Lady's Island Corridor Study

BEAUFORT, SC



BEAUFORT
SOUTH CAROLINA

Stantec

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ENGINEERING

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1.0 Introduction

The purpose of the Lady's Island Corridor Study is to determine the most effective means of implementing the following improvements on Lady's Island:

- Improve congestion and reduce delays
- Improve safety
- Enhance bicycle and pedestrian accommodations

This traffic study intends to determine these means while maintaining the character of the area and enhancing the corridors with streetscape elements and lighting. Originally the study was focused on the two main corridors, US 21 Business / US 21 Sea Island Parkway and US 21 Lady's Island Drive / SC 802 Sams Point Road. In order to meet its stated goals, the scope was expanded to include several side streets as identified in this report.

The main intersection where these two corridors intersect is beginning to reach full capacity today in the AM and PM peak hours. With several developments underway, the intersection will likely exceed capacity by 2020. Long queues are expected to develop in the future, blocking access for side streets and driveways. Further to the east, a new Walmart development is under construction on US 21 Sea Island Parkway. Residential side streets in this area already have difficulties making left turns onto US 21. Future increases in the US 21 traffic volumes will increase the side street delays.

Traffic counts collected in 2016 show US 21 Business Sea Island Parkway has reached an ADT of 21,660 vehicles per day (vpd), while US 21 Lady's Island Drive has reached 26,000 vpd. These busy corridors are beginning to outgrow their existing two-way left-turn lanes. Raised medians, where feasible, can reduce right angle conflicts and potentially reduce right angle crashes.

This report documents the data collected, analyses performed, and conceptual improvements planned for the area. Concept plans have also been developed. They are provided separately.

2.0 Existing Conditions

2.1 PROJECT LOCATION

The project study area is approximately a total of 4.4 miles along US 21 Business Sea Island Parkway, SC 802 Sams Point Road, US 21 Lady's Island Drive, and US 21 Sea Island Parkway in Lady's Island. The study area along Sea Island Parkway begins at the Wood's Memorial Bridge and extends to the Chowan Creek Bridge. The study area along Sams Point Road begins at Miller Drive and extends to the intersection of Sea Island Parkway. The study area along Lady's Island Drive begins at the intersection of Sea Island Parkway and extends to Rue Du Bois. The study area is essentially divided into two distinct study sub areas by the natural marsh along Sea Island Parkway. The sub area to the west of the marsh incudes the main US 21 Business/SC 802 Intersection and numerous commercial developments. The sub area to the east of the marsh includes the airport, the Walmart development, and the remainder of the study area to the Chowan Creek Bridge. Figure 2.1 below shows the project study area.

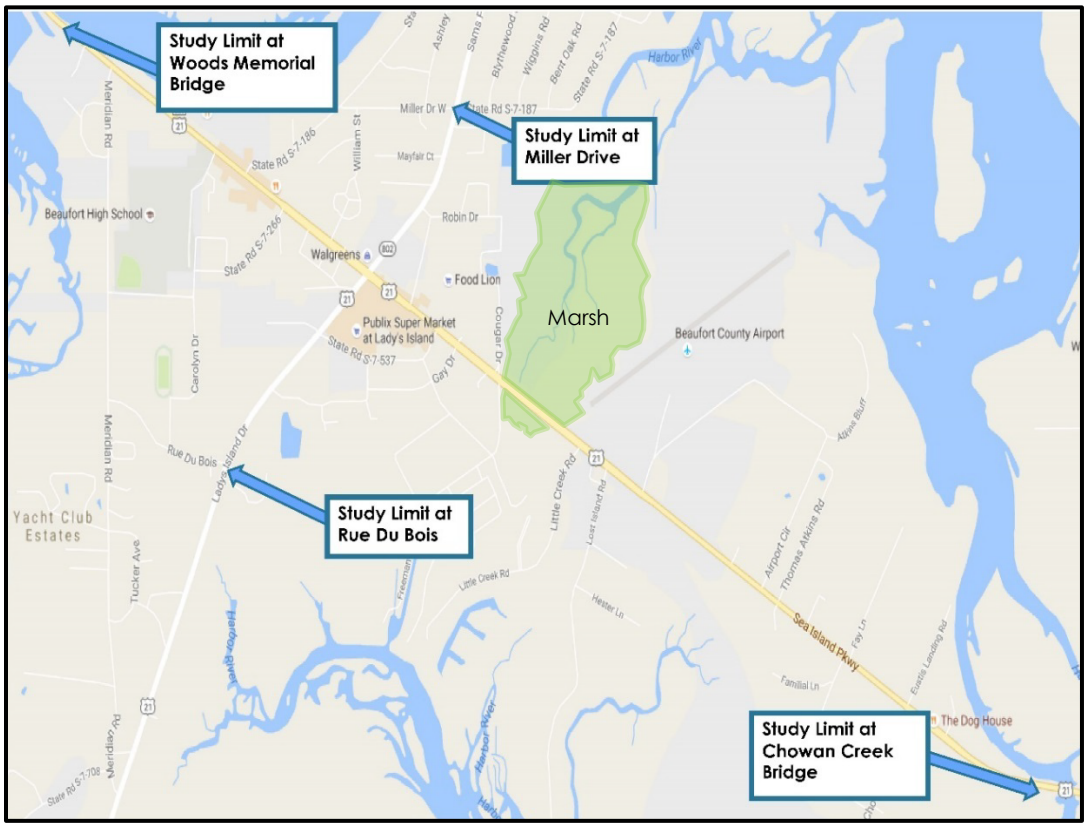


Figure 2.1 – Project Study Area

2.2 EXISTING ROADWAYS

US 21 Business/US 21 (Sea Island Parkway) is currently a three-lane roadway at the Wood's Memorial Bridge which widens out to a five-lane road near Youmans Drive. At the marsh, the roadway narrows to four lanes and at airport circle narrows down to a three-lane road. The 3.3 mile section of US 21 Business has a speed limit of 40 miles per hour (mph) from Wood's Memorial Bridge to near Lost Island Road, 50 mph from near Lost Island Road to a location near Hudson Drive, and 55 mph from near Hudson Drive to the study limit at Chowan Creek Bridge. The 2015 Annual Average Daily Traffic (AADT) for US 21B between Meridian Road and US 21 is 19,500 vehicles per day (vpd) and between US 21 and Chowan Creek Bluff is 17,800 vpd.

US 21 (Ladys Island Drive) is currently a five-lane roadway within the study limits. The 0.6 mile section of US 21 has a speed limit of 45 miles per hour (mph) from the intersection at US 21 Business to just north of Hazel Farm Road. From Hazel Farm Road to the southern study limit, the speed limit is 55 mph. The 2015 Annual Average Daily Traffic (AADT) for US 21 between US 21 Business and Meridian Road is 20,600 vehicles per day (vpd).

SC 802 (Sams Point Road) is currently a five-lane roadway within the study limits. The 0.5 mile section of US 21 has a speed limit of 45 miles per hour (mph) and the 2015 Annual Average Daily Traffic (AADT) for SC 802 between US 21 and Robin Drive is 20,000 vehicles per day (vpd) and between Robin Drive and Brickyard Point Road is 20,200 vpd.

Meridian Road The posted speed limit is 35 mph and the 2015 AADT is 2,000 vpd.

S-7-186 Sunset Boulevard The posted speed limit is 35 mph and the 2015 AADT is 3,000 vpd.

Youmans Drive The posted speed limit is 30 mph and the 2015 AADT is 900 vpd.

Sams Point Way The posted speed limit is 45 mph and the 2015 AADT is 2,600 vpd.

S-7-187 Miller Drive West The posted speed limit is 30 mph and the 2015 AADT is 1,450 vpd.

Several other roadways are included in this study and are listed on the following page.

The following roadways are all two-lane roadways with unknown AADTs that intersect US 21 Business, US 21, and SC 802 in the study area:

- ***Geechie Road***
- ***S-7-537 (Ferry Drive)***
- ***Cougar Drive***
- ***Airport Circle***
- ***Eustis Landing Road***
- ***Hazel Farm Road***
- ***Professional Village Circle***
- ***S-7-497 (Gay Drive)***
- ***Lost Island Road***
- ***Old Distant Island Road***
- ***Ashland Park Road***
- ***Rue Du Bois***

2.3 COUNT DATA

48-hour tube count data was collected just west of SC 802 and US 21 on US 21B and just south of US 21B on US 21, which is located near the center of the project limits, on September 7, 2016. Based on the tube count data, it was determined that the peak hours were 7:15 AM – 8:15 AM and 4:30 PM – 5:30 PM. Turning movement counts were conducted during these two peak hours at 20 locations along the corridor. Figure 2.2 on the following page shows the count locations. Count data is shown in Appendix A. The 2016 counts showed noticeable increases from SCDOT's 2015 count data. They showed 21,660 vehicles per day (vpd) for the US 21 Business Sea Island Parkway west of SC 802 and 26,000 vpd for US 21 Lady's Island Drive south of Sea Island Parkway. Seasonal impacts were also considered, with Saturday summer counts collected. The counts conducted in the summer considered 24-hour counts just west of SC 802 and US 21 on US 21B and just south of US 21B on US 21 and turning movement counts at the intersections of Sea Island Parkway& Professional Village Circle, Sea Island Parkway & Sams Point Road/Lady's Island Drive, Sea Island Parkway & Sams Point Way, Sea Island Parkway& Ferry Road, Sams Point Road & Sams Point Way, and Lady's Island Drive & Ferry Drive. The data showed that the weekday volumes during September were consistently higher than the Saturday summer traffic collected, thus the seasonal data was omitted in the final reporting herein for simplicity.

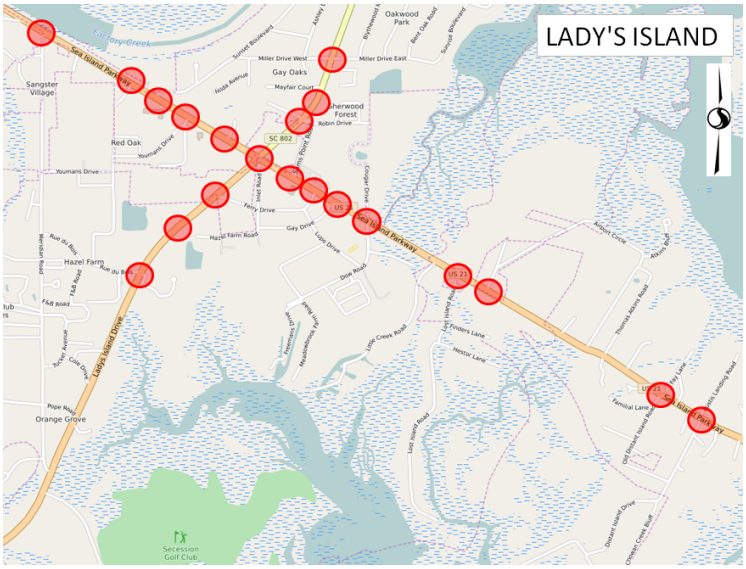


Figure 2.2 – Turning Movement Count Data Map

2.4 CRASH DATA

Crash data within the study area was obtained from the Department of Public Safety. Four years of data were obtained from January 1, 2012 to December 31, 2015. In total, there were 541 crashes in 4 years with two crashes involving at least one fatality and 180 crashes involving at least one injury. A summary of the crash data is provided below in Table 2.1.

Table 2.1 – Summary of Crash Data within Project Limits

Crashes by Injury Class	
Fatal Crashes	2
Injury Crashes	180
PDO Crashes	359
Total Crashes	541

Crashes by Manner of Collision	
Rear End	246
Angle	177
Sideswipe	41
Other	77
Total Crashes	541

Figure 2.3 below and Figure 2.4 on the following page are examples of the types of collisions experienced within the study limits. The segment shown in Figure 2.3 experiences a higher rate of rear-end collisions compared to the other types of collisions due to the stop and go congestion that is experienced in this area. Figure 2.4 shows the second most frequent type of collision in the study area, right angle collisions. At driveway locations and unsignalized intersections, angled collisions are experienced more frequently because of turning vehicles along high volume roads.



Figure 2.3 – Rear End Collisions Along Sea Island Parkway



Figure 2.4 – Angled Collisions on Sea Island Parkway Just West of SC 802

3.0 Projected Conditions

3.1 GROWTH RATES

Historic tube counts collected by SCDOT from 2008 – 2015 and tube counts collected by Stantec in 2016 along US 21 Business Sea Island Parkway and US 21 Lady's Island Drive show that the traffic volumes are increasing at a rate of 1.54% compounded annually over the past ten years. Table 3.1 shows AADTs and growth rates for the study area.

Table 3.1 – Lady's Island Area AADT and Growth Rates

Location		US 21 B (West of Sunset Blvd)	US 21 Lady's Island Dr (South of Sea Island Pkwy)	Average	
Station		137	221		
Year	2006	19,900	21,000	20,450	
	2007	19,400	19,700	19,550	
	2008	18,000	19,700	18,850	
	2009	17,100	19,700	18,400	
	2010	17,400	20,000	18,700	
	2011	17,100	20,000	18,550	
	2012	16,200	18,300	17,250	
	2013	16,500	18,600	17,550	
	2014	16,400	18,400	17,400	
	2015	19,500	20,600	20,050	
	2016	21,660	26,000	23,830	
Rates	2-Year	16.04%	20.65%	18.48%	17.03%
	3-Year	10.42%	13.26%	11.93%	10.73%
	4-Year	8.43%	10.52%	9.54%	8.41%
	5-Year	5.33%	6.00%	5.69%	5.14%
	6-Year	4.08%	5.00%	4.57%	4.12%
	7-Year	3.81%	4.57%	4.22%	3.76%
	8-Year	2.54%	4.00%	3.30%	2.97%
	9-Year	1.29%	3.55%	2.43%	2.22%
	10-Year	0.88%	2.38%	1.65%	1.54%
				LINEAR	EXPONENTIAL

3.2 FUTURE VOLUMES

The year 2038 is selected as the Design Year for this study, to give a reasonable long term view of the corridors. Considering the local roads along with US 21 and US 21 Business, a growth rate of 1.0% compounded annually is used to project future traffic volumes. This 1.0% growth rate is used for each intersection turning movement count along the corridor.

3.3 DEVELOPMENTS AND TRIP GENERATION

In an effort to project accurate future traffic, current proposed developments were incorporated in the future volume development as vested traffic. The proposed developments included were Walmart, Taco Bell, Harris Teeter, The Village at Oyster Bluff, Marina Village, Lady's Island Shopping Center redevelopment, and White Hall Plantation. The proposed developments' new trips were determined based off completed Traffic Impact Analyses (TIA) and the ITE's Trip Generation Manual, 9th Edition. The projected traffic was distributed throughout the study area according to the TIAs and existing volumes. These trips are shown in Appendix B.

4.0 Concept Development

4.1 NO BUILD ALTERNATE

As with any project, there is a "do nothing" option where you consider leaving the project in the current conditions for comparison to the proposed conditions. With no improvements to the study area in Lady's Island, traffic congestion will continue to compound each year.

4.2 BUILD CONCEPT

The proposed concept plan is provided separately. It includes the following elements:

Greater Street Connectivity. Seven new connections are shown to provide alternate routes for relief of congested intersections and safer means for difficult turning movements. These connections include:

1. Enhanced access on Miller Drive West and Sunset Boulevard to avoid the congested main US 21 / SC 802 intersection
2. Paving of Hazel Farm Road and enhanced access on Gay Drive to avoid the congested main intersection
3. Relocation of the Beaufort High School access road to align with Sunset Boulevard
4. Additional access for Lady's Island Middle School, to align with Gay Drive
5. Extension of Mayfair Court to Miller Street
6. Extension of Meadowbrook Drive to Dow Road
7. New frontage road to provide better access for Lost Island Road and Little Creek Road

Each of these connections provide their own individual benefits. The first two connections will provide congestion relief from the main US 21 / SC 801 intersection, which is expected to otherwise develop major queues and delays over time. Relocation of the Beaufort High School access road allows the existing traffic signal to be relocated to Sunset Boulevard, providing better access for Sunset Boulevard. The Lady's Island Shopping Center would be redeveloped separately by others to accommodate this new access road. The additional access for Lady's Island Middle School will allow it to use the new traffic signal at Gay Drive, providing safer access onto US 21. Extending Mayfair Court will allow its residents access to the new Miller Drive signal on SC 802 Sams Point Road. Extending Meadowbrook Drive to Dow Road will provide access for Tidewatch Business Center and other properties to the new Gay Drive signal. Lastly, the new

frontage road will allow Lost Island Road and Little Creek Road residents direct access to the new Walmart traffic signal. This will make access onto US 21 safer for them.

Traffic Signal Improvements. New traffic signals are shown at the following locations:

- US 21 Business Sea Island Parkway and Sunset Boulevard / Beaufort High School (relocation from current Beaufort High School access)
- SC 802 Sams Point Road and Miller Drive
- US 21 Lady's Island Drive and Hazel Farm Road
- US 21 Sea Island Parkway and Gay Drive

The five traffic signals in this area are to be interconnected to improve vehicular progression and reduce rear end collisions.

Improvements to the Main Intersection of US 21 and SC 802. Limited space is available to widen this congested intersection. However, there are two additions that can be implemented. As part of the Harris Teeter development, a new right turn lane will be constructed for the US 21 Sea Island Parkway eastbound approach. The concept plan for this study shows a new right turn lane for the SC 802 southbound approach. It will allow the southbound approach to have two through lanes and a dedicated right turn lane. This will be especially beneficial for the morning peak, where very heavy right turn volumes occur.

Extension of the US 21 Sea Island Parkway Eastbound Outside Through Lane. The outside through lane currently tapers down just prior to Lost Island Road. This creates a rear end crash potential for eastbound drivers turning right onto Little Creek Road and Lost Island Road. With the planned Walmart development, extending this outside through lane past the commercial area would provide both congestion and safety benefits. Along with this extension, the westbound right turns onto the two Walmart site driveways will be converted to through-right lanes. This will provide congestion relief for westbound traffic, particularly in the morning peak.

Raised Medians for Access Management and Safety Improvements. The medians are shown in the concept plan for parts of US 21 Business Sea Island Parkway, US 21 Sea Island Parkway, SC 802 Sams Point Road, and US 21 Lady's Island Drive. Careful consideration is given to alternate routes associated with the medians. For example, a new driveway onto the newly signalized Hazel Farm Road is shown for Sea Island Presbyterian Church and Mayfair Court is extended to provide alternate access. Also, the three-lane segment of US 21 Business Sea Island Parkway

does not include a raised median, as it would be too tight to accommodate any u-turn movements.

Traffic Calming Elements. With Sunset Boulevard, Miller Drive, and Gay Drive being designed as alternate routes to relieve the main intersection, it will be important to preserve their residential character. A previous study of Sunset Boulevard and Miller Drive by SCDOT found that those two streets did not meet policy criteria for traffic calming due to speed limits and functional class. Based on public input and the proposed connectivity, this study recognizes there will at least be a need for regulating flows. In the concept plan, these streets are designed to provide traffic flows that are largely uninterrupted, yet at low speeds. The intent is for these streets to flow freely, but at speeds that are safe for residents and pedestrians. The traffic calming elements include groups of landscaped areas along their shoulders that alternate with median chicanes. Also included are 25 mph speed limit postings. Combined, these elements should make drivers feel compelled to drive at a more consistent, slow speed. Lastly, roundabouts are included to avoid delays that would result from stop control and to better regulate traffic flows. The Hazel Farm Road / Gay Drive roundabout has the added benefit of accommodating street geometry needs without displacing any properties.

Enhanced Bicycle and Pedestrian Accommodations. Sidewalks already exist along both major routes and all approaches except for SC 802 Sams Point Road have dedicated bicycle lanes. However, the City of Beaufort wishes to enhance bicycle and pedestrian accommodations, pursuant to its Civic Master Plan. The concept plan shows the sidewalks to be widened, with multi-use paths on SC 802 to account for the lack of dedicated bicycle lanes. Side streets Sunset Boulevard, Miller Drive West, and Gay Drive also feature sidewalk/path enhancements.

Corridor Enhancements. Landscaping, irrigation, and lighting are planned to enhance the main corridors, as well as Sunset Boulevard, Miller Drive West, Gay Drive, and the Beaufort High School access road. These elements should significantly enhance the area.

4.3 OTHER ALTERNATES CONSIDERED

Other design alternates were originally considered under this study. Among them included:

Widening of US 21 Business / US 21 Sea Island Parkway and/or US 21 Lady's Island Drive / SC 802 Sams Point Road. With commercial buildings, parking lots and large oak trees close to the

existing through lanes, no feasible options existed for widening the main corridors. Impacts would have been very significant, so this alternate was omitted from selection.

Hazel Farm Road Extension. Extension through the undeveloped area between Gay Drive and Meadowbrook Drive was considered in lieu of using Gay Drive. This would have routed traffic away from residential streets. However, it would have also incurred significantly higher property impacts and resulted in poor land use, with essentially unusable acreage along its length.

Omitting the US 21 Sea Island Parkway Eastbound Through Lane Extension. Omitting this extension was considered because of the wetland impacts it will require. However, it was determined that the safety benefits outweighed the wetland impacts. The congestion relief it offers is also warranted.

Maintaining the Existing Beaufort High School Traffic Signal. This alternate was considered in case relocating the traffic signal should be disallowed. A right turn acceleration lane from Sunset Boulevard onto US 21 Business westbound could accommodate heavy AM traffic flows in that direction. However, right of way impacts would be significant. It would also not accommodate the much needed left turn from US 21 Business onto Sunset Boulevard.

Other Traffic Signal Locations. Several other intersections were considered for traffic signals. Among them included US 21 Lady's Island Drive at Ferry Drive, US 21 Lady's Island Drive at Rue Du Bois, US 21 Sea Island Parkway at Sams Point Way, US 21 Sea Island Parkway at Ferry Road, and SC 802 Sams Point Road at Sams Point Way. None of these intersections were deemed feasible for signal installation, due to low side street volumes, close proximity to other existing signals, and potential queueing issues.

5.0 Operations Analysis

The No Build Alternate and the Build Concept were compared for intersection delays. Detailed Synchro analyses were performed for each study area intersection. Using the existing and projected traffic volumes, intersection analyses were conducted for the study area intersections considering 2020 No Build conditions, 2038 No Build conditions, and 2038 Build conditions. This analysis was conducted using the Transportation Research Board's *Highway Capacity Manual 2000 (HCM 2000)* methodologies of the *Synchro*, Version 9 software for intersection analysis.

Intersection level of service (LOS) grades range from LOS A to LOS F, which are directly related to the level of control delay at the intersection and characterize the operational conditions of the intersection traffic flow. LOS A operations typically represent ideal, free-flow conditions where vehicles experience little to no delays, and LOS F operations typically represent poor, forced-flow (bumper-to-bumper) conditions with high vehicular delays, and are generally considered undesirable. Table 5.1 summarizes the *HCM 2010* control delay thresholds associated with each LOS grade for unsignalized and signalized intersections.

Table 5.1 – HCM 2010 LOS Criteria for Unsignalized and Signalized Intersections

Unsignalized Intersections	
LOS	**Control Delay Per Vehicle (seconds)**
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

Signalized Intersections	
LOS	**Control Delay Per Vehicle (seconds)**
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80

5.1 INTERSECTION LEVEL OF SERVICE AND DELAY RESULTS

An Analysis of the 2016 Existing, 2038 No Build, and 2038 Build conditions was conducted. Intersection levels of service (LOS) results for the AM Peak Hour are shown in Table 5.2 for each of the analysis scenarios and Table 5.4 for the PM Peak Hour. It should be noted that the overall intersection LOS and delay shown in bold is for signalized intersections. All other LOS and delays are for stop controlled side street approaches. Also, the "+" in the table symbolizes that there

are no turning volumes at the intersection. The results highlighted in green represent a letter grade improvement in the 2038 Build LOS for the alternate, whereas the results highlighted in red represent a letter grade worse.

Analysis of the 2016 Existing peak hour shows one approach operates at LOS F, one approach at LOS E, seven approaches/intersections at LOS D, and eleven approaches/intersections at LOS C or better. Overall, the corridor has moderate delays. Analysis of the 2038 No Build AM and PM peak hours shows that the corridor will experience high delays in the future if no improvements are implemented. Analysis of the 2038 Build Conditions shows marked improvement over the No Build conditions. Out of 23 intersections in the 2038 AM Peak Hour Build scenario, 1 intersection got worse than the 2038 AM Peak Hour No Build scenario, 17 intersections improved (green), and 5 intersections remain at the same letter grade LOS. Out of 23 intersections in the 2038 PM Peak Hour Build scenario, 1 intersection got worse than the 2038 PM peak hour No Build scenario, 16 intersections improved (green), and 6 intersections remain at the same letter grade LOS. The intersection with decreased LOS in the Build scenarios is US 21 Business at the High School driveway. Here, the traffic signal has been relocated to Sunset Boulevard and side street volumes are expected to be very low. A very small number of vehicles are expected to experience the reduced LOS shown. The delay reported is only for the worst case minor street and is not the delay experienced by Sea Island Parkway. The 2016 Existing results are shown in Appendix C, the 2038 No Build results are shown in Appendix D, and the 2038 Build results are shown in Appendix E.

The mini roundabouts were analyzed using *Sidra* software. Based on the projected future 2038 Peak Hour Build volumes, the roundabouts are expected to operate at an LOS A in both the AM and PM peak hour. The results are shown for the AM Peak in Table 5.3 on the following page and are shown for the PM Peak in Table 5.5 on page 17. The *Sidra* results are shown in Appendix F. With the intersection of Sunset Boulevard and Miller Drive being an existing intersection, future 2038 delays are also shown for two scenarios without the roundabout: (1) existing stop control conditions (stopping on the Miller Drive approach only) and (2) all way stop control implemented. The results show the roundabout option to provide significantly lower delays. Meanwhile, Hazel Farm Road and Gay Drive would essentially be a new intersection. The roundabout is needed at this intersection to provide roadway geometry that avoids displacing properties.

Table 5.2 – AM Peak Intersection LOS and Delay Results

Intersection	2016 No Build Peak Hour		2038 No Build Peak Hour		2038 Build Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
US 21 B (Sea Island Pky) & Meridian Rd	C	23.0 (NB)	F	110.7 (NB)	F	110.7 (NB)
US 21 B (Sea Island Pky) & Beaufort High School	**C**	**21.9**	**D**	**40.4**	F	98.1
US 21 B (Sea Island Pky) & Sunset Blvd	E	43.6 (SB)	F	N.A. (NB)	**E**	**59.0**
US 21 B (Sea Island Pky) & Youmans Dr	C	22.8 (SB)	E	47.8 (NB)	C	24.0 (SB)
US 21 B (Sea Island Pky) & Professional Village Cr	C	22.2 (SB)	F	96.2 (SB)	D	25.7 (SB)
US 21 (Sea Island Pky) & SC 802 (Sams Point Rd)	**D**	**54.9**	**F**	**147.9**	**D**	**42.2**
US 21 (Sea Island Pky) & Sams Point Way	C	17.2 (SB)	F	449.7 (NB)	C	20.2 (NB)
US 21 (Sea Island Pky) & Ferry Rd	D	31.3 (SB)	F	217.9 (SB)	C	21.8 (SB)
US 21 (Sea Island Pky) & Gay Dr	B	14.7 (NB)	D	25.4 (NB)	**B**	**16.9**
US 21 (Sea Island Pky) & Cougar Dr	F	62.2 (NB)	F	N.A. (SB)	-	+
US 21 (Sea Island Pky) & Lost Island Rd	B	14.5 (NB)	C	22.0 (NB)	B	12.4 (NB)
US 21 (Sea Island Pky) & Airport Circle	C	19.3 (SB)	**B**	**17.3**	**B**	**16.5**
US 21 (Sea Island Pky) & Old Distant Island Rd	C	20.9 (NB)	F	224.7 (NB)	F	224.7 (NB)
US 21 (Sea Island Pky) & Eustis Landing Road/Chowan Creek Bluff	**C**	**21.1**	**E**	**59.4**	**E**	**59.4**
US 21 (Lady's Island Drive) & Rue Du Bois	C	24.9 (EB)	F	74.9 (EB)	E	37.0 (EB)
US 21 (Lady's Island Drive) & Hazel Farm Rd	C	17.3 (WB)	D	26.4 (WB)	**B**	**14.3**
US 21 (Lady's Island Drive) & Ferry Dr	D	34.5 (WB)	F	284.4 (WB)	C	22.6 (WB)
SC 802 (Sams Point Road) & Sams Point Way	B	13.7 (WB)	C	22.9 (WB)	C	18.0 (WB)
SC 802 (Sams Point Road) & Ashland Park Rd	C	23.0 (EB)	E	43.6 (EB)	C	18.8 (EB)
SC 802 (Sams Point Road) & Miller Rd	D	33.8 (EB)	F	142.8 (EB)	**D**	**35.8**
US 21 B (Sea Island Pky) & Taco Bell	-	+	C	22.4 (NB)	B	12.5 (NB)
US 21 B (Sea Island Pky) & Walmart#3	-	+	E	45.5 (SB)	C	24.4 (SB)
US 21 B (Sea Island Pky) & Walmart#4	-	+	E	37.1 (SB)	C	16.9 (SB)

Table 5.3 – 2038 Build Intersection Alternatives AM Peak Hour LOS and Delay Results Comparison

AM Peak Hour LOS and Delay	Existing Stop Control		All Way Stop Control		Roundabout	
	2038 Build		2038 Build		2038 Build	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
Sunset Boulevard & Miller Drive	D	27.5 (Westbound)	E	36.0 (Westbound)	A	9.6
Hazel Farm Road & Gay Drive	-	-	-	-	A	8.3

Table 5.4 – PM Peak Intersection LOS and Delay Results

Intersection	2016 No Build Peak Hour		2038 No Build Peak Hour		2038 Build Peak Hour	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
US 21 B (Sea Island Pky) & Meridian Rd	D	28.2 (NB)	F	855.8 (SB)	F	855.8 (SB)
US 21 B (Sea Island Pky) & Beaufort High School	**C**	**20.8**	**D**	**45.0**	E	46.6 (SB)
US 21 B (Sea Island Pky) & Sunset Blvd	C	19.7 (SB)	F	N.A. (SB)	**D**	**52.6**
US 21 B (Sea Island Pky) & Youmans Dr	D	32.9 (SB)	F	N.A. (SB)	F	N.A. (SB)
US 21 B (Sea Island Pky) & Professional Village Cr	C	24.4 (SB)	F	223.9 (SB)	E	53.0 (SB)
US 21 (Sea Island Pky) & SC 802 (Sams Point Rd)	**D**	**53.9**	**F**	**153.9**	**E**	**69.6**
US 21 (Sea Island Pky) & Sams Point Way	C	15.9 (NB)	F	2667.8 (NB)	D	25.8 (NB)
US 21 (Sea Island Pky) & Ferry Rd	C	21.9 (SB)	F	126.1 (SB)	D	34.4 (SB)
US 21 (Sea Island Pky) & Gay Dr	C	20.1 (NB)	F	51.8 (NB)	**C**	**21.6**
US 21 (Sea Island Pky) & Cougar Dr	D	34.4 (NB)	F	325.5 (NB)	-	+
US 21 (Sea Island Pky) & Lost Island Rd	C	19.7 (NB)	F	55.0 (NB)	C	17.3 (NB)
US 21 (Sea Island Pky) & Airport Circle	B	13.3 (SB)	**D**	**46.6**	**C**	**24.0**
US 21 (Sea Island Pky) & Old Distant Island Rd	C	17.2 (NB)	D	32.6 (NB)	D	32.6 (NB)
US 21 (Sea Island Pky) & Eustis Landing Road/Chowan Creek Bluff	**C**	**20.1**	**E**	**75.7**	**E**	**75.7**
US 21 (Lady's Island Drive) & Rue Du Bois	D	25.0 (WB)	F	89.6 (WB)	F	81.4 (WB)
US 21 (Lady's Island Drive) & Hazel Farm Rd	D	27.1 (WB)	F	57.2 (WB)	**B**	**14.1**
US 21 (Lady's Island Drive) & Ferry Dr	F	53.0 (WB)	F	744.2 (WB)	C	24.7 (WB)
SC 802 (Sams Point Road) & Sams Point Way	D	30.5 (WB)	F	287.5 (WB)	F	125.0 (WB)
SC 802 (Sams Point Road) & Ashland Park Rd	C	18.1 (EB)	E	35.3 (EB)	C	16.8 (EB)
SC 802 (Sams Point Road) & Miller Rd	E	40.5 (WB)	F	183.8 (WB)	**C**	**25.7**
US 21 B (Sea Island Pky) & Taco Bell	-	+	F	53.0 (NB)	C	17.0 (NB)
US 21 B (Sea Island Pky) & Walmart#3	-	+	F	N.A. (SB)	C	17.9 (SB)
US 21 B (Sea Island Pky) & Walmart#4	-	+	C	21.1 (SB)	B	13.4 (SB)

Table 5.5 – 2038 Build Intersection Alternatives PM Peak Hour LOS and Delay Results Comparison

PM Peak Hour LOS and Delay	Existing Stop Control		All Way Stop Control		Roundabout	
	2038 Build		2038 Build		2038 Build	
	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
Sunset Boulevard & Miller Drive	C	19.5 (Westbound)	C	20.3 (Northbound)	A	8.6
Hazel Farm Road & Gay Drive	-	-	-	-	A	8.2

5.2 NEW TRAFFIC SIGNALS

The 2038 Build Concept includes recommendations regarding traffic signals along the corridors. Three new traffic signals are recommended: one at the intersections of Sams Point Road and Miller Drive, one at Sea Island Parkway and Gay Drive, and one at Lady's Island Dive and Hazel Farm Road. One traffic signal on US 21 Sea Island Parkway is recommended to be relocated from the current Beaufort High School Access Road intersection to the Sunset Boulevard intersection to accommodate Sunset Boulevard traffic. The high school's main entrance will be relocated to align with Sunset Drive and the new signal. These signals will facilitate traffic in the future to utilize the alternative routes proposed in the concept plan. They are currently scoped to include mast arms to match the streetscape enhancements.

Based on a review of the proposed traffic signals, the AM and PM peak hours whose volumes were counted are expected to meet the *Manual of Uniform Traffic Control Devices*' (MUTCD's) one-hour, four-hour, and eight-hour warrants. Hours beyond the AM and PM peaks have not been counted. Based on anticipated traffic patterns, the four-hour warrant is likely to be met at all signals. Some intersections may meet the eight-hour warrant; however, this is difficult to predict.

Currently there are no funds for improvements. By the time any construction can occur, key developments identified, such as Walmart, Harris Teeter, etc., will likely be completed. Thus volumes will be lower than the 2038 turning movement counts projected, but not significantly lower. This study anticipates that by the time these signals can be funded and installed with roadway improvements, they will be warranted. Additional signal warrant analysis may be warranted during the design phase. Like this study, it would need to account for the latent turning movement demand that will exist but not necessarily show up in the volume counts due to difficulties in making these turns without a traffic signal.

6.0 Phases for Improvements

This study recognizes that the improvements will need to be constructed in phases, as individual projects. For planning and budgeting purposes, this study separates the proposed improvements into nine distinct improvement projects. These individual projects are listed below. The pages that follow provide descriptions for each project, with opinions of probable costs.

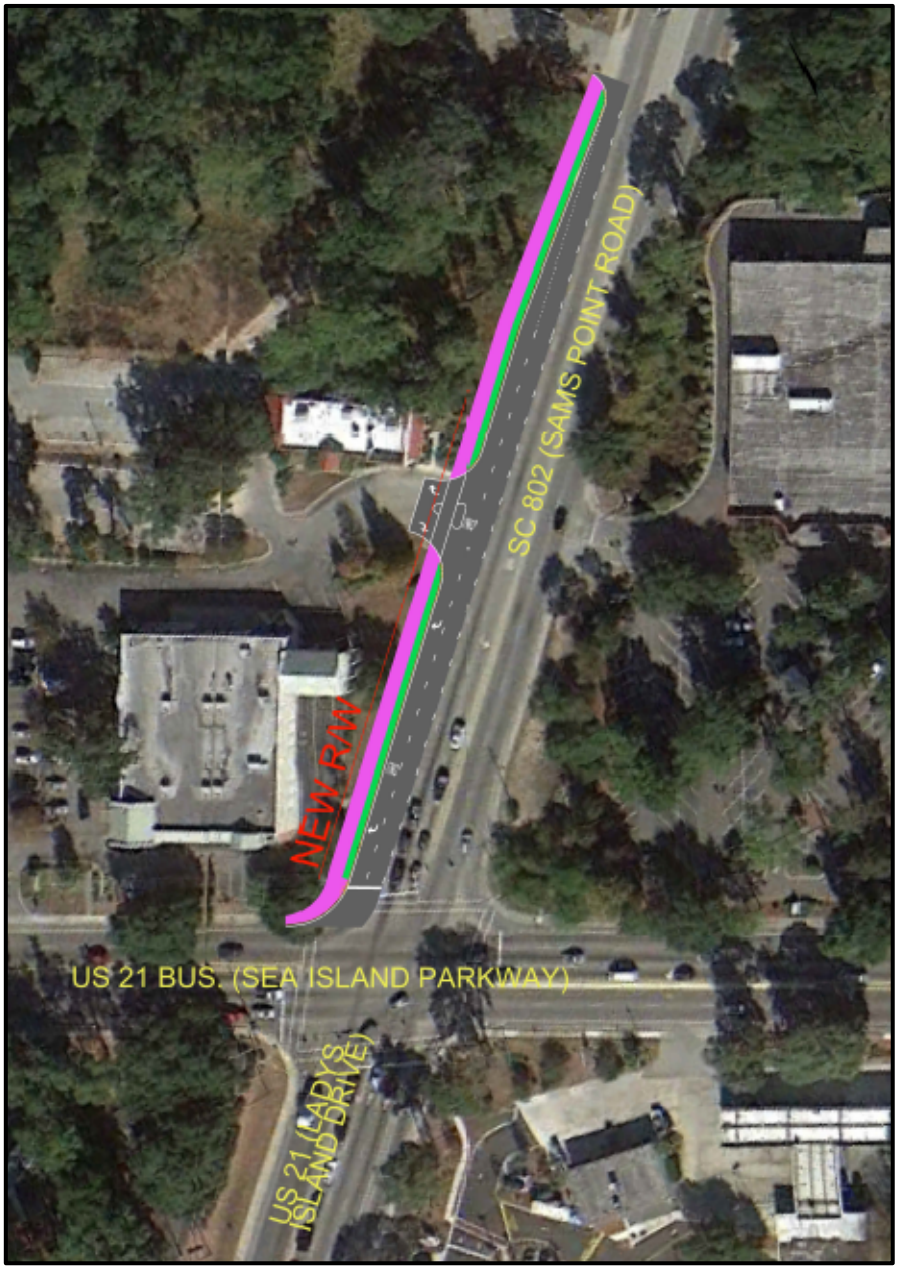
1. SC 802 Sams Point Road Right Turn Lane
2. Hazel Farm Road and S-7-497 Gay Drive
3. New Lady's Island Middle School Access
4. S-7-186 Sunset Boulevard and S-7-187 Miller Drive West
5. Beaufort High School Access Realignment
6. US 21 Business, US 21, and SC 802 Mainline Improvements
7. Meadowbrook Drive Extension
8. Mayfair Court Extension
9. US 21 Airport Area and Frontage Road

Each individual project provides its own specific benefits. Normally, the projects would be prioritized based on order of need. For Lady's Island, prioritization of these projects will depend somewhat on availability. For example, the Beaufort High School Access Realignment will require redevelopment of the adjacent shopping center.

It is not possible to precisely delineate the limits of each individual project because the elements of each project will depend partially on what elements have already been completed. In other words, the individual projects are somewhat interdependent of each other. For example, Hazel Farm Road and S-7-497 Gay Drive improvements will require turn lane / median improvements to Sea Island Parkway and Lady's Island Drive. The extent of those improvements will depend on whether the Hazel Farm / Gay Drive improvements begin first or the Sea Island Parkway and Lady's Island Drive improvements begin first. So the limits and costs for each individual project will likely change over time based on scheduling, but the overall totals should not change significantly.

6.1 SC 802 SAMS POINT ROAD TURN LANE

This project would include addition of the right turn lane at SC 802 (Sams Point Road) and US 21 Business. The dedicated right turn lane would open the existing right turn lane for conversion to a thru lane at the signal. This would benefit the intersection by providing relief for the heavy morning peak right turn movement and capacity for the through movement. The right turn is a good candidate for initial construction and can proceed the other projects. Upgrading the US 21 / SC 802 traffic signal to include mast arms would also be accomplished with this project.



SC 802 SAMS POINT TURN LANE					
SECTION	**ITEM**	**QUANTITY**	**UNIT**	**UNIT PRICE**	**NET PRICE**
1031000	MOBILIZATION	1.000	LS	$30,000.00	$30,000.00
2027000	REM.& DISP.OF EXISTING CONC.	10.000	CY	$29.00	$290.00
2031200	SITE EXCAVATION	1.000	LS	$65,000.00	$65,000.00
3100310	HOT MIX ASPHALT BASE COURSE - TYPE A	180.000	TON	$85.00	$15,300.00
4011004	LIQUID ASPHALT BINDER PG64-22	25.000	TON	$750.00	$18,750.00
4013200	MILLING EXISTING ASPHALT PAVEMENT 2.0"	1,098.000	SY	$19.00	$20,862.00
4020320	HOT MIX ASPHALT INTERMEDIATE COURSE TYPE B	60.000	TON	$90.00	$5,400.00
4030320	HOT MIX ASPHALT SURFACE COURSE TYPE B	170.000	TON	$105.00	$17,850.00
7203210	CONCRETE CURB AND GUTTER(2'-0") VERTICAL FACE	580.000	LF	$21.00	$12,180.00
7204100	CONCRETE SIDEWALK(4" UNIFORM)	598.000	SY	$54.00	$32,292.00
7209000	PEDESTRIAN RAMP CONSTRUCTION	50.000	SY	$170.00	$8,500.00
	TRAFFIC CONTROL	1.000	LS	$35,000.00	$35,000.00
	PAVEMENT MARKINGS	1.000	LS	$10,000.00	$10,000.00
	EROSION CONTROL	1.000	LS	$12,000.00	$12,000.00
	DRAINAGE	1.000	LS	$80,400.00	$80,400.00
	TRAFFIC SIGNAL UPGRADES WITH MAST ARMS	1.000	LS	$140,000.00	$140,000.00
				CONSTRUCTION COST=	$503,824.00
				PRELIMINARY ENGINEERING =	$55,000.00
				REIMBURSABLE UTILITY RELOCATION=	$40,000.00
				PERMITTING=	$500.00
				CONSTRUCTION OVERSIGHT=	$35,000.00
				SUBTOTAL =	$634,324.00
				CONTINGENCIES AT 20% =	$126,864.80
				TOTAL PROJECT COST =	**$761,188.80**

NOTES:

1. PROJECT COST EXCLUDES COSTS FOR OBTAINING RIGHT OF WAY AND PERMISSIONS/EASEMENTS.
2. COSTS FOR REIMBURSABLE UTILITY RELOCATIONS AND PERMITTING ARE HIGHLY CONCEPTUAL. THEY ARE PROVIDED FOR PLANNING PURPOSES ONLY.
3. ALL COSTS ARE IN 2017 DOLLARS.

6.2 HAZEL FARM ROAD AND S-7-497 GAY DRIVE

The Hazel Farm Road and S-7-497 Gay Drive project would include paving of Hazel Farm Road, improvements to Gay Drive, construction of the roundabout, installation of new traffic signals at each end, and signal interconnection with the US 21 / SC 802 signal. Upgrading these roads would provide beneficial street connectivity, increased pedestrian and bike safety, and congestion relief for the main intersection. With new signal implementation, this project is interdependent with improvements to mainline SC 802/US 21 Bus (Sea Island Parkway) and alignment of the new Lady's Island Middle School Access project. Addition of tune lanes, realignment of the middle school access, and median work to provide access management is needed at the connection of Hazel Farm at SC 802 and Gay Drive at US 21 Bus (Sea Island Parkway) to provide the full benefit of the signal interconnection.



