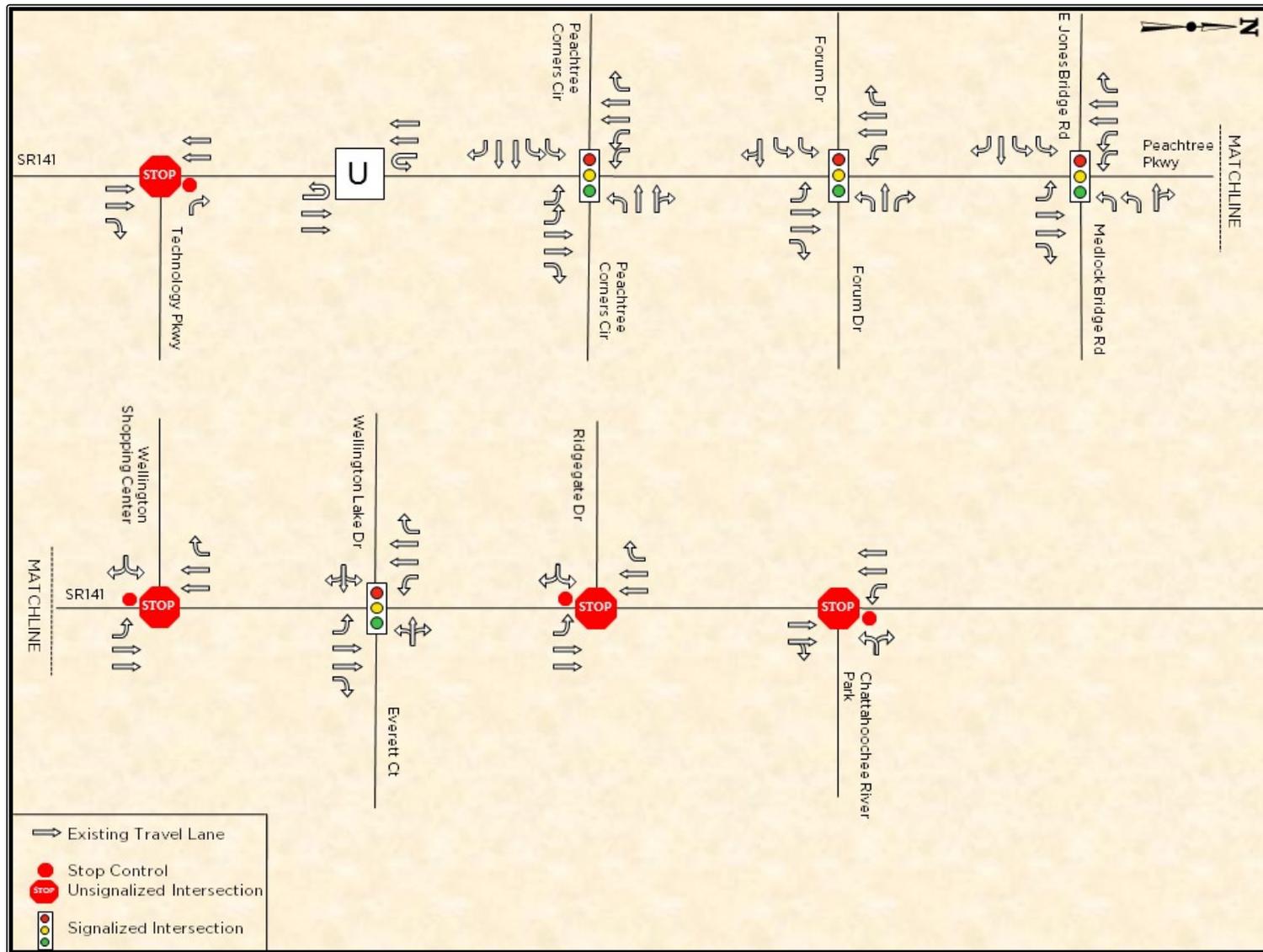


Figure 3 - Existing Lane Configurations and Traffic Control: Part II



### 3. TRAFFIC PROJECTIONS

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The Existing Year 2017, Opening Year 2022, Opening Year + 2 (2024), Design Year 2042, and Design Year + 2 (2044) traffic projections were formulated for locations in the project area by Wolverton and were approved by GDOT Office of Planning on July 5, 2017. The future year projections based on annual growth rates were determined for the corridor. The same growth rate was used for the No-Build and Build Scenarios. Projections were developed for the identical No-Build/Build Scenario.

The Traffic Data Report and the projected DHV and ADT for Existing Year 2017, Opening Year 2022, Opening Year + 2 (2024), Design Year 2042, and Design Year + 2 (2044) are illustrated in Appendix A for the identical No-Build/Build Scenario.

## 4. DATA ANALYSIS

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### 4.1. Level of Service Criteria

Capacity analysis was used to evaluate the projected volumes at the study intersections along the corridor. This process was used to determine the geometry and traffic control needed at each intersection to result in adequate levels of service (LOS) for Opening Year 2022 and Design Year 2042 conditions.

*Synchro* (1) was used to conduct capacity analysis. *Synchro* implements the capacity methods of the *Highway Capacity Manual* (HCM) (2) for performing the industry standard evaluation of intersection performance.

The HCM defines LOS in terms of the amount of control delay, including initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The LOS definitions for both stop controlled and signal controlled intersections are provided in Table 1.

**Table 1 - Level of Service Criteria**

LEVEL OF SERVICE	CONTROL DELAY PER VEHICLE (SEC)	
	WITH STOP-SIGN CONTROL	WITH SIGNAL CONTROL
A	$\leq 10$	$\leq 10$
B	$> 10$ and $\leq 15$	$> 10$ and $\leq 20$
C	$> 15$ and $\leq 25$	$> 20$ and $\leq 35$
D	$> 25$ and $\leq 35$	$> 35$ and $\leq 55$
E	$> 35$ and $\leq 50$	$> 55$ and $\leq 80$
F	$> 50$	$> 80$

Source: *Highway Capacity Manual*

GDOT has ranges of adequate LOS based on area classification. Rural, sparsely developed areas have a minimum LOS requirement of C. This is due to the expectancy of rural residents for relatively uncongested conditions and design flexibility related to lower right of way costs. The minimum LOS for urban areas is D. This reflects the greater acceptance of delay and congestion by urban residents. Additionally, the increased density of developments makes right of way costs much higher in urban areas. The SR 141/Peachtree Parkway project corridor is in the Atlanta metro area and, therefore, has a minimum LOS requirement of D.

## 4.2. Intersection Capacity Analysis Results

### Existing and No-Build

The study intersections were initially evaluated with the existing geometry, using the Existing Year 2017, Opening Year 2022, and Design Year 2042 volumes. This establishes a baseline for comparing improvements.

Table 2 (on Page 16) contains the results of the capacity analysis with the existing roadway geometry and operational conditions (No-Build) for Existing Year 2017, Opening Year 2022, and Design Year 2042. The values shown in parentheses indicate the estimated delay in seconds per vehicle.

As shown in Table 2, all the study intersections and movements are currently operating adequately, with the exceptions listed below.

#### *Existing Year 2017 - Inadequate LOS*

At the intersection of Holcomb Bridge Road and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the PM peak hour.

At the intersection of Pointe Parkway and SR 141/Peachtree Parkway, the westbound right turn movement is currently operating at LOS E during the PM peak hour.

At the intersection of Engineering Drive and SR 141/Peachtree Parkway, the northbound left turn movement is currently operating at LOS F during the AM peak hour and the eastbound left turn movement is currently operating at LOS F during the PM peak hour.

At the intersection of Scientific Drive and SR 141/Peachtree Parkway, the eastbound left turn movement is currently operating at LOS F during the PM peak hour and the westbound shared left/through movement is currently operating at LOS F during both peak hours.

At the intersection of Spalding Drive and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the PM peak hour.

At the intersection of Triangle Drive and SR 141/Peachtree Parkway, the northbound left turn movement is currently operating at LOS F during the AM peak hour and the eastbound shared left/through movement is currently operating at LOS F during the PM peak hour.

At the intersection of Peachtree Corners Circle and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the PM peak hour.

At the intersection of East Jones Bridge Road/Medlock Bridge Road and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the AM peak hour.

At the intersection of Wellington shopping center and SR 141/Peachtree Parkway, the eastbound shared left/right movement is currently operating at LOS F during both peak hours.

At the intersection of Ridgegate Drive and SR 141/Peachtree Parkway, the northbound left turn movement is currently operating at LOS F during the AM peak hour and the eastbound shared left/right movement is currently operating at LOS F during both peak hours.

#### *No-Build Year 2022 - Inadequate LOS*

By the Year 2022, in addition to the intersections and movements currently operating at inadequate LOS during one or both peak hours, the following study intersections and movements are expected to operate at inadequate LOS during one or both peak hours in the Year 2022 if no improvements are made.

At the intersection of Triangle Drive and SR 141/Peachtree Parkway, the eastbound right turn movement is expected to operate at LOS E during both peak hours in the Year 2022 if no improvements are made.

#### *No-Build Year 2042 - Inadequate LOS*

By the Year 2042, in addition to the intersections and movements currently operating at inadequate LOS during one or both peak hours and the intersections and movements expected to operate at inadequate LOS during one or both peak hours in the year 2022, the following study intersections and movements are expected to operate at inadequate LOS during one or both peak hours in the Year 2042 if no improvements are made.

At the intersection of Woodhill Drive and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made.

At the intersection of Jay Bird Alley/Technology Parkway and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS F during both peak hours in the Year 2042 if no improvements are made.

At the intersection of Westech Drive and SR 141/Peachtree Parkway, the westbound right turn movement is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made.

At the intersection of Engineering Drive and SR 141/Peachtree Parkway, the southbound U-turn movement is expected to operate at LOS E during the PM peak hour in the Year 2042 if no improvements are made, and the eastbound right turn movement is expected to operate at LOS E during the AM peak hour and LOS F in the PM peak hour in the Year 2042 if no improvements are made.

At the intersection of Scientific Drive and SR 141/Peachtree Parkway, the northbound left turn movement and the southbound left turn movement are expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made.

At the intersection of Technology Parkway and SR 141/Peachtree Parkway, the westbound right turn movement is expected to operate at LOS F during the PM peak hour in the Year 2042 if no improvements are made.

At the intersection of the U-turn median break and SR 141/Peachtree Parkway, the northbound U-turn movement is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made.

At the intersection of Forum Drive and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made.

At the intersection of Wellington shopping center and SR 141/Peachtree Parkway, the northbound left turn movement is expected to operate at LOS F during the AM peak hour in the Year 2042 if no improvements are made.

At the intersection of Wellington Lake Drive/Everett Court and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made.

At the intersection of Chattahoochee River Park and SR 141/Peachtree Parkway, the southbound left turn movement and the westbound shared left/right movement are expected to operate at LOS F during the PM peak hour in the Year 2042 if no improvements are made.

*Synchro* printouts for the Existing conditions for the Year 2017 and No-Build conditions for the Years 2022 and 2042 are provided in Appendix E.

**Table 2 - Capacity Analysis: No-Build**

INT #	INTERSECTION	CONTROL	MOVEMENT	AM PEAK HOUR			PM PEAK HOUR		
				Existing Year 2017	Future Background Year 2022	Future Background Year 2042	Existing Year 2017	Future Background Year 2022	Future Background Year 2042
	SR 141/Peachtree Pkwy CORRIDOR	Travel Time	NB	412.8 sec (6 min, 52.8 sec)	436.7 sec (7 min, 16.7 sec)	589.2 sec (9 min, 49.2 sec)	460.0 sec (7 min, 40.0 sec)	495.1 sec (8 min, 15.1 sec)	759.2 sec (12 min, 39.2 sec)
			SB	567.7 sec (9 min, 37.7 sec)	704.9 sec (11 min, 44.9 sec)	1556.5 sec (25 min, 56.5 sec)	454.2 sec (7 min, 34.2 sec)	468.0 sec (7 min, 48.0 sec)	652.5 sec (10 min, 52.5 sec)
1	SR 141/Peachtree Pkwy & Holcomb Bridge Rd	Traffic Signal	Overall	D (37.5)	D (42.3)	F (87.3)	E (71.9)	F (84.6)	F (147.6)
2	SR 141/Peachtree Pkwy & Woodhill Dr	Traffic Signal	Overall	A (7.0)	A (9.1)	E (68.0)	B (15.0)	B (15.7)	C (28.4)
3	SR 141/Peachtree Pkwy & E Pointe Pkwy	Right-In/Right-Out	WB R	D (32.1)	E (36.9)	F (73.6)	E (46.6)	F (57.7)	F (193.8)
4	SR 141/Peachtree Pkwy & Jay Bird Alley/Technology Pkwy	Traffic Signal	Overall	D (40.1)	D (49.5)	F (105.4)	D (47.1)	D (53.0)	F (103.3)
5	SR 141/Peachtree Pkwy & E Westech Dr	Right-In/Right-Out	WB R	C (22.2)	C (23.7)	E (36.6)	C (19.8)	C (21.0)	D (28.9)
6	SR 141/Peachtree Pkwy & W Parkway Ln	Right-In/Right-Out	EB R	C (22.6)	C (24.3)	D (33.8)	C (17.6)	C (18.5)	C (24.2)
7	SR 141/Peachtree Pkwy & Engineering Dr	Side Street Stop	NB L	F (173.1)	F (257.0)	F (917.1)	C (18.1)	C (20.1)	F (51.0)
			SB U	C (20.3)	C (21.8)	D (31.1)	C (24.2)	D (26.6)	E (44.5)
			EB L	A (0.0)	A (0.0)	A (0.0)	F (498.7)	F (722.2)	F (2332.5)
			EB R	D (25.6)	D (28.0)	E (47.1)	D (25.0)	D (28.8)	F (72.0)
8	SR 141/Peachtree Pkwy & Scientific Dr	Side Street Stop	NB L	C (20.5)	C (22.3)	E (35.2)	B (14.1)	B (14.9)	C (19.4)
			SB L	C (18.6)	C (20.6)	E (43.1)	C (17.8)	C (19.4)	D (31.2)
			EB L	A (0.0)	A (0.0)	A (0.0)	F (1263.7)	F (1880.4)	F (10,633.1)
			EB T+R	C (22.1)	C (23.7)	D (33.1)	C (16.6)	C (17.5)	C (22.5)
			WB L+T	F (6405.4)	F (8669.3)	-	F (2286.8)	F (3614.7)	F (14,109.1)
			WB R	C (18.7)	C (20.1)	D (28.0)	C (20.4)	C (22.2)	E (36.4)
9	SR 141/Peachtree Pkwy & Spalding Dr	Traffic Signal	Overall	D (46.8)	E (56.0)	F (122.6)	E (57.2)	E (61.6)	F (94.6)
10	SR 141/Peachtree Pkwy & Triangle Dr	Side Street Stop	NB L	F (80.1)	F (124.4)	F (567.4)	B (13.9)	B (14.5)	C (19.1)
			SB L	B (18.9)	C (20.8)	D (34.5)	B (16.5)	C (17.8)	D (27.7)
			EB L+T	A (0.0)	A (0.0)	A (0.0)	F (1467.6)	F (2365.2)	F (18,504.7)
			EB R	D (33.5)	E (39.1)	F (96.9)	D (30.8)	E (37.2)	F (127.8)
			WB L+T+R	C (16.1)	C (16.8)	C (20.7)	C (18.2)	C (19.2)	D (26.5)
11	SR 141/Peachtree Pkwy & E Technology Pkwy	Right-In/Right-Out	WB R	C (18.2)	C (19.5)	D (30.5)	D (27.4)	D (31.9)	F (87.5)
12	SR 141/Peachtree Pkwy & U-turn median break	Yield	NB U	D (25.7)	D (28.4)	E (47.0)	B (14.2)	B (14.9)	C (19.1)
			SB U	B (12.2)	B (12.7)	C (15.2)	C (17.8)	C (19.2)	D (29.5)
13	SR 141/Peachtree Pkwy & Peachtree Corners Cir	Traffic Signal	Overall	D (42.7)	E (57.6)	F (137.9)	E (57.9)	E (64.3)	F (95.9)
14	SR 141/Peachtree Pkwy & Forum Dr	Traffic Signal	Overall	A (1.7)	A (4.2)	E (68.4)	A (7.3)	A (7.3)	A (8.3)
15	SR 141/Peachtree Pkwy & E Jones Bridge Rd/Medlock Bridge Rd	Traffic Signal	Overall	E (60.4)	E (74.2)	F (142.0)	D (46.4)	D (51.7)	F (103.5)
16	SR 141/Peachtree Pkwy & Wellington SC	Side Street Stop	NB L	D (30.0)	D (33.9)	F (58.9)	C (18.8)	C (20.3)	D (30.5)
			EB L+R	F (981.7)	F (1336.0)	F (6622.7)	F (1584.9)	F (2049.9)	F (9324.7)
17	SR 141/Peachtree Pkwy & Wellington Lake Dr/ Everett Ct	Traffic Signal	Overall	B (11.7)	B (15.4)	E (78.4)	A (6.1)	A (6.9)	C (30.8)
18	SR 141/Peachtree Pkwy & Ridgeway Dr	Side Street Stop	NB L	F (50.8)	F (59.0)	F (121.8)	C (18.4)	C (19.9)	D (28.8)
			EB L+R	F (965.0)	F (1555.1)	F (86.9)**	F (2277.9)	F (3585.6)	F (7519.1)
19	SR 141/Peachtree Pkwy & Chattahoochee River Park	Side Street Stop	SB L	A (0.0)	A (0.0)	A (0.0)	D (28.1)	D (31.3)	F (53.0)
			WB L+R	A (0.0)	A (0.0)	A (0.0)	D (29.5)	D (32.1)	F (50.0)

\*Delay value is too high to calculate

\*\*Computational error, delay is greater than 3145.7 seconds

**LEGEND** Inadequate Level of Service (LOS E)  
Failing Level of Service (LOS F)

## Build

The project will provide operational improvements to SR 141/Peachtree Parkway from Holcomb Bridge Road on the southern end of the project to Chattahoochee Park Drive on the northern end of the project. The project spans approximately 3.5 miles. There are five alternatives which will be discussed further in the respective sections below.

The following five alternatives were analyzed for the SR 141/Peachtree Parkway study corridor:

- Alternative 1 – Four-Lane Median Divided, Conventional Intersection Improvements
- Alternative 2 – Six-Lane Median Divided, Conventional Intersection Improvements
- Alternative 3 – Four-Lane Median Divided, Innovative Intersection Improvements
- Alternative 4 – Six-Lane Median Divided, Innovative Intersection Improvements
- Alternative 5 – Four-/Six-Lane Median Divided, Innovative Intersection Improvements

These alternatives were chosen based upon the following criteria:

- Safety Benefits
- Cost
- Operational Benefits
- Right-of-Way (ROW) Impacts
- Environmental Impacts
- Pedestrian Facilities/Accommodations
- Future Transit Impacts
- Project Feasibility

Alternatives including, but not limited to, Single Point Urban Interchange (SPUI), Rotary Interchange, and Multi-Lane Roundabouts were not considered. Reasons for exclusion included, but were not limited to, any or all of these (related to the aforementioned criteria): ROW considerations, potentially very poor operations, and fiscal considerations. Alternatives including Median U-Turn (MUT) and Restricted Crossing U-Turn (RCUT) were considered. These chosen alternatives present less probability of invasive impacts to the adjacent properties and more potential for adequate operations.

Concept layouts and cost breakdowns for each of the five alternatives are provided in Appendix F. *Synchro* printouts for the Build conditions for the Years 2022 and 2042 are provided in Appendix G.

### *Alternative 1 – Four-Lane Median Divided, Conventional Intersection Improvements*

Alternative 1 consists of keeping the existing conventional operations in place, while adding the necessary mainline turn bays and side street capacity to achieve adequate LOS and to reduce expected future queue lengths. Figures 4 and 5 (on Pages 21 and 22, respectively) show the proposed lane configurations and traffic control for Alternative 1 – Four-Lane Median Divided, Conventional Intersection Improvements. Table 3 (on Page 23) contains the results of the capacity analysis with the roadway geometry and operational conditions for Alternative 1 for Opening Year 2022 and Design Year 2042. The values shown in parentheses indicate the estimated delay in seconds per vehicle.

Where inadequate operating conditions are expected, additional improvements were identified for the study intersections along SR 141/Peachtree Parkway. Each intersection was analyzed until it was determined to be sufficiently improved within feasible right-of-way limitations to provide an acceptable LOS.

At the intersection of Holcomb Bridge Road and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the PM peak hour. Therefore, for Alternative 1, the following lane configurations are recommended. On the northbound approach, dual left turn lanes, three through lanes, and a right turn lane are recommended to help provide adequate operating conditions at the intersection. On the eastbound approach, a right turn lane is recommended to help provide adequate operating conditions at the intersection. On the westbound approach, due to the recommended three northbound through lanes, the right turn movement will need to be altered from free-flow to yield. No additional improvements are recommended for the southbound approach for this alternative. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 1.

At the intersection of Woodhill Drive and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. Therefore, for Alternative 1, the following lane configurations are recommended. On the southbound approach, dual left turn lanes are recommended to help provide adequate operating conditions at the intersection. On the eastbound approach, a right turn lane is recommended to help provide adequate operating conditions at the intersection. No additional improvements are recommended for the southbound or westbound approaches for this alternative. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 1.

At the intersection of Pointe Parkway and SR 141/Peachtree Parkway, the westbound right turn movement is currently operating at LOS E during the PM peak hour. However, no additional improvements appear feasible for Alternative 1.

At the intersection of Jay Bird Alley/Technology Parkway and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS F during both peak hours in the Year 2042 if no improvements are made. Therefore, for Alternative 1, the following lane configurations are recommended. On the northbound approach, dual left turn lanes and a right turn lane are recommended to help provide adequate operating conditions at the intersection. On the eastbound approach, two through lanes are recommended to help provide adequate operating conditions at the intersection. On the westbound approach, two through lanes are recommended to help provide adequate operating conditions at the intersection. No additional improvements are recommended for the southbound approach for this alternative. The intersection is expected to operate inadequately at LOS E during both peak hours in the Design Year 2042, but no further improvements appear feasible for Alternative 1.

At the intersection of Westech Drive and SR 141/Peachtree Parkway, the westbound right turn movement is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. However, no additional improvements appear feasible for Alternative 1.

At the intersection of Engineering Drive and SR 141/Peachtree Parkway, all movements, consisting of the northbound left turn movement, the southbound U-turn movement, and the eastbound left and right turn movements either are currently operating inadequately during one or both peak hours or are expected to operate inadequately during one or both peak hours in the Year 2042 if no improvements are made. However, no additional improvements appear feasible for Alternative 1.

At the intersection of Scientific Drive and SR 141/Peachtree Parkway, all movements, except for the eastbound shared through/right movement, either are currently operating inadequately during one or both peak hours or are expected to operate inadequately during one or both peak hours in the Year 2042 if no improvements are made. However, no additional improvements appear feasible for Alternative 1.

At the intersection of Spalding Drive and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the PM peak hour. However, no additional improvements appear feasible for Alternative 1.

At the intersection of Triangle Drive and SR 141/Peachtree Parkway, the northbound left turn movement, the eastbound shared left/through movement, and the eastbound right turn movement either are currently operating inadequately during one or both peak hours or are expected to operate inadequately during one or both peak hours in the Year 2042 if no improvements are made. However, no additional improvements appear feasible for Alternative 1.

At the intersection of Technology Parkway and SR 141/Peachtree Parkway, the westbound right turn movement is expected to operate at LOS F during the PM peak hour in the Year 2042 if no improvements are made. However, no additional improvements appear feasible for Alternative 1.

At the intersection of U-turn median break and SR 141/Peachtree Parkway, the northbound U-turn movement is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. However, no additional improvements appear feasible for Alternative 1.

At the intersection of Peachtree Corners Circle and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the PM peak hour. Therefore, for Alternative 1, a westbound right turn lane is recommended to help provide adequate operating conditions at the intersection. The intersection is expected to operate inadequately at LOS F during the AM peak hour and LOS E during the PM peak hour in the Design Year 2042, but no further improvements appear feasible for Alternative 1.

At the intersection of Forum Drive and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. Therefore, for Alternative 1, the following lane configurations are recommended. On

the eastbound approach, a left turn lane, a shared left/through lane, and a right turn lane are recommended to help provide adequate operating conditions at the intersection. On the westbound approach, a left turn lane, a shared left/through lane, and a right turn lane are recommended to help provide adequate operating conditions at the intersection. No additional improvements are recommended for the northbound or southbound approaches for this alternative. The intersection is expected to operate inadequately at LOS F during the AM peak hour in the Design Year 2042, but no further improvements appear feasible for Alternative 1.

At the intersection of E Jones Bridge Road/Medlock Bridge Road and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the AM peak hour. Therefore, for Alternative 1, the following lane configurations are recommended. On the northbound approach, dual left turn lanes are recommended to help provide adequate operating conditions at the intersection. On the eastbound approach, an eastbound through lane and an eastbound shared through/right lane are recommended to help provide adequate operating conditions at the intersection. On the westbound approach, an eastbound through lane and an eastbound shared through/right lane are recommended to help provide adequate operating conditions at the intersection. No additional improvements are recommended for the southbound approach for this alternative. The intersection is expected to operate inadequately at LOS E during the AM peak hour in the Opening Year 2022, but no further improvements appear feasible for Alternative 1.

