

Lowcountry Rapid Transit Microsimulation Model Draft Report

Future Year Conditions No Build and Build Model Development and Analysis

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Prepared for:

Berkeley-Charleston-Dorchester Council of Governments BCDCOG

1362 McMillan Ave #100 North Charleston, SC 29405

Prepared by:

Stantec Consulting Services Inc. Under Subcontract to HDR

4969 Centre Pointe Drive, Suite 200 North Charleston SC 29418



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Prepared by		
	(signature)	
Victoria Edington, PE	(0)	
Daviewed by		
Reviewed by		
	(signature)	
Sam Williams, PE		
,		
Approved by		
	(signature)	
Stuart Day, PE, PTOE	, ,	
Juan Duj, . L, . 10L		

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Executive Summary

The Berkeley-Charleston-Dorchester Council of Governments (BCDCOG) is planning a rapid transit project approximately 20 miles long between Charleston and Ladson to provide reliable connectivity between communities and to enhance economic opportunities in the area. The project, named Lowcountry Rapid Transit (LCRT), will include a proposed Bus Rapid Transit (BRT) system from the Ladson Fairgrounds to Downtown Charleston. The BRT system will consist of stations, park-and-ride, and transit hubs along the entire corridor. The BRT will operate on dedicated lanes along at least 51% of the corridor to improve transit reliability.

US 78/US 52/Rivers Ave provides a key connection between Summerville, North Charleston, and Charleston. The corridor experiences significant congestion during peak periods. The addition of a BRT system running on dedicated lanes is likely to have an impact on traffic operations along the corridor. To inform the development of the BRT system, operational traffic models were developed to establish the existing performance levels of the road network in order to benchmark against the proposed changes as part of the LCRT project.

Microsimulation models encompassing segments of US 17A/Main St, US 78/University Blvd, US 52/US 78/Rivers Ave, US 52/Meeting St, US 78/King St, and Calhoun St were developed. The models also include the freeway interchanges for I-26 at US 17A, I-26 at US 78/University Blvd, and I-526 at US 52/US 78/Rivers Ave. Cross streets are included along the BRT route, but are limited in scope to reduce the size and complexity of the simulation model. The traffic model was developed using VISSIM 11.00-12.

The Existing Conditions base model was calibrated and validated to replicate the 2018 base year traffic conditions for the morning (7:15–8:45 AM) and evening (4:30–6:00 PM) peaks. The calibration methodology and results can be found in the *Lowcountry Rapid Transit Microsimulation Modeling Existing Conditions Base Model Development and Calibration* (July 2019) report.

The Opening Year (2025) and Design Year (2045) models have now been completed. The No Build models incorporate committed projects apart from the LCRT that are expected to be completed by the Opening Year (2025). The Build models incorporate the proposed rapid transit route, which is comprised of sections of dedicated bus-only transit lanes and sections of mixed traffic transit vehicle operations. Traffic volumes and signal timing were updated for each model to match the appropriate future year and No Build/Build conditions.

Results were obtained from the Future Year models in the form of network performance, intersection operations, and travel times. Although the results indicate that there are areas of the study network that are negatively impacted by the implementation of the LCRT, there are also areas that benefit from the geometric and signal changes that come along with the BRT route. As the LCRT design is finalized, further refinement of intersection layouts, signal timing, and TSP parameters will be necessary to mitigate some of the negative impacts and improve operations for the general traffic as well as the LCRT.



Abbreviations

AADT Average Annual Daily Traffic

ATCS Adaptive Traffic Control System

BCDCOG Berkeley-Charleston-Dorchester Council of Governments

BRT Bus Rapid Transit

CARTA Charleston Area Regional Transportation Authority

CHATS Charleston Area Transportation Study

DTA Dynamic Traffic Assignment

FHWA Federal Highway Administration

HCM Highway Capacity Manual

HV Heavy Vehicle

LCRT Lowcountry Rapid Transit

LOS Level of Service

LV Light Vehicles

MOE Measure of Effectiveness

mph miles per hour

OD Origin-Destination

QA/QC Quality Assurance/Quality Control

RBC Ring-Barrier Controller

SCDOT South Carolina Department of Transportation

TSP Transit Signal Priority

VAP Vehicle Actuated Programming

vph vehicles per hour



Glossary

Capacity The maximum hourly rate at which persons or vehicles can

reasonably be expected to traverse a point, or uniform section of a lane or roadway, during a given time period under prevailing

roadway, traffic, and control conditions.

Latent Demand Traffic attempting to enter the network that is unable to do so due to

geometric constraints at the boundaries of the network. Also referred

to as "Volume Denied Entry".

Standard Deviation A measure of the dispersion of a set of data from its mean value,

calculated as the square root of the variance.

Throughput The number of distinct vehicles (or people) able to enter or exit the

system during the analysis period.

Transit Signal Priority A set of operational improvements that uses technology to reduce

dwell time at traffic signals for transit vehicles by shortening red

lights or holding green lights longer.

Travel Demand The number of vehicles or persons that would like to be served by a

transportation facility, such as a roadway segment or sidewalk,

during a specific time period.



Introduction

1.0 INTRODUCTION

This report details the future opening year (2025) and future design year (2045) No Build and Build microsimulation model results as well as a summary of the operations and overall conclusions of the study for the proposed Lowcountry Rapid Transit (LCRT) project. This project will include a proposed Bus Rapid Transit (BRT) system from the Ladson Fairgrounds to Downtown Charleston. The BRT system will consist of 28 individual stations, three park-and-ride lots, and transit hubs along the entire corridor.

The future year models were developed from the previously-calibrated base year models using PTV VISSIM Version 11.00-12. The process by which the base models were created and calibrated is described in the *Lowcountry Rapid Transit Microsimulation Modeling Existing Conditions Base Model Development and Calibration* (July 2019) report.

1.1 OBJECTIVE

The purpose of the microsimulation model is to quantify the time savings for transit riders of the LCRT and to evaluate the anticipated future traffic conditions both with and without the BRT line in place. Results from the microsimulation model will help inform the design process and the plan for the BRT operations before opening day.

1.2 STUDY AREA

The LCRT route is proposed to begin along US 78 north of I-26 near Exchange Park. It stretches southward along US 78/University Boulevard to US 52/Rivers Avenue, and then continues into downtown Charleston along US 78/King St Extension, US 52/Meeting Street, and Calhoun Street, eventually terminating in a location along Line Street adjacent to the future Phase 2 of the WestEdge development. The study area includes a total of 181 existing intersections. The model study area follows the full length of the proposed BRT corridor. **Figure 1.1** on the next page shows a map of the study area.

1.3 MODELING PERIODS

Both weekday morning (AM) and evening (PM) time periods were modeled as part of this project. The hours modeled for each time of day are listed in **Table 1.1**. For each peak, 90 minutes were included in the simulation for analysis, along with a 45-minute "seeding" or "warm-up" period. The seeding period is necessary to load the model with traffic before the start of the analysis period.

Table 1.1: Modeling Periods

Time of Day	Seeding Period	Analysis Period
Morning (AM)	6:30 - 7:15	7:15 – 8:45
Evening (PM)	3:45 – 4:30	4:30 - 6:00



Introduction



Figure 1.1: Study Area



Base Year (2018) Model

2.0 BASE YEAR (2018) MODEL

The Base Year (2018) calibrated model was completed in July 2019. That phase of the project is summarized in the *Lowcountry Rapid Transit Microsimulation Modeling Existing Conditions Base Model Development and Calibration* (July 2019) report.

2.1 DATA COLLECTION

The data collection for this project is discussed in detail in the *Lowcountry Rapid Transit (LCRT) Traffic Analysis Methodology Technical Memorandum* (December 2018) and its appendices. The following items are some of the key elements that were included in the data collection process and incorporated into the base model during its development:

- Aerial imagery: Bing Maps (comes standard with PTV VISSIM) was used as a background to develop the base model. Google Earth was used to supplement the data, as necessary.
- Turning movement traffic counts: Counts were collected in November and December 2018.
- **Origin-destination (OD) data:** Streetlight Data was used as a starting point for the base year OD matrix.
- Approach queue lengths: Queue data was collected in the field on typical weekdays during February and March 2019.
- **Bus routes, stops, and schedules:** Route and stop information, along with current bus schedules, were gathered from the Charleston Area Regional Transportation Authority (CARTA) website.
- **Vehicle travel times:** Existing field travel times were obtained from floating-car surveys and Bluetooth data using StreetLight Data for all nine sections.
- **Traffic control type:** Google Maps and local staff knowledge of the area was used to determine intersection control types.
- **Speed limits:** Google Maps and local staff knowledge of the area was used to determine existing speed limits.
- Traffic signal phasing and timing: The City of Charleston and South Carolina Department of Transportation (SCDOT) provided the modeling team with signal programming information. This included historical signal timing records for certain signals that use an Adaptive Traffic Control System (ATCS), such as US 17A from Richardson Ave to Sangaree Pkwy/Brighton Park Blvd.

2.2 BASE MODEL DEVELOPMENT

The development of the base year (2018) model is described in the *Lowcountry Rapid Transit Microsimulation Modeling Existing Conditions Base Model Development and Calibration* (July 2019) report. The first step in modeling the existing conditions is to build the physical network within VISSIM. All model elements, from geometry to traffic control, were based on the most recent information available.

In order to develop the volume inputs for both AM and PM for the base model, the model network layout and the balanced turning movement volumes were run through VISUM, PTV's macrosimulation modeling



Base Year (2018) Model

software, to produce a series of Origin-Destination (OD) matrices for each peak period. With the matrices entered into VISSIM, traffic volumes were distributed throughout the network using Dynamic Traffic Assignment (DTA). Convergence criteria consistent with FHWA's *Traffic Analysis Toolbox Volume III:* Guidelines for Applying Traffic Microsimulation Modeling Software (2004) were used to verify the success of the DTA process. Additional detail on the creation of OD matrices and DTA can be found in Section 2.4 of the Lowcountry Rapid Transit Microsimulation Modeling Existing Conditions Base Model Development and Calibration (July 2019) report.

2.3 BASE MODEL CALIBRATION AND RESULTS

During calibration, the modeling team modified certain parameters within the models to better replicate local existing conditions. Global model parameters are typically based on average values, which may vary significantly from local conditions that have unique geometry or driving behavior. The following measures of effectiveness (MOEs) were used to calibrate the base models:

- Traffic Volumes
- Corridor Travel Times
- Approach Queue Lengths

The modeling team adjusted a specific set of pre-selected model parameters during calibration to improve the model's ability to reproduce local driving behavior along the study corridors for the AM and PM models individually. Additional detail on the calibration of the base models can be found in **Section 3.0** of the *Lowcountry Rapid Transit Microsimulation Modeling Existing Conditions Base Model Development and Calibration* (July 2019) report. Intersection delay and level of service results can be found in **Section 4.0** of the same report.

The AM and PM base models both meet the calibration targets for the above MOEs to a satisfactory level. There is a high level of confidence that they accurately simulate the existing traffic operations. Following calibration, the models were determined to be suitable for estimating future performance.



Future Year Model Setup and Methodology

3.0 FUTURE YEAR MODEL SETUP AND METHODOLOGY

The Future Year (2025 and 2045) models were developed from the previously completed Base Year (2018) model. The new models included a number of changes to network geometry, traffic control, and traffic volumes to reflect the future conditions with or without the construction of the LCRT project.

3.1 FUTURE YEAR GEOMETRY

3.1.1 No Build Models

Three (3) existing and committed projects within the study area are anticipated to be completed prior to the Opening Year (2025) of this project. They were therefore integrated into the Future Year (2025 and 2045) No Build analyses. The following changes are expected to be made prior to 2025:

- University Blvd & Medical Plaza Dr
 - The northbound approach of Medical Plaza Dr will be widened from two (2) lanes to three (3) lanes, to include two left turn lanes and a shared through and right turn lane.
 - The signal timing at this intersection will be modified to take out the split phasing on the side street, allowing both the northbound and southbound approaches to operate at the same time.
- Rivers Ave & McMillan Ave
 - McMillan Ave will be narrowed from two (2) lanes in each direction to one (1) lane in each direction on both sides of Rivers Ave.
 - The northeast and southwest approaches on McMillan Ave will be modified to include one left turn pocket and one continuous shared through and right turn lane. The left turn pocket on each approach was coded into the VISSIM model to be approximately 200 ft long.
- Calhoun St & Courtenay Dr
 - The eastbound approach of Calhoun St will be widened from two (2) lanes to four (4) lanes, to include a left turn lane, two through lanes, and a right turn lane.
 - The southbound approach on Courtenay Dr will be widened to add a second right tune lane.

Roadway plans documenting the proposed improvements at Calhoun St & Courtenay Dr are provided in **Appendix A**. Roadway plans documenting the other changes are not currently available.

3.1.2 Build Models

The committed projects to modify operations at the three (3) intersections described above were also incorporated in the Future Year (2025 and 2045) Build models. Aside from the geometric changes carried over from the Future Year (2025 and 2045) No Build models, the primary changes to the model network for the Future Year (2025 and 2045) Build models come from the addition of the BRT.

For at least 51% of the corridor, the BRT will be provided with exclusive lanes that primarily run in the median of US 78/University Blvd and US 52/Rivers Ave. Through the US 52/US 78 interchange, the BRT exclusive lanes will transition to run along the outside of University Blvd and Rivers Ave, eliminating any



Future Year Model Setup and Methodology

potential conflicts with general traffic in the interchange. In four locations – near Rivers Ave & Reynolds Ave, near Rivers Ave & Durant Ave, near Rivers Ave & Melnick Dr, and along US 78/University Blvd between Ingleside Blvd and Medical Plaza Dr – the BRT operates in a single exclusive bi-directional lane. Hold signals at either end of each bi-directional segment prevent buses traveling in opposite directions from entering the single-lane segment at the same time.

In other areas of the network, such as downtown Charleston and along US 52/Rivers Ave near the I-526 interchange, the BRT will travel in mixed traffic. The project stakeholders have agreed to this plan for a variety of reasons, including operational concerns and right-of-way constraints. Even with certain areas operating in mixed traffic, the BRT will still utilize exclusive lanes for more than half of its route. As discussed further in **Section 3.2.2** below, Transit Signal Priority (TSP) was added into the model for all signals along the BRT route, whether the BRT is in exclusive lanes or in mixed traffic, to mitigate delays and improve the reliability of the BRT line. The general areas where the BRT operates in exclusive lanes and in mixed traffic are illustrated in **Figure 3.1**, below.

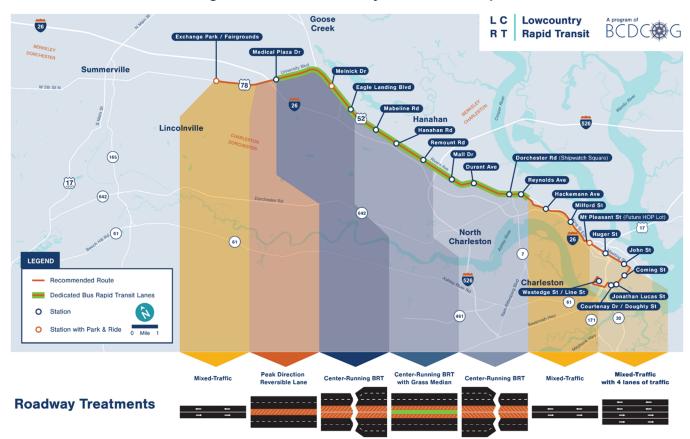


Figure 3.1: LCRT Roadway Treatments Map



Future Year Model Setup and Methodology

A total of 17 stations were included in the model along the BRT route in each direction. Several of the BRT stations in downtown Charleston, where the BRT travels in mixed traffic, will coincide with existing transit stops for other local bus routes. BRT buses were coded to stop at each station along the corridor for an average 20 seconds of dwell time. It is anticipated that station skipping will not occur in the LCRT system; therefore, the BRT buses were coded to always stop at the appropriate stations.

The approximate locations of each station included in the model, from south to north, are as follows:

- Calhoun St at Jonathan Lucas St/Barre St
- Calhoun St at Coming St
- Meeting St at John St (Visitors Center)
- Meeting St at US 17/Huger St
- Meeting St/King St at Mt Pleasant
- King St at Milford St
- King St at Hackemann Ave
- Rivers Ave at Reynolds Ave
- Rivers Ave at Dorchester Rd

- Rivers Ave at Durant Ave
- Rivers Ave at Mall Dr
- Rivers Ave at Remount Rd
- Rivers Ave at Hanahan Rd
- Rivers Ave at Mabeline Rd
- Rivers Ave at Eagle Landing Blvd
- Rivers Ave at Melnick Dr
- Rivers Ave at Medical Plaza Dr/BUC Club Blvd

Changes were made throughout the model network to accommodate the addition of the BRT, such as:

- turn pocket modifications (lengthening, adding additional lanes, etc.)
- restrictions to unsignalized mid-block left-turns across exclusive BRT lanes
- · additional U-turn opportunities at existing signals
- new/consolidated intersections with signal control

The Build design improvements include left-turn crossovers upstream of the main signal at three project intersections: Rivers Ave & Ashley Phosphate Rd, Rivers Ave & Morris Baker Blvd, and Rivers Ave & Remount Rd. The conflict between the BRT buses and vehicles entering the left turn pocket at these three locations will be controlled using signals. In the VISSIM model, Vehicle Actuated Programming (VAP) signals mimicking blank-out signs were used for the left-turn crossovers. A similar blank-out sign VAP signal controller was used at Rivers Ave & Otranto Blvd to control the conflict between the NB BRT buses in the curbside lane and the NB right-turn movement in the adjacent lane.

Future Year Build roadway plans illustrating the proposed improvements as of March 15, 2021, have been provided in **Appendix B**. A description of the specific geometric changes made along the BRT route in the VISSIM model network can be found in Error! Reference source not found. Please refer to the latest design files for detailed design review.

3.2 FUTURE YEAR TRAFFIC CONTROL

3.2.1 No Build Models

Future year signal timing was developed using Synchro software. Synchro models matching the Future Year No Build layout were created for both future years (2025 and 2045). Future turning movement volumes were estimated using the existing turning movement volumes and the same growth rates used to



Future Year Model Setup and Methodology

develop the Future Year (2025 and 2045) OD matrices, as discussed below in **Section 3.3**. In general, phase assignments, clearance intervals, and other basic signal settings from the existing conditions were maintained for the future years. If adjustments to the clearance intervals were needed, SCDOT standard intervals were used. For simplicity, all signals that previously operated in the Base Year (2018) model using an approximation of adaptive signal timing, as discussed in **Section 2.3.1** of the *Lowcountry Rapid Transit Microsimulation Modeling Existing Conditions Base Model Development and Calibration* (July 2019) report, were modified to use a single timing plan for each peak period model.

Signal timing for the entire model network was optimized for the Future Year (2025 and 2045) No Build conditions using Synchro's built in Cycle Length Analysis, Split Optimization, and Offset Optimization functions.

The signal timing information from the Future Year (2025 and 2045) No Build Synchro files was entered into ring-barrier controller (RBC) files for use in the Future Year (2025 and 2045) No Build VISSIM models. All relevant information was included, such as cycle lengths, splits, offsets, recall modes, clearance intervals, and pedestrian intervals.

3.2.2 Build Models

Signal timing for the Future Year Build models was also developed in Synchro, based on the files developed for the Future Year No Build scenario. Geometry, traffic volumes, and signal phasing were updated in Synchro to reflect the changes for the Build design. The signals along the LCRT corridor were then re-optimized for the new settings. In general, signals not located along the travel way of the BRT line kept the same signal timing for Build as was used in No Build.

The Build design improvements include three new signals and the removal of three traffic signals. These intersections are listed in **Table 3.1** on the next page. Basic signal timing settings, such as clearance intervals, for the three new signals highlighted in orange in the table were defined based on settings at neighboring signals. Signal timing for these intersections were developed in Synchro along with the rest of the LCRT corridor.

Table 3.1: Intersection Control Type Changes from No Build to Build

Intersection	Intersection		Control Type
Number	Intersection	No Build	Build
30	US 78 & I-26 WB Ramps	Unsignalized	Signalized
43	US 52/78/Rivers Ave & T-Mobile Dr	Signalized	Unsignalized
44	US 52/78/Rivers Ave & Melnick Dr	Unsignalized	Signalized
59	US 52/78/Rivers Ave & Stokes Ave	Signalized	Unsignalized
72	US 52/78/Rivers Ave & N of Sabal St	Unsignalized	Signalized
83	US 52/78/Rivers Ave & Alton	Signalized	Unsignalized



Future Year Model Setup and Methodology

The BRT generally operates parallel to the mainline through phases. This means that, along the parts of the LCRT corridor with exclusive BRT lanes in the median of the roadway, potential conflict points exist between the BRT and the left turns from the mainline. To preclude such conflicts, all left turns from the mainline across the exclusive BRT lanes will use protected phasing only. The impact of protected-only phasing on the left turn operations was taken into account as the Future Year Build signal timing was developed in Synchro.

In the Build models, Transit Signal Priority (TSP) was used along the BRT corridor to provide optimal service to the BRT buses while minimizing impacts to the general traffic. TSP was added to all signals that the BRT passes through, whether it is in exclusive lanes or mixed traffic. Check-in and check-out detectors were added to the model to trigger TSP when activated by a BRT bus. Check-in detectors were placed immediately downstream of the previous signal, or at a distance equating to roughly 30 seconds of travel time, whichever was closer. Travel times between the check-in detectors and their associated signals therefore ranged from approximately 10 to 30 seconds.

Per guidance from the design team, the use of partial TSP was preferred. This meant that no signal phases were allowed to be skipped in the attempt to provide a green indication to the BRT upon its arrival at the signal. Both Early Return (shortening phases in an attempt to return to serve the BRT phase early) and Green Extension (extending the BRT phase for a late arrival) were turned on in the TSP settings. The green extension limit was typically set at 20-25 seconds to avoid extending the BRT phase indefinitely to the detriment of serving other phases. Phases were allowed to be shortened to the minimum green time as the controller worked to return to the transit or to recover and return to coordination after a TSP call. Consecutive TSP calls were allowed.

3.3 FUTURE YEAR VOLUME DEVELOPMENT

The development of both opening year and design year traffic was based on an evaluation of traffic forecasts from the most current version of BCDCOG's regional traffic forecast model, Charleston Area Transportation Study (CHATS), along with an analysis of historical traffic growth rates. Future intersection turning movements were grown using a combination of travel demand forecast projections and historical growth trends. The procedure and recommended growth rates are discussed in this section.

3.3.1 Growth Rate Assumptions

The growth rates used to develop the matrices are discussed in detail in the *Lowcountry Rapid Transit* (*LCRT*) *Traffic Analysis Methodology Technical Memorandum* (December 2018). A combination of historical Average Annual Daily Traffic (AADT) data and travel demand model projections from BCDCOG's CHATS model were used to develop the growth assumptions. The overall growth rate used to estimate future volumes along the entire corridor was 1.0%.

However, three subareas along the proposed BRT route are expected to experience higher than average growth. The higher growth rates listed below were used to project the future volumes in these specific areas:



Future Year Model Setup and Methodology

Linear growth was assumed for all areas of the network for demand projection from the base year (2018) to the future year (2025 or 2045).

3.3.2 OD Matrix Development

OD matrices previously prepared for the base year VISSIM model were used to estimate future year OD matrices. The Base Year OD matrices were previously estimated using balanced turn volumes and the TFlowFuzzy algorithm provided within PTV VISUM.

To generate future year matrices, the Base Year (2018) OD matrices were grown by applying the appropriate growth rates depending on the geographic location of the origin zone. The resultant Future Year (2025 and 2045) OD matrices were back-checked by reviewing the average growth percentage of the destination zones. It was observed that the destination growth percent was well-aligned with the average annual growth rate of the zone.

Each 15-minute interval and vehicle type (light or heavy) combination required its own matrix, for a total of 18 matrices for each peak period. The size of the matrices depends upon the number of possible origin/destination zones that were coded into the model network. The Future Year (2025 and 2045) No Build and Build models each have a total of 362 zones.

It should be noted that both the No Build and Build models for each future year use the same set of OD matrices. Although some mode shift is likely to occur in the future with the opening of the BRT route, projections vary as to how large that mode shift might be. It was determined by the project team to use the most conservative approach and assume that no cars are taken out of the network as a result of adding the BRT line, in either the Opening Year (2025) or the Design Year (2045).

3.3.3 Dynamic Traffic Assignment

With the OD matrices entered in VISSIM, traffic volumes were assigned throughout the network using Dynamic Traffic Assignment (DTA). During DTA, traffic is assigned in the model network using the stochastic assignment (Kirchhoff) path choice model in each 15-minute interval. Due to the large scale of the network and the possibility of a large number of logical and illogical paths per OD pair, a cap of three paths between each OD pair was applied. "Travel time on paths" was used as the convergence criteria. The Future Year models reached convergence when the travel times on at least 80% of the OD paths varied by less than 25% from one simulation run to the next per 15-minute interval.



Future Year Model Setup and Methodology

3.4 FUTURE YEAR ADJUSTMENTS AND FINE-TUNING

Adjustments to model elements such as signal timing, lane change distances, and surcharges were made during the DTA process as the Future Year models were fine-tuned. A thorough QA/QC process was completed for each Future Year (2025 and 2045) No Build and Build model to ensure that the models were set up to be consistent with one another.

While completing the DTA process for the Future Year (2025 and 2045) models, it was determined that some adjustments were needed to help speed up the DTA process. Because the design now calls for the BRT line to terminate at the Ladson Fairgrounds on the north end, instead of continuing all the way into Summerville, the decision was made to "turn off" the Summerville area of the models. This was done in both the No Build and Build scenarios by deactivating all of the signals and removing all other types of traffic control north of the Fairgrounds. Vehicles still circulate through that part of the network, and interact with neighboring vehicles on the same link, but do not interact with any type of control or any conflicting vehicles. No evaluations of any of the traffic operations in the Summerville area have been completed for the Future Year (2025 and 2045) models, and as such, no results for that region of the network have been included in this report.



Opening Year (2025) Model Results

4.0 OPENING YEAR (2025) MODEL RESULTS

For the purposes of this study, the performance measures to be collected and compared include vehicle network throughput, intersection delay and level of service (LOS), and vehicle travel times. These metrics will be used to compare the future year scenarios amongst one another as well as to the Existing Conditions results.

Intersection delay results were extracted from the Opening Year (2025) No Build and Build models for 66 intersections and/or interchanges along the proposed BRT route between Ladson and downtown Charleston. Unless otherwise noted, the intersections included in the analysis are signalized in both the No Build and Build scenarios.

Six intersections, listed above in **Table 3.1**, see a change in control type from No Build to Build, either by adding a new signal or removing an existing one. Operations at each of those intersections were assessed using the applicable criteria, signalized or unsignalized, in each scenario. For the models in which they were unsignalized, they are marked with an asterisk in the delay and LOS results tables and charts throughout this report. Delay and LOS measurements were not collected for any intersections that are unsignalized in all scenarios.

The LOS criteria utilized in this study are based on the *Highway Capacity Manual* (HCM) thresholds for at-grade intersections. The relationships between average vehicle control delay and LOS as defined by the HCM are listed in **Table 4.1**.

LOS	Delay (s	sec/veh)
LUS	Signalized	Unsignalized
Α	≤ 10 sec	≤ 10 sec
В	10-20 sec	10-15 sec
С	20-35 sec	15-25 sec
D	35-55 sec	25-35 sec
Е	55-80 sec	35-50 sec
F	> 80 sec	> 50 sec

Table 4.1: HCM LOS Criteria for At-Grade Signalized Intersections

This model consists of a 90-minute analysis period for each peak period. Because the model network is very large, the single hour identified as the peak of the analysis period varies from location to location. The delay and LOS results, therefore, have been assessed using two overlapping one-hour intervals. These hourly intervals are as follows:

- AM Peak
 - 1st Hour = 7:15 8:15 am
 - 2nd Hour = 7:45 8:45 am

- PM Peak
 - 1st Hour = 4:30 5:30 pm
 - 2nd Hour = 5:00 6:00 pm



Opening Year (2025) Model Results

Several types of travel time measurements were collected in the Opening Year (2025) models. The first, referred to in this report as *Corridor Travel Time*, aligns with the travel time field data that was collected in 2018 and the travel time results produced by the Base Year (2018) models.

The corridor travel time segments align with the route that was the proposed BRT route at the time that field data was collected in 2018. The presumptive BRT route at that time, from Summerville to downtown Charleston, was broken down into a total of 10 segments for data collection and evaluation in the Base Year (2018) model. As mentioned above in **Section 3.4**, the Summerville area north of the BRT terminus at Ladson was "turned off" in the future year models, so Segments 1, 2, and 3 of the corridor travel time were removed from the Future Year (2025 and 2045) analysis.

The approximate limits of Segments 4 through 10 are listed below and illustrated on the next page in **Figure 4.1**. Average travel times for all vehicles along Segments 4 through 10 were collected in all scenarios of the VISSIM model and aggregated over the entire 90-minute analysis period. This allowed for an apples-to-apples comparison to be carried out across the board, from Existing Conditions to No Build and Build in both 2025 and 2045.

- Segment 4: US 78/University Blvd College Park Rd to Fernwood Dr
- Segment 5: US 78/University Blvd and US 52/Rivers Ave Fernwood Dr to Midland Park Rd
- Segment 6: US 52/Rivers Ave Midland Park Rd to McMillan Ave
- Segment 7: US 52/Rivers Ave and US 52/Meeting St McMillan Ave to Herbert St
- Segment 8: US 52/Meeting St Herbert St to Cedar St
- Segment 9: US 52/Meeting St Cedar St to Calhoun St
- Segment 10: Calhoun St US 52/Meeting St to Halsey Blvd

Note that parts of Segments 7 and 8 run along US 52/Meeting St between Rivers Ave and Mt Pleasant St. This section was part of the proposed BRT route at the time that field travel times were collected in 2018. BRT buses do not traverse this section in the Build models now that the BRT route travels instead along US 78/King St Extension between Rivers Ave and Mt Pleasant St.



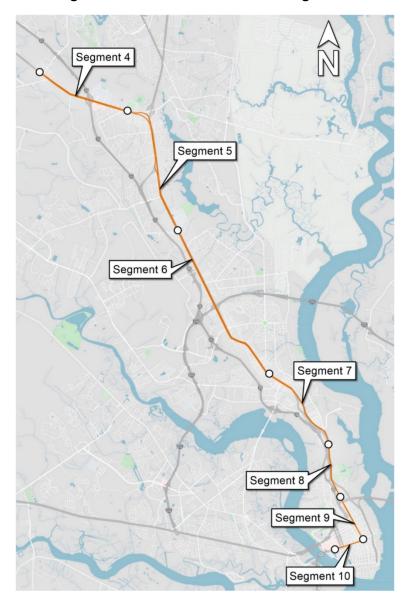


Figure 4.1: Corridor Travel Time Segments



Opening Year (2025) Model Results

The other types of travel time measurements discussed in this report are referred to under the heading of *BRT Travel Times*, and are only relevant to the Build scenarios. The average BRT travel times were also aggregated over the entire 90-minute analysis period.

Measurements were set up in the Build models to collect travel times just for the BRT buses from station to station. The start and end points of these measurements were placed in the model so as to exclude the station dwell time, while still generally capturing delays caused by traffic signals along the BRT route. In the example shown below in **Figure 4.2**, the end of the "Melnick to Medical Plaza" measurement leading into the Medical Plaza/BUC Club stop is shown in green and labeled "A", while the start of the "Medical Plaza to Fairgrounds" measurement is shown in blue and labeled "B". The time that the buses spend between "A" and "B" is not captured in the station-to-station BRT travel time.

In order to properly identify the benefit that the exclusive lanes and use of TSP provide to the BRT, separate, parallel, measurements were also set up in the general-purpose lanes. By setting the start and end points of the measurements at approximately the same spots, the general traffic travel times can be compared to the BRT travel times in a meaningful way. In the example below, the end of the "Melnick to Medical Plaza" general traffic measurement is labeled "a" and the start of the "Medical Plaza to Fairgrounds" general traffic measurement is labeled "b"; they each align with the associated BRT travel time measurements "A" and "B". The time that the general traffic spends between "a" and "b" is not captured in the station-to-station general traffic travel time.

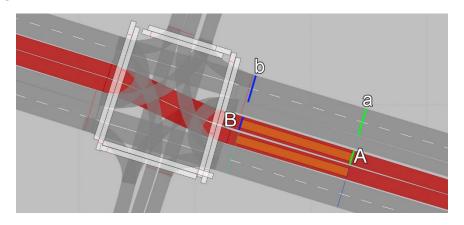


Figure 4.2: Station-to-Station BRT Travel Time Measurement Example

With 17 BRT stations located along the corridor, a total of 18 BRT travel time measurements were collected in each direction for each vehicle group (BRT buses and general traffic). These segments, demarcated by the BRT stations, are identified in **Figure 4.3** on the next page. Unlike the corridor travel time segments, the BRT travel time segments do follow the proposed BRT route along US 78/King St Extension between Rivers Ave and Mt Pleasant St.

The station-to-station BRT travel time measurements cannot be added up to calculate a total travel time along the entire BRT route because of the gaps left between the measurements to exclude the length of each station and its associated dwell time. This is true even for the parallel general traffic travel times, which also have a gap between measurements to mimic the BRT measurements as closely as possible.



Opening Year (2025) Model Results

Therefore, total travel times along the BRT route, including the dwell times at the stations, had to be collected separately. Because of the large scale of the network, no general vehicles and fewer than 10 buses are actually able to traverse the entire length of the network within the 90-minute analysis period. With that in mind, additional travel times along the BRT route were collected using shorter segments that were then added up to calculate the total for both BRT buses and general traffic. To be clear, the segments used for this method do not align with either the corridor travel time segments (which follow US 52/Meeting St into downtown instead of US 78/King St Extension) or the station-to-station measurements (which included gaps at the location of each station). The totals presented in this report for travel time along the BRT route, whether for BRT buses or for general traffic, are not equal to the sum of the station-to-station travel times.

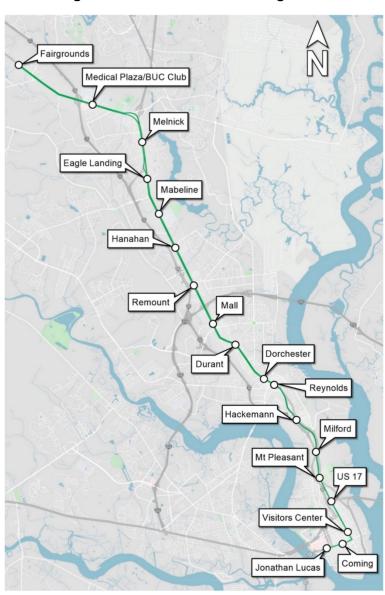


Figure 4.3: BRT Travel Time Segments



Opening Year (2025) Model Results

4.1 OPENING YEAR (2025) NO BUILD MODEL

113.16

Average

20

Network performance results for all six runs of the AM and PM peak models were examined to ensure that no outliers were recorded. **Table 4.2**, below, presents network-level results for both the AM and PM peak periods. These values are presented for each of the six runs, as well as the average of all the runs.

AM Peak PM Peak Average **Average** Total Average **Average Total** Run# Seed Seed **Travel Time Travel Time** Delay Speed Delay Speed Number Number (sec/veh) (mph) (hrs) (sec/veh) (mph) (hrs) 106.51 1 42 20 7,163 42 130.86 18 9,490 2 47 120.73 19 7,539 47 125.45 18 9,320 3 52 111.15 20 7,274 52 133.28 17 9,539 4 19 7,457 9,433 57 117.35 57 128.33 18 5 62 113.68 20 7,343 62 131.72 18 9,521 6 67 109.55 20 7,257 67 126.61 18 9,349

Table 4.2: Opening Year (2025) No Build Network Performance Summary

The study area experiences heavy congestion during both the Opening Year (2025) No Build AM and PM peak periods. While some vehicles are unable to enter the network due to downstream congestion, the volume that is denied entry comprises less than 1 percent of the overall Opening Year (2025) demand for both AM and PM, as shown below in **Table 4.3**. Although spillbacks may occur throughout the network, prominent locations where spillbacks happen in these models include Ingleside Blvd and Morrison Dr.

7,339

Average

129.37

18

9,442

Table 4.3: Opening Year (2025) No Build Model Throughput Volume

	AM Peak	PM Peak
Processed Demand	97,784	123,187
Volume Denied Entry	373	1,047
% Volume Served	99.62%	99.16%

All of the results presented hereafter for Opening Year (2025) No Build are the average of all six runs. Full results for both the AM and PM Opening Year (2025) No Build models are available in **Appendix D**.

4.1.1 Opening Year (2025) No Build Intersection Delay and LOS

The intersection delay and LOS results throughout the study area for Opening Year (2025) No Build are displayed on the next pages in **Table 4.4** and **Figure 4.4** for AM and in **Table 4.5** and **Figure 4.5** for PM. Out of the 66 intersections included in the LOS analysis, three (3) are expected to operate at LOS E or F in the AM peak, while four (4) are predicted to operate at LOS E or F in the PM peak.



Table 4.4: Opening Year (2025) No Build Intersection Delay and LOS for AM Peak

Node	Node Intersection Name		1 st Hour (7:15 – 8:15 am)			2 nd Hour (7:45 – 8:45 am)		
No.	Intersection Name	Volume	Delay	LOS	Volume	Delay	LOS	
22	US 78 & Ladson Rd/College Park Rd	2,793	63.3	Е	2,774	43.9	D	
23	US 78 & Ladson Rd/Ancrum Rd	3,284	52.9	D	3,182	54.2	D	
27	US 78 & Ingleside Blvd	4,290	46.0	D	4,123	47.3	D	
29	US 78 & I-26 EB Ramps	4,095	9.9	Α	3,982	13.7	В	
30	US 78 & I-26 WB Ramps *	3,540	23.6	С	3,498	33.7	D	
31	US 78/University Blvd & Medical Plaza Dr	4,989	31.4	С	5,052	35.6	D	
34	US 78/University Blvd & Medical Plaza Dr/BUC Club	4,445	19.8	В	4,475	22.7	С	
37	US 78/University Blvd & Elms Center Rd	4,252	17.8	В	4,200	18.4	В	
38	US 78/University Blvd & Fernwood Dr	4,072	11.8	В	3,925	10.8	В	
42	US 52/78/Rivers Ave & Otranto Rd/Otranto Blvd	6,820	45.7	D	6,877	45.7	D	
43	US 52/78/Rivers Ave & T Mobile Dr	6,585	11.7	В	6,599	15.0	В	
44	US 52/78/Rivers Ave & Melnick Dr *	6,610	26.0	D	6,600	33.4	D	
46	US 52/78/Rivers Ave & Greenridge Rd	7,518	44.6	D	7,654	47.2	D	
49	US 52/78/Rivers Ave & North Rivers Market Place	3,581	2.0	Α	3,681	2.9	Α	
50	US 52/78/Rivers Ave & Eagle Landing Blvd	3,871	15.4	В	3,840	14.3	В	
51	US 52/78/Rivers Ave & Northwood Blvd	3,940	8.5	Α	3,894	9.5	Α	
52	US 52/78/Rivers Ave & Ashley Phosphate	4,951	52.8	D	4,907	67.9	E	
54	US 52/78/Rivers Ave & Morris Baker Blvd	4,675	9.1	Α	4,636	9.5	Α	
56	US 52/78/Rivers Ave & Mabeline Rd	4,945	11.0	В	4,721	10.1	В	
59	US 52/78/Rivers Ave & Stokes Ave	4,484	8.3	Α	4,333	8.0	Α	
60	US 52/78/Rivers Ave & Midland Park Rd	4,775	20.3	С	4,667	23.6	С	
61	US 52/78/Rivers Ave & Eagle Dr	4,459	3.1	Α	4,320	2.8	Α	
62	US 52/78/Rivers Ave & Hanahan Rd	4,608	9.1	Α	4,483	9.8	Α	
65	US 52/78/Rivers Ave & Benderson Dr	4,040	4.4	Α	3,991	5.9	Α	
67	US 52/78/Rivers Ave & Aviation Ave	4,512	24.5	С	4,541	26.3	С	
70	US 52/78/Rivers Ave & Remount Rd	5,472	70.1	Е	5,503	66.4	E	
72	US 52/78/Rivers Ave & N of Sabal St *	3,752	8.0	Α	3,707	0.9	Α	
76	US 52/78/Rivers Ave & Harley St	3,847	5.8	Α	3,868	5.3	Α	
78	US 52/78/Rivers Ave & I-526 WB Ramps	4,148	4.2	Α	4,313	4.4	Α	
79	US 52/78/Rivers Ave & I-526 EB Ramps	3,501	4.7	Α	3,669	4.3	Α	
82	US 52/78/Rivers Ave & Mall Dr	2,463	6.2	Α	2,821	7.3	Α	
83	US 52/78/Rivers Ave & Alton	2,071	2.3	Α	2,285	2.8	Α	
84	US 52/78/Rivers Ave & Morningside Dr	2,074	9.4	Α	2,287	8.9	Α	
87	US 52/78/Rivers Ave & Piggly Wiggly Dr	1,887	4.4	Α	2,061	4.4	Α	

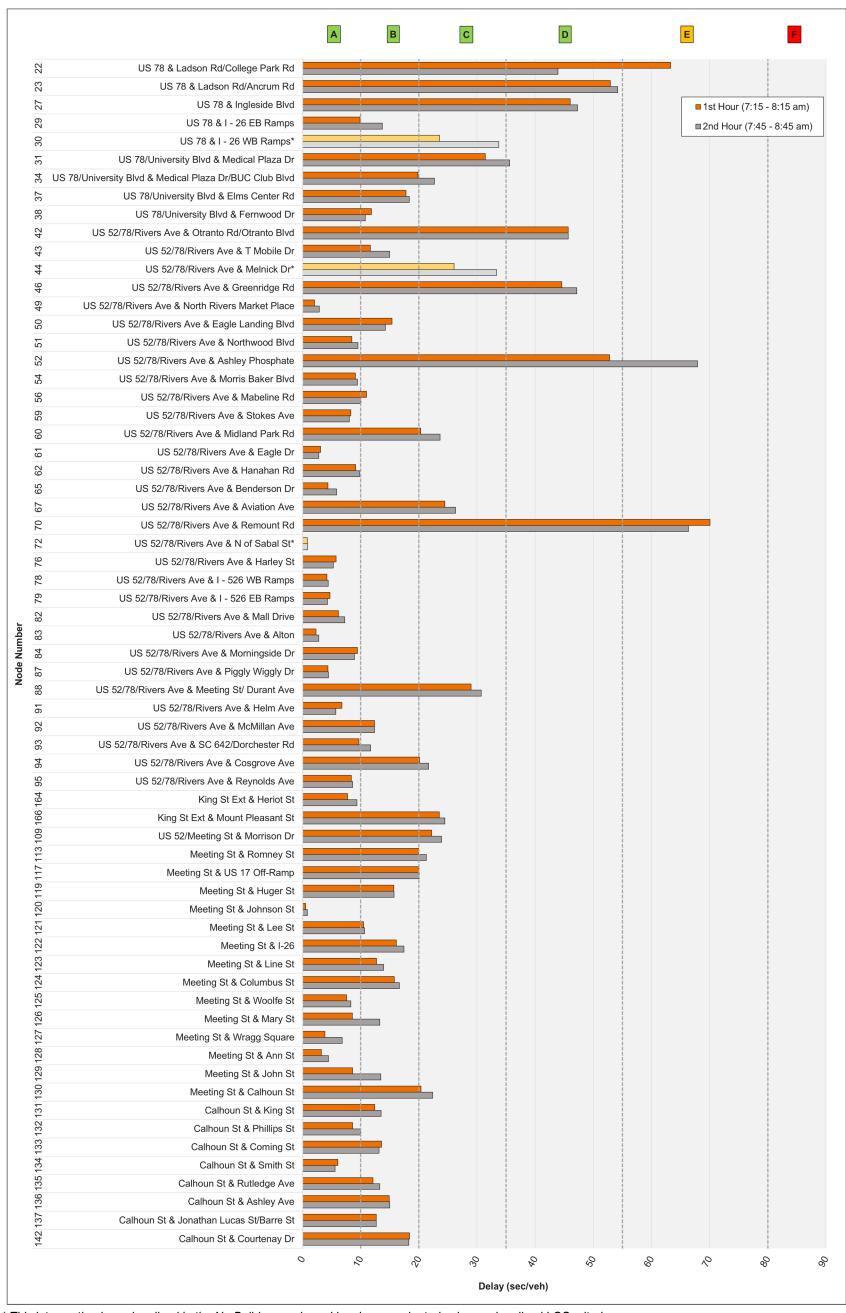


Node	L. Company of the Manager	1 st Hour	(7:15 – 8:	15 am)	2 nd Hour	r (7:45 – 8:	45 am)
No.	Intersection Name	Volume	Delay	LOS	Volume	Delay	LOS
88	US 52/78/Rivers Ave & Meeting St/Durant Ave	2,054	29.0	С	2,131	30.7	С
91	US 52/78/Rivers Ave & Helm Ave	1,454	6.8	Α	1,542	5.7	Α
92	US 52/78/Rivers Ave & McMillan Ave	1,926	12.4	В	2,020	12.4	В
93	US 52/78/Rivers Ave & SC 642/Dorchester Rd	1,648	9.7	Α	1,785	11.7	В
94	US 52/78/Rivers Ave & Cosgrove Ave	2,625	20.1	С	2,795	21.7	С
95	US 52/78/Rivers Ave & Reynolds Ave	1,232	8.4	Α	1,239	8.6	Α
164	King St Ext & Heriot St	1,001	7.7	Α	1,124	9.3	Α
166	King St Ext & Mount Pleasant St	2,346	23.5	С	2,427	24.5	С
109	US 52/Meeting St & Morrison Dr	2,578	22.2	С	2,743	23.9	С
113	Meeting St & Romney St	1,372	20.0	В	1,432	21.3	С
117	Meeting St & US 17 Off-Ramp	1,735	20.0	С	1,759	20.1	С
119	Meeting St & Huger St	1,902	15.7	В	1,876	15.7	В
120	Meeting St & Johnson St	1,097	0.5	Α	1,138	0.8	Α
121	Meeting St & Lee St	1,159	10.5	В	1,189	10.7	В
122	Meeting St & I-26	2,037	16.1	В	2,107	17.5	В
123	Meeting St & Line St	2,072	12.7	В	2,176	13.9	В
124	Meeting St & Columbus St	2,107	15.8	В	2,244	16.6	В
125	Meeting St & Woolfe St	1,719	7.6	Α	1,842	8.3	Α
126	Meeting St & Mary St	1,489	8.6	Α	1,585	13.3	В
127	Meeting St & Wragg Square	1,250	3.8	Α	1,299	6.8	Α
128	Meeting St & Ann St	1,180	3.2	Α	1,295	4.5	Α
129	Meeting St & John St	1,293	8.6	Α	1,455	13.5	В
130	Meeting St & Calhoun St	1,897	20.4	С	2,192	22.4	С
131	Calhoun St & King St	1,297	12.4	В	1,520	13.5	В
132	Calhoun St & Phillips St	1,235	8.6	Α	1,445	10.0	В
133	Calhoun St & Coming St	1,598	13.6	В	1,796	13.2	В
134	Calhoun St & Smith St	1,309	6.1	Α	1,454	5.6	Α
135	Calhoun St & Rutledge Ave	1,822	12.1	В	2,006	13.3	В
136	Calhoun St & Ashley Ave	1,849	14.9	В	1,974	15.0	В
137	Calhoun St & Jonathan Lucas St/Barre St	1,764	12.7	В	1,915	12.7	В
142	Calhoun St & Courtenay Dr	2,296	18.4	В	2,474	18.3	В

^{*} This intersection is unsignalized in the No Build scenario and has been evaluated using unsignalized LOS criteria.



Figure 4.4: Opening Year (2025) No Build Intersection Delay and LOS for AM Peak



^{*} This intersection is unsignalized in the No Build scenario and has been evaluated using unsignalized LOS criteria.



Table 4.5: Opening Year (2025) No Build Intersection Delay and LOS for PM Peak

Node	Node		1 st Hour (4:30 – 5:30 pm)			2 nd Hour (5:00 – 6:00 pm)		
No.	Intersection Name	Volume	Delay	LOS	Volume	Delay	LOS	
22	US 78 & Ladson Rd/College Park Rd	2,871	31.2	С	3,151	46.5	D	
23	US 78 & Ladson Rd/Ancrum Rd	3,907	54.6	D	4,152	64.2	Е	
27	US 78 & Ingleside Blvd	3,974	86.8	F	4,215	97.7	F	
29	US 78 & I-26 EB Ramps	4,012	9.8	Α	4,036	15.5	В	
30	US 78 & I-26 WB Ramps *	2,787	1.8	Α	3,055	7.1	Α	
31	US 78/University Blvd & Medical Plaza Dr	4,001	32.8	C	4,270	34.5	С	
34	US 78/University Blvd & Medical Plaza Dr/BUC Club	3,485	23.6	C	3,856	24.9	С	
37	US 78/University Blvd & Elms Center Rd	3,250	19.5	В	3,593	22.3	С	
38	US 78/University Blvd & Fernwood Dr	3,053	6.9	Α	3,432	10.0	В	
42	US 52/78/Rivers Ave & Otranto Rd/Otranto Blvd	6,877	40.7	D	7,654	47.1	D	
43	US 52/78/Rivers Ave & T Mobile Dr	6,422	30.1	С	7,108	33.8	С	
44	US 52/78/Rivers Ave & Melnick Dr *	6,323	21.4	С	7,106	32.7	D	
46	US 52/78/Rivers Ave & Greenridge Rd	7,788	35.3	D	8,502	47.8	D	
49	US 52/78/Rivers Ave & North Rivers Market Place	4,523	15.8	В	5,076	14.4	В	
50	US 52/78/Rivers Ave & Eagle Landing Blvd	4,586	16.7	В	5,200	17.6	В	
51	US 52/78/Rivers Ave & Northwood Blvd	4,673	24.0	С	5,332	28.4	С	
52	US 52/78/Rivers Ave & Ashley Phosphate	6,176	41.1	D	6,809	47.4	D	
54	US 52/78/Rivers Ave & Morris Baker Blvd	5,081	17.8	В	5,384	21.1	С	
56	US 52/78/Rivers Ave & Mabeline Rd	4,663	20.0	В	4,949	25.4	С	
59	US 52/78/Rivers Ave & Stokes Ave	4,261	13.2	В	4,404	15.7	В	
60	US 52/78/Rivers Ave & Midland Park Rd	4,708	32.8	C	4,807	34.5	С	
61	US 52/78/Rivers Ave & Eagle Dr	4,551	21.5	C	4,604	20.8	С	
62	US 52/78/Rivers Ave & Hanahan Rd	4,769	20.0	В	4,761	18.1	В	
65	US 52/78/Rivers Ave & Benderson Dr	4,530	3.9	Α	4,531	3.8	Α	
67	US 52/78/Rivers Ave & Aviation Ave	4,856	23.3	C	4,783	24.5	С	
70	US 52/78/Rivers Ave & Remount Rd	5,368	67.1	Е	5,399	73.1	E	
72	US 52/78/Rivers Ave & N of Sabal St *	3,598	7.1	Α	3,568	11.1	В	
76	US 52/78/Rivers Ave & Harley St	3,771	7.2	Α	4,041	10.4	В	
78	US 52/78/Rivers Ave & I-526 WB Ramps	4,249	4.5	Α	4,558	5.6	Α	
79	US 52/78/Rivers Ave & I-526 EB Ramps	4,132	8.3	Α	4,201	8.3	Α	
82	US 52/78/Rivers Ave & Mall Dr	3,122	9.0	Α	3,129	8.6	Α	
83	US 52/78/Rivers Ave & Alton	2,884	3.2	Α	2,840	3.1	Α	
84	US 52/78/Rivers Ave & Morningside Dr	2,792	11.8	В	2,801	12.5	В	
87	US 52/78/Rivers Ave & Piggly Wiggly Dr	2,612	4.5	Α	2,648	5.0	Α	

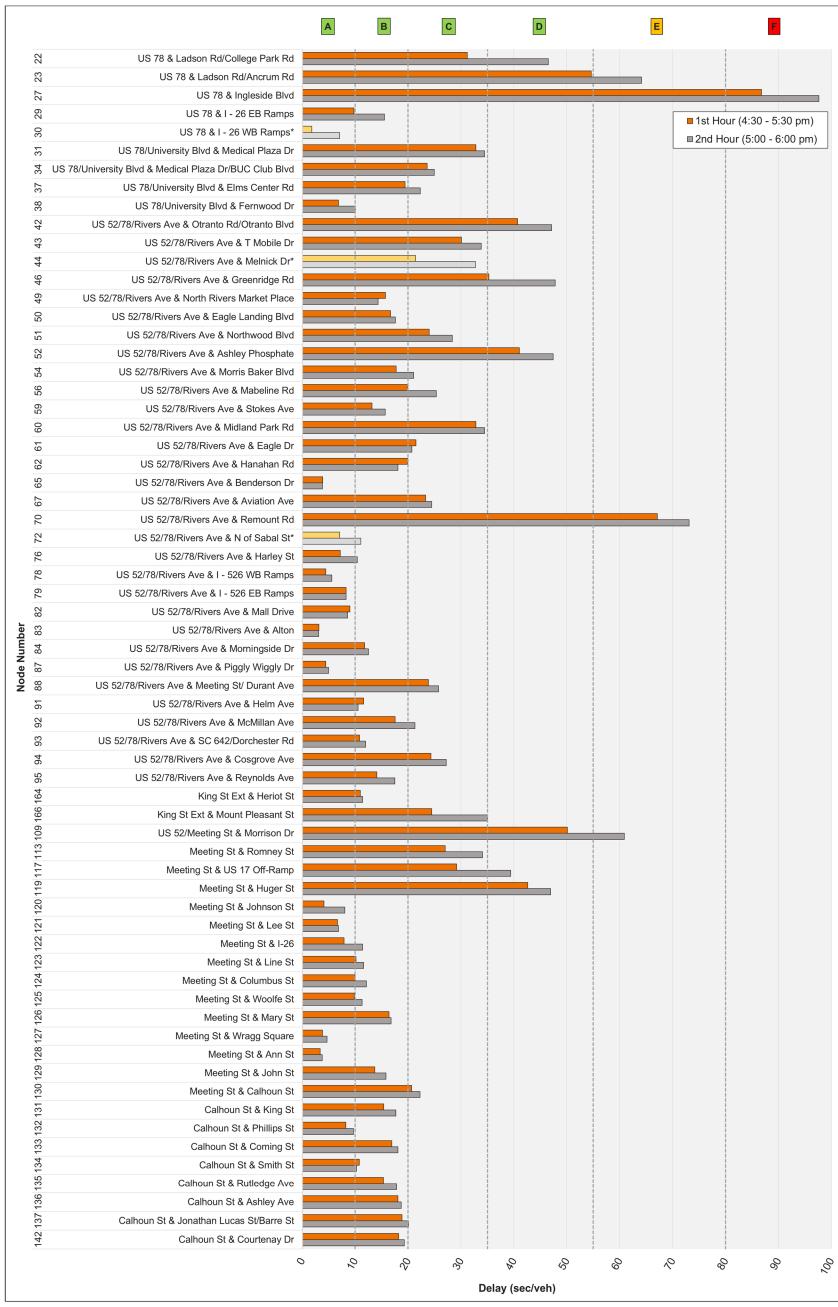


Node		1 st Hour (4:30 – 5:30 pm)		30 pm)	2 nd Hour (5:00 – 6:00 pm)			
No.	Intersection Name	Volume	Delay	LOS	Volume	Delay	LOS	
88	US 52/78/Rivers Ave & Meeting St/Durant Ave	3,053	23.9	С	3,120	25.8	С	
91	US 52/78/Rivers Ave & Helm Ave	2,258	11.6	В	2,265	10.6	В	
92	US 52/78/Rivers Ave & McMillan Ave	2,818	17.6	В	2,951	21.3	С	
93	US 52/78/Rivers Ave & SC 642/Dorchester Rd	2,480	10.9	В	2,488	12.0	В	
94	US 52/78/Rivers Ave & Cosgrove Ave	3,670	24.4	С	3,659	27.2	С	
95	US 52/78/Rivers Ave & Reynolds Ave	1,921	14.1	В	1,977	17.5	В	
164	King St Ext & Heriot St	1,342	11.0	В	1,403	11.4	В	
166	King St Ext & Mount Pleasant St	2,377	24.5	С	2,558	35.0	D	
109	US 52/Meeting St & Morrison Dr	2,897	50.1	D	2,988	60.9	Е	
113	Meeting St & Romney St	1,640	27.0	С	1,640	34.1	С	
117	Meeting St & US 17 Off-Ramp	1,964	29.2	С	2,100	39.4	D	
119	Meeting St & Huger St	2,490	42.6	D	2,627	47.0	D	
120	Meeting St & Johnson St	1,476	4.1	Α	1,568	8.1	Α	
121	Meeting St & Lee St	1,590	6.7	Α	1,667	6.8	Α	
122	Meeting St & I-26	2,097	7.9	Α	2,273	11.4	В	
123	Meeting St & Line St	2,221	10.2	В	2,346	11.6	В	
124	Meeting St & Columbus St	2,310	10.0	Α	2,448	12.1	В	
125	Meeting St & Woolfe St	1,954	9.8	Α	2,030	11.3	В	
126	Meeting St & Mary St	1,726	16.4	В	1,737	16.8	В	
127	Meeting St & Wragg Square	1,389	3.8	Α	1,383	4.7	Α	
128	Meeting St & Ann St	1,378	3.4	Α	1,366	3.8	Α	
129	Meeting St & John St	1,532	13.7	В	1,561	15.8	В	
130	Meeting St & Calhoun St	2,489	20.7	С	2,542	22.3	С	
131	Calhoun St & King St	1,767	15.4	В	1,891	17.7	В	
132	Calhoun St & Phillips St	1,611	8.3	Α	1,694	9.7	Α	
133	Calhoun St & Coming St	2,154	17.0	В	2,227	18.1	В	
134	Calhoun St & Smith St	1,747	10.8	В	1,746	10.3	В	
135	Calhoun St & Rutledge Ave	2,248	15.4	В	2,336	17.9	В	
136	Calhoun St & Ashley Ave	2,236	18.1	В	2,261	18.7	В	
137	Calhoun St & Jonathan Lucas St/Barre St	2,199	18.9	В	2,233	20.1	С	
142	Calhoun St & Courtenay Dr	2,754	18.3	В	2,809	19.3	В	

^{*} This intersection is unsignalized in the No Build scenario and has been evaluated using unsignalized LOS criteria.



Figure 4.5: Opening Year (2025) No Build Intersection Delay and LOS for PM Peak



^{*} This intersection is unsignalized in the No Build scenario and has been evaluated using unsignalized LOS criteria.



Opening Year (2025) Model Results

4.1.2 Opening Year (2025) No Build Corridor Travel Times

The results of the corridor travel time measurements are presented here for the Opening Year (2025) No Build. **Table 4.6** and **Figure 4.6** illustrate the travel times for the AM peak, while **Table 4.7** and **Figure 4.7** illustrate the travel times for the PM peak. Both northbound (from downtown Charleston to Ladson) and southbound (from Ladson to downtown Charleston) are included.

Table 4.6: Opening Year (2025) No Build Corridor Travel Time for AM Peak

Segment		Segment	Northbou	ınd Direction	Southbound Direction		
		Length (miles)	Travel Time (min)	Average Speed (mph)	Travel Time (min)	Average Speed (mph)	
Ladson	Segment 4	2.9	9.3	19	8.7	20	
	Segment 5	4.2	8.7	29	11.6	22	
	Segment 6	5.3	12.9	24	12.6	25	
	Segment 7	3.0	8.5	21	7.0	26	
	Segment 8	1.6	4.2	23	3.9	25	
	Segment 9	1.5	5.0	17	5.8	15	
Charleston Segment 10		0.9	4.0	14	4.5	12	
Total		19.4	52.5	22	54.1	21	

Figure 4.6: Opening Year (2025) No Build Corridor Travel Time for AM Peak

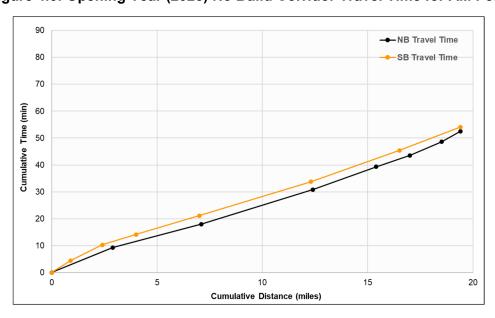
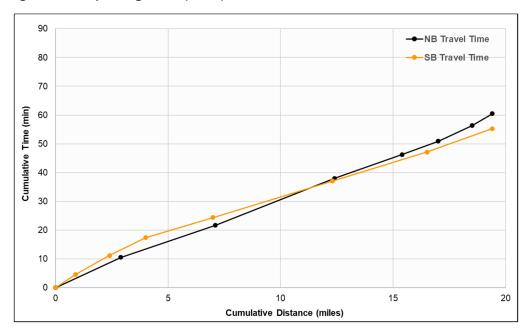




Table 4.7: Opening Year (2025) No Build Corridor Travel Time for PM Peak

Segment		Segment	Northbou	ınd Direction	Southbound Direction		
		Length (miles)	Travel Time (min)	Average Speed (mph)	Travel Time (min)	Average Speed (mph)	
Ladson	Segment 4	2.9	10.5	17	8.1	21	
	Segment 5	4.2	11.2	23	10.0	25	
	Segment 6	5.3	16.3	19	12.7	25	
Segment 7		3.0	8.3	22	7.0	26	
	Segment 8	1.6	4.6	21	6.2	16	
	Segment 9	1.5	5.4	16	6.6	13	
Charleston Segment 10		0.9	4.1	13	4.6	12	
Total		19.4	60.4	19	55.2	21	

Figure 4.7: Opening Year (2025) No Build Corridor Travel Time for PM Peak



Opening Year (2025) Model Results

4.2 OPENING YEAR (2025) BUILD MODEL

Network performance results for all six runs of the AM and PM peak models were examined to ensure that no outliers were recorded. **Table 4.8**, below, presents network-level results for both the AM and PM peak periods. These values are presented for each of the six runs, as well as the average of all the runs.

	AM Peak				PM Peak					
Run #	Seed Number	Average Delay (sec/veh)	Average Speed (mph)	Total Travel Time (hrs)	Seed Number	Average Delay (sec/veh)	Average Speed (mph)	Total Travel Time (hrs)		
1	42	180.51	16	8,978	42	160.00	16	10,447		
2	47	176.62	16	8,912	47	170.79	15	10,771		
3	52	174.85	16	8,834	52	163.96	16	10,534		
4	57	182.02	16	9,049	57	161.57	16	10,521		
5	62	174.58	16	8,842	62	162.29	16	10,500		
6	67	186.25	15	9,152	67	162.92	16	10,517		
	Average	179.14	16	8.961	Average	163.59	16	10.548		

Table 4.8: Opening Year (2025) Build Network Performance Summary

The study area experiences heavy congestion during both the Opening Year (2025) Build AM and PM peak periods. Some vehicles are unable to enter the network due to downstream congestion, resulting in approximately 3 percent of the overall demand in the AM model and approximately 2 percent of the overall demand in the PM model being denied entry, as shown below in **Table 4.9**. Spillbacks occur throughout the model, but are most prominent in locations such as Morrison Dr and Goose Creek Rd at the US 52/US 78 interchange. These results are slightly worse than those for the Opening Year (2025) No Build model, but do not appear to indicate any significant negative impacts to the overall network caused solely by the addition of the BRT in the Opening Year (2025).

Table 4.9: Opening Year (2025) Build Model Throughput Volume

	AM Peak	PM Peak
Processed Demand	95,841	122,122
Volume Denied Entry	3,013	2,718
% Volume Served	96.95%	97.82%

All of the results presented hereafter for Opening Year (2025) Build are the average of all six runs. Full results for both the AM and PM Opening Year (2025) Build models are available in **Appendix E**.

4.2.1 Opening Year (2025) Build Intersection Delay and LOS

The intersection delay and LOS results throughout the study area for Opening Year (2025) Build are displayed on the next pages in **Table 4.10** and **Figure 4.8** for AM and in **Table 4.11** and **Figure 4.9** for



Opening Year (2025) Model Results

PM. Out of the 66 intersections included in the LOS analysis, eight (8) are expected to operate at LOS E or F in the AM peak, while eleven (11) are predicted to operate at LOS E or F in the PM peak.

Table 4.10: Opening Year (2025) Build Intersection Delay and LOS for AM Peak

Node	Interception Name	1 st Hour	(7:15 – 8:	15 am)	2 nd Hour (7:45 – 8:45 am)		
No.	Intersection Name	Volume	Delay	LOS	Volume	Delay	LOS
22	US 78 & College Park Rd	2,710	76.9	Е	2,738	78.6	E
23	US 78 & Ladson Rd/Ancrum Rd	3,269	57.3	Е	3,012	84.3	F
27	US 78 & Ingleside Blvd	3,921	61.8	Е	3,561	89.0	F
29	US 78 & I-26 EB Ramps	3,477	24.2	С	3,227	36.6	D
30	US 78 & I-26 WB Ramps	4,684	55.7	Е	4,570	65.1	E
31	US 78/University Blvd & Medical Plaza Dr	4,376	34.1	С	4,380	40	D
34	US 78/University Blvd & Medical Plaza Dr/BUC Club	3,887	31.1	С	3,928	32.4	С
37	US 78/University Blvd & Elms Center Rd	3,754	45.2	D	3,600	42.1	D
38	US 78/University Blvd & Fernwood Dr	3,627	80.8	F	3,376	87.7	F
42	US 52/78/Rivers Ave & Otranto Rd/Otranto Blvd	5,952	87	F	5,844	100.5	F
43	US 52/78/Rivers Ave & T Mobile Dr *	5,776	31.8	D	5,614	45.7	Е
44	US 52/78/Rivers Ave & Melnick Dr	5,819	33.3	С	5,584	42.9	D
46	US 52/78/Rivers Ave & Greenridge Rd	6,895	42	D	6,824	43.6	D
49	US 52/78/Rivers Ave & North Rivers Market Place	3,405	8.1	Α	3,445	10.1	В
50	US 52/78/Rivers Ave & Eagle Landing Blvd	3,603	15.2	В	3,568	14	В
51	US 52/78/Rivers Ave & Northwood Blvd	3,682	15.7	В	3,646	18.4	В
52	US 52/78/Rivers Ave & Ashley Phosphate	4,748	41.5	D	4,789	42.7	D
54	US 52/78/Rivers Ave & Morris Baker Blvd	4,492	15.7	В	4,466	11.5	В
56	US 52/78/Rivers Ave & Mabeline Rd	4,919	25.4	С	4,725	23.4	С
59	US 52/78/Rivers Ave & Stokes Ave *	4,861	18	С	4,727	20.5	С
60	US 52/78/Rivers Ave & Midland Park Rd	5,118	50.6	D	5,050	56.5	E
61	US 52/78/Rivers Ave & Eagle Dr	4,637	21	С	4,551	25.1	С
62	US 52/78/Rivers Ave & Hanahan Rd	4,779	30.6	С	4,688	32.5	С
65	US 52/78/Rivers Ave & Benderson Dr	3,936	5.5	Α	4,070	7.0	Α
67	US 52/78/Rivers Ave & Aviation Ave	4,354	22.7	С	4,465	26.2	С
671	US 52/78/Rivers Ave & North Charleston Center	4,038	23.6	С	4,135	25.9	С
70	US 52/78/Rivers Ave & Remount Rd	6,119	32.7	С	6,289	34.3	С
72	US 52/78/Rivers Ave & N of Sabal St	4,007	17.5	В	4,029	14.1	В
76	US 52/78/Rivers Ave & Harley St	3,987	13.5	В	3,985	12.9	В
78	US 52/78/Rivers Ave & I-526 WB Ramps	4,249	4.8	Α	4,436	4.3	Α
79	US 52/78/Rivers Ave & I-526 EB Ramps	3,630	6	Α	3,810	5.1	Α
82	US 52/78/Rivers Ave & Mall Dr	2,725	28.8	С	3,093	34.4	С

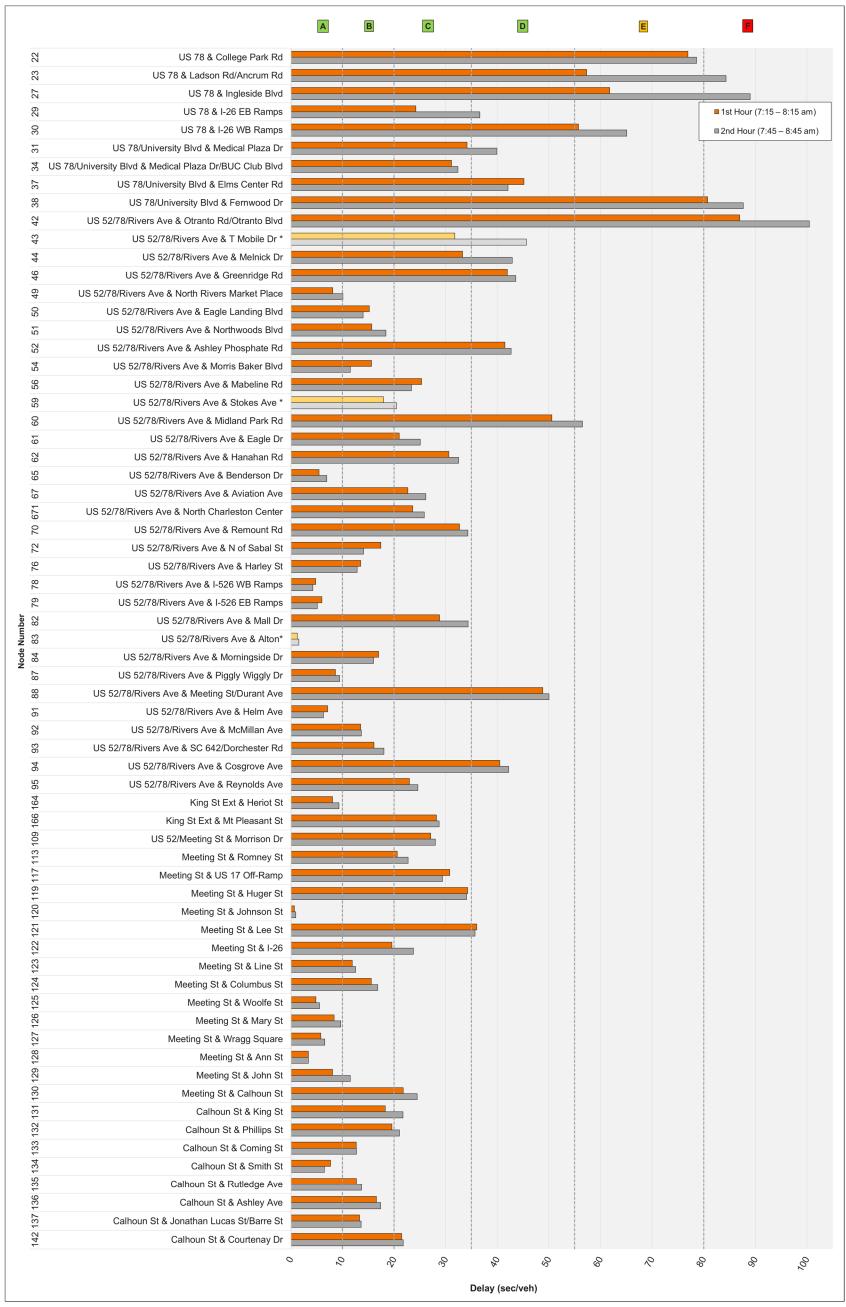


Node	Interpostion Name	1 st Hour	(7:15 – 8:	15 am)	2 nd Hour (7:45 – 8:45 am)		
No.	Intersection Name	Volume	Delay	LOS	Volume	Delay	LOS
83	US 52/78/Rivers Ave & Alton *	2,095	1.3	Α	2,316	1.5	Α
84	US 52/78/Rivers Ave & Morningside Dr	2,099	17	В	2,283	16.0	В
87	US 52/78/Rivers Ave & Piggly Wiggly Dr	1,855	8.6	Α	2,025	9.5	Α
88	US 52/78/Rivers Ave & Meeting St/Durant Ave	2,030	48.8	D	2,093	50.0	D
91	US 52/78/Rivers Ave & Helm Ave	1,426	7.2	Α	1,521	6.3	Α
92	US 52/78/Rivers Ave & McMillan Ave	1,887	13.5	В	1,977	13.7	В
93	US 52/78/Rivers Ave & SC 642/Dorchester Rd	1,616	16.1	В	1,755	18	В
94	US 52/78/Rivers Ave & Cosgrove Ave	2,580	40.5	D	2,776	42.2	D
95	US 52/78/Rivers Ave & Reynolds Ave	1,207	23	С	1,240	24.6	С
164	King St Ext & Heriot St	990	8.1	Α	1,109	9.3	Α
166	King St Ext & Mount Pleasant St	2,300	28.2	С	2,376	28.7	С
109	US 52/Meeting St & Morrison Dr	2,515	27.1	С	2,659	28	С
113	Meeting St & Romney St	1,387	20.6	С	1,452	22.7	С
117	Meeting St & US 17 Off-Ramp	1,719	30.8	С	1,758	29.4	С
119	Meeting St & Huger St	1,785	34.3	С	1,799	34.1	С
120	Meeting St & Johnson St	895	0.7	Α	973	1.0	Α
121	Meeting St & Lee St	959	36	D	1,026	35.7	D
122	Meeting St & I-26	1,843	19.6	В	1,949	23.8	С
123	Meeting St & Line St	1,904	11.9	В	2,025	12.5	В
124	Meeting St & Columbus St	2,028	15.6	В	2,195	16.9	В
125	Meeting St & Woolfe St	1,758	4.9	Α	1,920	5.5	Α
126	Meeting St & Mary St	1,538	8.4	Α	1,684	9.7	Α
127	Meeting St & Wragg Square	1,360	5.8	Α	1,479	6.6	Α
128	Meeting St & Ann St	1,235	3.4	Α	1,416	3.4	Α
129	Meeting St & John St	1,352	8.1	Α	1,564	11.5	В
130	Meeting St & Calhoun St	1,934	21.8	С	2,249	24.5	С
131	Calhoun St & King St	1,394	18.3	В	1,650	21.7	С
132	Calhoun St & Phillips St	1,319	19.6	В	1,530	21.1	С
133	Calhoun St & Coming St	1,652	12.7	В	1,847	12.7	В
134	Calhoun St & Smith St	1,365	7.7	Α	1,492	6.5	Α
135	Calhoun St & Rutledge Ave	1,883	12.7	В	2,043	13.7	В
136	Calhoun St & Ashley Ave	1,911	16.6	В	2,019	17.4	В
137	Calhoun St & Jonathan Lucas St/Barre St	1,833	13.3	В	1,981	13.6	В
142	Calhoun St & Courtenay Dr	2,312	21.5	С	2,500	21.8	С

^{*} This intersection is unsignalized in the Build scenario and has been evaluated using unsignalized LOS criteria.



Figure 4.8: Opening Year (2025) Build Intersection Delay and LOS for AM Peak



^{*} This intersection is unsignalized in the Build scenario and has been evaluated using unsignalized LOS criteria.



Table 4.11: Opening Year (2025) Build Intersection Delay and LOS for PM Peak

Node	L. C.	1 st Hour	(4:30 – 5:	30 pm)	2 nd Hour	(5:00 – 6:	00 pm)
No.	Intersection Name	Volume	Delay	LOS	Volume	Delay	LOS
22	US 78 & College Park Rd	2,944	51.6	D	3,136	55.7	E
23	US 78 & Ladson Rd/Ancrum Rd	4,066	54.8	D	4,122	56.4	Е
27	US 78 & Ingleside Blvd	4,146	35.0	D	4,237	37.7	D
29	US 78 & I-26 EB Ramps	3,970	6.7	Α	3,855	6.1	Α
30	US 78 & I-26 WB Ramps	4,782	18.5	В	4,792	23.5	С
31	US 78/University Blvd & Medical Plaza Dr	3,735	37.2	D	3,719	43.7	D
34	US 78/University Blvd & Medical Plaza Dr/BUC Club	3,267	31.7	С	3,238	30.2	С
37	US 78/University Blvd & Elms Center Rd	3,052	42.5	D	2,956	42.2	D
38	US 78/University Blvd & Fernwood Dr	2,800	78.8	Е	2,699	113.1	F
42	US 52/78/Rivers Ave & Otranto Rd/Otranto Blvd	6,937	44.4	D	7,150	62.0	E
43	US 52/78/Rivers Ave & T Mobile Dr *	6,421	8.1	Α	6,565	20.0	С
44	US 52/78/Rivers Ave & Melnick Dr	6,188	51.2	D	6,349	62.2	E
46	US 52/78/Rivers Ave & Greenridge Rd	7,540	35.8	D	7,636	51.3	D
49	US 52/78/Rivers Ave & North Rivers Market Place	4,431	31.9	С	4,556	40.3	D
50	US 52/78/Rivers Ave & Eagle Landing Blvd	4,463	21.4	С	4,681	28.8	С
51	US 52/78/Rivers Ave & Northwood Blvd	4,519	47.9	D	4,771	59.4	E
52	US 52/78/Rivers Ave & Ashley Phosphate	5,975	60.5	Е	6,321	79.4	Е
54	US 52/78/Rivers Ave & Morris Baker Blvd	4,953	24.3	С	5,080	42.9	D
56	US 52/78/Rivers Ave & Mabeline Rd	4,810	37.7	D	4,909	47.9	D
59	US 52/78/Rivers Ave & Stokes Ave *	4,649	7.9	Α	4,596	18.8	С
60	US 52/78/Rivers Ave & Midland Park Rd	5,057	30.9	С	5,155	35.5	D
61	US 52/78/Rivers Ave & Eagle Dr	5,037	25.6	С	4,914	25.8	С
62	US 52/78/Rivers Ave & Hanahan Rd	5,239	35.3	D	5,104	30.2	С
65	US 52/78/Rivers Ave & Benderson Dr	4,709	8.8	Α	4,709	8.4	Α
67	US 52/78/Rivers Ave & Aviation Ave	4,937	20.6	С	4,957	20.8	С
671	US 52/78/Rivers Ave & North Charleston Center	3,764	7.0	Α	3,891	8.8	Α
70	US 52/78/Rivers Ave & Remount Rd	5,945	26.8	С	6,152	28.1	С
72	US 52/78/Rivers Ave & N of Sabal St	4,132	20.6	С	4,216	20.6	С
76	US 52/78/Rivers Ave & Harley St	3,946	16.8	В	4,269	18.7	В
78	US 52/78/Rivers Ave & I-526 WB Ramps	4,339	3.8	Α	4,603	5.6	Α
79	US 52/78/Rivers Ave & I-526 EB Ramps	4,191	8.3	Α	4,245	8.8	Α
82	US 52/78/Rivers Ave & Mall Dr	3,214	53.5	D	3,214	55.9	E
83	US 52/78/Rivers Ave & Alton *	2,911	2.5	Α	2,829	2.5	Α
84	US 52/78/Rivers Ave & Morningside Dr	2,790	20.4	С	2,748	19.8	В

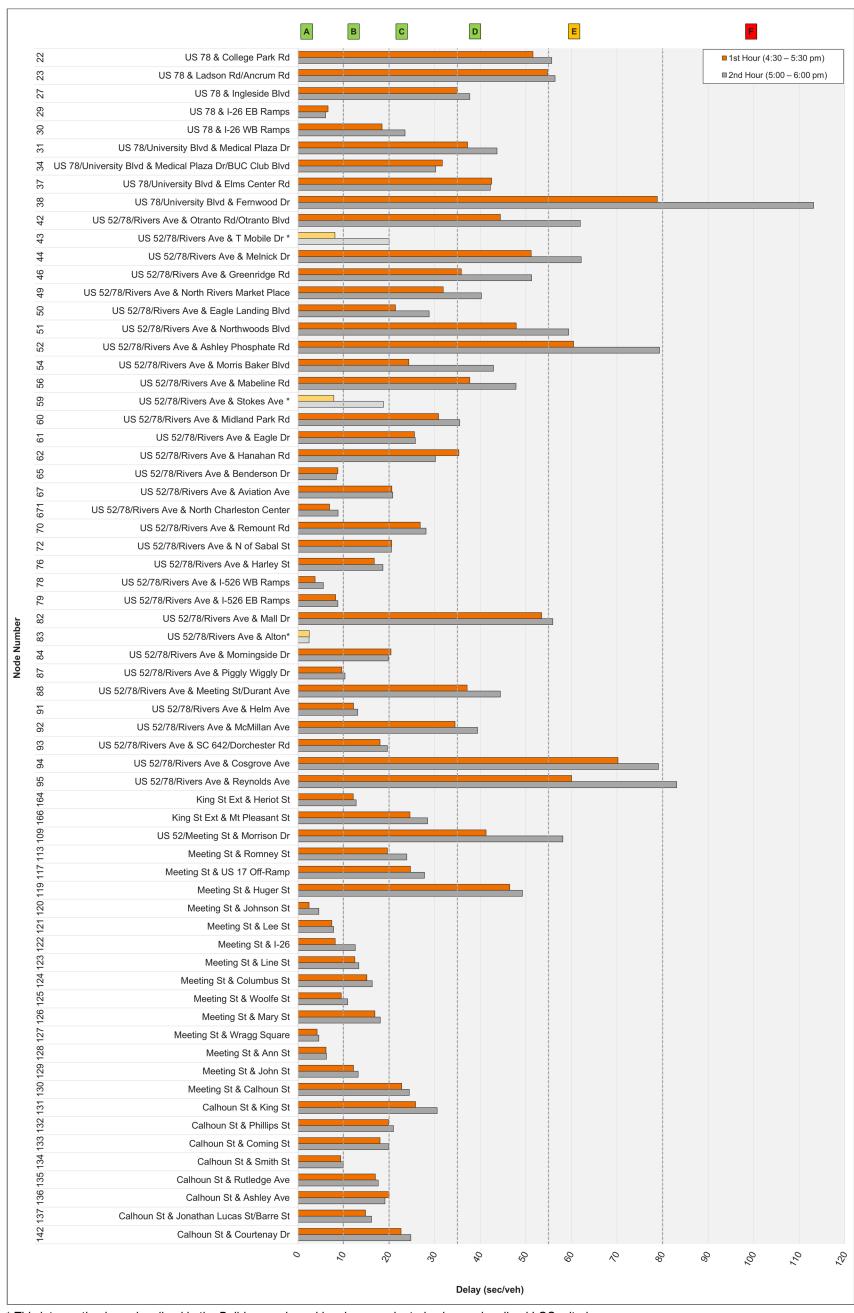


Node		1 st Hour	(4:30 – 5:	30 pm)	2 nd Hour	(5:00 – 6:	00 pm)
No.	Intersection Name	Volume	Delay	LOS	Volume	Delay	LOS
87	US 52/78/Rivers Ave & Piggly Wiggly Dr	2,593	9.7	Α	2,615	10.3	В
88	US 52/78/Rivers Ave & Meeting St/Durant Ave	2,949	37.1	D	2,979	44.4	D
91	US 52/78/Rivers Ave & Helm Ave	2,169	12.2	В	2,136	13.1	В
92	US 52/78/Rivers Ave & McMillan Ave	2,688	34.5	С	2,688	39.4	D
93	US 52/78/Rivers Ave & SC 642/Dorchester Rd	2,336	18.0	В	2,326	19.6	В
94	US 52/78/Rivers Ave & Cosgrove Ave	3,464	70.2	Е	3,443	79.1	Е
95	US 52/78/Rivers Ave & Reynolds Ave	1,858	60.1	Е	1,890	83.1	F
164	King St Ext & Heriot St	1,426	12.2	В	1,648	12.8	В
166	King St & Mount Pleasant St	2,620	24.6	С	2,896	28.5	С
109	US 52/Meeting St & Morrison Dr	3,042	41.3	D	3,085	58.1	Е
113	Meeting St & Romney St	1,784	19.7	В	1,886	23.9	С
117	Meeting St & US 17 Off-Ramp	2,218	24.7	С	2,347	27.8	С
119	Meeting St & Huger St	2,516	46.5	D	2,703	49.3	D
120	Meeting St & Johnson St	1,538	2.5	Α	1,668	4.6	Α
121	Meeting St & Lee St	1,643	7.5	Α	1,761	7.8	Α
122	Meeting St & I-26	2,137	8.2	Α	2,338	12.6	В
123	Meeting St & Line St	2,231	12.5	В	2,399	13.4	В
124	Meeting St & Columbus St	2,240	15.2	В	2,458	16.3	В
125	Meeting St & Woolfe St	2,032	9.5	Α	2,173	10.9	В
126	Meeting St & Mary St	1,794	16.9	В	1,865	18.1	В
127	Meeting St & Wragg Square	1,491	4.2	Α	1,515	4.6	Α
128	Meeting St & Ann St	1,523	6.2	Α	1,525	6.3	Α
129	Meeting St & John St	1,743	12.2	В	1,788	13.2	В
130	Meeting St & Calhoun St	2,527	22.8	С	2,611	24.4	С
131	Calhoun St & King St	1,781	25.8	С	1,876	30.6	С
132	Calhoun St & Phillips St	1,700	19.9	В	1,778	21.0	С
133	Calhoun St & Coming St	2,228	18.0	В	2,289	19.9	В
134	Calhoun St & Smith St	1,815	9.4	Α	1,813	10.0	Α
135	Calhoun St & Rutledge Ave	2,320	17.0	В	2,399	17.7	В
136	Calhoun St & Ashley Ave	2,317	20.0	С	2,328	19.1	В
137	Calhoun St & Jonathan Lucas St/Barre St	2,336	14.8	В	2,356	16.2	В
142	Calhoun St & Courtenay Dr	2,742	22.7	С	2,811	24.8	С

^{*} This intersection is unsignalized in the Build scenario and has been evaluated using unsignalized LOS criteria.



Figure 4.9: Opening Year (2025) Build Intersection Delay and LOS for PM Peak



^{*} This intersection is unsignalized in the Build scenario and has been evaluated using unsignalized LOS criteria.



Opening Year (2025) Model Results

Delay and LOS for the BRT movements were collected separately from the overall traffic for the intersections along the LCRT corridor in the Opening Year (2025) Build models. These movement-level results are displayed **Appendix E** for every signalized intersection that the BRT passes through.

The BRT experiences fairly low delays and good LOS at most intersections along the corridor in the Opening Year (2025) Build AM and PM peaks. The few locations that show a LOS of D or worse are typically locations where the BRT operations are not in an exclusive lane or are unusual in some other way. Possible explanations for these results are included in **Appendix C**, with a few major intersections discussed here:

- **US 78 & Ladson Rd/Ancrum Rd:** The BRT is traveling in mixed traffic, and the SB BRT in particular experiences long delays as it travels eastbound with the general traffic in the peak direction.
- US 78 & Ingleside Blvd: The SB BRT is traveling in mixed traffic and so experiences long delays as
 it travels eastbound with the general traffic. The exclusive lane for the NB BRT drops at this
 intersection, necessitating a queue jump for the buses to move over into the westbound general
 lanes. This impacts both the BRT delay, as the NB BRT must wait for its exclusive phase, and the
 overall delay at the intersection.
- Calhoun St & Courtenay Dr: The NB BRT makes a southbound left movement in mixed traffic at this
 intersection as it exits the Medical District onto Calhoun St. The BRT delay experienced here is very
 similar to the delay experienced by general purpose vehicles completing the southbound left
 movement.



Opening Year (2025) Model Results

4.2.2 Opening Year (2025) Build Corridor Travel Times

The results of the corridor travel time measurements are presented here for the Opening Year (2025) Build. **Table 4.12** and **Figure 4.10** illustrate the travel times for the AM peak, while **Table 4.13** and **Figure 4.11** illustrate the travel times for the PM peak. Both northbound (from downtown Charleston to Ladson) and southbound (from Ladson to downtown Charleston) are included.

Table 4.12: Opening Year (2025) Build Corridor Travel Time for AM Peak

		Segment	Northbou	ınd Direction	Southbou	ınd Direction
Segment		Length (miles)	Travel Time (min)	Average Speed (mph)	Travel Time (min)	Average Speed (mph)
Ladson	Segment 4	2.9	8.5	20	15.2	11
	Segment 5	4.2	12.9	20	20.0	13
	Segment 6	5.3	13.7	23	14.1	22
	Segment 7	3.0	9.3	20	7.3	25
	Segment 8	1.6	4.2	23	4.1	24
	Segment 9	1.5	6.3	14	6.7	13
Charleston	Segment 10	0.9	4.2	13	4.2	13
Total		19.4	59.0	20	71.6	16

Figure 4.10: Opening Year (2025) Build Corridor Travel Time for AM Peak

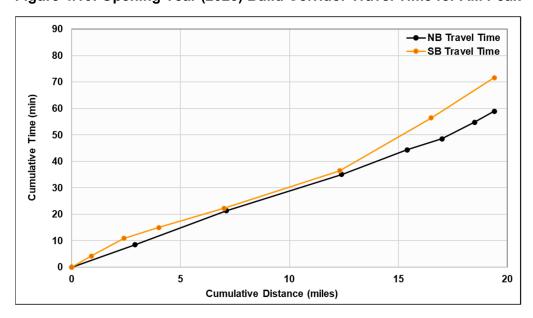
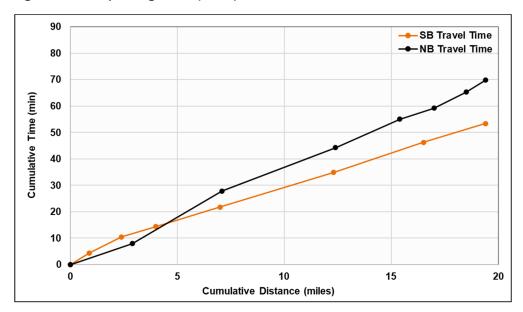




Table 4.13: Opening Year (2025) Build Corridor Travel Time for PM Peak

		Segment	Northbou	ınd Direction	Southbound Direction		
Segment		Length (miles)	Travel Time (min)	Average Speed (mph)	Travel Time (min)	Average Speed (mph)	
Ladson	Segment 4	2.9	8.0	22	7.1	24	
	Segment 5	4.2	19.9	13	11.4	22	
- 1	Segment 6	5.3	16.4	19	13.1	24	
- 1	Segment 7	3.0	10.8	17	7.4	24	
- 1	Segment 8	1.6	4.2	23	3.9	25	
- 1	Segment 9	1.5	6.1	14	6.2	14	
Charleston	Segment 10	0.9	4.5	12	4.4	13	
Total		19.4	69.8	17	53.4	22	

Figure 4.11: Opening Year (2025) Build Corridor Travel Time for PM Peak



Opening Year (2025) Model Results

4.2.3 Opening Year (2025) Build BRT Travel Times

The results of the travel time measurements along the BRT corridor in the Opening Year (2025) Build are shown below for both the BRT buses and the parallel general traffic. The northbound travel times are discussed in **Table 4.14** and **Table 4.15** for the AM and PM peaks, respectively. The southbound travel times are discussed in **Table 4.16** and **Table 4.17** for the AM and PM peaks, respectively. As discussed above in **Section 4.0**, the station-to-station travel times do not include dwell times at the BRT stations along the route; the Total BRT Route Travel Times presented in these tables do include dwell times.

Table 4.14: Opening Year (2025) Build BRT Northbound Travel Time for AM Peak

	Segment	General Tr	affic	BRT Bus	es
Segment (Station to Station)	Length (miles)	Travel Time (min)	Speed (mph)	Travel Time (min)	Speed (mph)
Fairgrounds to Medical Plaza *	2.5	6.1	25	7.5	20
Medical Plaza to Melnick	2.1	9.1	14	4.7	27
Melnick to Eagle Landing	1.1	2.3	29	1.9	35
Eagle Landing to Mabeline	1.1	2.6	26	2.4	29
Mabeline to Hanahan	1.1	2.4	27	2.0	33
Hanahan to Remount	1.2	3.0	25	2.4	30
Remount to Mall *	1.3	2.7	29	2.5	30
Mall to Durant	1.0	2.6	23	2.4	25
Durant to Dorchester	1.4	3.8	22	4.2	20
Dorchester to Reynolds *	0.4	1.1	19	1.1	20
Reynolds to Hackemann †	1.3	2.4	32	2.6	29
Hackemann to Milford †	1.2	2.5	29	2.6	28
Milford to Mt Pleasant *	0.7	1.7	25	1.7	24
Mt Pleasant to US 17 *	0.8	4.4	12	2.4	21
US 17 to Visitors Center †	1.1	4.6	14	3.4	19
Visitors Center to Coming †	0.5	2.3	13	2.2	13
Coming to Jonathan Lucas †	0.5	2.1	15	2.1	15
Jonathan Lucas to Medical District †	0.2	1.3	9	1.3	9
Total BRT Route Travel Time ◊	19.8	56.9	21	57.9	21

^{*} The BRT travels in mixed traffic for part of this segment.



[†] The BRT travels in mixed traffic for the entire length of this segment.

[♦] The Total BRT Route Travel Time is not a summation of the station-to-station segments, but is a separate measurement that includes travel time along the entire BRT route in the model, including dwell times.

Table 4.15: Opening Year (2025) Build BRT Northbound Travel Time for PM Peak

	Segment	General Tr	affic	BRT Bus	es
Segment (Station to Station)	Length (miles)	Travel Time (min)	Speed (mph)	Travel Time (min)	Speed (mph)
Fairgrounds to Medical Plaza *	2.5	5.6	27	5.7	27
Medical Plaza to Melnick	2.1	11.5	11	4.6	27
Melnick to Eagle Landing	1.1	4.8	14	2.0	34
Eagle Landing to Mabeline	1.1	5.5	12	2.7	25
Mabeline to Hanahan	1.1	4.7	14	2.1	32
Hanahan to Remount	1.2	2.8	26	2.4	30
Remount to Mall *	1.3	3.2	24	2.3	34
Mall to Durant	1.0	2.6	23	2.4	25
Durant to Dorchester	1.4	6.1	14	3.0	28
Dorchester to Reynolds *	0.4	2.7	8	1.1	20
Reynolds to Hackemann †	1.3	3.8	20	3.8	20
Hackemann to Milford †	1.2	3.6	20	3.2	22
Milford to Mt Pleasant *	0.7	2.2	19	2.4	17
Mt Pleasant to US 17 *	0.8	4.8	11	2.8	18
US 17 to Visitors Center †	1.1	4.2	15	3.5	18
Visitors Center to Coming †	0.5	2.7	11	2.4	12
Coming to Jonathan Lucas †	0.5	2.2	14	2.1	15
Jonathan Lucas to Medical District †	0.2	1.6	7	1.8	7
Total BRT Route Travel Time ◊	19.8	73.5	16	57.7	21

^{*} The BRT travels in mixed traffic for part of this segment.



[†] The BRT travels in mixed traffic for the entire length of this segment.

[♦] The Total BRT Route Travel Time is not a summation of the station-to-station segments, but is a separate measurement that includes travel time along the entire BRT route in the model, including dwell times.

Table 4.16: Opening Year (2025) Build BRT Southbound Travel Time for AM Peak

	Segment	General Tr	affic	BRT Bus	es
Segment (Station to Station)	Length (miles)	Travel Time (min)	Speed (mph)	Travel Time (min)	Speed (mph)
Fairgrounds to Medical Plaza *	2.5	13.4	11	8.9	17
Medical Plaza to Melnick	2.1	16.5	8	4.2	30
Melnick to Eagle Landing	1.1	2.5	27	2.1	32
Eagle Landing to Mabeline	1.1	3.0	23	2.5	28
Mabeline to Hanahan	1.1	3.4	19	2.0	33
Hanahan to Remount	1.2	2.8	26	2.3	31
Remount to Mall *	1.3	3.0	25	2.4	32
Mall to Durant	1.0	3.3	18	2.3	26
Durant to Dorchester	1.4	3.0	28	3.1	28
Dorchester to Reynolds *	0.4	1.2	17	1.0	21
Reynolds to Hackemann †	1.3	2.6	30	2.6	29
Hackemann to Milford †	1.2	2.1	34	2.1	34
Milford to Mt Pleasant *	0.7	1.3	33	1.5	30
Mt Pleasant to US 17 *	0.8	3.4	15	2.1	23
US 17 to Visitors Center †	1.1	4.5	14	3.4	19
Visitors Center to Coming †	0.5	2.2	13	1.9	15
Coming to Jonathan Lucas †	0.5	1.9	16	1.9	15
Jonathan Lucas to Medical District †	0.1	0.2	17	0.2	15
Total BRT Route Travel Time ◊	19.6	71.4	16	55.4	21

^{*} The BRT travels in mixed traffic for part of this segment.



[†] The BRT travels in mixed traffic for the entire length of this segment.

[♦] The Total BRT Route Travel Time is not a summation of the station-to-station segments, but is a separate measurement that includes travel time along the entire BRT route in the model, including dwell times.

Table 4.17: Opening Year (2025) Build BRT Southbound Travel Time for PM Peak

	Segment	General Tr	affic	BRT Bus	es
Segment (Station to Station)	Length (miles)	Travel Time (min)	Speed (mph)	Travel Time (min)	Speed (mph)
Fairgrounds to Medical Plaza *	2.5	5.7	27	5.4	29
Medical Plaza to Melnick	2.1	6.4	20	4.2	30
Melnick to Eagle Landing	1.1	2.8	24	2.2	30
Eagle Landing to Mabeline	1.1	3.2	21	2.7	25
Mabeline to Hanahan	1.1	3.0	22	2.0	33
Hanahan to Remount	1.2	2.5	30	2.7	27
Remount to Mall *	1.3	2.7	28	2.5	30
Mall to Durant	1.0	2.6	23	2.3	26
Durant to Dorchester	1.4	3.1	27	4.0	21
Dorchester to Reynolds *	0.4	1.3	16	1.0	21
Reynolds to Hackemann †	1.3	2.5	30	2.5	30
Hackemann to Milford †	1.2	2.1	35	2.1	33
Milford to Mt Pleasant *	0.7	1.4	32	1.7	26
Mt Pleasant to US 17 *	0.8	3.9	13	2.3	21
US 17 to Visitors Center †	1.1	4.0	16	3.5	18
Visitors Center to Coming †	0.5	2.4	12	2.0	15
Coming to Jonathan Lucas †	0.5	2.0	15	2.2	13
Jonathan Lucas to Medical District †	0.1	0.2	17	0.2	16
Total BRT Route Travel Time ◊	19.6	53.2	22	54.4	22

^{*} The BRT travels in mixed traffic for part of this segment.



[†] The BRT travels in mixed traffic for the entire length of this segment.

[♦] The Total BRT Route Travel Time is not a summation of the station-to-station segments, but is a separate measurement that includes travel time along the entire BRT route in the model, including dwell times.

Future Year (2045) Model Results

5.0 FUTURE YEAR (2045) MODEL RESULTS

The same performance measures were collected and compared for both the Opening Year (2025) and the Design Year (2045). The details of each of these metrics are outlined above in **Section 4.0**.

5.1 FUTURE YEAR (2045) NO BUILD MODEL

Network performance results for all six runs of the AM and PM peak models were examined to ensure that no outliers were recorded. **Table 5.1**, below, presents network-level results for both the AM and PM peak periods. These values are presented for each of the six runs, as well as the average of all the runs.

Table 5.1: Future Year (2045) No Build Network Performance Summary

	AM Peak				PM Peak				
Run #	Seed Number	Average Delay (sec/veh)	Average Speed (mph)	Total Travel Time (hrs)	Seed Number	Average Delay (sec/veh)	Average Speed (mph)	Total Travel Time (hrs)	
1	42	247.88	13	12,310	42	281.02	11	16,154	
2	47	235.46	13	11,997	47	269.90	11	15,871	
3	52	248.14	13	12,318	52	279.09	11	16,103	
4	57	245.62	13	12,291	57	294.94	11	16,578	
5	62	256.65	12	12,554	62	274.85	11	16,948	
6	67	258.72	12	12,526	67	304.17	11	16,609	
	Average	248.74	13	12,332	Average	284.00	11	16,211	

The study area experiences severe congestion during the Future Year (2045) No Build AM and PM peak periods. Some vehicles are unable to enter the network due to downstream congestion, resulting in approximately 7 percent of the overall demand in the AM model and approximately 8 percent of the overall demand in the PM model being denied entry, as shown below in **Table 5.2**. Spillbacks occur throughout the model, but are most prominent in locations such as Morrison Dr, I-26 at US 78, and Goose Creek Rd at the US 52/US 78 interchange. These results indicate a network that is much more congested than the Opening Year (2025) network, primarily because of the increase in traffic volumes.

Table 5.2: Future Year (2045) No Build Model Throughput Volume

	AM Peak	PM Peak
Processed Demand	110,787	137,831
Volume Denied Entry	7,905	12,037
% Volume Served	93.34%	91.97%

All of the results presented hereafter for Future Year (2045) No Build are the average of all six runs. Full results for both the AM and PM Future Year (2045) No Build models are available in **Appendix F**.



Future Year (2045) Model Results

5.1.1 Future Year (2045) No Build Intersection Delay and LOS

The intersection delay and LOS results throughout the study area for Future Year (2045) No Build are displayed on the following pages in **Table 5.3** and **Figure 5.1** for AM and in **Table 5.4** and **Figure 5.2** for PM. Out of the 66 intersections included in the LOS analysis, fourteen (14) are expected to operate at LOS E or F in the AM peak, while twenty-one (21) are predicted to operate at LOS E or F in the PM peak.

Table 5.3: Future Year (2045) No Build Intersection Delay and LOS for AM Peak

Node	Internation Name	1 st Hour	(7:15 – 8:	15 am)	2 nd Hour	r (7:45 – 8:	45 am)
No.	Intersection Name	Volume	Delay	LOS	Volume	Delay	LOS
22	US 78 & College Park Rd	2,547	185.3	F	2,341	241.9	F
23	US 78 & Ladson Rd/Ancrum Rd	3,185	132.1	F	2,969	153.0	F
27	US 78 & Ingleside Blvd	4,056	107.0	F	3,739	139.6	F
29	US 78 & I-26 EB Ramps	3,703	58.5	E	3,349	101.6	F
30	US 78 & I-26 WB Ramps *	3,053	67.3	F	2,826	89.7	F
31	US 78/University Blvd & Medical Plaza Dr	4,526	66.5	Е	4,321	110.5	F
34	US 78/University Blvd & Medical Plaza Dr/BUC	4,020	53.2	D	3,735	73.5	E
37	US 78/University Blvd & Elms Center Rd	3,883	56.8	E	3,390	85.3	F
38	US 78/University Blvd & Fernwood Dr	3,704	51.8	D	3,190	82.5	F
42	US 52/78/Rivers Ave & Otranto Rd/Otranto Blvd	6,865	64.3	E	6,831	63.3	E
43	US 52/78/Rivers Ave & T Mobile Dr	6,665	13.9	В	6,588	18.3	В
44	US 52/78/Rivers Ave & Melnick Dr *	6,690	32.8	D	6,635	37.0	E
46	US 52/78/Rivers Ave & Greenridge Rd	7,780	45.9	D	7,806	48.1	D
49	US 52/78/Rivers Ave & North Rivers Market Place	3,707	4.2	Α	3,816	5.8	Α
50	US 52/78/Rivers Ave & Eagle Landing Blvd	4,114	26.7	С	4,098	19.3	В
51	US 52/78/Rivers Ave & Northwood Blvd	4,206	18.9	В	4,179	25.1	С
52	US 52/78/Rivers Ave & Ashley Phosphate	5,227	82.6	F	5,229	93.7	F
54	US 52/78/Rivers Ave & Morris Baker Blvd	5,032	6.1	Α	4,942	6.0	Α
56	US 52/78/Rivers Ave & Mabeline Rd	5,377	9.8	Α	5,107	8.3	Α
59	US 52/78/Rivers Ave & Stokes Ave	4,892	10.6	В	4,681	10.6	В
60	US 52/78/Rivers Ave & Midland Park Rd	5,238	30.8	С	4,965	36.0	D
61	US 52/78/Rivers Ave & Eagle Dr	4,934	3.4	Α	4,700	3.0	Α
62	US 52/78/Rivers Ave & Hanahan Rd	5,142	10.7	В	4,901	10.5	В
65	US 52/78/Rivers Ave & Benderson Dr	4,493	6.0	Α	4,340	7.5	Α
67	US 52/78/Rivers Ave & Aviation Ave	4,902	53.9	D	4,831	67.8	E
70	US 52/78/Rivers Ave & Remount Rd	6,030	98.6	F	6,114	99.9	F
72	US 52/78/Rivers Ave & N of Sabal St *	4,201	1.0	Α	4,166	1.1	Α
76	US 52/78/Rivers Ave & Harley St	4,336	6.9	Α	4,394	6.2	Α
78	US 52/78/Rivers Ave & I-526 WB Ramps	4,708	4.6	Α	4,977	5.2	Α
79	US 52/78/Rivers Ave & I-526 EB Ramps	4,026	5.7	Α	4,293	5.0	Α

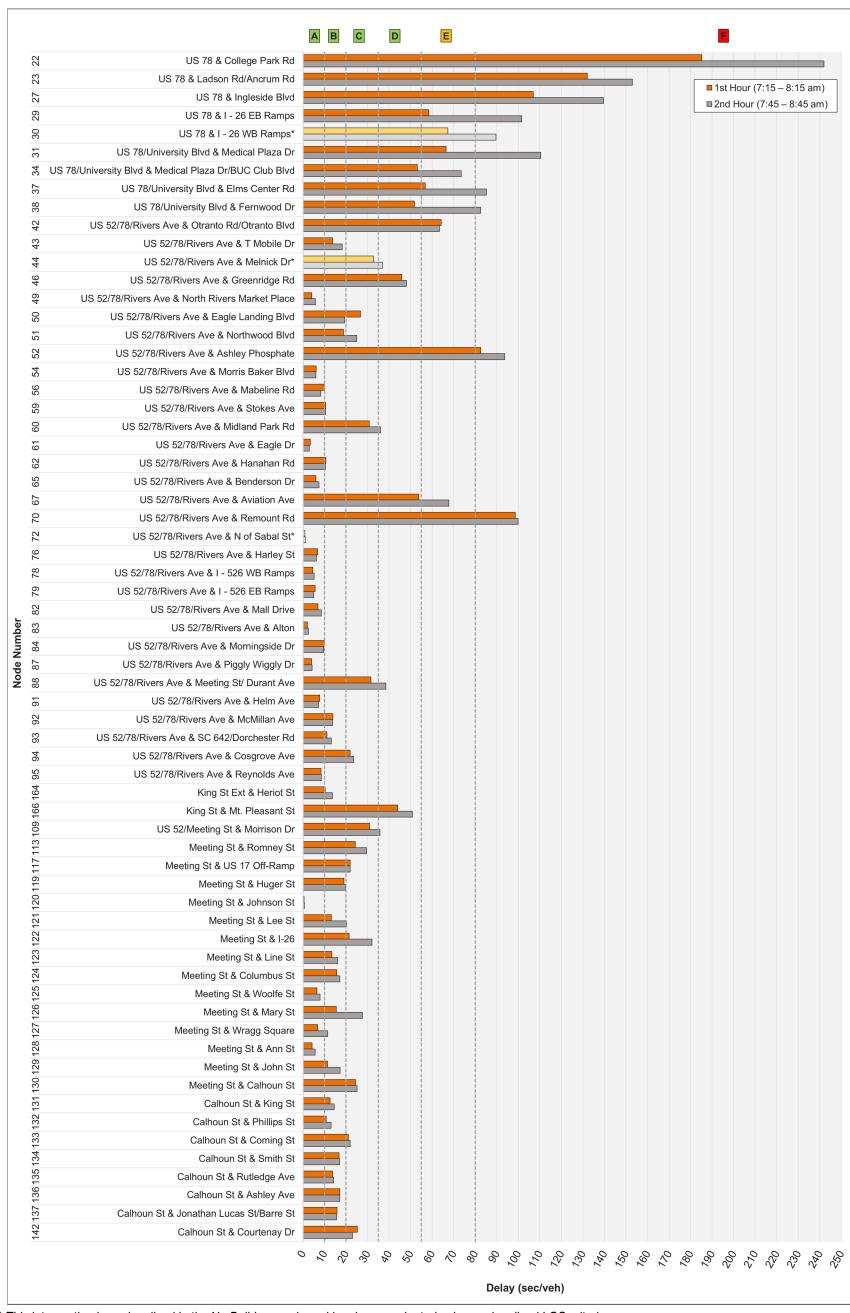


Node	L. C. C. No.	1 st Hour	(7:15 – 8:	15 am)	2 nd Hour	· (7:45 – 8:	45 am)
No.	Intersection Name	Volume	Delay	LOS	Volume	Delay	LOS
82	US 52/78/Rivers Ave & Mall Dr	2,785	7.1	Α	3,259	8.6	Α
83	US 52/78/Rivers Ave & Alton	2,351	2.2	Α	2,653	2.6	Α
84	US 52/78/Rivers Ave & Morningside Dr	2,348	9.8	Α	2,641	9.6	Α
87	US 52/78/Rivers Ave & Piggly Wiggly Dr	2,138	4.0	Α	2,369	4.2	Α
88	US 52/78/Rivers Ave & Meeting St/Durant Ave	2,364	31.6	С	2,483	38.5	D
91	US 52/78/Rivers Ave & Helm Ave	1,673	7.8	Α	1,792	7.2	Α
92	US 52/78/Rivers Ave & McMillan Ave	2,249	14.0	В	2,348	13.8	В
93	US 52/78/Rivers Ave & SC 642/Dorchester Rd	1,937	11.2	В	2,062	13.2	В
94	US 52/78/Rivers Ave & Cosgrove Ave	3,109	21.9	С	3,274	23.7	С
95	US 52/78/Rivers Ave & Reynolds Ave	1,487	8.4	Α	1,466	8.6	Α
164	King St Ext & Heriot St	1,247	10.3	В	1,430	13.7	В
166	King St & Mt. Pleasant St	2,892	44.0	D	3,037	50.9	D
109	US 52/Meeting St & Morrison Dr	3,184	31.0	С	3,385	35.8	D
113	Meeting St & Romney St	1,692	24.3	С	1,906	29.6	С
117	Meeting St & US 17 Off-Ramp	2,140	21.9	С	2,282	22.0	С
119	Meeting St & Huger St	2,314	19.1	В	2,441	19.7	В
120	Meeting St & Johnson St	1,309	0.6	Α	1,546	0.7	Α
121	Meeting St & Lee St	1,386	13.2	В	1,577	20.3	С
122	Meeting St & I-26	2,410	21.5	С	2,554	32.0	С
123	Meeting St & Line St	2,418	13.5	В	2,561	16.2	В
124	Meeting St & Columbus St	2,455	15.7	В	2,597	17.1	В
125	Meeting St & Woolfe St	2,082	6.5	Α	2,047	7.9	Α
126	Meeting St & Mary St	1,773	15.5	В	1,780	27.7	С
127	Meeting St & Wragg Square	1,525	6.9	Α	1,490	11.5	В
128	Meeting St & Ann St	1,369	4.3	Α	1,451	5.7	Α
129	Meeting St & John St	1,461	11.4	В	1,609	17.3	В
130	Meeting St & Calhoun St	2,194	24.4	С	2,548	25.2	С
131	Calhoun St & King St	1,518	12.6	В	1,801	14.6	В
132	Calhoun St & Phillips St	1,471	10.8	В	1,654	13.2	В
133	Calhoun St & Coming St	1,889	21.1	С	2,072	22.0	С
134	Calhoun St & Smith St	1,551	16.9	В	1,678	17.0	В
135	Calhoun St & Rutledge Ave	2,173	13.8	В	2,316	14.3	В
136	Calhoun St & Ashley Ave	2,207	17.1	В	2,264	17.1	В
137	Calhoun St & Jonathan Lucas St/Barre St	2,141	15.8	В	2,275	15.6	В
142	Calhoun St & Courtenay Dr	2,727	25.3	С	2,811	23.0	С

^{*} This intersection is unsignalized in the No Build scenario and has been evaluated using unsignalized LOS criteria.



Figure 5.1: Future Year (2045) No Build Intersection Delay and LOS for AM Peak



^{*} This intersection is unsignalized in the No Build scenario and has been evaluated using unsignalized LOS criteria.



Table 5.4: Future Year (2045) No Build Intersection Delay and LOS for PM Peak

Node	Indonesia di Mana	1 st Hour	(4:30 – 5:3	30 pm)	2 nd Hour	(5:00 – 6:	00 pm)
No.	Intersection Name	Volume	Delay	LOS	Volume	Delay	LOS
22	US 78 & College Park Rd	2,864	148.7	F	2,819	219.1	F
23	US 78 & Ladson Rd/Ancrum Rd	4,150	91.8	F	4,190	103.0	F
27	US 78 & Ingleside Blvd	4,182	97.3	F	4,383	94.1	F
29	US 78 & I-26 EB Ramps	4,184	44.4	D	4,218	42.9	D
30	US 78 & I-26 WB Ramps *	3,101	8.7	Α	3,471	7.6	Α
31	US 78/University Blvd & Medical Plaza Dr	4,284	66.0	Е	4,631	64.7	Е
34	US 78/University Blvd & Medical Plaza Dr/BUC Club	4,138	50.0	D	4,436	54.4	D
37	US 78/University Blvd & Elms Center Rd	3,961	30.1	С	4,078	35.3	D
38	US 78/University Blvd & Fernwood Dr	3,716	7.3	Α	3,925	17.2	В
42	US 52/78/Rivers Ave & Otranto Rd/Otranto Blvd	8,068	45.7	D	8,520	53.2	D
43	US 52/78/Rivers Ave & T Mobile Dr	7,530	16.9	В	7,905	22.3	С
44	US 52/78/Rivers Ave & Melnick Dr *	7,427	8.7	Α	7,694	27.3	D
46	US 52/78/Rivers Ave & Greenridge Rd	8,933	45.0	D	9,258	56.1	Е
49	US 52/78/Rivers Ave & North Rivers Market Place	5,048	18.2	В	5,457	19.4	В
50	US 52/78/Rivers Ave & Eagle Landing Blvd	5,106	21.2	С	5,592	24.0	С
51	US 52/78/Rivers Ave & Northwood Blvd	5,134	36.0	D	5,758	39.9	D
52	US 52/78/Rivers Ave & Ashley Phosphate	6,665	58.6	Е	7,265	73.5	Е
54	US 52/78/Rivers Ave & Morris Baker Blvd	5,424	20.6	С	5,837	30.9	С
56	US 52/78/Rivers Ave & Mabeline Rd	5,025	34.4	С	5,352	42.5	D
59	US 52/78/Rivers Ave & Stokes Ave	4,778	21.8	С	4,899	24.5	С
60	US 52/78/Rivers Ave & Midland Park Rd	5,251	26.4	С	5,389	28.8	С
61	US 52/78/Rivers Ave & Eagle Dr	5,064	18.6	В	5,193	20.0	С
62	US 52/78/Rivers Ave & Hanahan Rd	5,310	39.8	D	5,432	36.7	D
65	US 52/78/Rivers Ave & Benderson Dr	5,124	10.8	В	5,165	10.9	В
67	US 52/78/Rivers Ave & Aviation Ave	5,436	35.3	D	5,431	37.6	D
70	US 52/78/Rivers Ave & Remount Rd	5,927	77.0	Е	5,921	83.9	F
72	US 52/78/Rivers Ave & N of Sabal St *	3,889	40.9	Е	3,827	47.0	Е
76	US 52/78/Rivers Ave & Harley St	4,134	22.1	С	4,067	27.9	С
78	US 52/78/Rivers Ave & I-526 WB Ramps	4,685	24.4	С	4,409	52.6	D
79	US 52/78/Rivers Ave & I-526 EB Ramps	4,581	23.5	С	3,999	62.7	Е
82	US 52/78/Rivers Ave & Mall Dr	3,528	15.3	В	3,177	34.6	С
83	US 52/78/Rivers Ave & Alton	3,281	3.3	Α	3,001	6.6	Α
84	US 52/78/Rivers Ave & Morningside Dr	3,165	10.7	В	2,995	12.1	В
87	US 52/78/Rivers Ave & Piggly Wiggly Dr	2,945	5.2	Α	2,864	5.2	Α

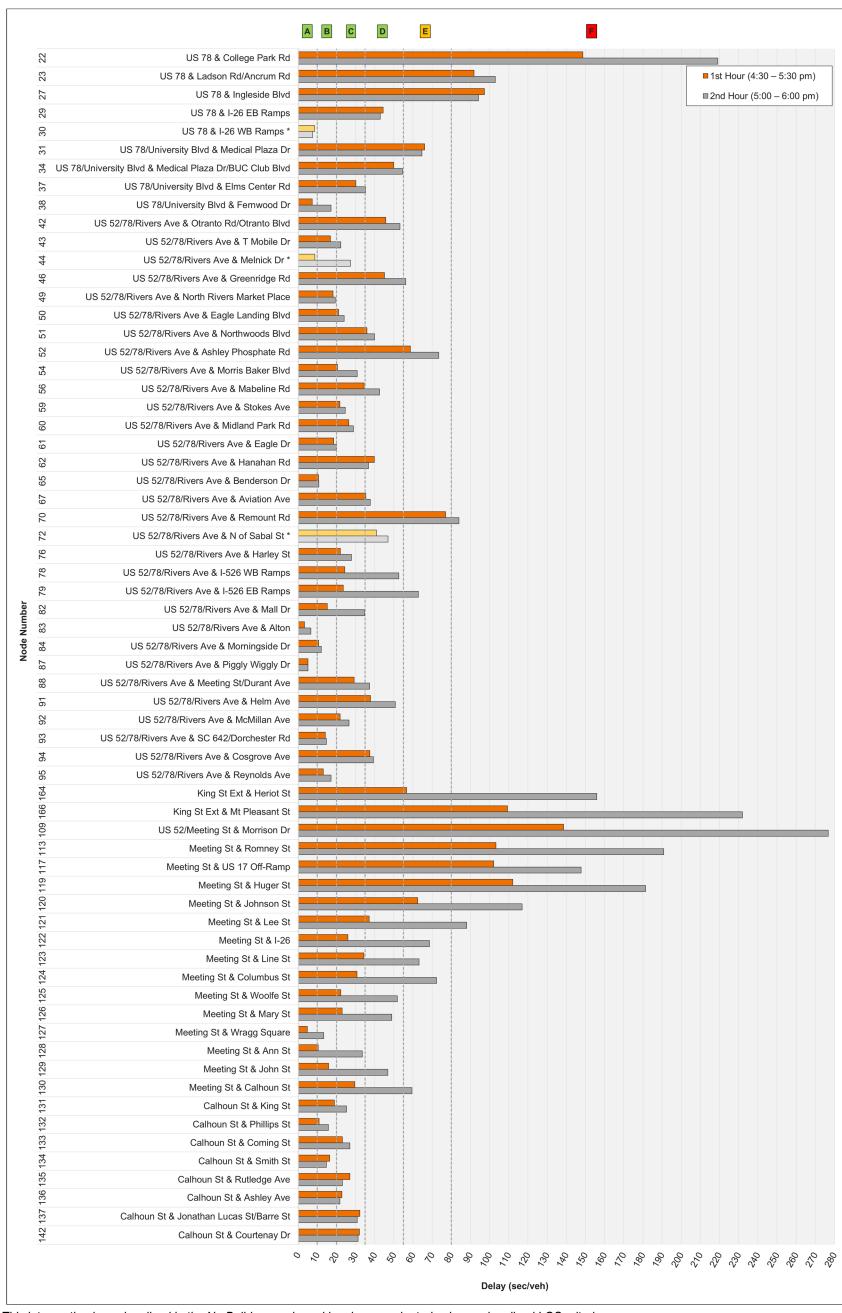


Node		1 st Hour	(4:30 – 5:	30 pm)	2 nd Hour (5:00 – 6:00 pm)		
No.	Intersection Name	Volume	Delay	LOS	Volume	Delay	LOS
88	US 52/78/Rivers Ave & Meeting St/Durant Ave	3,449	29.2	С	3,410	37.3	D
91	US 52/78/Rivers Ave & Helm Ave	2,614	37.7	D	2,457	50.8	D
92	US 52/78/Rivers Ave & McMillan Ave	3,307	22.0	С	3,237	26.6	С
93	US 52/78/Rivers Ave & SC 642/Dorchester Rd	2,881	14.2	В	2,732	14.7	В
94	US 52/78/Rivers Ave & Cosgrove Ave	4,252	37.4	D	4,017	39.3	D
95	US 52/78/Rivers Ave & Reynolds Ave	2,190	13.2	В	2,057	17.2	В
164	King St Ext & Heriot St	1,249	56.7	Е	852	155.9	F
166	King St & Mt. Pleasant St	2,189	109.3	F	1,489	231.9	F
109	US 52/Meeting St & Morrison Dr	2,277	138.5	F	1,427	276.7	F
113	Meeting St & Romney St	1,250	103.2	F	728	190.9	F
117	Meeting St & US 17 Off-Ramp	1,583	102.2	F	982	147.7	F
119	Meeting St & Huger St	2,042	112.1	F	1,371	181.4	F
120	Meeting St & Johnson St	1,177	62.5	Е	740	117.0	F
121	Meeting St & Lee St	1,370	37.1	D	833	88.0	F
122	Meeting St & I-26	2,010	25.9	С	1,295	68.5	Е
123	Meeting St & Line St	2,164	34.3	С	1,398	63.1	Е
124	Meeting St & Columbus St	2,186	30.7	С	1,456	72.3	Е
125	Meeting St & Woolfe St	2,024	22.2	С	1,300	51.8	D
126	Meeting St & Mary St	1,827	23.0	С	1,139	48.9	D
127	Meeting St & Wragg Square	1,516	4.9	Α	969	13.4	В
128	Meeting St & Ann St	1,564	10.4	В	997	33.5	С
129	Meeting St & John St	1,707	15.9	В	1,067	46.8	D
130	Meeting St & Calhoun St	2,820	29.6	С	2,054	59.5	Е
131	Calhoun St & King St	1,954	18.9	В	1,567	25.2	С
132	Calhoun St & Phillips St	1,856	10.9	В	1,560	15.9	В
133	Calhoun St & Coming St	2,498	23.1	С	2,234	27.0	С
134	Calhoun St & Smith St	2,015	16.5	В	1,773	14.8	В
135	Calhoun St & Rutledge Ave	2,622	27.0	С	2,505	23.1	С
136	Calhoun St & Ashley Ave	2,601	22.9	С	2,441	21.8	С
137	Calhoun St & Jonathan Lucas St/Barre St	2,584	32.2	С	2,403	30.8	С
142	Calhoun St & Courtenay Dr	3,179	32.0	С	3,108	31.3	С

^{*} This intersection is unsignalized in the No Build scenario and has been evaluated using unsignalized LOS criteria.