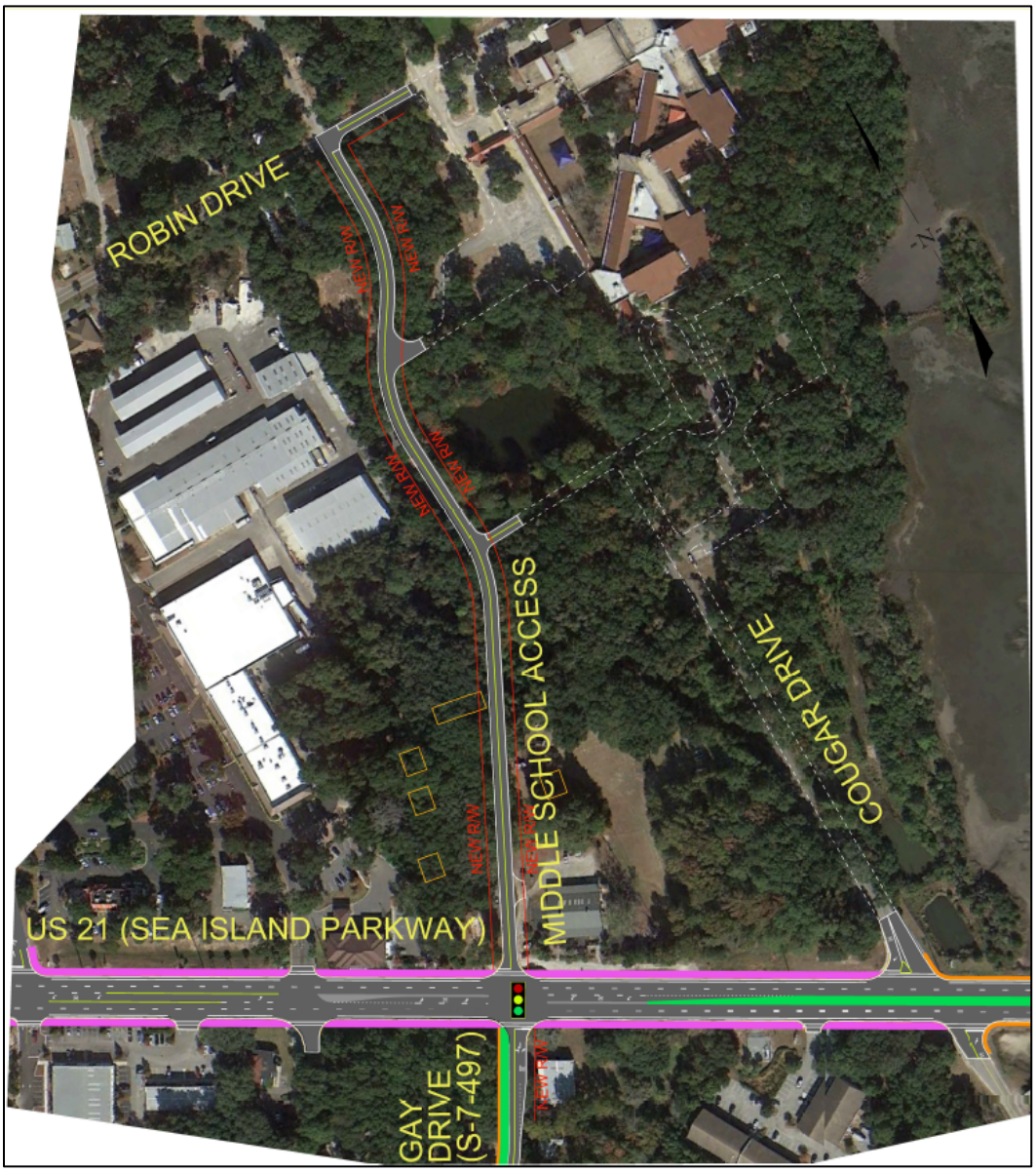
HAZEL FARM ROAD AND S-7-497 GAY DRIVE					
SECTION	**ITEM**	**QUANTITY**	**UNIT**	**UNIT PRICE**	**NET PRICE**
1031000	MOBILIZATION	1.000	LS	$120,000.00	$120,000.00
2025000	REM.&DISP.OF EXIST ASPH. PVMT.	1,335.000	SY	$35.00	$46,725.00
2031200	SITE EXCAVATION (INCLUDING DET. POND)	1.000	LS	$450,000.00	$450,000.00
3100310	HOT MIX ASPHALT BASE COURSE - TYPE A	1,170.000	TON	$85.00	$99,450.00
4011004	LIQUID ASPHALT BINDER PG64-22	175.000	TON	$750.00	$131,250.00
4013200	MILLING EXISTING ASPHALT PAVEMENT 2.0"	1,122.222	SY	$19.00	$21,322.22
4020320	HOT MIX ASPHALT INTERMEDIATE COURSE TYPE B	585.000	TON	$90.00	$52,650.00
4030320	HOT MIX ASPHALT SURFACE COURSE TYPE B	1,652.208	TON	$105.00	$173,481.88
5019010	STAINED CONCRETE PAVEMENT (8" UNIFORM)	192.111	SY	$130.00	$24,974.44
7201000	CONCRETE CURB (9" X 15")	230.000	LF	$27.00	$6,210.00
7203210	CONCRETE CURB AND GUTTER(2'-0") VERTICAL FACE	310.000	LF	$29.00	$8,990.00
7204100	CONCRETE SIDEWALK(4" UNIFORM)	1,092.000	SY	$54.00	$58,968.00
7209000	PEDESTRIAN RAMP CONSTRUCTION	175.000	SY	$170.00	$29,750.00
	TRAFFIC CONTROL	1.000	LS	$150,000.00	$150,000.00
	PAVEMENT MARKINGS AND SIGNING	1.000	LS	$75,000.00	$75,000.00
	TWO TRAFFIC SIGNAL WITH MAST ARMS	1.000	LS	$280,000.00	$280,000.00
	TRAFFIC SIGNAL INTERCONNECT	1.000	LS	$45,000.00	$45,000.00
	EROSION CONTROL	1.000	LS	$80,000.00	$80,000.00
	DRAINAGE	1.000	LS	$94,000.00	$94,000.00
	LANDSCAPING	1.000	LS	$23,192.50	$23,192.50
	IRRIGATION	1.000	LS	$75,000.00	$75,000.00
				CONSTRUCTION COST=	$2,045,964.04
				PRELIMINARY ENGINEERING =	$250,000.00
				REIMBURSABLE UTILITY RELOCATION=	$50,000.00
				PERMITTING=	$500.00
				CONSTRUCTION OVERSIGHT=	$140,000.00
				SUBTOTAL =	$2,486,464.04
				CONTINGENCIES AT 20% =	$497,292.81
				TOTAL PROJECT COST =	**$2,983,756.85**

NOTES:

1. PROJECT COST EXCLUDES COSTS FOR OBTAINING RIGHT OF WAY AND PERMISSIONS/EASEMENTS.
2. COSTS FOR REIMBURSABLE UTILITY RELOCATIONS AND PERMITTING ARE HIGHLY CONCEPTUAL. THEY ARE PROVIDED FOR PLANNING PURPOSES ONLY.
3. ALL COSTS ARE IN 2017 DOLLARS.

6.3 NEW LADY'S ISLAND MIDDLE SCHOOL ACCESS

The new Lady's Island Middle School Access project includes realigning the main entrance road to the middle school with Gay Drive and tie-ins to the middle school driveways, existing Cougar Drive, and Robin Drive. Cougar Drive would become right in right out. The benefits of this configuration include safer access to US 21 and street connectivity with the surrounding neighborhood near Robin drive. This project is dependent on improvements to the medians on mainline US 21 Bus (Sea Island Parkway) and signalization with the Gay Drive Project.



NEW LADY'S ISLAND MIDDLE SCHOOL ACCESS					
SECTION	**ITEM**	**QUANTITY**	**UNIT**	**UNIT PRICE**	**NET PRICE**
1031000	MOBILIZATION	1.000	LS	$75,000.00	$75,000.00
2031200	SITE EXCAVATION	1.000	LS	$245,000.00	$245,000.00
3100310	HOT MIX ASPHALT BASE COURSE - TYPE A	680.000	TON	$85.00	$57,800.00
4011004	LIQUID ASPHALT BINDER PG64-22	80.000	TON	$750.00	$60,000.00
4013200	MILLING EXISTING ASPHALT PAVEMENT 2.0"	333.333	SY	$19.00	$6,333.33
4020320	HOT MIX ASPHALT INTERMEDIATE COURSE TYPE B	340.000	TON	$90.00	$30,600.00
4030320	HOT MIX ASPHALT SURFACE COURSE TYPE B	500.000	TON	$105.00	$52,500.00
7203210	CONCRETE CURB AND GUTTER(2'-0") VERTICAL FACE	1,500.000	LF	$29.00	$43,500.00
	TRAFFIC CONTROL	1.000	LS	$75,000.00	$75,000.00
	PAVEMENT MARKINGS	1.000	LS	$50,000.00	$50,000.00
	EROSION CONTROL	1.000	LS	$75,000.00	$75,000.00
	DRAINAGE	1.000	LS	$260,000.00	$260,000.00
				CONSTRUCTION COST=	$1,030,733.33
				PRELIMINARY ENGINEERING =	$110,000.00
				REIMBURSABLE UTILITY RELOCATION=	$20,000.00
				PERMITTING=	$5,000.00
				CONSTRUCTION OVERSIGHT=	$70,000.00
				SUBTOTAL =	$1,235,733.33
				CONTINGENCIES AT 20% =	$247,146.67
				TOTAL PROJECT COST =	**$1,482,880.00**

NOTES:

1. PROJECT COST EXCLUDES COSTS FOR OBTAINING RIGHT OF WAY AND PERMISSIONS/EASEMENTS.
2. COSTS FOR REIMBURSABLE UTILITY RELOCATIONS AND PERMITTING ARE HIGHLY CONCEPTUAL. THEY ARE PROVIDED FOR PLANNING PURPOSES ONLY.
3. ALL COSTS ARE IN 2017 DOLLARS.

6.4 S-7-186 SUNSET BOULEVARD AND S-7-187 MILLER DRIVE WEST

S-7-186 Sunset Boulevard and S-7-187 Miller Drive West includes improvements to both streets, traffic calming, installation of a new traffic signal at the Miller Drive West intersection with SC 802, and signal interconnection with the US 21 / SC 802 signal. This would increase pedestrian safety on Sunset Boulevard and Miller Drive and provide congestion relief for the main US 21 / SC 801 intersection. These improvements are interdependent with the US 21 / SC 802 mainline project and the Beaufort High School Access Realignment.



S-7-186 SUNSET BOULEVARD AND S-7-187 MILLER DRIVE WEST					
SECTION	**ITEM**	**QUANTITY**	**UNIT**	**UNIT PRICE**	**NET PRICE**
1031000	MOBILIZATION	1.000	LS	$120,000.00	$120,000.00
2025000	REM.&DISP.OF EXIST ASPH. PVMT.	1,115.000	SY	$35.00	$39,025.00
2031200	SITE EXCAVATION	1.000	LS	$250,000.00	$250,000.00
3100310	HOT MIX ASPHALT BASE COURSE - TYPE A	350.000	TON	$85.00	$29,750.00
4011004	LIQUID ASPHALT BINDER PG64-22	160.000	TON	$750.00	$120,000.00
4013200	MILLING EXISTING ASPHALT PAVEMENT 2.0"	6,000.000	SY	$19.00	$114,000.00
4020320	HOT MIX ASPHALT INTERMEDIATE COURSE TYPE B	175.000	TON	$90.00	$15,750.00
4030320	HOT MIX ASPHALT SURFACE COURSE TYPE B	2,524.736	TON	$105.00	$265,097.29
5019010	STAINED CONCRETE PAVEMENT (8" UNIFORM)	199.222	SY	$130.00	$25,898.89
7201000	CONCRETE CURB (9" X 15")	690.000	LF	$27.00	$18,630.00
7203210	CONCRETE CURB AND GUTTER(2'-0") VERTICAL FACE	6,282.000	LF	$29.00	$182,178.00
7204100	CONCRETE SIDEWALK(4" UNIFORM)	5,219.444	SY	$54.00	$281,850.00
7206000	CONCRETE MEDIAN	0.000	SY	$105.00	$0.00
7209000	PEDESTRIAN RAMP CONSTRUCTION	150.000	SY	$170.00	$25,500.00
	TRAFFIC CONTROL	1.000	LS	$180,000.00	$180,000.00
	PAVEMENT MARKINGS	1.000	LS	$95,000.00	$95,000.00
	TRAFFIC SIGNAL WITH MAST ARMS	1.000	LS	$140,000.00	$140,000.00
	TRAFFIC SIGNAL INTERCONNECT	1.000	LS	$72,000.00	$72,000.00
	EROSION CONTROL	1.000	LS	$125,000.00	$125,000.00
	DRAINAGE	1.000	LS	$355,000.00	$355,000.00
	LANDSCAPING	1.000	LS	$51,450.00	$51,450.00
	IRRIGATION	1.000	LS	$100,000.00	$100,000.00
	LIGHTING	1.000	LS	$784,000.00	$784,000.00
				CONSTRUCTION COST=	$3,390,129.18
				PRELIMINARY ENGINEERING =	$370,000.00
				REIMBURSABLE UTILITY RELOCATION=	$100,000.00
				PERMITTING=	$5,000.00
				CONSTRUCTION OVERSIGHT=	$170,000.00
				SUBTOTAL =	$4,035,129.18
				CONTINGENCIES AT 20% =	$807,025.84
				TOTAL PROJECT COST =	**$4,842,155.02**

NOTES:

1. PROJECT COST EXCLUDES COSTS FOR OBTAINING RIGHT OF WAY AND PERMISSIONS/EASEMENTS.
2. COSTS FOR REIMBURSABLE UTILITY RELOCATIONS AND PERMITTING ARE HIGHLY CONCEPTUAL. THEY ARE PROVIDED FOR PLANNING PURPOSES ONLY.
3. ALL COSTS ARE IN 2017 DOLLARS.

6.5 BEAUFORT HIGH SCHOOL ACCESS REALIGNMENT

Beaufort High School Access includes realignment of the access road, tie-ins to the existing access and to the Lady's Island Shopping Center redevelopment, relocation of the existing traffic signal, and signal interconnection with the US 21 / SC 802 signal. This project improves the connection to US 21 with an alignment of Sunset Boulevard. Some sections are dependent upon coordination with property owners. For example, the Beaufort High School Access Realignment is dependent upon coordination with Lady's Island Shopping Center redevelopment. It requires relocation of the existing traffic signal. It could precede the Sunset Boulevard / Miller Drive West improvements, or otherwise the Sunset / Miller improvements would just not experience its full benefits until the signal was relocated.



BEAUFORT HIGH SCHOOL ACCESS REALIGNMENT					
SECTION	**ITEM**	**QUANTITY**	**UNIT**	**UNIT PRICE**	**NET PRICE**
1031000	MOBILIZATION	1.000	LS	$75,000.00	$75,000.00
2025000	REM.&DISP.OF EXIST ASPH. PVMT.	2,225.000	SY	$35.00	$77,875.00
2031200	SITE EXCAVATION	1.000	LS	$225,000.00	$225,000.00
3100310	HOT MIX ASPHALT BASE COURSE - TYPE A	135.000	TON	$85.00	$11,475.00
4011004	LIQUID ASPHALT BINDER PG64-22	55.000	TON	$750.00	$41,250.00
4013200	MILLING EXISTING ASPHALT PAVEMENT 2.0"	555.556	SY	$19.00	$10,555.56
4020320	HOT MIX ASPHALT INTERMEDIATE COURSE TYPE B	70.000	TON	$90.00	$6,300.00
4030320	HOT MIX ASPHALT SURFACE COURSE TYPE B	833.583	TON	$105.00	$87,526.25
7203210	CONCRETE CURB AND GUTTER(2'-0") VERTICAL FACE	2,290.000	LF	$21.00	$48,090.00
7204100	CONCRETE SIDEWALK(4" UNIFORM)	1,532.222	SY	$54.00	$82,740.00
7209000	PEDESTRIAN RAMP CONSTRUCTION	75.000	SY	$170.00	$12,750.00
	TRAFFIC CONTROL	1.000	LS	$130,000.00	$130,000.00
	PAVEMENT MARKINGS AND SIGNING	1.000	LS	$35,000.00	$35,000.00
	TRAFFIC SIGNAL WITH MAST ARMS	1.000	LS	$140,000.00	$140,000.00
	TRAFFIC SIGNAL INTERCONNECT	1.000	LS	$65,000.00	$65,000.00
	EROSION CONTROL	1.000	LS	$45,000.00	$45,000.00
	DRAINAGE	1.000	LS	$180,000.00	$180,000.00
				CONSTRUCTION COST=	$1,273,561.81
				PRELIMINARY ENGINEERING =	$95,000.00
				REIMBURSABLE UTILITY RELOCATION=	$50,000.00
				PERMITTING=	$5,000.00
				CONSTRUCTION OVERSIGHT=	$70,000.00
				SUBTOTAL =	$1,493,561.81
				CONTINGENCIES AT 20% =	$298,712.36
				TOTAL PROJECT COST =	**$1,792,274.17**

NOTES:

1. PROJECT COST EXCLUDES COSTS FOR OBTAINING RIGHT OF WAY AND PERMISSIONS/EASEMENTS.
2. COSTS FOR REIMBURSABLE UTILITY RELOCATIONS AND PERMITTING ARE HIGHLY CONCEPTUAL. THEY ARE PROVIDED FOR PLANNING PURPOSES ONLY.
3. ALL COSTS ARE IN 2017 DOLLARS.

6.6 US 21 BUSINESS, US 21, AND SC 802 MAINLINE IMPROVEMENTS

US 21 Business, US 21, and SC 802 Mainline includes all improvements to both corridors as shown below and on sheet 1 of the concept plan. The improvements include medians for access management, grass buffers and multi-use paths, lighting, and landscaping. These improvements would create a complete streets feel to the corridor and benefits include enhancing bicycle and pedestrian accommodations, safety, and improved vehicular progression. The full benefit of this project is interdependent with completion of the other projects.



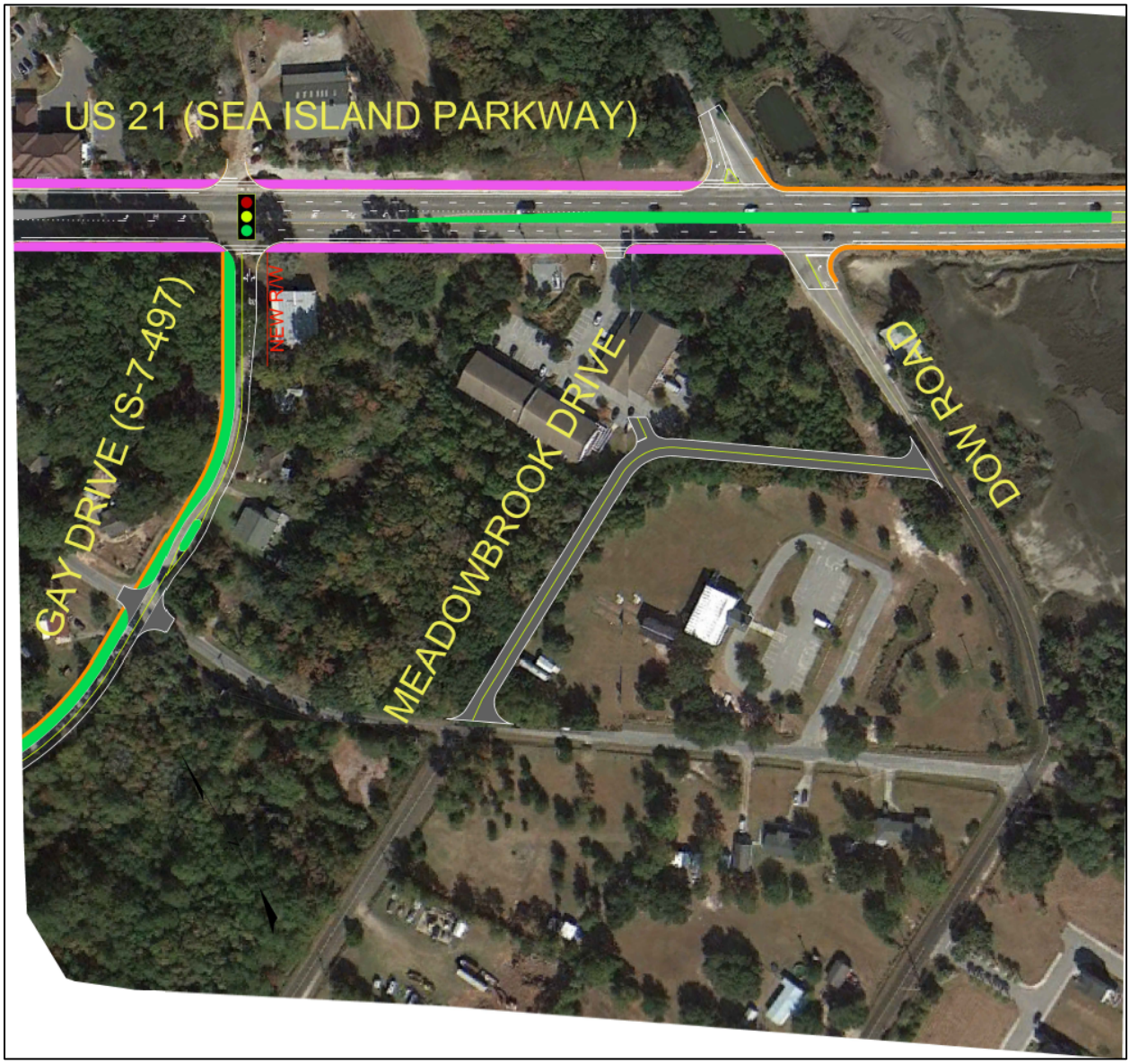
US 21 BUSINESS, US 21, AND SC 802 MAINLINE IMPROVEMENTS					
SECTION	**ITEM**	**QUANTITY**	**UNIT**	**UNIT PRICE**	**NET PRICE**
1031000	MOBILIZATION	1.000	LS	$225,000.00	$225,000.00
2027000	REM.& DISP.OF EXISTING CONC.	10.000	CY	$29.00	$290.00
2031200	SITE EXCAVATION	1.000	LS	$325,000.00	$325,000.00
3100310	HOT MIX ASPHALT BASE COURSE - TYPE A	190.000	TON	$85.00	$16,150.00
4011004	LIQUID ASPHALT BINDER PG64-22	685.000	TON	$750.00	$513,750.00
4013200	MILLING EXISTING ASPHALT PAVEMENT 2.0"	126,069.191	SY	$7.50	$945,518.93
4020320	HOT MIX ASPHALT INTERMEDIATE COURSE TYPE B	65.000	TON	$90.00	$5,850.00
4030320	HOT MIX ASPHALT SURFACE COURSE TYPE B	12,675.000	TON	$105.00	$1,330,875.00
7203210	CONCRETE CURB AND GUTTER(2'-0") VERTICAL FACE	3,182.000	LF	$29.00	$92,278.00
7204100	CONCRETE SIDEWALK(4" UNIFORM)	26,263.111	SY	$54.00	$1,418,208.00
7206000	CONCRETE MEDIAN	1,734.333	SY	$105.00	$182,105.00
7209000	PEDESTRIAN RAMP CONSTRUCTION	2,500.000	SY	$170.00	$425,000.00
	TRAFFIC CONTROL	1.000	LS	$250,000.00	$250,000.00
	PAVEMENT MARKINGS AND SIGNING	1.000	LS	$125,000.00	$125,000.00
	EROSION CONTROL	1.000	LS	$225,000.00	$225,000.00
	DRAINAGE	1.000	LS	$110,000.00	$110,000.00
	LANDSCAPING	1.000	LS	$289,762.50	$289,762.50
	IRRIGATION	1.000	LS	$160,000.00	$160,000.00
	RETAINING WALLS	1.000	LS	$100,000.00	$100,000.00
	LIGHTING	1.000	LS	$1,300,000.00	$1,300,000.00
				CONSTRUCTION COST=	$8,039,787.43
				PRELIMINARY ENGINEERING =	$600,000.00
				REIMBURSABLE UTILITY RELOCATION=	$100,000.00
				PERMITTING=	$20,000.00
				CONSTRUCTION OVERSIGHT=	$220,000.00
				SUBTOTAL =	$8,979,787.43
				CONTINGENCIES AT 20% =	$1,795,957.49
				TOTAL PROJECT COST =	**$10,775,744.92**

NOTES:

1. PROJECT COST EXCLUDES COSTS FOR OBTAINING RIGHT OF WAY AND PERMISSIONS/EASEMENTS.
2. COSTS FOR REIMBURSABLE UTILITY RELOCATIONS AND PERMITTING ARE HIGHLY CONCEPTUAL. THEY ARE PROVIDED FOR PLANNING PURPOSES ONLY.
3. ALL COSTS ARE IN 2017 DOLLARS.

6.7 MEADOWBROOK DRIVE EXTENTION

Extension of Meadowbrook Drive to Dow Road involves roadway work in existing right of way. The extension would increase roadway connectivity with access to the proposed signal at Gay Drive. This will be beneficial when Dow Road becomes right-in right-out. The Meadowbrook Drive Extension is not dependent on other projects, but its benefits would not be fully realized without US 21 Sea Island Parkway and Gay Drive improvements.



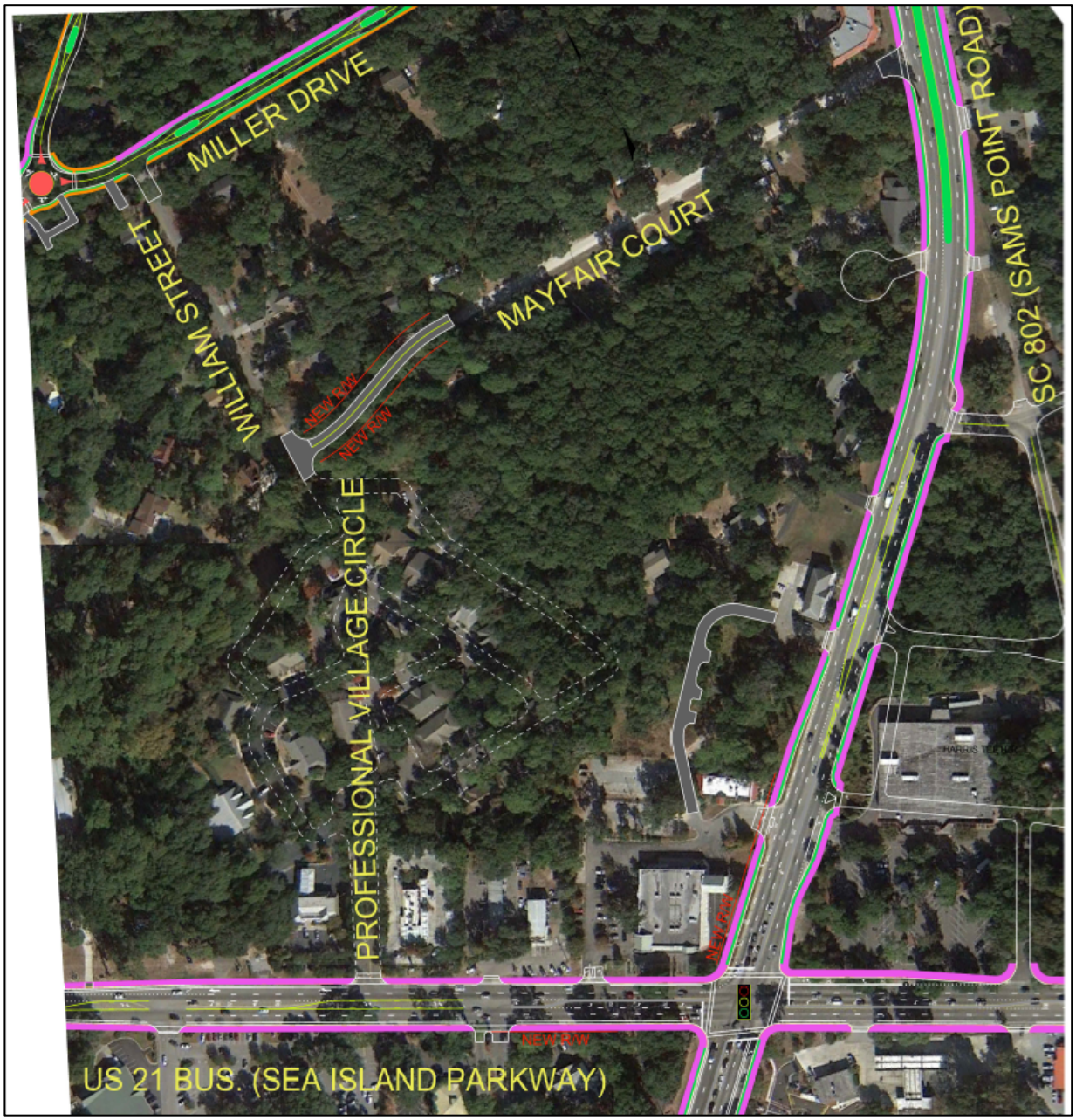
MEADOWBROOK DRIVE EXTENSION					
SECTION	**ITEM**	**QUANTITY**	**UNIT**	**UNIT PRICE**	**NET PRICE**
1031000	MOBILIZATION	1.000	LS	$75,000.00	$75,000.00
2031200	SITE EXCAVATION	1.000	LS	$165,000.00	$165,000.00
3100310	HOT MIX ASPHALT BASE COURSE - TYPE A	500.000	TON	$85.00	$42,500.00
4011004	LIQUID ASPHALT BINDER PG64-22	50.000	TON	$750.00	$37,500.00
4013200	MILLING EXISTING ASPHALT PAVEMENT 2.0"	333.333	SY	$19.00	$6,333.33
4020320	HOT MIX ASPHALT INTERMEDIATE COURSE TYPE B	250.000	TON	$90.00	$22,500.00
4030320	HOT MIX ASPHALT SURFACE COURSE TYPE B	250.000	TON	$105.00	$26,250.00
	TRAFFIC CONTROL	1.000	LS	$12,000.00	$12,000.00
	PAVEMENT MARKINGS AND SIGNING	1.000	LS	$50,000.00	$50,000.00
	EROSION CONTROL	1.000	LS	$50,000.00	$50,000.00
				CONSTRUCTION COST=	$487,083.33
				PRELIMINARY ENGINEERING =	$65,000.00
				REIMBURSABLE UTILITY RELOCATION=	$20,000.00
				PERMITTING=	$40,000.00
				CONSTRUCTION OVERSIGHT=	$35,000.00
				SUBTOTAL =	$647,083.33
				CONTINGENCIES AT 20% =	$129,416.67
				TOTAL PROJECT COST =	**$776,500.00**

NOTES:

1. PROJECT COST EXCLUDES COSTS FOR OBTAINING RIGHT OF WAY AND PERMISSIONS/EASEMENTS.
2. COSTS FOR REIMBURSABLE UTILITY RELOCATIONS AND PERMITTING ARE HIGHLY CONCEPTUAL. THEY ARE PROVIDED FOR PLANNING PURPOSES ONLY.
3. ALL COSTS ARE IN 2017 DOLLARS.

6.8 MAYFAIR COURT EXTENSION

Extension of Mayfair Court to William Street involves a new roadway connection and is dependent upon coordination with property owners. The Mayfair Court Extension is warranted before or during improvements to SC 802 Sams Point Road are made, as a median will be installed on SC 802. The Mayfair Court Extension may be combined with the mainline improvements. This benefits roadway connectivity and traffic progression on mainline SC 802 (Sams Point Road).



MAYFAIR COURT EXTENSION					
SECTION	**ITEM**	**QUANTITY**	**UNIT**	**UNIT PRICE**	**NET PRICE**
1031000	MOBILIZATION	1.000	LS	$25,000.00	$25,000.00
2031200	SITE EXCAVATION	1.000	LS	$125,000.00	$125,000.00
3100310	HOT MIX ASPHALT BASE COURSE - TYPE A	160.000	TON	$85.00	$13,600.00
4011004	LIQUID ASPHALT BINDER PG64-22	20.000	TON	$750.00	$15,000.00
4013200	MILLING EXISTING ASPHALT PAVEMENT 2.0"	435.111	SY	$19.00	$8,267.11
4020320	HOT MIX ASPHALT INTERMEDIATE COURSE TYPE B	80.000	TON	$90.00	$7,200.00
4030320	HOT MIX ASPHALT SURFACE COURSE TYPE B	125.000	TON	$105.00	$13,125.00
	TRAFFIC CONTROL	1.000	LS	$50,000.00	$50,000.00
	PAVEMENT MARKINGS AND SIGNING	1.000	LS	$20,000.00	$20,000.00
	EROSION CONTROL	1.000	LS	$25,000.00	$25,000.00
				CONSTRUCTION COST=	$302,192.11
				PRELIMINARY ENGINEERING =	$40,000.00
				REIMBURSABLE UTILITY RELOCATION=	$10,000.00
				PERMITTING=	$500.00
				CONSTRUCTION OVERSIGHT=	$22,000.00
				SUBTOTAL =	$374,692.11
				CONTINGENCIES AT 20% =	$74,938.42
				TOTAL PROJECT COST =	**$449,630.53**

NOTES:

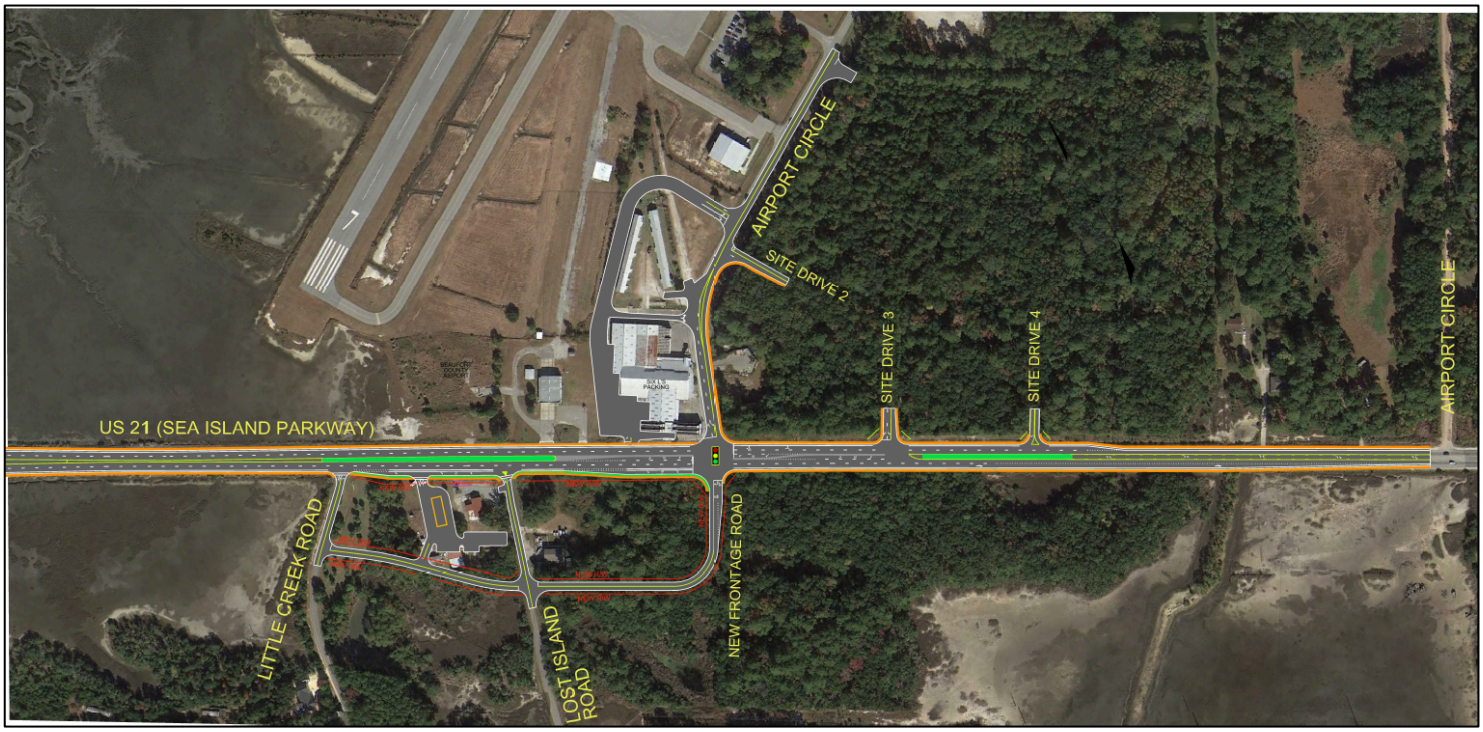
1. PROJECT COST EXCLUDES COSTS FOR OBTAINING RIGHT OF WAY AND PERMISSIONS/EASEMENTS.

2. COSTS FOR REIMBURSABLE UTILITY RELOCATIONS AND PERMITTING ARE HIGHLY CONCEPTUAL. THEY ARE PROVIDED FOR PLANNING PURPOSES ONLY.

3. ALL COSTS ARE IN 2017 DOLLARS.

6.9 US 21 AIRPORT AREA AND FRONTAGE ROAD

US 21 Airport Area and Frontage Road includes all improvements shown below and in sheet 2 of the concept plan. These improvements would provide reduced travel delays and improved access management on US 21. They would also provide Little Creek Road and Lost Island Road access to the traffic signal. The US 21 Airport Area and the Frontage road improvements are dependent upon right of way acquisitions from property owners.



US 21 AIRPORT AREA AND FRONTAGE ROAD					
SECTION	**ITEM**	**QUANTITY**	**UNIT**	**UNIT PRICE**	**NET PRICE**
1031000	MOBILIZATION	1.000	LS	$225,000.00	$225,000.00
2027000	REM.& DISP.OF EXISTING CONC.	205.000	CY	$29.00	$5,945.00
2031200	SITE EXCAVATION	1.000	LS	$205,000.00	$205,000.00
3100310	HOT MIX ASPHALT BASE COURSE - TYPE A	2,025.000	TON	$85.00	$172,125.00
4011004	LIQUID ASPHALT BINDER PG64-22	375.000	TON	$750.00	$281,250.00
4013200	MILLING EXISTING ASPHALT PAVEMENT 2.0"	35,841.000	SY	$9.50	$340,489.50
4020320	HOT MIX ASPHALT INTERMEDIATE COURSE TYPE B	810.000	TON	$90.00	$72,900.00
4030320	HOT MIX ASPHALT SURFACE COURSE TYPE B	4,395.000	TON	$105.00	$461,475.00
7203210	CONCRETE CURB AND GUTTER(2'-0") VERTICAL FACE	5,670.000	LF	$29.00	$164,430.00
7204100	CONCRETE SIDEWALK(4" UNIFORM)	1,809.444	SY	$54.00	$97,710.00
7206000	CONCRETE MEDIAN	485.111	SY	$105.00	$50,936.67
7209000	PEDESTRIAN RAMP CONSTRUCTION	200.000	SY	$170.00	$34,000.00
	TRAFFIC CONTROL	1.000	LS	$190,000.00	$190,000.00
	PAVEMENT MARKINGS AND SIGNING	1.000	LS	$125,000.00	$125,000.00
	TRAFFIC SIGNAL	1.000	LS	$190,000.00	$190,000.00
	EROSION CONTROL	1.000	LS	$175,000.00	$175,000.00
	DRAINAGE	1.000	LS	$370,000.00	$370,000.00
	LANDSCAPING	1.000	LS	$43,992.00	$43,992.00
	IRRIGATION	1.000	LS	$30,000.00	$30,000.00
				CONSTRUCTION COST=	$3,235,253.17
				PRELIMINARY ENGINEERING =	$380,000.00
				REIMBURSABLE UTILITY RELOCATION=	$100,000.00
				PERMITTING=	$210,000.00
				CONSTRUCTION OVERSIGHT=	$225,000.00
				SUBTOTAL =	$4,150,253.17
				CONTINGENCIES AT 20% =	$830,050.63
				TOTAL PROJECT COST =	**$4,980,303.80**

NOTES:

1. PROJECT COST EXCLUDES COSTS FOR OBTAINING RIGHT OF WAY AND PERMISSIONS/EASEMENTS.
2. COSTS FOR REIMBURSABLE UTILITY RELOCATIONS AND PERMITTING ARE HIGHLY CONCEPTUAL. THEY ARE PROVIDED FOR PLANNING PURPOSES ONLY.
3. ALL COSTS ARE IN 2017 DOLLARS.

7.0 Conclusion

The Lady's Island Corridor Study originated with the goals of Improving congestion and reducing delays, improving safety, enhancing bicycle and pedestrian accommodations, and enhancing aesthetics. The project team consisted of the City of Beaufort, Ward Edwards Engineering, and Stantec Consulting. Beaufort County and SCDOT provided additional cooperation. While developing the study, the team held several stakeholder meetings and two Public Information Meetings. Stakeholder meetings included:

- Area Developers and Engineers
- Various Property Owners
- Public Safety Representatives
- Lady's Island Community Preservation
- Sea Island Coalition
- Coastal Conservation League
- Beaufort County School District
- Northern Regional Plan Implementation Committee

The first Public Information Meeting was held on September 29, 2016. In that meeting, the team introduced the study's goals and objectives and requested citizen input on how the roadway corridors may be improved. The team collected public comments from that meeting and continued developing the study. The second Public Information Meeting was held on February 16, 2017. In that meeting, the team presented the results of the study and presented the concept plans. The team collected public comments from that meeting and then completed the study. The final concept plans and this report are the result of the team's analysis, stakeholder coordination, and feedback from the Public Information Meetings. The proposed improvements as shown in the concept plans will fully meet the intended objectives and significantly improve the corridors.

Programming and funding are needed to accomplish the proposed improvements. Improvements are expected to occur in phases, with the order of phasing to be determined in the near future based on availability and coordination with property owners.