At the intersection of Wellington Shopping Center and SR 141/Peachtree Parkway, the eastbound shared left/right turn movement is currently operating at LOS F during both peak hours. However, no additional improvements appear feasible for Alternative 1.

At the intersection of Wellington Lake Drive/Everett Court and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. However, no additional improvements appear feasible for Alternative 1.

At the intersection of Ridgegate Drive and SR 141/Peachtree Parkway, the northbound left turn movement is currently operating at LOS F during the AM peak hour, and the eastbound shared left/right turn movement is currently operating at LOS F during both peak hours. However, no additional improvements appear feasible for Alternative 1.

At the intersection of Chattahoochee River Park and SR 141/Peachtree Parkway, the southbound left turn movement and the westbound shared left/right turn movement are expected to operate at LOS F during the PM peak hour in the Year 2042 if no improvements are made. However, no additional improvements appear feasible for Alternative 1.

Figure 4 - Lane Configurations and Traffic Control - Alternative 1: Part I

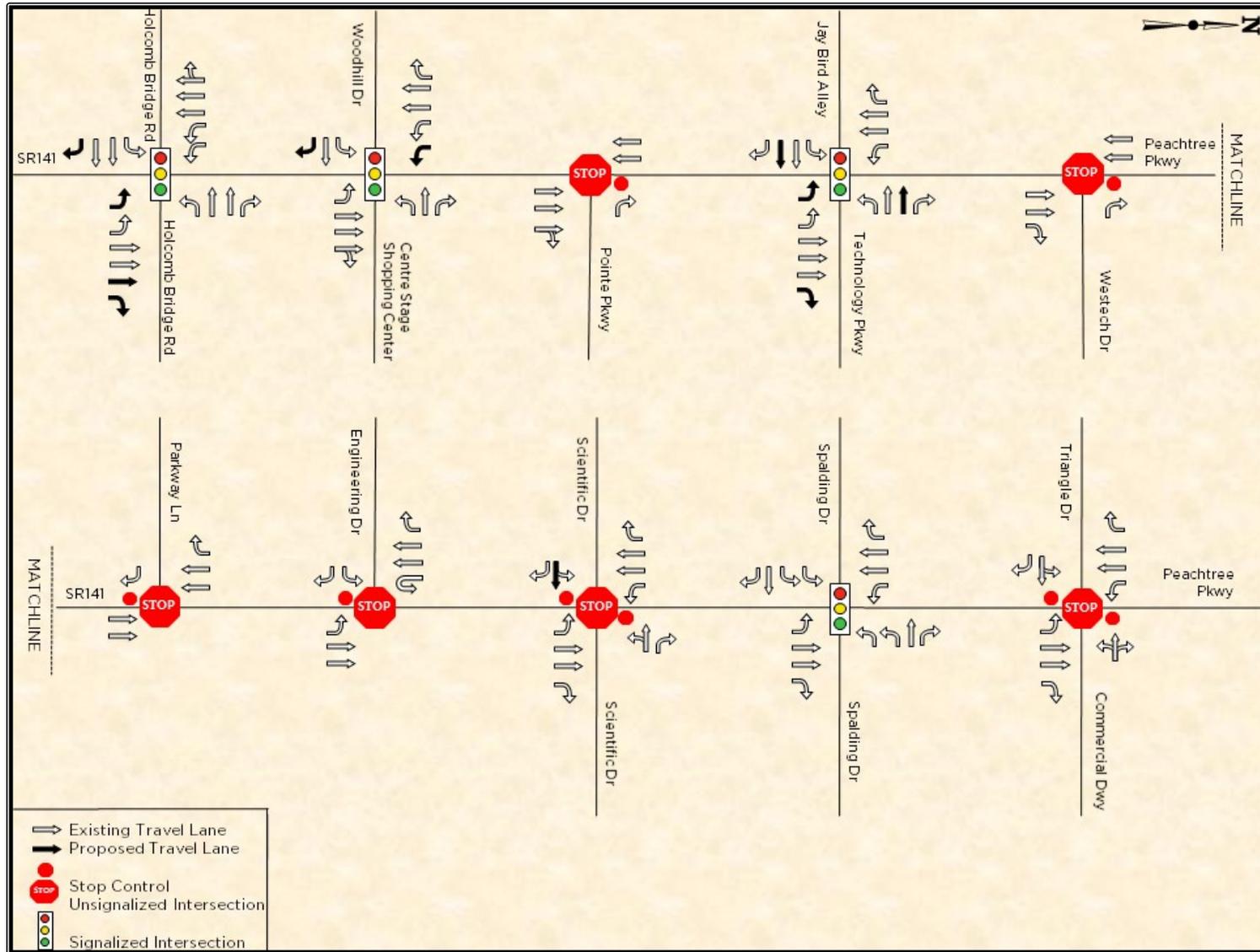
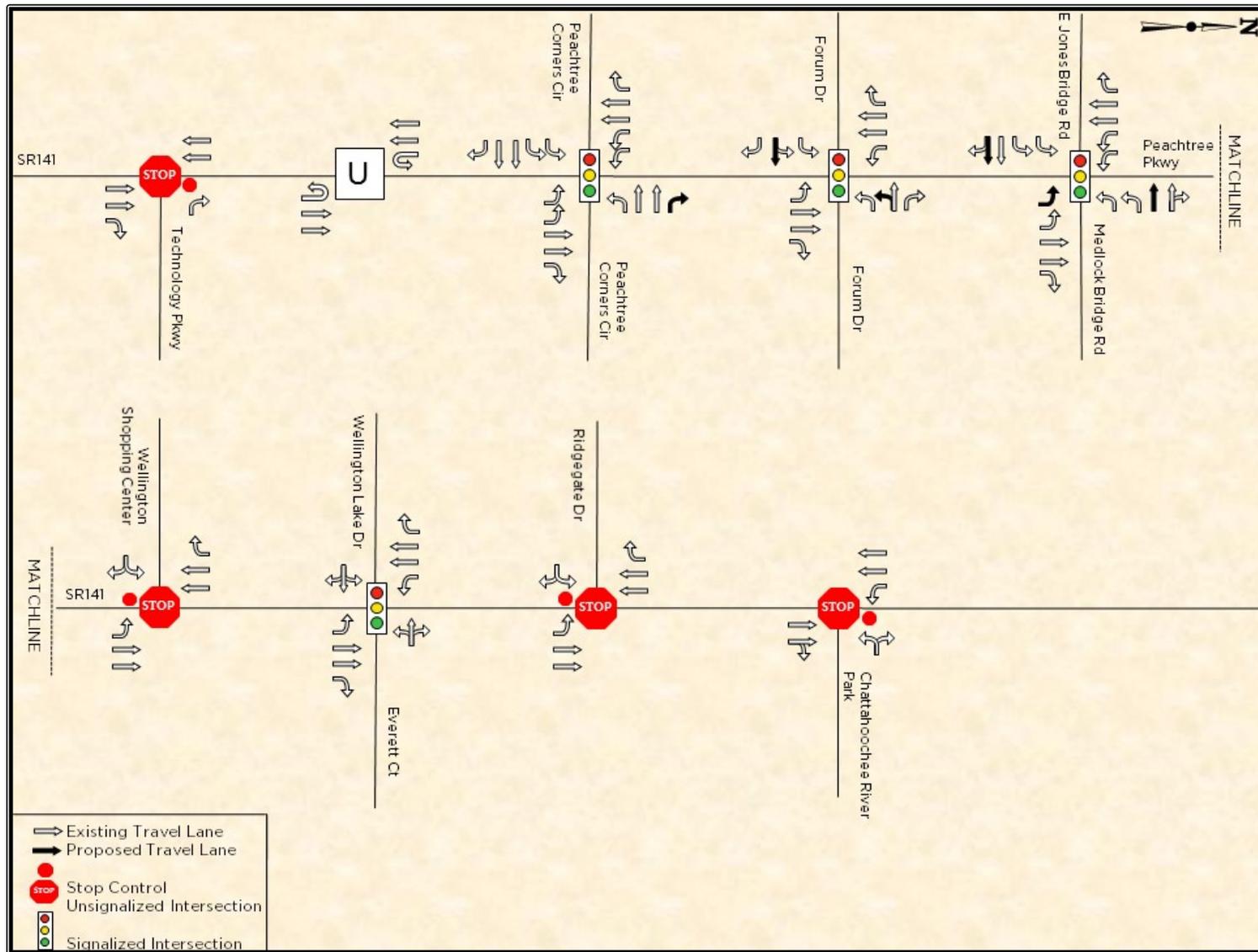


Figure 5 - Lane Configurations and Traffic Control - Alternative 1: Part II



**Table 3 - Capacity Analysis: Alternative 1**

INT #	INTERSECTION	CONTROL	IMPROVEMENTS	MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
					2022	2042	2022	2042
	SR 141/Peachtree Pkwy CORRIDOR	Travel Time	Alternative 1	NB	345.1 sec (5 min, 45.1 sec)	374.5 sec (6 min, 14.5 sec)	392.0 sec (6 min, 32.0 sec)	577.3 sec (9 min, 37.3 sec)
				SB	466.4 sec (7 min, 46.4 sec)	1089.4 sec (18 min, 9.4 sec)	389.0 sec (6 min, 29.0 sec)	491.3 sec (8 min, 11.3 sec)
1	SR 141/Peachtree Pkwy & Holcomb Bridge Rd	Traffic Signal	NB L addition (dual) NB T addition (3 lanes) NB R addition EB R addition WB R free-flow to yield	Overall	D (50.3)	D (47.2)	D (51.8)	D (48.0)
2	SR 141/Peachtree Pkwy & Woodhill Dr	Traffic Signal	SB L addition (dual) EB R addition	Overall	B (13.6)	D (53.4)	C (24.1)	C (28.9)
3	SR 141/Peachtree Pkwy & E Pointe Pkwy	Right-In/Right-Out	None	WB R	E (36.9)	F (73.6)	F (57.7)	F (193.8)
4	SR 141/Peachtree Pkwy & Jay Bird Alley/Technology Pkwy	Traffic Signal	NB L addition (dual) NB R addition EB T addition (dual) WB T addition (dual)	Overall	D (42.0)	E (70.3)	D (53.3)	E (64.0)
5	SR 141/Peachtree Pkwy & E Westech Dr	Right-In/Right-Out	None	WB R	C (23.7)	E (36.6)	C (21.0)	D (28.9)
6	SR 141/Peachtree Pkwy & W Parkway Ln	Right-In/Right-Out	None	EB R	C (24.3)	D (33.8)	C (18.5)	C (24.2)
7	SR 141/Peachtree Pkwy & Engineering Dr	Side Street Stop	None	NB L	F (257.0)	F (917.1)	C (20.1)	F (51.0)
				SB U	C (21.8)	D (31.1)	D (26.6)	E (44.5)
				EB L	A (0.0)	A (0.0)	F (722.2)	F (2332.5)
				EB R	D (28.0)	E (47.1)	D (28.8)	F (72.0)
8	SR 141/Peachtree Pkwy & Scientific Dr	Side Street Stop	Change EB L, EB T+R to EB L+T, EB R	NB L	C (22.3)	E (35.2)	B (14.9)	C (19.4)
				SB L	C (20.6)	E (43.1)	C (19.4)	D (31.2)
				EB L+T	A (0.0)	A (0.0)	F (1880.4)	F (10,633.1)
				EB R	C (23.7)	D (33.1)	C (17.5)	C (22.5)
				WB L+T	F (8669.3)	-*	F (3614.7)	F (14,109.1)
				WB R	C (20.1)	D (28.0)	C (22.2)	E (36.4)
9	SR 141/Peachtree Pkwy & Spalding Dr	Traffic Signal	None	Overall	D (50.4)	F (108.5)	E (55.4)	F (82.3)
10	SR 141/Peachtree Pkwy & Triangle Dr	Side Street Stop	None	NB L	F (124.4)	F (567.4)	B (14.5)	C (19.1)
				SB L	C (20.8)	D (34.5)	C (17.8)	D (27.7)
				EB L+T	A (0.0)	A (0.0)	F (2365.2)	F (18504.7)
				EB R	E (39.1)	-*	E (37.2)	F (127.8)
				WB L+T+R	C (16.8)	C (20.7)	C (19.2)	D (26.5)
11	SR 141/Peachtree Pkwy & E Technology Pkwy	Right-In/Right-Out	None	WB R	C (19.5)	D (30.5)	D (31.9)	F (87.5)
12	SR 141/Peachtree Pkwy & U-turn median break	Yield	None	NB U	D (28.4)	E (47.0)	B (14.9)	C (19.1)
				SB U	B (12.7)	C (15.2)	C (19.2)	D (29.5)
13	SR 141/Peachtree Pkwy & Peachtree Corners Cir	Traffic Signal	WB R addition	Overall	D (52.9)	F (111.2)	D (42.1)	E (60.3)
14	SR 141/Peachtree Pkwy & Forum Dr	Traffic Signal	Change EB L (dual), EB T+R to EBL, EB L+T, EB R Change WB L, WB T, WB R to WB L, WB L+T, WB R	Overall	A (6.1)	F (110.8)	A (8.2)	A (9.0)
15	SR 141/Peachtree Pkwy & E Jones Bridge Rd/ Medlock Bridge Rd	Traffic Signal	NB L addition (dual) Change EB T, EB R to EB T, EB T+R WB T addition (dual)	Overall	E (67.2)	F (129.0)	D (39.0)	E (79.2)
16	SR 141/Peachtree Pkwy & Wellington SC	Side Street Stop	None	NB L	D (33.9)	F (58.9)	C (20.3)	D (30.5)
				EB L+R	F (1336.0)	F (6622.7)	F (2049.9)	F (9324.7)
17	SR 141/Peachtree Pkwy & Wellington Lake Dr/ Everett Ct	Traffic Signal	None	Overall	B (17.8)	E (63.4)	A (9.3)	C (26.3)
18	SR 141/Peachtree Pkwy & Ridgeway Dr	Side Street Stop	None	NB L	F (59.0)	F (121.8)	C (19.9)	D (28.8)
				EB L+R	F (1555.1)	F (86.9)**	F (1238.8)	F (7519.1)
19	SR 141/Peachtree Pkwy & Chattahoochee River Park	Side Street Stop	None	SB L	A (0.0)	A (0.0)	D (31.3)	F (53.0)
				WB L+R	A (0.0)	A (0.0)	D (32.1)	F (50.0)

\*Delay value is too high to calculate

\*\*Computational error, delay is greater than 3145.7 seconds

**LEGEND** Inadequate Level of Service (LOS E)  
Failing Level of Service (LOS F)

### *Alternative 2 - Six-Lane Median Divided, Conventional Intersection Improvements*

Alternative 2 consists of keeping the conventional operations in place, while adding a third through lane in each direction to form a six-lane median divided highway, in addition to adding the necessary turn bays and side street capacity to achieve adequate LOS and to reduce expected future queue lengths. Figures 6 and 7 (on Pages 28 and 29, respectively) show the proposed lane configurations and traffic control for Alternative 2 - Six-Lane Median Divided, Conventional Intersection Improvements. Table 4 (on Page 30) contains the results of the capacity analysis with the roadway geometry and operational conditions for Alternative 2 for Opening Year 2022 and Design Year 2042. The values shown in parentheses indicate the estimated delay in seconds per vehicle.

Where inadequate operating conditions are expected, additional improvements were identified for the study intersections along SR 141/Peachtree Parkway. Each intersection was analyzed until it was determined to be sufficiently improved within feasible right-of-way limitations to provide an acceptable LOS.

In each of the intersection descriptions below, it is assumed that there are three through lanes in each direction.

At the intersection of Holcomb Bridge Road and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the PM peak hour. Therefore, for Alternative 2, the following lane configurations are recommended. On the northbound approach, dual left turn lanes, three through lanes, and a right turn lane are recommended to help provide adequate operating conditions at the intersection. On the southbound approach, a right turn lane is recommended to help provide adequate operating conditions at the intersection. On the eastbound approach, a right turn lane is recommended to help provide adequate operating conditions at the intersection. On the westbound approach, due to the recommended three northbound through lanes, the right turn movement will need to be altered from free-flow to yield. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 2, except for the AM peak hour, where there is a slightly inadequate LOS E; however, no further improvements appear feasible for Alternative 2.

At the intersection of Woodhill Drive and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. Therefore, for Alternative 2, the following lane configurations are recommended. On the northbound approach, a right turn lane is recommended to help provide adequate operating conditions at the intersection. On the southbound approach, dual left turn lanes are recommended to help provide adequate operating conditions at the intersection. On the eastbound approach, a right turn lane is recommended to help provide adequate operating conditions at the intersection. No additional improvements are recommended for the westbound approach for this alternative. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 2.

At the intersection of Pointe Parkway and SR 141/Peachtree Parkway, the westbound right turn movement is currently operating at LOS E during the PM peak hour. However, no additional improvements appear feasible for Alternative 2.

At the intersection of Jay Bird Alley/Technology Parkway and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS F during both peak hours in the Year 2042 if no improvements are made. Therefore, for Alternative 1, the following lane configurations are recommended. On the northbound approach, dual left turn lanes and a right turn lane are recommended to help provide adequate operating conditions at the intersection. On the eastbound approach, two through lanes are recommended to help provide adequate operating conditions at the intersection. On the westbound approach, two through lanes are recommended to help provide adequate operating conditions at the intersection. No additional improvements are recommended for the southbound approach for this alternative. The intersection is expected to operate inadequately at LOS E during the PM peak hour in the Design Year 2042; however, no further improvements appear feasible for Alternative 2.

At the intersection of Westech Drive and SR 141/Peachtree Parkway, the westbound right turn movement is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made; however, no additional improvements appear feasible for Alternative 2.

At the intersection of Parkway Lane and SR 141/Peachtree Parkway, the eastbound right turn movement is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made; however, no additional improvements appear feasible for Alternative 2.

At the intersection of Engineering Drive and SR 141/Peachtree Parkway, all movements, consisting of the northbound left turn movement, the southbound U-turn movement, and the eastbound left and right turn movements either are currently operating inadequately during one or both peak hours or are expected to operate inadequately during one or both peak hours in the Year 2042 if no improvements are made. On the southbound approach, a right turn lane is recommended; however, no additional improvements appear feasible for Alternative 2.

At the intersection of Scientific Drive and SR 141/Peachtree Parkway, all movements, except for the eastbound shared through/right movement, either are currently operating inadequately during one or both peak hours or are expected to operate inadequately during one or both peak hours in the Year 2042 if no improvements are made; however, no additional improvements appear feasible for Alternative 2.

At the intersection of Spalding Drive and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the PM peak hour. With the extra through lane in each direction for Alternative 2, the overall intersection is expected to operate adequately until the

year 2042, when it is expected the overall intersection will operate at LOS E during the PM peak hour; however, no additional improvements appear feasible for Alternative 2.

At the intersection of Triangle Drive and SR 141/Peachtree Parkway, the northbound left turn movement, the eastbound shared left/through movement, and the eastbound right turn movement either are currently operating inadequately during one or both peak hours or are expected to operate inadequately during one or both peak hours in the Year 2042 if no improvements are made; however, no additional improvements appear feasible for Alternative 2.

At the intersection of Technology Parkway and SR 141/Peachtree Parkway, the westbound right turn movement is expected to operate at LOS F during the PM peak hour in the Year 2042 if no improvements are made. On the northbound approach, a right turn lane is recommended; however, no additional improvements appear feasible for Alternative 2.

At the intersection of U-turn median break and SR 141/Peachtree Parkway, the northbound U-turn movement is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made; however, no additional improvements appear feasible for Alternative 2.

At the intersection of Peachtree Corners Circle and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the PM peak hour. Therefore, for Alternative 2, a westbound right turn lane is recommended to help provide adequate operating conditions at the intersection. The intersection is expected to operate inadequately at LOS E during the PM peak hour in the Design Year 2042; however, no further improvements appear feasible for Alternative 2.

At the intersection of Forum Drive and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. Therefore, for Alternative 2, the following lane configurations are recommended. On the eastbound approach, a left turn lane, a shared left/through lane, and a right turn lane are recommended to help provide adequate operating conditions at the intersection. On the westbound approach, a left turn lane, a shared left/through lane, and a right turn lane are recommended to help provide adequate operating conditions at the intersection. No additional improvements are recommended for the northbound or southbound approaches for this alternative. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 2.

At the intersection of E Jones Bridge Road/Medlock Bridge Road and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the AM peak hour. Therefore, for Alternative 2, the following lane configurations are recommended. On the northbound approach, dual left turn lanes are recommended to help provide adequate operating conditions at the intersection. On the eastbound approach, an eastbound through

lane and an eastbound shared through/right lane are recommended to help provide adequate operating conditions at the intersection. On the westbound approach, an eastbound through lane and an eastbound shared through/right lane are recommended to help provide adequate operating conditions at the intersection. No additional improvements are recommended for the southbound approach for this alternative. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 2.

At the intersection of Wellington Shopping Center and SR 141/Peachtree Parkway, the eastbound shared left/right turn movement is currently operating at LOS F during both peak hours; however, no additional improvements appear feasible for Alternative 2.

At the intersection of Wellington Lake Drive/Everett Court and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made; however, no additional improvements appear feasible for Alternative 2.

At the intersection of Ridgegate Drive and SR 141/Peachtree Parkway, the northbound left turn movement is currently operating at LOS F during the AM peak hour, and the eastbound shared left/right turn movement is currently operating at LOS F during both peak hours; however, no additional improvements appear feasible for Alternative 2.

At the intersection of Chattahoochee River Park and SR 141/Peachtree Parkway, the southbound left turn movement and the westbound shared left/right turn movement are expected to operate at LOS F during the PM peak hour in the Year 2042 if no improvements are made; however, no additional improvements appear feasible for Alternative 2.