Figure 5.2: Future Year (2045) No Build Intersection Delay and LOS for PM Peak



^{*} This intersection is unsignalized in the No Build scenario and has been evaluated using unsignalized LOS criteria.



Future Year (2045) Model Results

5.1.2 Future Year (2045) No Build Corridor Travel Times

The results of the corridor travel time measurements are presented here for the Future Year (2045) No Build. **Table 5.5** and **Figure 5.3** illustrate the travel times for the AM peak, while **Table 5.6** and **Figure 5.4** illustrate the travel times for the PM peak. Both northbound (from downtown Charleston to Ladson) and southbound (from Ladson to downtown Charleston) are included.

Table 5.5: Future Year (2045) No Build Corridor Travel Time for AM Peak

		Segment	Northbou	ınd Direction	Southbound Direction			
Segment		Length (miles)	Travel Time (min)	Average Speed (mph)	Travel Time (min)	Average Speed (mph)		
Ladson	Segment 4	2.9	18.4	9	20.9	8		
	Segment 5	4.2	12.4	20	18.1	14		
	Segment 6	5.3	13.2	24	16.4	19		
	Segment 7	3.0	8.5	21	7.4	25		
	Segment 8	1.6	4.7	21	4.6	21		
	Segment 9	1.5	5.0	18	7.2	12		
Charleston	Segment 10	0.9	4.6	12	4.8	12		
Total		19.4	66.7	17	79.3	15		

Figure 5.3: Future Year (2045) No Build Corridor Travel Time for AM Peak

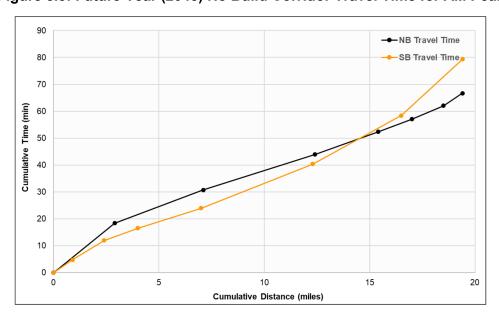
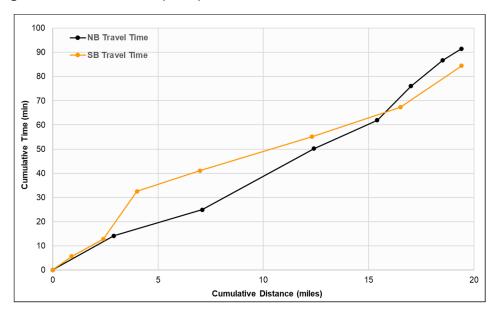




Table 5.6: Future Year (2045) No Build Corridor Travel Time for PM Peak

		Segment	Northbou	ınd Direction	Southbound Direction		
Segment		Length (miles)	Travel Time (min)	Average Speed (mph)	Travel Time (min)	Average Speed (mph)	
Ladson	Segment 4	2.9	14.1	12	17.1	10	
	Segment 5	4.2	10.8	23	12.2	21	
	Segment 6	5.3	25.3	12	14.0	22	
	Segment 7	3.0	11.8	15	8.6	21	
	Segment 8	1.6	14.1	7	19.7	5	
	Segment 9	1.5	10.6	8	7.1	12	
Charleston	Segment 10	0.9	4.8	12	5.7	10	
Total		19.4	91.5	13	84.5	14	

Figure 5.4: Future Year (2045) No Build Corridor Travel Time for PM Peak





Future Year (2045) Model Results

5.2 FUTURE YEAR (2045) BUILD MODEL

Network performance results for all six runs of the AM and PM peak models were examined to ensure that no outliers were recorded. **Table 5.7**, below, presents network-level results for both the AM and PM peak periods. These values are presented for each of the six runs, as well as the average of all the runs.

		AM I	Peak			PM I	Peak	
Run #	Seed Number	Average Delay (sec/veh)	Average Speed (mph)	Total Travel Time (hrs)	Seed Number	Average Delay (sec/veh)	Average Speed (mph)	Total Travel Time (hrs)
1	42	285.18	12	13,451	42	327.19	10	17,603
2	47	289.52	12	13,457	47	305.25	11	17,175
3	52	297.35	11	13,658	52	338.72	10	17,833
4	57	298.51	11	13,636	57	324.63	10	17,647
5	62	294.66	11	13,618	62	314.54	10	17,291
6	67	314.53	11	14,012	67	312.56	10	17,231
	Average	296.62	11	13.638	Average	320.48	10	17.463

Table 5.7: Future Year (2045) Build Network Performance Summary

The study area experiences severe congestion during the Future Year (2045) Build AM and PM peak periods. Some vehicles are unable to enter the network due to downstream congestion, resulting in approximately 9 percent of the overall demand in both the AM and PM models being denied entry, as shown below in **Table 5.8**. Spillbacks occur throughout the model, but are most prominent in locations such as Morrison Dr, Goose Creek Rd at the US 52/US 78 interchange, Ladson Rd, and Ingleside Blvd. These results indicate a network that is much more congested than the Opening Year (2025) network, but do not appear to point towards any significant negative impacts to the overall network caused solely by the addition of the BRT when compared against the Future Year (2045) No Build network results.

Table 5.8: Future Year (2045) Build Model Throughput Volume

	AM Peak	PM Peak
Processed Demand	109,377	136,499
Volume Denied Entry	10,485	14,153
% Volume Served	91.25%	90.61%

All of the results presented hereafter for Future Year (2045) Build are the average of all six runs. Full results for both the AM and PM Future Year (2045) Build models are available in **Appendix G**.

5.2.1 Future Year (2045) Build Intersection Delay and LOS

The intersection delay and LOS results throughout the study area for Future Year (2045) Build are displayed on the next pages in **Table 5.9** and **Figure 5.5** for AM and in **Table 5.10** and **Figure 5.6** for



Future Year (2045) Model Results

PM. Out of the 66 intersections included in the LOS analysis, seventeen (17) are expected to operate at LOS E or F in the AM peak, while thirty-four (34) are predicted to operate at LOS E or F in the PM peak.

Table 5.9: Future Year (2045) Build Intersection Delay and LOS for AM Peak

Node	L. C. C. M. C.	1 st Hour	(7:15 – 8:	15 am)	2 nd Hour (7:45 – 8:45 am)		
No.	Intersection Name	Volume	Delay	LOS	Volume	Delay	LOS
22	US 78 & College Park Rd	2,580	144.2	F	2,422	201.6	F
23	US 78 & Ladson Rd/Ancrum Rd	2,548	216.5	F	2,405	256.7	F
27	US 78 & Ingleside Blvd	3,446	152.3	F	3,278	201.8	F
29	US 78 & I-26 EB Ramps	3,110	49.4	D	2,912	54.4	D
30	US 78 & I-26 WB Ramps	4,615	77.1	Е	4,262	85.5	F
31	US 78/University Blvd & Medical Plaza Dr	4,233	54.9	D	3,974	70.0	Е
34	US 78/University Blvd & Medical Plaza Dr/BUC Club	3,940	46.4	D	3,589	53.5	D
37	US 78/University Blvd & Elms Center Rd	3,799	70.8	Е	3,404	88.7	F
38	US 78/University Blvd & Fernwood Dr	3,664	97.1	F	3,341	115.1	F
42	US 52/78/Rivers Ave & Otranto Rd/Otranto Blvd	6,150	90.1	F	5,716	104.5	F
43	US 52/78/Rivers Ave & T Mobile Dr *	6,044	36.1	Е	5,530	57.2	F
44	US 52/78/Rivers Ave & Melnick Dr	6,155	38.0	D	5,551	57.4	Е
46	US 52/78/Rivers Ave & Greenridge Rd	7,250	44.4	D	6,930	49.8	D
49	US 52/78/Rivers Ave & North Rivers Market Place	3,544	7.9	Α	3,587	10.8	В
50	US 52/78/Rivers Ave & Eagle Landing Blvd	3,852	19.0	В	3,796	16.5	В
51	US 52/78/Rivers Ave & Northwood Blvd	3,967	22.2	С	3,934	28.0	С
52	US 52/78/Rivers Ave & Ashley Phosphate	5,206	54.6	D	5,267	61.7	Е
54	US 52/78/Rivers Ave & Morris Baker Blvd	4,901	37.3	D	4,744	43.4	D
56	US 52/78/Rivers Ave & Mabeline Rd	5,378	42.5	D	5,108	49.2	D
59	US 52/78/Rivers Ave & Stokes Ave *	5,255	40.6	Е	5,085	45.2	Е
60	US 52/78/Rivers Ave & Midland Park Rd	5,505	56.6	Е	5,325	65.0	Е
61	US 52/78/Rivers Ave & Eagle Dr	5,097	28.6	С	4,896	29.2	С
62	US 52/78/Rivers Ave & Hanahan Rd	5,336	39.4	D	5,123	42.0	D
65	US 52/78/Rivers Ave & Benderson Dr	4,418	8.5	Α	4,440	9.1	Α
67	US 52/78/Rivers Ave & Aviation Ave	4,861	29.8	С	4,899	39.9	D
671	US 52/78/Rivers Ave & North Charleston Center	4,519	26.0	С	4,636	27.1	С
70	US 52/78/Rivers Ave & Remount Rd	6,965	39.2	D	7,112	38.8	D
72	US 52/78/Rivers Ave & N of Sabal St	4,718	29.0	С	4,602	16.2	В
76	US 52/78/Rivers Ave & Harley St	4,712	14.2	В	4,598	13.7	В
78	US 52/78/Rivers Ave & I-526 WB Ramps	5,015	5.2	Α	5,168	5.3	Α
79	US 52/78/Rivers Ave & I-526 EB Ramps	4,319	6.3	Α	4,491	5.2	Α

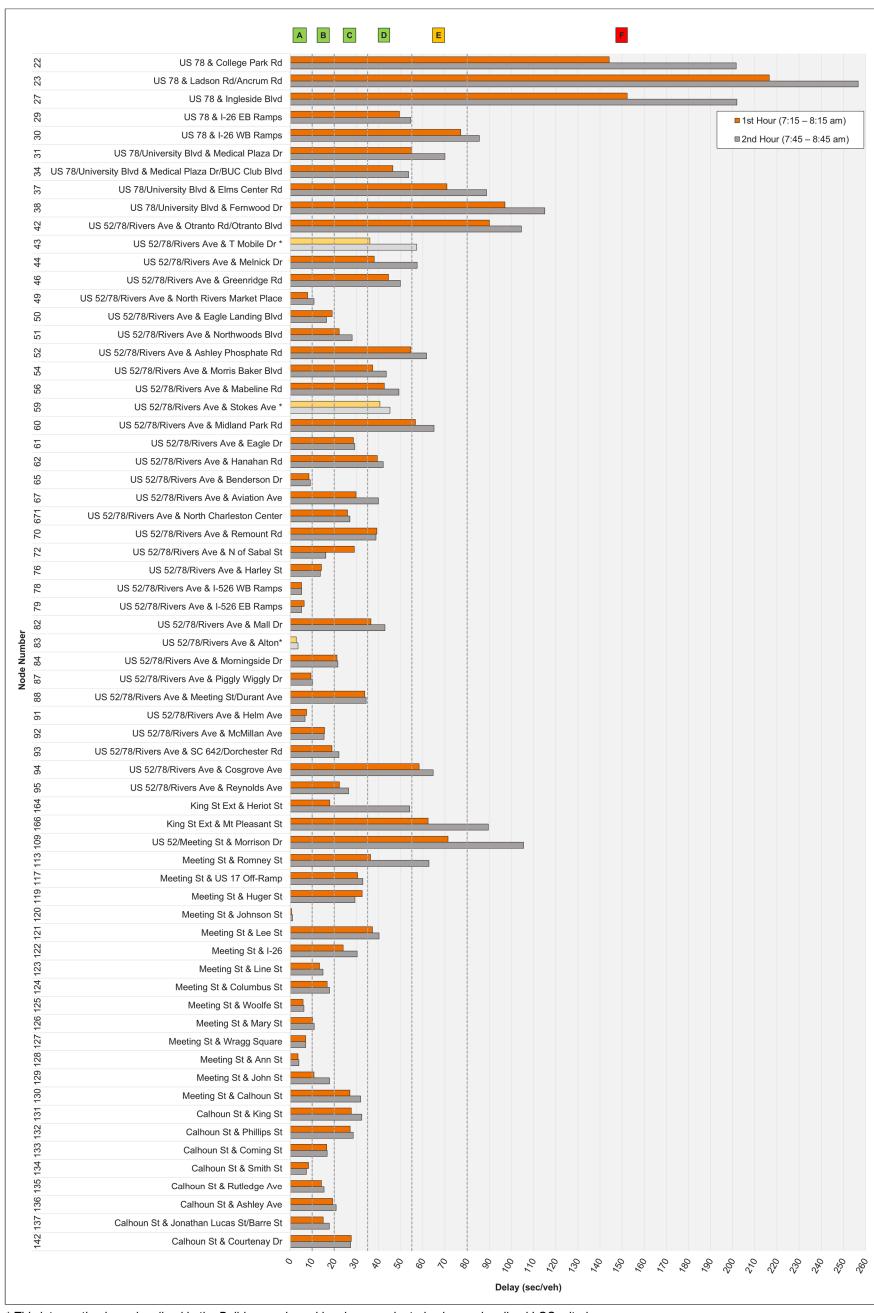


Node	L. C. C. C. N. C.	1 st Hour	(7:15 – 8:	15 am)	2 nd Hour (7:45 – 8:45 am)		
No.	Intersection Name	Volume	Delay	LOS	Volume	Delay	LOS
82	US 52/78/Rivers Ave & Mall Dr	3,203	36.5	D	3,601	42.9	D
83	US 52/78/Rivers Ave & Alton *	2,441	2.8	Α	2,694	3.6	Α
84	US 52/78/Rivers Ave & Morningside Dr	2,440	21.2	С	2,661	21.6	С
87	US 52/78/Rivers Ave & Piggly Wiggly Dr	2,157	9.4	Α	2,362	10.2	В
88	US 52/78/Rivers Ave & Meeting St/Durant Ave	2,394	33.7	С	2,455	34.3	С
91	US 52/78/Rivers Ave & Helm Ave	1,682	7.5	Α	1,790	6.7	Α
92	US 52/78/Rivers Ave & McMillan Ave	2,231	15.5	В	2,339	15.4	В
93	US 52/78/Rivers Ave & SC 642/Dorchester Rd	1,936	18.9	В	2,082	22.1	С
94	US 52/78/Rivers Ave & Cosgrove Ave	3,123	58.3	Е	3,308	64.7	Е
95	US 52/78/Rivers Ave & Reynolds Ave	1,519	22.2	С	1,525	26.5	С
164	King St Ext & Heriot St	1,209	18.0	В	1,288	54.0	D
166	King St Ext & Mount Pleasant St	2,723	62.4	Е	2,593	89.6	F
109	US 52/Meeting St & Morrison Dr	2,969	71.4	Е	3,057	105.5	F
113	Meeting St & Romney St	1,556	36.3	D	1,645	62.8	Е
117	Meeting St & US 17 Off-Ramp	1,994	30.5	С	2,033	32.9	С
119	Meeting St & Huger St	2,118	32.5	С	2,125	29.3	С
120	Meeting St & Johnson St	1,099	0.7	Α	1,257	1.1	Α
121	Meeting St & Lee St	1,170	37.2	D	1,322	40.1	D
122	Meeting St & I-26	2,195	24.0	С	2,351	30.3	С
123	Meeting St & Line St	2,258	13.3	В	2,438	14.8	В
124	Meeting St & Columbus St	2,347	16.7	В	2,588	17.8	В
125	Meeting St & Woolfe St	2,058	5.8	Α	2,199	6.3	Α
126	Meeting St & Mary St	1,794	10.2	В	1,904	10.9	В
127	Meeting St & Wragg Square	1,543	7.0	Α	1,582	7.0	Α
128	Meeting St & Ann St	1,411	3.6	Α	1,528	4.0	Α
129	Meeting St & John St	1,543	10.8	В	1,691	17.8	В
130	Meeting St & Calhoun St	2,224	27.0	С	2,542	31.9	С
131	Calhoun St & King St	1,657	27.6	С	1,947	32.3	С
132	Calhoun St & Phillips St	1,575	27.1	С	1,772	28.5	С
133	Calhoun St & Coming St	1,961	16.5	В	2,139	16.7	В
134	Calhoun St & Smith St	1,632	8.4	Α	1,723	7.3	Α
135	Calhoun St & Rutledge Ave	2,247	14.1	В	2,360	15.4	В
136	Calhoun St & Ashley Ave	2,279	19.3	В	2,324	20.8	С
137	Calhoun St & Jonathan Lucas St/Barre St	2,182	15.0	В	2,267	17.7	В
142	Calhoun St & Courtenay Dr	2,741	27.6	С	2,875	27.3	С

^{*} This intersection is unsignalized in the Build scenario and has been evaluated using unsignalized LOS criteria.



Figure 5.5: Future Year (2045) Build Intersection Delay and LOS for AM Peak



^{*} This intersection is unsignalized in the Build scenario and has been evaluated using unsignalized LOS criteria.



Table 5.10: Future Year (2045) Build Intersection Delay and LOS for PM Peak

Node	L. Constant	1 st Hour	(4:30 – 5:3	30 pm)	2 nd Hour	(5:00 – 6:	00 pm)
No.	Intersection Name	Volume	Delay	LOS	Volume	Delay	LOS
22	US 78 & College Park Rd	3,299	64.0	Е	3,573	68.1	Е
23	US 78 & Ladson Rd/Ancrum Rd	4,607	60.4	Е	4,738	73.4	Е
27	US 78 & Ingleside Blvd	4,818	55.3	Е	4,972	56.4	E
29	US 78 & I-26 EB Ramps	4,661	20.7	С	4,458	22.3	С
30	US 78 & I-26 WB Ramps	5,640	30.4	С	5,655	38.0	D
31	US 78/University Blvd & Medical Plaza Dr	4,511	54.3	D	4,404	58.9	E
34	US 78/University Blvd & Medical Plaza Dr/BUC Club	3,996	55.3	Е	3,892	47.7	D
37	US 78/University Blvd & Elms Center Rd	3,591	57.0	Е	3,441	63.5	E
38	US 78/University Blvd & Fernwood Dr	3,335	84.3	F	3,184	106.1	F
42	US 52/78/Rivers Ave & Otranto Rd/Otranto Blvd	7,330	64.3	Е	7,231	77.5	E
43	US 52/78/Rivers Ave & T Mobile Dr *	6,798	14.7	В	6,637	24.5	С
44	US 52/78/Rivers Ave & Melnick Dr	6,578	57.0	Е	6,430	62.4	E
46	US 52/78/Rivers Ave & Greenridge Rd	8,038	50.1	D	7,780	61.5	E
49	US 52/78/Rivers Ave & North Rivers Market Place	4,556	39.1	D	4,421	54.0	D
50	US 52/78/Rivers Ave & Eagle Landing Blvd	4,604	28.4	С	4,536	48.3	D
51	US 52/78/Rivers Ave & Northwood Blvd	4,614	57.0	Е	4,598	87.8	F
52	US 52/78/Rivers Ave & Ashley Phosphate	6,176	75.9	Е	6,094	105.7	F
54	US 52/78/Rivers Ave & Morris Baker Blvd	5,135	54.6	D	4,998	65.0	E
56	US 52/78/Rivers Ave & Mabeline Rd	4,851	53.4	D	4,631	67.9	E
59	US 52/78/Rivers Ave & Stokes Ave *	4,613	39.0	Е	4,163	71.3	F
60	US 52/78/Rivers Ave & Midland Park Rd	5,281	59.6	Е	4,956	92.4	F
61	US 52/78/Rivers Ave & Eagle Dr	5,332	57.3	Е	4,948	65.7	E
62	US 52/78/Rivers Ave & Hanahan Rd	5,485	72.1	Е	5,026	71.6	E
65	US 52/78/Rivers Ave & Benderson Dr	5,114	21.8	С	4,687	42.5	D
67	US 52/78/Rivers Ave & Aviation Ave	5,455	30.1	С	5,054	50.4	D
671	US 52/78/Rivers Ave & North Charleston Shopping	4,203	10.4	В	3,903	33.7	С
70	US 52/78/Rivers Ave & Remount Rd	6,747	28.0	С	6,669	32.9	С
72	US 52/78/Rivers Ave & N of Sabal St	4,769	24.4	С	4,651	27.3	С
76	US 52/78/Rivers Ave & Harley St	4,524	20.6	С	4,786	23.7	С
78	US 52/78/Rivers Ave & I - 526 WB Ramps	4,939	4.3	Α	5,169	8.7	Α
79	US 52/78/Rivers Ave & I - 526 EB Ramps	4,751	8.0	Α	4,804	9.3	Α
82	US 52/78/Rivers Ave & Mall Drive	3,549	70.0	E	3,636	68.7	Е
83	US 52/78/Rivers Ave & Alton *	3,242	9.3	Α	3,222	9.5	Α
84	US 52/78/Rivers Ave & Morningside Dr	3,096	25.0	С	3,122	21.8	С

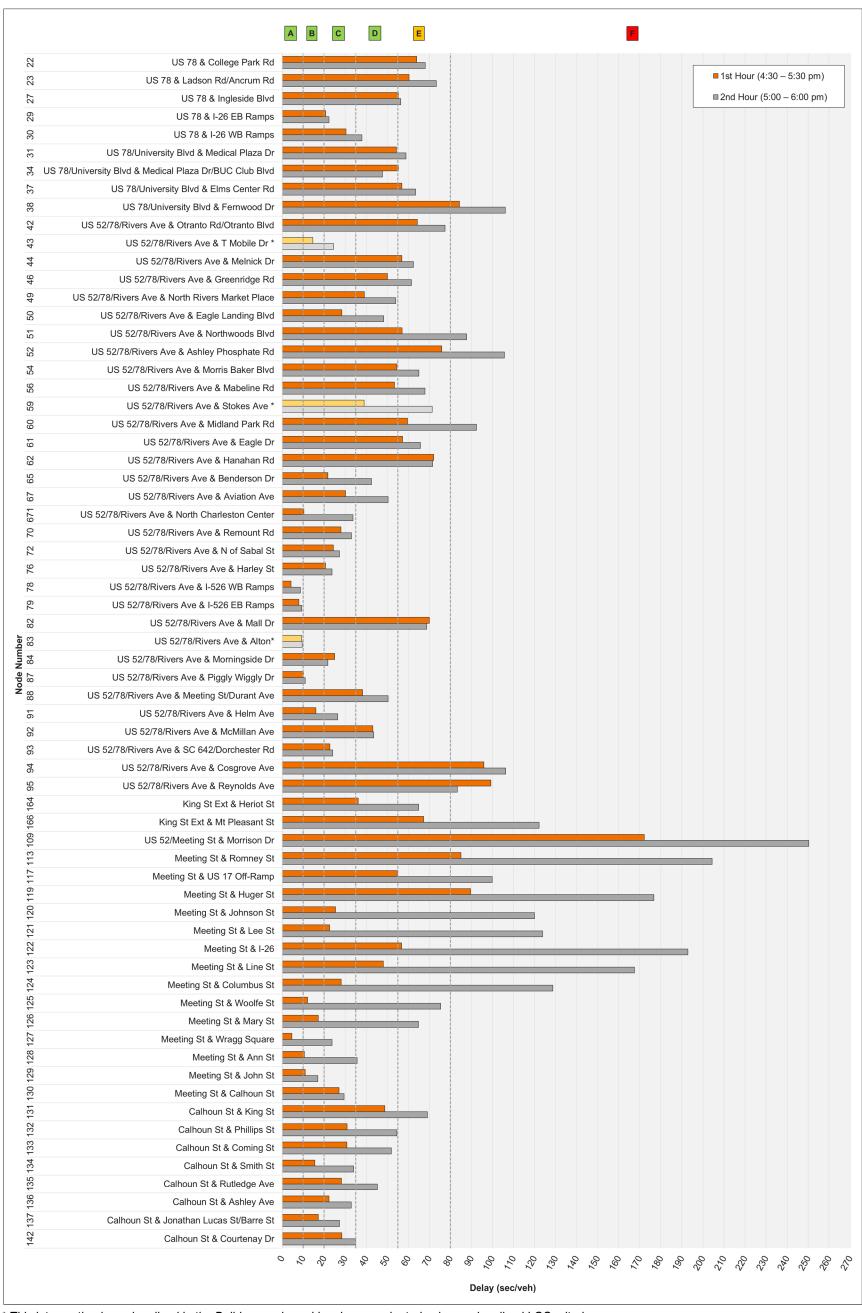


Node	L. C.	1 st Hour	(4:30 – 5:	30 pm)	2 nd Hour	(5:00 – 6:	00 pm)
No.	Intersection Name	Volume	Delay	LOS	Volume	Delay	LOS
87	US 52/78/Rivers Ave & Piggly Wiggly Dr	2,902	10.1	В	2,950	11.0	В
88	US 52/78/Rivers Ave & Meeting St/Durant Ave	3,270	38.3	D	3,319	50.4	D
91	US 52/78/Rivers Ave & Helm Ave	2,507	16.1	В	2,454	26.4	С
92	US 52/78/Rivers Ave & McMillan Ave	3,090	43.1	D	3,065	43.6	D
93	US 52/78/Rivers Ave & SC 642/Dorchester Rd	2,719	22.7	С	2,687	24.0	С
94	US 52/78/Rivers Ave & Cosgrove Ave	3,987	95.9	F	3,891	106.3	F
95	US 52/78/Rivers Ave & Reynolds Ave	2,229	99.2	F	2,195	83.3	F
164	King St Ext & Heriot St	1,668	36.2	D	1,043	64.9	Е
166	King St Ext & Mount Pleasant St	2,593	67.3	Е	1,581	122.1	F
109	US 52/Meeting St & Morrison Dr	2,226	172.1	F	1,621	250.3	F
113	Meeting St & Romney St	1,349	85.0	F	723	204.4	F
117	Meeting St & US 17 Off-Ramp	1,908	54.7	D	889	99.8	F
119	Meeting St & Huger St	2,302	89.6	F	1,142	176.7	F
120	Meeting St & Johnson St	1,372	25.4	С	675	120.0	F
121	Meeting St & Lee St	1,551	22.6	С	817	123.8	F
122	Meeting St & I-26	1,916	56.8	Е	992	192.9	F
123	Meeting St & Line St	2,038	48.1	D	1,133	167.4	F
124	Meeting St & Columbus St	1,935	28.1	С	1,165	128.7	F
125	Meeting St & Woolfe St	1,742	12.2	В	1,065	75.4	Е
126	Meeting St & Mary St	1,604	17.2	В	969	64.9	Е
127	Meeting St & Wragg Square	1,321	4.7	Α	791	23.7	С
128	Meeting St & Ann St	1,411	10.6	В	882	35.6	D
129	Meeting St & John St	1,571	11.0	В	971	17.0	В
130	Meeting St & Calhoun St	2,722	27.1	С	2,146	29.4	С
131	Calhoun St & King St	2,055	48.9	D	1,845	69.0	Е
132	Calhoun St & Phillips St	1,881	30.9	С	1,667	54.6	D
133	Calhoun St & Coming St	2,526	30.8	С	2,263	51.9	D
134	Calhoun St & Smith St	2,058	15.6	В	1,749	34.0	С
135	Calhoun St & Rutledge Ave	2,683	28.2	С	2,466	45.3	D
136	Calhoun St & Ashley Ave	2,689	22.3	С	2,409	32.9	С
137	Calhoun St & Jonathan Lucas St/Barre St	2,719	17.2	В	2,370	27.3	С
142	Calhoun St & Courtenay Dr	3,225	28.5	С	3,021	34.9	С

^{*} This intersection is unsignalized in the Build scenario and has been evaluated using unsignalized LOS criteria.



Figure 5.6: Future Year (2045) Build Intersection Delay and LOS for PM Peak



^{*} This intersection is unsignalized in the Build scenario and has been evaluated using unsignalized LOS criteria.



Future Year (2045) Model Results

Delay and LOS for the BRT movements were collected separately from the overall traffic for the intersections along the LCRT corridor in the Future Year (2045) Build models. These movement-level results are displayed in **Appendix G** and include every signalized intersection that the BRT passes through.

The BRT experiences fairly low delays and good LOS at most intersections along the corridor in the Future Year (2045) Build AM and PM peaks. The few locations that show a LOS of D or worse are typically locations where the BRT operations are not in an exclusive lane or are unusual in some other way. Possible explanations for these results are included in **Appendix C**, with a few major intersections discussed here:

- **US 78 & College Park Rd:** The BRT is traveling in mixed traffic, and the SB BRT in particular experiences long delays as it travels eastbound with the general traffic in the peak direction.
- **US 78 & Ladson Rd/Ancrum Rd:** The BRT is traveling in mixed traffic, and the SB BRT in particular experiences long delays as it travels eastbound with the general traffic in the peak direction.
- US 78 & Ingleside Blvd: The SB BRT is traveling in mixed traffic and so experiences long delays as
 it travels eastbound with the general traffic. The exclusive lane for the NB BRT drops at this
 intersections, necessitating a queue jump for the buses to move over into the westbound general
 lanes. This impacts both the BRT delay, as the NB BRT must wait for its exclusive phase, and the
 overall delay at the intersection.
- US 52/Meeting St & Morrison Dr: The SB BRT transitions from the Mt Pleasant crossover to traveling in mixed traffic as it goes through this intersection. If there is a long queue on the SB approach, which happens often in the Design Year (2045) models, it can inadvertently block the BRT bus from entering the mainline, resulting in a higher delay at this intersection.
- Calhoun St & Courtenay Dr: The NB BRT makes a southbound left movement in mixed traffic at this
 intersection as it exits the Medical District onto Calhoun St. The BRT delay experienced here is very
 similar to the delay experienced by general purpose vehicles completing the southbound left
 movement.



Future Year (2045) Model Results

5.2.2 Future Year (2045) Build Corridor Travel Times

The results of the corridor travel time measurements are presented here for the Future Year (2045) Build. **Table 5.11** and **Figure 5.7** illustrate the travel times for the AM peak, while **Table 5.12** and **Figure 5.8** illustrate the travel times for the PM peak. Both northbound (from downtown Charleston to Ladson) and southbound (from Ladson to downtown Charleston) are included.

Table 5.11: Future Year (2045) Build Corridor Travel Time for AM Peak

			Northbou	ind Direction	Southbound Direction		
Segment		Segment Length (miles)	Travel Time (min)	Average Speed (mph)	Travel Time (min)	Average Speed (mph)	
Ladson	Segment 4	2.9	11.9	15	30.5	6	
	Segment 5	4.2	14.1	18	26.7	9	
	Segment 6	5.3	13.8	23	14.4	22	
	Segment 7	3.0	9.6	19	7.8	23	
	Segment 8	1.6	6.1	16	7.2	14	
	Segment 9	1.5	6.6	13	7.4	12	
Charleston	Segment 10	0.9	4.8	12	4.5	12	
Total		19.4	66.9	17	98.5	12	

Figure 5.7: Future Year (2045) Build Corridor Travel Time for AM Peak

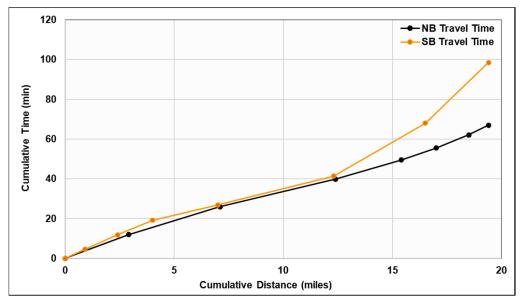
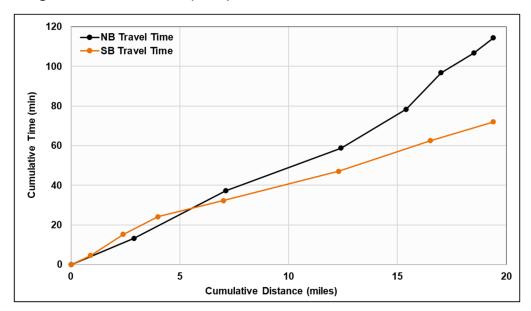




Table 5.12: Future Year (2045) Build Corridor Travel Time for PM Peak

		Segment	Northbou	ınd Direction	Southbou	ınd Direction
Segment		Length (miles)	Travel Time (min)	Average Speed (mph)	Travel Time (min)	Average Speed (mph)
Ladson	Segment 4	2.9	13.3	13	9.5	18
- 1	Segment 5	4.2	23.9	11	15.4	16
- 1	Segment 6	5.3	21.6	15	14.8	21
- 1	Segment 7	3.0	19.6	9	8.1	22
- 1	Segment 8	1.6	18.4	5	8.9	11
	Segment 9	1.5	9.9	9	10.7	8
Charleston	Segment 10	0.9	7.7	7	4.5	12
Total		19.4	114.4	10	72.0	16

Figure 5.8: Future Year (2045) Build Corridor Travel Time for PM Peak



Future Year (2045) Model Results

5.2.3 Future Year (2045) Build BRT Travel Times

The results of the travel time measurements along the BRT corridor in the Future Year (2045) Build for are shown below for both the BRT buses and the parallel general traffic. The northbound travel times are discussed in **Table 5.13** and **Table 5.14** for the AM and PM peaks, respectively. The southbound travel times are discussed in **Table 5.15** and **Table 5.16** for the AM and PM peaks, respectively. As discussed above in **Section 4.0**, the station-to-station travel times do not include dwell times at the BRT stations along the route; the Total BRT Route Travel Times presented in these tables do include dwell times.

Table 5.13: Future Year (2045) Build Northbound BRT Travel Time for AM Peak

	Segment	General Tr	affic	BRT Buses		
Segment (Station to Station)	Length (miles)	Travel Time (min)	Speed (mph)	Travel Time (min)	Speed (mph)	
Fairgrounds to Medical Plaza *	2.5	8.8	17	13.5	11	
Medical Plaza to Melnick	2.1	10.2	13	4.8	26	
Melnick to Eagle Landing	1.1	3.2	21	2.0	34	
Eagle Landing to Mabeline	1.1	2.8	24	2.5	28	
Mabeline to Hanahan	1.1	2.7	24	2.0	32	
Hanahan to Remount	1.2	3.2	23	2.3	31	
Remount to Mall *	1.3	2.8	27	2.6	29	
Mall to Durant	1.0	2.7	22	2.3	26	
Durant to Dorchester	1.4	3.4	25	3.6	24	
Dorchester to Reynolds *	0.4	1.8	12	1.1	20	
Reynolds to Hackemann †	1.3	2.5	31	2.5	30	
Hackemann to Milford †	1.2	2.7	27	2.8	26	
Milford to Mt Pleasant *	0.7	1.8	23	2.0	21	
Mt Pleasant to US 17 *	0.8	6.5	8	3.5	14	
US 17 to Visitors Center †	1.1	4.6	14	3.3	20	
Visitors Center to Coming †	0.5	2.7	11	2.4	12	
Coming to Jonathan Lucas †	0.5	2.3	14	2.3	14	
Jonathan Lucas to Medical District †	0.2	1.4	9	1.4	9	
Total BRT Route Travel Time ◊	19.8	73.1	16	66.3	18	

^{*} The BRT travels in mixed traffic for part of this segment.



[†] The BRT travels in mixed traffic for the entire length of this segment.

[♦] The Total BRT Route Travel Time is not a summation of the station-to-station segments, but is a separate measurement that includes travel time along the entire BRT route in the model, including dwell times.

Table 5.14: Future Year (2045) Build Northbound BRT Travel Time for PM Peak

	Segment	General Tr	affic	BRT Buses		
Segment (Station to Station)	Length (miles)	Travel Time (min)	Speed (mph)	Travel Time (min)	Speed (mph)	
Fairgrounds to Medical Plaza *	2.5	9.4	16	6.8	22	
Medical Plaza to Melnick	2.1	11.6	11	4.7	27	
Melnick to Eagle Landing	1.1	6.5	10	2.0	33	
Eagle Landing to Mabeline	1.1	7.5	9	2.7	26	
Mabeline to Hanahan	1.1	8.0	8	2.1	32	
Hanahan to Remount	1.2	7.0	10	2.5	29	
Remount to Mall *	1.3	3.4	22	2.4	32	
Mall to Durant	1.0	2.9	21	2.4	25	
Durant to Dorchester	1.4	7.0	12	3.1	27	
Dorchester to Reynolds *	0.4	2.9	7	1.0	21	
Reynolds to Hackemann †	1.3	4.5	17	4.1	19	
Hackemann to Milford †	1.2	3.1	23	3.1	24	
Milford to Mt Pleasant *	0.7	2.1	20	3.7	11	
Mt Pleasant to US 17 *	0.8	14.3	4	14.6	3	
US 17 to Visitors Center †	1.1	6.8	9	4.6	14	
Visitors Center to Coming †	0.5	3.6	8	3.6	8	
Coming to Jonathan Lucas †	0.5	4.4	7	4.8	7	
Jonathan Lucas to Medical District †	0.2	2.1	6	2.2	6	
Total BRT Route Travel Time ◊	19.8	107.3	11	75.3	16	

^{*} The BRT travels in mixed traffic for part of this segment.



[†] The BRT travels in mixed traffic for the entire length of this segment.

[♦] The Total BRT Route Travel Time is not a summation of the station-to-station segments, but is a separate measurement that includes travel time along the entire BRT route in the model, including dwell times.

Table 5.15: Future Year (2045) Build BRT Travel Time Southbound for AM Peak

	Segment	General Tr	affic	BRT Buses		
Segment (Station to Station)	Length (miles)	Travel Time (min)	Speed (mph)	Travel Time (min)	Speed (mph)	
Fairgrounds to Medical Plaza *	2.5	27.7	5	21.5	7	
Medical Plaza to Melnick	2.1	22.3	6	4.5	28	
Melnick to Eagle Landing	1.1	2.5	27	2.3	29	
Eagle Landing to Mabeline	1.1	4.3	16	2.5	27	
Mabeline to Hanahan	1.1	5.7	12	2.0	34	
Hanahan to Remount	1.2	3.4	22	2.3	31	
Remount to Mall *	1.3	3.4	22	2.4	31	
Mall to Durant	1.0	2.8	21	2.2	27	
Durant to Dorchester	1.4	3.0	28	3.2	26	
Dorchester to Reynolds *	0.4	1.3	16	1.0	21	
Reynolds to Hackemann †	1.3	2.6	30	2.7	28	
Hackemann to Milford †	1.2	2.7	26	3.0	24	
Milford to Mt Pleasant *	0.7	3.1	14	2.5	18	
Mt Pleasant to US 17 *	0.8	5.1	10	2.8	17	
US 17 to Visitors Center †	1.1	4.7	14	3.7	18	
Visitors Center to Coming †	0.5	2.4	12	2.0	14	
Coming to Jonathan Lucas †	0.5	1.9	15	2.0	15	
Jonathan Lucas to Medical District †	0.1	0.2	17	0.2	14	
Total BRT Route Travel Time ◊	19.6	101.8	12	72.1	16	

^{*} The BRT travels in mixed traffic for part of this segment.



[†] The BRT travels in mixed traffic for the entire length of this segment.

[♦] The Total BRT Route Travel Time is not a summation of the station-to-station segments, but is a separate measurement that includes travel time along the entire BRT route in the model, including dwell times.

Table 5.16: Future Year (2045) Build BRT Travel Time Southbound for PM Peak

	Segment	General Tr	affic	BRT Buses		
Segment (Station to Station)	Length (miles)	Travel Time (min)	Speed (mph)	Travel Time (min)	Speed (mph)	
Fairgrounds to Medical Plaza *	2.5	7.1	21	5.8	27	
Medical Plaza to Melnick	2.1	11.6	11	4.3	29	
Melnick to Eagle Landing	1.1	2.8	24	2.2	31	
Eagle Landing to Mabeline	1.1	3.4	20	2.7	25	
Mabeline to Hanahan	1.1	4.6	14	2.1	32	
Hanahan to Remount	1.2	2.6	28	2.6	28	
Remount to Mall *	1.3	3.1	25	2.4	32	
Mall to Durant	1.0	2.4	25	2.2	27	
Durant to Dorchester	1.4	3.2	26	3.4	25	
Dorchester to Reynolds *	0.4	1.4	15	0.9	23	
Reynolds to Hackemann †	1.3	2.5	31	2.5	30	
Hackemann to Milford †	1.2	2.2	33	2.1	33	
Milford to Mt Pleasant *	0.7	3.2	14	3.3	13	
Mt Pleasant to US 17 *	0.8	6.9	7	6.7	7	
US 17 to Visitors Center †	1.1	6.9	9	5.2	12	
Visitors Center to Coming †	0.5	2.6	11	2.0	14	
Coming to Jonathan Lucas †	0.5	2.1	14	2.3	13	
Jonathan Lucas to Medical District †	0.1	0.2	17	0.2	15	
Total BRT Route Travel Time ◊	19.6	70.7	17	60.4	19	

^{*} The BRT travels in mixed traffic for part of this segment.



[†] The BRT travels in mixed traffic for the entire length of this segment.

[♦] The Total BRT Route Travel Time is not a summation of the station-to-station segments, but is a separate measurement that includes travel time along the entire BRT route in the model, including dwell times.

Scenario Comparisons

6.0 SCENARIO COMPARISONS

This section briefly presents metrics for comparison from each of the VISSIM models created as part of the LCRT project. This includes the Future Year (2025 and 2045) No Build and Build models discussed in this report. Additionally, for completeness, results from the Existing Conditions model are also included.

6.1 MODEL THROUGHPUT VOLUME COMPARISONS

A comparison of the total model throughput within the study area has been put together for all five scenarios. The AM results are in **Table 6.1** and the PM results are in **Table 6.2**. **Figure 6.1** shows the processed demand vs. the volume denied entry for all five scenarios for both AM and PM.

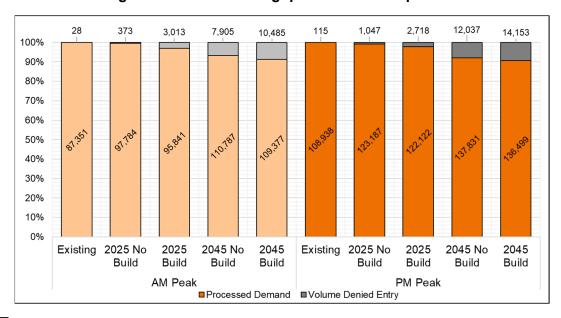
Table 6.1: Model Throughput Volume Comparison for AM Peak

Network Parameter	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
Processed Demand	87,351	97,784	95,841	110,787	109,377
Volume Denied Entry	28	373	3,013	7,905	10,485
% Volume Served	99.97%	99.62%	96.95%	93.34%	91.25%

Table 6.2: Model Throughput Volume Comparison for PM Peak

Network Parameter	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
Processed Demand	108,938	123,187	122,122	137,831	136,499
Volume Denied Entry	115	1,047	2,718	12,037	14,153
% Volume Served	99.89%	99.16%	97.82%	91.97%	90.61%

Figure 6.1: Model Throughput Volume Comparison





Scenario Comparisons

6.2 INTERSECTION DELAY AND LOS COMPARISONS

Comparisons of the intersection delay and LOS for the major intersections in the study area are shown below in **Table 6.3** for the 2^{nd} Hour of the AM peak (7:45 – 8:45 am) and in **Table 6.4** for the 2^{nd} Hour of the PM peak (5:00 – 6:00 pm). All five scenarios are included, and intersections that operate at LOS E or F are highlighted.

Table 6.3: Intersection Delay and LOS Comparison for AM Peak

Nada		LOS/Delay – AM Peak 2 nd Hour (7:45 – 8:45 am)					
Node No.	Intersection Name	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build	
22	US 78 & College Park Rd	C/24.8	D/43.9	E/78.6	F/241.9	F/201.6	
23	US 78 & Ladson Rd/Ancrum Rd	C/30.2	D/54.2	F/84.3	F/153.0	F/256.7	
27	US 78 & Ingleside Blvd	C/27.1	D/47.3	F/89.0	F/139.6	F/201.8	
29	US 78 & I-26 EB Ramps	A/8.6	B/13.7	D/36.6	F/101.6	D/54.4	
30	US 78 & I-26 WB Ramps *	E/38.1	D/33.7	E/65.1	F/89.7	F/85.5	
31	US 78/University Blvd & Medical Plaza Dr	D/36.5	D/35.6	D/40.0	F/110.5	E/70.0	
34	US 78/University Blvd & Medical Plaza Dr/BUC Club	B/12.6	C/22.7	C/32.4	E/73.5	D/53.5	
37	US 78/University Blvd & Elms Center Rd	B/13.4	B/18.4	D/42.1	F/85.3	F/88.7	
38	US 78/University Blvd & Fernwood Dr	A/7.5	B/10.8	F/87.7	F/82.5	F/115.1	
42	US 52/78/Rivers Ave & Otranto Rd/Otranto Blvd	D/42.5	D/45.7	F/100.5	E/63.3	F/104.5	
43	US 52/78/Rivers Ave & T-Mobile Dr †	B/11.4	B/15.0	E/45.7	B/18.3	F/57.2	
44	US 52/78/Rivers Ave & Melnick Dr *	A/1.8	D/33.4	D/42.9	E/37.0	E/57.4	
46	US 52/78/Rivers Ave & Greenridge Rd	C/23.4	D/47.2	D/43.6	D/48.1	D/49.8	
49	US 52/78/Rivers Ave & North Rivers Market Place	A/4.5	A/2.9	B/10.1	A/5.8	B/10.8	
50	US 52/78/Rivers Ave & Eagle Landing Blvd	B/15.8	B/14.3	B/14.0	B/19.3	B/16.5	
51	US 52/78/Rivers Ave & Northwood Blvd	A/8.8	A/9.5	B/18.4	C/25.1	C/28.0	
52	US 52/78/Rivers Ave & Ashley Phosphate	C/32.3	E/67.9	D/42.7	F/93.7	E/61.7	
54	US 52/78/Rivers Ave & Morris Baker Blvd	A/6.8	A/9.5	B/11.5	A/6.0	D/43.4	
56	US 52/78/Rivers Ave & Mabeline Rd	A/7.0	B/10.1	C/23.4	A/8.3	D/49.2	
59	US 52/78/Rivers Ave & Stokes Ave †	A/9.9	A/8.0	C/20.5	B/10.6	E/45.2	
60	US 52/78/Rivers Ave & Midland Park Rd	D/45.3	C/23.6	E/56.5	D/36.0	E/65.0	
61	US 52/78/Rivers Ave & Eagle Dr	A/3.2	A/2.8	C/25.1	A/3.0	C/29.2	
62	US 52/78/Rivers Ave & Hanahan Rd	A/8.9	A/9.8	C/32.5	B/10.5	D/42.0	
65	US 52/78/Rivers Ave & Benderson Dr	A/3.3	A/5.9	A/7.0	A/7.5	A/9.1	
67	US 52/78/Rivers Ave & Aviation Ave	C/24.0	C/26.3	C/26.2	E/67.8	D/39.9	
671	US 52/78/Rivers Ave & North Charleston Center	N/A	N/A	C/25.9	N/A	C/27.1	
70	US 52/78/Rivers Ave & Remount Rd	D/50.2	E/66.4	C/34.3	F/99.9	D/38.8	
72	US 52/78/Rivers Ave & N of Sabal St *	A/0.8	A/0.9	B/14.1	A/1.1	B/16.2	
76	US 52/78/Rivers Ave & Harley St	A/4.1	A/5.3	B/12.9	A/6.2	B/13.7	
78	US 52/78/Rivers Ave & I-526 WB Ramps	A/3.7	A/4.4	A/4.3	A/5.2	A/5.3	



Scenario Comparisons

		LOS/I	Delay – AM F	Peak 2 nd Hou	ur (7:45 – 8:4	5 am)
Node No.	Intersection Name	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
79	US 52/78/Rivers Ave & I-526 EB Ramps	A/3.9	A/4.3	A/5.1	A/5.0	A/5.2
82	US 52/78/Rivers Ave & Mall Dr	A/6.4	A/7.3	C/34.4	A/8.6	D/42.9
83	US 52/78/Rivers Ave & Alton †	A/1.9	A/2.8	A/1.5	A/2.6	A/3.6
84	US 52/78/Rivers Ave & Morningside Dr	A/8.1	A/8.9	B/16.0	A/9.6	C/21.6
87	US 52/78/Rivers Ave & Piggly Wiggly Dr	A/3.4	A/4.4	A/9.5	A/4.2	B/10.2
88	US 52/78/Rivers Ave & Meeting St/Durant Ave	C/29.6	C/30.7	D/50.0	D/38.5	C/34.3
91	US 52/78/Rivers Ave & Helm Ave	A/4.5	A/5.7	A/6.3	A/7.2	A/6.7
92	US 52/78/Rivers Ave & McMillan Ave	B/10.8	B/12.4	B/13.7	B/13.8	B/15.4
93	US 52/78/Rivers Ave & SC 642/Dorchester Rd	B/10.6	B/11.7	B/18.0	B/13.2	C/22.1
94	US 52/78/Rivers Ave & Cosgrove Ave	C/23.1	C/21.7	D/42.2	C/23.7	E/64.7
95	US 52/78/Rivers Ave & Reynolds Ave	A/6.8	A/8.6	C/24.6	A/8.6	C/26.5
164	King St Ext & Heriot St	A/8.7	A/9.3	A/9.3	B/13.7	D/54.0
166	King St & Mt. Pleasant St	C/26.5	C/24.5	C/28.7	D/50.9	F/89.6
109	US 52/Meeting St & Morrison Dr	C/24.8	C/23.9	C/28.0	D/35.8	F/105.5
113	Meeting St & Romney St	B/16.9	C/21.3	C/22.7	C/29.6	E/62.8
117	Meeting St & US 17 Off-Ramp	B/17.0	C/20.1	C/29.4	C/22.0	C/32.9
119	Meeting St & Huger St	B/14.0	B/15.7	C/34.1	B/19.7	C/29.3
120	Meeting St & Johnson St	A/0.8	A/0.8	A/1.0	A/0.7	A/1.1
121	Meeting St & Lee St	A/5.3	B/10.7	D/35.7	C/20.3	D/40.1
122	Meeting St & I-26	B/11.5	B/17.5	C/23.8	C/32.0	C/30.3
123	Meeting St & Line St	B/13.3	B/13.9	B/12.5	B/16.2	B/14.8
124	Meeting St & Columbus St	B/11.8	B/16.6	B/16.9	B/17.1	B/17.8
125	Meeting St & Woolfe St	A/4.9	A/8.3	A/5.5	A/7.9	A/6.3
126	Meeting St & Mary St	B/11.9	B/13.3	A/9.7	C/27.7	B/10.9
127	Meeting St & Wragg Square	A/5.6	A/6.8	A/6.6	B/11.5	A/7.0
128	Meeting St & Ann St	A/4.5	A/4.5	A/3.4	A/5.7	A/4.0
129	Meeting St & John St	A/9.4	B/13.5	B/11.5	B/17.3	B/17.8
130	Meeting St & Calhoun St	C/28.4	C/22.4	C/24.5	C/25.2	C/31.9
131	Calhoun St & King St	B/10.9	B/13.5	C/21.7	B/14.6	C/32.3
132	Calhoun St & Phillips St	A/8.4	B/10.0	C/21.1	B/13.2	C/28.5
133	Calhoun St & Coming St	B/13.1	B/13.2	B/12.7	C/22.0	B/16.7
134	Calhoun St & Smith St	A/7.5	A/5.6	A/6.5	B/17.0	A/7.3
135	Calhoun St & Rutledge Ave	B/11.4	B/13.3	B/13.7	B/14.3	B/15.4
136	Calhoun St & Ashley Ave	B/12.9	B/15.0	B/17.4	B/17.1	C/20.8
137	Calhoun St & Jonathan Lucas St/Barre St	B/10.1	B/12.7	B/13.6	B/15.6	B/17.7
142	Calhoun St & Courtenay Dr	C/20.2	B/18.3	C/21.8	C/23.0	C/27.3

^{*} This intersection is unsignalized in the Existing/No Build scenarios. A signal will be added here in the Build scenario.

[†] This intersection is signalized in the Existing/No Build scenarios. The signal here will be removed in the Build scenario.



Scenario Comparisons

Table 6.4: Intersection Delay and LOS Comparison for PM Peak

Nada		LOS/[Delay – PM P	eak 2 nd Hoι	ır (5:00 – 6:0	0 pm)
Node No.	Intersection Name	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
22	US 78 & College Park Rd	D/41.1	D/46.5	E/55.7	F/219.1	E/68.1
23	US 78 & Ladson Rd/Ancrum Rd	E/60.4	E/64.2	E/56.4	F/103.0	E/73.4
27	US 78 & Ingleside Blvd	C/27.8	F/97.7	D/37.7	F/94.1	E/56.4
29	US 78 & I-26 EB Ramps	A/4.2	B/15.5	A/6.1	D/42.9	C/22.3
30	US 78 & I-26 WB Ramps *	A/0.8	A/7.1	C/23.5	A/7.6	D/38.0
31	US 78/University Blvd & Medical Plaza Dr	D/39.6	C/34.5	D/43.7	E/64.7	E/58.9
34	US 78/University Blvd & Medical Plaza Dr/BUC Club	B/16.7	C/24.9	C/30.2	D/54.4	D/47.7
37	US 78/University Blvd & Elms Center Rd	B/18.4	C/22.3	D/42.2	D/35.3	E/63.5
38	US 78/University Blvd & Fernwood Dr	A/6.4	B/10.0	F/113.1	B/17.2	F/106.1
42	US 52/78/Rivers Ave & Otranto Rd/Otranto Blvd	D/40.5	D/47.1	E/62.0	D/53.2	E/77.5
43	US 52/78/Rivers Ave & T-Mobile Dr †	B/18.9	C/33.8	C/20.0	C/22.3	C/24.5
44	US 52/78/Rivers Ave & Melnick Dr *	B/11.6	D/32.7	E/62.2	D/27.3	E/62.4
46	US 52/78/Rivers Ave & Greenridge Rd	D/44.8	D/47.8	D/51.3	E/56.1	E/61.5
49	US 52/78/Rivers Ave & North Rivers Market Place	B/11.6	B/14.4	D/40.3	B/19.4	D/54.0
50	US 52/78/Rivers Ave & Eagle Landing Blvd	C/21.9	B/17.6	C/28.8	C/24.0	D/48.3
51	US 52/78/Rivers Ave & Northwood Blvd	C/30.0	C/28.4	E/59.4	D/39.9	F/87.8
52	US 52/78/Rivers Ave & Ashley Phosphate	D/46.7	D/47.4	E/79.4	E/73.5	F/105.7
54	US 52/78/Rivers Ave & Morris Baker Blvd	B/18.7	C/21.1	D/42.9	C/30.9	E/65.0
56	US 52/78/Rivers Ave & Mabeline Rd	B/17.0	C/25.4	D/47.9	D/42.5	E/67.9
59	US 52/78/Rivers Ave & Stokes Ave †	C/30.8	B/15.7	C/18.8	C/24.5	F/71.3
60	US 52/78/Rivers Ave & Midland Park Rd	B/15.6	C/34.5	D/35.5	C/28.8	F/92.4
61	US 52/78/Rivers Ave & Eagle Dr	A/4.3	C/20.8	C/25.8	C/20.0	E/65.7
62	US 52/78/Rivers Ave & Hanahan Rd	C/23.3	B/18.1	C/30.2	D/36.7	E/71.6
65	US 52/78/Rivers Ave & Benderson Dr	A/4.9	A/3.8	A/8.4	B/10.9	D/42.5
67	US 52/78/Rivers Ave & Aviation Ave	C/24.0	C/24.5	C/20.8	D/37.6	D/50.4
671	US 52/78/Rivers Ave & North Charleston Center	N/A	N/A	A/8.8	N/A	C/33.7
70	US 52/78/Rivers Ave & Remount Rd	E/57.1	E/73.1	C/28.1	F/83.9	C/32.9
72	US 52/78/Rivers Ave & N of Sabal St *	A/3.4	B/11.1	C/20.6	E/47.0	C/27.3
76	US 52/78/Rivers Ave & Harley St	A/7.7	B/10.4	B/18.7	C/27.9	C/23.7
78	US 52/78/Rivers Ave & I-526 WB Ramps	A/2.9	A/5.6	A/5.6	D/52.6	A/8.7
79	US 52/78/Rivers Ave & I-526 EB Ramps	A/4.9	A/8.3	A/8.8	E/62.7	A/9.3
82	US 52/78/Rivers Ave & Mall Dr	A/6.9	A/8.6	E/55.9	C/34.6	E/68.7
83	US 52/78/Rivers Ave & Alton †	A/2.6	A/3.1	A/2.5	A/6.6	A/9.5
84	US 52/78/Rivers Ave & Morningside Dr	A/8.9	B/12.5	B/19.8	B/12.1	C/21.8
87	US 52/78/Rivers Ave & Piggly Wiggly Dr	A/3.9	A/5.0	B/10.3	A/5.2	B/11.0
88	US 52/78/Rivers Ave & Meeting St/Durant Ave	B/19.8	C/25.8	D/44.4	D/37.3	D/50.4
91	US 52/78/Rivers Ave & Helm Ave	A/8.4	B/10.6	B/13.1	D/50.8	C/26.4



Scenario Comparisons

Mada		LOS/I	Delay – PM P	Peak 2 nd Hou	ır (5:00 – 6:0	0 pm)
Node No.	Intersection Name	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
92	US 52/78/Rivers Ave & McMillan Ave	B/16.1	C/21.3	D/39.4	C/26.6	D/43.6
93	US 52/78/Rivers Ave & SC 642/Dorchester Rd	B/10.5	B/12.0	B/19.6	B/14.7	C/24.0
94	US 52/78/Rivers Ave & Cosgrove Ave	C/22.3	C/27.2	E/79.1	D/39.3	F/106.3
95	US 52/78/Rivers Ave & Reynolds Ave	B/13.2	B/17.5	F/83.1	B/17.2	F/83.3
164	King St Ext & Heriot St	A/9.2	B/11.4	B/12.8	F/155.9	E/64.9
166	King St & Mt. Pleasant St	C/30.3	D/35.0	C/28.5	F/231.9	F/122.1
109	US 52/Meeting St & Morrison Dr	C/30.1	E/60.9	E/58.1	F/276.7	F/250.3
113	Meeting St & Romney St	B/19.2	C/34.1	C/23.9	F/190.9	F/204.4
117	Meeting St & US 17 Off-Ramp	C/27.2	D/39.4	C/27.8	F/147.7	F/99.8
119	Meeting St & Huger St	D/37.1	D/47.0	D/49.3	F/181.4	F/176.7
120	Meeting St & Johnson St	B/10.2	A/8.1	A/4.6	F/117.0	F/120.0
121	Meeting St & Lee St	A/3.9	A/6.8	A/7.8	F/88.0	F/123.8
122	Meeting St & I-26	B/10.1	B/11.4	B/12.6	E/68.5	F/192.9
123	Meeting St & Line St	B/11.7	B/11.6	B/13.4	E/63.1	F/167.4
124	Meeting St & Columbus St	A/9.6	B/12.1	B/16.3	E/72.3	F/128.7
125	Meeting St & Woolfe St	A/9.4	B/11.3	B/10.9	D/51.8	E/75.4
126	Meeting St & Mary St	B/12.7	B/16.8	B/18.1	D/48.9	E/64.9
127	Meeting St & Wragg Square	A/7.0	A/4.7	A/4.6	B/13.4	C/23.7
128	Meeting St & Ann St	A/4.4	A/3.8	A/6.3	C/33.5	D/35.6
129	Meeting St & John St	B/10.9	B/15.8	B/13.2	D/46.8	B/17.0
130	Meeting St & Calhoun St	C/24.6	C/22.3	C/24.4	E/59.5	C/29.4
131	Calhoun St & King St	B/12.3	B/17.7	C/30.6	C/25.2	E/69.0
132	Calhoun St & Phillips St	A/6.1	A/9.7	C/21.0	B/15.9	D/54.6
133	Calhoun St & Coming St	B/15.0	B/18.1	B/19.9	C/27.0	D/51.9
134	Calhoun St & Smith St	A/7.4	B/10.3	A/10.0	B/14.8	C/34.0
135	Calhoun St & Rutledge Ave	B/10.6	B/17.9	B/17.7	C/23.1	D/45.3
136	Calhoun St & Ashley Ave	B/15.8	B/18.7	B/19.1	C/21.8	C/32.9
137	Calhoun St & Jonathan Lucas St/Barre St	B/10.7	C/20.1	B/16.2	C/30.8	C/27.3
142	Calhoun St & Courtenay Dr	C/20.4	B/19.3	C/24.8	C/31.3	C/34.9

^{*} This intersection is unsignalized in the Existing/No Build scenarios. A signal will be added here in the Build scenario.

A detailed discussion of the intersection delay and LOS results is provided in **Appendix C**, including discussion of the geometric and signal changes made from Existing to No Build to Build and their impacts on the intersection operations. In general, most intersections see an increase in delay from Existing to 2025 to 2045 as the volumes throughout the network grow for the future years. The impacts of the changes for the Build network are not as easily summarized, because they depend on many different factors at each individual intersection.



[†] This intersection is signalized in the Existing/No Build scenarios. The signal here will be removed in the Build scenario.

Scenario Comparisons

It should be noted that, besides geometric changes to the roadway, the addition of TSP in the Build scenarios is one of the main reasons for changes in traffic operations between No Build and Build. The use of TSP at a signal may have a variable impact on the traffic operations depending on the proportion of traffic on the side street versus the main street. At locations with higher main street volumes, TSP may provide a benefit to the overall operations, whereas at locations with a more even split between side street and main street volumes, TSP may increase the overall intersection delay. Refinement of the signal timing and TSP parameters throughout the study area will be completed as the LCRT design is finalized.

6.3 CORRIDOR TRAVEL TIME COMPARISONS

Comparisons of the travel time segments along the LCRT corridor are shown below in **Table 6.5** and **Table 6.6** for AM Peak and in **Table 6.7** and **Table 6.8** for PM Peak. The first table for each peak period shows the northbound travel times, from downtown Charleston to Ladson, while the second table shows the southbound travel times, from Ladson to downtown Charleston. These travel times are the average for all vehicles, including the BRT for the segments where it travels in mixed traffic.

	Segment	Modeled Travel Times (minutes)							
Segment	Length (miles)	Existing	Existing 2025 No Build 2025 Build		2045 No Build	2045 Build			
Segment 4	2.9	6.4	9.3	8.5	18.4	11.9			
Segment 5	4.2	8.5	8.7	12.9	12.4	14.1			
Segment 6	5.3	12.5	12.9	13.7	13.2	13.8			
Segment 7	3.0	8.3	8.5	9.3	8.5	9.6			
Segment 8	1.6	4.3	4.2	4.2	4.7	6.1			
Segment 9	1.5	4.6	5.0	6.3	5.0	6.6			
Segment 10	0.9	3.7	4.0	4.2	4.6	4.8			
Total	19.4	48.3	52.5	59.0	66.7	66.9			

Table 6.5: Northbound Corridor Travel Time Comparison for AM Peak

There are a couple of segments in this table that show an increase in northbound travel time from the No Build to the Build in the AM peak. This observation is most pronounced along Segment 5 in the Opening Year (2025). In the transition from the No Build scenario to the Build scenario, updates to the roadway geometry result in fewer points at which mainline left/ U-turns and side street left turns are able to occur. This, in turn, results in higher volumes at many of the remaining left/U-turn locations along the mainline. Coupled with a reduction in green time at each left/U-turn movement due to the presence of the BRT lane requiring protected-only phasing, this results in longer queues at each left/U-turn lane. These longer queues have an increased likelihood of spilling back and blocking the through lanes, increasing the travel time along the corridor. Additionally, since northbound is the off-peak direction in the AM, the phase splits at signals are preferential to the southbound direction, leaving less green time for northbound traffic.

The decrease in travel time from No Build to Build along Segment 4 in the Future Year (2045) is primarily the result of the improvement in signal coordination along the corridor. Additionally, because northbound is the off-peak direction in the AM peak, there is less congestion as a result of capacity constraints; in this



Scenario Comparisons

situation, the travel time improvements that result from signal timing adjustments will not be overshadowed by capacity issues.

Table 6.6: Southbound Corridor Travel Time Comparison for AM Peak

	Segment	Modeled Travel Times (minutes)							
Segment	Length (miles)	Existing	Existing 2025 No Build		2045 No Build	2045 Build			
Segment 4	2.9	8.1	8.7	15.2	20.9	30.5			
Segment 5	4.2	9.1	11.6	20.0	18.1	26.7			
Segment 6	5.3	12.2	12.6	14.1	16.4	14.4			
Segment 7	3.0	7.0	7.0	7.3	7.4	7.8			
Segment 8	1.6	4.1	3.9	4.1	4.6	7.2			
Segment 9	1.5	5.8	5.8	6.7	7.2	7.4			
Segment 10	0.9	3.9	4.5	4.2	4.8	4.5			
Total	19.4	50.2	54.1	71.6	79.3	98.5			

In Segments 4 and 5 of both Future Year scenarios, the Build shows an increase in southbound travel time compared to the No Build. As with the northbound travel times, the presence of fewer points at which mainline left/U-turns and side street left turns are able to occur ultimately results in longer queues for left/U-turns on the mainline. These queues are more prone to spillback in the Build than in the No Build, which may block the through movements and increases the travel time along the segment. Since southbound is the peak direction in the AM peak period, left turn queue spillback can have an impact on a large number of through vehicles.

Specifically noting the improved travel time along Segment 6 in Future Year (2045), this is likely due to reduced demand in this segment and direction in the AM peak as a result of the congestion seen in Segment 5. Because the left/U-turn issues described here primarily occur in Segment 5, there are fewer vehicles entering Segment 6, resulting in less congestion and improved travel times.

Table 6.7: Northbound Corridor Travel Time Comparison for PM Peak

	Segment	Modeled Travel Times (minutes)						
Segment	Length (miles)	Existing 2025 No Build		2025 Build	2045 No Build	2045 Build		
Segment 4	2.9	7.6	10.5	8.0	14.1	13.3		
Segment 5	4.2	9.7	11.2	19.9	10.8	23.9		
Segment 6	5.3	14.0	16.3	16.4	25.3	21.6		
Segment 7	3	7.5	8.3	10.8	11.8	19.6		
Segment 8	1.6	4.1	4.6	4.2	14.1	18.4		
Segment 9	1.5	5.4	5.4	6.1	10.6	9.9		
Segment 10	0.9	3.8	4.1	4.5	4.8	7.7		
Total	19.4	52.2	60.4	69.8	91.5	114.4		



Scenario Comparisons

There are a couple of segments in the above table that show an increase in northbound travel time from the No Build to the Build in the PM peak period. This observation is most pronounced along Segments 5, 7, and 8 in both the Opening Year (2025) and the Future Year (2045). As in the AM peak, updates to the roadway geometry in the Build design result in fewer points at which mainline left/U-turns and side street left turns are able to occur. This, in turn, results in higher volumes at many of the remaining mainline left/U-turn locations. Coupled with a reduction in green time at each left/U-turn movement due to the presence of the BRT lane requiring protected-only phasing, this results in longer queues at each left/U-turn lane. These longer queues have an increased likelihood of spilling back and blocking the through lanes, increasing the travel time along the corridor. Additionally, because northbound is the peak direction in the PM peak period, queuing can have an impact on a large number of through vehicles.

Specifically noting the improved travel times along Segment 6 in Future Year (2045), this is likely due to reduced demand in this segment and direction as a result of the congestion seen in Segment 7. Because the left/U-turn issues described here occur in Segment 7, there are fewer vehicles entering Segment 6, resulting in less congestion and improved travel times.

Table 6.8: Southbound Corridor Travel Time Comparison for PM Peak

	Segment	Modeled Travel Times (minutes)							
Segment	Length (miles)	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build			
Segment 4	2.9	7.1	8.1	7.1	17.1	9.5			
Segment 5	4.2	10.0	10.0	11.4	12.2	15.4			
Segment 6	5.3	12.1	12.7	13.1	14.0	14.8			
Segment 7	3	6.8	7.0	7.4	8.6	8.1			
Segment 8	1.6	4.2	6.2	3.9	19.7	8.9			
Segment 9	1.5	6.1	6.6	6.2	7.1	10.7			
Segment 10	0.9	3.6	4.6	4.4	5.7	4.5			
Total	19.4	49.9	55.2	53.4	84.5	72.0			

The improved southbound travel times in Segments 4 and 8 are the result, primarily, of the improvement in signal coordination along the corridor. Additionally, because southbound is the off-peak direction in the PM peak, there is less congestion due to capacity constraints; in this situation, the travel time improvements that result from signal timing adjustments will not be overshadowed by capacity issues.



Summary and Conclusions

7.0 SUMMARY AND CONCLUSIONS

The Future Year (2045) No Build and Build VISSIM models for the proposed LCRT route have been developed, adjusted, and fine-tuned. Future Year geometry, traffic control, and volumes were integrated into the Future Year (2025 and 2045) No Build analyses. All signal timing was carefully reviewed to ensure that the input data is reasonable for the development of the Future Year models. Additionally, all traffic control data for the Future Year (2025 and 2045) Build models, including signal control changes and Transit Signal Priority (TSP), were also carefully reviewed to ensure that the input data is reasonable for the development of the Future Year Build model.

7.1 OPENING YEAR (2025) MODELS

The study area experiences heavy congestion during both the Opening Year (2025) No Build and Build AM and PM peak periods, as is evident from the network statistics presented in this report. According to the throughput analysis for the Opening Year (2025) No Build and Build models, 99.62% and 96.95% of the total volume is able to be served in the AM peak, while 99.16% and 97.82% of the total volume is able to be served in the PM peak, respectively for the No Build and Build scenarios. The total model throughput decreases slightly with the addition of the BRT in both the AM and PM peak periods.

Opening Year (2025) No Build and Build delay analyses results indicate that out of the 66 intersections included in the LOS analysis, two (2) and eight (8) are expected to operate at LOS E or F in the second hour of the AM peak, respectively. In the second hour of the PM peak, four (4) and eleven (11) intersections respectively are expected to operate at LOS E or F for the Opening Year (2025) No Build and Build scenarios. These results indicate that operations in certain locations may be negatively impacted by the addition of the BRT; it should be noted that most of these locations are already highly congested. At other intersections throughout the network, the LOS results indicate that implementation of the BRT may have a neutral or even a positive impact on general traffic intersection operations.

Corridor travel time analyses indicate that drivers are likely to experience travel time increases along several segments of the corridor due to the geometry adjustments and rerouting of demand necessitated by the addition of the BRT lanes, as described above in **Section 6.3**. These increases are expected primarily to occur in portions of the corridor with higher left/U-turn volumes, such as Segments 5 and 6. In other areas of the network, such as Segments 7 through 10, the travel time differences between the No Build and the Build scenarios are much less pronounced and are just as likely to show a decrease in travel time as an increase.

Along the BRT corridor itself, the BRT travel times do show that the BRT buses experience a benefit over the general traffic. Compared to general traffic travel times, the BRT typically has a shorter overall travel time as well as a shorter travel time between stations in both directions for both the AM and PM peaks. Even after accounting for the added station dwell times in the total, the use of TSP signal control and exclusive lanes show a clear benefit to the BRT.



Summary and Conclusions

Although there are areas of the study network that are negatively impacted by the implementation of the LCRT, there are also areas that benefit from the geometric and signal changes that come along with the BRT route. As the LCRT design is finalized, further refinement of intersection layouts, signal timing, and TSP parameters will be necessary to mitigate some of the negative impacts and improve operations for the general traffic as well as the LCRT.

7.2 FUTURE YEAR (2045) MODELS

The study area experiences severe congestion during both the Future Year (2045) No Build and Build AM and PM peak periods, as is evident from the network statistics presented in this report. According to the throughput analysis for the Future Year (2045) No Build and Build models, 93.34% and 91.25% of the total volume is able to be served in the AM peak, while 91.97% and 90.61% of the total volume is able to be served in the PM peak, respectively for the No Build and Build scenarios. The total model throughput decreases slightly with the addition of the BRT in both the AM and PM peak periods.

Future Year (2045) No Build and Build delay analyses results indicate that out of the 66 major intersections included in the LOS analysis, fourteen (14) and seventeen (17) are expected to operate at LOS E or F in the second hour of the AM peak, respectively. In the second hour of the PM peak, twenty-one (21) and thirty-four (34) intersections respectively are expected to operate at LOS E or F for the Future Year (2045) No Build and Build scenarios. These results indicate that operations in certain locations may be negatively impacted by the addition of the BRT; it should be noted that most of these locations are already highly congested. At other intersections throughout the network, the LOS results indicate that implementation of the BRT may have a neutral or even a positive impact on general traffic intersection operations.

Corridor travel time analyses indicate that drivers are likely to experience travel time increases along several segments of the corridor due to the geometry adjustments and rerouting of demand necessitated by the addition of the BRT lanes, as described above in **Section 6.3**. These increases are expected primarily to occur in portions of the corridor with higher left/U-turn volumes, particularly Segment 5. In other areas of the network, the travel time differences between the No Build and the Build scenarios tend to be much smaller, whether the values show an increase or decrease in travel time.

Along the BRT corridor itself, the BRT travel times do show that the BRT buses experience a benefit over the general traffic. Compared to general traffic travel times, the BRT typically has a shorter overall travel time as well as a shorter travel time between stations in both directions for both the AM and PM peaks. Even after accounting for the added station dwell times in the total, the use of TSP signal control and exclusive lanes show a clear benefit to the BRT.

Although there are areas of the study network that are negatively impacted by the implementation of the LCRT, there are also areas that benefit from the geometric and signal changes that come along with the BRT route. As the LCRT design is finalized, further refinement of intersection layouts, signal timing, and TSP parameters will be necessary to mitigate some of the negative impacts and improve operations for the general traffic as well as the LCRT.

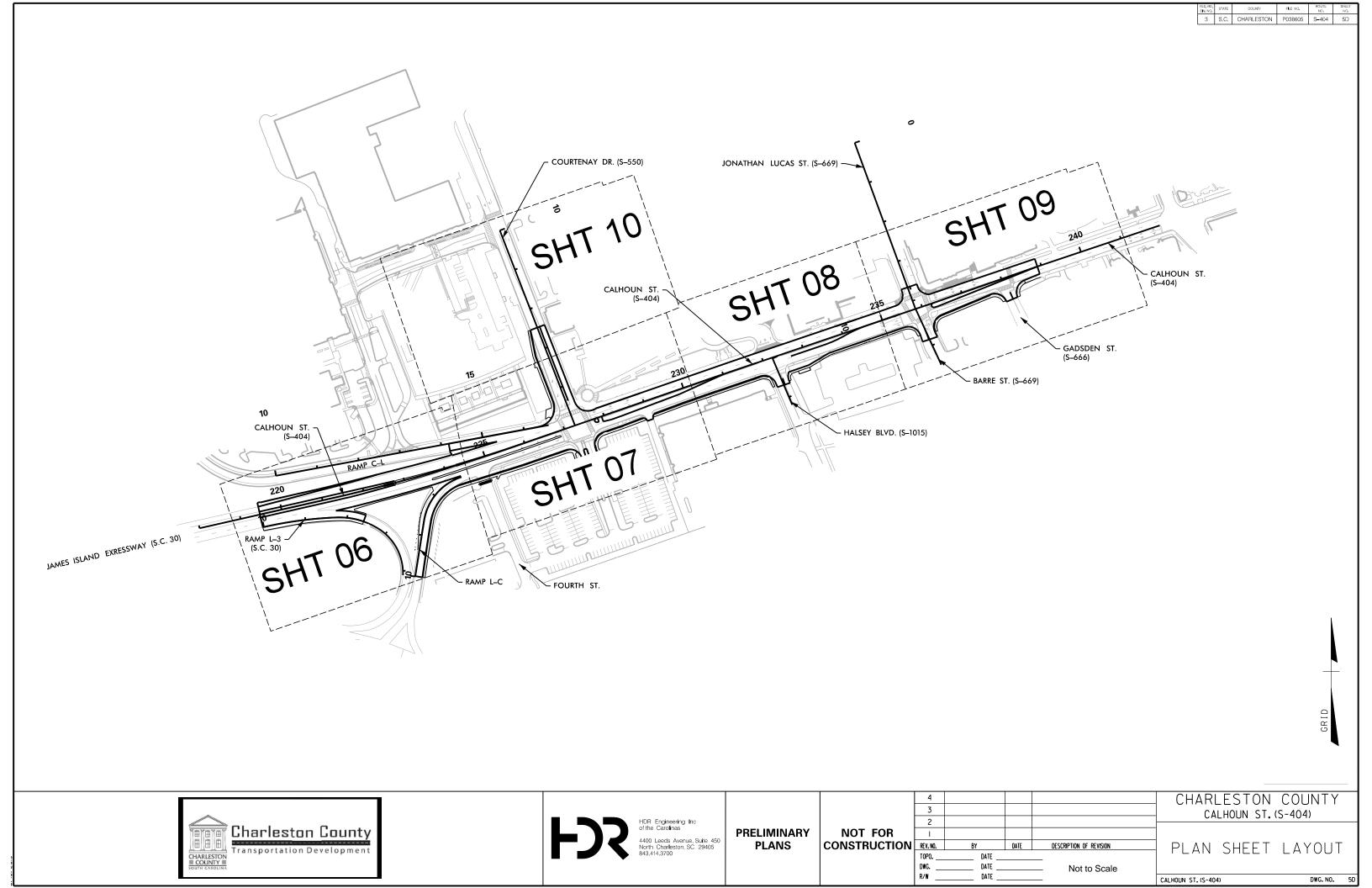


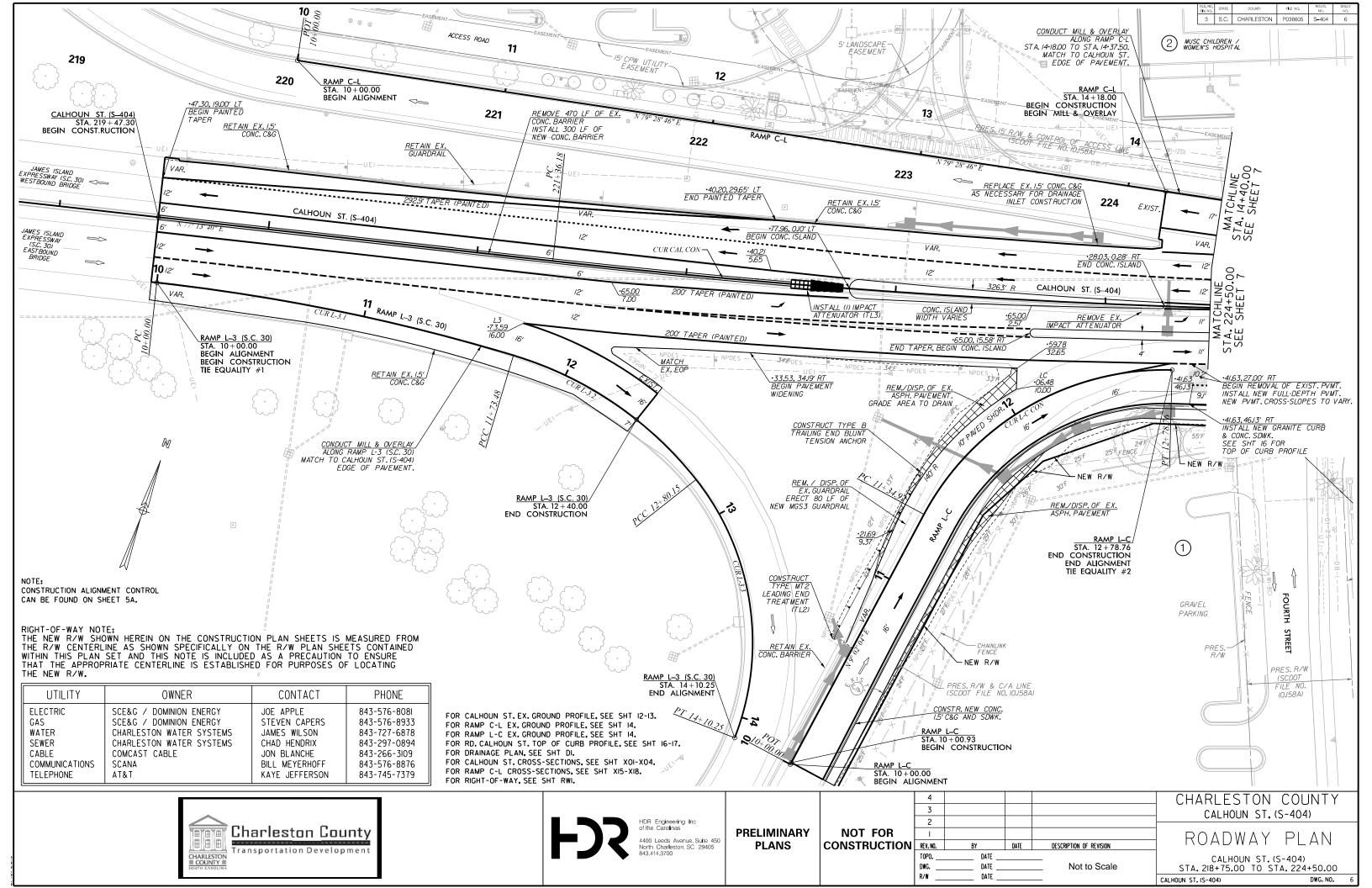
Appendix A - Calhoun & Courtenay Roadway Plans

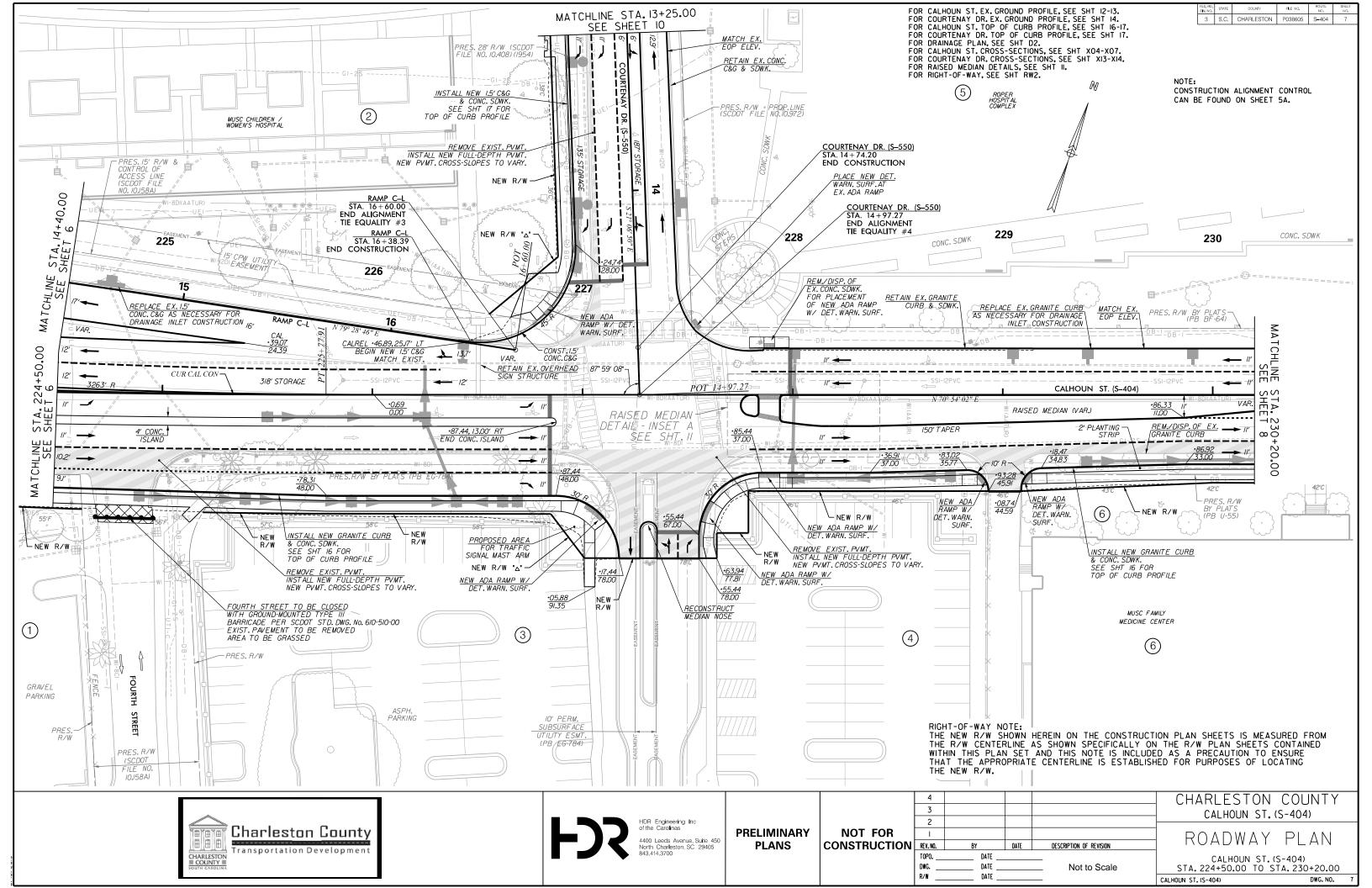
Appendix A - CALHOUN & COURTENAY ROADWAY PLANS

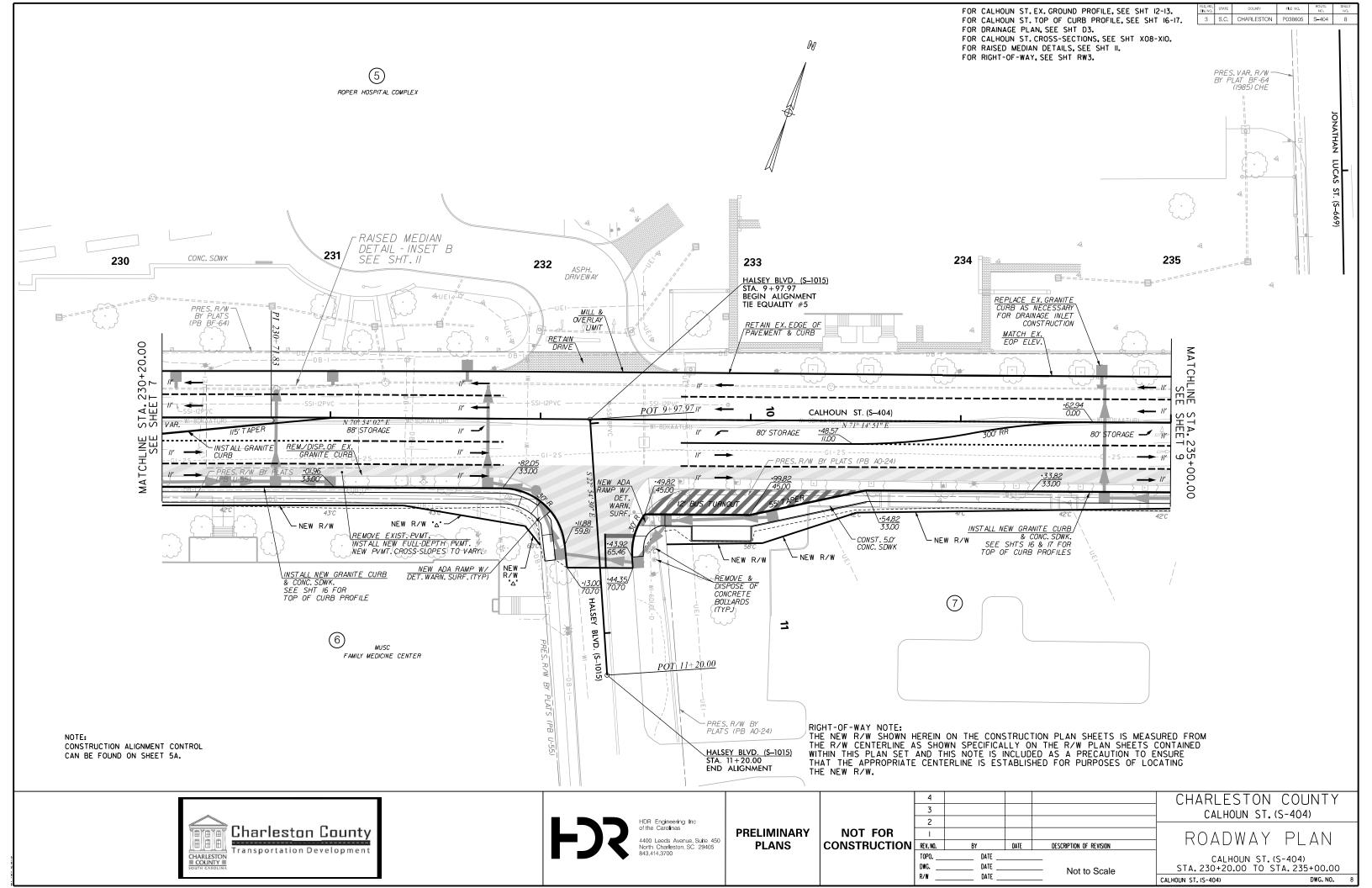
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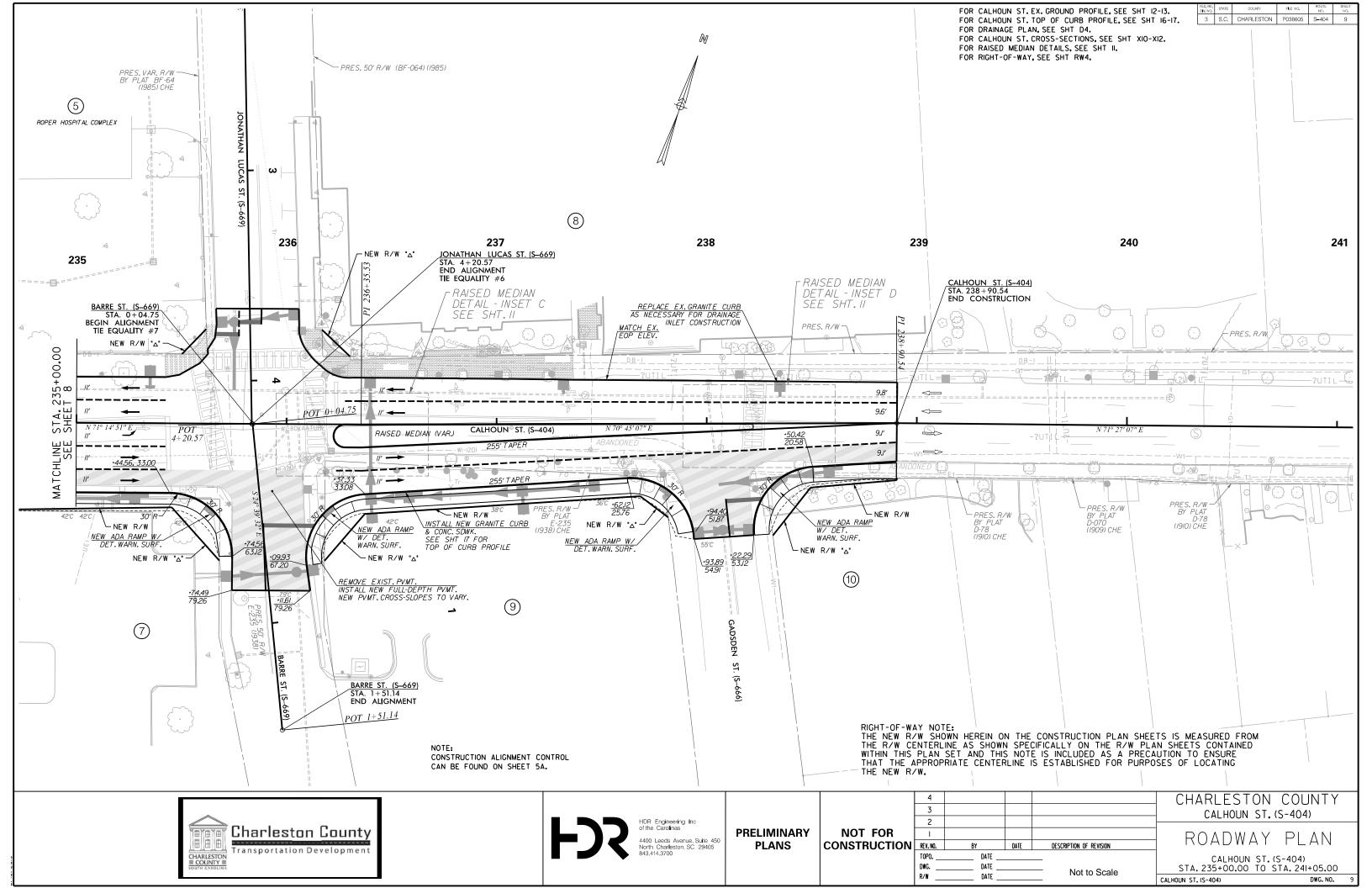


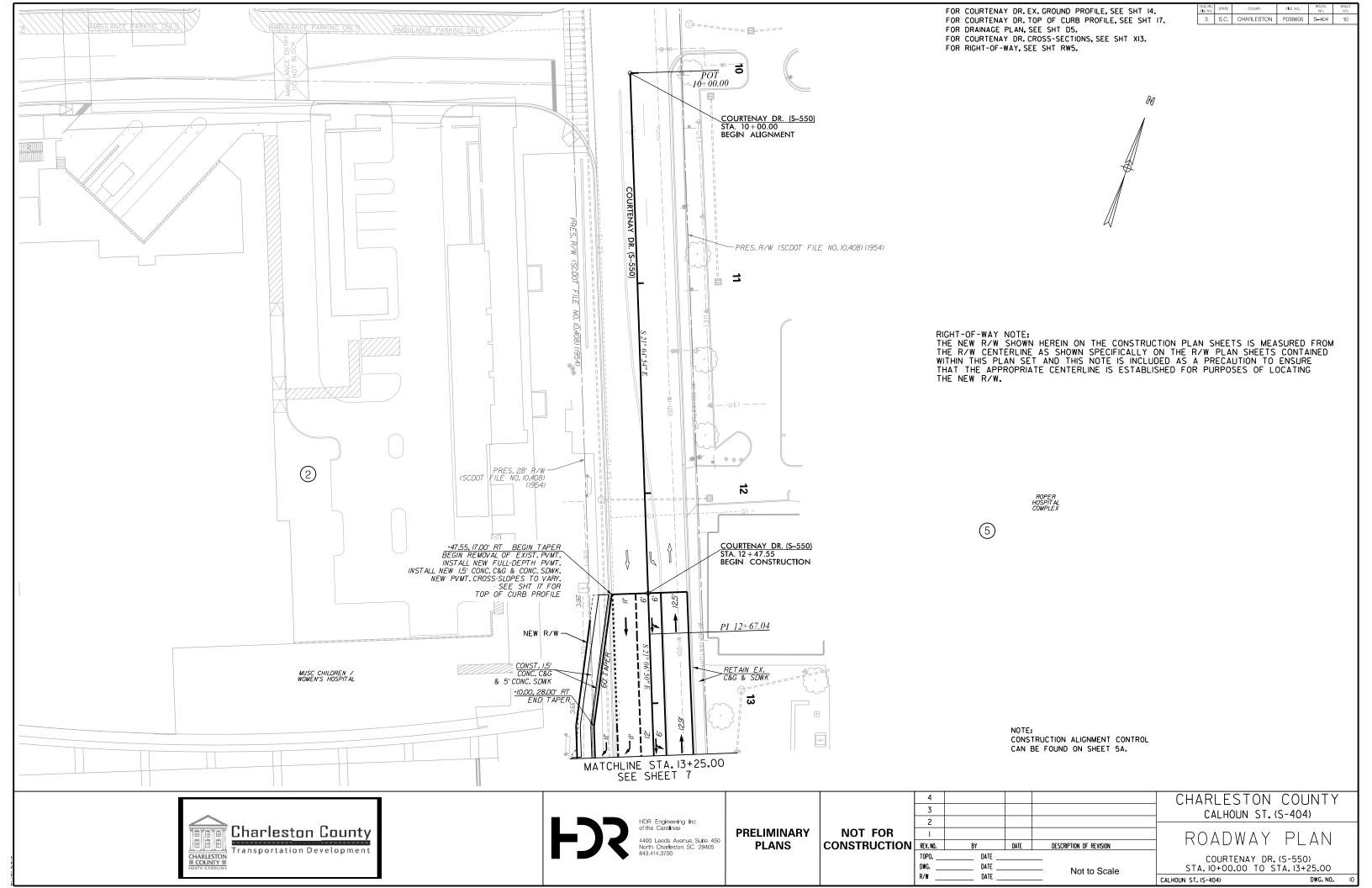












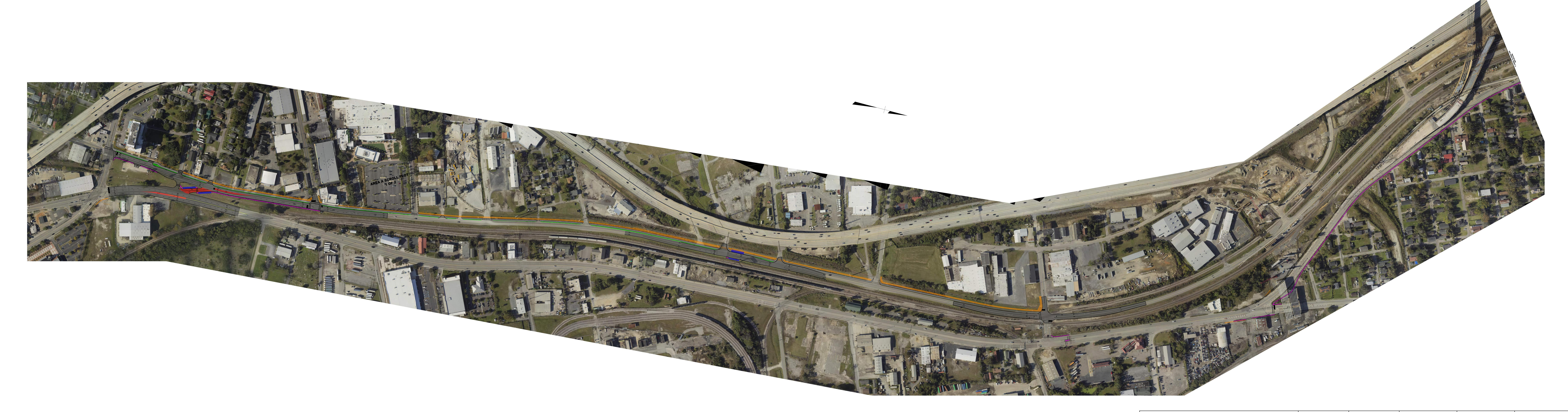
Appendix B - Build Roadway Plans

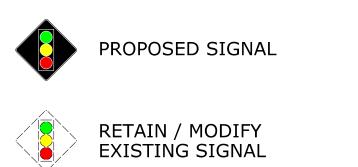
Appendix B - BUILD ROADWAY PLANS

Files provided to Stantec on March 15, 2021. These files are provided for information only and may not reflect the latest proposed roadway configuration. Please refer to the latest design files for detailed design review.

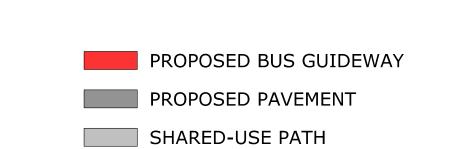












REMOVE EXISTING PAVEMENT

PRIME CONSULTANT:

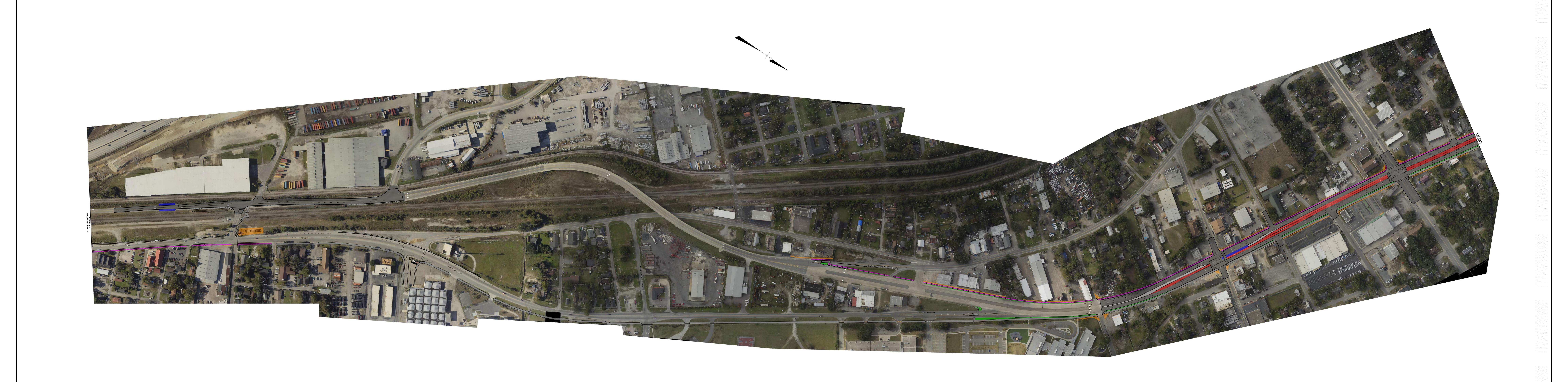
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Suite 450
Charleston, SC 29405

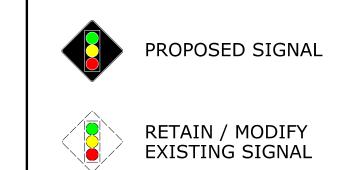
PRELIMINARY PLANS
NOT FOR
CONSTRUCTION

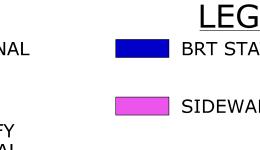
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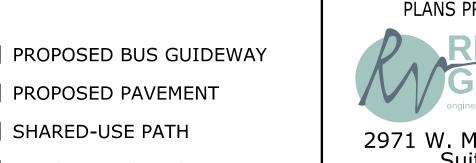
GRAPHIC SCALE

AREA B CONCEPTUAL PLA
RIVERS AVE. - ALT 3
MT PLEASANT ST. TO COSGROV

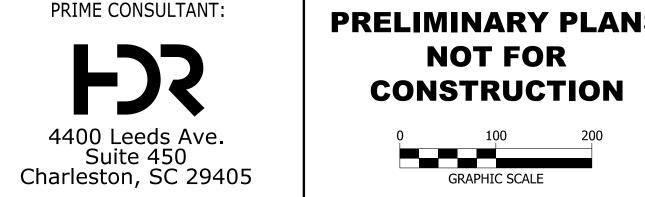














AREA B CONCEPTUAL PLANS
RIVERS AVE. - ALT 3
MT PLEASANT ST. TO COSGROVE



PLOT DRIVER: LCRT_PDF_100-Scale_RollPlo+s.pl+cfg
USER: CWOLFE

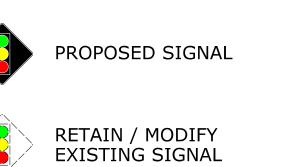
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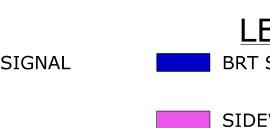
Lowcountry Rapid Trans

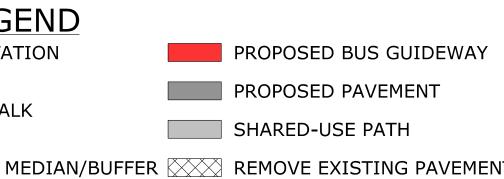
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RIVERS AVE.
COSGROVE AVE. TO PIGGLY WIG
Rapid Transit

SHEET NO.







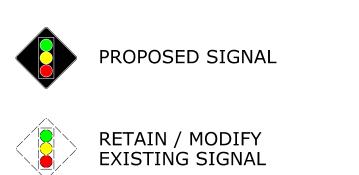




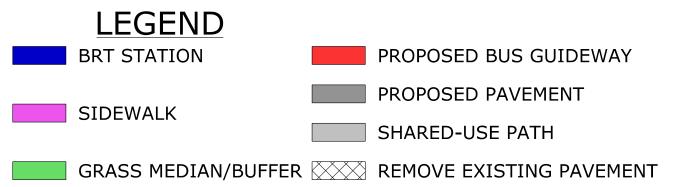
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GRAPHIC SCALE

L C Lowcountry R T Rapid Transit

1 OF 3







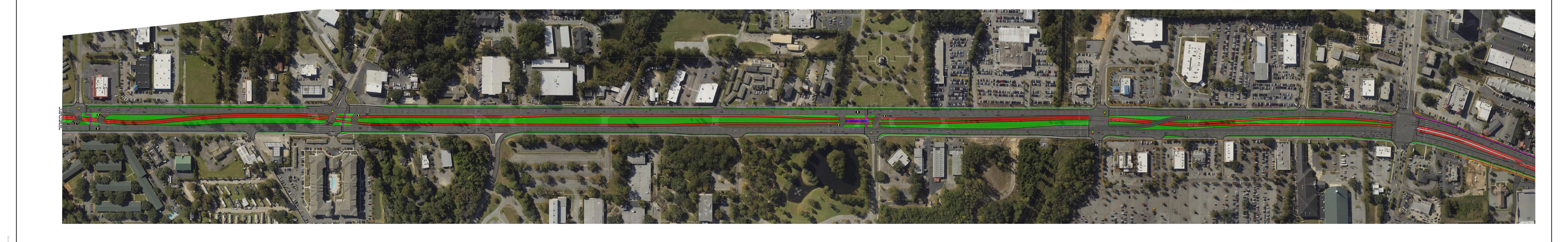


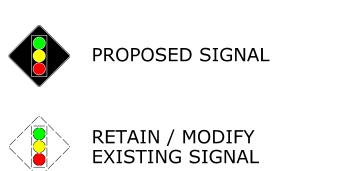
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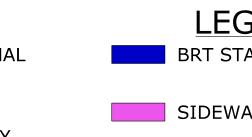
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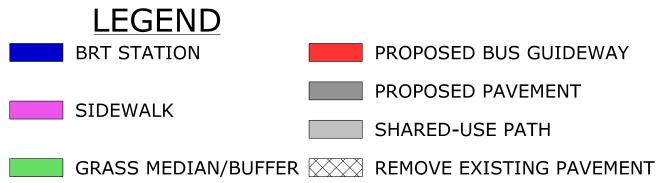
L C | Lowcountry R T | Rapid Transit

SHEET NO.
2 OF 3











0 100 200

GRAPHIC SCALE

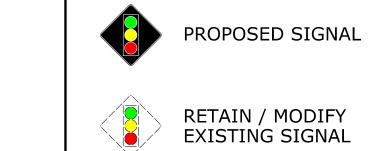
L C Lowcountry
R T Rapid Transit

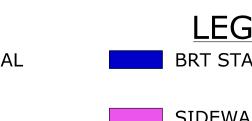
PIGGLY WIGGLY DR TO ASHLEY PHOSPHATE

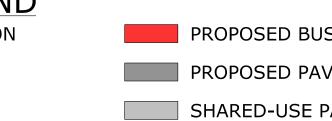
3 OF 3







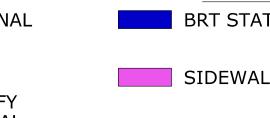






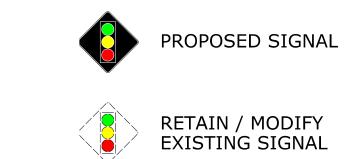


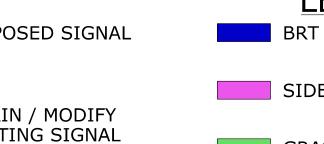


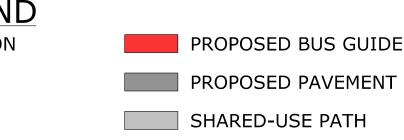












REMOVE EXISTING PAVEMENT





Lowcountry Rapid Transit

AREA F CONCEPTUAL PLANS
RIVERS AVE.
OLD UNIVERSITY BLVD. TO INGLESIDE BLVI

DESIGNED BY: DRAWN BY: CHECKED BY: DATE: SHEET NUMBER:

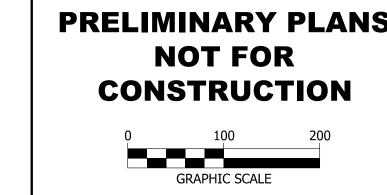
















Appendix C - Detailed Comparison of Intersection Delay Results

Appendix C - DETAILED COMPARISON OF INTERSECTION DELAY RESULTS

Intersection layouts as included in the VISSIM model are shown here and are accurate as of April 9, 2021. They may not reflect the latest proposed roadway configuration. Please refer to the latest design files for detailed design review.



Node No	Internaction Name	Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay	
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
22	US 78 & College Park Rd	Signalized	Signalized	C/24.8	D/43.9	E/78.6	F/241.9	F/201.6
	A View III		N	BRT LOS/Delay	NB BRT SB BRT	C/21.8 A/5.3	NB BRT SB BRT	D/37.9 F/208.0
1000						(2 nd Hour) LOS		17200.0
				Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
				D/41.1	D/46.6	E/55.7	F/219.1	E/68.1
6			BRT LOS/Delay	NB BRT	B/17.1	NB BRT	B/18.4	
		THE O VE		Bitt Econociay	SB BRT	A/3.5	SB BRT	A/9.3
		Explanation of Results:	Increased overall intersection delay in 2025 is likely cause by coordination of the signal or the addition of TSP. The BRT, particularly in the SB direction, experiences high delays because it is in mixed traffic here.					
No Build Changes:	N/A				Further refinement of the signal timing and TSF parameters will be completed as the LCRT design			RT design is
Build Changes:	Signal operation changed from fully-actuated TSP added for phases associated with the			Mitigation Strategies:		nto the upcomir	difications may ng county proje 8.	

Mada Na	Intersection Name	Signal	Control	AM Peak (2 nd Hour) LOS/Delay				
Node No.	intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
23	US 78 & Ladson Rd/Ancrum Rd	Signalized	Signalized	C/30.2	D/54.0	F/84.3	F/153.0	F/256.7
				BRT LOS/Delay	NB BRT	A/4.6	NB BRT	B/14.4
3			A A		SB BRT	C/33.1	SB BRT	F/250.2
1			1		PM Peak	(2 nd Hour) LOS	S/Delay	
1				Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
				E/60.4	E/63.1	E/56.4	F/103.0	E/73.4
	10.00			BRT LOS/Delay	NB BRT	B/11.0	NB BRT	A/9.9
1 1000					SB BRT	C/22.4	SB BRT	C/24.7
		Red Red Car	Explanation of Results:	Increased overall intersection delay in 2025 is likely caused by the addition of TSP. The BRT, particularly in the SB direction, experiences high delays because it is in mixed traffic here.				
No Build Changes:	N/A			Potential	parameters	will be comple	e signal timing	T design is
Build Changes:	TSP added for phases associated with th	ne BRT (EBT al	nd WBT).	Mitigation Strategies:	finalized. Some of these modifications may be able to be incorporated into the upcoming county project to widen US 78.			

No de No	lutana adan Mana	Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay		
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build	
27	US 78 & Ingleside Blvd	Signalized	Signalized	C/27.1	D/47.4	F/89.0	F/139.6	F/201.8	
				BRT LOS/Delay	NB BRT	F/98.6	NB BRT	F/274.9	
			Ä		SB BRT	D/39.7	SB BRT	E/72.8	
			PM Peak	(2 nd Hour) LOS	S/Delay				
				Existing	2025 No Build	2025 Build	2045 No Build	2045 Build	
		P		C/27.8	F/96.0	D/37.7	F/94.1	E/56.4	
1.				BRT LOS/Delay	NB BRT	C/22.3	NB BRT	C/27.9	
			SB BRT	B/10.1	SB BRT	C/20.9			
					The addition of the exclusive transit phase, the use of TSF on the main street, and the queue along EB US 78 caused by the downstream signal, particularly in the AM peak whe EB is the peak direction of travel, all contribute to high delays on Ingleside Blvd, both NB and SB.				
No Build Changes:	N/A EBL changed to protected-only phase. Exclusive transit phase added for the NB BRT to exit the exclusive BRT lane into the WBT lanes. TSP added for phases associated with the BRT (EBT and exclusive transit phase).			Potential	Additional changes at this location will be considered during Entry into Engineering, including an investigation into adding a second lane for the SBL to then be able to provide more time to the NBT/NBR without impacting the main street. Further refinement of the signal timing and				
Build Changes:				Mitigation Strategies:	TSP paramete finalized. Sor	ers will be com ne of these mo- nto the upcomir	pleted as the Lodifications maying county proje	CRT design is be able to be	

No do No	Lutana adam Mana	Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay	
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
29	US 78 & I-26 EB Ramps	Signalized	Signalized	A/8.6	B/13.4	D/36.6	F/101.6	D/54.4
			(*) (*)	BRT LOS/Delay	NB BRT SB BRT	A/3.0 A/3.9	NB BRT SB BRT	A/3.0 A/3.9
a provide		À			(2 nd Hour) LOS		7,0.5	
		0.10	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build	
-5		- Alas		A/4.2	B/15.6	A/6.1	D/42.9	C/22.3
		- The same of the		BRT LOS/Delay	NB BRT	A/3.1	NB BRT	A/3.5
					SB BRT	A/3.7	SB BRT	A/3.1
	3		Explanation of Results:	Operations generally improve from the No Build to the Build because TSP provides a benefit to the mainline. The exception is the 2025 Build AM peak, which sees worse performance due to the queue along EB US 78 caused by the downstream signal.				
No Build Changes:	N/A			Potential	to the downstr timing and TS	ream signal. Fu P parameters v	ay be improved irther refinemer vill be complete	nt of the signal d as the LCRT
Build Changes:	TSP added for phases associated with the	ne BRT (EBT a	nd WBT).	Mitigation Strategies:	design is fina	alized. Some of orporated into the	these modifica ne upcoming co US 78.	tions may be

No do No	Internation Name	Signal	Control		AM Peak	(2 nd Hour) LOS	5/Delay	
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
30	US 78 & I-26 WB Ramps	Unsignalized	Signalized	E/38.1	D/34.0	E/65.1	F/89.7	F/85.5
3 - 72 - 1 - AT VINS				BRT LOS/Delay	NB BRT	A/1.2	NB BRT	A/0.8
			N	BRT 200/Delay	SB BRT	A/3.3	SB BRT	A/3.4
		#	A N		PM Peak	(2 nd Hour) LOS	i/Delay	
Grant Control of the		一样		Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
w/Phi				A/0.8	A/7.1	C/23.5	A/7.6	D/38.0
				BRT LOS/Delay	NB BRT	A/1.3	NB BRT	A/1.0
			1	2111 200/2014	SB BRT	A/3.3	SB BRT	A/3.3
			Explanation of Results:	Existing and No Build results at this location use Unsignalized LOS criteria; Build results use Signalized LOS criteria. Increased overall intersection delay is due to the addition of the signal, which is required in order to maintair the EBL movement across the BRT lane onto the I-26 WB on-ramp and to control the interactions between the duallane off-ramps and the main street through movements.				
No Build Changes:				Potential Mitigation	Additional changes at this location will be during Entry into Engineering. One of consideration is to remove all proposed of NB-to-EB ramp, returning it to Existing of keeping the EBT on US 78/University Blv			
Build Changes:	West leg reconfigured to have a total of the reconfigured to have a total of three (3) WBT from I-26 reconfigured to have two (2) lanes. intersection movements (WBR remains free-fassociated with the BRT	Mitigation Strategies:	Further refinement of the signal timing and TSP parameters will be completed as the LCRT design is finalized. Some of these modifications may be able to be incorporated into the upcoming county project to widen US 78.					

Node No.	Intersection Name	Signal Control		AM Peak (2 nd Hour) LOS/Delay					
		No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build	
31	US 78/University Blvd & Medical Plaza Dr	Signalized	Signalized	D/36.5	D/35.7	D/40.0	F/110.5	E/70.0	
				BRT LOS/Delay	NB BRT	C/25.9	NB BRT	C/31.4	
	enmani.	SB BRT B/12.7 SB BRT B/13.2 PM Peak (2 nd Hour) LOS/Delay							
				2025 2025 2045 2045					
				Existing	No Build	Build	No Build	Build	
				D/39.6	C/34.3	D/43.7	E/64.7	E/58.9	
				BRT LOS/Delay	NB BRT SB BRT	C/20.0 A/7.2	NB BRT SB BRT	C/33.0 A/8.0	
23 1		Explanation of Results:	Intersection operations worsen in the future years because of increased volumes along an already congested corridor. Differences between No Build and Build can generally be attributed to the influence of TSP and optimized signal timing, including improved coordination along the corridor, which has a variable impact depending on the proportion of traffic on the side street vs. the main street. The NB BRT sees a higher delay because it occasionally waits at the stop bar if there is a SB BRT already in the bi-directional lane west of the intersection.						
No Build Changes:	South leg widened from two (2) lanes to three lanes and a shared NBT/R lane. Signal timing phasing on the side s	g modified to re		Potential Mitigation	Additional changes at this location will be considered during Entry into Engineering. Possible adjustments include the removal of phases, such as making one or both approaches on the side street right-out only. Moving the EB left turn to the downstream intersection, US 78/University Blvd & Medical Plaza Dr/BUC Club Blvd, may also be				
Build Changes:	Intersection geometry matches the No Bu associated with the BRT (EB		for phases	Strategies:	considered. Further refinement of the signal timing and TSP parameters will be completed as the LCRT design is finalized. Some of these modifications may be able to be incorporated into the upcoming county project to widen US 78.				

Node No.	Intersection Name	Signal Control		AM Peak (2 nd Hour) LOS/Delay				
		No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
34	US 78/University Blvd & Medical Plaza Dr/BUC Club Blvd	Signalized	Signalized	B/12.6	C/22.7	C/32.4	E/73.5	D/53.5
		BRT LOS/Delay	NB BRT	C/23.3	NB BRT	C/25.3		
		SB BRT B/18.5 SB BRT B/19.1 PM Peak (2 nd Hour) LOS/Delay						
		Existing	2025 No Build	2025 Build	2045 No Build	2045 Build		
				B/16.7	C/25.0	C/30.2	D/54.4	D/47.7
			BRT LOS/Delay	NB BRT	B/19.8	NB BRT	C/21.3	
MI O DE LEGISTE DE LEG				-	SB BRT	B/18.3	SB BRT	B/18.9
		Explanation of Results:	Operations generally improve from the No Build to the Build because of the influence of TSP and optimized signal timing, including improved coordination along to corridor. The NB BRT sees a higher delay because the dwell time at the station adjacent to this intersection is included in the delay measurement.					
No Build Changes:	N/A			Potential	Additional changes at this location will be considered during Entry into Engineering. Possible adjustments are related to those under consideration for the US 78/University Blvd & Medical Plaza Dr intersection, including moving all EB left turns to be located at this			
Build Changes:	EBU and WBU movements added. EBL/U a protected-only phases. TSP added for phas (EBT and WBT).	es associated v		Mitigation Strategies:	location. Further refinement of the signal timing and TSP parameters will be completed as the LCRT design is finalized. Some of these modifications may be able to be incorporated into the upcoming county project to widen US 78.			