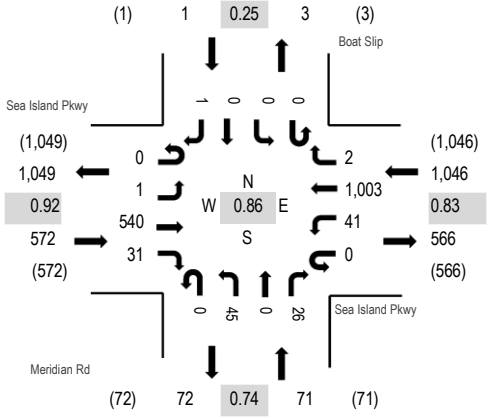
APPENDIX A

TURNING MOVEMENT COUNTS AND TUBE COUNTS

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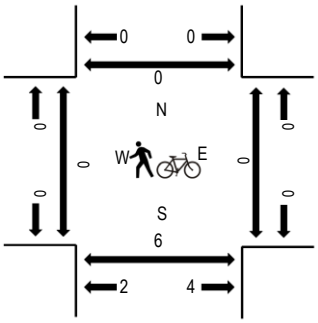
Location: 1 Meridian Rd & Sea Island Pkwy AM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Meridian Rd Northbound				Boat Slip Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:15 AM	0	0	123	3	0	1	218	1	0	8	0	3	0	0	0	0	357	1,690	0	0	0	0
7:30 AM	0	0	140	7	0	8	253	0	0	12	0	3	0	0	0	1	424		0	0	6	0
7:45 AM	0	0	147	8	0	19	295	0	0	12	0	9	0	0	0	0	490		0	0	0	0
8:00 AM	0	1	130	13	0	13	237	1	0	13	0	11	0	0	0	0	419		0	0	0	0

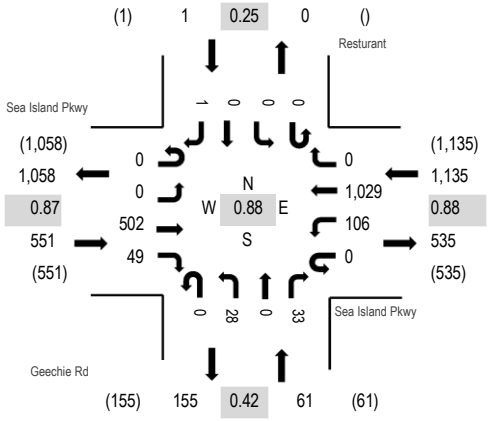
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	1	531	31	0	41	988	2	0	45	0	26	0	0	0	1	1,666
Mediums	0	0	9	0	0	0	15	0	0	0	0	0	0	0	0	0	24
Total	0	1	540	31	0	41	1,003	2	0	45	0	26	0	0	0	1	1,690

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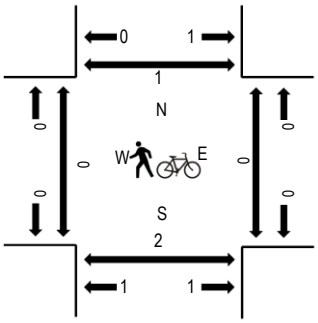
Location: 2 Geechie Rd & Sea Island Pkwy AM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Geechie Rd Northbound				Resturant Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:15 AM	0	0	113	10	0	20	220	0	0	1	0	5	0	0	0	0	369	1,748	0	0	2	1
7:30 AM	0	0	129	5	0	15	259	0	0	5	0	1	0	0	0	0	414		0	0	0	0
7:45 AM	0	0	148	10	0	14	310	0	0	8	0	5	0	0	0	1	496		0	0	0	0
8:00 AM	0	0	112	24	0	57	240	0	0	14	0	22	0	0	0	0	469		0	0	0	0

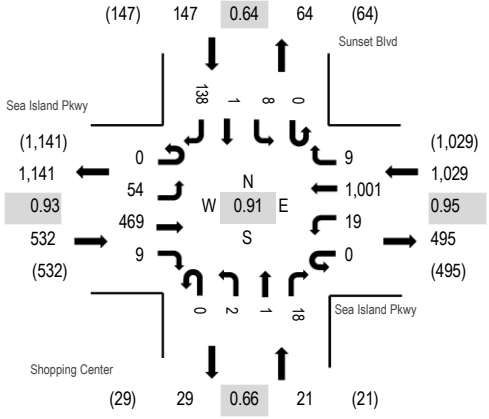
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	491	49	0	104	1,013	0	0	28	0	31	0	0	0	1	1,717
Mediums	0	0	11	0	0	2	16	0	0	0	0	2	0	0	0	0	31
Total	0	0	502	49	0	106	1,029	0	0	28	0	33	0	0	0	1	1,748

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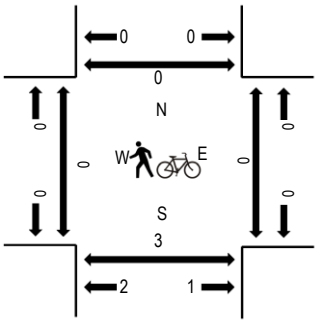
Location: 3 Shopping Center & Sea Island Pkwy AM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Shopping Center Northbound				Sunset Blvd Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:15 AM	0	9	102	2	0	2	223	3	0	0	0	2	0	2	0	19	364	1,729	0	0	2	0
7:30 AM	0	11	124	2	0	5	253	3	0	1	1	6	0	5	0	29	440		0	0	0	0
7:45 AM	0	19	121	3	0	7	259	2	0	1	0	6	0	0	1	56	475		0	0	0	0
8:00 AM	0	15	122	2	0	5	266	1	0	0	0	4	0	1	0	34	450		0	0	1	0

Peak Rolling Hour Flow Rates

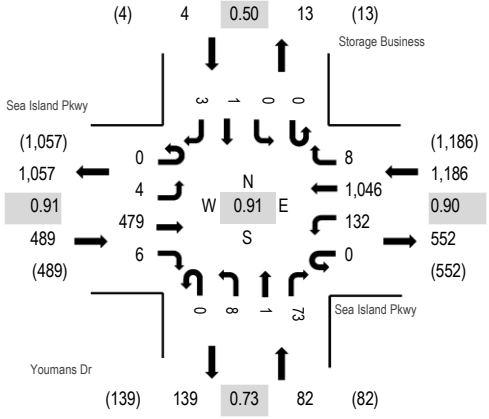
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	53	458	9	0	19	984	9	0	2	1	17	0	8	1	137	1,698
Mediums	0	1	11	0	0	0	17	0	0	0	0	1	0	0	0	1	31
Total	0	54	469	9	0	19	1,001	9	0	2	1	18	0	8	1	138	1,729

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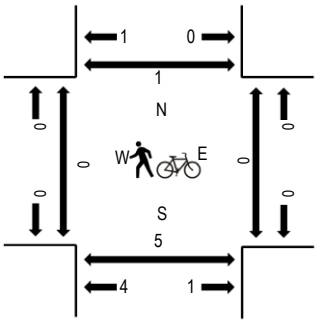
Location: 4 Youmans Dr & Sea Island Pkwy AM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 08:00 AM - 08:15 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Youmans Dr Northbound				Storage Business Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:15 AM	0	0	99	0	0	19	229	0	0	1	1	15	0	0	0	1	365	1,761	0	0	2	0
7:30 AM	0	2	132	1	0	19	281	1	0	2	0	14	0	0	0	1	453		0	0	0	0
7:45 AM	0	0	126	3	0	37	267	4	0	4	0	17	0	0	0	0	458		0	0	3	0
8:00 AM	0	2	122	2	0	57	269	3	0	1	0	27	0	0	1	1	485		0	0	0	1

Peak Rolling Hour Flow Rates

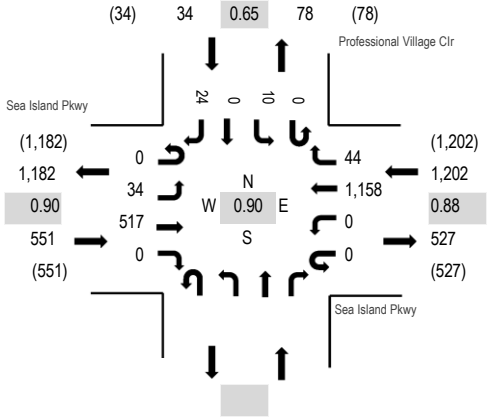
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	4	472	5	0	121	1,030	8	0	7	1	66	0	0	1	3	1,718
Mediums	0	0	7	1	0	11	16	0	0	1	0	7	0	0	0	0	43
Total	0	4	479	6	0	132	1,046	8	0	8	1	73	0	0	1	3	1,761

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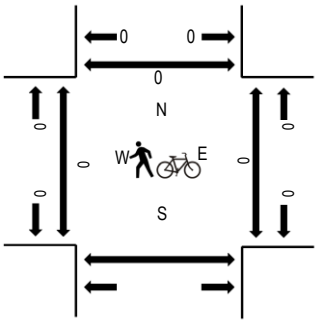
(303) 216-2439
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Location: 5 Professional Village Clr & Sea Island Pkwy AM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 08:00 AM - 08:15 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Northbound				Professional Village Clr Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:15 AM	0	2	112	0	0	0	241	9					0	1	0	1	366	1,787	0	0		0
7:30 AM	0	9	131	0	0	0	280	10					0	1	0	7	438		0	0		0
7:45 AM	0	13	140	0	0	0	302	17					0	4	0	9	485		0	0		0
8:00 AM	0	10	134	0	0	0	335	8					0	4	0	7	498		0	0		0

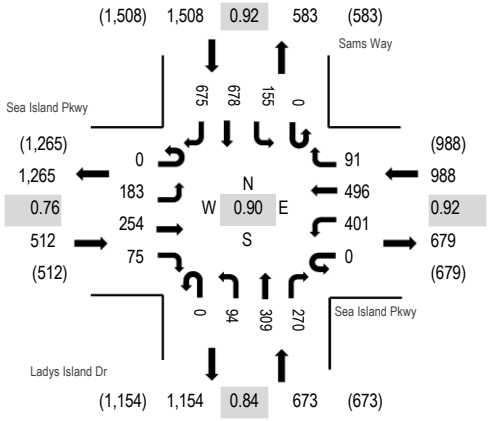
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0					0	0	0	0	0
Lights	0	34	499	0	0	0	1,131	44					0	9	0	24	1,741
Mediums	0	0	18	0	0	0	27	0					0	1	0	0	46
Total	0	34	517	0	0	0	1,158	44					0	10	0	24	1,787

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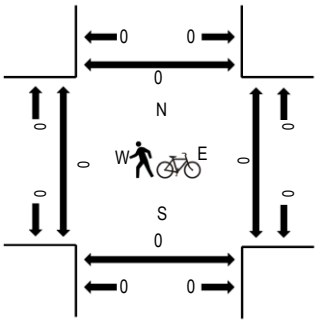
Location: 8 Ladys Island Dr & Sea Island Pkwy AM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Ladys Island Dr Northbound				Sams Way Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:15 AM	0	42	59	12	0	91	88	26	0	16	55	53	0	40	132	138	752	3,681	0	0	0	0
7:30 AM	0	32	54	14	0	108	113	27	0	27	90	66	0	30	197	174	932		0	0	0	0
7:45 AM	0	67	71	31	0	110	136	22	0	29	94	77	0	35	170	182	1,024		0	0	0	0
8:00 AM	0	42	70	18	0	92	159	16	0	22	70	74	0	50	179	181	973		0	0	0	0

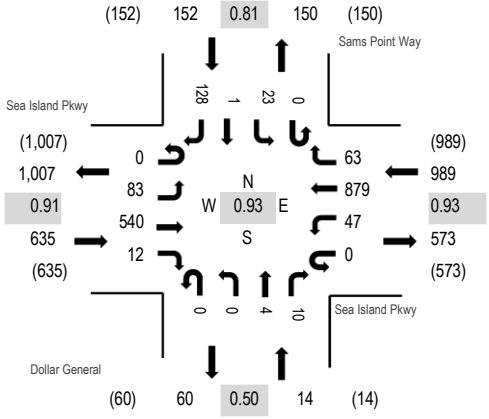
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	1	0	0	0	0	2	3	0	2	0	0	8
Lights	0	178	248	73	0	390	484	79	0	92	298	262	0	147	667	664	3,582
Mediums	0	5	6	2	0	10	12	12	0	2	9	5	0	6	11	11	91
Total	0	183	254	75	0	401	496	91	0	94	309	270	0	155	678	675	3,681

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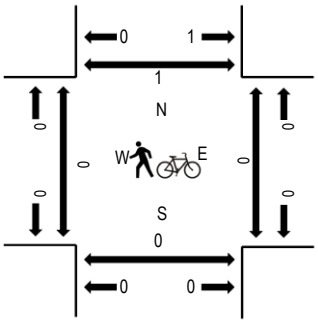
Location: 9 Dollar General & Sea Island Pkwy AM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Dollar General Northbound				Sams Point Way Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:15 AM	0	13	128	5	0	5	188	11	0	0	2	0	0	4	0	25	381	1,790	0	0	0	0
7:30 AM	0	21	118	1	0	8	239	20	0	0	1	6	0	8	0	30	452		0	0	0	1
7:45 AM	0	29	144	2	0	14	229	20	0	0	1	3	0	4	0	34	480		0	0	0	0
8:00 AM	0	20	150	4	0	20	223	12	0	0	0	1	0	7	1	39	477		0	0	0	0

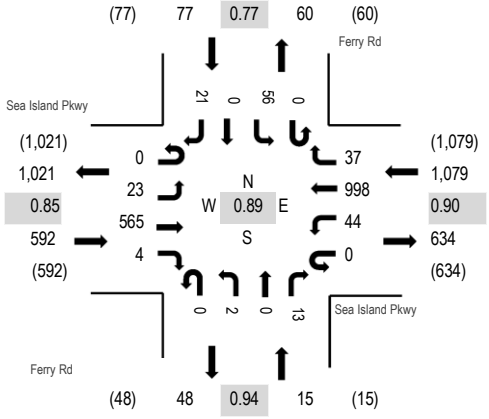
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	4
Lights	0	82	518	12	0	46	850	63	0	0	4	10	0	23	1	124	1,733
Mediums	0	1	19	0	0	1	28	0	0	0	0	0	0	0	0	4	53
Total	0	83	540	12	0	47	879	63	0	0	4	10	0	23	1	128	1,790

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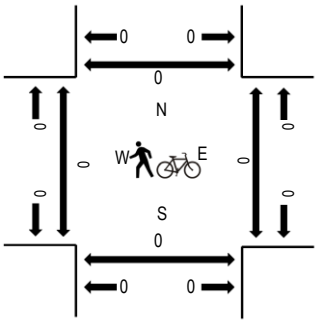
Location: 10 Ferry Rd & Sea Island Pkwy AM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 08:00 AM - 08:15 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Ferry Rd Northbound				Ferry Rd Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:15 AM	0	3	129	2	0	4	204	5	0	0	0	4	0	12	0	6	369	1,763	0	0	0	0
7:30 AM	0	5	127	0	0	11	262	10	0	1	0	3	0	12	0	4	435		0	0	0	0
7:45 AM	0	9	143	0	0	14	259	11	0	1	0	2	0	18	0	7	464		0	0	0	0
8:00 AM	0	6	166	2	0	15	273	11	0	0	0	4	0	14	0	4	495		0	0	0	0

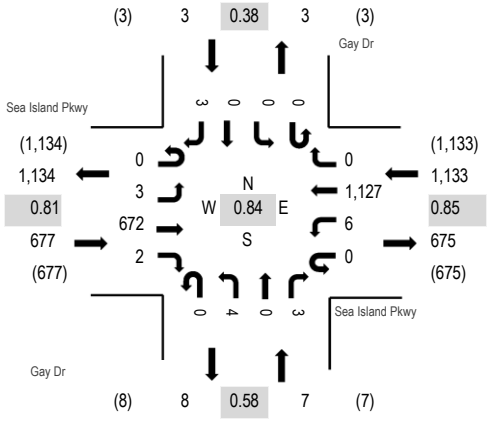
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	5	0	0	0	2	0	0	0	0	0	0	0	0	0	7
Lights	0	22	540	4	0	43	966	36	0	1	0	13	0	55	0	20	1,700
Mediums	0	1	20	0	0	1	30	1	0	1	0	0	0	1	0	1	56
Total	0	23	565	4	0	44	998	37	0	2	0	13	0	56	0	21	1,763

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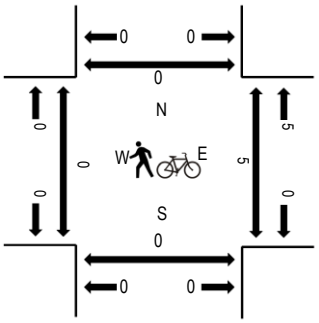
Location: 11 Gay Dr & Sea Island Pkwy AM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 08:00 AM - 08:15 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Gay Dr Northbound				Gay Dr Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:15 AM	0	2	166	0	0	1	219	0	0	2	0	1	0	0	0	2	393	1,820	0	0	0	0
7:30 AM	0	0	135	1	0	0	306	0	0	1	0	0	0	0	0	1	444		0	5	0	0
7:45 AM	0	0	164	1	0	0	273	0	0	0	0	2	0	0	0	0	440		0	0	0	0
8:00 AM	0	1	207	0	0	5	329	0	0	1	0	0	0	0	0	0	543		0	0	0	0

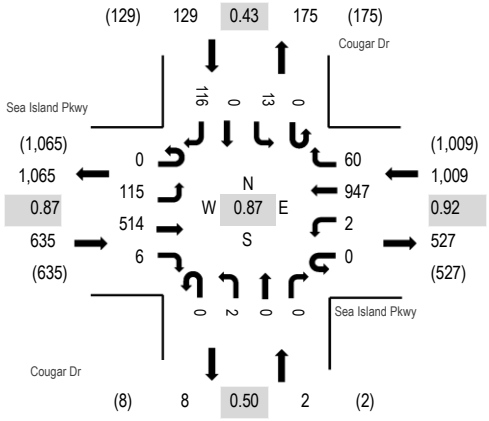
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	7	0	0	0	1	0	0	0	0	0	0	0	0	0	8
Lights	0	3	644	1	0	5	1,095	0	0	4	0	3	0	0	0	3	1,758
Mediums	0	0	21	1	0	1	31	0	0	0	0	0	0	0	0	0	54
Total	0	3	672	2	0	6	1,127	0	0	4	0	3	0	0	0	3	1,820

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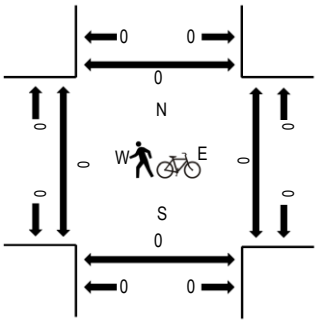
Location: 12 Cougar Dr & Sea Island Pkwy AM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 08:00 AM - 08:15 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Cougar Dr Northbound				Cougar Dr Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:15 AM	0	5	140	2	0	0	202	12	0	0	0	0	0	4	0	9	374	1,775	0	0	0	0
7:30 AM	0	10	132	0	0	1	268	5	0	1	0	0	0	0	0	9	426		0	0	0	0
7:45 AM	0	38	123	2	0	1	244	25	0	1	0	0	0	2	0	30	466		0	0	0	0
8:00 AM	0	62	119	2	0	0	233	18	0	0	0	0	0	7	0	68	509		0	0	0	0

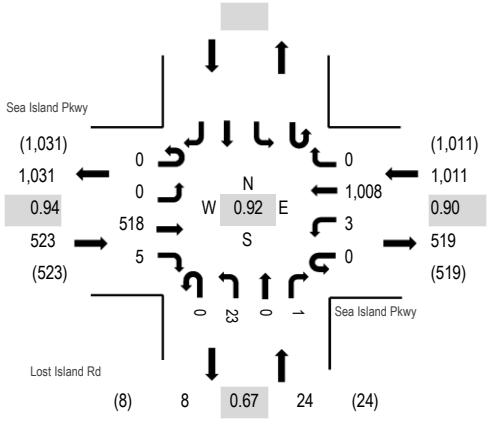
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Lights	0	115	491	6	0	1	922	51	0	2	0	0	0	9	0	110	1,707
Mediums	0	0	19	0	0	1	25	9	0	0	0	0	0	4	0	6	64
Total	0	115	514	6	0	2	947	60	0	2	0	0	0	13	0	116	1,775

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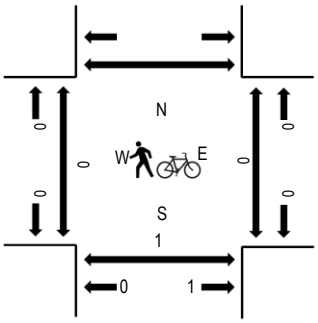
Location: 13 Lost Island Rd & Sea Island Pkwy AM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Lost Island Rd Northbound				Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:15 AM	0	0	137	0	0	1	208	0	0	5	0	0					351	1,558	0	0	0	
7:30 AM	0	0	136	3	0	2	279	0	0	3	0	0					423		0	0	0	
7:45 AM	0	0	123	0	0	0	273	0	0	9	0	0					405		0	0	0	
8:00 AM	0	0	122	2	0	0	248	0	0	6	0	1					379		0	0	1	

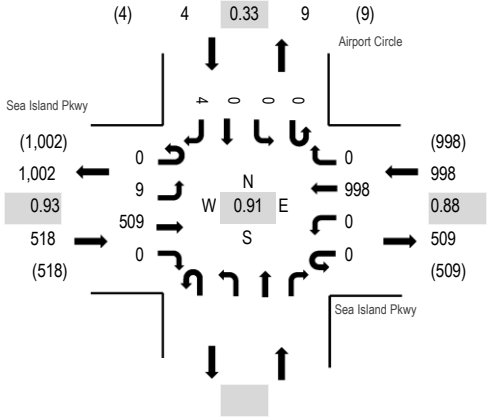
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	6	0	0	0	2	0	0	0	0	0					8
Lights	0	0	491	5	0	3	968	0	0	23	0	1					1,491
Mediums	0	0	21	0	0	0	38	0	0	0	0	0					59
Total	0	0	518	5	0	3	1,008	0	0	23	0	1					1,558

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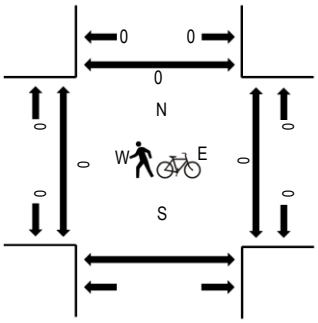
Location: 14 Airport Circle & Sea Island Pkwy AM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Northbound				Airport Circle Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:15 AM	0	1	138	0	0	0	202	0					0	0	0	0	341	1,520	0	0		0
7:30 AM	0	2	130	0	0	0	284	0					0	0	0	1	417		0	0		0
7:45 AM	0	2	118	0	0	0	261	0					0	0	0	0	381		0	0		0
8:00 AM	0	4	123	0	0	0	251	0					0	0	0	3	381		0	0		0

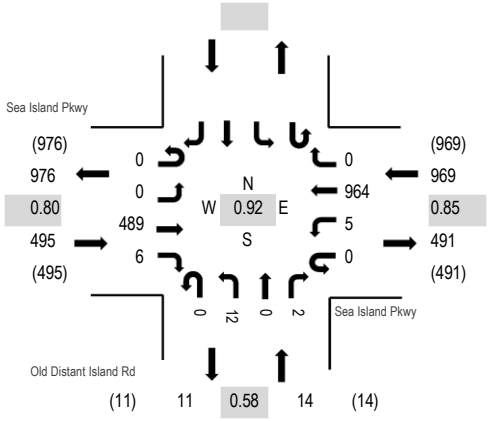
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	6	0	0	0	0	0					0	0	0	2	8
Lights	0	8	483	0	0	0	959	0					0	0	0	2	1,452
Mediums	0	1	20	0	0	0	39	0					0	0	0	0	60
Total	0	9	509	0	0	0	998	0					0	0	0	4	1,520

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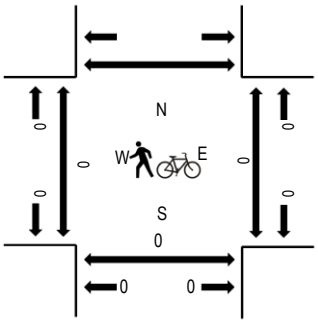
Location: 15 Old Distant Island Rd & Sea Island Pkwy AM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Old Distant Island Rd Northbound				Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:15 AM	0	0	117	2	0	2	204	0	0	0	0	1					326	1,478	0	0	0	
7:30 AM	0	0	152	2	0	1	243	0	0	4	0	0					402		0	0	0	
7:45 AM	0	0	110	0	0	1	283	0	0	3	0	0					397		0	0	0	
8:00 AM	0	0	110	2	0	1	234	0	0	5	0	1					353		0	0	0	

Peak Rolling Hour Flow Rates

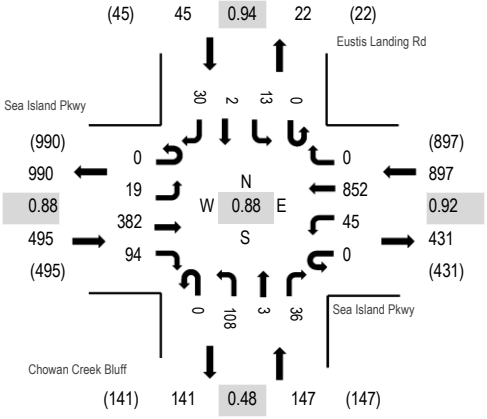
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0					0
Lights	0	0	474	4	0	5	929	0	0	11	0	2					1,425
Mediums	0	0	15	2	0	0	35	0	0	1	0	0					53
Total	0	0	489	6	0	5	964	0	0	12	0	2					1,478

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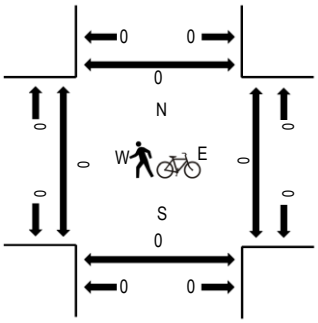
Location: 16 Chowan Creek Bluff & Sea Island Pkwy AM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Chowan Creek Bluff Northbound				Eustis Landing Rd Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:15 AM	0	9	81	51	0	18	170	0	0	33	1	16	0	3	0	9	391	1,584	0	0	0	0
7:30 AM	0	4	87	32	0	21	219	0	0	57	2	17	0	2	1	6	448		0	0	0	0
7:45 AM	0	3	107	8	0	3	241	0	0	10	0	2	0	5	1	6	386		0	0	0	0
8:00 AM	0	3	107	3	0	3	222	0	0	8	0	1	0	3	0	9	359		0	0	0	0

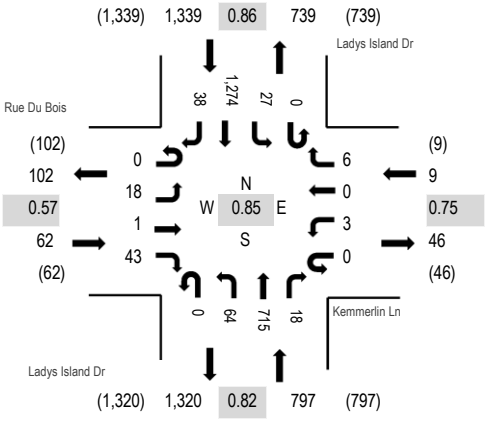
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Lights	0	17	363	93	0	43	822	0	0	105	3	35	0	12	2	26	1,521
Mediums	0	0	19	1	0	2	30	0	0	3	0	1	0	1	0	4	61
Total	0	19	382	94	0	45	852	0	0	108	3	36	0	13	2	30	1,584

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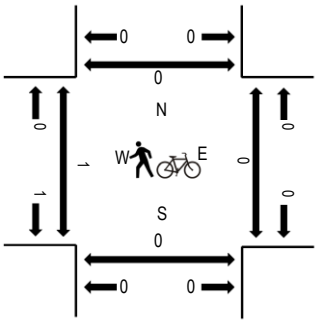
Location: 17 Ladys Island Dr & Kemmerlin Ln AM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Rue Du Bois Eastbound				Kemmerlin Ln Westbound				Ladys Island Dr Northbound				Ladys Island Dr Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:15 AM	0	4	0	3	0	1	0	1	0	8	140	3	0	3	247	11	421	2,207	1	0	0	0
7:30 AM	0	6	1	4	0	1	0	1	0	10	182	3	0	6	322	4	540		0	0	0	0
7:45 AM	0	6	0	11	0	0	0	2	0	15	220	7	0	6	373	11	651		0	0	0	0
8:00 AM	0	2	0	25	0	1	0	2	0	31	173	5	0	12	332	12	595		0	0	0	0

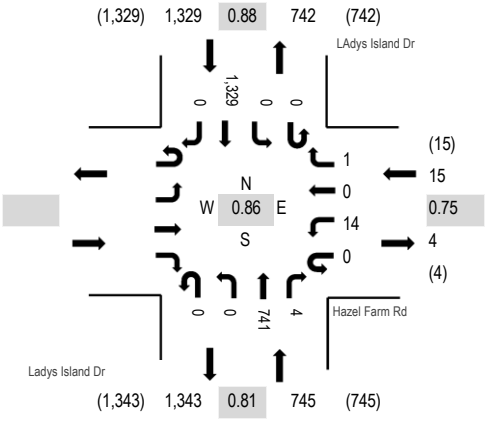
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	4	0	0	0	2	0	6
Lights	0	17	0	43	0	3	0	6	0	61	695	18	0	27	1,248	35	2,153
Mediums	0	1	1	0	0	0	0	0	0	3	16	0	0	0	24	3	48
Total	0	18	1	43	0	3	0	6	0	64	715	18	0	27	1,274	38	2,207

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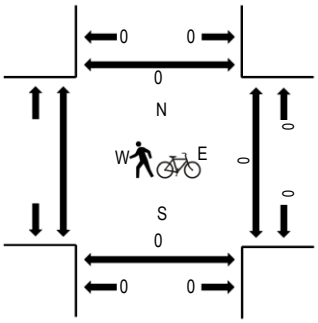
Location: 18 Ladys Island Dr & Hazel Farm Rd AM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Eastbound				Hazel Farm Rd Westbound				Ladys Island Dr Northbound				LAdys Island Dr Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:15 AM					0	4	0	1	0	0	143	1	0	0	257	0	406	2,089		0	0	0
7:30 AM					0	4	0	0	0	0	192	2	0	0	341	0	539			0	0	0
7:45 AM					0	3	0	0	0	0	229	1	0	0	377	0	610			0	0	0
8:00 AM					0	3	0	0	0	0	177	0	0	0	354	0	534			0	0	0

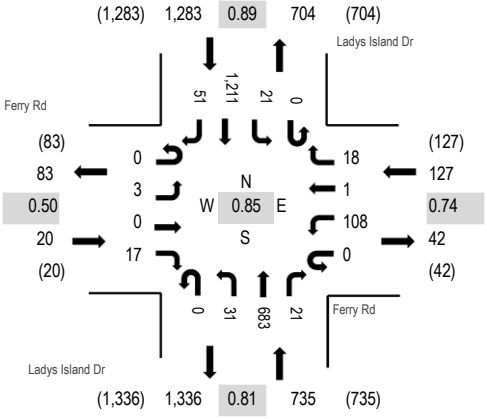
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks					0	0	0	0	0	0	7	0	0	0	1	0	8
Lights					0	14	0	1	0	0	720	3	0	0	1,304	0	2,042
Mediums					0	0	0	0	0	0	14	1	0	0	24	0	39
Total					0	14	0	1	0	0	741	4	0	0	1,329	0	2,089

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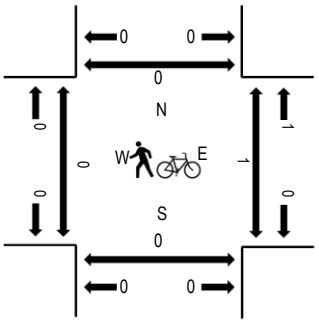
Location: 19 Ladys Island Dr & Ferry Rd AM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Ferry Rd Eastbound				Ferry Rd Westbound				Ladys Island Dr Northbound				Ladys Island Dr Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:15 AM	0	1	0	1	0	14	0	5	0	3	137	1	0	3	240	9	414	2,165	0	0	0	0
7:30 AM	0	0	0	3	0	21	0	6	0	8	173	7	0	7	319	19	563		0	1	0	0
7:45 AM	0	2	0	8	0	32	1	5	0	18	201	9	0	5	338	19	638		0	0	0	0
8:00 AM	0	0	0	5	0	41	0	2	0	2	172	4	0	6	314	4	550		0	0	0	0

Peak Rolling Hour Flow Rates

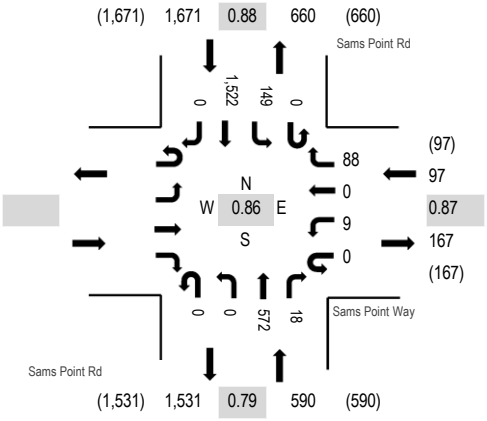
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	1	0	0	0	0	6	0	0	0	1	0	8
Lights	0	3	0	16	0	105	1	17	0	31	664	20	0	20	1,189	51	2,117
Mediums	0	0	0	1	0	2	0	1	0	0	13	1	0	1	21	0	40
Total	0	3	0	17	0	108	1	18	0	31	683	21	0	21	1,211	51	2,165

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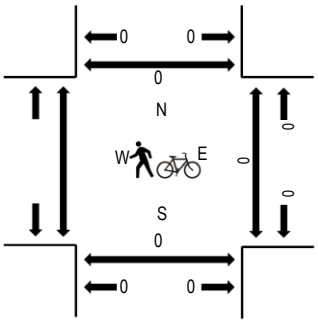
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Location: 20 Sams Point Rd & Sams Point Way AM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	Sams Point Way Eastbound				Sams Point Way Westbound				Sams Point Rd Northbound				Sams Point Rd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:15 AM					0	3	0	16	0	0	125	7	0	26	334	0	511	2,358		0	0	0
7:30 AM					0	2	0	21	0	0	134	4	0	32	375	0	568			0	0	0
7:45 AM					0	0	0	28	0	0	181	5	0	44	431	0	689			0	0	0
8:00 AM					0	4	0	23	0	0	132	2	0	47	382	0	590			0	0	0

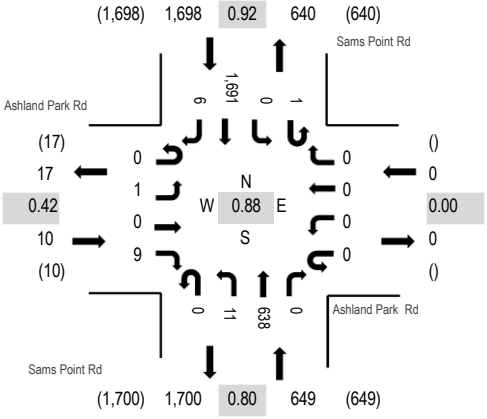
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks					0	0	0	0	0	0	2	0	0	0	2	0	4
Lights					0	7	0	87	0	0	544	18	0	143	1,494	0	2,293
Mediums					0	2	0	1	0	0	26	0	0	6	26	0	61
Total					0	9	0	88	0	0	572	18	0	149	1,522	0	2,358

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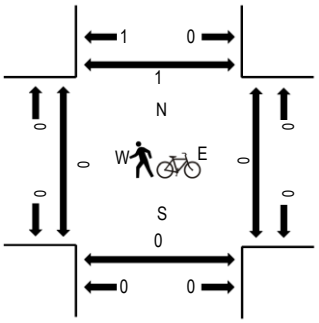
Location: 21 Sams Point Rd & Ashland Park Rd AM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Ashland Park Rd Eastbound				Ashland Park Rd Westbound				Sams Point Rd Northbound				Sams Point Rd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:15 AM	0	0	0	0	0	0	0	0	0	2	141	0	1	0	379	0	523	2,357	0	0	0	0
7:30 AM	0	1	0	5	0	0	0	0	0	3	163	0	0	0	420	5	597		0	0	0	0
7:45 AM	0	0	0	3	0	0	0	0	0	2	200	0	0	0	461	0	666		0	0	0	1
8:00 AM	0	0	0	1	0	0	0	0	0	4	134	0	0	0	431	1	571		0	0	0	0

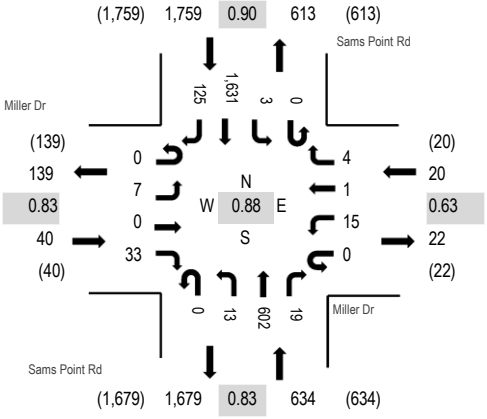
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3
Lights	0	1	0	9	0	0	0	0	0	11	613	0	1	0	1,656	6	2,297
Mediums	0	0	0	0	0	0	0	0	0	0	23	0	0	0	34	0	57
Total	0	1	0	9	0	0	0	0	0	11	638	0	1	0	1,691	6	2,357

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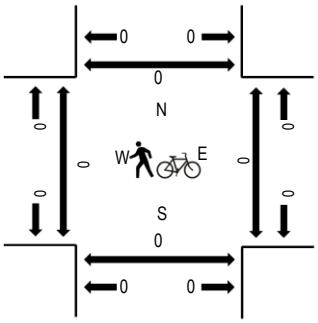
Location: 22 Sams Point Rd & Miller Dr AM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Miller Dr Eastbound				Miller Dr Westbound				Sams Point Rd Northbound				Sams Point Rd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:15 AM	0	0	0	10	0	2	0	0	0	4	132	6	0	0	377	14	545	2,453	0	0	0	0
7:30 AM	0	4	0	8	0	1	0	2	0	0	164	2	0	0	426	27	634		0	0	0	0
7:45 AM	0	1	0	7	0	5	1	1	0	3	183	5	0	0	434	54	694		0	0	0	0
8:00 AM	0	2	0	8	0	7	0	1	0	6	123	6	0	3	394	30	580		0	0	0	0

Peak Rolling Hour Flow Rates

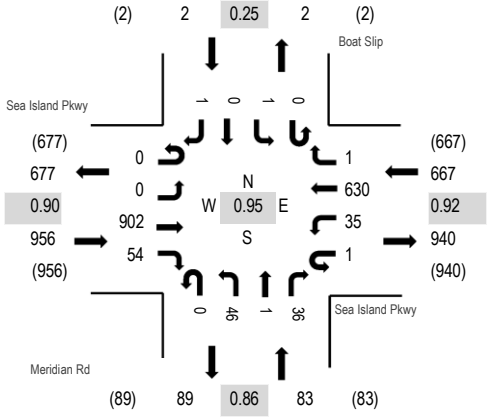
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2
Lights	0	7	0	31	0	15	1	4	0	12	580	17	0	3	1,598	124	2,392
Mediums	0	0	0	2	0	0	0	0	0	1	21	2	0	0	32	1	59
Total	0	7	0	33	0	15	1	4	0	13	602	19	0	3	1,631	125	2,453

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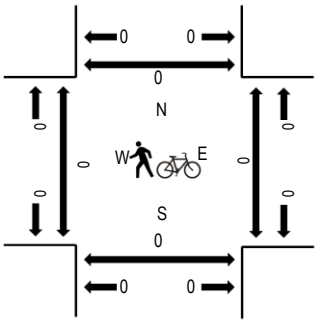
Location: 1 Meridian Rd & Sea Island Pkwy PM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Meridian Rd Northbound				Boat Slip Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:30 PM	0	0	221	21	0	9	145	1	0	11	0	8	0	0	0	0	416	1,708	0	0	0	0
4:45 PM	0	0	197	10	1	9	156	0	0	8	1	9	0	1	0	1	393		0	0	0	0
5:00 PM	0	0	225	17	0	9	173	0	0	16	0	8	0	0	0	0	448		0	0	0	0
5:15 PM	0	0	259	6	0	8	156	0	0	11	0	11	0	0	0	0	451		0	0	0	0

Peak Rolling Hour Flow Rates

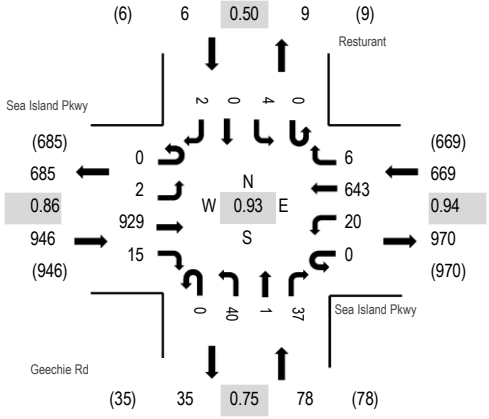
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	0	896	53	1	35	626	1	0	46	1	36	0	1	0	1	1,697
Mediums	0	0	6	1	0	0	4	0	0	0	0	0	0	0	0	0	11
Total	0	0	902	54	1	35	630	1	0	46	1	36	0	1	0	1	1,708

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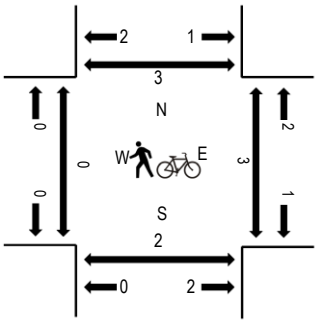
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Location: 2 Geechie Rd & Sea Island Pkwy PM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Geechie Rd Northbound				Resturant Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:30 PM	0	0	232	3	0	4	147	0	0	13	0	13	0	0	0	0	412	1,699	0	0	0	0
4:45 PM	0	1	206	3	0	10	162	2	0	7	1	12	0	2	0	1	407		0	2	1	1
5:00 PM	0	1	221	4	0	4	171	2	0	12	0	5	0	1	0	1	422		0	1	0	0
5:15 PM	0	0	270	5	0	2	163	2	0	8	0	7	0	1	0	0	458		0	0	0	0

Peak Rolling Hour Flow Rates

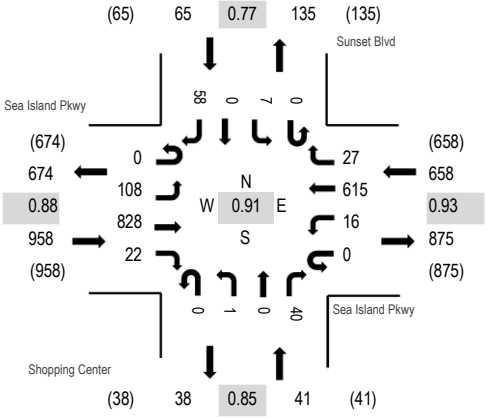
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	2	923	15	0	20	639	6	0	40	1	37	0	4	0	2	1,689
Mediums	0	0	6	0	0	0	4	0	0	0	0	0	0	0	0	0	10
Total	0	2	929	15	0	20	643	6	0	40	1	37	0	4	0	2	1,699

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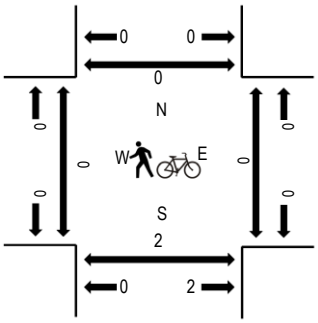
Location: 3 Shopping Center & Sea Island Pkwy PM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Shopping Center Northbound				Sunset Blvd Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:30 PM	0	38	206	3	0	7	145	4	0	0	0	12	0	1	0	12	428	1,722	0	0	2	0
4:45 PM	0	19	183	5	0	2	147	4	0	0	0	9	0	4	0	17	390		0	0	0	0
5:00 PM	0	21	206	6	0	3	162	7	0	1	0	7	0	2	0	14	429		0	0	0	0
5:15 PM	0	30	233	8	0	4	161	12	0	0	0	12	0	0	0	15	475		0	0	0	0

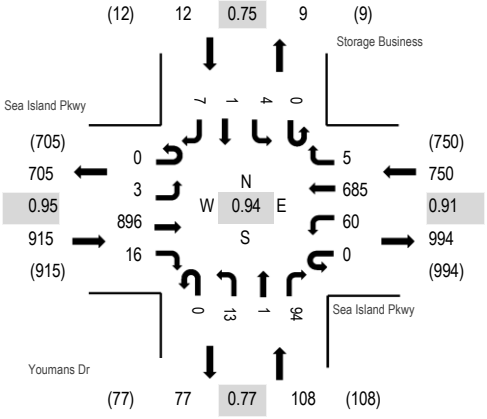
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	108	815	22	0	15	612	27	0	1	0	39	0	7	0	58	1,704
Mediums	0	0	13	0	0	1	3	0	0	0	0	1	0	0	0	0	18
Total	0	108	828	22	0	16	615	27	0	1	0	40	0	7	0	58	1,722