Figure 6 - Lane Configurations and Traffic Control - Alternative 2: Part I

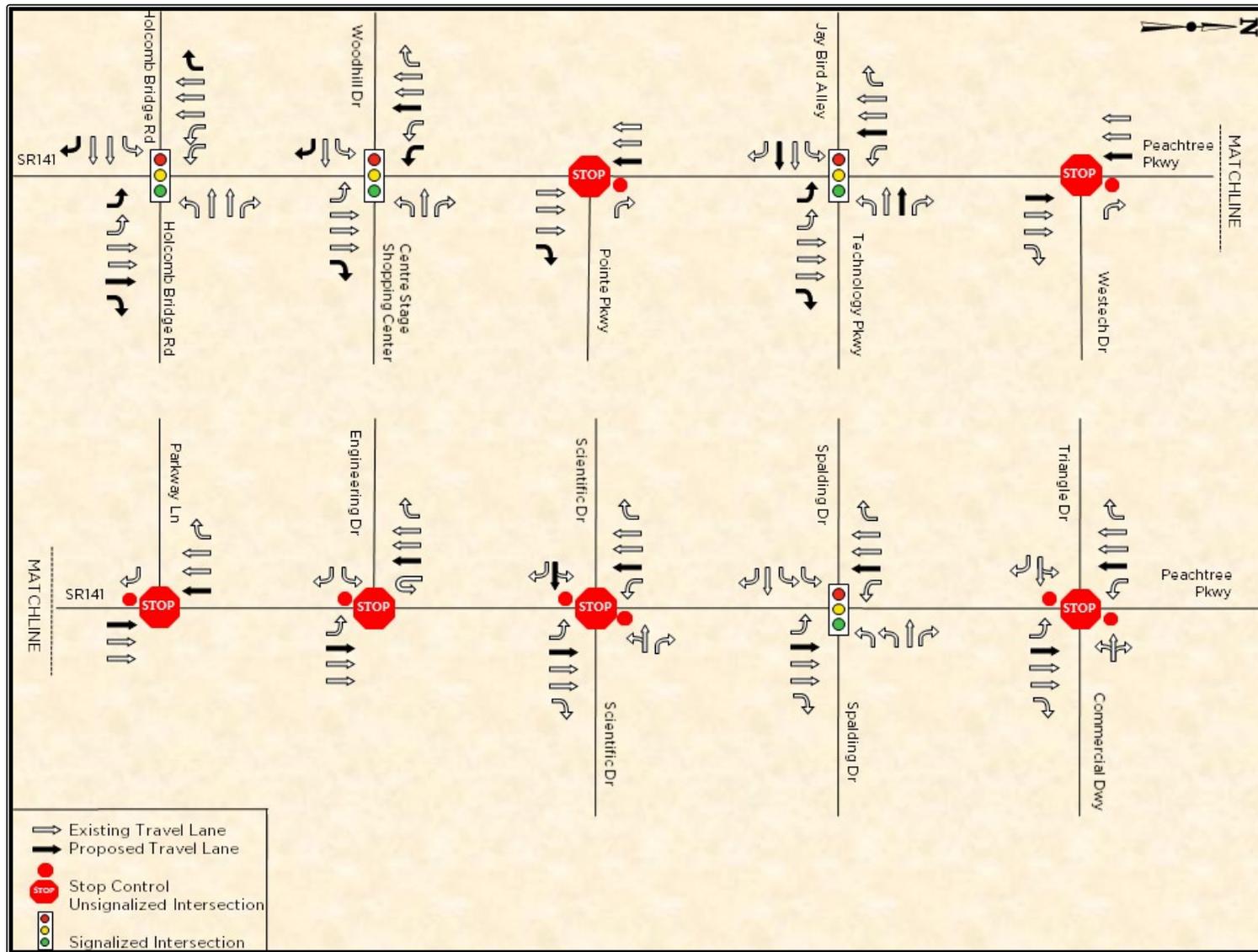
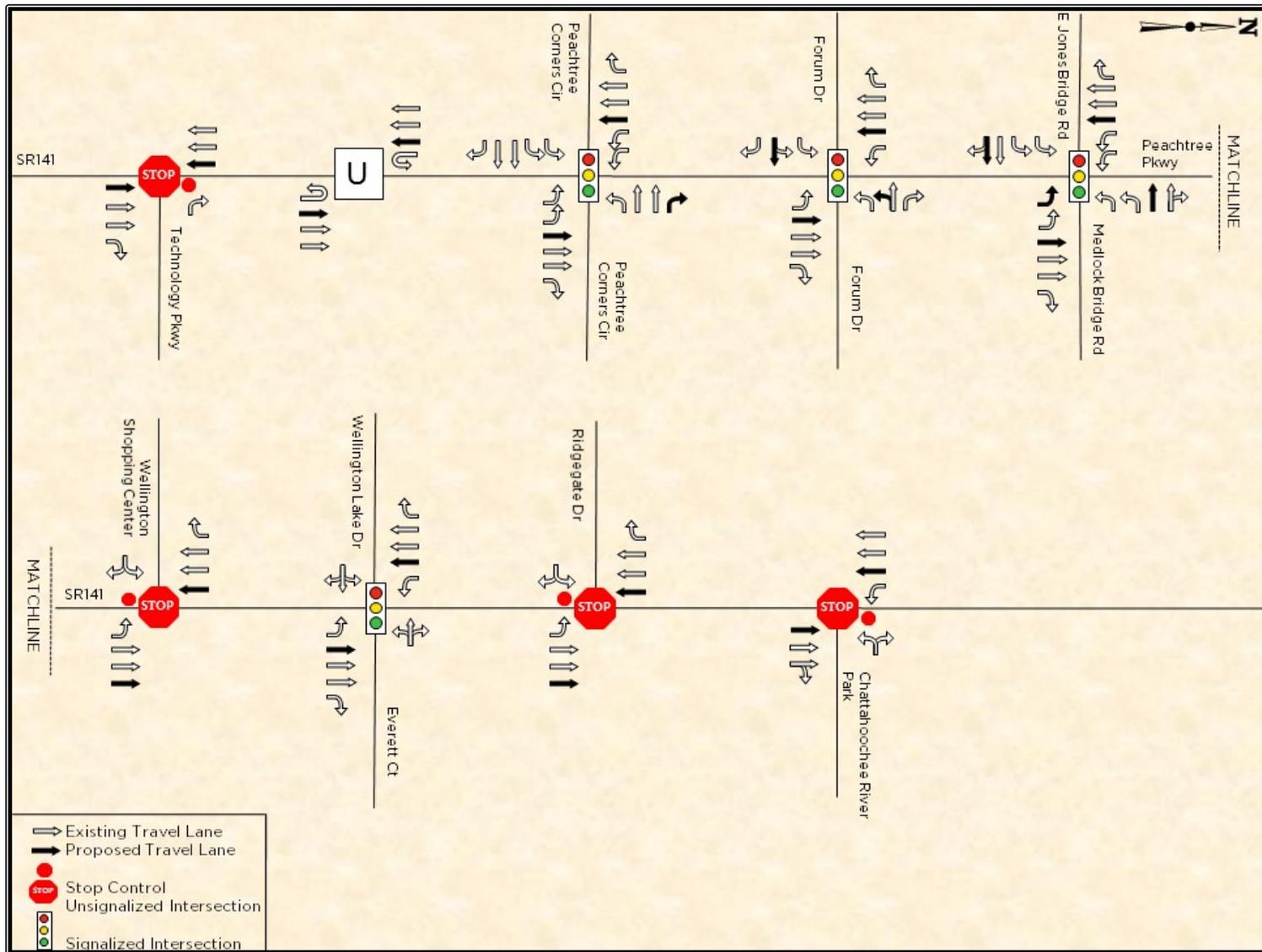


Figure 7 - Lane Configurations and Traffic Control - Alternative 2: Part II



**Table 4 - Capacity Analysis: Alternative 2**

INT #	INTERSECTION	CONTROL	IMPROVEMENTS	MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
					2022	2042	2022	2042
					329.0 sec (5 min, 29.0 sec)	348.8 sec (5 min, 48.8 sec)	355.6 sec (5 min, 55.6 sec)	398.4 sec (6 min, 38.4 sec)
	SR 141/Peachtree Pkwy CORRIDOR	Travel Time	Alternative 2	NB	341.3 sec (5 min, 41.3 sec)	395.0 sec (6 min, 35.0 sec)	367.9 sec (6 min, 7.9 sec)	394.6 sec (6 min, 34.6 sec)
1	SR 141/Peachtree Pkwy & Holcomb Bridge Rd	Traffic Signal	NB L addition (dual) NB T addition (3 lanes) NB R addition SB R addition EB R addition WB R free-flow to yield	Overall	D (48.1)	E (57.0)	D (37.6)	D (52.6)
2	SR 141/Peachtree Pkwy & Woodhill Dr	Traffic Signal	NB R addition SB L addition (dual) EB R addition	Overall	A (7.4)	B (10.5)	B (15.8)	C (28.5)
3	SR 141/Peachtree Pkwy & E Pointe Pkwy	Right-In/Right-Out	NB R addition	WB R	E (36.9)	F (73.6)	F (57.7)	F (193.8)
4	SR 141/Peachtree Pkwy & Jay Bird Alley/Technology Pkwy	Traffic Signal	NB L addition (dual) NB R addition EB T addition (dual) WB T addition (dual)	Overall	C (27.1)	C (31.5)	C (31.4)	E (59.5)
5	SR 141/Peachtree Pkwy & E Westech Dr	Right-In/Right-Out	None	WB R	D (27.6)	E (44.3)	C (23.8)	D (33.6)
6	SR 141/Peachtree Pkwy & W Parkway Ln	Right-In/Right-Out	None	EB R	D (27.5)	E (38.7)	C (20.9)	D (27.8)
7	SR 141/Peachtree Pkwy & Engineering Dr	Side Street Stop	SB R addition	NB L	F (1087.2)	F (2881.6)	F (54.4)	F (213.1)
				SB U	D (27.3)	E (40.8)	E (35.7)	F (69.1)
				EB L	A (0.0)	A (0.0)	F (1017.5)	-*
				EB R	D (32.7)	F (57.9)	E (38.4)	F (114.3)
8	SR 141/Peachtree Pkwy & Scientific Dr	Side Street Stop	Change EB L, EB T+R to EB L+T, EB R	NB L	F (55.4)	F (140.2)	D (27.4)	E (44.7)
				SB L	F (84.2)	F (368.1)	E (49.8)	F (161.4)
				EB L+T	A (0.0)	A (0.0)	F (809.8)	-*
				EB R	D (27.0)	E (38.0)	C (19.8)	D (25.9)
				WB L+T	F (6405.4)	-*	F (1472.9)	F (28611.3)
				WB R	C (23.1)	D (33.6)	D (26.5)	E (47.1)
9	SR 141/Peachtree Pkwy & Spalding Dr	Traffic Signal	None	Overall	D (39.4)	D (46.8)	D (49.0)	E (58.4)
10	SR 141/Peachtree Pkwy & Triangle Dr	Side Street Stop	None	NB L	F (865.9)	F (2532.0)	D (26.6)	E (45.4)
				SB L	F (51.7)	F (168.3)	E (46.0)	F (145.8)
				EB L+T	A (0.0)	A (0.0)	F (1023.4)	F (18,504.7)
				EB R	E (48.2)	F (136.0)	F (55.6)	F (200.2)
11	SR 141/Peachtree Pkwy & E Technology Pkwy	Right-In/Right-Out	NB R addition	WB R	C (23.7)	E (40.9)	E (43.2)	F (137.8)
12	SR 141/Peachtree Pkwy & U-turn median break	Yield	None	NB U	F (75.7)	F (178.2)	D (26.6)	E (39.6)
				SB U	C (20.3)	D (27.3)	E (46.1)	F (125.8)
13	SR 141/Peachtree Pkwy & Peachtree Corners Cir	Traffic Signal	WB R addition	Overall	D (49.8)	D (49.1)	D (39.3)	E (57.5)
14	SR 141/Peachtree Pkwy & Forum Dr	Traffic Signal	Change EB L (dual), EB T+R to EBL, EB L+T, EB R Change WB L, WB T, WB R to WB L, WB L+T, WB R	Overall	A (2.0)	A (1.8)	A (8.4)	B (15.0)
15	SR 141/Peachtree Pkwy & E Jones Bridge Rd/ Medlock Bridge Rd	Traffic Signal	NB L addition (dual) Change EB T, EB R to EB T, EB T+R WB T addition (dual)	Overall	D (38.9)	D (52.9)	C (31.3)	D (37.4)
16	SR 141/Peachtree Pkwy & Wellington SC	Side Street Stop	None	NB L	F (95.3)	F (226.4)	E (46.5)	F (103.0)
				EB L+R	F (195.9)	F (1374.2)	F (440.0)	F (3067.8)
17	SR 141/Peachtree Pkwy & Wellington Lake Dr/ Everett Ct	Traffic Signal	None	Overall	B (12.4)	B (12.4)	B (11.8)	A (8.4)
18	SR 141/Peachtree Pkwy & Ridgeway Dr	Side Street Stop	None	NB L	F (176.5)	F (573.9)	E (44.8)	F (89.5)
				EB L+R	F (345.2)	F (1745.2)	F (261.7)	F (2277.9)
19	SR 141/Peachtree Pkwy & Chattahoochee River Park	Side Street Stop	None	SB L	A (0.0)	A (0.0)	F (81.6)	F (182.7)
				WB L+R	A (0.0)	A (0.0)	E (36.9)	F (58.0)

\*Delay value is too high to calculate

**LEGEND** Inadequate Level of Service (LOS E)  
Failing Level of Service (LOS F)

### *Alternative 3 - Four-Lane Median Divided, Innovative Intersection Improvements*

Alternative 3 consists of the installation of innovative intersection improvements, specifically Median U-Turns (MUTs, also known as a Michigan Left Turn) and Restricted Crossing U-Turns (RCUTs), while adding the necessary mainline turn bays and side street capacity to achieve adequate LOS and to reduce expected future queue lengths. A MUT does not allow left turn movements from the side street, but all other typical movements at an intersection are allowed. An RCUT does not allow left turns or through movements from the side street, but all other typical movements at an intersection are allowed. Figures 8 and 9 (on Pages 35 and 36, respectively) show the proposed lane configurations and traffic control for Alternative 3 - Four-Lane Median Divided, Innovative Intersection Improvements. Table 5 (on Page 37) contains the results of the capacity analysis with the roadway geometry and operational conditions for Alternative 3 for Opening Year 2022 and Design Year 2042. The values shown in parentheses indicate the estimated delay in seconds per vehicle.

Where inadequate operating conditions are expected, additional improvements were identified for the study intersections along SR 141/Peachtree Parkway. Each intersection was analyzed until it was determined to be sufficiently improved within feasible right-of-way limitations to provide an acceptable LOS.

In each of the intersection descriptions below, it is assumed that there are no left turn lanes or movements allowed on the side streets.

At the intersection of Holcomb Bridge Road and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the PM peak hour. Therefore, for Alternative 3, the following lane configurations are recommended. On the northbound approach, dual left turn lanes, three through lanes, and a right turn lane are recommended to help provide adequate operating conditions at the intersection. On the eastbound approach, a right turn lane is recommended to help provide adequate operating conditions at the intersection. On the westbound approach, due to the recommended three northbound through lanes, the right turn movement will need to be altered from free-flow to yield. No additional improvements are recommended for the southbound approach for this alternative. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 3.

At the intersection of Woodhill Drive and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. Therefore, for Alternative 3, the following lane configurations are recommended. On the northbound approach, a right turn lane is recommended to help provide adequate operating conditions at the intersection. On the southbound approach, dual left turn lanes are recommended to help provide adequate operating conditions at the intersection. On the eastbound approach, a right turn lane is recommended to help provide adequate operating conditions at the intersection. No additional improvements are recommended for the westbound approach for this alternative. This intersection is proposed as an MUT for Alternative 3. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 3.

At the intersection of Pointe Parkway and SR 141/Peachtree Parkway, the westbound right turn movement is currently operating at LOS E during the PM peak hour; however, no additional improvements appear feasible for Alternative 3.

At the intersection of Jay Bird Alley/Technology Parkway and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS F during both peak hours in the Year 2042 if no improvements are made. Therefore, for Alternative 3, the following lane configurations are recommended. On the northbound approach, dual left turn lanes and a right turn lane are recommended to help provide adequate operating conditions at the intersection. On the southbound approach, dual left turn lanes are recommended to help provide adequate operating conditions at the intersection. On the eastbound approach, two through lanes are recommended to help provide adequate operating conditions at the intersection. On the westbound approach, two through lanes are recommended to help provide adequate operating conditions at the intersection. This intersection is proposed as an MUT for Alternative 3. The intersection is expected to operate inadequately at LOS E during the AM peak hour in the Design Year 2042; however, no further improvements appear feasible for Alternative 3.

At the intersection of Westech Drive and SR 141/Peachtree Parkway, the westbound right turn movement is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. At the intersection of Parkway Lane and SR 141/Peachtree Parkway, the eastbound right turn movement is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. To help provide adequate operating conditions at this intersection, it is recommended to realign Parkway Lane and Westech Drive to form a four-leg intersection at the current intersection location of Westech Drive. On the northbound approach, a left turn lane is recommended to help provide adequate operating conditions at this intersection. On the southbound approach, a left turn lane is recommended to help provide adequate operating conditions at this intersection. This intersection is proposed as a signalized RCUT for Alternative 3. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 3.

At the intersection of Engineering Drive and SR 141/Peachtree Parkway, all movements, consisting of the northbound left turn movement, the southbound U-turn movement, and the eastbound left and right turn movements either are currently operating inadequately during one or both peak hours or are expected to operate inadequately during one or both peak hours in the Year 2042 if no improvements are made. On the northbound approach, dual left turn lanes are recommended to help provide adequate operating conditions at the intersection. This intersection is proposed as a signalized RCUT for Alternative 3. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 3.

At the intersection of Scientific Drive and SR 141/Peachtree Parkway, all movements, except for the eastbound shared through/right movement, either are currently operating inadequately during one or both peak hours or are expected to operate inadequately during one or both peak hours in the Year 2042 if no improvements are made. This intersection is proposed as a signalized RCUT for Alternative 3. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 3.

At the intersection of Spalding Drive and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the PM peak hour. Therefore, for Alternative 3, the following lane configurations are recommended. On both the eastbound and westbound approaches, dual through lanes are recommended to help provide adequate operating conditions at the intersection. This intersection is proposed as an MUT for Alternative 3. The intersection is expected to operate inadequately at LOS E during the AM peak hour in the Design Year 2042; however, no further improvements appear feasible for Alternative 3.

At the intersection of Triangle Drive and SR 141/Peachtree Parkway, the northbound left turn movement, the eastbound shared left/through movement, and the eastbound right turn movement either are currently operating inadequately during one or both peak hours or are expected to operate inadequately during one or both peak hours in the Year 2042 if no improvements are made. Therefore, for Alternative 3, the following lane configurations are recommended. On the northbound approach, dual left turn lanes are recommended to help provide adequate operating conditions at this intersection. This intersection is proposed as a signalized RCUT for Alternative 3. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 3.

At the intersection of Technology Parkway and SR 141/Peachtree Parkway, the westbound right turn movement is expected to operate at LOS F during the PM peak hour in the Year 2042 if no improvements are made; however, no additional improvements appear feasible for Alternative 3.

At the intersection of U-turn median break and SR 141/Peachtree Parkway, the northbound U-turn movement is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. Therefore, for Alternative 3, the following lane configurations are recommended. On the southbound approach, dual left turn lanes are recommended to help provide adequate operating conditions at this intersection. This intersection is proposed as a signalized U-turn as part of the RCUT at Technology Parkway to the south and the MUT at Peachtree Corners Circle to the north for Alternative 3. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 3.

At the intersection of Peachtree Corners Circle and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the PM peak hour. Therefore, for Alternative 3, the following lane configurations are recommended. On both the eastbound and westbound approaches, dual through lanes are recommended to help provide adequate operating conditions at the intersection. This intersection is proposed as an MUT for Alternative 3. The intersection is expected to operate inadequately at LOS E during the AM peak hour in the Design Year 2042; however, no further improvements appear feasible for Alternative 3.

At the intersection of Forum Drive and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. Therefore, for Alternative 2, the following lane configurations are recommended. On the eastbound approach, dual right turn lanes are recommended to help provide adequate operating conditions at the intersection. This intersection is proposed as a signalized RCUT for Alternative 3. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 3.

At the intersection of E Jones Bridge Road/Medlock Bridge Road and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the AM peak hour. Therefore, for Alternative 3, the following lane configurations are recommended. On the northbound approach, dual left turn lanes are recommended to help provide adequate operating conditions at the intersection. On the eastbound approach, dual through lanes and dual right turn lanes are recommended to help provide adequate operating conditions at the intersection. On the westbound approach, dual through lanes and dual right turn lanes are recommended to help provide adequate operating conditions at the intersection. This intersection is proposed as an MUT for Alternative 3. The intersection is expected to operate inadequately at LOS F during the AM peak hour and LOS E during the PM peak hour in the Design Year 2042; however, no further improvements appear feasible for Alternative 3.

At the intersection of Wellington Shopping Center and SR 141/Peachtree Parkway, the eastbound shared left/right turn movement is currently operating at LOS F during both peak hours. Therefore, for Alternative 3, the following lane configurations are recommended. On the northbound approach, dual left turn lanes are recommended to help provide adequate operating conditions at the intersection. On the southbound approach, a U-turn lane is recommended to help provide adequate operating conditions at the intersection. This intersection is proposed as a signalized RCUT for Alternative 3. The intersection is expected to operate inadequately at LOS E during the AM peak hour in the Design Year 2042; however, no further improvements appear feasible for Alternative 3.

At the intersection of Wellington Lake Drive/Everett Court and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. Using the Eighth Highest Hour from the Design Year 2042 ADT from the traffic projections, this intersection currently does not warrant a traffic signal nor is expected to warrant a traffic signal in the Design Year 2042. This intersection is proposed as an unsignalized RCUT for Alternative 3. The northbound left turn movement and the eastbound right turn movement are expected to operate inadequately at LOS E and F respectively during the AM peak hour in the Opening Year 2022; however, no further improvements appear feasible for Alternative 3.

At the intersection of Ridgeway Drive and SR 141/Peachtree Parkway, the northbound left turn movement is currently operating at LOS F during the AM peak hour, and the eastbound shared left/right turn movement is currently operating at LOS F during both peak hours. This intersection is proposed as an unsignalized RCUT for Alternative 3. The eastbound right turn movement is expected to operate inadequately at LOS E during the AM peak hour in the Opening Year 2022; however, no further improvements appear feasible for Alternative 3.

At the intersection of Chattahoochee River Park and SR 141/Peachtree Parkway, the southbound left turn movement and the westbound shared left/right turn movement are expected to operate at LOS F during the PM peak hour in the Year 2042 if no improvements are made. This intersection is proposed as an unsignalized RCUT for Alternative 3. The southbound left turn movement and the westbound right turn movement are expected to operate inadequately at LOS F during the PM peak hour in the Design Year 2042; however, no further improvements appear feasible for Alternative 3.

Figure 8 - Lane Configurations and Traffic Control - Alternative 3: Part I

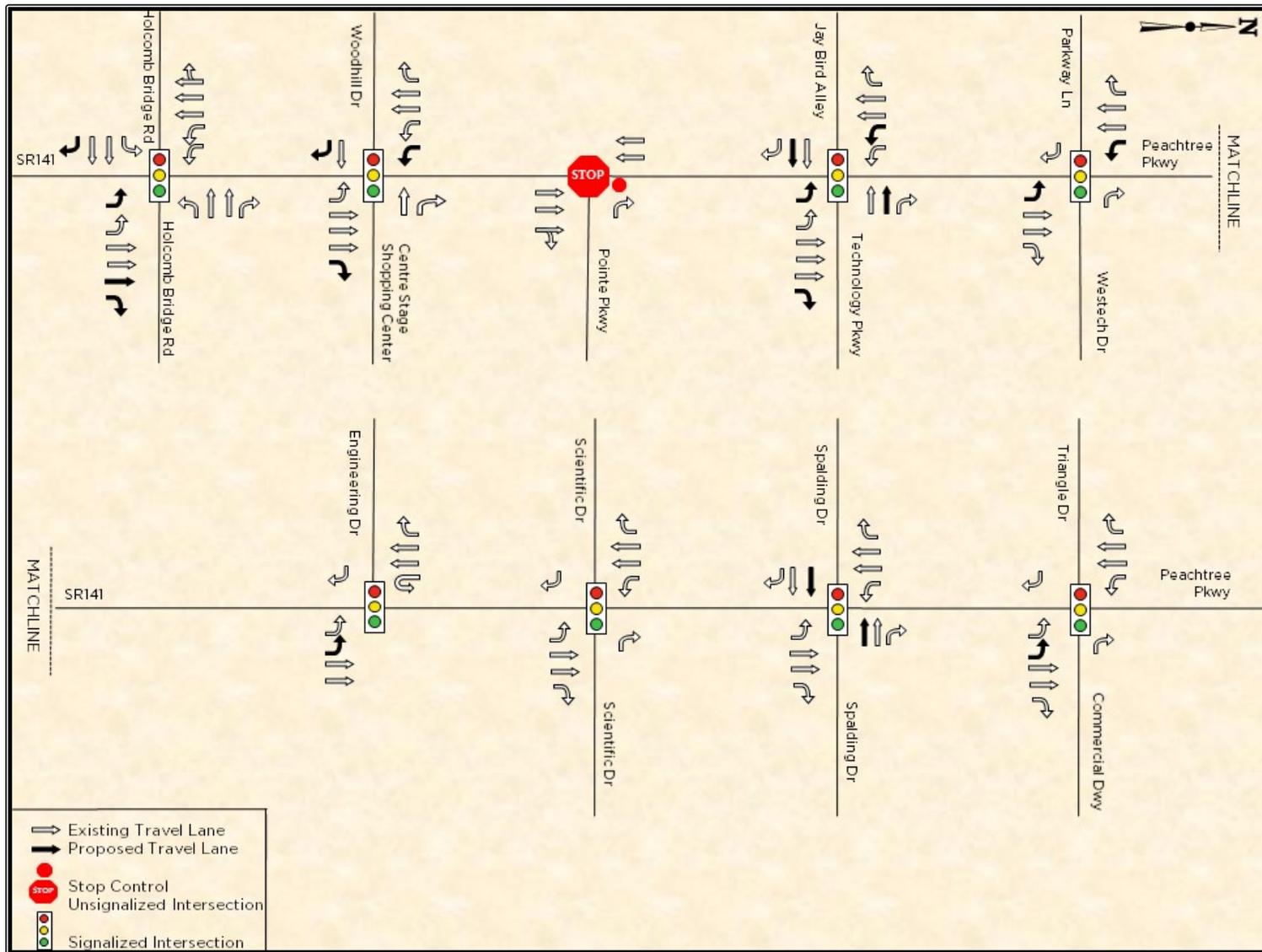
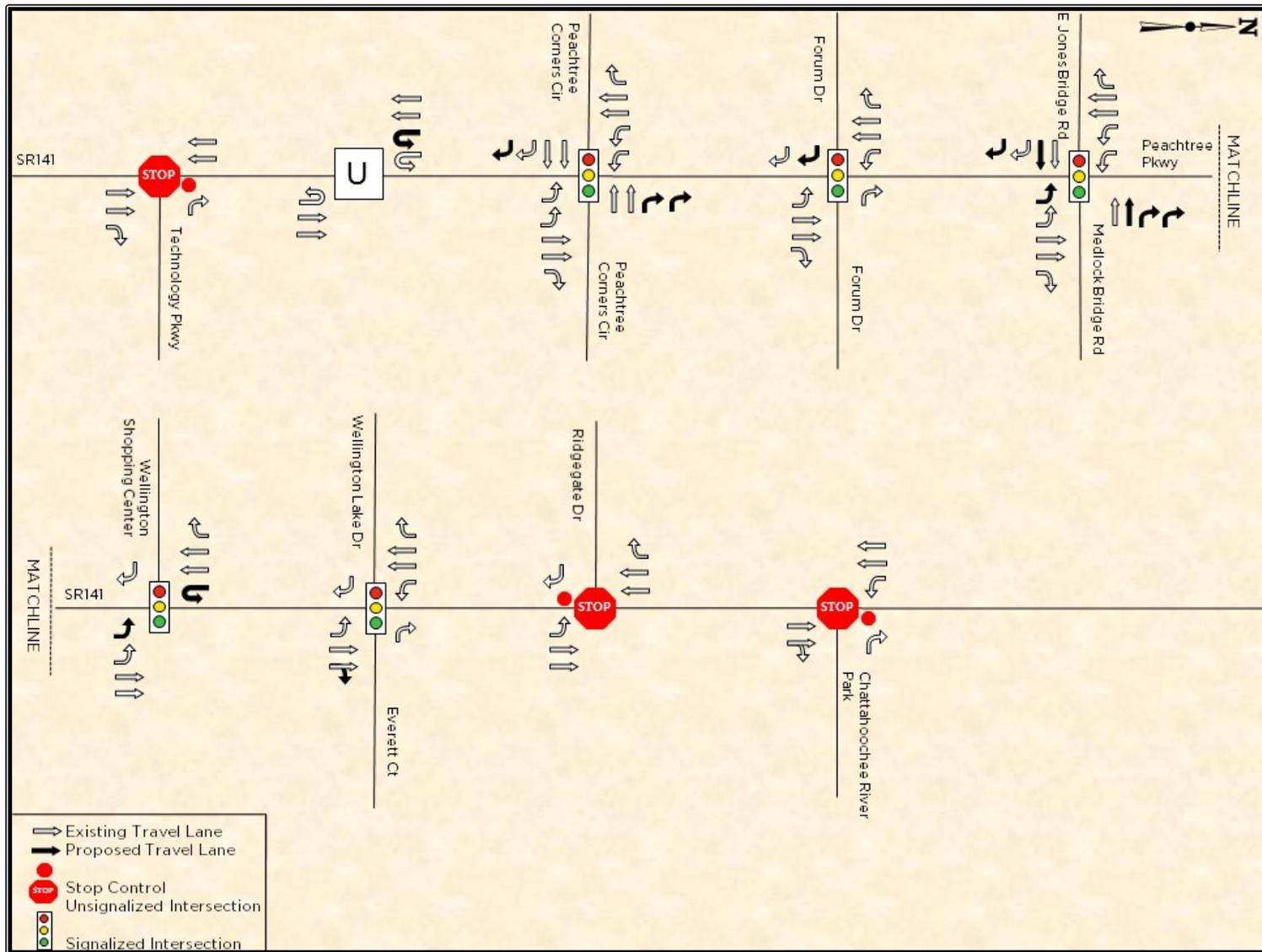