N. I. N.		Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay		
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build	
37	US 78/University Blvd & Elms Center Rd	Signalized	Signalized	B/13.4	B/18.4	D/42.1	F/85.3	F/88.7	
				BRT LOS/Delay	NB BRT	A/5.9	NB BRT	A/8.7	
		N N	PM Peak (2 nd Hour) LOS/Delay						
			7 5 8	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build	
		w		B/18.4	C/22.4	D/42.2	D/35.3	E/63.5	
				BRT LOS/Delay	NB BRT SB BRT	A/5.8			
			Explanation of Results:	left turns intersection,	on the mainline especially becard with the addi	A/1.8 SB BRT A/1.4 Hour) LOS/Delay 2025 2045 2045 Build No Build Build D/42.2 D/35.3 E/63.5			
No Build Changes:	N/A			Potential Mitigation	parameters	s will be comple	ted as the LCR	T design is	
Build Changes:	EBU and WBU movements added. EBL/U a protected-only phases. TSP added for phas (EBT and WBT).	es associated v		Strategies:					

No to No		Signal	Control		AM Peak (2 nd Hour) LOS/Delay			
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
38	US 78/University Blvd & Fernwood Dr	Signalized	Signalized	A/7.5	B/10.7	F/87.7	F/82.5	F/115.1
				BRT LOS/Delay	NB BRT	C/34.8	NB BRT	C/28.1
The same of the sa			N		SB BRT	C/28.0	SB BRT	D/38.5
					PM Peak ((2 nd Hour) LOS	/Delay	
2				Signalized A/7.5 B/10.7 F/87.7 F/82.5 F/115. BRT LOS/Delay BRT C/34.8 NB BRT C/28.1 SB BRT C/28.0 SB BRT D/38.5 PM Peak (2 nd Hour) LOS/Delay Existing 2025 2025 2045 No Build Build Build No Build Build No Build Build No Build Build No Build Build Scenarios impacted by the addition of the exclusive transit phase. Change from protected-permissive to protected-only let turns on the mainline also adds to the delay at this intersection, especially because left turn/U-turn volum are increased with the addition of the BRT lanes, which block unsignalized left turns. The WBL/U movement Blvd. Additional changes at this location will be considered during Entry into Engineering. With the BRT lanes no removed from the median through the US 52/US 78 interchange, the intersection at US 78/University Blvd Old University Blvd might be able to be re-opened for lurn movements. That change may help relieve some of congestion at this location by relocating some of the WBL/U volume. Further refinement of the signal timing.				
		C		A/6.4	B/10.0	F/113.1	B/17.2	F/106.1
1		2	2	BRT LOS/Delay				B/14.9
		2 6		,	C/23.8			
sta.					impacted by the change from turns on the intersection, are increase block unsign particular see	e addition of the protected-permone mainline also especially becard with the additionalized left turns an increase iniversity Blvd transports.	e exclusive transissive to proted adds to the deluse left turn/U-ion of the BRT s. The WBL/U rowolume due to the comment of the second access to the excess to the comment of the excess to the excess	nsit phase. The cted-only left blay at this turn volumes lanes, which novement in o vehicles on
No Build Changes:	N/A				during Entry removed fr interchange, Old University turn movemen	ng. With the BR through the US n at US 78/Univ able to be re-o may help relie	T lanes now S 52/US 78 ersity Blvd & pened for left ve some of the	
Build Changes:	EBU and WBU movements added. EBL/U a protected-only phases. A single exclusive train NB and SB BRT to transition between the exclusive lanes at the same time. TSP add phase.	nsit phase adde median and th	ed for both the e curbside	Strategies: WBL/U volume. Further refinem TSP parameters will be completed finalized. Some of these modified the strategies will be completed finalized.			by relocating sement of the signleted as the Lodifications maying county project	ome of the nal timing and CRT design is be able to be

		Signal	Control		AM Peak	(2 nd Hour) LOS	S/Delay	
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
42	US 52/78/Rivers Ave & Otranto Rd/Otranto Blvd	Signalized	Signalized	D/42.5	D/45.9	F/100.5	E/63.3	F/104.5
			N	BRT LOS/Delay	NB BRT	B/15.3	NB BRT	B/16.0
			A		SB BRT PM Peak (В/15.8
				Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
* IT				D/40.5	D/47.1	E/62.0	D/53.2	E/77.5
A TOTAL STREET			BRT LOS/Delay NB BRT B	B/16.8	NB BRT	C/27.0		
* 4	A SE TO SEE	The second	17		SB BRT	C/23.8	SB BRT	B/16.2
			Explanation of Results:	Conditions, is future years. increased over	s impacted by to The addition coerall intersection roportion of traf	he increased vo if TSP may con n delay because fic on the side s	olume for the tribute to the this location	
No Build Changes:	N/A			Potential	during Entry removed fr interchange,	into Engineering the median	ng. With the BR through the US n at US 78/Univ	T lanes now \$ 52/US 78 ersity Blvd &
Build Changes:	SBR turn pocket added, overlapped with the cout sign added to the NBR to control conflict lane. TSP added for phases associated wit	side NB BRT	Mitigation Strategies:	turn movement congestion at volumes. Furt	ts. That change this location by ther refinement s will be comple	Build No Build Build F/100.5 E/63.3 F/104.5 B/15.3 NB BRT B/16.0 A/9.5 SB BRT B/15.8 Hour) LOS/Delay 2025 2045 Ro Build E/62.0 D/53.2 E/77.5 B/16.8 NB BRT C/27.0		

		Signal	Control		AM Peak ((2 nd Hour) LOS	6/Delay					
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build				
43	US 52/78/Rivers Ave & T-Mobile Dr	Signalized	Unsignalized	B/11.4	B/14.6	E/45.7	B/18.3	F/57.2				
	3,101		B. B. E. E.	BRT LOS/Delay	NB BRT	A/0.2	NB BRT	A/0.2				
118		ANDRESES COS	À		SB BRT	A/2.9	SB BRT	F/57.2 A/0.2 A/3.9 A/3.9 A/3.9 C/24.5 A/0.2 A/2.3 A/2.3				
4 1 1	#1 1 F	996			PM Peak ((2 nd Hour) LOS	6/Delay					
ge. 218				Existing	2025 No Build	2025 Build	2045 No Build					
		F EF O A	Live	B/18.9	C/22.3	C/24.5						
			dell's	BRT LOS/Delay	NB BRT SB BRT	A/0.2 A/1.9	NB BRT SB BRT					
DAR	TO THE REAL PROPERTY OF THE PERSON OF THE PE			,	A/2.3							
			Explanation of Results:	Existing and No Build results at this location use Signalized LOS criteria; Build results use Unsignalized LOS criteria. Delays at this intersection in the Build scenarios are related to the removal of the signal, which increases the delay on the side street approaches. Queueing along Rivers Ave between Otranto Rd and Melnick Dr also contributes to the overall intersection delay.								
No Build Changes:	N/A			Potential	this location	n will be comple	ing at the signa eted as the LCR at may allow for	T design is				
Build Changes:	All left turn movements removed.	d.	Mitigation Strategies:	finalized. That refinement may allow for im coordination along Rivers Ave, including creat gaps for traffic on the side street approaches he the mainline.			eating longer					

Ma ta Ma		Signal	Control		AM Peak	(2 nd Hour) LOS	5/Delay		
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build	
44	US 52/78/Rivers Ave & Melnick Dr	Unsignalized	Signalized	A/1.8	D/33.1	D/42.9	E/37.0	E/57.4	
1136			N	BRT LOS/Delay	NB BRT	D/37.8	NB BRT	D/41.5	
. ;),					SB BRT PM Peak	C/30.2 (2 nd Hour) LOS	SB BRT	D/41.1	
				Existing 2025 2025 2045 No Build Build Build					
A B				B/11.6	D/32.7	E/62.2	D/27.3	E/62.4	
	Carried Marie Mari			BRT I OS/Delay					
					LOS criteria; B volume increas delays for the s delay in resp scenarios becar phase. The BR at the stations delay measure direction mus	No Build results at this location use Unsignalized ; Build results use Signalized LOS criteria. Traffic			
No Build Changes:	N/A Signal added. SBR turn pocket overlapped with the curbside SB BRT lane. NBU and SBU movements added. Pedestrian crossings added. NBL/U and SBL/U both set up as protected-only phases. A single exclusive transit phase added for both the NB and SB BRT to transition between the median and the curbside exclusive lanes at the same time. TSP added for the exclusive transit phase.		Potential Mitigation	Further refinement of the signal timing and TSP parameters will be completed as the LCRT design is finalized.					
Build Changes:			Strategies:				i desigii is		

N. L. M.		Signal	Control		AM Peak	(2 nd Hour) LOS	S/Delay			
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build		
46	US 52/78/Rivers Ave & Greenridge Rd	Signalized	Signalized	C/23.4	D/47.0	D/43.6	D/48.1	D/49.8		
	2000		N	BRT LOS/Delay	NB BRT	A/4.2	NB BRT	A/4.9		
	400000000000000000000000000000000000000		À		SB BRT A/2.2 SB BRT A/2.7 PM Peak (2 nd Hour) LOS/Delay					
	A COLUMN TO THE PARTY OF THE PA			Existing	2025 No Build	2025 Build	2045 No Build	2045 Build		
	#86-8 6 85 8			D/44.8	E/56.1	E/61.5				
A	1.51			BRT LOS/Delay NB BRT A/4.2 NB BRT A/4.9 SB BRT A/2.2 SB BRT A/2.7 PM Peak (2 nd Hour) LOS/Delay Existing 2025 2025 2045 No Build Build No Build Build D/44.8 D/47.7 D/51.3 E/56.1 E/61.5 BRT LOS/Delay NB BRT A/6.2 NB BRT A/8.3 SB BRT A/4.0 SB BRT A/4.7 Explanation of Results: Although this location is congested, traffic operations a this signal are largely stable and do not show any significant negative impacts in the Build scenarios.						
				this signa	l are largely sta	able and do not	show any			
No Build Changes:	N/A			Potential Mitigation			1/0			
Build Changes:	NBL storage length increased to approximately 1600ft. Pedestrian crossings added. NBL changed to protected-only phase. TSP added for phases associated with the BRT (NBT and SBT).			Strategies:	N/A					

No de No	Lutana adam Mana	Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay	D/54.0 A/8.3 A/4.8 Aly stable across leak in the Build models can be SBL, as well as in the side street the considered sysical changes to elization for the
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	
49	US 52/78/Rivers Ave & North Rivers Market Place	Signalized	Signalized	A/4.5	A/2.9	B/10.1	A/5.8	B/10.8
	The same of the sa		N	BRT LOS/Delay	NB BRT SB BRT	A/2.9 A/2.0	NB BRT SB BRT	
						(2 nd Hour) LOS		A/ 1.0
				Existing 2025 2025 2045 No Build Build No Build				
				B/11.6	B/14.4	D/40.3	B/19.4	D/54.0
				BRT LOS/Delay	NB BRT	A/5.7	NB BRT	A/8.3
*		The state of the s	a E	Bitti Econociay	SB BRT	A/5.8	SB BRT	A/4.8
			The state of the s	Explanation of Results:	the board, win scenarios. The attributed to the	th the exception he increased do the protected-o	n of the PM pea elay in those me nly NBL and SE and delay on th	k in the Build odels can be BL, as well as
No Build Changes:	N/A	N/A			Additional changes at this location will be considered during Entry into Engineering. Possible physical changes to investigate include removal of the channelization for the EBR movement, removal of the north crosswalk across Rivers Ave, or the conversion of both crosswalks across Rivers Ave to two-stage crossings. Consideration may also be made to add protected left turn phases to the side streets, which are currently permissive only. Further refinement to TSP parameters will also be completed as the LCRT design is finalized.			
Build Changes:	SBU relocated to be within the intersection, SBL. Pedestrian crossings added. NBL ar protected-only phases. TSP added for phas (NBT and SBT).	Mitigation Strategies:						

		Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay			
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build		
50	US 52/78/Rivers Ave & Eagle Landing Blvd	Signalized	Signalized	B/15.8	B/14.4	B/14.0	B/19.3	B/16.5		
				RPT LOS/Delay	NB BRT	C/27.7	NB BRT	C/26.2		
1		ABILE	N	Bit i LOO/Delay	SB BRT	C/24.3	SB BRT	C/25.1		
F	34	1			PM Peak	(2 nd Hour) LOS	6/Delay			
				Existing	2025 No Build	2025 Build	Ald No Build Build 4.0 B/19.3 B/16.5 7.7 NB BRT C/26.2 4.3 SB BRT C/25.1 Ar) LOS/Delay 25 2045 Build Build B.8 C/24.0 D/48.3 7.3 NB BRT C/25.8 5.5 SB BRT C/29.7 Ation to the east leg to allow the side of be removed, delay at this location eak period, particularly for the NBL, movements. Both directions of the elay because the dwell times at the sintersection and are included in the lay measurement.			
2				C/21.9	B/17.6	C/28.8	2045 No Build B/19.3 B/16.5 NB BRT C/26.2 SB BRT C/25.1 OS/Delay 2045 No Build Build C/24.0 D/48.3 NB BRT C/25.8 SB BRT C/25.8 SB BRT C/29.7 to the east leg to allow the side removed, delay at this location period, particularly for the NBL, rements. Both directions of the decause the dwell times at the ersection and are included in the neasurement.			
		1 Tal	Build Existing 2025 No Build Build No Build No Build No Build Signalized B/15.8 B/14.4 B/14.0 B/19.3 BRT LOS/Delay NB BRT C/27.7 NB BRT SB BRT C/24.3 SB BRT C/24.3 SB BRT C/24.3 SB BRT C/21.9 B/17.6 C/28.8 C/24.0 BRT LOS/Delay NB BRT C/27.3 NB BRT SB BRT D/36.5 SB B		C/25.8					
1 2			16年4	BRT LOS/Delay Existing BRT LOS/Delay BRT LOS/Delay BRT LOS/Delay BRT LOS/Delay BRT LOS/Delay BRT LOS/Delay Existing C/21.9 BRT LOS/Delay BRT LOS/Delay BRT LOS/Delay BRT LOS/Delay Existing C/21.9 BRT LOS/Delay BRT LOS/Delay BRT LOS/Delay BRT LOS/Delay BRT LOS/Delay Even with the modification to the east leg to allow the side street split phasing to be removed, delay at this location increases in the PM peak period, particularly for the NBL, SBL, and side street movements. Both directions of the BRT see a higher delay because the dwell times at the stations adjacent to this intersection and are included in the delay measurement. Potential Mitigation Strategies: BRT See a Further refinement of the signal timing and TSP parameters will be completed as the LCRT design is finalized.		C/29.7				
41100					street split pl increases in t SBL, and sid BRT see a h	nasing to be rer he PM peak pe le street moven ligher delay be ent to this inters	moved, delay at priod, particularly nents. Both dire cause the dwell section and are	this location y for the NBL, ections of the times at the		
No Build Changes:	N/A East leg reconfigured to include two (2) departing lanes and five (5) approach lanes: two WBL, two WBT, and one WBR. Pedestrian crossings added. Signal timing modified to remove the split phasing on the side street. NBL and SBL both changed to protected-only phases. TSP added for phases associated with the BRT (NBT and SBT).									
Build Changes:										

		Signal	Control		AM Peak	(2 nd Hour) LOS	S/Delay		
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build	
51	US 52/78/Rivers Ave & Northwoods Blvd	Signalized	Signalized	A/8.8	A/9.5	B/18.4	C/25.1	C/28.0	
			N	BRT LOS/Delay	NB BRT	A/6.5	NB BRT	A/4.9	
		3 3 3	A					B/17.2	
			事	BRT LOS/Delay NB BRT				2045 Build	
				C/30.0	C/28.4	E/59.4	D/39.9	F/87.8	
7				BRT LOS/Delay BRT LOS/Delay NB BRT A/6.5 NB BRT A/4. SB BRT B/15.7 SB BRT B/17 PM Peak (2 nd Hour) LOS/Delay Existing 2025 No Build Build C/30.0 C/28.4 E/59.4 D/39.9 F/87 BRT LOS/Delay NB BRT A/4.4 NB BRT A/5. SB BRT A/6.6 SB BRT A/8. Explanation of Results: Overall delay at this location increases in the Built scenarios, mostly due to high delays for the NBL, SBL side street movements. Additional changes at this location will be considered during Entry into Engineering, including possible adjustments to the side street geometry to improve significance. Additional changes at this location will be considered during Entry into Engineering, including possible adjustments to the side street geometry to improve significance. Potential Mitigation adjustments to the side street geometry to improve significance. Potential Mitigation adjustments to the side street geometry to improve significance. Additional changes at this location will be considered during Entry into Engineering, including possible adjustments to the side street geometry to improve significance. Potential Mitigation adjustments to the side street geometry to improve significance. Figure 1.				A/5.0	
Mone	Managements at Attallions of	6 Siffer of			SB BRT	A/6.6	SB BRT	2045 Build F/87.8 A/5.0 A/8.8 n the Build NBL, SBL, and	
					stly due to high	cour) LOS/Delay 2025 Ruild No Build D/39.9 F/87.8 No.6 SB BRT A/5.0 A/4.4 NB BRT A/5.0 A/6.6 SB BRT A/8.8 This location increases in the Build le to high delays for the NBL, SBL, and le street movements. The street movements in the Build le to high delays for the NBL, SBL, and le street movements.			
No Build Changes:	N/A Pedestrian crossing added. NBL and SBL both changed to protected-only phases. TSP added for phases associated with the BRT (NBT and SBT).		Potential during Entry into Engineering, inc		ering, including	possible			
Build Changes:			Mitigation Strategies:	efficiency and reduce delay. Further refinement of the signal timing and TSP parameters will be completed as t LCRT design is finalized.					

Node No	Interception Name	Signal	Control		AM Peak	(2 nd Hour) LOS	S/Delay				
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build			
52	US 52/78/Rivers Ave & Ashley Phosphate Rd	Signalized	Signalized	C/32.3	E/67.9	D/42.7	F/93.7	E/61.7			
		N N		BRT LOS/Delay	NB BRT	B/13.6	NB BRT	B/18.0 Δ/7.4			
								7,77.1			
				SB BRT							
				D/46.7	E/73.5	F/105.7					
		ALL STATES		BRT LOS/Delay			NB BRT	BRT B/18.0 BRT A/7.4 O45 Build Build 73.5 F/105.7 BRT C/23.7 BRT B/16.6 gested in the Existing reased volume for the Build scenarios, the atturn helps decrease a PM peak of the Build ray contribute to the abecause this location the side street vs. the all timing and TSP			
				BRT 200/Bolay	SB BRT B/18.0 SB BRT B/1						
			Conditions, in future years, expansion of the overall into scenarios, increased over	s impacted by to a the EBR to a duersection delay the addition of erall intersection of training training to the addition of the addition of training training training the addition of training training training the additional training tr	the increased vik of the Build so ual right turn he r. In the PM pea TSP may contr n delay becaus	2045 No Build F/93.7 E/61.7 NB BRT B/18.0 SB BRT A/7.4 elay 2045 No Build E/73.5 F/105.7 NB BRT C/23.7 SB BRT B/16.6 congested in the Existing increased volume for the off the Build scenarios, the large turn helps decrease in the PM peak of the Build P may contribute to the delay because this location on the side street vs. the eet.					
No Build Changes:	N/A			Potential	Further refinement of the signal timing and TSF						
Build Changes:	West leg reconfigured to have a total of two (2) EBR lanes. Left-turn crossover for SBL added upstream of main intersection and blank out sign added to the crossover to control conflicts between the SBL and the BRT. Pedestrian crossing added. TSP added for phase associated with the BRT (SBT).			Mitigation Strategies:	parameters will be completed as the LCRT design i finalized.						

No do No	Lutana adam Mana	Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay			
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build		
54	US 52/78/Rivers Ave & Morris Baker Blvd	Signalized	Signalized	A/6.8	A/9.5	B/11.5	A/6.0	D/43.4		
	3 11 11 11 11 20		N	BRT LOS/Delay	NB BRT	A/2.0	NB BRT	A/1.2		
			A	SB BRT A/5.7 SB BRT A/4.0 PM Peak (2 nd Hour) LOS/Delay Existing 2025 2025 2045 2045 No Build Build No Build Build				7 (4.0		
SEL				Existing No Build Build No Build Build B/18.7 C/21.1 D/42.9 C/30.9 E/65.0						
		TOPE A ST		B/18.7	C/21.1	D/42.9	C/30.9	E/65.0		
				BRT LOS/Delay						
				Bitti Econociay	SB BRT A/6.6 SB BRT A/9					
60					congestion ald increases the movements. The	ong this segmen he delay for the he addition of T	nt of Rivers Ave NBL, SBL, and SP may also co	e, which in turn d side street ontribute to the		
No Build Changes:	N/A			Potential Mitigation			e signal timing			
Build Changes:	main intersection and blank out sign added conflicts between the SBL and the BRT. TSP	nent added. Left-turn crossover for SBL added upstream of action and blank out sign added to the crossover to control the SBL and the BRT. TSP added for phases associated with the BRT (NBT and SBT).			parameters will be completed as the LCRT design is finalized.			a design is		

No do No	Internation Name	Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay			
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build		
56	US 52/78/Rivers Ave & Mabeline Rd	Signalized	Signalized	A/7.0	B/10.1	C/23.4	A/8.3	D/49.2		
		103	Z V	BRT LOS/Delay	NB BRT	D/52.7	NB BRT	D/46.8		
9		33/	4				25 2045 Build Bu			
				PM Peak (2 nd Hour) LOS/Delay Existing 2025 No Build B/17.0 C/25.4 D/47.9 D/42.5 BRT LOS/Delay NB BRT C/2 NB BRT C/2 No Build Build No Build Bui						
				BRT LOS/Delay PM Peak (2 nd Hour) LOS/Delay Existing 2025 No Build Build B/17.0 C/25.4 D/47.9 D/42.5 BRT LOS/Delay NB BRT C/24 SB BRT C/26 No Build BRT LOS/Delay In the Build scenarios, certain movements that we previously unsignalized, such as SBT, SBU, and NBU now signalized and therefore see an increase in delay added pedestrian crossing across Rivers Ave als contributes to increased vehicle delay. Additionally, a						
7				B/17.0 C/25.4 D/47.9 D/42.5				E/67.9		
X.				BRT LOS/Delay NB BRT C/33.9 NB BRT C/24.						
			-	previously uns now signalized added per contributes to station is loca this location results in a which are activ	signalized, such and therefore destrian crossir increased vehi ated within the formula to the total total total total total total total signal increased to the total to	cenarios, certain movements that were nalized, such as SBT, SBU, and NBU, are nd therefore see an increase in delay. The strian crossing across Rivers Ave also creased vehicle delay. Additionally, a BRT d within the footprint of the intersection at etween the two U-turns. This placement				
No Build Changes:	N/A				Additional changes at this location will be considuring Entry into Engineering. It may be possible to separate signal controllers to control the two halves			sible to use two halves of this		
Changes	movement removed. SBU relocated to be with stop bar with the SBL. Pedestrian crossing a changed to protected-only phases. TSP adde	ng reconfigured to have a total of two (2) WBR lanes. WBL removed. SBU relocated to be within the intersection, sharing a lith the SBL. Pedestrian crossing added. NBU and SBL/U both protected-only phases. TSP added for phases associated with the BRT (NBT and SBT).			coordination along Rivers Ave. Further refinement of the signal timing and TSP parameters will be completed as the LCRT design is finalized.					

Na da Na	Internation Name	Signal Control			AM Peak	(2 nd Hour) LOS	6/Delay	d LOS criteria. arios are related es the delay on y NB Rivers Ave R vehicles have he mainline. als adjacent to RT design is r improved
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	
59	US 52/78/Rivers Ave & Stokes Ave	Signalized	Unsignalized	A/9.9	A/7.8	C/20.5	B/10.6	E/45.2
			N A	BRT LOS/Delay	NB BRT	A/0.0	NB BRT	
					A/9.9 A/7.8 C/20.5 B/10.6 E/45.2 LOS/Delay NB BRT A/0.0 NB BRT A/0.0 PM Peak (2 nd Hour) LOS/Delay Existing 2025 2025 2045 No Build Build No Build SB BRT A/0.1 LOS/Delay NB BRT A/0.0 NB BRT A/0.1 Existing and No Build results at this location use Signaliz LOS criteria; Build results use Unsignalized LOS criteria Delays at this intersection in the Build scenarios are related to the removal of the signal, which increases the delay of the side street approach. Heavy traffic along NB Rivers A also contributes to the delay, because WBR vehicles had difficulty finding a gap in which to enter the mainline. Further refinement of the timing at the signals adjacent this location will be completed as the LCRT design is finalized. That refinement may allow for improved coordination along Rivers Ave, including creating longer trategies.			
		ASIS	1	Existing				
		A A A		C/30.8	B/15.5	C/18.8	C/24.5	F/71.3
				BRT LOS/Delay				
			1		SB BRT	A/0.1	SB BRT	A/0.1
			Explanation of Results:	se Unsignalized he Build scenal which increased by traffic along because WBR	LOS criteria. rios are related s the delay on NB Rivers Ave vehicles have			
No Build Changes:	N/A			Potential	this location will be completed as the LCRT design			
Build Changes:	All left turns and U-turns removed. Signal removed.			Mitigation Strategies:	coordination along Rivers Ave, including creating longer gaps for traffic on the side street approach here to enter			

No do No	lutana adam Nama	Signal	Control	AM Peak (2 nd Hour) LOS/Delay				
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
60	US 52/78/Rivers Ave & Midland Park Rd	Signalized	Signalized	D/45.3	C/23.6	E/56.5	D/36.0	E/65.0
	Mr. Wallship	S. C. S.	N P	BRT LOS/Delay	NB BRT	A/2.4	NB BRT	A/1.9
		1			SB BRT	A/3.8	SB BRT	A/2.3
				BRT LOS/Delay NB BRT A/2.4 NB BRT A/1 SB BRT A/3.8 SB BRT A/2 PM Peak (2 nd Hour) LOS/Delay Existing 2025 2025 2045 No Build Build No Build Buil				
								2045 Build
,				B/15.6 C/33.9 D		D/35.5	C/28.8	F/92.4
1		The state of the s		BRT LOS/Delay NB BRT A/4.0 NB BRT				A/4.0
	179		3.5	BITT EOO/Belay	SB BRT	A/2.7	SB BRT	No Build D/36.0 E/65.0 NB BRT SB BRT A/2.3 Pelay 2045 No Build C/28.8 F/92.4 NB BRT A/4.0 SB BRT A/2.1 A/4.0 B/4.0 B/4.
				•	In the Build scenarios, certain movements that were previously unsignalized, such as NBT, NBU, and SBU, at now signalized and therefore see an increase in delay. The added pedestrian crossing across Rivers Ave also contributes to increased vehicle delay.			
No Build Changes:	N/A			Potential Mitigation	during Entry into Engineering. It may be possotential separate signal controllers to control the two			sible to use two halves of this
Build Changes:	West leg reconfigured to have a total of two (2) EBR lanes. EBL move removed. NBU relocated to be within the intersection, sharing a stop with the NBL. Pedestrian crossing added. NBL/U and SBU both chang protected-only phases. TSP added for phases associated with the B (NBT and SBT).			Strategies:	intersection independently, potentially improving coordination along Rivers Ave. Further refinement of the signal timing and TSP parameters will be completed as th LCRT design is finalized.			

No do No	Indonesia Managara	Signal	Control		AM Peak	(2 nd Hour) LOS	S/Delay			
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build		
61	US 52/78/Rivers Ave & Eagle Dr	Signalized	Signalized	A/3.2	A/2.7	C/25.1	A/3.0	C/29.2		
			N	BRT LOS/Delay	NB BRT	A/5.3	NB BRT	A/8.0		
			4	2.11 200/201ay	SB BRT	A/2.5	SB BRT	Build C/29.2 A/8.0 A/1.4 2045 Build E/65.7 A/2.3 A/3.2 ents that were BU, and SBU, are ease in delay. The vers Ave also e delay. be considered cossible to use two two halves of this lly improving refinement of the completed as the		
					PM Peak	(2 nd Hour) LOS	6/Delay			
			6	Existing 2025 No Build 2025 Build 2045 No Build A/4.3 C/20.7 C/25.8 C/20.0						
				A/4.3	C/20.7	C/25.8	C/20.0	E/65.7		
	Suntan			Existing No Build Build No Build Build A/4.3 C/20.7 C/25.8 C/20.0 E/68 BRT LOS/Delay NB BRT A/1.4 NB BRT A/2						
			La	J. 100/2014	SB BRT	A/2.1	SB BRT	A/3.2		
			•	previously uns now signalized added ped	signalized, such I and therefore destrian crossir	n as NBT, NBU, see an increas ng across Rivers	No Build A/3.0 C/29.2 NB BRT A/8.0 SB BRT A/1.4 Delay 2045 No Build C/20.0 E/65.7 NB BRT A/2.3 SB BRT A/3.2 A/3.2 In movements that were as NBT, NBU, and SBU, are be an increase in delay. The across Rivers Ave also sed vehicle delay. Cation will be considered armay be possible to use two ontrol the two halves of this or, potentially improving a Further refinement of the pers will be completed as the			
No Build Changes:	N/A			Potential Mitigation	It may be poss control the two	sible to use two halves of this				
Build Changes:	I NRI PERESTIAN CROSSING ARRED NIKI /I I AND SKI I NOTO CHANDER TO				coordination	along Rivers A nd TSP param	ve. Further refir	nement of the		

No to Mo		Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay	
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
62	US 52/78/Rivers Ave & Hanahan Rd	Signalized	Signalized	A/8.9	A/9.7	C/32.5	B/10.5	D/42.0
		N		BRT LOS/Delay	NB BRT	C/20.9	NB BRT	C/21.7
		A			SB BRT	C/23.6	SB BRT	C/30.4
				PM Peak	(2 nd Hour) LOS	S/Delay		
	BE STATE OF THE ST			Existing 2025 2025 2045 No Build Build No Build				2045 Build
				C/23.3	B/18.0	C/30.2	D/36.7	E/71.6
		A ANTA		BRT LOS/Delay NB BRT C/27.1 NB BRT CR PRT				
			Explanation of Results:	•				
Changes	N/A		Potential Mitigation	Additional changes at this location will be considered during Entry into Engineering. It may be possible to use two separate signal controllers to control the two halves of this				
	East leg reconfigured to have a total of two (2) WBR lanes. WBL movement removed. SBU relocated to be within the intersection, shari stop bar with the SBL. Pedestrian crossing added. NBU and SBL/U be changed to protected-only phases. TSP added for phases associated the BRT (NBT and SBT).			Strategies:	intersection independently, potentially improving coordination along Rivers Ave. Further refinement of the signal timing and TSP parameters will be completed as the LCRT design is finalized.			

No. 10 No.	L. C.	Signal	Control		AM Peak (2 nd Hour) LOS	S/Delay	of 2045 Build, d left and U-turn that green time protected-only.	
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build		
65	US 52/78/Rivers Ave & Benderson Dr	Signalized	Signalized	A/3.3	A/5.9	A/7.0	A/7.5	A/9.1	
	1 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N		BRT LOS/Delay	NB BRT	A/1.7	NB BRT		
	L	A		,	SB BRT	A/2.1	SB BRT	A/1.9	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				PM Peak (2 nd Hour) LOS	S/Delay		
				Existing	2025 No Build	2025 Build	No Build Build A/7.5 A/9.1 NB BRT A/2.3 SB BRT A/1.9 LOS/Delay AB BRT A/2.5 NB BRT A/2.5 NB BRT A/2.5 SB BRT A/3.7 AB BRT A/3.7 Build Build Build Build B/10.9 AB BRT A/2.5 BB BRT A/2.5 BB BRT A/3.7		
		What had		A/4.9	A/3.8	A/8.4	B/10.9	D/42.5	
	34 7 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4			BRT LOS/Delay NB BRT A/3.5 NB BRT A/2 SB BRT A/4.2 SB BRT A/3					
				Bit i Ecorbeiay	A/3.7				
			Explanation of Results:	the board. The which sees a head volumes on the	ne exception is nigher delay du e mainline at t	the PM peak on the to increased the same time the	f 2045 Build, left and U-turn nat green time		
No Build Changes:	N/A West leg reconfigured to have a total of two (2) EBR lanes. EBL movement removed. SBU relocated to be within the intersection, and SBL movement added at the same stop bar. Pedestrian crossing added. NBL and SBL/L both changed to protected-only phases. TSP added for phases associate with the BRT (NBT and SBT).			Potential Mitigation	Mitigation parameters will be completed as the LCRT design is				
Build									

No do No	Internation Name	Control	AM Peak (2 nd Hour) LOS/Delay							
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build		
67	US 52/78/Rivers Ave & Aviation Ave	Signalized	Signalized	C/24.0	C/26.4	C/26.2	E/67.8	D/39.9		
	All the state of t			BRT LOS/Delay	NB BRT	A/9.8	NB BRT	A/4.6		
	100000000000000000000000000000000000000	A A		Bitt 200/Dolay	SB BRT	A/5.8	SB BRT	A/4.2		
					PM Peak	(2 nd Hour) LOS	6/Delay			
			Annay (Existing	2025 No Build	PM Peak (2 nd Hour) LOS/Delay 2025 No Build C/24.4 C/20.8 D/37.6 D/50.4 NB BRT A/4.7 SB BRT A/6.0 SB BRT A/4.5 A/4.5 A/4.5 A/4.5 A/4.5 A/4.5 A/4.6 A/4.7 A/4.5 A/4.7 A/4.5 A/4.7 A/4.				
				C/24.0	C/24.4	C/20.8	D/37.6	D/50.4		
		EA .		BRT LOS/Delay	NB BRT	A/4.7	NB BRT	A/8.4		
	in the second se	2 P	8	2111 200/201ay	SB BRT	A/6.0	SB BRT	A/4.5		
				Explanation of Results:						
No Build Changes:	N/A			Potential						
Build Changes:	NBU movement removed. TSP added for pha (NBT and SBT).	I with the BRT	Mitigation Strategies:	parameters	Mitigation parameters will be completed as					

		Signal Control			AM Peak (2 nd Hour) LOS/Delay				
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build	
671	US 52/78/Rivers Ave & North Charleston Shopping Center	N/A	Signalized	N/A	N/A	C/25.9	N/A	C/27.1	
0			N	BRT LOS/Delay	NB BRT	A/2.9	NB BRT	A/2.9	
		Mary Mary	A		SB BRT	A/4.1	SB BRT	Build C/27.1 A/2.9 A/5.6 2045 Build C/33.7 A/3.3	
2.63					PM Peak	(2 nd Hour) LOS	S/Delay		
				Existing 2025 2025 2045 No Build Build No Build					
		300		N/A	N/A	A/8.8	N/A	C/33.7	
				BRT LOS/Delay	NB BRT	A/3.7	NB BRT	A/3.3	
				BKT LOS/Delay	SB BRT	A/6.3	SB BRT	C/27.1 A/2.9 A/5.6 2045 Build C/33.7 A/3.3	
				Explanation of Results:		N	/A		
No Build Changes:	N/A			Potential Mitigation					
Build Changes:	East leg reconfigured to remove the WBL land NBU movement from just south of Aviation A intersection instead and include two (2) lanes two (2) to one (1). Pedestrian crossing additional changed to protected-only phases. TSP addet the BRT (NBT and S	ve relocated to s. SBL/U lanes ded. NBU and S d for phases a	be within this reduced from SBL/U both	Strategies:		IV	/A		

		Signal Control			AM Peak (2 nd Hour) LOS/Delay				
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build	
70	US 52/78/Rivers Ave & Remount Rd	Signalized	Signalized	D/50.2	E/66.1	C/34.3	F/99.9	D/38.8	
		N		BRT LOS/Delay	NB BRT	C/24.0	NB BRT	C/28.0	
					Existing				
				Existing					
				E/57.1	E/72.8	C/28.1	F/83.9	C/32.9	
			50.00	BRT LOS/Delay					
4		1 1 11 1 10			SB BRT	B/17.1	SB BRT	B/17.6	
				•	increased delay in the No Build scenarios. The improvement from No Build to Build can be attributed to removal of the EBL and WBL movements. The NB BR sees a higher delay because the dwell time at the statical adjacent to this intersection is included in the delay				
No Build Changes:	N/A East and west legs both reconfigured to have two (2) through lanes and two (2) right turn lanes; EBL and WBL movements removed. Left-turn crossover for SBL added upstream of main intersection and blank out sign added to control conflicts between the SBL and the BRT. Signal timing modified to remove the split phasing on the side street. TSP added for phase associated with the BRT (SBT).								
Build Changes:						N	/A		

N. I. N.	1.4	Signal	Control		AM Peak	(2 nd Hour) LOS	S/Delay		
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build	
72	US 52/78/Rivers Ave & N of Sabal St	Unsignalized	Signalized	A/0.8	A/0.8	B/14.1	A/1.1	B/16.2	
		212	W N	BRT LOS/Delay	NB BRT	A/2.4	NB BRT	A/7.1	
			Ä				2045 No Build A/1.1 B/16.2 NB BRT A/7.1 SB BRT A/7.1 SB BRT A/7.1 LOS/Delay 2045 No Build E/47.0 C/27.3 NB BRT A/0.1 A/0.1		
				Existing	Avo.8 Avo.8 Avo.8 Avo.8 B/14.1 Avo.9 Avo.8 Avo.8 B/14.1 Avo.9 Avo.9 Avo.9 Avo.9 Avo.9 Avo.9 Avo.9 BBRT Avo.9 Avo.9 Avo.9 Avo.9 Avo.9 Avo.9 Avo.9 Avo.9 Avo.9 BBRT Avo.9 Avo.9 Avo.9 BBRT Avo.9 BBRT Avo.9 BBRT Avo.1 Avo.1 Avo.9 BBRT Avo.1 Avo.9 BBRT Avo.1 Avo.9 BBRT Avo.1 Avo.9 BBRT Avo.1 Avo.1 Existing and No Build results at this location use Unsignalized LOS criteria; Build results use Signalized LOS criteria. In the Build scenarios, certain movements that were previously unsignalized, such as NBT and SBT, are now signalized and therefore see an increase in delay. Additional changes at this location will be considered during Entry into Engineering. It may be possible to use two separate signal controllers to control the two halves of this intersection independently, potentially improving coordination along Rivers Ave. Further refinement of the signal timing and TSP parameters will be completed as the				
		2.1		A/3.4	B/11.1	C/20.6	E/47.0	C/27.3	
			A THE REAL PROPERTY.	Existing No Build Build No Build Build A/3.4 B/11.1 C/20.6 E/47.0 C/27.3 BRT LOS/Delay NB BRT A/2.0 NB BRT A/3.9 SB BRT A/1.4 SB BRT A/0.1 Existing and No Build results at this location use Unsignalized LOS criteria; Build results use Signalized LOS criteria. In the Build scenarios, certain movements that were previously unsignalized, such as NBT and SBT, are					
		THE NA		,	SB BRT	A/1.4	SB BRT	A/0.1	
				Unsignalized L criteria. In th were previous	OS criteria; Bu le Build scenar sly unsignalized	ild results use S ios, certain mov d, such as NBT	Signalized LOS vements that and SBT, are		
No Build Changes:	N/A			Potential	during Entry into Engineering. It may be possible to separate signal controllers to control the two halves			sible to use two halves of this	
Build Changes:	Signal added. EBL movement removed. NBL/U and SBL both set up as protected-only phases. TSP added for phases associated with the BRT (NBT and SBT).			Mitigation Strategies:	coordination along Rivers Ave. Further refinement of the			nement of the	

No to No		Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay	B/13.7 A/2.4 B/10.2 2045 Build C/23.7 A/6.1 B/16.3			
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build				
76	US 52/78/Rivers Ave & Harley St	Signalized	Signalized	A/4.1	A/5.0	B/12.9	A/6.2	B/13.7			
	1020		Z	BRT LOS/Delay	NB BRT SB BRT	A/0.4 A/8.5	NB BRT				
						(2 nd Hour) LOS	2045 No Build A/6.2 B/13.7 NB BRT A/2.4 SB BRT B/10.2 S/Delay 2045 No Build C/27.9 C/23.7 NB BRT A/6.1 SB BRT B/16.3 anal are largely stable across poard.				
				Frieting Frieting							
			1 65 4	A/7.7	B/10.4	B/18.7	A/6.2 B/13.7 NB BRT A/2.4 SB BRT B/10.2 /Delay 2045 Build C/27.9 C/23.7 NB BRT A/6.1 SB BRT B/16.3 aal are largely stable across pard.				
				BRT LOS/Delay	NB BRT	A/1.7	NB BRT B/10.2 /Delay 2045 Build C/27.9 C/23.7 NB BRT A/6.1 SB BRT B/16.3				
1			3 300	Divi 200/2014y	SB BRT	B/19.7	SB BRT	B BRT			
				Explanation of Results:	Traffic operations at this signal are largely stable across the board.						
No Build Changes:	N/A			Potential							
Build Changes:	East leg reconfigured to remove the WBL lane, leaving a single WBR lane. NBL movement added, sharing a stop bar with NBU. Pedestrian crossing added. NBL/U and SBL/U both changed to protected-only phases. Exclusive transit phase added for the SB BRT to exit the exclusive BRT lane into the SBT lanes. TSP added for phases associated with the BRT (NBT and exclusive transit phase).			Mitigation Strategies:	N/A						

No de No	Lutana atlan Mana	Signal (Control		AM Peak (2 nd Hour) LOS/Delay					
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build		
78	US 52/78/Rivers Ave & I-526 WB Ramps	Signalized	Signalized	A/3.7	A/4.4	A/4.3	A/5.2	A/5.3		
			N	BRT LOS/Delay	NB BRT	A/1.5	NB BRT	A/1.5		
			A					777.2		
				A/3.7 A/4.4 A/4.3 A/5.2 A/5.3 BRT LOS/Delay BRT LOS/Delay BRT LOS/Delay BRT LOS/Delay BRT LOS/Delay BRT LOS/Delay A/5.5 BRT A/4.2 BRT LOS/Delay Existing A/5.5 A/5.6 BRT LOS/Delay BRT LOS/Delay BRT LOS/Delay Existing A/2.9 A/5.5 A/5.6 BRT LOS/Delay BRT LOS/Delay BRT LOS/Delay Explanation of Results: Explanation of Results: Explanation of Results: BRT LOS/Delay A/5.5 A/5.6 BRT A/0.2 BRT A						
		TUA.								
				BRT I OS/Delay	NB BRT	No Build Build No Build Build A/4.4 A/4.3 A/5.2 A/5.3 NB BRT A/1.5 NB BRT A/1.5 SB BRT A/4.2 SB BRT A/4.2 PM Peak (2 nd Hour) LOS/Delay 2025 2025 2045 No Build Build Build A/5.5 A/5.6 D/52.6 A/8.7 NB BRT A/0.2 NB BRT A/0.2 SB BRT A/2.4 SB BRT A/2.4 Fraffic operations at this signal are largely stable across the board, with the exception of the PM peak of 2045 No Build. The overall intersection delay in that scenario is mpacted by heavy congestion and queueing along this segment of Rivers Ave. The addition of TSP and signal optimization in the 2045 Build scenarios, including improved coordination along Rivers Ave, resolves this				
				BIT LOO/Delay	SB BRT	A/2.4	SB BRT	A/2.4		
3				the board, wir Build. The o impacted by segment of f optimization	th the exception verall intersect heavy congest Rivers Ave. The continuation alor ordination alor	n of the PM pea ion delay in tha ion and queueil e addition of TS Build scenarios ng Rivers Ave, r	k of 2045 No t scenario is ng along this P and signal , including			
No Build Changes:	N/A									
Build Changes:	TSP added for phase associated w	Mitigation Strategies:	parameters			i aesign is				

No de No	Lutana adam Mana	Signal Control			AM Peak (2 nd Hour) LOS/Delay				
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build	
79	US 52/78/Rivers Ave & I-526 EB Ramps	Signalized	Signalized	A/3.9	A/4.3	A/5.1	A/5.0	A/5.2	
			N	BRT LOS/Delay	NB BRT	B/19.8	NB BRT	B/19.8	
		A					7 4 0.2		
				Build Existing 2025 No Build Build No Build Build Spaliced A/3.9 A/4.3 A/5.1 A/5.0 A/5.2 BRT LOS/Delay NB BRT B/19.8 NB BRT B/19.8 SB BRT A/0.2 SB BRT A/0.2 PM Peak (2 nd Hour) LOS/Delay Existing 2025 No Build Build No Build Build A/4.9 A/8.4 A/8.8 E/62.7 A/9.3 BRT LOS/Delay SB BRT A/0.2 SB BRT A/0.2 FM Peak (2 nd Hour) LOS/Delay Existing 2025 No Build Build No Build Build A/4.9 A/8.4 A/8.8 E/62.7 A/9.3 BRT LOS/Delay SB BRT A/0.2 SB BRT A/0.2 Traffic operations at this signal are largely stable across the board, with the exception of the PM peak of 2045 N Build. The overall intersection delay in that scenario is impacted by heavy congestion and queueing along this segment of Rivers Ave. The addition of TSP and signal optimization in the 2045 Build scenarios, including improved coordination along Rivers Ave, resolves this issue. Potential Mitigation Strategies: Further refinement of the signal timing and TSP parameters will be completed as the LCRT design is finalized.					
				BRT LOS/Delay SB BRT B/19.8 NB BRT B/19.8 SB BRT A/0.2 SB BRT A/0.2 PM Peak (2 nd Hour) LOS/Delay Existing 2025 2025 2045 No Build Build A/4.9 A/8.4 A/8.8 E/62.7 A/9.1 BRT LOS/Delay NB BRT A/1.2 NB BRT A/1.2 SB BRT A/0.2 SB BRT A/0.2 Traffic operations at this signal are largely stable act the board, with the exception of the PM peak of 2045 Build. The overall intersection delay in that scenarior impacted by heavy congestion and queueing along segment of Rivers Ave. The addition of TSP and sign optimization in the 2045 Build scenarios, including improved coordination along Rivers Ave, resolves to the sequence of the position of the province of the					
		7/		BRT LOS/Delav			NB BRT		
				2.tt. 200/2010,	SB BRT	A/0.2	SB BRT	A/0.2	
					the board, wi Build. The c impacted by segment of optimizati	th the exception overall intersect heavy congest Rivers Ave. The on in the 2045 pordination alor	n of the PM pea ion delay in that ion and queueit e addition of TS Build scenarios ng Rivers Ave, r	k of 2045 No t scenario is ng along this P and signal , including	
No Build Changes:	N/A			Potential Further refinement of the signal tim					
Build Changes:	Exclusive transit phase added for the NB BF lane into the NBT lanes. TSP added for	Strategies: BRT to exit the exclusive BRT						i uesigii is	

Maria		Signal	Control		AM Peak (2 nd Hour) LOS/Delay				
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build	
82	US 52/78/Rivers Ave & Mall Dr	Signalized	Signalized	A/6.4	A/7.1	C/34.4	A/8.6	D/42.9	
		4 6 国		BRT LOS/Delay	NB BRT	C/33.2	NB BRT	C/31.5	
(1)	- The state of the		Ä		SB BRT	C/32.0	SB BRT	D/36.8	
3					PM Peak	(2 nd Hour) LOS	S/Delay		
	99			PM Peak (2 nd Hour) LOS/Delay Existing 2025 No Build Build A/6.9 A/8.5 E/55.9 C/34.6 E/6 BRT LOS/Delay NB BRT C/30.3 NB BRT C/30.3 NB BRT C/30.3 In the Build scenarios, certain movements that we previously unsignalized, such as NBT, NBU, and Stenarios and therefore see an increase in delay added pedestrian crossing across Rivers Ave and contributes to increased vehicle delay. The BRT seep the contributes to increased vehicle delay. The BRT seep the contributes to increased vehicle delay. The BRT seep the contributes to increased vehicle delay. The BRT seep the contributes to increased vehicle delay.					
		10 1		BRT I OS/Delay	NB BRT	C/30.3	NB BRT	C/32.4	
		Ele I		Bit i Eoo/Delay	SB BRT	C/28.5	SB BRT	D/42.9 C/31.5 D/36.8 D/36.8	
PLY		•	previously uns now signalized added ped contributes t higher dela	signalized, such d and therefore destrian crossir o increased vel ay because the this intersectio	n as NBT, NBU, see an increasing across Rivershicle delay. The dwell times at t	and SBU, are e in delay. The s Ave also BRT sees a he stations			
No Build Changes:	N/A		Potential Mitigation	Further refinement of the signal timing and TSP					
Changes	NBL. Pedestrian crossing added. NBR and W Clifton Dr and included in the signal operat changed to protected-only phases. TSP adde	relocated to be within the intersection, sharing a stop bar with the edestrian crossing added. NBR and WBR movements maintained at on Dr and included in the signal operations. NBL/U and SBU both ed to protected-only phases. TSP added for phases associated with the BRT (NBT and SBT).			parameters will be completed as the LCRT design is finalized.				

Martania		Signal	Control		AM Peak	(2 nd Hour) LOS	S/Delay				
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build			
83	US 52/78/Rivers Ave & Alton	Signalized	Unsignalized	A/1.9	A/2.6	A/1.5	A/2.6	A/3.6			
		N		BRT LOS/Delay	NB BRT	A/0.1	NB BRT	A/0.0			
		A			SB BRT	A/1.1	SB BRT	A/0.9			
					PM Peak	(2 nd Hour) LOS	S/Delay				
				Existing	2025 No Build	ak (2 nd Hour) LOS/Delay 2025 Build No Build Build A/2.5 A/6.6 A/9.5 A/0.1 NB BRT A/0.1 SB BRT A/1.2 d No Build results at this location use Signalized ria; Build results use Unsignalized LOS criteria.					
				A/2.6	A/3.1	A/2.5	A/6.6	A/9.5			
		11.11		BRT LOS/Delay	NB BRT	A/0.1	NB BRT	A/0.1			
			() ()		SB BRT	A/1.1	SB BRT	A/1.2			
			Explanation of Results:	LOS criteria; Traffic opera	Existing and No Build results at this location use Signalon LOS criteria; Build results use Unsignalized LOS cromagneriations at this signal are largely stable at the board. Removal of the signal has little to no impact						
No Build Changes:	N/A			Potential							
Build Changes:	All left turns and U-turns removed	. Signal remove	ed.	Mitigation Strategies:	N/A						

No de No	lutana adan Mana	Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay	2045 Build C/21.6 A/2.0 A/0.3 2045 Build C/21.8 A/0.9 A/1.7		
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build			
84	US 52/78/Rivers Ave & Morningside Dr	Signalized	Signalized	A/8.1	A/8.7	B/16.0	A/9.6	C/21.6		
			N N	BRT LOS/Delay	NB BRT SB BRT	A/2.5 A/0.8	NB BRT			
		1	A				225			
			400	Existing	2025 No Build	2025 Build				
				A/8.9	B/12.6	B/19.8	B/12.1	C/21.8		
	95			BRT LOS/Delay	NB BRT	A/3.3				
Make A		1		2.11. 200/20149	SB BRT	A/1.6	SB BRT	A/1.7		
				Explanation of Results:	Traffic opera			stable across		
No Build Changes:	N/A			Potential						
Build Changes:	SBU movement added. Pedestrian crossing added. NBU changed to protected-only phase; SBL/U is already protected-only. TSP added for phases associated with the BRT (NBT and SBT).			Mitigation Strategies:	N/A					

No to Mo		Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay	
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
87	US 52/78/Rivers Ave & Piggly Wiggly Dr	Signalized	Signalized	A/3.4	A/4.1	A/9.5	A/4.2	B/10.2
			N	BRT LOS/Delay	NB BRT SB BRT	A/2.9 A/4.4	NB BRT SB BRT	A/1.6 A/2.7
33			A			(2 nd Hour) LOS		7 (2.1
				Existing 2025 2025 2045 No Build Build No Build				
				A/3.9	A/4.9	B/10.3	A/5.2	B/11.0
				BRT LOS/Delay NB BRT A/0.1 NB BRT			A/0.0	
		318		SB BRT A/1.0 SB BRT A/0				
a 30				Explanation of Results:	Traffic opera		nal are largely soard.	stable across
No Build Changes:	N/A			Potential Mitigation				
Build Changes:	North leg reconfigured to have one (1) SBU lane, two (2) SBT lanes, and one (1) SBR lane. South leg reconfigured to have one (1) NBL lane and two (2) NBT lanes. Pedestrian crossing added. NBL and SBU both changed to protected-only phases. TSP added for phases associated with the BRT (NBT and SBT).			Strategies:	N/A			

		Signal	Control		AM Peak	(2 nd Hour) LOS	S/Delay	
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
88	US 52/78/Rivers Ave & Meeting St/ Durant Ave	Signalized	Signalized	C/29.6	C/31.6	D/50.0	D/38.5	C/34.3
				BRT LOS/Delay	NB BRT	C/20.7	NB BRT	C/20.6
						C/23.3		
				Existing No Build Build No Build Build				
11.				B/19.8 C/25.5 D/44.4 D/37.3				D/50.4
				NB BRT C/20.7 NB BRT C/20.6				
					the board. The time at the sta in the delay m in either dir	e BRT sees a hation adjacent teasurement, and rection must ware RT already in the	igher delay bec to this intersection and because the ait occasionally the bi-directional	ause the dwell on is included BRT traveling if there is a
No Build Changes:	N/A East leg reconfigured to have one (1) WBL/U lane, one (1) WBT lane, and one (1) WBT/R lane. West leg reconfigured to have one (1) EBL/U lane, one (1) EBT lane, and one (1) EBT/R lane. Pedestrian crossing added. EBL/U and WBL/U both changed to protected-only phases. TSP added for phases associated with the BRT (EBT and WBT).			Potential Mitigation				
Build Changes:				Strategies:	N/A			

No de No	lutana adan Mana	Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay	
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
91	US 52/78/Rivers Ave & Helm Ave	Signalized	Signalized	A/4.5	A/5.7	A/6.3	A/7.2	A/6.7
			Z	BRT LOS/Delay	NB BRT	A/0.1	NB BRT	A/1.9 Δ/2.1
1			A	Existing No Build Build No Build Build A/4.5 A/5.7 A/6.3 A/7.2 A/6.7 NB BRT A/0.1 NB BRT A/1.9			7 (2.1	
				BRT LOS/Delay SB BRT A/1.6 SB BRT A/2.1 PM Peak (2 nd Hour) LOS/Delay Existing 2025 No Build Build A/8.4 B/10.4 B/13.1 D/50.8 C/26.4 BRT LOS/Delay NB BRT A/2.4 SB BRT A/0.2 SB BRT A/0.1 Traffic operations at this signal are largely stable across the board. The exception is the PM peak of 2045. The N Build scenario sees a higher delay due to increased volumes. Differences between No Build and Build can generally be attributed to the influence of TSP and				
		at the state of th		A/8.4	B/10.4	B/13.1	D/50.8	C/26.4
7	3 [11]			BRT LOS/Delay SB BRT				A/4.2
			917	BITT EOO/Belay	SB BRT	A/0.2	SB BRT	A/0.1
				the board. Th Build scend volumes. Di generally optimized s	e exception is t ario sees a higl ifferences betw be attributed to signal timing, w the proportion	the PM peak of her delay due to een No Build ar the influence o thich has a varia of traffic on the	2045. The No increased nd Build can f TSP and able impact	
No Build Changes:	N/A							
Build Changes:	NBU and SBU movements added. SBL/U a protected-only phases. TSP added for phas (NBT and SBT).	es associated			parameters will be completed as the L			i design is

No do No	Internation Name	Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay			
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build		
92	US 52/78/Rivers Ave & McMillan Ave	Signalized	Signalized	B/10.8	B/12.3	B/13.7	B/13.8	B/15.4		
		1		BRT LOS/Delay	NB BRT	A/6.8	NB BRT	B/12.8		
			NA	B/10.8 B/12.3 B/13.7 B/13.8 B/15.4 BRT LOS/Delay			7,0.4			
N. S.				Existing						
				B/16.1	C/21.3	D/39.4	C/26.6	D/43.6		
				BRT LOS/Delay	NB BRT	A/3.6	NB BRT	A/2.8		
				Ditti 200/20lay	SB BRT	A/4.0	SB BRT	A/9.9		
					slightly in the E	Build scenarios	Build No Build Build D/39.4 C/26.6 D/43.6 A/3.6 NB BRT A/2.8 A/4.0 SB BRT A/9.9 s location during the PM peak increases scenarios, mostly due to high delays for			
No Build Changes:	North and south legs (McMillan Ave) narrowed direction to one (1) lane in each direction on North leg reconfigured to have one (1) SBL possible South leg reconfigured to have one (1) NBL lane.	n both sides of ocket and one (Rivers Ave. 1) SBT/R lane.							
				-		i desigii is				

No to No		Signal	Control		AM Peak	(2 nd Hour) LOS	S/Delay		
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build	
93	US 52/78/Rivers Ave & SC 642/Dorchester Rd	Signalized	Signalized	B/10.6	B/11.7	B/18.0	B/13.2	C/22.1	
7 254/			V B	BRT LOS/Delay	NB BRT	C/22.5	NB BRT	C/24.0	
			À		SB BRT	C/20.6	SB BRT	C/21.6	
		River			PM Peak	Build No Build Build B/18.0 B/13.2 C/22.1 C/22.5 NB BRT C/24.0 C/20.6 SB BRT C/21.6 (2 nd Hour) LOS/Delay 2025 2045 Build No Build Build B/19.6 B/14.7 C/24.0 C/26.5 NB BRT C/26.3 C/25.4 SB BRT C/20.1 attions at this signal are largely stable across BRT sees a higher delay because the dwell			
				BRT LOS/Delay NB BRT C/22.5 NB BRT C/24. SB BRT C/20.6 SB BRT C/21. PM Peak (2 nd Hour) LOS/Delay Existing 2025 2025 2045 No Build Build No Build Build No Build Build SB BRT C/24. B/10.5 B/11.9 B/19.6 B/14.7 C/24. BRT LOS/Delay NB BRT C/26.5 NB BRT C/26.5 SB BRT C/26. SB BRT C/25.4 SB BRT C/20. Traffic operations at this signal are largely stable across the board. The BRT sees a higher delay because the country time at the station adjacent to this intersection is inclusive.					
				B/10.5	B/11.9	B/19.6	B/14.7	C/24.0	
				Existing 2025 2025 2045 2045 Build Build					
					SB BRT	C/25.4	SB BRT	C/20.1	
				the board. The	e BRT sees a hi ation adjacent t	NB BRT C/24.0 SB BRT C/21.6 Delay 2045 Build B/14.7 C/24.0 NB BRT C/26.3 SB BRT C/20.1 al are largely stable across ther delay because the dwell this intersection is included easurement.			
No Build Changes:	N/A			Potential Mitigation	//\				
Build Changes:	WBU movement added. WBL/U changed to added for phases associated with the			Strategies:					

		Signal	Control		AM Peak ((2 nd Hour) LOS	6/Delay		
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build	
94	US 52/78/Rivers Ave & Cosgrove Ave	Signalized	Signalized	C/23.1	C/21.7	D/42.2	C/23.7	E/64.7	
100 700				BRT LOS/Delay	NB BRT	B/10.9	NB BRT	B/10.6	
			N					B/12.4	
			A Company	Existing No Build Build No Build Build					
				C/22.3	C/27.1	E/79.1	D/39.3	F/106.3	
10				BRT LOS/Delay					
			6 68	,	SB BRT	B/12.9	SB BRT	B/10.8	
			-	Conditions, is future years. Ir the higher left time that green being protections to be contribute to because this left.	s impacted by to the Build scerturn volumes of the time for the ected-only. The to the increased ocation has a h	he increased vonarios, delay incontrol the main strees movements addition of TSI doverall interseigh proportion of	colume for the creases due to et at the same is limited by may also ection delay of traffic on the		
No Build Changes:	N/A			Additional changes at this location during Entry into Engineering. One Potential consideration is to adjust the phasing			ng. One modifice phasing on the	cation under side street to	
Build Changes:	East and west legs both reconfigured to remove the exclusive EBR and WBR lanes and change the outside through lanes to be shared, EBT/R and WBT/R. EBL and WBL both changed to protected-only phases. TSP added for phases associated with the BRT (EBT and WBT).				approaches.	Further refinen	issive left turns nent of the sign pleted as the L0 ized.	al timing and	

Na da Na	Indoor of the Manage	Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay	
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
95	US 52/78/Rivers Ave & Reynolds Ave	Signalized	Signalized	A/6.8	A/8.3	C/24.6	A/8.6	C/26.5
				BRT LOS/Delay	NB BRT SB BRT	C/30.2 B/17.8	NB BRT SB BRT	C/27.2 C/27.1
						(2 nd Hour) LOS		<u> </u>
Ť				Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
				B/13.2	B/17.2	F/83.3		
				BRT LOS/Delay	NB BRT SB BRT	D/39.7 C/21.3	NB BRT	E/57.0 C/20.2
					impacted by the change from turns on the intersection. dwell time a included in the traveling in eith	e addition of the protected-permone mainline also the BRT sees to the station added delay measure direction muser direction in BRT already in	tion in the Build e exclusive transisive to prote adds to the de a higher delay jacent to this in ement, and becust wait occasio the bi-directionation.	nsit phase. The cted-only left elay at this because the tersection is cause the BRT anally if there is
No Build Changes:	N/A			Potential	Further refinement of the signal timing and T			
Build Changes:	EBL and WBL both changed to protected-or phase added for the SB BRT to exit the excl lanes. TSP added for phases associated with transit phase).	usive BRT lane	into the EBT					i uesigii is

No do No	lutana adan Mana	Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay	intersection,			
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build				
164	King St Ext & Heriot St	Signalized	Signalized	A/8.7	A/9.2	A/9.3	B/13.7	D/54.0			
		Z		BRT LOS/Delay	NB BRT SB BRT	A/1.7	NB BRT				
		A		PM Peak (2 nd Hour) LOS/Delay							
				Existing	2025 No Build	BRT A/1.7 NB BRT A/5.6 BRT A/1.6 SB BRT A/1.2 M Peak (2 nd Hour) LOS/Delay 025 2025 2045 Suild Build No Build Build 11.3 B/12.8 F/155.9 E/64.9 BRT A/4.9 NB BRT A/9.1					
				A/9.2	B/11.3	B/12.8	F/155.9	E/64.9			
				BRT LOS/Delay	NB BRT						
			Explanation of Results:	Pleasant St	area impacts th	ne delay at this	intersection,				
No Build Changes:	N/A		Potential Mitigation		Further refinement of the signal timing and parameters, both here and at the Morrison Dr / N						
Build Changes:	SBR overlap phase removed. TSP added for phases associated with the BRT (NBT and SBT).			Strategies:	St intersections, will be completed as the LCRT design finalized.						

		Signal	Control	ted C/26.5 C/24.3 C/28.7 D/50.9 F/89. BRT LOS/Delay NB BRT N/A NB BRT N/A PM Peak (2 nd Hour) LOS/Delay Existing 2025 No Build Build Build No Build Build No Build Build Build No Build Build Build Build Build State S				
Node No.	Intersection Name	No Build	Build	Existing				2045 Build
166	King St Ext & Mt Pleasant St	Signalized	Signalized	C/26.5	C/24.3	C/28.7	D/50.9	F/89.6
	(A)	HE WAT	N I	BRT LOS/Delay				N/A
1			A					N/A
-			A		PM Peak	(2 nd Hour) LOS	S/Delay	
		+		Existing				2045 Build
DBA	M M A A A A A A A A A A A A A A A A A A		1	C/30.3	D/35.0	C/28.5	F/231.9	F/122.1
		4 4	*	C/30.3 D/35.0 C/28.5 F/231.9 F/1 BRT LOS/Delay NB BRT N/A NB BRT N/A SB BRT N/A This location, which is already congested in the Exclusion of TSP at the neighboring US 52/Meeting St & Morrison Dr, may also contributed.				
				,	SB BRT	N/A	SB BRT	N/A
					Conditions, i future years. T US 52/Meeting increased o coordinatio disrupted wher	s impacted by the addition of the addition of the section of these two in TSP is triggerueing here imp	the increased vites at the neige. Dr, may also continued the signals may tended by the BRT. Dacts other inter-	olume for the hboring signal, ontribute to the because the hporarily be The increased
No Build Changes:	N/A							
Build Changes:	N/A			Strategies:		lized.	ir design is	

		Signal Control			AM Peak ((2 nd Hour) LOS	S/Delay	
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
109	US 52/Meeting St & Morrison Dr	Signalized	Signalized	C/24.8	C/23.6	C/28.0	D/35.8	F/105.5
		The Man	N	BRT LOS/Delay	NB BRT	A/5.9	NB BRT	C/32.0
	1		A		SB BRT PM Peak	C/24.4 (2 nd Hour) LOS	SB BRT S/Delay	E/55.7
	72	90 09 h		Existing	2045 No Build	2045 Build		
	8 3 0800	1903	Y	C/30.1 E/60.6 E/58.1			F/276.7	F/250.3
	3 1000		BRT LOS/Delay	NB BRT SB BRT	A/3.5 C/21.8	NB BRT SB BRT	F/115.5 F/113.9	
			Explanation of Results:	Conditions, is future years. T to the increa coordination of Mt Pleasant S triggered by the both direction	his location, which is already congested in the Existing conditions, is impacted by the increased volume for the are years. The addition of TSP here may also contribute to the increased overall intersection delay because the ordination of this signal with its neighbor, King St Ext & Pleasant St, may temporarily be disrupted when TSP is gered by the BRT. The BRT experiences high delays in both directions because it is in mixed traffic here. The increased delay and queueing here impacts other intersections in the area.			
No Build Changes:	Pedestrian crossing added on the north s	side of the intersection.		Potential Mitigation				
Build Changes:	TSP added for phases associated with the BRT (NBT and SBT).			Strategies:	parameters	•	ized.	ir udəliğir iə

No de No	lutana adan Mana	Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay			
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build		
113	Meeting St & Romney St	Signalized	Signalized	B/16.9	C/21.5	C/22.7	C/29.6	E/62.8		
				BRT LOS/Delay	NB BRT	A/7.6	NB BRT	C/20.0		
			Ä		SB BRT PM Peak			A/1.7		
		3 3		Existing	2025 No Build	2025 Build	2045 No Build C/29.6 E/62.8 NB BRT C/20.0 SB BRT A/1.7 DS/Delay 2045 No Build F/190.9 F/204.4 NB BRT SB BRT A/7.2 Dr / Mt Pleasant St area spills St and King St and impacts the een them along Romney St. This lay at this intersection in 2045, beak. The addition of TSP in the ocontribute to the increased because it may potentially be ation with adjacent signals. the signal timing and TSP at the Morrison Dr / Mt Pleasant			
W.	A Maria		AT I	Existing 2025 Robuild Robuild			F/204.4			
A		A A		BRT LOS/Delay			C/22.7 C/29.6 E/62.8 A/7.6 NB BRT C/20.0 A/0.5 SB BRT A/1.7 A/0.5 SB BRT A/1.7 A/0.5 SB BRT Build C/23.9 F/190.9 F/204.4 B/16.8 NB BRT E/74.8 A/1.2 SB BRT A/7.2 Morrison Dr / Mt Pleasant St area spills eeting St and King St and impacts the n between them along Romney St. This is the delay at this intersection in 2045, he PM peak. The addition of TSP in the may also contribute to the increased n delay because it may potentially be coordination with adjacent signals.			
	S SUE WITH			Ditti 200/20lay	SB BRT	A/1.2	SB BRT	A/7.2		
	a a a a a a a a a a a a a a a a a a a	-	back along b east-west conr queuing incre particularly du Build scena overall inters	oth Meeting St nection between eases the delay ring the PM pearios may also of section delay be	and King St and them along R at this intersed ak. The addition contribute to the ecause it may p	2045 No Build C/29.6 E/62.8 NB BRT C/20.0 SB BRT A/1.7 Play 2045 No Build F/190.9 F/204.4 NB BRT E/74.8 SB BRT A/7.2 Mt Pleasant St area spills I King St and impacts the em along Romney St. This this intersection in 2045, The addition of TSP in the tribute to the increased use it may potentially be with adjacent signals. gnal timing and TSP Morrison Dr / Mt Pleasant ed as the LCRT design is				
No Build Changes:	N/A		Potential	Further refinement of the signal timing and TSF						
Build Changes:	TSP added for phases associated with the	he BRT (NBT a	nd SBT).	Mitigation Strategies:		ns, will be comp	pleted as the L0			

No to Mo		Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay	2045 Build C/22.0 C/32.9 B BRT B/10.5 B BRT A/1.6 By 2045 B Build C/47.7 F/99.8 B BRT E/65.8 B BRT A/3.5 B BRT A/3.5 B BRT B/10.5 B BRT A/1.6 B BRT A/1.6 B BRT B/10.5 B BRT A/1.6 B BRT A/1.6 B BRT B/10.5 B BRT A/1.6 B BRT A/1.6 B BRT B/10.5 B BRT B/10.5 B BRT A/1.6 B BRT B/10.5 B BRT B BRT B/10.5 B BRT B BRT B BRT B BRT			
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build				
117	Meeting St & US 17 Off-Ramp	Signalized	Signalized	B/17.0	C/20.5	C/29.4	C/22.0	C/32.9			
			N	BRT LOS/Delay	NB BRT SB BRT	B/17.5 A/3.5	NB BRT				
			Ä			(2 nd Hour) LOS	2045 No Build C/22.0 C/32.9 NB BRT B/10.5 SB BRT A/1.6 LOS/Delay 2045 No Build Build F/147.7 F/99.8 NB BRT E/65.8 SB BRT A/3.5 increases in the PM peak of 2045 estion and queuing throughout of TSP in the Build scenarios may creased overall intersection delay ally be disrupting the coordination diacent signals.				
33003				Existing No Build Build No Build Build							
11		7		C/27.2	D/39.4	C/27.8	F/147.7	F/99.8			
***	in it	ales to the		BRT LOS/Delay	NB BRT	B/15.8	NB BRT	E/65.8			
	No.	2	BITT EOO/Delay	SB BRT	A/2.4	SB BRT	A/3.5				
				Explanation of Results:	due to loca downtown. Th also contribut	alized congestic e addition of TS te to the increas ay potentially b	on and queuing SP in the Build sed overall inter e disrupting the	throughout scenarios may rsection delay			
No Build Changes:	NI/Δ			Potential	Further refinement of the signal timing and TSI						
Build Changes:	North leg reconfigured to add one (1) SBL po add one (1) departing lane, which acts as a Ramp. SBL movement removed at the adjace Meeting St & US 17 On-Ramp. TSP added fo BRT (NBT and SB	connection to the ent unsignalized or phases assoc	ne US 17 On- d intersection,	Mitigation Strategies:	tigation parameters will be completed as the LCRT designategies: finalized.						

No to No		Signal	Control		AM Peak	(2 nd Hour) LOS	S/Delay	C/29.3 A/9.6 A/0.5 A/0.5 A/0.5 A/0.5 A/0.5 A/0.5 C/31.9 C/27.5 A/0.7 C/31.9 C/27.5 A/0.6 A/0.5 A/0.
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	
119	Meeting St & Huger St	Signalized	Signalized	B/14.0	B/15.6	C/34.1	B/19.7	C/29.3
	1 3 3 cc c c	Y	N	BRT LOS/Delay	NB BRT	B/12.7	NB BRT	Build C/29.3 A/9.6 A/0.5 2045 Build F/176.7 C/31.9 C/27.5 M peak of 2045 of throughout scenarios may ersection delay er coordination
			A					7,0.0
oth.				BRT LOS/Delay				
September 1			4	D/37.1 D/47.2 D/49.3 F/			F/181.4	F/176.7
				BRT LOS/Delay	C/31.9			
		1			SB BRT	A/9.1	SB BRT	C/27.5
			due to loca downtown. Th also contribut	alized congestice e addition of TS te to the increas ay potentially b	2045 No Build B/19.7 C/29.3 NB BRT A/9.6 SB BRT A/0.5 S/Delay 2045 No Build F/181.4 F/176.7 NB BRT C/31.9 SB BRT C/27.5 reases in the PM peak of 2045 on and queuing throughout SP in the Build scenarios may sed overall intersection delay be disrupting the coordination ent signals.			
No Build Changes:	N/A			Potential	•			
Build Changes:	SBL storage length increased to approxim phases associated with the BRT			Mitigation Strategies:	parameters will be completed as			. i design is

		Signal	Control		AM Peak ((2 nd Hour) LOS	S/Delay	
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	
120	Meeting St & Johnson St	Signalized	Signalized	A/0.8	A/0.8	A/1.0	A/0.7	A/1.1
			N	BRT LOS/Delay	NB BRT	A/0.1	NB BRT	
		訊量	A					A/0.0
		111		uild Existing 2025				
1/2	A POUR	W.		Build Existing No Build Build No Build Build Signalized A/0.8 A/0.8 A/1.0 A/0.7 A/1.1 BRT LOS/Delay NB BRT A/0.1 NB BRT A/0.2 BRT LOS/Delay Existing 2025 2025 2045 No Build Build B/10.2 A/8.1 A/4.6 F/117.0 F/120.0 BRT LOS/Delay NB BRT A/3.7 NB BRT A/9.7 SB BRT A/0.5 SB BRT A/0.4 Explanation of Results: Delay at this intersection increases in the PM peak of 2045 due to localized congestion and queuing throughout downtown.				
			2.1	B/10.2	No Build Build No Build Build A/0.8 A/1.0 A/0.7 A/1.1 NB BRT A/0.1 NB BRT A/0.2 SB BRT A/0.0 SB BRT A/0.0 PM Peak (2 nd Hour) LOS/Delay 2025 2025 2045 No Build Build No Build Build A/8.1 A/4.6 F/117.0 F/120.0 NB BRT A/3.7 NB BRT A/9.7 SB BRT A/0.5 SB BRT A/0.4 Delay at this intersection increases in the PM peak of 2045 due to localized congestion and queuing throughout downtown.			
			* 0	BRT LOS/Delay				
	The state of the s	1.000	SB BRT A/0.5 SB BRT A/					
						lized congestion	on and queuing	
No Build Changes:	N/A							
Build Changes:	TSP added for phases associated with t	he BRT (NBT a	nd SBT).		parameters	-	i design is	

No to No		Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay	g throughout d scenarios may ersection delay
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	
121	Meeting St & Lee St	Signalized	Signalized	A/5.3	B/10.5	D/35.7	C/20.3	D/40.1
	The state of the s		1 3 1	BRT LOS/Delay	NB BRT SB BRT	A/9.4 A/8.6	NB BRT	Build D/40.1 A/9.9 B/14.5 2045 Build F/123.8 C/33.9 A/2.3 M peak of 2045 g throughout scenarios may ersection delay e coordination
	1 100		À			(2 nd Hour) LOS		<i>B</i> /11.0
			8.50	Existing	2025 No Build	2025 Build	2045 No Build	
		3	AK.	A/3.9	A/6.9	A/7.8	F/88.0	F/123.8
	a		1	BRT LOS/Delay	NB BRT	A/6.1	NB BRT	C/33.9
	The state of the s	2/3		Bitti Econociay	SB BRT	A/1.6	SB BRT	A/2.3
\$ V.2			Explanation of Results:	due to loca downtown. Th also contribut	lized congestice e addition of TS e to the increas	on and queuing SP in the Build s sed overall inter e disrupting the	2045 No Build C/20.3 D/40.1 NB BRT SB BRT B/14.5 Play 2045 No Build F/88.0 F/123.8 NB BRT C/33.9 SB BRT A/2.3 Pes in the PM peak of 2045 and queuing throughout in the Build scenarios may overall intersection delay isrupting the coordination signals.	
No Build Changes:	N/A		Potential Further refinement of the signal timi					
Build Changes:	TSP added for phases associated with t	nd SBT).	Mitigation Strategies:	parameters will be completed as the LCRT design is finalized.				

No. 10 Mar		Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay	C/30.3 A/4.1 A/6.7 2045 Build F/192.9 A/9.2 B/13.4 PM peak of 2045 ng throughout lld scenarios may ntersection delay the coordination
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	
122	Meeting St & I-26	Signalized	Signalized	B/11.5	B/17.4	C/23.8	C/32.0	C/30.3
1			N	BRT LOS/Delay	NB BRT SB BRT	A/5.4 A/5.8	NB BRT	
1			A			(2 nd Hour) LOS		A/b.7
2		*		Existing 2025 2025 2045 No Build Build No Build				
				B/10.1	B/11.6	B/12.6	E/68.5	F/192.9
1		1		BRT LOS/Delay	NB BRT	A/0.4	NB BRT	A/9.2
-				Bit i Loorbeilay	SB BRT	A/3.3	SB BRT	2045 Build F/192.9 A/9.2 B/13.4 PM peak of 2045 ing throughout ild scenarios may intersection delay the coordination
0			Explanation of Results:	due to loca downtown. Th also contribut	lized congestice e addition of TS e to the increas	2045 No Build C/32.0 C/30.3 NB BRT A/4.1 SB BRT A/6.7 //Delay 2045 No Build Build E/68.5 F/192.9 NB BRT A/9.2 SB BRT B/13.4 eases in the PM peak of 2045 and queuing throughout P in the Build scenarios may ed overall intersection delay e disrupting the coordination ant signals.		
No Build Changes:	N/A			Potential	Further refinement of the signal timing and TSP			
Build Changes:	TSP added for phases associated with t	he BRT (NBT a	nd SBT).	Mitigation Strategies:	parameters	i design is		

No to No		Signal	Control		AM Peak	(2 nd Hour) LOS	S/Delay		
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build	
123	Meeting St & Line St	Signalized	Signalized	B/13.3	B/13.9	B/12.5	B/16.2	B/14.8	
1 A			N	BRT LOS/Delay	NB BRT SB BRT	A/1.4 B/13.4	NB BRT	A/3.0	
			A			(2 nd Hour) LOS		D/ 14.0	
	ALE			Existing	2025 No Build	2025 Build	2045 No Build B/16.2 B/14.8 NB BRT A/3.0 SB BRT B/14.6 COS/Delay 2045 No Build B/63.1 F/167.4 NB BRT B/11.4 SB BRT D/47.9 Ancreases in the PM peak of 2045 stion and queuing throughout f TSP in the Build scenarios may reased overall intersection delay be disrupting the coordination jacent signals.		
	THE REAL PROPERTY OF THE PARTY	70		B/11.7	B/11.6	B/13.4	E/63.1	F/167.4	
6				BRT LOS/Delay		B/11.4			
			3	Bit'i Ecorbeiay	SB BRT	A/7.9	SB BRT	A/3.0 B/14.6 2045 Build F/167.4 B/11.4 D/47.9 A peak of 2045 throughout scenarios may rection delay coordination	
		Explanation of Results:	due to loca downtown. Th also contribut	alized congestice e addition of TS te to the increas ay potentially b	B/16.2 B/14.8 NB BRT SB BRT B/14.6 OS/Delay 2045 No Build E/63.1 F/167.4 NB BRT NB BRT D/47.9 Accreases in the PM peak of 2045 stion and queuing throughout to TSP in the Build scenarios may eased overall intersection delay be disrupting the coordination accent signals.				
No Build Changes:	N/A TSP added for phases associated with the BRT (NBT and SBT).			Potential	Further refinement of the signal timing and TSP parameters will be completed as the LCRT design is finalized.				
Build Changes:				Mitigation Strategies:					

No de No	lutana adan Mana	Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay		
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build	
124	Meeting St & Columbus St	Signalized	Signalized	B/11.8	B/16.6	B/16.9	B/17.1	B/17.8	
			N	BRT LOS/Delay	NB BRT SB BRT	A/2.5 A/3.8	NB BRT	A/2.7	
			T			(2 nd Hour) LOS		F(1.3	
			5	Existing	2025 No Build	2025 Build	2045 No Build B/17.1 B/17.8 NB BRT A/2.7 SB BRT A/7.3 //Delay 2045 No Build E/72.3 F/128.7 NB BRT C/21.1 SB BRT A/7.4 Passes in the PM peak of 2045 In and queuing throughout P in the Build scenarios may ed overall intersection delay ed disrupting the coordination and signals. Pessignal timing and TSP ared as the LCRT design is		
		The second	7	A/9.6	B/12.0	B/16.3 E/	E/72.3	F/128.7	
•	III. IIIIIII			BRT LOS/Delay					
		300	2.tt. 200/201ay	SB BRT	A/8.5	SB BRT	A/7.4		
			Explanation of Results:	due to loca downtown. Th also contribut	alized congestice e addition of TS te to the increas ay potentially b	LOS/Delay 2045 No Build Build E/72.3 F/128.7 NB BRT C/21.1 SB BRT A/7.4 In increases in the PM peak of 2045 gestion and queuing throughout of TSP in the Build scenarios may creased overall intersection delay ally be disrupting the coordination adjacent signals.			
No Build Changes:	N/A				Further refinement of the signal timing				
Build Changes:	TSP added for phases associated with the	Mitigation Strategies:	parameters			. i design is			

No de No	lutana adan Mana	Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay	throughout scenarios may ersection delay	
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build		
125	Meeting St & Woolfe St	Signalized	Signalized	A/4.9	A/8.3	A/5.5	A/7.9	A/6.3	
			N N	BRT LOS/Delay	NB BRT SB BRT	A/0.7	NB BRT	A/6.3 A/6.3 A/6.3 A/1.0 A/1.0 A/1.0 A/1.0 A/1.0 A/1.0 Build Bu	
		10.1							
				Existing	2025 No Build	Build Build No Build Build No Build Build No. Build Survey No. Build Sur			
				A/9.4	B/11.3	B/10.9	D/51.8	E/75.4	
				BRT LOS/Delay	NB BRT	A/2.4		Build A/6.3 A/0.3 A/1.0 2045 Build E/75.4 A/0.3 A/3.9 PM peak of 2045 g throughout discenarios may ersection delay ne coordination g and TSP	
			BRT EOO/Delay	SB BRT	A/7.0	SB BRT	A/3.9		
				Explanation of Results:	due to loca downtown. Th also contribut	alized congestic e addition of TS te to the increas ay potentially b	on and queuing SP in the Build s sed overall inter e disrupting the	throughout scenarios may rsection delay	
No Build Changes:	N/A								
Build Changes:	TSP added for phases associated with the	nd SBT).	Mitigation Strategies:	parameters will be completed as the LCRT design is finalized.					

No to No		Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay		
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build	
126	Meeting St & Mary St	Signalized	Signalized	B/11.9	B/13.1	A/9.7	C/27.7	B/10.9	
				BRT LOS/Delay	NB BRT	B/10.8	NB BRT	B/14.3	
*			A					7 0 1.2	
				Build Existing No Build Build No Build Build Signalized B/11.9 B/13.1 A/9.7 C/27.7 B/1 BRT LOS/Delay NB BRT B/10.8 NB BRT B/1 SB BRT A/5.3 SB BRT A/ PM Peak (2 nd Hour) LOS/Delay Existing 2025 No Build Build Search SB BRT B/14.3 SB BRT A/ Explanation of Results: Delay at this intersection increases in the PM peak of due to localized congestion and queuing through downtown. The addition of TSP in the Build scenarior also contribute to the increased overall intersection because it may potentially be disrupting the coordin with adjacent signals. Potential Further refinement of the signal timing and TS				2045 Build	
				B/12.7 B/16.5 B/18.1 D/48.9			D/48.9	E/64.9	
CELE		III.		BRT I OS/Delay	NB BRT	A/7.9	NB BRT	B/11.2	
				Ditti 200/Dolay	SB BRT	B/14.3	SB BRT	A/5.8	
					due to loca downtown. Th also contribut	lized congestice addition of TS e to the increase ay potentially b	2025 Build B/18.1 D/48.9 E/64.9 A/7.9 NB BRT B/11.2 B/14.3 SB BRT A/5.8 section increases in the PM peak of 2045 ed congestion and queuing throughout ddition of TSP in the Build scenarios may of the increased overall intersection delay potentially be disrupting the coordination with adjacent signals.		
No Build Changes:	N/A				Further refinement of the signal timing and TSP				
Build Changes:	TSP added for phases associated with t	he BRT (NBT a	ind SBT).	Mitigation parameters will be completed				i design is	

No to No		Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay	
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
127	Meeting St & Wragg Square	Signalized	Signalized	A/5.6	A/6.9	A/6.6	B/11.5	A/7.0
			N	BRT LOS/Delay	NB BRT	A/0.2	NB BRT	A/0.3 A/3.8
		an .	A					7,0.0
				Build Existing No Build Build No Build Build gnalized A/5.6 A/6.9 A/6.6 B/11.5 A/7 BRT LOS/Delay NB BRT A/0.2 NB BRT A/0.2 NB BRT A/0.2 SB BRT A/3.3 SB BRT A/3.3 SB BRT A/3.4 SB BRT A/3.4 SB BRT A/3.4 SB BRT A/4.6 B/13.4 C/2.5 No Build Build No Build Build A/7.0 A/4.8 A/4.6 B/13.4 C/2.5 SB BRT A/2.1 NB BRT A/2.1 SB BRT A/5.5 SB				2045 Build
				A/7.0	A/4.8	A/4.6	B/13.4	C/23.7
1.				I BR I LOS/Delay				
	學			BITT EOO/Delay	SB BRT	A/7.2	SB BRT	A/5.7
				the board, v	c operations at this signal are largely stable across board, with the exception of the PM peak in 2045, this slightly impacted by localized congestion and			
No Build Changes:	N/A		Potential	Further refinement of the signal timing and T parameters will be completed as the LCRT des				
Build Changes:	TSP added for phases associated with t	he BRT (NBT a	and SBT).	Mitigation Strategies:	parameters	. i design is		

Nede Ne	Interception Name	Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay		
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	A/3.4 B/17.5 A/0.4 Bak (2 nd Hour) LOS/De 2025 Build A/6.3 C/20.6 A/0.6 Derations at this signal ard, with the exception of a slightly impacted by loqueuing the refinement of the signer will be completed	2045 No Build	2045 Build	
128	Meeting St & Ann St	Signalized	Signalized	A/4.5	A/4.5	A/3.4	A/5.7	A/4.0	
			N V	BRT LOS/Delay	NB BRT		NB BRT	B/17.1	
		an .	A					740.0	
				Existing	2025 No Build	2025			
				A/4.4	SB BRT A/0.4 SB BRT A/0.3 PM Peak (2 nd Hour) LOS/Delay Existing 2025				
				BRT LOS/Delay					
				Bit i Eco/Bolay	SB BRT	A/0.6	SB BRT	A/0.3	
				the board, v	vith the exception	on of the PM pe by localized con	eak in 2045,		
No Build Changes:	N/A			Potential					
Build Changes:	TSP added for phases associated with tl	nd SBT).	Mitigation Strategies:						

No to No		Signal	Control	AM Peak (2 nd Hour) LOS/Delay					
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build	
129	Meeting St & John St	Signalized	Signalized	A/9.4	B/13.3	B/11.5	B/17.3	B/17.8	
			N	BRT LOS/Delay	NB BRT	A/3.1	NB BRT	A/3.3	
			A		SB BRT	C/27.6	SB BRT	C/25.6	
		1/16	Par		PM Peak	(2 nd Hour) LOS	S/Delay		
	30			Existing 2025 No Build 2025 Build 2045 No Build 2045 Build B/10.9 B/15.7 B/13.2 D/46.8 B/17.0 BRT LOS/Delay NB BRT A/2.5 NB BRT A/3.0 SB BRT C/23.9 SB BRT B/17.3					
				BRT LOS/Delay				A/3.0	
					SB BRT	C/23.9	SB BRT	B/17.3	
					the board, v	vith the exception	nal are largely son of the PM people of	eak in 2045,	
No Build Changes:	N/A			Potential Mitigation					
Build Changes:	TSP added for phases associated with t	nd SBT).	Strategies:	parameters will be completed as the LCRT design is finalized.					

No. 1. No.		Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay				
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build			
130	Meeting St & Calhoun St	Signalized	Signalized	C/28.4	C/22.4	C/24.5	C/25.2	C/31.9			
				BRT LOS/Delay	NB BRT	C/21.8	NB BRT	C/20.2			
*		A L	A A	C/28.4 C/22.4 C/24.5 C/25.2 C/31.9							
		Ali	To the second	PM Peak (2 nd Hour) LOS/Delay Existing 2025 No Build Build C/24.6 C/22.2 C/24.4 E/59.5 C/29. BRT LOS/Delay NB BRT C/22.5 SB BRT B/11.2 Traffic operations at this signal are largely stable acrethe board, with the exception of the PM peak in 2045							
			C/24.6 C/22.2 C/24.4 E/59.5 NB BRT C/22.5 NB BRT SB BRT SB BRT Traffic operations at this signal are large the board, with the exception of the PM Build, which is slightly impacted by local		E/59.5	C/29.4					
		T.		BRT I OS/Delay	NB BRT	C/22.5	NB BRT	C/23.5			
				BIXT EOO/Delay	SB BRT	B/11.2	SB BRT	B/11.7			
					the board, wi Build, which and queuein location becau	th the exception is slightly impa ng. The NB BR use it must mak	at this signal are largely stable across exception of the PM peak in 2045 No htly impacted by localized congestion e NB BRT sees a higher delay at this must make an EBL movement in mixe				
No Build Changes:	N/A	N/A									
Build Changes:	West leg reconfigured to convert the EBL lane the EBR lane continuous back to King S associated with the BRT (EBL			parameters		i design is					

No de No	Indonesia Managa	Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay		
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build	
131	Calhoun St & King St	Signalized	Signalized	B/10.9	B/13.5	C/21.7	B/14.6	C/32.3	
		N		BRT LOS/Delay	NB BRT SB BRT	A/9.1 B/11.3	NB BRT SB BRT	B/17.3 B/10.6	
		6.			(2 nd Hour) LOS		D/ 10.0		
				Existing 2025 2025 2045 2045 No Build Build No Build Build					
		Take Co		B/12.3 B/17.7 C/30.6 C/25		C/25.2	E/69.0		
				BRT LOS/Delay	NB BRT	B/18.5	NB BRT	C/34.6	
			60	Bitti Econdelay	SB BRT	B/14.5	SB BRT	B/13.6	
			Explanation of Results:	future years phase re movements a Build scena overall interse	s. The addition duces available this intersection may also ection delay because.	the increased vof the pedestriate green time for on. The addition contribute to the cause this located street vs. the	an scramble the other n of TSP in the e increased ion has a high		
No Build Changes:	N/A			Potential	ne signal timing				
Build Changes:	(EBL and WBL). Signal timing modified to i scramble phase instead of individual pedestri	west legs both reconfigured to add one (1) left turn pocket each d WBL). Signal timing modified to include a single pedestrian phase instead of individual pedestrian phases with each through SP added for phases associated with the BRT (EBT and WBT).		Mitigation parameters will be completed as the LCRT design is strategies: finalized.					

Nede Ne	Interception Name	Signal	Control		AM Peak	(2 nd Hour) LOS	5/Delay	
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
132	Calhoun St & Phillips St	Signalized	Signalized	A/8.4	A/9.8	C/21.1	B/13.2	C/28.5
				BRT LOS/Delay	NB BRT	C/28.9	NB BRT	C/34.2
4.		1	N 23	BRT 200/Belay	SB BRT	A/7.6	SB BRT	B/13.3
	TO BE		A		PM Peak	(2 nd Hour) LOS	5/Delay	
				Existing	2025 No Build	o Build Build No Build Build A/9.8 C/21.1 B/13.2 C/28.5 B BRT C/28.9 NB BRT C/34.2 B BRT A/7.6 SB BRT B/13.3 PM Peak (2 nd Hour) LOS/Delay B/13.3 C/21.0 B/15.9 A/9.5 C/21.0 B/15.9 D/54.6 B BRT C/29.2 NB BRT E/57.5		
				A/6.1	A/9.5			D/54.6
		mer a		BRT LOS/Delay	NB BRT	C/29.2	NB BRT	E/57.5
			1. 1	BKT LOS/Delay	SB BRT	A/4.8	SB BRT	B/11.6
				Explanation of Results:	future years phase red movements at Build scena overall interse	s. The addition duces available this intersection may also dection delay bed	of the pedestriate green time for on. The addition contribute to the cause this locati	the other of TSP in the e increased on has a high
No Build Changes:	N/A			Potential Mitigation				
Build Changes:	EBL and WBL movements removed. Signal single pedestrian scramble phase instead of with each through phase. TSP added for pha (EBT and WBT).	individual pede ses associated	strian phases	Strategies:				i ucsigii is

No to No		Signal	Control		AM Peak	(2 nd Hour) LOS	5/Delay			
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build		
133	Calhoun St & Coming St	Signalized	Signalized	B/13.1	B/13.1	B/12.7	C/22.0	B/16.7		
				BRT LOS/Delay	NB BRT	A/5.5	NB BRT	B/10.8		
			N		SB BRT B/15.3 SB BRT B/16.9					
		7-7	A		PM Peak	2025 Ruild Ruild Build Build B/12.7 C/22.0 B/16.7 A/5.5 NB BRT B/10.8 B/15.3 SB BRT B/16.9 2025 2045 No Build Build Build B/19.9 C/27.0 D/51.9 A/5.3 NB BRT B/16.2 B/17.1 SB BRT C/20.5 tween No Build and Build can generally be he influence of TSP and optimized signal has a variable impact depending on the raffic on the side street vs. the main street.				
THE REAL PROPERTY.										
						C/27.0	D/51.9			
		1		BRT LOS/Delay	NB BRT		C/22.0 B/16.7 C/22.0 B/16.7 S.5 NB BRT B/10.8 S.3 SB BRT B/16.9 C/25 2045 Build D/51.9 C/27.0 D/51.9 S.3 NB BRT B/16.2 T.1 SB BRT C/20.5 No Build and Build can generally be uence of TSP and optimized signal a variable impact depending on the on the side street vs. the main street.			
			A							
					attributed to timing, which	the influence c th has a variabl	of TSP and opting the second of the second o	mized signal adding on the		
No Build Changes:	N/A			Potential Mitigation						
Build Changes:	Two departing lanes maintained on the east	Strategies: gured to have one (1) EBL only lane and one (1) EBT lane. lanes maintained on the east leg. TSP added for phases associated with the BRT (EBT and WBT).			parameters will be completed as the LCRT design is					

		Signal	Control		AM Peak	(2 nd Hour) LOS	S/Delay	
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build
134	Calhoun St & Smith St	Signalized	Signalized	A/7.5	A/5.6	A/6.5	B/17.0	A/7.3
12				BRT LOS/Delav	NB BRT	A/1.5	NB BRT	A/1.5
			N A	Build Existing 2025 No Build Build No Build Build Squalized A/7.5 A/5.6 A/6.5 B/17.0 A/7.3 BRT LOS/Delay NB BRT A/1.5 NB BRT A/1.5 SB BRT A/2.9 PM Peak (2 nd Hour) LOS/Delay Existing 2025 No Build Build No Build Build A/7.4 B/10.3 A/10.0 B/14.8 C/34.4 BRT LOS/Delay SB BRT A/3.9 SB BRT A/6.1 Explanation of Results: Traffic operations at this signal are largely stable across the board. Potential Mitigation Strategies: Further refinement of the signal timing and TSP parameters will be completed as the LCRT design in finalized.			A/2.9	
				Existing 2025 No Build 2025 Build 2045 No Build 2045 Build 2045 No Build 2045 Build 2045 Build				
			nion.	A/7.4	B/10.3	A/10.0		C/34.0
		TEL	Wan I	BRT LOS/Delay				C/26.1
		-	6	J. 1. 200/20.0.y	SB BRT	A/3.9	SB BRT	A/6.1
					Traffic opera			stable across
No Build Changes:	N/A							
Build Changes:	TSP added for phases associated with the BRT (EBT and WBT).				parameters will be completed as the LCRT design is finalized.			

No to No		Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay	g and TSP		
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build			
135	Calhoun St & Rutledge Ave	Signalized	Signalized	B/11.4	B/13.3	B/13.7	B/14.3	B/15.4		
•				BRT LOS/Delay	NB BRT	A/3.8	NB BRT			
	A BASE	11	Ä	SB BRT A/3.9 SB BRT PM Peak (2 nd Hour) LOS/Delay			A/6. <i>1</i>			
				No Build Build No Build B						
				B/10.6	B/17.9	B/17.7	C/23.1	D/45.3		
		R.		BRT LOS/Delay	NB BRT	A/5.5	NB BRT			
Comment				,	SB BRT	A/9.0	SB BRT	A/8.6		
A. Marine					Traffic opera		A/5.5 NB BRT C/22.5			
No Build Changes:	N/A			Potential Further refinement of the signal timing and TS						
Build Changes:	TSP added for phases associated with the	ne BRT (EBT a	nd WBT).	Mitigation Strategies:	parameters will be completed as the LCRT design is finalized.					

No de No	Indonesia Managa	Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay	C/32.9 B/16.3 C/33.9 ly stable across		
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build			
136	Calhoun St & Ashley Ave	Signalized	Signalized	B/12.9	B/14.8	B/17.4	B/17.1	C/20.8		
Market				BRT LOS/Delay	NB BRT	B/11.3	2045 No Build B/17.1 C/20.8 NB BRT B/11.9 SB BRT B/17.3 DS/Delay 2045 No Build Build C/21.8 C/32.9 NB BRT C/33.9 Signal are largely stable across a board.			
	WE AND THE	1771	BRT LOS/Delay NB BRT B/11.3 NB BRT B/11 SB BRT C/23.0 SB BRT B/17 PM Peak (2 nd Hour) LOS/Delay Existing 2025 2025 2045 No Build Buil	B/17.3						
				PM Peak (2 nd Hour) LOS/Delay						
MA				Existing						
1		1 1		B/15.8	B/15.8 B/18.7 B/19.1 C/21.8	C/32.9				
			The sales	BRT LOS/Delay						
		A supple	A STATE OF THE STA	,	SB BRT	C/24.2	SB BRT	C/33.9		
OB O					Traffic opera		C/24.2 SB BRT C/33.9 Ins at this signal are largely stable across			
No Build Changes:	N/A			Potential Mitigation						
Build Changes:	West leg reconfigured to have one (1) EBL on Two departing lanes maintained on the east associated with the BRT (EB	leg. TSP adde		Strategies:		i desigii is				

No to No		Signal	Control		AM Peak (2 nd Hour) LOS/Delay				
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	and TSP	
137	Calhoun St & Jonathan Lucas St/Barre St	Signalized	Signalized	B/10.1	B/12.4	B/13.6	B/15.6	B/17.7	
				BRT LOS/Delay	NB BRT	B/16.8	NB BRT	C/21.5	
			N	Bitt 200/Bolay	SB BRT	2025 Build B/13.6 B/15.6 B/17.7 B/16.8 NB BRT C/21.5 B/16.9 SB BRT C/20.4 (2 nd Hour) LOS/Delay 2025 Build No Build B/16.2 C/30.8 C/27.3 B/12.9 NB BRT B/14.9 B/19.9 SB BRT B/16.9 tions at this signal are largely stable across the board.			
	B A C		TAR		PM Peak ((2 nd Hour) LOS	/Delay		
Toa.	EET CEET		1	Existing	2025 No Build				
			-	B/10.7	C/20.1	NB BRT B/16.8 NB BRT C/21.5 SB BRT B/16.9 SB BRT C/20.4 PM Peak (2 nd Hour) LOS/Delay 2025 2025 2045 2045 No Build Build Build Build C/20.1 B/16.2 C/30.8 C/27.3 NB BRT B/12.9 NB BRT B/14.9 SB BRT B/19.9 SB BRT B/16.9 Traffic operations at this signal are largely stable across			
		14		BRT LOS/Delay	NB BRT	B/12.9	NB BRT	B/14.9	
100		-		Divi 200/Dolay	SB BRT	B/19.9	SB BRT	T C/21.5 T C/20.4 2045 Build C/27.3 T B/14.9 T B/16.9	
8 8 8 8		THE STATE OF THE S	22.29	Explanation of Results:	Traffic opera	-		stable across	
No Build Changes:	N/A	N/A			Further refinement of the signal timing and TSP				
Build Changes:	West leg reconfigured to convert the EBL land the EBR lane continuous back to Courtenay associated with the BRT (EBT	Dr. TSP adde		Mitigation Strategies:	parameters	•		i ucaigir ia	

		Signal	Control		AM Peak	(2 nd Hour) LOS	6/Delay		
Node No.	Intersection Name	No Build	Build	Existing	2025 No Build	2025 Build	2045 No Build	2045 Build	
142	Calhoun St & Courtenay Dr	Signalized	Signalized	C/20.2	B/18.0	C/21.8	C/23.0	C/27.3	
			P	BRT LOS/Delay	NB BRT	E/58.4	NB BRT	E/60.1	
1			N	2111 200/201ay	SB BRT	N/A	SB BRT	2045 o Build C/23.0 C/27.3 BB BRT E/60.1 BB BRT N/A 2045 o Build C/31.3 C/34.9 BB BRT F/165.8 BB BRT N/A at this location because it in mixed traffic from was not enabled for this ns in the Medical District ne scope of the VISSIM anal timing and TSP as the LCRT design is	
		المسلسل المسلم	A		PM Peak	Build No Build Build C/21.8 C/23.0 C/27.3 E/58.4 NB BRT E/60.1 N/A SB BRT N/A (2 nd Hour) LOS/Delay 2025 2045 Build Build C/24.8 C/31.3 C/34.9 F/91.8 NB BRT F/165.8 N/A SB BRT N/A sees a higher delay at this location because it ake a SBL movement in mixed traffic from r to Calhoun St. TSP was not enabled for this ecause BRT operations in the Medical District dered to be outside the scope of the VISSIM model.			
				Existing	2025 No Build				
			10 10 10 10 10 10 10 10 10 10 10 10 10 1	C/20.4	B/19.2	C/31.3	C/34.9		
				BRT LOS/Delay	NB BRT				
1				Ditti 200/20lay	SB BRT	N/A	SB BRT	N/A	
					must mak Courtenay Dr movement be	BRT N/A SB BRT N/A B BRT sees a higher delay at this location because it ust make a SBL movement in mixed traffic from enay Dr to Calhoun St. TSP was not enabled for this ment because BRT operations in the Medical District considered to be outside the scope of the VISSIM			
No Build Changes:	West leg widened from two (2) lanes to four EBL lane, two (2) EBT lanes, and one (1) EBL/T lane an	BR lane. North	leg widened	Potential	Mitigation parameters will be completed as the LCRT design is				
Build Changes:	Intersection geometry matches	s the No Build.		Mitigation Strategies:					

LOWCOUNTRY RAPID TRANSIT MICROSIMULATION MODEL DRAFT REPORT

Appendix D - 2025 No Build VISSIM Output

Appendix D - 2025 NO BUILD VISSIM OUTPUT



Node Level Performance, AM Peak Hour

Node				st Hour			d Hour	
No.	Intersection Name	Movement		– 8:15 a			– 8:45 a	
			Volume	Delay	LOS	Volume	Delay	LOS
		SBR	181	26.3	С	180	18.8	В
		SBT	526	57.1	Е	501	48.7	D
		SBL	188	52.7	D	156	47.0	D
		WBR	42	58.9	Е	31	51.5	D
		WBT	66	40.3	D	68	35.8	D
22	US 78 & College Park Rd	WBL	372	53.7	D	438	47.5	D
	oo 70 d conege 1 dik Ka	NBR	42	58.9	Е	31	51.5	D
		NBT	372	53.7	D	438	47.5	D
		NBL	66	40.3	D	68	35.8	D
		EBR	124	23.8	С	124	18.0	В
		EBT	462	25.8	С	482	20.5	С
		EBL	418	193.3	F	374	98.0	F
		SBR	6	74.1	Е	7	40.4	D
		SBT	46	93.2	F	32	93.3	F
		SBL	96	102.5	F	66	97.7	F
		WBR	11	18.3	В	13	21.7	С
		WBT	343	32.0	С	323	36.3	D
23	US 78 & Ladson Rd/	WBL	604	113.8	F	630	121.7	F
25	Ancrum Rd	NBR	1369	29.9	С	1308	29.5	С
		NBT	17	62.3	Е	16	64.1	Е
		NBL	55	57.6	Е	70	64.5	Е
		EBR	48	38.6	D	43	34.0	С
		EBT	646	49.8	D	620	46.3	D
		EBL	7	94.0	F	8	97.3	F
		SBR	24	26.2	С	24	16.7	В
		SBT	62	100.3	F	55	96.8	F
		SBL	82	168.5	F	66	156.8	F
		WBR	56	14.8	В	49	16.7	В
		WBT	1051	15.2	В	1064	24.0	С
27	US 78 & Ingleside Blvd	WBL	387	133.1	F	351	139.9	F
21	1 00 70 & Ingleside biva	NBR	437	45.1	D	384	45.3	D
		NBT	9	128.2	F	10	95.5	F
		NBL	92	120.1	F	80	148.0	F
		EBR	187	23.3	С	148	23.1	С
		EBT	1895	37.4	D	1884	36.7	D
		EBL	9	44.4	D	11	45.3	D
		WBT	1386	0.5	Α	1388	1.1	Α
29	US 78 & I-26 EB Ramps	WBL	162	109.0	F	166	113.9	F
	20 70 G 1 20 ED Italiips	EBR	846	3.2	Α	743	4.2	Α
		EBT	1703	11.4	В	1686	18.5	В
		WBT	1069	0.1	N/A	1097	0.1	N/A
30	US 78 & I-26 WB Ramps *	EBT	2373	34.6	N/A	2330	50.0	N/A
		EBL	97	19.8	С	70	26.7	D
		SBR	34	14.1	В	38	13.9	В
	US 78/University Blvd &	SBT	5	66.0	Е	5	71.7	Е
31	Medical Plaza Dr	SBL	14	81.6	F	17	84.6	F
	caicai i iaza bi	WBR	135	21.3	С	174	24.4	С
		WBT	1466	18.9	В	1469	20.9	С



			19	st Hour	-	2n	d Hour	
Node	Intersection Name	Movement		– 8:15 a	m)		– 8:45 aı	m)
No.	microconon name	Movement	Volume	Delay	LOS	Volume	Delay	Los
		WBL	86	94.1	F	97	95.1	F
		NBR	47	61.7	Ė	61	121.1	F
		NBT	32	108.6	F	44	150.7	F
		NBL	132	95.5	F	114	100.5	F
		EBR	652	25.8	C	622	30.4	С
		EBT	2164	27.9	C	2195	31.6	C
		EBL	228	90.3	F	221	93.7	F
		SBR	16	13.5	В	16	15.2	В
		SBT	5	74.4	Е	4	64.6	Е
		SBL	34	78.7	Е	22	78.2	Е
		WBR	185	20.4	С	162	21.5	С
		WBT	1599	16.9	В	1621	17.2	В
	US 78/University Blvd &	WBL	198	133.1	F	215	167.1	F
34	Medical Plaza Dr/BUC Club	NBR	106	27.5	С	93	34.1	С
	Blvd	NBT	16	67.0	Е	19	69.5	Е
		NBL	94	78.2	Е	105	103.7	F
		EBR	130	5.7	Α	157	5.6	Α
		EBT	1954	6.2	Α	1947	6.1	Α
		EBL	111	30.7	С	113	30.4	С
		SBR	85	39.9	D	101	43.5	D
		SBT	16	82.1	F	18	81.8	F
		SBL	177	89.3	F	176	89.6	F
		WBR	118	14.7	В	125	15.6	В
		WBT	1919	14.4	В	1917	14.8	В
0.7	US 78/University Blvd &	WBL	15	25.6	С	15	24.4	С
37	Elms Center Rd	NBR	21	29.8	С	28	30.3	С
		NBT	25	64.7	Е	20	64.1	Е
		NBL	130	68.5	Е	130	68.4	Е
		EBR	53	4.1	Α	63	4.0	Α
		EBT	1586	4.7	Α	1474	3.7	Α
		EBL	114	59.6	Е	140	58.7	Е
		SBR	6	22.1	С	13	18.1	В
		SBT	0	0.0	Α	1	68.7	Е
		SBL	3	81.9	F	3	76.9	Е
		WBR	21	3.7	Α	12	3.2	Α
		WBT	2058	12.1	В	2028	11.7	В
38	US 78/University Blvd &	WBL	84	36.8	D	77	31.2	С
30	Fernwood Dr	NBR	68	23.5	С	60	21.1	С
		NBT	0	0.0	Α	2	70.6	Ш
		NBL	110	76.0	Е	81	76.2	Е
		EBR	21	5.5	Α	17	8.3	Α
		EBT	1692	5.6	Α	1618	4.8	Α
		EBL	6	29.8	С	15	21.5	С
		SBR	30	37.4	D	77	42.2	D
		SBT	4127	44.7	D	4113	44.5	D
	US 52/78/Rivers Ave &	SBL	37	99.6	F	58	96.7	F
42	Otranto Rd/Otranto Blvd	WBR	116	62.1	Е	104	71.8	Е
	Citatilo Nu/Ottatilo Bivu	WBT	62	142.2	F	69	146.8	F
		WBL	236	132.8	F	222	142.3	F
		NBR	106	3.1	Α	105	3.2	Α



			15	st Hour		2r	nd Hour	
Node	Intersection Name	Movement		– 8:15 aı	m)		– 8:45 a	m)
No.			Volume	Delay	Los	Volume	Delay	Los
		NBT	1364	15.5	В	1422	15.7	В
		NBL	158	93.7	F	158	97.6	F
		EBR	362	55.2	Е	327	49.4	D
		EBT	27	94.6	F	45	96.7	F
		EBL	200	82.3	F	181	78.8	Е
		SBR	48	5.6	Α	82	7.9	Α
		SBT	4659	12.0	В	4544	12.8	В
		SBL	22	96.3	F	36	108.1	F
		WBR	5	9.4	Α	18	145.2	F
		WBT	4	92.3	F	6	158.5	F
	US 52/78/Rivers Ave & T	WBL	23	118.6	F	32	179.0	F
43	Mobile Dr	NBR	51	2.6	Α	59	3.3	Α
		NBT	1601	3.4	Α	1648	6.6	Α
		NBL	44	111.4	F	50	203.9	F
		NBU	12			18		
		EBR	55	17.7	В	49	18.1	В
		EBT	4	120.0	F	8	98.5	F
		EBL	19	96.9	F	21	87.8	F
		SBR	37	6.7	N/A N/A	20	9.8	N/A N/A
		SBT SBL	4701 3	28.0 11.2	B B	4635 4	31.7 15.2	C C
		WBR	15	22.0	С	16	23.0	C
	US 52/78/Rivers Ave &	WBL	3	256.2	F	1	595.2	F
44	Melnick Dr *	NBR	21	1.7	N/A	18	1.9	N/A
	INTERITION DI	NBT	1703	0.8	N/A	1770	4.2	N/A
		NBL	33	94.5	F	51	112.9	F
		EBR	89	371.5	F	80	683.4	F
		EBL	6	541.5	F	7	761.6	F
		SBR	114	12.0	В	173	10.5	В
		SBT	4688	27.9	C	4615	28.2	C
		WBR	28	37.5	D	29	56.4	Е
		WBT	63	99.2	F	70	131.2	F
46	US 52/78/Rivers Ave &	WBL	12	110.5	F	21	156.1	F
	Greenridge Rd	NBT	1671	12.7	В	1777	13.2	В
		NBL	110	483.8	F	111	585.6	F
		EBR	738	149.5	F	753	151.9	F
		EBL	98	107.3	F	106	119.6	F
		SBR	99	1.1	Α	142	1.2	Α
		SBT	2530	8.0	Α	2451	0.8	Α
		SBL	64	4.5	Α	88	5.5	Α
		WBR	17	5.3	Α	19	5.4	Α
		WBT	4	72.2	E	4	100.1	F
40	US 52/78/Rivers Ave &	WBL	17	94.4	F	31	97.2	F
49	North Rivers Market Place	NBR	19	1.1	A	25	1.2	Α
		NBT	802	0.8	A	869	0.9	Α
		NBL	7	24.5	С	9	26.9	С
		EBR	4	4.1	А	9	1.0	Α
		EBT	5	96.4	F	5	98.1	F
		EBL	17	88.5	F	32	89.3	F



			19	st Hour		2n	d Hour	
Node	Intersection Name	Movement		– 8:15 a	m)		– 8:45 a	m)
No.	mioression rams	ino vonioni	Volume	Delay	Los	Volume	Delay	Los
		SBR	61	1.1	A	76	1.8	A
		SBT	2453	8.5	Α	2352	7.5	Α
		SBL	43	9.9	Α	61	11.4	В
		WBR	46	5.7	Α	52	5.8	Α
		WBT	38	74.2	Е	33	83.4	F
50	US 52/78/Rivers Ave &	WBL	302	88.6	F	261	87.4	F
30	Eagle Landing Blvd	NBR	122	2.3	Α	129	2.6	Α
		NBT	758	6.5	Α	823	6.9	Α
		NBL	9	25.6	С	8	27.7	С
		EBR	11	5.8	Α	7	19.2	В
		EBT	5	79.3	Е	13	91.9	F
		EBL	25	97.1	F	30	100.3	F
		SBR	50	4.2	Α	51	5.0	Α
		SBT	2617	3.2	Α	2468	3.6	Α
		SBL	92	5.7	Α	104	6.3	Α
		WBR	42	18.2	В	48	30.9	C
		WBT	10	88.5	F	13	96.6	F
51	US 52/78/Rivers Ave &	WBL	99	131.2	F	105	131.2	F
	Northwoods Blvd	NBR	51	2.3	A	65	2.4	Α
		NBT	811	3.3	A	866	3.9	A
		NBL	34	24.8	С	46	21.0	С
		EBR	87	12.2	B F	77	11.1	B F
		EBT EBL	14	97.6	F	10 49	96.3 101.8	F
		SBR	39 217	89.2 17.9	В	231	15.8	В
		SBT	2552	36.3	D	2376	34.2	С
		SBL	28	113.4	F	28	116.3	F
		WBR	14	24.1	С	18	20.0	В
		WBT	53	82.9	F	55	83.9	F
	US 52/78/Rivers Ave &	WBL	108	72.9	Ē	123	75.2	Ė
52	Ashley Phosphate Rd	NBR	106	6.5	A	89	6.2	A
		NBT	673	13.2	В	731	12.9	В
		NBL	346	71.6	Е	375	70.6	Е
		EBR	543	130.4	F	548	178.3	F
		EBT	102	114.8	F	98	212.7	F
		EBL	210	151.6	F	237	325.0	F
		SBR	39	6.2	Α	55	5.4	Α
		SBT	3379	9.6	Α	3259	8.7	Α
		SBL	16	95.0	F	33	100.4	F
		WBR	2	29.7	С	10	15.9	В
		WBT	1	130.3	F	2	110.7	F
	LIC 52/70/Divers Ave 9	WBL	18	89.4	F	32	105.7	F
54	US 52/78/Rivers Ave & Morris Baker Blvd	NBR	34	1.2	Α	46	1.3	Α
	IVIUITIS DAKEI DIVU	NBT	1112	2.1	Α	1131	1.4	Α
		NBL	17	111.7	F	29	107.9	F
		EBR	48	22.2	С	17	24.4	С
		EBT	1	26.4	С	2	88.3	F
		EBL	12	94.4	F	23	115.0	F



Node				st Hour			d Hour	
No.	Intersection Name	Movement		– 8:15 a			– 8:45 aı	
			Volume	Delay	LOS	Volume	Delay	LOS
		SBT	2866	2.0	Α	2798	2.0	Α
		SBL	492	36.1	D	408	40.4	D
		SBU	7			10		_
56	US 52/78/Rivers Ave &	WBR	241	5.7	Α	203	5.9	Α
	Mabeline Rd	WBL	61	51.3	D	36	45.8	D
		NBR	230	22.4	С	172	20.2	С
		NBT	966	21.5	С	1007	18.5	В
		NBU	7	1.4	Α	10	1.4	Α
		SBT	2542	3.6	Α	2443	3.0	Α
		SBL	268	40.7	D	256	40.1	D
		SBU	6	40.7	D	7	40.1	D
59	US 52/78/Rivers Ave &	WBR	77	3.2	Α	72	3.1	Α
39	Stokes Ave	WBL	48	48.3	D	56	45.7	D
		NBR	301	2.7	Α	256	2.5	Α
		NBT	1214	11.0	В	1212	10.9	В
		NBU	31	7.0	Α	35	11.0	В
		SBR	234	9.7	Α	204	9.3	Α
		SBT	2380	12.2	В	2307	11.4	В
		SBU	10	4.1	Α	6	6.2	Α
		WBR	21	8.0	Α	20	7.8	Α
00	US 52/78/Rivers Ave &	NBR	24	1.9	Α	69	1.9	Α
60	Midland Park Rd	NBT	1250	0.8	Α	1158	1.5	Α
		NBL	232			280		
		NBU	12	76.7	Е	17	99.5	F
		EBR	371	36.6	D	358	44.3	D
		EBL	245	132.3	F	251	139.0	F
		SBR	108	2.8	Α	107	2.6	Α
		SBT	2677	1.6	Α	2561	1.6	Α
		SBU	38	1.2	Α	70	1.5	Α
	US 52/78/Rivers Ave &	NBT	1469	0.9	Α	1451	0.9	Α
61	Eagle Dr	NBL	44			39		
		NBU	2	84.8	F	2	78.4	Е
		EBR	95	13.3	В	70	11.7	В
		EBL	29	95.5	F	24	99.8	F
		SBT	2547	0.8	Α	2398	0.8	A
		SBL	225			243		
		SBU	0	37.2	D	0	37.1	D
	US 52/78/Rivers Ave &	WBR	302	7.0	Α	281	6.9	Α
62	Hanahan Rd	WBL	170	40.7	D	159	40.2	D
	Transfer Tta	NBR	154	8.0	A	183	9.0	A
		NBT	1211	17.6	В	1220	18.8	В
		NBU	0	0.0	A	0	0.0	A
		SBR	21	5.8	A	36	7.4	A
		SBT	2650	4.4	A	2475	5.3	A
		SBU	14	2.8	A	9	4.1	A
	US 52/78/Rivers Ave &	WBR	3	8.6	A	0	0.0	A
65	Benderson Dr	NBR	1	0.5	A	2	0.4	A
	20110010011 21	NBT	1254	0.3	A	1291	0.4	A
		NBL	51			84		
		NBU	32	56.0	Е	66	55.7	Е
		טטאו	JZ	<u> </u>		00		



			16	st Hour		2n	d Hour	
Node	Intersection Name	Movement		– 8:15 a	m)		– 8:45 a	m)
No.	intersection Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		EBR	10	18.5	В	22	14.8	В
		EBL	5	109.3	F	7	108.0	F
		SBR	574	3.4	A	523	2.9	A
		SBT	2121	15.6	В	1992	16.5	В
		WBR	3	8.6	A	9	7.2	A
		NBR	5	4.9	A	7	5.4	A
67	US 52/78/Rivers Ave &	NBT	804	13.0	В	858	12.8	В
0,	Aviation Ave	NBL	101			86		
		NBU	10	132.7	F	51	99.1	F
		EBR	371	20.7	С	455	27.6	С
		EBL	523	81.2	F	561	85.2	F
		SBR	150	17.2	В	134	14.0	В
		SBT	1832	72.7	E	1745	68.9	E
		SBL	365	88.9	F	375	88.6	F
		WBR	220	79.8	Ē	228	53.4	D
		WBT	474	120.2	F	400	104.2	F
	US 52/78/Rivers Ave &	WBL	589	74.2	Ē	626	75.7	Ė
70	Remount Rd	NBR	305	1.8	A	328	2.2	A
		NBT	647	50.0	D	699	51.7	D
		NBL	97	76.7	Е	106	73.1	Е
		EBR	347	42.0	D	390	47.6	D
		EBT	365	90.3	F	388	90.9	F
		EBL	86	108.6	F	90	109.0	F
		SBR	12	0.6	N/A	23	0.5	N/A
		SBT	2696	0.9	N/A	2640	0.9	N/A
		SBU	12	2.6	Α	11	3.4	Α
	US 52/78/Rivers Ave & N of	NBT	994	0.3	N/A	1002	0.3	N/A
72	Sabal St *	NBL	3	13.7	В	13	17.1	C
		NBU	4	27.6	D	2	26.2	D
		EBR	22	2.5	A	9	2.4	A
		EBL	11	14.7	В	6	14.2	В
		SBR	12	1.0	Α	10	1.8	Α
		SBT	2487	1.9	Α	2501	1.6	Α
		SBL	101			90		
		SBU	71	18.5	В	54	18.6	В
70	US 52/78/Rivers Ave &	WBR	61	8.2	Α	59	8.5	Α
76	Harley St	WBL	112	26.4	С	91	26.4	С
	,	NBR	37	9.2	Α	41	9.4	Α
		NBT	890	11.4	В	943	10.6	В
		NBU	66	1.5	Α	67	3.4	Α
		EBR	14	19.4	В	15	19.0	В
		SBR	708	2.0	Α	798	2.2	Α
		SBT	2009	5.8	Α	1979	6.3	Α
70	US 52/78/Rivers Ave & I-526	WBR	328	1.1	Α	321	1.2	Α
78	WB Ramps	NBT	766	0.3	Α	815	0.4	Α
		NBL	139	26.6	С	158	26.2	С
		EBR	197	0.1	Α	242	0.1	Α
								Δ.
	110 F2/70/Divore Ave 9 1 500	SBT	1621	0.5	Α	1750	0.6	Α
79	US 52/78/Rivers Ave & I-526 EB Ramps	SBT SBL	1621 586	0.5 15.9	A B	1750 474	0.6 15.9	B



			19	st Hour		2n	d Hour	
Node	Intersection Name	Movement		– 8:15 a	m)		– 8:45 a	m)
No.	microcollon Hame	Movement	Volume	Delay	Los	Volume	Delay	Los
		NBR	176	3.1	A	208	3.4	A
		NBT	797	7.2	Α	878	7.1	Α
		EBR	216	0.9	Α	264	1.1	Α
		SBR	412	5.7	Α	448	6.7	Α
		SBT	1165	7.0	Α	1378	8.5	Α
		SBU	3	3.4	Α	4	3.6	Α
		WBR	0	0.0	Α	0	0.0	Α
00	US 52/78/Rivers Ave & Mall	NBR	0	0.0	Α	0	0.0	Α
82	Drive	NBT	651	0.5	Α	754	0.6	Α
		NBL	44	40.0	D	51	22.4	С
		NBU	37	18.3	В	29	22.4	C
		EBR	67	8.1	А	62	9.0	Α
		EBL	86	27.5	C	97	31.1	С
		SBR	37	1.5	Α	34	1.8	Α
		SBT	1151	0.7	Α	1262	0.8	Α
		SBL	24	23.7	С	28	25.9	С
		SBU	27	23.7	J	22	25.9	C
83	US 52/78/Rivers Ave & Alton	WBR	107	6.6	Α	134	6.3	Α
		WBL	8	28.7	С	20	30.3	С
		NBR	63	2.5	Α	73	2.9	Α
		NBT	626	2.7	Α	686	3.3	Α
		EBR	29	2.4	Α	28	2.5	Α
		SBT	1031	0.4	Α	1155	0.3	Α
		SBL	157	34.2	С	155	34.6	С
	US 52/78/Rivers Ave &	WBR	83	4.6	Α	91	5.1	Α
84	Morningside Dr	WBL	178	30.7	С	176	30.5	С
	I Worthingside Di	NBR	35	4.2	Α	46	4.3	Α
		NBT	593	13.2	В	665	12.9	В
		NBU	0	0.0	Α	0	0.0	Α
		SBR	149	2.3	Α	197	2.6	Α
		SBT	1030	3.6	Α	1095	3.6	Α
87	US 52/78/Rivers Ave &	NBT	572	2.8	Α	625	2.8	Α
0,	Piggly Wiggly Dr	NBL	33	7.8	Α	42	8.6	Α
		EBR	24	3.0	Α	21	3.2	Α
		EBL	79	29.0	С	81	30.9	С
		SBR	138	9.6	A	131	7.6	Α
		SBT	98	31.8	С	81	31.4	С
		SBL	120	58.8	E	96	61.6	E
		WBR	114	4.6	A	108	4.1	A
	110 50/70/5:	WBT	389	10.9	В	437	9.5	A
88	US 52/78/Rivers Ave &	WBL	11	19.8	В	7	19.9	В
	Meeting St/Durant Ave	NBR	6	38.1	D	10	47.6	D
		NBT	45	22.8	С	49	23.2	С
		NBL	82	20.5	С	101	21.5	C
		EBR	198	6.7	A	229	10.1	В
		EBT	704	52.7	D	761	57.0	E
		EBL	154	12.3	В	126	16.4	В
	US 52/78/Rivers Ave & Helm	SBR	3	5.1	A	4	6.0	A
91	Ave	SBT	773	7.4	A	836	6.1	A
		SBL	26	10.0	В	27	9.0	Α



Nodo			1s	t Hour		2n	d Hour	
Node No.	Intersection Name	Movement	(7:15	– 8:15 a	m)	(7:45	– 8:45 aı	m)
NO.			Volume	Delay	LOS	Volume	Delay	LOS
		WBR	16	5.5	Α	11	6.1	Α
		WBT	10	11.3	В	8	9.9	Α
		WBL	53	10.1	В	41	10.1	В
		NBR	41	4.8	Α	44	4.9	Α
		NBT	507	5.3	Α	553	4.6	Α
		NBL	1	13.3	В	2	4.9	Α
		EBR	12	5.4	Α	16	5.3	Α
		EBT	8	8.8	Α	2	7.4	Α
		EBL	5	9.6	Α	0	0.0	Α
		SBR	104	17.6	В	97	16.7	В
		SBT	95	29.4	С	85	29.5	С
		SBL	120	32.0	С	111	32.2	С
		WBR	173	4.2	Α	196	4.7	Α
		WBT	491	10.7	В	526	10.7	В
92	US 52/78/Rivers Ave &	WBL	14	13.2	В	21	12.8	В
	McMillan Ave	NBR	6	9.4	A	12	13.2	В
		NBT	68	26.9	С	77	26.6	С
		NBL	24	28.1	С	17	26.7	C
		EBR	22	3.0	A	22	3.3	Α
		EBT	659	7.6	A	698	8.5	A
		EBL	155	10.6	В	165	11.5	В
		WBT	524	5.9	A	564	6.5	A
	110 50/70/D: 4 0 00	WBL	89	15.7	В	88	16.3	В
93	US 52/78/Rivers Ave & SC 642/Dorchester Rd	NBR	109	10.7	В	144	15.4	В
	642/Dorchester Ru	NBL	153	26.4	C	181	28.5	C
		EBR EBT	68	4.8 8.6	A	60 751	5.3	A
		SBR	708 38	22.0	A C	38	10.8 22.4	B C
		SBT	260	30.9	С	280	30.3	C
		SBL	260	31.9	С	23	32.3	C
		WBR	23	7.0	A	30	8.6	A
		WBT	317	12.1	В	352	13.9	В
	US 52/78/Rivers Ave &	WBL	130	16.8	В	146	20.5	C
94	Cosgrove Ave	NBR	177	17.3	В	210	17.9	В
	- Coog. 6 v 6 7 v 6	NBT	592	19.5	В	569	19.3	В
		NBL	261	23.1	С	265	24.1	C
		EBR	283	12.1	В	305	15.9	В
		EBT	476	24.7	С	517	28.4	С
		EBL	45	26.3	С	60	28.4	C
		SBR	85	11.6	В	102	12.3	В
		SBT	24	28.9	С	28	28.0	C
		SBL	27	30.6	С	18	32.4	C
		WBR	28	4.6	A	28	6.6	A
		WBT	338	6.3	A	331	6.6	A
95	US 52/78/Rivers Ave &	WBL	26	11.6	В	26	11.5	В
	Reynolds Ave	NBR	57	12.5	В	44	12.3	В
		NBT	29	28.7	С	40	30.1	C
		NBL	16	32.4	C	18	29.2	C
		EBR	16	3.3	Α	19	2.4	A
		EBT	530	5.3	Α	512	5.2	Α
Ц		'	300	0.0	7.7	U12	J.2	7.1



Node	Internal Con Name	N		t Hour	\		d Hour	
No.	Intersection Name	Movement	Volume	– 8:15 a Delay	m) LOS	Volume	– 8:45 aı Delay	m) LOS
		EDI						
		EBL	59	5.3	Α	76	5.5	A
		SBR	78	3.4	A	85	3.9	A
		SBT	499	4.5	A	510	5.4	A
164	King St Ext & Heriot St	NBT	248	3.6	A	312	3.9	A
		NBL	28	9.6	A	36	10.6	В
		EBR	59	12.6	В	58	16.6	В
		EBL	90	37.1 25.5	D C	123	39.7	D C
		SBR SBT	36		U U	43 360	24.9	C
		SBL	340 181	27.1 33.4	O	175	28.1	D
		WBR	136	3.8	A	187	38.3 4.3	A
		WBT	303	12.8	В	286	14.9	В
		WBL	62	57.1	E	67	53.0	D
166	King St & Mt Pleasant St	NBR	56	21.3	С	61	20.8	С
		NBT	114	28.4	С	139	25.4	C
		NBL	127	54.3	D	143	48.9	D
		EBR	314	17.0	В	237	17.8	В
		EBT	658	21.0	С	713	22.9	С
		EBL	23	20.5	C	22	24.0	C
		SBR	160	8.5	A	179	10.7	В
		SBT	261	35.2	D	304	39.2	D
		SBL	287	43.2	D	291	43.8	D
		WBR	328	7.0	A	316	7.8	A
		WBT	273	23.7	С	274	26.6	C
	US 52/Meeting St &	WBL	39	37.6	D	47	43.5	D
109	Morrison Dr	NBR	38	2.4	A	54	3.0	A
	Memeri 21	NBT	234	35.9	D	245	35.9	D
		NBL	72	57.6	Е	86	60.0	E
		EBR	171	12.0	В	149	13.9	В
		EBT	592	11.0	В	660	11.7	В
		EBL	128	20.8	С	143	22.4	C
		SBR	47	4.6	Α	36	5.4	Α
		SBT	435	11.6	В	452	11.5	В
		SBL	22	20.0	С	21	20.6	С
		WBR	53	9.8	Α	72	9.3	Α
		WBT	71	21.8	C	79	19.5	В
440	Manting Ot 9 Dagger of Ot	WBL	24	24.0	C	18	24.9	С
113	Meeting St & Romney St	NBR	22	4.4	Α	19	5.4	Α
		NBT	223	30.2	O	225	31.8	С
		NBL	77	35.0	C	81	34.3	С
		EBR	203	17.8	В	177	19.5	В
		EBT	82	27.2	С	98	28.0	С
		EBL	114	32.7	С	156	37.3	D
		SBR	41	3.8	А	38	3.5	Α
		SBT	584	7.7	Α	604	7.4	Α
	Meeting St & US 17 Off-	WBR	121	24.6	С	160	24.0	С
117	Ramp	WBT	0	0.0	Α	0	0.0	Α
	· ·	WBL	514	26.6	С	449	25.4	С
		NBT	179	8.5	Α	170	7.8	Α
		1.401	175	0.0	71	170	7.0	



Node			1s	t Hour		2 n	d Hour	
Noae No.	Intersection Name	Movement	(7:15	– 8:15 a	m)	(7:45	– 8:45 a	m)
NO.			Volume	Delay	LOS	Volume	Delay	LOS
		NBL	297	40.2	D	340	41.6	D
		SBR	251	10.1	В	204	10.0	Α
		SBT	488	22.5	С	476	22.1	С
		SBL	37	25.9	С	38	27.3	С
		WBR	102	12.6	В	83	12.1	В
		WBT	87	27.9	С	76	28.8	С
119	Meeting St & Huger St	WBL	28	33.1	С	30	33.2	С
110	I weeting of a riager of	NBR	28	2.3	Α	20	2.0	Α
		NBT	419	4.4	Α	459	5.6	Α
		NBL	47	28.2	С	54	25.2	С
		EBR	83	10.0	В	92	10.7	В
		EBT	89	16.4	В	101	16.5	В
		EBL	245	21.1	С	250	20.4	С
		SBT	599	0.2	Α	596	0.3	Α
120	Meeting St & Johnson St	WBR	38	6.3	Α	47	6.8	Α
.20	integrand of a confidence of	NBR	6	1.3	Α	9	1.9	Α
		NBT	455	0.5	Α	487	0.9	Α
		SBR	39	8.6	Α	29	11.6	В
		SBT	524	11.1	В	525	12.3	В
		SBL	37	23.7	С	41	22.1	С
		WBR	23	3.1	Α	37	3.4	Α
		WBT	1	5.5	Α	3	11.8	В
121	Meeting St & Lee St	WBL	10	12.0	В	16	12.1	В
		NBR	45	3.6	A	35	3.3	Α
		NBT	425	9.5	A	436	8.5	Α
		NBL	31	17.6	В	30	14.6	В
		EBR	9	5.5	A	8	5.2	Α
		EBT	5	11.1	В	7	10.6	В
		EBL	13	8.0	A	21	9.7	A
		SBT	542	5.9	A	550	5.8	A
122	Meeting St & I-26	NBT	401	35.2	D	406	35.8	D
		EBR	996	14.3	В	1059	16.9	В
		EBL	100	12.9	В	93	12.3	В
		SBR	135	11.0	В	128	12.3	В
		SBT	1368	12.0	В	1445	13.8	В
		SBL WBR	31	11.1	В	30	11.5	В
			11	18.2	В	6	11.4	В
		WBT	7	50.0	D	1	38.5	D
123	Meeting St & Line St	WBL	7 9	45.4	D	8	39.7	D A
		NBR		4.0	A	8 270	5.5	A
		NBT	368	5.9	A	379	5.4	A D
		NBL	23	35.8 29.5	D C	26	39.4	С
		EBR EBT	73 26		D	103 23	28.8	D
		EBL		44.9	D		46.0	
		SBR	23 45	49.6 9.7	A	22 50	44.8 11.9	D B
		SBT	1230	13.7	В	1324		В
124	Mooting St & Columbus St	SBL			В		15.0	
124	Meeting St & Columbus St		171	16.0		176	16.7	B
		WBR WBT	46 24	11.2	B C	48 28	10.0	A C
	<u> </u>	VVDI	<u> </u>	34.4	U	20	33.2	



			10	st Hour	_	2n	d Hour	
Node	Intersection Name	Movement		– 8:15 a	m)		– 8:45 a	m)
No.	intersection Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		WBL	74	45.3	D	74	46.1	D
		NBR	47	21.1	C	52	23.1	C
		NBT	340	8.9	A	353	8.5	A
		NBL	15	26.1	C	22	32.0	C
		EBR	33	30.5	C	32	30.1	C
		EBT	74	36.8	D	78	36.7	D
		EBL	13	43.9	D	13	39.2	D
		SBR	111	8.1	A	96	8.8	A
		SBT	1051	7.7	A	1158	8.3	A
		SBL	32	9.4	A	33	9.2	A
		WBR	17	5.1	A	25	8.3	A
		WBT	6	38.4	D	9	35.4	D
		WBL	5	30.2	С	6	41.6	D
125	Meeting St & Woolfe St	NBR	10	3.7	A	10	4.1	A
		NBT	432	3.9	A	434	4.1	A
		NBL	8	11.9	В	10	14.0	В
		EBR	16	15.7	В	16	17.3	В
		EBT	10	32.7	С	16	35.4	D
		EBL	21	43.0	D	26	40.2	D
		SBR	85	5.1	A	116	8.2	A
		SBT	796	6.4	A	880	15.0	В
		SBL	36	10.0	A	31	14.8	В
		WBR	44		A	56		А
		WBT	11	9.4	C	11	8.5 29.0	
		WBL		30.8	D			C
126	Meeting St & Mary St		11	38.6		11 9	34.3	
		NBR	14	7.1	A		6.2	A
		NBT NBL	348 11	7.3	A C	331 8	6.5 30.1	A C
		EBR	51	20.0 8.6		48		В
					A C		10.0	С
		EBT EBL	25	26.3	C	20	26.1	C
		SBR	60	28.1		70	27.8	
		SBT	39 819	1.3	A	62	2.1	A
				3.0	A	870	8.0	A
127	Mooting St & Wrogg Square	WBR WBT	119 9	6.9	A C	51 6	6.5	A C
121	Meeting St & Wragg Square	WBL	5	32.2 37.3	D	6 6	31.5 42.2	D
		NBT	253	37.3	A	295	2.8	A
		NBL	11		В	13		C
		SBT	796	17.8	A	860	22.0	
		SBL	26	1.1	A	15	2.3	A
		NBR		1.8		25	4.2	A
120	Mooting St & Ann St		25	6.1	A		6.3	A
128	Meeting St & Ann St	NBT	257	7.3	A	301	8.6	A
		EBR EBT	60	5.0	A	76 16	5.2	A
		EBL	13 6	28.4	C	16	26.8	C
				28.1		5	31.1	
		SBR	46	3.9	A	41	5.7	A
100	Mosting St 9 John St	SBT	786	8.0	A	849	15.8	В
129	Meeting St & John St	SBL	19	10.9	В	37	19.8	В
		WBR	17	14.4	В	35	11.8	В
L		WBT	27	35.0	D	30	30.0	С



Node			15	t Hour		2 n	d Hour	
No.	Intersection Name	Movement	(7:15	– 8:15 a	m)	(7:45	– 8:45 a	m)
NO.			Volume	Delay	LOS	Volume	Delay	LOS
		WBL	21	34.7	С	16	37.9	D
		NBR	20	4.0	Α	44	3.2	Α
		NBT	266	4.2	Α	286	4.2	Α
		NBL	37	18.8	В	43	22.0	С
		EBR	47	6.8	Α	58	7.2	Α
		EBT	8	27.3	С	11	36.8	D
		EBL	2	35.8	D	4	30.0	С
		SBR	161	6.1	Α	161	6.5	Α
		SBT	506	19.9	В	588	22.9	С
		SBL	136	18.0	В	137	21.0	С
		WBR	61	22.8	С	51	25.4	С
		WBT	213	33.8	С	214	34.6	С
130	Meeting St & Calhoun St	WBL	48	49.7	D	56	55.3	Е
		NBR	25	7.1	Α	48	9.0	Α
		NBT	197	10.7	В	244	11.2	В
		NBL	78	16.8	В	99	19.3	В
		EBR	107	11.2	В	138	14.1	В
		EBT	305	26.1	С	380	28.8	С
		EBL	66	22.9	С	80	23.7	C
		SBR	105	12.8	В	129	13.7	В
		SBT	91	21.9	С	139	21.3	С
		SBL	19	17.8	В	27	27.0	С
		WBR	55	7.8	Α	62	8.5	Α
131	Calhoun St & King St	WBT	312	9.7	Α	316	10.1	В
		WBL	84	14.6	В	94	16.8	В
		EBR	54	9.6	A	44	11.1	В
		EBT	464	11.6	В	576	12.5	В
		EBL	115	16.2	В	132	15.2	В
		SBR	19	5.7	A	12	5.3	A
		SBT	77	23.3	С	117	24.0	С
		SBL	8	28.7	С	9	32.6	C
400	Calle a con Ct & Distillina Ct	WBR	36	5.6	A	36	5.4	A
132	Calhoun St & Phillips St	WBT	361	7.1	A	389	7.2	Α
		WBL	20	11.3	В	22	14.3	В
		EBR	39	7.3	A	56 740	9.0	A
		EBT EBL	629	7.6	A	749	9.0	A
		WBR	50 45	11.3	В	60 44	14.3	В ^
		WBT		6.2	A	357	6.0	A
		NBR	335 69	18.0	B A		17.2	B
133	Calhoun St & Coming St	NBT	361	8.3 25.8	C	83	9.2 25.8	A
133	Camburi St & Conting St	NBL	37	31.8	С	349 55		C
		EBT	651	5.3	A	782	29.2 5.8	A
		EBL						
		SBR	102	9.2	A A	129 50	10.6	B
		SBT	70 31	9.3	C	25	9.3	A
		SBL		22.4	С	16	23.4	C
134	Calhoun St & Smith St	WBR	24 10	20.7	A	11	23.0	A
		WBT	360	5.0	A	396	2.8 5.3	A
		WBL	2		A	396		В
		WDL		8.6	A	J	13.3	D



Node							nd Hour		
No.	Intersection Name	Movement	(7:15	– 8:15 a	m)	(7:45	– 8:45 a	m)	
NO.			Volume	Delay	LOS	Volume	Delay	LOS	
		NBR	19	8.4	Α	21	7.0	Α	
		NBT	25	23.2	С	18	21.4	С	
		NBL	12	25.0	С	7	22.3	С	
		EBR	8	3.6	Α	10	3.4	Α	
		EBT	720	4.1	Α	874	4.2	Α	
		EBL	33	8.1	Α	29	8.2	Α	
		SBR	285	9.5	Α	274	9.7	Α	
		SBT	171	21.8	С	242	23.9	С	
		SBL	76	20.5	С	96	20.9	С	
135	Calhoun St & Rutledge Ave	WBT	467	11.2	В	449	11.2	В	
100	Camban of a Raticage Ave	WBL	20	19.5	В	19	20.3	С	
		NBR	43	7.8	Α	36	8.2	Α	
136		EBR	26	10.2	В	26	12.7	В	
		EBT	736	10.7	В	866	11.8	В	
		WBR	173	17.4	В	186	17.5	В	
		WBT	573	15.8	В	539	15.6	В	
		NBR	50	11.4	В	44	12.3	В	
136	Calhoun St & Ashley Ave	NBT	128	29.6	С	126	30.7	С	
130	Callibuit St & Ashley Ave	NBL	37	32.1	С	36	29.7	С	
		EBR	8	6.8	Α	15	6.6	Α	
		EBT	715	9.8	Α	852	36 29.7 15 6.6 152 10.7 17.9	В	
		EBL	163	17.4	В	177	17.9	В	
		SBR	59	6.7	Α	68	6.7	Α	
		SBT	9	19.2	В	8	19.7	В	
		SBL	77	26.9	С	77	28.0	С	
		WBR	118	14.4	В	112	14.1	В	
		WBT	463	16.0	В	454	15.6	В	
137	Calhoun St & Jonathan	WBL	21	22.1	С	15	23.6	С	
137	Lucas St/Barre St	NBR	19	9.4	Α	14	10.7	В	
		NBT	18	25.3	С	15	23.3	С	
		NBL	35	27.8	С	32	25.1	С	
		EBR	37	9.5	Α	47	10.3	В	
		EBT	797	8.0	Α	959	9.0	Α	
		EBL	113	16.8	В	116	18.2	В	
		SBR	152	2.4	Α	143	2.6	Α	
		SBT	3	28.7	С	1	8.4	Α	
		SBL	105	34.8	С	121	35.1	D	
		WBR	98	29.5	С	106	26.7	С	
		WBT	457	32.2	С	450	30.9	С	
142	Calhoun St & Courtenay Dr	NBR	0	0.0	Α	0	0.0	Α	
		NBT	0	0.0	Α	0	0.0	Α	
		NBL	1	32.4	С	0	0.0	Α	
		EBR	0	0.0	Α	0	0.0	Α	
		EBT	939	9.0	Α	1105	9.6	Α	
		EBL	541	22.4	С	549	24.1	С	

^{*} This intersection is unsignalized in the No Build scenario and has been evaluated using unsignalized LOS criteria.