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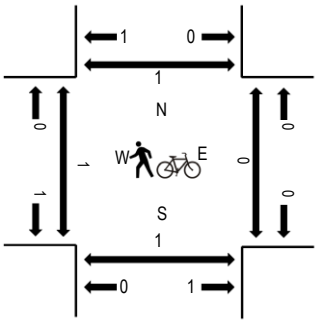
Location: 4 Youmans Dr & Sea Island Pkwy PM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Youmans Dr Northbound				Storage Business Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:30 PM	0	0	222	6	0	16	159	1	0	2	0	19	0	1	0	2	428	1,785	0	0	0	0
4:45 PM	0	1	211	2	0	14	154	1	0	4	0	22	0	3	0	1	413		0	0	0	0
5:00 PM	0	0	226	5	0	15	189	1	0	3	1	31	0	0	1	1	473		1	0	0	0
5:15 PM	0	2	237	3	0	15	183	2	0	4	0	22	0	0	0	3	471		0	0	0	0

Peak Rolling Hour Flow Rates

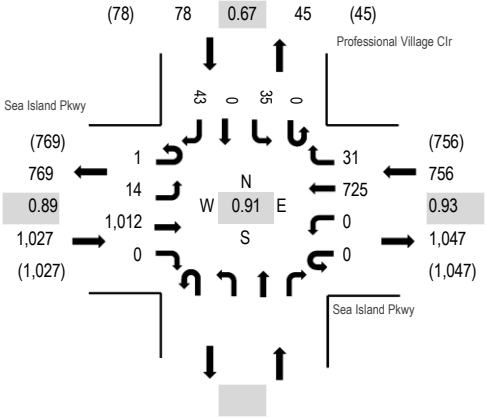
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lights	0	3	888	16	0	54	682	5	0	13	1	93	0	4	1	7	1,767
Mediums	0	0	8	0	0	6	3	0	0	0	0	1	0	0	0	0	18
Total	0	3	896	16	0	60	685	5	0	13	1	94	0	4	1	7	1,785

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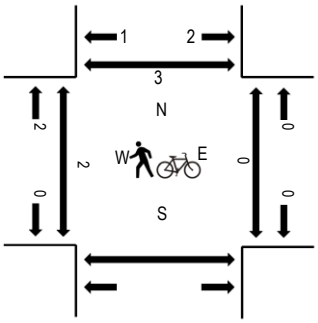
Location: 5 Professional Village Clr & Sea Island Pkwy PM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Northbound				Professional Village Clr Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:30 PM	0	5	235	0	0	0	169	11					0	5	0	12	437	1,861	2	0		2
4:45 PM	1	2	249	0	0	0	167	5					0	8	0	5	437		0	0		0
5:00 PM	0	2	246	0	0	0	191	9					0	15	0	14	477		0	0		0
5:15 PM	0	5	282	0	0	0	198	6					0	7	0	12	510		0	0		0

Peak Rolling Hour Flow Rates

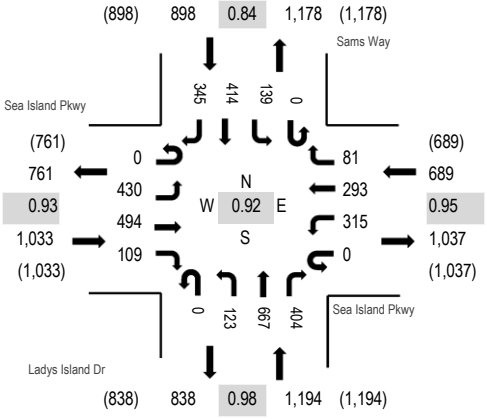
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0					0	0	0	0	0
Lights	1	14	1,000	0	0	0	714	31					0	35	0	43	1,838
Mediums	0	0	12	0	0	0	11	0					0	0	0	0	23
Total	1	14	1,012	0	0	0	725	31					0	35	0	43	1,861

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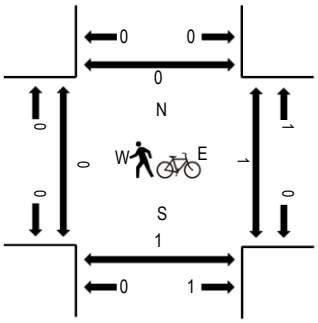
Location: 8 Ladys Island Dr & Sea Island Pkwy PM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Ladys Island Dr Northbound				Sams Way Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:30 PM	0	113	111	27	0	74	73	21	0	35	157	98	0	31	94	77	911	3,814	0	0	0	0
4:45 PM	0	103	109	36	0	82	65	16	0	27	170	96	0	33	90	81	908		0	1	0	0
5:00 PM	0	108	128	20	0	76	78	23	0	34	172	99	0	32	105	89	964		0	0	0	0
5:15 PM	0	106	146	26	0	83	77	21	0	27	168	111	0	43	125	98	1,031		0	0	1	0

Peak Rolling Hour Flow Rates

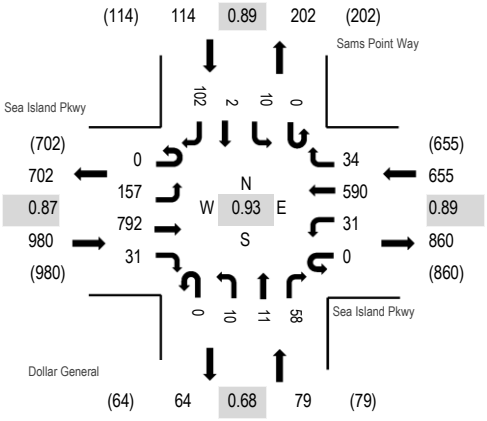
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	7	0	1	0	0	1	0	0	0	4	0	13
Lights	0	423	493	107	0	299	290	79	0	122	661	399	0	135	402	337	3,747
Mediums	0	7	1	2	0	9	3	1	0	1	5	5	0	4	8	8	54
Total	0	430	494	109	0	315	293	81	0	123	667	404	0	139	414	345	3,814

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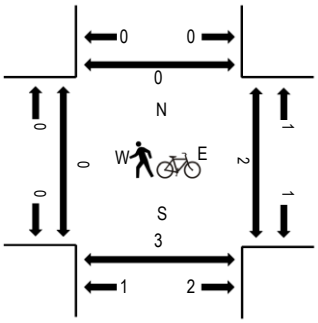
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Location: 9 Dollar General & Sea Island Pkwy PM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Dollar General Northbound				Sams Point Way Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:30 PM	0	38	192	6	0	10	145	9	0	1	1	8	0	5	0	26	441	1,828	0	0	0	0
4:45 PM	0	33	183	5	0	5	132	9	0	5	3	21	0	1	0	21	418		0	0	0	0
5:00 PM	0	44	186	10	0	7	168	8	0	3	3	15	0	1	1	30	476		0	1	3	0
5:15 PM	0	42	231	10	0	9	145	8	0	1	4	14	0	3	1	25	493		0	1	0	0

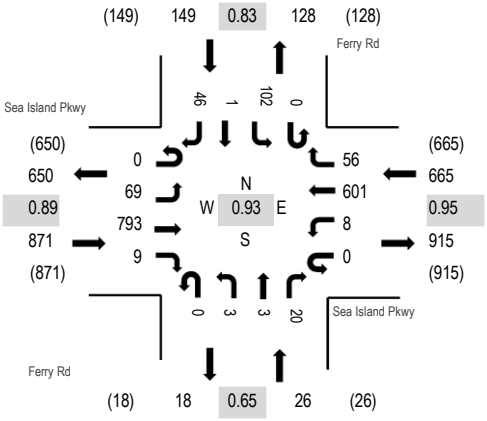
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	9
Lights	0	157	782	31	0	31	567	34	0	10	11	57	0	10	2	102	1,794
Mediums	0	0	10	0	0	0	14	0	0	0	0	1	0	0	0	0	25
Total	0	157	792	31	0	31	590	34	0	10	11	58	0	10	2	102	1,828

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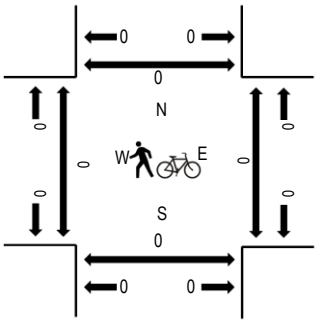
Location: 10 Ferry Rd & Sea Island Pkwy PM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Ferry Rd Northbound				Ferry Rd Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:30 PM	0	11	183	5	0	1	155	16	0	2	0	8	0	24	0	13	418	1,711	0	0	0	0
4:45 PM	0	20	183	1	0	2	142	11	0	0	2	3	0	18	1	4	387		0	0	0	0
5:00 PM	0	16	205	2	0	2	161	12	0	0	1	5	0	33	0	11	448		0	0	0	0
5:15 PM	0	22	222	1	0	3	143	17	0	1	0	4	0	27	0	18	458		0	0	0	0

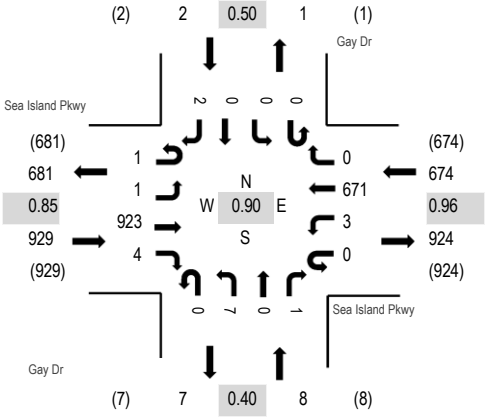
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	9	0	0	0	0	0	0	1	0	0	10
Lights	0	69	780	9	0	8	580	56	0	3	3	20	0	100	1	46	1,675
Mediums	0	0	13	0	0	0	12	0	0	0	0	0	0	1	0	0	26
Total	0	69	793	9	0	8	601	56	0	3	3	20	0	102	1	46	1,711

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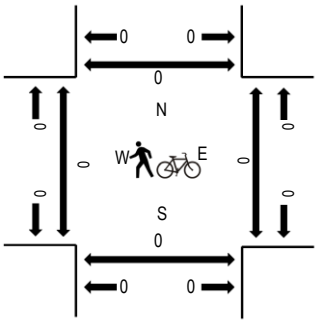
Location: 11 Gay Dr & Sea Island Pkwy PM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Gay Dr Northbound				Gay Dr Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:30 PM	1	1	212	2	0	1	174	0	0	2	0	0	0	0	0	0	393	1,613	0	0	0	0
4:45 PM	0	0	195	0	0	1	158	0	0	4	0	1	0	0	0	1	360		0	0	0	0
5:00 PM	0	0	271	2	0	1	172	0	0	0	0	0	0	0	0	0	446		0	0	0	0
5:15 PM	0	0	245	0	0	0	167	0	0	1	0	0	0	0	0	1	414		0	0	0	0

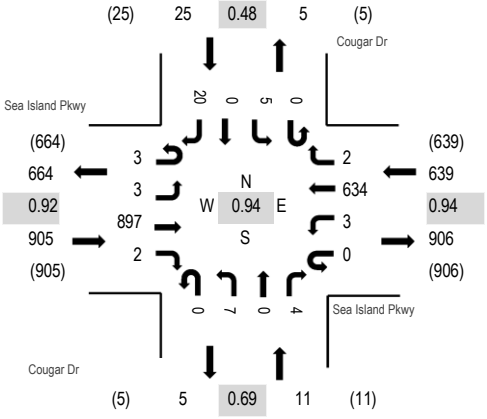
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	1	0	0	0	9	0	0	0	0	0	0	0	0	0	10
Lights	1	1	910	4	0	3	650	0	0	7	0	1	0	0	0	2	1,579
Mediums	0	0	12	0	0	0	12	0	0	0	0	0	0	0	0	0	24
Total	1	1	923	4	0	3	671	0	0	7	0	1	0	0	0	2	1,613

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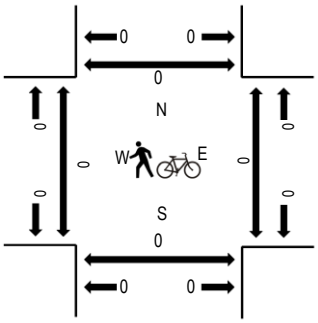
Location: 12 Cougar Dr & Sea Island Pkwy PM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Cougar Dr Northbound				Cougar Dr Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:30 PM	0	1	205	0	0	0	155	0	0	2	0	1	0	2	0	11	377	1,580	0	0	0	0
4:45 PM	0	1	204	2	0	2	146	2	0	2	0	2	0	1	0	3	365		0	0	0	0
5:00 PM	1	0	245	0	0	0	170	0	0	2	0	0	0	0	0	4	422		0	0	0	0
5:15 PM	2	1	243	0	0	1	163	0	0	1	0	1	0	2	0	2	416		0	0	0	0

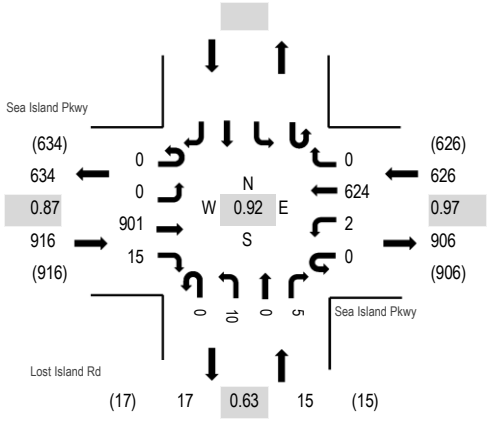
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	1	0	0	0	9	0	0	0	0	0	0	0	0	0	10
Lights	3	2	884	2	0	3	615	2	0	7	0	2	0	4	0	18	1,542
Mediums	0	1	12	0	0	0	10	0	0	0	0	2	0	1	0	2	28
Total	3	3	897	2	0	3	634	2	0	7	0	4	0	5	0	20	1,580

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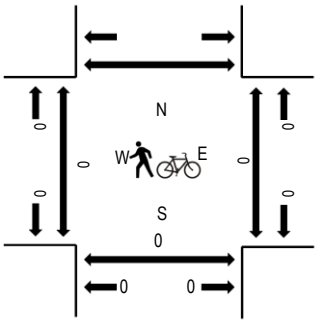
Location: 13 Lost Island Rd & Sea Island Pkwy PM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Lost Island Rd Northbound				Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:30 PM	0	0	224	1	0	0	158	0	0	1	0	1					385	1,557	0	0	0	
4:45 PM	0	0	205	4	0	1	148	0	0	3	0	1					362		0	0	0	
5:00 PM	0	0	214	5	0	1	160	0	0	6	0	0					386		0	0	0	
5:15 PM	0	0	258	5	0	0	158	0	0	0	0	3					424		0	0	0	

Peak Rolling Hour Flow Rates

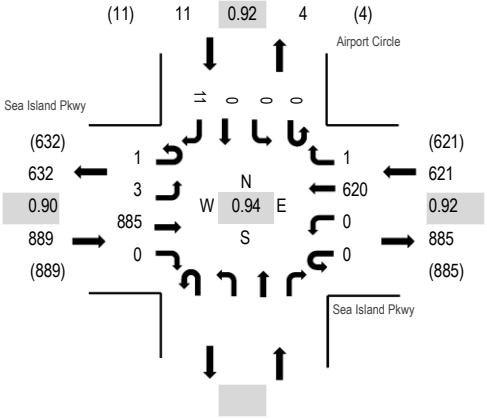
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	1	0	0	0	7	0	0	0	0	0					8
Lights	0	0	883	14	0	2	609	0	0	9	0	5					1,522
Mediums	0	0	17	1	0	0	8	0	0	1	0	0					27
Total	0	0	901	15	0	2	624	0	0	10	0	5					1,557

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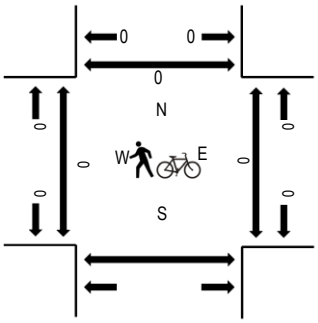
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Location: 14 Airport Circle & Sea Island Pkwy PM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Northbound				Airport Circle Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:30 PM	0	0	211	0	0	0	154	1					0	0	0	3	369	1,521	0	0		0
4:45 PM	0	0	199	0	0	0	140	0					0	0	0	3	342		0	0		0
5:00 PM	0	2	231	0	0	0	168	0					0	0	0	3	404		0	0		0
5:15 PM	1	1	244	0	0	0	158	0					0	0	0	2	406		0	0		0

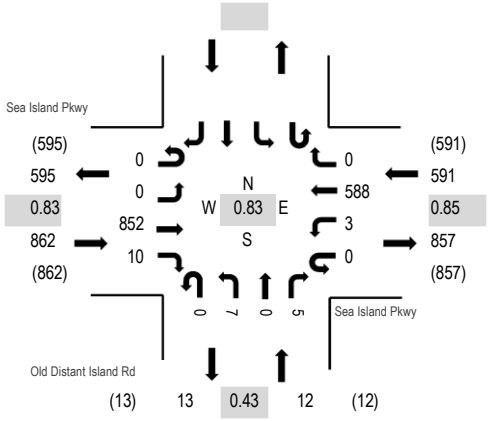
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	1	0	0	0	7	0					0	0	0	2	10
Lights	1	3	873	0	0	0	601	1					0	0	0	9	1,488
Mediums	0	0	11	0	0	0	12	0					0	0	0	0	23
Total	1	3	885	0	0	0	620	1					0	0	0	11	1,521

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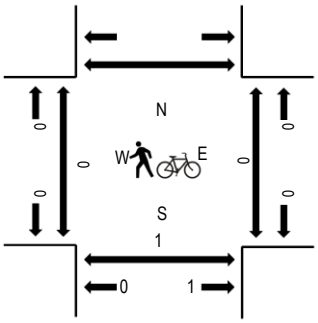
Location: 15 Old Distant Island Rd & Sea Island Pkwy PM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Old Distant Island Rd Northbound				Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:30 PM	0	0	209	2	0	0	125	0	0	1	0	0					337	1,465	0	0	0	
4:45 PM	0	0	198	2	0	2	147	0	0	2	0	0					351		0	0	0	
5:00 PM	0	0	185	5	0	0	144	0	0	1	0	1					336		0	0	0	
5:15 PM	0	0	260	1	0	1	172	0	0	3	0	4					441		0	0	0	

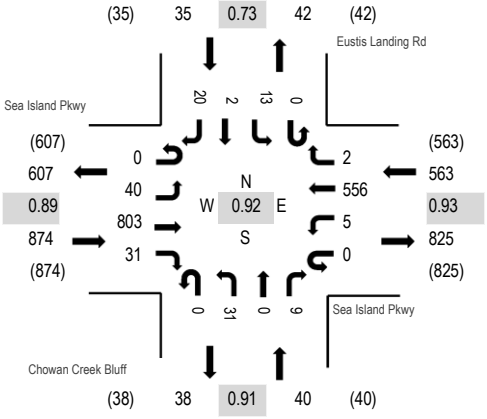
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	2	0	0	0	7	0	0	0	0	0					9
Lights	0	0	836	10	0	3	569	0	0	7	0	5					1,430
Mediums	0	0	14	0	0	0	12	0	0	0	0	0					26
Total	0	0	852	10	0	3	588	0	0	7	0	5					1,465

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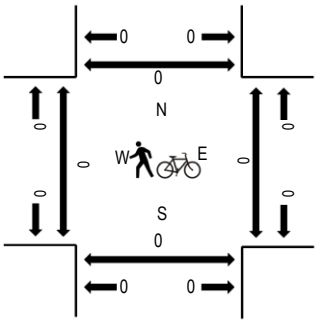
Location: 16 Chowan Creek Bluff & Sea Island Pkwy PM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Sea Island Pkwy Eastbound				Sea Island Pkwy Westbound				Chowan Creek Bluff Northbound				Eustis Landing Rd Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:30 PM	0	8	196	11	0	0	139	1	0	8	0	3	0	2	0	2	370	1,512	0	0	0	0
4:45 PM	0	9	182	7	0	0	127	1	0	10	0	1	0	1	2	5	345		0	0	0	0
5:00 PM	0	9	199	7	0	3	149	0	0	5	0	2	0	5	0	6	385		0	0	0	0
5:15 PM	0	14	226	6	0	2	141	0	0	8	0	3	0	5	0	7	412		0	0	0	0

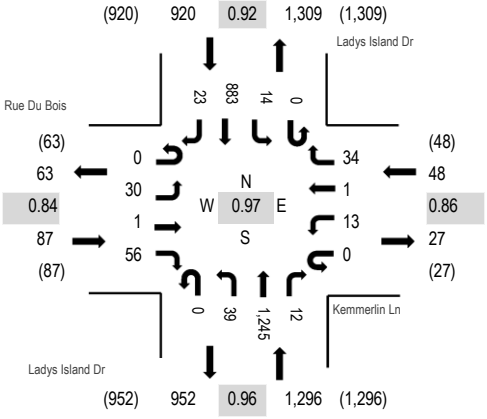
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	1	0	0	0	5	0	0	0	0	0	0	0	0	1	7
Lights	0	35	793	30	0	5	539	2	0	29	0	9	0	13	2	19	1,476
Mediums	0	5	9	1	0	0	12	0	0	2	0	0	0	0	0	0	29
Total	0	40	803	31	0	5	556	2	0	31	0	9	0	13	2	20	1,512

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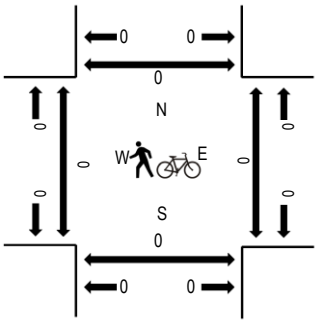
Location: 17 Ladys Island Dr & Kemmerlin Ln PM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Rue Du Bois Eastbound				Kemmerlin Ln Westbound				Ladys Island Dr Northbound				Ladys Island Dr Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:30 PM	0	4	0	16	0	4	0	10	0	8	323	5	0	7	201	7	585	2,351	0	0	0	0
4:45 PM	0	9	1	14	0	2	0	9	0	5	299	3	0	3	222	5	572		0	0	0	0
5:00 PM	0	12	0	14	0	3	0	8	0	12	312	0	0	2	215	7	585		0	0	0	0
5:15 PM	0	5	0	12	0	4	1	7	0	14	311	4	0	2	245	4	609		0	0	0	0

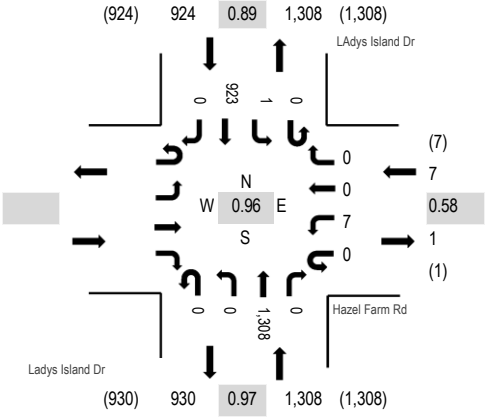
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	6
Lights	0	29	1	56	0	13	1	34	0	37	1,232	12	0	14	855	23	2,307
Mediums	0	1	0	0	0	0	0	0	0	2	12	0	0	0	23	0	38
Total	0	30	1	56	0	13	1	34	0	39	1,245	12	0	14	883	23	2,351

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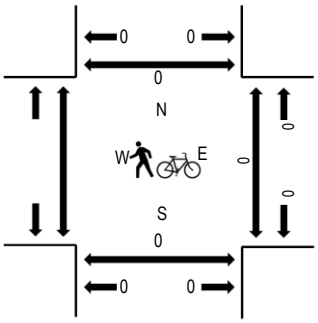
Location: 18 Ladys Island Dr & Hazel Farm Rd PM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Eastbound				Hazel Farm Rd Westbound				Ladys Island Dr Northbound				LAdys Island Dr Southbound				Total	Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:30 PM					0	1	0	0	0	0	335	0	0	0	216	0	552	2,239		0	0	0
4:45 PM					0	3	0	0	0	0	313	0	0	1	230	0	547			0	0	0
5:00 PM					0	3	0	0	0	0	338	0	0	0	218	0	559			0	0	0
5:15 PM					0	0	0	0	0	0	322	0	0	0	259	0	581			0	0	0

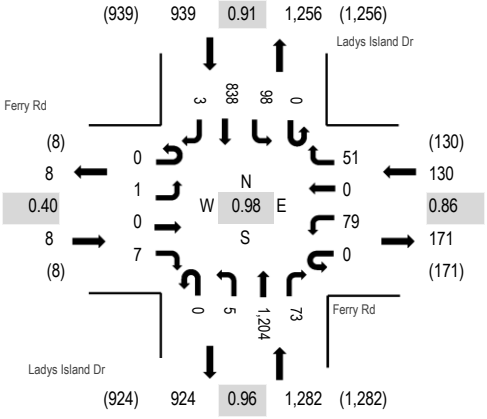
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks					0	0	0	0	0	0	1	0	0	0	11	0	12
Lights					0	7	0	0	0	0	1,293	0	0	1	890	0	2,191
Mediums					0	0	0	0	0	0	14	0	0	0	22	0	36
Total					0	7	0	0	0	0	1,308	0	0	1	923	0	2,239

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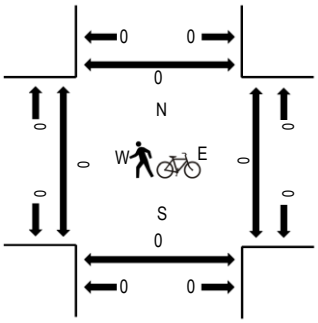
Location: 19 Ladys Island Dr & Ferry Rd PM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Ferry Rd Eastbound				Ferry Rd Westbound				Ladys Island Dr Northbound				Ladys Island Dr Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:30 PM	0	0	0	2	0	19	0	10	0	2	306	22	0	22	194	1	578	2,359	0	0	0	0
4:45 PM	0	1	0	4	0	21	0	17	0	1	290	19	0	26	211	1	591		0	0	0	0
5:00 PM	0	0	0	0	0	20	0	8	0	1	315	18	0	32	193	0	587		0	0	0	0
5:15 PM	0	0	0	1	0	19	0	16	0	1	293	14	0	18	240	1	603		0	0	0	0

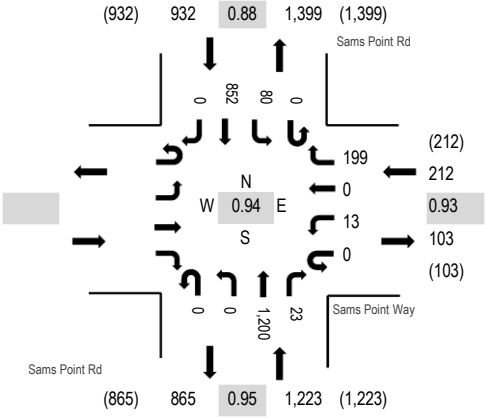
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	1	0	0	0	8	0	9
Lights	0	1	0	7	0	78	0	51	0	5	1,191	73	0	98	805	3	2,312
Mediums	0	0	0	0	0	1	0	0	0	0	12	0	0	0	25	0	38
Total	0	1	0	7	0	79	0	51	0	5	1,204	73	0	98	838	3	2,359

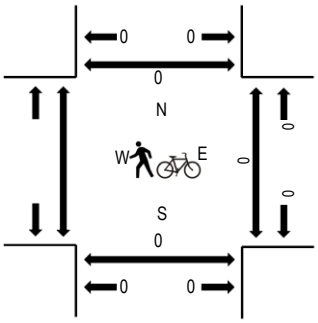
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Location: 20 Sams Point Rd & Sams Point Way PM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

Traffic Counts

Interval Start Time	Sams Point Way Eastbound				Sams Point Way Westbound				Sams Point Rd Northbound				Sams Point Rd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:30 PM					0	4	0	42	0	0	276	8	0	21	188	0	539	2,367		0	0	0
4:45 PM					0	0	0	57	0	0	300	7	0	16	199	0	579			0	0	0
5:00 PM					0	6	0	51	0	0	317	5	0	21	221	0	621			0	0	0
5:15 PM					0	3	0	49	0	0	307	3	0	22	244	0	628			0	0	0

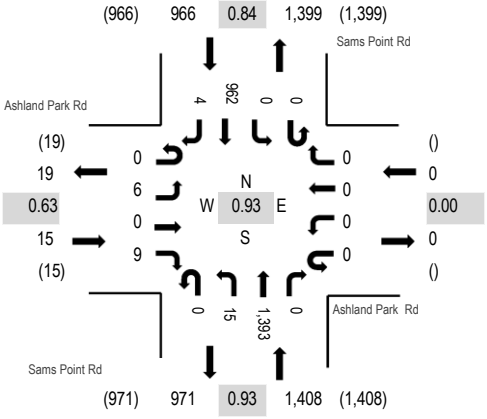
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks					0	0	0	0	0	0	2	0	0	0	3	0	5
Lights					0	13	0	198	0	0	1,188	21	0	79	828	0	2,327
Mediums					0	0	0	1	0	0	10	2	0	1	21	0	35
Total					0	13	0	199	0	0	1,200	23	0	80	852	0	2,367

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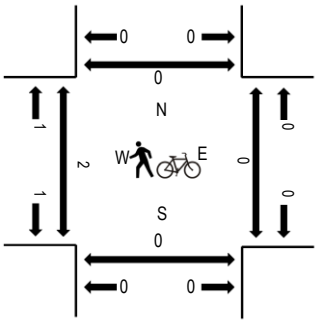
Location: 21 Sams Point Rd & Ashland Park Rd PM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Ashland Park Rd Eastbound				Ashland Park Rd Westbound				Sams Point Rd Northbound				Sams Point Rd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:30 PM	0	2	0	2	0	0	0	0	0	4	329	0	0	0	216	1	554	2,389	0	0	0	0
4:45 PM	0	2	0	2	0	0	0	0	0	4	340	0	0	0	218	0	566		1	0	0	0
5:00 PM	0	2	0	4	0	0	0	0	0	5	373	0	0	0	243	2	629		0	0	0	0
5:15 PM	0	0	0	1	0	0	0	0	0	2	351	0	0	0	285	1	640		0	0	0	0

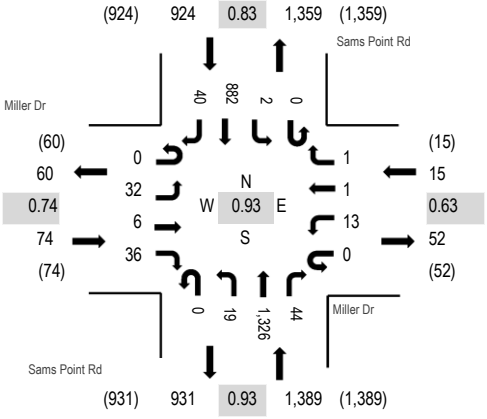
Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	5
Lights	0	6	0	8	0	0	0	0	0	15	1,381	0	0	0	937	3	2,350
Mediums	0	0	0	1	0	0	0	0	0	0	10	0	0	0	22	1	34
Total	0	6	0	9	0	0	0	0	0	15	1,393	0	0	0	962	4	2,389

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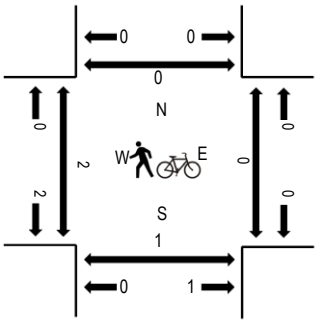
Location: 22 Sams Point Rd & Miller Dr PM
Date and Start Time: Wednesday, September 7, 2016
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts

Interval Start Time	Miller Dr Eastbound				Miller Dr Westbound				Sams Point Rd Northbound				Sams Point Rd Southbound					Rolling Hour	Pedestrain Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:30 PM	0	6	3	7	0	3	1	0	0	5	311	12	0	1	205	10	564	2,402	0	0	0	0
4:45 PM	0	12	3	10	0	3	0	0	0	5	325	12	0	1	193	6	570		1	0	0	0
5:00 PM	0	8	0	7	0	1	0	1	0	3	358	13	0	0	217	12	620		0	0	0	0
5:15 PM	0	6	0	12	0	6	0	0	0	6	332	7	0	0	267	12	648		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	3
Lights	0	32	6	35	0	13	1	1	0	19	1,315	43	0	2	860	40	2,367
Mediums	0	0	0	1	0	0	0	0	0	0	9	0	0	0	22	0	32
Total	0	32	6	36	0	13	1	1	0	19	1,326	44	0	2	882	40	2,402

APPENDIX B

VOLUME DEVELOPMENT

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business (Sea Island Parkway) & Meridian Road

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: September 7, 2016

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**45**	**0**	**26**	**0**	**0**	**1**	**41**	**1003**	**2**	**1**	**540**	**31**
Walmart								60			72	
Harris Teeter								24			36	
The Village at Oyster Bluff								10			8	
Marina Village								3			3	
Taco Bell (New Trips)								6			7	
Lady's Island Shopping Center (additional)								9			14	
White Hall Plantation	3		11				13	56			42	3
Total	3	0	11	0	0	0	13	168	0	0	182	3
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	11	0	6	0	0	0	10	245	0	0	132	8
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**59**	**0**	**43**	**0**	**0**	**1**	**64**	**1,416**	**2**	**1**	**854**	**42**
Redistributed Trips Concept Plan												
2038 TRAFFIC VOLUMES CONCEPT PLAN	**59**	**0**	**43**	**0**	**0**	**1**	**64**	**1,416**	**2**	**1**	**854**	**42**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**46**	**1**	**36**	**1**	**0**	**1**	**36**	**630**	**1**	**0**	**902**	**54**
Walmart								86			81	
Harris Teeter								51			52	
The Village at Oyster Bluff								15			12	
Marina Village								7			7	
Taco Bell (New Trips)								4			5	
Lady's Island Shopping Center (additional)								47			44	
White Hall Plantation	6		24				16	67			94	4
Total	6	0	24	0	0	0	16	277	0	0	295	4
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	11	0	9	0	0	0	9	154	0	0	221	13
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**63**	**1**	**69**	**1**	**0**	**1**	**61**	**1,061**	**1**	**0**	**1,418**	**71**
Redistributed Trips Concept Plan												
2038 TRAFFIC VOLUMES CONCEPT PLAN	**63**	**1**	**69**	**1**	**0**	**1**	**61**	**1,061**	**1**	**0**	**1,418**	**71**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business (Sea Island Parkway) & Beaufort High School

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: September 7, 2016

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**28**	**0**	**33**	**0**	**0**	**1**	**106**	**1029**	**0**	**0**	**502**	**49**
Walmart								60			72	
Harris Teeter								24			36	
The Village at Oyster Bluff								10			8	
Marina Village								5			5	
Taco Bell (New Trips)								6			7	
Lady's Island Shopping Center (additional)								9			14	
White Hall Plantation								69			53	
Total	0	0	0	0	0	0	0	183	0	0	195	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	7	0	8	0	0	0	26	252	0	0	123	12
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**35**	**0**	**41**	**0**	**0**	**1**	**132**	**1,464**	**0**	**0**	**820**	**61**
Redistributed Trips Concept Plan	-35		-41				-132	35				
2038 TRAFFIC VOLUMES CONCEPT PLAN	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1,499**	**0**	**0**	**820**	**61**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**40**	**1**	**37**	**4**	**0**	**2**	**20**	**643**	**6**	**2**	**929**	**15**
Walmart								86			81	
Harris Teeter								51			52	
The Village at Oyster Bluff								15			12	
Marina Village								13			13	
Taco Bell (New Trips)								4			5	
Lady's Island Shopping Center (additional)								47			44	
White Hall Plantation								83			118	
Total	0	0	0	0	0	0	0	299	0	0	325	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	10	0	9	1	0	0	5	157	1	0	227	4
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**50**	**1**	**46**	**5**	**0**	**2**	**25**	**1,099**	**7**	**2**	**1,481**	**19**
Redistributed Trips Concept Plan	-50	-1	-46				-25	50	1			
2038 TRAFFIC VOLUMES CONCEPT PLAN	**0**	**0**	**0**	**5**	**0**	**2**	**0**	**1,149**	**8**	**2**	**1,481**	**19**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business (Sea Island Parkway) & Sunset Boulevard

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: September 7, 2016

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**2**	**1**	**18**	**8**	**1**	**138**	**19**	**1001**	**9**	**54**	**469**	**9**
Walmart								60			72	
Harris Teeter								24			36	
The Village at Oyster Bluff								10			8	
Marina Village				9		2		3	8	2	3	
Taco Bell (New Trips)								6			7	
Lady's Island Shopping Center (additional)	9	3	5		6		9					14
White Hall Plantation								69			53	
Total	9	3	5	9	6	2	9	172	8	2	179	14
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	0	0	4	2	0	34	5	245	2	13	115	2
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**11**	**4**	**27**	**19**	**7**	**174**	**33**	**1,418**	**19**	**69**	**763**	**25**
Redistributed Trips Concept Plan	35		41			442	132	-442		144	-185	
2038 TRAFFIC VOLUMES CONCEPT PLAN	**46**	**4**	**68**	**19**	**7**	**616**	**165**	**976**	**19**	**213**	**578**	**25**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**1**	**0**	**40**	**7**	**0**	**58**	**16**	**615**	**27**	**108**	**828**	**22**
Walmart								86			81	
Harris Teeter								51			52	
The Village at Oyster Bluff								15			12	
Marina Village				20		5		8	21	5	8	
Taco Bell (New Trips)								4			5	
Lady's Island Shopping Center (additional)	47	19	28		17		26					44
White Hall Plantation								83			118	
Total	47	19	28	20	17	5	26	247	21	5	276	44
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	0	0	10	2	0	14	4	151	7	26	203	5
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**48**	**19**	**78**	**29**	**17**	**77**	**46**	**1,013**	**55**	**139**	**1,307**	**71**
Redistributed Trips Concept Plan	51		46			251	25	-251		321	-367	
2038 TRAFFIC VOLUMES CONCEPT PLAN	**99**	**19**	**124**	**29**	**17**	**328**	**71**	**762**	**55**	**460**	**940**	**71**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business (Sea Island Parkway) & Youmans Drive

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: September 7, 2016

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**8**	**1**	**73**	**0**	**1**	**3**	**132**	**1046**	**8**	**4**	**479**	**6**
Walmart								60			72	
Harris Teeter								24			36	
The Village at Oyster Bluff								10			8	
Marina Village								11			12	
Taco Bell (New Trips)								6			7	
Lady's Island Shopping Center (additional)								9			5	
White Hall Plantation								69			53	
Total	0	0	0	0	0	0	0	189	0	0	193	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	2	0	18	0	0	1	32	256	2	1	117	1
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**10**	**1**	**91**	**0**	**1**	**4**	**164**	**1,491**	**10**	**5**	**789**	**7**
Redistributed Trips Concept Plan								-442			-144	
2038 TRAFFIC VOLUMES CONCEPT PLAN	**10**	**1**	**91**	**0**	**1**	**4**	**164**	**1,049**	**10**	**5**	**645**	**7**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**13**	**1**	**94**	**4**	**1**	**7**	**60**	**685**	**5**	**3**	**896**	**16**
Walmart								86			81	
Harris Teeter								51			52	
The Village at Oyster Bluff								15			12	
Marina Village								29			28	
Taco Bell (New Trips)								4			5	
Lady's Island Shopping Center (additional)								26			28	
White Hall Plantation								83			118	
Total	0	0	0	0	0	0	0	294	0	0	324	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	3	0	23	1	0	2	15	168	1	1	219	4
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**16**	**1**	**117**	**5**	**1**	**9**	**75**	**1,147**	**6**	**4**	**1,439**	**20**
Redistributed Trips Concept Plan								-251			-321	
2038 TRAFFIC VOLUMES CONCEPT PLAN	**16**	**1**	**117**	**5**	**1**	**9**	**75**	**896**	**6**	**4**	**1,118**	**20**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business (Sea Island Parkway) & Professional Village Circle

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: September 7, 2016

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**0**	**0**	**0**	**10**	**0**	**24**	**0**	**1158**	**44**	**34**	**517**	**0**
Walmart								60			72	
Harris Teeter								24			36	
The Village at Oyster Bluff								10			8	
Marina Village								11			12	
Taco Bell (New Trips)								6			7	
Lady's Island Shopping Center (additional)								9			5	
White Hall Plantation								69			53	
Total	0	0	0	0	0	0	0	189	0	0	193	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	0	0	0	2	0	6	0	283	11	8	127	0
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**0**	**0**	**0**	**12**	**0**	**30**	**0**	**1,630**	**55**	**42**	**837**	**0**
Redistributed Trips Concept Plan								-442			-144	
2038 TRAFFIC VOLUMES CONCEPT PLAN	**0**	**0**	**0**	**12**	**0**	**30**	**0**	**1,188**	**55**	**42**	**693**	**0**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**0**	**0**	**0**	**35**	**0**	**43**	**0**	**725**	**31**	**14**	**1012**	**0**
Walmart								86			81	
Harris Teeter								51			52	
The Village at Oyster Bluff								15			12	
Marina Village								29			28	
Taco Bell (New Trips)								4			5	
Lady's Island Shopping Center (additional)								26			28	
White Hall Plantation								83			118	
Total	0	0	0	0	0	0	0	294	0	0	324	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	0	0	0	9	0	11	0	177	8	3	248	0
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**0**	**0**	**0**	**44**	**0**	**54**	**0**	**1,196**	**39**	**17**	**1,584**	**0**
Redistributed Trips Concept Plan								-251			-321	
2038 TRAFFIC VOLUMES CONCEPT PLAN	**0**	**0**	**0**	**44**	**0**	**54**	**0**	**945**	**39**	**17**	**1,263**	**0**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business (Sea Island Parkway) & SC 802 (Sams Point Road)

TRAFFIC CONTROL: Signalized

DATE COUNTED: September 7, 2016

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**94**	**309**	**270**	**155**	**678**	**675**	**401**	**496**	**91**	**183**	**254**	**75**
Walmart			73	108			60	60	91		72	
Harris Teeter		37	9	4	4	4	25	20		27	9	
The Village at Oyster Bluff	0	23	0	15	34	10	0	0	12	8	0	0
Marina Village	3					4		4		5	4	3
Taco Bell (New Trips)			7	10			6	6	9		7	
Lady's Island Shopping Center (additional)	6					1		2		1	1	3
White Hall Plantation	17					26		26		20	20	13
Total	26	60	89	137	38	45	91	118	112	61	113	19
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	23	76	66	38	166	165	98	121	22	45	62	18
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**143**	**445**	**425**	**330**	**882**	**885**	**590**	**735**	**225**	**289**	**429**	**112**
Redistributed Trips Concept Plan			-255			-442	-354			-144		
2038 TRAFFIC VOLUMES CONCEPT PLAN	**143**	**445**	**170**	**330**	**882**	**443**	**236**	**735**	**225**	**145**	**429**	**112**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**123**	**667**	**404**	**139**	**414**	**345**	**315**	**293**	**81**	**430**	**494**	**109**
Walmart			81	122			86	86	128		81	
Harris Teeter		53	13	8	10	8	53	43		39	13	
The Village at Oyster Bluff	0	39	0	15	50	23	0	0	18	12	0	0
Marina Village	7					11		11		11	10	7
Taco Bell (New Trips)			5	7			4	4	6		5	
Lady's Island Shopping Center (additional)	17					3		6		5	6	17
White Hall Plantation	21					31		31		44	44	30
Total	45	92	99	152	60	76	143	181	152	111	159	54
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	30	163	99	34	101	84	77	72	20	105	121	27
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**198**	**922**	**602**	**325**	**575**	**505**	**535**	**546**	**253**	**646**	**774**	**190**
Redistributed Trips Concept Plan			-361			-251	-375			-321		
2038 TRAFFIC VOLUMES CONCEPT PLAN	**198**	**922**	**241**	**325**	**575**	**254**	**160**	**546**	**253**	**325**	**774**	**190**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business (Sea Island Parkway) & Sams Point Way