Figure 9 - Lane Configurations and Traffic Control - Alternative 3: Part II



**Table 5 - Capacity Analysis: Alternative 3**

INT #	INTERSECTION	CONTROL	IMPROVEMENTS	MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
					2022	2042	2022	2042
	SR 141/Peachtree Pkwy CORRIDOR	Travel Time	Alternative 3	NB	371.9 sec (6 min, 11.9 sec)	391.8 sec (6 min, 31.8 sec)	460.6 sec (7 min, 40.6 sec)	725.4 sec (12 min, 5.4 sec)
				SB	504.9 sec (8 min, 24.9 sec)	1014.4 sec (16 min, 54.4 sec)	457.3 sec (7 min, 37.3 sec)	529.9 sec (8 min, 49.9 sec)
1	SR 141/Peachtree Pkwy & Holcomb Bridge Rd	Traffic Signal	NB L addition (dual) NB T addition (3 lanes) NB R addition EB R addition WB R free-flow to yield	Overall	C (34.7)	D (48.4)	D (38.6)	D (54.5)
2	SR 141/Peachtree Pkwy & Woodhill Dr	Traffic Signal (MUT)	NB R addition SB L addition (dual) EB R addition	Overall	B (15.3)	D (50.4)	B (15.2)	C (26.8)
3	SR 141/Peachtree Pkwy & E Pointe Pkwy	Right-In/Right-Out	None	WB R	E (37.4)	F (76.0)	F (65.5)	F (236.2)
4	SR 141/Peachtree Pkwy & Jay Bird Alley/ Technology Pkwy	Traffic Signal (MUT)	NB L addition (dual) NB R addition SB L addition (dual) EB T addition (dual) WB T addition (dual)	Overall	C (29.2)	E (71.6)	C (22.7)	D (45.0)
5	SR 141/Peachtree Pkwy & W Parkway Ln/E Westech Dr	Traffic Signal (RCUT)	Realign at E Westech Dr NB L addition SB L addition	Overall	A (2.6)*	A (5.9)*	A (3.2)*	A (5.8)*
7	SR 141/Peachtree Pkwy & Engineering Dr	Traffic Signal (RCUT)	NB L addition (dual)	Overall	A (5.4)*	B (12.4)*	A (3.4)*	A (4.6)*
8	SR 141/Peachtree Pkwy & Scientific Dr	Traffic Signal (RCUT)	None	Overall	A (5.5)*	A (7.1)*	A (6.2)*	A (8.4)*
9	SR 141/Peachtree Pkwy & Spalding Dr	Traffic Signal (MUT)	EB T addition (dual) WB T addition (dual)	Overall	C (27.1)	E (68.0)	C (29.9)	D (49.0)
10	SR 141/Peachtree Pkwy & Triangle Dr	Traffic Signal (RCUT)	NB L addition (dual)	Overall	B (13.9)*	C (27.4)*	A (7.2)*	A (9.9)*
11	SR 141/Peachtree Pkwy & E Technology Pkwy	Right-In/Right-Out	None	WB R	C (19.5)	D (30.5)	D (31.9)	F (87.5)
12	SR 141/Peachtree Pkwy & U-turn median break	Traffic Signal (RCUT)	SB L addition (dual)	Overall	A (2.9)*	A (3.9)*	A (10.0)*	C (25.4)*
13	SR 141/Peachtree Pkwy & Peachtree Corners Cir	Traffic Signal (MUT)	EB R addition (dual) WB R addition (dual)	Overall	C (32.4)	E (67.4)	D (39.5)	F (92.5)
14	SR 141/Peachtree Pkwy & Forum Dr	Traffic Signal (RCUT)	EB R addition (dual)	Overall	A (5.2)*	D (43.5)*	A (4.3)*	B (12.5)*
15	SR 141/Peachtree Pkwy & E Jones Bridge Rd/ Medlock Bridge Rd	Traffic Signal (MUT)	NB L addition (dual) (500') EB T addition (dual) EB R addition (dual) WB T addition (dual) WB R addition (dual)	Overall	C (34.9)	F (110.8)	C (24.0)	E (58.5)
16	SR 141/Peachtree Pkwy & Wellington SC	Traffic Signal (RCUT)	NB L addition (dual) SB U addition	Overall	B (18.1)*	E (63.8)*	A (6.6)*	A (8.9)*
17	SR 141/Peachtree Pkwy & Wellington Lake Dr/ Everett Ct	RCUT	None	NB L	E (45.0)	F (103.3)	C (23.2)	E (39.0)
				SB L	C (21.7)	D (30.9)	D (30.0)	F (51.2)
				EB R	F (90.8)	F (272.6)	C (24.3)	E (35.8)
				WB R	C (23.7)	D (32.7)	D (31.1)	E (47.9)
18	SR 141/Peachtree Pkwy & Ridgeway Dr	RCUT	None	NB L	D (34.1)	F (64.5)	C (20.2)	D (29.6)
				EB R	E (44.4)	F (86.9)**	C (22.3)	D (30.8)
19	SR 141/Peachtree Pkwy & Chattahoochee River Park	RCUT	None	SB L	A (0.0)	A (0.0)	D (31.3)	F (53.0)
				WB R	A (0.0)	A (0.0)	D (32.1)	F (50.0)

\*HCM 2000 output due to non-NEMA phasing  
 \*\*Computational error, delay is greater than 3145.7 seconds

**LEGEND** Inadequate Level of Service (LOS E)  
 Failing Level of Service (LOS F)

### *Alternative 4 - Six-Lane Median Divided, Innovative Intersection Improvements*

Alternative 4 consists of the installation of innovative intersection improvements, specifically Median U-Turns (MUTs, also known as a Michigan Left Turn) and Restricted Crossing U-Turns (RCUTs), while adding a third through lane in each direction to form a six-lane median divided highway and adding the necessary mainline turn bays and side street capacity to achieve adequate LOS and to reduce expected future queue lengths. A MUT does not allow left turn movements from the side street, but all other typical movements at an intersection are allowed. An RCUT does not allow left turns or through movements from the side street, but all other typical movements at an intersection are allowed. Figures 10 and 11 (on Pages 42 and 43, respectively) show the proposed lane configurations and traffic control for Alternative 4 - Six-Lane Median Divided, Innovative Intersection Improvements. Table 6 (on Page 44) contains the results of the capacity analysis with the roadway geometry and operational conditions for Alternative 4 for Opening Year 2022 and Design Year 2042. The values shown in parentheses indicate the estimated delay in seconds per vehicle.

Where inadequate operating conditions are expected, additional improvements were identified for the study intersections along SR 141/Peachtree Parkway. Each intersection was analyzed until it was determined to be sufficiently improved within feasible right-of-way limitations to provide an acceptable LOS.

In each of the intersection descriptions below, it is assumed that there are no left turn lanes or movements allowed on the side streets.

At the intersection of Holcomb Bridge Road and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the PM peak hour. Therefore, for Alternative 4, the following lane configurations are recommended. On the northbound approach, dual left turn lanes, three through lanes, and a right turn lane are recommended to help provide adequate operating conditions at the intersection. On the southbound approach, a right turn lane is recommended to help provide adequate operating conditions at the intersection. On the eastbound approach, a right turn lane is recommended to help provide adequate operating conditions at the intersection. On the westbound approach, due to the recommended three northbound through lanes, the right turn movement will need to be altered from free-flow to yield. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 4.

At the intersection of Woodhill Drive and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. Therefore, for Alternative 4, the following lane configurations are recommended. On the northbound approach, a right turn lane is recommended to help provide adequate operating conditions at the intersection. On the southbound approach, dual left turn lanes are recommended to help provide adequate operating conditions at the intersection. On the eastbound approach, a right turn lane is recommended to help provide adequate operating conditions at the intersection. No additional improvements are recommended for the westbound approach for this alternative. This intersection is proposed as an MUT for Alternative 4. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 4.

At the intersection of Pointe Parkway and SR 141/Peachtree Parkway, the westbound right turn movement is currently operating at LOS E during the PM peak hour; however, no additional improvements appear feasible for Alternative 4.

At the intersection of Jay Bird Alley/Technology Parkway and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS F during both peak hours in the Year 2042 if no improvements are made. Therefore, for Alternative 4, the following lane configurations are recommended. On the northbound approach, dual left turn lanes and a right turn lane are recommended to help provide adequate operating conditions at the intersection. On the southbound approach, dual left turn lanes are recommended to help provide adequate operating conditions at the intersection. On the eastbound approach, two through lanes are recommended to help provide adequate operating conditions at the intersection. On the westbound approach, two through lanes are recommended to help provide adequate operating conditions at the intersection. This intersection is proposed as an MUT for Alternative 4. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 4.

At the intersection of Westech Drive and SR 141/Peachtree Parkway, the westbound right turn movement is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. At the intersection of Parkway Lane and SR 141/Peachtree Parkway, the eastbound right turn movement is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. To help provide adequate operating conditions at this intersection, it is recommended to realign Parkway Lane and Westech Drive to form a four-leg intersection at the current intersection location of Westech Drive. On the northbound approach, a left turn lane is recommended to help provide adequate operating conditions at this intersection. On the southbound approach, a left turn lane is recommended to help provide adequate operating conditions at this intersection. This intersection is proposed as a signalized RCUT for Alternative 4. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 4.

At the intersection of Engineering Drive and SR 141/Peachtree Parkway, all movements, consisting of the northbound left turn movement, the southbound U-turn movement, and the eastbound left and right turn movements either are currently operating inadequately during one or both peak hours or are expected to operate inadequately during one or both peak hours in the Year 2042 if no improvements are made. This intersection is proposed as a signalized RCUT for Alternative 4. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 4.

At the intersection of Scientific Drive and SR 141/Peachtree Parkway, all movements, except for the eastbound shared through/right movement, either are currently operating inadequately during one or both peak hours or are expected to operate inadequately during one or both peak hours in the Year 2042 if no improvements are made. This intersection is proposed as a signalized RCUT for Alternative 4. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 4.

At the intersection of Spalding Drive and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the PM peak hour. Therefore, for Alternative 4, the

following lane configurations are recommended. On both the eastbound and westbound approaches, dual through lanes are recommended to help provide adequate operating conditions at the intersection. This intersection is proposed as an MUT for Alternative 4. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 4.

At the intersection of Triangle Drive and SR 141/Peachtree Parkway, the northbound left turn movement, the eastbound shared left/through movement, and the eastbound right turn movement either are currently operating inadequately during one or both peak hours or are expected to operate inadequately during one or both peak hours in the Year 2042 if no improvements are made. Therefore, for Alternative 4, the following lane configurations are recommended. On the northbound approach, dual left turn lanes are recommended to help provide adequate operating conditions at this intersection. This intersection is proposed as a signalized RCUT for Alternative 4. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 4.

At the intersection of Technology Parkway and SR 141/Peachtree Parkway, the westbound right turn movement is expected to operate at LOS F during the PM peak hour in the Year 2042 if no improvements are made; however, no additional improvements appear feasible for Alternative 4.

At the intersection of U-turn median break and SR 141/Peachtree Parkway, the northbound U-turn movement is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. Therefore, for Alternative 4, the following lane configurations are recommended. On the southbound approach, dual left turn lanes are recommended to help provide adequate operating conditions at this intersection. This intersection is proposed as a signalized U-turn as part of the RCUT at Technology Parkway to the south and the MUT at Peachtree Corners Circle to the north for Alternative 4. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 4.

At the intersection of Peachtree Corners Circle and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the PM peak hour. Therefore, for Alternative 4, the following lane configurations are recommended. On the eastbound approach, dual right turn lanes are recommended to help provide adequate operating conditions at the intersection. On the westbound approach, a right turn lane is recommended to help provide adequate operating conditions at the intersection. This intersection is proposed as an MUT for Alternative 4. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 4.

At the intersection of Forum Drive and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. Therefore, for Alternative 4, the following lane configurations are recommended. On the eastbound approach, dual right turn lanes are recommended to help provide adequate operating conditions at the intersection. This intersection is proposed as a signalized RCUT for Alternative 4. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 4.

At the intersection of E Jones Bridge Road/Medlock Bridge Road and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the AM peak hour. Therefore, for Alternative 4, the following lane configurations are recommended. On the northbound approach, dual left turn lanes are recommended to help provide adequate operating conditions at the intersection. On the eastbound approach, dual through lanes and dual right turn lanes are recommended to help provide adequate operating conditions at the intersection. On the westbound approach, dual through lanes and a right turn lane are recommended to help provide adequate operating conditions at the intersection. This intersection is proposed as an MUT for Alternative 4. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 4.

At the intersection of Wellington Shopping Center and SR 141/Peachtree Parkway, the eastbound shared left/right turn movement is currently operating at LOS F during both peak hours. Therefore, for Alternative 4, the following lane configurations are recommended. On the northbound approach, dual left turn lanes are recommended to help provide adequate operating conditions at the intersection. On the southbound approach, a U-turn lane is recommended to help provide adequate operating conditions at the intersection. This intersection is proposed as a signalized RCUT for Alternative 4. The intersection is expected to operate adequately in the Design Year 2042 with these recommended improvements for Alternative 4.

At the intersection of Wellington Lake Drive/Everett Court and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. Using the Eighth Highest Hour from the Design Year 2042 ADT from the traffic projections, this intersection currently does not warrant a traffic signal nor is expected to warrant a traffic signal in the Design Year 2042. This intersection is proposed as an unsignalized RCUT for Alternative 4. All turning movements are expected to operate inadequately during either the AM or PM peak hour in the Opening Year 2022; however, no further improvements appear feasible for Alternative 4.

At the intersection of Ridgegate Drive and SR 141/Peachtree Parkway, the northbound left turn movement is currently operating at LOS F during the AM peak hour, and the eastbound shared left/right turn movement is currently operating at LOS F during both peak hours. This intersection is proposed as an unsignalized RCUT for Alternative 4. The northbound left turn movement and the eastbound right turn movement are expected to operate inadequately at LOS F during the AM peak hour in the Opening Year 2022; however, no further improvements appear feasible for Alternative 4.

At the intersection of Chattahoochee River Park and SR 141/Peachtree Parkway, the southbound left turn movement and the westbound shared left/right turn movement are expected to operate at LOS F during the PM peak hour in the Year 2042 if no improvements are made. This intersection is proposed as an unsignalized RCUT for Alternative 4. The southbound left turn movement and the westbound right turn movement are expected to operate inadequately at LOS F and E respectively during the PM peak hour in the Opening Year 2022; however, no further improvements appear feasible for Alternative 4.

Figure 10 - Lane Configurations and Traffic Control - Alternative 4: Part I

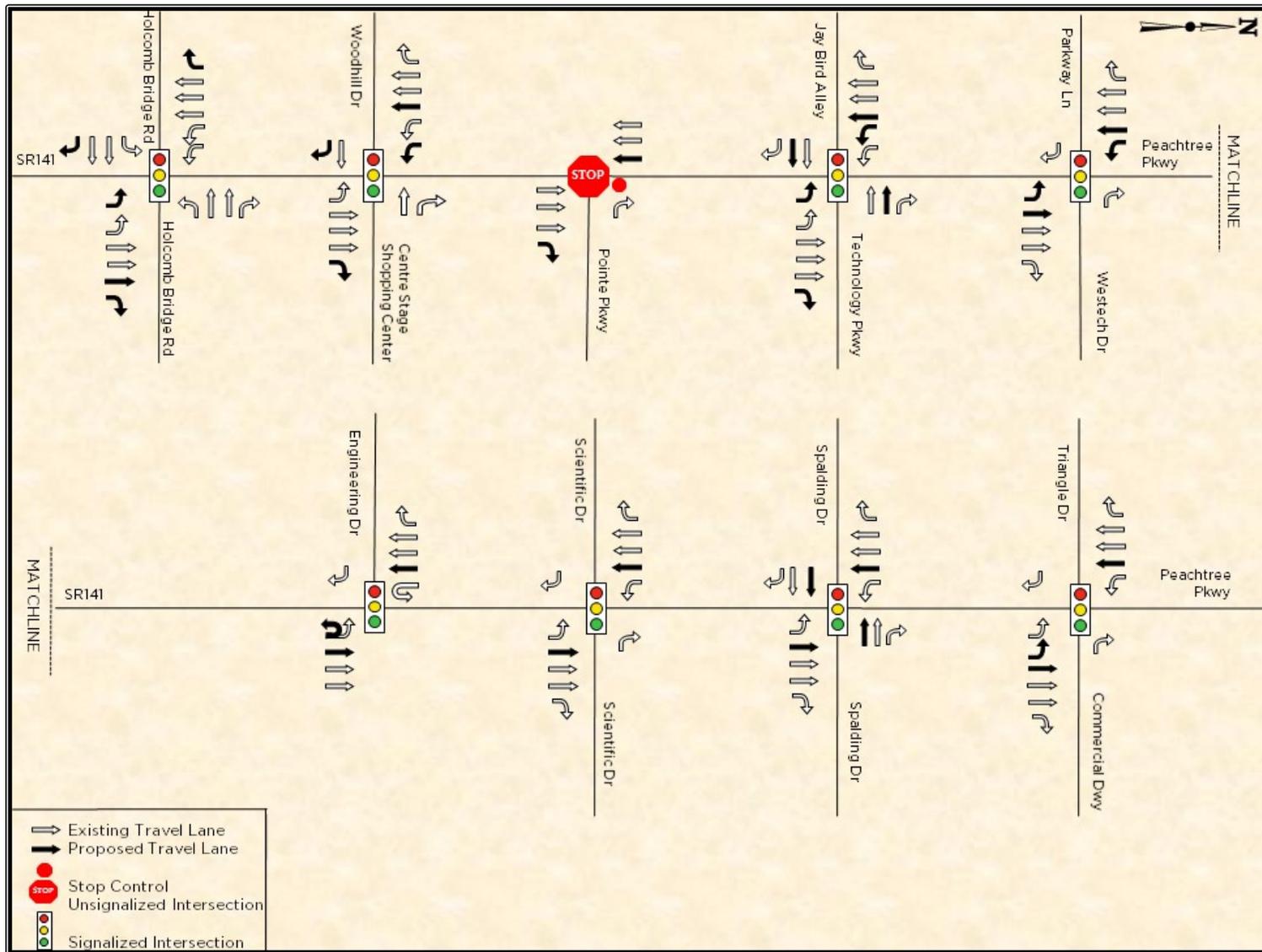
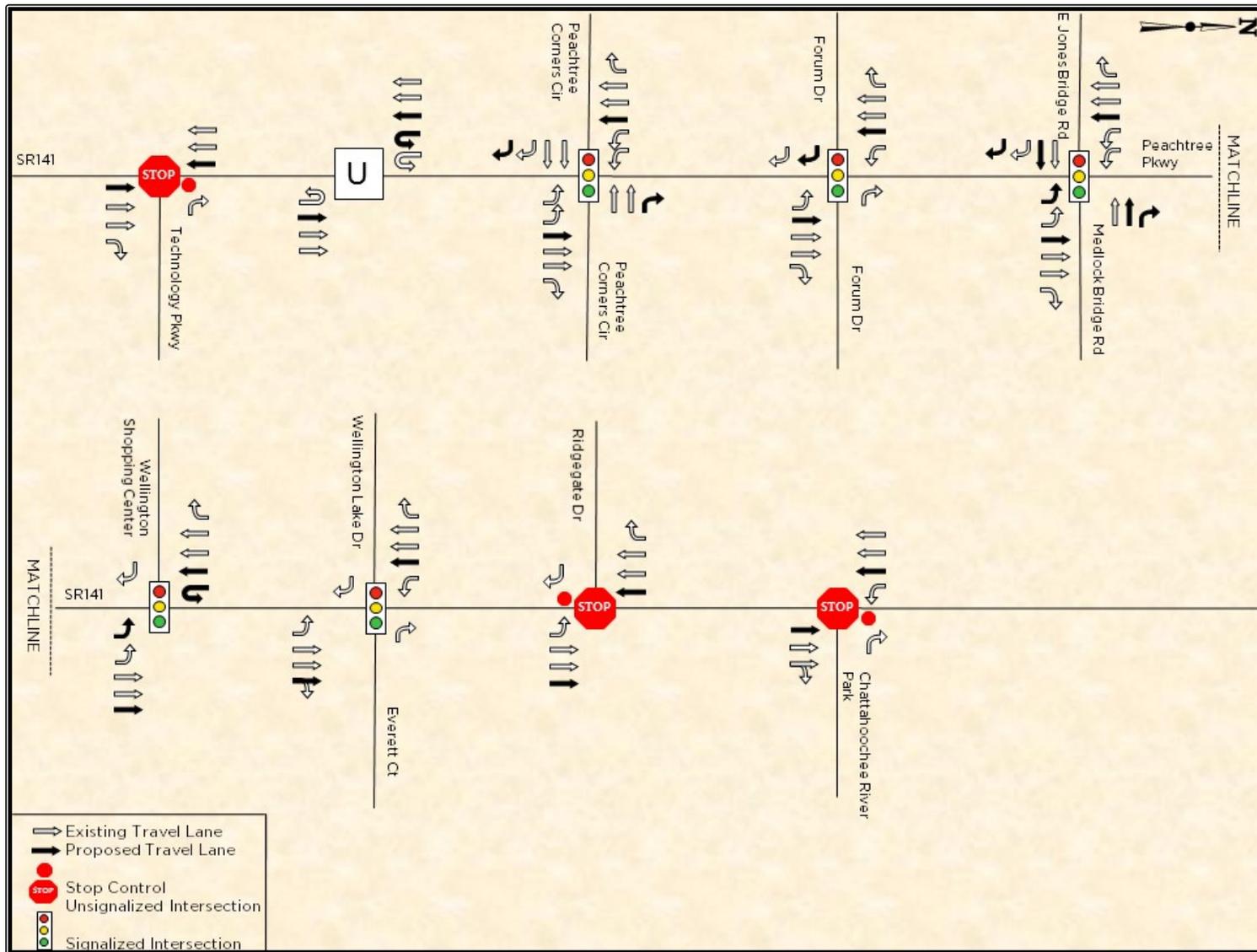