Node Level Performance, PM Peak Hour

Node	Intersection Name	Movement		st Hour – 5:30 p	m)		d Hour – 6:00 p	m)
No.			Volume	Delay	LOS	Volume	Delay	LOS
		SBR	245	7.0	Α	274	12.1	В
		SBT	382	31.7	С	418	40.6	D
		SBL	154	28.4	C	179	38.3	D
		WBR	28	41.0	D	26	43.9	D
		WBT	62	30.0	C	61	44.3	D
22	US 78 & College Park Rd	WBL	394	46.1	D	422	66.2	Е
	OS 78 & College Falk IN	NBR	28	41.0	D	26	43.9	D
		NBT	394	46.1	D	422	66.2	Е
		NBL	62	30.0	С	61	44.3	D
		EBR	72	13.1	В	65	12.9	В
		EBT	436	16.2	В	502	17.9	В
		EBL	234	26.3	С	211	25.1	С
		SBR	23	57.1	Е	29	82.5	F
		SBT	57	104.9	F	56	120.8	F
		SBL	41	102.2	F	60	130.2	F
		WBR	42	43.8	D	49	20.5	С
		WBT	667	29.6	С	785	41.4	D
23	US 78 & Ladson Rd/	WBL	1068	81.1	F	1042	97.9	F
	Ancrum Rd	NBR	920	12.2	В	972	15.8	В
		NBT	113	84.6	F	109	92.5	F
		NBL	246	90.4	F	259	103.4	F
		EBR	79	66.7	Е	94	80.8	F
		EBT	516	86.0	F	576	95.0	F
		EBL	16	94.5	F	18	101.0	F
		SBR	29	15.4	В	52	14.4	В
		SBT	14	64.0	E	25	78.2	Е
		SBL	38	79.6	Е	51	108.7	F
		WBR	73	50.2	D	136	42.4	D
		WBT	1826	54.4	D	1757	52.4	D
27	US 78 & Ingleside Blvd	WBL	373	112.6	F	387	124.9	F
	3	NBR	240	199.4	F	298	207.1	F
		NBT	9	462.1	F	16	406.3	F
		NBL	120	961.3	F	164	939.6	F
		EBR	159	14.5	В	188	17.0	В
		EBT	1059	32.9	С	1102	37.6	D
		EBL	38	61.3	E	41	80.5	F
		WBT	2142	8.1	A	2172	17.9	В
29	US 78 & I-26 EB Ramps	WBL	378	37.5	D	339	42.0	D
		EBR	615	2.7	A	538	2.1	A
		EBT	879	6.8	A N/A	987	8.5	A N/A
30	LIC 70 9 L 26 M/D Dames *	WBT EBT	1531	0.4	N/A	1561	1.6	N/A
30	US 78 & I-26 WB Ramps *	EBL	1113	0.5	N/A	1383 111	12.1	N/A
			144	26.7	D F		23.3	C
		SBR	174	131.3		158 7	63.7	E F
24	US 78/University Blvd &	SBT	6	149.4	F	27	84.5	
31	OI Medical Plaza Dr	SBL WBR	29 22	134.9	F C		79.0	E C
				22.8	C	26	21.4	C
		WBT	1920	26.1	U	1850	25.2	



Node				t Hour			d Hour	
No.	Intersection Name	Movement		– 5:30 p			– 6:00 p	
		MIDI	Volume	Delay	LOS	Volume	Delay	LOS
		WBL	14	88.4	F	31	115.4	F
		NBR	49	20.3	С	59	29.4	С
		NBT	3	59.3	E	11	61.3	Е
		NBL	424	72.4	E	430	75.8	E
		EBR	321	4.7	A	308	11.0	В
		EBT	996	13.7	B	1283	26.4	C F
		EBL SBR	47	108.7	С	82	137.5	
		SBT	148 21	24.5 50.9	D	134 7	18.7 56.3	B E
		SBL	116	51.9	D	136		D
		WBR	51	17.9	В	87	54.8 31.0	С
		WBT	1487	17.9	В	1506	24.3	C
	US 78/University Blvd &	WBL	32	17.2	В	39	35.4	D
34	Medical Plaza Dr/BUC	NBR	189	31.5	С	192	33.8	С
	Club Blvd	NBT	23	59.7	E	32	60.3	E
		NBL	304	74.9	E	294	67.4	E
		EBR	52	9.2	A	66	8.3	A
		EBT	1040	12.9	В	1315	11.0	В
		EBL	22	28.0	С	45	39.8	D
		SBR	94	34.6	C	74	28.8	С
		SBT	35	64.0	E	31	58.6	E
		SBL	235	67.0	Ē	221	69.9	Ē
		WBR	85	12.6	В	95	19.1	В
		WBT	1121	13.9	В	1341	19.0	В
	US 78/University Blvd &	WBL	17	20.1	C	19	26.9	C
37	Elms Center Rd	NBR	66	31.1	C	58	31.4	C
	Lime Conton red	NBT	34	60.6	E	41	62.8	E
		NBL	112	64.3	Ē	100	61.2	Ē
		EBR	41	9.7	A	51	15.0	В
		EBT	1308	8.8	A	1452	12.6	В
		EBL	103	18.2	В	113	31.4	C
		SBR	7	8.1	Α	11	15.2	В
		SBT	3	80.1	F	4	69.1	Е
		SBL	16	75.3	Е	22	74.3	Е
		WBR	17	1.1	Α	14	1.2	Α
		WBT	1181	4.0	Α	1398	7.9	Α
20	US 78/University Blvd &	WBL	67	21.2	С	93	31.2	С
38	Fernwood Dr	NBR	113	11.6	В	180	20.0	В
		NBT	3	76.4	Е	1	85.6	F
		NBL	42	80.6	F	52	78.0	Е
		EBR	17	8.1	Α	23	11.2	В
		EBT	1585	5.2	Α	1633	6.3	Α
		EBL	5	10.6	В	3	18.9	В
		SBR	173	41.7	D	255	46.9	D
		SBT	2427	40.7	D	2715	47.1	D
	110 50/70/Divers Aves 9	SBL	99	135.8	F	113	174.8	F
42	US 52/78/Rivers Ave & Otranto Rd/Otranto Blvd	WBR	94	16.8	В	111	35.3	D
	Chanto Nu/Otranto bivo	WBT	120	81.6	F	115	90.5	F
		WBL	162	71.8	Е	174	89.8	F
		NBR	239	7.4	Α	254	8.5	Α



Node	Intersection Name	Movement		st Hour – 5:30 p	m)		d Hour – 6:00 p	m)
No.	intersection rame	movement	Volume	Delay	LOS	Volume	Delay	Los
		NBT	2949	34.9	С	3157	36.9	D
		NBL	149	80.4	F	189	102.0	F
		EBR	166	11.2	В	206	24.1	С
		EBT	95	69.2	Е	104	79.2	Е
		EBL	213	60.7	Е	267	77.8	Е
		SBR	77	7.9	Α	91	8.5	Α
		SBT	2652	20.9	С	3043	16.7	В
		SBL	19	77.3	Е	19	106.9	F
		WBR	8	29.8	С	13	22.6	С
		WBT	22	59.7	Е	20	69.0	E
	LIC 52/79/Divore Ave 9 T	WBL	40	68.3	Е	44	88.7	F
43	US 52/78/Rivers Ave & T Mobile Dr	NBR	47	11.8	В	53	12.9	В
	Wobile Di	NBT	3274	34.6	С	3529	42.4	D
		NBL	73	80.6	F	95	143.5	F
		NBU	18			15		
		EBR	73	15.0	В	71	31.2	С
		EBT	9	72.8	Е	9	128.2	F
		EBL	78	108.3	F	72	171.1	F
		SBR	24	2.0	N/A	26	2.1	N/A
		SBT	2703	1.2	N/A	3143	1.7	N/A
		SBL	4	62.0	F	5	115.4	F
	US 52/78/Rivers Ave & Melnick Dr *	WBR	18	16.6	С	21	31.3	D
44		WBL	1	66.5	F	1	80.4	F
7-7		NBR	20	11.1	N/A	25	28.0	N/A
		NBT	3388	37.5	N/A	3670	58.8	N/A
		NBL	111	31.8	D	130	55.0	F
		EBR	48	13.0	В	77	20.5	С
		EBL	8	53.8	F	8	88.0	F
		SBR	211	12.9	В	270	15.1	В
		SBT	2712	38.2	D	2945	44.7	D
		WBR	46	102.2	F	60	146.4	F
4.0	US 52/78/Rivers Ave &	WBT	371	98.8	F	426	150.5	F
46	Greenridge Rd	WBL	61	100.2	F	51	141.9	F
		NBT	3494	13.8	В	3750	19.6	В
		NBL	288	99.4	F	307	129.7	F
		EBR	472	31.2	C F	548	42.6	D
		EBL	135	215.2		147	371.3	F
		SBR SBT	215	17.4	В	203	15.9	B B
		SBL	1162	18.6	B D	1418	17.3	D
		WBR	144 121	49.2 6.3	A	129 149	45.1 6.5	A
		WBT	48	62.0	E	37	59.8	E
	110 50/70/D: 1 3	WBL	119	70.8	E	120	73.1	E
49	US 52/78/Rivers Ave &	NBR	82	1.9	A	80	1.9	A
	North Rivers Market Place	NBT	2335	3.9	A	2641	4.3	A
		NBL	18	14.3	В	17	17.9	В
		EBR	59	5.7	A	80	4.9	A
		EBT	29	63.4	E	21	61.7	E
		EBL	197	76.6	Е	184	76.1	Е



Nodo			15	st Hour		2 n	d Hour	
Node No.	Intersection Name	Movement	(4:30	– 5:30 p	m)	(5:00	– 6:00 p	m)
NO.			Volume	Delay	Los	Volume	Delay	LOS
		SBR	156	1.9	Α	134	2.2	Α
		SBT	1102	8.7	Α	1395	9.3	Α
		SBL	79	63.1	Е	90	74.2	Е
		WBR	60	11.6	В	74	12.5	В
		WBT	68	69.8	Е	72	68.6	Е
50	US 52/78/Rivers Ave &	WBL	223	74.9	Е	237	76.5	Е
	Eagle Landing Blvd	NBR	369	5.3	Α	388	6.0	Α
		NBT	2292	9.9	Α	2563	11.6	В
		NBL	38	25.2	С	51	36.2	D
		EBR	37	34.8	С	36	31.9	С
		EBT	70	76.7	E	59	74.7	E
		EBL	94	78.3	E	105	78.8	E
		SBR	62	2.2	A	79	3.1	A
		SBT	1132	2.9	A	1435	3.5	A
		SBL	166	37.2	D	150	41.6	D
		WBR	181	60.3	E	189	81.8	F
	LIC 50/70/Divers Ave 9	WBT	43	90.1	F	47	109.6	F
51	US 52/78/Rivers Ave & Northwoods Blvd	WBL	166	82.6	В	170		F B
	Northwoods Biva	NBR NBT	80	11.8 23.5	С	80	13.5	С
		NBL	2389 158	27.2	С	2657 169	28.5 39.9	D
		EBR	127	7.4	A	162	9.1	A
		EBT	38	70.0	E	41	69.2	E
		EBL	137	71.9	Ē	160	89.8	F
		SBR	415	8.7	A	498	12.3	В
		SBT	835	43.7	D	1028	45.9	D
		SBL	131	69.3	E	136	67.0	E
		WBR	94	47.4	D	94	46.9	D
		WBT	267	66.8	E	257	67.9	E
	US 52/78/Rivers Ave &	WBL	165	47.9	D	166	48.6	D
52	Ashley Phosphate Rd	NBR	215	25.8	С	247	36.8	D
		NBT	2080	36.1	D	2236	42.5	D
		NBL	844	56.6	Е	796	60.9	Е
		EBR	471	11.7	В	593	32.9	С
		EBT	173	55.0	D	191	61.1	Е
		EBL	490	63.0	Е	572	81.8	F
		SBR	118	2.5	Α	100	3.0	А
		SBT	1269	4.0	Α	1473	6.3	Α
		SBL	146	66.3	Е	160	70.3	Е
		WBR	88	21.7	С	98	26.4	С
		WBT	11	58.0	E	15	55.1	E
	110 F2/70/Divers Aves 9	WBL	89	66.0	E	112	63.7	E
54	US 52/78/Rivers Ave & Morris Baker Blvd							
	INIOITIS DAKEI DIVU	NBR	145	10.4	В	157	13.5	В
		NBT	2940	17.6	В	2968	21.8	C
		NBL	57	76.4	E	65	74.8	Е
		EBR	95	14.7	В	103	16.4	В
		EBT	12	52.5	D	8	69.4	Е
		EBL	113	63.2	Е	131	63.0	Е



			16	st Hour	_	2nd Hour			
Node	Intersection Name	Movement		– 5:30 p	m)		– 6:00 p	m)	
No.	miter section realite	Movement	Volume	Delay	LOS	Volume	Delay	LOS	
		SBT	1235	0.6	A	1403	0.8	A	
		SBL	182			222			
		SBU	7	99.6	F	17	101.9	F	
	US 52/78/Rivers Ave &	WBR	445	51.6	D	526	61.4	Е	
56	Mabeline Rd	WBL	50	102.2	F	70	100.6	F	
		NBR	40	15.2	В	68	22.9	С	
		NBT	2672	16.8	В	2619	22.6	С	
		NBU	16	8.1	Α	11	14.7	В	
		SBT	1316	0.5	Α	1315	0.5	Α	
		SBL	109	CO 5	_	193	70.0	_	
		SBU	6	68.5	Е	2	78.8	Е	
	US 52/78/Rivers Ave &	WBR	188	11.2	В	106	11.4	В	
59	Stokes Ave	WBL	149	65.6	Е	102	67.0	Е	
		NBR	160	6.9	Α	181	11.5	В	
		NBT	2297	14.4	В	2475	16.8	В	
		NBU	41	39.2	D	33	47.0	D	
		SBR	135	14.0	В	141	15.0	В	
		SBT	1363	22.1	С	1325	24.5	С	
		SBU 11 7.9 A 15 6.2 WBR 21 11.9 B 30 12.1	6.2	Α					
		WBR	21	11.9	В	30	12.1	В	
60	US 52/78/Rivers Ave &	NBR	27	16.6	В	30	15.2	В	
60	Midland Park Rd	NBT	2214	15.2	В	2346	15.5	В	
		NBL	402	150.4	F	399	156.9	F	
		NBU	69	150.4	Г	69	150.9		
		EBR	234	7.2	Α	211	11.5	В	
		EBL	235	67.6	Е	243	75.8	Е	
		SBR	33	10.1	В	31	10.6	В	
		SBT	1551	12.0	В	1515	11.4	В	
		SBU	31	7.1	Α	55	6.2	Α	
61	US 52/78/Rivers Ave &	NBT	2602	25.9	С	2706	24.9	С	
01	Eagle Dr	NBL	129	49.7	D	104	51.6	D	
		NBU	2			3			
		EBR	116	8.1	Α	105	9.0	Α	
		EBL	88	39.8	D	85	42.3	D	
		SBT	1471	0.8	Α	1425	0.7	Α	
		SBL	204	67.9	Е	200	66.5	Е	
		SBU	0			0			
62	US 52/78/Rivers Ave &	WBR	327	22.4	С	283	20.4	С	
52	Hanahan Rd	WBL	183	74.7	Е	138	66.1	Е	
		NBR	193	13.6	В	197	12.7	В	
		NBT	2394	23.7	С	2522	21.7	С	
		NBU	0	0.0	Α	0	0.0	Α	
		SBR	40	7.2	Α	47	7.1	Α	
		SBT	1726	5.5	A	1609	5.6	Α	
		SBU	44	1.7	Α	45	1.9	Α	
65	US 52/78/Rivers Ave &	WBR	8	12.8	В	10	14.7	В	
	Benderson Dr	NBR	6	2.1	Α	9	1.5	Α	
		NBT	2405	0.8	Α	2507	0.8	Α	
		NBL	75	21.2	С	63	21.0	С	
		NBU	66			53			



		1st Hour 2nd Hour						
Node	Intersection Name	Movement		– 5:30 p	m)		– 6:00 p	m)
No.	microcolon Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		EBR	110	9.7	A	126	9.7	A
		EBL	49	30.8	С	61	32.4	C
		SBR	815	5.2	A	757	5.2	A
		SBT	1071	17.1	В	1027	17.2	В
		WBR	18	10.9	В	15	11.3	В
		NBR	35	10.4	В	38	10.9	В
67	US 52/78/Rivers Ave &	NBT	1948	7.7	A	1984	7.6	A
	Aviation Ave	NBL	223			218		
		NBU	18	92.6	F	9	93.8	F
		EBR	142	11.7	В	135	16.1	В
		EBL	590	86.7	F	604	93.5	F
		SBR	471	20.6	С	449	21.3	С
		SBT	754	55.2	Е	684	54.3	D
		SBL	180	81.3	F	207	83.8	F
		WBR	237	83.8	F	258	115.8	F
		WBT	396	122.6	F	413	155.1	F
70	US 52/78/Rivers Ave &	WBL	152	62.7	Е	169	68.8	Е
70	Remount Rd	NBR	210	7.6	Α	220	7.4	Α
		NBT	1632	68.9	Е	1671		Е
		NBL	334	135.1	F	348	141.3	F
		EBR	325	25.8	С	341	29.2	С
		EBT	453	73.5	Е	439	76.4	Е
		EBL	230	67.7	Е	206	70.1	Ε
		SBR	46	0.6	N/A	23	0.5	N/A
		SBT	1222	0.4	N/A	1225	0.4	N/A
		SBU	49	27.1	D	45	27.4	D
72	US 52/78/Rivers Ave & N	NBT	2181	9.9	N/A	2176	16.1	N/A
12	of Sabal St *	NBL	33	17.3	С	30	21.6	С
		NBU	8	28.8	D	6	30.8	D
		EBR	33	11.2	В	40	10.2	В
		EBL	28	33.8	D	26	46.0	Е
		SBR	8	0.5	Α	9	0.5	Α
		SBT	1235	0.8	Α	1220	0.9	Α
		SBL	44	20.4	С	48	28.9	С
		SBU	45	20.4		38	20.9	C
76	US 52/78/Rivers Ave &	WBR	125	10.3	В	147	20.1	С
10	Harley St	WBL	85	25.9	С	104	44.5	D
		NBR	11	7.1	Α	12	9.5	Α
		NBT	2028	10.1	В	2247	13.5	В
		NBU	179	1.6	Α	199	2.5	Α
		EBR	12	6.3	Α	16	7.1	Α
		SBR	370	1.2	Α	377	1.3	Α
		SBT	1155	4.8	Α	1149	5.0	Α
78	US 52/78/Rivers Ave & I-	WBR	199	1.0	Α	418	2.6	Α
, ,	526 WB Ramps	NBT	2237	0.6	Α	2271	2.4	Α
		NBL	242	47.7	D	276	47.3	D
		EBR	47	0.0	Α	67	0.0	Α
	US 52/78/Rivers Ave & I-	SBT	832	0.2	Α	848	0.2	Α
79	526 EB Ramps	SBL	369	52.1	D	369	52.1	D
		WBR	436	0.1	Α	526	0.2	Α



			15	st Hour		2nd Hour			
Node	Intersection Name	Movement		– 5:30 p	m)		– 6:00 p	m)	
No.			Volume	Delay	Ĺos	Volume	Delay	Ĺos	
		NBR	196	2.4	Α	176	2.7	Α	
		NBT	2058	6.9	Α	2048	7.1	Α	
		EBR	242	1.0	Α	233	1.0	Α	
		SBR	134	4.2	Α	148	4.6	Α	
		SBT	783	10.4	В	772	11.1	В	
		SBU	13	4.3	Α	23	4.4	Α	
		WBR	0	0.0	Α	0	0.0	Α	
82	US 52/78/Rivers Ave &	NBR	0	0.0	Α	0	0.0	Α	
	Mall Drive	NBT	1706	1.4	Α	1710	1.2	Α	
		NBL	55	25.7	С	67	26.8	С	
		NBU	18			18			
		EBR	57	15.7	В	57	15.1	В	
		EBL	355	39.6	D	338	36.7	D	
		SBR	8	1.2	A	6	1.9	A	
		SBT	811	0.5	Α	784	0.5	Α	
		SBL SBU	21 61	19.0	В	23 46	22.3	С	
83	US 52/78/Rivers Ave &	WBR	202	8.8	Α	227	9.4	Α	
03	Alton	WBL	10	34.5	C	9	29.8	C	
		NBR	144	3.8	A	141	3.5	A	
		NBT	1589	2.7	A	1582	2.6	A	
		EBR	41	1.9	A	24	1.8	A	
		SBT	756	0.2	A	708	0.3	A	
		SBL	107	44.4	D	111	42.7	D	
		WBR	78	8.2	A	94	7.9	A	
84	US 52/78/Rivers Ave &	WBL	130	36.5	D	145	34.2	С	
	Morningside Dr	NBR	88	6.9	Α	96	7.4	Α	
		NBT	1632	13.5	В	1649	14.4	В	
		NBU	0	0.0	Α	0	0.0	Α	
		SBR	45	1.8	Α	60	2.2	Α	
		SBT	802	2.9	Α	763	2.8	Α	
87	US 52/78/Rivers Ave &	NBT	1601	3.7	Α	1632	4.3	Α	
"	Piggly Wiggly Dr	NBL	27	7.5	Α	36	7.9	Α	
		EBR	44	2.4	Α	52	2.7	Α	
		EBL	95	32.2	С	107	32.8	С	
		SBR	212	13.1	В	239	12.3	В	
		SBT	68	40.2	D	74	38.0	D	
		SBL	115	86.3	F	117	90.9	F	
		WBR	200	6.1	Α	203	6.5	Α	
		WBT	1127	8.7	Α	1118	9.2	Α	
	US 52/78/Rivers Ave &	WBL	9	13.5	В	11	13.9	В	
88	Meeting St/Durant Ave	NBR	17	63.6	Е	17	58.2	Е	
		NBT	177	34.8	С	210	33.4	С	
		NBL	285	35.4	D	326	38.1	D	
		EBR	169	5.2	Α	147	5.6	Α	
		EBT	518	47.5	D	464	57.7	E	
		EBL	159	21.4	С	200	21.2	С	
		CDL	109	Z1.4	C	200	21.2		



		1st Hour 2nd Hour						
Node	Intersection Name	Movement		– 5:30 p	m)		– 6:00 p	m)
No.	microcolon Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		SBR	3	5.1	A	6	7.7	A
		SBT	670	7.5	A	655	7.8	Α
		SBL	21	19.0	В	31	17.7	В
		WBR	44	9.4	Α	47	8.1	Α
		WBT	8	10.7	В	13	11.4	В
0.4	US 52/78/Rivers Ave &	WBL	49	11.9	В	55	12.0	В
91	Helm Ave	NBR	66	11.8	В	74	11.2	В
		NBT	1365	13.6	В	1349	11.7	В
		NBL	9	9.5	Α	10	8.6	Α
		EBR	8	6.2	Α	8	6.4	Α
		EBT	14	10.6	В	16	11.4	В
		EBL	3	13.6	В	4	11.5	В
		SBR	280	26.5	C	364	40.1	D
		SBT	118	34.3	C	150	45.8	D
		SBL	175	33.4	С	225	42.8	D
		WBR	266	6.3	Α	311	6.8	Α
		WBT	1127	17.3	В	1053	17.7	В
92	US 52/78/Rivers Ave &	WBL	35	14.9	В	29	17.7	В
32	McMillan Ave	NBR	15	10.4	В	26	9.5	Α
		NBT	58	24.4	С	56	21.0	С
		NBL	26	27.7	С	23	27.2	С
		EBR	53	3.3	Α	56	3.2	Α
		EBT	545	10.7	В	544	11.1	В
		EBL	124	18.8	В	118	19.5	В
		WBT	1243	8.6	Α	1169	9.3	Α
		WBL	221	19.3	В	217	24.6	C
93	US 52/78/Rivers Ave & SC	NBR	103	11.2	В	97	10.4	В
	642/Dorchester Rd	NBL	178	26.8	С	217	27.3	С
		EBR	104	5.2	Α	162	5.7	Α
		EBT	636	8.6	Α	628	9.1	Α
		SBR	97	35.1	D	84	33.9	С
		SBT	499	35.6	D	503	35.6	D
		SBL	24	30.1	С	23	29.7	С
		WBR	73	23.7	C	87	16.9	В
	LIC F0/70/Division A	WBT	1031	18.3	В	944	17.6	В
94	US 52/78/Rivers Ave &	WBL	325	31.8	С	298	30.3	C
	Cosgrove Ave	NBR NBT	87 465	13.2	В	108	15.4	В
			465	16.9	B C	524	19.7	В
		NBL	337	32.1		370	62.2	E
		EBR EBT	360	12.9	B C	332	13.0	В
		EBL	332	31.2	D	354	29.8	C D
		SBR	46	38.8 14.9	B	36 187	36.2	D
		SBT	99 42	26.6	С	187 51	43.0 45.2	D
		SBL	18	34.2	C	20	45.2	D
	LIS 52/78/Divore Ava 9	WBR	99	12.0	В	98	12.4	В
95	US 52/78/Rivers Ave & Reynolds Ave	WBT	1089	13.3	В	963	13.5	В
	Reynolds Ave	WBL	68	14.1	В	72	13.5	В
		NBR	25	15.5	В	47	14.8	В
		NBT	76	27.5	С	71	26.9	С
L		וטטו	10	21.0	U	<i>i</i> 1	20.9	



Node				t Hour			d Hour	
No.	Intersection Name	Movement		– 5:30 p			– 6:00 p	
110.			Volume	Delay	LOS	Volume	Delay	LOS
		NBL	40	29.0	С	40	28.6	С
		EBR	40	5.9	Α	44	6.5	Α
		EBT	266	9.2	Α	302	10.0	Α
		EBL	64	17.0	В	87	15.3	В
		SBR	178	5.9	Α	167	5.8	Α
		SBT	493	7.3	Α	401	7.9	Α
164	King St Ext & Heriot St	NBT	426	6.2	Α	569	6.0	Α
104	King St Ext & Hellot St	NBL	35	16.0	В	28	12.3	В
		EBR	57	19.7	В	53	20.3	С
		EBL	153	37.6	D	184	37.9	D
		SBR	99	25.9	С	63	24.1	С
		SBT	302	30.6	С	263	26.3	С
		SBL	158	53.4	D	140	70.9	Е
		WBR	18	2.3	Α	75	7.2	Α
		WBT	607	7.7	Α	591	14.5	В
400	King Ot 9 Mt Diagram C	WBL	11	20.2	С	57	46.8	D
166	King St & Mt Pleasant St	NBR	35	27.6	С	51	48.5	D
		NBT	426	31.5	С	514	41.4	D
		NBL	189	40.8	D	186	46.1	D
		EBR	116	14.3	В	138	33.6	С
		EBT	407	22.1	С	454	48.4	D
		EBL	15	27.3	C	31	59.2	E
		SBR	98	5.2	A	184	28.9	С
		SBT	346	18.4	В	369	67.3	E
		SBL	147	55.9	E	176	76.5	E
		WBR	692	79.9	Ē	657	79.9	Ē
		WBT	531	92.5	F	496	107.7	F
	US 52/Meeting St &	WBL	80	105.0	F	84	170.0	F
109	Morrison Dr	NBR	43	2.2	A	48	4.0	A
	Wornson Br	NBT	354	25.1	C	300	25.1	C
		NBL	8	43.7	D	45	61.0	E
		EBR	189	12.2	В	149	33.0	С
		EBT	358	12.7	В	415	18.9	В
		EBL	54	27.1	С	68	40.4	D
		SBR	90	7.1	A	52	16.6	В
		SBT	503	15.4	В	532	29.7	С
		SBL	22	20.2	С	29	35.7	D
						68		
		WBR	38	14.7	В		21.1	C
		WBT	155	24.5	С	132	26.5	С
113	Meeting St & Romney St	WBL	49	26.6	C	71	39.3	D
		NBR	34	8.9	A	23	9.2	A
		NBT	302	39.4	D	279	46.0	D
		NBL	212	53.8	D	178	56.6	E
		EBR	71	17.1	В	108	24.0	С
		EBT	59	27.3	С	59	25.8	С
ļ		EBL	109	38.9	D	112	42.9	D
		SBR	37	3.3	A	44	3.8	Α
117	Meeting St & US 17 Off-	SBT	542	22.6	С	667	21.3	C
	Ramp	WBR	242	36.4	D	285	57.2	E
		WBT	41	43.9	D	53	60.6	Е



Node	Intercetion Name	B		st Hour	····)		d Hour	···· \
No.	Intersection Name	Movement		– 5:30 p			– 6:00 p	
		MDI	Volume	Delay	LOS	Volume	Delay	LOS
		WBL	215	64.5	E	267	102.8	F
		NBT	263	4.9	A	171	5.6	A
		NBL	627	30.8	C	614	33.9	C
		SBR	142	7.2	A	211	9.5	A
		SBT	348	14.1	В	419	14.1	В
		SBL	23	29.6	С	36	28.4	C
		WBR	244	73.5	E	216	95.4	F
		WBT	148	93.1	F	193	98.5	F
119	Meeting St & Huger St	WBL	19	86.7	F	42	80.3	F
	3	NBR	33	64.9	Е	40	46.6	D
		NBT	946	51.5	D	887	52.8	D
		NBL	74	36.8	D	123	60.5	Е
		EBR	46	9.9	Α	28	16.0	В
		EBT	87	18.3	В	91	21.4	С
		EBL	380	28.4	С	344	36.3	D
		SBT	414	0.2	Α	487	0.3	Α
120	Meeting St & Johnson St	WBR	27	18.9	В	33	32.9	С
120	Wiccumg of a domination of	NBR	10	1.2	Α	8	4.3	Α
		NBT	1026	4.9	Α	1040	10.4	В
		SBR	18	3.8	Α	10	3.2	Α
		SBT	380	5.0	Α	457	4.9	Α
		SBL	16	20.3	С	18	27.8	С
		WBR	91	7.5	Α	93	6.9	Α
		WBT	12	21.6	С	8	22.2	С
121	Mooting St 9 Loo St	WBL	21	18.1	В	28	20.0	В
121	Meeting St & Lee St	NBR	74	4.7	Α	52	3.5	Α
		NBT	909	6.3	Α	932	6.3	Α
		NBL	15	5.7	Α	7	4.8	Α
		EBR	21	5.7	Α	21	6.1	Α
		EBT	4	18.9	В	2	32.1	С
		EBL	31	23.0	С	42	23.8	С
		SBT	422	2.1	Α	505	2.1	Α
400	Manting Ct 9 L OC	NBT	935	4.2	Α	891	4.5	Α
122	Meeting St & I-26	EBR	677	15.2	В	778	22.7	С
		EBL	65	23.3	С	102	31.8	С
		SBR	93	10.4	В	137	14.1	В
		SBT	969	10.7	В	1105	11.8	В
		SBL	36	22.6	С	38	20.5	С
		WBR	19	9.0	Α	28	9.0	Α
		WBT	13	27.3	С	17	24.5	С
400	Monting Ct 9 Line Ct	WBL	8	27.6	С	13	27.7	С
123	Meeting St & Line St	NBR	26	6.5	A	27	5.0	Α
		NBT	833	5.9	Α	763	6.1	Α
		NBL	32	27.7	С	27	60.2	Е
		EBR	76	13.7	В	57	15.2	В
		EBT	36	22.8	С	37	22.7	С
		EBL	83	23.6	С	102	24.1	C
		SBR	56	7.0	A	71	8.8	A
124	Meeting St & Columbus St	SBT	877	6.3	A	977	7.4	A
		SBL	120	18.0	В	122	14.7	В



			1st Hour 2nd Ho					
Node	Intersection Name	Movement		– 5:30 p	m)		– 6:00 p	m)
No.	intersection Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		WBR	74	13.6	В	94	13.0	В
		WBT	65	28.1	С	68	28.7	С
		WBL	81	31.3	C	111	34.0	C
		NBR	46	8.2	A	58	6.0	A
		NBT	775	5.6	A	661	6.9	A
		NBL	116	17.5	В	130	27.8	C
		EBR	15	18.5	В	23	19.0	В
		EBT	47	25.8	С	65	27.5	C
		EBL	42	32.0	С	72	33.3	C
		SBR	67	12.8	В	79	13.2	В
		SBT	739	13.2	В	804	13.8	В
		SBL	56	23.8	С	58	23.1	C
		WBR	56	10.4	В	53	11.3	В
		WBT	7	25.9	С	7	31.5	C
		WBL	8	30.3	C	13	33.1	C
125	Meeting St & Woolfe St	NBR	14	8.0	A	22	7.1	A
		NBT	903	3.9	A	861	5.4	A
		NBL	14	9.7				В
		EBR	25	15.7	A 21 13.4 B 34 17.6 B C 41 32.0 C	В		
		EBT	33	29.4				C
		EBL	37	31.8	С	42	32.5	C
		SBR	108	10.0	В	107	12.2	В
		SBT	534	21.0	С	567	21.9	C
		SBL	39	31.1	С	30	33.8	C
		WBR	67	10.4	В	85	12.1	В
		WBT	17	26.2	C	23	29.0	C
		WBL	14	31.5	C	16	27.3	C
126	Meeting St & Mary St	NBR	17	14.5	В	11	11.8	В
		NBT	754	12.4	В	714	11.9	В
		NBL	26	15.5	В	27	13.2	В
		EBR	28	5.4	Α	33	7.2	Α
		EBT	18	17.4	В	21	19.9	В
		EBL	110	23.8	C	107	23.9	С
		SBR	36	2.0	Α	39	2.3	Α
		SBT	539	4.2	Α	569	6.5	Α
	Manting Ct 8 NA	WBR	55	8.7	Α	66	8.1	Α
127	Meeting St & Wragg	WBT	6	27.7	С	6	29.9	С
	Square	WBL	9	36.2	D	3	44.9	D
		NBT	743	2.8	Α	687	2.6	Α
		NBL	5	6.7	Α	14	7.1	Α
		SBT	526	3.2	Α	549	3.6	Α
		SBL	21	6.6	Α	22	6.7	Α
		NBR	38	2.4	Α	25	2.1	Α
128	Meeting St & Ann St	NBT	744	2.9	Α	697	3.0	Α
		EBR	35	4.7	Α	55	6.0	Α
		EBT	12	25.6	С	15	31.5	С
		EBL	6	28.6	С	7	26.1	С
		SBR	38	4.7	Α	52	4.9	Α
129	Meeting St & John St	SBT	495	17.4	В	504	20.0	В
	_	SBL	29	22.0	С	38	27.2	С



			16	d Hour				
Node	Intersection Name	Movement		st Hour – 5:30 p	m)		– 6:00 p	m)
No.	intersection Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		WBR	46	12.1	В	44	11.3	В
		WBT	20	28.3	С	22	27.4	C
		WBL	28	30.9	С	19	26.5	C
		NBR	18	8.1	A	21	7.6	A
		NBT	727	9.7	A	659	11.0	В
		NBL	55	22.9	С	105	24.8	C
		EBR	47	8.6	A	56	11.5	В
		EBT	21	25.7	С	24	27.9	C
		EBL	9	27.1	C	16	26.1	C
		SBR	143	6.8	Α	127	7.2	Α
		SBT	296	21.6	С	282	22.6	С
		SBL	88	28.9	С	89	30.1	С
		WBR	94	26.8	С	107	29.3	С
		WBT	392	30.9	С	425	32.2	С
400		WBL	44	30.8	С	40	31.7	С
130	Meeting St & Calhoun St	NBR	86	14.6	В	88	14.6	В
		NBT	600	15.8	В	575	16.5	В
		NBL	245	21.6	С	310	27.3	С
		EBR	117	7.7	Α	128	7.1	Α
		EBT	280	21.1	С	273	21.1	С
		EBL	106	26.2	С	104	26.8	С
		SBR	135	11.2	В	141	12.9	В
		SBT	128	18.8	В	138	18.5	В
		SBL	89	21.7	С	96	23.9	С
		WBR	120	10.6	В	184	11.3	В
131	Calhoun St & King St	WBT	549	12.2	В	555	12.8	В
	_	WBL	110	16.4	В	118	16.8	В
		EBR	103	11.5	В	115	12.6	В
		EBT	416	16.4	В	410	19.9	В
		EBL	120	30.2	С	135	44.7	D
		SBR	71	9.6	Α	102	10.4	В
		SBT	115	21.6	C	115	22.0	С
		SBL	23	26.0	O	31	29.2	С
		WBR	40	4.7	Α	47	6.0	Α
132	Calhoun St & Phillips St	WBT	615	4.2	Α	621	4.6	Α
		WBL	29	8.9	Α	30	8.4	Α
		EBR	58	6.8	Α	58	8.0	Α
		EBT	618	8.9	Α	641	10.9	В
		EBL	42	14.6	В	54	21.2	С
		WBR	60	13.7	В	61	12.7	В
		WBT	631	13.1	В	661	13.2	В
		NBR	86	10.0	В	137	12.0	В
133	Calhoun St & Coming St	NBT	481	33.4	С	481	35.0	D
		NBL	122	43.0	D	130	48.0	D
		EBT	632	5.5	Α	625	6.5	Α
		EBL	146	12.1	В	134	13.7	В
		SBR	80	11.2	В	72	12.8	В
134	Calhoun St & Smith St	SBT	29	25.6	С	31	23.0	С
104		SBL	14	22.0	С	18	21.6	С
		WBR	21	6.2	Α	20	5.4	Α



Nodo			15	st Hour		2nd Hour			
Node No.	Intersection Name	Movement	(4:30	– 5:30 p	m)	(5:00	– 6:00 p	m)	
NO.			Volume	Delay	LOS	Volume	Delay	LOS	
		WBT	716	6.1	Α	750	6.8	Α	
		WBL	13	20.6	С	17	20.6	С	
		NBR	22	14.3	В	18	12.9	В	
		NBT	17	27.0	С	13	28.9	С	
		NBL	22	25.8	С	19	24.9	С	
		EBR	34	3.5	Α	38	2.2	Α	
		EBT	750	13.5	В	725	12.1	В	
		EBL	33	18.5	В	28	15.8	В	
		SBR	311	18.3	В	313	30.3	С	
		SBT	247	20.8	С	268	20.4	С	
		SBL	155	19.9	В	168	20.1	С	
135 Calhoun St & Rutledge	Calhoun St & Rutledge	WBT	829	12.2	В	894	15.4	В	
133	Ave	WBL	18	21.7	С	17	24.9	С	
		NBR	38	6.4	Α	42	6.8	Α	
		EBR	30	10.0	В	32	10.9	В	
		EBT	622	15.3	В	603	14.3	В	
		WBR	130	19.1	В	139	21.3	С	
		WBT	1010	18.5	В	1058	19.4	В	
		NBR	48	14.2	В	47	13.0	В	
136	Calhoun St & Ashley Ave	NBT	188	32.8	С	185	31.8	С	
130		NBL	86	35.8	D	76	34.4	С	
		EBR	23	6.4	Α	24	7.2	Α	
		EBT	603	9.6	Α	595	10.7	В	
		EBL	149	22.6	С	141	23.6	С	
		SBR	142	12.8	В	155	14.6	В	
		SBT	6	25.3	С	6	22.9	С	
		SBL	96	29.7	С	83	29.9	С	
		WBR	106	24.3	С	91	25.1	С	
		WBT	997	25.3	С	1057	26.4	С	
137	Calhoun St & Jonathan	WBL	2	19.1	В	2	28.0	С	
137	Lucas St/Barre St	NBR	38	7.7	Α	34	7.4	Α	
		NBT	20	23.3	С	17	24.2	С	
		NBL	73	28.9	С	58	26.5	С	
		EBR	14	7.4	Α	10	7.5	Α	
		EBT	626	6.8	Α	624	6.8	Α	
		EBL	82	20.7	С	98	32.5	С	
		SBR	506	10.4	В	508	10.3	В	
		SBT	26	45.7	D	31	44.0	D	
		SBL	111	40.5	D	112	37.6	D	
		WBR	67	22.6	С	76	22.9	С	
	Calhoun St & Courtenay	WBT	1153	22.3	С	1190	23.0	С	
142	Dr	NBR	4	9.5	Α	3	10.0	Α	
		NBT	32	31.5	С	25	32.1	С	
		NBL	5	52.5	D	4	43.5	D	
		EBR	0	0.0	Α	0	0.0	Α	
	E	EBT	626	7.6	Α	636	7.7	Α	
	storeaction is unsignalized in	EBL	228	26.8	С	227	36.9	D	

^{*} This intersection is unsignalized in the No Build scenario and has been evaluated using unsignalized LOS criteria.



LOWCOUNTRY RAPID TRANSIT MICROSIMULATION MODEL DRAFT REPORT

Appendix E - 2025 Build VISSIM Output

Appendix E- 2025 BUILD VISSIM OUTPUT



Node Level Performance, AM Peak Hour

No.	Node			1s	t Hour		2nd Hour		
SBR 180 7.45		Intersection Name	Movement	(7:15	– 8:15 aı	m)	(7:45	– 8:45 aı	m)
22 US 78 & College Park Rd BBT	NO.			Volume	Delay	LOS	Volume	Delay	LOS
22 US 78 & College Park Rd SBL			SBR	180	74.5	ш	182	61.6	Е
22 US 78 & College Park Rd WBR WBR 322 42.9 WBT 322 42.9 WBS WBL 8 124.3 F 8 1114.3 F 8 1114.3 F 8 1114.3 F 8 NBR 40 132.1 F 35 131.6 F NBT NBT 333 128.1 F 35 131.6 F NBL 63 130.8 F 68 140.2 F BBR 122 24.3 C 121 27.0 C EBR 122 24.3 C 121 27.0 C EBL 401 39.7 D 347 41.3 D NB BRT 5 21.8 C 66 63.2 C SB BRT 65 SBR 7 53.3 D 7 49.4 D SBR 7 53.3 D 7 49.4 D SBR 7 53.3 D 7 49.4 D SBR 7 SBL 94 117.7 F 65 137.3 F WBR 1338 49.2 D 1148 101.7 F NBL 630 100.3 F 633 103.9 F NBR 1338 49.2 D 1148 101.7 F NBT NBL 56 69.4 E 12 125.7 NBBR 1338 49.2 D 1148 101.7 F BBR 16 SBR 7 90.5 F 8 86.3 F NBR 1338 49.2 D 1148 101.7 F SBR 7 SBR 8 SBR 7 90.5 F 8 86.3 F NBBRT 5 SBR 7 90.5 F 8 86.3 F 88.6 F 88.6 F 88.6 F BBR 7 90.5 F 8 86.3 F 88.6 F 88.6 F 88.6 F BBR 7 90.5 F 8 86.3 F 88.6 F 88			SBT	506	120.9	F	496	112.1	F
US 78 & College Park Rd WBT 322 US 78 & College Park Rd WBT NBR 40 132.1 F 35 131.6 F 35 131.6 F NBT NBT 333 128.1 F 424 130.5 F 88 140.2 EBR 132 24.3 C 121 27.0 C EBT 464 23.4 C 484 33.7 C EBT 464 23.4 C 484 33.7 C EBT NBR 7 53.3 D 7 49.4 D NBR NBR 7 53.3 D 7 49.4 D NBR SBR 7 53.3 D 7 49.4 D NBR SBR 7 53.3 D 7 49.4 D NBR NBR 131 11.7 B 14 86 87.4 F 31 89.5 F SBL 94 111.7 F 65 137.3 F WBR 131 11.7 B 14 86 A WBT 343 20.8 C 343 21.3 C WBL 630 100.3 F 633 103.9 F NBR NBR 1338 B 146 B WBT 1388 B 146 B 158 B 162 B 17 B 186 B 197 B 187 B 188 B			SBL	183	171.0	F	157	180.2	F
US 78 & College Park Rd WBL 8			WBR	90	36.1	D	112	35.2	D
US 78 & College Park Rd NBR			WBT	322	42.9	D	304	46.2	D
NBT 333 128.1 F 424 130.5 F			WBL	8	124.3	F	8	114.3	F
NBI	22	LIC 70 9 Collogo Dark Dd	NBR	40	132.1	F	35	131.6	F
EBR 122 24.3 C 121 27.0 C EBT 464 23.4 C 484 33.7 C EBL 401 39.7 D 347 41.3 D NB BRT 5 21.8 C 6 26.3 C SB BRT 6 5.3 A 6 10.5 B SBR 7 7 53.3 A 7 49.4 D SBR 7 7 53.3 A 7 7 49.4 D SBR 7 7 53.3 A 7 7 49.4 D SBR 7 7 53.3 A 7 7 49.4 D SBR 7 7 53.3 A 7 7 49.4 D SBR 7 7 53.3 A 7 7 49.4 D SBR 7 7 53.3 A 7 7 49.4 D SBR 7 7 53.3 A 7 7 49.4 D SBR 7 7 53.3 A 7 7 49.4 D SBR 7 7 53.3 A 7 7 49.4 D SBR 7 7 53.3 A 7 7 49.4 D SBR 7 7 53.3 A 7 7 49.4 D SBR 7 5 65 137.3 F 8 14 8 6 A 7 14 8 8 6 A 8 14 8 14 8 14 8 14 8 14 8 14 8 14 8	22	05 76 & College Park Ru	NBT	333	128.1	F	424	130.5	F
EBT			NBL	63	130.8	F	68	140.2	F
EBL 401 39.7 D 347 41.3 D NB BRT 5 21.8 C 6 26.3			EBR	122	24.3	C	121	27.0	С
NB BRT 5 21.8			EBT	464	23.4	С	484	33.7	С
SB BRT 6 5.3 A 6 10.5 B SBR 7 53.3 D 7 49.4 D SBT 46 87.4 F 31 89.5 F SBL 94 117.7 F 65 137.3 F WBR 13 11.7 B 14 8.6 A WBT 343 20.8 C 343 21.3 C WBL 630 100.3 F 633 103.9 F NBR 1338 49.2 D 1148 101.7 F NBT 16 56.4 E 12 125.7 F NBL 56 69.4 E 62 110.7 F EBR 48 31.4 C 43 42.0 D EBR 48 31.4 C 43 42.0 D EBR 634 45.8 D 606 82.9 F EBL 7 90.5 F 8 86.3 F NB BRT 5 4.6 A 6 6.1 A SB BRT 6 33.1 C 6 81.2 F SBR 23 22.8 C 24 14.6 B SBR 23 22.8 C 24 14.6 B SBR 79 164.7 F 65 180.8 F WBR 51 14.9 B 47 19.9 B WBT 927 16.7 B 958 24.4 C WBL 353 90.2 F 311 95.1 F NBR 99.9 F 9 136.9 F NBR 177 34.7 C 120 47.4 D EBR 1772 76.1 E 1515 94.0 F EBR 9 120.6 F 9 126.9 F NB BRT 5 98.6 F 6 163.3 F NB BRT 6 99.1244 88.8 D 1322 F NB BRT 6 99.1244 88.8 D 1322 F NB BRT 6 99.1244 88.8 D 1322 F NB BRT			EBL	401	39.7	D	347	41.3	D
SBR			NB BRT	5	21.8	С	6	26.3	С
SBT			SB BRT	6	5.3	Α	6	10.5	В
SBL 94 117.7 F 65 137.3 F			SBR	7	53.3	D	7	49.4	D
WBR			SBT	46	87.4	F	31	89.5	F
23 US 78 & Ladson Rd/ Ancrum Rd WBL 630 100.3 F 633 103.9 F NBR 1338 49.2 D 1148 101.7 F NBT 16 56.4 E 62 110.7 F NBL 56 69.4 E 62 110.7 F EBR 48 31.4 C 43 42.0 D EBL 7 90.5 F 8 86.3 F NB BRT 5 NB BRT 5 SBR 23 22.8 C 24 14.6 B SBT 62 146.5 F 53 138.7 F SBL 79 164.7 F 65 180.8 F WBR 51 14.9 WBR 51 14.9 WBR 51 14.9 B 47 19.9 B WBT 927 16.7 B 958 24.4 C WBL 353 90.2 F 311 95.1 F NBR NBR 405 129.7 NBR NBR 405 129.7 F 364 240.3 F NBR 177 34.7 C 120 47.4 D EBR 1727 61.2 EBR 1727 61.2 EBL 9 120.6 F 9 126.9 F NB BRT 5 SB BRT 6 39.7 D 6 64.8 EBR 722 8.5 A 0 1185 1.2 A WBL 126 74.6 EBR 722 8.5 A 0 1327 76.9 EBR 724 8.8 B 1322 B 1323 B 1323 B 1324 B 1324 B 1324 B 1324 B 1324 B 1326 B 1327 1424 1438 D 1327 76.9 EBR 1424 1438 D 1327 76.9 EBR 1424 1438 D 1327 76.9 EBR NB BRT 5 3.0 A 6 2.9 A			SBL	94	117.7	F	65	137.3	F
23 US 78 & Ladson Rd/ Ancrum Rd WBL 630 100.3 F 633 103.9 NBR 1338 49.2 D 1148 101.7 F NBT 16 56.4 E 12 125.7 F NBL 63 100.7 F 8BR 48 31.4 C 43 42.0 D EBR 48 31.4 C 43 42.0 D EBR 69.4 EBR 60 EBR 790.5 F 8 86.3 F NB BRT 5 NB BRT 5 SBR 23 22.8 C 24 14.6 B SBR 5BR 23 22.8 C 24 14.6 B SBR 5BR 23 22.8 C 24 14.6 B SBR 5BR 79 16.7 SBL 79 16.7 B 95.8 WBR 51 14.9 B 47 19.9 B WBT 927 16.7 B 958 24.4 C WBL 353 90.2 F 364 24.0 C WBL 353 90.2 F 311 95.1 F NBR NBR 405 129.7 NBR NBR 405 129.7 NBL 93 92.7 F 78 107.6 F EBR 177 34.7 C 120 47.4 D EBL 9 120.6 F 9 126.9 F NB BRT 5 SB BRT 6 39.7 D 6 64.8 E WBT 1194 1.0 A 1185 1.2 A WBL 126 74.6 EBR 722 8.5 A B RBR 132 B BBR 132 B BBR 132 B BBR 1424 48.8 D 1327 76.9 EBR 722 8.5 A 6 2.9 A			WBR	13	11.7	В		8.6	Α
US 78 & Ladson Rd/ Ancrum Rd NBR			WBT	343	20.8	C	343	21.3	
NBR			WBL	630	100.3	F	633	103.9	F
Ancrum Rd NBL 56 69.4 E 62 110.7 F	00		NBR	1338	49.2	D	1148		F
NBL 56 69.4 E 62 110.7 F	23					Е			F
EBR									
EBT 634 45.8 D 606 82.9 F EBL 7 90.5 F 8 86.3 F NB BRT 5 4.6 A 6 6.1 A SB BRT 6 33.1 C 6 81.2 F SBR 23 22.8 C 24 14.6 B SBT 62 146.5 F 53 138.7 F SBL 79 164.7 F 65 180.8 F WBR 51 14.9 B 47 19.9 B WBT 927 16.7 B 958 24.4 C WBL 353 90.2 F 311 95.1 F NBR 405 129.7 F 364 240.3 F NBT 9 90.9 F 9 136.9 F NBL 93 92.7 F 78 107.6 F EBR 177 34.7 C 120 47.4 D EBT 1727 61.2 E 1515 94.0 F EBL 9 120.6 F 9 126.9 F NB BRT 5 98.6 F 6 163.3 F SB BRT 6 39.7 D 6 64.8 E WBT 1194 1.0 A 1185 1.2 A WBL 126 74.6 E 122 78.4 E EBR 722 8.5 A 581 13.2 B EBT 1424 48.8 D 1327 76.9 E EBT 1424 48.8 D 1327 76.9 E									
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NB BRT 5 4.6 A 6 6.1 A						F			F
SB BRT 6 33.1 C 6 81.2 F SBR 23 22.8 C 24 14.6 B SBT 62 146.5 F 53 138.7 F SBL 79 164.7 F 65 180.8 F WBR 51 14.9 B 47 19.9 B WBT 927 16.7 B 958 24.4 C WBL 353 90.2 F 311 95.1 F NBR 405 129.7 F 364 240.3 F NBT 9 90.9 F 9 136.9 F NBL 93 92.7 F 78 107.6 F EBR 1777 34.7 C 120 47.4 D EBT 1727 61.2 E 1515 94.0 F EBL 9 120.6 F 9 126.9 F NB BRT 5 98.6 F 6 163.3 F SB BRT 6 39.7 D 6 64.8 E WBT 1194 1.0 A 1185 1.2 A WBL 126 74.6 E 122 78.4 E EBR 722 8.5 A 581 13.2 B EBR 722 8.5 A 581 13.2 B EBR 722 8.5 A 581 13.2 B EBR 724 48.8 D 1327 76.9 E						Α			
SBR 23 22.8 C 24 14.6 B SBT 62 146.5 F 53 138.7 F SBL 79 164.7 F 65 180.8 F WBR 51 14.9 B 47 19.9 B WBT 927 16.7 B 958 24.4 C WBL 353 90.2 F 311 95.1 F NBR 405 129.7 F 364 240.3 F NBT 9 90.9 F 9 136.9 F NBL 93 92.7 F 78 107.6 F EBR 177 34.7 C 120 47.4 D EBT 1727 61.2 E 1515 94.0 F EBL 9 120.6 F 9 126.9 F NB BRT 5 98.6 F 6 163.3 F SB BRT 6 39.7 D 6 64.8 E WBT 1194 1.0 A 1185 1.2 A WBL 126 74.6 E 122 78.4 E EBR 722 8.5 A 581 13.2 B									
SBT 62 146.5 F 53 138.7 F SBL 79 164.7 F 65 180.8 F WBR 51 14.9 B 47 19.9 B WBT 927 16.7 B 958 24.4 C WBL 353 90.2 F 311 95.1 F NBR 405 129.7 F 364 240.3 F NBT 9 90.9 F 9 136.9 F NBL 93 92.7 F 78 107.6 F EBR 177 34.7 C 120 47.4 D EBT 1727 61.2 E 1515 94.0 F EBL 9 120.6 F 9 126.9 F NB BRT 5 98.6 F 6 163.3 F SB BRT 6 39.7 D 6 64.8 E WBT 1194 1.0 A 1185 1.2 A WBL 126 74.6 E 122 78.4 E EBR 722 8.5 A 581 13.2 B US 78 & I-26 EB Ramps									
SBL 79 164.7 F 65 180.8 F WBR 51 14.9 B 47 19.9 B WBT 927 16.7 B 958 24.4 C WBL 353 90.2 F 311 95.1 F NBR 405 129.7 F 364 240.3 F NBT 9 90.9 F 9 136.9 F NBL 93 92.7 F 78 107.6 F EBR 177 34.7 C 120 47.4 D EBT 1727 61.2 E 1515 94.0 F EBL 9 120.6 F 9 126.9 F NB BRT 5 98.6 F 6 163.3 F SB BRT 6 39.7 D 6 64.8 E WBT 1194 1.0 A 1185 1.2 A WBL 126 74.6 E 122 78.4 E EBR 722 8.5 A 581 13.2 B EBR 724 48.8 D 1327 76.9 E						F			
WBR 51 14.9 B 47 19.9 B WBT 927 16.7 B 958 24.4 C WBL 353 90.2 F 311 95.1 F NBR 405 129.7 F 364 240.3 F NBT 9 90.9 F 9 136.9 F NBL 93 92.7 F 78 107.6 F EBR 177 34.7 C 120 47.4 D EBT 1727 61.2 E 1515 94.0 F EBL 9 120.6 F 9 126.9 F NB BRT 5 98.6 F 6 163.3 F SB BRT 6 39.7 D 6 64.8 E WBT 1194 1.0 A 1185 1.2 A WBL 126 74.6 E 122 78.4 E EBR 722 8.5 A 581 13.2 B EBR 722 8.5 A 581 13.2 B EBR 722 8.5 A 581 13.2 B EBR 724 48.8 D 1327 76.9 E NB BRT 5 3.0 A 6 2.9 A									
US 78 & Ingleside Blvd WBT 927 16.7 B 958 24.4 C WBL 353 90.2 F 311 95.1 F NBR 405 129.7 F 364 240.3 F NBT 9 90.9 F 9 136.9 F NBL 93 92.7 F 78 107.6 F EBR 177 34.7 C 120 47.4 D EBT 1727 61.2 E 1515 94.0 F EBL 9 120.6 F 9 126.9 F NB BRT 5 98.6 F 6 163.3 F SB BRT 6 39.7 D 6 64.8 E WBT 1194 1.0 A 1185 1.2 A WBL 126 74.6 E 122 78.4 E EBR 722 8.5 A 581 13.2 B EBT 1424 48.8 D 1327 76.9 E NB BRT 5 3.0 A 6 2.9 A						В			
US 78 & Ingleside Blvd WBL 353 90.2 F 311 95.1 F NBR 405 129.7 F 364 240.3 F NBT 9 90.9 F 9 136.9 F NBL 93 92.7 F 78 107.6 F EBR 177 34.7 C 120 47.4 D EBT 1727 61.2 EBL 9 120.6 F NB BRT 5 98.6 F 6 163.3 F SB BRT 6 39.7 D 6 64.8 E WBT 1194 1.0 A 1185 1.2 A WBL 126 74.6 EBR 722 8.5 A 581 13.2 B EBR 722 8.5 NB BRT 76.9 EBR NB BRT 5 NB BRT 5 NB BRT 1424 48.8 D 1327 76.9 E NB BRT 5 NB BRT 5 NB BRT 5 NB BRT 5 3.0 A 6 2.9 A									
US 78 & Ingleside Blvd NBR									
NBT 9 90.9 F 9 136.9 F NBL 93 92.7 F 78 107.6 F EBR 177 34.7 C 120 47.4 D EBT 1727 61.2 E 1515 94.0 F EBL 9 120.6 F 9 126.9 F NB BRT 5 98.6 F 6 163.3 F SB BRT 6 39.7 D 6 64.8 E WBT 1194 1.0 A 1185 1.2 A WBL 126 74.6 E 122 78.4 E EBR 722 8.5 A 581 13.2 B EBT 1424 48.8 D 1327 76.9 E NB BRT 5 3.0 A 6 2.9 A		.							
NBL 93 92.7 F 78 107.6 F EBR 177 34.7 C 120 47.4 D EBT 1727 61.2 E 1515 94.0 F EBL 9 120.6 F 9 126.9 F NB BRT 5 98.6 F 6 163.3 F SB BRT 6 39.7 D 6 64.8 E WBT 1194 1.0 A 1185 1.2 A WBL 126 74.6 E 122 78.4 E EBR 722 8.5 A 581 13.2 B EBT 1424 48.8 D 1327 76.9 E NB BRT 5 3.0 A 6 2.9 A	27	US 78 & Ingleside Blvd							
EBR 177 34.7 C 120 47.4 D EBT 1727 61.2 E 1515 94.0 F EBL 9 120.6 F 9 126.9 F NB BRT 5 98.6 F 6 163.3 F SB BRT 6 39.7 D 6 64.8 E WBT 1194 1.0 A 1185 1.2 A WBL 126 74.6 E 122 78.4 E EBR 722 8.5 A 581 13.2 B EBT 1424 48.8 D 1327 76.9 E NB BRT 5 3.0 A 6 2.9 A									
EBT 1727 61.2 E 1515 94.0 F EBL 9 120.6 F 9 126.9 F NB BRT 5 98.6 F 6 163.3 F SB BRT 6 39.7 D 6 64.8 E WBT 1194 1.0 A 1185 1.2 A WBL 126 74.6 E 122 78.4 E EBR 722 8.5 A 581 13.2 B EBT 1424 48.8 D 1327 76.9 E NB BRT 5 3.0 A 6 2.9 A									
EBL 9 120.6 F 9 126.9 F NB BRT 5 98.6 F 6 163.3 F SB BRT 6 39.7 D 6 64.8 E WBT 1194 1.0 A 1185 1.2 A WBL 126 74.6 E 122 78.4 E EBR 722 8.5 A 581 13.2 B EBT 1424 48.8 D 1327 76.9 E NB BRT 5 3.0 A 6 2.9 A									
NB BRT 5 98.6 F 6 163.3 F SB BRT 6 39.7 D 6 64.8 E WBT 1194 1.0 A 1185 1.2 A WBL 126 74.6 E 122 78.4 E EBR 722 8.5 A 581 13.2 B EBT 1424 48.8 D 1327 76.9 E NB BRT 5 3.0 A 6 2.9 A									
SB BRT 6 39.7 D 6 64.8 E WBT 1194 1.0 A 1185 1.2 A WBL 126 74.6 E 122 78.4 E EBR 722 8.5 A 581 13.2 B EBT 1424 48.8 D 1327 76.9 E NB BRT 5 3.0 A 6 2.9 A									
WBT 1194 1.0 A 1185 1.2 A WBL 126 74.6 E 122 78.4 E EBR 722 8.5 A 581 13.2 B EBT 1424 48.8 D 1327 76.9 E NB BRT 5 3.0 A 6 2.9 A									
US 78 & I-26 EB Ramps WBL 126 74.6 E 122 78.4 E EBR 722 8.5 A 581 13.2 B EBT 1424 48.8 D 1327 76.9 E NB BRT 5 3.0 A 6 2.9 A									
29 US 78 & I-26 EB Ramps EBR 722 8.5 A 581 13.2 B EBT 1424 48.8 D 1327 76.9 E NB BRT 5 3.0 A 6 2.9 A									
EBT 1424 48.8 D 1327 76.9 E NB BRT 5 3.0 A 6 2.9 A									
NB BRT 5 3.0 A 6 2.9 A	29	US 78 & I-26 EB Ramps							
			SB BRT	6	3.9	A	6	4.1	A



Node			1st Hour			2nd Hour		
Node No.	Intersection Name	Movement	(7:15	– 8:15 aı	m)	(7:45	– 8:45 a	m)
NO.			Volume	Delay	LOS	Volume	Delay	LOS
		SBR	465	38.7	D	452	39.6	D
		WBR	467	2.6	Α	433	1.6	Α
		WBT	857	10.7	В	857	8.8	Α
30	US 78 & I-26 WB Ramps	NBR	675	74.2	Е	702	75.4	Е
30	00 70 & 1-20 WB Ramps	EBT	2122	83.0	F	2057	103.9	F
		EBL	87	99.1	F	59	120.7	F
		NB BRT	5	1.2	Α	6	1.0	Α
		SB BRT	6	3.3	Α	6	3.2	Α
		SBR	34	183.3	F	38	199.5	F
		SBT	5	175.2	F	5	206.5	F
		SBL	14	152.1	F	17	171.0	F
	US 78/University Blvd & Medical Plaza Dr	WBR	102	21.7	С	133	21.6	С
		WBT	1159	20.3	С	1142	22.1	С
		WBL	66	112.2	F	73	143.8	F
31		NBR	45	96.0	F	55	205.4	F
0.		NBT	32	145.7	F	40	226.2	F
		NBL	131	111.4	F	110	132.1	F
		EBR	606	14.2	В	577	14.9	В
		EBT	1970	29.2	С	1980	31.7	С
		EBL	207	86.1	F	204	94.1	F
		NB BRT	5	25.9	С	6	28.1	С
		SB BRT	6	12.7	В	6	17.6	В
		SBR	15	12.9	В	16	12.6	В
		SBT	8	67.4	Е	7	71.1	Е
		SBL	33	86.7	F	21	77.5	Е
		WBR	138	19.4	В	139	21.1	С
		WBT	1230	24.1	С	1223	25.0	С
		WBL	200	152.0	F	213	150.9	F
	US 78/University Blvd &	WBU	55			65		
34	Medical Plaza Dr/BUC Club	NBR	106	39.1	D	93	50.1	D
	Blvd	NBT	19	94.3	F	22	98.1	F
		NBL	94	88.1	F	110	105.0	F
		EBR	217	9.4	Α	274	9.4	Α
		EBT	1663	13.7	В	1621	12.2	В
		EBL	97	75.1	Е	109	75.7	Е
		EBU	5	00.0	0	7	00.0	0
		NB BRT	6 7	23.3	С	7	22.6	С
		SB BRT		18.5	В	6	17.4	В
		SBR	84	78.3	E	94	73.5	E
		SBT	17	137.2	F	19	110.7	F
		SBL	185	147.6	F	176	132.3	F
		WBR	111	27.8	С	120	28.0	С
	LIC 70/Linius are it - Divid 9	WBT	1365	25.9	С	1326	27.1	С
37	US 78/University Blvd &	WBL	11	107.2	F	8	96.2	F
	Elms Center Rd	WBU	0			0		
		NBR	21	62.8	E	27	51.8	D
		NBT	32	81.4	F	28	77.6	E
		NBL	119	76.9	E	123	85.6	F
		EBR	48	20.5	С	59	15.0	В
		EBT	1499	31.4	С	1317	18.3	В



No. Intersection Name	Node			1st Hour				d Hour	
BBL 163 127.9 F 193 137.2 173.0		Intersection Name	Movement						
BBU 89 127.9 F 100 137.2 F NB BRT 6 5.9 A 7 4.2 A A SB BRT 7 1.8 A 6 1.8 A A A A A A A A A	140.				Delay	LOS		Delay	LOS
BBRT 6 5.9 A 7 4.2 A SB BRT 7 1.8 A 6 1.8 A C SBT 0 0.0 A 1 56.3 E SBT 0 0.0 A 1 56.3 E SBT 3 75.9 E 3 63.0 E SBT 17 52.1 E 15 58.5 E WBT 1457 99.7 F 1416 111.2 F WBL 60 187.9 F 241 241.1 F WBL 251 SBT 30 0.0 A 1 73.0 E SBT 30 38.9 D 16 42.2 D SBT 32.0 C 6 34.6 C SBT 34.0 SBT 34.0 SBT 34.0 SBT 34.0 SBT 34.0 SBT 34.0 SBT 35.0 SBT 34.0					127.9	F		137.2	F
SB BRT									
SBR 6 30.3 C 13 32.0 C SBT 0 0.0 A 1 56.3 E SBL 3 75.9 E 3 63.0 E SBL 3 75.9 E 3 63.0 E SBL 3 75.9 E 3 63.0 E SBL 3 75.9 E 15 58.5 E WBR 17 62.1 E 15 58.5 E WBR 17 62.1 E 15 58.5 E WBR 17457 99.7 F 1416 111.2 F WBL 60 WBU 251 187.9 F 241 210.1 F WBL 251 187.9 F 251 251 251 251 251 251 251 251 251 251									
SBT									
SBL 3 75.9 E 3 63.0 E WBR 17 62.1 E 15 58.5 E WBT 1457 99.7 F 1416 111.2 F WBL 60 WBU 251 187.9 F 54 241 210.1 F 241 210.1 E 241									
WBR									
WBT									
WBL G0									
WBU 251 187.9 F 241 210.1 F					99.7	F		111.2	F
NBR					187.9	F		210.1	F
## Fernwood Dr NBT						-			
NBL	38								
## BBR 20 38.9 D 16 42.2 D ## EBT 1618 42.1 D 1446 41.3 D ## EBU 0 114.9 F 11 ## II 114.4 F ## EBU 0 14.9 F 11 ## II 114.4 F ## II 114.4 114.5 ## II		Fernwood Dr							
## BBT 1618 42.1 D 1446 41.3 D ## BBL 5 114.9 F 11 114.4 F ## BBU 0 NB BRT 6 34.8 C 7 29.9 C ## SB BRT 7 28.0 C 6 34.6 C ## SBR 19 56.5 E 27 53.1 D ## SBL 22 162.1 F 36 164.7 F ## WBR 88 184.1 F 76 179.9 F ## WBT 35 323.5 F 50 330.1 F ## WBT 35 322.5 F 50 330.1 F ## WBT 35 322.5 F 50 330.1 F ## WBT 35 322.2 C 1574 25.1 C ## NBL 118 491.5 F 125 705.6 F ## EBR 322 219.4 F 317 237.8 F ## EBT 20 224.8 F 40 246.4 F ## EBL 185 181.5 F 176 201.8 F ## BBRT 6 9.5 A 5 10.4 B ## SB BRT 6 9.5 A 5 10.4 B ## SBR 73 14.7 N/A 82 22.9 N/A ## WBR 31 8.0 A 66 10.7 B ## NB BRT 6 0.2 A 6 0.2 A ## NB BRT 6 0.2 A 6 0.2 A ## NB BRT 6 0.2 A 6 0.2 A ## SB BRT 5 2.9 A 5 4.2 A ## SBR 33 25.5 C 17 26.9 C ## SBR 3723 35.4 D 3418 40.0 D ## SBL 2 39.2 F 2 155.8 F ## WBR 31 32.3 35.4 D 3418 40.0 D ## SBL 2 339.2 F 2 155.8 F ## WBR 31 5 6.6 A ## WBR 31 5 6.6 A									
### Results									
## BBU					42.1	D		41.3	D
NB BRT 6					114.9	F		114.4	F
SB BRT 7 28.0 C 6 34.6 C					24.0	-		20.0	-
A2									
A2 SBT 3405 71.0 E 3157 82.3 F SBL 22 162.1 F 36 164.7 F WBR 88 184.1 F 76 179.9 F WBT 35 323.5 F 50 330.1 F WBL 167 296.1 F 151 306.7 F SBL 185 181.5 F 175 100.6 F SB SBRT 6 9.5 A 5 10.4 B SB SB SBRT 6 9.5 N/A 3517 49.0 N/A WBR 31 8.0 A 66 10.7 B SB SB SB SB SB SB SB									
A2									
WBR									
A2									
WBL 167 296.1 F 151 306.7 F NBR 103 4.4 A 110 6.8 A NBT 1459 21.2 C 1574 25.1 C NBL 118 491.5 F 125 705.6 F EBR 322 219.4 F 317 237.8 F EBT 20 224.8 F 40 246.4 F EBL 185 181.5 F 176 201.8 F NB BRT 6 15.3 B 6 17.9 B SB BRT 6 9.5 A 5 10.4 B SBR 73 14.7 N/A 82 22.9 N/A SBT 3800 40.5 N/A 3517 49.0 N/A WBR 31 8.0 A 66 10.7 B NBR 75 3.0 N/A 79 3.9 N/A NBR 75 3.0 N/A 79 3.9 N/A NBR 75 30.8 D 73 38.1 E NB BRT 6 0.2 A 6 0.2 A SB BRT 5 2.9 A 5 4.2 A SBR 3723 35.4 D 3418 40.0 D SBL 2 139.2 F 125 155.8 WBR 15 6.6 A 16 9.6 A WBR 15 6.6 A 0 0.0 A		110 50/70/D' A 0							
A2									
A2 Otranto Rd/Otranto Blvd NBT									
NBL	42								
## BBR 322 219.4 F 317 237.8 F EBT 20 224.8 F 40 246.4 F EBL 185 181.5 F 176 201.8 F NB BRT 6 15.3 B 6 17.9 B SB BRT 6 9.5 A 5 10.4 B SBT 3800 40.5 N/A 3517 49.0 N/A WBR 31 8.0 A 66 10.7 B NBR 75 3.0 N/A 79 3.9 N/A NBT 1674 15.7 N/A 1755 45.4 N/A EBR 75 30.8 D 73 38.1 E NB BRT 6 0.2 A 6 0.2 A SB BRT 5 2.9 A 5 4.2 A SBT 3723 35.4 D 3418 40.0 D SBL 2 139.2 F 2 155.8 F WBR 15 6.6 A 16 9.6 A WBT 0 0.0 A 0 0.0 A		Otranto Ro/Otranto Bivo							
## BT 20 224.8 F 40 246.4 F EBL 185 181.5 F 176 201.8 F NB BRT 6 15.3 B 6 17.9 B SB BRT 6 9.5 A 5 10.4 B SBR 73 14.7 N/A 82 22.9 N/A SBT 3800 40.5 N/A 3517 49.0 N/A WBR 31 8.0 A 66 10.7 B NBR 75 3.0 N/A 79 3.9 N/A NBT 1674 15.7 N/A 1755 45.4 N/A EBR 75 30.8 D 73 38.1 E NB BRT 6 0.2 A 6 0.2 A SB BRT 5 2.9 A 5 4.2 A SBR 33 25.5 C 17 26.9 C SBT 3723 35.4 D 3418 40.0 D SBL 2 139.2 F 2 155.8 F WBR 15 6.6 A 16 9.6 A WBT 0 0.0 A 0 0.0 A									
## BBL 185 181.5 F 176 201.8 F NB BRT 6 15.3 B 6 17.9 B SB BRT 6 9.5 A 5 10.4 B SBR 73 14.7 N/A 82 22.9 N/A SBT 3800 40.5 N/A 3517 49.0 N/A WBR 31 8.0 A 66 10.7 B NBR 75 3.0 N/A 79 3.9 N/A NBT 1674 15.7 N/A 1755 45.4 N/A EBR 75 30.8 D 73 38.1 E NB BRT 6 0.2 A 6 0.2 A SB BRT 5 2.9 A 5 4.2 A SBR 33 25.5 C 17 26.9 C SBT 3723 35.4 D 3418 40.0 D SBL 2 139.2 F 2 155.8 F WBR 15 6.6 A 16 9.6 A WBT 0 0.0 A 0 0.0 A									
NB BRT 6									
SB BRT 6 9.5 A 5 10.4 B SBR 73 14.7 N/A 82 22.9 N/A SBT 3800 40.5 N/A 3517 49.0 N/A WBR 31 8.0 A 66 10.7 B NBR 75 3.0 N/A 79 3.9 N/A NBT 1674 15.7 N/A 1755 45.4 N/A EBR 75 30.8 D 73 38.1 E NB BRT 6 0.2 A 6 0.2 A SB BRT 5 2.9 A 5 4.2 A SBR 33 25.5 C 17 26.9 C SBT 3723 35.4 D 3418 40.0 D SBL 2 139.2 F 2 155.8 F WBR 15 6.6 A 16 9.6 A WBT 0 0.0 A 0 0.0 A									
A3									
A3									
WBR 31 8.0 A 66 10.7 B									
A3									
Mobile Dr * NBT 1674 15.7 N/A 1755 45.4 N/A		IIS 52/78/Rivers Ave & T							
EBR 75 30.8 D 73 38.1 E NB BRT 6 0.2 A 6 0.2 A SB BRT 5 2.9 A 5 4.2 A SBR 33 25.5 C 17 26.9 C SBT 3723 35.4 D 3418 40.0 D SBL 2 139.2 F 2 155.8 F WBR 15 6.6 A 16 9.6 A WBT 0 0.0 A 0 0.0 A	43								
NB BRT 6 0.2 A 6 0.2 A SB BRT 5 2.9 A 5 4.2 A SBR 33 25.5 C 17 26.9 C SBT 3723 35.4 D 3418 40.0 D SBL 2 139.2 F 2 155.8 F WBR 15 6.6 A 16 9.6 A WBT 0 0.0 A 0 0.0 A		WIODIIC DI							
SB BRT 5 2.9 A 5 4.2 A SBR 33 25.5 C 17 26.9 C SBT 3723 35.4 D 3418 40.0 D SBL 2 139.2 F 2 155.8 F WBR 15 6.6 A 16 9.6 A WBT 0 0.0 A 0 0.0 A									
SBR 33 25.5 C 17 26.9 C SBT 3723 35.4 D 3418 40.0 D SBL 2 139.2 F 2 155.8 F WBR 15 6.6 A 16 9.6 A WBT 0 0.0 A 0 0.0 A									
SBT 3723 35.4 D 3418 40.0 D SBL 2 139.2 F 2 155.8 F SBU 92 139.2 F 128 155.8 F WBR 15 6.6 A 16 9.6 A WBT 0 0.0 A 0 0.0 A									
44 US 52/78/Rivers Ave & Melnick Dr SBL 2 139.2 F 128 155.8 F WBR 15 6.6 A 16 9.6 A WBT 0 0.0 A 0 0.0 A									
44 US 52/78/Rivers Ave & SBU 92 139.2 F 128 155.8 F WBR 15 6.6 A 16 9.6 A WBT 0 0.0 A 0 0.0 A									
WBR 15 6.6 A 16 9.6 A WBT 0 0.0 A 0 0.0 A		IIS 52/78/Rivers Ave &			139.2	F		155.8	F
WBT 0 0.0 A 0 0.0 A	44				6.6	Α		9.6	Α
		William Di							
		<u> </u>	WBL	3	101.1	F	1	177.6	F
NBR 22 15.5 B 18 20.7 C							-		



Node	Intersection Name	Movement	1st Hour (7:15 – 8:15 am)				d Hour – 8:45 a	m)
No.	This cooling Hamo	inio voinioni	Volume	Delay	Los	Volume	Delay	LOS
		NBT	1669	19.3	В	1720	37.9	D
		NBL	35		-	57		_
		NBU	89	100.3	F	102	103.7	F
		EBR	120	12.8	В	93	11.1	В
		EBT	0	0.0	Α	0	0.0	Α
		EBL	11	85.9	F	8	107.5	F
		NB BRT	6	37.8	D	6	47.2	D
		SB BRT	5	30.2	С	5	31.8	С
		SBR	86	10.0	В	112	7.4	Α
		SBT	4052	23.3	С	3716	20.4	С
		WBR	30	35.5	D	32	51.5	D
		WBT	62	80.4	F	73	106.5	F
	US 52/78/Rivers Ave &	WBL	13	84.4	F	22	106.9	F
46	Greenridge Rd	NBT	1731	12.3	В	1916	13.6	В
	a.com.ago ma	NBL	110	392.0	F	109	527.7	F
		EBR	711	155.3	F	737	150.6	F
		EBL	91	134.8	F	101	149.9	F
		NB BRT	6	4.2	Α	7	1.9	Α
		SB BRT	5	2.2	A	5	1.6	A
		SBR	79	2.1	A	102	2.1	A
	US 52/78/Rivers Ave & North Rivers Market Place	SBT	2223	1.8	А	2058	1.8	А
		SBL	56	92.9	F	57	97.2	F
		SBU	113	0.0	Λ	124	0.0	Λ
		WBR	17	6.2	A	19	8.8	A
		WBT WBL	3 17	85.9	F	4	95.6	F
49		NBR	18	87.4 1.1		31 27	97.8 1.5	
49		NBT	837	4.3	A A	963	5.9	A A
		NBL	8	96.3	F	10	91.2	F
		EBR	4	4.1	A	9	1.5	A
		EBT	6	78.9	E	6	71.3	E
		EBL	16	83.3	F	32	87.6	F
		NB BRT	6	2.9	A	7	1.5	А
		SB BRT	5	2.0	A	5	1.8	A
		SBR	55	2.5	A	51	2.0	A
		SBT	2155	6.8	Α	2001	5.7	A
		SBL	34	75.6	Е	42	83.1	F
		WBR	46	4.5	A	52	4.5	Α
		WBT	39	63.3	Е	33	70.2	Е
		WBL	301	76.4	Е	266	74.6	Е
		NBR	123	2.1	Α	136	2.2	Α
50	US 52/78/Rivers Ave &	NBT	791	9.4	Α	924	8.0	Α
	Eagle Landing Blvd	NBL	9	102.1	F	7	98.4	F
		EBR	11	7.1	А	7	9.7	Α
		EBT	6	111.1	F	12	98.5	F
		EBL	25	90.0	F	29	90.8	F
		NB BRT	6	27.7	С	6	24.1	С
		SB BRT	6	24.3	С	5	23.8	С



Node			19	st Hour		2nd Hour		
No.	Intersection Name	Movement		– 8:15 a			– 8:45 aı	m)
NO.			Volume	Delay	LOS	Volume	Delay	LOS
		SBR	45	6.1	Α	34	6.0	Α
		SBT	2338	4.4	Α	2145	3.9	Α
		SBL	78	79.3	Е	87	74.8	Е
		WBR	40	84.2	F	42	113.6	F
		WBT	10	152.6	F	13	178.2	F
		WBL	93	215.5	F	97	243.5	F
51	US 52/78/Rivers Ave &	NBR	50	3.7	Α	71	3.9	Α
	Northwoods Blvd	NBT	843	9.2	Α	965	9.9	Α
		NBL	36	88.4	F	48	100.5	F
		EBR	85	10.5	В	76	9.7	Α
		EBT	13	96.0	F	10	89.9	F
		EBL	40	105.3	F	49	114.3	F
		NB BRT	6	6.5	Α	6	3.2	Α
		SB BRT	6	15.7	В	5	15.2	В
		SBR	184	22.8	С	201	20.2	С
		SBT	2275	38.7	D	2097	34.6	С
		SBL	22	74.7	Е	23	84.3	F
		WBR	14	16.6	В	18	15.0	В
	US 52/78/Rivers Ave & Ashley Phosphate Rd	WBT	54	72.7	Е	53	72.8	Е
		WBL	107	109.6	F	122	124.2	F
52		NBR	105	9.0	Α	88	10.3	В
		NBT	697	23.5	С	764	26.6	С
		NBL	337	77.7	E	341	97.1	F
		EBR	571	34.8	С	629	34.3	С
		EBT	110	72.0	E	123	65.5	E
		EBL	230	66.0	Е	302	72.7	Е
		NB BRT	6	13.6	В	6	13.0	В
		SB BRT	6	3.9	A	5	7.9	Α
		SBR	36	6.5	A	50	4.3	A
		SBT	3137	18.3	В	3048	11.7	В
		SBL	16	74.7	E	31	76.3	E
		WBR	2	24.6	С	10	11.9	В
		WBT	1	145.3	F	3	95.6	F
		WBL	16	94.3	F	34	105.0	F
- 4	US 52/78/Rivers Ave &	NBR	34	1.4	A	45	1.4	A
54	Morris Baker Blvd	NBT	1090	1.5	Α	1114	1.6	Α
		NBL	17	64.0	Е	29	56.1	Е
		NBU	75 46	26 F	-	53	22.6	<u> </u>
		EBR	46	26.5	C	16	22.6	С
		EBT	0	0.0	A F	1	130.6	F
		EBL ND DDT	13	82.9		24	101.9	F
		NB BRT	6 6	2.0	A	6 5	2.3	A
		SB BRT		5.7	A		6.1	A
		SBT	2736	15.2	В	2630	13.3	В
		SBL	466	80.7	F	401	78.3	Е
F.C.	US 52/78/Rivers Ave &	SBU	34	20.4	-	48	10.0	D
56	Mabeline Rd	WBR	301	20.4	С	237	18.6	В
	<u>1</u>	NBR	224	22.9	C	172	20.5	C
		NBT	938	22.8	С	999	20.7	C
		NBU	140	73.2	Е	152	73.6	Е



Nede			1s	st Hour		2 n	d Hour	
Node No.	Intersection Name	Movement	(7:15	– 8:15 a	m)		– 8:45 a	m)
NO.			Volume	Delay	LOS	Volume	Delay	LOS
		NB BRT	6	52.7	D	6	47.2	D
		SB BRT	6	24.4	С	5	23.2	С
		SBT	2838	29.5	N/A	2732	34.2	N/A
		WBR	123	10.5	В	125	10.4	В
59	US 52/78/Rivers Ave &	NBR	531	1.7	N/A	506	1.7	N/A
33	Stokes Ave *	NBT	1357	1.0	N/A	1354	1.5	N/A
		NB BRT	6	0.0	Α	6	0.0	Α
		SB BRT	6	0.1	Α	5	0.1	Α
		SBR	228	23.0	С	193	24.6	С
		SBT	2186	31.8	С	2146	36.6	D
		SBU	394	102.5	F	388	105.4	F
		WBR	21	28.8	С	20	30.3	С
	US 52/78/Rivers Ave &	NBR	17	10.1	В	57	6.2	Α
60	Midland Park Rd	NBT	1445	14.4	В	1390	16.8	В
	Wilding Fancita	NBL	239	85.2	F	269	121.6	F
		NBU	12			15		
		EBR	567	178.1	F	565	182.2	F
		NB BRT	6	2.4	Α	6	1.9	Α
		SB BRT	6	3.8	Α	5	4.7	Α
		SBR	99	10.5	В	99	10.6	В
		SBT	2480	16.1	В	2398	21.1	С
		SBU	241	76.0	Е	287	98.6	F
	US 52/78/Rivers Ave & Eagle Dr	NBT	1477	6.4	Α	1467	6.3	Α
61		NBL	43	127.1	F	37	121.8	F
		NBU	169			160		
		EBR	121	16.6	В	94	16.7	В
		NB BRT	6	5.3	A	6	3.3	Α
		SB BRT	6	2.5	A	5	4.0	Α
		SBT	2533	14.5	В	2416	14.7	В
		SBL	213	117.8	F	216	116.4	F
		SBU	28		_	23		-
00	US 52/78/Rivers Ave &	WBR	469	87.3	F	433	88.8	F
62	Hanahan Rd	NBR	153	11.4	В	182	13.9	В
		NBT	1197	24.2	С	1201	28.3	С
		NBU ND DDT	178	54.1	D	208	64.6	E
		NB BRT SB BRT	7 7	20.9	C	6 5	22.7 25.6	C
		SBR	18	3.3	A	29		A
		SBT	2494	3.3	A	2425	3.0 4.4	A
		SBL	1	3.1	A	1	4.4	A
		SBU	66	84.8	F	69	87.5	F
		WBR	3	7.6	Δ		0.0	Λ
				7.6	A	0	0.0	A
65	US 52/78/Rivers Ave &	NBR	1	0.6	А	0	0.0	Α
	Benderson Dr	NBT	1280	1.2	Α	1428	2.6	А
		NBL	51	87.6	F	82	85.1	F
		EBR	15	37.3	D	29	33.8	С
		NB BRT	7	1.7	A	7	1.5	А
		SB BRT	6	2.1	Α	5	2.1	Α



Node	Intersection Name		1s	t Hour		2nd Hour		
No.	Intersection Name	Movement	(7:15	– 8:15 a	m)		– 8:45 a	m)
NO.			Volume	Delay	LOS	Volume	Delay	LOS
		SBR	539	10.4	В	498	10.9	В
		SBT	2009	13.2	В	1922	16.0	В
		WBR	3	8.8	Α	9	9.5	Α
		NBR	5	14.0	В	7	11.7	В
67	US 52/78/Rivers Ave &	NBT	811	16.0	В	911	19.1	В
	Aviation Ave	NBL	103	88.6	F	90	91.4	F
		EBR	365	36.5	D	453	46.0	D
		EBL	510	61.5	Е	569	59.6	Е
		NB BRT	6	9.8	Α	6	12.2	В
		SB BRT	6	5.8	Α	5	6.5	Α
		SBT	2396	13.3	В	2292	14.7	В
		SBL	14	102.3	F	13	101.0	F
		SBU	18			17		
	US 52/78/Rivers Ave &	WBR	3	14.0	В	15	13.8	В
671	North Charleston Center	NBR	40	2.0	Α	23	1.7	Α
		NBT	897	7.1	Α	971	8.0	Α
		NBU	649	82.6	F	744	82.4	F
		NB BRT	6	2.9	Α	6	3.1	Α
		SB BRT	6	4.1	A	5	4.4	Α
		SBR	147	18.0	В	128	21.4	C
		SBT	2374	15.9	В	2348	17.2	В
		SBL	340	98.7	F	342	95.1	F
		WBR	788	27.3	С	870	31.6	С
		WBT	452	67.4	Е	414	66.1	Е
70	US 52/78/Rivers Ave &	NBR	302	8.3	Α	329	9.4	Α
	Remount Rd	NBT	802	22.5	С	860	25.8	С
		NBL	91	70.5	Ш	99	72.4	Е
		EBR	437	37.2	D	480	37.8	D
		EBT	366	82.7	F	405	84.9	F
		NB BRT	6	24.0	С	6	20.2	С
		SB BRT	6	9.2	A	6	7.8	Α
		SBR	12	3.9	A	21	2.5	Α
		SBT	2596	13.6	В	2535	6.8	A
		SBU	164	54.9	D	203	63.9	Е
70	US 52/78/Rivers Ave & N of	NBT	995	9.2	А	1002	9.5	Α
72	Sabal St	NBL	3	84.9	F	12	87.1	F
		NBU	179			181		
		EBR	32	28.7	С	15	9.2	A
		NB BRT	6	2.4	A	6	2.7	A
		SB BRT	5	4.1	A	5	1.2	A
		SBR	12	3.6	A	10	5.4	A
		SBT	2536	6.9	A	2519	6.8	Α
		SBL	104	79.7	Е	89	71.2	Е
	110 50/70/5:	SBU	77			75		
76	US 52/78/Rivers Ave &	WBR	170	8.4	A	149	8.8	A
	Harley St	NBR	37	7.8	A	40	8.5	A
		NBT	919	11.5	В	965	11.3	В
	 	NBL	0	87.1	F	0	84.8	F
		NBU	108			111		
		EBR	13	16.0	В	14	16.2	В



			1st Hour 2nd Hour						
Node	Intersection Name	Movement		– 8:15 a	m)		– 8:45 a	m)	
No.	Intersection Hamo	ino voinoni	Volume	Delay	Los	Volume	Delay	Los	
		NB BRT	6	0.4	A	6	0.4	A	
		SB BRT	6	8.5	Α	6	10.2	В	
		SBR	686	1.8	Α	769	2.2	Α	
		SBT	2039	7.5	Α	2027	6.2	Α	
		WBR	326	0.4	Α	321	0.4	Α	
70	US 52/78/Rivers Ave & I-	NBT	864	0.6	Α	924	0.6	Α	
78	526 WB Ramps	NBL	138	24.2	С	155	24.9	С	
	-	EBR	195	0.1	Α	242	0.1	Α	
		NB BRT	5	1.5	Α	6	1.4	Α	
		SB BRT	5	4.2	Α	6	2.4	Α	
		SBT	1656	0.5	Α	1798	0.5	Α	
		SBL	582	23.4	С	467	22.9	С	
		WBR	110	0.0	Α	98	0.0	Α	
79	US 52/78/Rivers Ave & I-	NBR	175	0.8	Α	203	0.9	Α	
7.5	526 EB Ramps	NBT	889	8.1	Α	974	7.8	Α	
		EBR	214	0.3	Α	264	0.3	Α	
		NB BRT	5	19.8	В	6	18.3	В	
		SB BRT	5	0.2	Α	6	0.1	Α	
		SBR	395	20.7	С	434	26.3	С	
		SBT	1131	15.7	В	1323	19.4	В	
		SBU	298	81.7	F	326	99.0	F	
		WBR	0	0.0	A	0	0.0	Α	
		NBR	0	0.0	Α	0	0.0	Α	
82	US 52/78/Rivers Ave & Mall	NBT	653	17.4	В	748	22.8	С	
	Drive	NBL	43	111.1	F	48	129.6	F	
		NBU	42 67	0.5	Λ	45 62	0.5	Λ.	
		EBR EBL	84	8.5 69.0	A E	97	9.5 69.6	A E	
		NB BRT	6	33.2	С	6	29.6	С	
		SB BRT	6	32.0	C	6	26.0	C	
		SBR	36	1.2	N/A	34	1.7	N/A	
		SBT	1171	0.8	N/A	1281	0.9	N/A	
		WBR	112	7.8	A	149	9.0	A	
	US 52/78/Rivers Ave &	NBR	88	1.4	N/A	100	1.4	N/A	
83	Alton *	NBT	649	0.8	N/A	713	0.8	N/A	
		EBR	30	7.2	Α	28	7.8	Α	
		NB BRT	5	0.1	Α	6	0.0	Α	
		SB BRT	6	1.1	A	6	1.1	A	
		SBT	989	3.2	Α	1092	3.0	Α	
		SBL	152			148			
		SBU	58	55.9	E	63	57.5	Е	
		WBR	83	7.6	Α	91	7.6	Α	
		WBL	178	60.1	Е	175	60.5	Е	
84	US 52/78/Rivers Ave & Morningside Dr	NBR	35	4.7	Α	45	4.3	Α	
	Morningolde Di	NBT	580	14.2	В	649	13.7	В	
		NBU	16	59.9	Е	10	65.4	Е	
		NB BRT	5	2.5	Α	6	1.0	А	
		SB BRT	6	0.8	Α	6	1.4	А	



			15	st Hour		2nd Hour			
Node	Intersection Name	Movement		– 8:15 a	m)		– 8:45 a	m)	
No.	microcotion itame	Movement	Volume	Delay	LOS	Volume	Delay	LOS	
		SBR	144	1.6	A	187	2.0	A	
		SBT	986	6.4	A	1037	7.2	A	
		SBU	18	41.3	D	34	37.2	D	
		NBT	564	7.3	Α	613	8.3	Α	
87	US 52/78/Rivers Ave &	NBL	33	42.6	D	41	44.4	D	
	Piggly Wiggly Dr	EBR	23	5.2	Α	21	5.1	Α	
		EBL	77	39.8	D	79	37.9	D	
		NB BRT	6	2.9	Α	6	1.1	Α	
		SB BRT	6	4.4	Α	6	4.9	Α	
		SBR	138	9.9	Α	130	8.8	Α	
		SBT	98	37.7	D	81	37.4	D	
		SBL	120	70.2	Е	96	70.0	Е	
		WBR	113	1.7	Α	107	1.4	Α	
		WBT	377	6.9	Α	424	6.0	Α	
		WBL	12			8			
		WBU	18	28.7	С	16	27.8	С	
	US 52/78/Rivers Ave &	NBR	6	39.6	D	10	55.4	Е	
88	Meeting St/Durant Ave	NBT	46	26.9	С	49	25.1	С	
		NBL	84	28.8	С	102	26.9	С	
		EBR	189	74.1	Е	219	74.4	Е	
		EBT	665	77.3	Е	722	82.1	F	
		EBL	156			122			
		EBU	0	79.6	E	0	83.7	F	
		NB BRT	6	20.7	С	6	17.9	В	
		SB BRT	6	24.8	C	6	27.9	С	
		SBR	3	1.8	A	4	3.9	A	
		SBT	733	4.4	A	801	4.2	A	
		SBL	26			27			
		SBU	7	36.2	D	10	32.4	С	
		WBR	16	15.4	В	11	12.7	В	
		WBT	10	36.0	D	8	33.7	С	
		WBL	54	31.9	С	42	32.1	С	
	US 52/78/Rivers Ave &	NBR	41	5.9	A	44	6.1	A	
91	Helm Ave	NBT	503	5.4	Α	547	5.2	Α	
		NBL	1		_	2			
		NBU	0	44.3	D	0	26.8	С	
		EBR	12	10.9	В	16	7.8	А	
		EBT	8	32.5	С	2	23.9	С	
		EBL	5	35.9	D	0	0.0	Α	
		NB BRT	6	0.1	A	6	0.0	A	
		SB BRT	6	1.6	A	5	0.0	A	
		SBR	106	19.0	В	98	16.2	В	
		SBT	94	32.3	С	85	30.6	C	
		SBL	119	34.2	С	110	36.8	D	
		WBR	175	5.7	A	195	7.2	A	
92	US 52/78/Rivers Ave &	WBT	478	5.7	A	510	6.7	A	
	McMillan Ave	WBL	13			20			
		WBU	0 45.9	45.9	D	0	42.9	D	
		NBR	6	10.4	В	11	14.9	В	
		NBT	67	25.5	C	76	27.0	С	
		וטו	01	20.0		, 0	21.0		



			1st Hour 2nd Hour					
Node	Intersection Name	Movement		– 8:15 a	m)		– 8:45 a	m)
No.	microcolon Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		NBL	22	28.6	C	16	33.9	C
		EBR	22	2.4	A	20	2.5	A
		EBT	618	2.8	A	667	3.1	A
		EBL	150			161		
		EBU	8	49.1	D	1	50.3	D
		NB BRT	6	6.8	А	6	5.0	Α
		SB BRT	6	2.1	A	5	4.8	A
		WBT	517	6.8	A	554	7.4	A
		WBL	87			86		
		WBU	5	43.0	D	8	43.9	D
		NBR	106	11.2	В	144	15.1	В
93	US 52/78/Rivers Ave & SC	NBL	152	31.9	С	182	33.1	C
	642/Dorchester Rd	EBR	67	14.1	В	58	16.4	В
		EBT	671	16.9	В	712	19.6	В
		NB BRT	6	22.5	С	7	23.7	С
		SB BRT	6	20.6	C	5	23.4	C
		SBR	40	48.9	D	40	47.9	D
		SBT	259	58.0	Е	286	56.8	Е
		SBL	26	65.1	E	23	63.3	E
		WBR	25	14.4	В	30	15.0	В
		WBT	313	16.9	В	347	20.4	С
		WBL	131	108.0	F	137	116.9	F
	US 52/78/Rivers Ave &	NBR	173	39.5	D	209	41.5	D
94	Cosgrove Ave	NBT	578	41.7	D	576	42.4	D
		NBL	255	50.6	D	267	52.0	D
		EBR	274	25.5	С	299	28.8	С
		EBT	458	26.4	С	501	28.0	С
		EBL	43	70.4	Е	56	76.5	Е
		NB BRT	6	10.9	В	7	10.0	В
		SB BRT	6	11.4	В	5	14.5	В
		SBR	86	37.2	D	102	36.5	D
		SBT	24	72.4	Е	27	71.6	Е
		SBL	26	69.7	Е	18	75.7	Е
		WBR	28	6.9	Α	27	8.4	Α
		WBT	330	10.4	В	333	10.9	В
		WBL	28	65.2	Е	28	70.5	Е
95	US 52/78/Rivers Ave &	NBR	56	28.7	С	45	32.9	С
90	Reynolds Ave	NBT	29	62.9	Е	39	67.6	Е
		NBL	15	64.3	Е	17	57.3	Е
		EBR	18	10.8	В	19	11.4	В
		EBT	504	13.2	В	503	13.7	В
		EBL	55	72.1	Е	72	69.8	Е
		NB BRT	6	30.2	С	6	31.7	С
		SB BRT	6	17.8	В	5	18.1	В
		SBR	77	4.4	Α	84	5.3	Α
		SBT	493	6.7	Α	506	7.3	Α
164	King St Ext & Heriot St	NBT	236	2.9	Α	297	3.5	Α
104	I King St Ext & Hellot St	NBL	28	13.6	В	37	15.1	В
		EBR	53	11.5	В	53	15.4	В
		EBL	96	28.2	С	128	29.7	С



			10	st Hour	_	2n	d Hour	
Node	Intersection Name	Movement		– 8:15 a	m)		– 8:45 a	m)
No.	microcolon Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		NB BRT	6	1.7	A	7	1.6	A
		SB BRT	5	1.6	A	5	1.5	A
		SBR	25	21.7	С	32	21.3	C
		SBT	360	26.6	C	393	26.6	C
		SBL	159	43.0	D	148	39.8	D
		WBR	109	2.1	Α	157	3.2	Α
		WBT	290	13.5	В	276	16.4	В
400	15. 0. 0. 1. 5.	WBL	51	69.8	Е	52	69.5	Е
166	King St & Mt Pleasant St	NBR	43	25.7	С	43	34.1	С
		NBT	122	29.3	С	148	33.4	С
		NBL	152	54.3	D	160	62.9	Е
		EBR	322	23.5	С	252	22.6	С
		EBT	650	29.9	С	699	28.5	С
		EBL	22	29.8	С	21	34.1	С
		SBR	158	8.4	Α	175	11.1	В
		SBT	270	31.6	С	309	37.5	D
		SBL	277	73.2	Е	275	78.5	Е
		WBR	329	9.8	Α	317	10.8	В
		WBT	272	33.1	С	271	34.6	С
		WBL	38	53.3	D	49	50.0	D
109	US 52/Meeting St &	NBR	36	2.3	Α	48	2.4	Α
109	Morrison Dr	NBT	257	32.0	С	279	32.2	С
		NBL	24	59.6	Е	44	56.6	Е
		EBR	135	25.1	С	95	23.1	С
		EBT	608	13.2	В	675	10.8	В
		EBL	107	23.7	С	117	26.5	С
		NB BRT	6	5.9	Α	6	7.8	Α
		SB BRT	6	24.4	С	5	27.0	С
		SBR	32	6.8	Α	24	7.1	Α
		SBT	464	12.3	В	463	12.6	В
		SBL	25	11.8	В	23	13.3	В
		WBR	52	13.6	В	69	12.3	В
		WBT	70	25.7	С	83	23.7	С
		WBL	22	33.6	С	16	30.4	С
113	Meeting St & Romney St	NBR	16	5.1	Α	17	5.4	Α
110	I weeking of a Rommey of	NBT	192	20.9	С	205	19.9	В
		NBL	97	23.7	С	92	24.5	С
		EBR	206	21.9	С	192	25.3	С
		EBT	85	34.3	С	98	38.7	D
		EBL	128	42.0	D	173	48.3	D
		NB BRT	6	7.6	Α	6	7.1	Α
		SB BRT	6	0.5	Α	5	1.6	Α
		SBR	42	3.7	Α	38	3.5	Α
		SBT	283	13.7	В	285	13.7	В
		SBL	319	14.0	В	331	14.1	В
117	Meeting St & US 17 Off-	WBR	126	38.3	D	167	36.4	D
	Ramp	WBT	0	0.0	Α	0	0.0	Α
		WBL	512	46.0	D	451	43.1	D
		NBT	146	30.7	С	145	30.0	С
		NBL	291	38.8	D	341	37.7	D



			16	st Hour		2n	d Hour	
Node	Intersection Name	Movement		– 8:15 a	m)		– 8:45 a	m)
No.	microcolon Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		NB BRT	6	17.5	В	6	17.4	В
		SB BRT	6	3.5	A	5	4.3	A
		SBR	331	32.5	С	273	33.4	С
		SBT	419	21.0	С	436	18.9	В
		SBL	40	20.2	С	42	22.8	С
		WBR	108	52.8	D	85	62.2	Е
		WBT	83	117.8	F	74	126.5	F
		WBL	27	100.6	F	29	96.6	F
110	Monting Ct 9 Huggs Ct	NBR	21	30.4	С	15	28.2	С
119	Meeting St & Huger St	NBT	365	35.2	D	429	35.2	D
		NBL	37	46.2	D	44	44.0	D
		EBR	17	12.9	В	16	14.6	В
		EBT	91	20.4	C	105	20.5	С
		EBL	249	22.4	C	255	23.4	С
		NB BRT	5	12.7	В	6	14.9	В
		SB BRT	7	6.2	Α	6	4.8	Α
		SBT	462	0.4	Α	477	0.7	Α
		WBR	38	6.3	Α	47	6.5	Α
120	Meeting St & Johnson St	NBR	6	1.0	Α	9	0.9	Α
120	I weeting of a sormson of	NBT	389	0.6	А	441	0.7	Α
		NB BRT	5	0.1	Α	5	0.2	Α
		SB BRT	7	0.0	Α	6	0.0	Α
		SBR	40	28.8	С	30	30.5	С
		SBT	387	42.8	D	404	42.8	D
		SBL	37	40.2	D	43	39.2	D
		WBR	23	3.7	Α	37	3.8	Α
		WBT	0	0.0	Α	3	14.6	В
		WBL	12	20.2	С	17	17.4	В
121	Meeting St & Lee St	NBR	45	27.3	С	35	29.5	С
	3	NBT	365	33.4	С	395	34.1	С
		NBL	30	46.6	D	30	48.4	D
		EBR	8	7.9	A	8	9.0	Α
		EBT	5	14.1	В	7	12.0	В
		EBL	13	11.6	В	22	12.1	В
		NB BRT	5	9.4	A	6	15.4	В
		SB BRT SBT	5 404	8.6 20.8	A C	6 428	8.6	A C
		NBT	353	20.8	С	372	20.2	С
		EBR	999	18.2	В	1064	25.6	C
122	Meeting St & I-26	EBL	88	16.8	В	84	22.4	C
		NB BRT	6	5.4	A	6	7.0	A
		SB BRT	5	5.8	A	6	5.0	A
		SBR	141	10.2	В	158	10.8	В
		SBT	1226	10.2	В	1296	11.9	В
		SBL	30	11.4	В	30	11.1	В
		WBR	11	13.5	В	6	8.2	A
123	Meeting St & Line St	WBT	2	46.7	D	0	0.0	A
		WBL	7	41.9	D	9	36.6	D
		NBR	9	2.9	A	8	3.1	A
		NBT	319	5.8	A	347	5.4	A
L		וטוו	313	5.0	- 1	J+1	5.4	$ \wedge$



Node				t Hour)		d Hour)
No.	Intersection Name	Movement		– 8:15 a			– 8:45 a	
		NBL	Volume 34	Delay 34.0	LOS	Volume 28	Delay 41.0	LOS
		EBR	80	26.6	С	105	26.6	С
		EBT	26	41.8	D	23	40.4	D
		EBL	22	38.9	D	21	39.4	D
		NB BRT	6	1.4	A	6	3.0	A
		SB BRT	5	13.4	В	6	14.7	В
		SBR	38	9.5	Α	16	9.7	Α
		SBT	1109	11.6	В	1212	12.2	В
		SBL	164	10.3	В	173	11.2	В
		WBR	43	13.4	В	47	12.2	В
		WBT	26	32.6	С	17	41.0	D
		WBL	75	59.3	Е	87	69.1	Е
124	Meeting St & Columbus St	NBR	46	17.3	В	54	19.3	В
124	Weeting St & Columbus St	NBT	313	9.1	Α	333	9.1	Α
		NBL	57	16.6	В	59	17.3	В
		EBR	79	34.8	С	115	35.6	D
		EBT	76	42.2	D	79	43.3	D
		EBL	6	50.1	D	7	44.8	D
		NB BRT	6	2.5	Α	6	2.3	Α
		SB BRT	5	3.8	Α	6	6.6	Α
		SBR	111	3.6	Α	97	3.8	Α
		SBT	1072	3.6	Α	1212	4.1	Α
		SBL	32	5.5	Α	34	5.8	Α
		WBR	17	5.2	Α	25	9.1	Α
		WBT	6	33.0	С	9	33.1	С
		WBL	4	41.0	D	6	43.4	D
125	Meeting St & Woolfe St	NBR	9	4.3	A A	9	4.6	A
		NBT NBL	452 8	4.8		462 11	5.1 17.7	A
		EBR	o 16	13.6 14.5	B B	17	14.5	B B
		EBT	10	36.0	D	16	34.5	С
		EBL	21	36.6	D	25	35.5	D
		NB BRT	6	0.7	A	6	1.3	A
		SB BRT	5	0.5	A	6	0.6	A
		SBR	46	6.8	A	62	8.0	A
		SBT	857	5.6	A	1009	7.8	A
		SBL	33	7.4	Α	35	9.7	A
		WBR	46	7.4	Α	59	8.6	Α
		WBT	8	33.1	С	7	33.8	С
		WBL	12	30.6	С	11	29.7	С
		NBR	14	7.6	Α	9	7.6	Α
126	Meeting St & Mary St	NBT	376	9.7	Α	365	9.7	Α
		NBL	18	17.8	В	9	19.7	В
		EBR	55	9.6	Α	48	10.8	В
		EBT	26	23.6	С	18	27.3	С
		EBL	52	27.5	С	58	30.9	С
		NB BRT	6	10.8	В	6	9.4	Α
		SB BRT	5	5.3	А	6	5.4	Α



			19	st Hour		2n	d Hour	
Node	Intersection Name	Movement		– 8:15 a	m)		– 8:45 a	m)
No.	microcotion itame	Movement	Volume	Delay	LOS	Volume	Delay	Los
		SBR	101	6.5	A	108	6.6	A
		SBT	821	6.0	A	951	7.4	A
		WBR	121	8.8	A	49	10.0	В
		WBT	5	43.8	D	5	40.3	D
127	Meeting St & Wragg	WBL	7	38.4	D	8	41.2	D
	Square	NBT	286	2.0	A	331	2.1	Α
		NBL	20	9.8	Α	28	11.4	В
		NB BRT	6	0.2	Α	6	1.2	A
		SB BRT	5	5.3	Α	6	4.2	Α
		SBT	799	1.3	Α	934	1.5	Α
		SBL	29	2.2	Α	22	3.8	Α
		NBR	24	4.3	Α	26	3.7	Α
		NBT	300	5.4	Α	351	5.8	Α
128	Meeting St & Ann St	EBR	66	7.2	Α	70	8.5	Α
	3	EBT	12	44.5	D	9	38.2	D
		EBL	7	47.2	D	9	40.6	D
		NB BRT	6	17.5	В	6	15.1	В
		SB BRT	5	0.4	Α	6	0.3	Α
		SBR	45	6.1	Α	64	10.7	В
		SBT	800	6.6	Α	888	11.3	В
		SBL	20	8.8	Α	41	16.7	В
		WBR	21	15.7	В	39	13.2	В
		WBT	22	37.1	D	29	35.2	D
		WBL	22	41.4	D	15	40.4	D
120	Mosting Ct 9, John Ct	NBR	21	3.4	Α	44	5.1	Α
129	Meeting St & John St	NBT	297	4.9	Α	326	5.7	Α
		NBL	41	11.8	В	44	23.0	С
		EBR	53	10.1	В	56	11.7	В
		EBT	7	35.6	D	9	36.6	D
		EBL	9	40.4	D	12	38.5	D
		NB BRT	6	3.1	Α	6	3.6	Α
		SB BRT	5	27.6	С	6	24.4	С
		SBR	185	7.3	Α	197	8.4	Α
		SBT	491	22.0	С	574	31.5	С
		SBL	139	25.4	С	137	34.2	С
		WBR	63	24.2	С	55	24.1	С
		WBT	212	34.8	С	209	32.4	С
		WBL	48	41.1	D	57	44.5	D
130	Meeting St & Calhoun St	NBR	24	7.5	Α	48	11.2	В
100	I wooding of a Camban of	NBT	209	13.7	В	260	14.4	В
		NBL	67	19.8	В	84	23.8	С
		EBR	111	10.2	В	153	11.4	В
		EBT	303	25.8	С	378	25.0	С
		EBL	89	25.0	С	101	24.6	С
		NB BRT	6	21.8	С	6	23.1	С
		SB BRT	5	6.9	Α	6	7.5	Α
		SBR	135	25.0	С	161	32.3	С
131	Calhoun St & King St	SBT	85	43.2	D	137	46.9	D
		SBL	23	35.1	D	44	46.4	D
L		WBR	41	16.5	В	43	18.5	В



			19	t Hour		2n	d Hour	
Node	Intersection Name	Movement		– 8:15 a	m)		– 8:45 a	m)
No.	Intersection Hame		Volume	Delay	Los	Volume	Delay	Los
		WBT	336	19.4	В	350	20.2	С
		WBL	85	50.0	D	97	56.1	E
		EBR	56	2.3	Α	46	3.8	Α
		EBT	488	7.8	Α	599	9.4	Α
		EBL	147	15.0	В	174	17.7	В
		NB BRT	6	9.1	Α	6	7.0	Α
		SB BRT	5	11.3	В	6	9.5	Α
		SBR	19	6.4	Α	12	9.8	Α
		SBT	74	38.7	D	118	40.8	D
		SBL	8	43.7	D	9	38.3	D
		WBR	84	13.4	В	94	12.5	В
132	Calhoun St & Phillips St	WBT	390	17.9	В	415	16.5	В
		EBR	61	12.6	В	76	14.5	В
		EBT	687	20.0	С	809	22.0	C
		NB BRT	6	28.9	C	6	32.8	C
		SB BRT	5	7.6	A	6	5.2	Α
		WBR	45	2.7	A	44	2.7	A
		WBT	360	2.7	A	386	2.9	A
		NBR	67	6.9	Α	83	6.6	Α
		NBT	357	39.3	D	351	39.5	D
133	Calhoun St & Coming St	NBL	36	43.6	D	55	44.8	D
	Cambun St & Coming St	EBT	686	4.4	A	802	5.4	A
		EBL	103	7.3	A	129	8.0	A
		NB BRT	6	5.5	A	6	4.7	A
		SB BRT	5	15.3	В	6	18.1	В
		SBR	70	17.4	В	51	15.0	В
		SBT	32	43.2	D	26	42.6	D
		SBL	23	39.3	D	16	40.8	D
		WBR	10	5.0	A	11	4.4	A
		WBT	381	7.8	A	419	7.7	A
		WBL	2	18.3	В	3	19.7	В
		NBR	19	17.7	В	22	14.2	В
134	Calhoun St & Smith St	NBT	25	42.4	D	19	42.5	D
		NBL	13	36.5	D	7	42.6	D
		EBR	8	2.2	A	9	1.9	A
		EBT	756	2.6	A	889	2.7	A
		EBL	32	5.9	A	26	6.3	A
		NB BRT	6	1.5	A	6	3.6	A
		SB BRT	5	3.6	A	6	4.8	A
		SBR	286	11.9	В	275	11.0	В
		SBT	174	30.0	С	244	31.7	С
		SBL	75	28.6	С	96	28.4	С
		WBT	492	5.5	A	466	4.8	A
		WBL	21	14.9	В	19	13.8	В
135	Calhoun St & Rutledge Ave	NBR	43	6.4	A	36	6.7	A
	ĺ	EBR	25	11.7	В	27	9.9	A
		EBT	772	12.5	В	884	13.1	В
		NB BRT	6	3.8	A	6	7.2	
								A
		SB BRT	5	3.9	А	6	4.3	Α



NI. I.			1s	t Hour		2 n	d Hour	
Node	Intersection Name	Movement	(7:15	– 8:15 a	m)	(7:45	– 8:45 a	m)
No.			Volume	Delay	LOS	Volume	Delay	LOS
		WBR	176	17.2	В	184	17.9	В
		WBT	602	15.1	В	561	15.8	В
		NBR	50	14.5	В	44	13.9	В
		NBT	128	50.2	D	126	49.5	D
136	Calhoun St & Ashley Ave	NBL	37	52.9	D	36	50.5	D
130	Camoun St & Ashley Ave	EBR	8	14.9	В	13	16.2	В
		EBT	749	10.9	В	877	13.1	В
		EBL	163	12.9	В	177	14.0	В
		NB BRT	6	11.3	В	6	8.9	Α
		SB BRT	5	23.0	C	6	20.7	С
		SBR	63	8.0	Α	78	7.4	Α
		SBT	11	45.5	D	11	45.4	D
		SBL	102	47.0	D	106	47.5	D
		WBR	129	10.7	В	120	11.1	В
	Calhoun St & Jonathan Lucas St/Barre St	WBT	477	10.0	Α	475	10.5	В
		WBL	20	15.1	В	15	19.9	В
137		NBR	20	18.4	В	14	23.2	С
137		NBT	16	50.3	D	14	49.3	D
		NBL	37	43.2	D	33	43.6	D
		EBR	36	8.0	Α	44	9.1	Α
		EBT	805	8.7	Α	965	10.1	В
		EBL	123	17.7	В	113	17.3	В
		NB BRT	6	16.8	В	6	18.1	В
		SB BRT	5	16.9	В	6	15.7	В
		SBR	146	26.8	C	133	27.7	С
		SBT	3	55.4	Е	1	63.2	Е
		SBL	107	44.2	D	118	43.1	D
		WBR	114	38.0	D	126	36.6	D
		WBT	460	41.0	D	452	40.8	D
142	Calhoun St & Courtenay Dr	NBR	0	0.0	Α	0	0.0	Α
142	Cambuli St & Counterlay Di	NBT	0	0.0	Α	0	0.0	Α
		NBL	1	36.9	D	0	0.0	Α
		EBR	0	0.0	Α	0	0.0	Α
		EBT	949	7.6	Α	1115	8.5	Α
		EBL	530	19.6	В	555	23.4	С
		NB BRT	6	58.4	Е	6	43.7	D

^{*} This intersection is unsignalized in the Build scenario and has been evaluated using unsignalized LOS criteria.