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: September 7, 2016

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**0**	**4**	**10**	**23**	**1**	**128**	**63**	**879**	**47**	**83**	**540**	**12**
Walmart								211			253	
Harris Teeter				21		2		27	10	18	4	
The Village at Oyster Bluff								12			15	
Marina Village								4			4	
Taco Bell (New Trips)								21			24	
Lady's Island Shopping Center (additional)								2			1	
White Hall Plantation								26			20	
Total	0	0	0	21	0	2	0	303	10	18	321	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	0	1	2	6	0	31	15	215	12	20	132	3
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**0**	**5**	**12**	**50**	**1**	**161**	**78**	**1,397**	**69**	**121**	**993**	**15**
Redistributed Trips Concept Plan								-354			-255	
2038 TRAFFIC VOLUMES CONCEPT PLAN	**0**	**5**	**12**	**50**	**1**	**161**	**78**	**1,043**	**69**	**121**	**738**	**15**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**10**	**11**	**58**	**10**	**2**	**102**	**31**	**590**	**34**	**157**	**792**	**31**
Walmart								300			284	
Harris Teeter				43		6		39	14	26	8	
The Village at Oyster Bluff								18			23	
Marina Village								11			10	
Taco Bell (New Trips)								14			17	
Lady's Island Shopping Center (additional)								6			6	
White Hall Plantation								31			44	
Total	0	0	0	43	0	6	0	419	14	26	392	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	2	3	14	2	0	25	8	144	8	38	194	8
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**12**	**14**	**72**	**55**	**2**	**133**	**39**	**1,153**	**56**	**221**	**1,378**	**39**
Redistributed Trips Concept Plan								-375			-361	
2038 TRAFFIC VOLUMES CONCEPT PLAN	**12**	**14**	**72**	**55**	**2**	**133**	**39**	**778**	**56**	**221**	**1,017**	**39**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business (Sea Island Parkway) & Ferry Drive

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: September 7, 2016

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**2**	**0**	**13**	**56**	**0**	**21**	**44**	**998**	**37**	**23**	**565**	**4**
Walmart								211			253	
Harris Teeter								37			25	
The Village at Oyster Bluff								12			15	
Marina Village								4			4	
Taco Bell (New Trips)								21			24	
Lady's Island Shopping Center (additional)								2			1	
White Hall Plantation								26			20	
Total	0	0	0	0	0	0	0	313	0	0	342	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	0	0	3	14	0	5	11	244	9	6	138	1
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**2**	**0**	**16**	**70**	**0**	**26**	**55**	**1,555**	**46**	**29**	**1,045**	**5**
Redistributed Trips Concept Plan							-55	-354			-255	
2038 TRAFFIC VOLUMES CONCEPT PLAN	**2**	**0**	**16**	**70**	**0**	**26**	**0**	**1,201**	**46**	**29**	**790**	**5**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**3**	**3**	**20**	**102**	**1**	**46**	**8**	**601**	**56**	**69**	**793**	**9**
Walmart								300			284	
Harris Teeter								53			51	
The Village at Oyster Bluff								18			23	
Marina Village								11			10	
Taco Bell (New Trips)								14			17	
Lady's Island Shopping Center (additional)								6			6	
White Hall Plantation								31			44	
Total	0	0	0	0	0	0	0	433	0	0	435	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	1	1	5	25	0	11	2	147	14	17	194	2
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**4**	**4**	**25**	**127**	**1**	**57**	**10**	**1,181**	**70**	**86**	**1,422**	**11**
Redistributed Trips Concept Plan							-10	-375			-361	
2038 TRAFFIC VOLUMES CONCEPT PLAN	**4**	**4**	**25**	**127**	**1**	**57**	**0**	**806**	**70**	**86**	**1,061**	**11**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business (Sea Island Parkway) & Gay Drive

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: September 7, 2016

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**4**	**0**	**3**	**0**	**0**	**3**	**6**	**1059**	**0**	**3**	**672**	**2**
Walmart								211			253	
Harris Teeter								37			25	
The Village at Oyster Bluff								12			15	
Marina Village								4			4	
Taco Bell (New Trips)								21			24	
Lady's Island Shopping Center (additional)								2			1	
White Hall Plantation								26			20	
Total	0	0	0	0	0	0	0	313	0	0	342	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	1	0	1	0	0	1	1	259	0	1	164	0
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**5**	**0**	**4**	**0**	**0**	**4**	**7**	**1,631**	**0**	**4**	**1,178**	**2**
Redistributed Trips Concept Plan	2		255	16		144	411	-498	75	143	-405	7
2038 TRAFFIC VOLUMES CONCEPT PLAN	**7**	**0**	**259**	**16**	**0**	**148**	**418**	**1,133**	**75**	**147**	**773**	**9**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**7**	**0**	**1**	**0**	**0**	**2**	**3**	**671**	**0**	**2**	**923**	**4**
Walmart								300			284	
Harris Teeter								53			51	
The Village at Oyster Bluff								18			23	
Marina Village								11			10	
Taco Bell (New Trips)								14			17	
Lady's Island Shopping Center (additional)								6			6	
White Hall Plantation								31			44	
Total	0	0	0	0	0	0	0	433	0	0	435	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	2	0	0	0	0	0	1	164	0	0	226	1
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**9**	**0**	**1**	**0**	**0**	**2**	**4**	**1,268**	**0**	**2**	**1,584**	**5**
Redistributed Trips Concept Plan	9		366	6		25	389	-400	2	7	-370	2
2038 TRAFFIC VOLUMES CONCEPT PLAN	**18**	**0**	**367**	**6**	**0**	**27**	**393**	**868**	**2**	**9**	**1,214**	**7**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business (Sea Island Parkway) & Cougar Drive

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: September 7, 2016

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**2**	**0**	**0**	**13**	**0**	**116**	**2**	**947**	**60**	**115**	**514**	**6**
Walmart								211			253	
Harris Teeter								37			25	
The Village at Oyster Bluff								12			15	
Marina Village								4			4	
Taco Bell (New Trips)								21			24	
Lady's Island Shopping Center (additional)								2			1	
White Hall Plantation								26			20	
Total	0	0	0	0	0	0	0	313	0	0	342	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	0	0	0	3	0	28	0	232	15	28	126	1
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**2**	**0**	**0**	**16**	**0**	**144**	**2**	**1,492**	**75**	**143**	**982**	**7**
Redistributed Trips Concept Plan	-2			-16		-144	-2		-75	-143	16	-7
2038 TRAFFIC VOLUMES CONCEPT PLAN	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,492**	**0**	**0**	**998**	**0**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**7**	**0**	**4**	**5**	**0**	**20**	**3**	**634**	**2**	**6**	**897**	**2**
Walmart								300			284	
Harris Teeter								53			51	
The Village at Oyster Bluff								18			23	
Marina Village								11			10	
Taco Bell (New Trips)								14			17	
Lady's Island Shopping Center (additional)								6			6	
White Hall Plantation								31			44	
Total	0	0	0	0	0	0	0	433	0	0	435	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	2	0	1	1	0	5	1	155	0	1	220	0
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**9**	**0**	**5**	**6**	**0**	**25**	**4**	**1,222**	**2**	**7**	**1,552**	**2**
Redistributed Trips Concept Plan	-9		-5	-6		-25	-4		-2	-7	6	-2
2038 TRAFFIC VOLUMES CONCEPT PLAN	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,222**	**0**	**0**	**1,558**	**0**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business (Sea Island Parkway) & Lost Island Road

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: September 7, 2016

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**23**	**0**	**1**	**0**	**0**	**0**	**3**	**1008**	**0**	**0**	**518**	**5**
Walmart								211			253	
Harris Teeter								37			25	
The Village at Oyster Bluff								12			15	
Marina Village								4			4	
Taco Bell (New Trips)	21						10				10	7
Lady's Island Shopping Center (additional)								2			1	
White Hall Plantation								26			20	
Total	21	0	0	0	0	0	10	292	0	0	328	7
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	6	0	0	0	0	0	1	247	0	0	127	1
Redistributed Trips by Median	-50						-14	50				
2038 NO-BUILD TRAFFIC VOLUMES	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1,597**	**0**	**0**	**973**	**13**
Redistributed Trips Concept Plan												
2038 TRAFFIC VOLUMES CONCEPT PLAN	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1,597**	**0**	**0**	**973**	**13**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**10**	**0**	**5**	**0**	**0**	**0**	**2**	**624**	**0**	**0**	**901**	**15**
Walmart								300			284	
Harris Teeter								53			51	
The Village at Oyster Bluff								18			23	
Marina Village								11			10	
Taco Bell (New Trips)	14						7				7	5
Lady's Island Shopping Center (additional)								6			6	
White Hall Plantation								31			44	
Total	14	0	0	0	0	0	7	419	0	0	425	5
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	2	0	1	0	0	0	0	153	0	0	220	4
Redistributed Trips by Median	-26						-9	26				
2038 NO-BUILD TRAFFIC VOLUMES	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**1,222**	**0**	**0**	**1,546**	**24**
Redistributed Trips Concept Plan												
2038 TRAFFIC VOLUMES CONCEPT PLAN	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**1,222**	**0**	**0**	**1,546**	**24**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business (Sea Island Parkway) & Airport Circle

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: September 7, 2016

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**998**	**0**	**9**	**509**	**0**
Walmart				60		121		90		108	145	
Harris Teeter								37			25	
The Village at Oyster Bluff								12			15	
Marina Village								4			4	
Taco Bell (New Trips)								10			10	
Lady's Island Shopping Center (additional)								2			1	
White Hall Plantation								26			20	
Total	0	0	0	60	0	121	0	181	0	108	220	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	0	0	0	0	0	1	0	244	0	2	125	0
Redistributed Trips by Median	50						14					
2038 NO-BUILD TRAFFIC VOLUMES	**50**	**0**	**0**	**60**	**0**	**126**	**14**	**1,423**	**0**	**119**	**854**	**0**
Redistributed Trips Concept Plan												
2038 TRAFFIC VOLUMES CONCEPT PLAN	**50**	**0**	**0**	**60**	**0**	**126**	**14**	**1,423**	**0**	**119**	**854**	**0**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**0**	**0**	**0**	**0**	**0**	**11**	**0**	**620**	**1**	**4**	**885**	**0**
Walmart				207		171		129		244	40	
Harris Teeter								53			51	
The Village at Oyster Bluff								18			23	
Marina Village								11			10	
Taco Bell (New Trips)								7			7	
Lady's Island Shopping Center (additional)								6			6	
White Hall Plantation								31			44	
Total	0	0	0	207	0	171	0	255	0	244	181	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	0	0	0	0	0	3	0	152	0	1	217	0
Redistributed Trips by Median	26						9					
2038 NO-BUILD TRAFFIC VOLUMES	**26**	**0**	**0**	**207**	**0**	**185**	**9**	**1,027**	**1**	**249**	**1,283**	**0**
Redistributed Trips Concept Plan												
2038 TRAFFIC VOLUMES CONCEPT PLAN	**26**	**0**	**0**	**207**	**0**	**185**	**9**	**1,027**	**1**	**249**	**1,283**	**0**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business (Sea Island Parkway) & Old Distant Island Road

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: September 7, 2016

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**12**	**0**	**2**	**0**	**0**	**0**	**5**	**964**	**0**	**0**	**489**	**6**
Walmart								108			90	
Harris Teeter								37			25	
The Village at Oyster Bluff								12			15	
Marina Village								4			4	
Taco Bell (New Trips)								10			10	
Lady's Island Shopping Center (additional)								2			1	
White Hall Plantation								26			20	
Total	0	0	0	0	0	0	0	199	0	0	165	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	3	0	0	0	0	0	1	236	0	0	120	1
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**15**	**0**	**2**	**0**	**0**	**0**	**6**	**1,399**	**0**	**0**	**774**	**7**
Redistributed Trips Concept Plan												
2038 TRAFFIC VOLUMES CONCEPT PLAN	**15**	**0**	**2**	**0**	**0**	**0**	**6**	**1,399**	**0**	**0**	**774**	**7**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**7**	**0**	**5**	**0**	**0**	**0**	**3**	**588**	**0**	**0**	**852**	**10**
Walmart								122			128	
Harris Teeter								53			51	
The Village at Oyster Bluff								18			23	
Marina Village								11			10	
Taco Bell (New Trips)								7			7	
Lady's Island Shopping Center (additional)								6			6	
White Hall Plantation								31			44	
Total	0	0	0	0	0	0	0	248	0	0	269	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	2	0	1	0	0	0	1	144	0	0	208	2
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**9**	**0**	**6**	**0**	**0**	**0**	**4**	**980**	**0**	**0**	**1,329**	**12**
Redistributed Trips Concept Plan												
2038 TRAFFIC VOLUMES CONCEPT PLAN	**9**	**0**	**6**	**0**	**0**	**0**	**4**	**980**	**0**	**0**	**1,329**	**12**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business (Sea Island Parkway) & Eustis Landing Road

TRAFFIC CONTROL: Signalized

DATE COUNTED: September 7, 2016

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**108**	**3**	**36**	**13**	**2**	**30**	**45**	**852**	**0**	**19**	**382**	**94**
Walmart	18							90			75	15
Harris Teeter								37			25	
The Village at Oyster Bluff								12			15	
Marina Village								4			4	
Taco Bell (New Trips)								10			10	
Lady's Island Shopping Center (additional)								2			1	
White Hall Plantation								26			20	
Total	18	0	0	0	0	0	0	181	0	0	150	15
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	26	1	9	3	0	7	11	208	0	5	93	23
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**152**	**4**	**45**	**16**	**2**	**37**	**56**	**1,241**	**0**	**24**	**625**	**132**
Redistributed Trips Concept Plan												
2038 TRAFFIC VOLUMES CONCEPT PLAN	**152**	**4**	**45**	**16**	**2**	**37**	**56**	**1,241**	**0**	**24**	**625**	**132**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**31**	**0**	**9**	**13**	**2**	**20**	**5**	**556**	**2**	**40**	**803**	**31**
Walmart	20							102			107	21
Harris Teeter								53			51	
The Village at Oyster Bluff								18			23	
Marina Village								11			10	
Taco Bell (New Trips)								7			7	
Lady's Island Shopping Center (additional)								6			6	
White Hall Plantation								31			44	
Total	20	0	0	0	0	0	0	228	0	0	248	21
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	8	0	2	3	0	5	1	136	0	10	197	8
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**59**	**0**	**11**	**16**	**2**	**25**	**6**	**920**	**2**	**50**	**1,248**	**60**
Redistributed Trips Concept Plan												
2038 TRAFFIC VOLUMES CONCEPT PLAN	**59**	**0**	**11**	**16**	**2**	**25**	**6**	**920**	**2**	**50**	**1,248**	**60**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business (Lasy's Island Drive) & Rue Du Bois

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: September 7, 2016

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**64**	**715**	**18**	**27**	**1274**	**38**	**3**	**0**	**6**	**18**	**1**	**43**
Walmart		73			168							
Harris Teeter		46			29							
The Village at Oyster Bluff		23			34							
Marina Village		3			3							
Taco Bell (New Trips)		7			6							
Lady's Island Shopping Center (additional)		6			3							
White Hall Plantation		17			13							
Total	0	175	0	0	256	0	0	0	0	0	0	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	16	175	4	7	312	9	1	0	1	4	0	11
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**80**	**1,065**	**22**	**34**	**1,842**	**47**	**4**	**0**	**7**	**22**	**1**	**54**
Redistributed Trips Concept Plan												
2038 TRAFFIC VOLUMES CONCEPT PLAN	**80**	**1,065**	**22**	**34**	**1,842**	**47**	**4**	**0**	**7**	**22**	**1**	**54**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**39**	**1245**	**12**	**14**	**883**	**23**	**13**	**1**	**34**	**30**	**1**	**56**
Walmart		81			208							
Harris Teeter		66			63							
The Village at Oyster Bluff		39			50							
Marina Village		7			7							
Taco Bell (New Trips)		5			4							
Lady's Island Shopping Center (additional)		17			17							
White Hall Plantation		21			30							
Total	0	236	0	0	379	0	0	0	0	0	0	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	10	305	3	3	216	6	3	0	8	7	0	14
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**49**	**1,786**	**15**	**17**	**1,478**	**29**	**16**	**1**	**42**	**37**	**1**	**70**
Redistributed Trips Concept Plan												
2038 TRAFFIC VOLUMES CONCEPT PLAN	**49**	**1,786**	**15**	**17**	**1,478**	**29**	**16**	**1**	**42**	**37**	**1**	**70**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business (Lady's Island Drive) & Hazel Farm Road

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: September 7, 2016

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**0**	**741**	**4**	**0**	**1329**	**0**	**14**	**0**	**1**	**0**	**0**	**0**
Walmart		73			168							
Harris Teeter		46			29							
The Village at Oyster Bluff		23			34							
Marina Village		3			3							
Taco Bell (New Trips)		7			6							
Lady's Island Shopping Center (additional)		6			3							
White Hall Plantation		17			13							
Total	0	175	0	0	256	0	0	0	0	0	0	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	0	181	1	0	325	0	3	0	0	0	0	0
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**0**	**1,097**	**5**	**0**	**1,910**	**0**	**17**	**0**	**1**	**0**	**0**	**0**
Redistributed Trips Concept Plan		-255	255		-354		354					
2038 TRAFFIC VOLUMES CONCEPT PLAN	**0**	**842**	**260**	**0**	**1,556**	**0**	**371**	**0**	**1**	**0**	**0**	**0**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**0**	**1308**	**0**	**1**	**923**	**0**	**7**	**0**	**0**	**0**	**0**	**0**
Walmart		81			208							
Harris Teeter		66			63							
The Village at Oyster Bluff		39			50							
Marina Village		7			7							
Taco Bell (New Trips)		5			4							
Lady's Island Shopping Center (additional)		17			17							
White Hall Plantation		21			30							
Total	0	236	0	0	379	0	0	0	0	0	0	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	0	320	0	0	226	0	2	0	0	0	0	0
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**0**	**1,864**	**0**	**1**	**1,528**	**0**	**9**	**0**	**0**	**0**	**0**	**0**
Redistributed Trips Concept Plan		-361	361		-375		375					
2038 TRAFFIC VOLUMES CONCEPT PLAN	**0**	**1,503**	**361**	**1**	**1,153**	**0**	**384**	**0**	**0**	**0**	**0**	**0**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business (Lady's Island Drive) & Ferry Road

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: September 7, 2016

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**31**	**683**	**21**	**21**	**1211**	**51**	**108**	**1**	**18**	**3**	**0**	**17**
Walmart		73			168							
Harris Teeter		46			29							
The Village at Oyster Bluff		23			34							
Marina Village		3			3							
Taco Bell (New Trips)		7			6							
Lady's Island Shopping Center (additional)		6			3							
White Hall Plantation		17			13							
Total	0	175	0	0	256	0	0	0	0	0	0	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	8	167	5	5	296	12	26	0	4	1	0	4
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**39**	**1,025**	**26**	**26**	**1,763**	**63**	**134**	**1**	**22**	**4**	**0**	**21**
Redistributed Trips Concept Plan		-255			-354							
2038 TRAFFIC VOLUMES CONCEPT PLAN	**39**	**770**	**26**	**26**	**1,409**	**63**	**134**	**1**	**22**	**4**	**0**	**21**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**5**	**1204**	**73**	**98**	**838**	**3**	**79**	**0**	**51**	**1**	**0**	**7**
Walmart		81			208							
Harris Teeter		66			63							
The Village at Oyster Bluff		39			50							
Marina Village		7			7							
Taco Bell (New Trips)		5			4							
Lady's Island Shopping Center (additional)		17			17							
White Hall Plantation		21			30							
Total	0	236	0	0	379	0	0	0	0	0	0	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	1	295	18	24	205	1	19	0	12	0	0	2
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**6**	**1,735**	**91**	**122**	**1,422**	**4**	**98**	**0**	**63**	**1**	**0**	**9**
Redistributed Trips Concept Plan		-361			-375							
2038 TRAFFIC VOLUMES CONCEPT PLAN	**6**	**1,374**	**91**	**122**	**1,047**	**4**	**98**	**0**	**63**	**1**	**0**	**9**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

SC 802 (Sams Point Road) & Sams Point Way

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: September 7, 2016

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**0**	**572**	**18**	**149**	**1522**	**0**	**9**	**0**	**88**	**0**	**0**	**0**
Walmart		91			108							
Harris Teeter		40		4	60				2			
The Village at Oyster Bluff		43			34							
Marina Village		5			4							
Packing Shed												
Taco Bell (New Trips)		9			10							
Lady's Island Shopping Center (additional)		1			1							
White Hall Plantation		20			26							
Total	0	209	0	4	243	0	0	0	2	0	0	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	0	140	4	36	372	0	2	0	22	0	0	0
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**0**	**921**	**22**	**189**	**2,137**	**0**	**11**	**0**	**112**	**0**	**0**	**0**
Redistributed Trips Concept Plan		-144			-422							
2038 TRAFFIC VOLUMES CONCEPT PLAN	**0**	**777**	**22**	**189**	**1,715**	**0**	**11**	**0**	**112**	**0**	**0**	**0**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**0**	**1200**	**23**	**80**	**852**	**0**	**13**	**0**	**199**	**0**	**0**	**0**
Walmart		128			122							
Harris Teeter		85		5	86				5			
The Village at Oyster Bluff		69			88							
Marina Village		11			11							
Taco Bell (New Trips)		6			7							
Lady's Island Shopping Center (additional)		5			3							
White Hall Plantation		44			31							
Total	0	348	0	5	348	0	0	0	5	0	0	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	0	294	6	20	208	0	3	0	49	0	0	0
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**0**	**1,842**	**29**	**105**	**1,408**	**0**	**16**	**0**	**253**	**0**	**0**	**0**
Redistributed Trips Concept Plan		-321			-251							
2038 TRAFFIC VOLUMES CONCEPT PLAN	**0**	**1,521**	**29**	**105**	**1,157**	**0**	**16**	**0**	**253**	**0**	**0**	**0**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

SC 802 (Sams Point Road) & Ashland Park Road

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: September 7, 2016

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**11**	**638**	**0**	**1**	**1691**	**6**	**0**	**0**	**0**	**1**	**0**	**9**
Walmart		91			108							
Harris Teeter		40			64							
The Village at Oyster Bluff		43			34							
Marina Village		5			4							
Taco Bell (New Trips)		9			10							
Lady's Island Shopping Center (additional)		1			1							
White Hall Plantation		20			26							
Total	0	209	0	0	247	0	0	0	0	0	0	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	3	156	0	0	414	1	0	0	0	0	0	2
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**14**	**1,003**	**0**	**1**	**2,352**	**7**	**0**	**0**	**0**	**1**	**0**	**11**
Redistributed Trips Concept Plan		-144			-422							
2038 TRAFFIC VOLUMES CONCEPT PLAN	**14**	**859**	**0**	**1**	**1,930**	**7**	**0**	**0**	**0**	**1**	**0**	**11**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**15**	**1393**	**0**	**0**	**962**	**4**	**0**	**0**	**0**	**6**	**0**	**9**
Walmart		128			122							
Harris Teeter		85			91							
The Village at Oyster Bluff		69			88							
Marina Village		11			11							
Taco Bell (New Trips)		6			7							
Lady's Island Shopping Center (additional)		5			3							
White Hall Plantation		44			31							
Total	0	348	0	0	353	0	0	0	0	0	0	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	4	341	0	0	235	1	0	0	0	1	0	2
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**19**	**2,082**	**0**	**0**	**1,550**	**5**	**0**	**0**	**0**	**7**	**0**	**11**
Redistributed Trips Concept Plan		-321			-251							
2038 TRAFFIC VOLUMES CONCEPT PLAN	**19**	**1,761**	**0**	**0**	**1,299**	**5**	**0**	**0**	**0**	**7**	**0**	**11**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

SC 802 (Sams Point Road) & Miller Drive

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: September 7, 2016

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**13**	**602**	**19**	**3**	**1631**	**125**	**15**	**1**	**4**	**7**	**0**	**33**
Walmart		91			108							
Harris Teeter		40			64							
The Village at Oyster Bluff		43			34							
Marina Village		5			4							
Taco Bell (New Trips)		9			10							
Lady's Island Shopping Center (additional)		1			1							
White Hall Plantation		20			26							
Total	0	209	0	0	247	0	0	0	0	0	0	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	3	147	5	1	399	31	4	0	1	2	0	8
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**16**	**958**	**24**	**4**	**2,277**	**156**	**19**	**1**	**5**	**9**	**0**	**41**
Redistributed Trips Concept Plan		-144			-442	422				144		
2038 TRAFFIC VOLUMES CONCEPT PLAN	**16**	**814**	**24**	**4**	**1,835**	**578**	**19**	**1**	**5**	**153**	**0**	**41**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES	**19**	**1326**	**44**	**2**	**882**	**40**	**13**	**1**	**1**	**32**	**6**	**36**
Walmart		128			122							
Harris Teeter		85			91							
The Village at Oyster Bluff		69			88							
Marina Village		11			11							
Taco Bell (New Trips)		6			7							
Lady's Island Shopping Center (additional)		5			3							
White Hall Plantation		44			31							
Total	0	348	0	0	353	0	0	0	0	0	0	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	5	324	11	0	216	10	3	0	0	8	1	9
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**24**	**1,998**	**55**	**2**	**1,451**	**50**	**16**	**1**	**1**	**40**	**7**	**45**
Redistributed Trips Concept Plan		-321			-251	251				321		
2038 TRAFFIC VOLUMES CONCEPT PLAN	**24**	**1,677**	**55**	**2**	**1,200**	**301**	**16**	**1**	**1**	**361**	**7**	**45**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business (Sea Island Parkway) & Taco Bell Driveway

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: NA

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES								**1009**			**527**	
Walmart								211			253	
Harris Teeter								37			25	
The Village at Oyster Bluff								12			15	
Marina Village								4			4	
Taco Bell (New Trips)			10					21			7	17
Lady's Island Shopping Center (additional)								2			1	
White Hall Plantation								26			20	
Total	0	0	10	0	0	0	0	313	0	0	325	17
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	0	0	0	0	0	0	0	247	0	0	129	0
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**0**	**0**	**10**	**0**	**0**	**0**	**0**	**1,569**	**0**	**0**	**981**	**17**
Redistributed Trips Concept Plan												
2038 TRAFFIC VOLUMES CONCEPT PLAN	**0**	**0**	**10**	**0**	**0**	**0**	**0**	**1,569**	**0**	**0**	**981**	**17**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES								**639**			**906**	
Walmart								300			284	
Harris Teeter								53			51	
The Village at Oyster Bluff								18			23	
Marina Village								11			10	
Taco Bell (New Trips)			7					14			5	12
Lady's Island Shopping Center (additional)								6			6	
White Hall Plantation								31			44	
Total	0	0	7	0	0	0	0	433	0	0	423	12
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	0	0	0	0	0	0	0	156	0	0	222	0
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**1,228**	**0**	**0**	**1,551**	**12**
Redistributed Trips Concept Plan												
2038 TRAFFIC VOLUMES CONCEPT PLAN	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**1,228**	**0**	**0**	**1,551**	**12**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business (Sea Island Parkway) & Walmart Driveway #3

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: NA

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES								**998**			**509**	
Walmart				30		60		30	72	145	60	
Harris Teeter								37			25	
The Village at Oyster Bluff								12			15	
Marina Village								4			4	
Taco Bell (New Trips)								10			10	
Lady's Island Shopping Center (additional)								2			1	
White Hall Plantation								26			20	
Total	0	0	0	30	0	60	0	121	72	145	135	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	0	0	0	0	0	0	0	244	0	0	125	0
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**0**	**0**	**0**	**30**	**0**	**60**	**0**	**1,363**	**72**	**145**	**769**	**0**
Redistributed Trips Concept Plan												
2038 TRAFFIC VOLUMES CONCEPT PLAN	**0**	**0**	**0**	**30**	**0**	**60**	**0**	**1,363**	**72**	**145**	**769**	**0**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES								**620**			**885**	
Walmart				43		86		43	81	162	85	
Harris Teeter								53			51	
The Village at Oyster Bluff								18			23	
Marina Village								11			10	
Taco Bell (New Trips)								7			7	
Lady's Island Shopping Center (additional)								6			6	
White Hall Plantation								31			44	
Total	0	0	0	43	0	86	0	169	81	162	226	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	0	0	0	0	0	0	0	152	0	0	217	0
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**0**	**0**	**0**	**43**	**0**	**86**	**0**	**941**	**81**	**162**	**1,328**	**0**
Redistributed Trips Concept Plan												
2038 TRAFFIC VOLUMES CONCEPT PLAN	**0**	**0**	**0**	**43**	**0**	**86**	**0**	**941**	**81**	**162**	**1,328**	**0**

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

US 21 Business (Sea Island Parkway) & Walmart Driveway #4

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: NA

AM PEAK HOUR (7:15-8:15 AM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES								**998**			**509**	
Walmart						30		72	36		90	
Harris Teeter								37			25	
The Village at Oyster Bluff								12			15	
Marina Village								4			4	
Taco Bell (New Trips)								10			10	
Lady's Island Shopping Center (additional)								2			1	
White Hall Plantation								26			20	
Total	0	0	0	0	0	30	0	163	36	0	165	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	0	0	0	0	0	0	0	244	0	0	125	0
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**0**	**0**	**0**	**0**	**0**	**30**	**0**	**1,405**	**36**	**0**	**799**	**0**
Redistributed Trips Concept Plan												
2038 TRAFFIC VOLUMES CONCEPT PLAN	**0**	**0**	**0**	**0**	**0**	**30**	**0**	**1,405**	**36**	**0**	**799**	**0**

PM PEAK HOUR (4:30-5:30 PM)	NBL	NBT	NBR	SBL	SBT	SBR	WBL	WBT	WBR	EBL	EBT	EBR
2016 TRAFFIC VOLUMES								**620**			**885**	
Walmart						43		81	41		128	
Harris Teeter								53			51	
The Village at Oyster Bluff								18			23	
Marina Village								11			10	
Taco Bell (New Trips)								7			7	
Lady's Island Shopping Center (additional)								6			6	
White Hall Plantation								31			44	
Total	0	0	0	0	0	43	0	207	41	0	269	0
Years To Buildout (2038)	22	22	22	22	22	22	22	22	22	22	22	22
Background Traffic Growth	0	0	0	0	0	0	0	152	0	0	217	0
Redistributed Trips by Median												
2038 NO-BUILD TRAFFIC VOLUMES	**0**	**0**	**0**	**0**	**0**	**43**	**0**	**979**	**41**	**0**	**1,371**	**0**
Redistributed Trips Concept Plan												
2038 TRAFFIC VOLUMES CONCEPT PLAN	**0**	**0**	**0**	**0**	**0**	**43**	**0**	**979**	**41**	**0**	**1,371**	**0**

APPENDIX C

2016 EXISTING SYNCHRO RESULTS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	540	31	1	1003	2	45	0	26	0	0	1
Future Volume (Veh/h)	1	540	31	1	1003	2	45	0	26	0	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1	600	34	1	1114	2	50	0	29	0	0	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1116			634			1736	1737	617	1765	1753	1115
vC1, stage 1 conf vol							619	619		1117	1117	
vC2, stage 2 conf vol							1117	1118		648	636	
vCu, unblocked vol	1116			634			1736	1737	617	1765	1753	1115
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			78	100	94	100	100	100
cM capacity (veh/h)	626			949			222	248	490	218	247	253

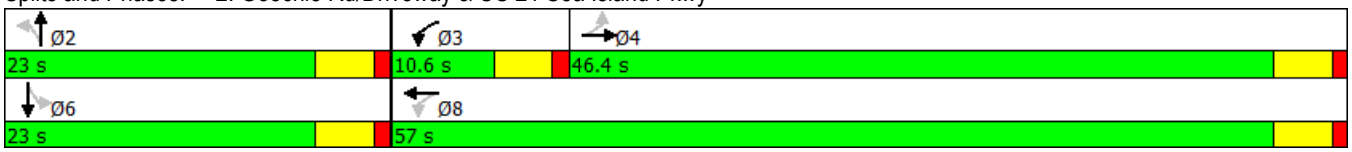
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total	635	1	1116	79	1
Volume Left	1	1	0	50	0
Volume Right	34	0	2	29	1
cSH	626	949	1700	278	253
Volume to Capacity	0.00	0.00	0.66	0.28	0.00
Queue Length 95th (ft)	0	0	0	28	0
Control Delay (s)	0.0	8.8	0.0	23.0	19.3
Lane LOS	A	A		C	C
Approach Delay (s)	0.0	0.0		23.0	19.3
Approach LOS				C	C

Intersection Summary				
Average Delay	1.0			
Intersection Capacity Utilization	70.3%	ICU Level of Service		C
Analysis Period (min)	15			

Lane Group	EBT	WBL	WBT	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	502	106	1029	28	0	0
Future Volume (vph)	502	106	1029	28	0	0
Turn Type	NA	pm+pt	NA	Perm	NA	NA
Protected Phases	4	3	8		2	6
Permitted Phases		8		2		
Detector Phase	4	3	8	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5	22.5	22.5
Total Split (s)	46.4	10.6	57.0	23.0	23.0	23.0
Total Split (%)	58.0%	13.3%	71.3%	28.8%	28.8%	28.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5	4.5
Lead/Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes				
Recall Mode	None	None	None	Max	Max	Max
Act Effct Green (s)	41.6	49.8	49.8		18.6	18.6
Actuated g/C Ratio	0.54	0.64	0.64		0.24	0.24
v/c Ratio	0.62	0.29	0.95		0.16	0.00
Control Delay	16.3	7.0	31.5		5.9	0.0
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	16.3	7.0	31.5		5.9	0.0
LOS	B	A	C		A	A
Approach Delay	16.3		29.2		5.9	
Approach LOS	B		C		A	

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 77.4	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 24.3	Intersection LOS: C
Intersection Capacity Utilization 105.0%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 2: Geechie Rd/Driveway & US 21 Sea Island Pkwy



Lane Group	EBT	WBL	WBT	NBL	NBT	SBT
Protected Phases	4	3	8		2	6
Permitted Phases		8		2		
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5	22.5	22.5
Total Split (s)	46.4	10.6	57.0	23.0	23.0	23.0
Total Split (%)	58.0%	13.3%	71.3%	28.8%	28.8%	28.8%
Maximum Green (s)	41.9	6.1	52.5	18.5	18.5	18.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes				
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	Max	Max	Max
Walk Time (s)	7.0		7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0		11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0		0	0	0	0
90th %ile Green (s)	41.9	6.1	52.5	18.5	18.5	18.5
90th %ile Term Code	Hold	Max	Max	MaxR	MaxR	MaxR
70th %ile Green (s)	41.9	6.1	52.5	18.5	18.5	18.5
70th %ile Term Code	Hold	Max	Max	MaxR	MaxR	MaxR
50th %ile Green (s)	41.9	6.1	52.5	18.5	18.5	18.5
50th %ile Term Code	Hold	Max	Max	MaxR	MaxR	MaxR
30th %ile Green (s)	41.9	6.1	52.5	18.5	18.5	18.5
30th %ile Term Code	Hold	Max	Max	MaxR	MaxR	MaxR
10th %ile Green (s)	39.6	0.0	39.6	18.5	18.5	18.5
10th %ile Term Code	Hold	Skip	Gap	MaxR	MaxR	MaxR

Intersection Summary
Cycle Length: 80
Actuated Cycle Length: 77.4
Control Type: Actuated-Uncoordinated
90th %ile Actuated Cycle: 80
70th %ile Actuated Cycle: 80
50th %ile Actuated Cycle: 80
30th %ile Actuated Cycle: 80
10th %ile Actuated Cycle: 67.1

Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	612	118	1143	68	1
v/c Ratio	0.62	0.29	0.95	0.16	0.00
Control Delay	16.3	7.0	31.5	5.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	16.3	7.0	31.5	5.9	0.0
Queue Length 50th (ft)	201	19	443	0	0
Queue Length 95th (ft)	309	36	#795	25	0
Internal Link Dist (ft)	1300		417	377	79
Turn Bay Length (ft)		200			
Base Capacity (vph)	1004	408	1269	425	469
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.61	0.29	0.90	0.16	0.00

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	502	49	106	1029	0	28	0	33	0	0	1
Future Volume (vph)	0	502	49	106	1029	0	28	0	33	0	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5		4.5	4.5			4.5			4.5	
Lane Util. Factor		1.00		1.00	1.00			1.00			1.00	
Frt		0.99		1.00	1.00			0.93			0.86	
Flt Protected		1.00		0.95	1.00			0.98			1.00	
Satd. Flow (prot)		1841		1770	1863			1652			1611	
Flt Permitted		1.00		0.25	1.00			0.89			1.00	
Satd. Flow (perm)		1841		475	1863			1509			1611	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	558	54	118	1143	0	31	0	37	0	0	1
RTOR Reduction (vph)	0	4	0	0	0	0	0	52	0	0	1	0
Lane Group Flow (vph)	0	608	0	118	1143	0	0	16	0	0	0	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	6%	2%	2%	2%
Turn Type		NA		pm+pt	NA		Perm	NA			NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		41.6		50.8	50.8			18.6			18.6	
Effective Green, g (s)		41.6		50.8	50.8			18.6			18.6	
Actuated g/C Ratio		0.53		0.65	0.65			0.24			0.24	
Clearance Time (s)		4.5		4.5	4.5			4.5			4.5	
Vehicle Extension (s)		3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)		976		385	1207			358			382	
v/s Ratio Prot		0.33		0.02	c0.61						0.00	
v/s Ratio Perm				0.18				c0.01				
v/c Ratio		0.62		0.31	0.95			0.05			0.00	
Uniform Delay, d1		12.9		7.9	12.6			23.1			22.8	
Progression Factor		1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2		1.2		0.5	14.8			0.2			0.0	
Delay (s)		14.1		8.3	27.4			23.3			22.8	
Level of Service		B		A	C			C			C	
Approach Delay (s)		14.1			25.6			23.3			22.8	
Approach LOS		B			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	21.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	78.4	Sum of lost time (s)	13.5
Intersection Capacity Utilization	105.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	54	469	9	19	1001	9	2	1	18	8	1	138
Future Volume (Veh/h)	54	469	9	19	1001	9	2	1	18	8	1	138
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	60	521	10	21	1112	10	2	1	20	9	1	153
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			TWLTL							
Median storage veh)					2							
Upstream signal (ft)		497										
pX, platoon unblocked				0.78			0.78	0.78	0.78	0.78	0.78	
vC, conflicting volume	1122			531			1954	1810	526	1820	1810	1117
vC1, stage 1 conf vol							646	646		1159	1159	
vC2, stage 2 conf vol							1308	1164		662	651	
vCu, unblocked vol	1122			258			2081	1897	251	1911	1897	1117
tC, single (s)	4.1			4.1			7.1	6.5	6.3	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.4	3.5	4.0	3.3
p0 queue free %	90			98			87	99	97	95	100	39
cM capacity (veh/h)	623			1019			15	182	607	196	218	252

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NE 1	SW 1
Volume Total	60	531	21	1122	23	163
Volume Left	60	0	21	0	2	9
Volume Right	0	10	0	10	20	153
cSH	623	1700	1019	1700	134	248
Volume to Capacity	0.10	0.31	0.02	0.66	0.17	0.66
Queue Length 95th (ft)	8	0	2	0	15	103
Control Delay (s)	11.4	0.0	8.6	0.0	37.4	43.6
Lane LOS	B		A		E	E
Approach Delay (s)	1.2		0.2		37.4	43.6
Approach LOS					E	E

Intersection Summary				
Average Delay	4.6			
Intersection Capacity Utilization	70.5%	ICU Level of Service	C	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	4	479	6	132	1046	8	8	1	73	0	1	3
Future Volume (Veh/h)	4	479	6	132	1046	8	8	1	73	0	1	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	4	532	7	147	1162	9	9	1	81	0	1	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)		1218										
pX, platoon unblocked				0.81			0.81	0.81	0.81	0.81	0.81	
vC, conflicting volume	1171			539			2003	2008	536	2086	2008	1166
vC1, stage 1 conf vol							544	544		1460	1460	
vC2, stage 2 conf vol							1460	1465		625	547	
vCu, unblocked vol	1171			314			2121	2127	310	2222	2126	1166
tC, single (s)	4.1			4.2			7.2	6.5	6.3	7.1	6.5	6.2
tC, 2 stage (s)							6.2	5.5		6.1	5.5	
tF (s)	2.2			2.3			3.6	4.0	3.4	3.5	4.0	3.3
p0 queue free %	99			85			92	99	86	100	99	99
cM capacity (veh/h)	596			983			117	150	577	119	148	236

Direction, Lane #	EB 1	WB 1	WB 2	NE 1	SW 1
Volume Total	543	147	1171	91	4
Volume Left	4	147	0	9	0
Volume Right	7	0	9	81	3
cSH	596	983	1700	406	206
Volume to Capacity	0.01	0.15	0.69	0.22	0.02
Queue Length 95th (ft)	1	13	0	21	1
Control Delay (s)	0.2	9.3	0.0	16.4	22.8
Lane LOS	A	A		C	C
Approach Delay (s)	0.2	1.0		16.4	22.8
Approach LOS				C	C

Intersection Summary				
Average Delay	1.6			
Intersection Capacity Utilization	103.0%	ICU Level of Service		G
Analysis Period (min)	15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	34	517	1158	44	10	24
Future Volume (Veh/h)	34	517	1158	44	10	24
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	38	574	1287	49	11	27
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)			681			
pX, platoon unblocked	0.85				0.85	0.85
vC, conflicting volume	1336				1674	668
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1041				1440	255
tC, single (s)	4.1				7.0	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.6	3.3
p0 queue free %	93				88	96
cM capacity (veh/h)	564				91	632

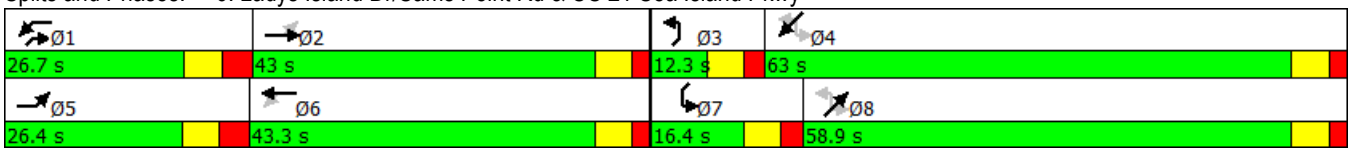
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	229	383	858	478	11	27
Volume Left	38	0	0	0	11	0
Volume Right	0	0	0	49	0	27
cSH	564	1700	1700	1700	91	632
Volume to Capacity	0.07	0.23	0.50	0.28	0.12	0.04
Queue Length 95th (ft)	5	0	0	0	10	3
Control Delay (s)	2.7	0.0	0.0	0.0	50.0	10.9
Lane LOS	A				E	B
Approach Delay (s)	1.0		0.0		22.2	
Approach LOS					C	

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	49.9%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations										
Traffic Volume (vph)	183	254	401	496	94	309	270	155	678	675
Future Volume (vph)	183	254	401	496	94	309	270	155	678	675
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA	Perm
Protected Phases	5	2	1	6	3	8	1	7	4	
Permitted Phases	2		6		8		8	4		4
Detector Phase	5	2	1	6	3	8	1	7	4	4
Switch Phase										
Minimum Initial (s)	6.0	25.0	6.0	25.0	6.0	15.0	6.0	6.0	15.0	15.0
Minimum Split (s)	13.3	43.0	13.3	39.0	12.3	42.3	13.3	13.3	43.3	43.3
Total Split (s)	26.4	43.0	26.7	43.3	12.3	58.9	26.7	16.4	63.0	63.0
Total Split (%)	18.2%	29.7%	18.4%	29.9%	8.5%	40.6%	18.4%	11.3%	43.4%	43.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.3	4.0	4.0	4.3	4.3
All-Red Time (s)	3.3	2.0	3.3	2.0	2.3	2.0	3.3	2.3	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.3	6.0	7.3	6.0	6.3	6.3	7.3	6.3	6.3	6.3
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Max	None	None	None	None	Max	Max
Act Effct Green (s)	49.3	34.2	55.3	37.3	58.8	52.8	78.6	66.6	56.7	56.7
Actuated g/C Ratio	0.35	0.24	0.39	0.26	0.41	0.37	0.55	0.47	0.40	0.40
v/c Ratio	0.69	0.44	1.05	0.72	0.82	0.26	0.30	0.37	1.01	0.87
Control Delay	40.5	44.2	92.6	52.4	69.4	32.3	2.9	24.1	79.0	30.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.5	44.2	92.6	52.4	69.4	32.3	2.9	24.1	79.0	30.7
LOS	D	D	F	D	E	C	A	C	E	C
Approach Delay		42.8		68.7		25.7			51.7	
Approach LOS		D		E		C			D	