Figure 11 - Lane Configurations and Traffic Control - Alternative 4: Part II



**Table 6 - Capacity Analysis: Alternative 4**

INT #	INTERSECTION	CONTROL	IMPROVEMENTS	MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
					2022	2042	2022	2042
	SR 141/Peachtree Pkwy CORRIDOR	Travel Time	Alternative 4	NB	350.6 sec (5 min, 50.6 sec)	372.0 sec (6 min, 12.0 sec)	412.6 sec (6 min, 52.6 sec)	483.4 sec (8 min, 3.4 sec)
				SB	413.5 sec (6 min, 53.5 sec)	489.8 sec (8 min, 9.8 sec)	442.1 sec (7 min, 22.1 sec)	462.7 sec (7 min, 42.7 sec)
1	SR 141/Peachtree Pkwy & Holcomb Bridge Rd	Traffic Signal	NB L addition (dual) NB T addition (3 lanes) NB R addition SB R addition EB R addition WB R free-flow to yield	Overall	D (39.0)	D (49.4)	D (38.6)	D (54.4)
2	SR 141/Peachtree Pkwy & Woodhill Dr	Traffic Signal (MUT)	NB R addition SB L addition (dual) EB R addition	Overall	A (8.8)	B (12.6)	B (12.4)	B (16.3)
3	SR 141/Peachtree Pkwy & E Pointe Pkwy	Right-In/Right-Out	NB R addition	WB R	E (37.4)	F (76.0)	F (65.5)	F (236.2)
4	SR 141/Peachtree Pkwy & Jay Bird Alley/ Technology Pkwy	Traffic Signal (MUT)	NB L addition (dual) NB R addition SB L addition (dual) EB T addition (dual) WB T addition (dual)	Overall	B (12.7)	B (17.3)	B (15.7)	C (20.5)
5	SR 141/Peachtree Pkwy & W Parkway Ln/E Westech Dr	Traffic Signal (RCUT)	Realign at E Westech Dr NB L addition SB L addition	Overall	A (1.0)*	A (1.4)*	A (3.9)*	A (4.5)*
7	SR 141/Peachtree Pkwy & Engineering Dr	Traffic Signal (RCUT)	None	Overall	A (5.9)*	B (10.9)*	A (1.2)*	A (2.1)*
8	SR 141/Peachtree Pkwy & Scientific Dr	Traffic Signal (RCUT)	None	Overall	A (2.5)*	A (3.9)*	A (5.2)*	A (6.2)*
9	SR 141/Peachtree Pkwy & Spalding Dr	Traffic Signal (MUT)	EB T addition (dual) WB T addition (dual)	Overall	B (15.9)	C (21.2)	B (20.0)	C (24.6)
10	SR 141/Peachtree Pkwy & Triangle Dr	Traffic Signal (RCUT)	NB L addition (dual)	Overall	A (7.3)*	A (8.9)*	A (5.8)*	A (6.5)*
11	SR 141/Peachtree Pkwy & E Technology Pkwy	Right-In/Right-Out	None	WB R	C (23.7)	E (40.9)	E (43.2)	F (137.8)
12	SR 141/Peachtree Pkwy & U-turn median break	Traffic Signal (RCUT)	SB L addition (dual)	Overall	A (2.5)*	A (2.5)*	A (7.5)*	A (9.3)*
13	SR 141/Peachtree Pkwy & Peachtree Corners Cir	Traffic Signal (MUT)	EB R addition (dual) WB R addition	Overall	B (15.1)	B (16.6)	C (22.5)	D (35.5)
14	SR 141/Peachtree Pkwy & Forum Dr	Traffic Signal (RCUT)	EB R addition (dual)	Overall	A (2.2)*	A (8.2)*	A (5.0)*	A (8.1)*
15	SR 141/Peachtree Pkwy & E Jones Bridge Rd/ Medlock Bridge Rd	Traffic Signal (MUT)	NB L addition (dual) EB T addition (dual) EB R addition (dual) WB T addition (dual) WB R addition	Overall	C (23.7)	C (32.0)	C (21.4)	C (30.4)
16	SR 141/Peachtree Pkwy & Wellington SC	Traffic Signal (RCUT)	NB L addition (dual) SB U addition	Overall	A (7.8)*	B (10.8)*	A (4.6)*	A (5.2)*
17	SR 141/Peachtree Pkwy & Wellington Lake Dr/ Everett Ct	RCUT	None	NB L	F (229.6)	F (804.7)	F (81.5)	F (254.8)
				SB L	E (48.6)	F (83.6)	F (83.1)	F (204.0)
				EB R	F (128.7)	F (369.2)	D (28.6)	E (43.5)
				WB R	D (26.9)	E (37.8)	E (35.5)	F (55.8)
18	SR 141/Peachtree Pkwy & Ridgeway Dr	RCUT	None	NB L	F (97.9)	F (314.1)	E (47.1)	F (99.0)
				EB R	F (53.8)	F (111.2)	D (25.4)	E (35.7)
19	SR 141/Peachtree Pkwy & Chattahoochee River Park	RCUT	None	SB L	A (0.0)	A (0.0)	F (81.6)	F (182.7)
				WB R	A (0.0)	A (0.0)	E (36.9)	F (58.0)

\*HCM 2000 output due to non-NEMA phasing

**LEGEND** Inadequate Level of Service (LOS E)  
Failing Level of Service (LOS F)

### *Alternative 5 - Four-/Six-Lane Median Divided, Innovative Intersection Improvements*

Alternative 5 consists of the installation of innovative intersection improvements, specifically Median U-Turns (MUTs, also known as a Michigan Left Turn) and Restricted Crossing U-Turns (RCUTs). A MUT does not allow left turn movements from the side street, but all other typical movements at an intersection are allowed. An RCUT does not allow left turns or through movements from the side street, but all other typical movements at an intersection are allowed. For Alternative 5, the best-case scenario considering the best value of number of lanes on the mainline, side street capacity, and delay were implemented. Figures 12 and 13 (on Page 50 and 51, respectively) show the proposed lane configurations and traffic control for Alternative 5 - Four-/Six-Lane Median Divided, Innovative Intersection Improvements. Table 7 (on Page 52) contains the results of the capacity analysis with the roadway geometry and operational conditions for Alternative 5 for Opening Year 2022 and Design Year 2042. The values shown in parentheses indicate the estimated delay in seconds per vehicle.

At the intersection of Holcomb Bridge Road and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the PM peak hour. Therefore, for Alternative 5, the lane configurations from Alternative 4 - Six-Lane Median Divided, Innovative Intersection Improvements are recommended. A conventional intersection type is recommended for this intersection due to the limited access component of this intersection on its south leg. This would cause undue delay for traffic rerouting due to an innovative intersection improvement. The intersection is expected to operate adequately in the Design Year 2042 for Alternative 5 using the recommended improvements from Alternative 4.

At the intersection of Woodhill Drive and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. Therefore, for Alternative 5, the lane configurations from Alternative 4 - Six-Lane Median Divided, Innovative Intersection Improvements are recommended. This intersection is recommended as an MUT for Alternative 5. The intersection is expected to operate adequately in the Design Year 2042 for Alternative 5 using the recommended improvements from Alternative 4.

At the intersection of Pointe Parkway and SR 141/Peachtree Parkway, the westbound right turn movement is currently operating at LOS E during the PM peak hour. A northbound right turn lane is warranted by expected volume, and this improvement is recommended; however, no additional improvements appear feasible from any of the previous alternatives. Due to the six-lane recommendation for the two intersections adjacent to Pointe Parkway, Woodhill Drive and Jay Bird Alley/Technology Parkway, it is recommended to apply the six-lane median divided section through Pointe Parkway and keep the right-in/right-out operation.

At the intersection of Jay Bird Alley/Technology Parkway and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS F during both peak hours in the Year 2042 if no improvements are made. Therefore, for Alternative 5, the lane configurations from Alternative 4 - Six-Lane Median Divided, Innovative Intersection Improvements are recommended. This intersection is recommended as an MUT for Alternative 5. The intersection is expected to operate adequately in the Design Year 2042 for Alternative 5 using the recommended improvements from Alternative 4.

At the intersection of Westech Drive and SR 141/Peachtree Parkway, the westbound right turn movement is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. At the intersection of Parkway Lane and SR 141/Peachtree Parkway, the eastbound right turn movement is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. To help provide adequate operating conditions at this intersection, it is recommended to realign Parkway Lane and Westech Drive to form a four-leg intersection at the current intersection location of Westech Drive. Therefore, for Alternative 5, the lane configurations from Alternative 4 - Six-Lane Median Divided, Innovative Intersection Improvements are recommended. This intersection is recommended as a signalized RCUT for Alternative 5. The intersection is expected to operate adequately in the Design Year 2042 for Alternative 5 using the recommended improvements from Alternative 4.

At the intersection of Engineering Drive and SR 141/Peachtree Parkway, all movements, consisting of the northbound left turn movement, the southbound U-turn movement, and the eastbound left and right turn movements either are currently operating inadequately during one or both peak hours or are expected to operate inadequately during one or both peak hours in the Year 2042 if no improvements are made. This intersection is expected to operate adequately in the Design Year 2042 for both Alternative 3 - Four-Lane Median Divided, Innovative Intersection Improvements and Alternative 4 - Six-Lane Median Divided, Innovative Intersection Improvements; however, Alternative 4 is only slightly better than Alternative 3, but is much more impactful to the cost of the project. Therefore, for Alternative 5, the lane configurations from Alternative 3 - Four-Lane Median Divided, Innovative Intersection Improvements are recommended. This intersection is proposed as a signalized RCUT for Alternative 5. The intersection is expected to operate adequately in the Design Year 2042 for Alternative 5 using the recommended improvements from Alternative 3.

At the intersection of Scientific Drive and SR 141/Peachtree Parkway, all movements, except for the eastbound shared through/right movement, either are currently operating inadequately during one or both peak hours or are expected to operate inadequately during one or both peak hours in the Year 2042 if no improvements are made. This intersection is expected to operate adequately in the Design Year 2042 for both Alternative 3 - Four-Lane Median Divided, Innovative Intersection Improvements and Alternative 4 - Six-Lane Median Divided, Innovative Intersection Improvements; however, Alternative 4 is only slightly better than Alternative 3. Therefore, for Alternative 5, the lane configurations from Alternative 3 - Four-Lane Median Divided, Innovative Intersection Improvements are recommended. This intersection is proposed as a signalized RCUT for Alternative 5. The intersection is expected to operate adequately in the Design Year 2042 for Alternative 5 using the recommended improvements from Alternative 3.

At the intersection of Spalding Drive and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the PM peak hour. Therefore, for Alternative 5, the lane configurations from Alternative 4 - Six-Lane Median Divided, Innovative Intersection Improvements are recommended. This intersection is recommended as an MUT for Alternative 5. The intersection is expected to operate adequately in the Design Year 2042 for Alternative 5 using the recommended improvements from Alternative 4.

At the intersection of Triangle Drive and SR 141/Peachtree Parkway, the northbound left turn movement, the eastbound shared left/through movement, and the eastbound right turn

movement either are currently operating inadequately during one or both peak hours or are expected to operate inadequately during one or both peak hours in the Year 2042 if no improvements are made. This intersection is expected to operate adequately in the Design Year 2042 for both Alternative 3 - Four-Lane Median Divided, Innovative Intersection Improvements and Alternative 4 - Six-Lane Median Divided, Innovative Intersection Improvements; however, due to the six-lane recommendation for the two major signalized intersections adjacent to Triangle Drive, Spalding Drive and Peachtree Corners Circle, it is recommended to apply the six-lane median divided section through Triangle Drive. Therefore, for Alternative 5, the lane configurations from Alternative 4 - Six-Lane Median Divided, Innovative Intersection Improvements are recommended. This intersection is proposed as a signalized RCUT for Alternative 5. The intersection is expected to operate adequately in the Design Year 2042 for Alternative 5 using the recommended improvements from Alternative 4.

At the intersection of Technology Parkway and SR 141/Peachtree Parkway, the westbound right turn movement is expected to operate at LOS F during the PM peak hour in the Year 2042 if no improvements are made; however, no additional improvements appear feasible from any of the previous alternatives. Due to the six-lane recommendation for the two major signalized intersections adjacent to Technology Parkway, Spalding Drive and Peachtree Corners Circle, it is recommended to apply the six-lane median divided section through Technology Parkway and keep the right-in/right-out operation.

At the intersection of U-turn median break and SR 141/Peachtree Parkway, the northbound U-turn movement is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. This intersection is expected to operate adequately in the Design Year 2042 for both Alternative 3 - Four-Lane Median Divided, Innovative Intersection Improvements and Alternative 4 - Six-Lane Median Divided, Innovative Intersection Improvements; however, due to the six-lane recommendation for the two major signalized intersections adjacent to the U-turn median break, Spalding Drive and Peachtree Corners Circle, it is recommended to apply the six-lane median divided section through the U-turn median break. Therefore, for Alternative 5, the lane configurations from Alternative 4 - Six-Lane Median Divided, Innovative Intersection Improvements are recommended. This intersection is proposed as a signalized U-turn as part of the RCUT at Technology Parkway to the south and the MUT at Peachtree Corners Circle to the north for Alternative 4. The intersection is expected to operate adequately in the Design Year 2042 for Alternative 5 using the recommended improvements from Alternative 4.

At the intersection of Peachtree Corners Circle and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the PM peak hour. Therefore, for Alternative 5, the lane configurations from Alternative 4 - Six-Lane Median Divided, Innovative Intersection Improvements are recommended. This intersection is recommended as an MUT for Alternative 5. The intersection is expected to operate adequately in the Design Year 2042 for Alternative 5 using the recommended improvements from Alternative 4.

At the intersection of Forum Drive and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. Therefore, for Alternative 5, the lane configurations from Alternative 4 - Six-Lane Median Divided, Innovative Intersection Improvements are recommended. This intersection is proposed as a signalized RCUT for Alternative 4. The intersection is expected to operate

adequately in the Design Year 2042 for Alternative 5 using the recommended improvements from Alternative 4.

At the intersection of E Jones Bridge Road/Medlock Bridge Road and SR 141/Peachtree Parkway, the overall intersection is currently operating at LOS E during the AM peak hour. Therefore, for Alternative 5, the lane configurations from Alternative 4 - Six-Lane Median Divided, Innovative Intersection Improvements are recommended. This intersection is recommended as an MUT for Alternative 5. The intersection is expected to operate adequately in the Design Year 2042 for Alternative 5 using the recommended improvements from Alternative 4.

At the intersection of Wellington Shopping Center and SR 141/Peachtree Parkway, the eastbound shared left/right turn movement is currently operating at LOS F during both peak hours. Therefore, for Alternative 5, the lane configurations from Alternative 4 - Six-Lane Median Divided, Innovative Intersection Improvements are recommended. This intersection is recommended as a signalized RCUT for Alternative 5. The intersection is expected to operate adequately in the Design Year 2042 for Alternative 5 using the recommended improvements from Alternative 4.

At the intersection of Wellington Lake Drive/Everett Court and SR 141/Peachtree Parkway, the overall intersection is expected to operate at LOS E during the AM peak hour in the Year 2042 if no improvements are made. Using the Eighth Highest Hour from the Design Year 2042 ADT from the traffic projections, this intersection currently does not warrant a traffic signal nor is expected to warrant a traffic signal in the Design Year 2042. This intersection is expected to operate inadequately in the Design Year 2042 for both Alternative 3 - Four-Lane Median Divided, Innovative Intersection Improvements and Alternative 4 - Six-Lane Median Divided, Innovative Intersection Improvements; however, Alternative 3 allows for fewer inadequate turning movements and lower delays in both the Opening Year 2022 and the Design Year 2042. This is due to the intuitive relative ease of crossing two lanes of a single direction of opposing traffic versus three lanes of a single direction of opposing traffic. This intersection is proposed as an unsignalized RCUT for Alternative 5. No further improvements appear feasible from any of the previous alternatives.

At the intersection of Ridgegate Drive and SR 141/Peachtree Parkway, the northbound left turn movement is currently operating at LOS F during the AM peak hour, and the eastbound shared left/right turn movement is currently operating at LOS F during both peak hours. This intersection is expected to operate inadequately in the Design Year 2042 for both Alternative 3 - Four-Lane Median Divided, Innovative Intersection Improvements and Alternative 4 - Six-Lane Median Divided, Innovative Intersection Improvements; however, Alternative 3 allows for fewer inadequate turning movements and lower delays in both the Opening Year 2022 and the Design Year 2042. This is due to the intuitive relative ease of crossing two lanes of a single direction of opposing traffic versus three lanes of a single direction of opposing traffic. This intersection is proposed as an unsignalized RCUT for Alternative 5. The right turn movement is expected to operate inadequately at LOS E during the AM peak hour in the Opening Year 2022, but no further improvements appear feasible from any of the previous alternatives.

At the intersection of Chattahoochee River Park and SR 141/Peachtree Parkway, the southbound left turn movement and the westbound shared left/right turn movement are expected to operate at LOS F during the PM peak hour in the Year 2042 if no improvements are made. This intersection is expected to operate inadequately in the Design Year 2042 for both Alternative 3 - Four-Lane Median Divided, Innovative Intersection Improvements and Alternative 4 - Six-Lane Median Divided, Innovative Intersection Improvements; however, Alternative 3 allows for fewer inadequate turning movements and lower delays in both the Opening Year 2022 and the Design Year 2042. This is due to the intuitive relative ease of crossing two lanes of a single direction of opposing traffic versus three lanes of a single direction of opposing traffic. This intersection is proposed as an unsignalized RCUT for Alternative 5. The southbound left turn movement and the westbound right turn movement are expected to operate inadequately at LOS F during the PM peak hour in the Design Year 2042, but no further improvements appear feasible from any of the previous alternatives.