Node Level Performance, PM Peak Hour

Node	Intersection Name	Movement		t Hour – 5:30 p	m)		nd Hour – 6:00 pr	n)
No.			Volume	Delay	Los	Volume	Delay	Los
		SBR	244	19.8	В	276	24.9	С
		SBT	381	73.2	Е	425	70.8	Е
		SBL	154	107.9	F	183	114.7	F
		WBR	329	40.1	D	397	44.2	D
		WBT	572	36.9	D	540	36.2	D
		WBL	24	79.3	Е	29	79.8	Е
00	LIC 70 9 Callana Danis Dal	NBR	27	92.2	F	25	105.4	F
22	US 78 & College Park Rd	NBT	396	97.3	F	412	114.5	F
		NBL	61	90.5	F	60	103.0	F
		EBR	72	21.6	С	65	23.7	С
		EBT	451	23.8	С	513	25.6	С
		EBL	235	28.9	С	212	29.0	С
		NB BRT	5	17.1	В	5	15.9	В
		SB BRT	6	3.5	Α	6	5.1	Α
		SBR	23	63.8	Е	29	71.5	Е
		SBT	59	107.0	F	59	114.2	F
		SBL	42	86.7	F	62	126.6	F
		WBR	45	47.6	D	51	38.3	D
		WBT	715	29.8	С	733	27.8	С
		WBL	1158	92.5	F	1033	95.8	F
23	US 78 & Ladson Rd/ Ancrum Rd	NBR	918	17.4	В	972	21.6	С
23		NBT	111	107.1	F	109	118.8	F
		NBL	241	120.5	F	263	128.6	F
		EBR	82	35.4	D	97	33.6	С
		EBT	535	45.9	D	600	42.4	D
		EBL	16	81.6	F	18	78.6	E
		NB BRT	4	11.0	В	5	11.5	В
		SB BRT	6	22.4	С	6	26.2	С
		SBR	29	11.3	В	51	15.2	В
		SBT	15	114.9	F	27	115.6	F
		SBL	40	100.2	F	52	100.1	F
		WBR	69	23.8	С	117	23.0	С
		WBT	1728	23.9	С	1557	22.5	С
		WBL	354	89.6	F	347	90.5	F
27	US 78 & Ingleside Blvd	NBR	373	25.5	С	399	30.3	С
		NBT	17	89.7	F	30	87.0	F
		NBL	244	113.1	F	233	147.6	F
		EBR	159	7.1	A	197	9.7	A
		EBT	1072	18.7	В	1178	22.0	С
		EBL	38	113.5	F	42	119.2	F
		NB BRT	5	22.3	С	6	24.4	C
		SB BRT	6	10.1	В	6	8.9	A
		WBT	2002	1.6	A	1922	1.5	A
		WBL	341	53.4	D	267	56.4	E
29	US 78 & I-26 EB Ramps	EBR	662	2.4	A	586	2.1	Α
		EBT	955	3.6	A	1070	4.0	A
		NB BRT	5	3.1	A	6	3.0	A
		SB BRT	6	3.7	Α	5	3.5	Α



Node	Interesting Name	Marramant		st Hour – 5:30 p	····)		nd Hour – 6:00 pr	~ \
No.	Intersection Name	Movement			LOS			LOS
		SBR	Volume	Delay 55.0	E	Volume 1047	Delay 52.6	
		WBR	1006 848	1.0	A	704	0.7	D A
		WBT	1336	7.9	A	1141	8.2	A
		NBR	245	45.1	D	346	58.7	E
30	US 78 & I-26 WB Ramps	EBT	1188	1.4	A	1422	13.7	В
		EBL	153	60.0	E	122	67.9	E
		NB BRT	5	1.3	A	6	1.2	A
		SB BRT	8	3.3	A	6	3.1	A
		SBR	117	426.9	F	120	431.2	F
		SBT	5	441.2	F	4	405.1	F
		SBL	30	366.9	F	19	394.9	F
		WBR	18	16.2	В	22	14.5	В
		WBT	1634	13.6	В	1306	14.4	В
		WBL	10	118.6	F	18	109.7	F
	US 78/University Blvd &	NBR	49	28.0	С	59	35.4	D
31	Medical Plaza Dr	NBT	3	71.3	E	11	68.4	E
	modical Flaza B.	NBL	424	72.1	Ē	428	74.2	Ē
		EBR	333	4.7	A	319	5.9	A
		EBT	1053	13.1	В	1322	24.3	C
		EBL	51	113.2	F	84	151.4	F
		NB BRT	5	20.0	C	6	23.1	C
		SB BRT	7	7.2	A	6	7.2	A
		SBR	149	28.1	С	134	21.4	C
		SBT	29	56.4	E	17	54.9	D
		SBL	106	67.4	Ē	132	71.9	E
		WBR	36	22.2	С	43	17.9	В
		WBT	1194	21.1	C	912	18.8	В
		WBL	34			28		
		WBU	27	92.2	F	24	88.1	F
	US 78/University Blvd &	NBR	188	59.1	Е	193	60.2	Е
34	Medical Plaza Dr/BUC Club	NBT	29	87.1	F	38	85.3	F
	Blvd	NBL	296	110.0	F	297	101.8	F
		EBR	88	8.0	Α	99	7.2	Α
		EBT	1050	8.3	Α	1268	8.3	Α
		EBL	23	00.0	-	37	400.4	٦
		EBU	11	98.8	F	6	120.4	F
		NB BRT	6	19.8	В	6	19.0	В
		SB BRT	6	18.3	В	6	19.0	В
		SBR	93	69.2	Е	74	62.0	Ш
		SBT	35	101.9	F	32	100.4	F
		SBL	249	105.8	F	228	104.7	F
		WBR	68	23.7	С	42	26.3	С
		WBT	781	26.1	С	590	27.3	С
37	US 78/University Blvd &	WBL	11	100.6	F	9	104.2	F
3/	Elms Center Rd	WBU	0	100.6	F	0	104.3	
		NBR	67	45.1	D	57	46.3	D
		NBT	34	75.5	Е	44	66.4	Е
		NBL	111	84.2	F	104	74.5	Ш
		EBR	41	13.9	В	50	12.9	В
		EBT	1311	16.8	В	1441	16.1	В



			16	t Hour		21	nd Hour	
Node	Intersection Name	Movement		– 5:30 p	m)		– 6:00 pr	m)
No.	microccion Hame	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		EBL	126			155		
		EBU	119	133.5	F	121	134.3	F
		NB BRT	5	7.6	Α	5	3.8	Α
		SB BRT	6	3.1	A	6	3.1	A
		SBR	7	15.9	В	11	13.8	В
		SBT	3	96.0	F	4	88.6	F
		SBL	15	90.1	F	22	83.7	F
		WBR	14	66.6	E	12	99.8	F
		WBT	806	103.6	F	567	255.7	F
		WBL	43			31		
		WBU	145	561.1	F	158	649.5	F
	US 78/University Blvd &	NBR	113	19.3	В	174	37.9	D
38	Fernwood Dr	NBT	3	107.1	F	1	123.3	F
		NBL	40	103.8	F	48	106.8	F
		EBR	19	14.2	В	23	20.2	С
		EBT	1579	16.5	В	1637	19.1	В
		EBL	4		-	3		_
		EBU	0	123.7	F	0	139.2	F
		NB BRT	5	7.8	Α	5	16.9	В
		SB BRT	6	28.6	С	6	27.9	С
		SBR	172	29.7	С	234	50.9	D
		SBT	2546	43.4	D	2669	68.4	Е
		SBL	97	201.8	F	98	256.1	F
		WBR	93	73.1	E	105	76.1	Е
		WBT	121	142.2	F	111	129.2	F
		WBL	162	142.8	F	166	134.4	F
42	US 52/78/Rivers Ave &	NBR	221	6.6	Α	215	7.5	Α
42	Otranto Rd/Otranto Blvd	NBT	2927	26.7	С	2900	29.1	С
		NBL	141	64.5	Е	155	73.8	E
		EBR	162	23.7	С	172	85.7	F
		EBT	94	85.3	F	90	136.4	F
		EBL	195	137.5	F	231	249.5	F
		NB BRT	6	16.8	В	6	23.7	С
		SB BRT	6	23.8	С	6	16.9	В
		SBR	125	5.0	N/A	142	9.0	N/A
		SBT	2743	9.1	N/A	2874	33.7	N/A
		WBR	71	9.4	Α	79	10.0	В
43	US 52/78/Rivers Ave & T	NBR	66	4.1	N/A	74	5.1	N/A
43	Mobile Dr *	NBT	3215	7.3	N/A	3196	9.1	N/A
		EBR	160	14.1	В	157	25.1	D
		NB BRT	6	0.2	Α	5	0.1	Α
		SB BRT	6	1.9	Α	6	4.6	Α
		SBR	24	19.5	В	23	27.2	С
		SBT	2626	34.0	С	2759	46.3	D
		SBL	5	117.6	F	5	138.2	F
44	US 52/78/Rivers Ave &	SBU	173			195		
77	Melnick Dr	WBR	17	9.5	Α	19	8.9	Α
		WBT	0	0.0	Α	1	59.9	Е
		WBL	1	57.5	E	1	77.4	Е
		NBR	18	43.0	D	18	56.5	Е



Node	Internation Name	Marramant		st Hour	····)		nd Hour – 6:00 pr	
No.	Intersection Name	Movement	Volume	– 5:30 p Delay	LOS	Volume	Delay	LOS
		NBT	3053	53.5	D	3015	62.0	E
		NBL	96	33.3	D	113	02.0	
		NBU	111	198.2	F	106	228.1	F
		EBR	48	8.0	Α	78	8.8	Α
		EBT	0	0.0	A	1	43.8	D
		EBL	8	65.7	E	9	57.8	E
		NB BRT	6	37.2	D	5	43.1	D
		SB BRT	6	30.2	С	6	32.7	C
		SBR	205	16.0	В	239	17.1	В
		SBT	2725	37.5	D	2794	40.3	D
		WBR	39	104.4	F	44	126.6	F
		WBT	328	101.0	F	330	116.6	F
		WBL	56	101.2	F	44	110.3	F
46	US 52/78/Rivers Ave &	NBT	3282	15.0	В	3172	37.6	D
	Greenridge Rd	NBL	286	113.7	F	302	125.7	F
		EBR	474	25.2	С	560	28.0	С
		EBL	134	215.5	F	141	397.1	F
		NB BRT	6	6.2	Α	5	5.2	Α
		SB BRT	6	4.0	Α	6	5.4	Α
		SBR	209	2.9	Α	192	2.9	Α
		SBT	1204	3.4	Α	1387	3.6	Α
		SBL	137	102.7	F	125	100.1	F
		SBU	105	103.7	Г	94	108.1	Г
		WBR	38	768.3	F	35	1136.6	F
		WBT	28	366.0	F	21	591.6	F
	US 52/78/Rivers Ave &	WBL	77	236.1	F	67	367.2	F
49	North Rivers Market Place	NBR	79	2.8	Α	71	5.1	Α
	North Rivers Market Flace	NBT	2239	10.8	В	2254	23.5	С
		NBL	15	64.7	Е	14	74.3	Е
		EBR	58	21.3	С	77	18.7	В
		EBT	29	62.5	Е	22	60.0	Е
		EBL	201	127.6	F	188	113.3	F
		NB BRT	7	5.7	Α	6	3.4	Α
		SB BRT	6	5.8	A	6	6.0	Α
		SBR	148	3.4	A	121	3.4	A
		SBT	1120	7.0	A	1334	6.9	A
		SBL	71	89.6	F	74	95.9	F
		WBR	60	7.5	A	73	11.0	В
		WBT	69	54.6	D	74	57.3	E
		WBL	223	60.4	E	236	59.8	E
	US 52/78/Rivers Ave &	NBR	344	6.1	A	331	7.9	A
50	Eagle Landing Blvd	NBT	2186	20.2	С	2192	35.7	D
		NBL	34	83.2	F	39	86.5	F
		EBR	36	21.2	С	36	20.1	С
		EBT	70	76.4	Е	61	73.0	Е
		EBL	95	81.2	F	104	91.9	F
		NB BRT	7	27.3	С	6	29.4	С
		SB BRT	6	36.5	D	6	32.8	С



			16	st Hour	_	2r	nd Hour	
Node	Intersection Name	Movement		– 5:30 p	m)		– 6:00 pr	n)
No.	microcolon Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		SBR	60	18.9	В	71	22.2	C
		SBT	1147	25.3	С	1375	28.1	C
		SBL	159	131.8	F	141	141.5	F
		WBR	158	183.3	F	163	224.3	F
		WBT	38	221.7	F	37	271.1	F
		WBL	152	295.8	F	139	340.6	F
	US 52/78/Rivers Ave &	NBR	77	15.3	В	68	20.3	C
51	Northwoods Blvd	NBT	2272	26.6	С	2277	44.5	D
		NBL	149	58.4	E	140	61.8	Е
		EBR	126	6.2	A	161	8.6	A
		EBT	38	66.3	Е	42	65.9	Е
		EBL	137	87.8	F	152	113.3	F
		NB BRT	7	4.4	Α	6	5.6	Α
		SB BRT	5	6.6	Α	6	7.2	Α
		SBR	387	14.1	В	453	19.8	В
		SBT	881	40.2	D	1010	44.0	D
		SBL	123	55.5	Е	126	60.2	Е
		WBR	94	27.1	С	91	32.4	С
		WBT	269	41.4	D	254	38.8	D
		WBL	166	27.2	С	165	28.7	С
50	US 52/78/Rivers Ave &	NBR	196	33.7	С	203	50.9	D
52	Ashley Phosphate Rd	NBT	1960	50.9	D	2044	68.8	Е
		NBL	764	154.0	F	720	146.3	F
		EBR	470	12.2	В	572	27.4	С
		EBT	172	49.1	D	158	146.7	F
		EBL	447	128.8	F	446	289.9	F
		NB BRT	6	21.1	С	5	22.7	С
		SB BRT	6	18.0	В	6	21.0	С
		SBR	116	3.0	Α	98	3.6	Α
		SBT	1219	8.1	Α	1388	11.2	В
		SBL	144	50.2	D	153	53.8	D
		WBR	85	33.5	С	93	61.4	Е
		WBT	11	62.3	Ш	14	66.0	Ш
		WBL	91	69.1	Е	114	69.6	Е
	US 52/78/Rivers Ave &	NBR	139	9.0	Α	141	25.3	С
54	Morris Baker Blvd	NBT	2792	25.8	С	2699	56.9	Е
	MONTO BUILDING	NBL	55	64.8	Е	60	68.9	Е
		NBU	72			73		
		EBR	96	14.7	В	101	14.2	В
		EBT	14	47.0	D	9	48.4	D
		EBL	114	87.3	F	130	93.1	F
		NB BRT	5	9.6	Α	5	10.2	В
		SB BRT	6	6.6	Α	6	7.6	Α
		SBT	1249	5.3	Α	1380	7.9	Α
		SBL	186	44.0	D	198	57.8	Е
	US 52/78/Rivers Ave &	SBU	59			59		
56	Mabeline Rd	WBR	499	36.8	D	577	62.0	E
		NBR	32	51.1	D	55	62.3	E
		NBT	2506	50.2	D	2450	64.2	E
		NBU	250	71.5	Е	163	81.5	F



Node	Internation Name	Marramant		st Hour		2nd Hour (5:00 – 6:00 pm)		
No.	Intersection Name	Movement	Volume	– 5:30 p Delay	LOS	Volume	– 6:00 pr Delay	LOS
		NB BRT	6	33.9	C	6	33.1	C
		SB BRT	6	29.1	С	6	25.2	C
		SBT	1648	0.5	N/A	1610	1.2	N/A
		WBR	329	55.9	F	186	150.4	F
	US 52/78/Rivers Ave &	NBR	262	2.1	N/A	346	7.1	N/A
59	Stokes Ave *	NBT	2400	7.3	N/A	2444	27.2	N/A
	Glorido 7170	NB BRT	6	0.0	A	7	0.0	A
		SB BRT	6	0.1	A	6	0.1	A
		SBR	129	17.5	В	136	18.4	В
		SBT	1328	25.6	С	1263	27.9	C
		SBU	182	36.6	D	246	53.2	D
	US 52/78/Rivers Ave & Midland Park Rd	WBR	20	39.8	D	29	74.0	Е
		NBR	26	12.3	В	30	17.0	В
60		NBT	2398	21.5	С	2512	29.4	С
		NBL	409	00.0	-	392	04.4	1
		NBU	82	88.6	F	76	81.1	F
		EBR	474	35.9	D	462	39.6	D
		NB BRT	6	4.0	Α	7	4.7	Α
		SB BRT	6	2.7	Α	6	2.2	Α
		SBR	33	16.3	В	31	15.3	В
110 F2/70/Di		SBT	1559	21.3	C	1423	21.3	С
		SBU	268	62.9	Е	275	87.1	F
	US 52/78/Rivers Ave &	NBT	2647	22.2	С	2730	20.9	С
61	Eagle Dr	NBL	129	51.8	D	107	48.2	D
	Lagic Di	NBU	188			148		
		EBR	203	13.1	В	191	12.5	В
		NB BRT	6	1.4	Α	6	0.7	Α
		SB BRT	6	2.1	Α	6	2.5	Α
		SBT	1651	23.4	С	1515	21.1	С
		SBL	207	107.4	F	186	93.1	F
		SBU	90			83		
00	US 52/78/Rivers Ave &	WBR	512	66.4	E	421	39.2	D
62	Hanahan Rd	NBR	190	18.9	В	196	18.8	В
		NBT	2348 229	29.1 32.7	C	2507	27.8 32.7	C
		NBU NB BRT		27.1	C	186		C
		SB BRT	6	35.1	D	5 6	24.5 37.4	D
		SBR	39	7.9	A	45	7.7	A
		SBT	1807	7.7	A	1626	6.7	A
		SBL	5			3	0.7	
		SBU	92	62.9	Е	92	59.4	Е
		WBR	8	12.4	В	10	12.2	В
	US 52/78/Rivers Ave &	NBR	2	4.5	A	7	7.2	A
65	Benderson Dr							
	Donaerson Di	NBT	2512	5.1	Α	2662	5.3	Α
		NBL	76	40.0	D	66	39.7	D
		EBR	159	30.8	С	188	31.5	С
		NB BRT	7	3.5	Α	5	5.0	Α
		SB BRT	6	4.2	Α	6	2.9	Α
		OD DICT	J	7.2		J	2.3	



Node	Interesting Name	Massaurant		t Hour	>	2nd Hour (5:00 – 6:00 pm)			
No.	Intersection Name	Movement	Volume	– 5:30 p Delay	m) LOS	Volume	– 6:00 pr	n) LOS	
		SBR		16.2			_		
		SBT	814 1145	9.8	B A	749 1089	16.2 9.7	B A	
		WBR	18	11.8	В	15	13.1	В	
		NBR	34	7.2	A	38	5.5	A	
	LIC F2/79/Divore Ave 8	NBT	1967	13.2	В	2099	13.9	В	
67	US 52/78/Rivers Ave & Aviation Ave	NBL	226	65.5	E	215	65.1	E	
	Aviation Ave	EBR	142	11.6	В	138	11.7	В	
		EBL	578	59.2	E	604	58.5	E	
		NB BRT	6	4.7	A	5	4.4	A	
		SB BRT	6	6.0	A	6	5.5	A	
		SBT	1301	5.6	A	1199	5.9	A	
		SBL	4	3.0		1	5.5		
		SBU	79	37.6	D	102	40.7	D	
	US 52/78/Rivers Ave &	WBR	22	13.6	В	8	13.5	В	
671	US 52/78/Rivers Ave &	NBR	14	1.8	A	4	3.3	A	
North Charleston Center	North Charleston Center	NBT	2094	2.5	A	2276	4.5	A	
		NBU	241	42.2	D	290	43.5	D	
		NB BRT	6	3.7	A	5	3.8	A	
		SB BRT	6	6.3	A	6	7.5	A	
		SBR	477	28.7	C	463	26.4	C	
	SBT	1041	23.9	C	967	24.5	C		
		SBL	166	60.0	E	177	58.0	E	
LIS 52/78/Rivers Ave &	WBR	389	18.9	В	451	20.0	В		
		WBT	396	39.5	D	434	41.9	D	
	US 52/78/Rivers Ave &	NBR	218	6.5	A	244	7.5	A	
70	Remount Rd	NBT	1918	16.7	В	2023	18.7	В	
		NBL	318	69.0	Е	338	69.5	Е	
		EBR	539	27.9	С	563	29.1	С	
		EBT	448	38.4	D	462	42.7	D	
		NB BRT	6	32.1	С	5	32.7	С	
		SB BRT	6	17.1	В	6	18.9	В	
		SBR	48	7.4	Α	26	7.5	Α	
		SBT	1255	8.3	Α	1251	8.2	Α	
		SBU	399	44.1	D	376	45.1	D	
	110 50/70/D: A 0 N . (NBT	2137	21.4	С	2240	21.0	С	
72	US 52/78/Rivers Ave & N of	NBL	29	F2 F	2	30	F0.7	_	
	Sabal St	NBU	173	53.5	D	196	52.7	D	
		EBR	60	6.0	Α	67	6.4	Α	
		NB BRT	6	2.0	Α	5	2.0	Α	
		SB BRT	6	1.4	Α	6	2.7	Α	
		SBR	5	10.9	В	7	9.3	Α	
		SBT	1339	15.3	В	1345	17.6	В	
		SBL	43	66.8	Е	45	69.3	Е	
		SBU	119	00.0		113	09.3	_ E	
76	US 52/78/Rivers Ave &	WBR	209	11.9	В	259	17.1	В	
10	Harley St	NBR	14	8.2	Α	14	10.0	В	
		NBT	1948	10.0	В	2195	11.8	В	
		NBL	3	50.7	D	3	54.3	D	
		NBU	246	50.7	U	262	04.0	U	
		EBR	12	6.4	Α	16	6.6	Α	



Node	Intersection Name	1st Hour Movement (4:30 – 5:30 pm)				2nd Hour) (5:00 – 6:00 pm)				
No.	microcolon Name	Movement	Volume	Delay	Los	Volume	Delay	LOS		
		NB BRT	5	1.7	A	5	2.1	A		
		SB BRT	6	19.7	В	6	19.1	В		
		SBR	371	0.9	Α	373	1.0	Α		
		SBT	1268	5.5	Α	1257	5.7	Α		
		WBR	199	0.4	Α	413	3.2	Α		
70	US 52/78/Rivers Ave & I-	NBT	2241	1.1	Α	2246	4.3	Α		
78	526 WB Ramps	NBL	215	30.2	С	250	30.3	С		
		EBR	47	0.0	Α	67	0.0	Α		
		NB BRT	5	0.2	Α	5	0.9	Α		
		SB BRT	6	2.4	Α	6	1.9	Α		
	SBT	944	0.3	Α	949	0.3	Α			
	79 US 52/78/Rivers Ave & I- 526 EB Ramps	SBL	362	33.4	С	368	34.5	С		
		WBR	436	0.1	Α	520	1.7	Α		
70		NBR	180	0.8	Α	165	0.7	Α		
13		NBT	2017	11.0	В	2000	11.6	В		
	EBR	242	0.4	Α	233	0.3	Α			
		NB BRT	5	1.2	Α	6	1.5	Α		
		SB BRT	6	0.2	Α	6	0.1	Α		
		SBR	134	23.0	С	146	25.0	С		
US 52/78/Rivers Ave & Mall	SBT	787	23.5	С	763	24.3	С			
	SBU	286	115.4	F	286	116.0	F			
		WBR	0	0.0	Α	0	0.0	Α		
		NBR	0	0.0	Α	0	0.0	Α		
		NBT	1650	26.5	С	1651	26.3	С		
	Drive	NBL	55	61.3	Е	66	61.0	Е		
		NBU	27			24				
		EBR	41	166.1	F	40	182.1	F		
		EBL	226	272.3	F	228	298.9	F		
		NB BRT	5	30.3	С	6	34.1	С		
		SB BRT	6	28.5	C	6 7	28.3	C		
		SBR	10	1.0	N/A		1.2	N/A		
		SBT WBR	893 209	11.7	N/A B	839 235	0.9 13.2	N/A B		
	LIC 52/79/Divore Ave 9	NBR	159	2.7	N/A	159	2.1	N/A		
83	US 52/78/Rivers Ave & Alton *	NBT	1589	1.9	N/A	1555	1.7	N/A N/A		
	AROH	EBR	41	7.2	A A	24	7.1	A A		
		NB BRT	5	0.1	A	6	0.0	A		
		SB BRT	5	1.1	A	6	1.1	A		
		SBT	724	2.1	A	674	1.8	A		
		SBL	104			105				
		SBU	104	71.9	Е	87	66.8	Е		
		WBR	78	12.3	В	94	11.4	В		
		WBL	132	70.9	Е	145	74.8	E		
84	US 52/78/Rivers Ave &	NBR	87	8.9	A	95	8.2	A		
	Morningside Dr	NBT	1547	18.8	В	1538	18.0	В		
		NBU	5	81.9	F	1	104.7	F		
		NB BRT	5	3.3	A	6	1.2	A		
		SB BRT	5	1.6	A	6	2.2	A		
		OD DK I	ິວ	1.0	A	U	2.2	A		



			1st Hour			2nd Hour		
Node	Intersection Name	Movement		– 5:30 p	m)	(5:00 – 6:00 pm)		
No.	microcollon Hame	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		SBR	43	1.3	A	57	1.7	A
		SBT	777	4.5	Α	726	4.9	Α
		SBU	93	46.0	D	104	44.6	D
		NBT	1506	7.4	Α	1526	7.4	Α
87	US 52/78/Rivers Ave &	NBL	26	52.4	D	33	57.2	Е
	Piggly Wiggly Dr	EBR	44	3.5	Α	52	3.1	Α
		EBL	95	49.4	D	107	50.3	D
		NB BRT	5	0.1	Α	6	0.0	Α
		SB BRT	5	1.0	Α	6	1.7	Α
		SBR	210	23.3	С	239	38.0	D
		SBT	68	68.5	Е	74	113.0	F
	SBL	112	133.6	F	117	190.3	F	
	WBR	189	1.4	Α	190	1.6	Α	
	WBT	1043	3.6	Α	1019	3.9	Α	
		WBL	8	40.5	٥	10	44.0	7
	US 52/78/Rivers Ave &	WBU	28	43.5	D	30	44.6	D
1 99 1		NBR	17	80.4	F	17	80.3	F
	Meeting St/Durant Ave	NBT	168	72.3	Е	203	73.5	Ε
	-	NBL	280	77.7	Е	299	84.6	F
		EBR	168	43.7	D	143	43.2	D
		EBT	495	47.6	D	438	52.5	D
		EBL	153	04.0	ı	193	000	1
		EBU	0	84.2	F	0	86.2	F
		NB BRT	7	23.5	С	7	26.1	С
		SB BRT	6	23.5	С	6	27.7	С
		SBR	2	7.9	Α	5	6.0	Α
		SBT	640	7.3	Α	627	7.7	Α
		SBL	21	12.1	2	31	40.2	٦
		SBU	22	43.1	D	27	40.3	D
		WBR	45	18.8	В	47	20.9	С
		WBT	9	42.3	D	13	39.9	D
		WBL	51	39.2	D	56	37.5	D
01	US 52/78/Rivers Ave &	NBR	63	11.5	В	66	12.0	В
91	Helm Ave	NBT	1277	12.0	В	1216	12.6	В
		NBL	7	43.5	D	10	41.7	D
		NBU	1	43.3	D	2	41./	U
		EBR	8	9.9	Α	8	11.4	В
		EBT	14	30.2	C	16	35.5	D
		EBL	3	34.0	O	4	39.1	D
		NB BRT	5	2.4	Α	5	3.5	А
		SB BRT	6	0.2	Α	6	1.5	А
		SBR	280	103.4	F	286	126.2	F
		SBT	120	113.1	F	126	134.5	F
		SBL	173	86.9	F	169	104.6	F
	US 52/78/Rivers Ave &	WBR	243	6.0	Α	294	6.0	Α
92	McMillan Ave	WBT	1035	7.4	Α	979	7.0	Α
	IVICIVIIIIAII AVE	WBL	32	48.0	D	26	45.5	D
		WBU	0			0	40.0	U
		NBR	15	13.5	В	26	14.5	В
		NBT	57	28.0	С	55	25.9	С



No. No. No. 27 38.1 D 25 34.2 C 25 25 25 25 25 25 25	Node	Intersection Name	Movement		st Hour	m)	2nd Hour (5:00 – 6:00 pm)				
NBL 27 38.1 D 25 34.2 C EBR 52 5.3 A 57 5.2 A EBR 522 7.7 A 515 8.1 A EBU 0 142.7 F 122 153.9 F WBL 199 8.9 A 1084 9.9 A WBL 199 45.6 D 144 46.6 D WBL 199 45.6 D 144 46.6 D WBL 199 45.6 D 144 46.6 D WBL 177 42.8 D 218 42.4 L EBR 102 18.6 B 146 21.8 D SBR 97 65.2 E 82 56.9 E SBR 97 65.2 E 82 56.9 E SBR 58 100.3 F 71 98.3 F WBL 265 236.7 F 261 246.2 F WBR 353 33.0 C 319 30.0 G EBR 352 349 139.0 F SBR 42 82.2 F 40 116.7 F SBR 98 87.9 F 136 138.0 F SBR 42 82.2 F 40 116.7 F SBR 366 34.6 C 99 49.1 T WBR 565 90.8 F 72 114.0 F WBL 65 90.8 F 72 114.0 F WBL 65 90.8 F 72 114.0 F WBL	No.	intersection Name	Movement						LOS		
BBR 52 5.3 A 57 5.2 F EBT 522 7.7 A 515 8.1 F EBL 123 FBU 0 142.7 F 122 153.9 F BBRT 5 3.6 A 5 5.1 F BBRT 5 3.6 A 5 5.1 F BBRT 5 3.6 A 5 5.1 F BBRT 6 4.0 A 6 3.0 F WBT 1129 8.9 A 1084 9.9 F WBL 199 45.6 D 198 46.6 D WBL 199 45.6 D 198 46.6 D WBL 177 42.8 D 218 42.4 F BBR 102 18.6 B 146 21.8 F BBRT 6 26.5 C 6 26.6 C SB BRT 6 26.5 C 6 26.6 C SB BRT 6 25.4 C 6 24.9 C SBR 97 65.2 E 82 56.9 F SBR 500 64.3 E 498 61.2 E SBR 58 100.3 F 71 98.3 F WBR 98 87.9 C 104 32.0 F BBR 36 100.3 F 71 98.3 F WBR 98 87.9 C 104 32.0 F BBR 36 100.3 F 71 98.3 F WBR 58 100.3 F 71 98.3 F BBRT 6 26.5 C 6 26.6 C SBR 58 SBR 56 C 50 C 6 26.6 C SBR 58 SBR 56 C 50 C 6 26.6 C SBR 58 SBR 56 C 50 C 6 26.6 C SBR 58 SBR 56 C 50 C 6 26.6 C SBR 58 SBR 58 100.3 F 71 98.3 F SBR 6 10.4 S 2.9 F SBR 50 C 508 35.9 F SBR 6 10.4 S 2.9 F SBR 58 100.5 S 2.9 F SBR 6 10.4 S 2.9 F SBR 7 100.5 S 2.9 F SBR 7 100.5 S 2.9 F SBR 100.5 S 2.9 F SB			NRI			_			C		
BBT 522 7.7 A 515 8.1 / EBL 123						_			A		
BBL 123 142.7 F 122 153.9 F 18U 0 153.9 F 18U 0 18BRT 5 3.6 A 5 5.1 A 6 3.0 A 7 8 8 8 8 8 8 9 A 1084 9.9 A 10									A		
BBU 0 142.7 F 0 153.9 F NB BRT 5 3.6 A 5 5.1 A 6 3.0 A 8 BRT 6 103 17.0 B 97 14.3 E 8 BRT 103 17.0 E 8 E 8 146 21.8 C 18 E 8 BRT 103 17.0 E 8 E 8 2 56.9 E 8 2 5					7.7	A		0.1	A		
NB BRT 5 3.6					142.7	F		153.9	F		
93 US 52/78/Rivers Ave & SC 642/Dorchester Rd US 52/78/Rivers Ave & SC 652/Dorchester Rd US 52/78/Rivers Ave & SE 72/Dorchester Rd US 52/78/Rivers Ave & Revnolds Ave NBT 75/Dorchester Rd US 52/78/Rivers Ave & NBR 24 476, D 466 56.3				_	3.6	Δ		5.1	Α		
93 US 52/78/Rivers Ave & SC 642/Dorchester Rd WBT 1129 8.9 A 1084 9.9 MBL 199 WBU 8 45.6 D 144 46.6 E 188 WBL 177 42.8 D 218 42.4 E 188 WBL 188									A		
93 US 52/78/Rivers Ave & SC 642/Dorchester Rd WBL 8 45.6 D 198 46.6 C 642/Dorchester Rd WBL 8 45.6 D 144 46.6 C 642/Dorchester Rd NBR 103 17.0 B 97 14.3 E 642/Dorchester Rd NBR 103 17.0 B 97 14.3 E 7 14.3 E									A		
93 US 52/78/Rivers Ave & SC 642/Dorchester Rd WBU					0.5			5.5			
93 US 52/78/Rivers Ave & SC 642/Dorchester Rd NBR					45.6	D		46.6	D		
93					17.0	R		1// 3	В		
BBR 102 18.6 B 146 21.8 C EBT 606 18.1 B 558 19.6 EBT 6 26.5 C 6 26.6 C SB BRT 6 25.4 C 6 24.9 C SBR 97 65.2 E 82 56.9 E SBT 500 64.3 E 498 61.2 E SBL 25 59.6 E 22 53.3 EWBR 58 100.3 F 71 98.3 EWBT 913 79.0 E 868 84.9 EWBL 265 236.7 F 261 246.2 F WBL 265 236.7 F 261 246.2 F WBL 265 236.7 F 261 246.2 F WBL 326 70.3 E 349 139.0 EWBT 320 29.9 C 316 29.6 C SBW 35.9 EWBT 320 29.9 C 316 29.6 C SWBR SBWT 6 6.3 A 6 5.1 A SWBWT 6 6.3 A 6 5.1 A SWBWT 6 6.3 A 6 5.1 A SWBWT 6 6 6.3 A 6 5.1 A SWBWT 1036 66.8 E 962 97.4 EWBT 1036 EWBT 1036 66.8 E 962 97.4 EWBT 1036 EWBT 1036 EWBT 103	03	US 52/78/Rivers Ave & SC							D		
BBT 606 18.1 B 558 19.6 B NB BRT 6 26.5 C 6 26.6 C SB BRT 6 25.4 C 6 24.9 C SBR 97 65.2 E 82 56.9 B SBT 500 64.3 E 498 61.2 E SBL 25 59.6 E 22 53.3 E WBR 58 100.3 F 71 98.3 E WBR 58 100.3 F 71 98.3 E WBT 913 79.0 E 868 84.9 E WBL 265 236.7 F 261 246.2 E NBR 85 22.9 C 104 32.0 C NBT 467 28.6 C 508 35.9 E NBT 467 28.6 C 508 35.9 E NBT 320 29.9 C 316 29.6 C EBL 46 71.7 E 34 65.2 E SB BRT 6 12.9 B 6 10.4 E SB BRT 6 12.9 B 6 10.4 E SB BRT 6 12.9 B 6 10.4 E SBR 98 87.9 F 136 138.0 E SBR 98 87.9 F 136 138.0 E SBR 98 87.9 F 136 138.0 E SBL 18 105.9 F 20 110.1 E WBR 96 34.6 C 99 49.1 E WBR 96 34.6	33	642/Dorchester Rd							C		
NB BRT 6 26.5 C 6 26.6 C									В		
SB BRT 6 25.4 C 6 24.9 C SBR 97 65.2 E 82 56.9 E SBT 500 64.3 E 498 61.2 E SBL 25 59.6 E 22 53.3 E WBR 58 100.3 F 71 98.3 E WBT 913 79.0 E 868 84.9 E WBL 265 236.7 F 261 246.2 E NBR 85 22.9 C 104 32.0 C NBT 467 28.6 C 508 35.9 E NBL 326 70.3 E 349 139.0 E EBR 353 33.0 C 319 30.0 C EBR 353 33.0 C 319 30.0 C EBR 353 33.0 C 319 30.0 C SBRT 6 6.3 A 6 5.1 F SB BRT 6 6.3 A 6 5.1 F SB BRT 6 12.9 B 6 10.4 E SBR 98 87.9 F 136 138.0 E SBR 98 87.9 F 136 138.0 E SBR 98 87.9 F 20 110.1 E WBR 96 34.6 C 99 49.1 E									С		
SBR 97 65.2 E 82 56.9 E SBT 500 64.3 E 498 61.2 E SBL 25 59.6 E 22 53.3 E WBR 58 100.3 F 71 98.3 E WBT 913 79.0 E 868 84.9 E WBL 265 236.7 F 261 246.2 E NBR 85 22.9 C 104 32.0 C NBT 467 28.6 C 508 35.9 E NBL 326 70.3 E 349 139.0 E BBR 353 33.0 C 319 30.0 E BBR 353 33.0 C 319 30.0 E BBR 353 33.0 C 319 30.0 E BBL 46 71.7 E 34 65.2 E NB BRT 6 6.3 A 6 5.1 MB BRT 6 6.3 A 6 5.1 MB BRT 6 12.9 B 6 10.4 E SBR 98 87.9 F 136 138.0 E SBR 98 87.9 E SBR 98 8									C		
SBT 500 64.3 E 498 61.2 E SBL 25 59.6 E 22 53.3 E WBR 58 100.3 F 71 98.3 F WBT 913 79.0 E 868 84.9 F WBL 265 236.7 F 261 246.2 F NBR 85 22.9 C 104 32.0 C NBT 467 28.6 C 508 35.9 F NBL 326 70.3 E 349 139.0 E BR 353 33.0 C 319 30.0 E BR 353 BRT 6 6.3 A 6 5.1 F SB BRT 6 6.3 A 6 5.1 F SB BRT 6 12.9 B 6 10.4 E SBR 98 87.9 F 136 138.0 F SBR 98 87.9 F SBR 98 87.9 F SBR 98 87.9 F SBR 98 87.9 F SBR 98 87.0 F SBR 98 8									E		
SBL 25 59.6 E 22 53.3 E WBR 58 100.3 F 71 98.3 F WBT 913 79.0 E 868 84.9 F WBL 265 236.7 F 261 246.2 F NBR 85 22.9 C 104 32.0 C NBT 467 28.6 C 508 35.9 F NBL 326 70.3 E 349 139.0 F EBL 46 71.7 E 34 65.2 F NB BRT 6 6.3 A 6 5.1 F SB BRT 6 12.9 B 6 10.4 F SB BRT 42 82.2 F 40 116.7 F SBL 18 105.9 F 20 110.1 F SBL 18 105.9 F 20 110.1 F WBR 96 34.6 C 99 49.1 F WBT 1036 66.8 E 962 97.4 F WBL 65 90.8 F 72 114.0 F NBR 24 47.6 D 46 56.3 F Reynolds Ave									Ē		
SER									D		
94 US 52/78/Rivers Ave & Cosgrove Ave WBT 913 79.0 E 868 84.9 F WBL 265 236.7 F 261 246.2 F NBR 85 22.9 C 104 32.0 G NBT 467 28.6 C 508 35.9 E NBL 326 70.3 E 349 139.0 F EBR 353 33.0 C 319 30.0 G EBT 320 29.9 C 316 29.6 G EBL 46 71.7 E 34 65.2 E MB BRT 6 6.3 A 6 5.1 MB BRT 6 12.9 B 6 10.4 E SBR 98 87.9 F 136 138.0 F SBL 18 105.9 F 20 110.1 F SBL 18 105.9 F 20 110.1 F WBR 96 34.6 C 99 49.1 E WBT 1036 66.8 E 962 97.4 F WBL 65 90.8 F 72 114.0 F WBL 65 90.8 F 72 114.0 F T T T T T T T T T	I GA I							F			
Section Sect									F		
SER									F		
NBT 467 28.6 C 508 35.9 E NBL 326 70.3 E 349 139.0 F EBR 353 33.0 C 319 30.0 C EBT 320 29.9 C 316 29.6 C EBL 46 71.7 E 34 65.2 E NB BRT 6 6.3 A 6 5.1 7 SB BRT 6 12.9 B 6 10.4 E SBR 98 87.9 F 136 138.0 F SBL 18 105.9 F 20 110.1 F SBL 18 105.9 F 20 110.1 F WBR 96 34.6 C 99 49.1 E WBT 1036 66.8 E 962 97.4 F WBL 65 90.8 F 72 114.0 F WBL 75 66.1 E 72 68.5 F		LIS 52/78/Pivors Ava &							С		
NBL 326 70.3 E 349 139.0 F EBR 353 33.0 C 319 30.0 C EBT 320 29.9 C 316 29.6 C EBL 46 71.7 E 34 65.2 E NB BRT 6 6.3 A 6 5.1 A SB BRT 6 12.9 B 6 10.4 E SBR 98 87.9 F 136 138.0 F SBL 18 105.9 F 20 110.1 F WBR 96 34.6 C 99 49.1 E WBT 1036 66.8 E 962 97.4 F WBL 65 90.8 F 72 114.0 F WBL 65 90.8 F									D		
EBR 353 33.0 C 319 30.0 C EBT 320 29.9 C 316 29.6 C EBL 46 71.7 E 34 65.2 E NB BRT 6 6.3 A 6 5.1 A SB BRT 6 12.9 B 6 10.4 E SBR 98 87.9 F 136 138.0 F SBT 42 82.2 F 40 116.7 F SBL 18 105.9 F 20 110.1 F WBR 96 34.6 C 99 49.1 E WBT 1036 66.8 E 962 97.4 F WBL 65 90.8 F 72 114.0 F WBL 75		Cosgrove Ave							F		
EBT 320 29.9 C 316 29.6 C EBL 46 71.7 E 34 65.2 E 34 65.									С		
BBL 46 71.7 E 34 65.2 E NB BRT 6 6.3 A 6 5.1 MB BRT 6 12.9 B 6 10.4 E SBR 98 87.9 F 136 138.0 F SBL 18 105.9 F 20 110.1 F WBR 96 34.6 C 99 49.1 WBT 1036 66.8 E 962 97.4 F WBL 65 90.8 F 72 114.0 F WBL 65 90.8 F 72 114.0 F Reynolds Ave NBT 75 66.1 E 72 68.5									C		
NB BRT 6 6.3 A 6 5.1 A									E		
SB BRT 6 12.9 B 6 10.4 E SBR 98 87.9 F 136 138.0 F SBT 42 82.2 F 40 116.7 F SBL 18 105.9 F 20 110.1 F WBR 96 34.6 C 99 49.1 WBT 1036 66.8 E 962 97.4 F WBL 65 90.8 F 72 114.0 F WBL 65 90.8 F 72 114.0 F Reynolds Ave NBR 24 47.6 D 46 56.3 E Reynolds Ave NBT 75 66.1 E 72 68.5									A		
SBR 98 87.9 F 136 138.0 F SBT 42 82.2 F 40 116.7 F SBL 18 105.9 F 20 110.1 F WBR 96 34.6 C 99 49.1 E WBT 1036 66.8 E 962 97.4 F WBL 65 90.8 F 72 114.0 F WBL 65 90.8 F 72 114.0 F Reynolds Ave NBT 75 66.1 E 72 68.5									В		
SBT 42 82.2 F 40 116.7 F SBL 18 105.9 F 20 110.1 F WBR 96 34.6 C 99 49.1 E WBT 1036 66.8 E 962 97.4 F WBL 65 90.8 F 72 114.0 F WBL 65 90.8 F 72 114.0 F Reynolds Ave NBR 24 47.6 D 46 56.3 E Reynolds Ave NBT 75 66.1 E 72 68.5									F		
SBL 18 105.9 F 20 110.1 F WBR 96 34.6 C 99 49.1 E WBT 1036 66.8 E 962 97.4 F WBL 65 90.8 F 72 114.0 F WBL 65 90.8 F 72 114.0 F Reynolds Ave NBT 75 66.1 E 72 68.5									F		
WBR 96 34.6 C 99 49.1 E WBT 1036 66.8 E 962 97.4 F WBL 65 90.8 F 72 114.0 F WBL 65 90.8 F 72 114.0 F WBL 84 47.6 D 46 56.3 F Reynolds Ave NBT 75 66.1 E 72 68.5									F		
WBT 1036 66.8 E 962 97.4 F WBL 65 90.8 F 72 114.0 F WBL 0552/78/Rivers Ave & NBR 24 47.6 D 46 56.3 F Reynolds Ave NBT 75 66.1 E 72 68.5									D		
WBL 65 90.8 F 72 114.0 F US 52/78/Rivers Ave & Reynolds Ave NBR 24 47.6 D 46 56.3 E NBT 75 66.1 E 72 68.5 E									F		
95 US 52/78/Rivers Ave & NBR 24 47.6 D 46 56.3 Reynolds Ave NBT 75 66.1 E 72 68.5									F		
95 Reynolds Ave NBT 75 66.1 E 72 68.5		US 52/78/Rivers Ave &									
110 101 12 12	95								F		
NBL 39 88.7 F 39 94.0 F									F		
									В		
									C		
									F		
									E		
SB BRT 6 21.3 C 6 22.2 C									C		
									A		
									A		
NRT 530 5.2 A 758 7.4		.,, _, _, _, _, _							A		
16/1 Kind St Evi & Horiot St	164	King St Ext & Heriot St							В		
									C		
									D		



No. NB BRT 6 4.9	Node	Internal Control	Management		t Hour	>	2nd Hour (5:00 – 6:00 pm)			
NB BRT 6	No.	Intersection Name	Movement							
SB BRT 6 3.5			ND DDT							
SBR										
SBT 370 24.4 C 364 22.6 C SBL 119 61.0 E 1111 85.9 E WBR 219 7.8 A 329 11.6 WBT 701 18.4 B 648 23.6 C WBL 89 31.7 C 94 43.1 D WBL 89 31.7 C 94 43.1 D WBL 147 49.1 D 151 49.6 D WBL 147 49.1 D 151 49.6 D EBR 130 14.4 B 156 16.7 B EBL 8 36.2 D 28 50.7 D SBR 234 18.0 B 271 62.9 E SBT 273 31.8 C 291 36.7 D SBL 146 61.6 E 168 67.0 E SBL 146 61.6 E 148 147 14										
SBL										
NBR										
WBT Reserve WBT WBL Reserve Reserve WBL Reserve WBL Reserve										
NB										
NBR										
NBR	166	King St & Mt Pleasant St								
NBL 147 49.1 D 151 49.6 D EBR 130 14.4 B 156 16.7 B EBT 393 21.8 C 483 26.5 C EBL 8 36.2 D 28 50.7 D SBR 234 18.0 B 271 62.9 E SBT 273 31.8 C 291 36.7 D SBL 146 61.6 E 168 67.0 E WBR 546 46.8 D 476 68.3 E WBT 691 71.8 E 663 104.8 E WBL 59 79.2 E 75 123.3 F NBR 43 3.3 A 56 5.3 A Morrison Dr NBL 92 49.9 D 143 84.1 F EBR 127 18.9 B 107 18.7 B EBR 67 36.1 D 66 33.9 C NB BRT 6 3.5 A 6 5.8 A SB BRT 6 21.8 C 6 45.5 D SBR 55 5.3 A 60 6.1 A SBR 55 5.3 A 60 6.1 A SBR 55 5.3 A 561 9.0 A SBL 20 14.9 B 24 15.4 B WBR 55 15.2 B 59 16.7 B WBR 55 15.2 B 59 16.7 B WBR 55 15.2 B 59 16.7 B		o o								
BBR										
BBT 393 21.8 C 483 26.5 C EBL										
BBL 8 36.2 D 28 50.7 D										
SBR										
SBT 273 31.8 C 291 36.7 D SBL										
SBL										
NBR S46 46.8 D 476 68.3 E										
WBT 691 71.8 E 663 104.8 F WBL 59 79.2 E 75 123.3 F NBR 43 3.3 A 56 5.3 A NBT 406 26.8 C 314 28.2 C NBL 92 49.9 D 143 84.1 F EBR 127 18.9 B 107 18.7 B EBL 67 36.1 D 66 33.9 C NB BRT 6 3.5 A 6 5.8 A SB BRT 6 21.8 C 6 45.5 D SBR 55 5.3 A 60 6.1 A SBT 537 8.5 A 561 9.0 A SBL 20 14.9 B 24 15.4 B WBR 55 15.2 B 59 16.7 B WBT 131 25.5 C 147 27.7 C									Е	
NBL S9 79.2 E 75 123.3 F									Е	
NBR 43 3.3 A 56 5.3 A NBT 406 26.8 C 314 28.2 C NBL 92 49.9 D 143 84.1 FEBR 127 18.9 B 107 18.7 EBT 358 11.5 B 455 9.8 EBL 67 36.1 D 66 33.9 C NB BRT 6 3.5 A 6 5.8 A SB BRT 6 21.8 C 6 45.5 D SBR 55 5.3 A 60 6.1 A SBT 537 8.5 A 561 9.0 A SBL 20 14.9 B 24 15.4 B WBR 55 15.2 B 59 16.7 B WBT 131 25.5 C 147 27.7 C									F	
NBT 406 26.8 C 314 28.2 C NBL 92 49.9 D 143 84.1 EBR 127 18.9 B 107 18.7 B EBT 358 11.5 B 455 9.8 A EBL 67 36.1 D 66 33.9 C NB BRT 6 3.5 A 6 5.8 A SB BRT 6 21.8 C 6 45.5 D SBR 55 5.3 A 60 6.1 A SBT 537 8.5 A 561 9.0 A SBL 20 14.9 B 24 15.4 B WBR 55 15.2 B 59 16.7 B WBT 131 25.5 C 147 27.7 C									F	
NBT 406 26.8 C 314 28.2 C NBL 92 49.9 D 143 84.1 E EBR 127 18.9 B 107 18.7 B EBT 358 11.5 B 455 9.8 A EBL 67 36.1 D 66 33.9 C NB BRT 6 3.5 A 6 5.8 A SB BRT 6 21.8 C 6 45.5 D SBR 55 5.3 A 60 6.1 A SBT 537 8.5 A 561 9.0 A SBL 20 14.9 B 24 15.4 B WBR 55 15.2 B 59 16.7 B WBT 131 25.5 C 147 27.7 C									Α	
EBR 127 18.9 B 107 18.7 B EBT 358 11.5 B 455 9.8 A EBL 67 36.1 D 66 33.9 C NB BRT 6 3.5 A 6 5.8 A SB BRT 6 21.8 C 6 45.5 D SBR 55 5.3 A 60 6.1 A SBT 537 8.5 A 561 9.0 A SBL 20 14.9 B 24 15.4 B WBR 55 15.2 B 59 16.7 B WBT 131 25.5 C 147 27.7 C					26.8		314	28.2	С	
EBT 358 11.5 B 455 9.8 A EBL 67 36.1 D 66 33.9 C NB BRT 6 3.5 A 6 5.8 A SB BRT 6 21.8 C 6 45.5 D SBR 55 5.3 A 60 6.1 A SBT 537 8.5 A 561 9.0 A SBL 20 14.9 B 24 15.4 B WBR 55 15.2 B 59 16.7 B WBT 131 25.5 C 147 27.7 C									F	
EBL 67 36.1 D 66 33.9 CON NB BRT 6 3.5 A 6 5.8 A SB BRT 6 21.8 C 6 45.5 D SBR 55 5.3 A 60 6.1 A SBT 537 8.5 A 561 9.0 A SBL 20 14.9 B 24 15.4 B WBR 55 15.2 B 59 16.7 B WBT 131 25.5 C 147 27.7 C			EBR	127	18.9		107	18.7	В	
NB BRT 6 3.5 A 6 5.8 A SB BRT 6 21.8 C 6 45.5 D SBR 55 5.3 A 60 6.1 A SBT 537 8.5 A 561 9.0 A SBL 20 14.9 B 24 15.4 B WBR 55 15.2 B 59 16.7 B WBT 131 25.5 C 147 27.7 C						В			Α	
SB BRT 6 21.8 C 6 45.5 D SBR 55 5.3 A 60 6.1 A SBT 537 8.5 A 561 9.0 A SBL 20 14.9 B 24 15.4 B WBR 55 15.2 B 59 16.7 B WBT 131 25.5 C 147 27.7 C									С	
SBR 55 5.3 A 60 6.1 A SBT 537 8.5 A 561 9.0 A SBL 20 14.9 B 24 15.4 B WBR 55 15.2 B 59 16.7 B WBT 131 25.5 C 147 27.7 C								5.8	Α	
SBT 537 8.5 A 561 9.0 A SBL 20 14.9 B 24 15.4 B WBR 55 15.2 B 59 16.7 B WBT 131 25.5 C 147 27.7 C			SB BRT	6	21.8	С	6	45.5	D	
SBL 20 14.9 B 24 15.4 B WBR 55 15.2 B 59 16.7 B WBT 131 25.5 C 147 27.7 C			SBR	55	5.3	Α	60	6.1	Α	
WBR 55 15.2 B 59 16.7 B WBT 131 25.5 C 147 27.7 C				537	8.5	Α	561	9.0	Α	
WBT 131 25.5 C 147 27.7 C			SBL	20	14.9	В	24	15.4	В	
			WBR	55	15.2	В	59	16.7	В	
MDI 50 000 0 01 070			WBT	131	25.5		147	27.7	С	
			WBL	59	26.6	С	64	27.2	С	
113 Meeting St & Pompey St	112	Meeting St & Pompey St		35	5.4	Α	35	10.3	В	
NB1 405 24.8 C 423 30.0 C	113	l weeting St & Ronniey St	NBT	405	24.8		423	30.0	С	
NBL 173 31.7 C 216 46.2 D			NBL	173	31.7	С	216	46.2	D	
EBR 149 13.5 B 130 15.9 B			EBR	149	13.5	В	130	15.9	В	
EBT 60 28.1 C 55 31.0 C			EBT	60	28.1	С	55	31.0	С	
EBL 106 44.6 D 113 50.0 D			EBL	106	44.6	D	113	50.0	D	
NB BRT 6 16.8 B 6 18.3 B			NB BRT	6	16.8	В	6	18.3	В	
SB BRT 6 1.2 A 6 1.4 A			SB BRT	6	1.2	Α	6	1.4	Α	
			SBR	40	6.6		49	5.6	Α	
			SBT	341	14.6		382	14.2	В	
									В	
Mosting St 8 LIS 17 Off WRP 246 35 3 D 300 45 8 D	447	Meeting St & US 17 Off-							D	
11/ - *	117								D	
									D	
									С	
									С	



			16	st Hour		2nd Hour				
Node	Intersection Name	Movement		– 5:30 p	m)	(5:00 – 6:00 pm)				
No.	microcollon Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS		
		NB BRT	6	15.8	В	6	17.4	В		
		SB BRT	6	2.4	A	5	4.1	A		
		SBR	192	13.9	В	207	15.5	В		
		SBT	355	19.3	В	414	20.7	С		
		SBL	23	45.4	D	30	41.4	D		
		WBR	251	79.8	Е	243	101.3	F		
		WBT	142	97.0	F	169	108.4	F		
		WBL	18	88.4	F	40	94.3	F		
440	Meeting St & Huger St	NBR	30	71.4	Е	31	59.8	Е		
119		NBT	1012	53.5	D	982	51.6	D		
		NBL	81	42.4	D	131	54.4	D		
		EBR	30	12.6	В	41	13.8	В		
		EBT	94	23.2	С	105	25.7	С		
		EBL	291	30.3	С	311	34.2	С		
		NB BRT	6	24.2	С	6	24.5	С		
		SB BRT	5	9.1	Α	5	1.8	Α		
		SBT	404	0.6	Α	487	0.9	Α		
		WBR	28	14.5	В	33	14.2	В		
120	Meeting St & Johnson St	NBR	11	2.4	Α	10	3.0	Α		
120	Meeting St & Johnson St	NBT	1097	2.9	Α	1141	5.9	Α		
		NB BRT	6	3.7	Α	6	4.2	Α		
		SB BRT	5	0.5	Α	5	0.6	Α		
		SBR	19	6.2	Α	11	5.8	Α		
		SBT	366	9.2	Α	453	10.0	В		
	Meeting St & Lee St	SBL	18	18.5	В	20	26.3	С		
		WBR	96	8.0	Α	100	7.9	Α		
		WBT	12	19.8	В	8	18.6	В		
		WBL	17	23.5	С	21	20.8	С		
121		NBR	73	5.2	Α	51	4.5	Α		
121		NBT	975	5.8	Α	1028	5.6	Α		
		NBL	15	4.7	Α	8	6.6	Α		
		EBR	17	5.5	Α	13	5.9	Α		
		EBT	4	19.6	В	2	23.6	С		
		EBL	37	23.0	С	49	22.4	С		
		NB BRT	6	6.1	Α	6	5.0	Α		
		SB BRT	5	1.6	Α	6	2.6	Α		
		SBT	399	3.2	Α	488	3.3	Α		
		NBT	996	4.4	Α	976	4.3	Α		
122	Meeting St & I-26	EBR	674	15.2	В	764	25.5	C		
		EBL	69	22.8	С	111	36.7	D		
		NB BRT	7	0.4	Α	6	0.6	Α		
		SB BRT	5	3.3	Α	6	3.6	Α		
		SBR	142	10.9	В	172	13.8	В		
		SBT	895	12.1	В	1031	13.1	В		
		SBL	36	22.2	С	38	25.1	С		
123	Meeting St & Line St	WBR	23	6.5	Α	33	8.8	Α		
		WBT	13	15.2	В	17	17.7	В		
		WBL	4	26.2	С	7	23.5	С		
		NBR	25	10.4	В	27	9.8	Α		
		NBT	856	10.4	В	837	10.7	В		



Node	l de di N		1st Hour (4:30 – 5:30 pm)			2nd Hour (5:00 – 6:00 pm)		
No.	Intersection Name	Movement						
		NDI	Volume	Delay	LOS	Volume	Delay	LOS
		NBL	25	29.4	С	29	38.6	D
		EBR	59	14.3	B C	65	16.1	В
		EBT EBL	38 117	21.2 22.7	C	37	20.5 22.4	C
		NB BRT			A	110 7	4.0	A
		SB BRT	7 5	3.4 7.9		6	10.6	В
		SBR	10		A B	19		В
		SBT	834	11.6 12.4	В	949	13.9 13.3	В
		SBL	117	18.9	В	133	22.6	С
		WBR	76	19.3	В	95	20.4	C
		WBT	42	38.6	D	54	38.3	D
		WBL	104	46.4	D	118	48.5	D
		NBR	44	10.8	В	60	9.0	A
124 Meeting St & Columbus St	Meeting St & Columbus St	NBT	819	10.8	В	785	9.7	A
		NBL	110	15.7	В	144	19.3	В
	EBR	20	19.3	В	31	22.0	С	
		EBT	57	36.2	D	54	38.9	D
		EBL	12	38.4	D	22	41.1	D
		NB BRT	7	4.7	A	7	3.3	A
		SB BRT	5	8.5	A	6	8.4	A
		SBR	69	9.1	A	80	10.3	В
		SBT	762	8.7	A	833	10.7	В
		SBL	58	17.3	В	59	18.9	В
		WBR	57	10.3	В	54	10.3	В
		WBT	7	25.0	С	7	23.7	С
	Meeting St & Woolfe St	WBL	8	29.3	C	13	26.9	C
		NBR	13	10.0	A	22	9.9	A
125		NBT	957	7.9	A	977	8.8	A
		NBL	14	18.5	В	19	21.1	C
		EBR	25	12.8	В	34	16.1	В
		EBT	33	28.7	C	39	26.9	C
		EBL	37	27.8	C	42	28.3	C
		NB BRT	7	2.4	A	6	2.6	A
		SB BRT	5	7.0	A	6	7.3	A
		SBR	86	15.9	В	114	17.1	В
		SBT	569	17.9	В	590	19.3	В
		SBL	39	26.9	С	31	31.5	C
		WBR	67	8.4	A	83	10.6	В
		WBT	16	20.2	С	25	21.6	C
		WBL	14	23.9	С	16	22.8	C
		NBR	17	17.6	В	10	20.0	C
126	Meeting St & Mary St	NBT	799	16.4	В	825	17.3	В
120	Mooting of a Mary of	NBL	22	24.1	С	27	22.3	С
		EBR	31	7.7	А	19	10.3	В
		EBT	18	16.1	В	21	16.3	В
		EBL	119	17.1	В	108	19.0	В
		NB BRT	6	7.9	Α	6	5.9	А
		SB BRT	5	14.3	В	6	11.2	В



Node				st Hour			nd Hour	>
No.	Intersection Name	Movement		– 5:30 p			– 6:00 pr	
		CDD	Volume	Delay	LOS	Volume	Delay	LOS
		SBR SBT	31	6.1 6.2	A	22 599	6.0	A
		WBR	581 52	10.1	A B		7.2 10.1	A B
		WBT	5	28.6	С	64 6	32.0	С
127	Mosting St & Wrong Square	WBL	10		С	4		C
127	Meeting St & Wragg Square	NBT		28.8 1.8	A		27.9	A
		NBL	788	6.5	A	799	1.9 5.5	A
		NB BRT	26 6	2.1	A	23 6	2.3	A
		SB BRT	5	7.2	A	6	7.6	A
	SBT	573	1.5	A	586	1.2	A	
		SBL	18	11.6	В	16	9.9	A
		NBR	38	7.1	A	28	7.9	A
	NBT	814	9.0	A	822	9.3	A	
128	Meeting St & Ann St	EBR	68	6.9	A	58	6.7	A
120	I Weeting St & Aim St	EBT	14	25.4	C	17	30.2	C
		EBL	0	0.0	A	0	0.0	A
		NB BRT	6	20.6	C	6	17.1	В
		SB BRT	5	0.6	A	6	0.5	A
		SBR	92	12.9	В	41	14.1	В
	SBT	518	15.7	В	562	16.0	В	
		SBL	32	20.0	В	40	21.0	С
		WBR	47	13.4	В	46	12.7	В
		WBT	24	26.4	С	18	24.1	С
		WBL	27	25.6	С	23	25.5	С
	Meeting St & John St	NBR	19	5.1	A	21	4.9	A
129		NBT	761	6.9	A	760	7.7	A
		NBL	100	16.4	В	112	19.4	В
		EBR	67	12.7	В	100	15.4	В
		EBT	18	27.5	C	24	26.3	C
		EBL	45	25.5	C	49	28.3	C
		NB BRT	6	2.5	A	6	2.4	A
		SB BRT	5	23.9	С	6	22.2	C
		SBR	171	9.7	A	193	11.2	В
		SBT	326	23.0	С	325	25.1	С
		SBL	70	89.2	F	75	90.1	F
		WBR	103	23.7	С	111	24.5	С
		WBT	385	26.8	С	420	27.6	С
		WBL	44	28.8	С	39	28.3	С
400	Maratina Ot 8 Oallan a Ot	NBR	86	15.8	В	89	17.2	В
130	Meeting St & Calhoun St	NBT	668	19.2	В	663	20.2	С
		NBL	181	33.0	С	217	39.1	D
		EBR	87	5.9	A	89	6.0	Α
		EBT	298	17.2	В	276	17.4	В
		EBL	114	20.7	С	119	21.1	С
		NB BRT	6	22.5	С	6	21.6	С
		SB BRT	5	11.2	В	6	10.8	В
		SBR	174	28.2	С	163	30.2	С
404	Calleaum Ct 9 King Ct	SBT	112	42.6	D	117	42.8	D
131	Calhoun St & King St	SBL	77	41.6	D	77	48.0	D
		WBR	48	19.0	В	90	20.3	С



			16	t Hour		2nd Hour			
Node	Intersection Name	Movement		.: нош – 5:30 р	m)	(5:00 – 6:00 pm)			
No.	intersection Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS	
		WBT	562	22.7	C	596	24.9	C	
		WBL	128	35.0	D	146	44.3	D	
		EBR	103	5.9	A	112	8.4	Α	
		EBT	419	19.5	В	411	26.1	С	
		EBL	162	37.9	D	169	54.2	D	
		NB BRT	6	18.5	В	6	23.3	С	
		SB BRT	6	14.5	В	8	16.8	В	
		SBR	72	13.7	В	102	13.6	В	
		SBT	114	39.9	D	116	41.2	D	
		SBL	22	38.1	D	29	38.0	D	
		WBR	82	16.9	В	95	17.9	В	
132	Calhoun St & Phillips St	WBT	657	16.7	В	663	17.1	В	
	·	EBR	89	13.9	В	84	14.4	В	
		EBT	665	20.9	С	689	22.9	С	
		NB BRT	6	29.2	С	6	34.2	С	
		SB BRT	6	4.8	Α	8	4.1	Α	
	WBR	59	8.3	Α	62	10.4	В		
		WBT	660	4.4	Α	703	5.5	Α	
		NBR	86	12.7	В	135	16.1	В	
133 Calhoun St & Coming		NBT	487	45.5	D	472	49.3	D	
	Calhoun St & Coming St	NBL	122	56.3	E	128	63.4	Е	
		EBT	668	7.4	Α	658	8.7	Α	
		EBL	149	11.5	В	134	12.6	В	
		NB BRT	7	5.3	Α	6	7.9	Α	
		SB BRT	6	17.1	В	7	18.8	В	
		SBR	80	19.4	В	73	23.6	С	
		SBT	30	38.5	D	31	43.3	D	
		SBL	14	43.4	D	19	46.0	D	
		WBR	20	4.1	Α	19	5.1	Α	
		WBT	751	4.1	Α	788	5.3	Α	
		WBL	13	13.6	В	17	17.1	В	
134	Calhoun St & Smith St	NBR	22	25.2	С	18	18.6	В	
134	Camoun St & Simin St	NBT	18	44.8	D	14	45.2	D	
		NBL	21	41.9	D	19	48.1	D	
		EBR	33	4.0	Α	37	3.7	Α	
		EBT	784	9.7	Α	755	9.8	Α	
		EBL	33	16.3	В	28	15.4	В	
		NB BRT	7	5.5	Α	6	9.3	Α	
		SB BRT	5	3.9	Α	5	4.2	Α	
		SBR	307	26.6	С	316	27.8	С	
		SBT	248	28.4	С	270	29.6	С	
		SBL	154	28.2	С	169	27.5	С	
		WBT	869	11.0	В	918	13.2	В	
4.0-		WBL	16	20.5	С	15	26.8	С	
135	Calhoun St & Rutledge Ave	NBR	38	6.0	Α	42	6.1	Α	
		EBR	29	9.9	Α	32	7.5	Α	
		EBT	657	14.3	В	637	12.3	В	
		NB BRT	8	5.5	Α	7	9.7	Α	
		SB BRT	5	9.0	Α	5	9.1	Α	
		3D DIKT	- 3	0.0	- 71	9	5.1	T	



No. In		1st Hour 2nd Hour						
Node	Intersection Name	Movement		– 5:30 p	m)		- 6:00 pr	n)
No.			Volume	Delay	Los	Volume	Delay	LOS
		WBR	132	19.8	В	139	19.8	В
		WBT	1056	18.2	В	1092	18.2	В
		NBR	48	17.6	В	47	17.7	В
		NBT	186	46.1	D	185	41.6	D
400	Callagora Ot 9 Aalalagora	NBL	85	50.1	D	77	50.2	D
136	Calhoun St & Ashley Ave	EBR	23	10.9	В	24	10.2	В
		EBT	642	11.7	В	627	10.2	В
		EBL	147	20.9	С	141	20.7	С
		NB BRT	7	12.7	В	7	1.9	Α
		SB BRT	5	24.2	С	6	23.6	С
		SBR	195	16.4	В	192	19.0	В
		SBT	6	60.7	E	8	58.0	Е
137 Calhoun St & Jonathan Lucas St/Barre St	SBL	149	50.5	D	129	51.0	D	
		WBR	121	11.5	В	116	14.0	В
		WBT	1007	9.4	Α	1077	11.8	В
		WBL	2	10.1	В	3	19.1	В
		NBR	38	12.5	В	34	12.9	В
		NBT	20	44.9	D	19	44.1	D
		NBL	74	49.2	D	57	50.3	D
		EBR	13	7.4	Α	8	7.7	Α
		EBT	609	7.0	Α	612	7.3	Α
		EBL	105	31.3	С	105	41.8	D
		NB BRT	7	12.9	В	7	13.6	В
		SB BRT	4	19.9	В	6	21.2	С
		SBR	457	32.2	С	471	34.5	С
		SBT	26	101.3	F	31	94.0	F
		SBL	93	70.4	E	97	66.3	Е
		WBR	86	20.0	В	87	23.6	С
		WBT	1189	21.4	С	1236	24.2	С
1.10	Callagua Ct & Caustas D	NBR	6	14.9	В	5	16.5	В
142	Calhoun St & Courtenay Dr	NBT	31	46.2	D	24	43.5	D
		NBL	5	45.3	D	4	49.1	D
		EBR	0	0.0	Α	0	0.0	Α
		EBT	647	5.6	Α	640	5.6	Α
		EBL	206	27.5	С	220	33.1	С
		NB BRT	7	91.8	F	7	80.3	F

^{*}This intersection is unsignalized in the Build scenario and has been evaluated using unsignalized LOS criteria.



LOWCOUNTRY RAPID TRANSIT MICROSIMULATION MODEL DRAFT REPORT

Appendix F - 2045 No Build VISSIM Output

Appendix F- 2045 NO BUILD VISSIM OUTPUT



Node Level Performance, AM Peak Hour

Node	Intersection Name			t Hour		2nd Hour			
No.	Intersection Name	Movement		– 8:15 a			– 8:45 a		
110.			Volume	Delay	LOS	Volume	Delay	LOS	
		SBR	155	88.8	F	156	101.5	F	
		SBT	458	133.6	F	407	158.2	F	
		SBL	157	509.9	F	134	656.8	F	
		WBR	38	291.5	F	33	357.6	F	
		WBT	55	125.4	F	54	139.0	F	
22	US 78 & College Park Rd	WBL	264	185.9	F	337	194.7	F	
	Co / C d Comogo / dink / td	NBR	38	291.5	F	33	357.6	F	
		NBT	264	185.9	F	337	194.7	F	
		NBL	55	125.4	F	54	139.0	F	
		EBR	129	246.9	F	110	403.0	F	
		EBT	465	342.8	F	398	556.4	F	
		EBL	442	97.9	F	336	131.5	F	
		SBR	7	374.4	F	9	312.3	F	
		SBT	51	386.0	F	46	355.7	F	
		SBL	106	491.3	F	96	466.7	F	
		WBR	12	15.9	В	13	11.8	В	
		WBT	304	30.9	С	286	23.7	С	
23	US 78 & Ladson Rd/	WBL	580	75.5	Е	608	79.7	E	
	Ancrum Rd	NBR	1391	114.5	F	1254	146.8	F	
	NBT	13	122.0	F	16	132.0	F		
		NBL	51	121.6	F	61	111.8	F	
		EBR	38	170.8	F	38	233.7	F	
		EBT	597	215.8	F	497	290.9	F	
		EBL	5	159.0	F	6	147.3	F	
		SBR	26	82.3	F	29	68.8	Е	
		SBT	82	141.7	F	73	139.4	F	
		SBL	107	253.5	F	88	277.2	F	
		WBR	46	45.5	D	48	56.9	Е	
		WBT	839	45.8	D	820	53.7	D	
27	US 78 & Ingleside Blvd	WBL	307	419.5	F	304	473.9	F	
	9	NBR	519	178.7	F	529	215.5	F	
		NBT	13	178.4	F	13	171.9	F	
		NBL	119	157.4	F	98	184.6	F	
		EBR	199	31.6	С	150	47.6	D	
		EBT	1797	60.1	E	1579	97.2	F	
		EBL	9	43.2	D	12	60.6	E	
		WBT	1196	99.9	F	1076	199.1	F	
29	US 78 & I-26 EB Ramps	WBL	136	174.2	F	99	271.4	F	
		EBR	820	6.4	A	683	9.0	A	
		EBT	1553	47.3	D N/A	1494	66.1	E NI/A	
20	LIC 70 9 L 26 M/D Damas *	WBT	889	20.0	N/A	784	47.2	N/A	
30	US 78 & I-26 WB Ramps *	EBT	2063	91.9	N/A	1972	110.8	N/A	
		EBL	102	38.7	E	71	49.3	Е	
		SBR	46	72.4	F	50	104.4	F	
24	US 78/University Blvd &	SBT	6	93.9		6	100.4	F	
31	Medical Plaza Dr	SBL	17	87.4	F	23	91.2	F	
		WBR	94	51.1	D	125	90.9	F	
		WBT	1208	82.2	F	1012	202.4	F	



			1st Hour 2nd Hour					
Node	Intersection Name	Movement		– 8:15 a	m)		– 8:45 a	m)
No.	microconon name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		WBL	72	99.2	F	66	103.0	F
		NBR	56	129.3	F	73	281.4	F
		NBT	35	280.1	F	52	390.2	F
		NBL	140	260.7	F	144	440.5	F
		EBR	593	45.0	D	596	50.6	D
		EBT	2050	47.8	D	1961	56.2	Е
		EBL	211	104.1	F	214	108.1	F
		SBR	20	34.5	С	23	49.8	D
		SBT	5	102.9	F	3	118.8	F
		SBL	43	120.5	F	31	130.1	F
		WBR	133	71.4	Е	147	142.4	F
		WBT	1303	59.0	E	1126	127.0	F
	US 78/University Blvd &	WBL	190	349.4	F	159	187.8	F
34	Medical Plaza Dr/BUC Club	NBR	124	94.4	F	84	200.8	F
Bl	Blvd	NBT	18	174.6	F	19	249.0	F
		NBL	109	199.3	F	95	369.5	F
		EBR	118	6.6	Α	141	7.8	Α
		EBT	1870	17.2	В	1795	20.9	С
		EBL	90	30.5	С	111	30.4	С
		SBR	89	233.8	F	90	308.0	F
		SBT	18	248.9	F	18	326.5	F
		SBL	197	250.3	F	188	276.6	F
		WBR	84	54.5	D	80	96.9	F
		WBT	1538	64.7	Е	1314	106.5	F
	US 78/University Blvd &	WBL	12	56.4	Е	5	71.9	Е
37	Elms Center Rd	NBR	23	138.2	F	19	342.1	F
		NBT	29	201.6	F	20	355.7	F
		NBL	121	244.6	F	115	454.7	F
		EBR	51	9.1	Α	61	10.1	В
		EBT	1616	11.7	В	1354	9.9	Α
		EBL	108	49.0	D	126	37.0	D
		SBR	6	103.6	F	17	115.7	F
		SBT	0	0.0	Α	2	91.8	F
		SBL	3	114.4	F	3	108.3	F
		WBR	21	35.3	D	14	62.1	Е
		WBT	1643	79.1	Е	1375	153.4	F
38	US 78/University Blvd &	WBL	73	69.2	Е	52	76.5	Е
30	Fernwood Dr	NBR	83	234.8	F	72	286.4	F
		NBT	0	0.0	Α	1	389.0	F
		NBL	120	357.0	F	110	453.8	F
		EBR	27	8.6	Α	19	6.4	Α
		EBT	1724	9.5	Α	1516	6.5	Α
		EBL	5	30.6	С	9	24.5	С
		SBR	21	49.4	D	38	40.6	D
		SBT	3946	51.3	D	3909	51.3	D
	US 52/78/Rivers Ave &	SBL	25	86.4	F	46	87.8	F
42	Otranto Rd/Otranto Blvd	WBR	117	129.1	F	96	126.1	F
42	Ottaillo Nu/Ottaillo bivu	WBT	55	209.4	F	68	203.4	F
		WBL	230	211.0	F	223	212.0	F
		NBR	119	3.6	А	118	4.5	Α



Nodo			1:	st Hour		2nd Hour			
Node No.	Intersection Name	Movement	(7:15	– 8:15 a	m)	(7:45	– 8:45 а	m)	
NO.			Volume	Delay	LOS	Volume	Delay	LOS	
		NBT	1508	23.8	С	1517	21.5	С	
		NBL	178	117.3	F	167	119.5	F	
		EBR	402	141.3	F	385	139.0	F	
		EBT	31	168.2	F	52	171.2	F	
		EBL	236	174.5	F	214	175.9	F	
		SBR	48	6.9	Α	53	4.8	А	
		SBT	4526	13.5	В	4438	13.9	В	
		SBL	18	105.7	F	23	113.1	F	
		WBR	8	23.9	С	20	160.9	F	
		WBT	5	122.1	F	6	194.4	F	
	US 52/78/Rivers Ave & T	WBL	28	160.7	F	36	213.3	F	
43	Mobile Dr	NBR	56	3.1	Α	61	4.8	Α	
		NBT	1780	3.6	А	1760	10.8	В	
		NBL	46	249.2	F	43	424.3	F	
		NBU	18			19		-	
		EBR	66	21.0	С	60	20.0	С	
		EBT	4	117.4	F	8	101.2	F	
		EBL	19	99.1	F N/A	26	105.6	F N/A	
		SBR	39	9.4	N/A	21	9.7	N/A	
		SBT	4593	31.8	N/A	4543	32.3	N/A	
	US 52/78/Rivers Ave & Melnick Dr *	SBL	1	1.3	A	1	1.3	A	
		WBR	21	84.1	F	23	77.8	F	
44		WBL NBR	3 21	310.2	•	2 19	302.0		
		NBT	1887	1.4 1.1	N/A N/A		3.6 10.8	N/A N/A	
		NBL	34	73.4	F	1890 54	149.7	F	
		EBR	87	721.3	F	78	856.6	F	
		EBL	4	718.2	F	6	882.4	F	
		SBR	108	16.0	В	143	11.9	В	
		SBT	4642	29.6	С	4563	29.8	С	
		WBR	31	44.1	D	32	70.1	E	
		WBT	74	103.1	F	81	151.2	F	
46	US 52/78/Rivers Ave &	WBL	17	109.6	F	21	156.9	F	
	Greenridge Rd	NBT	1860	14.0	В	1893	15.2	В	
		NBL	111	492.2	F	110	589.7	F	
		EBR	830	136.3	F	847	132.8	F	
		EBL	111	125.6	F	119	126.9	F	
		SBR	88	2.3	Α	126	2.5	Α	
		SBT	2548	2.9	Α	2502	2.9	Α	
		SBL	62	6.4	Α	69	7.1	Α	
		WBR	24	5.4	Α	26	7.3	Α	
		WBT	4	107.9	F	5	117.6	F	
	US 52/78/Rivers Ave &	WBL	20	86.0	F	40	123.7	F	
49	North Rivers Market Place	NBR	21	1.6	Α	27	1.6	Α	
		NBT	905	3.2	Α	961	3.3	Α	
		NBL	7	24.3	С	8	27.8	С	
		EBR	5	1.9	Α	12	1.9	Α	
		EBT	5	75.5	Е	6	106.2	F	
		EBL	20	101.4	F	39	113.7	F	



Node				st Hour			d Hour	
No.	Intersection Name	Movement		– 8:15 a			– 8:45 a	
1101			Volume	Delay	LOS	Volume	Delay	LOS
		SBR	68	2.1	Α	63	1.2	Α
		SBT	2468	8.1	A	2435	7.1	Α
		SBL	40	11.0	В	55	10.1	В
		WBR	57	8.3	A	65	6.6	A
	110 50/70/D: A 0	WBT	45	123.5	F	38	81.8	F
50	US 52/78/Rivers Ave &	WBL	394	188.6	F	346	139.2	F
	Eagle Landing Blvd	NBR	139	2.1	A	138	2.0	A
		NBT	847	4.6	A	896	3.9	A
		NBL	10	22.7	В	7	16.9	B B
		EBR EBT	13 6	14.0	F	10 16	14.0 90.5	F
		EBL	30	106.5 96.1	F	36	100.1	F
		SBR	55	3.6	А	42	3.9	А
		SBT	2727	1.9	A	2640	2.2	A
		SBL	95	4.2	A	111	5.1	A
		WBR	47	234.3	F	48	323.2	F
		WBT	11	453.6	F	15	493.7	F
	US 52/78/Rivers Ave &	WBL	103	472.9	F	115	559.8	F
51	Northwoods Blvd	NBR	58	1.8	A	65	2.1	A
	1 North Weeds Biva	NBT	903	2.0	A	940	2.2	A
		NBL	39	21.4	С	43	19.6	В
		EBR	111	14.3	В	97	13.5	В
		EBT	14	89.5	F	11	98.2	F
		EBL	44	105.8	F	54	140.3	F
		SBR	210	19.2	В	246	19.6	В
		SBT	2668	38.7	D	2575	38.9	D
		SBL	33	95.6	F	35	88.6	F
		WBR	19	27.4	С	22	26.7	С
		WBT	61	90.9	F	64	89.2	F
50	US 52/78/Rivers Ave &	WBL	124	77.0	Е	135	78.5	Е
52	Ashley Phosphate Rd	NBR	121	7.6	Α	97	8.0	Α
		NBT	764	17.9	В	815	17.5	В
		NBL	395	78.7	Ш	411	78.2	Е
		EBR	527	319.1	F	525	345.8	F
		EBT	101	413.4	F	92	521.5	F
		EBL	209	247.4	F	217	419.9	F
		SBR	37	4.6	Α	51	3.4	Α
		SBT	3566	5.6	Α	3450	4.0	Α
		SBL	14	90.2	F	30	92.7	F
		WBR	4	6.6	Α	12	7.8	Α
		WBT	2	68.9	Е	4	59.9	Е
	US 52/78/Rivers Ave &	WBL	20	97.8	F	38	127.5	F
54	Morris Baker Blvd	NBR	36	1.4	Α	48	1.4	Α
	INIOITIS DANEI DIVU	NBT	1267	2.2	А	1238	1.6	Α
		NBL	21	93.9	F	32	92.4	F
		EBR	56	24.1	С	19	15.0	В
		EBT	1	60.3	Ш	3	39.3	D
		EBL	13	91.8	F	24	111.3	F



	1st Hour 2nd Hour							
Node	Intersection Name	Movement		– 8:15 a	m)		- 8:45 а	m)
No.	intersection Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		SBT	3036	2.3	A	2966	2.3	A
		SBL	537	2.0		449		
		SBU	7	40.1	D	9	39.5	D
	US 52/78/Rivers Ave &	WBR	287	6.0	Α	245	5.7	Α
56	Mabeline Rd	WBL	74	58.5	E	38	51.8	D
	Wasomio rea	NBR	267	16.4	В	200	14.7	В
		NBT	1092	12.7	В	1096	10.7	В
		NBU	8	2.9	A	13	2.0	A
		SBT	2725	5.1	Α	2601	4.3	Α
		SBL	262			285		
		SBU	6	42.8	D	8	42.0	D
	US 52/78/Rivers Ave &	WBR	90	3.3	Α	79	3.5	Α
59 Stokes Ave		WBL	60	44.6	D	67	47.4	D
	NBR	342	7.4	A	276	7.1	A	
		NBT	1369	15.4	В	1326	16.0	В
		NBU	38	13.2	В	40	18.1	В
		SBR	271	17.7	В	216	16.2	В
		SBT	2545	21.7	С	2480	21.1	С
		SBU	13	7.9	A	9	11.0	В
		WBR	23	9.9	Α	21	9.3	Α
00	US 52/78/Rivers Ave & Midland Park Rd	NBR	18	1.8	Α	52	4.0	Α
60		NBT	1442	1.3	Α	1301	4.0	Α
		NBL	275	00.0	1	287	400.7	1
		NBU	13	92.3	F	19	132.7	F
		EBR	402	73.3	Е	341	83.3	F
		EBL	236	181.9	F	240	199.6	F
		SBR	110	2.5	Α	116	2.1	Α
		SBT	2894	1.7	Α	2752	1.4	Α
		SBU	36	2.0	Α	60	1.8	Α
61	US 52/78/Rivers Ave &	NBT	1688	0.8	Α	1617	1.3	Α
61	Eagle Dr	NBL	55	00.2	F	43	02.4	F
		NBU	2	99.2	Г	2	93.1	Г
		EBR	118	16.3	В	85	14.7	В
		EBL	34	96.3	F	27	95.5	F
		SBT	2780	1.3	Α	2602	1.1	Α
		SBL	243	48.4	D	242	48.6	D
		SBU	0	40.4	D	0	40.0	D
62	US 52/78/Rivers Ave &	WBR	360	9.3	Α	339	8.6	Α
02	Hanahan Rd	WBL	210	42.7	D	200	42.9	D
		NBR	171	10.3	В	201	10.0	В
		NBT	1380	18.7	В	1317	18.1	В
		NBU	0	0.0	Α	0	0.0	Α
		SBR	21	6.8	Α	30	7.8	Α
		SBT	2920	6.5	Α	2720	7.5	Α
		SBU	19	3.2	Α	12	4.0	Α
65	US 52/78/Rivers Ave &	WBR	4	12.6	В	0	0.0	Α
	Benderson Dr	NBR	3	0.9	Α	2	0.6	Α
		NBT	1413	0.5	Α	1384	0.5	Α
		NBL	56	65.2	Е	86	56.7	Е
		NBU	39	55.2	_	75	55.7	



			1st Hour 2nd Hour					
Node	Intersection Name	Movement		ы поиг – 8:15 a	m)		ы пош – 8:45 а	m)
No.	intersection Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		EBR	13	18.9	В	25	17.9	В
		EBL	7	95.3	F	9	103.0	F
		SBR	622	3.8	A	569	3.3	A
		SBT	2298	53.4	D	2173	61.4	E
		WBR	2	9.0	A	7	7.0	A
		NBR	7	19.2	В	8	12.8	В
67	US 52/78/Rivers Ave &	NBT	951	13.1	В	991	12.8	В
07	Aviation Ave	NBL	121	13.1	В	115	12.3	В
		NBU	121	133.6	F	55	110.6	F
		EBR	347	157.5	F	395	224.6	F
		EBL	542	109.6	F	519	149.6	F
		SBR	155	35.5	D	148	34.3	С
		SBT	1953	123.2	F	1906	121.1	F
		SBL	371	108.0	F	378	111.4	F
		WBR	230	135.1	F	256	131.5	F
		WBT	450	184.4	F	387	193.7	F
	US 52/78/Rivers Ave &	WBL	641	140.4	F	684	158.6	F
70	Remount Rd	NBR	371	2.8	A	392	3.2	A
	Remount Ru	NBT	801	52.3	D	836	53.8	D
		NBL	112	86.1	F	121	89.4	F
		EBR	416	47.0	D	448	51.8	D
		EBT	433		E	460		E
		EBL		60.8	D		64.4	D
			99	50.7		103	51.0	
		SBR	14	0.9	N/A	22	0.8	N/A
	US 52/78/Rivers Ave & N of	SBT SBU	2922	1.1	N/A	2915 9	1.3	N/A
			16	1.9	A N/A	1187	4.1	A N/A
72		NBT	1202	0.3	N/A		0.4	N/A
	Sabal St *	NBL	6	19.5	С	17 2	24.8	С
		NBU	2	31.0	D		29.9	D
		EBR EBL	26 14	3.2	A C	10 6	2.8	A C
				17.0			21.1	
		SBR	13	1.1	A	15	1.3	A
		SBT	2682	2.1	А	2743	2.0	Α
		SBL	116	19.6	В	111	20.5	С
	LIC FO/70/Divers Ave 9	SBU	89	10.7	D	70	0.0	Λ
76	US 52/78/Rivers Ave &	WBR WBL	78	10.7	B C	77	9.8	A C
	Harley St	NBR	141 47	27.7	В	111 48	27.0	
		NBT		12.0	В		11.5	B B
			1066	14.2		1116	13.1	
		NBU	86	2.2	A	89	3.8	A
		EBR	17	17.6	В	19	16.3	В
		SBR SBT	770	2.0	A	875 2234	2.7	A
	LIC 52/79/Divoro Ava 9 1 500	WBR	2195	6.7	A		7.6	A
78	US 52/78/Rivers Ave & I-526	NBT	395	1.2	A	393 964	1.3	A
10	WB Ramps		932	0.4	A C		0.4	A
		NBL	165	28.2		198	28.4	C
		EBR	252	0.1	A	315	0.1	A
70	US 52/78/Rivers Ave & I-526	SBT	1783	0.6	A	1997	1.0	A
79	EB Ramps	SBL WBR	667 142	17.6 0.1	B A	556 129	17.6 0.1	B A
					Δ	1 74		



No. Intersection Name	Nodo			1st Hour			2nd Hour			
NBR	Node	Intersection Name	Movement	(7:15	– 8:15 a	m)	(7:45	– 8:45 а	m)	
82 US 52/78/Rivers Ave & Alton 84 US 52/78/Rivers Ave & Mall 85 BT	NO.			Volume	Delay	LOS	Volume	Delay	LOS	
BEBR 260 1.1			NBR	221	3.5	Α	262	3.7	Α	
82 82 82 82 83 84 84 85 85 85 85 85 85 85 85			NBT	955	9.0	Α	1033	8.0	Α	
SBT					1.1	Α			Α	
SBU S SBU				462		Α	524			
NBR				1263		Α	1549		В	
NBR								3.2		
BT								0.0		
NB	82									
NBU	"-	Drive			0.6	A		0.7	Α	
NBU					19.3	В		24 4	С	
BBL 98 30.3 C 115 33.4 C SBR 38 1.7 A 39 2.3 A SBT 1258 0.7 A 1431 1.0 A SBL 28 22.1 C 30 22.9 C SBU 33 32.9 C 33 32.9 C 30 33 32.9 C 33 C 34 C										
SBR 38 1.7										
SBT 1258 0.7										
SBL										
SBU 33 22.1 C 33 22.9 C					0.7	Α		1.0	Α	
SBU 33 33 33 34 34 35 34 35 34 34					22.1	C		22.9	С	
WBL 8 34.9 C 22 31.8 C NBR 78 2.4 A 84 2.8 A NBT 742 2.1 A 820 2.6 A EBR 36 2.4 A 38 2.9 A SBT 1128 0.4 A 1306 0.4 A SBL 172 37.3 D 179 38.1 D WBR 101 5.0 A 108 5.4 A WBL 207 31.6 C 206 32.1 C NBR 37 3.4 A 54 3.7 A NBT 701 12.7 B 788 13.0 B NBU 1 18.9 B 1 18.9 B SBR 166 2.3 A 221 2.8 A SBT 1132 2.9 A 1235 3.4 A NBT 683 3.2 A 747 3.2 A NBL 43 9.7 A 49 10.0 A EBR 27 4.1 A 27 4.8 A EBR 31.4 C 94 32.6 C SBT 115 31.4 C 94 32.6 C SBT 471 11.7 B 525 10.9 B WBR 138 5.5 A 132 5.1 A WBR 138 5.										
NBR	83	US 52/78/Rivers Ave & Alton								
NBT										
BBR 36 2.4 A 38 2.9 A SBT 1128 0.4 A 1306 0.4 A SBL 172 37.3 D 179 38.1 D WBR 101 5.0 A 108 5.4 A WBL 207 31.6 C 206 32.1 C NBR 37 3.4 A 54 3.7 A NBT 701 12.7 B 788 13.0 B NBU 1 18.9 B 1 18.9 B SBT 1132 2.9 A 1235 3.4 A SBT 1132 2.9 A SBT 1132 2.9 A 1235 3.4 A SBT 1132 1.0 C SBT 1132 2.9 A 1235 3.4 A SBT 1132 2.9 A SBT 113										
SBT										
SBL 172 37.3 D 179 38.1 D WBR 101 5.0 A 108 5.4 A WBR 207 31.6 C 206 32.1 C NBR 37 3.4 A 54 3.7 A NBT 701 12.7 B 788 13.0 B NBU 1 18.9 B 1 18.9 B SBR 166 2.3 A 221 2.8 A SBT 1132 2.9 A 1235 3.4 A Piggly Wiggly Dr SBR 27 4.1 A 27 4.8 A EBR 31.4 C 94 32.6 C SBL 144 62.3 E 121 68.6 E WBR 138 5.5 A 132 5.1 A WBT 471 11.7 B 525 10.9 B WBT 471 11.7 B 525 10.9 B WBT 471 11.7 B 525 10.9 B WBT 471 471 471 471 471 471 471 NBR 10 57.0 E 12 43.0 D NBT 54 24.1 C 59 31.1 C NBR 10 57.0 E 12 43.0 D NBT 54 24.1 C 59 31.1 C NBR 10 57.0 E 12 43.0 D NBT 54 24.1 C 59 31.1 C NBR 10 57.0 E 12 43.0 D NBT 54 24.1 C 59 31.1 C NBR 10 57.0 E 12 43.0 D NBT 54 24.1 C 59 31.1 C NBR 10 57.0 E 12 43.0 D NBT 54 24.1 C 59 31.1 C NBR 10 57.0 E 12 43.0 D NBT 54 24.1 C 59 31.1 C NBR 10 57.0 E 12 43.0 D NBT 54 24.1 C 59 31.1 C NBR 10 57.0 E 12 43.0 D NBT 54 24.1 C 59 31.1 C NBR 10 57.0 E 12 43.0 D NBT 54 24.1 C 59 31.1 C NBT 54 24.1 C 59 31.1 C										
NBR										
No.									_	
Morningside Dr WBL 207 31.6 C 206 32.1 C NBR 37 3.4 A 54 3.7 A NBT 701 12.7 B 788 13.0 B NBU 1 18.9 B 1 18.9 B SBR 166 2.3 A 221 2.8 A SBT 1132 2.9 A 1235 3.4 A SBT 1132 2.9 A 1235 3.4 A NBT 683 3.2 A 747 3.2 A NBL 43 9.7 A 49 10.0 A EBR 27 4.1 A 27 4.8 A EBL 87 33.3 C 91 34.0 C SBR 162 11.8 B 154 11.9 B SBT 115 31.4 C 94 32.6 C SBL 144 62.3 E 121 68.6 E WBR 138 5.5 A 132 5.1 A WBR 138 5.5 A 132 A WBR 138 5.5 A 132 A WBR 138 5.5 A 132 A										
NBK ST 701 12.7 B 788 13.0 B NBU	84									
NBU										
88 US 52/78/Rivers Ave & Piggly Wiggly Dr 88 US 52/78/Rivers Ave & Piggly Wiggly Dr 88 US 52/78/Rivers Ave & Piggly Wiggly Dr 88 US 52/78/Rivers Ave & Meeting St/Durant Ave 88 US 52/78/Rivers Ave & Meeting St/Durant Ave 88 US 52/78/Rivers Ave & Helm 88 US 52/78/Rivers Ave & Helm 89 US 52/78/Rivers Ave & Helm 89 US 52/78/Rivers Ave & Helm 80 US 52/78/Rivers Ave & Helm										
SBT				_						
NBT 683 3.2 A 747 3.2 A										
NBL 43 9.7 A 49 10.0 A		LIC 50/70/Divers Ave 9								
BBR 27 4.1 A 27 4.8 A EBL 87 33.3 C 91 34.0 C SBR 162 11.8 B 154 11.9 B SBT 115 31.4 C 94 32.6 C SBL 144 62.3 E 121 68.6 E WBR 138 5.5 A 132 5.1 A WBT 471 11.7 B 525 10.9 B WBL 15 24.6 C 13 25.0 C NBR 10 57.0 E 12 43.0 D NBT 54 24.1 C 59 31.1 C NBL 94 22.7 C 117 24.0 C EBR 220 10.9 B 260 19.3 B EBT 756 57.7 E 835 71.7 E EBL 182 16.5 B 161 25.6 C SBR 4 11.7 B 2 7.4 A SBR 44 11.7 B 2 7.4 A SBR 445 8.8 A 939 7.9 A	87									
BBL 87 33.3 C 91 34.0 C SBR 162 11.8 B 154 11.9 B SBT 115 31.4 C 94 32.6 C SBL 144 62.3 E 121 68.6 E WBR 138 5.5 A 132 5.1 A WBT 471 11.7 B 525 10.9 B WBL 15 24.6 C 13 25.0 C NBR 10 57.0 E 12 43.0 D NBT 54 24.1 C 59 31.1 C NBL 94 22.7 C 117 24.0 C EBR 220 10.9 B 260 19.3 B EBT 756 57.7 E 835 71.7 E EBL 182 16.5 B 161 25.6 C SBR 4 11.7 B 2 7.4 A		Piggiy Wiggiy Di								
SBR 162 11.8 B 154 11.9 B										
SBT										
SBL										
WBR 138 5.5 A 132 5.1 A WBT 471 11.7 B 525 10.9 B WBL 15 24.6 C 13 25.0 C NBR 10 57.0 E 12 43.0 D NBT 54 24.1 C 59 31.1 C NBL 94 22.7 C 117 24.0 C EBR 220 10.9 B 260 19.3 B EBT 756 57.7 E 835 71.7 E EBL 182 16.5 B 161 25.6 C SBR 4 11.7 B 2 7.4 A SBT 845 8.8 A 939 7.9 A										
WBT 471 11.7 B 525 10.9 B										
US 52/78/Rivers Ave & WBL 15 24.6 C 13 25.0 C NBR 10 57.0 E 12 43.0 D NBT 54 24.1 C 59 31.1 C NBL 94 22.7 C 117 24.0 C EBR 220 10.9 B 260 19.3 B EBT 756 57.7 E 835 71.7 E EBL 182 16.5 B 161 25.6 C SBR 4 11.7 B 2 7.4 A SBT 845 8.8 A 939 7.9 A										
Meeting St/Durant Ave NBR		LIS 52/78/Rivers Ave &								
NBT 54 24.1 C 59 31.1 C NBL 94 22.7 C 117 24.0 C EBR 220 10.9 B 260 19.3 B EBT 756 57.7 E 835 71.7 E EBL 182 16.5 B 161 25.6 C SBR 4 11.7 B 2 7.4 A SBT 845 8.8 A 939 7.9 A	88									
NBL 94 22.7 C 117 24.0 C EBR 220 10.9 B 260 19.3 B EBT 756 57.7 E 835 71.7 E EBL 182 16.5 B 161 25.6 C US 52/78/Rivers Ave & Helm Ave SBT 845 8.8 A 939 7.9 A		I Mooning Subarant Ave							_	
EBR 220 10.9 B 260 19.3 B EBT 756 57.7 E 835 71.7 E EBL 182 16.5 B 161 25.6 C SBR 4 11.7 B 2 7.4 A SBT 845 8.8 A 939 7.9 A								1		
EBT 756 57.7 E 835 71.7 E EBL 182 16.5 B 161 25.6 C US 52/78/Rivers Ave & Helm SBR 4 11.7 B 2 7.4 A SBT 845 8.8 A 939 7.9 A										
BBL 182 16.5 B 161 25.6 C SBR 4 11.7 B 2 7.4 A SBT 845 8.8 A 939 7.9 A										
91 US 52/78/Rivers Ave & Helm SBR 4 11.7 B 2 7.4 A SBT 845 8.8 A 939 7.9 A										
91 US 52/78/Rivers Ave & Heim SBT 845 8.8 A 939 7.9 A										
	1 91 1									
	"	Ave	SBL	28	11.9	В	30	10.4	В	



Node	Interception Name			st Hour		2nd Hour		
No.	Intersection Name	Movement		– 8:15 a			– 8:45 a	
		WDD	Volume	Delay	LOS	Volume	Delay	LOS
		WBR	19	6.2	A	12	5.5	A
		WBT	12	11.9	В	11	11.5	В
		WBL	70	12.0	В	54	11.3	В
		NBR	51	5.3	A	52	5.6	A
		NBT	618	6.3	A	670	5.9	A
		NBL	1	21.8	C	2	13.1	В
		EBR	13	5.0	A	18	6.6	A
		EBT	9	10.3	В	3 2	10.7	В
		EBL		9.4	A		5.8	A
		SBR	115	16.1	В	112	15.5	В
		SBT SBL	112	27.8	C	101	27.8	С
			139	30.4		133	31.0	C
		WBR	213	4.9	A	233	5.5	A
	LIC 52/79/Divers Ave 8	WBT	616	13.2	B B	640	13.6	В
92	US 52/78/Rivers Ave & McMillan Ave	WBL	17	15.5		25	17.3	В
	IVICIVIIIIan Ave	NBR NBT	7	5.9	A	12 91	10.2	B C
		NBL	79 25	24.8	C	17	24.7	С
			23	27.8		24	28.3 3.1	A
		EBR EBT	718	3.8 9.9	A	774		В
		EBL	185	16.3	A	185	10.0	В
		WBT	660	6.5	В		15.3 6.8	
		WBL	104		A B	689 107		A B
	US 52/78/Rivers Ave & SC 642/Dorchester Rd	NBR	133	17.8 14.6	В	169	19.8 21.4	С
93		NBL	183	29.0	С	209	33.3	С
		EBR	77	4.9	A	69	5.6	A
		EBT	783	10.3	В	820	11.7	В
		SBR	49	27.5	С	52	27.4	С
		SBT	312	33.8	C	336	34.2	C
		SBL	29	35.4	D	26	33.3	C
		WBR	27	7.1	A	38	10.4	В
		WBT	417	12.6	В	440	14.8	В
	US 52/78/Rivers Ave &	WBL	172	19.6	В	176	23.7	C
94	Cosgrove Ave	NBR	210	17.7	В	247	18.7	В
		NBT	695	19.8	В	674	19.7	В
		NBL	301	24.3	С	309	25.5	C
		EBR	325	13.7	В	340	16.5	В
		EBT	524	30.6	С	573	33.6	С
		EBL	50	27.0	С	65	30.3	C
		SBR	100	13.4	В	124	13.0	В
		SBT	29	28.8	С	33	27.0	С
		SBL	30	33.4	C	19	33.3	C
		WBR	35	5.7	A	30	5.7	A
	110 50/70/70	WBT	461	7.2	A	419	7.5	Α
95	US 52/78/Rivers Ave &	WBL	38	12.9	В	37	12.7	В
	Reynolds Ave	NBR	67	11.3	В	53	11.4	В
		NBT	37	26.4	С	50	29.7	С
		NBL	16	30.9	С	18	31.0	С
	land the second	EBR	20	5.3	Α	21	5.1	A
		EBT	595	4.9	Α	580	4.9	Α



			1st Hour 2nd Hour						
Node	Intersection Name	Movement		– 8:15 a	m)		– 8:45 a	m)	
No.	intersection Name	Wovement	Volume	Delay	LOS	Volume	Delay	LOS	
		EBL	67	6.6	A	87	6.4	A	
		SBR	93	4.7	Α	89	5.5	Α	
		SBT	610	6.3	Α	644	7.5	A	
		NBT	298	4.1	Α	400	5.4	Α	
164	King St Ext & Heriot St	NBL	37	14.7	В	48	16.4	В	
		EBR	73	19.2	В	70	31.0	C	
		EBL	139	38.7	D	182	52.4	D	
		SBR	55	31.5	С	67	38.2	D	
		SBT	442	34.6	С	505	40.5	D	
		SBL	173	45.9	D	161	66.5	Е	
		WBR	172	6.6	Α	248	7.2	A	
		WBT	374	18.3	В	339	19.4	В	
		WBL	33	102.8	F	27	101.0	F	
166	King St & Mt Pleasant St	NBR	46	36.3	D	47	46.1	D	
		NBT	133	33.7	С	165	36.7	D	
		NBL	140	70.6	Е	165	81.5	F	
		EBR	394	56.9	Е	285	67.6	Е	
		EBT	905	56.1	Е	999	66.5	Е	
		EBL	27	59.1	Е	31	72.5	Е	
		SBR	127	22.7	С	141	19.6	В	
	US 52/Meeting St & Morrison Dr	SBT	303	46.0	D	349	58.7	Е	
		SBL	321	65.8	Е	316	82.0	F	
		WBR	463	13.5	В	437	15.5	В	
		WBT	369	40.6	D	367	44.0	D	
400		WBL	63	68.7	Е	74	78.5	Е	
109		NBR	51	4.2	Α	64	5.7	Α	
		NBT	288	41.2	D	330	41.1	D	
		NBL	80	63.1	Е	105	70.5	Е	
		EBR	208	13.5	В	206	15.0	В	
		EBT	773	16.1	В	850	18.2	В	
		EBL	141	26.5	C	150	27.4	С	
		SBR	54	8.5	Α	44	9.7	Α	
		SBT	541	14.4	В	648	15.2	В	
		SBL	30	21.4	С	24	18.5	В	
		WBR	56	11.1	В	79	12.0	В	
		WBT	85	23.6	С	95	22.4	С	
113	Meeting St & Romney St	WBL	30	28.4	С	24	26.8	С	
113	Weeting of a Ronniey of	NBR	30	6.4	Α	26	8.3	Α	
		NBT	285	33.8	С	299	46.1	D	
		NBL	87	38.6	D	96	55.7	Е	
		EBR	255	24.6	С	271	29.8	С	
		EBT	96	33.2	С	112	40.9	D	
		EBL	145	41.7	D	190	49.0	D	
		SBR	48	3.2	Α	48	3.0	Α	
		SBT	740	6.7	Α	880	6.7	Α	
	Meeting St & US 17 Off-	WBR	138	30.4	С	192	28.8	С	
117	Ramp	WBT	0	0.0	Α	0	0.0	Α	
	Kamp -	WBL	616	32.9	С	540	32.1	С	
		NBT	248	7.3	A	240	6.7	Α	
		NBL	352	42.5	D	385	48.2	D	



			10	2n	nd Hour			
Node	Intersection Name	Movement		st Hour – 8:15 a	m)		– 8:45 a	m)
No.	micraconon name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		SBR	337	13.8	В	271	13.9	В
		SBT	591	24.2	С	707	25.8	С
		SBL	49	30.4	C	48	28.3	С
		WBR	119	23.2	С	94	21.4	C
		WBT	108	44.1	D	92	45.4	D
		WBL	35	45.1	D	36	43.7	D
119	Meeting St & Huger St	NBR	34	2.7	Α	26	2.4	А
		NBT	533	4.3	Α	593	6.4	Α
		NBL	62	37.0	D	79	36.3	D
		EBR	46	10.6	В	95	11.6	В
		EBT	105	16.4	В	114	16.8	В
		EBL	296	25.9	С	287	26.5	С
		SBT	672	0.2	Α	837	0.3	Α
400	Masting Ot 8 Jahrana Ot	WBR	43	7.5	Α	52	7.3	Α
120	Meeting St & Johnson St	NBR	7	1.8	Α	10	1.7	Α
		NBT	586	0.5	Α	648	0.8	Α
		SBR	50	9.1	Α	30	27.1	С
		SBT	584	15.5	В	734	29.3	С
		SBL	40	37.0	D	46	43.7	D
		WBR	29	3.5	Α	46	4.0	Α
	Meeting St & Lee St	WBT	2	13.8	В	5	13.5	В
121		WBL	13	13.0	В	18	24.2	С
121		NBR	54	4.8	Α	39	4.0	Α
		NBT	549	10.1	В	585	9.6	Α
		NBL	40	29.3	C	39	32.2	C
		EBR	7	10.1	В	6	10.1	В
		EBT	4	9.4	Α	7	9.8	Α
		EBL	17	6.7	Α	27	9.3	Α
		SBT	602	10.1	В	746	17.1	В
122	Meeting St & I-26	NBT	517	31.7	C	549	31.7	C
122	Weeting St & 1-20	EBR	1167	23.2	С	1146	42.0	D
		EBL	125	18.4	В	116	29.8	С
		SBR	221	12.4	В	244	17.4	В
		SBT	1504	13.4	В	1605	17.3	В
		SBL	37	12.3	В	36	13.3	В
		WBR	14	15.3	В	6	10.3	В
		WBT	3	32.4	С	1	38.0	D
123	Meeting St & Line St	WBL	6	46.5	D	6	48.2	D
0		NBR	13	5.0	Α	10	4.6	Α
		NBT	474	6.7	Α	520	6.7	Α
		NBL	10	40.0	D	7	50.6	D
		EBR	80	31.5	С	81	32.9	С
		EBT	29	44.6	D	23	44.6	D
		EBL	30	39.9	D	25	39.3	D
		SBR	42	9.9	Α	19	11.6	В
		SBT	1349	12.8	В	1472	15.0	В
124	Meeting St & Columbus St	SBL	195	13.7	В	198	13.6	В
		WBR	60	13.8	В	62	12.0	В
		WBT	17	39.3	D	16	35.1	D
		WBL	100	54.1	D	104	57.9	Е



			1st Hour 2nd Hour					
Node	Intersection Name	Movement		– 8:15 a	m)		– 8:45 a	m)
No.	intersection Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		NBR	47	24.2	C	55	23.3	C
		NBT	424	9.3	A	449	8.7	A
		NBL	60	20.1	С	63	20.5	C
		EBR	64	29.0	C	61	29.9	C
		EBT	87	35.8	D	80	37.8	D
		EBL	16	36.0	D	25	40.4	D
		SBR	130	5.7	A	112	6.5	A
		SBT	1242	6.3	Α	1203	8.1	A
		SBL	40	7.7	Α	39	9.6	Α
		WBR	21	8.7	Α	35	9.0	Α
		WBT	7	29.4	С	12	30.6	С
40-		WBL	5	42.0	D	4	41.0	D
125	Meeting St & Woolfe St	NBR	10	4.0	Α	10	4.0	Α
		NBT	563	4.1	Α	555	3.9	Α
		NBL	9	17.7	В	12	17.6	В
		EBR	17	19.2	В	19	20.4	С
		EBT	12	38.8	D	18	41.9	D
		EBL	28	40.2	D	30	36.7	D
		SBR	61	12.4	В	92	19.6	В
		SBT	960	17.8	В	949	38.2	D
		SBL	42	28.9	С	40	63.6	Е
		WBR	55	9.7	Α	65	11.2	В
		WBT	9	39.2	D	14	39.4	D
400	Meeting St & Mary St	WBL	17	32.4	С	15	31.9	С
126		NBR	17	9.2	Α	9	4.0	Α
		NBT	454	8.2	Α	427	7.3	Α
		NBL	10	26.7	С	17	23.3	С
		EBR	47	11.4	В	47	11.2	В
		EBT	31	24.2	С	22	24.2	С
		EBL	75	30.2	С	87	30.6	С
		SBR	108	2.0	Α	84	2.9	Α
		SBT	910	7.7	Α	919	15.2	В
		WBR	140	9.1	Α	57	7.5	Α
127	Meeting St & Wragg Square	WBT	7	32.0	С	5	37.1	D
		WBL	9	39.7	D	8	37.5	D
		NBT	342	3.6	Α	396	3.5	Α
		NBL	14	19.5	В	21	21.7	С
		SBT	883	2.5	Α	905	4.0	Α
		SBL	35	2.3	Α	22	3.6	Α
		NBR	26	4.6	Α	29	5.5	Α
128	Meeting St & Ann St	NBT	341	6.5	Α	401	7.6	Α
		EBR	56	4.9	Α	62	4.9	Α
		EBT	14	40.0	D	14	37.4	D
		EBL	15	31.3	С	15	30.6	С
		SBR	26	6.0	Α	29	8.0	Α
		SBT	882	12.7	В	902	22.1	С
120	Meeting St & John St	SBL	21	13.9	В	33	24.7	С
129	I wiscuing of a doning of	WBR	22	15.7	В	46	15.0	В
		WBT	26	36.5	D	28	34.2	С
		WBL	25	36.2	D	25	36.0	D



	1st Hour 2nd Hour						d Hour	
Node	Intersection Name	Movement		– 8:15 a	m)		– 8:45 a	m)
No.	microcolon Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		NBR	24	2.8	A	49	3.5	A
		NBT	339	4.1	Α	374	4.8	A
		NBL	26	21.1	С	33	33.1	С
		EBR	53	9.7	Α	65	10.8	В
		EBT	9	39.9	D	13	35.0	С
		EBL	9	30.8	С	12	33.0	С
		SBR	184	6.7	Α	203	7.2	Α
		SBT	569	23.2	С	615	23.6	С
		SBL	155	22.6	С	138	23.5	С
		WBR	76	28.6	С	62	25.6	С
		WBT	247	37.9	D	250	36.2	D
130	Mooting St & Colhoup St	WBL	58	91.6	F	67	99.8	F
130	Meeting St & Calhoun St	NBR	29	7.1	Α	57	9.1	Α
		NBT	235	11.3	В	297	11.8	В
		NBL	87	19.1	В	107	23.6	С
		EBR	114	13.7	В	212	19.7	В
		EBT	363	29.1	С	445	31.4	С
		EBL	82	25.0	С	99	24.5	С
		SBR	126	15.4	В	134	18.4	В
		SBT	101	22.8	С	146	23.4	С
	Calhoun St & King St	SBL	20	23.5	С	93	26.8	С
		WBR	58	9.7	Α	63	10.4	В
131		WBT	366	10.5	В	371	11.7	В
		WBL	94	19.6	В	124	22.3	С
		EBR	65	7.7	Α	52	9.3	Α
		EBT	547	10.3	В	669	11.1	В
		EBL	144	15.6	В	153	16.5	В
		SBR	21	7.3	Α	14	9.2	Α
		SBT	90	23.7	С	138	24.5	С
		SBL	11	22.6	С	11	24.7	С
		WBR	43	5.7	Α	41	6.1	Α
132	Calhoun St & Phillips St	WBT	425	8.3	Α	436	9.0	Α
		WBL	25	14.3	В	27	20.3	С
		EBR	48	11.6	В	61	12.6	В
		EBT	751	10.7	В	865	13.3	В
		EBL	60	14.2	В	67	18.2	В
		WBR	51	7.6	A	49	7.0	A
		WBT	393	20.1	С	402	20.3	С
400	Calbarin Ct & Caratina Ct	NBR	82	11.0	В	98	11.9	В
133	Calhoun St & Coming St	NBT	429	27.0	С	419	27.6	С
		NBL	41	30.0	С	65	31.2	С
		EBT	777	18.8	В	894	19.8	В
		EBL SBR	120	26.8	С	148	29.9	С
		SBT	86	13.1 22.0	В	60	12.4	В
		SBL	36		C	32	22.4	C
124	Calhaun St & Smith St	WBR	32	25.6		24	24.5	
134	Calhoun St & Smith St		10	7.5	A	13	6.8	A
		WBT WBL	418	10.1	B C	452	9.8	A
			4 22	22.1		4	21.0	C
		NBR		10.5	В	26	9.1	А



Node	Interpostion Name	Mayamant	1st Hour (7:15 – 8:15 am)			2nd Hour (7:45 – 8:45 am)			
No.	Intersection Name	Movement	Volume	– 8:15 a Delay	n) LOS	Volume	− 8:45 a Delay	m) LOS	
		NBT	29	21.7	C	21	21.3	C	
		NBL	15	26.4	C	8	19.0	В	
		EBR	10	18.0	В	12	17.2	В	
		EBT	849	19.4	В	995	20.0	В	
		EBL	43	23.7	С	34	24.8	С	
		SBR	340	14.1	В	324	12.6	В	
		SBT	202	22.4	С	288	24.4	С	
		SBL	87	20.1	С	112	21.5	С	
135	Calhoun St & Rutledge Ave	WBT	554	11.7	В	517	10.9	В	
	Camban St a riandage / ivo	WBL	21	25.9	С	21	25.9	С	
		NBR	53	8.2	A	43	9.2	A	
		EBR	30	11.9	В	31	13.4	В	
		EBT	886	12.6	B B	981	12.8	B B	
		WBR WBT	213 679	18.8 17.7	В	215 626	18.9 17.6	В	
		NBR	59	16.4	В	53	17.0	В	
		NBT	153	30.0	С	153	30.5	С	
136	Calhoun St & Ashley Ave	NBL	44	36.4	D	42	34.9	C	
		EBR	10	8.2	A	16	8.0	A	
		EBT	856	11.6	В	958	12.1	В	
		EBL	195	24.4	С	205	25.5	С	
		SBR	69	6.9	Α	90	6.7	Α	
		SBT	11	31.5	С	12	26.7	С	
		SBL	102	27.4	С	101	26.8	С	
		WBR	134	17.4	В	127	17.3	В	
		WBT	550	21.6	С	532	21.2	С	
137	Calhoun St & Jonathan	WBL	23	26.6	С	14	27.3	С	
	Lucas St/Barre St	NBR	23	10.3	В	16	10.3	В	
		NBT NBL	18 46	24.9 27.4	C	15 41	24.4 27.8	C	
		EBR	44	12.6	В	53	14.0	В	
		EBT	940	9.1	A	1062	9.7	A	
		EBL	183	25.7	С	214	27.4	C	
		SBR	177	3.1	A	158	3.2	A	
		SBT	5	36.0	D	2	40.8	D	
		SBL	122	36.4	D	128	36.5	D	
		WBR	123	41.5	D	136	36.9	D	
		WBT	541	42.0	D	535	39.0	D	
142	Calhoun St & Courtenay Dr	NBR	0	0.0	Α	0	0.0	Α	
		NBT	0	0.0	Α	0	0.0	Α	
		NBL	1	33.9	С	0	0.0	Α	
+ 71		EBR	0	0.0	Α	0	0.0	Α	
		EBT	1168	9.6	A	1317	10.6	В	
		EBL	591	42.1	D	537	37.0	D	

^{*} This intersection is unsignalized in the No Build scenario and has been evaluated using unsignalized LOS criteria.