Intersection Summary	
Cycle Length: 145	
Actuated Cycle Length: 142.3	
Natural Cycle: 145	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.05	
Intersection Signal Delay: 50.3	Intersection LOS: D
Intersection Capacity Utilization 104.4%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 6: Ladys Island Dr/Sams Point Rd & US 21 Sea Island Pkwy



Lane Group	EBL	EBT	WBL	WBT	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	5	2	1	6	3	8	1	7	4	
Permitted Phases	2		6		8		8	4		4
Minimum Initial (s)	6.0	25.0	6.0	25.0	6.0	15.0	6.0	6.0	15.0	15.0
Minimum Split (s)	13.3	43.0	13.3	39.0	12.3	42.3	13.3	13.3	43.3	43.3
Total Split (s)	26.4	43.0	26.7	43.3	12.3	58.9	26.7	16.4	63.0	63.0
Total Split (%)	18.2%	29.7%	18.4%	29.9%	8.5%	40.6%	18.4%	11.3%	43.4%	43.4%
Maximum Green (s)	19.1	37.0	19.4	37.3	6.0	52.6	19.4	10.1	56.7	56.7
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.3	4.0	4.0	4.3	4.3
All-Red Time (s)	3.3	2.0	3.3	2.0	2.3	2.0	3.3	2.3	2.0	2.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.5	3.0	3.5	3.0	3.5	3.0	3.0	3.5	3.5
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	Min	None	Max	None	None	None	None	Max	Max
Walk Time (s)		5.0		5.0		5.0			5.0	5.0
Flash Dont Walk (s)		32.0		28.0		31.0			28.0	28.0
Pedestrian Calls (#/hr)		0		0		0			0	0
90th %ile Green (s)	19.1	37.0	19.4	37.3	6.0	52.6	19.4	10.1	56.7	56.7
90th %ile Term Code	Max	Hold	Max	MaxR	Max	Hold	Max	Max	MaxR	MaxR
70th %ile Green (s)	19.1	37.0	19.4	37.3	6.0	52.6	19.4	10.1	56.7	56.7
70th %ile Term Code	Max	Hold	Max	MaxR	Max	Hold	Max	Max	MaxR	MaxR
50th %ile Green (s)	17.5	35.4	19.4	37.3	6.0	52.6	19.4	10.1	56.7	56.7
50th %ile Term Code	Gap	Hold	Max	MaxR	Max	Hold	Max	Max	MaxR	MaxR
30th %ile Green (s)	14.8	32.7	19.4	37.3	6.0	52.6	19.4	10.1	56.7	56.7
30th %ile Term Code	Gap	Hold	Max	MaxR	Max	Hold	Max	Max	MaxR	MaxR
10th %ile Green (s)	11.4	29.3	19.4	37.3	6.0	53.6	19.4	9.1	56.7	56.7
10th %ile Term Code	Gap	Hold	Max	MaxR	Max	Hold	Max	Gap	MaxR	MaxR

Intersection Summary
Cycle Length: 145
Actuated Cycle Length: 142.3
Control Type: Actuated-Uncoordinated
90th %ile Actuated Cycle: 145
70th %ile Actuated Cycle: 145
50th %ile Actuated Cycle: 143.4
30th %ile Actuated Cycle: 140.7
10th %ile Actuated Cycle: 137.3

Lane Group	EBL	EBT	WBL	WBT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	203	365	446	652	104	343	300	172	753	750
v/c Ratio	0.69	0.44	1.05	0.72	0.82	0.26	0.30	0.37	1.01	0.87
Control Delay	40.5	44.2	92.6	52.4	69.4	32.3	2.9	24.1	79.0	30.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.5	44.2	92.6	52.4	69.4	32.3	2.9	24.1	79.0	30.7
Queue Length 50th (ft)	122	141	~347	288	52	117	5	91	~745	356
Queue Length 95th (ft)	183	191	#499	365	#158	161	50	143	#1010	#644
Internal Link Dist (ft)		253		679		521			619	
Turn Bay Length (ft)	200		350		350		550	460		
Base Capacity (vph)	329	906	425	902	127	1301	1002	467	742	863
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	0.62	0.40	1.05	0.72	0.82	0.26	0.30	0.37	1.01	0.87

Intersection Summary

~ 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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	183	254	75	401	496	91	94	309	270	155	678	675
Future Volume (vph)	183	254	75	401	496	91	94	309	270	155	678	675
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3	6.0		7.3	6.0		6.3	6.3	7.3	6.3	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1752	3411		1770	3400		1770	3505	1583	1736	1863	1583
Flt Permitted	0.22	1.00		0.39	1.00		0.08	1.00	1.00	0.47	1.00	1.00
Satd. Flow (perm)	405	3411		728	3400		141	3505	1583	864	1863	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	203	282	83	446	551	101	104	343	300	172	753	750
RTOR Reduction (vph)	0	19	0	0	10	0	0	0	142	0	0	233
Lane Group Flow (vph)	203	346	0	446	642	0	104	343	158	172	753	517
Heavy Vehicles (%)	3%	2%	3%	2%	2%	13%	2%	3%	2%	4%	2%	2%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases	2			6			8		8	4		4
Actuated Green, G (s)	50.5	34.2		56.7	37.3		58.8	52.8	72.2	66.6	56.7	56.7
Effective Green, g (s)	50.5	34.2		56.7	37.3		58.8	52.8	72.2	66.6	56.7	56.7
Actuated g/C Ratio	0.36	0.24		0.40	0.26		0.41	0.37	0.51	0.47	0.40	0.40
Clearance Time (s)	7.3	6.0		7.3	6.0		6.3	6.3	7.3	6.3	6.3	6.3
Vehicle Extension (s)	3.0	3.5		3.0	3.5		3.0	3.5	3.0	3.0	3.5	3.5
Lane Grp Cap (vph)	298	820		432	891		127	1301	803	465	742	631
v/s Ratio Prot	0.08	0.10		c0.14	0.19		c0.03	0.10	0.03	0.03	c0.40	
v/s Ratio Perm	0.16			c0.27			0.30		0.07	0.15		0.33
v/c Ratio	0.68	0.42		1.03	0.72		0.82	0.26	0.20	0.37	1.01	0.82
Uniform Delay, d1	34.6	45.6		38.8	47.7		34.9	31.2	19.1	22.6	42.7	38.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.3	0.4		51.9	5.0		32.0	0.1	0.1	0.5	36.8	11.4
Delay (s)	40.9	46.1		90.7	52.7		66.9	31.3	19.3	23.0	79.5	49.6
Level of Service	D	D		F	D		E	C	B	C	E	D
Approach Delay (s)		44.2			68.1			31.4			60.3	
Approach LOS		D			E			C			E	

Intersection Summary			
HCM 2000 Control Delay	54.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	142.2	Sum of lost time (s)	25.9
Intersection Capacity Utilization	104.4%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	540	12	63	879	47	0	4	10	23	1	128
Future Volume (Veh/h)	83	540	12	63	879	47	0	4	10	23	1	128
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	92	600	13	70	977	52	0	4	11	26	1	142
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												10
Median type		None			TWLTL							
Median storage veh)					2							
Upstream signal (ft)		759										
pX, platoon unblocked				0.97			0.97	0.97	0.97	0.97	0.97	
vC, conflicting volume	1029			613			1420	1960	306	1640	1940	514
vC1, stage 1 conf vol							790	790		1143	1143	
vC2, stage 2 conf vol							629	1169		497	797	
vCu, unblocked vol	1029			548			1377	1931	234	1603	1911	514
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	7.0
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	86			93			100	97	99	85	99	72
cM capacity (veh/h)	671			990			173	143	748	178	191	502

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1
Volume Total	92	400	213	70	651	378	4	11	169
Volume Left	92	0	0	70	0	0	0	0	26
Volume Right	0	0	13	0	0	52	0	11	142
cSH	671	1700	1700	990	1700	1700	143	748	598
Volume to Capacity	0.14	0.24	0.13	0.07	0.38	0.22	0.03	0.01	0.28
Queue Length 95th (ft)	12	0	0	6	0	0	2	1	29
Control Delay (s)	11.2	0.0	0.0	8.9	0.0	0.0	30.9	9.9	17.2
Lane LOS	B			A			D	A	C
Approach Delay (s)	1.5			0.6			15.5		17.2
Approach LOS							C		C

Intersection Summary				
Average Delay	2.4			
Intersection Capacity Utilization	48.4%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	565	4	44	998	37	2	0	13	56	0	21
Future Volume (Veh/h)	23	565	4	44	998	37	2	0	13	56	0	21
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	26	628	4	49	1109	41	2	0	14	62	0	23
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)		1208										
pX, platoon unblocked												
vC, conflicting volume	1150			632			1358	1930	316	1608	1912	575
vC1, stage 1 conf vol							682	682		1228	1228	
vC2, stage 2 conf vol							676	1248		380	684	
vCu, unblocked vol	1150			632			1358	1930	316	1608	1912	575
tC, single (s)	4.2			4.1			8.5	6.5	6.9	7.5	6.5	7.0
tC, 2 stage (s)							7.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			4.0	4.0	3.3	3.5	4.0	3.3
p0 queue free %	96			95			99	100	98	63	100	95
cM capacity (veh/h)	592			947			198	186	680	169	202	454

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1	SB 2
Volume Total	26	419	213	49	739	411	16	62	23
Volume Left	26	0	0	49	0	0	2	62	0
Volume Right	0	0	4	0	0	41	14	0	23
cSH	592	1700	1700	947	1700	1700	522	169	454
Volume to Capacity	0.04	0.25	0.13	0.05	0.43	0.24	0.03	0.37	0.05
Queue Length 95th (ft)	3	0	0	4	0	0	2	39	4
Control Delay (s)	11.4	0.0	0.0	9.0	0.0	0.0	12.1	38.0	13.4
Lane LOS	B			A			B	E	B
Approach Delay (s)	0.4			0.4			12.1	31.3	
Approach LOS							B	D	

Intersection Summary				
Average Delay	1.8			
Intersection Capacity Utilization	51.9%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	672	2	6	1059	0	4	0	3	0	0	3
Future Volume (Veh/h)	3	672	2	6	1059	0	4	0	3	0	0	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	3	747	2	7	1177	0	4	0	3	0	0	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1177			749			1360	1945	374	1574	1946	588
vC1, stage 1 conf vol							754	754		1191	1191	
vC2, stage 2 conf vol							606	1191		382	755	
vCu, unblocked vol	1177			749			1360	1945	374	1574	1946	588
tC, single (s)	4.1			4.4			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.4			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			99	100	100	100	100	99
cM capacity (veh/h)	589			764			293	218	623	187	219	452

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	376	376	7	785	392	7	3
Volume Left	3	0	7	0	0	4	0
Volume Right	0	2	0	0	0	3	3
cSH	589	1700	764	1700	1700	379	452
Volume to Capacity	0.01	0.22	0.01	0.46	0.23	0.02	0.01
Queue Length 95th (ft)	0	0	1	0	0	1	1
Control Delay (s)	0.2	0.0	9.8	0.0	0.0	14.7	13.0
Lane LOS	A		A			B	B
Approach Delay (s)	0.1		0.1			14.7	13.0
Approach LOS						B	B

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	39.9%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	514	6	2	947	60	2	0	0	13	0	116
Future Volume (Veh/h)	115	514	6	2	947	60	2	0	0	13	0	116
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	128	571	7	2	1052	67	2	0	0	14	0	129
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												12
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1119			578			1360	1954	289	1631	1924	560
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1119			578			1360	1954	289	1631	1924	560
tC, single (s)	4.1			5.1			7.5	6.5	6.9	8.1	6.5	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.7			3.5	4.0	3.3	3.8	4.0	3.3
p0 queue free %	79			100			97	100	100	67	100	72
cM capacity (veh/h)	620			725			65	50	708	42	52	464

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	128	381	197	2	701	418	2	143
Volume Left	128	0	0	2	0	0	2	14
Volume Right	0	0	7	0	0	67	0	129
cSH	620	1700	1700	725	1700	1700	65	430
Volume to Capacity	0.21	0.22	0.12	0.00	0.41	0.25	0.03	0.33
Queue Length 95th (ft)	19	0	0	0	0	0	2	36
Control Delay (s)	12.3	0.0	0.0	10.0	0.0	0.0	62.2	26.7
Lane LOS	B			A			F	D
Approach Delay (s)	2.2			0.0			62.2	26.7
Approach LOS							F	D

Intersection Summary				
Average Delay	2.8			
Intersection Capacity Utilization	48.6%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	518	5	3	1008	23	1
Future Volume (Veh/h)	518	5	3	1008	23	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	576	6	3	1120	26	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			582		1145	579
vC1, stage 1 conf vol					579	
vC2, stage 2 conf vol					566	
vCu, unblocked vol			582		1145	579
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		94	100
cM capacity (veh/h)			988		405	458

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	582	376	747	27
Volume Left	0	3	0	26
Volume Right	6	0	0	1
cSH	1700	988	1700	407
Volume to Capacity	0.34	0.00	0.44	0.07
Queue Length 95th (ft)	0	0	0	5
Control Delay (s)	0.0	0.1	0.0	14.5
Lane LOS		A		B
Approach Delay (s)	0.0	0.0		14.5
Approach LOS				B

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	40.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	9	509	998	0	0	4
Future Volume (Veh/h)	9	509	998	0	0	4
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	10	566	1109	0	0	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1109				1695	1109
vC1, stage 1 conf vol					1109	
vC2, stage 2 conf vol					586	
vCu, unblocked vol	1109				1695	1109
tC, single (s)	4.2				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.3				3.5	3.3
p0 queue free %	98				100	98
cM capacity (veh/h)	597				280	255

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	10	566	1109	4
Volume Left	10	0	0	0
Volume Right	0	0	0	4
cSH	597	1700	1700	255
Volume to Capacity	0.02	0.33	0.65	0.02
Queue Length 95th (ft)	1	0	0	1
Control Delay (s)	11.1	0.0	0.0	19.3
Lane LOS	B			C
Approach Delay (s)	0.2		0.0	19.3
Approach LOS				C

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	489	6	5	964	12	2
Future Volume (Veh/h)	489	6	5	964	12	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	543	7	6	1071	13	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)				1133		
pX, platoon unblocked					0.49	
vC, conflicting volume			550		1630	546
vC1, stage 1 conf vol					546	
vC2, stage 2 conf vol					1083	
vCu, unblocked vol			550		1763	546
tC, single (s)			4.1		6.5	6.2
tC, 2 stage (s)					5.5	
tF (s)			2.2		3.6	3.3
p0 queue free %			99		94	100
cM capacity (veh/h)			1020		223	537

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	550	1077	15
Volume Left	0	6	13
Volume Right	7	0	2
cSH	1700	1020	241
Volume to Capacity	0.32	0.01	0.06
Queue Length 95th (ft)	0	0	5
Control Delay (s)	0.0	0.2	20.9
Lane LOS		A	C
Approach Delay (s)	0.0	0.2	20.9
Approach LOS			C

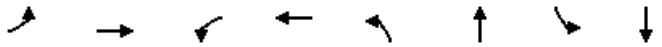
Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	64.7%	ICU Level of Service	C
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	19	382	45	852	108	3	13	2
Future Volume (vph)	19	382	45	852	108	3	13	2
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	42.0	42.0	42.0	42.0	23.0	23.0	23.0	23.0
Total Split (%)	64.6%	64.6%	64.6%	64.6%	35.4%	35.4%	35.4%	35.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)		4.5	4.5	4.5		4.5		4.5
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)		35.1	35.1	35.1		18.6		18.6
Actuated g/C Ratio		0.56	0.56	0.56		0.30		0.30
v/c Ratio		0.74	0.12	0.93		0.39		0.11
Control Delay		17.0	7.1	29.7		19.1		9.9
Queue Delay		0.0	0.0	0.0		0.0		0.0
Total Delay		17.0	7.1	29.7		19.1		9.9
LOS		B	A	C		B		A
Approach Delay		17.0		28.6		19.1		9.9
Approach LOS		B		C		B		A

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 62.7	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 23.6	Intersection LOS: C
Intersection Capacity Utilization 67.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 14: Chowan Creek Bluff/Eustis Landing Rd & US 21 Sea Island Pkwy





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	42.0	42.0	42.0	42.0	23.0	23.0	23.0	23.0
Total Split (%)	64.6%	64.6%	64.6%	64.6%	35.4%	35.4%	35.4%	35.4%
Maximum Green (s)	37.5	37.5	37.5	37.5	18.5	18.5	18.5	18.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag								
Lead-Lag Optimize?								
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	Max	Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0
90th %ile Green (s)	37.5	37.5	37.5	37.5	18.5	18.5	18.5	18.5
90th %ile Term Code	Max	Max	Max	Max	MaxR	MaxR	MaxR	MaxR
70th %ile Green (s)	37.5	37.5	37.5	37.5	18.5	18.5	18.5	18.5
70th %ile Term Code	Hold	Hold	Max	Max	MaxR	MaxR	MaxR	MaxR
50th %ile Green (s)	37.5	37.5	37.5	37.5	18.5	18.5	18.5	18.5
50th %ile Term Code	Hold	Hold	Max	Max	MaxR	MaxR	MaxR	MaxR
30th %ile Green (s)	36.6	36.6	36.6	36.6	18.5	18.5	18.5	18.5
30th %ile Term Code	Hold	Hold	Gap	Gap	MaxR	MaxR	MaxR	MaxR
10th %ile Green (s)	26.8	26.8	26.8	26.8	18.5	18.5	18.5	18.5
10th %ile Term Code	Hold	Hold	Gap	Gap	MaxR	MaxR	MaxR	MaxR

Intersection Summary
Cycle Length: 65
Actuated Cycle Length: 62.7
Control Type: Actuated-Uncoordinated
90th %ile Actuated Cycle: 65
70th %ile Actuated Cycle: 65
50th %ile Actuated Cycle: 65
30th %ile Actuated Cycle: 64.1
10th %ile Actuated Cycle: 54.3

Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	549	50	947	163	49
v/c Ratio	0.74	0.12	0.93	0.39	0.11
Control Delay	17.0	7.1	29.7	19.1	9.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	17.0	7.1	29.7	19.1	9.9
Queue Length 50th (ft)	132	8	294	43	5
Queue Length 95th (ft)	251	22	#564	92	27
Internal Link Dist (ft)	1053		490	351	331
Turn Bay Length (ft)		290			
Base Capacity (vph)	797	467	1098	417	446
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.69	0.11	0.86	0.39	0.11

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	382	94	45	852	0	108	3	36	13	2	30
Future Volume (vph)	19	382	94	45	852	0	108	3	36	13	2	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5		4.5	4.5			4.5			4.5	
Lane Util. Factor		1.00		1.00	1.00			1.00			1.00	
Frt		0.97		1.00	1.00			0.97			0.91	
Flt Protected		1.00		0.95	1.00			0.96			0.99	
Satd. Flow (prot)		1771		1736	1827			1721			1532	
Flt Permitted		0.74		0.43	1.00			0.75			0.92	
Satd. Flow (perm)		1306		779	1827			1346			1426	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	21	424	104	50	947	0	120	3	40	14	2	33
RTOR Reduction (vph)	0	14	0	0	0	0	0	18	0	0	23	0
Lane Group Flow (vph)	0	535	0	50	947	0	0	145	0	0	26	0
Heavy Vehicles (%)	2%	5%	2%	4%	4%	2%	3%	2%	3%	8%	2%	13%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		35.0		35.0	35.0			18.6			18.6	
Effective Green, g (s)		35.0		35.0	35.0			18.6			18.6	
Actuated g/C Ratio		0.56		0.56	0.56			0.30			0.30	
Clearance Time (s)		4.5		4.5	4.5			4.5			4.5	
Vehicle Extension (s)		3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)		730		435	1021			399			423	
v/s Ratio Prot					c0.52							
v/s Ratio Perm		0.41		0.06				c0.11			0.02	
v/c Ratio		0.73		0.11	0.93			0.36			0.06	
Uniform Delay, d1		10.3		6.5	12.6			17.3			15.7	
Progression Factor		1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2		3.8		0.1	13.8			2.6			0.3	
Delay (s)		14.1		6.6	26.5			19.9			16.0	
Level of Service		B		A	C			B			B	
Approach Delay (s)		14.1			25.5			19.9			16.0	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	62.6	Sum of lost time (s)	9.0
Intersection Capacity Utilization	67.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	1	43	3	0	6	64	715	18	27	1274	38
Future Volume (Veh/h)	18	1	43	3	0	6	64	715	18	27	1274	38
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	20	1	48	3	0	7	71	794	20	30	1416	42
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			TWLTL	
Median storage veh)											2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2022	2432	708	1762	2464	407	1458			814		
vC1, stage 1 conf vol	1476	1476		946	946							
vC2, stage 2 conf vol	546	956		816	1518							
vCu, unblocked vol	2022	2432	708	1762	2464	407	1458			814		
tC, single (s)	7.6	8.5	6.9	7.5	6.5	6.9	4.2			4.1		
tC, 2 stage (s)	6.6	7.5		6.5	5.5							
tF (s)	3.6	5.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	83	98	87	98	100	99	84			96		
cM capacity (veh/h)	114	61	377	157	95	593	445			809		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	21	48	10	71	529	285	30	708	708	42
Volume Left	20	0	3	71	0	0	30	0	0	0
Volume Right	0	48	7	0	0	20	0	0	0	42
cSH	110	377	323	445	1700	1700	809	1700	1700	1700
Volume to Capacity	0.19	0.13	0.03	0.16	0.31	0.17	0.04	0.42	0.42	0.02
Queue Length 95th (ft)	17	11	2	14	0	0	3	0	0	0
Control Delay (s)	45.4	15.9	16.5	14.6	0.0	0.0	9.6	0.0	0.0	0.0
Lane LOS	E	C	C	B			A			
Approach Delay (s)	24.9		16.5	1.2			0.2			
Approach LOS	C		C							

Intersection Summary				
Average Delay	1.3			
Intersection Capacity Utilization	52.1%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	14	1	741	4	0	1329
Future Volume (Veh/h)	14	1	741	4	0	1329
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	16	1	823	4	0	1477
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1564	414			827	
vC1, stage 1 conf vol	825					
vC2, stage 2 conf vol	738					
vCu, unblocked vol	1564	414			827	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	95	100			100	
cM capacity (veh/h)	300	588			800	

Direction, Lane #	WB 1	NE 1	NE 2	SW 1	SW 2
Volume Total	17	549	278	492	985
Volume Left	16	0	0	0	0
Volume Right	1	0	4	0	0
cSH	309	1700	1700	800	1700
Volume to Capacity	0.05	0.32	0.16	0.00	0.58
Queue Length 95th (ft)	4	0	0	0	0
Control Delay (s)	17.3	0.0	0.0	0.0	0.0
Lane LOS	C				
Approach Delay (s)	17.3	0.0		0.0	
Approach LOS	C				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	3	0	17	108	1	18	31	683	21	21	1211	51
Future Volume (Veh/h)	3	0	17	108	1	18	31	683	21	21	1211	51
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	3	0	19	120	1	20	34	759	23	23	1346	57
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)			5			5						
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)											1003	
pX, platoon unblocked												
vC, conflicting volume	1878	2270	702	1558	2288	391	1403			782		
vC1, stage 1 conf vol	1420	1420		838	838							
vC2, stage 2 conf vol	458	850		719	1449							
vCu, unblocked vol	1878	2270	702	1558	2288	391	1403			782		
tC, single (s)	7.5	6.5	7.0	7.5	6.5	7.0	4.1			4.2		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.4	3.5	4.0	3.4	2.2			2.2		
p0 queue free %	98	100	95	47	99	97	93			97		
cM capacity (veh/h)	132	165	372	225	140	597	483			812		

Direction, Lane #	EB 1	WB 1	NE 1	NE 2	SW 1	SW 2	SW 3
Volume Total	22	141	414	402	23	897	506
Volume Left	3	120	34	0	23	0	0
Volume Right	19	20	0	23	0	0	57
cSH	431	261	483	1700	812	1700	1700
Volume to Capacity	0.05	0.54	0.07	0.24	0.03	0.53	0.30
Queue Length 95th (ft)	4	73	6	0	2	0	0
Control Delay (s)	17.6	34.5	2.2	0.0	9.6	0.0	0.0
Lane LOS	C	D	A		A		
Approach Delay (s)	17.6	34.5	1.1		0.2		
Approach LOS	C	D					

Intersection Summary				
Average Delay	2.6			
Intersection Capacity Utilization	61.8%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	9	88	572	18	149	1522
Future Volume (Veh/h)	9	88	572	18	149	1522
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	10	98	636	20	166	1691
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1824	328			656	
vC1, stage 1 conf vol	646					
vC2, stage 2 conf vol	1178					
vCu, unblocked vol	1824	328			656	
tC, single (s)	7.2	6.9			4.2	
tC, 2 stage (s)	6.2					
tF (s)	3.7	3.3			2.2	
p0 queue free %	94	85			82	
cM capacity (veh/h)	163	668			914	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	108	424	232	166	846	846
Volume Left	10	0	0	166	0	0
Volume Right	98	0	20	0	0	0
cSH	519	1700	1700	914	1700	1700
Volume to Capacity	0.21	0.25	0.14	0.18	0.50	0.50
Queue Length 95th (ft)	19	0	0	17	0	0
Control Delay (s)	13.7	0.0	0.0	9.8	0.0	0.0
Lane LOS	B			A		
Approach Delay (s)	13.7	0.0		0.9		
Approach LOS	B					

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	54.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	9	0	0	0	11	638	0	1	1691	6
Future Volume (Veh/h)	1	0	9	0	0	0	11	638	0	1	1691	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1	0	10	0	0	0	12	709	0	1	1879	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2263	2618	943	1684	2621	354	1886			709		
vC1, stage 1 conf vol	1884	1884		733	733							
vC2, stage 2 conf vol	378	733		952	1888							
vCu, unblocked vol	2263	2618	943	1684	2621	354	1886			709		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	96	100	100	100	96			100		
cM capacity (veh/h)	71	111	264	211	100	642	314			886		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	11	0	366	354	940	946
Volume Left	1	0	12	0	1	0
Volume Right	10	0	0	0	0	7
cSH	211	1700	314	1700	886	1700
Volume to Capacity	0.05	0.00	0.04	0.21	0.00	0.56
Queue Length 95th (ft)	4	0	3	0	0	0
Control Delay (s)	23.0	0.0	1.3	0.0	0.0	0.0
Lane LOS	C	A	A		A	
Approach Delay (s)	23.0	0.0	0.7		0.0	
Approach LOS	C	A				

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	57.6%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	0	33	15	1	4	13	602	19	3	1631	125
Future Volume (Veh/h)	7	0	33	15	1	4	13	602	19	3	1631	125
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	8	0	37	17	1	4	14	669	21	3	1812	139
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2254	2606	976	1656	2664	345	1951			690		
vC1, stage 1 conf vol	1888	1888		708	708							
vC2, stage 2 conf vol	367	718		949	1957							
vCu, unblocked vol	2254	2606	976	1656	2664	345	1951			690		
tC, single (s)	7.5	6.5	7.0	7.5	6.5	6.9	4.3			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.4	3.5	4.0	3.3	2.3			2.2		
p0 queue free %	89	100	85	91	99	99	95			100		
cM capacity (veh/h)	70	110	244	191	90	651	273			900		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	45	22	14	446	244	3	1208	743
Volume Left	8	17	14	0	0	3	0	0
Volume Right	37	4	0	0	21	0	0	139
cSH	169	207	273	1700	1700	900	1700	1700
Volume to Capacity	0.27	0.11	0.05	0.26	0.14	0.00	0.71	0.44
Queue Length 95th (ft)	25	9	4	0	0	0	0	0
Control Delay (s)	33.8	24.4	18.9	0.0	0.0	9.0	0.0	0.0
Lane LOS	D	C	C			A		
Approach Delay (s)	33.8	24.4	0.4			0.0		
Approach LOS	D	C						

Intersection Summary				
Average Delay	0.9			
Intersection Capacity Utilization	59.4%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	902	54	36	630	1	46	1	36	1	0	1
Future Volume (Veh/h)	0	902	54	36	630	1	46	1	36	1	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	1002	60	40	700	1	51	1	40	1	0	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	701			1062			1813	1813	1032	1853	1842	700
vC1, stage 1 conf vol							1032	1032		780	780	
vC2, stage 2 conf vol							781	781		1072	1062	
vCu, unblocked vol	701			1062			1813	1813	1032	1853	1842	700
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			94			77	100	86	99	100	100
cM capacity (veh/h)	896			656			223	245	283	167	219	439

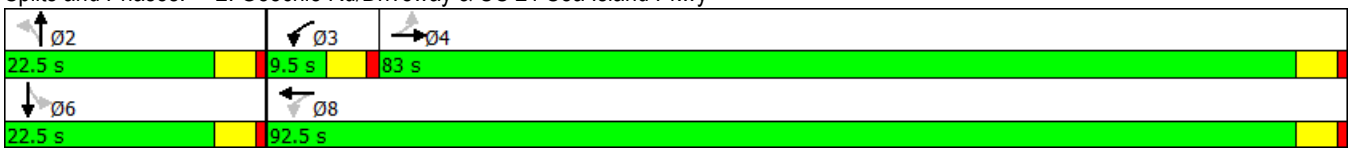
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total	1062	40	701	92	2
Volume Left	0	40	0	51	1
Volume Right	60	0	1	40	1
cSH	896	656	1700	246	242
Volume to Capacity	0.00	0.06	0.41	0.37	0.01
Queue Length 95th (ft)	0	5	0	41	1
Control Delay (s)	0.0	10.8	0.0	28.2	20.0
Lane LOS		B		D	C
Approach Delay (s)	0.0	0.6		28.2	20.0
Approach LOS				D	C

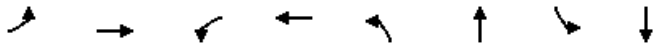
Intersection Summary				
Average Delay	1.6			
Intersection Capacity Utilization	63.7%	ICU Level of Service		B
Analysis Period (min)	15			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	2	929	20	643	40	1	4	0
Future Volume (vph)	2	929	20	643	40	1	4	0
Turn Type	Perm	NA	pm+pt	NA	Perm	NA	Perm	NA
Protected Phases		4	3	8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	3	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	83.0	83.0	9.5	92.5	22.5	22.5	22.5	22.5
Total Split (%)	72.2%	72.2%	8.3%	80.4%	19.6%	19.6%	19.6%	19.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)		4.5	4.5	4.5		4.5		4.5
Lead/Lag	Lag	Lag	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes					
Recall Mode	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)		52.9	55.8	55.8		19.3		19.3
Actuated g/C Ratio		0.62	0.66	0.66		0.23		0.23
v/c Ratio		0.91	0.06	0.59		0.23		0.01
Control Delay		25.8	4.0	9.2		26.2		0.0
Queue Delay		0.0	0.0	0.0		0.0		0.0
Total Delay		25.8	4.0	9.2		26.2		0.0
LOS		C	A	A		C		A
Approach Delay		25.8		9.0		26.2		
Approach LOS		C		A		C		

Intersection Summary	
Cycle Length: 115	
Actuated Cycle Length: 84.8	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 19.1	Intersection LOS: B
Intersection Capacity Utilization 63.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: Geechie Rd/Driveway & US 21 Sea Island Pkwy





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Protected Phases		4	3	8		2		6
Permitted Phases	4		8		2		6	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	83.0	83.0	9.5	92.5	22.5	22.5	22.5	22.5
Total Split (%)	72.2%	72.2%	8.3%	80.4%	19.6%	19.6%	19.6%	19.6%
Maximum Green (s)	78.5	78.5	5.0	88.0	18.0	18.0	18.0	18.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lag	Lag	Lead					
Lead-Lag Optimize?	Yes	Yes	Yes					
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	Max	Max	Max	Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0		11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0
90th %ile Green (s)	78.5	78.5	5.0	88.0	18.0	18.0	18.0	18.0
90th %ile Term Code	Max	Max	Max	Hold	MaxR	MaxR	MaxR	MaxR
70th %ile Green (s)	72.8	72.8	5.0	82.3	18.0	18.0	18.0	18.0
70th %ile Term Code	Gap	Gap	Max	Hold	MaxR	MaxR	MaxR	MaxR
50th %ile Green (s)	47.4	47.4	0.0	47.4	18.0	18.0	18.0	18.0
50th %ile Term Code	Gap	Gap	Skip	Hold	MaxR	MaxR	MaxR	MaxR
30th %ile Green (s)	40.2	40.2	0.0	40.2	18.0	18.0	18.0	18.0
30th %ile Term Code	Gap	Gap	Skip	Hold	MaxR	MaxR	MaxR	MaxR
10th %ile Green (s)	31.1	31.1	0.0	31.1	18.0	18.0	18.0	18.0
10th %ile Term Code	Gap	Gap	Skip	Hold	MaxR	MaxR	MaxR	MaxR

Intersection Summary
Cycle Length: 115
Actuated Cycle Length: 84.8
Control Type: Actuated-Uncoordinated
90th %ile Actuated Cycle: 115
70th %ile Actuated Cycle: 109.3
50th %ile Actuated Cycle: 74.4
30th %ile Actuated Cycle: 67.2
10th %ile Actuated Cycle: 58.1

Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	1051	22	721	86	6
v/c Ratio	0.91	0.06	0.59	0.23	0.01
Control Delay	25.8	4.0	9.2	26.2	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	25.8	4.0	9.2	26.2	0.0
Queue Length 50th (ft)	353	3	171	19	0
Queue Length 95th (ft)	742	9	239	83	0
Internal Link Dist (ft)	1321		417	377	79
Turn Bay Length (ft)		200			
Base Capacity (vph)	1635	349	1701	370	407
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.64	0.06	0.42	0.23	0.01

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	929	15	20	643	6	40	1	37	4	0	2
Future Volume (vph)	2	929	15	20	643	6	40	1	37	4	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5		4.5	4.5			4.5			4.5	
Lane Util. Factor		1.00		1.00	1.00			1.00			1.00	
Frt		1.00		1.00	1.00			0.94			0.95	
Flt Protected		1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)		1859		1770	1860			1699			1722	
Flt Permitted		1.00		0.21	1.00			0.86			0.90	
Satd. Flow (perm)		1857		399	1860			1507			1593	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	2	1032	17	22	714	7	44	1	41	4	0	2
RTOR Reduction (vph)	0	1	0	0	0	0	0	26	0	0	5	0
Lane Group Flow (vph)	0	1050	0	22	721	0	0	60	0	0	1	0
Turn Type	Perm	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		52.9		58.9	58.9			19.3			19.3	
Effective Green, g (s)		52.9		58.9	58.9			19.3			19.3	
Actuated g/C Ratio		0.61		0.68	0.68			0.22			0.22	
Clearance Time (s)		4.5		4.5	4.5			4.5			4.5	
Vehicle Extension (s)		3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)		1126		293	1256			333			352	
v/s Ratio Prot				0.00	c0.39							
v/s Ratio Perm		c0.57		0.05				c0.04			0.00	
v/c Ratio		0.93		0.08	0.57			0.18			0.00	
Uniform Delay, d1		15.5		7.4	7.5			27.5			26.5	
Progression Factor		1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2		13.6		0.1	0.6			1.2			0.0	
Delay (s)		29.1		7.5	8.1			28.7			26.5	
Level of Service		C		A	A			C			C	
Approach Delay (s)		29.1			8.1			28.7			26.5	
Approach LOS		C			A			C			C	

Intersection Summary			
HCM 2000 Control Delay	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	87.2	Sum of lost time (s)	13.5
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	108	828	22	16	615	27	1	0	40	7	0	58
Future Volume (Veh/h)	108	828	22	16	615	27	1	0	40	7	0	58
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	120	920	24	18	683	30	1	0	44	8	0	64
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			TWLTL							
Median storage veh)					2							
Upstream signal (ft)		497										
pX, platoon unblocked				0.46			0.46	0.46	0.46	0.46	0.46	
vC, conflicting volume	713			944			1955	1921	932	1938	1918	698
vC1, stage 1 conf vol							1172	1172		734	734	
vC2, stage 2 conf vol							783	749		1204	1184	
vCu, unblocked vol	713			287			2493	2419	261	2456	2412	698
tC, single (s)	4.1			4.2			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.3			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	86			97			99	100	88	92	100	85
cM capacity (veh/h)	887			574			114	133	355	98	126	440

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NE 1	SW 1
Volume Total	120	944	18	713	45	72
Volume Left	120	0	18	0	1	8
Volume Right	0	24	0	30	44	64
cSH	887	1700	574	1700	340	317
Volume to Capacity	0.14	0.56	0.03	0.42	0.13	0.23
Queue Length 95th (ft)	12	0	2	0	11	21
Control Delay (s)	9.7	0.0	11.5	0.0	17.2	19.7
Lane LOS	A		B		C	C
Approach Delay (s)	1.1		0.3		17.2	19.7
Approach LOS					C	C

Intersection Summary				
Average Delay	1.9			
Intersection Capacity Utilization	65.9%	ICU Level of Service	C	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	3	896	16	60	685	5	13	1	94	4	1	7
Future Volume (Veh/h)	3	896	16	60	685	5	13	1	94	4	1	7
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	3	996	18	67	761	6	14	1	104	4	1	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)		1218										
pX, platoon unblocked				0.46			0.46	0.46	0.46	0.46	0.46	
vC, conflicting volume	767			1014			1914	1912	1005	2014	1918	764
vC1, stage 1 conf vol							1011	1011		898	898	
vC2, stage 2 conf vol							904	901		1116	1020	
vCu, unblocked vol	767			439			2405	2399	420	2621	2412	764
tC, single (s)	4.1			4.2			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.3			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			86			92	99	64	93	99	98
cM capacity (veh/h)	847			495			182	189	290	61	156	404

Direction, Lane #	EB 1	WB 1	WB 2	NE 1	SW 1
Volume Total	1017	67	767	119	13
Volume Left	3	67	0	14	4
Volume Right	18	0	6	104	8
cSH	847	495	1700	270	142
Volume to Capacity	0.00	0.14	0.45	0.44	0.09
Queue Length 95th (ft)	0	12	0	53	7
Control Delay (s)	0.1	13.4	0.0	28.4	32.9
Lane LOS	A	B		D	D
Approach Delay (s)	0.1	1.1		28.4	32.9
Approach LOS				D	D

Intersection Summary				
Average Delay	2.4			
Intersection Capacity Utilization	64.2%	ICU Level of Service		C
Analysis Period (min)	15			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	14	1012	725	31	35	43
Future Volume (Veh/h)	14	1012	725	31	35	43
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	16	1124	806	34	39	48
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)			681			
pX, platoon unblocked	0.94				0.94	0.94
vC, conflicting volume	840				1417	420
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	709				1321	264
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				72	93
cM capacity (veh/h)	835				137	693

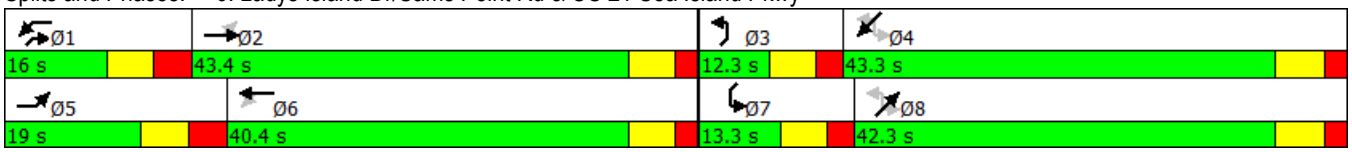
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	391	749	537	303	39	48
Volume Left	16	0	0	0	39	0
Volume Right	0	0	0	34	0	48
cSH	835	1700	1700	1700	137	693
Volume to Capacity	0.02	0.44	0.32	0.18	0.28	0.07
Queue Length 95th (ft)	1	0	0	0	27	6
Control Delay (s)	0.6	0.0	0.0	0.0	41.5	10.6
Lane LOS	A				E	B
Approach Delay (s)	0.2		0.0		24.4	
Approach LOS					C	

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	47.9%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations										
Traffic Volume (vph)	430	494	315	293	123	667	404	139	414	345
Future Volume (vph)	430	494	315	293	123	667	404	139	414	345
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+ov	pm+pt	NA	Perm
Protected Phases	5	2	1	6	3	8	1	7	4	
Permitted Phases	2		6		8		8	4		4
Detector Phase	5	2	1	6	3	8	1	7	4	4
Switch Phase										
Minimum Initial (s)	6.0	25.0	6.0	25.0	6.0	15.0	6.0	6.0	15.0	15.0
Minimum Split (s)	13.3	43.0	13.3	39.0	12.3	42.3	13.3	13.3	43.3	43.3
Total Split (s)	19.0	43.4	16.0	40.4	12.3	42.3	16.0	13.3	43.3	43.3
Total Split (%)	16.5%	37.7%	13.9%	35.1%	10.7%	36.8%	13.9%	11.6%	37.7%	37.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.3	4.0	4.0	4.3	4.3
All-Red Time (s)	3.3	2.0	3.3	2.0	2.3	2.0	3.3	2.3	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.3	6.0	7.3	6.0	6.3	6.3	7.3	6.3	6.3	6.3
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Max	None	None	None	None	Max	Max
Act Effct Green (s)	47.8	37.4	41.8	34.4	42.0	36.0	51.0	44.0	37.0	37.0
Actuated g/C Ratio	0.42	0.33	0.36	0.30	0.37	0.31	0.44	0.38	0.32	0.32
v/c Ratio	1.16	0.59	1.24	0.40	0.61	0.67	0.58	0.68	0.77	0.50
Control Delay	123.6	33.7	161.8	30.9	34.6	37.9	19.7	38.3	45.1	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	123.6	33.7	161.8	30.9	34.6	37.9	19.7	38.3	45.1	5.3
LOS	F	C	F	C	C	D	B	D	D	A
Approach Delay		71.2		90.7		31.4			28.7	
Approach LOS		E		F		C			C	

Intersection Summary	
Cycle Length: 115	
Actuated Cycle Length: 115	
Natural Cycle: 115	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.24	
Intersection Signal Delay: 52.3	Intersection LOS: D
Intersection Capacity Utilization 93.8%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 6: Ladys Island Dr/Sams Point Rd & US 21 Sea Island Pkwy



Lane Group	EBL	EBT	WBL	WBT	NEL	NET	NER	SWL	SWT	SWR
Protected Phases	5	2	1	6	3	8	1	7	4	
Permitted Phases	2		6		8		8	4		4
Minimum Initial (s)	6.0	25.0	6.0	25.0	6.0	15.0	6.0	6.0	15.0	15.0
Minimum Split (s)	13.3	43.0	13.3	39.0	12.3	42.3	13.3	13.3	43.3	43.3
Total Split (s)	19.0	43.4	16.0	40.4	12.3	42.3	16.0	13.3	43.3	43.3
Total Split (%)	16.5%	37.7%	13.9%	35.1%	10.7%	36.8%	13.9%	11.6%	37.7%	37.7%
Maximum Green (s)	11.7	37.4	8.7	34.4	6.0	36.0	8.7	7.0	37.0	37.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.3	4.0	4.0	4.3	4.3
All-Red Time (s)	3.3	2.0	3.3	2.0	2.3	2.0	3.3	2.3	2.0	2.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.5	3.0	3.5	3.0	3.5	3.0	3.0	3.5	3.5
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	Min	None	Max	None	None	None	None	Max	Max
Walk Time (s)		5.0		5.0		5.0			5.0	5.0
Flash Dont Walk (s)		32.0		28.0		31.0			28.0	28.0
Pedestrian Calls (#/hr)		0		0		0			0	0
90th %ile Green (s)	11.7	37.4	8.7	34.4	6.0	36.0	8.7	7.0	37.0	37.0
90th %ile Term Code	Max	Hold	Max	MaxR	Max	Max	Max	Max	MaxR	MaxR
70th %ile Green (s)	11.7	37.4	8.7	34.4	6.0	36.0	8.7	7.0	37.0	37.0
70th %ile Term Code	Max	Hold	Max	MaxR	Max	Hold	Max	Max	MaxR	MaxR
50th %ile Green (s)	11.7	37.4	8.7	34.4	6.0	36.0	8.7	7.0	37.0	37.0
50th %ile Term Code	Max	Hold	Max	MaxR	Max	Hold	Max	Max	MaxR	MaxR
30th %ile Green (s)	11.7	37.4	8.7	34.4	6.0	36.0	8.7	7.0	37.0	37.0
30th %ile Term Code	Max	Hold	Max	MaxR	Max	Hold	Max	Max	MaxR	MaxR
10th %ile Green (s)	11.7	37.4	8.7	34.4	6.0	36.0	8.7	7.0	37.0	37.0
10th %ile Term Code	Max	Hold	Max	MaxR	Max	Hold	Max	Max	MaxR	MaxR

Intersection Summary
Cycle Length: 115
Actuated Cycle Length: 115
Control Type: Actuated-Uncoordinated
90th %ile Actuated Cycle: 115
70th %ile Actuated Cycle: 115
50th %ile Actuated Cycle: 115
30th %ile Actuated Cycle: 115
10th %ile Actuated Cycle: 115

Lane Group	EBL	EBT	WBL	WBT	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	478	670	350	416	137	741	449	154	460	383
v/c Ratio	1.16	0.59	1.24	0.40	0.61	0.67	0.58	0.68	0.77	0.50
Control Delay	123.6	33.7	161.8	30.9	34.6	37.9	19.7	38.3	45.1	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	123.6	33.7	161.8	30.9	34.6	37.9	19.7	38.3	45.1	5.3
Queue Length 50th (ft)	~324	209	~234	118	62	250	169	70	305	0
Queue Length 95th (ft)	#590	271	#439	165	105	318	275	#127	433	68
Internal Link Dist (ft)		376		679		587			543	
Turn Bay Length (ft)	200		350		350		550	460		
Base Capacity (vph)	412	1136	282	1046	226	1107	776	228	599	769
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	1.16	0.59	1.24	0.40	0.61	0.67	0.58	0.68	0.77	0.50

Intersection Summary

~ 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.