Figure 12 - Lane Configurations and Traffic Control - Alternative 5: Part I

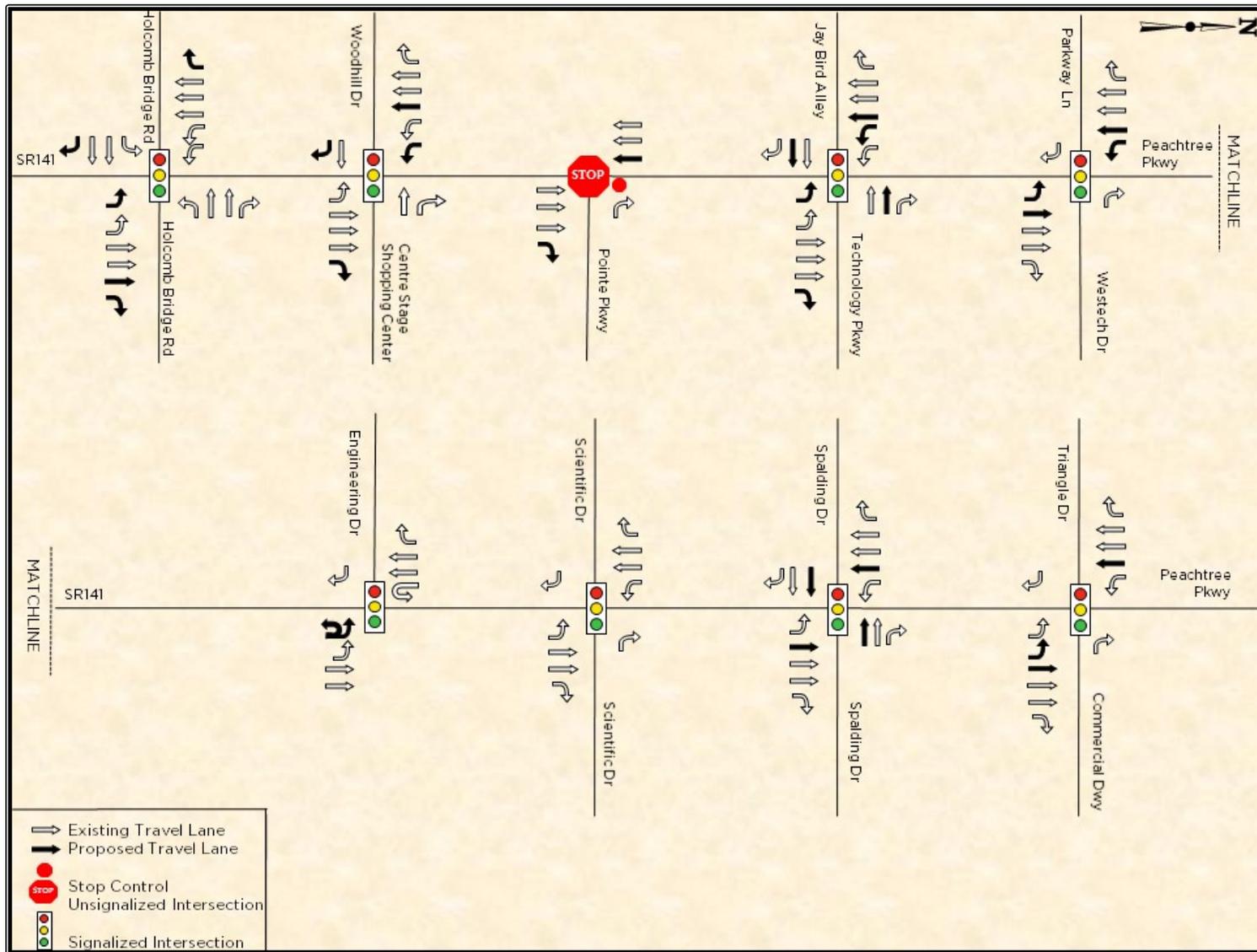


Figure 13 - Lane Configurations and Traffic Control - Alternative 5: Part II

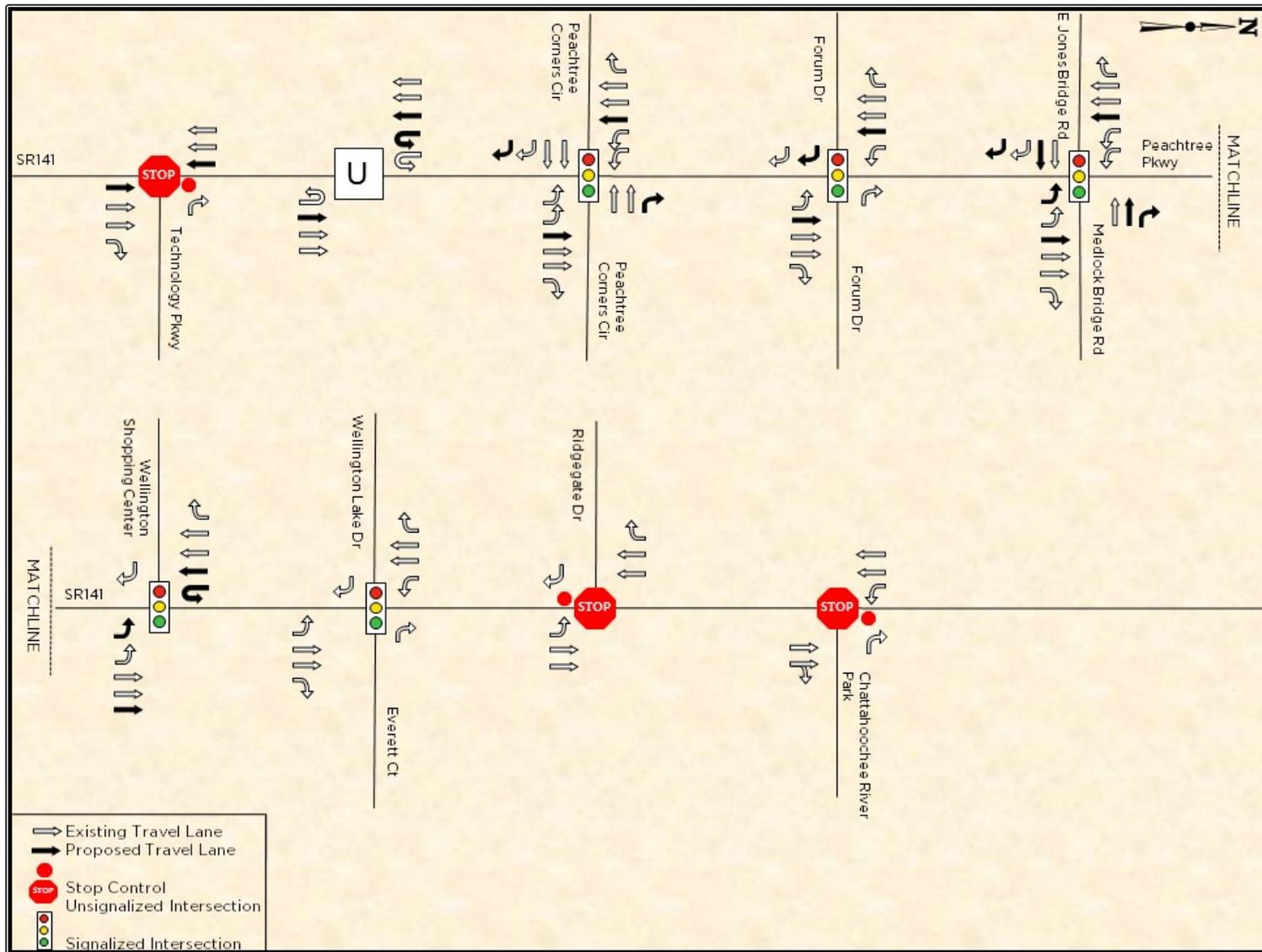


Table 7 - Capacity Analysis: Alternative 5

INT #	INTERSECTION	CONTROL	IMPROVEMENTS	MOVEMENT	AM PEAK HOUR		PM PEAK HOUR	
					2022	2042	2022	2042
	SR 141/Peachtree Pkwy CORRIDOR	Travel Time	Alternative 5	NB	350.2 sec (5 min, 50.2 sec)	371.1 sec (6 min, 11.1 sec)	389.8 sec (6 min, 29.8 sec)	486.9 sec (8 min, 6.9 sec)
				SB	411.6 sec (6 min, 51.6 sec)	478.0 sec (7 min, 58.0 sec)	429.3 sec (7 min, 9.3 sec)	460.4 sec (7 min, 40.4 sec)
1	SR 141/Peachtree Pkwy & Holcomb Bridge Rd	Traffic Signal	NB L addition (dual) NB T addition (3 lanes) NB R addition SB R addition EB R addition WB R free-flow to yield	Overall	D (35.3)	D (49.4)	D (38.6)	D (54.4)
2	SR 141/Peachtree Pkwy & Woodhill Dr	Traffic Signal (MUT)	NB R addition SB L addition (dual) EB R addition	Overall	A (8.8)	B (12.6)	B (12.4)	B (16.3)
3	SR 141/Peachtree Pkwy & E Pointe Pkwy	Right-In/Right-Out	NB R addition	WB R	E (37.4)	F (76.0)	F (65.5)	F (236.2)
4	SR 141/Peachtree Pkwy & Jay Bird Alley/ Technology Pkwy	Traffic Signal (MUT)	NB L addition (dual) NB R addition SB L addition (dual) EB T addition (dual) WB T addition (dual)	Overall	B (12.8)	B (17.3)	B (15.5)	C (20.5)
5	SR 141/Peachtree Pkwy & W Parkway Ln/E Westech Dr	Traffic Signal (RCUT)	Realign at E Westech Dr NB L addition SB L addition	Overall	A (3.5)*	A (4.6)*	A (2.8)*	A (2.8)*
7	SR 141/Peachtree Pkwy & Engineering Dr	Traffic Signal (RCUT)	NB L addition (dual)	Overall	A (8.0)*	B (11.4)*	A (2.7)*	A (5.1)*
8	SR 141/Peachtree Pkwy & Scientific Dr	Traffic Signal (RCUT)	None	Overall	A (8.6)*	A (5.2)*	B (12.1)*	B (11.8)*
9	SR 141/Peachtree Pkwy & Spalding Dr	Traffic Signal (MUT)	EB T addition (dual) WB T addition (dual)	Overall	B (19.8)	C (26.5)	C (31.7)	D (37.6)
10	SR 141/Peachtree Pkwy & Triangle Dr	Traffic Signal (RCUT)	NB L addition (dual)	Overall	A (7.3)*	B (13.9)*	A (4.8)*	A (6.4)*
11	SR 141/Peachtree Pkwy & E Technology Pkwy	Right-In/Right-Out	None	WB R	C (23.7)	E (40.9)	E (43.2)	F (137.8)
12	SR 141/Peachtree Pkwy & U-turn median break	Traffic Signal (RCUT)	SB L addition (dual)	Overall	A (2.7)*	A (3.4)*	A (6.6)*	B (10.2)*
13	SR 141/Peachtree Pkwy & Peachtree Corners Cir	Traffic Signal (MUT)	EB R addition (dual) WB R addition	Overall	B (15.1)	D (37.4)	C (23.4)	D (41.4)
14	SR 141/Peachtree Pkwy & Forum Dr	Traffic Signal (RCUT)	EB R addition (dual)	Overall	A (2.3)*	A (3.9)*	A (5.4)*	A (5.8)*
15	SR 141/Peachtree Pkwy & E Jones Bridge Rd/ Medlock Bridge Rd	Traffic Signal (MUT)	NB L addition (dual) EB T addition (dual) EB R addition (dual) WB T addition (dual) WB R addition	Overall	C (23.7)	C (32.1)	C (21.4)	D (48.6)
16	SR 141/Peachtree Pkwy & Wellington SC	Traffic Signal (RCUT)	NB L addition (dual) SB U addition	Overall	A (7.7)*	B (10.8)*	A (4.4)*	A (5.1)*
17	SR 141/Peachtree Pkwy & Wellington Lake Dr/ Everett Ct	RCUT	None	NB L	E (45.0)	F (103.3)	C (23.2)	E (39.0)
				SB L	C (21.7)	D (30.9)	D (29.9)	F (51.2)
				EB R	F (90.8)	F (272.6)	C (24.3)	E (35.8)
				WB R	C (23.7)	D (32.7)	D (30.9)	E (47.9)
18	SR 141/Peachtree Pkwy & Ridgeway Dr	RCUT	None	NB L	D (34.1)	F (64.5)	C (20.2)	D (29.6)
				EB R	E (44.4)	F (86.9)	C (22.3)	D (30.8)
19	SR 141/Peachtree Pkwy & Chattahoochee River Park	RCUT	None	SB L	A (0.0)	A (0.0)	D (31.3)	F (53.0)
				WB R	A (0.0)	A (0.0)	D (32.1)	F (50.0)

\*HCM 2000 output due to non-NEMA phasing

**LEGEND** Inadequate Level of Service (LOS E)  
Failing Level of Service (LOS F)

A summary of improvements by Alternative is shown in Table 8. Table 9 summarizes the year of expected inadequate LOS, if any, for each intersection by Alternative.

### 4.3. Storage Summary

The Build improvements with queue lengths for the five alternatives for the SR 141/Peachtree Parkway area are included in Tables 10 through 19 for Opening Year 2022 and Design Year 2042. Both the 50<sup>th</sup> percentile queue length and 95<sup>th</sup> percentile queue length from *Synchro* are shown. The queue lengths are shown for the entire lane group; i.e. for a dual movement, the queue is spread over both lanes. These queue lengths do not include deceleration.

All turn bays must exceed the 95<sup>th</sup> percentile queue length or meet minimum deceleration criteria as stipulated by GDOT, whichever is longer, unless geometrically infeasible. See GDOT standards and details for bay taper and deceleration lengths.

Table 8 - Summary of Improvements by Alternative

INT #	INTERSECTION	IMPROVEMENTS									
		ALTERNATIVE 1		ALTERNATIVE 2		ALTERNATIVE 3		ALTERNATIVE 4		ALTERNATIVE 5	
		CONTROL	GEOMETRY	CONTROL	GEOMETRY	CONTROL	GEOMETRY	CONTROL	GEOMETRY	CONTROL	GEOMETRY
1	SR 141/Peachtree Pkwy & Holcomb Bridge Rd	Traffic Signal	NB L addition (dual) NB T addition (3 lanes) NB R addition EB R addition WB R free-flow to yield	Traffic Signal	NB L addition (dual) NB T addition (3 lanes) NB R addition SB R addition EB R addition WB R free-flow to yield	Traffic Signal	NB L addition (dual) NB T addition (3 lanes) NB R addition EB R addition WB R free-flow to yield	Traffic Signal	NB L addition (dual) NB T addition (3 lanes) NB R addition SB R addition EB R addition WB R free-flow to yield	Traffic Signal	NB L addition (dual) NB T addition (3 lanes) NB R addition SB R addition EB R addition WB R free-flow to yield
2	SR 141/Peachtree Pkwy & Woodhill Dr	Traffic Signal	SB L addition (dual) EB R addition	Traffic Signal	NB R addition SB L addition (dual) EB R addition	Traffic Signal (MUT)	NB R addition SB L addition (dual) EB R addition	Traffic Signal (MUT)	NB R addition SB L addition (dual) EB R addition	Traffic Signal (MUT)	NB R addition SB L addition (dual) EB R addition
3	SR 141/Peachtree Pkwy & E Pointe Pkwy	Right-In/Right-Out	None	Right-In/Right-Out	NB R addition	Right-In/Right-Out	None	Right-In/Right-Out	NB R addition	Right-In/Right-Out	NB R addition
4	SR 141/Peachtree Pkwy & Jay Bird Alley/Technology Pkwy	Traffic Signal	NB L addition (dual) NB R addition EB T addition (dual) WB T addition (dual)	Traffic Signal	NB L addition (dual) NB R addition EB T addition (dual) WB T addition (dual)	Traffic Signal (MUT)	NB L addition (dual) NB R addition SB L addition (dual) EB T addition (dual) WB T addition (dual)	Traffic Signal (MUT)	NB L addition (dual) NB R addition SB L addition (dual) EB T addition (dual) WB T addition (dual)	Traffic Signal (MUT)	NB L addition (dual) NB R addition SB L addition (dual) EB T addition (dual) WB T addition (dual)
5	SR 141/Peachtree Pkwy & E Westech Dr	Right-In/Right-Out	None	Right-In/Right-Out	None	Traffic Signal (RCUT)	Realign at E Westech Dr NB L addition SB L addition	Traffic Signal (RCUT)	Realign at E Westech Dr NB L addition SB L addition	Traffic Signal (RCUT)	Realign at E Westech Dr NB L addition SB L addition
6	SR 141/Peachtree Pkwy & W Parkway Ln	Right-In/Right-Out	None	Right-In/Right-Out	None						
7	SR 141/Peachtree Pkwy & Engineering Dr	Side Street Stop	None	Side Street Stop	SB R addition	Traffic Signal (RCUT)	NB L addition (dual)	Traffic Signal (RCUT)	None	Traffic Signal (RCUT)	NB L addition (dual)
8	SR 141/Peachtree Pkwy & Scientific Dr	Side Street Stop	Change EB L, EB T+R to EB L+T, EB R	Side Street Stop	Change EB L, EB T+R to EB L+T, EB R	Traffic Signal (RCUT)	None	Traffic Signal (RCUT)	None	Traffic Signal (RCUT)	None
9	SR 141/Peachtree Pkwy & Spalding Dr	Traffic Signal	None	Traffic Signal	None	Traffic Signal (MUT)	EB T addition (dual) WB T addition (dual)	Traffic Signal (MUT)	EB T addition (dual) WB T addition (dual)	Traffic Signal (MUT)	EB T addition (dual) WB T addition (dual)
10	SR 141/Peachtree Pkwy & Triangle Dr	Side Street Stop	None	Side Street Stop	None	Traffic Signal (RCUT)	NB L addition (dual)	Traffic Signal (RCUT)	NB L addition (dual)	Traffic Signal (RCUT)	NB L addition (dual)
11	SR 141/Peachtree Pkwy & E Technology Pkwy	Right-In/Right-Out	None	Right-In/Right-Out	NB R addition	Right-In/Right-Out	None	Right-In/Right-Out	None	Right-In/Right-Out	None
12	SR 141/Peachtree Pkwy & U-turn median break	Yield	None	Yield	None	Traffic Signal (RCUT)	SB L addition (dual)	Traffic Signal (RCUT)	SB L addition (dual)	Traffic Signal (RCUT)	SB L addition (dual)
13	SR 141/Peachtree Pkwy & Peachtree Corners Cir	Traffic Signal	WB R addition	Traffic Signal	WB R addition	Traffic Signal (MUT)	EB R addition (dual) WB R addition (dual)	Traffic Signal (MUT)	EB R addition (dual) WB R addition	Traffic Signal (MUT)	EB R addition (dual) WB R addition
14	SR 141/Peachtree Pkwy & Forum Dr	Traffic Signal	Change EB L (dual), EB T+R to EBL, EB L+T, EB R Change WB L, WB T, WB R to WB L, WB L+T, WB R	Traffic Signal	Change EB L (dual), EB T+R to EBL, EB L+T, EB R Change WB L, WB T, WB R to WB L, WB L+T, WB R	Traffic Signal (RCUT)	EB R addition (dual)	Traffic Signal (RCUT)	EB R addition (dual)	Traffic Signal (RCUT)	EB R addition (dual)
15	SR 141/Peachtree Pkwy & E Jones Bridge Rd/Medlock Bridge Rd	Traffic Signal	NB L addition (dual) Change EB T, EB R to EB T, EB T+R WB T addition (dual)	Traffic Signal	NB L addition (dual) Change EB T, EB R to EB T, EB T+R WB T addition (dual)	Traffic Signal (MUT)	NB L addition (dual) (500') EB T addition (dual) EB R addition (dual) WB T addition (dual) WB R addition (dual)	Traffic Signal (MUT)	NB L addition (dual) EB T addition (dual) EB R addition (dual) WB T addition (dual) WB R addition	Traffic Signal (MUT)	NB L addition (dual) EB T addition (dual) EB R addition (dual) WB T addition (dual) WB R addition
16	SR 141/Peachtree Pkwy & Wellington SC	Side Street Stop	None	Side Street Stop	None	Traffic Signal (RCUT)	NB L addition (dual) SB U addition	Traffic Signal (RCUT)	NB L addition (dual) SB U addition	Traffic Signal (RCUT)	NB L addition (dual) SB U addition
17	SR 141/Peachtree Pkwy & Wellington Lake Dr/ Everett Ct	Traffic Signal	None	Traffic Signal	None	RCUT	None	RCUT	None	RCUT	None
18	SR 141/Peachtree Pkwy & Ridgegate Dr	Side Street Stop	None	Side Street Stop	None	RCUT	None	RCUT	None	RCUT	None
19	SR 141/Peachtree Pkwy & Chattahoochee River Park	Side Street Stop	None	Side Street Stop	None	RCUT	None	RCUT	None	RCUT	None

**Table 9 - Summary of Expected Inadequate LOS by Alternative**

INT #	INTERSECTION	Alternative					
		No Build	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5
1	SR 141/Peachtree Pkwy & Holcomb Bridge Rd	2017	Adequate	2042	Adequate	Adequate	Adequate
2	SR 141/Peachtree Pkwy & Woodhill Dr	2042	Adequate	Adequate	Adequate	Adequate	Adequate
3	SR 141/Peachtree Pkwy & E Pointe Pkwy	2017	2022	2022	2022	2022	2022
4	SR 141/Peachtree Pkwy & Jay Bird Alley/ Technology Pkwy	2042	2042	2042	2042	Adequate	Adequate
5	SR 141/Peachtree Pkwy & E Westech Dr	2042	2042	2042	Adequate	Adequate	Adequate
6	SR 141/Peachtree Pkwy & W Parkway Ln	Adequate	Adequate	2042			
7	SR 141/Peachtree Pkwy & Engineering Dr	2017	2022	2022	Adequate	Adequate	Adequate
8	SR 141/Peachtree Pkwy & Scientific Dr	2017	2022	2022	Adequate	Adequate	Adequate
9	SR 141/Peachtree Pkwy & Spalding Dr	2017	2022	2042	2042	Adequate	Adequate
10	SR 141/Peachtree Pkwy & Triangle Dr	2017	2022	2022	Adequate	Adequate	Adequate
11	SR 141/Peachtree Pkwy & E Technology Pkwy	2042	2042	2022	2042	2022	2022
12	SR 141/Peachtree Pkwy & U-turn median break	2042	2042	2022	Adequate	Adequate	Adequate
13	SR 141/Peachtree Pkwy & Peachtree Corners Cir	2017	2042	2042	2042	Adequate	Adequate
14	SR 141/Peachtree Pkwy & Forum Dr	2042	2042	Adequate	Adequate	Adequate	Adequate
15	SR 141/Peachtree Pkwy & E Jones Bridge Rd/ Medlock Bridge Rd	2017	2022	Adequate	2042	Adequate	Adequate
16	SR 141/Peachtree Pkwy & Wellington SC	2017	2022	2022	2042	Adequate	Adequate
17	SR 141/Peachtree Pkwy & Wellington Lake Dr/ Everett Ct	2042	2042	Adequate	2022	2022	2022
18	SR 141/Peachtree Pkwy & Ridgeway Dr	2017	2022	2022	2022	2022	2022
19	SR 141/Peachtree Pkwy & Chattahoochee River Park	2042	2042	2022	2042	2022	2042

**LEGEND**

- Inadequate in 2017
- Inadequate by 2022
- Inadequate by 2042
- Adequate through 2042

**Table 10 - Storage Summary - Alternative 1: Part I**

INT #	INTERSECTION	GEOMETRY	MOVEMENT	AM PEAK HOUR				PM PEAK HOUR						
				2022		2042		2022		2042				
				50th%	95th%	50th%	95th%	50th%	95th%	50th%	95th%			
1	SR 141/Peachtree Pkwy & Holcomb Bridge Rd	NB: 2 Left, 3 Through, 1 Right SB: 2 Left, 2 Through, 1 Through+Right EB: 1 Left (TWLTL), 2 Through, 1 Right WB: 1 Left (TWLTL), 2 Through, 1 Right	NB L	78	119	97	177	74	113	92	162			
			NB T	575	648	794	862	631	715	866	987			
			NB R	0	0	0	0	56	118	86	153			
			SB L	70	74	88	75	120	157	153	168			
			SB T+R	509	566	813	477	428	560	734	805			
			EB L	89	149	113	239	112	171	139	257			
			EB T	145	194	181	238	270	334	337	466			
			EB R	0	0	0	0	25	71	35	118			
			WB L	121	185	152	243	149	233	200	384			
			WB T	282	348	363	500	247	312	306	379			
			WB R	147	263	235	435	55	159	183	313			
			2	SR 141/Peachtree Pkwy & Woodhill Dr	NB: 1 Left, 2 Through, 1 Through+Right SB: 2 Left, 2 Through, 1 Right EB: 1 Left (TWLTL), 1 Through, 1 Right WB: 1 Left, 1 Through, 1 Right	NB L	152	258	213	276	80	108	97	104
						NB T+R	77	69	75	76	95	106	140	112
SB L	25	27				29	27	88	106	106	101			
SB T	137	656				1889	1513	212	307	298	283			
SB R	25	0				34	29	0	25	0	0			
EB L	96	175				171	310	89	144	119	229			
EB T	25	25				25	25	42	84	53	102			
EB R	0	0				0	0	25	91	71	218			
WB L	25	41				25	53	94	152	142	263			
WB T	51	124				63	156	32	68	37	78			
WB R	0	0				0	0	0	52	25	72			
3	SR 141/Peachtree Pkwy & E Pointe Pkwy	NB: 2 Through, 1 Through+Right WB: 1 Right				NB R	-	-	-	-	-	-	-	
						WB R	-	35	-	73	-	85	-	188
4	SR 141/Peachtree Pkwy & Jay Bird Alley/ Technology Pkwy	NB: 2 Left, 3 Through, 1 Right SB: 1 Left, 2 Through, 1 Right EB: 1 Left, 2 Through, 1 Right WB: 1 Left, 2 Through, 1 Right	NB L	81	138	112	190	102	151	122	192			
			NB T	119	152	127	133	179	214	242	339			
			NB R	25	25	25	25	25	45	26	38			
			SB L	28	30	33	32	51	66	63	73			
			SB T	102	101	1715	107	151	348	1195	1133			
			SB R	0	0	0	0	0	0	0	0			
			EB L	102	228	152	291	71	117	88	144			
			EB T	59	111	74	152	99	140	120	168			
			EB R	0	31	0	96	106	241	275	490			
			WB L	169	319	246	408	232	345	292	397			
			WB T	98	154	122	210	95	133	117	164			
			WB R	0	0	0	0	0	0	0	0			
			5	SR 141/Peachtree Pkwy & E Westech Dr	NB: 2 Through, 1 Right (drop) WB: 1 Right	NB R	-	-	-	-	-	-	-	
WB R	-	25				-	30	-	25	-	25			
6	SR 141/Peachtree Pkwy & W Parkway Ln	SB: 2 Through, 1 Right EB: 1 Right	SB R	-	-	-	-	-	-	-				
			EB R	-	25	-	25	-	25	-	25			
7	SR 141/Peachtree Pkwy & Engineering Dr	NB: 1 Left, 2 Through SB: 1 U-Turn, 2 Through, 1 Right EB: 1 Left, 1 Right	NB L	-	440	-	850	-	40	-	113			
			SB U	-	25	-	25	-	25	-	28			
			SB R	-	-	-	-	-	-	-	-			
			EB L	-	0	-	0	-	65	-	80			
			EB R	-	25	-	35	-	78	-	183			
8	SR 141/Peachtree Pkwy & Scientific Dr	NB: 1 Left, 2 Through, 1 Right SB: 1 Left, 2 Through, 1 Right EB: 1 Left+Through, 1 Right WB: 1 Left+Through, 1 Right	NB L	-	25	-	25	-	25	-	25			
			NB R	-	-	-	-	-	-	-	-			
			SB L	-	50	-	120	-	25	-	50			
			SB R	-	-	-	-	-	-	-	-			
			EB L+T	-	0	-	0	-	60	-	68			
			EB R	-	25	-	25	-	25	-	25			
			WB L+T	-	190	-	-	-	158	-	205			
9	SR 141/Peachtree Pkwy & Spalding Dr	NB: 1 Left, 2 Through, 1 Right SB: 1 Left, 2 Through, 1 Right EB: 2 Left, 1 Through, 1 Right WB: 2 Left, 1 Through, 1 Right	NB L	88	196	120	224	109	192	132	215			
			NB T	315	378	334	474	753	744	1157	1290			
			NB R	25	25	0	25	32	33	37	46			
			SB L	81	81	107	95	148	249	215	280			
			SB T	833	266	1853	292	759	868	1128	1230			
			SB R	0	0	25	25	25	32	42	51			
			EB L	47	102	67	136	96	170	127	218			
			EB T	236	408	342	535	356	509	476	699			
			EB R	0	0	0	47	0	25	0	34			
			WB L	66	128	89	169	62	124	78	152			
			WB T	271	465	398	599	380	571	539	764			
			WB R	0	0	0	0	0	25	0	36			

**Table 11 – Storage Summary – Alternative 1: Part II**

INT #	INTERSECTION	GEOMETRY	MOVEMENT	AM PEAK HOUR				PM PEAK HOUR			
				2022		2042		2022		2042	
				50th%	95th%	50th%	95th%	50th%	95th%	50th%	95th%
10	SR 141/Peachtree Pkwy & Triangle Dr	NB: 1 Left, 2 Through, 1 Right SB: 1 Left, 2 Through, 1 Right EB: 1 Left+Through, 1 Right WB: 1 Left+Through+Right	NB L	-	213	-	465	-	25	-	25
			NB R	-	-	-	-	-	-	-	-
			SB L	-	28	-	55	-	25	-	48
			SB R	-	-	-	-	-	-	-	-
			EB L+T	-	0	-	0	-	100	-	133
			EB R	-	40	-	98	-	123	-	298
11	SR 141/Peachtree Pkwy & E Technology Pkwy	NB: 2 Through, 1 Right WB: 1 Right	WB L+T+R	-	25	-	25	-	25	-	25
			NB R	-	-	-	-	-	-	-	-
12	SR 141/Peachtree Pkwy & U-turn median break	NB: 1 U-Turn, 2 Through SB: 1 U-Turn, 2 Through	WB R	-	43	-	83	-	85	-	198
			NB U	-	25	-	25	-	25	-	25
13	SR 141/Peachtree Pkwy & Peachtree Corners Cir	NB: 2 Left, 2 Through, 1 Right SB: 2 Left, 2 Through, 1 Right EB: 2 Left, 2 Through, 1 Right WB: 1 Left, 2 Through, 1 Right	SB U	-	0	-	0	-	25	-	30
			NB L	85	149	121	157	97	119	124	125
			NB T	598	669	647	713	800	881	1087	837
			NB R	25	25	25	31	0	0	25	25
			SB L	25	25	25	25	34	59	41	64
			SB T	1446	1564	2050	1657	423	628	754	977
			SB R	32	36	80	30	25	47	25	48
			EB L	124	216	176	274	285	355	375	503
			EB T	99	143	121	168	218	284	276	386
			EB R	0	0	0	0	0	0	0	52
			WB L	106	207	64	102	204	310	258	447
			WB T	217	330	311	430	157	213	198	311
			WB R	0	0	0	0	0	0	0	25
14	SR 141/Peachtree Pkwy & Forum Dr	NB: 1 Left, 2 Through, 1 Right SB: 1 Left, 2 Through, 1 Right EB: 1 Left, 1 Left+Through, 1 Right WB: 1 Left, 1 Left+Through, 1 Right	NB L	0	25	25	25	25	25	25	25
			NB T	25	25	109	103	307	326	374	371
			NB R	0	0	0	0	25	25	0	0
			SB L	0	25	25	25	25	25	25	25
			SB T	127	235	2338	198	108	163	109	240
			SB R	0	0	0	0	0	25	0	25
			EB L	25	25	25	25	130	205	164	311
			EB L+T	25	25	25	25	130	205	162	303
			EB R	0	0	0	0	0	0	0	0
			WB L	25	38	25	45	25	61	31	82
			WB L+T	25	41	25	46	25	61	30	83
			WB R	0	0	0	0	0	0	0	0
			15	SR 141/Peachtree Pkwy & E Jones Bridge Rd/ Medlock Bridge Rd	NB: 2 Left, 2 Through, 1 Right SB: 2 Left, 2 Through, 1 Right EB: 2 Left, 1 Through, 1 Through+Right WB: 2 Left, 1 Through, 1 Through+Right	NB L	31	58	36	69	80
NB T	35	87				165	260	674	1132	1464	1588
NB R	0	0				0	25	25	25	25	25
SB L	135	140				160	137	311	439	455	578
SB T	1537	1642				2180	1681	185	204	455	522
SB R	0	0				0	0	0	25	25	25
EB L	77	118				95	155	82	152	114	202
EB T+R	166	275				244	360	112	206	175	282
WB L	134	230				204	307	91	163	122	212
WB T+R	83	123				100	145	129	215	182	286
16	SR 141/Peachtree Pkwy & Wellington SC	NB: 1 Left, 2 Through SB: 2 Through, 1 Right EB: 1 Left+Right	NB L	-	25	-	25	-	25	-	25
			SB R	-	-	-	-	-	-	-	-
			EB L+R	-	150	-	193	-	258	-	338
17	SR 141/Peachtree Pkwy & Wellington Lake Dr/ Everett Ct	NB: 1 Left, 2 Through, 1 Right SB: 1 Left, 2 Through, 1 Right EB: 1 Left+Through+Right WB: 1 Left+Through+Right	NB L	25	25	25	25	25	25	32	41
			NB T	581	571	688	841	348	416	1857	785
			NB R	0	0	0	0	0	0	0	0
			SB L	25	25	25	25	0	0	0	0
			SB T	1233	1562	2310	2386	503	596	817	944
			SB R	0	0	0	0	0	0	0	0
			EB L+T+R	25	115	25	117	0	25	0	25
WB L+T+R	25	25	25	25	25	25	25	25			
18	SR 141/Peachtree Pkwy & Ridgeway Dr	NB: 1 Left, 2 Through SB: 2 Through, 1 Right EB: 1 Left+Right	NB L	-	25	-	25	-	25	-	25
			SB R	-	-	-	-	-	-	-	-
			EB L+R	-	128	-	43	-	90	-	105
19	SR 141/Peachtree Pkwy & Chattahoochee River Park	NB: 1 Through, 1 Through+Right SB: 1 Left, 2 Through WB: 1 Left+Right	NB R	-	-	-	-	-	-	-	-
			SB L	-	0	-	0	-	25	-	25
			WB L+R	-	0	-	0	-	25	-	25