Node Level Performance, PM Peak Hour

Node				st Hour		2nd Hour (5:00 – 6:00 pr		
No.	Intersection Name	Movement		– 5:30 p				
		000	Volume	Delay	LOS	Volume	Delay	LOS
		SBR	278	31.8	C	217	65.6	E
		SBT	431	83.7	F	356	119.6	F
		SBL	135	536.4	F	135	751.5	F
		WBR	20	407.9	F	16	411.2	F
		WBT	48	146.6	F	46	150.1	F
22	US 78 & College Park Rd	WBL	313	223.7	F	311	225.4	F
		NBR	20	407.9	F	16	411.2	F
		NBT	313	223.7	F	311	225.4	F
		NBL	48	146.6	F	46	150.1	F
		EBR	70	213.9	F	60	444.0	F
		EBT	415	397.1	F	437	611.6	F
		EBL	247	62.6	E	207	120.7	F
		SBR	27	59.5	E	31	65.5	Е
		SBT	68	102.8	F	68	109.3	F
		SBL	53	91.8	F	75	107.7	F
		WBR	44	76.6	Е	57	74.7	Е
		WBT	678	31.3	С	819	33.8	С
23	US 78 & Ladson Rd/	WBL	1182	70.6	Е	1166	74.9	Е
	Ancrum Rd	NBR	1053	27.3	С	896	35.5	D
		NBT	115	244.2	F	111	297.1	F
		NBL	256	270.4	F	262	321.0	F
		EBR	63	235.8	F	84	240.1	F
		EBT	488	258.6	F	487	263.2	F
		EBL	15	161.8	F	14	161.9	F
		SBR	35	17.2	В	61	30.0	С
		SBT	20	50.8	D	34	80.6	F
		SBL	54	87.5	F	73	137.9	F
		WBR	66	58.4	E	111	49.7	D
		WBT	1846	69.9	E	1862	59.3	E
27	US 78 & Ingleside Blvd	WBL	341	111.9	F	401	123.0	F
		NBR	246	211.1	F	331	154.2	F
		NBT	8	437.5	F	15	324.7	F
		NBL	156	863.6	F	205	687.1	F
		EBR	175	16.4	В	191	15.4	В
		EBT	1197	36.3	D	1058	38.3	D
		EBL	42	51.1	D	45	59.4	E
		WBT	2099	70.9	E	2182	67.2	E
29	US 78 & I-26 EB Ramps	WBL	409	63.8	E	389	62.9	E
	·	EBR	714	3.6	A	601	2.5	A
		EBT WBT	961	8.7	A N/A	1045	8.1	A N/A
30		EBT	1655	10.8 0.7	N/A	1692	10.6	N/A
30	US 78 & I-26 WB Ramps *	EBL	1277		N/A F	1647	1.9	N/A
			170	50.7 307.3		133	43.0	E F
		SBR SBT	180		F	191	299.1	
31	US 78/University Blvd &	SBL	7	320.0	F	7	300.9	F
31	Medical Plaza Dr	WBR	36 25	311.5	С	27 32	305.0	F
		WBT		32.0	C		35.8	D D
		VVDI	2286	34.5	U	2256	39.1	U



			16	st Hour	_	21	nd Hour	
Node	Intersection Name	Movement		– 5:30 p	m)		– 6:00 p	m)
No.	microcolon Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		WBL	19	87.5	F	35	82.8	F
		NBR	37	615.1	F	22	477.5	F
		NBT	4	516.7	F	2	468.6	F
		NBL	195	517.3	F	202	529.3	Ė
		EBR	359	7.2	А	365	8.9	Α
		EBT	1094	3.2	A	1409	9.0	A
		EBL	49	58.2	Е	87	66.1	E
		SBR	196	33.8	С	174	28.7	С
		SBT	27	50.3	D	9	46.5	D
		SBL	149	55.0	D	175	55.8	E
		WBR	62	63.5	Е	101	74.9	Ē
		WBT	1798	52.3	D	1787	67.6	Ē
	US 78/University Blvd &	WBL	41	35.1	D	42	57.5	Ē
34	Medical Plaza Dr/BUC Club	NBR	236	90.1	F	243	96.5	F
	Blvd	NBT	25	123.3	F	39	121.3	F
		NBL	355	130.2	F	358	127.7	F
		EBR	55	10.7	В	72	10.1	В
		EBT	1166	16.4	В	1393	13.4	В
		EBL	27	47.1	D	41	71.9	Е
		SBR	121	58.4	Е	87	71.5	Е
		SBT	45	88.7	F	39	97.3	F
		SBL	308	96.5	F	282	97.8	F
		WBR	109	21.5	С	113	31.3	С
		WBT	1407	19.9	В	1533	29.4	С
07	US 78/University Blvd &	WBL	22	23.4	C	20	33.3	С
37	Elms Center Rd	NBR	87	37.7	D	71	62.3	Е
		NBT	46	62.0	Е	52	75.9	Е
		NBL	142	65.3	Е	130	95.1	F
		EBR	50	15.1	В	56	18.5	В
		EBT	1511	18.2	В	1582	20.2	С
		EBL	120	33.3	C	121	47.4	D
		SBR	13	13.5	В	16	22.9	С
		SBT	4	69.7	Е	6	67.2	Е
		SBL	20	79.3	Е	28	83.2	F
		WBR	22	1.8	Α	18	3.2	Α
		WBT	1482	5.0	Α	1612	19.5	В
38	US 78/University Blvd &	WBL	85	29.7	С	103	47.3	D
30	Fernwood Dr	NBR	148	15.5	В	217	54.8	D
		NBT	6	81.1	F	2	75.1	Е
		NBL	50	83.8	F	60	131.0	F
		EBR	22	7.0	Α	25	7.1	Α
		EBT	1862	4.3	А	1835	4.5	Α
		EBL	5	9.4	Α	5	20.2	С
		SBR	204	47.9	D	285	55.7	Е
		SBT	2880	44.9	D	3075	54.7	D
	US 52/78/Rivers Ave &	SBL	114	193.0	F	114	212.5	F
42	Otranto Rd/Otranto Blvd	WBR	104	102.4	F	109	110.8	F
		WBT	131	181.3	F	128	193.7	F
		WBL	175	189.1	F	177	193.7	F
		NBR	279	6.9	А	283	7.8	Α



Node	Intersection Name	Movement		st Hour – 5:30 p	m)		nd Hour – 6:00 p	m)
No.	microcolion Hame	Movement	Volume	Delay	Los	Volume	Delay	LOS
		NBT	3463	26.5	С	3539	29.8	С
		NBL	178	80.5	F	194	86.2	F
		EBR	196	17.9	В	223	35.9	D
		EBT	107	87.8	F	110	103.5	F
		EBL	240	85.2	F	287	111.8	F
		SBR	91	2.7	Α	103	3.8	Α
		SBT	3153	5.0	Α	3399	8.3	Α
		SBL	21	127.8	F	21	123.3	F
		WBR	10	80.0	Е	15	58.6	E
		WBT	25	119.7	F	23	123.6	F
	LIC 50/70/Divers Ave 8 T	WBL	43	134.7	F	53	133.2	F
43	US 52/78/Rivers Ave & T Mobile Dr	NBR	59	9.4	Α	61	11.0	В
	Wobile Di	NBT	3808	19.4	В	3902	26.7	С
		NBL	82	100.1	F	103	108.2	F
		NBU	24	100.1	_	16	106.2	Г
		EBR	80	20.0	C	76	34.2	С
		EBT	9	137.3	F	9	150.7	F
		EBL	87	148.1	F	88	164.8	F
		SBR	31	2.4	N/A	31	11.3	N/A
		SBT	3217	3.6	N/A	3365	31.0	N/A
		SBL	6	55.7	F	5	69.6	F
		WBR	22	14.6	В	27	21.1	С
44	US 52/78/Rivers Ave &	WBL	1	73.4	F	1	149.9	F
44	Melnick Dr *	NBR	22	5.8	N/A	24	11.6	N/A
		NBT	3937	11.5	N/A	4023	21.6	N/A
		NBL	123	46.0	Е	143	78.0	F
		EBR	59	15.7	С	66	104.0	F
		EBL	11	56.1	F	10	86.5	F
		SBR	245	20.3	С	268	23.4	С
		SBT	3221	45.5	D	3157	55.5	Е
		WBR	50	154.4	F	57	192.4	F
	US 52/78/Rivers Ave &	WBT	394	159.9	F	386	205.3	F
46	Greenridge Rd	WBL	65	166.6	F	57	202.9	F
		NBT	3948	18.2	В	4177	19.3	В
		NBL	333	105.7	F	369	117.8	F
		EBR	532	50.7	D	633	71.4	E
		EBL	146	249.5	F	156	444.2	F
		SBR	248	14.0	В	219	14.1	В
		SBT	1340	16.1	В	1519	16.5	В
		SBL	152	35.0	С	141	40.5	D
		WBR	146	10.1	В	177	9.6	A
		WBT	55 136	80.8	F	41	77.5	E F
49	US 52/78/Rivers Ave &	WBL	136	86.7		138	88.1	
.5	North Rivers Market Place	NBR NBT	92 2541	2.1	A	86 2701	2.5	A
				6.5	A	2791	10.4	B C
		NBL EBR	21 66	14.6 12.7	B B	20 96	20.0 9.5	A
		EBT	32	76.9	E	25	77.8	E
		EBL	225	104.0	F	209	107.0	F



Node	Intersection Name	Movement		st Hour – 5:30 p	m)		nd Hour – 6:00 pi	m)
No.			Volume	Delay	Los	Volume	Delay	Los
		SBR	186	2.3	A	149	2.8	A
		SBT	1284	11.5	В	1505	13.2	В
		SBL	87	42.4	D	96	54.4	D
		WBR	76	12.1	В	85	15.5	В
		WBT	76	91.8	F	84	93.4	F
	US 52/78/Rivers Ave &	WBL	249	122.4	F	275	132.2	F
50	Eagle Landing Blvd	NBR	400	5.0	Α	419	5.4	Α
		NBT	2478	9.6	Α	2701	13.3	В
		NBL	46	13.8	В	56	18.3	В
		EBR	41	60.7	Е	40	58.8	Е
		EBT	79	102.0	F	67	106.5	F
		EBL	111	126.6	F	118	127.2	F
		SBR	69	14.3	В	86	18.9	В
		SBT	1302	15.1	В	1581	18.2	В
		SBL	193	66.5	Е	166	69.4	Е
		WBR	195	163.6	F	212	187.6	F
		WBT	47	205.0	F	48	217.5	F
51	US 52/78/Rivers Ave &	WBL	183	217.8	F	183	236.9	F
"	Northwoods Blvd	NBR	88	7.2	Α	89	7.5	Α
		NBT	2529	15.1	В	2806	18.6	В
		NBL	177	21.8	С	196	26.2	C
		EBR	154	7.5	A	183	13.3	В
		EBT	44	91.1	F	45	95.8	F
		EBL	158	149.4	F	166	193.9	F
		SBR	471	36.6	D	551	51.3	D
		SBT	924	100.3	F	1083	108.0	F
		SBL	159	95.2	F	151	90.7	F
		WBR WBT	92	98.4	F	92	108.7	F
	US 52/78/Rivers Ave &	WBL	269 164	115.6 95.5	F	255 177	127.6 104.9	F
52	Ashley Phosphate Rd	NBR	231	19.5	В	256	32.4	С
	Ashley Filosphate Ru	NBT	2096	26.0	С	2359	37.9	D
		NBL	922	61.5	E	868	72.8	E
		EBR	552	18.3	В	663	40.9	D
		EBT	205	78.3	E	195	100.5	F
		EBL	584	117.0	F	617	172.0	F
		SBR	139	2.6	А	118	2.9	Α
		SBT	1428	4.3	A	1617	5.9	A
		SBL	170	106.6	F	182	108.1	F
		WBR	102	37.3	D	115	57.8	Е
		WBT	12	78.2	Е	17	74.9	Е
		WBL	113	102.8	F	140	97.5	F
54	US 52/78/Rivers Ave &	NBR	142	7.9	Α	155	17.3	В
	Morris Baker Blvd	NBT	3000	13.8	В	3174	30.1	С
		NBL	56	119.4	F	61	120.8	F
		EBR	109	39.7	D	108	43.4	D
		EBT	16	105.4	F	11	117.4	F
		EBL	142	105.4	F	146	120.6	F



			10	st Hour	_	21	nd Hour	
Node	Intersection Name	Movement		– 5:30 p	m)		– 6:00 pi	m)
No.	merseonen Hame	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		SBT	1416	1.2	A	1549	2.1	A
		SBL	216			242		
		SBU	60	91.7	F	65	110.4	F
	US 52/78/Rivers Ave &	WBR	310	166.8	F	441	156.5	F
56	Mabeline Rd	WBL	89	452.6	F	66	339.1	F
		NBR	45	12.3	В	72	27.5	С
		NBT	2858	18.4	В	2893	33.8	С
		NBU	15	15.4	В	10	26.5	С
		SBT	1534	1.0	Α	1470	0.9	Α
		SBL	120	04.6	F	206	02.0	F
		SBU	9	91.6	Г	6	92.9	Г
59	US 52/78/Rivers Ave &	WBR	223	36.9	D	133	18.5	В
59	Stokes Ave	WBL	179	130.3	F	123	106.9	F
		NBR	181	16.2	В	203	30.3	С
		NBT	2490	22.1	С	2718	27.4	С
		NBU	46	95.6	F	43	134.7	F
		SBR	155	17.6	В	160	16.3	В
		SBT	1603	23.9	С	1492	24.6	С
		SBU	9	8.6	Α	15	6.5	Α
		WBR	22	16.5	В	33	20.8	С
60	US 52/78/Rivers Ave &	NBR	30	9.9	Α	31	12.7	В
	Midland Park Rd	NBT	2365	11.2	В	2601	13.4	В
		NBL	424	109.5	F	460	112.3	F
		NBU	78			84		
		EBR	277	9.4	А	237	14.1	В
		EBL	290	55.4	Е	276	66.8	Е
		SBR	37	3.5	Α	35	3.2	Α
		SBT	1833	2.5	Α	1684	2.4	Α
		SBU	36	8.7	Α	56	8.0	Α
61	US 52/78/Rivers Ave &	NBT	2775	25.6	С	3055	26.5	С
	Eagle Dr	NBL	145	79.1	Е	136	83.2	F
		NBU	2			3		
		EBR	137	11.0	В	125	10.9	В
		EBL	101	61.6	E	102	63.5	E
		SBT	1703	1.7	А	1591	1.5	Α
		SBL	251	153.1	F	216	148.4	F
	LIC FO/70/Divore Ave 9	SBU	0	120.1		0	111 6	_
62	US 52/78/Rivers Ave &	WBR	368	129.1	F	409	111.6	F
	Hanahan Rd	WBL	213	205.9	F	193	170.0	F
		NBR NBT	213	21.7	C C	226	21.8	C
		NBU	2565 0	30.2		2800 0	29.9	A
		SBR	43	0.0 19.1	A	53	0.0 19.7	
		SBT	2028	20.3	B C	1917	21.8	B C
		SBU	49	20.3	A	53	3.0	A
		WBR	12	2.5 14.6	В	14	14.8	
65	US 52/78/Rivers Ave & Benderson Dr	NBR	7	3.5	A	10	2.9	B A
	Deligerson Di	NBT	2640	0.9	A	2763	0.9	A
		NBL	87		- A	78		
		NBU	77	30.9	С	61	32.4	С
L		NBU	11			UI		



			10	st Hour	_	2r	nd Hour	
Node	Intersection Name	Movement		– 5:30 p	m)		– 6:00 p	m)
No.	microcolon Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		EBR	131	16.1	В	148	14.4	В
		EBL	56	52.7	D	71	51.3	D
		SBR	964	7.5	A	906	7.1	A
		SBT	1244	21.1	С	1225	20.7	C
		WBR	21	10.0	В	16	11.8	В
		NBR	34	14.1	В	42	13.6	В
67	US 52/78/Rivers Ave &	NBT	2062	10.4	В	2173	10.3	В
	Aviation Ave	NBL	246			240		
		NBU	19	136.9	F	8	142.4	F
		EBR	164	40.3	D	151	54.3	D
		EBL	683	138.2	F	673	158.5	F
		SBR	553	25.8	С	530	25.6	С
		SBT	879	60.1	Е	818	74.7	Е
		SBL	215	87.0	F	237	86.2	F
		WBR	279	113.9	F	289	145.2	F
		WBT	392	164.0	F	395	199.5	F
	US 52/78/Rivers Ave &	WBL	179	67.1	Е	190	84.4	F
70	Remount Rd	NBR	216	9.2	Α	233	9.0	Α
		NBT	1689	72.4	Е	1715	75.5	Е
		NBL	359	164.3	F	358	157.0	F
		EBR	380	35.7	D	387	38.6	D
		EBT	523	90.1	F	522	89.1	F
		EBL	268	80.1	F	250	79.5	E
		SBR	53	0.8	N/A	28	0.9	N/A
		SBT	1398	8.8	N/A	1408	13.7	N/A
		SBU	38	661.0	F	34	890.6	F
72	US 52/78/Rivers Ave & N of	NBT	2302	44.0	N/A	2291	44.6	N/A
12	Sabal St *	NBL	41	245.4	F	30	312.7	F
		NBU	5	571.3	F	4	892.6	F
		EBR	33	331.1	F	20	481.0	F
		EBL	23	477.5	E	17	920.7	F
		SBR	7	0.3	Α	8	7.1	Α
		SBT	1416	0.9	Α	1308	7.7	Α
		SBL	46	37.5	D	53	40.1	D
		SBU	53			49		
76	US 52/78/Rivers Ave &	WBR	161	32.5	С	186	35.9	D
'	Harley St	WBL	107	35.1	D	128	45.8	D
		NBR	13	31.4	С	13	37.5	D
		NBT	2106	36.8	D	2138	41.3	D
		NBU	211	3.5	Α	173	4.5	Α
		EBR	18	6.9	Α	16	12.5	В
		SBR	440	1.5	Α	372	5.1	Α
		SBT	1342	5.2	A	1167	31.5	C
78	US 52/78/Rivers Ave & I-	WBR	232	1.4	A	403	19.8	В
	526 WB Ramps	NBT	2360	39.4	D	2125	82.2	F
		NBL	256	51.9	D	262	54.6	D
		EBR	58	0.0	A	82	18.2	В
	US 52/78/Rivers Ave & I-	SBT	977	1.6	A	816	57.9	E
79	526 EB Ramps	SBL	421	56.7	Е	373	65.3	E
	<u>'</u>	WBR	539	13.4	В	442	67.0	Е



			10	t Hour		2r	nd Hour	
Node	Intersection Name	Movement		– 5:30 p	m)		– 6:00 pi	m)
No.	microcolon Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		NBR	211	5.3	A	174	10.6	В
		NBT	2141	34.0	С	1962	74.1	Е
		EBR	294	2.0	Α	232	40.2	D
		SBR	155	4.2	Α	136	4.5	A
		SBT	917	11.8	В	740	11.7	В
		SBU	16	6.3	А	17	11.1	В
		WBR	0	0.0	Α	0	0.0	Α
00	US 52/78/Rivers Ave & Mall	NBR	0	0.0	Α	0	0.0	Α
82	Drive	NBT	1880	3.1	Α	1733	33.9	С
		NBL	71	07.0	С	76	20.2	С
		NBU	20	27.3	C	18	28.3	C
		EBR	66	43.4	D	68	43.3	D
		EBL	404	78.0	Ш	392	88.7	F
		SBR	9	1.3	Α	6	1.3	Α
		SBT	950	0.7	Α	767	0.5	Α
		SBL	22	18.6	В	21	20.5	С
	US 52/78/Rivers Ave &	SBU	74			50		
83	Alton	WBR	234	9.4	Α	259	13.7	В
	Alton	WBL	13	41.9	D	10	40.4	D
		NBR	162	4.5	Α	163	7.5	Α
		NBT	1767	2.9	Α	1696	7.5	Α
		EBR	51	2.0	Α	30	1.9	Α
		SBT	892	0.3	Α	706	0.2	Α
		SBL	124	50.4	D	104	41.9	D
	US 52/78/Rivers Ave &	WBR	94	9.9	Α	112	11.6	В
84	Morningside Dr	WBL	159	38.1	D	172	37.9	D
	inioninigolae 21	NBR	95	5.3	Α	107	5.6	Α
		NBT	1801	11.2	В	1794	12.9	В
		NBU	0	0.0	Α	0	0.0	Α
		SBR	50	2.2	Α	60	2.2	Α
		SBT	942	2.9	Α	787	2.9	Α
87	US 52/78/Rivers Ave &	NBT	1752	4.7	Α	1787	4.4	Α
	Piggly Wiggly Dr	NBL	36	8.0	A	42	7.4	Α
		EBR	52	4.5	A	58	4.4	A
		EBL	115	32.5	C	130	33.2	С
		SBR	241	28.2	C	288	38.9	D
		SBT	82	54.7	D	88	84.4	F
		SBL	136	117.8	F	136	167.8	F
		WBR	220	6.7	A	222	7.2	A
	110 F0/70/Divers Acce 9	WBT	1207	9.1	A	1196	9.4	A
88	US 52/78/Rivers Ave &	WBL	9	9.3	A	14	10.4	В
	Meeting St/Durant Ave	NBR	24	59.8	E	19	89.1	F
		NBT	213	39.4	D	240	49.5	D
		NBL	337	40.8	D	362 156	53.9	D A
		EBR	192	7.8	A	156	8.0	A
		EBT	607	52.4	D C	481	68.5	E C
		EBL SBR	188	24.6		212 8	24.9	
91	US 52/78/Rivers Ave &	SBT	706	15.0	В		12.8	В
91	Helm Ave	SBL	796	14.5	B C	707	14.5	В
L		SDL	23	31.4	U	33	31.4	С



			1:	st Hour		2r	nd Hour	
Node	Intersection Name	Movement		– 5:30 p	m)		– 6:00 p	m)
No.			Volume	Delay	Ĺos	Volume	Delay	Ĺos
		WBR	56	41.0	D	59	45.8	D
		WBT	10	27.8	С	15	27.7	С
		WBL	57	19.1	В	64	24.5	С
		NBR	79	39.2	D	80	60.7	Е
		NBT	1552	51.4	D	1448	71.5	Е
		NBL	8	31.7	С	10	47.0	D
		EBR	11	4.8	Α	12	6.2	Α
		EBT	16	11.6	В	19	11.1	В
		EBL	4	17.8	В	5	24.9	С
		SBR	332	39.7	D	406	54.7	D
		SBT	139	44.0	D	169	59.6	Е
		SBL	209	39.6	D	251	53.5	D
		WBR	315	9.5	Α	341	8.5	Α
		WBT	1302	20.7	С	1132	21.3	С
92	US 52/78/Rivers Ave &	WBL	42	22.3	С	35	18.5	В
52	McMillan Ave	NBR	20	12.9	В	35	13.0	В
		NBT	68	22.4	С	63	20.9	С
		NBL	30	24.3	С	29	26.7	С
		EBR	62	3.6	Α	62	3.4	Α
		EBT	646	10.8	В	592	10.6	В
		EBL	150	29.5	С	128	26.1	С
		WBT	1433	11.5	В	1244	11.6	В
		WBL	243	33.2	С	231	33.9	С
93	US 52/78/Rivers Ave & SC	NBR	123	15.2	В	118	14.7	В
	642/Dorchester Rd	NBL	213	30.2	С	263	30.7	С
		EBR	118	5.8	Α	173	6.6	Α
		EBT	754	10.3	В	708	10.4	В
		SBR	111	45.2	D	96	42.6	D
		SBT	595	42.0	D	594	40.7	D
		SBL	27	33.5	С	25	30.6	С
		WBR	72	42.4	D	85	19.4	В
		WBT	1185	38.8	D	966	30.0	С
94	US 52/78/Rivers Ave &	WBL	351	59.7	Е	301	44.6	D
	Cosgrove Ave	NBR	101	15.3	В	118	19.4	В
		NBT	555	16.9	В	598	22.0	С
		NBL	385	54.8	D	412	113.7	F
		EBR	422	18.1	В	387	16.4	В
		EBT	396	39.3	D	393	36.3	D
		EBL	54	60.4	E	43	40.4	D
		SBR	120	16.8	В	201	49.1	D
		SBT	50	27.4	С	55 22	52.0	D
		SBL	18	30.1	С	22	45.1	D
		WBR	115	11.2	В	106	10.9	В
OF	US 52/78/Rivers Ave &	WBT	1198	13.0	В	918	12.5	В
95	Reynolds Ave	WBL	85	13.0	В	83	13.1	В
		NBR	28	17.3	B C	53	17.2	В
		NBT	90	26.8	C	83	27.9	C
		NBL	46 52	29.5		49 49	28.8	
		EBR EBT		3.6	A		4.1	A
		CDI	315	3.8	Α	344	4.4	Α



			16	st Hour		2r	nd Hour	
Node	Intersection Name	Movement		– 5:30 p	m)		– 6:00 pi	m)
No.	microcolon Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		EBL	76	18.7	В	100	15.7	В
		SBR	95	142.3	F	72	401.3	F
		SBT	214	141.9	F	84	518.4	F
		NBT	760	7.8	Α	593	15.9	В
164	King St Ext & Heriot St	NBL	40	14.4	В	23	16.7	В
		EBR	40	231.3	F	24	961.6	F
		EBL	101	177.2	F	57	735.3	F
		SBR	66	238.4	F	24	588.8	F
		SBT	65	177.4	F	20	428.6	F
		SBL	111	573.4	F	72	1119.2	F
		WBR	265	8.6	Α	272	8.1	Α
		WBT	490	19.7	В	361	14.3	В
400	King Ct 9 Mt Diagont Ct	WBL	50	42.7	D	40	25.6	С
166	King St & Mt Pleasant St	NBR	36	117.2	F	28	277.3	F
		NBT	500	66.3	Е	336	97.1	F
		NBL	140	58.2	Е	103	81.5	F
		EBR	62	277.5	F	44	1123.5	F
		EBT	372	224.9	F	173	1001.3	F
		EBL	34	245.5	F	18	836.4	F
		SBR	133	105.2	F	86	210.6	F
		SBT	316	340.2	F	198	731.8	F
		SBL	105	246.7	F	59	512.0	F
		WBR	359	77.1	Ш	149	103.7	F
		WBT	583	144.3	F	529	209.7	F
109	US 52/Meeting St &	WBL	47	322.2	F	31	704.6	F
109	Morrison Dr	NBR	30	2.3	Α	23	8.0	Α
		NBT	124	34.8	С	40	31.7	С
		NBL	91	75.3	Е	60	95.1	F
		EBR	178	213.6	F	99	555.2	F
		EBT	288	35.3	D	142	137.4	F
		EBL	23	46.0	D	12	100.2	F
		SBR	116	139.4	F	91	263.2	F
		SBT	452	75.4	Е	265	128.3	F
		SBL	16	69.7	Е	9	101.6	F
		WBR	7	93.0	F	7	330.6	F
		WBT	172	179.9	F	101	419.3	F
113	Meeting St & Romney St	WBL	46	138.8	F	21	309.9	F
	l	NBR	23	53.4	D	12	246.9	F
		NBT	114	111.3	F	50	316.0	F
		NBL	139	206.3	F	64	443.8	F
		EBR	52	54.4	D	38	63.8	Е
		EBT	51	51.4	D	29	83.9	F
		EBL	67	52.0	D	46	79.7	Е
		SBR	29	6.4	Α	18	10.2	В
		SBT	495	38.2	D	311	41.1	D
	Meeting St & US 17 Off-	WBR	212	152.0	F	128	262.9	F
117	Ramp	WBT	35	172.5	F	25	246.9	F
		WBL	208	270.3	F	133	376.5	F
		NBT	84	14.0	В	52	66.8	E
L		NBL	518	72.4	Е	314	76.1	Е



			16	st Hour	_	2r	nd Hour	
Node	Intersection Name	Movement		– 5:30 p	m)		– 6:00 pi	m)
No.	microcolon Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		SBR	169	10.2	В	116	34.0	C
		SBT	287	18.8	В	162	19.7	В
		SBL	15	47.9	D	15	40.9	D
		WBR	204	157.5	F	141	295.2	F
		WBT	164	160.8	F	122	259.4	F
440	Manifest Of O.H. and Of	WBL	18	148.6	F	14	254.6	F
119	Meeting St & Huger St	NBR	30	112.3	F	23	123.7	F
		NBT	660	165.7	F	406	260.5	F
		NBL	123	118.0	F	110	201.5	F
		EBR	9	73.1	Е	5	120.6	F
		EBT	74	93.6	F	62	111.8	F
		EBL	287	134.5	F	199	169.3	F
		SBT	318	0.1	Α	183	0.1	Α
120	Mosting Ct 9 Johnson Ct	WBR	19	379.3	F	9	1195.3	F
120	Meeting St & Johnson St	NBR	7	72.9	Е	7	92.0	F
		NBT	835	86.3	F	543	172.7	F
		SBR	16	7.8	Α	8	8.1	Α
		SBT	292	12.2	В	174	11.9	В
		SBL	12	28.4	C	9	24.7	С
		WBR	102	48.9	D	73	172.9	F
		WBT	12	38.5	D	8	45.2	D
121	Mooting St & Loo St	WBL	25	33.6	C	14	42.9	D
121	Meeting St & Lee St	NBR	77	30.3	C	35	68.1	Е
		NBT	757	53.6	D	470	123.7	F
		NBL	21	16.0	В	7	38.3	D
		EBR	21	6.1	Α	9	4.5	Α
		EBT	5	25.2	С	2	22.9	С
		EBL	36	52.9	D	25	189.5	F
		SBT	335	3.8	Α	194	5.1	Α
122	Meeting St & I-26	NBT	807	37.1	D	485	123.1	F
122	I Weeting St & 1-20	EBR	794	22.2	С	565	57.3	Е
		EBL	76	84.6	F	52	221.7	F
		SBR	128	12.4	В	66	38.5	D
		SBT	960	13.2	В	673	15.0	В
		SBL	37	23.8	С	22	20.6	С
		WBR	29	29.1	С	18	111.1	F
		WBT	9	26.5	С	8	57.1	Е
123	Meeting St & Line St	WBL	12	41.7	D	13	43.2	D
1.20		NBR	29	35.0	С	18	70.7	Е
		NBT	670	56.4	Е	405	150.0	F
		NBL	85	69.5	Е	61	79.4	Е
		EBR	42	52.7	D	12	141.3	F
		EBT	39	62.5	Е	21	106.9	F
		EBL	127	114.0	F	85	178.4	F
		SBR	62	2.1	Α	60	21.6	С
		SBT	833	2.8	A	565	3.6	Α
124	Meeting St & Columbus St	SBL	117	10.5	В	71	7.9	A
	22	WBR	82	66.8	Е	64	140.6	F
		WBT	44	45.3	D	20	108.8	F
		WBL	113	51.3	D	100	65.1	Е



Node				st Hour			nd Hour	
No.	Intersection Name	Movement		– 5:30 p			- 6:00 pi	
		A I D D	Volume	Delay	LOS	Volume	Delay	LOS
		NBR	42	58.0	E	24	163.0	F
		NBT	706	71.9	E	417	215.7	F
		NBL	102	42.4	D	47	99.6	F
		EBR	11	23.5	С	13	64.2	E
		EBT	55	34.7	С	41	62.1	E
		EBL	26	114.3	F	39	202.7	F
		SBR	71	4.2	A	50	4.7	Α
		SBT	774	4.8	A	524	5.2	A
		SBL	54	13.5	В	38	10.8	В
		WBR	57	73.9	E	47	121.0	F
		WBT	8	48.6	D	5	82.9	F
125	Meeting St & Woolfe St	WBL	11	78.8	E	8	130.8	F
		NBR	17	32.4	С	12	131.1	F
		NBT	917	40.9	D	530	128.6	F
		NBL	14	54.0	D	9	162.2	F
		EBR	30	37.4	D	25	67.7	E
		EBT	37	57.9	E	28	80.9	F
		EBL	39	74.7	E	30	127.1	F
		SBR	110	5.9	A	47	4.8	A
		SBT	579	14.4	B C	410	14.0	В
		SBL	42	24.5		19	30.2	C F
		WBR	73	36.2	D	56	130.5	
		WBT	16	42.0	D	10	62.0	E
126	Meeting St & Mary St	WBL	18	40.6	D	16	97.8	F
		NBR	20	28.9	C	6	74.1	E F
		NBT NBL	819	32.3 31.7	C	492	91.3 38.2	D
		EBR	38 1	18.0	В	<u>8</u> 1	18.0	В
		EBT	15	27.6	С	13	72.7	E
		EBL	96	37.9	D	63	137.2	F
		SBR	7	1.2	A	4	1.5	А
		SBT	595	3.8	A	425	3.4	A
		WBR	64	16.1	В	46	146.3	F
127	Mooting St & Wragg Square	WBT	3	45.1	D	0	0.0	A
127	Meeting St & Wragg Square	WBL	11	39.0	D	4	90.6	F
		NBT	828	5.2	A	484	17.3	В
		NBL	8	7.6	A	4	18.8	В
		SBT	594	1.8	A	422	1.6	A
		SBL	13	11.3	В	6	15.1	В
		NBR	43	8.9	A	18	54.7	D
128	Meeting St & Ann St	NBT	818	16.6	В	461	89.1	F
'20	Modeling Ot a Aim Ot	EBR	56	8.9	A	44	44.1	D
		EBT	18	41.4	D	15	62.0	E
		EBL	24	86.4	F	32	130.7	F
		SBR	31	3.5	A	16	4.0	A
		SBT	588	13.3	В	432	12.2	В
		SBL	32	18.5	В	23	18.7	В
129	Meeting St & John St	WBR	57	29.8	С	37	122.6	F
		WBT	16	39.5	D	8	153.3	F
		WBL	25	44.8	D	11	121.5	F
<u> </u>	<u> </u>	****	20	_ - -∓.∪	U		141.0	——————————————————————————————————————



			10	st Hour	_	2r	nd Hour	
Node	Intersection Name	Movement		– 5:30 p	m)		– 6:00 p	m)
No.	microcolon Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		NBR	18	12.0	В	10	167.5	F
		NBT	777	11.4	В	433	105.6	F
		NBL	52	20.8	С	23	149.4	F
		EBR	40	28.7	С	28	92.0	F
		EBT	20	51.8	D	15	192.3	F
		EBL	54	60.4	Е	35	187.1	F
		SBR	210	9.1	Α	156	9.1	Α
		SBT	310	31.5	С	215	29.2	С
		SBL	95	42.0	D	66	47.5	D
		WBR	116	43.1	D	75	100.5	F
		WBT	433	47.3	D	349	119.3	F
130	Meeting St & Calhoun St	WBL	50	53.7	D	35	92.9	F
130	I wieeting St & Camburi St	NBR	97	18.3	В	63	104.2	F
		NBT	670	20.3	С	391	88.9	F
		NBL	283	36.7	D	272	133.5	F
		EBR	140	8.1	Α	111	6.9	Α
		EBT	310	26.9	С	277	27.4	С
		EBL	111	34.8	С	50	66.9	Е
		SBR	125	17.9	В	67	16.0	В
		SBT	81	23.7	С	47	24.6	С
		SBL	85	24.1	С	62	22.2	С
		WBR	122	13.8	В	157	13.7	В
131	Calhoun St & King St	WBT	640	13.6	В	472	15.4	В
		WBL	168	20.5	С	134	22.5	С
		EBR	121	15.1	В	114	26.2	С
		EBT	477	18.9	В	368	33.4	С
		EBL	138	46.1	D	147	63.2	Е
		SBR	84	12.1	В	112	12.6	В
		SBT	138	24.7	С	130	24.9	С
		SBL	27	28.7	С	26	28.2	С
		WBR	49	8.3	Α	38	7.5	Α
132	Calhoun St & Phillips St	WBT	691	6.9	Α	487	6.6	Α
		WBL	31	12.2	В	22	13.6	В
		EBR	74	9.2	Α	62	20.3	С
		EBT	713	11.4	В	634	22.6	С
		EBL	51	22.5	С	51	21.1	С
		WBR	69	18.1	В	52	15.9	В
		WBT	710	17.6	В	553	16.8	В
400	0-11	NBR	104	17.9	В	138	19.7	В
133	Calhoun St & Coming St	NBT	567	43.8	D	549	48.9	D
		NBL	145	62.9	E	150	65.1	E
		EBT	730	6.9	A	645	13.2	В
		EBL	173	15.3	В	146	14.5	В
		SBR	93	13.6	В	83	15.6	В
		SBT	33	24.8	С	36	28.1	С
404	Colbour St 9 Contill St	SBL	17	19.9	В	24	30.4	C
134	Calhoun St & Smith St	WBR	24	7.9	A	22	7.3	A
		WBT	815	8.1	A	680	8.5	A
		WBL	16	23.9	С	17	25.3	C
L		NBR	24	16.6	В	17	11.7	В



Node			1s	t Hour		2 r	nd Hour	
No.	Intersection Name	Movement		– 5:30 p			- 6:00 pi	
140.			Volume	Delay	LOS	Volume	Delay	LOS
		NBT	23	26.0	С	17	27.0	С
		NBL	27	23.2	С	23	25.0	С
		EBR	41	11.4	В	45	5.8	Α
		EBT	865	23.6	С	785	18.9	В
		EBL	42	30.3	С	32	26.2	С
		SBR	375	60.8	E	387	44.8	D
		SBT	292	20.5	C C	322	21.0	C
		SBL WBT	180 955	22.5 17.7	В	186 848	21.2 16.9	В
135	Calhoun St & Rutledge Ave	WBL	21	26.6	С	16	27.1	С
		NBR	44	9.2	A	47	8.0	A
		EBR	34	20.5	C	35	15.3	В
		EBT	723	27.0	С	666	21.5	С
		WBR	147	24.7	C	144	24.2	С
		WBT	1176	21.1	C	1087	21.3	C
		NBR	53	18.5	В	53	16.4	В
		NBT	223	33.8	С	220	33.2	C
136	Calhoun St & Ashley Ave	NBL	100	40.3	D	92	39.1	D
		EBR	28	8.7	Α	27	8.5	Α
		EBT	703	15.9	В	664	14.3	В
		EBL	173	42.9	D	156	34.6	С
		SBR	165	27.5	С	153	28.3	С
		SBT	9	32.9	С	10	30.4	С
		SBL	115	29.7	С	115	32.4	С
		WBR	138	42.2	D	122	39.5	D
		WBT	1146	48.5	D	1086	45.5	D
137	Calhoun St & Jonathan	WBL	4	45.4	D	3	51.9	D
137	Lucas St/Barre St	NBR	50	12.2	В	41	9.7	Α
		NBT	29	27.3	С	25	25.1	С
		NBL	84	41.4	D	66	38.0	D
		EBR	17	9.4	Α	10	8.8	Α
		EBT	721	7.1	Α	693	7.3	Α
		EBL	109	28.4	С	81	29.9	С
		SBR	597	14.3	В	626	14.4	В
		SBT	32	66.3	E	38	61.5	E
		SBL	121	46.9	D	107	46.6	D
		WBR	54	50.3	D	51 1265	47.1	D
140	Collegia St & Courtonay Dr	WBT	1331	50.5	D	1265	47.2	D
142	Calhoun St & Courtenay Dr	NBR	5	11.1	В	5	10.4	В
		NBT	35	33.4	C	28	36.0	D
		NBL EBR	6 0	37.8	D	5 0	41.4	D ^
		EBT	746	0.0 7.8	A A	701	0.0	A
		EBL			C		7.9 43.0	A D
<u> </u>		LDL	256	31.6	U.	286	43.0	U

^{*} This intersection is unsignalized in the No Build scenario and has been evaluated using unsignalized LOS criteria.



LOWCOUNTRY RAPID TRANSIT MICROSIMULATION MODEL DRAFT REPORT

Appendix G - 2045 Build VISSIM Output

Appendix G - 2045 BUILD VISSIM OUTPUT



Node Level Performance, AM Peak Hour

Node				st Hour			nd Hour	
No.	Intersection Name	Movement		– 8:15 aı			– 8:45 ar	
			Volume	Delay	LOS	Volume	Delay	LOS
		SBR	175	113.5	F	174	111.4	F
22 23		SBT	503	155.9	F	456	166.2	F
		SBL	160	339.8	F	152	533.8	F
		WBR	78	42.6	D	93	40.8	D
		WBT	321	52.7	D	290	47.8	D
		WBL	9	107.9	F	10	107.7	F
22	US 78 & College Park Rd	NBR	36	346.7	F	31	448.7	F
		NBT	256	199.1	F	304	234.2	F
		NBL	52	146.1	F	48	174.6	F
		EBR	122	170.4	F	114	284.1	F
		EBT EBL	434	227.4	F	417	409.7 46.4	F D
			436	46.7	D D	333		D
		NB BRT SB BRT	5 5	37.9	F	6 5	40.6 442.5	F
		SBR	3	208.0 727.7	F	5	713.7	F
		SBT	24	747.2	F	31	734.7	F
		SBL	63	1168.1	F	58	1256.4	F
		WBR	03	1100.1	Г	36	1230.4	Г
		WBR	14	13.1	В	13	9.1	Α
		WBT						
		WBT	358	27.4	С	339	32.9	С
		WBL						
23	US 78 & Ladson Rd/	WBL	623	135.2	F	616	160.0	F
23	Ancrum Rd	NBR	770	294.2	F	678	360.5	F
		NBT	9	254.1	F	9	260.9	F
		NBL	29	221.2	F	27	252.7	F
		EBR	40	160.6	F	41	217.3	F
		EBT	577	248.4	F	542	319.5	F
		EBL	4	151.5	F	6	196.4	F
		NB BRT	5	14.4	В	6	23.5	С
		SB BRT	4	250.2	F	4	278.9	F
		SBR	18	247.3	F	26	349.7	F
		SBT	57	454.6	F	65	525.9	F
		SBL	72	480.5	F	72	676.1	F
		WBR	54	54.2	D	51	68.8	Е
		WBT	1044	53.5	D	1041	71.0	E
		WBL	383	181.7	F	367	228.9	F
27	LIC 79 8 Ingleside Plyd	NBR	338	431.1	F	332	594.8	F
21	US 78 & Ingleside Blvd	NBT	9	201.9	F	5	349.1	F
		NBL	84	209.7	F	63	387.5	F
		EBR	136	77.3	Е	125	86.2	F
		EBT	1243	147.4	F	1122	172.7	F
		EBL	5	154.3	F	7	176.9	F
		NB BRT	5	274.9	F	6	403.4	F
		SB BRT	4	72.8	Е	4	124.5	F
		WBT	1381	10.6	В	1306	15.5	В
29	US 78 & I-26 EB Ramps	WBL	152	79.4	Е	127	83.6	F
		EBR	557	19.8	В	497	22.8	С



Node	Intersection Name	Mayamant		st Hour – 8:15 ar	m)		nd Hour – 8:45 ar	m)
No.	intersection Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		EBT	1011	126.6	F	973	130.8	F F
		NB BRT	6	3.0	A	6	2.8	A
		SB BRT	4	3.9	A	4	4.1	A
		SBR	569	58.2	E	537	74.5	E
		WBR	523	3.2	A	465	2.2	A
		WBT	971	18.8	В	895	21.7	C
		NBR	770	78.3	E	724	89.1	F
30	US 78 & I-26 WB Ramps	EBT	1692	143.3	F	1577	154.0	F
		EBL	85	157.0	F	58	153.4	F
		NB BRT	6	0.8	A	6	0.7	A
		SB BRT	4	3.4	A	4	3.4	A
		SBR	44	320.3	F	48	412.4	F
		SBT	5	304.7	F	6	420.1	F
		SBL	17	283.3	F	21	388.7	F
		WBR	90	26.2	С	130	25.2	C
		WBT	1313	28.7	С	1192	28.9	C
		WBL	77	130.3	F	76	121.3	F
	US 78/University Blvd &	NBR	51	363.7	F	46	550.7	F
31	Medical Plaza Dr	NBT	29	427.3	Ė	36	578.2	F
		NBL	138	225.6	F	118	362.9	F
		EBR	521	17.9	В	507	20.7	C
		EBT	1765	47.3	D	1618	57.8	E
		EBL	179	78.9	E	172	87.9	F
		NB BRT	6	31.4	С	6	39.4	D
		SB BRT	4	13.2	В	4	15.6	В
		SBR	20	20.5	С	23	16.5	В
		SBT						
		SBT	7	84.2	F	6	56.8	Е
		SBL	39	105.6	F	29	103.6	F
		WBR	129	22.9	С	140	25.3	С
		WBT	1349	30.8	С	1232	33.6	С
		WBL	235			209		
		WBL	233	173.9	F	209	192.1	F
		WBU	46			50		
	US 78/University Blvd &	NBR	131	113.3	F	96	158.1	F
34	Medical Plaza Dr/BUC	NBR	101	110.0		30	130.1	'
	Club Blvd	NBT	23	167.8	F	24	171.0	F
		NBT						
		NBL	122	136.6	F	119	145.1	F
		EBR	191	12.4	В	204	17.7	В
		EBR						
		EBT	1563	27.9	С	1363	38.1	D
		EBL	72	59.1	Е	84	65.3	Е
		EBU	5			4		
		NB BRT	5	25.3	С	5	27.5	C
		SB BRT	4	19.1	В	4	17.4	В
		SBR	80	218.6	F	90	225.0	F
37	US 78/University Blvd &	SBT	19	264.4	F	19	259.1	F
	Elms Center Rd	SBL	184	324.9	F	175	326.5	F
		WBR	111	28.7	С	110	34.7	С



Node			nt (7:15 – 8:15 am) (7:45 –		nd Hour			
No.	Intersection Name	Movement						
)A/DT					Delay	LOS
		WBT	1429	29.4	С	1351	34.7	С
		WBL	11	106.5	F	7	104.6	F
		WBU	0		_	0		_
		NBR	28	133.1	F	33	192.6	F
		NBT	37	128.2	F	31	161.6	F
		NBL	150	138.1	F	148	160.6	F
		EBR	41	44.7	D	46	73.7	E
		EBT	1470	54.3	D	1140	84.7	F
		EBL	149	146.9	F	161	161.2	F
		EBU	85			87		•
		NB BRT	5	8.7	A	5	5.0	A
		SB BRT	4	1.4	A	4	1.4	A
		SBR	7	31.8	C	16	38.5	D
		SBT	0	0.0	A	2	79.4	E
		SBL	4	62.3	E	4	57.6	Е
		WBR	23	50.1	D	20	49.4	D
		WBT	1485	100.9	F	1448	108.0	F
		WBL	67	206.3	F	59	204.6	F
	110 70/11st seet DI 10	WBU	275	407.4	-	280	440.0	-
38	US 78/University Blvd &	NBR	87	127.1	F	80	118.2	F
	Fernwood Dr	NBT	0	0.0	A	1	84.0	F
		NBL	138	205.4	F	109	202.3	F
		EBR	24	64.7	E	16	91.8	F
		EBT	1539	62.1	Е	1292	98.3	F
		EBL	5	122.7	F	5	156.3	F
		EBU	0	20.4	-	0 6	20.2	-
		NB BRT	6	28.1	С		29.3	С
		SB BRT		38.5	D	4	41.0	D
		SBR SBT	18 3370	63.4 72.2	E	19	62.6	E F
		SBL	17		E F	2996	88.9	F
		WBR		153.9	F	24	159.4 174.5	F
		WBT	91 33	168.1 317.5	F	84 44	331.1	F
		WBL	182	279.9	F	153	299.7	F
	LIC FO/70/Divers Ave 9							
42	US 52/78/Rivers Ave & Otranto Rd/Otranto Blvd	NBR NBT	121 1638	4.8 24.0	A C	115	6.4 27.1	A C
	Citatilo Nu/Ottatilo bivo	NBL	135		F	1631 137		F
		EBR		557.4	F		675.2 251.2	F
		EBT	325 21	235.8 243.7	F	306	262.6	F
		EBL		196.1	F	29 172	202.6	F
			191			172		
		NB BRT	6 4	16.0	B B	5 4	18.9	B B
		SB BRT SBR	80	15.8 16.7	N/A	73	12.6 19.2	N/A
		SBT	3807		N/A		56.2	N/A N/A
		WBR		40.1		3339		N/A B
	LIC F2/79/Divore Ave 9 T		36	8.8	Α	78	11.1	D
43	US 52/78/Rivers Ave & T Mobile Dr *	NBR NBR	76	3.8	N/A	76	4.8	N/A
		NBT NBT	1901	32.7	N/A	1824	69.3	N/A
		EBR	89	28.2	D	93	33.5	D



		1st Hour 2nd Hour						
Node	Intersection Name	Movement		– 8:15 ar	n)		– 8:45 ar	n)
No.	microconon Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		NB BRT	7	0.2	A	5	0.1	A
		SB BRT	4	3.9	Α	4	7.5	Α
		SBR	38	22.4	С	20	27.1	С
		SBT	3778	36.2	D	3313	44.2	D
		SBL	0		_	1		_
		SBU	92	138.7	F	120	186.6	F
		WBR	20	7.5	Α	19	9.0	Α
		WBT	0	0.0	Α	0	0.0	Α
		WBL	3	75.7	Е	0	0.0	Α
4.4	US 52/78/Rivers Ave &	NBR	24	28.7	С	17	64.7	Е
44	Melnick Dr	NBT	1904	34.2	С	1783	74.6	Е
		NBL	38		-	53		_
		NBU	98	105.1	F	100	126.4	F
		EBR	139	18.0	В	109	14.0	В
		EBT	0	0.0	Α	0	0.0	Α
		EBL	10	103.5	F	9	153.3	F
		NB BRT	7	41.5	D	5	41.7	D
		SB BRT	5	41.1	D	4	41.2	D
		SBR	92	11.1	В	94	7.8	Α
		SBT	4125	24.5	С	3674	20.7	С
		WBR	30	49.5	D	32	63.1	Е
		WBT	74	90.3	F	86	118.1	F
	LIC FO/70/Division Avia 9	WBL	17	96.8	F	22	122.4	F
46	US 52/78/Rivers Ave & Greenridge Rd	NBT	2008	16.9	В	2076	33.0	С
	Greeninge Ru	NBL	112	442.7	F	109	575.5	F
		EBR	692	163.2	F	728	153.5	F
		EBL	95	150.5	F	102	159.9	F
		NB BRT	6	4.9	Α	5	2.6	Α
		SB BRT	5	2.7	Α	4	1.2	Α
		SBR	74	1.7	Α	82	2.1	Α
		SBT	2233	1.7	Α	2041	1.8	Α
		SBL	56	95.9	F	50	97.0	F
		SBU	103		ļ	138		
		WBR	24	6.1	Α	26	8.0	Α
		WBT	5	90.3	F	4	98.4	F
	US 52/78/Rivers Ave &	WBL	18	87.8	F	38	110.9	F
49	North Rivers Market Place	NBR	22	1.4	Α	29	1.5	Α
	The state of the s	NBT	964	4.2	Α	1109	6.2	Α
		NBL	9	75.9	E	9	80.0	Е
		EBR	5	9.0	Α	12	8.1	Α
		EBT	5	84.1	F	5	78.1	Е
		EBL	19	84.9	F	39	98.6	F
		NB BRT	6	1.3	Α	5	2.9	Α
		SB BRT	5	1.6	A	4	1.9	A
		SBR	58	2.3	Α	49	2.1	Α
		SBT	2171	8.7	A	2006	7.0	Α
50	US 52/78/Rivers Ave &	SBL	33	76.8	Е	38	79.9	Е
	Eagle Landing Blvd	WBR	57	4.8	A	64	4.8	A
		WBT	46	59.8	E	38	66.1	E
L		WBL	371	91.9	F	317	83.1	F



Node	Indonesia Nama	Management		st Hour	>		nd Hour	>
No.	Intersection Name	Movement		– 8:15 aı			– 8:45 ar	
		NDD	Volume	Delay	LOS	Volume	Delay	LOS
		NBR NBT	144 907	2.4 10.8	A B	155 1058	2.6 10.2	A B
		NBL		95.5	F	8	97.5	F
		EBR	10 13	8.0		9	10.0	A
		EBT	7	81.8	A F	9 15	78.2	E
		EBL	29	86.1	F	34	82.2	F
		NB BRT	6	26.2	С	5	22.2	С
		SB BRT	4	25.1	C	4	23.4	С
		SBR	53	4.5	A	38	5.0	A
		SBT	2422	4.2	A	2210	4.4	A
		SBL	81	76.5	E	89	76.2	E
		WBR	49	160.3	F	51	219.3	F
		WBT	11	344.8	F	16	389.1	F
		WBL	107	358.0	F	119	424.6	F
	US 52/78/Rivers Ave &	NBR	60	4.3	A	80	4.9	А
51	Northwoods Blvd	NBT	968	10.3	В	1112	10.0	В
	Northwoods Biva	NBL	41	87.8	F	53	98.3	F
		EBR	111	14.1	В	97	12.1	В
		EBT	15	100.7	F	12	102.5	F
		EBL	42	101.2	F	54	142.3	F
		NB BRT	6	4.9	A	6	4.9	А
		SB BRT	4	17.2	В	4	14.3	В
		SBR						
		SBR	185	31.1	С	209	26.2	С
		SBT						
		SBT	2394	49.0	D	2225	42.4	D
		SBL	26	76.3	Е	27	88.2	F
		WBR	19	18.3	В	22	27.0	C
		WBT	63	73.5	Е	65	77.9	E
	US 52/78/Rivers Ave &	WBL	121	129.5	F	134	148.6	F
52	Ashley Phosphate Rd	NBR	120	13.0	В	97	15.0	В
		NBT	792	28.9	С	859	33.4	С
		NBL	359	155.1	F	360	262.3	F
		EBR	675	46.1	D	739	48.4	D
		EBT	130	63.1	Е	148	61.8	Е
		EBL	269	66.8	Е	360	72.8	Е
		NB BRT	6	18.0	В	6	19.2	В
		SB BRT	4	7.4	Α	4	6.5	Α
		SBR	35	24.6	С	49	28.4	С
		SBT	3344	49.6	D	3181	58.7	Е
		SBL	15	90.1	F	27	90.1	F
		WBR	4	6.7	Α	12	7.2	Α
		WBT	2	110.6	F	4	102.5	F
F 4	US 52/78/Rivers Ave &	WBL	20	94.4	F	38	110.6	F
54	Morris Baker Blvd	NBR	35	1.3	Α	47	1.3	Α
		NBT	1259	1.6	Α	1237	1.4	Α
		NBL	20		E	32		F
		NBU	92	65.1	Е	62	59.3	Е
		EBR	54	44.1	D	18	54.6	D
		EBT	1	55.6	Е	3	60.7	Е



No. Intersection Name Novement No. Novement No. Volume Delay LOS Delay	Node				st Hour	,		nd Hour	,
BBL		Intersection Name	Movement						
NB BRT 6			EDI					_	
SB BRT 5 4.0 A 5 4.7 A SBT SBT 2893 44.8 D 2772 59.2 E SBT SBL SBL SBL SBU 37 43 64.7 E SBU 37 28.9 C 20.0 C 24.5 C 282 20.0 C 24.5 C 282 20.0 C 24.5 C 28.5 C 20.0 C 24.5 C 28.5 C 20.0 C 24.5 C 28.5 C 20.5 24.5 C 28.5 C 20.0 C 24.5 C 28.5 C									
SBT SBT SBL SBL SBL SBL SBL SBL SBL SBL SBU 37									
SBT SBL SBL SBL SBL SBL SBL SBL SBL SBL SBU 37 SBU 39 SBU SB				5	4.0	А	5	4.7	А
SBL				2893	44.8	D	2772	59.2	Е
SBL SBU			SBL	504			127		
SBU				304	67.2	E	421	64.7	E
SS SZ				37	01.2	_	<i>4</i> 3	04.7	
Mabeline Rd WBR 362 22.4 C 282 20.0 C NBR 263 29.6 C 205 24.5 C NBT 1077 28.0 C 1117 23.5 C NBT 1077 28.0 C 1117 23.5 C NBU 166 91.0 F 178 98.3 F NB BRT 6 46.8 D 6 41.3 D 8 BRT 4 26.7 C 4 25.2 C SBT 2979 70.2 N/A 2887 78.0 N/A WBR 150 11.5 B 146 11.6 B NBR 150 11.5 B 146 11.6 B NBR 565 2.0 N/A 538 1.9 N/A NBT 1553 1.4 N/A 1506 2.0 N/A NB BRT 6 0.0 A 5 0.0 A 5 0.0 A SB BRT 4 0.0 A 4 0.1 A SB BRT 2302 40.0 D 2240 46.3 D SBU 394 119.8 F 405 118.8 F WBR 25 34.7 C 22 33.9 C NBR 15 8.4 A 38 6.2 A NBT 1569 16.6 B 1542 19.5 B NBL 284 NBU 14 118.6 F 297 170.9 F NB BRT 7 1.9 A 6 1.6 A SB BRT 7 1.9 A 6 1.6 A SB BRT 4 2.3 A 4 2.9 A SBR 98 11.8 B 104 11.5 B SBT 2608 21.5 C 2502 20.9 C SBU 219 92.1 F 260 93.3 F NBT 1760 13.8 B 1666 15.0 B NBT 1760 13.8	56								
NBT		Mabeline Rd	-						
NBU									
NB BRT 6									
SB BRT									
SBT 2979 70.2 N/A 2887 78.0 N/A WBR 150 11.5 B 146 11.6 B NBR 565 2.0 N/A 538 1.9 N/A NBR 1553 1.4 N/A 1506 2.0 N/A NB NBR 1553 1.4 N/A 1506 2.0 N/A NB NBR 1553 1.4 N/A 1506 2.0 N/A NB NBRT 6 0.0 A 4 0.1 A A 4 0.1 A A A 31.0 C SBT 2302 40.0 D 2240 46.3 D SBU 394 119.8 F 405 118.8 F WBR 25 34.7 C 22 33.9 C NBR 15 8.4 A 38 6.2 A NBT 1669 16.6 B 1542 19.5 B NBL 284 NBU 14 118.6 F 18 170.9 F NB NBRT 7 1.9 A 6 1.6 A SB SBT 4 2.3 A 4 2.9 A A SBR SBT 4 2.3 A 4 2.9 A SBR SBT 2608 21.5 C 2502 20.9 C SBU 219 92.1 F 2600 93.3 F NBT 1760 13.8 B 1666 15.0 B NBL 55 NBU 198 158.4 F 43 199 157.8 F									
Solution									
S S S S S S S S S S									
Stokes Ave * NBT									
NB Stokes Ave St	59								
SB BRT 4 0.0 A 4 0.1 A SBR 255 28.8 C 213 31.0 C SBT 2302 40.0 D 2240 46.3 D SBU 394 119.8 F 405 118.8 F WBR 25 34.7 C 22 33.9 C NBR 15 8.4 A 38 6.2 A NBT 1669 16.6 B 1542 19.5 B NBL 284 118.6 F 297 170.9 F NBU 14 118.6 F 297 170.9 F NB BRT 7 1.9 A 6 1.6 A SB BRT 4 2.3 A 4 2.9 A SBR 98 11.8 B 104 11.5 B SBR 2608 21.5 C 2502 20.9 C SBU 219 92.1 F 260 93.3 F NBT 1760 13.8 B 1666 15.0 B NBL 55 NBU 198 158.4 F 43 199 157.8 F		Stokes Ave *							
SBR 255 28.8 C 213 31.0 C SBT 2302 40.0 D 2240 46.3 D SBU 394 119.8 F 405 118.8 F WBR 25 34.7 C 22 33.9 C NBR 15 8.4 A 38 6.2 A NBT 1669 16.6 B 1542 19.5 B NBL 284 NBU 14 118.6 F 18 170.9 F NB BRT 7 1.9 A 6 1.6 A SB BRT 4 2.3 A 4 2.9 A SBR 98 11.8 B 104 11.5 B SBT 2608 21.5 C 2502 20.9 C SBU 219 92.1 F 260 93.3 F NBT 1760 13.8 B 1666 15.0 B NBL 55 NBU 198 158.4 F 43 199 157.8 F									
SBT 2302 40.0 D 2240 46.3 D SBU 394 119.8 F 405 118.8 F WBR 25 34.7 C 22 33.9 C NBR 15 8.4 A 38 6.2 A NBT 1669 16.6 B 1542 19.5 B NBL 284 118.6 F 297 170.9 F NBU 14 118.6 F 18 170.9 F NB BRT 7 1.9 A 6 1.6 A SB BRT 4 2.3 A 4 2.9 A SBR 98 11.8 B 104 11.5 B SBT 2608 21.5 C 2502 20.9 C SBU 219 92.1 F 260 93.3 F NBT 1760 13.8 B 1666 15.0 B									
BBU 394 119.8 F 405 118.8 F WBR 25 34.7 C 22 33.9 C NBR 15 8.4 A 38 6.2 A NBT 1669 16.6 B 1542 19.5 B NBL 284 NBU 14 118.6 F 18 170.9 F NB BRT 7 1.9 A 6 1.6 A SB BRT 4 2.3 A 4 2.9 A SBR 98 11.8 B 104 11.5 B SBT 2608 21.5 C 2502 20.9 C SBU 219 92.1 F 260 93.3 F NBT 1760 13.8 B 1666 15.0 B NBL 55 NBU 198 157.8 F									
WBR 25 34.7 C 22 33.9 C									
NBR									
60									
Midland Park Rd NB1	00	US 52/78/Rivers Ave &							
NBU	60				16.6	В		19.5	В
EBR 540 188.0 F 544 190.9 F NB BRT 7 1.9 A 6 1.6 A SB BRT 4 2.3 A 4 2.9 A SBR 98 11.8 B 104 11.5 B SBT 2608 21.5 C 2502 20.9 C SBU 219 92.1 F 260 93.3 F NBT 1760 13.8 B 1666 15.0 B NBL 55 NBU 198 158.4 F 43 199 157.8 F					118.6	F		170.9	F
NB BRT 7 1.9 A 6 1.6 A SB BRT 4 2.3 A 4 2.9 A SBR 98 11.8 B 104 11.5 B SBT 2608 21.5 C 2502 20.9 C SBU 219 92.1 F 260 93.3 F NBT 1760 13.8 B 1666 15.0 B NBL 55 NBU 198 158.4 F 43 157.8 F					400.0	_		400.0	
SB BRT 4 2.3 A 4 2.9 A SBR 98 11.8 B 104 11.5 B SBT 2608 21.5 C 2502 20.9 C SBU 219 92.1 F 260 93.3 F NBT 1760 13.8 B 1666 15.0 B NBL 55 NBU 198 158.4 F 43 157.8 F									
SBR 98 11.8 B 104 11.5 B SBT 2608 21.5 C 2502 20.9 C SBU 219 92.1 F 260 93.3 F NBT 1760 13.8 B 1666 15.0 B NBL 55 NBU 198 158.4 F 43 157.8 F									
SBT 2608 21.5 C 2502 20.9 C SBU 219 92.1 F 260 93.3 F NBT 1760 13.8 B 1666 15.0 B NBL 55 NBU 198 157.8 F									
61 US 52/78/Rivers Ave & SBU 219 92.1 F 260 93.3 F NBT 1760 13.8 B 1666 15.0 B NBL 55 NBU 198 158.4 F 43 157.8 F									
61 US 52/78/Rivers Ave & NBT 1760 13.8 B 1666 15.0 B NBL 55 158.4 F 43 157.8 F									
61 US 52/78/Rivers Ave & NBL 55 158.4 F 43 157.8 F									
NBU 198 158.4 199 157.8	61	US 52/78/Rivers Ave &			13.0	В		15.0	В
	01	Eagle Dr			158.4	F		157.8	F
					25.1	C		24.0	C
NB BRT 7 8.0 A 5 6.7 A									
SB BRT 4 1.4 A 4 2.1 A									
SB BRI 4 1.4 A 4 2.1 A SBT 2692 16.9 B 2558 15.4 B									
SRI 218 218									
SBU 35 116.6 F 27 119.6 F					116.6	F		119.6	F
WBR 564 136.2 F 529 148.6 F					136.2	F		148.6	F
62 US 52/78/Rivers Ave & NRR 182 15.4 B 207 18.4 B	62								
Hanahan Rd NBT 102 13.4 D 207 16.4 D NBT 1421 30.6 C 1341 34.5 C	52	Hanahan Rd							
NBU 214 54.9 D 235 76.6 E									
NB BRT 6 21.7 C 5 24.0 C									
			SB BRT	4	30.4	C	4	31.3	C



No. Intersection Name SBR 18 SBT 2692 SBU 76 WBR 4 NBR 2 SB SBT 153 SB SBT 153 SB SB SB SB SB SB SB S	1st Hour 7:15 – 8:15 a	m)		nd Hour – 8:45 ar	m)
SBR 18 SBT 2692 SBL 2 SBU 76 WBR 4 NBR 2 NBT 1532 NBL 61 EBR 21 NB BRT 6 SB BRT 4 SBT SBT 2145 WBR 4 SBT 2145 WBR 2 NBT 980 NBL 1122 EBR 420 EBL 607 NB BRT 6 SB BRT 4 SBT SBT 2548 SBT 2145 SBT SBT 2548		LOS	Volume	Delay	LOS
SBT 2692 SBL 2 SBU 76 WBR 4 NBR 2 NBT 1532 NBL 61 EBR 21 NB BRT 6 SB BRT 4 WBR 2 NBT 1532 NBL 61 EBR 21 NB BRT 6 SB BRT 4 WBR 2 NBR 7 NBT 980 NBL 122 EBR 420 EBL 607 NB BRT 6 SB BRT 4 SBT SBL 13 SBU 23 SBU 23 WBR 5 NBT 1080 NBU 784 NBT 1080 NBU 784 NB BRT 6 SB BRT 4 SBT SBBRT 4 SBT SBBRT 4 SBT SBBRT 4 SBT 1080 NBU 784 NBT 1080 NBU 784 NBT 6 SB BRT 4 SBT 2650 SBL 371 WBR 914 WBT 455 NBR 368 NBR 368 NBR 368 NBR 368 NBR 368 NBR NBT 990 NBT		A	29	3.9	A
SBL 2 SBU 76 WBR 4 NBR 2 NBT 1532 SBT 2145 WBR 2 NBT 1532 SBT 2145 WBR 2 NBT 2 SBT 2145 WBR 2 NBT		A	2612	7.8	A
SBU 76 WBR 4 NBR 2 NBT 1532 NBL 61 EBR 21 NB BRT 6 SB BRT 4 SBT 2145 WBR 2 NBR 7 2 NBT 1930 NBL 122 EBR 420 EBL 607 NB BRT 6 SB BRT 4 4 4 4 4 4 4 4 4			2		
S S S S S S S S S S	u < /i	F	72	95.0	F
65 Benderson Dr NBR 2		Α	0	0.0	Α
67 US 52/78/Rivers Ave & Aviation Ave US 52/78/Rivers Ave & Aviation Ave US 52/78/Rivers Ave & NBT 980 RBR 420 EBR 420 EBR 420 EBR 607 NB BRT 6 SB BRT 4 SBT 2548 SBT 2548 SBT 38BU 23 WBR 5 NBH 13 SBU 23 WBR 5 NBH 13 SBU 23 WBR 5 NBH 13 SBU 23 WBR 5 NBH 1080 NB BRT 6 SB BRT 4 NBR 914 WBR 91		Α	0	0.0	Α
NBL 61 EBR 21 NB BRT 6 SB BRT 4 SBR 568 SBT 2145 WBR 2 NBE 7 WBR 2 NBE 7 NBE 122 EBR 420 EBL 607 NB BRT 6 SB BRT 4 SBT 2548 SBT 2548 SBT 3 SBU 23 WBR 5 NBE 1080 NBE 7 NBE 1080 NBU 784 NBU 784 NBBRT 6 SB BRT 4 WBR 914 WBR 9		Α	1597	2.7	Α
67 US 52/78/Rivers Ave & Aviation Ave 10		F	87	82.3	F
NB BRT 6 SB BRT 4 SBR 568 SBT 2145 WBR 2 NBR 7 NBR 7 NBL 122 EBR 420 EBL 607 NB BRT 6 SB BRT 4 SBT 2548 SBT 38 SBU 23 WBR 5 NBU 784 NB BRT 6 SB BRT 4 SBT 58 SBT 1080 NB BRT 6 SB BRT 4 SBT 2650 SBL 371 WBR 914 WBT 455 NBR 368 NBR 368 NBR 990 NBT NBL 110 EBR 505 EBT 427 NB BRT 6 SB BRT 4 SBR 505 SBT 2650 SBL 371 WBR 990 NBT NBT 1080 NBT NBT 1080 NBT NBR 368		D	34	40.9	D
SBR 568 SBT 2145 WBR 2 NBR 7 NBR 7 NBT 980 NB BRT 6 SB BRT 4 SBT 2548 SBT 2548 SBT 2548 SBT 2548 SBT 2548 SBT 3 SBU 23 WBR 5 NBR 47 NBT 1080 NBU 784 NB BRT 6 SB BRT 4 SBR 155 SBT 2650 SBL 371 WBR 914 WBT 455 NBR 368 NBR 914 WBT 455 NBR 914 WBT 990 NBT NBT 1080 NBT NBT 990 NBT NBT 1080 NBT NBT 1080 NBT NBT 990 NBT NBT 1080 NBT NBT NBT 1080 NBT		Α	6	2.0	Α
SBT 2145 WBR 2 NBR 7 NBT 980 NB 122 EBR 420 EBL 607 NB BRT 6 SB BRT 4 SBT 2548 SBT 380 23 WBR 5 NBR 7 NB BRT 6 SB BRT 4 SBT 2548 SBT 2548 SBT 380 23 WBR 5 NBR 47 NBT 1080 NBU 784 NB BRT 6 SB BRT 4 SBR 155 SBL 371 WBR 914 WBR 914 WBT 455 NBR 368 NBR 914 WBT 455 NBR 914 WBT 455 NBR 914 WBT 455 NBR 914 WBT 455 NBR 916 NBT 990 NBT 108 NBT 990 NBT 108 NBT 990 NBT 108 NBT 990 NBT 108 NBT 108 NBT 990 NBT 108 NBT 1		Α	4	2.3	Α
OF The Part of Section	8 12.7	В	539	12.5	В
NBR 7 NBT 980	45 20.6	С	2073	23.8	С
S S2/78/Rivers Ave & Aviation Ave NBT 980	7.0	Α	7	7.1	Α
Aviation Ave NBL 122	13.5	В	8	13.1	В
AVIATION AVE NBL 122	0 18.0	В	1105	20.4	С
EBL 607 NB BRT 6 SB BRT 4 SBT 2548 SBT SBL 13 SBU 23 WBR 5 North Charleston Center NB BRT 6 SB BRT 4 SBT SBL 13 SBU 23 WBR 5 NBR 47 NBT 1080 NBU 784 NB BRT 6 SB BRT 4 SBR 155 SBT 2650 SBL 371 WBR 914 WBR 914 WBT 455 NBR 914 WBT 455 NBR 914 WBT 455 NBR 990 NBT 990 NBT 990 NBT 100 BBRT 6 SB BRT 427 NB BRT 6 SB BRT 427 NB BRT 6 SB BRT 4	2 93.3	F	113	92.2	F
NB BRT 6 SB BRT 4	0 59.2	Е	477	107.9	F
SB BRT 4 SBT 2548 SBT SBL 13 SBU 23 WBR 5 NBR 47 NBT 1080 NBU 784 NB BRT 6 SB BRT 4 SBR 155 SBL 371 WBR 914 WBT 455 NBR 368 NBR NBT 455 NBR 368 NBR NBT NBL 110 EBR 505 EBT 427 NB BRT 6 SB BRT 4 SBRT 4 SBRT 6 SB BRT 4 SBRT 5	7 65.6	Е	567	98.3	F
The state of the	4.6	Α	6	9.2	Α
SBT SBL 13 SBU 23 SBU 23 SBU 23 WBR 5 NBR 47 NBT 1080 NBU 784 NB BRT 6 SB BRT 4 SBR 155 SBL 371 WBR 914 WBT 455 NBR 368 NBR 368 NBR 990 NBT NBL 110 EBR 505 EBT 427 NB BRT 6 SB BRT 4	4.2	Α	4	4.2	Α
SB SB SB SB SB SB SB SB	18 16.8	В	2474	17.7	В
SBU 23	10.0	D	2474	17.7	D
OF Content	103.5	F	13	102.6	F
North Charleston Center NBR	3 103.5	Г	21	102.0	Г
70 North Charleston Center NBR 47		В	18	13.9	В
NBU 784 NB BRT 6 SB BRT 4 SBR 155 SBT 2650 SBL 371 WBR 914 WBT 455 NBR 368 Remount Rd NBT 990 NBT NBL 110 EBR 505 EBT 427 NB BRT 6 SB BRT 4		Α	30	3.0	Α
70 US 52/78/Rivers Ave & Remount Rd US 52/78/Rivers Ave & Remount Rd Rd Remount Rd Rd Remount Rd Rd Remount Rd Rd Remount Rd Remount Rd	30 9.1	Α	1168	9.8	Α
TO US 52/78/Rivers Ave & Remount Rd SBR 155 SBR 155 SBT 2650 SBL 371 WBR 914 WBT 455 NBR 368 NBR 980 NBT 990 NBT NBL 110 EBR 505 EBT 427 NB BRT 6 SB BRT 4		Е	854	76.9	Е
70 US 52/78/Rivers Ave & Remount Rd		Α	5	2.8	Α
TO US 52/78/Rivers Ave & Remount Rd SBT 2650 SBL 371 WBR 914 WBT 455 NBR 368 NBR NBR 990 NBT NBL 110 EBR 505 EBT 427 NB BRT 6 SB BRT 4		Α	4	6.1	Α
TO US 52/78/Rivers Ave & Remount Rd SBL 371 WBR 914 WBT 455 NBR 368 NBR NBR 990 NBT NBL 110 EBR 505 EBT 427 NB BRT 6 SB BRT 4		С	145	28.6	С
70 US 52/78/Rivers Ave & Remount Rd		С	2619	24.6	С
70 US 52/78/Rivers Ave & Remount Rd NBT 990 NBT 990 NBT 990 NBT 110 EBR 505 EBT 427 NB BRT 6 SB BRT 4		F	364	90.4	F
70 US 52/78/Rivers Ave & NBR NBR NBR NBT 990 NBT NBL 110 EBR 505 EBT 427 NB BRT 6 SB BRT 4		С	997	40.8	D
70 US 52/78/Rivers Ave & Remount Rd NBT 990 NBT NBL 110 EBR 505 EBT 427 NB BRT 6 SB BRT 4	5 72.0	Е	406	72.5	Е
70 US 52/78/Rivers Ave & Remount Rd NBT 990 NBT NBL 110 EBR 505 EBT 427 NB BRT 6 SB BRT 4	8 9.4	Α	394	10.7	В
NBT 990 NBT NBL 110 EBR 505 EBT 427 NB BRT 6 SB BRT 4	0	,,	001	10.7	
EBR 505 EBT 427 NB BRT 6 SB BRT 4	0 23.0	С	1028	25.7	С
EBT 427 NB BRT 6 SB BRT 4	0 66.6	Е	113	72.1	Е
NB BRT 6 SB BRT 4	5 43.7	D	558	43.2	D
SB BRT 4	7 84.8	F	479	85.8	F
	28.0	С	5	22.3	С
SBR 13		Α	4	8.1	Α
		Α	23	2.8	Α
LIS 52/78/Rivers Ave & N SBT 2964		С	2855	9.3	Α
of Sahal St SBU 193	3 47.8	D	223	58.0	Е
NBT 1229	29 10.5	В	1186	10.5	В
72 US 52/78/Rivers Ave & N SBU 193	3 47.8	C D	2855 223	9.3 58.0	A E



Node	Intersection Name	Mayamant		st Hour – 8:15 ar	~\		nd Hour – 8:45 ar	~ \
No.	intersection Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		NBL	6			16		
		NBU	245	133.1	F	220	93.1	F
		EBR	41	49.0	D	17	10.1	В
		NB BRT	7	7.1	A	7	2.3	A
		SB BRT	4	7.1	Α	4	2.3	Α
		SBR	11	7.6	Α	13	5.9	Α
		SBT	2952	8.5	Α	2841	7.5	Α
		SBL	122	64.5	Е	112	57.4	Е
		SBU	90	04.5		88	37.4	_
		WBR	218	9.6	Α	188	9.6	Α
76	US 52/78/Rivers Ave &	NBR	47	8.0	Α	47	10.0	В
'0	Harley St	NBT	1116	12.5	В	1145	13.6	В
		NBL	2	82.4	F	2	83.6	F
		NBU	131			139		
		EBR	17	25.9	С	19	24.5	С
		NB BRT	7	2.4	A	7	3.5	A
		SB BRT	4	10.2	В	4	7.1	A
		SBR SBT	781	2.2	Α	854	3.3	Α
		SBT	2378	8.4	Α	2322	8.2	Α
		WBR	395	0.5	Α	393	0.5	Α
	US 52/78/Rivers Ave & I-	NBT	393					
78	526 WB Ramps	NBT	1048	0.7	Α	1091	0.7	Α
	ozo WB Rampo	NBL	165	21.7	С	197	23.1	С
		EBR	252	0.1	A	315	0.1	A
		NB BRT	5	1.5	Α	5	1.5	Α
		SB BRT	4	6.0	Α	4	2.9	Α
		SBT	4004			0077		
		SBT	1931	0.6	Α	2077	0.7	Α
		SBL	693	23.9	С	557	22.7	С
	US 52/78/Rivers Ave & I-	WBR	142	0.1	Α	129	0.1	Α
79	526 EB Ramps	NBR	223	1.2	Α	254	0.9	Α
	320 LB Ramps	NBT	1064	8.6	Α	1151	7.6	Α
		EBR	259	0.4	Α	316	0.4	Α
		NB BRT	5	19.1	В	5	21.0	С
		SB BRT	5	0.3	A	4	0.1	A
		SBR	466	25.5	С	503	34.2	С
		SBT	1290	17.7	В	1501	23.0	С
		SBU	382	113.8	F	399	125.8	F
		WBR	0	0.0	A	0	0.0	A
		NBR NBT	790	0.0	A C	0	0.0	A C
	US 52/78/Rivers Ave &		780	22.1		893	28.7	
82	Mall Drive	NBL	51	138.5	F	57	165.2	F
		NBU	48			50		
		EBR	80	7.9	Α	77	9.6	Α
		EBL	99	66.6	Е	115	67.6	Е
		NB BRT	5	31.5	С	4	32.1	С
		SB BRT	5	36.8	D	4	32.0	С



Node	Intersection Name	Movement		st Hour – 8:15 ar	n)		nd Hour – 8:45 ar	m)
No.	microconon Name	Movement	Volume	Delay	Los	Volume	Delay	LOS
		SBR	40	1.1	N/A	40	1.7	N/A
		SBT	1344	3.3	N/A	1464	4.3	N/A
		WBR	137	8.4	Α	177	10.0	Α
	US 52/78/Rivers Ave &	NBR	103	1.4	N/A	113	1.5	N/A
83	Alton *	NBT	771	0.9	N/A	856	1.1	N/A
		EBR	36	9.1	Α	38	9.1	Α
		NB BRT	5	0.0	Α	4	0.0	Α
		SB BRT	5	0.9	Α	4	1.3	Α
		SBT	1137	5.4	Α	1246	6.0	Α
		SBL	174	04.0	_	176	00.0	_
		SBU	70	84.8	F	81	92.2	F
		WBR	102	8.0	Α	108	8.0	Α
84	US 52/78/Rivers Ave &	WBL	210	57.4	Е	204	57.2	Ε
04	Morningside Dr	NBR	37	5.5	Α	55	6.1	Α
		NBT	687	15.4	В	771	16.3	В
		NBU	20	64.4	E	15	60.4	Е
		NB BRT	5	2.0	Α	4	2.4	Α
		SB BRT	5	0.3	Α	4	0.7	Α
		SBR	168	2.4	Α	217	3.0	Α
		SBT	1129	6.6	Α	1195	7.4	Α
		SBU	22	38.7	D	37	38.1	D
	US 52/78/Rivers Ave &	NBT	671	9.1	Α	742	10.1	В
87	Piggly Wiggly Dr	NBL	44	41.8	D	48	42.8	D
	i iggiy wiggiy Di	EBR	27	6.3	Α	26	6.6	Α
		EBL	87	38.6	D	91	38.9	D
		NB BRT	5	1.6	Α	4	0.2	Α
		SB BRT	5	2.7	Α	4	4.0	Α
		SBR	161	10.0	В	153	9.8	Α
		SBT	115	37.8	D	95	35.8	D
		SBL	145	58.8	Е	122	60.3	Е
		WBR	139	1.6	Α	132	1.2	Α
		WBT	461	6.3	Α	517	5.8	Α
		WBL	16	26.4	С	12	29.1	С
		WBU	23			18		
88	US 52/78/Rivers Ave &	NBR	11	31.8	С	12	25.5	С
	Meeting St/Durant Ave	NBT	54	27.4	С	59	27.2	С
		NBL	94	26.4	С	117	27.5	С
		EBR	224	44.7	D	253	46.8	D
		EBT	754	47.7	D	803	50.9	D
		EBL	190	61.1	Е	156	62.2	Е
		EBU	0			0		
		NB BRT	5	20.6	С	5	17.7	В
		SB BRT	5	23.3	C	4	27.0	C
		SBR	3	1.8	A	2	2.4	A
		SBT	838	4.2	Α	915	4.0	Α
	US 52/78/Rivers Ave &	SBL	30	35.8	D	31	34.8	С
91	Helm Ave	SBU	8			13		
		WBR	19	14.8	В	12	11.8	В
		WBT	11	34.7	С	9	34.2	С
		WBL	69	33.7	С	52	34.4	С



Node	Intersection Name	Movement		st Hour – 8:15 ar	n)		nd Hour – 8:45 ar	n)
No.	intersection Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		NBR	53	5.8	A	54	6.1	A
		NBT	616	6.1	A	669	5.9	A
		NBL	1	0.1		2		
		NBU	0	44.2	D	0	31.1	С
		EBR	13	10.3	В	18	8.9	Α
		EBT	9	26.8	С	3	21.5	C
		EBL	6	34.0	C	2	36.2	D
		NB BRT	7	1.9	A	6	2.8	Α
		SB BRT	4	2.1	Α	4	0.0	Α
		SBR	115	20.9	С	114	20.1	С
		SBT	112	32.0	С	101	30.2	С
		SBL	139	37.4	D	131	40.8	D
		WBR	217	8.1	Α	232	9.1	Α
		WBT	601	9.0	Α	627	9.2	Α
		WBL	16	42 F	D	25	40.2	D
		WBU	0	43.5	D	0	40.3	D
92	US 52/78/Rivers Ave &	NBR	7	12.3	В	12	18.8	В
92	McMillan Ave	NBT	79	23.8	С	89	26.7	С
		NBL	24	33.0	С	18	34.0	С
		EBR	24	2.9	Α	26	2.8	Α
		EBT	695	2.9	Α	767	3.6	Α
		EBL	189	54.2	D	190	53.5	D
		EBU	7			3		_
		NB BRT	6	12.8	В	6	11.4	В
		SB BRT	4	8.4	Α	5	7.6	Α
		WBT	654	6.6	Α	677	7.4	Α
		WBL	102	49.4	D	108	53.2	D
		WBU	17			15		_
00	US 52/78/Rivers Ave & SC	NBR	133	15.8	В	170	21.7	С
93	642/Dorchester Rd	NBL	181	36.2	D	211	39.9	D
		EBR	74	19.3	В	72	22.6	С
		EBT	766	21.0	С	820	25.0	С
		NB BRT SB BRT	6 4	24.0	C	6 4	22.8	C
		SBR	48	21.6 48.9	D	51	22.6 48.9	D
		SBT	314	58.0	E	340	59.5	E
		SBL	31	66.0	Ē	27	66.5	E
		WBR	27	36.7	D	36	57.2	E
		WBT	430	56.0	E	446	73.2	E
		WBL	156	306.9	F	161	337.8	F
		NBR	211	44.3	D	250	48.3	D
94	US 52/78/Rivers Ave &	NBT	686	44.8	D	683	47.1	D
34	Cosgrove Ave	NBL	299	56.2	Е	309	68.6	E
		EBR	327	30.4	С	344	33.4	С
		EBT	535	30.7	С	587	32.1	С
		EBL	51	67.0	Е	66	71.6	Е
		NB BRT	6	10.6	В	6	9.5	Α
		SB BRT	4	12.4	В	4	7.6	Α



Node	Interpostion Name	Marramant		st Hour	~\		nd Hour	~ \
No.	Intersection Name	Movement		– 8:15 ar			– 8:45 ar	
		CDD	Volume	Delay	LOS	Volume	Delay	LOS
		SBR SBT	99 28	48.9	D E	122 32	51.7	D E
		SBL	30	71.9 86.0	F	21	73.5 81.3	F
		WBR	37	8.5	А	34	10.8	В
		WBT	479	11.7	В	459	17.4	В
		WBL	38	73.6	E	41	75.0	E
	US 52/78/Rivers Ave &	NBR	66	30.6	С	54	29.8	С
95	Reynolds Ave	NBT	35	56.3	E	48	63.0	E
	1 toynolds 7 tvo	NBL	15	56.5	Ē	18	71.8	Ē
		EBR	20	8.7	A	22	7.1	A
		EBT	603	10.6	В	585	11.5	В
		EBL	61	61.9	E	86	65.4	E
		NB BRT	6	27.2	С	6	25.3	С
		SB BRT	4	27.1	С	4	25.5	C
		SBR	95	7.1	A	91	50.7	D
		SBT	573	22.1	С	559	98.7	F
		NBT	300	4.4	A	362	5.2	Α
		NBL	36	19.8	В	44	21.2	С
164	King St Ext & Heriot St	EBR	80	30.6	C	78	110.1	F
		EBL	121	38.9	D	150	97.0	F
		NB BRT	5	5.6	Α	5	4.1	А
		SB BRT	5	1.2	Α	5	7.8	Α
		SBR						
		SBR	33	37.2	D	34	63.6	Е
		SBT	440	45.0		4.4.4	70.7	_
		SBT	418	45.3	D	441	79.7	Е
		SBL	405	00.5	-	400	405.0	-
		SBL	185	90.5	F	160	135.0	F
		WBR	167	13.2	В	220	13.7	В
166	King St & Mt Pleasant St	WBT	387	36.6	D	410	35.0	С
		WBL	49	163.0	F	52	136.3	F
		NBR	32	28.9	С	21	53.9	D
		NBT	137	31.5	С	155	47.0	D
		NBL	125	74.7	Е	104	120.2	F
		EBR	416	75.5	Е	276	122.1	F
		EBT	755	88.1	F	698	150.3	F
		EBL	22	96.1	F	26	163.6	F
		SBR	183	131.1	F	203	131.1	F
		SBT	326	54.5	D	389	65.3	Е
		SBL	334	116.7	F	328	175.9	F
		WBR	397	49.1	D	386	101.9	F
		WBT	344	131.9	F	362	193.2	F
	US 52/Meeting St &	WBL	39	161.2	F	49	235.6	F
109	Morrison Dr	NBR	40	45.4	D	52	61.3	E
		NBT	261	67.7	Е	297	88.6	F
		NBL	78	295.0	F	119	319.0	F
		EBR	113	31.1	С	110	36.7	D
		EBT	720	18.9	В	643	24.2	С
		EBL			D	121		D
		EDL	135	38.5	U	121	54.6	U



Node				st Hour	,		nd Hour	,
No.	Intersection Name	Movement		– 8:15 aı			– 8:45 ar	
		ND DDT	Volume	Delay	LOS	Volume	Delay	LOS
		NB BRT	5	32.0	С	5	32.1	С
		SB BRT	5	55.7	Е	5	68.7	Е
		SBR	46	7.6	Α	33	8.6	Α
		SBT	476	13.2	В	570	14.6	В
		SBL	27	13.6	В	22	17.7	В
		WBR	61	27.5	С	70	63.8	Е
		WBT	79	29.4	С	95	57.6	E
		WBL	29	33.8	С	21	60.6	Е
113	Meeting St & Romney St	NBR	22	29.9	С	19	41.7	D
113	I weeting St & Rolliney St	NBT	235	31.3	С	247	89.3	F
		NBL	89	26.3	С	88	90.6	F
		EBR	248	56.2	Е	210	107.0	F
		EBT	94	72.4	Е	93	125.0	F
		EBL	153	102.7	F	177	219.7	F
		NB BRT	6	20.0	С	6	64.8	Е
		SB BRT	5	1.7	Α	5	5.0	Α
		SBR	46	3.0	Α	43	2.6	Α
		SBT	299	13.6	В	382	11.5	В
		SBL	362	13.7	В	355	13.7	
		WBR	141	39.1	D	177	69.7	
117	Meeting St & US 17 Off-	WBT	0	0.0	Α	0	0.0	Α
'''	Ramp	WBL	616	41.4	D	509	47.5	D
		NBT	184	34.0	С	187	35.0	С
		NBL	348	41.0	D	379	41.7	D
		NB BRT	6	10.5	В	6	29.1	
		SB BRT	4	1.6	Α	4	2.0	
		SBR	347	20.0	В	255	19.7	
		SBT	507	21.4	С	588	17.4	3.7 B 9.7 E 0.0 A 7.5 D 5.0 C 1.7 D 9.1 C 2.0 A 9.7 B 7.4 B 5.0 B 3.2 C
		SBL	57	14.5	В	56	15.0	
		WBR	126	49.0	D	93	33.2	
		WBT	107	64.1	Е	87	60.7	Е
		WBL	35	67.5	Е	37	59.9	Е
119	Meeting St & Huger St	NBR	27	27.9	С	22	27.6	С
		NBT	449	34.9	С	512	32.0	С
		NBL	57	23.8	С	56	26.2	С
		EBR	17	27.5	С	29	24.5	С
		EBT	100	34.2	С	107	33.6	С
		EBL	295	46.1	D	289	45.0	D
		NB BRT	5	9.6	A	6	8.1	A
		SB BRT	4	0.5	A	4	1.7	A
		SBT	556	0.3	A	651	0.6	A
	Meeting St & Johnson St	WBR	43	7.7	A	50	7.5	A
120		NBR	6	0.7	A	9	2.8	A
		NBT	494	0.6	A	547	1.0	A
		NB BRT	5	0.2	A	6	0.5	A
		SB BRT	4	0.0	A	4	0.1	A
464	Marking Ot 0.1	SBR	50	34.1	С	30	32.8	С
121	Meeting St & Lee St	SBT	462	45.0	D	567	50.4	D
		SBL	39	46.5	D	42	44.7	D



Node	Intersection Name	Movement		st Hour – 8:15 ar	n)	2nd Hour (7:45 – 8:45 am)		
No.	intersection Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		WBR	30	3.6	A	46	4.5	A
		WBT	2	15.6	В	6	24.9	C
		WBL	12	13.1	В	18	19.0	В
		NBR	54	30.4	С	40	31.6	С
		NBT	457	32.9	С	497	34.0	C
		NBL	39	49.1	D	38	53.7	D
		EBR	7	8.0	A	6	7.7	A
		EBT	5	17.6	В	7	16.5	В
		EBL	16	13.5	В	27	14.4	В
		NB BRT	6	9.9	Α	6	13.7	В
		SB BRT	4	14.5	В	4	29.1	С
		SBT	478	21.0	С	592	22.5	С
		NBT	430	23.6	С	467	24.2	С
400		EBR	1169	25.6	С	1186	36.7	D
122	Meeting St & I-26	EBL	121	20.8	С	109	30.9	С
		NB BRT	6	4.1	A	6	4.6	Α
		SB BRT	4	6.7	Α	4	10.3	В
		SBR	185	10.0	Α	182	12.3	В
		SBT	1415	12.0	В	1554	14.2	В
		SBL	33	13.4	В	33	13.5	В
		WBR	12	18.3	В	5	12.0	В
		WBT	5	42.3	D	2	37.0	D
		WBL	6	48.9	D	9	44.6	D
400		NBR	13	3.6	Α	10	4.7	Α
123	Meeting St & Line St	NBT	396	6.1	Α	445	6.0	Α
		NBL	32	39.0	D	27	58.1	Е
		EBR	106	33.0	С	129	33.3	С
		EBT	32	46.6	D	27	48.1	D
		EBL	27	47.8	D	20	52.4	D
		NB BRT	6	3.0	Α	6	3.1	Α
		SB BRT	4	14.6	В	4	16.8	В
		SBR	19	8.5	Α	8	8.7	Α
		SBT	1319	11.5	В	1481	12.2	В
		SBL	189	11.1	В	198	11.8	В
		WBR	54	32.9	С	60	29.0	С
		WBT	37	52.5	D	26	60.3	Е
		WBL	85	71.6	Е	97	78.1	Е
124	Meeting St & Columbus St	NBR	51	21.1	С	60	25.0	С
124	Meeting St & Columbus St	NBT	375	9.7	Α	410	10.2	В
		NBL	69	20.0	В	74	24.0	С
		EBR	58	31.8	С	72	33.2	С
		EBT	86	41.1	D	89	44.4	D
		EBL	10	35.2	D	18	40.0	D
		NB BRT	6	2.7	Α	6	6.0	Α
		SB BRT	4	7.3	Α	4	12.5	В
		SBR	128	5.1	Α	113	5.4	Α
		SBT	1252	4.7	Α	1344	4.9	Α
125	Meeting St & Woolfe St	SBL	41	7.0	Α	39	6.7	Α
		WBR	19	9.7	Α	33	10.9	В
		WBT	7	32.7	С	11	34.1	С



Node				st Hour	,		nd Hour	,
No.	Intersection Name	Movement		– 8:15 ar			– 8:45 ar	
		MAID	Volume	Delay	LOS	Volume	Delay	LOS
		WBL	6	39.4	D	4	37.6	D
		NBR	11	5.6	A	11	5.6	A
		NBT	531	4.6	A	565	5.2	A
		NBL	8	17.7	В	12	21.6	С
		EBR	18	17.7	В	18	20.0	В
		EBT	12	33.6	С	19	35.0	D
		EBL	29	36.5	D	31	35.1	D
		NB BRT	6	0.3	A	6	0.9	A
		SB BRT	4	1.0	A	4	0.7	A
		SBR	83	11.0	В	141	10.0	В
		SBT	973	7.6	A	1045	9.2	A
		SBL	44	9.8	A	43	11.8	В
		WBR	52	11.1	В	71	9.2	Α
		WBT	11	39.5	D	10	43.1	D
		WBL	16	35.7	D	15	32.1	C
126	Meeting St & Mary St	NBR	16	7.2	A	8	7.4	Α
		NBT	443	9.9	Α	447	10.1	В
		NBL	23	23.8	С	7	31.8	С
		EBR	50	11.9	В	32	11.7 B 25.3 C	
		EBT	30	26.3	С	23		
		EBL	59	27.8	С	69	29.5	1.7 B 5.3 C 9.5 C 9.0 A 1.4 B 6.6 A 3.5 A
		NB BRT	6	14.3	В	6	9.0	
		SB BRT	4	4.2	Α	4	11.4	
		SBR	108	7.0	Α	126	6.6	
		SBT	930	7.7	Α	964	8.5	
		WBR	140	10.7	В	57	10.3	
	Meeting St & Wragg	WBT	5	43.8	D	5	46.7	D
127	Square	WBL	8	43.1	D	7	46.4	D
	o qua. o	NBT	338	1.8	Α	404	1.7	Α
		NBL	16	17.3	В	22	13.9	В
		NB BRT	6	0.3	Α	6	0.4	Α
		SB BRT	4	3.8	Α	4	8.9	Α
		SBT	903	1.3	Α	946	1.9	Α
		SBL	37	3.4	Α	23	3.8	Α
		NBR	29	3.3	A	31	3.6	Α
		NBT	344	6.1	A	417	5.6	Α
128	Meeting St & Ann St	EBR	81	8.6	Α	89	9.0	Α
		EBT	12	42.3	D	16	40.8	D
		EBL	10	46.1	D	9	44.6	D
		NB BRT	6	17.1	В	6	15.3	В
		SB BRT	4	0.3	A	4	1.5	Α
		SBR	69	6.7	Α	65	13.6	В
		SBT	892	10.8	В	913	20.6	С
		SBL	21	14.3	В	40	30.6	С
		WBR	24	15.8	В	49	21.8	С
129	Meeting St & John St	WBT	28	38.8	D	33	43.6	D
		WBL	22	36.2	D	16	43.7	D
		NBR	24	4.4	Α	51	5.9	Α
		NBT	343	5.7	Α	383	7.1	Α
		NBL	50	17.4	В	55	24.6	С



Node				st Hour			nd Hour	
No.	Intersection Name	Movement		– 8:15 aı				
		500	Volume	Delay	LOS	Volume		
		EBR	55	10.7	В			
		EBT	11	30.4	С			
		EBL	7	31.1	С			
		NB BRT	6	3.3	A			
		SB BRT	4	25.6	С			
		SBR	181	8.4	A			
		SBT	561	30.3	С			
		SBL	153	30.1	С		62 12.9 B 11 35.6 D 14 35.6 D 6 4.4 A 4 27.8 C 154 12.7 B 637 45.6 D 138 46.9 D 60 30.0 C 252 37.1 D 66 67.9 E 57 11.4 B 303 14.1 B 100 30.7 C 190 13.5 B 460 29.6 C 127 29.2 C 6 25.5 C 4 8.2 A 200 51.0 D 194 61.2 E 82 65.1 E 57 18.8 B 377 24.0 C 72 81.5 F 53 <	
		WBR	73	30.5	С			
		WBT	252	37.6	D			
		WBL	57	66.1	E			
130	Meeting St & Calhoun St	NBR	28	10.3	В			
.00	3	NBT	243	13.4	В			
		NBL	76	24.1	С			
		EBR	133	12.7	В			
		EBT	366	30.4	С			
		EBL	104	30.1	С			
		NB BRT	6	20.2	С			
		SB BRT	4	7.0	Α			
		SBR	181	29.4	С			
		SBT	106	44.0	D	194		
		SBL	36	41.1	D			
		WBR	50	18.5	В			
		WBT	376	23.0	С			
131	Calhoun St & King St	WBL	81	69.5	Е			
	Odinoun of a King of	EBR	65	10.1	В			
		EBT	576	20.0	С			
		EBL	187	34.8	С			
		NB BRT	6	17.3	В			
		SB BRT	4	10.6	В			
		SBR	21	10.8	В			
		SBT	90	41.4	D			
		SBL	10	43.3	D			
		WBR	101	15.6	В			
132	Calhoun St & Phillips St	WBT	458	18.3	В			_
		EBR	73	23.9	С			
		EBT	824	32.2	С	947		
		NB BRT	6	34.2	С			
		SB BRT	4	13.3	В			
		WBR	51	2.6	A			
		WBT	423	3.4	A			
		NBR	82	8.4	Α	99	8.9	Α
		NBT	422	42.1	D	413	43.8	D
133	Calhoun St & Coming St	NBL	41	46.9	D	65	53.1	D
	_	EBT	820	11.0	В	929	11.0	В
		EBL	122	11.1	В	148	10.9	В
		NB BRT	6	10.8	В	6	12.8	В
		SB BRT	4	16.9	В	4	21.0	С



Node				st Hour	,		nd Hour	,
No.	Intersection Name	Movement		– 8:15 aı			– 8:45 ar	
		ODD	Volume	Delay	LOS	Volume	Delay	LOS
		SBR	86	24.7	С	60	23.6	C
		SBT	36	41.2	D	33	39.1	D
		SBL	31	44.2	D	24	43.6	D
		WBR	10	5.3	A	12	5.8	A
		WBT	447	8.4	A	478	8.6	A
		WBL	5	20.0	В	6	20.5	С
134	Calhoun St & Smith St	NBR	22	17.8	В	26	13.3	В
		NBT NBL	28 14	42.4 41.8	D D	22 8	41.6 36.4	D D
		EBR	10	2.1	A	12	2.3	A
		EBT	904	2.7	A	1014	2.8	A
		EBL	41	6.3	A	32	7.6	A
		NB BRT	6	1.5	A	6	3.1	A
		SB BRT	4	2.9	A	4	4.6	A
		SBR	342	17.5	В	325	14.5	В
		SBT	205	29.2	С	292	32.8	С
		SBL	87	29.9	C	113	30.0	C
		WBT	584	6.7	A	540	6.0	A
	Calhoun St & Rutledge	WBL	24	24.4	C	21	23.8	C
135	Ave	NBR	53	7.0	A	43	7.0	A
	7.00	EBR	30	11.1	В	30	13.5	В
		EBT	927	13.0	В	1001	14.2	В
		NB BRT	6	3.8	A	6	6.2	A
		SB BRT	4	6.7	A	4	4.0	A
		WBR	214	18.9	В	213	18.3	В
		WBT	709	16.3	В	655	16.9	В
		NBR	59	30.4	С	52	32.3	С
		NBT	152	60.0	Е	152	58.7	Е
400		NBL	45	67.1	Е	43	67.8	Е
136	Calhoun St & Ashley Ave	EBR	10	9.6	Α	17	15.7	В
		EBT	897	12.2	В	988	15.8	В
		EBL	196	17.3	В	207	19.5	В
		NB BRT	6	11.9	В	6	13.3	В
		SB BRT	4	17.3	В	4	20.9	С
		SBR	68	8.4	Α	76	8.9	Α
		SBT	14	46.5	D	13	46.9	D
		SBL	116	47.1	D	116	46.8	D
		WBR	155	11.8	В	158	11.8	В
		WBT	562	11.4	В	537	11.0	В
		WBL	24	22.6	С	15	22.3	С
	0.11.	NBR	23	17.8	В	16	23.6	С
137	Calhoun St & Jonathan	NBT	21	44.0	D	16	42.7	D
	Lucas St/Barre St	NBL	43	44.7	D	40	46.4	D
		EBR	41	8.7	Α	52	14.0	В
		EBT	966	10.8	В	1093	17.2	В
		EBL	154	21.4	С	142	21.0	С
		NB BRT	6	21.5	С	6	26.4	С
		SB BRT	4	20.4	С	4	17.7	В



Node No.	Intersection Name	Movement		st Hour – 8:15 ar	n)		nd Hour – 8:45 ar		
NO.			Volume	Delay	Los	Volume	Delay	LOS	
		SBR	177	25.5	C	171	25.0	С	
		SBT	5	42.0	D	2	56.2	Е	
		SBL	137	46.8	D	146	44.8	D	
		WBR	130	49.6	D	134	48.1	D	
		WBT	539	49.2	D	515	48.2	D	
142	Calhoun St & Courtenay	NBR	0	0.0	Α	0	0.0	Α	
142	Dr	NBT	0	0.0	Α	0	0.0	Α	
		NBL	1	19.8	В	0	0.0	Α	
		EBR	0	0.0	Α	0	0.0	Α	
		EBT	1135	8.2	Α	1287	9.3	Α	
		EBL	617	36.0	D	619	39.0	D	
		NB BRT	6	60.1	Е	6	48.2	D	

^{*} This intersection is unsignalized in the Build scenario and has been evaluated using unsignalized LOS criteria.