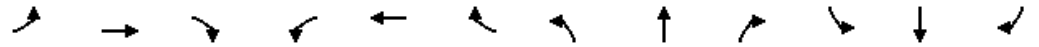
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	430	494	109	315	293	81	123	667	404	139	414	345
Future Volume (vph)	430	494	109	315	293	81	123	667	404	139	414	345
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3	6.0		7.3	6.0		6.3	6.3	7.3	6.3	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3443		1752	3424		1770	3539	1583	1752	1863	1583
Flt Permitted	0.40	1.00		0.28	1.00		0.23	1.00	1.00	0.20	1.00	1.00
Satd. Flow (perm)	740	3443		521	3424		426	3539	1583	377	1863	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	478	549	121	350	326	90	137	741	449	154	460	383
RTOR Reduction (vph)	0	16	0	0	22	0	0	0	82	0	0	260
Lane Group Flow (vph)	478	654	0	350	394	0	137	741	367	154	460	123
Heavy Vehicles (%)	2%	2%	2%	3%	2%	2%	2%	2%	2%	3%	2%	2%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases	2			6			8		8	4		4
Actuated Green, G (s)	49.1	37.4		43.1	34.4		42.0	36.0	44.7	44.0	37.0	37.0
Effective Green, g (s)	49.1	37.4		43.1	34.4		42.0	36.0	44.7	44.0	37.0	37.0
Actuated g/C Ratio	0.43	0.33		0.37	0.30		0.37	0.31	0.39	0.38	0.32	0.32
Clearance Time (s)	7.3	6.0		7.3	6.0		6.3	6.3	7.3	6.3	6.3	6.3
Vehicle Extension (s)	3.0	3.5		3.0	3.5		3.0	3.5	3.0	3.0	3.5	3.5
Lane Grp Cap (vph)	420	1119		288	1024		225	1107	615	227	599	509
v/s Ratio Prot	c0.12	0.19		0.09	0.12		0.03	0.21	0.05	c0.04	c0.25	
v/s Ratio Perm	c0.37			0.36			0.19		0.19	0.22		0.08
v/c Ratio	1.14	0.58		1.22	0.39		0.61	0.67	0.60	0.68	0.77	0.24
Uniform Delay, d1	30.6	32.3		33.0	31.9		27.3	34.3	28.0	25.6	35.1	28.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	87.3	0.8		124.4	1.1		4.6	1.6	1.6	7.8	9.1	1.1
Delay (s)	117.9	33.2		157.4	33.0		32.0	35.9	29.5	33.4	44.3	29.8
Level of Service	F	C		F	C		C	D	C	C	D	C
Approach Delay (s)		68.4			89.8			33.4			37.0	
Approach LOS		E			F			C			D	

Intersection Summary			
HCM 2000 Control Delay	53.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	25.9
Intersection Capacity Utilization	93.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	157	792	31	31	590	34	10	11	58	10	2	102
Future Volume (Veh/h)	157	792	31	31	590	34	10	11	58	10	2	102
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	174	880	34	34	656	38	11	12	64	11	2	113
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												10
Median type		None			TWLTL							
Median storage veh)					2							
Upstream signal (ft)		759										
pX, platoon unblocked				0.90			0.90	0.90	0.90	0.90	0.90	
vC, conflicting volume	694			914			1642	2007	457	1601	2005	347
vC1, stage 1 conf vol							1245	1245		743	743	
vC2, stage 2 conf vol							397	762		858	1262	
vCu, unblocked vol	694			683			1491	1897	175	1446	1895	347
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	81			96			93	92	92	95	99	83
cM capacity (veh/h)	897			816			154	159	754	203	164	649

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1
Volume Total	174	587	327	34	437	257	23	64	126
Volume Left	174	0	0	34	0	0	11	0	11
Volume Right	0	0	34	0	0	38	0	64	113
cSH	897	1700	1700	816	1700	1700	157	754	724
Volume to Capacity	0.19	0.35	0.19	0.04	0.26	0.15	0.15	0.08	0.17
Queue Length 95th (ft)	18	0	0	3	0	0	13	7	16
Control Delay (s)	10.0	0.0	0.0	9.6	0.0	0.0	31.9	10.2	13.0
Lane LOS	A			A			D	B	B
Approach Delay (s)	1.6			0.4			15.9		13.0
Approach LOS							C		B

Intersection Summary				
Average Delay	2.5			
Intersection Capacity Utilization	44.0%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	793	9	8	601	56	3	3	20	102	1	46
Future Volume (Veh/h)	69	793	9	8	601	56	3	3	20	102	1	46
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	77	881	10	9	668	62	3	3	22	113	1	51
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)		1208										
pX, platoon unblocked												
vC, conflicting volume	730			891			1444	1788	446	1335	1762	365
vC1, stage 1 conf vol							1040	1040		717	717	
vC2, stage 2 conf vol							404	748		618	1045	
vCu, unblocked vol	730			891			1444	1788	446	1335	1762	365
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	91			99			99	99	96	59	100	92
cM capacity (veh/h)	870			757			206	220	560	278	231	632

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1	SB 2
Volume Total	77	587	304	9	445	285	28	114	51
Volume Left	77	0	0	9	0	0	3	113	0
Volume Right	0	0	10	0	0	62	22	0	51
cSH	870	1700	1700	757	1700	1700	415	278	632
Volume to Capacity	0.09	0.35	0.18	0.01	0.26	0.17	0.07	0.41	0.08
Queue Length 95th (ft)	7	0	0	1	0	0	5	48	7
Control Delay (s)	9.5	0.0	0.0	9.8	0.0	0.0	14.3	26.7	11.2
Lane LOS	A			A			B	D	B
Approach Delay (s)	0.8			0.1			14.3	21.9	
Approach LOS							B	C	

Intersection Summary				
Average Delay	2.5			
Intersection Capacity Utilization	47.9%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	923	4	3	671	0	7	0	1	0	0	2
Future Volume (Veh/h)	2	923	4	3	671	0	7	0	1	0	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	1026	4	3	746	0	8	0	1	0	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	746			1030			1413	1784	515	1270	1786	373
vC1, stage 1 conf vol							1032	1032		752	752	
vC2, stage 2 conf vol							381	752		518	1034	
vCu, unblocked vol	746			1030			1413	1784	515	1270	1786	373
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			97	100	100	100	100	100
cM capacity (veh/h)	858			670			233	252	505	311	250	624

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	515	517	3	497	249	9	2
Volume Left	2	0	3	0	0	8	0
Volume Right	0	4	0	0	0	1	2
cSH	858	1700	670	1700	1700	248	624
Volume to Capacity	0.00	0.30	0.00	0.29	0.15	0.04	0.00
Queue Length 95th (ft)	0	0	0	0	0	3	0
Control Delay (s)	0.1	0.0	10.4	0.0	0.0	20.1	10.8
Lane LOS	A		B			C	B
Approach Delay (s)	0.0		0.0			20.1	10.8
Approach LOS						C	B

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	39.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	897	2	3	634	2	7	0	4	5	0	20
Future Volume (Veh/h)	6	897	2	3	634	2	7	0	4	5	0	20
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	7	997	2	3	704	2	8	0	4	6	0	22
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												12
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	706			999			1370	1724	500	1228	1724	353
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	706			999			1370	1724	500	1228	1724	353
tC, single (s)	4.8			4.1			7.5	6.5	7.9	7.9	6.5	7.1
tC, 2 stage (s)												
tF (s)	2.5			2.2			3.5	4.0	3.8	3.7	4.0	3.4
p0 queue free %	99			100			92	100	99	95	100	96
cM capacity (veh/h)	710			689			100	87	407	113	87	621

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	7	665	334	3	469	237	12	28
Volume Left	7	0	0	3	0	0	8	6
Volume Right	0	0	2	0	0	2	4	22
cSH	710	1700	1700	689	1700	1700	134	529
Volume to Capacity	0.01	0.39	0.20	0.00	0.28	0.14	0.09	0.05
Queue Length 95th (ft)	1	0	0	0	0	0	7	4
Control Delay (s)	10.1	0.0	0.0	10.3	0.0	0.0	34.4	16.9
Lane LOS	B			B			D	C
Approach Delay (s)	0.1			0.0			34.4	16.9
Approach LOS							D	C

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	38.3%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	901	15	2	624	10	5
Future Volume (Veh/h)	901	15	2	624	10	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1001	17	2	693	11	6
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			1018		1360	1010
vC1, stage 1 conf vol					1010	
vC2, stage 2 conf vol					350	
vCu, unblocked vol			1018		1360	1010
tC, single (s)			4.1		7.0	6.9
tC, 2 stage (s)					6.0	
tF (s)			2.2		3.6	3.3
p0 queue free %			100		96	97
cM capacity (veh/h)			677		277	238

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	1018	233	462	17
Volume Left	0	2	0	11
Volume Right	17	0	0	6
cSH	1700	677	1700	262
Volume to Capacity	0.60	0.00	0.27	0.06
Queue Length 95th (ft)	0	0	0	5
Control Delay (s)	0.0	0.1	0.0	19.7
Lane LOS		A		C
Approach Delay (s)	0.0	0.0		19.7
Approach LOS				C

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	58.3%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	4	885	620	1	0	11
Future Volume (Veh/h)	4	885	620	1	0	11
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	4	983	689	1	0	12
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	690				1680	690
vC1, stage 1 conf vol					690	
vC2, stage 2 conf vol					991	
vCu, unblocked vol	690				1680	690
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	97
cM capacity (veh/h)	905				299	445

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	4	983	690	12
Volume Left	4	0	0	0
Volume Right	0	0	1	12
cSH	905	1700	1700	445
Volume to Capacity	0.00	0.58	0.41	0.03
Queue Length 95th (ft)	0	0	0	2
Control Delay (s)	9.0	0.0	0.0	13.3
Lane LOS	A			B
Approach Delay (s)	0.0		0.0	13.3
Approach LOS				B

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	852	10	3	588	7	5
Future Volume (Veh/h)	852	10	3	588	7	5
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	947	11	3	653	8	6
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)				1133		
pX, platoon unblocked					0.78	
vC, conflicting volume			958		1612	952
vC1, stage 1 conf vol					952	
vC2, stage 2 conf vol					659	
vCu, unblocked vol			958		1643	952
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		97	98
cM capacity (veh/h)			718		305	314

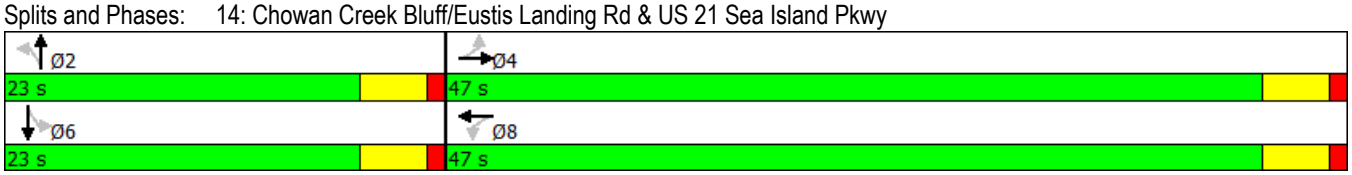
Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	958	656	14
Volume Left	0	3	8
Volume Right	11	0	6
cSH	1700	718	309
Volume to Capacity	0.56	0.00	0.05
Queue Length 95th (ft)	0	0	4
Control Delay (s)	0.0	0.1	17.2
Lane LOS		A	C
Approach Delay (s)	0.0	0.1	17.2
Approach LOS			C

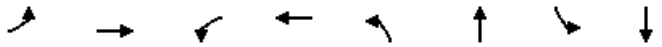
Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	55.4%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	40	803	5	556	31	0	13	2
Future Volume (vph)	40	803	5	556	31	0	13	2
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	47.0	47.0	47.0	47.0	23.0	23.0	23.0	23.0
Total Split (%)	67.1%	67.1%	67.1%	67.1%	32.9%	32.9%	32.9%	32.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)		4.5	4.5	4.5		4.5		4.5
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)		39.3	39.3	39.3		18.6		18.6
Actuated g/C Ratio		0.59	0.59	0.59		0.28		0.28
v/c Ratio		0.94	0.02	0.57		0.10		0.08
Control Delay		30.4	5.8	10.8		12.9		12.4
Queue Delay		0.0	0.0	0.0		0.0		0.0
Total Delay		30.4	5.8	10.8		12.9		12.4
LOS		C	A	B		B		B
Approach Delay		30.4		10.8		12.9		12.4
Approach LOS		C		B		B		B

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 67	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 22.2	Intersection LOS: C
Intersection Capacity Utilization 88.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 14: Chowan Creek Bluff/Eustis Landing Rd & US 21 Sea Island Pkwy





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	47.0	47.0	47.0	47.0	23.0	23.0	23.0	23.0
Total Split (%)	67.1%	67.1%	67.1%	67.1%	32.9%	32.9%	32.9%	32.9%
Maximum Green (s)	42.5	42.5	42.5	42.5	18.5	18.5	18.5	18.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag								
Lead-Lag Optimize?								
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	Max	Max	Max	Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0
90th %ile Green (s)	42.5	42.5	42.5	42.5	18.5	18.5	18.5	18.5
90th %ile Term Code	Max	Max	Hold	Hold	MaxR	MaxR	MaxR	MaxR
70th %ile Green (s)	42.5	42.5	42.5	42.5	18.5	18.5	18.5	18.5
70th %ile Term Code	Max	Max	Hold	Hold	MaxR	MaxR	MaxR	MaxR
50th %ile Green (s)	42.5	42.5	42.5	42.5	18.5	18.5	18.5	18.5
50th %ile Term Code	Max	Max	Hold	Hold	MaxR	MaxR	MaxR	MaxR
30th %ile Green (s)	40.5	40.5	40.5	40.5	18.5	18.5	18.5	18.5
30th %ile Term Code	Gap	Gap	Hold	Hold	MaxR	MaxR	MaxR	MaxR
10th %ile Green (s)	29.6	29.6	29.6	29.6	18.5	18.5	18.5	18.5
10th %ile Term Code	Gap	Gap	Hold	Hold	MaxR	MaxR	MaxR	MaxR

Intersection Summary
Cycle Length: 70
Actuated Cycle Length: 67
Control Type: Actuated-Uncoordinated
90th %ile Actuated Cycle: 70
70th %ile Actuated Cycle: 70
50th %ile Actuated Cycle: 70
30th %ile Actuated Cycle: 68
10th %ile Actuated Cycle: 57.1

Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	970	6	620	44	38
v/c Ratio	0.94	0.02	0.57	0.10	0.08
Control Delay	30.4	5.8	10.8	12.9	12.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	30.4	5.8	10.8	12.9	12.4
Queue Length 50th (ft)	320	1	139	7	5
Queue Length 95th (ft)	#614	5	220	29	26
Internal Link Dist (ft)	1053		490	351	331
Turn Bay Length (ft)		290			
Base Capacity (vph)	1127	314	1189	428	456
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.86	0.02	0.52	0.10	0.08

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	803	31	5	556	2	31	0	9	13	2	20
Future Volume (vph)	40	803	31	5	556	2	31	0	9	13	2	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5		4.5	4.5			4.5			4.5	
Lane Util. Factor		1.00		1.00	1.00			1.00			1.00	
Frt		1.00		1.00	1.00			0.97			0.92	
Flt Protected		1.00		0.95	1.00			0.96			0.98	
Satd. Flow (prot)		1840		1770	1862			1738			1686	
Flt Permitted		0.96		0.26	1.00			0.82			0.92	
Satd. Flow (perm)		1764		494	1862			1481			1585	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	44	892	34	6	618	2	34	0	10	14	2	22
RTOR Reduction (vph)	0	2	0	0	0	0	0	17	0	0	16	0
Lane Group Flow (vph)	0	968	0	6	620	0	0	27	0	0	22	0
Heavy Vehicles (%)	13%	2%	3%	2%	2%	2%	2%	7%	2%	2%	2%	2%
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		39.3		39.3	39.3			18.6			18.6	
Effective Green, g (s)		39.3		39.3	39.3			18.6			18.6	
Actuated g/C Ratio		0.59		0.59	0.59			0.28			0.28	
Clearance Time (s)		4.5		4.5	4.5			4.5			4.5	
Vehicle Extension (s)		3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)		1036		290	1093			411			440	
v/s Ratio Prot					0.33							
v/s Ratio Perm		c0.55		0.01				c0.02			0.01	
v/c Ratio		0.93		0.02	0.57			0.07			0.05	
Uniform Delay, d1		12.6		5.8	8.5			17.8			17.7	
Progression Factor		1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2		14.7		0.0	0.7			0.3			0.2	
Delay (s)		27.3		5.8	9.2			18.1			17.9	
Level of Service		C		A	A			B			B	
Approach Delay (s)		27.3			9.2			18.1			17.9	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	20.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	66.9	Sum of lost time (s)	9.0
Intersection Capacity Utilization	88.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1	56	13	1	34	39	1245	12	14	883	23
Future Volume (Veh/h)	30	1	56	13	1	34	39	1245	12	14	883	23
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	33	1	62	14	1	38	43	1383	13	16	981	26
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			TWLTL	
Median storage veh)											2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1829	2495	490	2060	2514	698	1007			1396		
vC1, stage 1 conf vol	1013	1013		1476	1476							
vC2, stage 2 conf vol	816	1482		585	1039							
vCu, unblocked vol	1829	2495	490	2060	2514	698	1007			1396		
tC, single (s)	7.6	6.5	6.9	7.5	6.5	6.9	4.2			4.1		
tC, 2 stage (s)	6.6	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	82	99	88	88	99	90	94			97		
cM capacity (veh/h)	178	138	524	115	141	383	666			486		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	34	62	53	43	922	474	16	490	490	26
Volume Left	33	0	14	43	0	0	16	0	0	0
Volume Right	0	62	38	0	0	13	0	0	0	26
cSH	177	524	232	666	1700	1700	486	1700	1700	1700
Volume to Capacity	0.19	0.12	0.23	0.06	0.54	0.28	0.03	0.29	0.29	0.02
Queue Length 95th (ft)	17	10	21	5	0	0	3	0	0	0
Control Delay (s)	30.1	12.8	25.0	10.8	0.0	0.0	12.7	0.0	0.0	0.0
Lane LOS	D	B	D	B			B			
Approach Delay (s)	18.9		25.0	0.3			0.2			
Approach LOS	C		D							

Intersection Summary				
Average Delay	1.5			
Intersection Capacity Utilization	51.0%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	7	0	1308	0	1	923
Future Volume (Veh/h)	7	0	1308	0	1	923
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	8	0	1453	0	1	1026
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1968	726			1453	
vC1, stage 1 conf vol	1453					
vC2, stage 2 conf vol	515					
vCu, unblocked vol	1968	726			1453	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	95	100			100	
cM capacity (veh/h)	171	367			462	

Direction, Lane #	WB 1	NE 1	NE 2	SW 1	SW 2
Volume Total	8	969	484	343	684
Volume Left	8	0	0	1	0
Volume Right	0	0	0	0	0
cSH	171	1700	1700	462	1700
Volume to Capacity	0.05	0.57	0.28	0.00	0.40
Queue Length 95th (ft)	4	0	0	0	0
Control Delay (s)	27.1	0.0	0.0	0.1	0.0
Lane LOS	D			A	
Approach Delay (s)	27.1	0.0		0.0	
Approach LOS	D				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	46.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	1	0	7	79	0	51	5	1204	73	98	838	3
Future Volume (Veh/h)	1	0	7	79	0	51	5	1204	73	98	838	3
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1	0	8	88	0	57	6	1338	81	109	931	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)			5			5						
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)											1003	
pX, platoon unblocked												
vC, conflicting volume	1860	2582	467	2074	2542	710	934			1419		
vC1, stage 1 conf vol	1150	1150		1390	1390							
vC2, stage 2 conf vol	710	1431		684	1152							
vCu, unblocked vol	1860	2582	467	2074	2542	710	934			1419		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	99	32	100	85	99			77		
cM capacity (veh/h)	130	80	542	130	139	376	729			476		

Direction, Lane #	EB 1	WB 1	NE 1	NE 2	SW 1	SW 2	SW 3
Volume Total	9	145	675	750	109	621	313
Volume Left	1	88	6	0	109	0	0
Volume Right	8	57	0	81	0	0	3
cSH	610	215	729	1700	476	1700	1700
Volume to Capacity	0.01	0.68	0.01	0.44	0.23	0.37	0.18
Queue Length 95th (ft)	1	105	1	0	22	0	0
Control Delay (s)	14.1	53.0	0.2	0.0	14.8	0.0	0.0
Lane LOS	B	F	A		B		
Approach Delay (s)	14.1	53.0	0.1		1.5		
Approach LOS	B	F					

Intersection Summary				
Average Delay	3.7			
Intersection Capacity Utilization	80.1%	ICU Level of Service	D	
Analysis Period (min)	15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	13	199	1200	23	80	852
Future Volume (Veh/h)	13	199	1200	23	80	852
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	14	221	1333	26	89	947
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1998	680			1359	
vC1, stage 1 conf vol	1346					
vC2, stage 2 conf vol	652					
vCu, unblocked vol	1998	680			1359	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	92	44			82	
cM capacity (veh/h)	182	394			502	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	235	889	470	89	474	474
Volume Left	14	0	0	89	0	0
Volume Right	221	0	26	0	0	0
cSH	368	1700	1700	502	1700	1700
Volume to Capacity	0.64	0.52	0.28	0.18	0.28	0.28
Queue Length 95th (ft)	106	0	0	16	0	0
Control Delay (s)	30.5	0.0	0.0	13.7	0.0	0.0
Lane LOS	D			B		
Approach Delay (s)	30.5	0.0		1.2		
Approach LOS	D					

Intersection Summary			
Average Delay	3.2		
Intersection Capacity Utilization	61.4%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	0	9	0	0	0	15	1393	0	0	962	4
Future Volume (Veh/h)	6	0	9	0	0	0	15	1393	0	0	962	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	7	0	10	0	0	0	17	1548	0	0	1069	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1879	2653	536	2126	2655	774	1073			1548		
vC1, stage 1 conf vol	1071	1071		1582	1582							
vC2, stage 2 conf vol	808	1582		544	1073							
vCu, unblocked vol	1879	2653	536	2126	2655	774	1073			1548		
tC, single (s)	7.5	6.5	7.1	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.4	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	100	98	100	100	100	97			100		
cM capacity (veh/h)	190	138	466	105	136	341	645			424		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	17	0	791	774	534	538
Volume Left	7	0	17	0	0	0
Volume Right	10	0	0	0	0	4
cSH	292	1700	645	1700	424	1700
Volume to Capacity	0.06	0.00	0.03	0.46	0.00	0.32
Queue Length 95th (ft)	5	0	2	0	0	0
Control Delay (s)	18.1	0.0	0.7	0.0	0.0	0.0
Lane LOS	C	A	A			
Approach Delay (s)	18.1	0.0	0.4		0.0	
Approach LOS	C	A				

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	59.1%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	6	36	13	1	1	19	1326	44	2	882	40
Future Volume (Veh/h)	32	6	36	13	1	1	19	1326	44	2	882	40
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	36	7	40	14	1	1	21	1473	49	2	980	44
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1786	2570	512	2077	2568	761	1024			1522		
vC1, stage 1 conf vol	1006	1006		1540	1540							
vC2, stage 2 conf vol	780	1564		538	1028							
vCu, unblocked vol	1786	2570	512	2077	2568	761	1024			1522		
tC, single (s)	7.5	6.5	7.0	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	82	95	92	87	99	100	97			100		
cM capacity (veh/h)	204	141	504	111	143	348	674			434		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	83	16	21	982	540	2	653	371
Volume Left	36	14	21	0	0	2	0	0
Volume Right	40	1	0	0	49	0	0	44
cSH	272	117	674	1700	1700	434	1700	1700
Volume to Capacity	0.31	0.14	0.03	0.58	0.32	0.00	0.38	0.22
Queue Length 95th (ft)	31	11	2	0	0	0	0	0
Control Delay (s)	23.9	40.5	10.5	0.0	0.0	13.3	0.0	0.0
Lane LOS	C	E	B			B		
Approach Delay (s)	23.9	40.5	0.1			0.0		
Approach LOS	C	E						

Intersection Summary				
Average Delay	1.1			
Intersection Capacity Utilization	48.8%	ICU Level of Service	A	
Analysis Period (min)	15			

APPENDIX D

2038 NO BUILD SYNCHRO RESULTS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	854	42	64	1416	2	59	0	43	0	0	1
Future Volume (Veh/h)	1	854	42	64	1416	2	59	0	43	0	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1	949	47	71	1573	2	66	0	48	0	0	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1575			996			2690	2692	972	2738	2714	1574
vC1, stage 1 conf vol							974	974		1716	1716	
vC2, stage 2 conf vol							1716	1717		1022	998	
vCu, unblocked vol	1575			996			2690	2692	972	2738	2714	1574
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			90			29	100	84	100	100	99
cM capacity (veh/h)	418			695			93	117	306	84	112	135

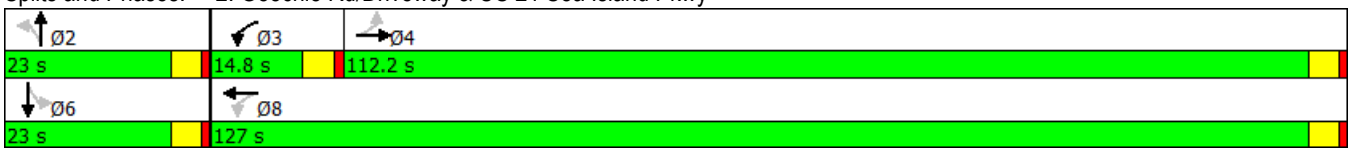
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total	997	71	1575	114	1
Volume Left	1	71	0	66	0
Volume Right	47	0	2	48	1
cSH	418	695	1700	131	135
Volume to Capacity	0.00	0.10	0.93	0.87	0.01
Queue Length 95th (ft)	0	9	0	139	1
Control Delay (s)	0.1	10.8	0.0	110.7	31.8
Lane LOS	A	B		F	D
Approach Delay (s)	0.1	0.5		110.7	31.8
Approach LOS				F	D

Intersection Summary				
Average Delay	4.9			
Intersection Capacity Utilization	93.9%	ICU Level of Service		F
Analysis Period (min)	15			

Lane Group	EBT	WBL	WBT	NBL	NBT	SBT
Lane Configurations						
Traffic Volume (vph)	820	132	1464	35	0	0
Future Volume (vph)	820	132	1464	35	0	0
Turn Type	NA	pm+pt	NA	Perm	NA	NA
Protected Phases	4	3	8		2	6
Permitted Phases		8		2		
Detector Phase	4	3	8	2	2	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	9.5	22.5	22.5	22.5	22.5
Total Split (s)	112.2	14.8	127.0	23.0	23.0	23.0
Total Split (%)	74.8%	9.9%	84.7%	15.3%	15.3%	15.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5		4.5	4.5
Lead/Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes				
Recall Mode	None	None	None	Max	Max	Max
Act Effct Green (s)	110.0	122.5	122.5		18.5	18.5
Actuated g/C Ratio	0.73	0.82	0.82		0.12	0.12
v/c Ratio	0.72	0.42	1.07		0.39	0.00
Control Delay	15.3	6.5	60.0		36.9	0.0
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	15.3	6.5	60.0		36.9	0.0
LOS	B	A	E		D	A
Approach Delay	15.3		55.6		36.9	
Approach LOS	B		E		D	

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 150	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 41.1	Intersection LOS: D
Intersection Capacity Utilization 128.3%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 2: Geechie Rd/Driveway & US 21 Sea Island Pkwy



Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	979	147	1627	85	1
v/c Ratio	0.72	0.42	1.07	0.39	0.00
Control Delay	15.3	6.5	60.0	36.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	15.3	6.5	60.0	36.9	0.0
Queue Length 50th (ft)	488	24	~1757	37	0
Queue Length 95th (ft)	678	38	#2021	94	0
Internal Link Dist (ft)	1300		417	377	79
Turn Bay Length (ft)		200			
Base Capacity (vph)	1355	370	1521	218	266
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.72	0.40	1.07	0.39	0.00

Intersection Summary

~ 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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	820	61	132	1464	0	35	0	41	0	0	1
Future Volume (vph)	0	820	61	132	1464	0	35	0	41	0	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5		4.5	4.5			4.5			4.5	
Lane Util. Factor		1.00		1.00	1.00			1.00			1.00	
Frt		0.99		1.00	1.00			0.93			0.86	
Flt Protected		1.00		0.95	1.00			0.98			1.00	
Satd. Flow (prot)		1845		1770	1863			1653			1611	
Flt Permitted		1.00		0.18	1.00			0.86			1.00	
Satd. Flow (perm)		1845		334	1863			1459			1611	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	911	68	147	1627	0	39	0	46	0	0	1
RTOR Reduction (vph)	0	2	0	0	0	0	0	39	0	0	1	0
Lane Group Flow (vph)	0	977	0	147	1627	0	0	46	0	0	0	0
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	6%	2%	2%	2%
Turn Type		NA		pm+pt	NA		Perm	NA			NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		110.0		122.5	122.5			18.5			18.5	
Effective Green, g (s)		110.0		122.5	122.5			18.5			18.5	
Actuated g/C Ratio		0.73		0.82	0.82			0.12			0.12	
Clearance Time (s)		4.5		4.5	4.5			4.5			4.5	
Vehicle Extension (s)		3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)		1353		349	1521			179			198	
v/s Ratio Prot		0.53		0.02	c0.87						0.00	
v/s Ratio Perm				0.32				c0.03				
v/c Ratio		0.72		0.42	1.07			0.26			0.00	
Uniform Delay, d1		11.3		13.0	13.8			59.5			57.6	
Progression Factor		1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2		1.9		0.8	44.2			3.5			0.0	
Delay (s)		13.3		13.8	58.0			63.0			57.7	
Level of Service		B		B	E			E			E	
Approach Delay (s)		13.3			54.3			63.0			57.7	
Approach LOS		B			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	40.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	128.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	69	763	25	33	1418	19	11	4	27	19	7	174
Future Volume (Veh/h)	69	763	25	33	1418	19	11	4	27	19	7	174
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	77	848	28	37	1576	21	12	4	30	21	8	193
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			TWLTL							
Median storage veh)					2							
Upstream signal (ft)		497										
pX, platoon unblocked				0.69			0.69	0.69	0.69	0.69	0.69	
vC, conflicting volume	1597			876			2863	2687	862	2694	2690	1586
vC1, stage 1 conf vol							1016	1016		1660	1660	
vC2, stage 2 conf vol							1847	1671		1034	1030	
vCu, unblocked vol	1597			596			3474	3219	576	3230	3224	1586
tC, single (s)	4.1			4.1			7.1	6.5	6.3	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.4	3.5	4.0	3.3
p0 queue free %	81			95			0	94	91	75	92	0
cM capacity (veh/h)	410			677			0	62	352	85	106	133

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NE 1	SW 1
Volume Total	77	876	37	1597	46	222
Volume Left	77	0	37	0	12	21
Volume Right	0	28	0	21	30	193
cSH	410	1700	677	1700	0	125
Volume to Capacity	0.19	0.52	0.05	0.94	Err	1.77
Queue Length 95th (ft)	17	0	4	0	Err	425
Control Delay (s)	15.8	0.0	10.6	0.0	Err	437.3
Lane LOS	C		B		F	F
Approach Delay (s)	1.3		0.2		Err	437.3
Approach LOS					F	F

Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	95.7%	ICU Level of Service	F	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	5	789	7	164	1491	10	10	1	91	0	1	4
Future Volume (Veh/h)	5	789	7	164	1491	10	10	1	91	0	1	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	6	877	8	182	1657	11	11	1	101	0	1	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)		1218										
pX, platoon unblocked				0.69			0.69	0.69	0.69	0.69	0.69	
vC, conflicting volume	1668			885			2918	2925	881	3021	2924	1662
vC1, stage 1 conf vol							893	893		2026	2026	
vC2, stage 2 conf vol							2026	2032		994	897	
vCu, unblocked vol	1668			611			3550	3559	606	3698	3557	1662
tC, single (s)	4.1			4.2			7.2	6.5	6.3	7.1	6.5	6.2
tC, 2 stage (s)							6.2	5.5		6.1	5.5	
tF (s)	2.2			2.3			3.6	4.0	3.4	3.5	4.0	3.3
p0 queue free %	98			72			73	98	70	100	98	97
cM capacity (veh/h)	385			650			40	63	334	4	61	120

Direction, Lane #	EB 1	WB 1	WB 2	NE 1	SW 1
Volume Total	891	182	1668	113	5
Volume Left	6	182	0	11	0
Volume Right	8	0	11	101	4
cSH	385	650	1700	191	101
Volume to Capacity	0.02	0.28	0.98	0.59	0.05
Queue Length 95th (ft)	1	29	0	81	4
Control Delay (s)	0.6	12.7	0.0	47.8	42.6
Lane LOS	A	B		E	E
Approach Delay (s)	0.6	1.2		47.8	42.6
Approach LOS				E	E

Intersection Summary				
Average Delay	2.9			
Intersection Capacity Utilization	144.2%	ICU Level of Service	H	
Analysis Period (min)	15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	42	837	1630	55	12	30
Future Volume (Veh/h)	42	837	1630	55	12	30
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	47	930	1811	61	13	33
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)			681			
pX, platoon unblocked	0.78				0.78	0.78
vC, conflicting volume	1872				2400	936
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1554				2232	355
tC, single (s)	4.1				7.0	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.6	3.3
p0 queue free %	86				40	93
cM capacity (veh/h)	329				22	501

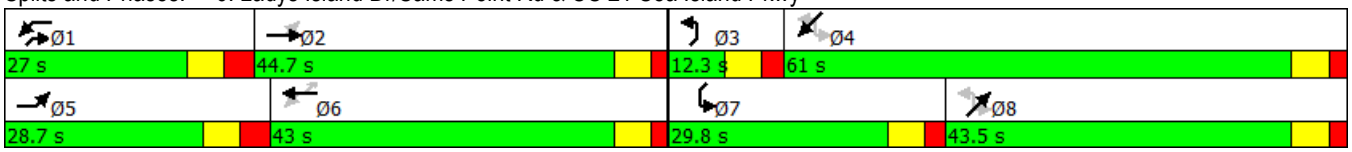
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	357	620	1207	665	13	33
Volume Left	47	0	0	0	13	0
Volume Right	0	0	0	61	0	33
cSH	329	1700	1700	1700	22	501
Volume to Capacity	0.14	0.36	0.71	0.39	0.60	0.07
Queue Length 95th (ft)	12	0	0	0	43	5
Control Delay (s)	5.0	0.0	0.0	0.0	308.3	12.7
Lane LOS	A				F	B
Approach Delay (s)	1.8		0.0		96.2	
Approach LOS					F	

Intersection Summary				
Average Delay	2.1			
Intersection Capacity Utilization	64.2%	ICU Level of Service		C
Analysis Period (min)	15			

Lane Group	EBL	EBT	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations											
Traffic Volume (vph)	289	429	590	735	225	143	445	425	330	882	885
Future Volume (vph)	289	429	590	735	225	143	445	425	330	882	885
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	Perm
Protected Phases	5	2	1	6		3	8	1	7	4	
Permitted Phases	2		6		6	8		8	4		4
Detector Phase	5	2	1	6	6	3	8	1	7	4	4
Switch Phase											
Minimum Initial (s)	6.0	25.0	6.0	25.0	25.0	6.0	15.0	6.0	6.0	15.0	15.0
Minimum Split (s)	13.3	43.0	13.3	39.0	39.0	12.3	42.3	13.3	13.3	43.3	43.3
Total Split (s)	28.7	44.7	27.0	43.0	43.0	12.3	43.5	27.0	29.8	61.0	61.0
Total Split (%)	19.8%	30.8%	18.6%	29.7%	29.7%	8.5%	30.0%	18.6%	20.6%	42.1%	42.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.3	4.0	4.0	4.3	4.3
All-Red Time (s)	3.3	2.0	3.3	2.0	2.0	2.3	2.0	3.3	2.3	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.3	6.0	7.3	6.0	6.0	6.3	6.3	7.3	6.3	6.3	6.3
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Max	Max	None	None	None	None	Max	Max
Act Effct Green (s)	58.8	38.7	55.4	37.0	37.0	44.0	38.0	64.0	67.0	54.7	54.7
Actuated g/C Ratio	0.41	0.27	0.38	0.26	0.26	0.30	0.26	0.44	0.46	0.38	0.38
v/c Ratio	1.05	0.65	1.84	0.90	0.51	1.28	0.54	0.62	0.86	1.40	1.20
Control Delay	106.0	49.1	413.6	66.6	18.1	203.9	48.8	26.8	47.5	222.2	128.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	106.0	49.1	413.6	66.6	18.1	203.9	48.8	26.8	47.5	222.2	128.4
LOS	F	D	F	E	B	F	D	C	D	F	F
Approach Delay		68.9		191.7			61.5			155.1	
Approach LOS		E		F			E			F	

Intersection Summary	
Cycle Length: 145	
Actuated Cycle Length: 145	
Natural Cycle: 145	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.84	
Intersection Signal Delay: 135.1	Intersection LOS: F
Intersection Capacity Utilization 128.4%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Ladys Island Dr/Sams Point Rd & US 21 Sea Island Pkwy



Lane Group	EBL	EBT	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	321	601	656	817	250	159	494	472	367	980	983
v/c Ratio	1.05	0.65	1.84	0.90	0.51	1.28	0.54	0.62	0.86	1.40	1.20
Control Delay	106.0	49.1	413.6	66.6	18.1	203.9	48.8	26.8	47.5	222.2	128.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	106.0	49.1	413.6	66.6	18.1	203.9	48.8	26.8	47.5	222.2	128.4
Queue Length 50th (ft)	~279	256	~827	396	56	~138	213	257	233	~1231	~905
Queue Length 95th (ft)	#477	324	#1072	#510	146	#294	273	381	#345	#1492	#1169
Internal Link Dist (ft)		376		679			587			549	
Turn Bay Length (ft)	200		350		200	350		550	460		
Base Capacity (vph)	307	929	356	903	494	124	917	765	434	702	818
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.05	0.65	1.84	0.90	0.51	1.28	0.54	0.62	0.85	1.40	1.20

Intersection Summary

~ 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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	289	429	112	590	735	225	143	445	425	330	882	885
Future Volume (vph)	289	429	112	590	735	225	143	445	425	330	882	885
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3	6.0		7.3	6.0	6.0	6.3	6.3	7.3	6.3	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1752	3423		1770	3539	1429	1770	3505	1583	1736	1863	1583
Flt Permitted	0.10	1.00		0.25	1.00	1.00	0.11	1.00	1.00	0.28	1.00	1.00
Satd. Flow (perm)	191	3423		471	3539	1429	196	3505	1583	510	1863	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	321	477	124	656	817	250	159	494	472	367	980	983
RTOR Reduction (vph)	0	16	0	0	0	130	0	0	72	0	0	222
Lane Group Flow (vph)	321	585	0	656	817	120	159	494	400	367	980	761
Heavy Vehicles (%)	3%	2%	3%	2%	2%	13%	2%	3%	2%	4%	2%	2%
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases	2			6		6	8		8	4		4
Actuated Green, G (s)	60.1	38.7		56.7	37.0	37.0	44.0	38.0	57.7	67.0	54.7	54.7
Effective Green, g (s)	60.1	38.7		56.7	37.0	37.0	44.0	38.0	57.7	67.0	54.7	54.7
Actuated g/C Ratio	0.41	0.27		0.39	0.26	0.26	0.30	0.26	0.40	0.46	0.38	0.38
Clearance Time (s)	7.3	6.0		7.3	6.0	6.0	6.3	6.3	7.3	6.3	6.3	6.3
Vehicle Extension (s)	3.0	3.5		3.0	3.5	3.5	3.0	3.5	3.0	3.0	3.5	3.5
Lane Grp Cap (vph)	309	913		360	903	364	124	918	629	427	702	597
v/s Ratio Prot	0.15	0.17		c0.25	0.23		0.05	0.14	0.09	c0.13	c0.53	
v/s Ratio Perm	0.28			c0.46		0.08	0.33		0.17	0.26		0.48
v/c Ratio	1.04	0.64		1.82	0.90	0.33	1.28	0.54	0.64	0.86	1.40	1.28
Uniform Delay, d1	45.3	47.0		37.5	52.3	43.9	47.5	46.0	35.2	28.6	45.1	45.1
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	61.6	1.6		380.8	14.2	2.4	174.9	0.7	2.1	15.7	186.8	136.5
Delay (s)	106.9	48.6		418.3	66.5	46.3	222.4	46.6	37.3	44.3	232.0	181.7
Level of Service	F	D		F	E	D	F	D	D	D	F	F
Approach Delay (s)		68.9			197.5			67.6			181.2	
Approach LOS		E			F			E			F	