**Table 12 - Storage Summary - Alternative 2: Part I**

INT #	INTERSECTION	GEOMETRY	MOVEMENT	AM PEAK HOUR				PM PEAK HOUR			
				2022		2042		2022		2042	
				50th%	95th%	50th%	95th%	50th%	95th%	50th%	95th%
1	SR 141/Peachtree Pkwy & Holcomb Bridge Rd	NB: 2 Left, 3 Through, 1 Right SB: 2 Left, 3 Through, 1 Right EB: 1 Left (TWLTL), 2 Through, 1 Right WB: 1 Left (TWLTL), 2 Through, 1 Right	NB L	78	119	97	177	74	112	92	154
			NB T	552	648	794	862	631	715	866	987
			NB R	0	0	0	0	46	105	70	136
			SB L	73	95	88	97	124	164	151	253
			SB T	126	172	725	1119	104	120	343	591
			SB R	0	0	0	0	0	25	25	25
			EB L	108	170	113	239	112	171	139	257
			EB T	148	194	181	238	270	334	337	466
			EB R	0	0	0	0	25	71	35	118
			WB L	139	235	152	243	149	233	200	384
			WB T	282	348	363	500	247	312	306	379
			WB R	142	258	235	435	55	159	183	313
			2	SR 141/Peachtree Pkwy & Woodhill Dr	NB: 1 Left, 3 Through, 1 Right SB: 2 Left, 3 Through, 1 Right EB: 1 Left (TWLTL), 1 Through, 1 Right WB: 1 Left, 1 Through, 1 Right	NB L	153	216	189	211	77
NB T	89	100				105	100	104	128	130	157
NB R	0	0				0	0	0	0	0	0
SB L	25	36				30	36	87	125	106	129
SB T	112	123				116	160	147	171	139	220
SB R	0	0				0	0	0	0	0	0
EB L	91	227				157	296	86	142	109	167
EB T	25	25				25	25	42	84	54	98
EB R	0	0				0	0	0	74	32	116
WB L	25	42				25	53	91	150	115	176
WB T	50	97				62	131	31	67	37	75
WB R	0	0				0	0	0	52	0	66
3	SR 141/Peachtree Pkwy & E Pointe Pkwy	NB: 3 Through, 1 Right WB: 1 Right				NB R	-	-	-	-	-
			WB R	-	35	-	73	-	85	-	188
4	SR 141/Peachtree Pkwy & Jay Bird Alley/ Technology Pkwy	NB: 2 Left, 3 Through, 1 Right SB: 1 Left, 3 Through, 1 Right EB: 1 Left, 2 Through, 1 Right WB: 1 Left, 2 Through, 1 Right	NB L	79	118	94	134	100	139	119	165
			NB T	76	178	136	332	90	399	351	530
			NB R	25	25	25	33	25	25	35	48
			SB L	27	35	34	39	52	73	65	86
			SB T	73	78	90	94	106	202	140	154
			SB R	0	0	0	0	0	0	0	0
			EB L	82	135	100	163	70	105	82	135
			EB T	58	91	72	110	101	132	116	163
			EB R	0	39	25	79	97	199	180	366
			WB L	132	200	163	256	229	286	266	424
			WB T	95	136	117	164	93	121	111	154
WB R	0	0	0	0	0	0	0	0			
5	SR 141/Peachtree Pkwy & E Westech Dr	NB: 3 Through, 1 Right WB: 1 Right	NB R	-	-	-	-	-	-	-	
			WB R	-	25	-	38	-	25	-	25
6	SR 141/Peachtree Pkwy & W Parkway Ln	SB: 3 Through, 1 Right EB: 1 Right	SB R	-	-	-	-	-	-	-	
			EB R	-	25	-	25	-	25	-	25
7	SR 141/Peachtree Pkwy & Engineering Dr	NB: 1 Left, 3 Through SB: 1 U-Turn, 3 Through, 1 Right EB: 1 Left, 1 Right	NB L	-	743	-	1065	-	103	-	240
			SB U	-	25	-	25	-	25	-	43
			SB R	-	-	-	-	-	-	-	-
			EB L	-	0	-	0	-	70	-	-*
			EB R	-	25	-	43	-	103	-	230
8	SR 141/Peachtree Pkwy & Scientific Dr	NB: 1 Left, 3 Through, 1 Right SB: 1 Left, 3 Through, 1 Right EB: 1 Left+Through, 1 Right WB: 1 Left+Through, 1 Right	NB L	-	25	-	55	-	25	-	25
			NB R	-	-	-	-	-	-	-	-
			SB L	-	158	-	360	-	63	-	150
			SB R	-	-	-	-	-	-	-	-
			EB L+T	-	0	-	0	-	53	-	-*
			EB R	-	25	-	25	-	25	-	25
			WB L+T	-	188	-	-*	-	143	-	208
			WB R	-	25	-	35	-	38	-	78
9	SR 141/Peachtree Pkwy & Spalding Dr	NB: 1 Left, 3 Through, 1 Right SB: 1 Left, 3 Through, 1 Right EB: 2 Left, 1 Through, 1 Right WB: 2 Left, 1 Through, 1 Right	NB L	85	145	105	188	106	155	126	156
			NB T	197	223	254	384	375	423	586	617
			NB R	25	25	25	25	39	46	61	73
			SB L	77	98	94	102	154	217	188	318
			SB T	202	325	510	535	503	584	665	737
			SB R	0	0	25	0	48	63	55	72
			EB L	46	78	58	117	94	138	116	194
			EB T	229	318	287	459	357	451	428	607
			EB R	0	0	0	25	0	25	0	31
			WB L	64	102	80	150	60	97	77	133
			WB T	260	358	327	524	374	480	464	674
			WB R	0	0	0	0	0	25	0	34

**Table 13 – Storage Summary – Alternative 2: Part II**

INT #	INTERSECTION	GEOMETRY	MOVEMENT	AM PEAK HOUR				PM PEAK HOUR						
				2022		2042		2022		2042				
				50th%	95th%	50th%	95th%	50th%	95th%	50th%	95th%			
10	SR 141/Peachtree Pkwy & Triangle Dr	NB: 1 Left, 3 Through, 1 Right SB: 1 Left, 3 Through, 1 Right EB: 1 Left+Through, 1 Right WB: 1 Left+Through+Right	NB L	-	453	-	658	-	25	-	38			
			NB R	-	-	-	-	-	-	-	-			
			SB L	-	68	-	153	-	68	-	155			
			SB R	-	-	-	-	-	-	-	-			
			EB L+T	-	0	-	0	-	90	-	133			
			EB R	-	50	-	115	-	165	-	370			
11	SR 141/Peachtree Pkwy & E Technology Pkwy	NB: 3 Through, 1 Right WB: 1 Right	WB L+T+R	-	25	-	25	-	25	-	33			
			NB R	-	-	-	-	-	-	-	-			
12	SR 141/Peachtree Pkwy & U-turn median break	NB: 1 U-Turn, 3 Through SB: 1 U-Turn, 3 Through	WB R	-	53	-	105	-	108	-	248			
			NB U	-	25	-	28	-	25	-	25			
13	SR 141/Peachtree Pkwy & Peachtree Corners Cir	NB: 2 Left, 3 Through, 1 Right SB: 2 Left, 3 Through, 1 Right EB: 2 Left, 2 Through, 1 Right WB: 1 Left, 2 Through, 1 Right	SB U	-	25	-	25	-	38	-	93			
			NB L	81	123	104	189	88	131	112	139			
			NB T	388	423	464	536	414	510	622	728			
			NB R	25	50	25	59	25	25	25	25			
			SB L	25	25	25	25	34	62	40	70			
			SB T	714	454	835	1208	142	205	443	445			
			SB R	25	52	25	202	25	25	25	58			
			EB L	117	167	152	251	286	335	347	417			
			EB T	99	141	121	166	217	271	266	336			
			EB R	0	0	0	0	0	0	0	25			
			WB L	99	168	125	235	204	283	248	348			
			WB T	200	260	254	377	156	205	192	252			
			WB R	0	0	0	0	0	0	0	0			
			14	SR 141/Peachtree Pkwy & Forum Dr	NB: 1 Left, 3 Through, 1 Right SB: 1 Left, 3 Through, 1 Right EB: 1 Left, 1 Left+Through, 1 Right WB: 1 Left, 1 Left+Through, 1 Right	NB L	25	40	25	42	32	56	37	47
NB T	34	37				37	39	213	228	260	275			
NB R	0	0				0	0	25	25	25	25			
SB L	27	34				35	35	42	83	53	91			
SB T	25	64				30	76	97	158	133	243			
SB R	0	0				0	0	25	25	25	25			
EB L	25	25				25	25	130	198	160	237			
EB L+T	25	25				25	25	130	198	157	233			
EB R	0	0				0	0	0	0	0	0			
WB L	25	38				25	45	25	58	31	71			
WB L+T	25	41				25	46	25	58	30	69			
WB R	0	0				0	0	0	0	0	0			
15	SR 141/Peachtree Pkwy & E Jones Bridge Rd/ Medlock Bridge Rd	NB: 2 Left, 3 Through, 1 Right SB: 2 Left, 3 Through, 1 Right EB: 2 Left, 1 Through, 1 Through+Right WB: 2 Left, 1 Through, 1 Through+Right				NB L	31	58	37	72	80	120	98	138
						NB T	47	52	63	104	280	185	431	605
			NB R	25	0	0	25	25	25	25	50			
			SB L	135	186	163	191	295	364	378	514			
			SB T	348	426	1039	1112	120	132	152	163			
			SB R	0	0	0	25	0	25	25	25			
			EB L	72	109	90	136	81	121	102	177			
			EB T+R	144	200	203	318	108	158	143	243			
			WB L	129	177	162	263	89	131	110	188			
			WB T+R	83	122	100	142	126	174	156	245			
16	SR 141/Peachtree Pkwy & Wellington SC	NB: 1 Left, 3 Through SB: 3 Through, 1 Right EB: 1 Left+Right	NB L	-	25	-	25	-	25	-	48			
			SB R	-	-	-	-	-	-	-	-			
			EB L+R	-	85	-	165	-	183	-	315			
17	SR 141/Peachtree Pkwy & Wellington Lake Dr/ Everett Ct	NB: 1 Left, 3 Through, 1 Right SB: 1 Left, 3 Through, 1 Right EB: 1 Left+Through+Right WB: 1 Left+Through+Right	NB L	39	80	36	68	87	119	79	101			
			NB T	37	88	138	148	56	38	211	118			
			NB R	0	0	0	0	0	0	0	0			
			SB L	25	25	25	25	0	0	0	0			
			SB T	487	583	764	905	269	350	445	494			
			SB R	0	0	0	0	0	0	0	0			
			EB L+T+R	0	40	0	40	0	0	0	0			
WB L+T+R	25	25	25	25	25	25	25	25						
18	SR 141/Peachtree Pkwy & Ridgegate Dr	NB: 1 Left, 3 Through SB: 3 Through, 1 Right EB: 1 Left+Right	NB L	-	25	-	30	-	25	-	38			
			SB R	-	-	-	-	-	-	-	-			
			EB L+R	-	88	-	128	-	58	-	98			
19	SR 141/Peachtree Pkwy & Chattahoochee River Park	NB: 2 Through, 1 Through+Right SB: 1 Left, 3 Through WB: 1 Left+Right	NB R	-	-	-	-	-	-	-	-			
			SB L	-	0	-	0	-	25	-	25			
			WB L+R	-	0	-	0	-	25	-	25			

**Table 14 - Storage Summary - Alternative 3: Part I**

INT #	INTERSECTION	GEOMETRY	MOVEMENT	AM PEAK HOUR				PM PEAK HOUR						
				2022		2042		2022		2042				
				50th%	95th%	50th%	95th%	50th%	95th%	50th%	95th%			
1	SR 141/Peachtree Pkwy & Holcomb Bridge Rd	NB: 2 Left, 3 Through, 1 Right SB: 2 Left, 2 Through, 1 Through+Right EB: 1 Left (TWLTL), 2 Through, 1 Right WB: 1 Left, (TWLTL), 2 Through, 1 Right	NB L	78	119	97	177	74	112	92	162			
			NB T	608	683	837	909	657	732	952	1036			
			NB R	0	0	0	0	50	111	78	147			
			SB L	124	130	151	132	168	220	214	252			
			SB T+R	609	600	849	541	413	541	729	801			
			EB L	89	158	113	239	113	174	141	271			
			EB T	147	202	181	238	270	337	351	479			
			EB R	0	0	0	0	25	71	35	119			
			WB L	121	185	152	243	150	247	201	386			
			WB T	282	348	363	500	245	308	308	381			
			WB R	103	216	225	421	26	121	124	248			
			2	SR 141/Peachtree Pkwy & Woodhill Dr	NB: 1 Left, 3 Through, 1 Right SB: 2 Left, 2 Through, 1 Right EB: 1 Through, 1 Right WB: 1 Through, 1 Right	NB L	152	246	226	261	80	103	98	101
NB T	98	94				132	227	90	111	134	113			
NB R	0	0				0	0	0	0	0	0			
SB L	77	86				93	86	135	154	164	151			
SB T	180	1454				1916	1633	157	186	196	181			
SB R	25	25				25	25	0	0	0	0			
EB T	25	25				25	25	39	76	49	94			
EB R	62	146				106	223	132	230	194	385			
WB T	49	91				58	107	30	62	34	72			
WB R	0	26				0	48	83	170	128	249			
3	SR 141/Peachtree Pkwy & E Pointe Pkwy	NB: 2 Through, 1 Through+Right WB: 1 Right				NB R	-	-	-	-	-	-	-	
						WB R	-	35	-	73	-	93	-	205
4	SR 141/Peachtree Pkwy & Jay Bird Alley/ Technology Pkwy	NB: 2 Left, 3 Through, 1 Right SB: 2 Left, 2 Through, 1 Right EB: 2 Through, 1 Right WB: 2 Through, 1 Right	NB L	91	151	122	186	102	156	139	198			
			NB T	25	25	25	25	147	78	83	130			
			NB R	0	25	0	0	25	25	25	25			
			SB L	25	25	25	25	25	37	28	36			
			SB T	447	600	1785	1890	648	860	1402	1528			
			SB R	0	25	0	0	0	0	0	0			
			EB T	55	89	71	110	86	125	109	153			
			EB R	112	262	222	415	272	454	475	708			
			WB T	95	138	121	187	90	128	112	156			
			WB R	94	222	176	365	162	270	235	392			
			5	SR 141/Peachtree Pkwy & E Westech Dr/ W Parkway Ln	NB: 1 Left, 3 Through, 1 Right SB: 1 Left, 2 Through, 1 Right EB: 1 Right WB: 1 Right	NB L	70	141	128	279	122	164	166	284
						NB T	126	53	0	0	0	0	0	0
NB R	0	0				0	0	0	0	0	0			
SB L	0	25				0	0	25	25	25	25			
SB T	27	68				25	25	25	198	442	190			
SB R	0	0				0	0	0	0	0	0			
EB R	0	0				0	0	0	0	0	0			
WB R	0	0				0	0	0	0	0	0			
7	SR 141/Peachtree Pkwy & Engineering Dr	NB: 2 Left, 2 Through SB: 1 U-Turn, 2 Through, 1 Right EB: 1 Right	NB L	144	202	192	297	44	67	50	65			
			NB T	0	0	25	0	25	25	25	25			
			SB U	0	0	0	25	25	42	25	43			
			SB T	30	55	56	906	35	432	361	475			
			SB R	0	0	0	25	25	25	25	25			
			EB R	0	0	0	0	0	0	0	0			
			8	SR 141/Peachtree Pkwy & Scientific Dr	NB: 1 Left, 2 Through, 1 Right SB: 1 Left, 2 Through, 1 Right EB: 1 Right WB: 1 Right	NB L	25	25	25	25	25	25	25	25
NB T	402	648				610	754	278	434	460	631			
NB R	25	25				25	25	0	41	27	37			
SB L	80	94				155	130	93	125	133	131			
SB T	0	0				50	0	0	0	0	0			
SB R	0	0				0	0	0	0	0	0			
EB R	0	0				0	0	0	0	0	0			
WB R	0	0				0	0	0	0	0	0			
9	SR 141/Peachtree Pkwy & Spalding Dr	NB: 1 Left, 2 Through, 1 Right SB: 1 Left, 2 Through, 1 Right EB: 2 Through, 1 Right WB: 2 Through, 1 Right	NB L	127	247	196	270	138	193	179	248			
			NB T	557	788	642	651	641	625	734	995			
			NB R	25	25	25	25	71	101	111	177			
			SB L	84	96	97	95	158	252	215	371			
			SB T	1112	890	1825	1709	385	618	547	678			
			SB R	25	25	25	25	25	56	54	94			
			EB T	122	171	154	249	188	243	235	330			
			EB R	27	109	98	256	50	158	182	381			
			WB T	140	214	191	297	197	254	248	348			
			WB R	0	77	35	134	0	82	54	163			

**Table 15 – Storage Summary – Alternative 3: Part II**

INT #	INTERSECTION	GEOMETRY	MOVEMENT	AM PEAK HOUR				PM PEAK HOUR						
				2022		2042		2022		2042				
				50th%	95th%	50th%	95th%	50th%	95th%	50th%	95th%			
10	SR 141/Peachtree Pkwy & Triangle Dr	NB: 2 Left, 2 Through, 1 Right SB: 1 Left, 2 Through, 1 Right EB: 1 Right WB: 1 Right	NB L	163	212	210	322	51	58	54	59			
			NB T	25	41	155	242	360	518	605	646			
			NB R	0	0	0	0	0	0	0	0			
			SB L	25	26	25	25	25	25	25	41			
			SB T	820	928	1797	1895	196	199	480	407			
			SB R	25	32	27	27	0	25	0	25			
			EB R	0	0	0	0	0	0	0	0			
			WB R	0	0	0	0	0	0	0	0			
11	SR 141/Peachtree Pkwy & E Technology Pkwy	NB: 2 Through, 1 Right WB: 1 Right	NB R	-	-	-	-	-	-	-	-			
			WB R	-	43	-	83	-	85	-	198			
12	SR 141/Peachtree Pkwy & U-turn median break	NB: 1 U-Turn, 2 Through SB: 2 U-Turn, 2 Through	NB U	0	25	25	25	0	0	0	0			
			NB T	32	42	320	335	461	575	774	881			
			SB U	63	65	86	72	165	180	213	241			
			SB T	0	0	250	0	0	0	0	0			
13	SR 141/Peachtree Pkwy & Peachtree Corners Cir	NB: 2 Left, 2 Through, 1 Right SB: 2 Left, 2 Through, 1 Right EB: 2 Through, 2 Right WB: 2 Through, 2 Right	NB L	89	159	124	216	108	123	130	135			
			NB T	52	66	471	444	1238	1373	1777	1696			
			NB R	25	0	25	25	25	25	25	25			
			SB L	25	25	25	25	176	279	240	350			
			SB T	916	1501	2013	1667	383	555	498	755			
			SB R	71	113	166	137	79	150	98	224			
			EB T	96	139	118	166	196	254	247	312			
			EB R	177	284	249	368	435	576	613	760			
			WB T	205	301	285	404	134	181	167	220			
			WB R	63	101	75	117	153	207	191	253			
			14	SR 141/Peachtree Pkwy & Forum Dr	NB: 1 Left, 2 Through, 1 Right SB: 1 Left, 2 Through, 1 Right EB: 2 Right WB: 1 Right	NB L	77	192	140	299	29	32	158	123
						NB T	224	261	114	110	25	43	398	25
NB R	0	0				0	0	0	0	0	0			
SB L	0	0				25	0	113	190	201	276			
SB T	25	25				2225	25	92	179	216	286			
SB R	0	0				0	0	0	25	0	25			
EB R	25	25				25	25	25	35	40	71			
WB R	0	0				0	0	0	0	0	0			
15	SR 141/Peachtree Pkwy & E Jones Bridge Rd/ Medlock Bridge Rd	NB: 2 Left, 2 Through, 1 Right SB: 2 Left, 2 Through, 1 Right EB: 2 Through, 2 Right WB: 2 Through, 2 Right	NB L	45	95	52	113	101	145	128	143			
			NB T	310	338	241	563	467	958	1584	1706			
			NB R	25	25	25	25	25	52	60	64			
			SB L	140	148	170	145	322	443	480	598			
			SB T	1653	1761	2277	1787	408	327	614	590			
			SB R	0	25	25	25	25	25	25	25			
			EB T	79	118	103	162	85	126	105	150			
			EB R	203	318	211	334	144	234	198	311			
			WB T	76	114	97	150	116	164	143	195			
			WB R	151	243	0	54	109	159	134	206			
			16	SR 141/Peachtree Pkwy & Wellington SC	NB: 2 Left, 2 Through SB: 1 U-Turn, 2 Through, 1 Right EB: 1 Right	NB L	139	229	204	311	111	123	135	123
						NB T	0	0	0	0	0	0	111	0
SB U	25	25				25	25	25	25	25	25			
SB T	987	1167				2283	2357	390	508	734	850			
SB R	25	25				25	25	0	25	0	25			
EB R	0	0				0	0	0	0	0	0			
17	SR 141/Peachtree Pkwy & Wellington Lake Dr/ Everett Ct	NB: 1 Left, 1 Through, 1 Through+Right SB: 1 Left, 2 Through, 1 Right EB: 1 Right WB: 1 Right	NB L	-	28	-	55	-	30	-	50			
			NB R	-	-	-	-	-	-	-	-			
			SB L	-	25	-	25	-	25	-	25			
			SB R	-	-	-	-	-	-	-	-			
			EB R	-	108	-	180	-	25	-	30			
			WB R	-	25	-	25	-	25	-	25			
18	SR 141/Peachtree Pkwy & Ridgeway Dr	NB: 1 Left, 2 Through SB: 2 Through, 1 Right EB: 1 Right	NB L	-	25	-	25	-	25	-	25			
			SB R	-	-	-	-	-	-	-	-			
			EB R	-	25	-	43	-	25	-	25			
19	SR 141/Peachtree Pkwy & Chattahoochee River Park	NB: 1 Through, 1 Through+Right SB: 1 Left, 2 Through WB: 1 Right	NB R	-	-	-	-	-	-	-	-			
			SB L	-	0	-	0	-	25	-	25			
			WB R	-	0	-	0	-	25	-	25			