Node Level Performance, PM Peak Hour

Node			1st Hour (4:30 – 5:30 pm)			2nd Hour			
No.	Intersection Name	Movement					- 6:00 p		
			Volume	Delay	LOS	Volume	Delay	LOS	
		SBR	288	27.1	С	315	34.8	С	
		SBT	452	80.4	F	489	85.9	F	
		SBL	174	135.7	F	201	169.5	F	
		WBR	340	46.6	D	464	52.4	D	
		WBT	629	40.5	D	658	41.9	D	
		WBL	23	85.6	F	32	87.6	F	
22	US 78 & College Park Rd	NBR	24	148.0	F	29	146.0	F	
22	03 76 & College Falk Ru	NBT	420	148.1	F	420	145.1	F	
		NBL	62	142.1	F	66	140.8	F	
		EBR	83	23.8	С	78	26.6	С	
		EBT	534	25.3	С	579	27.9	С	
		EBL	272	35.6	D	248	38.7	D	
		NB BRT	4	18.4	В	4	22.1	С	
		SB BRT	6	9.3	Α	6	10.4	В	
		SBR	27	82.7	F	30	85.8	F	
		SBT	68	113.8	F	68	122.6	F	
		SBL	51	92.3	F	71	138.3	F	
		WBR	47	15.4	В	61	73.1	Ε	
		WBT	759	30.6	С	882	31.2	С	
		WBL	1286	71.6	Е	1235	94.0	F	
00	US 78 & Ladson Rd/	NBR	1102	29.9	С	1040	38.2	D	
23	Ancrum Rd	NBT	125	177.7	F	127	232.8	F	
		NBL	274	209.0	F	301	254.6	F	
		EBR	89	48.4	D	109	46.4	D	
		EBT	627	56.6	Е	675	58.2	Е	
		EBL	17	104.3	F	20	90.9	F	
	EBL NB B	NB BRT	4	9.9	Α	4	13.6	В	
		SB BRT	6	24.7	С	6	25.2	С	
		SBR	34	24.3	С	60	19.6	В	
		SBT	20	108.7	F	33	122.1	F	
		SBL	57	113.3	F	71	106.6	F	
		WBR	71	52.8	D	138	51.1	D	
		WBT	1960	58.1	Е	1976	50.9	D	
		WBL	362	103.6	F	417	103.9	F	
		NBR	480	33.9	С	501	42.1	D	
27	US 78 & Ingleside Blvd	NBT	23	90.3	F	35	98.6	F	
		NBL	303	156.8	F	273	204.9	F	
		EBR	188	10.9	В	211	10.5	В	
		EBT	1269	22.9	С	1202	23.6	С	
		EBL	47	115.0	F	50	142.0	F	
		NB BRT	4	27.9	С	4	38.9	D	
		SB BRT	6	20.9	C	5	13.4	В	
		WBT	2252	29.5	C	2332	23.8	C	
		WBL	414	55.0	D	341	53.0	D	
		EBR	812	3.2	A	632	5.1	A	
29	US 78 & I-26 EB Ramps	EBT	1175	4.6	A	1146	22.2	C	
		NB BRT	4	3.5	A	5	3.2	A	
		SB BRT	7	3.1	A	6	3.5	A	
L		וווט טט		J. I		J	0.0		



Node	Internation Name	Marramant		st Hour	>		nd Hour	···· \
No.	Intersection Name	Movement		– 5:30 pr			– 6:00 p	
		000	Volume	Delay	LOS	Volume	Delay	LOS
		SBR	1067	96.8	F	1240	79.1	Е
		WBR	992	1.5	Α	866	1.1	Α
		WBT	1607	23.2	С	1436	20.8	С
30	US 78 & I-26 WB Ramps	NBR	301	51.8	D	403	62.6	Е
	oo ro a r zo mo mampo	EBT	1476	4.7	Α	1577	36.4	D
		EBL	187	44.7	D	124	62.6	Е
		NB BRT	4	1.0	Α	5	1.1	Α
		SB BRT	7	3.3	Α	7	3.2	Α
		SBR	95	504.0	F	96	520.5	F
		SBT	4	494.2	F	4	501.6	F
		SBL	26	485.8	F	22	482.8	F
		WBR	17	23.6	С	23	22.6	С
		WBT	1984	33.4	С	1684	25.2	С
		WBL	16	112.9	F	23	102.0	F
24	US 78/University Blvd &	NBR	63	91.0	F	73	98.2	F
31	Medical Plaza Dr	NBT	4	135.5	F	12	131.3	F
		NBL	514	131.1	F	520	138.5	F
		EBR	409	6.5	Α	379	8.6	Α
		EBT	1307	24.1	С	1467	36.7	D
		EBL	64	118.6	F	93	165.8	F
		NB BRT	4	33.0	С	5	26.9	С
		SB BRT	6	8.0	A	6	7.4	Α
		SBR	195	41.8	D	173	36.8	D
		SBT	36	59.4	Е	17	61.7	Е
		SBL	137	68.8	Ē	163	91.1	F
		WBR	45	53.7	D	61	33.4	C
		WBT	1463	59.2	E	1196	34.0	C
		WBL	46			32		
		WBU	33	122.5	F	31	100.4	F
	US 78/University Blvd &	NBR	214	113.0	F	231	123.2	F
34	Medical Plaza Dr/BUC	NBT	28	126.3	F	40	129.1	F
	Club Blvd	NBL	323	153.6	F	330	141.4	Ė
		EBR	110	10.8	В	117	10.7	В
		EBT	1309	13.4	В	1440	18.3	В
		EBL	32	13.4	В	43	10.5	В
		EBU	19	153.6	F	9	116.7	F
		NB BRT	4	21.3	С	5	20 F	С
		SB BRT	6		В	6	20.5	
				18.9	F		19.6	B F
		SBR	107	141.6		75 25	161.8	
		SBT	37	173.4	F	35	185.2	F
		SBL	268	189.9	F	258	211.8	F
		WBR	83	33.6	C C	62	28.5	C
	LIC 70/University Divid 0	WBT	912	34.1	C	769	31.3	Ü
37	US 78/University Blvd &	WBL	14	113.9	F	13	108.4	F
	Elms Center Rd	WBU	0			0		
		NBR	86	65.0	E	75	70.9	E
		NBT	46	92.6	F	58	91.5	F
		NBL	140	100.0	F	143	97.2	F
		EBR	48	18.7	В	57	26.8	С
		EBT	1568	19.9	В	1595	27.4	С



Node	Intersection Name	Movement		st Hour – 5:30 pr	n)		nd Hour – 6:00 p	m)
No.	intersection Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		EBL	148	,		167		
		EBU	127	147.6	F	126	164.2	F
		NB BRT	4	5.8	Α	4	5.3	Α
		SB BRT	6	2.5	Α	6	3.1	Α
		SBR	13	16.0	В	17	16.8	В
		SBT	3	98.4	F	5	89.4	F
		SBL	20	86.5	F	27	91.3	F
		WBR	13	52.4	D	17	67.8	Е
		WBT	938	148.0	F	744	207.6	F
		WBL	50	205.7	_	32	407.0	_
		WBU	194	395.7	F	191	467.8	F
38	US 78/University Blvd &	NBR	148	33.2	С	208	88.9	F
	Fernwood Dr	NBT	5	87.5	F	3	96.4	F
		NBL	51	97.9	F	59	151.8	F
		EBR	23	20.3	С	26	31.3	С
		EBT	1865	21.6	С	1847	30.9	С
		EBL	4	133.2	F	3	156.6	F
		EBU	0	133.2	Г	0	150.0	Г
		NB BRT	4	14.9	В	4	11.8	В
		SB BRT	6	23.8	С	6	29.4	С
		SBR	176	51.3	D	214	67.9	Е
		SBT	2665	68.2	Е	2542	88.3	F
		SBL	100	429.9	F	100	420.3	F
		WBR	102	120.0	F	91	129.1	F
		WBT	131	194.5	F	124	200.4	F
		WBL	173	193.3	F	167	209.2	F
42	US 52/78/Rivers Ave &	NBR	243	8.1	Α	233	8.2	Α
72	Otranto Rd/Otranto Blvd	NBT	3069	31.6	С	3057	32.2	С
		NBL	154	79.1	Е	162	93.5	F
		EBR	184	52.3	D	181	99.2	F
		EBT	103	109.9	F	98	153.6	F
		EBL	224	166.4	F	258	244.6	F
		NB BRT	4	27.0	С	4	28.3	С
		SB BRT	6	16.2	В	6	20.4	С
		SBR	132	5.6	N/A	139	14.3	N/A
		SBT	2900	20.2	N/A	2750	42.9	N/A
		WBR	84	10.3	В	95	11.7	В
43	US 52/78/Rivers Ave & T	NBR	77	4.5	N/A	79	4.4	N/A
	Mobile Dr *	NBT	3378	10.5	N/A	3352	10.5	N/A
		EBR	183	21.9	С	184	38.8	E
		NB BRT	4	0.2	A	4	0.2	Α
		SB BRT	6	2.3	A	6	7.6	A
		SBR	26	21.2	С	25	28.6	С
		SBT	2814	39.4	D	2669	48.7	D
	110 50/70/D: 1 1	SBL	4	122.8	F	3	136.9	F
44	US 52/78/Rivers Ave &	SBU	187			199		
	Melnick Dr	WBR	21	8.9	A	27	8.8	A
		WBT	3	59.6	E	2	56.9	E
		WBL	1	79.0	E	1	103.5	F
		NBR	18	64.1	E	17	55.6	Е



Node	Intersection Name	Movement		st Hour – 5:30 pr	n)		nd Hour – 6:00 pi	m)
No.	misicosiion riams	1110 7 0 1110 111	Volume	Delay	Los	Volume	Delay	Los
		NBT	3208	60.8	Е	3151	62.0	E
		NBL	102			122		
		NBU	115	194.2	F	102	197.8	F
		EBR	60	8.6	Α	90	9.0	Α
		EBT	0	0.0	Α	0	0.0	Α
		EBL	11	56.8	Е	15	58.9	Е
		NB BRT	4	49.2	D	4	48.8	D
		SB BRT	6	28.8	С	6	32.5	С
		SBR	220	20.5	С	224	19.0	В
		SBT	2982	42.7	D	2790	41.3	D
		WBR	41	132.0	F	42	155.9	F
	US 52/78/Rivers Ave &	WBT	329	116.1	F	302	127.7	F
		WBL	53	112.4	F	47	111.1	F
46	Greenridge Rd	NBT	3387	33.8	C	3300	53.7	D
	Greenlage Ru	NBL	324	155.8	F	332	156.4	F
		EBR	557	30.3	C	597	33.5	С
		EBL	136	299.1	F	140	444.4	F
		NB BRT	3	8.3	Α	3	2.7	Α
		SB BRT	6	4.7	Α	6	4.2	Α
		SBR	235	3.3	Α	202	3.1	Α
		SBT	1311	3.2	Α	1366	3.5	Α
		SBL	145	102.2	F	132	104.3	F
		SBU	112	102.2	ļ	101	104.3	<u>.</u>
		WBR	35	1022.3	F	34	1221.5	F
		WBT	29	529.2	F	27	600.4	F
	LIS 52/78/Divors Avg 8	WBL	76	322.2	F	64	364.0	F
49	US 52/78/Rivers Ave & North Rivers Market Place	NBR	79	3.3	Α	71	7.3	Α
		NBT	2184	16.1	В	2070	40.6	D
		NBL	18	68.4	Е	15	80.8	F
		EBR	65	28.6	С	90	56.8	Е
		EBT	31	66.2	Е	24	79.6	Е
		EBL	229	150.1	F	220	192.8	F
		NB BRT	4	8.3	Α	4	2.4	Α
		SB BRT	6	4.8	Α	6	5.0	Α
		SBR	168	3.3	A	124	3.1	A
		SBT	1202	12.2	В	1314	19.4	В
		SBL	77	83.2	F	79	98.8	F
		WBR	74	9.1	A	84	16.7	В
		WBT	80	55.6	E	89	59.1	E
		WBL	261	75.4	Е	274	84.0	F
	110 50/70/D: 4 6	NBR	342	6.8	Α	309	11.4	В
50	US 52/78/Rivers Ave & Eagle Landing Blvd	NBT	2110	28.2	С	1985	63.7	Е
	Lagic Landing Diva	NBL	40	81.3	F	37	96.5	F
		EBR	44	30.8	С	43	31.0	С
		EBT	82	80.6	F	70	77.8	Е
		EBL	115	95.4	F	120	141.5	F
		NB BRT	4	25.8	С	4	26.2	С
		SB BRT	6	29.7	С	6	29.3	С



Node				st Hour	,		nd Hour	
No.	Intersection Name	Movement		– 5:30 pr			- 6:00 pi	
		000	Volume	Delay	LOS	Volume	Delay	LOS
		SBR	65	21.3	С	72	24.3	C
		SBT	1252	31.0	С	1407	36.5	D
		SBL	164	189.3	F	147	291.4	F
		WBR	144	228.0	F	157	256.8	F
		WBT	37	281.6	F	32	308.0	F
	110 50/70/D: A 0	WBL	146	358.6	F	131	385.1	F
51	US 52/78/Rivers Ave & Northwoods Blvd	NBR	76	13.6	В	63	27.0	С
	Northwoods bivd	NBT	2209	32.4	С	2050	81.3	F
		NBL	151	57.8	E	135	74.2	E
		EBR	154	6.3	A	180	24.2	C F
		EBT EBL	46	62.7	E F	47 167	83.5	F
			161	85.8			169.8	
		NB BRT SB BRT	4 7	5.0 8.8	A	4 7	5.3 6.8	A
		SBR	423	16.6	A B	487	21.2	A C
		SBT		39.3	D	1028	42.4	D
		SBL	969	62.1	E	130	70.2	E
		WBR	135 96	27.9	С	93	47.4	D
		WBT	280	40.6	D	263	46.2	D
		WBL	166	27.5	С	176	28.5	С
	US 52/78/Rivers Ave &	NBR	195	32.2	С	184	44.1	D
52	Ashley Phosphate Rd	NBT	1906	57.3	E	1839	87.1	F
	Asiliey Pilospilate Ru	NBL	777	168.4	F	731	161.2	F
		EBR	529	21.0	С	515	69.8	E
		EBT	186	133.5	F	146	305.4	F
		EBL	470	244.6	F	431	456.7	F
		NB BRT	4	23.7	С	4	18.3	В
		SB BRT	7	16.6	В	7	21.0	C
		SBR	133	3.3	A	105	3.6	A
		SBT	1357	8.2	A	1415	10.6	В
		SBL	159	53.1	D	158	55.6	E
		WBR	97	57.9	E	107	93.7	F
		WBT	12	87.3	F	18	96.1	F
		WBL	109	117.7	F	144	114.7	F
		NBR	135	25.6	С	124	42.3	D
54	US 52/78/Rivers Ave &	NBT	2730	68.7	E	2513	88.3	F
	Morris Baker Blvd	NBL	54			52		
		NBU	89	123.8	F	83	80.4	F
		EBR	106	63.6	Е	112	78.9	Е
		EBT	15	84.2	F	10	116.5	F
		EBL	130	191.0	F	150	207.6	F
		NB BRT	4	8.2	Α	4	10.8	В
		SB BRT	6	9.6	Α	6	8.0	A
		SBT	1410	6.1	Α	1445	8.0	Α
		SBL	211			207		
	110 70/70/70	SBU	72	60.8	Е	68	72.5	Е
56	US 52/78/Rivers Ave &	WBR	593	92.5	F	628	134.3	F
00	Mabeline Rd	NBR	30	58.9	Е	35	81.8	F
		NBT	2343	69.6	Е	2164	89.6	F
		NBU	169	84.1	F	60	92.9	F



Node	Intersection Name	Mayamant		st Hour – 5:30 pr	m)		nd Hour – 6:00 p	m)
No.	intersection Name	Movement	Volume	– 5.30 pi Delay	LOS	Volume	Delay	LOS
		NB BRT	5	24.0	C	4	25.9	C
		SB BRT	6	26.9	С	6	22.0	C
		SBT	1755	5.9	N/A	1585	23.7	N/A
		WBR	191	290.7	F	33	1141.2	F
	US 52/78/Rivers Ave &	NBR	274	10.4	N/A	289	24.8	N/A
59	Stokes Ave *	NBT	2386	52.2	N/A	2248	103.4	N/A
		NB BRT	4	0.0	Α	4	0.0	Α
		SB BRT	6	0.1	Α	6	0.1	Α
		SBR	132	24.9	С	129	29.6	С
		SBT	1388	43.4	D	1254	53.2	D
		SBU	194	91.1	F	216	219.2	F
		WBR	16	268.9	F	21	719.5	F
	LIC FO/70/Divers Ave 9	NBR	27	25.5	С	27	63.0	Е
60	US 52/78/Rivers Ave & Midland Park Rd	NBT	2464	45.1	D	2339	94.9	F
	I WILLIAM FAIR RU	NBL	421	98.6	F	373	88.6	F
		NBU	82	90.0	_	57	00.0	Г
		EBR	549	128.2	F	533	132.2	F
		NB BRT	4	4.0	Α	4	3.1	Α
		SB BRT	6	2.1	Α	6	2.2	Α
		SBR	33	36.9	D	31	29.7	С
		SBT	1637	79.6	Е	1513	62.9	Е
		SBU	306	115.3	F	301	156.6	F
	US 52/78/Rivers Ave &	NBT	2738	34.3	С	2556	57.6	Е
61	Eagle Dr	NBL	133	91.7	F	117	83.8	F
	1.59.0 2.	NBU	235			190		
		EBR	242	42.8	D	230	34.1	С
		NB BRT	4	2.3	A	4	2.2	Α
		SB BRT	6	3.2	A	6	3.5	A
		SBT	1769	38.3	D	1658	30.4	С
		SBL SBU	219	192.9	F	194	170.6	F
		WBR	103 617	119.9	F	102 515	80.9	F
62	US 52/78/Rivers Ave &	NBR	185	48.5	D	173	59.6	E
02	Hanahan Rd	NBT	2391	72.1	E	2276	88.2	F
		NBU	193	51.7	D	100	61.0	E
		NB BRT	4	26.9	С	4	26.2	С
		SB BRT	6	30.7	C	7	29.6	C
		SBR	38	6.7	A	43	7.7	A
		SBT	1896	8.7	A	1703	9.2	A
		SBL	5			3		
		SBU	99	98.9	F	95	140.9	F
		WBR	11	50.4	D	13	91.3	F
	US 52/78/Rivers Ave &	NBR	2	17.7	В	5	57.7	Е
65	Benderson Dr	NBT	2779	26.6	С	2530	62.1	Е
		NBL	87	50.9	D	69	68.1	Е
		EBR	186	33.3	С	220	34.1	С
		NB BRT	3	2.5	Α	3	2.2	Α
		SB BRT	6	3.7	Α	6	2.6	Α
L		JD D.()	_	0.1	- ' '	,	0	1



Node				st Hour			nd Hour	
No.	Intersection Name	Movement		– 5:30 pı			- 6:00 p	
		000	Volume	Delay	LOS	Volume	Delay	LOS
		SBR	863	17.6	В	793	17.2	В
		SBT	1215	13.6	В	1167	13.0	В
		WBR	22	11.9	В	17	77.6	Е
		NBR	34	11.4	В	32	35.5	D
67	US 52/78/Rivers Ave &	NBT	2220	18.8	В	2038	52.3	D
	Aviation Ave	NBL	261	68.2	Е	218	66.1	E
		EBR	163	42.9	D	144	71.1	Е
		EBL	668	99.4	F	641	146.6	F
		NB BRT	3	8.4	Α	3	9.3	Α
		SB BRT	6	4.5	Α	6	4.1	Α
		SBT	1386	5.6	Α	1281	7.0	Α
		SBL	5	41.5	D	0	88.2	F
		SBU	90	71.0		100	00.2	'
	US 52/78/Rivers Ave &	WBR	25	15.0	В	9	36.8	D
671	North Charleston Center	NBR	22	1.7	Α	5	20.6	С
	North Chaneston Center	NBT	2383	7.9	Α	2230	41.3	D
		NBU	282	45.4	D	270	87.9	F
		NB BRT	3	3.3	Α	3	2.9	Α
		SB BRT	6	7.0	Α	6	7.8	Α
		SBR	523	34.0	С	488	30.6	С
		SBT	1149	26.8	С	1060	25.7	С
		SBL	176	60.5	Е	175	59.8	Е
		WBR	460	21.1	С	516	31.0	С
		WBT	397	39.2	D	436	40.8	D
70	US 52/78/Rivers Ave &	NBR	253	5.6	Α	272	9.5	Α
70	Remount Rd	NBT	2174	14.9	В	2149	29.5	С
		NBL	379	75.3	Е	365	74.5	Е
		EBR	655	30.3	С	650	30.3	С
		EBT	532	41.5	D	526	41.8	D
		NB BRT	4	37.0	D	3	40.6	D
		SB BRT	6	17.6	В	6	21.5	С
		SBR	56	8.9	Α	29	6.0	Α
		SBT	1437	10.0	В	1408	9.7	Α
		SBU	477	39.4	D	436	42.8	D
		NBT	2439	28.7	С	2401	34.2	С
72	US 52/78/Rivers Ave & N	NBL	38			32		
	of Sabal St	NBU	211	47.9	D	230	47.5	D
		EBR	78	6.3	Α	83	6.6	Α
		NB BRT	4	3.9	Α	3	2.1	Α
		SB BRT	6	0.1	A	6	0.1	Α
		SBR	7	26.2	С	8	25.5	С
		SBT	1558	21.8	C	1541	25.0	C
		SBL	49			53		
		SBU	146	85.0	F	136	86.3	F
	US 52/78/Rivers Ave &	WBR	268	15.4	В	319	22.4	С
76	Harley St	NBR	14	9.9	A	16	14.5	В
	_	NBT	2164	10.8	В	2380	14.2	В
		NBL	1			3		
		NBU	294	49.5	D	305	55.4	Е
		EBR	18	9.0	Α	19	8.3	Α
L	<u> </u>			0.0		.0	0.0	



Node	Intersection Name	Mayamant		st Hour – 5:30 pr	m)		nd Hour – 6:00 p	m)
No.	intersection Name	Movement	Volume	– 5.30 pi Delay	LOS	Volume	Delay	LOS
		NB BRT	5	6.1	A	3	9.6	A
		SB BRT	6	16.3	В	6	12.7	В
		SBR	453	1.3	A	435	1.2	A
		SBT	1469	6.5	A	1444	7.5	A
		WBR	232	0.4	A	454	6.3	A
	US 52/78/Rivers Ave & I-	NBT	2492	1.5	A	2479	9.1	A
78	526 WB Ramps	NBL	238	30.0	С	268	30.5	С
		EBR	58	0.0	Α	91	0.0	A
		NB BRT	4	0.1	Α	3	0.1	Α
		SB BRT	6	2.3	Α	6	3.4	Α
		SBT	1101	0.4	Α	1119	0.4	Α
		SBL	417	33.6	С	418	33.6	С
		WBR	554	0.2	Α	619	3.4	Α
70	US 52/78/Rivers Ave & I-	NBR	196	0.9	Α	186	0.8	Α
79	526 EB Ramps	NBT	2181	10.7	В	2175	12.8	В
	·	EBR	294	0.4	Α	280	0.4	Α
		NB BRT	4	1.1	Α	3	1.0	Α
		SB BRT	6	0.2	Α	6	0.2	Α
		SBR	155	27.4	С	169	25.8	С
		SBT	912	29.1	С	903	28.5	С
		SBU	347	204.8	F	349	186.5	F
		WBR	0	0.0	Α	0	0.0	Α
		NBR	0	0.0	Α	0	0.0	Α
82	US 52/78/Rivers Ave &	NBT	1761	38.1	D	1837	40.2	D
02	Mall Drive	NBL	68	68.8	Е	73	67.5	Е
		NBU	29			24		
		EBR	39	172.9	F	46	176.2	F
		EBL	230	290.8	F	227	290.5	F
		NB BRT	4	32.4	С	3	34.2	С
		SB BRT	5	22.0	С	7	23.6	С
		SBR	9	3.5	N/A	7	1.0	N/A
		SBT	1025	9.8	N/A	985	1.3	N/A
		WBR	232	29.2	D	278	52.6	F
83	US 52/78/Rivers Ave &	NBR	177	4.8	N/A	183	4.6	N/A
	Alton *	NBT	1743	7.0	N/A	1733	7.8	N/A
		EBR	51	10.2	В	30	7.7	A
		NB BRT	3 5	0.1	A	2	0.0	A
		SB BRT		1.2	A	6	1.2	A
		SBT SBL	832 120	6.6	Α	798 119	2.3	А
		SBU	120	100.5	F	103	71.3	E
		WBR	94	14.4	В	113	14.7	В
0.4	US 52/78/Rivers Ave &	WBL	161	72.3	Е	173	70.1	Е
84	Morningside Dr	NBR	91	10.6	В	102	10.8	В
		NBT	1661	20.0	В	1709	20.9	С
		NBU	6	78.9	Е	1	88.5	F
		NB BRT	3	0.9	Α	2	1.8	Α
		SB BRT	6	1.7	А	6	0.7	Α



			19	st Hour		2r	nd Hour	
Node	Intersection Name	Movement		– 5:30 pr	n)		– 6:00 pi	m)
No.			Volume	Delay	Los	Volume	Delay	Los
		SBR	50	1.5	A	69	1.8	A
		SBT	901	5.2	Α	861	5.3	Α
		SBU	110	45.8	D	123	46.3	D
	110 50/70/5:	NBT	1636	6.8	Α	1667	7.6	Α
87	US 52/78/Rivers Ave &	NBL	34	59.4	Е	35	53.5	D
	Piggly Wiggly Dr	EBR	52	7.2	Α	58	7.1	Α
		EBL	112	54.0	D	129	53.9	D
		NB BRT	3	0.0	Α	2	0.0	Α
		SB BRT	6	0.8	Α	6	0.9	Α
		SBR	234	54.0	D	257	86.2	F
		SBT	80	101.7	F	80	170.2	F
		SBL	132	173.4	F	130	262.9	F
		WBR	208	1.6	Α	204	1.6	Α
		WBT	1139	3.8	Α	1145	3.8	Α
		WBL	9		1	12	00.4	7
		WBU	33	36.3	D	24	39.1	D
00	US 52/78/Rivers Ave &	NBR	22	72.7	Е	17	76.8	Е
88	Meeting St/ Durant Ave	NBT	169	81.5	F	222	84.7	F
	· ·	NBL	293	90.4	F	303	94.7	F
		EBR	188	20.9	C	172	23.6	С
		EBT	580	25.9	C	519	30.3	С
		EBL	175	07.7	ı	228	404.4	-
		EBU	0	87.7	F	0	104.4	F
		NB BRT	4	31.6	C	3	31.4	С
		SB BRT	6	19.1	В	6	25.5	С
		SBR	4	8.6	Α	8	7.9	Α
		SBT	756	5.6	Α	714	6.9	Α
		SBL	23	44.0	٥	34	447	7
		SBU	22	41.9	D	31	44.7	D
		WBR	55	25.6	C	58	32.0	С
		WBT	9	43.7	D	14	39.4	D
		WBL	57	41.5	D	64	41.3	D
01	US 52/78/Rivers Ave &	NBR	73	15.2	В	75	25.4	С
91	Helm Ave	NBT	1462	18.9	В	1401	34.5	С
		NBL	6	52.7	D	9		D
		NBU	2	52.7	U	3	54.0	U
		EBR	11	9.1	Α	12	10.5	В
		EBT	16	37.2	D	19	37.3	D
		EBL	5	47.5	D	6	48.8	D
		NB BRT	4	4.2	Α	3	5.6	Α
		SB BRT	7	0.1	А	6	0.2	А
		SBR	296	134.4	F	297	134.6	F
		SBT	127	144.0	F	125	147.2	F
		SBL	178	112.7	F	182	116.2	F
	LIC F2/79/Divora Ava 9	WBR	281	6.8	А	336	7.5	А
92	US 52/78/Rivers Ave & McMillan Ave	WBT	1220	8.6	Α	1156	9.1	А
	IVICIVIIIIAII AVE	WBL	39	52.1		38	40.1	
		WBU	0	52.1	D	0	49.1	D
i l								
		NBR	20	15.5	В	35	18.2	В



Node				st Hour			nd Hour	
No.	Intersection Name	Movement		– 5:30 pı			- 6:00 pi	
			Volume	Delay	LOS	Volume	Delay	LOS
		NBL	29	30.1	С	28	34.3	С
		EBR	62	8.2	A	67	8.1	Α
		EBT	620	11.5	В	595	10.8	В
		EBL	141	213.3	F	140	210.0	F
		EBU	0			0		^
		NB BRT	4	2.8	A	3	3.2	A
		SB BRT	6	9.9	A	6	4.8	A
		WBT	1334	12.5	В	1265	12.2	В
		WBL	215	46.6	D	216	45.2	D
		WBU	9	25.0	С	13 117	20.2	-
93	US 52/78/Rivers Ave & SC	NBR NBL	122	25.0 51.2	D		30.2	C E
93	642/Dorchester Rd	EBR	213		С	263	57.1	С
		EBT	114	25.2	С	152 654	27.1	C
		NB BRT	705	24.8 26.3	C		24.4 23.9	C
		SB BRT	4 6	20.3	C	3 6	23.9	C
		SBR	110	170.0	F	99	159.4	F
		SBT	573	161.6	F	587	147.6	F
		SBL	27	138.3	F	25	130.2	F
		WBR	51	81.0	F	71	93.5	F
		WBT	1089	86.4	F	1031	90.5	F
		WBL	290	165.3	F	289	156.8	F
	US 52/78/Rivers Ave &	NBR	100	30.5	С	106	52.4	D
94	Cosgrove Ave	NBT	546	33.9	С	523	53.3	D
	Cosgrove Ave	NBL	362	177.7	F	366	263.3	F
		EBR	400	43.0	D	374	39.4	D
		EBT	378	38.4	D	370	39.8	D
		EBL	54	77.3	E	42	77.1	E
		NB BRT	5	1.6	A	4	1.8	A
		SB BRT	6	10.8	В	6	7.2	A
		SBR	105	326.5	F	144	278.1	F
		SBT	48	303.1	F	43	277.0	F
		SBL	15	296.7	F	22	287.6	F
		WBR	117	47.7	D	121	36.7	D
		WBT	1269	101.5	F	1125	76.3	E
		WBL	85	114.2	F	95	95.4	F
	US 52/78/Rivers Ave &	NBR	28	86.9	F	53	81.9	F
95	Reynolds Ave	NBT	90	106.0	F	86	101.6	F
	,	NBL	47	131.7	F	50	114.8	F
		EBR	49	8.8	Α	45	5.0	A
		EBT	303	13.6	В	322	9.6	Α
		EBL	72	57.2	Е	88	61.0	Е
		NB BRT	5	57.0	E	4	56.1	E
		SB BRT	6	20.2	С	6	19.5	В
		SBR	181	33.6	С	147	59.2	Е
		SBT	366	71.5	Е	250	147.5	F
404	King Of Fort 9 11 stat Of	NBT	814	7.9	Α	407	7.1	Α
164	King St Ext & Heriot St	NBL	49	21.3	С	31	23.2	С
		EBR	69	105.0	F	42	189.9	F
		EBL	184	108.5	F	164	160.8	F



Node	Intersection Name	Movement		st Hour – 5:30 pr	n)		nd Hour – 6:00 pi	m)
No.	intersection Name	Movement	Volume	– 5.56 pi Delay	LOS	Volume	Delay	LOS
		NB BRT	4	9.1	A	2	6.4	A
		SB BRT	5	45.3	D	3	94.0	F
		SBR	36	54.3	D	17	113.7	F
		SBT	321	83.9	F	186	146.2	F
		SBL	65	257.3	F	65	298.2	F
		WBR	382	22.7	С	229	27.2	С
		WBT	388	34.7	С	275	54.1	D
400	King Ot 8 Mt Diagram of Ot	WBL	104	85.3	F	73	120.8	F
166	King St & Mt Pleasant St	NBR	39	73.8	Е	33	60.2	Е
		NBT	452	53.8	D	183	46.3	D
		NBL	129	86.5	F	62	73.8	Е
		EBR	194	89.0	F	93	202.4	F
		EBT	467	105.4	F	356	248.5	F
		EBL	21	73.0	E	12	189.3	F
		SBR	294	222.3	F	183	391.6	F
		SBT	343	78.5	E	197	156.2	F
		SBL	148	240.1	F	117	308.8	F
		WBR	176	219.7	F	181	253.1	F
		WBT	384	323.4	F	286	463.9	F
		WBL	19	273.1	F	9	485.1	F
109	US 52/Meeting St &	NBR	27	136.0	F	16	181.4	F
100	Morrison Dr	NBT	65	177.5	F	57	347.6	F
		NBL	198	341.9	F	114	522.7	F
		EBR	81	64.6	Е	94	67.2	Е
		EBT	424	31.3	С	307	35.0	D
		EBL	66	71.4	E	59	49.9	D
		NB BRT	4	115.5	F	2	130.8	F
		SB BRT	5	113.9	F	4	192.9	F
		SBR	31	21.8	С	23	13.3	В
		SBT	536	10.2	В	300	13.5	В
		SBL WBR	21	13.4	B	14 77	25.4 495.1	C F
		WBT	78 89	226.2 97.8	F	41	583.3	F
		WBL	59 59	124.9	F	38	402.0	F
		NBR	33	141.1	F	15	222.6	F
113	Meeting St & Romney St	NBT	171	148.1	F	89	411.2	F
		NBL	148	170.7	F	45	249.7	F
		EBR	84	120.0	F	30	403.2	F
		EBT	37	115.6	F	17	420.1	F
		EBL	63	286.8	F	36	615.5	F
		NB BRT	5	74.8	Ē	2	111.1	F
		SB BRT	5	7.2	A	4	34.3	С
		SBR	35	5.5	A	22	4.8	A
		SBT	306	26.6	С	133	84.3	F
		SBL	335	12.8	В	186	14.5	В
447	Meeting St & US 17 Off-	WBR	211	124.5	F	88	307.6	F
117	Ramp	WBT	38	142.3	F	14	422.8	F
		WBL	225	96.7	F	84	226.9	F
		NBT	183	76.3	Е	73	159.5	F
		NBL	578	45.2	D	294	67.9	Е



Node	Interpostion Name	Mayamant		st Hour	~ \		nd Hour	~~\
No.	Intersection Name	Movement		– 5:30 pr	n) LOS		- 6:00 pi	
		NB BRT	Volume	Delay 65.8	E	Volume	130.3	LOS F
		SB BRT	5 3	3.5	A	2	144.2	F
		SBR	291	67.5	E	129	166.6	F
		SBT	181	31.6	С	32	129.7	F
		SBL	19	26.4	С	9	26.4	С
		WBR	157	222.7	F	64	382.4	F
		WBT	94	256.8	F	46	491.9	F
		WBL	5	149.1	F	1	241.0	F
		NBR	40	70.7	Ē	22	132.3	F
119	Meeting St & Huger St	NBT	867	76.1	Ē	427	157.1	F
		NBL	217	113.7	F	143	243.3	F
		EBR	19	53.8	D	8	94.8	F
		EBT	87	64.9	Е	61	83.7	F
		EBL	329	95.4	F	205	122.6	F
		NB BRT	5	31.9	С	2	39.4	D
		SB BRT	4	27.5	C	2	51.0	D
		SBT	209	0.2	A	40	0.3	A
		WBR	32	41.1	D	18	92.5	F
		NBR	9	10.0	А	5	31.3	С
120	Meeting St & Johnson St	NBT	1122	29.7	С	612	130.9	F
		NB BRT	5	9.7	Α	2	18.2	В
		SB BRT	4	0.4	Α	2	0.0	Α
		SBR	21	5.6	Α	6	2.5	Α
		SBT	171	9.7	Α	28	6.3	Α
		SBL	18	24.1	С	10	17.2	В
		WBR	113	27.5	С	73	158.5	F
		WBT	13	36.5	D	10	63.3	Е
		WBL	15	22.9	С	12	84.5	F
404		NBR	83	14.4	В	38	42.1	D
121	Meeting St & Lee St	NBT	1038	24.8	С	598	137.9	F
		NBL	17	8.7	Α	5	14.9	В
		EBR	18	4.4	Α	11	23.5	С
		EBT	5	18.1	В	2	25.7	С
		EBL	40	43.4	D	28	168.8	F
		NB BRT	6	33.9	С	3	61.8	Ε
		SB BRT	4	2.3	Α	2	0.7	Α
		SBT	201	22.6	С	46	134.3	F
		NBT	1099	15.6	В	653	106.4	F
122	Mooting St 8 L 26	EBR	551	153.4	F	277	391.9	F
122	Meeting St & I-26	EBL	66	57.8	Е	17	245.6	F
		NB BRT	6	9.2	Α	3	17.3	В
		SB BRT	4	13.4	В	2	25.5	С
		SBR	325	140.1	F	173	295.1	F
		SBT	373	40.6	D	124	177.7	F
		SBL	29	47.8	D	13	159.9	F
123	Mooting St & Line St	WBR	28	15.7	В	16	156.4	F
123	Meeting St & Line St	WBT	18	44.6	D	20	63.6	Е
		WBL	5	24.8	С	4	18.4	В
		NBR	34	14.2	В	21	49.3	D
		NBT	1038	22.7	С	638	130.9	F



Node	Intersection Name	Marramant		st Hour	~~\		nd Hour	
No.	Intersection Name	Movement		– 5:30 pr			- 6:00 pi	
		NBL	Volume	Delay	LOS F	Volume	Delay	LOS
		EBR	76 15	128.9 13.8	В	73	178.1 0.0	F
		EBT	43	21.4	С	0 29	44.0	A D
		EBL	58	23.7	С	25	178.8	F
		NB BRT	6	11.4	В	3	15.8	В
		SB BRT	4	47.9	D	2	91.8	F
		SBR	2	3.4	A	0	0.0	A
		SBT	322	11.9	В	101	11.8	В
		SBL	75	21.5	С	26	37.7	D
		WBR	83	37.1	D	59	187.9	F
		WBT	71	47.8	D	53	118.2	F
		WBL	94	51.5	D	71	149.5	F
		NBR	44	21.1	C	31	103.6	F
124	Meeting St & Columbus St	NBT	1009	24.2	C	649	135.3	F
		NBL	17	29.3	С	19	143.6	F
		EBR	38	38.8	D	30	128.4	F
		EBT	92	51.0	D	61	141.7	F
		EBL	89	69.7	Е	66	233.3	F
		NB BRT	6	21.1	С	3	29.9	С
		SB BRT	4	7.4	A	2	10.3	В
		SBR	64	6.6	Α	38	6.2	Α
		SBT	312	7.6	Α	118	8.1	Α
		SBL	44	17.4	В	22	24.8	С
		WBR	60	13.7	В	52	85.4	F
		WBT	8	20.5	С	6	53.9	D
		WBL	12	29.1	С	9	67.1	Е
125	Mosting Ct 9 Woolfo Ct	NBR	20	13.5	В	16	108.3	F
123	Meeting St & Woolfe St	NBT	1101	12.2	В	712	96.0	F
		NBL	17	14.6	В	13	64.1	Е
		EBR	30	16.7	В	24	58.1	Е
		EBT	38	27.3	С	28	64.1	Е
		EBL	40	30.9	С	30	111.5	F
		NB BRT	5	0.3	Α	1	0.4	Α
		SB BRT	4	3.9	Α	2	3.0	Α
		SBR	26	11.4	В	6	3.8	Α
		SBT	219	16.7	В	64	10.3	В
		SBL	35	33.7	С	11	39.5	D
		WBR	81	9.6	A	60	128.7	F
		WBT	17	24.2	С	12	26.3	C
		WBL	16	22.7	С	15	123.4	F
		NBR	20	20.6	С	9	19.2	В
126	Meeting St & Mary St	NBT	939	17.3	В	631	74.8	Е
		NBL	24	19.2	В	3	18.3	В
		EBR	59	7.7	Α	38	34.2	С
		EBT	27	18.1	В	22	44.5	D
		EBL	146	19.5	В	102	101.8	F
		NB BRT	6	11.2	В	2	7.1	Α
		SB BRT	4	5.8	А	2	1.3	Α



Node	Intersection Name	Movement		st Hour – 5:30 pr	n)		nd Hour – 6:00 pi	m)
No.	intersection Name	Movement	Volume	Delay	LOS	Volume	Delay	LOS
		SBR	6	2.9	A	6	4.2	A
		SBT	290	6.1	A	110	6.1	A
		WBR	62	13.5	В	45	72.6	Е
		WBT	7	32.4	С	2	62.3	Ē
127	Meeting St & Wragg	WBL	12	31.4	С	3	59.5	E
	Square	NBT	931	3.1	A	619	29.0	С
		NBL	17	6.0	Α	8	8.5	Α
		NB BRT	6	2.2	Α	3	1.3	Α
		SB BRT	4	5.7	Α	2	6.6	Α
		SBT	285	1.9	Α	108	1.6	Α
		SBL	16	13.7	В	6	41.8	D
		NBR	43	10.7	В	19	12.9	В
		NBT	887	11.9	В	589	67.3	Е
128	Meeting St & Ann St	EBR	101	6.6	Α	100	53.0	D
		EBT	19	26.8	С	22	47.5	D
		EBL	60	35.0	С	41	73.0	Е
		NB BRT	6	16.8	В	3	17.2	В
		SB BRT	4	0.3	Α	2	0.2	Α
		SBR	50	10.1	В	31	5.7	Α
		SBT	313	15.0	В	150	10.5	В
		SBL	30	18.0	В	28	19.1	В
		WBR	57	12.8	В	43	26.1	С
		WBT	32	25.8	С	23	25.2	С
		WBL	22	28.4	С	5	27.0	C
129	Meeting St & John St	NBR	19	7.2	Α	12	18.4	В
		NBT	877	7.5	A	586	34.0	С
		NBL	84	19.4	В	29	20.6	С
		EBR	59	7.3	A	39	11.6	В
		EBT	25	21.0	С	21	23.9	C F
		EBL	5 5	19.5	В	7	199.9	
		NB BRT SB BRT	4	3.0	A B	3	2.6	A B
		SBR	109	17.3 11.2	В	33	14.1 8.3	A
		SBT	200	42.7	D	85	21.6	C
		SBL	55	136.8	F	38	72.0	E
		WBR	122	25.0	С	100	63.6	E
		WBT	457	29.1	C	448	46.3	D
		WBL	50	35.2	D	41	42.2	D
		NBR	100	19.9	В	81	56.5	E
130	Meeting St & Calhoun St	NBT	754	22.2	С	553	31.2	С
		NBL	263	36.8	D	279	29.9	C
		EBR	183	6.1	A	182	6.4	A
		EBT	323	19.2	В	268	20.8	C
		EBL	107	24.0	С	41	20.5	C
		NB BRT	5	23.5	С	3	19.0	В
		SB BRT	4	11.7	В	2	9.2	Α
		SBR	201	65.7	Е	144	89.8	F
101	Colhaun Ct 9 King Ct	SBT	145	87.1	F	136	107.9	F
131	Calhoun St & King St	SBL	169	101.0	F	171	117.0	F
		WBR	96	20.9	С	157	18.7	В



Node				st Hour			nd Hour	
No.	Intersection Name	Movement		– 5:30 pr			- 6:00 p	
110.			Volume	Delay	LOS	Volume	Delay	LOS
		WBT	627	23.8	С	542	22.4	С
		WBL	104	44.9	D	70	36.0	D
		EBR	105	24.3	С	107	69.7	Е
		EBT	436	44.8	D	327	95.3	F
		EBL	175	82.1	F	193	146.6	F
		NB BRT	5	34.6	С	4	98.0	F
		SB BRT	4	13.6	В	2	16.0	В
		SBR	83	14.1	В	117	19.9	В
		SBT	135	39.0	D	134	43.0	D
		SBL	27	53.5	D	32	72.4	E
400	Callagora Ct 9 Digiting Ct	WBR	93	17.3	В	83	16.9	В
132	Calhoun St & Phillips St	WBT	735	16.1	В	610	16.2	В
		EBR	100	30.3	С	76	72.9	E
		EBT	709	48.2	D	614	110.3	F
		NB BRT	5	57.5	E	4	128.1	F
		SB BRT	4	11.6	В	2	20.0	С
		WBR	70	9.8	A	64	11.1	В
		WBT	739	4.9	A C	665	6.3	A
		NBR	105	31.5	E	149	60.0	E E
133	Calbarra St & Camina St	NBT	570	70.6	F	547	80.0 100.3	F
133	Calhoun St & Coming St	NBL	147	89.6		147		
		EBT EBL	735	18.4	B C	562	73.1	E
		NB BRT	165	24.0 16.2	В	133	70.2 73.1	E E
		SB BRT	6 4	20.5	С	4 2	13.8	В
		SBR	93	21.7	С	84	39.9	D
		SBT	34	42.6	D	36	59.9	E
		SBL	18	47.2	D	25	75.5	E
		WBR	23	5.2	A	23	6.4	A
		WBT	849	5.0	A	771	6.2	A
		WBL	17	18.4	В	17	20.5	C
		NBR	25	31.9	С	18	42.7	D
134	Calhoun St & Smith St	NBT	22	38.8	D	17	39.7	D
		NBL	26	40.3	D	22	39.3	D
		EBR	39	13.6	В	41	40.3	D
		EBT	878	21.8	С	674	69.3	E
		EBL	40	25.8	С	25	53.1	D
		NB BRT	7	26.1	С	5	68.7	E
		SB BRT	4	6.1	A	2	0.6	A
		SBR	374	66.3	Е	392	48.1	D
		SBT	295	30.9	С	324	33.2	C
		SBL	179	32.6	С	175	113.9	F
		WBT	996	16.8	В	932	16.4	В
	Calhoun St & Rutledge	WBL	22	27.8	С	18	27.1	С
135	Ave	NBR	44	11.8	В	38	136.8	F
	7.00	EBR	33	14.0	В	28	56.4	E
		EBT	744	24.1	С	565	82.9	F
		NB BRT	7	22.5	С	5	120.9	F
		SB BRT	4			2		
		OD DK I	4	8.6	А	2	1.8	Α



Node				st Hour			nd Hour	
No.	Intersection Name	Movement		- 5:30 pr	n)		- 6:00 pi	m)
NO.			Volume	Delay	LOS	Volume	Delay	LOS
		WBR	147	22.4	С	151	19.5	В
		WBT	1239	19.3	В	1171	19.0	В
		NBR	52	23.3	С	53	35.1	D
		NBT	218	49.9	D	221	50.0	D
136	Calbaua St & Aablay Aya	NBL	97	53.8	D	92	58.1	Е
130	Calhoun St & Ashley Ave	EBR	27	12.8	В	24	47.1	D
		EBT	740	13.5	В	568	57.9	Е
		EBL	171	30.3	С	131	48.0	D
		NB BRT	6	16.3	В	5	69.8	Е
		SB BRT	4	33.9	С	2	26.2	С
		SBR	222	25.5	С	171	35.3	D
		SBT	11	58.2	Е	11	95.1	F
		SBL	161	58.0	Е	145	86.9	F
		WBR	127	10.2	В	122	11.0	В
	Calhoun St & Jonathan	WBT	1194	10.4	В	1167	11.3	В
		WBL	4	12.7	В	3	15.5	В
137		NBR	50	17.1	В	33	35.9	D
137	Lucas St/Barre St	NBT	23	50.9	D	18	59.2	E
		NBL	88	52.4	D	66	49.6	D
		EBR	16	6.6	Α	7	16.2	В
		EBT	714	8.3	Α	570	41.6	D
		EBL	114	41.7	D	62	47.3	D
		NB BRT	6	14.9	В	5	37.6	D
		SB BRT	4	16.9	В	3	19.0	В
		SBR	530	43.2	D	570	50.1	D
		SBT	31	136.4	F	37	124.1	F
		SBL	109	88.7	F	85	103.6	F
		WBR	106	24.5	С	94	28.7	С
		WBT	1398	25.2	С	1306	27.9	С
142	Calhoun St & Courtenay	NBR	5	15.6	В	5	15.6	В
142	Dr	NBT	35	46.6	D	28	45.7	D
		NBL	6	49.3	D	5	61.8	Е
		EBR	0	0.0	Α	0	0.0	Α
		EBT	755	5.6	Α	609	13.3	В
		EBL	253	43.1	D	289	52.4	D
		NB BRT	6	165.8	F	6	194.9	F

^{*} This intersection is unsignalized in the Build scenario and has been evaluated using unsignalized LOS criteria.



LOWCOUNTRY RAPID TRANSIT MICROSIMULATION MODEL DRAFT REPORT

Appendix H - LCRT Route Southern Terminus Traffic Analysis

Appendix H - LCRT ROUTE SOUTHERN TERMINUS TRAFFIC ANALYSIS





LCRT Route Southern Terminus Traffic Analysis

Lowcountry Rapid Transit

Berkeley, Charleston & Dorchester Counties, SC July 12, 2021

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1.1 LCRT Route Southern Terminus Background

The purpose of this document is to provide traffic analysis of existing and proposed conditions along the proposed LCRT route beginning on Courtenay Drive at Calhoun Street and terminating at the southern terminus proposed on Line Street west of Hagood Avenue, as illustrated in Figure 1. Also shown in Figure 1 is a proposed alignment for transit vehicles during tidal flood events, which makes use of Hagood Avenue and the Spring Street connector from US 17 to Lockwood Drive.

The proposed route includes a pair of LCRT stations at Doughty Street on either side of Courtenay Street for service in both the northbound and southbound directions as well as the terminus station on Line Street which will also provide transit vehicle charging capabilities.

Within this area, the transit vehicles will operate in mixed traffic (i.e., no dedicated lanes) and without the use of Transit Signal Priority (TSP). TSP is used to increase transit vehicle efficiency by providing a means for vehicles to communicate with signal controllers and a traffic management center. This communication allows transit vehicles to tell signals that it is approaching, and equipment in the signal cabinet can determine how to influence the traffic signal to provide a green indication for oncoming bus. For the purposes of 30% design, TSP within this section of the route was evaluated from a qualitative perspective and determined to offer only minor improvements for transit vehicles, while potentially contributing to recurring signal coordination interruption between the closely spaced signals on Lockwood Drive at Spring Street and at Bee Street. During the design phase of LCRT, the use of TSP and/or queue jump lanes may be explored more comprehensively and supplemental traffic analysis using microsimulation tools such as VISSIM may be used to quantify the traffic impacts of TSP.

Figure 1. Traffic Analysis Addendum Study Area



1.2 Analysis Methodology

Volume Development

Traffic volumes in this section were compiled from various sources. The source of data for each intersection within the analysis is summarized below in Table 1. Manual adjustments were made to establish a baseline existing conditions year consistent with the rest of the LCRT study area.

Table 1. Turning Movement Count Locations and Source

Intersection	Data Source
Courtenay St at Doughty St/Ralph H Johnson Dr	2018 LCRT Traffic Report Count Program
Courtenay St at Bee St	2018 LCRT Traffic Report Count Program
Lockwood Dr at Bee St	2018 LCRT Traffic Report Count Program
Lockwood Dr at Spring St	2018 LCRT Traffic Report Count Program
Hagood Ave at Line St	2021 Observations
Fishburne St at Hagood Ave	2017 City of Charleston Signal Timing Project
Hagood Ave at Spring St	2017 Charleston County US 17 Corridor Study

Background traffic growth was applied at a rate of 1% per year, linearly, for the following intersections:

- Courtenay Street at Doughty Street/Ralph H Johnson Drive
- Courtenay Street at Bee Street

The background rate of 1% is consistent with the methodology utilized on Calhoun Street and Meeting Street in the LCRT Traffic Report. A 1% growth rate is reflective of conditions in which changes to land use is on-going, but somewhat constrained by available land due to an urban setting.

Background traffic growth was applied at a rate of 2% per year, linearly, for the following intersections:

- Lockwood Drive at Spring Street
- Lockwood Drive at Spring Street
- Hagood Avenue at Line Street
- Fishburne Street at Hagood Avenue

A 2% linear growth rate was utilized at these intersections to approximate stronger growth related to the proposed land use densification of the WestEdge Phase 2 proposed plan. The Charleston Area Transportation Study (CHATS) regional travel demand model was used to determine the level of regional growth projected in this area over the 20-year design life.

Note that there are several proposed roadway projects and planned development opportunities within the document's study area. Proposed roadway projects in the area are in various stages of planning and approval. At this time, any roadway project on an SCDOT maintained road which has not been approved, or any roadway project on any road that is not included in the regional long range transportation plan's fiscally constrained project list have not been considered as background projects in No-Build and Build conditions. As projects within the area advance through review, approval, and funding, the LCRT project will continue to coordinate and incorporate any changes to future traffic analyses that may be necessary. Only projects appearing in the region's fiscally constrained plan may be considered appropriate background projects, per Federal Highway Administration and Federal Transit Administration guidelines. Similarly, as planned developments in the area establish traffic generation estimates and are approved,

the LCRT project will conduct a data review and traffic analysis update if a change is determined to be needed.

Intersection Capacity Analysis

The following methodology was used to develop level of service (LOS) and delay measurements for signalized and unsignalized intersections within the segment study area.

- Synchro capacity analysis methodology was used for signalized intersections
- Highway Capacity Manual 6th Edition (HCM 6) was used for unsignalized intersections

Synchro was used for signalized intersections due to limitations in HCM at certain locations and to maintain consistency across all intersections and travel time calculations. The traffic-carrying ability of a roadway is described by Level of Service (LOS), ranging from A to F. Table 2 defines the traffic flow conditions and approximate driver comfort level at each LOS for signalized and unsignalized intersections.

Table 2. LOS for Intersections

Traffic Flow Conditions	LOS	Delay (sec/veh) at Intersections				
Trainic Flow Conditions	103	<u>Signalized</u>	<u>Unsignalized</u>			
Progression is extremely favorable and most vehicles do not stop at all	Α	0-10	0-10			
Good progression, some delay	В	10-20	10-15			
Fair progression, some delay	С	20-35	15-25			
Unfavorable progression, congestion becomes apparent	D	35-55	25-35			
Poor progression, significant delay	E	55-80	35-50			
Poor progression, extreme delay	F	>80, or v/c >1.00	>50, or v/c > 1.00			

Delay thresholds associated with LOS at an intersection differ between those that are signalized and unsignalized. The HCM explains that drivers expect to be serviced in a systematic and orderly pattern at a signalized intersection and are therefore willing to accept greater thresholds of delay associated with LOS. Conversely, service at an unsignalized intersection generally depends on gap acceptance and driver aggression, which are latently random. As a result, drivers at unsignalized intersections are expected to exhibit lower thresholds of delay associated with LOS. A signalized intersection is described by a single, hourly flow rate-weighted LOS, whereas unsignalized intersections are assigned multiple LOS, for each movement with conflicting traffic streams; i.e., major street left turns and all side-street movements.

The intersection capacity analyses were performed using the traffic modeling software Synchro, Version 10. This software package is based on methodologies from the Highway Capacity Manual and is accepted by SCDOT for the analysis of signalized and unsignalized intersections.

Transit Vehicle Travel Time

Transit vehicle travel times in this section were approximated using intersection movement delay, posted speed limits and distance between intersections, and observations to calculate a total trip time. Since TSP was not used in this area, the average delay for general purpose traffic is assumed to be equivalent to the average delay for transit vehicles.

1.3 2025 and 2045 No Build Traffic Analysis

The following table summarizes 2025 No Build traffic conditions at the study area intersections.

Table 3. 2025 No Build Intersection LOS and Delay

Intersection	Traffic Control	Intersection Delay		
Intersection	Trairic Control	2025 AM	2025 PM	
Courtenay Drive & Doughty Street	Signal	B (18.1)	B (19.2)	
Courtenay Drive & Ralph Johnson Drive	Signal	A (6.2)	B (13.6)	
Courtenay Drive & Bee Street	Signal	C (21.2)	C (29.8)	
Lockwood Drive & Bee Street	Signal	C (32.9)	B (19.7)	
Lockwood Drive & Spring Street	Signal	D (40.7)	D (48.8)	
Hagood Avenue & Line Street	Minor Street Stop Control*	B (14.1)	B (10.5)	
Hagood Avenue & Spring Street	Minor Street Stop Control*	C (20.0)	C (24.0)	
Hagood Avenue & Fishburne Street	Signal	B (13.7)	B (14.8)	

^{*} LOS and delay reported for minor street approach only; major street approaches are free flowing

As evidenced in the table above, the intersection with the highest overall intersection delay within the study area is Lockwood Drive at Spring Street.

The LCRT project also evaluates a 20-year traffic analysis condition. Therefore, to remain consistent with the rest of the project, a 2045 No Build analysis was also conducted. The results of this analysis are shown in Table 4.

Table 4. 2045 No Build Intersection LOS and Delay

Interpostion	Troffic Control	Intersection Delay			
Intersection	Traffic Control	2045 AM	2045 PM		
Courtenay Drive & Doughty Street	Signal	C (22.4)	C (26.1)		
Courtenay Drive & Ralph Johnson Drive	Signal	A (7.3)	C (23.0)		
Courtenay Drive & Bee Street	Signal	C (22.9)	C (30.1)		
Lockwood Drive & Bee Street	Signal	F (112.4)	D (43.6)		
Lockwood Drive & Spring Street	Signal	F (101.3)	F (176.6)		
Hagood Avenue & Line Street	Minor Street Stop Control*	C (23.0)	B (12.5)		
Hagood Avenue & Spring Street	Minor Street Stop Control*	F (59.6)	F (185.6)		
Hagood Avenue & Fishburne Street	Signal	B (14.4)	C (22.0)		

^{*} LOS and delay reported for minor street approach only; major street approaches are free flowing

The 2045 analysis reveals that two traffic signals will likely reach LOS F conditions during at least one peak period. These two signals are on Lockwood Drive. The minor street approach of Hagood Avenue at Spring Street is modeled at a LOS F during both time periods. This is not uncommon for unsignalized approaches in areas where moderate to heavy traffic volume is present on the major street.

1.4 2025 and 2045 Build Traffic Analysis

The LCRT project proposes two physical modifications to roads and signals in this area.

- Lockwood Drive at Spring Street: proposed LCRT project improvement would construct one additional northbound left turn lane; resulting northbound lane geometry would be dual left turn lanes and dual through lanes
- Hagood Avenue road diet: proposed LCRT project improvement would raise the elevation of Hagood Avenue outside of the existing floodplain and resurface the roadway, which is currently four-lanes, to a three-lane typical section (one lane in each direction and a center left turn lane)

The resulting intersection LOS and delay for 2025 and 2045 conditions are summarized in Table 5 and Table 6 respectively. Intersections where a physical change affected LOS and delay are denoted in **Bold Italics**. Note that there is a minor change in delay at the Lockwood Drive at Bee Street due to the interactions between the signal coordination. In 2025 analysis conditions, the change is less than 1 second of additional delay per vehicle. By 2045 the PM peak exhibited a 5 second per vehicle increase.

Table 5. 2025 Build Intersection LOS and Delay

Intersection	Traffic Control	Intersection Delay			
Intersection	Trairie Control	2025 AM	2025 PM		
Courtenay Drive & Doughty Street	Signal	B (18.1)	B (19.2)		
Courtenay Drive & Ralph Johnson Drive	Signal	A (6.2)	B (13.6)		
Courtenay Drive & Bee Street	Signal	C (21.2)	C (29.8)		
Lockwood Drive & Bee Street	Signal	C (33.4)	C (20.6)		
Lockwood Drive & Spring Street	Signal	C (29.9)	D (40.1)		
Hagood Avenue & Line Street	Minor Street Stop Control*	B (14.2)	B (11.4)		
Hagood Avenue & Spring Street	Minor Street Stop Control*	C (20.0)	C (24.0)		
Hagood Avenue & Fishburne Street	Signal	B (19.3)	B (15.8)		

^{*} LOS and delay reported for minor street approach only; major street approaches are free flowing

Table 6. 2045 Build Intersection LOS and Delay

Intersection	Traffic Control	Intersection Delay			
Intersection	Harric Control	2045 AM	2045 PM		
Courtenay Drive & Doughty Street	Signal	C (22.4)	C (26.1)		
Courtenay Drive & Ralph Johnson Drive	Signal	A (7.3)	C (23.0)		
Courtenay Drive & Bee Street	Signal	C (22.9)	C (30.1)		
Lockwood Drive & Bee Street	Signal	F (111.6)	D (48.8)		
Lockwood Drive & Spring Street	Signal	D (53.6)	F (146.6)		
Hagood Avenue & Line Street	Minor Street Stop Control*	C (23.9)	B (13.8)		
Hagood Avenue & Spring Street	Minor Street Stop Control*	F (59.6)	F (185.6)		
Hagood Avenue & Fishburne Street	Signal	D (53.4)	E (76.3)		

1.5 Transit Vehicle Travel Time

An estimate of transit vehicle travel time along the southern terminus route extension was produced using Build Synchro capacity analysis results, approximate link speed between intersections, and an assumed 30 second dwell time at each station. The 2025 north-to-south travel time is summarized in Table 7 and the 2025 south-to-north travel time is summarized in Table 8. Similarly, the approximate travel times under 2045 conditions are summarized in Table 9 and Table 10.

This assessment is based on the primary route shown in Figure 1. The assessment also includes proposed LCRT project modifications:

- the addition of a second dedicated northbound left turn lane from Lockwood Drive onto the US 17 on-ramp
- a lane reduction on Hagood Avenue in each direction

It should be noted that an alternative route was initially considered, which would take northbound transit vehicles leaving the southern terminus station along Hagood Street south to Spring Street and then onto Lockwood Drive by making a westbound left turn at the signal of Lockwood Drive and Spring Street. Assessment of movement delay and routine queueing on Spring Street along this route led the project team to designate this the 'flood route' that transit vehicles should only take during tidal flood events that block the primary route. Refer to Figure 1 for a primary and flood route alignment illustration.

Table 7. 2025 North-to-South Transit Vehicle Travel Time

Segments	Segment Speed (mph)	Segment Distance (mi)	Segment Travel Time (sec)
Courtenay Drive: Calhoun Street to Doughty Street	20	0.15	27
Courtenay Drive: Doughty Street to Ralph Johnson Drive	20	0.03	5.4
Courtenay Drive: Ralph Johnson Drive to Bee Street	20	0.1	18
Bee Street: Courtenay Drive to Lockwood Drive	25	0.23	33.1
Lockwood Drive: Bee Street to Spring Street	25	0.1	14.4
Lockwood Drive: Spring Street to Westedge Street	25	0.48	69.1
Westedge Street/Line Street: Fishburne Street to Hagood Ave	20	0.27	48.6
Intersection Movements	Intersection Movement	AM Movement Delay (sec)	PM Movement Delay (sec)
Courtenay Drive & Doughty Street	NBT	25.2	33.1
Courtenay Drive & Ralph Johnson Drive	NBT	1.2	2
Courtenay Drive & Bee Street	NBL	2.5	21.4
Bee Street & Lockwood Drive	WBR	13.4	18.8
Lockwood Drive & Spring Street	NBT	22.4	10.5
Fishburne Street & Westedge Street	EBR	0	0
		2025 AM	2025 PM
Total Station [Dwell Time (min)	0.5	0.5
Total T	ravel Time (min)	5.2	5.5

Table 8. 2025 South-to-North Transit Vehicle Travel Time

Segments	Segment Speed (mph)	Segment Distance (mi)	Segment Travel Time (sec)			
Hagood Avenue: Line Street to Fishburne Street	20	0.12	17.3			
Lockwood Drive: Hagood Avenue to Spring Street	20	0.68	97.9			
Lockwood Drive: Bee Street to Spring Street	20	0.1	14.4			
Bee Street: Courteney Drive to Lockwood Drive	25	0.23	33.1			
Courtenay Drive: Ralph Johnson Drive to Bee Street	25	0.1	18			
Courtenay Drive: Doughty Street to Ralph Johnson Drive	25	0.03	5.4			
Courtenay Drive: Calhoun Street to Doughty Street	20	0.15	27			
Intersection Movements	Intersection Movement	AM Movement Delay (sec)	PM Movement Delay (sec)			
Hagood Avenue & Line Street	EBL	18.8	13.7			
Hagood Avenue & Fishburne Street	NBL	15.5	18.2			
Lockwood Drive & Spring Street	SBT	36.9	44.1			
Bee Street & Lockwood Drive	SBL	61.6	67			
Courtenay Drive & Bee Street	EBR	10	2.1			
Courtenay Drive & Ralph Johnson Drive	SBT	5.9	13.6			
Courtenay Drive & Doughty Street	SBT	2.9	5.8			
		2025 AM	2025 PM			
Total Station I	Total Station Dwell Time (min)					
Total T	ravel Time (min)	6.6	6.8			

Table 9. 2045 North-to-South Transit Vehicle Travel Time

Segments	Segment Speed (mph)	Segment Distance (mi)	Segment Travel Time (sec)
Courtenay Drive: Calhoun Street to Doughty Street	20	0.15	27
Courtenay Drive: Doughty Street to Ralph Johnson Drive	20	0.03	5.4
Courtenay Drive: Ralph Johnson Drive to Bee Street	20	0.1	18
Bee Street: Courtenay Drive to Lockwood Drive	25	0.23	33.1
Lockwood Drive: Bee Street to Spring Street	25	0.1	14.4
Lockwood Drive: Spring Street to Westedge Street	25	0.48	69.1
Westedge Street/Line Street: Fishburne Street to Hagood Ave	20	0.27	48.6
Intersection Movements	Intersection Movement	AM Movement Delay (sec)	PM Movement Delay (sec)
Courtenay Drive & Doughty Street	NBT	31.7	43.7
Courtenay Drive & Ralph Johnson Drive	NBT	1.7	2.6
Courtenay Drive & Bee Street	NBL	4.5	25.5
Bee Street & Lockwood Drive	WBR	21.1	32.3
Lockwood Drive & Spring Street	NBT	81.4	11.5
Fishburne Street & Westedge Street	EBR	0	0
		2045 AM	2045 PM
Total Station [Owell Time (min)	0.5	0.5
Total T	ravel Time (min)	6.4	6.0

Table 10. 2045 South-to-North Transit Vehicle Travel Time

Cogmonto	Segment	Segment	Segment Travel
Segments	Speed (mph)	Distance (mi)	Time (sec)
Hagood Avenue: Line Street to Fishburne Street	20	0.12	17.3
Lockwood Drive: Hagood Avenue to Spring Street	20	0.68	97.9
Lockwood Drive: Bee Street to Spring Street	20	0.1	14.4
Bee Street: Courteney Drive to Lockwood Drive	25	0.23	33.1
Courtenay Drive: Ralph Johnson Drive to Bee Street	25	0.1	18
Courtenay Drive: Doughty Street to Ralph Johnson Drive	25	0.03	5.4
Courtenay Drive: Calhoun Street to Doughty Street	20	0.15	27
Intersection Movements	Intersection Movement	AM Movement Delay (sec)	PM Movement Delay (sec)
Hagood Avenue & Line Street	EBL	35.3	18.6
Hagood Avenue & Fishburne Street	NBL	12.8	13.5
Lockwood Drive & Spring Street	SBT	58.1	56.7
Bee Street & Lockwood Drive	SBL	259.6	96.9
Courtenay Drive & Bee Street	EBR	8.5	2.2
Courtenay Drive & Ralph Johnson Drive	SBT	7.8	37
Courtenay Drive & Doughty Street	SBT	3	11.8
		2045 AM	2045 PM
Total Station [0.5	0.5	
Total T	ravel Time (min)	10.5	8.0

1.6 Conclusions

This section summarizes results found in Section 1.3, 1.4 and 1.5.

- Analysis conclusions from the capacity analysis indicate that the addition of a second northbound left turn lane at the signal of Lockwood Drive at Spring Street would improve overall intersection operations during both peak periods. This improvement increases transit throughput and reliability, while also improving general purpose operations in an often-congested area.
- The road diet on Hagood Avenue would have minor impacts to the ability for left turns to be made from the side-street. The increase in delay for the side-street is minimal, and the approach LOS does not exceed LOS C in 2045 conditions.
- The highest change in LOS occurs at the signal of Fishburne Street and Hagood Avenue.
 Opening year analysis suggests minimal change, but if traffic growth occurs at the rate projected the 2045 operations at this signal may reach LOS E during the PM peak. This is primarily because the road diet on Hagood Avenue negates the ability to carry two southbound through lanes through the signal.

As previously noted, when planned projects, such as the Ashley River Pedestrian Bridge reach approval stages with SCDOT and design moves out of the preliminary engineering phase, the LCRT project team will continue to coordinate with the appropriate parties to update analyses with latest information.

 Transit travel times are within 5-7 minutes to travel 1.3 miles for both northbound and southbound routes during 2025. By 2045 the travel time range increases to 6-11 minutes, including station dwell time at the Courtenay Street Station. Note that dwell at the end of the line station was not included in this calculation. These times are achievable without TSP.

Appendix A – Synchro Output

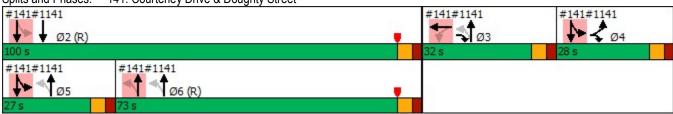


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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					4			414		*	1₃	
Traffic Volume (vph)	0	0	0	29	1	74	14	608	55	157	234	39
Future Volume (vph)	0	0	0	29	1	74	14	608	55	157	234	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Frt					0.904			0.988			0.979	
Flt Protected					0.986			0.999		0.950		
Satd. Flow (prot)	0	0	0	0	1660	0	0	3493	0	1656	1707	0
Flt Permitted					0.986			0.684		0.297		
Satd. Flow (perm)	0	0	0	0	1660	0	0	2392	0	518	1707	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					66			7			17	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		198			609			481			134	
Travel Time (s)		5.4			16.6			13.1			3.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	9%	9%	9%
Adj. Flow (vph)	0	0	0	31	1	78	15	640	58	165	246	41
Shared Lane Traffic (%)	•			•	•	. •		0.0				
Lane Group Flow (vph)	0	0	0	0	110	0	0	713	0	165	287	0
Turn Type	•			Perm	NA	· ·	Perm	NA		custom	NA	J
Protected Phases				. 0	3		. 0	6		5 4	245	
Permitted Phases				3	•		6	· ·		2		
Detector Phase				3	3		6	6		5 4	245	
Switch Phase					•			· ·		· ·		
Minimum Initial (s)				10.0	10.0		20.0	20.0				
Minimum Split (s)				32.0	32.0		28.0	28.0				
Total Split (s)				32.0	32.0		73.0	73.0				
Total Split (%)				20.0%	20.0%		45.6%	45.6%				
Maximum Green (s)				26.0	26.0		67.0	67.0				
Yellow Time (s)				3.5	3.5		3.5	3.5				
All-Red Time (s)				2.5	2.5		2.5	2.5				
Lost Time Adjust (s)				2.0	-2.0		2.0	-2.0				
Total Lost Time (s)					4.0			4.0				
Lead/Lag				Lead	Lead		Lag	Lag				
Lead-Lag Optimize?				2000								
Vehicle Extension (s)				3.0	3.0		3.0	3.0				
Recall Mode				None	None		C-Min	C-Min				
Act Effct Green (s)				110110	17.7		O Willi	85.4		134.3	134.3	
Actuated g/C Ratio					0.11			0.53		0.84	0.84	
v/c Ratio					0.45			0.56		0.22	0.20	
Control Delay					33.3			25.2		2.6	2.0	
Queue Delay					0.0			0.0		1.4	0.8	
Total Delay					33.3			25.2		4.0	2.9	
LOS					C			C		A.0	Α.	
Approach Delay					33.3			25.2		Λ	3.3	
Approach LOS					33.3 C			23.2 C			3.5 A	
Queue Length 50th (ft)					43			251		12	18	
Queue Length 95th (ft)					102			383		36	55	
Queue Lengin 95in (ii)					102			აია		30	55	

Lane Group	Ø2	Ø4	Ø5
Lane Configurations	- DL	ÐΤ	20
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl) Lane Util. Factor			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Heavy Vehicles (%)			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	2	4	5
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	20.0	10.0	5.0
Minimum Split (s)	30.0	28.0	11.0
Total Split (s)	100.0	28.0	27.0
Total Split (%)	63%	18%	17%
Maximum Green (s)	94.0	22.0	21.0
()	3.5	3.5	3.5
Yellow Time (s)	3.5 2.5		3.5 2.5
All-Red Time (s)	2.5	2.5	2.5
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag		Lag	Lead
Lead-Lag Optimize?			
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	C-Min	None	None
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Quodo Longin John (it)			

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		118			529			401			54	
Turn Bay Length (ft)												
Base Capacity (vph)					344			1280		760	1431	
Starvation Cap Reductn					0			0		425	857	
Spillback Cap Reductn					0			0		0	0	
Storage Cap Reductn					0			0		0	0	
Reduced v/c Ratio					0.32			0.56		0.49	0.50	
Intersection Summary												
Area Type:	Other											
Cycle Length: 160												
Actuated Cycle Length: 10	60											
Offset: 119 (74%), Refere	nced to phase	2:SBTL	and 6:NE	BTL, Start	of Yellow	'						
Natural Cycle: 100												
Control Type: Actuated-C	oordinated											
Maximum v/c Ratio: 0.56												
Intersection Signal Delay:	18.1			ln	tersection	LOS: B						
Intersection Capacity Utili	zation 54.0%			IC	U Level o	of Service	Α					
Analysis Period (min) 15												

Splits and Phases: 141: Courteney Drive & Doughty Street



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Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø3	Ø5	Ø6	
Lane Configurations	*	7	*	↑	†					
Traffic Volume (vph)	51	91	106	577	345	213				
Future Volume (vph)	51	91	106	577	345	213				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900				
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95				
Frt		0.850			0.943	0.00				
Flt Protected	0.950	0.000	0.950		0.0.0					
Satd. Flow (prot)	1456	1302	1770	1863	3337	0				
Flt Permitted	0.950	1002	0.410	1000	0001	•				
Satd. Flow (perm)	1456	1302	764	1863	3337	0				
Right Turn on Red	1100	Yes	701	1000	0001	Yes				
Satd. Flow (RTOR)		97			148	100				
Link Speed (mph)	25	31		25	25					
Link Distance (ft)	231			134	540					
Travel Time (s)	6.3			3.7	14.7					
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				
Heavy Vehicles (%)	24%	24%	2%	2%	2%	2%				
Adj. Flow (vph)	54	97	113	614	367	227				
Shared Lane Traffic (%)	J T	31	110	014	301	221				
Lane Group Flow (vph)	54	97	113	614	594	0				
Turn Type	Prot	custom	Perm	NA	NA	U				
Protected Phases	4	4 3	1 Cilli	563	2		3	5	6	
Permitted Phases	т.	4	563	000	_		U	U	· ·	
Detector Phase	4	4 3	563	563	2					
Switch Phase	т.	70	000	000	_					
Minimum Initial (s)	10.0				20.0		10.0	5.0	20.0	
Minimum Split (s)	28.0				30.0		32.0	11.0	28.0	
Total Split (s)	28.0				100.0		32.0	27.0	73.0	
Total Split (%)	17.5%				62.5%		20%	17%	46%	
Maximum Green (s)	22.0				94.0		26.0	21.0	67.0	
Yellow Time (s)	3.5				3.5		3.5	3.5	3.5	
All-Red Time (s)	2.5				2.5		2.5	2.5	2.5	
Lost Time Adjust (s)	-2.0				-2.0		2.0	2.0	2.0	
Total Lost Time (s)	4.0				4.0					
Lead/Lag	Lag				7.0		Lead	Lead	Lag	
Lead-Lag Optimize?	Lug						Loud	Loud	Lug	
Vehicle Extension (s)	3.0				3.0		3.0	3.0	3.0	
Recall Mode	None				C-Min		None	None	C-Min	
Act Effct Green (s)	15.9	37.6	136.1	136.1	114.4		110110	110110	O IVIIII	
Actuated g/C Ratio	0.10	0.24	0.85	0.85	0.72					
v/c Ratio	0.38	0.26	0.17	0.39	0.24					
Control Delay	73.6	8.5	0.7	0.9	5.9					
Queue Delay	0.0	0.0	0.9	0.3	0.0					
Total Delay	73.6	8.5	1.6	1.2	5.9					
LOS	F	A	A	A	A					
Approach Delay	31.8	/ \	, , , , , , , , , , , , , , , , , , ,	1.2	5.9					
Approach LOS	C			A	A					
Queue Length 50th (ft)	54	0	1	7	63					
Queue Length 95th (ft)	99	44	2	9	125					
Quodo Longin 30th (it)	33	77		J	120					



Internal Link Dist (ft) 151 54 460 Turn Bay Length (ft)
Turn Bay Length (ft)
Base Capacity (vph) 218 435 700 1707 2428
Starvation Cap Reductn 0 0 397 506 0
Spillback Cap Reductn 0 12 0 0 1
Storage Cap Reductn 0 0 0 0
Reduced v/c Ratio 0.25 0.23 0.37 0.51 0.24

Intersection Summary

Area Type: Other

Cycle Length: 160
Actuated Cycle Length: 160

Offset: 119 (74%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 100

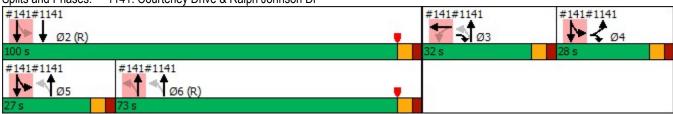
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.56 Intersection Signal Delay: 6.2 Intersection Capacity Utilization 45.4%

Intersection LOS: A ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1141: Courteney Drive & Ralph Johnson Dr



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	-	00.000	*	*		~	1	24.0	/	\$3.50	*	32.0
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	↑	7	7	ĵ.		7	↑ ↑		ሻ	†	
Traffic Volume (vph)	79	110	73	43	114	21	108	489	65	123	463	280
Future Volume (vph)	79	110	73	43	114	21	108	489	65	123	463	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	570		215	0		0	200		0	120		0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.977			0.983			0.943	
FIt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1612	1657	0	1770	3479	0	1770	3337	0
FIt Permitted	0.410			0.497		_	0.331		_	0.414		
Satd. Flow (perm)	764	1863	1583	843	1657	0	617	3479	0	771	3337	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			77		6			13			115	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		790			244			540			423	
Travel Time (s)		21.5			6.7			14.7			11.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	12%	12%	12%	2%	2%	2%	2%	2%	2%
Adj. Flow (vph)	83	116	77	45	120	22	114	515	68	129	487	295
Shared Lane Traffic (%)												
Lane Group Flow (vph)	83	116	77	45	142	0	114	583	0	129	782	0
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8	1		4		1	6		5	2	
Permitted Phases	8		8	4			6			2		
Detector Phase	8	8	1	4	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	6.0	6.0	5.0	6.0	6.0		5.0	8.0		5.0	8.0	
Minimum Split (s)	36.0	36.0	11.0	35.0	35.0		11.0	29.0		11.0	36.0	
Total Split (s)	51.0	51.0	24.0	51.0	51.0		24.0	85.0		24.0	85.0	
Total Split (%)	31.9%	31.9%	15.0%	31.9%	31.9%		15.0%	53.1%		15.0%	53.1%	
Maximum Green (s)	45.5	45.5	18.5	45.0	45.0		18.5	79.5		18.5	79.0	
Yellow Time (s)	3.5	3.5	3.0	3.5	3.5		3.0	3.5		3.0	3.5	
All-Red Time (s)	2.0	2.0	2.5	2.5	2.5		2.5	2.0		2.5	2.5	
Lost Time Adjust (s)	-1.5	-1.5	-1.5	-2.0	-2.0		-1.5	-1.5		-1.5	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag			Lead				Lead	Lag		Lead	Lag	
Lead-Lag Optimize?								_				
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	20.6	20.6	33.7	20.6	20.6		127.1	118.0		127.7	118.3	
Actuated g/C Ratio	0.13	0.13	0.21	0.13	0.13		0.79	0.74		0.80	0.74	
v/c Ratio	0.85	0.49	0.20	0.42	0.65		0.21	0.23		0.19	0.31	
Control Delay	123.8	70.5	10.0	78.8	81.0		2.5	4.9		3.9	6.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	1.0	
Total Delay	123.8	70.5	10.0	78.8	81.0		2.5	4.9		3.9	7.7	
LOS	F	7 G.G	Α	F E	F		Α.	Α.		Α.	Α.	
Approach Delay	•	69.7	, (_	80.5		,,,	4.5		, (7.2	
, approach boldy		00.1			50.5			7.0			1.2	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		Е			F			Α			Α	
Queue Length 50th (ft)	86	115	0	47	145		3	10		22	110	
Queue Length 95th (ft)	#158	175	43	91	220		18	42		45	171	
Internal Link Dist (ft)		710			164			460			343	
Turn Bay Length (ft)	570		215				200			120		
Base Capacity (vph)	224	547	496	247	490		650	2570		758	2497	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	1368	
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.37	0.21	0.16	0.18	0.29		0.18	0.23		0.17	0.69	

Intersection Summary

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 155 (97%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85 Intersection Signal Delay: 21.2 Intersection Capacity Utilization 53.4%

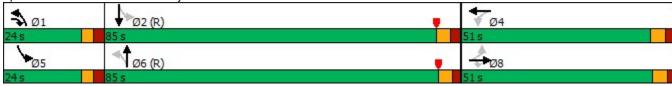
Intersection LOS: C
ICU Level of Service A

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 140: Courteney Drive & Bee Street



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	4				77		↑ ↑		×	^	
Traffic Volume (vph)	502	463	0	0	0	216	0	1082	62	144	968	0
Future Volume (vph)	502	463	0	0	0	216	0	1082	62	144	968	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	250	,,,,,	0
Storage Lanes	1		0	0		2	0		0	0		0
Taper Length (ft)	25			25		_	25			25		•
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	0.88	1.00	0.95	0.95	1.00	0.95	1.00
Frt	0.00	0.00	1.00	1.00	1.00	0.850	1.00	0.992	0.00	1.00	0.00	1.00
Flt Protected	0.950	0.995				0.000		0.002		0.950		
Satd. Flow (prot)	1698	1778	0	0	0	2538	0	3511	0	1703	3406	0
Flt Permitted	0.950	0.995				2000		0011		0.950	0100	
Satd. Flow (perm)	1698	1778	0	0	0	2538	0	3511	0	1703	3406	0
Right Turn on Red	1000	1770	Yes			Yes		0011	Yes	1700	0100	Yes
Satd. Flow (RTOR)			100			32		6	100			100
Link Speed (mph)		30			30	0 <u>Z</u>		30			30	
Link Opeca (mph) Link Distance (ft)		237			505			132			252	
Travel Time (s)		5.4			11.5			3.0			5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	1%	12%	12%	12%	2%	2%	2%	6%	6%	2%
Adj. Flow (vph)	546	503	0	0	0	235	0	1176	67	157	1052	0
Shared Lane Traffic (%)	10%	303	U	U	U	200	U	1170	O1	107	1002	U
Lane Group Flow (vph)	491	558	0	0	0	235	0	1243	0	157	1052	0
Turn Type	Split	NA	U	- U	U	pm+ov		NA	0	Prot	NA	J
Protected Phases	8	8				1		2		1	6	
Permitted Phases						8						
Detector Phase	8	8				1		2		1	6	
Switch Phase						•						
Minimum Initial (s)	8.0	8.0				8.0		5.0		8.0	5.0	
Minimum Split (s)	47.0	47.0				15.0		15.0		15.0	15.0	
Total Split (s)	48.0	48.0				19.0		53.0		19.0	72.0	
Total Split (%)	40.0%	40.0%				15.8%		44.2%		15.8%	60.0%	
Maximum Green (s)	41.0	41.0				12.5		47.0		12.5	66.0	
Yellow Time (s)	3.5	3.5				3.0		4.0		3.0	4.0	
All-Red Time (s)	3.5	3.5				3.5		2.0		3.5	2.0	
Lost Time Adjust (s)	-3.0	-3.0				-2.5		0.0		-2.5	-1.0	
Total Lost Time (s)	4.0	4.0				4.0		6.0		4.0	5.0	
Lead/Lag	1.0	1.0				Lag		Lead		Lag	0.0	
Lead-Lag Optimize?						Lug		Yes		Lug		
Vehicle Extension (s)	4.0	4.0				4.0		3.0		4.0	3.0	
Recall Mode	None	None				None		C-Max		None		
Walk Time (s)	9.0	9.0				110110		O Max		110110	O Max	
Flash Dont Walk (s)	31.0	31.0										
Pedestrian Calls (#/hr)	01.0	0										
Act Effct Green (s)	42.9	42.9				61.9		48.1		15.0	68.1	
Actuated g/C Ratio	0.36	0.36				0.52		0.40		0.12	0.57	
v/c Ratio	0.81	0.88				0.32		0.88		0.12	0.54	
Control Delay	46.6	52.6				13.4		42.1		58.5	4.7	
Queue Delay	0.5	0.9				0.0		0.0		0.0	0.3	
Queue Delay	0.0	۵.5				0.0		0.0		0.0	0.0	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	47.1	53.6				13.4		42.1		58.5	5.0	
LOS	D	D				В		D		Е	Α	
Approach Delay		50.6			13.4			42.1			11.9	
Approach LOS		D			В			D			В	
Queue Length 50th (ft)	353	415				44		469		129	100	
Queue Length 95th (ft)	503	#624				69		#605		m#201	112	
Internal Link Dist (ft)		157			425			52			172	
Turn Bay Length (ft)										250		
Base Capacity (vph)	622	651				1323		1411		212	1933	
Starvation Cap Reductn	0	0				0		0		0	333	
Spillback Cap Reductn	16	16				93		0		0	0	
Storage Cap Reductn	0	0				0		0		0	0	
Reduced v/c Ratio	0.81	0.88				0.19		0.88		0.74	0.66	

Intersection Summary

Area Type: Other

Cycle Length: 120
Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88 Intersection Signal Delay: 32.9

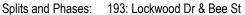
Intersection Signal Delay: 32.9 Intersection LOS: C
Intersection Capacity Utilization 77.6% ICU Level of Service D

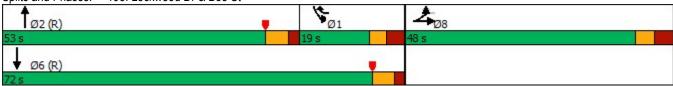
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.





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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				*	सी के		*	414				7
Traffic Volume (vph)	0	0	0	872	125	90	423	841	0	0	211	170
Future Volume (vph)	0	0	0	872	125	90	423	841	0	0	211	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	275		0	0		0	0		0
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	25			25		-	25		-	25		_
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor				0.0.	1.00	0.00	0.99	1.00				0.97
Frt					0.979		0.00					0.850
Flt Protected				0.950	0.968		0.950	0.998				0.000
Satd. Flow (prot)	0	0	0	1550	3085	0	1595	3351	0	0	1881	1599
Flt Permitted	•			0.950	0.968	•	0.950	0.998	· ·		1001	1000
Satd. Flow (perm)	0	0	0	1550	3085	0	1575	3349	0	0	1881	1554
Right Turn on Red	U	•	Yes	1000	0000	Yes	1010	00 10	Yes	v	1001	Yes
Satd. Flow (RTOR)			100		16	100			100			181
Link Speed (mph)		30			30			30			30	101
Link Opeca (mph) Link Distance (ft)		346			960			287			558	
Travel Time (s)		7.9			21.8			6.5			12.7	
Confl. Peds. (#/hr)		7.5			21.0	3	11	0.0			12.1	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	2%	6%	6%	6%	3%	3%	3%	1%	1%	1%
Adj. Flow (vph)	0	0	0	928	133	96	450	895	0	0	224	181
Shared Lane Traffic (%)	U		0	50%	100	30	10%	033	U	0	LLT	101
Lane Group Flow (vph)	0	0	0	464	693	0	405	940	0	0	224	181
Turn Type	U U		0	Split	NA	- U	Split	NA	U	0	NA	Perm
Protected Phases				4	4		2	2			3	1 Cilli
Permitted Phases											J	3
Detector Phase				4	4		2	2			3	3
Switch Phase					7						J	J
Minimum Initial (s)				7.0	7.0		12.0	12.0			7.0	7.0
Minimum Split (s)				49.0	49.0		37.0	37.0			30.0	30.0
Total Split (s)				49.0	49.0		41.0	41.0			30.0	30.0
Total Split (%)				40.8%	40.8%		34.2%	34.2%			25.0%	25.0%
Maximum Green (s)				42.0	42.0		33.5	33.5			24.0	24.0
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	3.5
All-Red Time (s)				3.5	3.5		4.0	4.0			2.5	2.5
Lost Time Adjust (s)				-3.0	-3.0		-3.5	-3.5			-2.0	-2.0
Total Lost Time (s)				4.0	4.0		4.0	4.0			4.0	4.0
Lead/Lag				Lag	Lag		4.0	4.0			Lead	
Lead-Lag Optimize?				Yes								Lead
				4.0	Yes 4.0		<i>E</i> 0	5.0			Yes 4.0	Yes
Vehicle Extension (s)							5.0					4.0
Recall Mode				None 8.0	None		C-Max	C-Max			None	None
Walk Time (s)					8.0		9.0	9.0			8.0	8.0
Flash Dont Walk (s)				34.0	34.0		20.0	20.0			16.0	16.0
Pedestrian Calls (#/hr)				12.0	42.0		0	0			0	0
Act Effet Green (s)				43.9	43.9		42.3	42.3			21.8	21.8
Actuated g/C Ratio				0.37	0.37		0.35	0.35			0.18	0.18
v/c Ratio				0.82	0.61		0.72	0.80			0.66	0.42

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay				47.2	32.6		45.2	44.4			54.8	8.8
Queue Delay				0.0	0.0		0.0	0.0			0.0	0.0
Total Delay				47.2	32.6		45.2	44.4			54.8	8.8
LOS				D	С		D	D			D	Α
Approach Delay					38.4			44.6			34.2	
Approach LOS					D			D			С	
Queue Length 50th (ft)				329	217		354	414			162	0
Queue Length 95th (ft)				#534	296		m430	m#502			238	59
Internal Link Dist (ft)		266			880			207			478	
Turn Bay Length (ft)				275								
Base Capacity (vph)				593	1190		562	1181			407	478
Starvation Cap Reductn				0	0		0	0			0	0
Spillback Cap Reductn				0	0		0	0			0	0
Storage Cap Reductn				0	0		0	0			0	0
Reduced v/c Ratio				0.78	0.58		0.72	0.80			0.55	0.38

Intersection Summary

Area Type: Other

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 36 (30%), Referenced to phase 2:NBTL, Start of Yellow

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 40.7 Intersection LOS: D
Intersection Capacity Utilization 80.6% ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 192: Lockwood Dr & Spring St



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्स	7		4			414			47>	
Traffic Volume (vph)	16	6	43	18	22	24	81	140	59	73	89	12
Future Volume (vph)	16	6	43	18	22	24	81	140	59	73	89	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	200		0	200		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt			0.850		0.950			0.968			0.989	
Flt Protected		0.964			0.986			0.986			0.980	
Satd. Flow (prot)	0	1152	1016	0	1780	0	0	3076	0	0	3364	0
Flt Permitted		0.964			0.986			0.986			0.980	
Satd. Flow (perm)	0	1152	1016	0	1780	0	0	3076	0	0	3364	0
Link Speed (mph)		25			20			30			30	
Link Distance (ft)		759			512			571			617	
Travel Time (s)		20.7			17.5			13.0			14.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	59%	59%	59%	0%	0%	0%	12%	12%	12%	4%	4%	4%
Adj. Flow (vph)	17	6	45	19	23	25	85	147	62	77	94	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	23	45	0	67	0	0	294	0	0	184	0
Sign Control		Stop			Stop			Free			Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 33.4% Analysis Period (min) 15

ICU Level of Service A

Synchro 10 Report Lanes, Volumes, Timings Page 3 Stantec

Intersection												
Int Delay, s/veh	5											
•		FRT	EDD	MAI	14/5-	14/00	NE	Not	NES	051	057	055
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	4.0	નું	7	40	4	•	•	414		=0	414	40
Traffic Vol, veh/h	16	6	43	18	22	24	81	140	59	73	89	12
Future Vol, veh/h	16	6	43	18	22	24	81	140	59	73	89	12
Conflicting Peds, #/hr	0	0	0	0	0	0	_ 0	_ 0	_ 0	_ 0	_ 0	_ 0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	-	-	-	-	-	-	-	-	-
Veh in Median Storage,		0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	59	59	59	0	0	0	12	12	12	4	4	4
Mvmt Flow	17	6	45	19	23	25	85	147	62	77	94	13
Major/Minor N	1inor2		N	/linor1			Major1		N	//ajor2		
Conflicting Flow All	510	634	54	552	609	105	107	0	0	209	0	0
Stage 1	255	255	-	348	348	-	-	-	-		-	-
Stage 2	255	379	_	204	261	_	_	_	_	_	_	_
Critical Hdwy	8.68	7.68	8.08	7.5	6.5	6.9	4.34	-	_	4.18	-	_
Critical Hdwy Stg 1	7.68	6.68	-	6.5	5.5	-		_	_	-	_	_
Critical Hdwy Stg 2	7.68	6.68	_	6.5	5.5	-	_	-	_	-	-	_
Follow-up Hdwy	4.09	4.59	3.89	3.5	4	3.3	2.32	_	_	2.24	_	_
Pot Cap-1 Maneuver	351	303	877	433	421	936	1433	-	_	1345	-	_
Stage 1	607	586	-	647	638	-	- 700	_	_	-	_	_
Stage 2	588	490	_	804	707	_	_	_	_	_	-	_
Platoon blocked, %	1	1	1	1	1		1	_	_		_	_
Mov Cap-1 Maneuver	294	265	877	365	368	936	1433	_	_	1345	_	_
Mov Cap-2 Maneuver	294	265	-	365	368	-	- 700	_	_	-	_	_
Stage 1	566	550	-	603	595	_	_	_	_	_	-	_
Stage 2	512	457	_	708	664	_	_	_	_	_	_	_
5.0g0 L	J 12	.07		. 00	30 1							
Approach	EB			WB			NB			SB		
HCM Control Delay, s	12.5			13.8			2.3			3.3		
HCM LOS	12.5 B			13.0 B			2.3			0.0		
TOW LOS	D			Б								
Minor Long/Major Mares		NDI	NDT	NDD I	EDI 51	EDI 201	M/DI 1	CDI	CDT	CDD		
Minor Lane/Major Mvmt		NBL	NBT			EBLn2V		SBL	SBT	SBR		
Capacity (veh/h)		1433	-	-	285	877	475	1345	-	-		
HCM Lane V/C Ratio		0.059	-	-		0.052			-	-		
HCM Control Delay (s)		7.7	0.1	-	18.7	9.3	13.8	7.8	0.1	-		
HCM Lane LOS		Α	Α	_	С	A	В	Α	Α	-		
HCM 95th %tile Q(veh)		0.2	-	-	0.3	0.2	0.5	0.2	-	-		

HCM 6th TWSC Synchro 10 Report Stantec Synchro 10 Report Page 4

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	×	†	7	7	↑	7		4	7		4 14	
Traffic Volume (vph)	269	83	135	21	117	18	15	59	43	11	139	375
Future Volume (vph)	269	83	135	21	117	18	15	59	43	11	139	375
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		0	150		100	0		0	100		0
Storage Lanes	1		1	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		-
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Frt			0.850			0.850			0.850		0.893	
Flt Protected	0.950			0.950				0.990			0.999	
Satd. Flow (prot)	1787	1881	1599	1736	1827	1553	0	1881	1615	0	3157	0
FIt Permitted	0.420			0.701				0.873		•	0.950	
Satd. Flow (perm)	790	1881	1599	1281	1827	1553	0	1659	1615	0	3002	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			142			121			133		395	100
Link Speed (mph)		35			35	161		30	100		30	
Link Distance (ft)		1055			1105			617			759	
Travel Time (s)		20.6			21.5			14.0			17.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	0%	0%	0.30	2%	2%	2%
Adj. Flow (vph)	283	87	142	22	123	19	16	62	45	12	146	395
Shared Lane Traffic (%)	200	01	172		120	10	10	02	-10	12	170	000
Lane Group Flow (vph)	283	87	142	22	123	19	0	78	45	0	553	0
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	7	4	1 Oilli	1 01111	8	i Oiiii	1 01111	2	1 OIIII	1 01111	6	
Permitted Phases	4	•	4	8		8	2	_	2	6		
Detector Phase	7	4	4	8	8	8	2	2	2	6	6	
Switch Phase	-		-				_	_	_		-	
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	14.0	14.0	33.0	33.0	33.0	13.0	13.0	13.0	13.0	13.0	
Total Split (s)	24.0	59.0	59.0	35.0	35.0	35.0	31.0	31.0	31.0	31.0	31.0	
Total Split (%)	26.7%	65.6%	65.6%	38.9%	38.9%	38.9%	34.4%	34.4%	34.4%	34.4%	34.4%	
Maximum Green (s)	17.0	52.0	52.0	28.0	28.0	28.0	25.0	25.0	25.0	25.0	25.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	2.5	2.5	2.5	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0		6.0	6.0		6.0	
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min	
Walk Time (s)				9.0	9.0	9.0						
Flash Dont Walk (s)				17.0	17.0	17.0						
Pedestrian Calls (#/hr)				0	0	0						
Act Effct Green (s)	39.4	39.4	39.4	11.4	11.4	11.4		37.6	37.6		37.6	
Actuated g/C Ratio	0.44	0.44	0.44	0.13	0.13	0.13		0.42	0.42		0.42	
v/c Ratio	0.49	0.11	0.18	0.14	0.53	0.06		0.11	0.06		0.37	
Control Delay	18.5	12.7	2.3	35.0	44.6	0.00		20.6	0.00		7.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	
- Guodo Dolay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	18.5	12.7	2.3	35.0	44.6	0.4		20.6	0.2		7.2	
LOS	В	В	Α	С	D	Α		С	Α		Α	
Approach Delay		13.0			38.2			13.1			7.2	
Approach LOS		В			D			В			Α	
Queue Length 50th (ft)	105	28	0	11	66	0		26	0		27	
Queue Length 95th (ft)	117	40	23	32	115	0		70	0		80	
Internal Link Dist (ft)		975			1025			537			679	
Turn Bay Length (ft)	175			150		100						
Base Capacity (vph)	586	1088	984	398	568	566		695	754		1487	
Starvation Cap Reductn	0	0	0	0	0	0		0	0		0	
Spillback Cap Reductn	0	0	0	0	0	0		0	0		0	
Storage Cap Reductn	0	0	0	0	0	0		0	0		0	
Reduced v/c Ratio	0.48	0.08	0.14	0.06	0.22	0.03		0.11	0.06		0.37	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.53

Intersection Signal Delay: 13.7 Intersection LOS: B
Intersection Capacity Utilization 52.0% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: Hagood Ave & Fishburne St

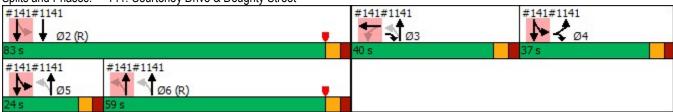


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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					4			473		*	1	
Traffic Volume (vph)	0	0	0	45	1	113	11	337	16	64	566	36
Future Volume (vph)	0	0	0	45	1	113	11	337	16	64	566	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Frt					0.904			0.993			0.991	
Flt Protected					0.986			0.998		0.950		
Satd. Flow (prot)	0	0	0	0	1660	0	0	3473	0	1719	1793	0
Flt Permitted					0.986			0.703		0.444		
Satd. Flow (perm)	0	0	0	0	1660	0	0	2447	0	803	1793	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					72			3			5	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		198			609			467			134	
Travel Time (s)		5.4			16.6			12.7			3.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	5%	5%	5%
Adj. Flow (vph)	0	0	0	47	1	119	12	355	17	67	596	38
Shared Lane Traffic (%)				••	•				••	•		
Lane Group Flow (vph)	0	0	0	0	167	0	0	384	0	67	634	0
Turn Type				Perm	NA	· ·	Perm	NA		custom	NA	J
Protected Phases				. 0	3			6		5 4	245	
Permitted Phases				3	•		6			2	2 10	
Detector Phase				3	3		6	6		54	245	
Switch Phase					•		•			V I	2.0	
Minimum Initial (s)				10.0	10.0		20.0	20.0				
Minimum Split (s)				32.0	32.0		28.0	28.0				
Total Split (s)				40.0	40.0		59.0	59.0				
Total Split (%)				25.0%	25.0%		36.9%	36.9%				
Maximum Green (s)				34.0	34.0		53.0	53.0				
Yellow Time (s)				3.5	3.5		3.5	3.5				
All-Red Time (s)				2.5	2.5		2.5	2.5				
Lost Time Adjust (s)				2.0	-2.0		2.0	-2.0				
Total Lost Time (s)					4.0			4.0				
Lead/Lag				Lead	Lead		Lag	Lag				
Lead-Lag Optimize?				2000								
Vehicle Extension (s)				3.0	3.0		3.0	3.0				
Recall Mode				None	None		C-Min	C-Min				
Act Effct Green (s)				110110	21.0		O Willi	70.0		131.0	131.0	
Actuated g/C Ratio					0.13			0.44		0.82	0.82	
v/c Ratio					0.60			0.36		0.07	0.43	
Control Delay					44.3			33.1		2.0	5.5	
Queue Delay					0.0			0.0		2.3	0.3	
Total Delay					44.3			33.1		4.3	5.8	
LOS					D			C		4.5 A	3.0 A	
Approach Delay					44.3			33.1		Λ.	5.7	
Approach LOS					44.5 D			33.1 C			3.7 A	
Queue Length 50th (ft)					94			133		4	78	
Queue Length 95th (ft)					164			240		15	104	
Queue Lengin 95in (ii)					104			240		10	104	

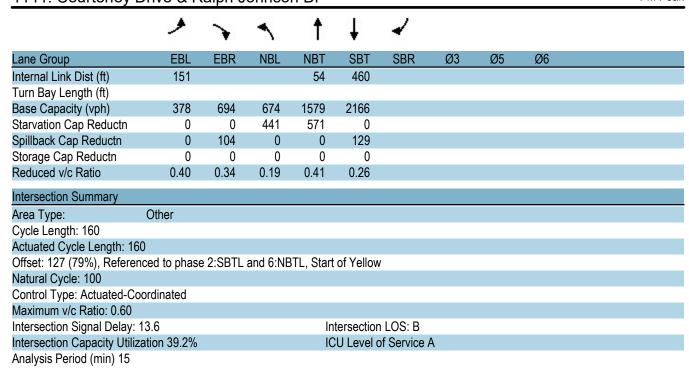
Lane Group	Ø2	Ø4	Ø5
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Lane Util. Factor			
Frt			
Flt Protected			
Satd. Flow (prot)			
FIt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Heavy Vehicles (%)			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	2	4	5
Permitted Phases		7	3
Detector Phase			
Switch Phase	00.0	10.0	F 0
Minimum Initial (s)	20.0	10.0	5.0
Minimum Split (s)	30.0	28.0	11.0
Total Split (s)	83.0	37.0	24.0
Total Split (%)	52%	23%	15%
Maximum Green (s)	77.0	31.0	18.0
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag		Lag	Lead
Lead-Lag Optimize?			
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	C-Min	None	None
Act Effct Green (s)	O Milli	110110	110110
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
•			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		118			529			387			54	
Turn Bay Length (ft)												
Base Capacity (vph)					429			1112		990	1489	
Starvation Cap Reductn					0			0		828	356	
Spillback Cap Reductn					0			0		0	0	
Storage Cap Reductn					0			0		0	0	
Reduced v/c Ratio					0.39			0.35		0.41	0.56	
Intersection Summary												
Area Type:	Other											
Cycle Length: 160												
Actuated Cycle Length: 16	60											
Offset: 127 (79%), Refere	nced to phase	2:SBTL	and 6:NE	3TL, Start	of Yellow	1						
Natural Cycle: 100												
Control Type: Actuated-Co	oordinated											
Maximum v/c Ratio: 0.60												
Intersection Signal Delay:					tersection							
Intersection Capacity Utiliz	zation 68.1%			IC	U Level o	of Service	С					
Analysis Period (min) 15												

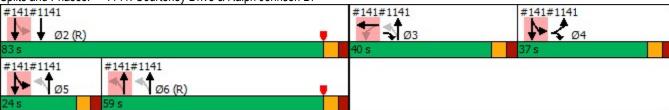
Splits and Phases: 141: Courteney Drive & Doughty Street



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Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø3	Ø5	Ø6	
Lane Configurations	*	7	*	^	†					
Traffic Volume (vph)	144	188	42	397	473	30				
Future Volume (vph)	144	188	42	397	473	30				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900				
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95				
Frt	1.00	0.850	1.00	1.00	0.991	0.00				
Flt Protected	0.950	0.000	0.950		0.001					
Satd. Flow (prot)	1671	1495	1752	1845	3507	0				
Flt Permitted	0.950	1100	0.427	1010	0001	•				
Satd. Flow (perm)	1671	1495	788	1845	3507	0				
Right Turn on Red	1071	Yes	100	1010	0001	Yes				
Satd. Flow (RTOR)		198			6	100				
Link Speed (mph)	25	100		25	25					
Link Distance (ft)	231			134	540					
Travel Time (s)	6.3			3.7	14.7					
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95				
Heavy Vehicles (%)	8%	8%	3%	3%	2%	2%				
Adj. Flow (vph)	152	198	44	418	498	32				
Shared Lane Traffic (%)	102	100		410	400	0Z				
Lane Group Flow (vph)	152	198	44	418	530	0				
Turn Type	Prot		Perm	NA	NA	U				
Protected Phases	4	4 3	1 01111	563	2		3	5	6	
Permitted Phases	т.	4	563	000	_		U	U	U	
Detector Phase	4	4 3	563	563	2					
Switch Phase	•	10	000	000	_					
Minimum Initial (s)	10.0				20.0		10.0	5.0	20.0	
Minimum Split (s)	28.0				30.0		32.0	11.0	28.0	
Total Split (s)	37.0				83.0		40.0	24.0	59.0	
Total Split (%)	23.1%				51.9%		25%	15%	37%	
Maximum Green (s)	31.0				77.0		34.0	18.0	53.0	
Yellow Time (s)	3.5				3.5		3.5	3.5	3.5	
All-Red Time (s)	2.5				2.5		2.5	2.5	2.5	
Lost Time Adjust (s)	-2.0				-2.0		2.0	2.0	2.0	
Total Lost Time (s)	4.0				4.0					
Lead/Lag	Lag				1.0		Lead	Lead	Lag	
Lead-Lag Optimize?							2000	2000	249	
Vehicle Extension (s)	3.0				3.0		3.0	3.0	3.0	
Recall Mode	None				C-Min		None	None	C-Min	
Act Effct Green (s)	30.1	55.0	121.9	121.9	97.0		110110	110110	0 111111	
Actuated g/C Ratio	0.19	0.34	0.76	0.76	0.61					
v/c Ratio	0.48	0.31	0.07	0.30	0.25					
Control Delay	61.0	4.0	1.0	1.8	13.5					
Queue Delay	0.0	0.1	0.5	0.3	0.0					
Total Delay	61.0	4.2	1.4	2.0	13.6					
LOS	61.0 E	4.2 A	Α	2.0 A	13.0 B					
Approach Delay	28.9	/ \	/\	2.0	13.6					
Approach LOS	20.5 C			Α.	10.0 B					
Queue Length 50th (ft)	145	0	1	14	97					
Queue Length 95th (ft)	193	42	2	16	147					
Quodo Longin 30th (it)	199	74		10	171					



Splits and Phases: 1141: Courteney Drive & Ralph Johnson Dr



	•		`		+	•	•	†	/	\ \	1	1
Lane Group	EBL	EBT	EBR	₩BL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
	T T		ZDK	VVDL		WDR	NDL 1		NDI	SDL 1		SBN
Lane Configurations	164	↑ 153	166	82	1 →	32	1	↑1 → 461	28	70	↑ ↑ 321	42
Traffic Volume (vph)	164	153	166	82	126	32	60	461	28	70	321	42
Future Volume (vph) Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
(, , ,		1900	215		1900		200	1900		120	1900	_
Storage Length (ft)	570 1		1	0		0	200		0	120		0
Storage Lanes	25		I	25		U	25		U	25		U
Taper Length (ft)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.05
Lane Util. Factor Frt	1.00	1.00	0.850	1.00	0.969	1.00	1.00		0.95	1.00	0.95	0.95
FIt Protected	0.050		0.650	0.050	0.969		0.050	0.992		0.950	0.963	
	0.950	1000	4500	0.950	1707	0	0.950	2544	0		3445	0
Satd. Flow (prot)	1770	1863	1583	1752 0.611	1787	0	1770 0.411	3511	0	1752	3445	0
Flt Permitted	0.605	1000	4500		1707	0		2511	0	0.391	2445	0
Satd. Flow (perm)	1127	1863	1583	1127	1787	0	766	3511	0	721	3445	0
Right Turn on Red			Yes		40	Yes		4	Yes		40	Yes
Satd. Flow (RTOR)		٥٦	175		10			4			10	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		790			244			540			423	
Travel Time (s)	0.05	21.5	0.05	0.05	6.7	0.05	0.05	14.7	0.05	0.05	11.5	0.05
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	2%	2%	2%	3%	3%	3%
Adj. Flow (vph)	173	161	175	86	133	34	63	485	29	74	338	44
Shared Lane Traffic (%)	470	404	475	00	407	_	00	544		7.4	200	0
Lane Group Flow (vph)	173	161	175	86	167	0	63	514	0	74	382	0
Turn Type	Perm	NA	pm+ov	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	0	8	1	4	4		1	6		5	2	
Permitted Phases	8		8	4			6	^		2		
Detector Phase	8	8	1	4	4		1	6		5	2	
Switch Phase	0.0	2.0	5 0	0.0	0.0		5 0	0.0		5 0	0.0	
Minimum Initial (s)	6.0	6.0	5.0	6.0	6.0		5.0	8.0		5.0	8.0	
Minimum Split (s)	36.0	36.0	11.0	35.0	35.0		11.0	29.0		11.0	36.0	
Total Split (s)	75.0	75.0	25.0	75.0	75.0		25.0	65.0		20.0	60.0	
Total Split (%)	46.9%	46.9%	15.6%	46.9%	46.9%		15.6%	40.6%		12.5%	37.5%	
Maximum Green (s)	69.5	69.5	19.5	69.0	69.0		19.5	59.5		14.5	54.0	
Yellow Time (s)	3.5	3.5	3.0	3.5	3.5		3.0	3.5		3.0	3.5	
All-Red Time (s)	2.0	2.0	2.5	2.5	2.5		2.5	2.0		2.5	2.5	
Lost Time Adjust (s)	-1.5	-1.5	-1.5	-2.0	-2.0		-1.5	-1.5		-1.5	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag			Lead				Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max	Max	Max	Max		Max	C-Max		Max	C-Max	
Act Effct Green (s)	71.0	71.0	96.0	71.0	71.0		81.0	61.0		72.0	56.0	
Actuated g/C Ratio	0.44	0.44	0.60	0.44	0.44		0.51	0.38		0.45	0.35	
v/c Ratio	0.35	0.19	0.17	0.17	0.21		0.12	0.38		0.17	0.32	
Control Delay	31.8	27.9	2.1	30.4	28.6		21.4	36.8		19.0	37.0	
Queue Delay	0.1	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	31.9	27.9	2.1	30.4	28.6		21.4	36.8		19.0	37.0	
LOS	С	С	Α	С	С		С	D		В	D	
Approach Delay		20.4			29.2			35.1			34.1	

	•	\rightarrow	*	1	•	*	1	†	1	1	Ţ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		С			С			D			С	
Queue Length 50th (ft)	118	102	0	60	112		29	226		46	162	
Queue Length 95th (ft)	183	154	32	105	173		59	192		m83	217	
Internal Link Dist (ft)		710			164			460			343	
Turn Bay Length (ft)	570		215				200			120		
Base Capacity (vph)	500	826	1019	500	798		519	1341		427	1212	
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	
Spillback Cap Reductn	33	0	0	0	52		0	0		0	0	
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	
Reduced v/c Ratio	0.37	0.19	0.17	0.17	0.22		0.12	0.38		0.17	0.32	

Area Type: Other

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 120 (75%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.38 Intersection Signal Delay: 29.8 Intersection Capacity Utilization 48.8%

Intersection LOS: C
ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 140: Courteney Drive & Bee Street



	۶	→	*	•	+	•	1	†	~	/	↓	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	र्स				77		↑ ↑		*	^	
Traffic Volume (vph)	342	234	0	0	0	435	0	916	34	69	1224	0
Future Volume (vph)	342	234	0	0	0	435	0	916	34	69	1224	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0	250		0
Storage Lanes	1		0	0		2	0		0	1		0
Taper Length (ft)	25			25		_	25		•	25		•
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	0.88	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor	0.00	0.00		1100		0.00		0.00	0.00	1.00	0.00	
Frt						0.850		0.995		1.00		
Flt Protected	0.950	0.990				0.000		0.000		0.950		
Satd. Flow (prot)	1681	1752	0	0	0	2787	0	3522	0	1770	3539	0
Flt Permitted	0.950	0.990	•	•	•	2101	· ·	OOLL	J	0.950	0000	V
Satd. Flow (perm)	1681	1752	0	0	0	2787	0	3522	0	1765	3539	0
Right Turn on Red	1001	1702	Yes	U	U	Yes	U	0022	Yes	1700	0000	Yes
Satd. Flow (RTOR)			103			86		4	103			103
Link Speed (mph)		30			30	00		30			30	
Link Distance (ft)		237			641			132			252	
Travel Time (s)		5.4			14.6			3.0			5.7	
Confl. Peds. (#/hr)		J. 4			14.0			3.0		2	J.1	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	360	246	0.93	0.93	0.95	458	0.95	964	36	73	1288	0.95
Shared Lane Traffic (%)	17%	240	U	U	U	430	U	904	30	13	1200	U
. ,	299	307	0	0	0	458	0	1000	0	73	1288	0
Lane Group Flow (vph)		NA	U	U	U		U	NA	U		1200 NA	U
Turn Type	Split 8	NA 8				pm+ov 1		NA 2		Prot 1	1NA 6	
Protected Phases Permitted Phases	0	0						Z		I	O	
Detector Phase	8	8				8		2		1	6	
Switch Phase	0	0				l		Z		I	O	
	0.0	8.0				8.0		5.0		8.0	15.0	
Minimum Initial (s)	8.0											
Minimum Split (s)	47.0	47.0				15.0		15.0		15.0	20.0	
Total Split (s)	49.0	49.0 40.8%				15.0 12.5%		56.0		15.0	71.0	
Total Split (%)	40.8%							46.7%		12.5%	59.2%	
Maximum Green (s)	42.0	42.0				8.5		50.0		8.5	66.0	
Yellow Time (s)	3.5	3.5				3.0		4.0		3.0	3.5	
All-Red Time (s)	3.5	3.5				3.5		2.0		3.5	1.5	
Lost Time Adjust (s)	-3.0	-3.0				-2.5		0.0		-2.5	-1.0	
Total Lost Time (s)	4.0	4.0				4.0		6.0		4.0	4.0	
Lead/Lag						Lead		Lag		Lead		
Lead-Lag Optimize?	4.0	4.0				Yes		Yes		Yes	2.0	
Vehicle Extension (s)	4.0	4.0				4.0		3.0		4.0	3.0	
Recall Mode	None	None				None		C-Max		None	C-Max	
Walk Time (s)	9.0	9.0									7.0	
Flash Dont Walk (s)	31.0	31.0									8.0	
Pedestrian Calls (#/hr)	0	0				10.1		00.0		40 =	0	
Act Effct Green (s)	31.7	31.7				49.4		60.6		13.7	80.3	
Actuated g/C Ratio	0.26	0.26				0.41		0.50		0.11	0.67	
v/c Ratio	0.67	0.66				0.38		0.56		0.36	0.54	
Control Delay	46.4	45.7				19.5		23.6		68.6	1.5	

	•	\rightarrow	*	1	←	*	1	†	-	1	Ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0				0.0		0.0		0.0	0.1	
Total Delay	46.4	45.7				19.5		23.6		68.6	1.6	
LOS	D	D				В		С		Е	Α	
Approach Delay		46.1			19.5			23.6			5.2	
Approach LOS		D			В			С			Α	
Queue Length 50th (ft)	218	224				109		275		54	17	
Queue Length 95th (ft)	288	292				132		401		m68	m24	
Internal Link Dist (ft)		157			561			52			172	
Turn Bay Length (ft)										250		
Base Capacity (vph)	630	657				1200		1779		203	2367	
Starvation Cap Reductn	0	0				0		0		0	143	
Spillback Cap Reductn	0	0				0		0		0	0	
Storage Cap Reductn	0	0				0		0		0	0	
Reduced v/c Ratio	0.47	0.47				0.38		0.56		0.36	0.58	

Area Type: Other

Cycle Length: 120 Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

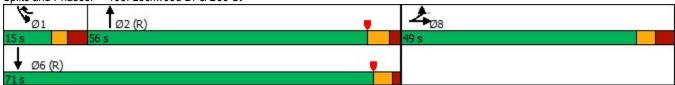
Maximum v/c Ratio: 0.67

Intersection Signal Delay: 19.7 Intersection LOS: B
Intersection Capacity Utilization 68.9% ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 193: Lockwood Dr & Bee St



	۶	→	*	•	+	•	1	†	~	-	Ţ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				*	414		ň	414			^	7
Traffic Volume (vph)	0	0	0	853	311	68	1010	381	0	0	364	371
Future Volume (vph)	0	0	0	853	311	68	1010	381	0	0	364	371
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	275	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0	0		0	0	1000	0
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	25		•	25		•	25		•	25		•
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00	1.00	0.01	1.00	0.00	0.99	1.00	1.00	1.00	1.00	0.97
Frt					0.987		0.00	1.00				0.850
Flt Protected				0.950	0.974		0.950	0.972				0.000
Satd. Flow (prot)	0	0	0	1610	3254	0	1610	3295	0	0	1863	1583
Flt Permitted	•	•	•	0.950	0.974	•	0.950	0.972		•	1000	1000
Satd. Flow (perm)	0	0	0	1610	3254	0	1598	3280	0	0	1863	1543
Right Turn on Red	U	U	Yes	1010	0204	Yes	1000	3200	Yes	U	1000	Yes
Satd. Flow (RTOR)			103		9	103			103			189
Link Speed (mph)		30			30			30			30	103
Link Distance (ft)		346			960			287			558	
Travel Time (s)		7.9			21.8			6.5			12.7	
Confl. Peds. (#/hr)		1.9			21.0	8	9	0.5			12.7	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
	0.95	0.95	0.95	898	327	72	1063	401	0.95	0.95	383	391
Adj. Flow (vph)	U	U	U		321	12		401	U	U	303	391
Shared Lane Traffic (%)	٥	0	٥	50%	040	٥	50%	022	٥	٥	202	204
Lane Group Flow (vph)	0	0	0	449	848	0	531	933	0	0	383	391
Turn Type				Split	NA		Split	NA			NA	Perm
Protected Phases				4	4		2	2			3	
Permitted Phases				4	4		0	0			2	3
Detector Phase				4	4		2	2			3	3
Switch Phase				7.0	7.0		40.0	40.0			7.0	7.0
Minimum Initial (s)				7.0	7.0		12.0	12.0			7.0	7.0
Minimum Split (s)				49.0	49.0		37.0	37.0			30.0	30.0
Total Split (s)				49.0	49.0		41.0	41.0			30.0	30.0
Total Split (%)				40.8%	40.8%		34.2%	34.2%			25.0%	25.0%
Maximum Green (s)				42.0	42.0		33.5	33.5			24.0	24.0
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	3.5
All-Red Time (s)				3.5	3.5		4.0	4.0			2.5	2.5
Lost Time Adjust (s)				-3.0	-3.0		-3.5	-3.5			-2.0	-2.0
Total Lost Time (s)				4.0	4.0		4.0	4.0			4.0	4.0
Lead/Lag				Lag	Lag						Lead	Lead
Lead-Lag Optimize?				Yes	Yes						Yes	Yes
Vehicle Extension (s)				4.0	4.0		5.0	5.0			4.0	4.0
Recall Mode				None	None		C-Max	C-Max			None	None
Walk Time (s)				8.0	8.0		9.0	9.0			8.0	8.0
Flash Dont Walk (s)				34.0	34.0		20.0	20.0			16.0	16.0
Pedestrian Calls (#/hr)				0	0		0	0			0	0
Act Effct Green (s)				42.7	42.7		39.3	39.3			26.0	26.0
Actuated g/C Ratio				0.36	0.36		0.33	0.33			0.22	0.22
v/c Ratio				0.78	0.73		1.01	0.97dl			0.95	0.81
Control Delay				45.2	37.2		72.6	39.1			80.8	37.1

	•	→	1	-	←	*	1	†	-	1	Ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay				0.0	0.0		0.0	0.0			0.0	0.0
Total Delay				45.2	37.2		72.6	39.1			80.8	37.1
LOS				D	D		Е	D			F	D
Approach Delay					40.0			51.3			58.8	
Approach LOS					D			D			Е	
Queue Length 50th (ft)				328	298		~495	303			295	155
Queue Length 95th (ft)				472	376		#727	#502			#486	#314
Internal Link Dist (ft)		266			880			207			478	
Turn Bay Length (ft)				275								
Base Capacity (vph)				603	1225		527	1080			403	482
Starvation Cap Reductn				0	0		0	0			0	0
Spillback Cap Reductn				0	0		0	0			0	0
Storage Cap Reductn				0	0		0	0			0	0
Reduced v/c Ratio				0.74	0.69		1.01	0.86			0.95	0.81

Area Type: Other

Cycle Length: 120
Actuated Cycle Length: 120

Offset: 29 (24%), Referenced to phase 2:NBTL, Start of Yellow

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 48.8 Intersection LOS: D
Intersection Capacity Utilization 91.6% ICU Level of Service F

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 192: Lockwood Dr & Spring St



	۶	-	*	1	•	•	1	†	-	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ર્ન	7		4			413			413	
Traffic Volume (vph)	25	21	51	2	4	8	34	196	55	0	99	15
Future Volume (vph)	25	21	51	2	4	8	34	196	55	0	99	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	200		0	200		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt			0.850		0.919			0.971			0.980	
Flt Protected		0.973			0.993			0.994				
Satd. Flow (prot)	0	1349	1179	0	1734	0	0	3139	0	0	3435	0
Flt Permitted		0.973			0.993			0.994				
Satd. Flow (perm)	0	1349	1179	0	1734	0	0	3139	0	0	3435	0
Link Speed (mph)		25			20			30			30	
Link Distance (ft)		759			512			612			617	
Travel Time (s)		20.7			17.5			13.9			14.0	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	37%	37%	37%	0%	0%	0%	11%	11%	11%	3%	3%	3%
Adj. Flow (vph)	27	22	54	2	4	9	36	209	59	0	105	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	49	54	0	15	0	0	304	0	0	121	0
Sign Control		Stop			Stop			Free			Free	

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 25.2% Analysis Period (min) 15

ICU Level of Service A

Synchro 10 Report Lanes, Volumes, Timings Page 3 Stantec

Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ન	7		4			414			47	
Traffic Vol, veh/h	25	21	51	2	4	8	34	196	55	0	99	15
Future Vol, veh/h	25	21	51	2	4	8	34	196	55	0	99	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	-	-	-	-	-	-	-	-	-
Veh in Median Storage	,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	37	37	37	0	0	0	11	11	11	3	3	3
Mvmt Flow	27	22	54	2	4	9	36	209	59	0	105	16
Major/Minor	Miner			Mine-1			Mais =1			Maisro		
	Minor2	4=0		Minor1	400		Major1			Major2		
Conflicting Flow All	292	453	61	375	432	134	121	0	0	268	0	0
Stage 1	113	113	-	311	311	-	-	-	-	-	-	-
Stage 2	179	340		64	121	-	-	-	-	-	-	_
Critical Hdwy	8.24	7.24	7.64	7.5	6.5	6.9	4.32	-	-	4.16	-	-
Critical Hdwy Stg 1	7.24	6.24	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	7.24	6.24	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.87	4.37	3.67	3.5	4	3.3	2.31	-	-	2.23	-	-
Pot Cap-1 Maneuver	576	442	920	580	531	897	1421	-	-	1285	-	-
Stage 1	811	740	-	680	662	-	-	-	-	-	-	-
Stage 2	713	558	-	971	813	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	554	429	920	512	515	897	1421	-	-	1285	-	-
Mov Cap-2 Maneuver	554	429	-	512	515	-	-	-	-	-	-	-
Stage 1	787	740	-	660	642	-	-	-	-	-	-	-
Stage 2	681	541	-	886	813	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	11.1			10.4			1			0		
HCM LOS	В			10.4 B						U		
TIOWI LOO	ט			U								
Minor Lane/Major Mvm	ıt	NBL	NBT	NRR F	-Bl n1	EBLn2V	VBI n1	SBL	SBT	SBR		
Capacity (veh/h)	_	1421	1101	-	489	920	680	1285	051	אופט		
HCM Lane V/C Ratio		0.025	-	-	0.1	0.059	0.022	1200	-	-		
HCM Control Delay (s)		7.6	0.1	_	13.2	9.2	10.4	0	-	-		
HCM Lane LOS										-		
HCM 95th %tile Q(veh)		A	Α	-	0.3	0.2	B	A	-	-		
HOW SOUT WITH Q(Ven)		0.1	-	-	0.3	0.2	0.1	0	-	-		

HCM 6th TWSC Synchro 10 Report Stantec Synchro 10 Report Page 4

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	×	^	7	*	†	7		ર્ન	7		413	
Traffic Volume (vph)	298	212	45	8	69	21	40	170	134	18	64	367
Future Volume (vph)	298	212	45	8	69	21	40	170	134	18	64	367
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		0	150		100	0		0	100		0
Storage Lanes	1		1	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Frt			0.850			0.850			0.850		0.877	
Flt Protected	0.950			0.950				0.990			0.998	
Satd. Flow (prot)	1787	1881	1599	1671	1759	1495	0	1826	1568	0	3128	0
Flt Permitted	0.378			0.617				0.852			0.939	
Satd. Flow (perm)	711	1881	1599	1085	1759	1495	0	1572	1568	0	2943	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			48			121			143		390	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1055			1060			617			758	
Travel Time (s)		20.6			20.6			14.0			17.2	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	1%	8%	8%	8%	3%	3%	3%	1%	1%	1%
Adj. Flow (vph)	317	226	48	9	73	22	43	181	143	19	68	390
Shared Lane Traffic (%)												
Lane Group Flow (vph)	317	226	48	9	73	22	0	224	143	0	477	0
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Detector Phase	7	4	4	8	8	8	2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	14.0	14.0	33.0	33.0	33.0	13.0	13.0	13.0	13.0	13.0	
Total Split (s)	23.0	56.0	56.0	33.0	33.0	33.0	34.0	34.0	34.0	34.0	34.0	
Total Split (%)	25.6%	62.2%	62.2%	36.7%	36.7%	36.7%	37.8%	37.8%	37.8%	37.8%	37.8%	
Maximum Green (s)	16.0	49.0	49.0	26.0	26.0	26.0	28.0	28.0	28.0	28.0	28.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	2.5	2.5	2.5	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0		6.0	6.0		6.0	
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min	
Walk Time (s)				9.0	9.0	9.0						
Flash Dont Walk (s)				17.0	17.0	17.0						
Pedestrian Calls (#/hr)				0	0	0						
Act Effct Green (s)	34.7	34.7	34.7	9.4	9.4	9.4		42.3	42.3		42.3	
Actuated g/C Ratio	0.39	0.39	0.39	0.10	0.10	0.10		0.47	0.47		0.47	
v/c Ratio	0.60	0.31	0.07	0.08	0.40	0.08		0.30	0.18		0.30	
Control Delay	24.0	18.4	4.0	36.5	43.5	0.6		19.5	4.2		4.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	24.0	18.4	4.0	36.5	43.5	0.6		19.5	4.2		4.7	
LOS	С	В	Α	D	D	Α		В	Α		Α	
Approach Delay		20.3			33.8			13.6			4.7	
Approach LOS		С			С			В			Α	
Queue Length 50th (ft)	123	82	0	5	40	0		81	0		14	
Queue Length 95th (ft)	161	112	17	18	79	0		160	38		51	
Internal Link Dist (ft)		975			980			537			678	
Turn Bay Length (ft)	175			150		100						
Base Capacity (vph)	534	1024	892	313	508	517		739	813		1590	
Starvation Cap Reductn	0	0	0	0	0	0		0	0		0	
Spillback Cap Reductn	0	0	0	0	0	0		0	0		0	
Storage Cap Reductn	0	0	0	0	0	0		0	0		0	
Reduced v/c Ratio	0.59	0.22	0.05	0.03	0.14	0.04		0.30	0.18		0.30	

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 65

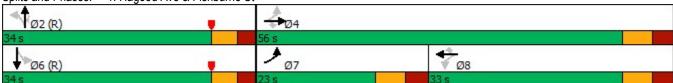
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 14.8 Intersection LOS: B
Intersection Capacity Utilization 64.3% ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Hagood Ave & Fishburne St

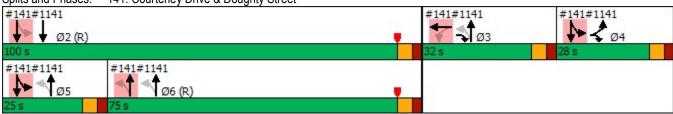


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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					4			414		*	1₃	
Traffic Volume (vph)	0	0	0	34	1	88	17	721	65	187	278	46
Future Volume (vph)	0	0	0	34	1	88	17	721	65	187	278	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Frt					0.903			0.988			0.979	
Flt Protected					0.986			0.999		0.950		
Satd. Flow (prot)	0	0	0	0	1659	0	0	3493	0	1656	1707	0
Flt Permitted					0.986			0.660		0.228		
Satd. Flow (perm)	0	0	0	0	1659	0	0	2308	0	397	1707	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					69			7			16	
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		198			609			490			134	
Travel Time (s)		5.4			16.6			13.4			3.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	9%	9%	9%
Adj. Flow (vph)	0	0	0	36	1	93	18	759	68	197	293	48
Shared Lane Traffic (%)	•				•							.0
Lane Group Flow (vph)	0	0	0	0	130	0	0	845	0	197	341	0
Turn Type	•			Perm	NA	•	Perm	NA		custom	NA	J
Protected Phases				. 0	3		. 0	6		5 4	245	
Permitted Phases				3	•		6	· ·		2	2 10	
Detector Phase				3	3		6	6		5 4	245	
Switch Phase					•			· ·		· ·	2 1 0	
Minimum Initial (s)				10.0	10.0		20.0	20.0				
Minimum Split (s)				32.0	32.0		28.0	28.0				
Total Split (s)				32.0	32.0		75.0	75.0				
Total Split (%)				20.0%	20.0%		46.9%	46.9%				
Maximum Green (s)				26.0	26.0		69.0	69.0				
Yellow Time (s)				3.5	3.5		3.5	3.5				
All-Red Time (s)				2.5	2.5		2.5	2.5				
Lost Time Adjust (s)				2.0	-2.0		2.0	-2.0				
Total Lost Time (s)					4.0			4.0				
Lead/Lag				Lead	Lead		Lag	Lag				
Lead-Lag Optimize?				2000			ag					
Vehicle Extension (s)				3.0	3.0		3.0	3.0				
Recall Mode				None	None		C-Min	C-Min				
Act Effct Green (s)				110110	20.2		O IVIIII	79.4		131.8	131.8	
Actuated g/C Ratio					0.13			0.50		0.82	0.82	
v/c Ratio					0.48			0.74		0.28	0.24	
Control Delay					35.6			31.7		5.1	2.3	
Queue Delay					0.0			0.0		2.9	0.7	
Total Delay					35.6			31.7		8.0	3.0	
LOS					55.0 D			C		Α	3.0 A	
Approach Delay					35.6			31.7			4.8	
Approach LOS					33.0 D			51.7 C			4.0 A	
Queue Length 50th (ft)					59			406		15	24	
Queue Length 95th (ft)					124			499		74	61	
Queue Lengin 95in (ii)					124			499		74	01	

Lane Group	Ø2	Ø4	Ø5
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Lane Util. Factor			
Frt			
Flt Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Heavy Vehicles (%)			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	2	4	5
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)	20.0	10.0	5.0
Minimum Split (s)	30.0	28.0	11.0
Total Split (s)	100.0	28.0	25.0
Total Split (%)	63%	18%	16%
Maximum Green (s)	94.0	22.0	19.0
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag		Lag	Lead
Lead-Lag Optimize?		-~8	_544
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	C-Min	None	None
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Queue Length 50th (ft)			
Queue Length 95th (ft)			
Casas Longin John (ii)			

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Internal Link Dist (ft)		118			529			410			54	
Turn Bay Length (ft)												
Base Capacity (vph)					347			1149		706	1407	
Starvation Cap Reductn					0			0		402	737	
Spillback Cap Reductn					0			0		0	0	
Storage Cap Reductn					0			0		0	0	
Reduced v/c Ratio					0.37			0.74		0.65	0.51	
Intersection Summary												
Area Type:	Other											
Cycle Length: 160												
Actuated Cycle Length: 16	0											
Offset: 116 (73%), Referen	nced to phase	e 2:SBTL	and 6:NE	BTL, Start	of Yellow	1						
Natural Cycle: 110												
Control Type: Actuated-Co	oordinated											
Maximum v/c Ratio: 0.74												
Intersection Signal Delay:				In	tersection	LOS: C						
Intersection Capacity Utiliz	zation 58.3%			IC	CU Level of	of Service	В					
Analysis Period (min) 15												

Splits and Phases: 141: Courteney Drive & Doughty Street



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Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø3	Ø5	Ø6	
Lane Configurations	*	7	*	^	†					
Traffic Volume (vph)	61	108	126	685	409	253				
Future Volume (vph)	61	108	126	685	409	253				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900				
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95				
Frt		0.850			0.943	0.00				
Flt Protected	0.950	0.000	0.950		0.0.0					
Satd. Flow (prot)	1456	1302	1770	1863	3337	0				
Flt Permitted	0.950	1002	0.359	1000	0001	•				
Satd. Flow (perm)	1456	1302	669	1863	3337	0				
Right Turn on Red	1 100	Yes	000	1000	0001	Yes				
Satd. Flow (RTOR)		115			148	100				
Link Speed (mph)	25	110		25	25					
Link Distance (ft)	231			134	540					
Travel Time (s)	6.3			3.7	14.7					
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				
Heavy Vehicles (%)	24%	24%	2%	2%	2%	2%				
, ,	65	115	134	729	435	269				
Adj. Flow (vph) Shared Lane Traffic (%)	00	110	134	129	433	209				
Lane Group Flow (vph)	65	115	134	729	704	0				
Turn Type	Prot	custom	Perm	NA	NA	U				
Protected Phases	4	4 3	Pelili	563	2		3	5	6	
Permitted Phases	4	4 3	563	303	2		3	ິວ	Ü	
Detector Phase	4	4 3	563	563	2					
Switch Phase	4	4 3	503	303	2					
Minimum Initial (s)	10.0				20.0		10.0	5.0	20.0	
()	28.0				30.0		32.0		28.0	
Minimum Split (s)								11.0		
Total Split (s)	28.0				100.0		32.0	25.0	75.0	
Total Split (%)	17.5%				62.5%		20%	16%	47%	
Maximum Green (s)	22.0				94.0		26.0	19.0	69.0	
Yellow Time (s)	3.5				3.5		3.5	3.5	3.5	
All-Red Time (s)	2.5				2.5		2.5	2.5	2.5	
Lost Time Adjust (s)	-2.0				-2.0					
Total Lost Time (s)	4.0				4.0		1	11		
Lead/Lag	Lag						Lead	Lead	Lag	
Lead-Lag Optimize?	2.0				3.0		2.0	2.0	2.0	
Vehicle Extension (s)	3.0						3.0	3.0	3.0	
Recall Mode	None	44.0	124.4	124.4	C-Min		None	None	C-Min	
Act Effet Green (s)	17.6	41.8	134.4	134.4	110.2					
Actuated g/C Ratio	0.11	0.26	0.84	0.84	0.69					
v/c Ratio	0.41	0.27	0.24	0.47	0.30					
Control Delay	72.5	7.4	0.9	0.9	7.5					
Queue Delay	0.0	0.1	1.8	0.8	0.2					
Total Delay	72.5	7.5	2.7	1.7	7.8					
LOS	E	Α	Α	A	A					
Approach Delay	31.0			1.9	7.8					
Approach LOS	С			A	A					
Queue Length 50th (ft)	65	0	2	9	95					
Queue Length 95th (ft)	113	46	m2	10	150					



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø3	Ø5	Ø6	
Internal Link Dist (ft)	151			54	460					
Turn Bay Length (ft)										
Base Capacity (vph)	218	471	594	1655	2344					
Starvation Cap Reductn	0	0	328	585	868					
Spillback Cap Reductn	0	40	0	0	4					
Storage Cap Reductn	0	0	0	0	0					
Reduced v/c Ratio	0.30	0.27	0.50	0.68	0.48					

Area Type: Other

Cycle Length: 160
Actuated Cycle Length: 160

Offset: 116 (73%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

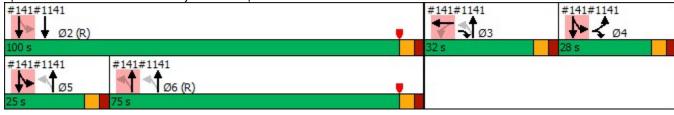
Maximum v/c Ratio: 0.74 Intersection Signal Delay: 7.3 Intersection Capacity Utilization 51.1%

Intersection LOS: A ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1141: Courteney Drive & Ralph Johnson Dr



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	4				77		†		¥	^	
Traffic Volume (vph)	761	702	0	0	0	327	0	1640	94	218	1468	0
Future Volume (vph)	761	702	0	0	0	327	0	1640	94	218	1468	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	250	,,,,,	0
Storage Lanes	1		0	0		2	0		0	0		0
Taper Length (ft)	25		•	25		_	25		•	25		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	0.88	1.00	0.95	0.95	1.00	0.95	1.00
Frt	0.00	0.00	1.00	1.00	1.00	0.850	1.00	0.992	0.00	1.00	0.00	1.00
Flt Protected	0.950	0.995				0.000		0.002		0.950		
Satd. Flow (prot)	1698	1778	0	0	0	2538	0	3511	0	1703	3406	0
Flt Permitted	0.950	0.995				2000		0011		0.950	0100	
Satd. Flow (perm)	1698	1778	0	0	0	2538	0	3511	0	1703	3406	0
Right Turn on Red	1000	1770	Yes			Yes		0011	Yes	1700	0100	Yes
Satd. Flow (RTOR)			100			19		4	100			100
Link Speed (mph)		30			30	13		30			30	
Link Distance (ft)		237			505			132			252	
Travel Time (s)		5.4			11.5			3.0			5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	1%	12%	12%	12%	2%	2%	2%	6%	6%	2%
Adj. Flow (vph)	827	763	0	0	0	355	0	1783	102	237	1596	0
Shared Lane Traffic (%)	10%	703	U	U	U	333	U	1703	102	231	1390	U
Lane Group Flow (vph)	744	846	0	0	0	355	0	1885	0	237	1596	0
Turn Type	Split	NA	U	U	U	pm+ov	U	NA	U	Prot	NA	U
Protected Phases	Spiit 8	8				1		2		1	6	
Permitted Phases	0	O				8				ı	U	
Detector Phase	8	8				1		2		1	6	
Switch Phase	U	0				ı				ı	U	
Minimum Initial (s)	8.0	8.0				8.0		5.0		8.0	5.0	
Minimum Split (s)	47.0	47.0				15.0		15.0		15.0	15.0	
Total Split (s)	71.0	71.0				24.0		75.0		24.0	99.0	
Total Split (%)	41.8%	41.8%				14.1%		44.1%		14.1%	58.2%	
Maximum Green (s)	64.0	64.0				17.5		69.0		17.5	93.0	
Yellow Time (s)	3.5	3.5				3.0		4.0		3.0	4.0	
All-Red Time (s)	3.5	3.5				3.5		2.0		3.5	2.0	
Lost Time Adjust (s)	-3.0	-3.0				-2.5		0.0		-2.5	-1.0	
	4.0	4.0				4.0		6.0		4.0	5.0	
Total Lost Time (s) Lead/Lag	4.0	4.0				Lag		Lead			5.0	
Lead-Lag Optimize?						Lay		Yes		Lag		
<u> </u>	4.0	4.0				4.0		3.0		4.0	3.0	
Vehicle Extension (s) Recall Mode	None	None				None		C-Max		None		
	9.0					None		C-IVIAX		NOHE	O-IVIAX	
Walk Time (s) Flash Dont Walk (s)	31.0	9.0 31.0										
()												
Pedestrian Calls (#/hr)	67.0	67.0				04.0		60.0		20.0	04.0	
Act Effet Green (s)	67.0	67.0				91.0		69.0		20.0	94.0	
Actuated g/C Ratio	0.39	0.39				0.54		0.41		0.12	0.55	
v/c Ratio	1.11	1.21				0.26		1.32		1.19	0.85	
Control Delay	116.4	150.6				20.7		189.3		153.0	10.7	
Queue Delay	0.0	0.0				0.0		0.0		0.0	3.1	