**Table 16 - Storage Summary - Alternative 4: Part I**

INT #	INTERSECTION	GEOMETRY	MOVEMENT	AM PEAK HOUR				PM PEAK HOUR						
				2022		2042		2022		2042				
				50th%	95th%	50th%	95th%	50th%	95th%	50th%	95th%			
1	SR 141/Peachtree Pkwy & Holcomb Bridge Rd	NB: 2 Left, 3 Through, 1 Right SB: 2 Left, 3 Through, 1 Right EB: 1 Left (TWLTL), 2 Through, 1 Right WB: 1 Left (TWLTL), 2 Through, 1 Right	NB L	78	119	97	177	74	112	91	145			
			NB T	584	683	837	909	657	732	952	1036			
			NB R	0	0	0	0	50	111	78	147			
			SB L	122	167	150	209	171	226	210	329			
			SB T	559	611	871	1122	564	186	473	616			
			SB R	0	0	0	0	0	25	25	25			
			EB L	108	170	113	239	113	174	141	271			
			EB T	148	194	181	238	270	337	351	479			
			EB R	0	0	0	0	25	71	35	119			
			WB L	139	235	152	243	150	247	201	386			
			WB T	282	348	363	500	245	308	308	381			
			WB R	95	208	225	421	26	121	124	248			
			2	SR 141/Peachtree Pkwy & Woodhill Dr	NB: 1 Left, 3 Through, 1 Right SB: 2 Left, 3 Through, 1 Right EB: 1 Through, 1 Right WB: 1 Through, 1 Right	NB L	152	209	180	198	79	102	97	100
						NB T	57	79	69	115	87	116	135	140
NB R	0	0				0	0	0	0	0	0			
SB L	78	116				90	105	135	182	164	197			
SB T	126	147				90	221	412	384	129	153			
SB R	25	25				0	25	0	0	0	0			
EB T	25	25				25	25	40	75	49	90			
EB R	26	106				25	101	108	201	156	267			
WB T	49	92				61	108	30	61	34	69			
WB R	0	0				0	25	25	78	98	193			
3	SR 141/Peachtree Pkwy & E Pointe Pkwy	NB: 3 Through, 1 Right WB: 1 Right				NB R	-	-	-	-	-	-	-	
						WB R	-	35	-	73	-	93	-	205
4	SR 141/Peachtree Pkwy & Jay Bird Alley/ Technology Pkwy	NB: 2 Left, 3 Through, 1 Right SB: 2 Left, 3 Through, 1 Right EB: 2 Through, 1 Right WB: 2 Through, 1 Right				NB L	89	130	117	153	101	141	118	152
						NB T	25	25	25	25	42	181	213	287
			NB R	0	0	0	0	0	25	25	25			
			SB L	25	25	25	25	25	46	29	48			
			SB T	587	471	682	617	470	672	622	847			
			SB R	25	25	0	0	0	25	0	25			
			EB T	56	84	66	100	91	117	101	139			
			EB R	68	159	167	295	219	323	333	521			
			WB T	96	131	112	154	94	121	104	142			
			WB R	94	181	142	245	171	253	218	332			
			5	SR 141/Peachtree Pkwy & E Westech Dr/ W Parkway Ln	NB: 1 Left, 3 Through, 1 Right SB: 1 Left, 3 Through, 1 Right EB: 1 Right WB: 1 Right	NB L	44	80	69	109	84	188	195	285
						NB T	0	0	0	0	0	0	0	0
						NB R	0	0	0	0	0	0	0	0
						SB L	0	0	0	0	25	29	25	25
SB T	25	25				25	25	135	301	56	391			
SB R	0	0				0	0	0	0	0	0			
EB R	0	0				0	0	0	0	0	0			
WB R	0	0				0	0	0	0	0	0			
7	SR 141/Peachtree Pkwy & Engineering Dr	NB: 1 Left, 3 Through SB: 1 U-Turn, 3 Through, 1 Right EB: 1 Right				NB L	149	234	152	204	25	25	32	64
						NB T	0	0	0	0	0	0	0	0
						SB U	0	25	25	25	25	36	25	74
						SB T	41	487	475	579	27	40	25	235
						SB R	0	25	25	25	0	25	0	25
						EB R	0	0	0	0	0	0	0	0
			8	SR 141/Peachtree Pkwy & Scientific Dr	NB: 1 Left, 3 Through, 1 Right SB: 1 Left, 3 Through, 1 Right EB: 1 Right WB: 1 Right	NB L	25	25	25	30	25	34	25	31
						NB T	81	171	176	341	131	445	291	364
						NB R	0	25	0	25	0	69	25	46
						SB L	92	94	116	156	76	203	175	170
						SB T	0	0	0	0	0	0	0	0
						SB R	0	0	0	0	0	0	0	0
						EB R	0	0	0	0	0	0	0	0
						WB R	0	0	0	0	0	0	0	0
9	SR 141/Peachtree Pkwy & Spalding Dr	NB: 1 Left, 3 Through, 1 Right SB: 1 Left, 3 Through, 1 Right EB: 2 Through, 1 Right WB: 2 Through, 1 Right				NB L	134	213	175	256	134	202	171	268
						NB T	267	287	304	365	570	651	542	591
						NB R	25	38	25	47	110	111	88	205
						SB L	80	112	94	116	191	275	195	267
						SB T	242	687	557	624	108	312	439	644
						SB R	25	31	46	53	0	25	25	39
			EB T	120	164	147	200	187	235	227	277			
			EB R	0	73	25	97	25	94	61	175			
			WB T	137	185	168	225	196	245	239	291			
			WB R	0	73	31	120	0	79	0	83			



**Table 18 - Storage Summary - Alternative 5: Part I**

INT #	INTERSECTION	GEOMETRY	MOVEMENT	AM PEAK HOUR				PM PEAK HOUR						
				2022		2042		2022		2042				
				50th%	95th%	50th%	95th%	50th%	95th%	50th%	95th%			
1	SR 141/Peachtree Pkwy & Holcomb Bridge Rd	NB: 2 Left, 3 Through, 1 Right SB: 2 Left, 3 Through, 1 Right EB: 1 Left (TWLTL), 2 Through, 1 Right WB: 1 Left (TWLTL), 2 Through, 1 Right	NB L	78	119	97	177	74	112	91	145			
			NB T	608	683	837	909	657	732	952	1036			
			NB R	0	0	0	0	50	111	78	147			
			SB L	123	169	150	209	174	222	219	329			
			SB T	719	359	785	1122	416	133	472	617			
			SB R	0	0	0	0	0	25	25	25			
			EB L	89	158	113	239	113	174	141	271			
			EB T	147	202	181	238	270	337	351	479			
			EB R	0	0	0	0	25	71	35	119			
			WB L	121	185	152	243	150	247	201	386			
			WB T	282	348	363	500	245	308	308	381			
			WB R	103	216	225	421	26	121	124	248			
			2	SR 141/Peachtree Pkwy & Woodhill Dr	NB: 1 Left, 3 Through, 1 Right SB: 2 Left, 3 Through, 1 Right EB: 1 Through, 1 Right WB: 1 Through, 1 Right	NB L	151	204	180	198	79	102	97	100
						NB T	57	63	64	103	87	116	136	145
NB R	0	0				0	0	0	0	0	0			
SB L	78	116				90	105	134	182	164	197			
SB T	53	72				90	194	350	391	126	145			
SB R	0	0				0	0	0	0	0	0			
EB T	25	25				25	25	40	75	49	90			
EB R	26	106				25	101	108	201	156	267			
WB T	49	92				61	108	30	61	34	69			
WB R	0	0				0	25	25	78	98	193			
3	SR 141/Peachtree Pkwy & E Pointe Pkwy	NB: 3 Through, 1 Right WB: 1 Right				NB R	-	-	-	-	-	-	-	
						WB R	-	35	-	73	-	93	-	205
4	SR 141/Peachtree Pkwy & Jay Bird Alley/ Technology Pkwy	NB: 2 Left, 3 Through, 1 Right SB: 2 Left, 3 Through, 1 Right EB: 2 Through, 1 Right WB: 2 Through, 1 Right				NB L	89	129	117	153	100	137	118	152
						NB T	25	25	25	25	42	180	213	287
			NB R	0	0	0	0	0	25	25	25			
			SB L	25	25	0	25	26	51	27	48			
			SB T	317	348	439	554	229	335	895	501			
			SB R	0	25	0	0	0	25	0	0			
			EB T	56	84	66	100	91	117	101	139			
			EB R	68	159	167	295	225	329	333	521			
			WB T	96	131	112	154	94	120	104	142			
			WB R	94	181	142	245	170	253	218	332			
			5	SR 141/Peachtree Pkwy & E Westech Dr/ W Parkway Ln	NB: 1 Left, 3 Through, 1 Right SB: 1 Left, 3 Through, 1 Right EB: 1 Right WB: 1 Right	NB L	27	62	69	109	81	162	173	270
						NB T	0	0	0	0	0	0	0	0
						NB R	0	0	0	0	0	0	0	0
						SB L	25	25	25	25	25	25	25	25
SB T	316	416				436	517	25	112	60	51			
SB R	25	25				25	25	0	0	0	0			
EB R	0	0				0	0	0	0	0	0			
WB R	0	0				0	0	0	0	0	0			
7	SR 141/Peachtree Pkwy & Engineering Dr	NB: 2 Left, 2 Through SB: 1 U-Turn, 2 Through, 1 Right EB: 1 Right				NB L	145	198	192	297	58	94	58	84
						NB T	0	25	25	25	25	25	25	56
			SB U	0	25	0	25	25	25	25	57			
			SB T	29	168	26	523	28	77	349	631			
			SB R	0	25	0	25	0	25	25	25			
			EB R	0	0	0	0	0	0	0	0			
			8	SR 141/Peachtree Pkwy & Scientific Dr	NB: 1 Left, 2 Through, 1 Right SB: 1 Left, 2 Through, 1 Right EB: 1 Right WB: 1 Right	NB L	25	25	25	25	25	25	25	33
						NB T	117	124	174	205	128	143	655	790
NB R	0	25				25	25	25	25	65	107			
SB L	109	228				135	235	129	220	231	317			
SB T	475	127				1068	1068	336	361	273	653			
SB R	0	0				0	0	0	0	0	0			
EB R	0	0				0	0	0	25	0	0			
WB R	0	0				0	0	0	0	0	0			
9	SR 141/Peachtree Pkwy & Spalding Dr	NB: 1 Left, 3 Through, 1 Right SB: 1 Left, 3 Through, 1 Right EB: 2 Through, 1 Right WB: 2 Through, 1 Right				NB L	141	216	154	219	136	192	178	220
						NB T	129	140	150	198	215	271	682	598
			NB R	0	25	0	25	25	29	118	138			
			SB L	77	112	93	115	174	255	193	267			
			SB T	366	486	532	603	279	319	439	634			
			SB R	27	71	45	51	25	49	25	43			
			EB T	120	164	147	200	187	235	227	277			
			EB R	25	80	25	97	25	89	61	175			
			WB T	137	185	168	225	196	245	239	291			
			WB R	0	73	31	120	0	79	0	83			

**Table 19 – Storage Summary – Alternative 5: Part II**

INT #	INTERSECTION	GEOMETRY	MOVEMENT	AM PEAK HOUR				PM PEAK HOUR						
				2022		2042		2022		2042				
				50th%	95th%	50th%	95th%	50th%	95th%	50th%	95th%			
10	SR 141/Peachtree Pkwy & Triangle Dr	NB: 2 Left, 3 Through, 1 Right SB: 1 Left, 3 Through, 1 Right EB: 1 Right WB: 1 Right	NB L	111	144	127	147	46	54	84	102			
			NB T	72	195	165	213	102	198	216	305			
			NB R	0	0	0	0	0	0	0	0			
			SB L	25	25	25	51	25	25	25	56			
			SB T	179	384	897	620	59	56	152	193			
			SB R	0	27	25	41	0	0	0	25			
			EB R	0	0	0	0	0	0	0	0			
			WB R	0	0	0	0	0	0	0	0			
11	SR 141/Peachtree Pkwy & E Technology Pkwy	NB: 3 Through, 1 Right WB: 1 Right	NB R	-	-	-	-	-	-	-				
			WB R	-	53	-	105	-	108	-	248			
12	SR 141/Peachtree Pkwy & U-turn median break	NB: 1 U-Turn, 3 Through SB: 2 U-Turn, 3 Through	NB U	0	25	25	25	25	25	25	25			
			NB T	25	44	130	227	220	287	339	464			
			SB U	71	110	70	84	170	204	265	291			
			SB T	0	0	0	0	0	0	0	0			
13	SR 141/Peachtree Pkwy & Peachtree Corners Cir	NB: 2 Left, 3 Through, 1 Right SB: 2 Left, 3 Through, 1 Right EB: 2 Through, 2 Right WB: 2 Through, 1 Right	NB L	88	128	115	171	109	155	134	173			
			NB T	152	188	83	124	335	389	1018	1093			
			NB R	25	25	0	25	25	26	25	36			
			SB L	25	26	25	25	162	220	214	325			
			SB T	186	252	730	760	382	363	367	368			
			SB R	58	80	86	169	29	25	33	84			
			EB T	93	130	112	157	180	232	231	290			
			EB R	172	225	208	292	372	462	526	672			
			WB T	199	251	244	311	123	166	156	205			
			WB R	0	51	25	78	49	139	155	272			
			14	SR 141/Peachtree Pkwy & Forum Dr	NB: 1 Left, 3 Through, 1 Right SB: 1 Left, 3 Through, 1 Right EB: 2 Right WB: 1 Right	NB L	86	159	92	167	84	122	168	176
						NB T	35	69	41	40	25	27	29	54
NB R	0	25				0	0	0	0	0	0			
SB L	25	25				25	29	54	103	212	300			
SB T	72	75				149	179	305	355	35	58			
SB R	0	25				0	0	25	45	0	0			
EB R	25	25				25	25	25	39	39	70			
WB R	0	0				0	0	0	0	0	0			
15	SR 141/Peachtree Pkwy & E Jones Bridge Rd/ Medlock Bridge Rd	NB: 2 Left, 3 Through, 1 Right SB: 2 Left, 3 Through, 1 Right EB: 2 Through, 2 Right WB: 2 Through, 1 Right				NB L	43	74	45	99	100	136	116	161
						NB T	56	102	329	351	83	104	227	427
			NB R	0	0	25	25	0	25	25	42			
			SB L	143	185	168	178	315	369	334	452			
			SB T	561	584	697	714	248	302	291	399			
			SB R	25	25	25	25	25	29	34	67			
			EB T	81	116	96	138	87	125	105	150			
			EB R	101	157	156	228	0	47	0	52			
			WB T	77	112	91	132	118	162	143	195			
			WB R	25	115	74	199	0	79	0	88			
16	SR 141/Peachtree Pkwy & Wellington SC	NB: 2 Left, 3 Through SB: 1 U-Turn, 3 Through, 1 Right EB: 1 Right	NB L	94	124	86	119	71	95	104	124			
			NB T	0	0	0	0	0	0	0	0			
			SB U	25	25	25	25	25	25	25	25			
			SB T	268	326	428	535	146	202	223	276			
			SB R	25	25	25	25	0	25	0	25			
			EB R	0	0	0	0	0	0	0	0			
17	SR 141/Peachtree Pkwy & Wellington Lake Dr/ Everett Ct	NB: 1 Left, 2 Through, 1 Right SB: 1 Left, 2 Through, 1 Right EB: 1 Right WB: 1 Right	NB L	-	28	-	55	-	30	-	50			
			NB R	-	-	-	-	-	-	-	-			
			SB L	-	25	-	25	-	25	-	25			
			SB R	-	-	-	-	-	-	-	-			
			EB R	-	108	-	180	-	25	-	30			
			WB R	-	25	-	25	-	25	-	25			
18	SR 141/Peachtree Pkwy & Ridgeway Dr	NB: 1 Left, 2 Through SB: 2 Through, 1 Right EB: 1 Right	NB L	-	25	-	25	-	25	-	25			
			SB R	-	-	-	-	-	-	-	-			
			EB R	-	25	-	43	-	25	-	25			
19	SR 141/Peachtree Pkwy & Chattahoochee River Park	NB: 1 Through, 1 Through+Right SB: 1 Left, 2 Through WB: 1 Right	NB R	-	-	-	-	-	-	-	-			
			SB L	-	0	-	0	-	25	-	25			
			WB R	-	0	-	0	-	25	-	25			

### 4.4. Crash Analysis

The crash analysis examines the crash statistics along SR 141/Peachtree Parkway and compares them to the statewide averages of similar facilities. The statewide averages are calculated using crash data that is collected annually by GDOT.

Crash rates are based on the number of crashes, injuries, and fatalities per one hundred million vehicle miles traveled.

Crash data on the SR 141/Peachtree Parkway corridor were provided by GDOT for the years of 2013, 2014, and 2015. Table 20 illustrates the differences between the crash rates on SR 141/Peachtree Parkway and the statewide averages. The crash data are included in Appendix H.

As can be seen in Table 20, the crash rates on SR 141/Peachtree Parkway exceeded the statewide averages for number of collisions and number of injuries for 2013, 2014, and 2015. However, no fatalities occurred.

**Table 20 - Crash Data**

LOCATION	TYPE	2013			2014			2015		
		STATEWIDE AVERAGE (RATES)	SR 141 (RATES)	SR 141 (NUMBER OF OCCURRENCES)	STATEWIDE AVERAGE (RATES)	SR 141 (RATES)	SR 141 (NUMBER OF OCCURRENCES)	STATEWIDE AVERAGE (RATES)	SR 141 (RATES)	SR 141 (NUMBER OF OCCURRENCES)
SR 141 from Holcomb Bridge Rd to Chattahoochee River	Collisions	336	566	347	363	568	341	335	523	324
	Injuries	137	169	104	147	175	105	141	182	113
	Fatalities	0.97	0	0	1.42	0	0	1.64	0	0

## 5. CONCLUSIONS

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Based on the analysis documented in this report, Wolverton makes the following conclusions.

The following intersections are currently experiencing inadequate levels of service during one or both peak hours:

- Holcomb Bridge Road and SR 141/Peachtree Parkway
- Pointe Parkway and SR 141/Peachtree Parkway
- Engineering Drive and SR 141/Peachtree Parkway
- Scientific Drive and SR 141/Peachtree Parkway
- Spalding Drive and SR 141/Peachtree Parkway
- Triangle Drive and SR 141/Peachtree Parkway
- Peachtree Corners Circle and SR 141/Peachtree Parkway
- E Jones Bridge Road/Medlock Bridge Road and SR 141/Peachtree Parkway
- Wellington shopping center and SR 141/Peachtree Parkway
- Ridgegate Drive and SR 141/Peachtree Parkway

In the Opening Year 2022, no additional intersections are expected to experience inadequate levels of service during one or both peak hours if no improvements are made.

In the Design Year 2042, in addition to the intersections currently experiencing inadequate levels of service during one or both peak hours, the following intersections are expected to experience inadequate levels of service during one or both peak hours if no improvements are made:

- Woodhill Drive and SR 141/Peachtree Parkway
- Jay Bird Alley/Technology Parkway and SR 141/Peachtree Parkway
- Westech Drive and SR 141/Peachtree Parkway
- Technology Parkway and SR 141/Peachtree Parkway
- U-turn median break and SR 141/Peachtree Parkway
- Form Drive and SR 141/Peachtree Parkway
- Wellington Lake Drive/Everett Court and SR 141/Peachtree Parkway
- Chattahoochee River Park and SR 141/Peachtree Parkway

The project will provide operational improvements to SR 141/Peachtree Parkway from Holcomb Bridge Road on the southern end of the project to Chattahoochee Park Drive on the northern end of the project. The project is identified as follows:

- PI No. 0015086, SR 141 from Chattahoochee River to Holcomb Bridge Road Study  
This project will provide improvements for SR 141/Peachtree Parkway.

The following five alternatives were analyzed for the SR 141/Peachtree Parkway area:

- Alternative 1 - Four-Lane Median Divided, Conventional Intersection Improvements
- Alternative 2 - Six-Lane Median Divided, Conventional Intersection Improvements
- Alternative 3 - Four-Lane Median Divided, Innovative Intersection Improvements
- Alternative 4 - Six-Lane Median Divided, Innovative Intersection Improvements
- Alternative 5 - Four-/Six-Lane Median Divided, Innovative Intersection Improvements

These alternatives were chosen based upon the following criteria:

- Safety Benefits
- Cost
- Operational Benefits
- Right-of-Way (ROW) Impacts
- Environmental Impacts
- Pedestrian Facilities/Accommodations
- Future Transit Impacts
- Project Feasibility

Alternatives including, but not limited to, Single Point Urban Interchange (SPUI), Rotary Interchange, and Multi-Lane Roundabouts were not considered. Reasons for exclusion included, but were not limited to, any or all of these (related to the aforementioned criteria): ROW considerations, potentially very poor operations, and fiscal considerations. Alternatives including Median U-Turn (MUT) and Restricted Crossing U-Turn (RCUT) were considered. These chosen alternatives present less probability of invasive impacts to the adjacent properties and more potential for adequate operations.

Table 21 provides a cost breakdown of each alternative, except for Alternative 1. Alternative 1 was not considered a feasible alternative for the long-term goals of the project, so no cost was estimated for Alternative 1.

**Table 21 - SR 141/Peachtree Parkway Cost Breakdown by Alternative**

Build Alternatives	Cost (\$)	ROW Area (SF) Required
No Build	0.00	0
Alternative 1	0.00*	0*
Alternative 2	29,493,821.78	145,747
Alternative 3	27,814,749.64	190,866
Alternative 4	30,555,284.23	125,981
Alternative 5	29,073,001.55	146,842

\* - No cost generated or ROW estimated for Alt 1

From Table 21, it is apparent that costs generated for Alternatives 2 through 5 are comparable. Alternative 3, while merely a four-lane alternative for SR 141/Peachtree Parkway, concurrently requires the most ROW acquisition due to extra side street capacity needed. If these factors are taken into consideration, it is apparent that a six-lane median divided highway, either conventional or innovative, will provide the best value of cost versus operational benefit.

The following intersections are still expected to operate inadequately, either for Opening Year 2022 or Design Year 2042 under each of the following alternatives:

- Alternative 1 - Four-Lane Median Divided, Conventional Intersection Improvements
  - Pointe Parkway and SR 141/Peachtree Parkway (2022)
  - Jay Bird Alley/Technology Parkway and SR 141/Peachtree Parkway (2042)
  - Westech Drive and SR 141/Peachtree Parkway (2042)
  - Engineering Drive and SR 141/Peachtree Parkway (2022)
  - Scientific Drive and SR 141/Peachtree Parkway (2022)
  - Spalding Drive and SR 141/Peachtree Parkway (2022)
  - Triangle Drive and SR 141/Peachtree Parkway (2022)
  - Technology Parkway and SR 141/Peachtree Parkway (2042)
  - U-turn median break and SR 141/Peachtree Parkway (2042)
  - Peachtree Corners Circle and SR 141/Peachtree Parkway (2042)
  - Forum Drive and SR 141/Peachtree Parkway (2042)
  - E Jones Bridge Road/Medlock Bridge Road and SR 141/Peachtree Parkway (2022)
  - Wellington shopping center and SR 141/Peachtree Parkway (2022)
  - Wellington Lake Drive/Everett Court and SR 141/Peachtree Parkway (2042)
  - Ridgegate Drive and SR 141/Peachtree Parkway (2022)
  - Chattahoochee River Park and SR 141/Peachtree Parkway (2042)
  
- Alternative 2 - Six-Lane Median Divided, Conventional Intersection Improvements
  - Holcomb Bridge Road and SR 141/Peachtree Parkway (2042)
  - Pointe Parkway and SR 141/Peachtree Parkway (2022)
  - Jay Bird Alley/Technology Parkway and SR 141/Peachtree Parkway (2042)
  - Westech Drive and SR 141/Peachtree Parkway (2042)
  - Parkway Lane and SR 141/Peachtree Parkway (2042)
  - Engineering Drive and SR 141/Peachtree Parkway (2022)
  - Scientific Drive and SR 141/Peachtree Parkway (2022)
  - Spalding Drive and SR 141/Peachtree Parkway (2042)
  - Triangle Drive and SR 141/Peachtree Parkway (2022)
  - Technology Parkway and SR 141/Peachtree Parkway (2022)
  - U-turn median break and SR 141/Peachtree Parkway (2022)
  - Peachtree Corners Circle and SR 141/Peachtree Parkway (2042)
  - Wellington shopping center and SR 141/Peachtree Parkway (2022)
  - Ridgegate Drive and SR 141/Peachtree Parkway (2022)
  - Chattahoochee River Park and SR 141/Peachtree Parkway (2022)
  
- Alternative 3 - Four-Lane Median Divided, Innovative Intersection Improvements
  - Pointe Parkway and SR 141/Peachtree Parkway (2022)
  - Jay Bird Alley/Technology Parkway and SR 141/Peachtree Parkway (2042)
  - Spalding Drive and SR 141/Peachtree Parkway (2042)
  - Technology Parkway and SR 141/Peachtree Parkway (2042)
  - Peachtree Corners Circle and SR 141/Peachtree Parkway (2042)
  - E Jones Bridge Road/Medlock Bridge Road and SR 141/Peachtree Pkwy (2042)
  - Wellington shopping center and SR 141/Peachtree Parkway (2042)
  - Wellington Lake Drive/Everett Court and SR 141/Peachtree Parkway (2022)
  - Ridgegate Drive and SR 141/Peachtree Parkway (2022)
  - Chattahoochee River Park and SR 141/Peachtree Parkway (2042)

- Alternative 4 – Six-Lane Median Divided, Innovative Intersection Improvements
  - Pointe Parkway and SR 141/Peachtree Parkway (2022)
  - Technology Parkway and SR 141/Peachtree Parkway (2022)
  - Wellington Lake Drive/Everett Court and SR 141/Peachtree Parkway (2022)
  - Ridgegate Drive and SR 141/Peachtree Parkway (2022)
  - Chattahoochee River Park and SR 141/Peachtree Parkway (2022)
  
- Alternative 5 – Four-/Six-Lane Median Divided, Innovative Intersection Improvements
  - Pointe Parkway and SR 141/Peachtree Parkway (2022)
  - Technology Parkway and SR 141/Peachtree Parkway (2022)
  - Wellington Lake Drive/Everett Court and SR 141/Peachtree Parkway (2022)
  - Ridgegate Drive and SR 141/Peachtree Parkway (2022)
  - Chattahoochee River Park and SR 141/Peachtree Parkway (2042)

Based upon the information furnished, Alternative 4 – Six-Lane Median Divided, Innovative Intersection Improvements, provides the best overall results. However, for select intersections, Alternative 3 provides the best results from a safety standpoint. Therefore, **Alternative 5** incorporates the best-case scenarios from Alternatives 3 and 4 by intersection, where feasible. This alternative provides the best value of most acceptable levels of service with minimal impact on adjacent properties.

## 6. REFERENCES

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1. Synchro, Version 9, Trafficware Ltd., Sugar Land, TX, 2015.
2. Highway Capacity Manual, HCM 2000/2010, Transportation Research Board, Washington, DC, 2000/2010.