	•	-	*	1	•	•	1	Ť	-	1	ţ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	116.4	150.6				20.7		189.3		153.0	13.8	
LOS	F	F				С		F		F	В	
Approach Delay		134.6			20.7			189.3			31.8	
Approach LOS		F			С			F			С	
Queue Length 50th (ft)	~993	~1203				111		~1426		~317	234	
Queue Length 95th (ft)	#1263	#1477				149		#1559		m#359	m228	
Internal Link Dist (ft)		157			425			52			172	
Turn Bay Length (ft)										250		
Base Capacity (vph)	669	700				1367		1427		200	1883	
Starvation Cap Reductn	0	0				0		0		0	196	
Spillback Cap Reductn	0	0				0		0		0	0	
Storage Cap Reductn	0	0				0		0		0	0	
Reduced v/c Ratio	1.11	1.21				0.26		1.32		1.19	0.95	

Area Type: Other

Cycle Length: 170
Actuated Cycle Length: 170

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.32
Intersection Signal Delay: 112.4

Intersection Signal Delay: 112.4 Intersection LOS: F
Intersection Capacity Utilization 111.6% ICU Level of Service H

Analysis Period (min) 15

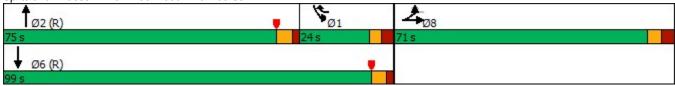
Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 192: Lockwood Dr & Bee St



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				*	413		*	414			*	7
Traffic Volume (vph)	0	0	0	1321	190	136	641	1274	0	0	320	258
Future Volume (vph)	0	0	0	1321	190	136	641	1274	0	0	320	258
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	275		0	0		0	0		0
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	25		-	25		-	25		-	25		_
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor				0.0.	1.00	0.00	0.99	1.00				0.97
Frt					0.979		0.00					0.850
Flt Protected				0.950	0.968		0.950	0.998				0.000
Satd. Flow (prot)	0	0	0	1550	3085	0	1595	3351	0	0	1881	1599
Flt Permitted	•	· ·	•	0.950	0.968	•	0.950	0.998	· ·		1001	1000
Satd. Flow (perm)	0	0	0	1550	3085	0	1571	3348	0	0	1881	1543
Right Turn on Red	U	U	Yes	1000	0000	Yes	1071	00 10	Yes	v	1001	Yes
Satd. Flow (RTOR)			100		12	100			100			222
Link Speed (mph)		30			30			30			30	
Link Opeca (mph) Link Distance (ft)		346			960			287			558	
Travel Time (s)		7.9			21.8			6.5			12.7	
Confl. Peds. (#/hr)		1.5			21.0	3	11	0.0			12.1	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	2%	6%	6%	6%	3%	3%	3%	1%	1%	1%
Adj. Flow (vph)	0	0	0	1405	202	145	682	1355	0	0	340	274
Shared Lane Traffic (%)	U	U	U	50%	202	170	10%	1000	U U	0	0+0	217
Lane Group Flow (vph)	0	0	0	702	1050	0	614	1423	0	0	340	274
Turn Type	U	U	U	Split	NA	- U	Split	NA	U U	U	NA	Perm
Protected Phases				4	4		2	2			3	1 Cilli
Permitted Phases											J	3
Detector Phase				4	4		2	2			3	3
Switch Phase					7						J	J
Minimum Initial (s)				7.0	7.0		12.0	12.0			7.0	7.0
Minimum Split (s)				49.0	49.0		37.0	37.0			30.0	30.0
Total Split (s)				71.0	71.0		69.0	69.0			30.0	30.0
Total Split (%)				41.8%	41.8%		40.6%	40.6%			17.6%	17.6%
Maximum Green (s)				64.0	64.0		61.5	61.5			24.0	24.0
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	3.5
All-Red Time (s)				3.5	3.5		4.0	4.0			2.5	2.5
Lost Time Adjust (s)				-3.0	-3.0		-3.5	-3.5			-2.0	-2.0
Total Lost Time (s)				4.0	4.0		4.0	4.0			4.0	4.0
Lead/Lag				Lag	Lag		4.0	4.0			Lead	
												Lead
Lead-Lag Optimize?				Yes 4.0	Yes 4.0		<i>E</i> 0	5.0			Yes 4.0	Yes
Vehicle Extension (s)							5.0					4.0
Recall Mode				None	None		C-Max	C-Max			None	None
Walk Time (s)				8.0	8.0		9.0	9.0			8.0	8.0
Flash Dont Walk (s)				34.0	34.0		20.0	20.0			16.0	16.0
Pedestrian Calls (#/hr)				67.0	67.0		0	0			0	0
Act Effet Green (s)				67.0	67.0		65.0	65.0			26.0	26.0
Actuated g/C Ratio				0.39	0.39		0.38	0.38			0.15	0.15
v/c Ratio				1.15	1.09dl		1.01	1.11			1.18	0.65

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay				131.1	55.0		89.6	109.0			171.3	22.3
Queue Delay				0.0	0.0		33.2	1.1			0.0	0.0
Total Delay				131.1	55.0		122.8	110.1			171.3	22.3
LOS				F	Е		F	F			F	С
Approach Delay					85.5			113.9			104.8	
Approach LOS					F			F			F	
Queue Length 50th (ft)				~1005	582		~762	~991			~452	52
Queue Length 95th (ft)				#1286	686		#1057	#1137			#665	159
Internal Link Dist (ft)		266			880			207			478	
Turn Bay Length (ft)				275								
Base Capacity (vph)				610	1223		609	1281			287	424
Starvation Cap Reductn				0	0		133	286			0	0
Spillback Cap Reductn				2	3		0	0			0	0
Storage Cap Reductn				0	0		0	0			0	0
Reduced v/c Ratio				1.15	0.86		1.29	1.43			1.18	0.65

Area Type: Other

Cycle Length: 170

Actuated Cycle Length: 170

Offset: 80 (47%), Referenced to phase 2:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.18

Intersection Signal Delay: 101.3 Intersection LOS: F
Intersection Capacity Utilization 63.7% ICU Level of Service B

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 191: Lockwood Dr & Spring St



	•	-	*	1	•	*	1	†	-	-	ļ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ર્ન	7		4			414			414	
Traffic Volume (vph)	22	10	63	26	32	36	121	208	87	107	133	20
Future Volume (vph)	22	10	63	26	32	36	121	208	87	107	133	20
ldeal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	200		0	200		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt			0.850		0.948			0.968			0.989	
Flt Protected		0.967			0.987			0.986			0.980	
Satd. Flow (prot)	0	1156	1016	0	1778	0	0	3076	0	0	3364	0
Flt Permitted		0.967			0.987			0.986			0.980	
Satd. Flow (perm)	0	1156	1016	0	1778	0	0	3076	0	0	3364	0
Link Speed (mph)		25			20			30			30	
Link Distance (ft)		759			512			529			617	
Travel Time (s)		20.7			17.5			12.0			14.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	59%	59%	59%	0%	0%	0%	12%	12%	12%	4%	4%	4%
Adj. Flow (vph)	23	11	66	27	34	38	127	219	92	113	140	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	34	66	0	99	0	0	438	0	0	274	0
Sign Control		Stop			Stop			Free			Free	

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 41.5% Analysis Period (min) 15

ICU Level of Service A

Synchro 10 Report Lanes, Volumes, Timings Page 3 Stantec

Delay, siveh 6.3 Sement EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT SBR SEC Configurations	Intersection													
Configurations	Int Delay, s/veh	6.3												
Configurations	Movement	FRI	FRT	FRR	WRI	WRT	WRR	NRI	NRT	NRR	SBI	SRT	SBR	
ffic Vol, veh/h					******		WEIT	INDL		HOIL	ODL		OBIT	
rer Vol, veh/h		22			26		36	121		87	107		20	
Control Stop	· · · · · · · · · · · · · · · · · · ·													
Control Stop	· · · · · · · · · · · · · · · · · · ·													
Channelized - None - None - None - None age Length - 200 None - None - None age Length - 200														
rage Length 200														
in Median Storage, # - 0 0 0 0 0 - 0 - 0 -			_			_	NOHE		_				NOHE	
de, % - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -			-			_	-		-				-	
k Hour Factor 95 95 95 95 95 95 95 95 95 95 95 95 95														
vy Vehicles, % 59 59 59 59 0 0 0 12 12 12 12 4 4 4 4 1														
or/Minor Minor2 Minor1 Major1 Major2 filicting Flow All 758 942 81 821 906 156 161 0 0 311 0 0 Stage 1 377 377 - 519 519 -														
or/Minor Minor2 Minor1 Major1 Major2 flicting Flow All 758 942 81 821 906 156 161 0 0 311 0 0 Stage 1 377 377 - 519 519 -														
fflicting Flow All 758 942 81 821 906 156 161 0 0 311 0 0 Stage 1 377 377 - 519 519	vivmt Flow	23	11	66	27	34	38	127	219	92	113	140	21	
fflicting Flow All 758 942 81 821 906 156 161 0 0 311 0 0 Stage 1 377 377 - 519 519														
fflicting Flow All 758 942 81 821 906 156 161 0 0 311 0 0 Stage 1 377 377 - 519 519	/lajor/Minor	Minor2		N	Minor1			Major1		ı	Major2			
Stage 1 377 377 - 519 519 - - -	Conflicting Flow All	758	942	81	821	906	156	161	0	0	311	0	0	
Stage 2 381 565 - 302 387				-		519	-	-	-	-	-	-	-	
cal Hdwy				-	302	387	_	-	-	-	-	-	-	
cal Hdwy Stg 1 7.68 6.68 - 6.5 5.5	Critical Hdwy			8.08			6.9	4.34	-	_	4.18	_	-	
cal Hdwy Stg 2								-	_	-		-	_	
Cap-1 Maneuver 244 199 *886 302 301 868 1438 - 1232 - Stage 1 556 543 - 513 536	, ,			_			_	_	_	_	_	_	_	
Cap-1 Maneuver 244 199 *886 302 301 868 1438 - - 1232 - Stage 1 556 543 - 513 536 -	, ,							2 32	_	_	2 24	_	_	
Stage 1 556 543 - 513 536									_	_		_	_	
Stage 2 481 386 - 771 659 - - - - - - - - - - - - - - - - -							-	-	_	_	-	_	_	
con blocked, % 1 2 2 2 4 1 2 2 2 2 2 2 3 3 3 3 4 1 1 3 5 8 1 3 4 2							_	_		_	_		_	
Cap-1 Maneuver 177 160 *886 225 241 868 1438 - - 1232 - Cap-2 Maneuver 177 160 - 225 241 -	•							1	_	_		_	_	
Cap-2 Maneuver 177 160 - 225 241 - <td></td> <td></td> <td>•</td> <td></td> <td></td> <td></td> <td>868</td> <td>•</td> <td>_</td> <td>_</td> <td>1232</td> <td>_</td> <td>_</td> <td></td>			•				868	•	_	_	1232	_	_	
Stage 1 496 488 - 458 478							-	1400	_	<u>_</u>		_	<u>_</u>	
Stage 2 381 344 - 627 592														
roach EB WB NB SB M Control Delay, s 16.7 20.9 2.4 3.5 M LOS C C Or Lane/Major Mvmt NBL NBT NBR EBLn1 EBLn2WBLn1 SBL SBT SBR vacity (veh/h) 1438 171 886 324 1232 M Lane V/C Ratio 0.089 0.197 0.075 0.305 0.091 M Control Delay (s) 7.7 0.2 - 31.1 9.4 20.9 8.2 0.2 - M Lane LOS A A - D A C A A - M 95th %tile Q(veh) 0.3 - 0.7 0.2 1.3 0.3	•						_	_	_	_	_	_	_	
M Control Delay, s 16.7	Olaye Z	301	JTT		021	002				_			_	
M Control Delay, s 16.7														
M LOS C C or Lane/Major Mvmt NBL NBT NBR EBLn1 EBLn2WBLn1 SBL SBT SBR vacity (veh/h) 1438 - 171 886 324 1232 M Lane V/C Ratio 0.089 - 0.197 0.075 0.305 0.091 M Control Delay (s) 7.7 0.2 - 31.1 9.4 20.9 8.2 0.2 - M Lane LOS A A - D A C A A - M 95th %tile Q(veh) 0.3 - 0.7 0.2 1.3 0.3	Approach													
or Lane/Major Mvmt	HCM Control Delay, s	16.7						2.4			3.5			
M Lane V/C Ratio 0.089 0.197 0.075 0.305 0.091	HCM LOS	С			С									
M Lane V/C Ratio 0.089 0.197 0.075 0.305 0.091														
M Lane V/C Ratio 0.089 0.197 0.075 0.305 0.091	Minor Lane/Maior Myr	mt	NRI	NRT	NBR	FBLn1	FBLn2V	VBLn1	SBI	SBT	SBR			
M Lane V/C Ratio 0.089 0.197 0.075 0.305 0.091											-			
M Control Delay (s) 7.7 0.2 - 31.1 9.4 20.9 8.2 0.2 - M Lane LOS A A - D A C A A - M 95th %tile Q(veh) 0.3 0.7 0.2 1.3 0.3					_					_	_			
M Lane LOS A A - D A C A A - M 95th %tile Q(veh) 0.3 0.7 0.2 1.3 0.3 es		:)												
M 95th %tile Q(veh) 0.3 0.7 0.2 1.3 0.3 es		2)												
es estate de la constant de la const		n)												
	•	1)	0.5	_	_	0.7	0.2	1.3	0.5	_	_			
olume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon	Votes													
	: Volume exceeds ca	apacity	\$: De	lay exc	eeds 30	00s	+: Com	putatior	Not De	efined	*: All	major v	olume ir	n platoon

HCM 6th TWSC Synchro 10 Report Stantec Synchro 10 Report Page 4

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	^	7	*	↑	7		र्स	7		414	
Traffic Volume (vph)	400	124	200	31	174	26	23	87	64	16	207	557
Future Volume (vph)	400	124	200	31	174	26	23	87	64	16	207	557
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		0	150		100	0		0	100		0
Storage Lanes	1		1	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95
Frt			0.850			0.850			0.850		0.893	
Flt Protected	0.950			0.950				0.990			0.999	
Satd. Flow (prot)	1787	1881	1599	1736	1827	1553	0	1881	1615	0	3157	0
Flt Permitted	0.384			0.673				0.710			0.948	
Satd. Flow (perm)	722	1881	1599	1230	1827	1553	0	1349	1615	0	2996	0
Right Turn on Red	. ==		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			211			121			133		586	. 00
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1055			1084			617			850	
Travel Time (s)		20.6			21.1			14.0			19.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	0%	0%	0%	2%	2%	2%
Adj. Flow (vph)	421	131	211	33	183	27	24	92	67	17	218	586
Shared Lane Traffic (%)	721	101	211		100		<u></u>	J <u>Z</u>	01		210	000
Lane Group Flow (vph)	421	131	211	33	183	27	0	116	67	0	821	0
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	7	4	1 OIIII	1 01111	8	1 01111	1 01111	2	1 01111	1 01111	6	
Permitted Phases	4	•	4	8		8	2	_	2	6		
Detector Phase	7	4	4	8	8	8	2	2	2	6	6	
Switch Phase	•	•	•				_	_	_	•		
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	14.0	14.0	33.0	33.0	33.0	13.0	13.0	13.0	13.0	13.0	
Total Split (s)	26.0	59.0	59.0	33.0	33.0	33.0	31.0	31.0	31.0	31.0	31.0	
Total Split (%)	28.9%	65.6%	65.6%	36.7%	36.7%	36.7%	34.4%	34.4%	34.4%	34.4%	34.4%	
Maximum Green (s)	19.0	52.0	52.0	26.0	26.0	26.0	25.0	25.0	25.0	25.0	25.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	2.5	2.5	2.5	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0		6.0	6.0		6.0	
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min	
Walk Time (s)				9.0	9.0	9.0	•	•		•	•	
Flash Dont Walk (s)				17.0	17.0	17.0						
Pedestrian Calls (#/hr)				0	0	0						
Act Effct Green (s)	47.5	47.5	47.5	14.3	14.3	14.3		29.5	29.5		29.5	
Actuated g/C Ratio	0.53	0.53	0.53	0.16	0.16	0.16		0.33	0.33		0.33	
v/c Ratio	0.61	0.33	0.33	0.10	0.10	0.10		0.26	0.33		0.60	
Control Delay	16.5	9.9	1.9	32.8	44.7	0.00		26.9	0.11		9.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	
Cacao Dolay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	

	•	-	*	1	←	*	1	†	-	1	Ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	16.5	9.9	1.9	32.8	44.7	0.4		26.9	0.4		9.7	
LOS	В	Α	Α	С	D	Α		С	Α		Α	
Approach Delay		11.3			38.2			17.2			9.7	
Approach LOS		В			D			В			Α	
Queue Length 50th (ft)	125	32	0	16	98	0		51	0		54	
Queue Length 95th (ft)	190	58	28	40	155	0		98	2		116	
Internal Link Dist (ft)		975			1004			537			770	
Turn Bay Length (ft)	175			150		100						
Base Capacity (vph)	690	1098	1021	355	527	534		451	628		1392	
Starvation Cap Reductn	0	0	0	0	0	0		0	0		0	
Spillback Cap Reductn	0	0	0	0	0	0		0	0		0	
Storage Cap Reductn	0	0	0	0	0	0		0	0		0	
Reduced v/c Ratio	0.61	0.12	0.21	0.09	0.35	0.05		0.26	0.11		0.59	

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 65

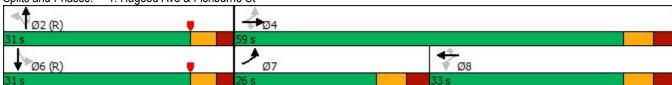
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 14.4 Intersection LOS: B
Intersection Capacity Utilization 75.5% ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: Hagood Ave & Fishburne St



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					4			413		7	1	
Traffic Volume (vph)	0	0	0	53	1	135	13	400	19	76	672	43
Future Volume (vph)	0	0	0	53	1	135	13	400	19	76	672	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	275		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00
Frt					0.904			0.993			0.991	
Flt Protected					0.986			0.998		0.950		
Satd. Flow (prot)	0	0	0	0	1660	0	0	3473	0	1719	1793	0
Flt Permitted					0.986			0.678		0.365	1700	
Satd. Flow (perm)	0	0	0	0	1660	0	0	2360	0	660	1793	0
Right Turn on Red			Yes		1000	Yes		2000	Yes	000	1730	Yes
Satd. Flow (RTOR)			103		72	103		3	103		5	103
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		198			609			472			134	
Travel Time (s)		5.4			16.6			12.9			3.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	5%	5%	5%
,											707	
Adj. Flow (vph)	0	0	0	56	1	142	14	421	20	80	707	45
Shared Lane Traffic (%)	0	0	^	^	100	^	^	455	0	00	750	0
Lane Group Flow (vph)	0	0	0	0	199	0	0	455	0	80	752	0
Turn Type				Perm	NA		Perm	NA		custom	NA	
Protected Phases				2	3		•	6		5 4	2 4 5	
Permitted Phases				3			6	^		2	0.45	
Detector Phase				3	3		6	6		5 4	245	
Switch Phase				40.0	40.0		00.0	00.0				
Minimum Initial (s)				10.0	10.0		20.0	20.0				
Minimum Split (s)				32.0	32.0		28.0	28.0				
Total Split (s)				39.0	39.0		51.0	51.0				
Total Split (%)				24.4%	24.4%		31.9%	31.9%				
Maximum Green (s)				33.0	33.0		45.0	45.0				
Yellow Time (s)				3.5	3.5		3.5	3.5				
All-Red Time (s)				2.5	2.5		2.5	2.5				
Lost Time Adjust (s)					-2.0			-2.0				
Total Lost Time (s)					4.0			4.0				
Lead/Lag				Lead	Lead		Lag	Lag				
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0	3.0		3.0	3.0				
Recall Mode				None	None		C-Min	C-Min				
Act Effct Green (s)					24.7			57.6		127.3	127.3	
Actuated g/C Ratio					0.15			0.36		0.80	0.80	
v/c Ratio					0.63			0.53		0.08	0.53	
Control Delay					47.6			43.7		4.2	11.3	
Queue Delay					0.0			0.0		4.2	0.5	
Total Delay					47.6			43.7		8.4	11.8	
LOS					D			D		Α	В	
Approach Delay					47.6			43.7			11.4	

Lane Group	Ø2	Ø4	Ø5
Lane Configurations			
Traffic Volume (vph)			
Future Volume (vph)			
Ideal Flow (vphpl)			
Storage Length (ft)			
Storage Lanes			
Taper Length (ft)			
Lane Util. Factor			
Frt			
Fit Protected			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Peak Hour Factor			
Heavy Vehicles (%)			
Adj. Flow (vph)			
Shared Lane Traffic (%)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	2	4	5
Permitted Phases	_		
Detector Phase			
Switch Phase			
Minimum Initial (s)	20.0	10.0	5.0
Minimum Split (s)	30.0	28.0	11.0
. , ,	80.0	41.0	29.0
Total Split (s)	50%	26%	18%
Total Split (%)			
Maximum Green (s)	74.0	35.0	23.0
Yellow Time (s)	3.5	3.5	3.5
All-Red Time (s)	2.5	2.5	2.5
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag		Lag	Lead
Lead-Lag Optimize?			
Vehicle Extension (s)	3.0	3.0	3.0
Recall Mode	C-Min	None	None
Act Effct Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Thhinani ngiah			

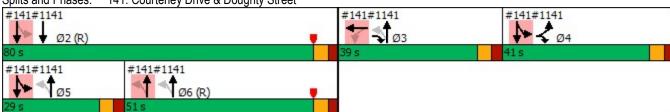
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS					D			D			В	
Queue Length 50th (ft)					126			228		12	246	
Queue Length 95th (ft)					201			m282		27	231	
Internal Link Dist (ft)		118			529			392			54	
Turn Bay Length (ft)										275		
Base Capacity (vph)					419			865		967	1427	
Starvation Cap Reductn					0			0		819	282	
Spillback Cap Reductn					0			0		0	0	
Storage Cap Reductn					0			0		0	0	
Reduced v/c Ratio					0.47			0.53		0.54	0.66	
Intersection Summary												
Area Type:	Other											
Cycle Length: 160												
Actuated Cycle Length: 10	60											
Offset: 28 (18%), Referen	ced to phase	2:SBTL a	and 6:NB	ΓL, Start o	of Yellow							
Natural Cycle: 100												
Control Type: Actuated-C	oordinated											
Maximum v/c Ratio: 0.63												

Analysis Period (min) 15 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 141: Courteney Drive & Doughty Street

Intersection Signal Delay: 26.1

Intersection Capacity Utilization 75.9%



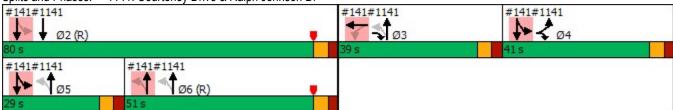
Intersection LOS: C

ICU Level of Service D

Lane Group EBL EBR NBL NBT SBT SBR Ø3 Ø5 Ø6 Lane Configurations Traffic Volume (vph) 171 224 50 471 561 36 Future Volume (vph) 171 224 50 471 561 36 Ideal Flow (vphpl) 1900 1900 1900 1900 1900 Lane Util. Factor 1.00 1.00 1.00 0.95 0.95 Frt 0.850 0.950 0.991 Flt Protected 0.950 0.950 Satd. Flow (prot) 1671 1495 1752 1845 3507 0 Flt Permitted 0.950 0.371	
Lane Configurations 1 1 Traffic Volume (vph) 171 224 50 471 561 36 Future Volume (vph) 171 224 50 471 561 36 Ideal Flow (vphpl) 1900 1900 1900 1900 1900 Lane Util. Factor 1.00 1.00 1.00 1.00 0.95 0.95 Frt 0.850 0.950 0.991	
Traffic Volume (vph) 171 224 50 471 561 36 Future Volume (vph) 171 224 50 471 561 36 Ideal Flow (vphpl) 1900 1900 1900 1900 1900 Lane Util. Factor 1.00 1.00 1.00 0.95 0.95 Frt 0.850 0.991 Flt Protected 0.950 0.950 Satd. Flow (prot) 1671 1495 1752 1845 3507 0 Flt Permitted 0.950 0.371	
Future Volume (vph) 171 224 50 471 561 36 Ideal Flow (vphpl) 1900 1900 1900 1900 1900 Lane Util. Factor 1.00 1.00 1.00 0.95 0.95 Frt 0.850 0.950 0.991 Flt Protected 0.950 0.950 0.950 Satd. Flow (prot) 1671 1495 1752 1845 3507 0 Flt Permitted 0.950 0.371	
Ideal Flow (vphpl) 1900 1900 1900 1900 1900 1900 Lane Util. Factor 1.00 1.00 1.00 0.95 0.95 Frt 0.850 0.991 Flt Protected 0.950 0.950 Satd. Flow (prot) 1671 1495 1752 1845 3507 0 Flt Permitted 0.950 0.371 0.371 0.371 0.371 Satd. Flow (perm) 1671 1495 684 1845 3507 0 Right Turn on Red Yes Yes Yes Satd. Flow (RTOR) 214 6	
Lane Util. Factor 1.00 1.00 1.00 1.00 0.95 0.95 Frt 0.850 0.991 Flt Protected 0.950 0.950 Satd. Flow (prot) 1671 1495 1752 1845 3507 0 Flt Permitted 0.950 0.371 0.371 0 Satd. Flow (perm) 1671 1495 684 1845 3507 0 Right Turn on Red Yes Yes Yes Satd. Flow (RTOR) 214 6	
Frt 0.850 0.991 Flt Protected 0.950 0.950 Satd. Flow (prot) 1671 1495 1752 1845 3507 0 Flt Permitted 0.950 0.371 0 <td></td>	
Fit Protected 0.950 0.950 Satd. Flow (prot) 1671 1495 1752 1845 3507 0 Fit Permitted 0.950 0.371 Satd. Flow (perm) 1671 1495 684 1845 3507 0 Right Turn on Red Yes Yes Satd. Flow (RTOR) 214 6	
Satd. Flow (prot) 1671 1495 1752 1845 3507 0 Flt Permitted 0.950 0.371 Satd. Flow (perm) 1671 1495 684 1845 3507 0 Right Turn on Red Yes Yes Satd. Flow (RTOR) 214 6	
Flt Permitted 0.950 0.371 Satd. Flow (perm) 1671 1495 684 1845 3507 0 Right Turn on Red Yes Yes Satd. Flow (RTOR) 214 6	
Satd. Flow (perm) 1671 1495 684 1845 3507 0 Right Turn on Red Yes Yes Satd. Flow (RTOR) 214 6	
Right Turn on Red Yes Yes Satd. Flow (RTOR) 214 6	
Satd. Flow (RTOR) 214 6	
20 20 20	
Link Distance (ft) 231 134 540	
Travel Time (s) 6.3 3.7 14.7	
Peak Hour Factor 0.95 0.95 0.95 0.95 0.95	
Heavy Vehicles (%) 8% 8% 3% 3% 2% 2%	
Adj. Flow (vph) 180 236 53 496 591 38	
Shared Lane Traffic (%)	
Lane Group Flow (vph) 180 236 53 496 629 0	
Turn Type Prot custom Perm NA NA	
Protected Phases 4 43 563 2 3 5 6	
Permitted Phases 4 563	
Detector Phase 4 4 3 5 6 3 5 6 3 2	
Switch Phase	
Minimum Initial (s) 10.0 20.0 10.0 5.0 20.0	
Minimum Split (s) 28.0 30.0 32.0 11.0 28.0	
Total Split (s) 41.0 80.0 39.0 29.0 51.0	
Total Split (%) 25.6% 50.0% 24% 18% 32%	
Maximum Green (s) 35.0 74.0 33.0 23.0 45.0	
Yellow Time (s) 3.5 3.5 3.5 3.5	
All-Red Time (s) 2.5 2.5 2.5	
Lost Time Adjust (s) -2.0 -2.0	
Total Lost Time (s) 4.0 4.0	
Lead/Lag Lag Lead Lead Lag	
Lead-Lag Optimize?	
Vehicle Extension (s) 3.0 3.0 3.0 3.0	
Recall Mode C-Min None C-Min	
Act Effct Green (s) 34.5 63.2 117.5 117.5 88.8	
Actuated g/C Ratio 0.22 0.40 0.73 0.73 0.56	
v/c Ratio 0.50 0.33 0.11 0.37 0.32	
Control Delay 59.2 5.2 1.1 2.0 36.7	
Queue Delay 0.0 0.3 0.9 0.6 0.3	
Total Delay 59.2 5.5 2.0 2.6 37.0	
LOS E A A D	
Approach Delay 28.7 2.5 37.0	
Approach LOS C A D	
Queue Length 50th (ft) 160 13 2 20 271	
Queue Length 95th (ft) 247 62 2 14 269	

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Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø3	Ø5	Ø6	
Internal Link Dist (ft)	151			54	460					
Turn Bay Length (ft)										
Base Capacity (vph)	403	752	546	1473	1948					
Starvation Cap Reductn	0	0	352	592	726					
Spillback Cap Reductn	0	159	0	0	141					
Storage Cap Reductn	0	0	0	0	0					
Reduced v/c Ratio	0.45	0.40	0.27	0.56	0.51					
Intersection Summary										
Area Type:	Other									
Cycle Length: 160										
Actuated Cycle Length: 160)									
Offset: 28 (18%), Reference	ed to phase	2:SBTL a	ind 6:NBT	ΓL, Start o	of Yellow					
Natural Cycle: 100										
Control Type: Actuated-Co	ordinated									
Maximum v/c Ratio: 0.63										
Intersection Signal Delay: 2				Int	tersection	LOS: C				
Intersection Capacity Utiliza	ation 40.9%			IC	U Level o	of Service	A			
Analysis Period (min) 15										

Splits and Phases: 1141: Courteney Drive & Ralph Johnson Dr



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	र्स				77		† 1>		*	^	
Traffic Volume (vph)	519	355	0	0	0	660	0	1388	52	104	1856	0
Future Volume (vph)	519	355	0	0	0	660	0	1388	52	104	1856	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	250		0
Storage Lanes	1		0	0		2	0		0	1		0
Taper Length (ft)	25		•	25		_	25			25		•
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	0.88	1.00	0.95	0.95	1.00	0.95	1.00
Ped Bike Factor	0.00	0.00				0.00		0.00	0.00	1.00	0.00	
Frt						0.850		0.995		1.00		
Flt Protected	0.950	0.990				0.000		0.000		0.950		
Satd. Flow (prot)	1681	1752	0	0	0	2787	0	3522	0	1770	3539	0
Flt Permitted	0.950	0.990	•	•	•	2101	•	OOLL	•	0.950	0000	V
Satd. Flow (perm)	1681	1752	0	0	0	2787	0	3522	0	1767	3539	0
Right Turn on Red	1001	1702	Yes	U	U	Yes	U	0022	Yes	1707	0000	Yes
Satd. Flow (RTOR)			103			32		3	103			103
Link Speed (mph)		30			30	JZ		30			30	
Link Distance (ft)		237			641			132			252	
Travel Time (s)		5.4			14.6			3.0			5.7	
Confl. Peds. (#/hr)		5.4			14.0			3.0		2	5.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
	546	374	0.95	0.93	0.95	695	0.95	1461	55	109	1954	0.95
Adj. Flow (vph) Shared Lane Traffic (%)	17%	3/4	U	U	U	090	U	1401	55	109	1904	U
. ,	453	467	0	0	0	695	0	1516	0	109	1954	0
Lane Group Flow (vph)		NA	U	U	U		U	NA	U		1954 NA	U
Turn Type	Split 8	NA 8				pm+ov 1		NA 2		Prot 1	1NA 6	
Protected Phases Permitted Phases	0	0						Z		I	O	
	0	8				8		2		1	c	
Detector Phase Switch Phase	8	Ö						2		I	6	
	8.0	8.0				8.0		5.0		8.0	15.0	
Minimum Initial (s)		47.0				15.0		15.0		15.0	20.0	
Minimum Split (s)	47.0											
Total Split (s)	53.0	53.0				18.0		79.0 52.7%		18.0	97.0	
Total Split (%)	35.3%	35.3%				12.0%				12.0%	64.7%	
Maximum Green (s)	46.0	46.0				11.5		73.0		11.5	92.0	
Yellow Time (s)	3.5	3.5				3.0		4.0		3.0	3.5	
All-Red Time (s)	3.5	3.5				3.5		2.0		3.5	1.5	
Lost Time Adjust (s)	-3.0	-3.0				-2.5		0.0		-2.5	-1.0	
Total Lost Time (s)	4.0	4.0				4.0		6.0		4.0	4.0	
Lead/Lag						Lag		Lead		Lag		
Lead-Lag Optimize?	4.0	4.0				Yes		Yes		Yes	2.0	
Vehicle Extension (s)	4.0	4.0				4.0		3.0		4.0	3.0	
Recall Mode	None	None				None		C-Max		None	C-Max	
Walk Time (s)	9.0	9.0									7.0	
Flash Dont Walk (s)	31.0	31.0									8.0	
Pedestrian Calls (#/hr)	0	0				0.4.7		75.0		44.0	0	
Act Effct Green (s)	46.7	46.7				64.7		75.3		14.0	95.3	
Actuated g/C Ratio	0.31	0.31				0.43		0.50		0.09	0.64	
v/c Ratio	0.86	0.86				0.57		0.86		0.66	0.87	
Control Delay	65.8	64.3				32.3		39.2		51.8	8.2	

	•	→	*	1	•	*	4	†	-	1	↓	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	37.4	33.5				3.8		3.8		0.0	11.3	
Total Delay	103.3	97.8				36.2		43.0		51.8	19.5	
LOS	F	F				D		D		D	В	
Approach Delay		100.5			36.2			43.0			21.2	
Approach LOS		F			D			D			С	
Queue Length 50th (ft)	430	442				267		689		98	163	
Queue Length 95th (ft)	#615	#605				335		802		m104	m117	
Internal Link Dist (ft)		157			561			52			172	
Turn Bay Length (ft)										250		
Base Capacity (vph)	549	572				1221		1768		165	2247	
Starvation Cap Reductn	0	0				0		0		0	306	
Spillback Cap Reductn	122	127				427		179		0	0	
Storage Cap Reductn	0	0				0		0		0	0	
Reduced v/c Ratio	1.06	1.05				0.88		0.95		0.66	1.01	

Area Type: Other

Cycle Length: 150
Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 43.6 Intersection LOS: D
Intersection Capacity Utilization 98.5% ICU Level of Service F

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 192: Lockwood Dr & Bee St



	۶	→	*	•	←	•	1	†	~	-	Ţ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				*	414		*	414			^	7
Traffic Volume (vph)	0	0	0	1294	472	103	1530	578	0	0	552	562
Future Volume (vph)	0	0	0	1294	472	103	1530	578	0	0	552	562
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	275		0	0		0	0		0
Storage Lanes	0		0	1		0	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	0.91	0.91	1.00	1.00	1.00	1.00
Ped Bike Factor					1.00		0.99	1.00				0.97
Frt					0.987							0.850
Flt Protected				0.950	0.974		0.950	0.972				
Satd. Flow (prot)	0	0	0	1610	3254	0	1610	3295	0	0	1863	1583
Flt Permitted				0.950	0.974		0.950	0.972				
Satd. Flow (perm)	0	0	0	1610	3254	0	1598	3281	0	0	1863	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					7							84
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		346			960			287			558	
Travel Time (s)		7.9			21.8			6.5			12.7	
Confl. Peds. (#/hr)						8	9					9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	1362	497	108	1611	608	0	0	581	592
Shared Lane Traffic (%)				50%			50%					
Lane Group Flow (vph)	0	0	0	681	1286	0	805	1414	0	0	581	592
Turn Type				Split	NA		Split	NA			NA	Perm
Protected Phases				4	4		2	2			3	
Permitted Phases												3
Detector Phase				4	4		2	2			3	3
Switch Phase												
Minimum Initial (s)				7.0	7.0		12.0	12.0			7.0	7.0
Minimum Split (s)				49.0	49.0		37.0	37.0			30.0	30.0
Total Split (s)				55.0	55.0		56.0	56.0			39.0	39.0
Total Split (%)				36.7%	36.7%		37.3%	37.3%			26.0%	26.0%
Maximum Green (s)				48.0	48.0		48.5	48.5			33.0	33.0
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	3.5
All-Red Time (s)				3.5	3.5		4.0	4.0			2.5	2.5
Lost Time Adjust (s)				-3.0	-3.0		-3.5	-3.5			-2.0	-2.0
Total Lost Time (s)				4.0	4.0		4.0	4.0			4.0	4.0
Lead/Lag				Lag	Lag						Lead	Lead
Lead-Lag Optimize?				Yes	Yes						Yes	Yes
Vehicle Extension (s)				4.0	4.0		5.0	5.0			4.0	4.0
Recall Mode				None	None		C-Max	C-Max			None	None
Walk Time (s)				8.0	8.0		9.0	9.0			8.0	8.0
Flash Dont Walk (s)				34.0	34.0		20.0	20.0			16.0	16.0
Pedestrian Calls (#/hr)				0	0		0	0			0	0
Act Effct Green (s)				51.0	51.0		52.0	52.0			35.0	35.0
Actuated g/C Ratio				0.34	0.34		0.35	0.35			0.23	0.23
v/c Ratio				1.24	1.18dl		1.44	1.38dl			1.34	1.40
Control Delay				166.3	125.3		242.9	153.7			210.7	229.4

	•	→	-	-	←	*	1	†	-	1	Ţ	1
	EDI	EDT	- FDD	MOI	MDT	W/DD	NDI	NDT	NDD	ODI	ODT	000
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay				0.0	0.0		0.4	0.4			0.6	0.0
Total Delay				166.3	125.3		243.3	154.0			211.4	229.4
LOS				F	F		F	F			F	F
Approach Delay					139.5			186.4			220.5	
Approach LOS					F			F			F	
Queue Length 50th (ft)				~907	~814		~1180	~945			~738	~709
Queue Length 95th (ft)				#1178	#963		#1469	#1093			#975	#950
Internal Link Dist (ft)		266			880			207			478	
Turn Bay Length (ft)				275								
Base Capacity (vph)				547	1110		558	1142			434	423
Starvation Cap Reductn				0	0		26	91			0	0
Spillback Cap Reductn				0	0		0	0			28	0
Storage Cap Reductn				0	0		0	0			0	0
Reduced v/c Ratio				1.24	1.16		1.51	1.35			1.43	1.40

Area Type: Other

Cycle Length: 150
Actuated Cycle Length: 150

Offset: 61 (41%), Referenced to phase 2:NBTL, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.44

Intersection Signal Delay: 176.6 Intersection LOS: F
Intersection Capacity Utilization 111.8% ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 191: Lockwood Dr & Spring St



	•	→	•	1	←	•	4	†	1	-	ļ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ર્ન	7		4			47>			413	
Traffic Volume (vph)	36	31	76	4	6	11	51	292	82	0	147	21
Future Volume (vph)	36	31	76	4	6	11	51	292	82	0	147	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	200		0	200		0
Storage Lanes	0		1	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt			0.850		0.926			0.971			0.981	
Flt Protected		0.974			0.991			0.994				
Satd. Flow (prot)	0	1351	1179	0	1744	0	0	3139	0	0	3438	0
Flt Permitted		0.974			0.991			0.994				
Satd. Flow (perm)	0	1351	1179	0	1744	0	0	3139	0	0	3438	0
Link Speed (mph)		25			20			30			30	
Link Distance (ft)		759			512			526			617	
Travel Time (s)		20.7			17.5			12.0			14.0	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	37%	37%	37%	0%	0%	0%	11%	11%	11%	3%	3%	3%
Adj. Flow (vph)	38	33	81	4	6	12	54	311	87	0	156	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	71	81	0	22	0	0	452	0	0	178	0
Sign Control		Stop			Stop			Free			Free	

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 35.4% Analysis Period (min) 15

ICU Level of Service A

Synchro 10 Report Lanes, Volumes, Timings Page 3 Stantec

Intersection													
Int Delay, s/veh	3.3												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		4	7	1102	4	· · · · · · · · · · · · · · · · · · ·	1102	414	HUIT	ODL	414	ODIT	
Fraffic Vol, veh/h	36	31	76	4	6	11	51	292	82	0	147	21	
uture Vol, veh/h	36	31	76	4	6	11	51	292	82	0	147	21	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	
RT Channelized	-	-	None	-	-	None	_	-	None	_	_	None	
Storage Length	_	-	200	-	-	-	-	-	-	-	-	-	
eh in Median Storage	,# -	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94	
leavy Vehicles, %	37	37	37	0	0	0	11	11	11	3	3	3	
/lvmt Flow	38	33	81	4	6	12	54	311	87	0	156	22	
lajor/Minor N	Minor2		ľ	Minor1		ı	Major1		N	Major2			
Conflicting Flow All	434	673	89	558	641	199	178	0	0	398	0	0	
Stage 1	167	167	-	463	463	-	-	-	-	-	-	-	
Stage 2	267	506	-	95	178	-	-	-	-	-	-	-	
Critical Hdwy	8.24	7.24	7.64	7.5	6.5	6.9	4.32	-	-	4.16	-	-	
Critical Hdwy Stg 1	7.24	6.24	-	6.5	5.5	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	7.24	6.24	-	6.5	5.5	-	-	-	-	-	-	-	
ollow-up Hdwy	3.87	4.37	3.67	3.5	4	3.3	2.31	-	-	2.23	-	-	
Pot Cap-1 Maneuver	503	346	*939	*475	433	815	1422	-	-	1150	-	-	
Stage 1	835	751	-	*554	568	-	-	-	-	-	-	-	
Stage 2	625	459	-	*985	817	-	-	-	-	-	-	-	
Platoon blocked, %	1	1	1	1	1	21-	1	-	-		-	-	
Mov Cap-1 Maneuver	472	329	*939	*386	412	815	1422	-	-	1150	-	-	
Mov Cap-2 Maneuver	472	329	-	*386	412	-	-	-	-	-	-	-	
Stage 1	794	751	-	*527	540	-	-	-	-	-	-	-	
Stage 2	579	437	-	*860	817	-	-	-	-	-	-	-	
				=			=						
Approach	EB			WB			NB			SB			
HCM Control Delay, s	12.5			11.9			1			0			
HCM LOS	В			В									
Air 1 / A		ND	NDT	NDD :	-DL 4		VDL 4	ODI	ODT	000			
Minor Lane/Major Mvm	ι	NBL	NBT	NRK I		EBLn2V		SBL	SBT	SBR			
Capacity (veh/h)		1422	-	-	393	939	547	1150	-	-			
ICM Control Doloy (a)		0.038	- 0.1		0.181	0.086		-	-	-			
HCM Long LOS		7.6	0.1	-	16.2	9.2	11.9	0	-	-			
HCM Lane LOS		A	Α	_	C	0.3	B	A 0	-	-			
HCM 95th %tile Q(veh)		0.1	-	-	0.7	0.3	0.1	U	-	-			
Votes													
: Volume exceeds cap	acity	\$: De	lay exc	eeds 30	00s	+: Com	outation	Not De	efined	*: All	major v	olume ir	n platoon

HCM 6th TWSC Synchro 10 Report Stantec Synchro 10 Report Page 4

Bane Group		۶	→	•	•	←	•	1	†	~	/	ţ	1
Traffic Volume (vph)	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	Lane Configurations	*	*	7	*	^	7		ર્ન	7		473	
Future Volume (vph)								59		198	26		545
Ideal Flow (ryhpit) 1900	(, ,			66				59					
Storage Length (ft) 175	· · ·			1900			1900	1900			1900	1900	
Storage Lanes	(, , ,			0	150					0			
Taper Length (ft)													
Lane Util. Factor					25						25		
Fith			1.00	1.00		1.00	1.00		1.00	1.00		0.95	0.95
Fit Protected 0.950 1.787 1881 1599 1671 1785 1495 0 1828 1568 0 3128 0 1181 0.397 0.559 0.778 0.930 0.559 0.778 0.930 0.559 0.778 0.930 0.559 0.778 0.930 0.559 0.559 0.778 0.930 0.559 0													
Satid. Flow (prot) 1787 1881 1599 1671 1759 1495 0 1828 1568 0 3128 0		0.950			0.950				0.991				
Fit Permitted 1,0397 1,0559 1,0778 0,030 1			1881	1599		1759	1495	0		1568	0		0
Satid. Flow (perm) 747 1881 1599 983 1759 1495 0 1435 1568 0 2915 0 1815 1700 1700 1815 1800													
Right Turn on Red Yes Ye			1881	1599		1759	1495	0		1568	0		0
Satd. Flow (RTOR)	\1 /												Yes
Link Speed (mph) 35 35 35 35 30 30 Link Distance (ft) 1055 1072 617 769 17.5 Fravel Time (s) 20.6 20.9 14.0 17.5 17.5 Peak Hour Factor 0.94												580	
Link Distance (ft)			35			35			30				
Travel Time (s)													
Peak Hour Factor 0.94 0.													
Heavy Vehicles (%)		0.94		0.94	0.94		0.94	0.94		0.94	0.94		0.94
Adj. Flow (vph) 470 335 70 13 110 33 63 268 211 28 102 580 Shared Lane Traffic (%) Lane Group Flow (vph) 470 335 70 13 110 33 0 331 211 0 710 0 Turn Type pm+pt NA Perm Perm NA Perm NA Perm NA Perm NA Perm NA Perm NA Na													
Shared Lane Traffic (%) Lane Group Flow (vph) 470 335 70 13 110 33 0 331 211 0 710 0 0	• ,												
Lane Group Flow (vph)													
Turn Type	` ,	470	335	70	13	110	33	0	331	211	0	710	0
Protected Phases 7 4 8 8 2 2 6 Permitted Phases 4 4 4 8 8 8 2 2 2 6 6 Detector Phase 7 4 4 8 8 8 8 2 2 2 2 6 6 Switch Phase Minimum Initial (s) 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0													
Permitted Phases													
Detector Phase 7 4 4 8 8 8 2 2 2 2 6 6 Switch Phase Minimum Initial (s) 7.0 </td <td></td> <td></td> <td></td> <td>4</td> <td>8</td> <td></td> <td>8</td> <td>2</td> <td></td> <td>2</td> <td>6</td> <td></td> <td></td>				4	8		8	2		2	6		
Switch Phase Minimum Initial (s) 7.0			4			8			2			6	
Minimum Initial (s) 7.0													
Minimum Split (s) 14.0 14.0 14.0 33.0 33.0 33.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0 13.0 37.0 31.0 31.0 31.0 31.0 31.0 31.0 31.0 31.0 31.0 31.0 31.0 31.0 31.0 <td></td> <td>7.0</td> <td></td>		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Total Split (s) 20.0 53.0 53.0 33.0 33.0 33.0 37.0 37.0 37.0 37.0 Total Split (%) 22.2% 58.9% 58.9% 36.7% 36.7% 36.7% 41.1%	Minimum Split (s)	14.0	14.0	14.0	33.0	33.0	33.0	13.0	13.0	13.0	13.0	13.0	
Total Split (%) 22.2% 58.9% 58.9% 36.7% 36.7% 41.1%	Total Split (s)	20.0	53.0	53.0	33.0	33.0	33.0	37.0	37.0	37.0	37.0	37.0	
Maximum Green (s) 13.0 46.0 46.0 26.0 26.0 26.0 26.0 31.0 <td></td> <td>22.2%</td> <td>58.9%</td> <td>58.9%</td> <td>36.7%</td> <td>36.7%</td> <td>36.7%</td> <td>41.1%</td> <td>41.1%</td> <td>41.1%</td> <td>41.1%</td> <td>41.1%</td> <td></td>		22.2%	58.9%	58.9%	36.7%	36.7%	36.7%	41.1%	41.1%	41.1%	41.1%	41.1%	
All-Red Time (s) 3.0 3.0 3.0 3.0 3.0 3.0 2.5 2.5 2.5 2.5 2.5 Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.		13.0	46.0	46.0	26.0	26.0	26.0	31.0	31.0	31.0	31.0	31.0	
All-Red Time (s) 3.0 3.0 3.0 3.0 3.0 3.0 2.5 2.5 2.5 2.5 2.5 Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	3.5	3.5		
Total Lost Time (s) 7.0 7.0 7.0 7.0 7.0 6.0 6.0 6.0 Lead/Lag Lead Lag	` ,		3.0	3.0		3.0						2.5	
Lead/Lag Lead Lag Lag Lag Lead-Lag Optimize? Yes Yes Yes Yes Vehicle Extension (s) 3.0	Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	
Lead-Lag Optimize? Yes Yes Yes Yes Vehicle Extension (s) 3.0 <	Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0		6.0	6.0		6.0	
Vehicle Extension (s) 3.0	` ,	Lead			Lag	Lag	Lag						
Vehicle Extension (s) 3.0	Lead-Lag Optimize?	Yes			_	Yes							
Recall Mode None None None None C-Min C-Min C-Min C-Min C-Min Walk Time (s) 9.0 9.0 9.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
		None	None	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min	
	Walk Time (s)				9.0	9.0	9.0						
Flash Dont Walk (s) 17.0 17.0					17.0	17.0	17.0						
Pedestrian Calls (#/hr) 0 0 0	. ,				0		0						
Act Effct Green (s) 33.9 33.9 11.0 11.0 11.0 43.1 43.1 43.1	,	33.9	33.9	33.9	11.0	11.0			43.1	43.1		43.1	
Actuated g/C Ratio 0.38 0.38 0.38 0.12 0.12 0.12 0.48 0.48 0.48	. ,												
v/c Ratio 0.95 0.47 0.11 0.11 0.51 0.11 0.48 0.25 0.42													
Control Delay 56.8 23.3 5.1 35.2 44.6 0.8 19.9 2.9 3.9													
Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0													

	•	-	*	1	•	*	1	†	1	-	↓	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	56.8	23.3	5.1	35.2	44.6	0.8		19.9	2.9		3.9	
LOS	Е	С	Α	D	D	Α		В	Α		Α	
Approach Delay		39.8			34.6			13.3			3.9	
Approach LOS		D			С			В			Α	
Queue Length 50th (ft)	204	130	0	7	60	0		135	0		22	
Queue Length 95th (ft)	#483	214	25	23	106	0		204	37		53	
Internal Link Dist (ft)		975			992			537			689	
Turn Bay Length (ft)	175			150		100						
Base Capacity (vph)	496	961	851	283	508	517		687	861		1699	
Starvation Cap Reductn	0	0	0	0	0	0		0	0		0	
Spillback Cap Reductn	0	0	0	0	0	0		0	0		0	
Storage Cap Reductn	0	0	0	0	0	0		0	0		0	
Reduced v/c Ratio	0.95	0.35	0.08	0.05	0.22	0.06		0.48	0.25		0.42	

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95
Intersection Signal Delay: 22.0

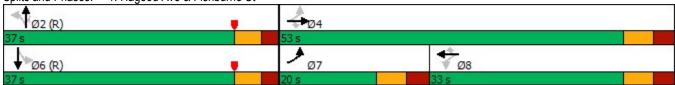
Intersection Signal Delay. 22.0
Intersection Capacity Utilization 84.6%

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

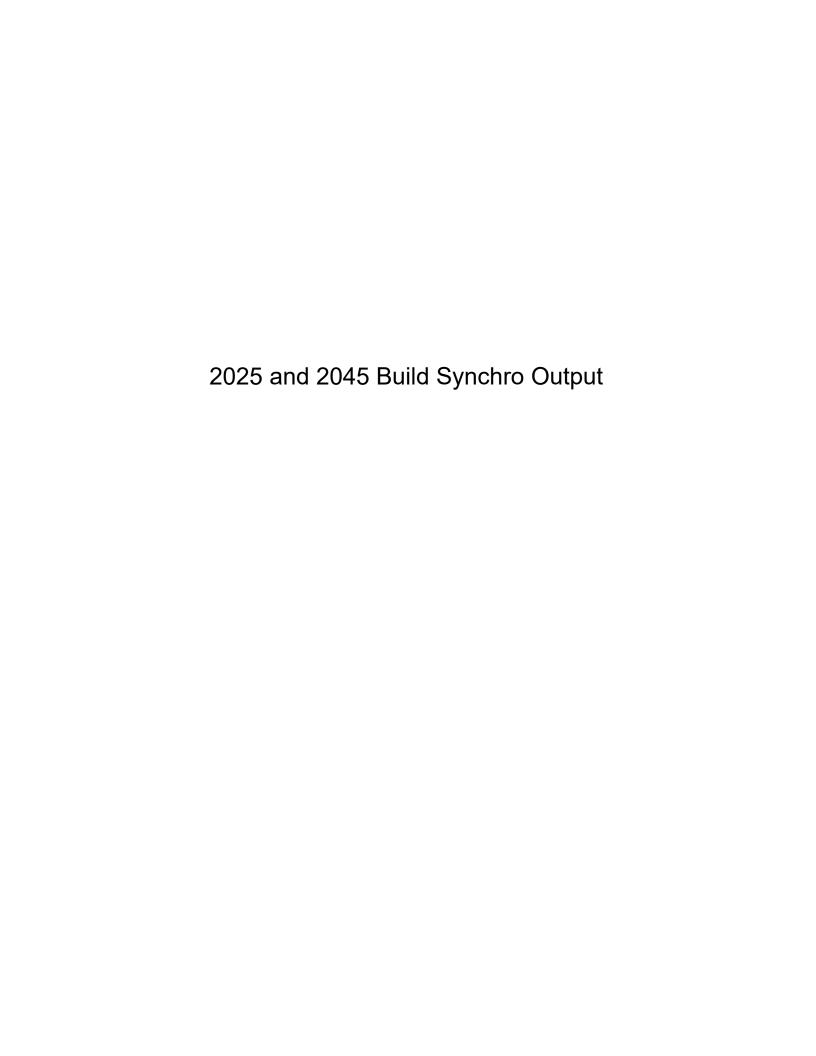
Queue shown is maximum after two cycles.

Splits and Phases: 1: Hagood Ave & Fishburne St



Intersection LOS: C

ICU Level of Service E



	۶	→	*	•	-	•	1	1	~	/	ţ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	र्स				77		† 1>		*	^	
Traffic Volume (vph)	502	463	0	0	0	216	0	1082	62	144	968	0
Future Volume (vph)	502	463	0	0	0	216	0	1082	62	144	968	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	0.88	1.00	0.95	0.95	1.00	0.95	1.00
Frt						0.850		0.992				
Flt Protected	0.950	0.995								0.950		
Satd. Flow (prot)	1698	1778	0	0	0	2538	0	3511	0	1703	3406	0
Flt Permitted	0.950	0.995								0.950		
Satd. Flow (perm)	1698	1778	0	0	0	2538	0	3511	0	1703	3406	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						32		6				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		244			426			123			320	
Travel Time (s)		5.5			9.7			2.8			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	1%	12%	12%	12%	2%	2%	2%	6%	6%	6%
Adj. Flow (vph)	546	503	0	0	0	235	0	1176	67	157	1052	0
Shared Lane Traffic (%)	10%											
Lane Group Flow (vph)	491	558	0	0	0	235	0	1243	0	157	1052	0
Turn Type	Split	NA				pm+ov		NA		Prot	NA	
Protected Phases	8	8				1		2		1	6	
Permitted Phases						8						
Detector Phase	8	8				1		2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0				8.0		5.0		8.0	5.0	
Minimum Split (s)	47.0	47.0				15.0		15.0		15.0	15.0	
Total Split (s)	48.0	48.0				19.0		53.0		19.0	72.0	
Total Split (%)	40.0%	40.0%				15.8%		44.2%		15.8%	60.0%	
Maximum Green (s)	41.0	41.0				12.5		47.0		12.5	66.0	
Yellow Time (s)	3.5	3.5				3.0		4.0		3.0	4.0	
All-Red Time (s)	3.5	3.5				3.5		2.0		3.5	2.0	
Lost Time Adjust (s)	-3.0	-3.0				-2.5		0.0		-2.5	-1.0	
Total Lost Time (s)	4.0	4.0				4.0		6.0		4.0	5.0	
Lead/Lag						Lag		Lead		Lag		
Lead-Lag Optimize?						, i		Yes				
Vehicle Extension (s)	4.0	4.0				4.0		3.0		4.0	3.0	
Recall Mode	None	None				None		C-Min		None	C-Min	
Walk Time (s)	9.0	9.0										
Flash Dont Walk (s)	31.0	31.0										
Pedestrian Calls (#/hr)	0	0										
Act Effct Green (s)	42.9	42.9				61.8		48.2		14.9	68.1	
Actuated g/C Ratio	0.36	0.36				0.52		0.40		0.12	0.57	
v/c Ratio	0.81	0.88				0.18		0.88		0.74	0.54	
Control Delay	46.6	52.6				13.4		42.0		61.6	6.9	
Queue Delay	0.0	0.0				0.0		0.0		0.0	0.3	
Total Delay	46.6	52.6				13.4		42.0		61.6	7.2	
LOS	D	D D				В		D		E	Α	
Approach Delay		49.8			13.4			42.0			14.2	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		D			В			D			В	
Queue Length 50th (ft)	353	415				44		469		129	101	
Queue Length 95th (ft)	503	#624				69		#605		m#213	113	
Internal Link Dist (ft)		164			346			43			240	
Turn Bay Length (ft)												
Base Capacity (vph)	622	651				1309		1416		213	1933	
Starvation Cap Reductn	0	0				0		0		0	300	
Spillback Cap Reductn	0	0				0		0		0	0	
Storage Cap Reductn	0	0				0		0		0	0	
Reduced v/c Ratio	0.79	0.86				0.18		0.88		0.74	0.64	

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 33.4
Intersection Capacity Utilization 77.6%

Intersection LOS: C ICU Level of Service D

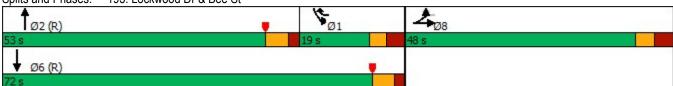
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 193: Lockwood Dr & Bee St



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				*	414		ሻሻ	^			^	7
Traffic Volume (vph)	0	0	0	872	125	90	423	841	0	0	211	170
Future Volume (vph)	0	0	0	872	125	90	423	841	0	0	211	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	275		100	0		0	0	,,,,,	100
Storage Lanes	0		0	1		0	2		0	0		1
Taper Length (ft)	25		-	25		-	25			25		_
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	0.97	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor		,,,,,,			1.00		0.98					0.97
Frt					0.979							0.850
Flt Protected				0.950	0.968		0.950					
Satd. Flow (prot)	0	0	0	1550	3085	0	3400	3505	0	0	3574	1599
Flt Permitted	•	-	-	0.950	0.968	-	0.950					
Satd. Flow (perm)	0	0	0	1550	3085	0	3331	3505	0	0	3574	1554
Right Turn on Red	•	•	Yes	1000		Yes			Yes			Yes
Satd. Flow (RTOR)					17							181
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		448			921			221			1596	
Travel Time (s)		10.2			20.9			5.0			36.3	
Confl. Peds. (#/hr)		10.2			20.0	3	11	0.0			00.0	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	2%	6%	6%	6%	3%	3%	3%	1%	1%	1%
Adj. Flow (vph)	0	0	0	928	133	96	450	895	0	0	224	181
Shared Lane Traffic (%)				50%	100	00	100	000			<u></u>	101
Lane Group Flow (vph)	0	0	0	464	693	0	450	895	0	0	224	181
Turn Type				Split	NA		Prot	NA			NA	Perm
Protected Phases				4	4		5	2			6	1 01111
Permitted Phases				<u> </u>			U				<u> </u>	6
Detector Phase				4	4		5	2			6	6
Switch Phase				'	•							
Minimum Initial (s)				7.0	7.0		12.0	12.0			7.0	7.0
Minimum Split (s)				49.0	49.0		36.5	36.5			30.0	30.0
Total Split (s)				53.0	53.0		36.5	67.0			30.5	30.5
Total Split (%)				44.2%	44.2%		30.4%	55.8%			25.4%	25.4%
Maximum Green (s)				46.0	46.0		29.0	59.5			24.5	24.5
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	3.5
All-Red Time (s)				3.5	3.5		4.0	4.0			2.5	2.5
Lost Time Adjust (s)				-3.0	-3.0		-3.5	-3.5			-2.0	-2.0
Total Lost Time (s)				4.0	4.0		4.0	4.0			4.0	4.0
Lead/Lag				4.0	٦.٥		Lead	4.0			Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				4.0	4.0		5.0	5.0			4.0	4.0
Recall Mode				None	None		None	C-Min			C-Min	C-Min
Walk Time (s)				8.0	8.0		9.0	9.0			8.0	8.0
Flash Dont Walk (s)				34.0	34.0		20.0	20.0			16.0	16.0
Pedestrian Calls (#/hr)				34.0	34.0		20.0	20.0			0.01	0.01
Act Effct Green (s)				47.1	47.1		26.9	64.9			34.0	34.0
. ,				0.39	0.39			0.54			0.28	
Actuated g/C Ratio							0.22				0.28	0.28
v/c Ratio				0.76	0.57		0.59	0.47			0.22	0.32

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay				39.7	28.9		41.6	22.1			36.9	7.7
Queue Delay				0.0	0.0		0.0	0.3			0.0	0.0
Total Delay				39.7	28.9		41.6	22.4			36.9	7.7
LOS				D	С		D	С			D	Α
Approach Delay					33.3			28.8			23.8	
Approach LOS					С			С			С	
Queue Length 50th (ft)				330	217		176	274			71	0
Queue Length 95th (ft)				428	251		m209	m346			122	63
Internal Link Dist (ft)		368			841			141			1516	
Turn Bay Length (ft)				275								100
Base Capacity (vph)				657	1319		920	1951			1050	584
Starvation Cap Reductn				0	0		0	467			0	0
Spillback Cap Reductn				0	0		0	0			0	0
Storage Cap Reductn				0	0		0	0			0	0
Reduced v/c Ratio				0.71	0.53		0.49	0.60			0.21	0.31

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 48 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 120

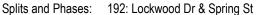
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 29.9 Intersection LOS: C
Intersection Capacity Utilization 86.4% ICU Level of Service E

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.





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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ર્ન	7		4		7	1>		7	1	
Traffic Volume (vph)	16	6	43	18	22	24	81	140	59	73	89	12
Future Volume (vph)	16	6	43	18	22	24	81	140	59	73	89	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	200		0	200		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.950			0.956			0.982	
Flt Protected		0.964			0.986		0.950			0.950		
Satd. Flow (prot)	0	1152	1016	0	1780	0	1612	1622	0	1736	1794	0
FIt Permitted		0.964			0.986		0.950			0.950		
Satd. Flow (perm)	0	1152	1016	0	1780	0	1612	1622	0	1736	1794	0
Link Speed (mph)		25			20			30			30	
Link Distance (ft)		759			512			571			617	
Travel Time (s)		20.7			17.5			13.0			14.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	59%	59%	59%	0%	0%	0%	12%	12%	12%	4%	4%	4%
Adj. Flow (vph)	17	6	45	19	23	25	85	147	62	77	94	13
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	23	45	0	67	0	85	209	0	77	107	0
Sign Control		Stop			Stop			Free			Free	

Area Type: Other

Control Type: Unsignalized
Intersection Capacity Utilization 35.3%
Analysis Period (min) 15

ICU Level of Service A

Synchro 10 Report Lanes, Volumes, Timings Page 3 Stantec

Intersection												
Int Delay, s/veh	5											
		EDT	EDD	14/51	\A/DT	14/00	ND	NET	NDD	051	057	000
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	40	ની	7	40	4	0.4	7	\$		7	4	40
Traffic Vol, veh/h	16	6	43	18	22	24	81	140	59	73	89	12
Future Vol, veh/h	16	6	43	18	22	24	81	140	59	73	89	12
Conflicting Peds, #/hr	0	0	0	0	0	0	_ 0	0	0	0	_ 0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	-	-	-	200	-	-	200	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	59	59	59	0	0	0	12	12	12	4	4	4
Mvmt Flow	17	6	45	19	23	25	85	147	62	77	94	13
Major/Minor	Minor2		_ [Minor1			Major1			Major2		
Conflicting Flow All	627	634	101	628	609	178	107	0	0	209	0	0
Stage 1	255	255	-	348	348	-	-	-	-		-	-
Stage 2	372	379	_	280	261	_		_		_	_	
Critical Hdwy	7.69	7.09	6.79	7.1	6.5	6.2	4.22			4.14	_	
Critical Hdwy Stg 1	6.69	6.09	0.13	6.1	5.5	0.2	7.22	_		T. 1T		
Critical Hdwy Stg 2	6.69	6.09	-	6.1	5.5	<u>-</u>	-	<u>-</u>	-	-	-	-
Follow-up Hdwy	4.031	4.531	3.831	3.5	3.5	3.3	2.308	_		2.236	_	
Pot Cap-1 Maneuver	332	335	852	405	416	870	1437	-	-	1350	-	-
•	658	614		672	638	010	1437	_	-	1000		-
Stage 1	547	526	-	748	704	-	-	-	-	-	-	-
Stage 2 Platoon blocked, %	54 <i>1</i>	526	- 1	140	104		1	-	-	-	_	-
	-		1 852		•	070		-	-	1250	-	-
Mov Cap-1 Maneuver		297		344	369	870	1437	-	-	1350	-	-
Mov Cap-2 Maneuver	280	297	-	344	369	-	-	-	-	-	-	-
Stage 1	619	579	-	632	600	-	-	-	-	-	-	-
Stage 2	480	495	-	660	664	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	12.6			14.2			2.2			3.3		
HCM LOS	В			В								
Minor Lane/Major Mvr	nt	NBL	NBT	NBR I	-Bl.n1	EBLn2V	VBL n1	SBL	SBT	SBR		
Capacity (veh/h)		1437	-	-	284	852	459	1350				
HCM Lane V/C Ratio		0.059	<u> </u>			0.053						
HCM Control Delay (s)	7.7	-		18.8	9.5	14.2	7.8	_	<u>-</u>		
HCM Lane LOS)	Α.		-	10.0 C	9.5 A	14.2 B	7.0 A		_		
HCM 95th %tile Q(veh	.)	0.2	-	-	0.3	0.2	0.5	0.2	-	-		
	1)	0.2	-	-	0.3	0.2	0.5	0.2	-	-		

HCM 6th TWSC Synchro 10 Report Stantec Synchro 10 Report Page 4

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	×	†	7	7	†	7		4	7	7	1€	
Traffic Volume (vph)	269	83	135	21	117	18	15	59	43	11	139	375
Future Volume (vph)	269	83	135	21	117	18	15	59	43	11	139	375
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		0	150		100	0		200	100		0
Storage Lanes	1		1	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.890	1100
Flt Protected	0.950			0.950				0.990		0.950		
Satd. Flow (prot)	1787	1881	1599	1736	1827	1553	0	1881	1615	1770	1658	0
Flt Permitted	0.420	1001	1000	0.701	.02.	1000		0.883	1010	0.706	1000	
Satd. Flow (perm)	790	1881	1599	1281	1827	1553	0	1678	1615	1315	1658	0
Right Turn on Red	700	1001	Yes	1201	1021	Yes		1010	Yes	1010	1000	Yes
Satd. Flow (RTOR)			142			121			133		150	100
Link Speed (mph)		35	172		35	121		30	100		30	
Link Opeca (mpn) Link Distance (ft)		1055			1105			617			759	
Travel Time (s)		20.6			21.5			14.0			17.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	1%	1%	1%	4%	4%	4%	0.93	0.93	0.93	2%	2%	2%
Adj. Flow (vph)	283	87	142	22	123	19	16	62	45	12	146	395
Shared Lane Traffic (%)	203	01	142	22	123	19	10	02	40	12	140	393
Lane Group Flow (vph)	283	87	142	22	123	19	0	78	45	12	541	0
		NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	U
Turn Type Protected Phases	pm+pt		Perm	Pellii	NA 8	Pelili	Pellii	2	Pellii	Pelili		
Permitted Phases	7	4	4	8	0	8	2		2	6	6	
Detector Phase	7	4	4	8	8	8	2	2	2	6	6	
	/	4	4	0	0	0	2	2		0	0	
Switch Phase	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	14.0	14.0	33.0	33.0	33.0	13.0	13.0	13.0	13.0	13.0	
Total Split (s)	24.0	59.0	59.0	35.0	35.0	35.0	31.0	31.0 34.4%	31.0	31.0	31.0	
Total Split (%)	26.7%	65.6%	65.6%	38.9%	38.9%	38.9%	34.4%		34.4%	34.4%	34.4%	
Maximum Green (s)	17.0	52.0	52.0	28.0	28.0	28.0	25.0	25.0	25.0	25.0	25.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	2.5	2.5	2.5	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0		6.0	6.0	6.0	6.0	
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes	0.0	0.0	Yes	Yes	Yes	0.0	0.0	0.0	0.0	0.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min	
Walk Time (s)				9.0	9.0	9.0						
Flash Dont Walk (s)				17.0	17.0	17.0						
Pedestrian Calls (#/hr)		A : =	A : =	0	0	0					4	
Act Effct Green (s)	34.7	34.7	34.7	11.4	11.4	11.4		42.3	42.3	42.3	42.3	
Actuated g/C Ratio	0.39	0.39	0.39	0.13	0.13	0.13		0.47	0.47	0.47	0.47	
v/c Ratio	0.58	0.12	0.20	0.14	0.53	0.06		0.10	0.05	0.02	0.63	
Control Delay	24.7	16.9	3.6	35.0	44.6	0.4		15.4	0.1	15.0	17.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	24.7	16.9	3.6	35.0	44.6	0.4		15.4	0.1	15.0	17.5	
LOS	С	В	Α	С	D	Α		В	Α	В	В	
Approach Delay		17.5			38.2			9.8			17.5	
Approach LOS		В			D			Α			В	
Queue Length 50th (ft)	113	31	0	11	66	0		24	0	4	163	
Queue Length 95th (ft)	164	56	32	32	115	0		55	0	14	303	
Internal Link Dist (ft)		975			1025			537			679	
Turn Bay Length (ft)	175			150		100			200	100		
Base Capacity (vph)	494	1086	983	398	568	566		788	829	618	858	
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Reduced v/c Ratio	0.57	0.08	0.14	0.06	0.22	0.03		0.10	0.05	0.02	0.63	

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 19.3 Intersection LOS: B
Intersection Capacity Utilization 62.8% ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: Hagood Ave & Fishburne St



	•	-	`		+	•	4	†	*	1	1	1
Lana Craun	EBL	EBT	EBR	₩BL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	T CDL		EDR	VVDL	VVDI		INDL		INDIX	SDL 1		SDR
Lane Configurations	342	4 234	0	0	0	435	0	↑ ↑ 916	34	6 9	↑↑ 1224	0
Traffic Volume (vph) Future Volume (vph)	342	234	0	0	0	435	0	916	34	69	1224	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	1900	0	1900	1900	0	1900	1900	0	250	1900	0
Storage Lanes	1		0	0		2	0		0	250		0
Taper Length (ft)	25		U	25		2	25		U	25		U
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	0.88	1.00	0.95	0.95	1.00	0.95	1.00
Frt	0.95	0.95	1.00	1.00	1.00	0.850	1.00	0.95	0.95	1.00	0.95	1.00
FIt Protected	0.950	0.990				0.000		0.995		0.950		
Satd. Flow (prot)	1681	1752	0	0	0	2787	0	3522	0	1770	3539	0
Flt Permitted	0.950	0.990	U	U	U	2101	U	3322	U	0.950	3333	U
Satd. Flow (perm)	1681	1752	0	0	0	2787	0	3522	0	1770	3539	0
Right Turn on Red	1001	1752	Yes	U	U	Yes	U	3322	Yes	1770	3333	Yes
Satd. Flow (RTOR)			163			98		4	163			163
Link Speed (mph)		30			30	90		30			30	
Link Distance (ft)		244			426			123			320	
Travel Time (s)		5.5			9.7			2.8			7.3	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	360	246	0.93	0.93	0.93	458	0.93	964	36	73	1288	0.93
Shared Lane Traffic (%)	17%	240	U	U	U	430	U	304	30	13	1200	U
Lane Group Flow (vph)	299	307	0	0	0	458	0	1000	0	73	1288	0
Turn Type	Split	NA	U	U	U	pm+ov	U	NA	U	Prot	NA	U
Protected Phases	8	8				1		2		1	6	
Permitted Phases	U	U				8		2			U	
Detector Phase	8	8				1		2		1	6	
Switch Phase	U	U				l I		2		ı	U	
Minimum Initial (s)	8.0	8.0				8.0		5.0		8.0	15.0	
Minimum Split (s)	47.0	47.0				15.0		15.0		15.0	20.0	
Total Split (s)	47.0	47.0				15.0		58.0		15.0	73.0	
Total Split (%)	39.2%	39.2%				12.5%		48.3%		12.5%	60.8%	
Maximum Green (s)	40.0	40.0				8.5		52.0		8.5	68.0	
Yellow Time (s)	3.5	3.5				3.0		4.0		3.0	3.5	
All-Red Time (s)	3.5	3.5				3.5		2.0		3.5	1.5	
Lost Time Adjust (s)	-3.0	-3.0				-2.5		0.0		-2.5	-1.0	
Total Lost Time (s)	4.0	4.0				4.0		6.0		4.0	4.0	
Lead/Lag	1.0	1.0				Lead		Lag		Lead	1.0	
Lead-Lag Optimize?						Loud		Yes		Loud		
Vehicle Extension (s)	4.0	4.0				4.0		3.0		4.0	3.0	
Recall Mode	None	None				None		C-Min		None	C-Min	
Walk Time (s)	9.0	9.0				140110		O IVIIII		140110	7.0	
Flash Dont Walk (s)	31.0	31.0									8.0	
Pedestrian Calls (#/hr)	0	0									0.0	
Act Effct Green (s)	31.6	31.6				49.5		60.5		13.8	80.4	
Actuated g/C Ratio	0.26	0.26				0.41		0.50		0.12	0.67	
v/c Ratio	0.20	0.20				0.38		0.56		0.12	0.54	
Control Delay	46.6	45.9				18.8		23.7		67.0	3.9	
Queue Delay	0.1	0.1				0.0		0.0		0.0	0.1	
Total Delay	46.7	46.0				18.8		23.7		67.0	4.1	
Total Dolay	70.7	+0.0				10.0		20.1		01.0	7.1	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	D	D				В		С		Е	Α	
Approach Delay		46.4			18.8			23.7			7.4	
Approach LOS		D			В			С			Α	
Queue Length 50th (ft)	218	224				105		275		60	67	
Queue Length 95th (ft)	289	293				127		404		m71	66	
Internal Link Dist (ft)		164			346			43			240	
Turn Bay Length (ft)										250		
Base Capacity (vph)	602	627				1208		1793		205	2370	
Starvation Cap Reductn	0	0				0		0		0	242	
Spillback Cap Reductn	28	29				47		0		0	0	
Storage Cap Reductn	0	0				0		0		0	0	
Reduced v/c Ratio	0.52	0.51				0.39		0.56		0.36	0.61	
Indone a chiana Cumana amu												

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.67

Intersection Signal Delay: 20.6 Intersection LOS: C
Intersection Capacity Utilization 68.9% ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 193: Lockwood Dr & Bee St



	۶	→	*	1	←	•	1	†	/	/	 	✓
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				*	414		ሻሻ	^			^	7
Traffic Volume (vph)	0	0	0	853	311	68	1010	381	0	0	364	371
Future Volume (vph)	0	0	0	853	311	68	1010	381	0	0	364	371
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	1000	0	275	1000	100	0	1000	0	0	1000	100
Storage Lanes	0		0	1		0	2		0	0		1
Taper Length (ft)	25		•	25		J	25		•	25		
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	0.97	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00	1.00	1.00	0.01	1.00	0.00	0.98	0.00	1.00	1.00	0.00	0.97
Frt					0.987		0.00					0.850
Flt Protected				0.950	0.974		0.950					0.000
Satd. Flow (prot)	0	0	0	1610	3255	0	3433	3539	0	0	3539	1583
Flt Permitted	0	U	U	0.950	0.974	O .	0.950	0000	U	· ·	0000	1000
Satd. Flow (perm)	0	0	0	1610	3255	0	3378	3539	0	0	3539	1539
Right Turn on Red	0	U	Yes	1010	0200	Yes	0070	0000	Yes	· ·	0000	Yes
Satd. Flow (RTOR)			100		9	100			100			196
Link Speed (mph)		30			30			30			30	100
Link Distance (ft)		448			921			221			1596	
Travel Time (s)		10.2			20.9			5.0			36.3	
Confl. Peds. (#/hr)		10.2			20.5	3	11	0.0			50.5	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0.93	0.33	0.33	898	327	72	1063	401	0.33	0.33	383	391
Shared Lane Traffic (%)	U	U	U	50%	JZ1	12	1003	701	U	U	303	331
Lane Group Flow (vph)	0	0	0	449	848	0	1063	401	0	0	383	391
Turn Type	U	U	U	Split	NA	U	Prot	NA	U	U	NA	Perm
Protected Phases				4	4		5	2			6	1 Cilli
Permitted Phases				7	7		3				U	6
Detector Phase				4	4		5	2			6	6
Switch Phase				7	7		3				U	U
Minimum Initial (s)				7.0	7.0		12.0	12.0			7.0	7.0
Minimum Split (s)				49.0	49.0		37.0	37.0			30.0	30.0
Total Split (s)				49.0	49.0		41.0	71.0			30.0	30.0
Total Split (%)				40.8%	40.8%		34.2%	59.2%			25.0%	25.0%
Maximum Green (s)				42.0	42.0		33.5	63.5			24.0	24.0
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	3.5
All-Red Time (s)				3.5	3.5		4.0	4.0			2.5	2.5
Lost Time Adjust (s)				-3.0	-3.0		-3.5	-3.5			-2.0	-2.0
Total Lost Time (s)				4.0	4.0		4.0	4.0			4.0	4.0
Lead/Lag				4.0	4.0		Lag	4.0			Lead	Lead
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				4.0	4.0		5.0	5.0			4.0	4.0
Recall Mode				None	None		None	C-Min			C-Min	C-Min
Walk Time (s)				8.0	8.0		9.0	9.0			8.0	8.0
Flash Dont Walk (s)				34.0	34.0		20.0	20.0			16.0	16.0
Pedestrian Calls (#/hr)				34.0	34.0		20.0	20.0			0.0	0.01
Act Effct Green (s)				42.6	42.6		39.5	69.4			25.8	25.8
()				0.36	0.36		0.33	0.58			0.22	0.22
Actuated g/C Ratio				0.36			0.33	0.56			0.22	
v/c Ratio					0.73							0.81
Control Delay				45.2	37.2		51.5	10.5			44.1	36.0

	•	→	7	1	•	*	1	†	1	1	Ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay				0.0	0.0		0.0	0.0			0.0	0.0
Total Delay				45.2	37.2		51.5	10.5			44.1	36.0
LOS				D	D		D	В			D	D
Approach Delay					40.0			40.3			40.0	
Approach LOS					D			D			D	
Queue Length 50th (ft)				328	298		~446	81			138	149
Queue Length 95th (ft)				472	376		#560	61			188	#306
Internal Link Dist (ft)		368			841			141			1516	
Turn Bay Length (ft)				275								100
Base Capacity (vph)				603	1226		1131	2045			766	486
Starvation Cap Reductn				0	0		0	0			0	0
Spillback Cap Reductn				0	0		0	0			0	0
Storage Cap Reductn				0	0		0	0			0	0
Reduced v/c Ratio				0.74	0.69		0.94	0.20			0.50	0.80

Area Type: Other

Cycle Length: 120
Actuated Cycle Length: 120

Offset: 80 (67%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay: 40.1 Intersection LOS: D
Intersection Capacity Utilization 90.2% ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 192: Lockwood Dr & Spring St



	•	-	*	1	•	•	1	†	1	-	↓	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ર્ન	7		4		7	1>		×	1>	
Traffic Volume (vph)	25	21	51	2	4	8	34	196	55	0	99	15
Future Volume (vph)	25	21	51	2	4	8	34	196	55	0	99	15
ldeal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	200		0	200		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.919			0.967			0.980	
Flt Protected		0.973			0.993		0.950					
Satd. Flow (prot)	0	1349	1179	0	1734	0	1626	1655	0	1845	1808	0
FIt Permitted		0.973			0.993		0.950					
Satd. Flow (perm)	0	1349	1179	0	1734	0	1626	1655	0	1845	1808	0
Link Speed (mph)		25			20			30			30	
Link Distance (ft)		759			512			612			617	
Travel Time (s)		20.7			17.5			13.9			14.0	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	37%	37%	37%	0%	0%	0%	11%	11%	11%	3%	3%	3%
Adj. Flow (vph)	27	22	54	2	4	9	36	209	59	0	105	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	49	54	0	15	0	36	268	0	0	121	0
Sign Control		Stop			Stop			Free			Free	

Area Type: Other

Control Type: Unsignalized
Intersection Capacity Utilization 27.4%
Analysis Period (min) 15

ICU Level of Service A

Synchro 10 Report Lanes, Volumes, Timings Page 3 Stantec

latara ati an												
Intersection	^											
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्स	7		4		*	1		*	1	
Traffic Vol, veh/h	25	21	51	2	4	8	34	196	55	0	99	15
Future Vol, veh/h	25	21	51	2	4	8	34	196	55	0	99	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	-	-	-	200	-	-	200	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	37	37	37	0	0	0	11	11	11	3	3	3
Mvmt Flow	27	22	54	2	4	9	36	209	59	0	105	16
Major/Minor	Minor2			Minor1			Major1		1	Major2		
Conflicting Flow All	430	453	113	462	432	239	121	0	0	268	0	0
Stage 1	113	113	-	311	311	200	141	-	-	200	-	-
Stage 2	317	340	_	151	121	_	_	_	_		_	_
Critical Hdwy	7.47	6.87	6.57	7.1	6.5	6.2	4.21	_	_	4.13	_	_
Critical Hdwy Stg 1	6.47	5.87	0.57	6.1	5.5	0.2	7.21	_	_	٦.١٥	_	_
Critical Hdwy Stg 1	6.47	5.87	_	6.1	5.5		_		_	_		
Follow-up Hdwy	3.833	4.333	3.633	3.5	4	3.3	2.299	_	_	2.227	_	_
Pot Cap-1 Maneuver	495	463	886	526	528	805	1425	_	_	1290	_	_
Stage 1	842	754	-	704	662	-	1720	_	_	1200	_	_
Stage 2	626	582	_	881	813		_	_	_	_		_
Platoon blocked, %	1	1	1	1	1		1	_	_		_	_
Mov Cap-1 Maneuver	477	451	886	466	515	805	1425	_	_	1290	_	_
Mov Cap-1 Maneuver	477	451	-	466	515	-	1720	_	_	1230	_	<u>-</u>
Stage 1	821	754	_	686	645		_	_	_	_		_
Stage 2	600	567	_	803	813	_	_	_	_	_	_	_
Olugo Z	000	001		000	010							
Annroach	EB			WB			NB			SB		
Approach										<u> 28</u>		
HCM Control Delay, s	11.4			10.8			0.9			U		
HCM LOS	В			В								
Minor Lane/Major Mvn	nt	NBL	NBT	NBR I	EBLn1	EBLn2V	VBLn1	SBL	SBT	SBR		
Capacity (veh/h)		1425	-	-	465	886	636	1290	-	-		
HCM Lane V/C Ratio		0.025	-	-	0.105	0.061	0.023	-	-	-		
HCM Control Delay (s))	7.6	-	-	13.7	9.3	10.8	0	-	-		
HCM Lane LOS		Α	-	-	В	Α	В	Α	-	-		
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.2	0.1	0	-	-		

HCM 6th TWSC Synchro 10 Report Stantec Synchro 10 Report Page 4

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	^	7	7	†	7		ર્ન	7	7	ĵ.	
Traffic Volume (vph)	298	212	45	8	69	21	40	170	134	18	64	367
Future Volume (vph)	298	212	45	8	69	21	40	170	134	18	64	367
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		0	150		100	0		200	100		0
Storage Lanes	1		1	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.872	
Flt Protected	0.950			0.950				0.990		0.950		
Satd. Flow (prot)	1787	1881	1599	1671	1759	1495	0	1826	1568	1787	1640	0
Flt Permitted	0.378			0.617				0.862		0.606		
Satd. Flow (perm)	711	1881	1599	1085	1759	1495	0	1590	1568	1140	1640	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			48			121			143		350	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1055			1060			617			758	
Travel Time (s)		20.6			20.6			14.0			17.2	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	1%	8%	8%	8%	3%	3%	3%	1%	1%	1%
Adj. Flow (vph)	317	226	48	9	73	22	43	181	143	19	68	390
Shared Lane Traffic (%)												
Lane Group Flow (vph)	317	226	48	9	73	22	0	224	143	19	458	0
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Detector Phase	7	4	4	8	8	8	2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	14.0	14.0	33.0	33.0	33.0	13.0	13.0	13.0	13.0	13.0	
Total Split (s)	20.0	53.0	53.0	33.0	33.0	33.0	37.0	37.0	37.0	37.0	37.0	
Total Split (%)	22.2%	58.9%	58.9%	36.7%	36.7%	36.7%	41.1%	41.1%	41.1%	41.1%	41.1%	
Maximum Green (s)	13.0	46.0	46.0	26.0	26.0	26.0	31.0	31.0	31.0	31.0	31.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	2.5	2.5	2.5	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0		6.0	6.0	6.0	6.0	
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min	
Walk Time (s)				9.0	9.0	9.0						
Flash Dont Walk (s)				17.0	17.0	17.0						
Pedestrian Calls (#/hr)				0	0	0						
Act Effct Green (s)	33.6	33.6	33.6	9.4	9.4	9.4		43.4	43.4	43.4	43.4	
Actuated g/C Ratio	0.37	0.37	0.37	0.10	0.10	0.10		0.48	0.48	0.48	0.48	
v/c Ratio	0.63	0.32	0.08	0.08	0.40	0.08		0.29	0.17	0.03	0.47	
Control Delay	25.8	19.6	4.6	36.5	43.5	0.6		18.1	3.7	16.5	6.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	25.8	19.6	4.6	36.5	43.5	0.6		18.1	3.7	16.5	6.6	
LOS	С	В	Α	D	D	Α		В	Α	В	Α	
Approach Delay		21.7			33.8			12.5			7.0	
Approach LOS		С			С			В			Α	
Queue Length 50th (ft)	123	82	0	5	40	0		81	0	6	36	
Queue Length 95th (ft)	183	128	19	18	79	0		144	34	20	115	
Internal Link Dist (ft)		975			980			537			678	
Turn Bay Length (ft)	175			150		100			200	100		
Base Capacity (vph)	505	961	840	313	508	517		765	829	549	971	
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Reduced v/c Ratio	0.63	0.24	0.06	0.03	0.14	0.04		0.29	0.17	0.03	0.47	

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 70

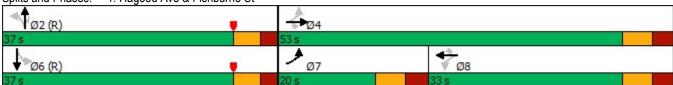
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 15.8 Intersection LOS: B
Intersection Capacity Utilization 76.2% ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: Hagood Ave & Fishburne St



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	ર્ન				77		†		7	^	
Traffic Volume (vph)	761	702	0	0	0	327	0	1640	94	218	1468	0
Future Volume (vph)	761	702	0	0	0	327	0	1640	94	218	1468	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	0.88	1.00	0.95	0.95	1.00	0.95	1.00
Frt						0.850		0.992				
Flt Protected	0.950	0.995								0.950		
Satd. Flow (prot)	1698	1778	0	0	0	2538	0	3511	0	1703	3406	0
Flt Permitted	0.950	0.995								0.950		
Satd. Flow (perm)	1698	1778	0	0	0	2538	0	3511	0	1703	3406	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						22		5				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		244			426			123			320	
Travel Time (s)		5.5			9.7			2.8			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	1%	1%	1%	12%	12%	12%	2%	2%	2%	6%	6%	2%
Adj. Flow (vph)	827	763	0	0	0	355	0	1783	102	237	1596	0
Shared Lane Traffic (%)	10%											
Lane Group Flow (vph)	744	846	0	0	0	355	0	1885	0	237	1596	0
Turn Type	Split	NA				pm+ov		NA		Prot	NA	
Protected Phases	8	8				1		2		1	6	
Permitted Phases						8						
Detector Phase	8	8				1		2		1	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0				8.0		5.0		8.0	5.0	
Minimum Split (s)	47.0	47.0				15.0		15.0		15.0	15.0	
Total Split (s)	60.0	60.0				19.0		71.0		19.0	90.0	
Total Split (%)	40.0%	40.0%				12.7%		47.3%		12.7%	60.0%	
Maximum Green (s)	53.0	53.0				12.5		65.0		12.5	84.0	
Yellow Time (s)	3.5	3.5				3.0		4.0		3.0	4.0	
All-Red Time (s)	3.5	3.5				3.5		2.0		3.5	2.0	
Lost Time Adjust (s)	-3.0	-3.0				-2.5		0.0		-2.5	-1.0	
Total Lost Time (s)	4.0	4.0				4.0		6.0		4.0	5.0	
Lead/Lag						Lead		Lag		Lead		
Lead-Lag Optimize?								Yes				
Vehicle Extension (s)	4.0	4.0				4.0		3.0		4.0	3.0	
Recall Mode	None	None				None		C-Min		None	C-Min	
Walk Time (s)	9.0	9.0										
Flash Dont Walk (s)	31.0	31.0										
Pedestrian Calls (#/hr)	0	0										
Act Effct Green (s)	56.0	56.0				75.0		65.0		15.0	85.0	
Actuated g/C Ratio	0.37	0.37				0.50		0.43		0.10	0.57	
v/c Ratio	1.18	1.28				0.28		1.24		1.39	0.83	
Control Delay	136.2	174.7				21.0		149.4		259.6	16.8	
Queue Delay	1.6	1.5				0.1		0.2		0.0	1.7	
Total Delay	137.8	176.2				21.1		149.6		259.6	18.5	
LOS	F	F				С		F		F	В	
Approach Delay		158.2			21.1			149.6			49.7	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		F			С			F			D	
Queue Length 50th (ft)	~911	~1097				104		~1202		~314	292	
Queue Length 95th (ft)	#1176	#1366				143		#1340		m#463	474	
Internal Link Dist (ft)		164			346			43			240	
Turn Bay Length (ft)												
Base Capacity (vph)	633	663				1280		1524		170	1930	
Starvation Cap Reductn	0	0				0		0		0	183	
Spillback Cap Reductn	119	125				179		66		0	0	
Storage Cap Reductn	0	0				0		0		0	0	
Reduced v/c Ratio	1.45	1.57				0.32		1.29		1.39	0.91	

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.39

Intersection Signal Delay: 111.6

Intersection LOS: F ICU Level of Service H

Intersection Capacity Utilization 111.6%

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

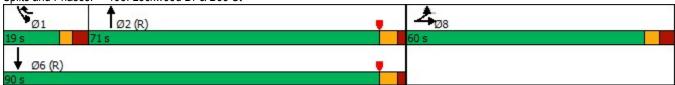
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 193: Lockwood Dr & Bee St



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				*	414		ሻሻ	^			^	7
Traffic Volume (vph)	0	0	0	1321	190	136	641	1274	0	0	320	258
Future Volume (vph)	0	0	0	1321	190	136	641	1274	0	0	320	258
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	1000	0	275	1000	100	0	1000	0	0	1000	100
Storage Lanes	0		0	1		0	2		0	0		1
Taper Length (ft)	25			25		•	25		V	25		•
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	0.97	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00	1.00	1.00	0.01	1.00	0.50	0.98	0.50	1.00	1.00	0.50	0.97
Frt					0.979		0.50					0.850
Flt Protected				0.950	0.968		0.950					0.000
Satd. Flow (prot)	0	0	0	1550	3085	0	3400	3505	0	0	3574	1599
Flt Permitted	U	U	U	0.950	0.968	U	0.950	0000	U	U	0014	1000
Satd. Flow (perm)	0	0	0	1550	3085	0	3327	3505	0	0	3574	1548
Right Turn on Red	U	U	Yes	1000	3003	Yes	0021	0000	Yes	U	0014	Yes
Satd. Flow (RTOR)			163		15	163			163			224
Link Speed (mph)		30			30			30			30	224
Link Distance (ft)		448			921			221			1596	
Travel Time (s)		10.2			20.9			5.0			36.3	
Confl. Peds. (#/hr)		10.2			20.5	3	11	5.0			30.3	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	2%	2%	2%	6%	6%	6%	3%	3%	3%	1%	1%	1%
, ,	2%	2%	270	1405	202	145	682	1355	0	0	340	274
Adj. Flow (vph)	U	U	U	50%	202	145	002	1333	U	U	340	214
Shared Lane Traffic (%)	0	0	0	702	1050	0	682	1355	0	0	340	274
Lane Group Flow (vph) Turn Type	U	U	U	Split	NA	U	Prot	NA	U	U	NA	Perm
Protected Phases				Split 4	4		5	2			6	reiiii
Permitted Phases				4	4		5				U	6
Detector Phase				4	4		5	2			6	6
Switch Phase				4	4		<u> </u>	Z			U	U
Minimum Initial (s)				7.0	7.0		12.0	12.0			7.0	7.0
. ,				49.0	49.0		37.0	37.0			30.0	30.0
Minimum Split (s)				81.0	81.0		38.0	69.0			31.0	31.0
Total Split (s)				54.0%	54.0%		25.3%	46.0%			20.7%	20.7%
Total Split (%)				74.0			30.5					
Maximum Green (s)					74.0			61.5			25.0	25.0
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	3.5
All-Red Time (s)				3.5	3.5		4.0	4.0			2.5	2.5
Lost Time Adjust (s)				-3.0	-3.0		-3.5	-3.5			-2.0	-2.0
Total Lost Time (s)				4.0	4.0		4.0	4.0			4.0	4.0
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?				4.0	4.0		Yes	<i>E</i> 0			Yes 4.0	Yes
Vehicle Extension (s)				4.0	4.0		5.0	5.0				4.0
Recall Mode				None	None		None	C-Min			C-Min	C-Min
Walk Time (s)				8.0	8.0		9.0	9.0			8.0	8.0
Flash Dont Walk (s)				34.0	34.0		20.0	20.0			16.0	16.0
Pedestrian Calls (#/hr)				0	0		0	0			0	0
Act Effct Green (s)				75.7	75.7		34.1	66.3			28.2	28.2
Actuated g/C Ratio				0.50	0.50		0.23	0.44			0.19	0.19
v/c Ratio				0.90	0.86dl		0.88	0.87			0.51	0.58

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay				49.4	29.8		49.5	34.2			58.1	17.4
Queue Delay				2.1	0.1		0.0	47.3			0.0	0.0
Total Delay				51.5	29.9		49.5	81.4			58.1	17.4
LOS				D	С		D	F			Е	В
Approach Delay					38.6			70.7			39.9	
Approach LOS					D			Е			D	
Queue Length 50th (ft)				656	401		326	659			160	42
Queue Length 95th (ft)				#950	481		m264	m523			214	139
Internal Link Dist (ft)		368			841			141			1516	
Turn Bay Length (ft)				275								100
Base Capacity (vph)				795	1590		773	1549			672	473
Starvation Cap Reductn				0	0		0	381			0	0
Spillback Cap Reductn				32	49		0	0			0	0
Storage Cap Reductn				0	0		0	0			0	0
Reduced v/c Ratio				0.92	0.68		0.88	1.16			0.51	0.58

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 64 (43%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 53.6 Intersection LOS: D
Intersection Capacity Utilization 117.5% ICU Level of Service H

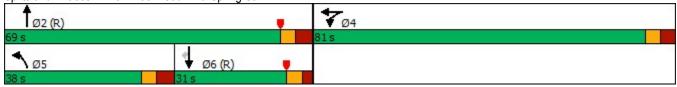
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

- m Volume for 95th percentile queue is metered by upstream signal.
- dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 192: Lockwood Dr & Spring St



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		ર્ન	7		4		×	7>		Y	f	
Traffic Volume (vph)	22	10	63	26	32	36	121	208	87	107	133	20
Future Volume (vph)	22	10	63	26	32	36	121	208	87	107	133	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	200		0	200		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.948			0.956			0.980	
Flt Protected		0.967			0.987		0.950			0.950		
Satd. Flow (prot)	0	1156	1016	0	1778	0	1612	1622	0	1736	1790	0
FIt Permitted		0.967			0.987		0.950			0.950		
Satd. Flow (perm)	0	1156	1016	0	1778	0	1612	1622	0	1736	1790	0
Link Speed (mph)		25			20			30			30	
Link Distance (ft)		759			512			529			617	
Travel Time (s)		20.7			17.5			12.0			14.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	59%	59%	59%	0%	0%	0%	12%	12%	12%	4%	4%	4%
Adj. Flow (vph)	23	11	66	27	34	38	127	219	92	113	140	21
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	34	66	0	99	0	127	311	0	113	161	0
Sign Control		Stop			Stop			Free			Free	

Area Type: Other

Control Type: Unsignalized
Intersection Capacity Utilization 44.2%
Analysis Period (min) 15

ICU Level of Service A

Synchro 10 Report Lanes, Volumes, Timings Page 3 Stantec

Intersection												
Int Delay, s/veh	6.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4	7		4		*	13		*	1,	
Traffic Vol. veh/h	22	10	63	26	32	36	121	208	87	107	133	20
Future Vol., veh/h	22	10	63	26	32	36	121	208	87	107	133	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	-	-	-	200	-	-	200	-	-
Veh in Median Storage	e,# -	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	59	59	59	0	0	0	12	12	12	4	4	4
Mvmt Flow	23	11	66	27	34	38	127	219	92	113	140	21
Major/Minor	Minor2		I	Minor1			Major1			Major2		
Conflicting Flow All	932	942	151	934	906	265	161	0	0	311	0	0
Stage 1	377	377	-	519	519	-	-	-	-	-	-	-
Stage 2	555	565	-	415	387	-	-	-	-	-	-	-
Critical Hdwy	7.69	7.09	6.79	7.1	6.5	6.2	4.22	-	-	4.14	-	-
Critical Hdwy Stg 1	6.69	6.09	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.69	6.09	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	4.031	4.531	3.831	3.5	4	3.3	2.308	-	-	2.236	-	-
Pot Cap-1 Maneuver	196	209	820	246	274	779	1379	-	-	1238	-	-
Stage 1	567	539	-	544	536	-	-	-	-	-	-	-
Stage 2	428	427	-	637	621	-	-	-	-	-	-	-
Platoon blocked, %	1	1	1	1	1		1	-	-		-	-
Mov Cap-1 Maneuver	144	173	820	187	226	779	1379	-	-	1238	-	-
Mov Cap-2 Maneuver	144	173	-	187	226	-	-	-	-	-	-	-
Stage 1	515	490	-	494	487	-	-	-	-	-	-	-
Stage 2	344	388	-	521	564	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	18.4			23.9			2.3			3.4		
HCM LOS	С			С								
Minor Lane/Major Mvn	nt	NBL	NBT	NBR I	EBL _{n1}	EBLn2V	VBLn1	SBL	SBT	SBR		
Capacity (veh/h)		1379	-	-	152	820	288	1238	-	-		
HCM Lane V/C Ratio		0.092	-	-	0.222	0.081	0.344	0.091	-	-		
HCM Control Delay (s)		7.9	-	-	35.3	9.8	23.9	8.2	-	-		
HCM Lane LOS		Α	-	-	Е	Α	С	Α	-	-		
HCM 95th %tile Q(veh)	0.3	-	-	0.8	0.3	1.5	0.3	-	-		

HCM 6th TWSC Synchro 10 Report Stantec Synchro 10 Report Page 4

Lane Configurations 1 7 1 7 1 7 1 7 1 7 1 1 1 1 1 1 1 1 1 2 2 3 87 64 16 207 Future Volume (vph) 400 124 200 31 174 26 23 87 64 16 207	557 557 1900 0 0
Traffic Volume (vph) 400 124 200 31 174 26 23 87 64 16 207 Future Volume (vph) 400 124 200 31 174 26 23 87 64 16 207 Ideal Flow (vphpl) 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900	557 1900 0 0
Traffic Volume (vph) 400 124 200 31 174 26 23 87 64 16 207 Future Volume (vph) 400 124 200 31 174 26 23 87 64 16 207 Ideal Flow (vphpl) 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900	557 1900 0 0
Future Volume (vph) 400 124 200 31 174 26 23 87 64 16 207 Ideal Flow (vphpl) 1900	557 1900 0 0
Ideal Flow (vphpl) 1900 1900 1900 1900 1900 1900 1900 190	1900 0 0
	0
	0
Storage Lanes 1 1 1 0 1 1	
Taper Length (ft) 25 25 25 25	1.00
Lane Util. Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.00
Frt 0.850 0.850 0.850 0.891	
Fit Protected 0.950 0.950 0.990 0.950	
Satd. Flow (prot) 1787 1881 1599 1736 1827 1553 0 1881 1615 1770 1660	0
Fit Permitted 0.384 0.673 0.696 0.682	
Satd. Flow (perm) 722 1881 1599 1230 1827 1553 0 1322 1615 1270 1660	0
Right Turn on Red Yes Yes Yes	Yes
Satd. Flow (RTOR) 211 121 133 179	100
Link Speed (mph) 35 35 30 30	
Link Distance (ft) 1055 1084 617 850	
Travel Time (s) 20.6 21.1 14.0 19.3	
\sqrt{f}	0.95
Heavy Vehicles (%) 1% 1% 1% 4% 4% 4% 0% 0% 0% 2% 2%	2%
Adj. Flow (vph) 421 131 211 33 183 27 24 92 67 17 218	586
Shared Lane Traffic (%)	000
Lane Group Flow (vph) 421 131 211 33 183 27 0 116 67 17 804	0
Turn Type pm+pt NA Perm Perm NA Perm Perm NA Perm Perm NA	
Protected Phases 7 4 8 2 6	
Permitted Phases 4 4 8 8 2 2 6	
Detector Phase 7 4 4 8 8 8 2 2 2 6 6	
Switch Phase	
Minimum Initial (s) 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0	
Minimum Split (s) 14.0 14.0 14.0 33.0 33.0 13.0 13.0 13.0 13.0 13.0	
Total Split (s) 15.0 48.0 48.0 33.0 33.0 42.0 42.0 42.0 42.0 42.0	
Total Split (%) 16.7% 53.3% 53.3% 36.7% 36.7% 46.7% 46.7% 46.7% 46.7% 46.7%	
Maximum Green (s) 8.0 41.0 41.0 26.0 26.0 26.0 36.0 36.0 36.0 36.0 36.0	
Yellow Time (s) 4.0 4.0 4.0 4.0 4.0 3.5 3.5 3.5 3.5	
All-Red Time (s) 3.0 3.0 3.0 3.0 3.0 2.5 2.5 2.5 2.5	
Lost Time Adjust (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	
Total Lost Time (s) 7.0 7.0 7.0 7.0 7.0 6.0 6.0 6.0 6.0	
Lead/Lag Lead Lag Lag	
Lead-Lag Optimize? Yes Yes Yes Yes	
Vehicle Extension (s) 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0	
Recall Mode None None None None C-Min C-Min C-Min C-Min C-Min	
Walk Time (s) 9.0 9.0 9.0	
Flash Dont Walk (s) 17.0 17.0	
Pedestrian Calls (#/hr) 0 0 0	
Act Effct Green (s) 29.3 29.3 29.3 14.3 14.3 47.7 47.7 47.7 47.7	
Actuated g/C Ratio 0.33 0.33 0.36 0.16 0.16 0.53 0.53 0.53 0.53	
v/c Ratio 1.28 0.21 0.32 0.17 0.63 0.08 0.17 0.07 0.03 0.83	
Control Delay 173.6 21.9 4.2 32.8 44.7 0.4 12.8 0.2 11.9 24.3	
Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	

	•	→	*	1	←	*	1	†	-	1	↓	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	173.6	21.9	4.2	32.8	44.7	0.4		12.8	0.2	11.9	24.3	
LOS	F	С	Α	С	D	Α		В	Α	В	С	
Approach Delay		100.7			38.2			8.2			24.0	
Approach LOS		F			D			Α			С	
Queue Length 50th (ft)	~277	54	0	16	98	0		32	0	4	291	
Queue Length 95th (ft)	#460	88	43	40	155	0		70	1	16	#602	
Internal Link Dist (ft)		975			1004			537			770	
Turn Bay Length (ft)	175			150		100			200	100		
Base Capacity (vph)	329	856	843	355	527	534		700	918	673	963	
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Reduced v/c Ratio	1.28	0.15	0.25	0.09	0.35	0.05		0.17	0.07	0.03	0.83	

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.28

Intersection Signal Delay: 53.4 Intersection LOS: D
Intersection Capacity Utilization 93.1% ICU Level of Service F

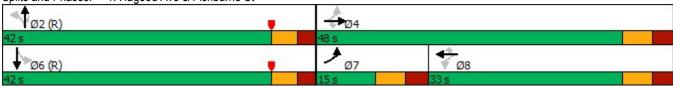
Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Hagood Ave & Fishburne St



Lane Configurations	1
Traffic Volume (vph) 519 355 0 0 0 660 0 1388 52 104 1856 Future Volume (vph) 519 355 0 0 0 660 0 1388 52 104 1856 Ideal Flow (vphpl) 1900	SBR
Traffic Volume (vph) 519 355 0 0 0 660 0 1388 52 104 1856 Future Volume (vph) 519 355 0 0 0 660 0 1388 52 104 1856 Ideal Flow (vphpl) 1900	
Future Volume (vph) 519 355 0 0 0 660 0 1388 52 104 1856 Ideal Flow (vphpl) 1900 1900 1900 1900 1900 1900 1900 190	0
Ideal Flow (vphpl)	0
Storage Length (ft) 0 0 0 0 0 250 Storage Lanes 1 0 0 2 0 0 1 Taper Length (ft) 25 25 25 25 25 Lane Util. Factor 0.95 0.95 1.00 1.00 1.00 0.88 1.00 0.95 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 0.95 1.00 0.95 0.95 0.95 1.00 0.95 0.95 0.95 0.95 0.95 1.00 0.95 0.995 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95	900
Storage Lanes	0
Taper Length (ft) 25 25 25 25 Lane Util. Factor 0.95 0.95 1.00 1.00 1.00 0.88 1.00 0.95 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 1.00 0.95 0.950 1.00 0.950 0.	0
Lane Util. Factor 0.95 0.95 1.00 1.00 1.00 0.88 1.00 0.95 0.95 1.00 0.95 Frt 0.850 0.990 0.990 0.95	
Frt 0.850 0.995 Filt Protected 0.950 0.990 0.950 0.950 Satd. Flow (prot) 1681 1752 0 0 0 2787 0 3522 0 1770 3539 Filt Permitted 0.950 0.990 0.950 0.9	1.00
Satd. Flow (prot) 1681 1752 0 0 0 2787 0 3522 0 1770 3539	
Satd. Flow (prot) 1681 1752 0 0 0 2787 0 3522 0 1770 3539 Flt Permitted 0.950 0.990 0.950 <td></td>	
Fit Permitted 0.950 0.990 0.950 Satd. Flow (perm) 1681 1752 0 0 0 2787 0 3522 0 1770 3539 Right Turn on Red Yes	0
Satd. Flow (perm) 1681 1752 0 0 0 2787 0 3522 0 1770 3539 Right Turn on Red Yes Yes <td></td>	
Right Turn on Red Yes	0
Satd. Flow (RTOR) 32 3 Link Speed (mph) 30 30 30 Link Distance (ft) 244 426 123 320 Travel Time (s) 5.5 9.7 2.8 7.3 Peak Hour Factor 0.95	Yes
Link Speed (mph) 30 30 30 30 Link Distance (ft) 244 426 123 320 Travel Time (s) 5.5 9.7 2.8 7.3 Peak Hour Factor 0.95 <	. 00
Link Distance (ft) 244 426 123 320 Travel Time (s) 5.5 9.7 2.8 7.3 Peak Hour Factor 0.95 <td></td>	
Travel Time (s) 5.5 9.7 2.8 7.3 Peak Hour Factor 0.95<	
Peak Hour Factor 0.95	
Adj. Flow (vph) 546 374 0 0 0 695 0 1461 55 109 1954 Shared Lane Traffic (%) 17% Lane Group Flow (vph) 453 467 0 0 695 0 1516 0 109 1954 Turn Type Split NA pm+ov NA Prot NA Protected Phases 8 8 1 2 1 6 Permitted Phases 8 8 8 8 8 8 8 8 8 8 9	0.95
Shared Lane Traffic (%) 17% Lane Group Flow (vph) 453 467 0 0 695 0 1516 0 109 1954 Turn Type Split NA pm+ov NA Prot NA Protected Phases 8 8 1 2 1 6 Permitted Phases 8 8 8 8 8 8 8 8 8 9	0.50
Lane Group Flow (vph) 453 467 0 0 0 695 0 1516 0 109 1954 Turn Type Split NA pm+ov NA Prot NA Protected Phases 8 8 1 2 1 6 Permitted Phases 8 8 8 8 8 8 8 8 9 <td< td=""><td>U</td></td<>	U
Turn TypeSplitNApm+ovNAProtNAProtected Phases81216Permitted Phases8	0
Protected Phases 8 8 1 2 1 6 Permitted Phases 8	U
Permitted Phases 8	
Delegion I delegate the control of t	
Switch Phase	
Minimum Initial (s) 8.0 8.0 8.0 5.0 8.0 15.0	
Minimum Split (s) 47.0 47.0 15.0 15.0 20.0	
Total Split (s) 53.0 53.0 18.0 79.0 18.0 97.0	
Total Split (%) 35.3% 35.3% 12.0% 52.7% 12.0% 64.7%	
Maximum Green (s) 46.0 46.0 11.5 73.0 11.5 92.0	
Yellow Time (s) 3.5 3.5 3.0 4.0 3.0 3.5	
All-Red Time (s) 3.5 3.5 2.0 3.5 1.5	
Lost Time Adjust (s) -3.0 -3.0 -2.5 0.0 -2.5 -1.0	
Total Lost Time (s) 4.0 4.0 4.0 4.0 4.0	
Lead/Lag Lead Lag Lead	
Lead-Lag Optimize? Yes	
Vehicle Extension (s) 4.0 4.0 4.0 3.0 4.0 3.0	
Recall Mode None None None C-Min None C-Min	
Walk Time (s) 9.0 9.0 7.0	
Flash Dont Walk (s) 31.0 31.0 8.0	
Pedestrian Calls (#/hr) 0 0 0	
Act Effct Green (s) 46.7 46.7 65.4 74.6 14.7 95.3	
Actuated g/C Ratio 0.31 0.31 0.44 0.50 0.10 0.64	
v/c Ratio 0.86 0.86 0.56 0.87 0.63 0.87	
Control Delay 65.8 64.3 31.8 40.2 96.9 11.1	
Queue Delay 27.0 23.5 0.4 27.6 0.0 6.8	
Total Delay 92.8 87.7 32.3 67.8 96.9 17.9	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	F	F				С		Е		F	В	
Approach Delay		90.2			32.3			67.8			22.0	
Approach LOS		F			С			Е			С	
Queue Length 50th (ft)	430	442				267		689		103	136	
Queue Length 95th (ft)	#615	#605				335		802		m124	m129	
Internal Link Dist (ft)		164			346			43			240	
Turn Bay Length (ft)										250		
Base Capacity (vph)	549	572				1235		1761		174	2247	
Starvation Cap Reductn	0	0				0		0		0	266	
Spillback Cap Reductn	109	113				184		320		0	0	
Storage Cap Reductn	0	0				0		0		0	0	
Reduced v/c Ratio	1.03	1.02				0.66		1.05		0.63	0.99	

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 48.8 Intersection LOS: D
Intersection Capacity Utilization 98.5% ICU Level of Service F

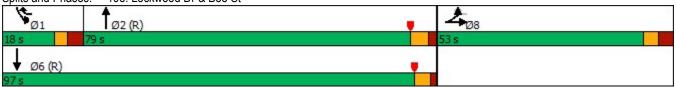
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 193: Lockwood Dr & Bee St



	٠	→	•	1	←	•	•	†	<u> </u>	\	Ţ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	LDL	LDI	LDIX	7	414	WDIX	ሻሻ	† †	HUIT	ODL	**	7
Traffic Volume (vph)	0	0	0	1294	472	103	1530	578	0	0	552	562
Future Volume (vph)	0	0	0	1294	472	103	1530	578	0	0	552	562
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	1900	0	275	1300	100	0	1300	0	0	1900	100
Storage Lanes	0		0	1		0	2		0	0		100
Taper Length (ft)	25		U	25		U	25		U	25		ı
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	0.95	0.97	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor	1.00	1.00	1.00	0.91	1.00	0.95	0.97	0.95	1.00	1.00	0.95	0.97
Frt					0.987		0.96					0.850
FIt Protected				0.950	0.967		0.050					0.000
	٥	0	٨			0	0.950	2520	٥	٥	2520	4500
Satd. Flow (prot)	0	0	0	1610	3255	0	3433	3539	0	0	3539	1583
Flt Permitted	0	0	^	0.950	0.974	0	0.950	2520	0	0	2520	4500
Satd. Flow (perm)	0	0	0	1610	3255	0	3380	3539	0	0	3539	1532
Right Turn on Red			Yes		-	Yes			Yes			Yes
Satd. Flow (RTOR)		00			7							84
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		448			921			221			1596	
Travel Time (s)		10.2			20.9			5.0			36.3	
Confl. Peds. (#/hr)						3	11					11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	1362	497	108	1611	608	0	0	581	592
Shared Lane Traffic (%)				50%								
Lane Group Flow (vph)	0	0	0	681	1286	0	1611	608	0	0	581	592
Turn Type				Split	NA		Prot	NA			NA	Perm
Protected Phases				4	4		5	2			6	
Permitted Phases												6
Detector Phase				4	4		5	2			6	6
Switch Phase												
Minimum Initial (s)				7.0	7.0		12.0	12.0			7.0	7.0
Minimum Split (s)				49.0	49.0		37.0	37.0			30.0	30.0
Total Split (s)				56.0	56.0		54.0	94.0			40.0	40.0
Total Split (%)				37.3%	37.3%		36.0%	62.7%			26.7%	26.7%
Maximum Green (s)				49.0	49.0		46.5	86.5			34.0	34.0
Yellow Time (s)				3.5	3.5		3.5	3.5			3.5	3.5
All-Red Time (s)				3.5	3.5		4.0	4.0			2.5	2.5
Lost Time Adjust (s)				-3.0	-3.0		-3.5	-3.5			-2.0	-2.0
Total Lost Time (s)				4.0	4.0		4.0	4.0			4.0	4.0
Lead/Lag							Lag				Lead	Lead
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				4.0	4.0		5.0	5.0			4.0	4.0
Recall Mode				None	None		None	C-Min			C-Min	C-Min
Walk Time (s)				8.0	8.0		9.0	9.0			8.0	8.0
Flash Dont Walk (s)				34.0	34.0		20.0	20.0			16.0	16.0
Pedestrian Calls (#/hr)				0	0		0	0			0	0
Act Effct Green (s)				52.0	52.0		50.0	90.0			36.0	36.0
Actuated g/C Ratio				0.35	0.35		0.33	0.60			0.24	0.24
v/c Ratio				1.22	1.16dl		1.41	0.29			0.68	1.37
Control Delay				156.3	116.3		222.9	11.5			56.7	218.4
Control Dolay				100.0	110.0		LLL.J	11.5			50.1	210.4

	•	-	*	1	•	•	1	†	-	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay				0.6	0.2		0.3	0.0			0.0	0.0
Total Delay				156.9	116.5		223.2	11.5			56.7	218.4
LOS				F	F		F	В			Е	F
Approach Delay					130.5			165.2			138.3	
Approach LOS					F			F			F	
Queue Length 50th (ft)				~895	~801		~1093	110			274	~701
Queue Length 95th (ft)				#1165	#950		#1223	m144			343	#942
Internal Link Dist (ft)		368			841			141			1516	
Turn Bay Length (ft)				275								100
Base Capacity (vph)				558	1132		1144	2123			849	431
Starvation Cap Reductn				0	0		76	0			0	0
Spillback Cap Reductn				42	43		0	0			0	0
Storage Cap Reductn				0	0		0	0			0	0
Reduced v/c Ratio				1.32	1.18		1.51	0.29			0.68	1.37

Area Type: Other

Cycle Length: 150
Actuated Cycle Length: 150

Offset: 144 (96%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.41

Intersection Signal Delay: 146.6 Intersection LOS: F
Intersection Capacity Utilization 119.0% ICU Level of Service H

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

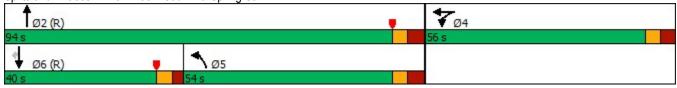
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

- m Volume for 95th percentile queue is metered by upstream signal.
- dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 192: Lockwood Dr & Spring St



	•	→	*	1	•	•	1	†	1	-	↓	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		र्स	7		4		×	7		×	7	
Traffic Volume (vph)	36	31	76	4	6	11	51	292	82	0	147	21
Future Volume (vph)	36	31	76	4	6	11	51	292	82	0	147	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		200	0		0	200		0	200		0
Storage Lanes	0		1	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.926			0.967			0.981	
Flt Protected		0.974			0.991		0.950					
Satd. Flow (prot)	0	1351	1179	0	1744	0	1626	1655	0	1845	1810	0
FIt Permitted		0.974			0.991		0.950					
Satd. Flow (perm)	0	1351	1179	0	1744	0	1626	1655	0	1845	1810	0
Link Speed (mph)		25			20			30			30	
Link Distance (ft)		759			512			526			617	
Travel Time (s)		20.7			17.5			12.0			14.0	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	37%	37%	37%	0%	0%	0%	11%	11%	11%	3%	3%	3%
Adj. Flow (vph)	38	33	81	4	6	12	54	311	87	0	156	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	71	81	0	22	0	54	398	0	0	178	0
Sign Control		Stop			Stop			Free			Free	

Area Type: Other

Control Type: Unsignalized
Intersection Capacity Utilization 42.2%
Analysis Period (min) 15

ICU Level of Service A

Synchro 10 Report Lanes, Volumes, Timings Page 3 Stantec

	۶	→	•	•	+	•	1	†	~	/	Ţ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	*	*	7	*	↑	7		र्स	7	*	1₃	
Traffic Volume (vph)	442	315	66	12	103	31	59	252	198	26	96	545
Future Volume (vph)	442	315	66	12	103	31	59	252	198	26	96	545
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	175		0	150		100	0		200	100		0
Storage Lanes	1		1	1		1	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.872	
Flt Protected	0.950			0.950				0.991		0.950		
Satd. Flow (prot)	1787	1881	1599	1671	1759	1495	0	1828	1568	1787	1640	0
Flt Permitted	0.397			0.559				0.704		0.533		
Satd. Flow (perm)	747	1881	1599	983	1759	1495	0	1299	1568	1003	1640	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			70			121			211		386	
Link Speed (mph)		35			35			30			30	
Link Distance (ft)		1055			1072			617			769	
Travel Time (s)		20.6			20.9			14.0			17.5	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	1%	1%	1%	8%	8%	8%	3%	3%	3%	1%	1%	1%
Adj. Flow (vph)	470	335	70	13	110	33	63	268	211	28	102	580
Shared Lane Traffic (%)												
Lane Group Flow (vph)	470	335	70	13	110	33	0	331	211	28	682	0
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	Perm	NA	Perm	Perm	NA	
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8		8	2		2	6		
Detector Phase	7	4	4	8	8	8	2	2	2	6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	14.0	14.0	33.0	33.0	33.0	13.0	13.0	13.0	13.0	13.0	
Total Split (s)	14.0	47.0	47.0	33.0	33.0	33.0	43.0	43.0	43.0	43.0	43.0	
Total Split (%)	15.6%	52.2%	52.2%	36.7%	36.7%	36.7%	47.8%	47.8%	47.8%	47.8%	47.8%	
Maximum Green (s)	7.0	40.0	40.0	26.0	26.0	26.0	37.0	37.0	37.0	37.0	37.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	2.5	2.5	2.5	2.5	2.5	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0		6.0	6.0	6.0	6.0	
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?	Yes			Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None	None	None	None	None	C-Min	C-Min	C-Min	C-Min	C-Min	
Walk Time (s)				9.0	9.0	9.0						
Flash Dont Walk (s)				17.0	17.0	17.0						
Pedestrian Calls (#/hr)				0	0	0						
Act Effct Green (s)	23.7	23.7	23.7	11.0	11.0	11.0		53.3	53.3	53.3	53.3	
Actuated g/C Ratio	0.26	0.26	0.26	0.12	0.12	0.12		0.59	0.59	0.59	0.59	
v/c Ratio	1.60	0.68	0.15	0.11	0.51	0.11		0.43	0.21	0.05	0.60	
Control Delay	310.1	36.2	6.6	35.2	44.6	0.8		13.5	2.1	9.7	7.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	

	•	→	*	1	←	*	1	†	1	1	Ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	310.1	36.2	6.6	35.2	44.6	0.8		13.5	2.1	9.7	7.9	
LOS	F	D	Α	D	D	Α		В	Α	Α	Α	
Approach Delay		180.9			34.6			9.0			7.9	
Approach LOS		F			С			Α			Α	
Queue Length 50th (ft)	~389	167	0	7	60	0		99	0	6	85	
Queue Length 95th (ft)	#555	240	28	23	106	0		185	31	20	217	
Internal Link Dist (ft)		975			992			537			689	
Turn Bay Length (ft)	175			150		100			200	100		
Base Capacity (vph)	294	836	749	283	508	517		768	1014	593	1128	
Starvation Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0		0	0	0	0	
Reduced v/c Ratio	1.60	0.40	0.09	0.05	0.22	0.06		0.43	0.21	0.05	0.60	

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.60

Intersection Signal Delay: 76.3 Intersection LOS: E
Intersection Capacity Utilization 102.2% ICU Level of Service G

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Hagood Ave & Fishburne St