Intersection Summary			
HCM 2000 Control Delay	147.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.58		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	25.9
Intersection Capacity Utilization	128.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	993	15	78	1397	69	0	5	12	50	1	161
Future Volume (Veh/h)	121	993	15	78	1397	69	0	5	12	50	1	161
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	134	1103	17	87	1552	77	0	6	13	56	1	179
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												10
Median type		None			TWLTL							
Median storage veh)					2							
Upstream signal (ft)		759										
pX, platoon unblocked				0.89			0.89	0.89	0.89	0.89	0.89	
vC, conflicting volume	1629			1120			2330	3182	560	2600	3152	814
vC1, stage 1 conf vol							1380	1380		1764	1764	
vC2, stage 2 conf vol							950	1803		836	1388	
vCu, unblocked vol	1629			881			2245	3206	250	2549	3172	814
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	7.0
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	66			87			100	0	98	15	98	44
cM capacity (veh/h)	395			677			6	5	665	66	55	319

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1
Volume Total	134	735	385	87	1035	594	6	13	236
Volume Left	134	0	0	87	0	0	0	0	56
Volume Right	0	0	17	0	0	77	0	13	179
cSH	395	1700	1700	677	1700	1700	5	665	271
Volume to Capacity	0.34	0.43	0.23	0.13	0.61	0.35	1.20	0.02	0.87
Queue Length 95th (ft)	37	0	0	11	0	0	39	1	187
Control Delay (s)	18.7	0.0	0.0	11.1	0.0	0.0	1401.3	10.5	66.2
Lane LOS	C			B			F	B	F
Approach Delay (s)	2.0			0.6			449.7		66.2
Approach LOS							F		F

Intersection Summary				
Average Delay	8.6			
Intersection Capacity Utilization	67.0%	ICU Level of Service		C
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	1045	5	55	1555	46	2	0	16	70	0	26
Future Volume (Veh/h)	29	1045	5	55	1555	46	2	0	16	70	0	26
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	32	1161	6	61	1728	51	2	0	18	78	0	29
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)		1208										
pX, platoon unblocked				0.92			0.92	0.92	0.92	0.92	0.92	
vC, conflicting volume	1779			1167			2243	3129	584	2538	3106	890
vC1, stage 1 conf vol							1228	1228		1876	1876	
vC2, stage 2 conf vol							1015	1901		662	1231	
vCu, unblocked vol	1779			1016			2181	3140	384	2500	3115	890
tC, single (s)	4.2			4.1			8.5	6.5	6.9	7.5	6.5	7.0
tC, 2 stage (s)							7.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			4.0	4.0	3.3	3.5	4.0	3.3
p0 queue free %	90			90			98	100	97	0	100	90
cM capacity (veh/h)	337			627			84	67	567	64	88	280

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1	SB 2
Volume Total	32	774	393	61	1152	627	20	78	29
Volume Left	32	0	0	61	0	0	2	78	0
Volume Right	0	0	6	0	0	51	18	0	29
cSH	337	1700	1700	627	1700	1700	360	64	280
Volume to Capacity	0.10	0.46	0.23	0.10	0.68	0.37	0.06	1.22	0.10
Queue Length 95th (ft)	8	0	0	8	0	0	4	159	9
Control Delay (s)	16.8	0.0	0.0	11.4	0.0	0.0	15.6	291.8	19.3
Lane LOS	C			B			C	F	C
Approach Delay (s)	0.4			0.4			15.6	217.9	
Approach LOS							C	F	

Intersection Summary				
Average Delay	7.9			
Intersection Capacity Utilization	62.9%	ICU Level of Service		B
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	1178	2	7	1631	0	5	0	4	0	0	4
Future Volume (Veh/h)	4	1178	2	7	1631	0	5	0	4	0	0	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	4	1309	2	8	1812	0	6	0	4	0	0	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1812			1311			2244	3146	656	2494	3147	906
vC1, stage 1 conf vol							1318	1318		1828	1828	
vC2, stage 2 conf vol							926	1828		666	1319	
vCu, unblocked vol	1812			1311			2244	3146	656	2494	3147	906
tC, single (s)	4.1			4.4			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.4			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			98			96	100	99	100	100	99
cM capacity (veh/h)	335			450			137	101	408	75	102	279

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	658	656	8	1208	604	10	4
Volume Left	4	0	8	0	0	6	0
Volume Right	0	2	0	0	0	4	4
cSH	335	1700	450	1700	1700	187	279
Volume to Capacity	0.01	0.39	0.02	0.71	0.36	0.05	0.01
Queue Length 95th (ft)	1	0	1	0	0	4	1
Control Delay (s)	0.4	0.0	13.1	0.0	0.0	25.4	18.1
Lane LOS	A		B			D	C
Approach Delay (s)	0.2		0.1			25.4	18.1
Approach LOS						D	C

Intersection Summary				
Average Delay	0.2			
Intersection Capacity Utilization	56.7%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	982	7	2	1492	75	2	0	0	16	0	144
Future Volume (Veh/h)	143	982	7	2	1492	75	2	0	0	16	0	144
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	159	1091	8	2	1658	83	2	0	0	18	0	160
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												12
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1741			1099			2246	3158	550	2567	3120	870
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1741			1099			2246	3158	550	2567	3120	870
tC, single (s)	4.1			5.1			7.5	6.5	6.9	8.1	6.5	7.0
tC, 2 stage (s)												
tF (s)	2.2			2.7			3.5	4.0	3.3	3.8	4.0	3.3
p0 queue free %	55			100			70	100	100	0	100	45
cM capacity (veh/h)	357			413			7	6	479	5	6	289

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	159	727	372	2	1105	636	2	178
Volume Left	159	0	0	2	0	0	2	18
Volume Right	0	0	8	0	0	83	0	160
cSH	357	1700	1700	413	1700	1700	7	54
Volume to Capacity	0.45	0.43	0.22	0.00	0.65	0.37	0.30	3.30
Queue Length 95th (ft)	55	0	0	0	0	0	16	Err
Control Delay (s)	22.9	0.0	0.0	13.8	0.0	0.0	705.5	Err
Lane LOS	C			B			F	F
Approach Delay (s)	2.9			0.0			705.5	Err
Approach LOS							F	F

Intersection Summary				
Average Delay	561.1			
Intersection Capacity Utilization	65.9%	ICU Level of Service	C	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	973	13	0	1597	0	1
Future Volume (Veh/h)	973	13	0	1597	0	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1081	14	0	1774	0	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)				612		
pX, platoon unblocked					0.67	
vC, conflicting volume			1095		1968	1081
vC1, stage 1 conf vol					1081	
vC2, stage 2 conf vol					887	
vCu, unblocked vol			1095		1466	1081
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			633		264	213

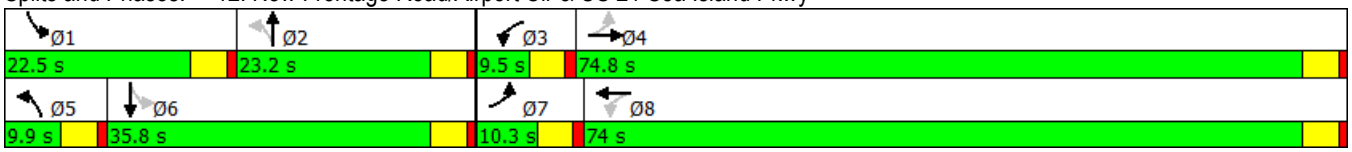
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	1086	9	591	1183	1
Volume Left	0	0	0	0	0
Volume Right	5	9	0	0	1
cSH	1700	1700	633	1700	213
Volume to Capacity	0.64	0.01	0.00	0.70	0.00
Queue Length 95th (ft)	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	22.0
Lane LOS					C
Approach Delay (s)	0.0		0.0		22.0
Approach LOS					C

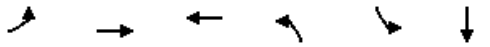
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	61.5%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	SBL	SBT	Ø2
Lane Configurations								
Traffic Volume (vph)	119	854	14	1423	50	60	0	
Future Volume (vph)	119	854	14	1423	50	60	0	
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	pm+pt	NA	
Protected Phases	7	4	3	8	5	1	6	2
Permitted Phases	4		8		2	6		
Detector Phase	7	4	3	8	5	1	6	
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	10.3	74.8	9.5	74.0	9.9	22.5	35.8	23.2
Total Split (%)	7.9%	57.5%	7.3%	56.9%	7.6%	17.3%	27.5%	18%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	Min
Act Effct Green (s)	79.9	79.9		69.6	11.8	19.2	12.0	
Actuated g/C Ratio	0.74	0.74		0.64	0.11	0.18	0.11	
v/c Ratio	0.72	0.71		0.76	0.34	0.29	0.56	
Control Delay	33.9	12.3		17.4	43.5	40.9	28.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay	33.9	12.3		17.4	43.5	40.9	28.2	
LOS	C	B		B	D	D	C	
Approach Delay		14.9		17.4			32.3	
Approach LOS		B		B			C	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 108.7	
Natural Cycle: 130	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 18.0	Intersection LOS: B
Intersection Capacity Utilization 111.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 12: New Frontage Road/Airport Cir & US 21 Sea Island Pkwy





Lane Group	EBL	EBT	WBT	NBL	SBL	SBT
Lane Group Flow (vph)	132	949	1596	54	67	140
v/c Ratio	0.72	0.71	0.76	0.34	0.29	0.56
Control Delay	33.9	12.3	17.4	43.5	40.9	28.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.9	12.3	17.4	43.5	40.9	28.2
Queue Length 50th (ft)	22	302	368	32	40	35
Queue Length 95th (ft)	#78	556	542	68	80	98
Internal Link Dist (ft)		532	392			381
Turn Bay Length (ft)	375				250	
Base Capacity (vph)	183	1342	2094	161	311	519
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	0.72	0.71	0.76	0.34	0.22	0.27

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	854	0	14	1423	0	50	0	0	60	0	126
Future Volume (vph)	119	854	0	14	1423	0	50	0	0	60	0	126
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5			4.5		4.5			4.5	4.5	
Lane Util. Factor	1.00	1.00			0.95		1.00			1.00	1.00	
Frt	1.00	1.00			1.00		1.00			1.00	0.85	
Flt Protected	0.95	1.00			1.00		0.95			0.95	1.00	
Satd. Flow (prot)	1626	1827			3470		1770			1770	1583	
Flt Permitted	0.08	1.00			0.94		0.67			0.47	1.00	
Satd. Flow (perm)	142	1827			3273		1244			877	1583	
Peak-hour factor, PHF	0.90	0.90	0.92	0.92	0.90	0.90	0.92	0.92	0.92	0.90	0.92	0.90
Adj. Flow (vph)	132	949	0	15	1581	0	54	0	0	67	0	140
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	78	0
Lane Group Flow (vph)	132	949	0	0	1596	0	54	0	0	67	62	0
Heavy Vehicles (%)	11%	4%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt			pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	79.9	79.9			69.6		11.7			20.8	12.0	
Effective Green, g (s)	79.9	79.9			69.6		11.7			20.8	12.0	
Actuated g/C Ratio	0.73	0.73			0.63		0.11			0.19	0.11	
Clearance Time (s)	4.5	4.5			4.5		4.5			4.5	4.5	
Vehicle Extension (s)	3.0	3.0			3.0		3.0			3.0	3.0	
Lane Grp Cap (vph)	181	1330			2076		153			238	173	
v/s Ratio Prot	0.04	c0.52					0.01			c0.02	c0.04	
v/s Ratio Perm	0.49				c0.49		0.02			0.03		
v/c Ratio	0.73	0.71			0.77		0.35			0.28	0.36	
Uniform Delay, d1	15.4	8.4			14.3		45.2			37.5	45.3	
Progression Factor	1.00	1.00			1.00		1.00			1.00	1.00	
Incremental Delay, d2	13.7	1.8			1.8		1.4			0.7	1.3	
Delay (s)	29.1	10.3			16.1		46.6			38.2	46.5	
Level of Service	C	B			B		D			D	D	
Approach Delay (s)		12.6			16.1			46.6			43.8	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	17.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	109.7	Sum of lost time (s)	18.0
Intersection Capacity Utilization	111.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	774	7	6	1399	15	2
Future Volume (Veh/h)	774	7	6	1399	15	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	860	8	7	1554	17	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)				1133		
pX, platoon unblocked					0.22	
vC, conflicting volume			868		2432	864
vC1, stage 1 conf vol					864	
vC2, stage 2 conf vol					1568	
vCu, unblocked vol			868		5798	864
tC, single (s)			4.1		6.5	6.2
tC, 2 stage (s)					5.5	
tF (s)			2.2		3.6	3.3
p0 queue free %			99		41	99
cM capacity (veh/h)			776		29	354

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	868	1561	19
Volume Left	0	7	17
Volume Right	8	0	2
cSH	1700	776	32
Volume to Capacity	0.51	0.01	0.60
Queue Length 95th (ft)	0	1	50
Control Delay (s)	0.0	1.1	224.7
Lane LOS		A	F
Approach Delay (s)	0.0	1.1	224.7
Approach LOS			F

Intersection Summary			
Average Delay	2.4		
Intersection Capacity Utilization	88.4%	ICU Level of Service	E
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	24	625	56	1241	152	4	16	2
Future Volume (vph)	24	625	56	1241	152	4	16	2
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	9.5	108.0	9.5	108.0	9.5	23.0	9.5	23.0
Total Split (%)	6.3%	72.0%	6.3%	72.0%	6.3%	15.3%	6.3%	15.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)		4.5	4.5	4.5		4.5		4.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	None	Max
Act Effct Green (s)		103.6	111.1	111.1		18.5		18.5
Actuated g/C Ratio		0.75	0.80	0.80		0.13		0.13
v/c Ratio		1.09	0.13	0.94		1.24		0.27
Control Delay		80.5	3.4	25.6		191.3		26.7
Queue Delay		0.0	0.0	0.0		0.0		0.0
Total Delay		80.5	3.4	25.6		191.3		26.7
LOS		F	A	C		F		C
Approach Delay		80.5		24.7		191.3		26.7
Approach LOS		F		C		F		C

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 138.6	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.24	
Intersection Signal Delay: 57.7	Intersection LOS: E
Intersection Capacity Utilization 90.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 14: Chowan Creek Bluff/Eustis Landing Rd & US 21 Sea Island Pkwy



Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	868	62	1379	223	61
v/c Ratio	1.09	0.13	0.94	1.24	0.27
Control Delay	80.5	3.4	25.6	191.3	26.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	80.5	3.4	25.6	191.3	26.7
Queue Length 50th (ft)	~902	10	841	~248	16
Queue Length 95th (ft)	#1160	18	#1487	#420	61
Internal Link Dist (ft)	1053		490	351	331
Turn Bay Length (ft)		290			
Base Capacity (vph)	793	493	1464	180	229
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.09	0.13	0.94	1.24	0.27

Intersection Summary

~ 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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	625	132	56	1241	0	152	4	45	16	2	37
Future Volume (vph)	24	625	132	56	1241	0	152	4	45	16	2	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5		4.5	4.5			4.5			4.5	
Lane Util. Factor		1.00		1.00	1.00			1.00			1.00	
Frt		0.98		1.00	1.00			0.97			0.91	
Flt Protected		1.00		0.95	1.00			0.96			0.99	
Satd. Flow (prot)		1776		1736	1827			1724			1532	
Flt Permitted		0.59		0.31	1.00			0.73			0.93	
Satd. Flow (perm)		1056		563	1827			1301			1447	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	694	147	62	1379	0	169	4	50	18	2	41
RTOR Reduction (vph)	0	5	0	0	0	0	0	7	0	0	36	0
Lane Group Flow (vph)	0	863	0	62	1379	0	0	216	0	0	25	0
Heavy Vehicles (%)	2%	5%	2%	4%	4%	2%	3%	2%	3%	8%	2%	13%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		103.6		112.0	112.0			18.5			18.5	
Effective Green, g (s)		103.6		112.0	112.0			18.5			18.5	
Actuated g/C Ratio		0.74		0.80	0.80			0.13			0.13	
Clearance Time (s)		4.5		4.5	4.5			4.5			4.5	
Vehicle Extension (s)		3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)		784		484	1466			172			191	
v/s Ratio Prot				0.00	c0.75							
v/s Ratio Perm		c0.82		0.10				c0.17			0.02	
v/c Ratio		1.10		0.13	0.94			1.26			0.13	
Uniform Delay, d1		18.0		4.0	11.1			60.5			53.4	
Progression Factor		1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2		63.5		0.1	12.1			153.8			0.3	
Delay (s)		81.4		4.1	23.2			214.3			53.7	
Level of Service		F		A	C			F			D	
Approach Delay (s)		81.4			22.4			214.3			53.7	
Approach LOS		F			C			F			D	

Intersection Summary			
HCM 2000 Control Delay	59.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	139.5	Sum of lost time (s)	18.0
Intersection Capacity Utilization	90.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	1	54	4	0	7	80	1065	22	34	1842	47
Future Volume (Veh/h)	22	1	54	4	0	7	80	1065	22	34	1842	47
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	24	1	60	4	0	8	89	1183	24	38	2047	52
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			TWLTL	
Median storage veh)											2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2900	3508	1024	2533	3548	604	2099			1207		
vC1, stage 1 conf vol	2123	2123		1373	1373							
vC2, stage 2 conf vol	778	1385		1160	2175							
vCu, unblocked vol	2900	3508	1024	2533	3548	604	2099			1207		
tC, single (s)	7.6	8.5	6.9	7.5	6.5	6.9	4.2			4.1		
tC, 2 stage (s)	6.6	7.5		6.5	5.5							
tF (s)	3.6	5.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	44	93	74	91	100	98	64			93		
cM capacity (veh/h)	43	15	233	43	3	442	248			574		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	25	60	12	89	789	418	38	1024	1024	52
Volume Left	24	0	4	89	0	0	38	0	0	0
Volume Right	0	60	8	0	0	24	0	0	0	52
cSH	40	233	108	248	1700	1700	574	1700	1700	1700
Volume to Capacity	0.63	0.26	0.11	0.36	0.46	0.25	0.07	0.60	0.60	0.03
Queue Length 95th (ft)	57	25	9	39	0	0	5	0	0	0
Control Delay (s)	192.9	25.7	42.6	27.4	0.0	0.0	11.7	0.0	0.0	0.0
Lane LOS	F	D	E	D			B			
Approach Delay (s)	74.9		42.6	1.9			0.2			
Approach LOS	F		E							

Intersection Summary					
Average Delay	2.8				
Intersection Capacity Utilization	69.7%	ICU Level of Service		C	
Analysis Period (min)	15				

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	17	1	1097	5	0	1910
Future Volume (Veh/h)	17	1	1097	5	0	1910
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	19	1	1219	6	0	2122
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2283	612			1225	
vC1, stage 1 conf vol	1222					
vC2, stage 2 conf vol	1061					
vCu, unblocked vol	2283	612			1225	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	90	100			100	
cM capacity (veh/h)	183	436			565	

Direction, Lane #	WB 1	NE 1	NE 2	SW 1	SW 2
Volume Total	20	813	412	707	1415
Volume Left	19	0	0	0	0
Volume Right	1	0	6	0	0
cSH	188	1700	1700	565	1700
Volume to Capacity	0.11	0.48	0.24	0.00	0.83
Queue Length 95th (ft)	9	0	0	0	0
Control Delay (s)	26.4	0.0	0.0	0.0	0.0
Lane LOS	D				
Approach Delay (s)	26.4	0.0		0.0	
Approach LOS	D				

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	62.8%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	4	0	21	134	1	22	39	1025	26	26	1763	63
Future Volume (Veh/h)	4	0	21	134	1	22	39	1025	26	26	1763	63
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	4	0	23	149	1	24	43	1139	29	29	1959	70
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)			5			5						
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)											1003	
pX, platoon unblocked												
vC, conflicting volume	2720	3306	1014	2277	3326	584	2029			1168		
vC1, stage 1 conf vol	2052	2052		1240	1240							
vC2, stage 2 conf vol	668	1254		1038	2087							
vCu, unblocked vol	2720	3306	1014	2277	3326	584	2029			1168		
tC, single (s)	7.5	6.5	7.0	7.5	6.5	7.0	4.1			4.2		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.4	3.5	4.0	3.4	2.2			2.2		
p0 queue free %	92	100	90	0	98	95	84			95		
cM capacity (veh/h)	52	78	229	111	43	445	276			577		

Direction, Lane #	EB 1	WB 1	NE 1	NE 2	SW 1	SW 2	SW 3
Volume Total	27	174	612	598	29	1306	723
Volume Left	4	149	43	0	29	0	0
Volume Right	23	24	0	29	0	0	70
cSH	269	125	276	1700	577	1700	1700
Volume to Capacity	0.10	1.40	0.16	0.35	0.05	0.77	0.43
Queue Length 95th (ft)	8	293	14	0	4	0	0
Control Delay (s)	31.0	284.4	5.9	0.0	11.6	0.0	0.0
Lane LOS	D	F	A		B		
Approach Delay (s)	31.0	284.4	3.0		0.2		
Approach LOS	D	F					

Intersection Summary				
Average Delay	15.6			
Intersection Capacity Utilization	78.5%	ICU Level of Service	D	
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	11	112	921	22	189	2137
Future Volume (Veh/h)	11	112	921	22	189	2137
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	12	124	1023	24	210	2374
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2642	524			1047	
vC1, stage 1 conf vol	1035					
vC2, stage 2 conf vol	1607					
vCu, unblocked vol	2642	524			1047	
tC, single (s)	7.2	6.9			4.2	
tC, 2 stage (s)	6.2					
tF (s)	3.7	3.3			2.2	
p0 queue free %	84	75			68	
cM capacity (veh/h)	76	498			648	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	136	682	365	210	1187	1187
Volume Left	12	0	0	210	0	0
Volume Right	124	0	24	0	0	0
cSH	335	1700	1700	648	1700	1700
Volume to Capacity	0.41	0.40	0.21	0.32	0.70	0.70
Queue Length 95th (ft)	48	0	0	35	0	0
Control Delay (s)	22.9	0.0	0.0	13.2	0.0	0.0
Lane LOS	C			B		
Approach Delay (s)	22.9	0.0		1.1		
Approach LOS	C					

Intersection Summary			
Average Delay	1.6		
Intersection Capacity Utilization	73.3%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	11	0	0	0	14	1003	0	1	2352	7
Future Volume (Veh/h)	1	0	11	0	0	0	14	1003	0	1	2352	7
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1	0	12	0	0	0	16	1114	0	1	2613	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	3208	3765	1310	2466	3769	557	2621			1114		
vC1, stage 1 conf vol	2619	2619		1146	1146							
vC2, stage 2 conf vol	589	1146		1320	2623							
vCu, unblocked vol	3208	3765	1310	2466	3769	557	2621			1114		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	100	92	100	100	100	90			100		
cM capacity (veh/h)	24	47	149	106	32	474	161			623		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	13	0	573	557	1308	1314
Volume Left	1	0	16	0	1	0
Volume Right	12	0	0	0	0	8
cSH	106	1700	161	1700	623	1700
Volume to Capacity	0.12	0.00	0.10	0.33	0.00	0.77
Queue Length 95th (ft)	10	0	8	0	0	0
Control Delay (s)	43.6	0.0	5.1	0.0	0.1	0.0
Lane LOS	E	A	A		A	
Approach Delay (s)	43.6	0.0	2.6		0.0	
Approach LOS	E	A				

Intersection Summary				
Average Delay	1.0			
Intersection Capacity Utilization	75.9%	ICU Level of Service	D	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	41	19	1	5	16	958	24	4	2277	156
Future Volume (Veh/h)	9	0	41	19	1	5	16	958	24	4	2277	156
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	10	0	46	21	1	6	18	1064	27	4	2530	173
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	3199	3752	1352	2432	3824	546	2703			1091		
vC1, stage 1 conf vol	2624	2624		1114	1114							
vC2, stage 2 conf vol	574	1127		1319	2711							
vCu, unblocked vol	3199	3752	1352	2432	3824	546	2703			1091		
tC, single (s)	7.5	6.5	7.0	7.5	6.5	6.9	4.3			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.4	3.5	4.0	3.3	2.3			2.2		
p0 queue free %	57	100	66	73	96	99	87			99		
cM capacity (veh/h)	23	46	135	79	25	482	135			635		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	56	28	18	709	382	4	1687	1016
Volume Left	10	21	18	0	0	4	0	0
Volume Right	46	6	0	0	27	0	0	173
cSH	73	88	135	1700	1700	635	1700	1700
Volume to Capacity	0.77	0.32	0.13	0.42	0.22	0.01	0.99	0.60
Queue Length 95th (ft)	91	30	11	0	0	0	0	0
Control Delay (s)	142.8	64.0	35.8	0.0	0.0	10.7	0.0	0.0
Lane LOS	F	F	E			B		
Approach Delay (s)	142.8	64.0	0.6			0.0		
Approach LOS	F	F						

Intersection Summary				
Average Delay	2.7			
Intersection Capacity Utilization	79.1%	ICU Level of Service	D	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	981	17	0	1569	0	10
Future Volume (Veh/h)	981	17	0	1569	0	10
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1066	18	0	1705	0	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			TWLTL		
Median storage veh)				2		
Upstream signal (ft)				897		
pX, platoon unblocked					0.67	
vC, conflicting volume			1084		1918	1066
vC1, stage 1 conf vol					1066	
vC2, stage 2 conf vol					852	
vCu, unblocked vol			1084		1393	1066
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	95
cM capacity (veh/h)			639		270	218

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	1066	18	852	852	11
Volume Left	0	0	0	0	0
Volume Right	0	18	0	0	11
cSH	1700	1700	1700	1700	218
Volume to Capacity	0.63	0.01	0.50	0.50	0.05
Queue Length 95th (ft)	0	0	0	0	4
Control Delay (s)	0.0	0.0	0.0	0.0	22.4
Lane LOS					C
Approach Delay (s)	0.0		0.0		22.4
Approach LOS					C

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	145	769	1363	72	30	60
Future Volume (Veh/h)	145	769	1363	72	30	60
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	158	836	1482	78	33	65
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						7
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (ft)		472				
pX, platoon unblocked					0.70	
vC, conflicting volume	1560				2634	1482
vC1, stage 1 conf vol					1482	
vC2, stage 2 conf vol					1152	
vCu, unblocked vol	1560				3113	1482
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.2				3.5	3.3
p0 queue free %	63				72	58
cM capacity (veh/h)	424				117	154

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	158	836	1482	78	98
Volume Left	158	0	0	0	33
Volume Right	0	0	0	78	65
cSH	424	1700	1700	1700	232
Volume to Capacity	0.37	0.49	0.87	0.05	0.42
Queue Length 95th (ft)	42	0	0	0	49
Control Delay (s)	18.5	0.0	0.0	0.0	45.5
Lane LOS	C				E
Approach Delay (s)	2.9		0.0		45.5
Approach LOS					E

Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	93.1%	ICU Level of Service	F
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Volume (veh/h)	0	799	1405	36	0	30
Future Volume (Veh/h)	0	799	1405	36	0	30
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	868	1527	39	0	33
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (ft)		911				
pX, platoon unblocked					0.70	
vC, conflicting volume	1566				2395	1527
vC1, stage 1 conf vol					1527	
vC2, stage 2 conf vol					868	
vCu, unblocked vol	1566				2775	1527
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	77
cM capacity (veh/h)	421				168	145

Direction, Lane #	EB 1	WB 1	WB 2	SB 1
Volume Total	868	1527	39	33
Volume Left	0	0	0	0
Volume Right	0	0	39	33
cSH	1700	1700	1700	145
Volume to Capacity	0.51	0.90	0.02	0.23
Queue Length 95th (ft)	0	0	0	21
Control Delay (s)	0.0	0.0	0.0	37.1
Lane LOS				E
Approach Delay (s)	0.0	0.0		37.1
Approach LOS				E

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	83.9%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1418	71	61	1061	2	63	1	69	1	0	1
Future Volume (Veh/h)	0	1418	71	61	1061	2	63	1	69	1	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	1576	79	68	1179	2	70	1	77	1	0	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1181			1655			2932	2932	1616	3009	2971	1180
vC1, stage 1 conf vol							1616	1616		1316	1316	
vC2, stage 2 conf vol							1316	1317		1693	1655	
vCu, unblocked vol	1181			1655			2932	2932	1616	3009	2971	1180
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			83			27	99	40	65	100	100
cM capacity (veh/h)	591			390			96	117	128	3	77	232

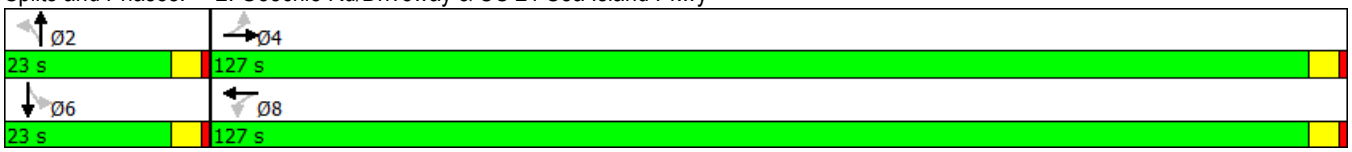
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total	1655	68	1181	148	2
Volume Left	0	68	0	70	1
Volume Right	79	0	2	77	1
cSH	591	390	1700	110	6
Volume to Capacity	0.00	0.17	0.69	1.34	0.36
Queue Length 95th (ft)	0	16	0	254	17
Control Delay (s)	0.0	16.2	0.0	274.4	855.8
Lane LOS		C		F	F
Approach Delay (s)	0.0	0.9		274.4	855.8
Approach LOS				F	F

Intersection Summary				
Average Delay	14.2			
Intersection Capacity Utilization	95.1%	ICU Level of Service		F
Analysis Period (min)	15			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	2	1481	25	1099	50	1	5	0
Future Volume (vph)	2	1481	25	1099	50	1	5	0
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	4	4	8	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	127.0	127.0	127.0	127.0	23.0	23.0	23.0	23.0
Total Split (%)	84.7%	84.7%	84.7%	84.7%	15.3%	15.3%	15.3%	15.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)		4.5	4.5	4.5		4.5		4.5
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	None	None	None	None	Max	Max	Max	Max
Act Effct Green (s)		122.5	122.5	122.5		18.5		18.5
Actuated g/C Ratio		0.82	0.82	0.82		0.12		0.12
v/c Ratio		1.10	0.12	0.81		0.54		0.04
Control Delay		72.3	4.0	12.9		58.6		22.4
Queue Delay		0.0	0.0	0.0		0.0		0.0
Total Delay		72.3	4.0	12.9		58.6		22.4
LOS		E	A	B		E		C
Approach Delay		72.3		12.7		58.6		22.4
Approach LOS		E		B		E		C

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 150	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 47.0	Intersection LOS: D
Intersection Capacity Utilization 94.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 2: Geechie Rd/Driveway & US 21 Sea Island Pkwy



Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	1669	28	1229	108	8
v/c Ratio	1.10	0.12	0.81	0.54	0.04
Control Delay	72.3	4.0	12.9	58.6	22.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	72.3	4.0	12.9	58.6	22.4
Queue Length 50th (ft)	~1851	5	541	78	0
Queue Length 95th (ft)	#2116	12	758	146	15
Internal Link Dist (ft)	1321		417	377	79
Turn Bay Length (ft)		200			
Base Capacity (vph)	1516	234	1520	200	204
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.10	0.12	0.81	0.54	0.04

Intersection Summary

~ 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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	1481	19	25	1099	7	50	1	46	5	0	2
Future Volume (vph)	2	1481	19	25	1099	7	50	1	46	5	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5		4.5	4.5			4.5			4.5	
Lane Util. Factor		1.00		1.00	1.00			1.00			1.00	
Frt		1.00		1.00	1.00			0.94			0.97	
Flt Protected		1.00		0.95	1.00			0.97			0.96	
Satd. Flow (prot)		1859		1770	1861			1700			1735	
Flt Permitted		1.00		0.15	1.00			0.83			0.88	
Satd. Flow (perm)		1858		287	1861			1453			1584	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	2	1646	21	28	1221	8	56	1	51	6	0	2
RTOR Reduction (vph)	0	0	0	0	0	0	0	21	0	0	7	0
Lane Group Flow (vph)	0	1669	0	28	1229	0	0	87	0	0	1	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		122.5		122.5	122.5			18.5			18.5	
Effective Green, g (s)		122.5		122.5	122.5			18.5			18.5	
Actuated g/C Ratio		0.82		0.82	0.82			0.12			0.12	
Clearance Time (s)		4.5		4.5	4.5			4.5			4.5	
Vehicle Extension (s)		3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)		1517		234	1519			179			195	
v/s Ratio Prot					0.66							
v/s Ratio Perm		c0.90		0.10				c0.06			0.00	
v/c Ratio		1.10		0.12	0.81			0.49			0.01	
Uniform Delay, d1		13.8		2.8	7.4			61.3			57.7	
Progression Factor		1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2		55.6		0.2	3.3			9.1			0.0	
Delay (s)		69.3		3.0	10.7			70.5			57.7	
Level of Service		E		A	B			E			E	
Approach Delay (s)		69.3			10.5			70.5			57.7	
Approach LOS		E			B			E			E	

Intersection Summary			
HCM 2000 Control Delay	45.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	94.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	139	1307	71	46	1013	55	48	19	78	29	17	77
Future Volume (Veh/h)	139	1307	71	46	1013	55	48	19	78	29	17	77
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	154	1452	79	51	1126	61	53	21	87	32	19	86
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			TWLTL							
Median storage veh)					2							
Upstream signal (ft)		497										
pX, platoon unblocked				0.24			0.24	0.24	0.24	0.24	0.24	
vC, conflicting volume	1187			1531			3123	3088	1492	3116	3098	1156
vC1, stage 1 conf vol							1800	1800		1258	1258	
vC2, stage 2 conf vol							1324	1289		1858	1839	
vCu, unblocked vol	1187			1632			8403	8256	1464	8373	8295	1156
tC, single (s)	4.1			4.2			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.3			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	74			44			0	0	0	0	0	64
cM capacity (veh/h)	588			91			0	0	37	0	0	239

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NE 1	SW 1
Volume Total	154	1531	51	1187	161	137
Volume Left	154	0	51	0	53	32
Volume Right	0	79	0	61	87	86
cSH	588	1700	91	1700	0	0
Volume to Capacity	0.26	0.90	0.56	0.70	Err	Err
Queue Length 95th (ft)	26	0	63	0	Err	Err
Control Delay (s)	13.3	0.0	86.3	0.0	Err	Err
Lane LOS	B		F		F	F
Approach Delay (s)	1.2		3.6		Err	Err
Approach LOS					F	F

Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	99.4%	ICU Level of Service	F	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	4	1439	20	75	1147	5	16	1	117	5	1	9
Future Volume (Veh/h)	4	1439	20	75	1147	5	16	1	117	5	1	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	4	1599	22	83	1274	6	18	1	130	6	1	10
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)		1218										
pX, platoon unblocked				0.24			0.24	0.24	0.24	0.24	0.24	
vC, conflicting volume	1280			1621			3068	3064	1610	3192	3072	1277
vC1, stage 1 conf vol							1618	1618		1443	1443	
vC2, stage 2 conf vol							1450	1446		1748	1629	
vCu, unblocked vol	1280			2005			8043	8024	1959	8556	8057	1277
tC, single (s)	4.1			4.2			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.3			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			0			0	0	0	0	0	95
cM capacity (veh/h)	542			64			0	0	19	0	0	203

Direction, Lane #	EB 1	WB 1	WB 2	NE 1	SW 1
Volume Total	1625	83	1280	149	17
Volume Left	4	83	0	18	6
Volume Right	22	0	6	130	10
cSH	542	64	1700	0	0
Volume to Capacity	0.01	1.29	0.75	Err	Err
Queue Length 95th (ft)	1	172	0	Err	Err
Control Delay (s)	1.9	318.1	0.0	Err	Err
Lane LOS	A	F		F	F
Approach Delay (s)	1.9	19.4		Err	Err
Approach LOS				F	F

Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	95.5%	ICU Level of Service	F	
Analysis Period (min)	15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	17	1584	1196	39	44	54
Future Volume (Veh/h)	17	1584	1196	39	44	54
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	19	1760	1329	43	49	60
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)			681			
pX, platoon unblocked	0.86				0.86	0.86
vC, conflicting volume	1372				2268	686
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1096				2144	294
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				0	90
cM capacity (veh/h)	541				34	601

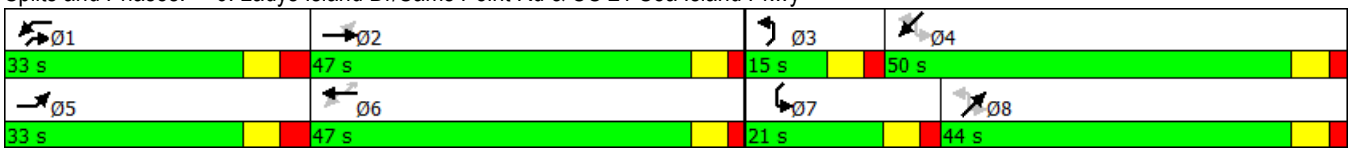
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	606	1173	886	486	49	60
Volume Left	19	0	0	0	49	0
Volume Right	0	0	0	43	0	60
cSH	541	1700	1700	1700	34	601
Volume to Capacity	0.04	0.69	0.52	0.29	1.43	0.10
Queue Length 95th (ft)	3	0	0	0	133	8
Control Delay (s)	1.0	0.0	0.0	0.0	483.7	11.7
Lane LOS	A				F	B
Approach Delay (s)	0.3		0.0		223.9	
Approach LOS					F	

Intersection Summary				
Average Delay	7.7			
Intersection Capacity Utilization	65.7%	ICU Level of Service	C	
Analysis Period (min)	15			

Lane Group	EBL	EBT	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations											
Traffic Volume (vph)	646	774	535	546	253	198	922	602	325	575	505
Future Volume (vph)	646	774	535	546	253	198	922	602	325	575	505
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	Perm
Protected Phases	5	2	1	6		3	8	1	7	4	
Permitted Phases	2		6		6	8		8	4		4
Detector Phase	5	2	1	6	6	3	8	1	7	4	4
Switch Phase											
Minimum Initial (s)	6.0	25.0	6.0	25.0	25.0	6.0	15.0	6.0	6.0	15.0	15.0
Minimum Split (s)	13.3	43.0	13.3	39.0	39.0	12.3	42.3	13.3	13.3	43.3	43.3
Total Split (s)	33.0	47.0	33.0	47.0	47.0	15.0	44.0	33.0	21.0	50.0	50.0
Total Split (%)	22.8%	32.4%	22.8%	32.4%	32.4%	10.3%	30.3%	22.8%	14.5%	34.5%	34.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.3	4.0	4.0	4.3	4.3
All-Red Time (s)	3.3	2.0	3.3	2.0	2.0	2.3	2.0	3.3	2.3	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.3	6.0	7.3	6.0	6.0	6.3	6.3	7.3	6.3	6.3	6.3
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min	None	Max	Max	None	None	None	None	Max	Max
Act Effct Green (s)	65.4	41.0	65.4	41.0	41.0	46.4	37.7	69.7	58.4	43.7	43.7
Actuated g/C Ratio	0.45	0.28	0.45	0.28	0.28	0.32	0.26	0.48	0.40	0.30	0.30
v/c Ratio	1.62	1.09	1.65	0.61	0.51	1.40	1.11	0.84	1.58	1.14	0.78
Control Delay	316.4	102.7	335.6	48.1	24.5	243.4	114.4	40.3	312.0	127.8	26.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	316.4	102.7	335.6	48.1	24.5	243.4	114.4	40.3	312.0	127.8	26.0
LOS	F	F	F	D	C	F	F	D	F	F	C
Approach Delay		188.5		158.8			103.3			133.8	
Approach LOS		F		F			F			F	

Intersection Summary	
Cycle Length: 145	
Actuated Cycle Length: 145	
Natural Cycle: 145	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.65	
Intersection Signal Delay: 145.1	Intersection LOS: F
Intersection Capacity Utilization 122.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 6: Ladys Island Dr/Sams Point Rd & US 21 Sea Island Pkwy



Lane Group	EBL	EBT	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	718	1071	594	607	281	220	1024	669	361	639	561
v/c Ratio	1.62	1.09	1.65	0.61	0.51	1.40	1.11	0.84	1.58	1.14	0.78
Control Delay	316.4	102.7	335.6	48.1	24.5	243.4	114.4	40.3	312.0	127.8	26.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	316.4	102.7	335.6	48.1	24.5	243.4	114.4	40.3	312.0	127.8	26.0
Queue Length 50th (ft)	~851	~589	~768	262	108	~227	~581	494	~435	~702	202
Queue Length 95th (ft)	#1101	#729	#1008	328	201	#402	#718	692	#642	#941	366
Internal Link Dist (ft)		376		679			587			517	
Turn Bay Length (ft)	200		350		200	350		550	460		
Base Capacity (vph)	442	985	360	1000	549	157	920	797	228	561	716
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.62	1.09	1.65	0.61	0.51	1.40	1.11	0.84	1.58	1.14	0.78

Intersection Summary

~ 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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	646	774	190	535	546	253	198	922	602	325	575	505
Future Volume (vph)	646	774	190	535	546	253	198	922	602	325	575	505
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3	6.0		7.3	6.0	6.0	6.3	6.3	7.3	6.3	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3435		1752	3539	1583	1770	3539	1583	1752	1863	1583
Flt Permitted	0.25	1.00		0.10	1.00	1.00	0.11	1.00	1.00	0.09	1.00	1.00
Satd. Flow (perm)	471	3435		180	3539	1583	198	3539	1583	169	1863	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	718	860	211	594	607	281	220	1024	669	361	639	561
RTOR Reduction (vph)	0	15	0	0	0	102	0	0	39	0	0	240
Lane Group Flow (vph)	718	1056	0	594	607	179	220	1024	630	361	639	321
Heavy Vehicles (%)	2%	2%	2%	3%	2%	2%	2%	2%	2%	3%	2%	2%
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases	2			6		6	8		8	4		4
Actuated Green, G (s)	66.7	41.0		66.7	41.0	41.0	46.4	37.7	63.4	58.4	43.7	43.7
Effective Green, g (s)	66.7	41.0		66.7	41.0	41.0	46.4	37.7	63.4	58.4	43.7	43.7
Actuated g/C Ratio	0.46	0.28		0.46	0.28	0.28	0.32	0.26	0.44	0.40	0.30	0.30
Clearance Time (s)	7.3	6.0		7.3	6.0	6.0	6.3	6.3	7.3	6.3	6.3	6.3
Vehicle Extension (s)	3.0	3.5		3.0	3.5	3.5	3.0	3.5	3.0	3.0	3.5	3.5
Lane Grp Cap (vph)	446	971		361	1000	447	157	920	692	228	561	477
v/s Ratio Prot	0.28	0.31		c0.29	0.17		0.08	0.29	0.16	c0.16	0.34	
v/s Ratio Perm	0.45			c0.46		0.11	0.36		0.24	c0.48		0.20
v/c Ratio	1.61	1.09		1.65	0.61	0.40	1.40	1.11	0.91	1.58	1.14	0.67
Uniform Delay, d1	31.0	52.0		46.5	45.0	42.1	43.4	53.6	38.1	43.7	50.6	44.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	284.7	55.7		302.6	2.7	2.7	214.3	65.8	15.9	282.4	82.5	7.4
Delay (s)	315.7	107.7		349.1	47.8	44.7	257.7	119.4	54.0	326.1	133.2	51.8
Level of Service	F	F		F	D	D	F	F	D	F	F	D
Approach Delay (s)		191.1			168.0			112.4			148.6	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	153.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.65		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	25.9
Intersection Capacity Utilization	122.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	221	1378	39	39	1153	56	12	14	72	55	2	133
Future Volume (Veh/h)	221	1378	39	39	1153	56	12	14	72	55	2	133
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	246	1531	43	43	1281	62	13	16	80	61	2	148
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												10
Median type		None			TWLTL							
Median storage veh)					2							
Upstream signal (ft)		759										
pX, platoon unblocked				0.75			0.75	0.75	0.75	0.75	0.75	
vC, conflicting volume	1343			1574			2772	3474	787	2744	3464	672
vC1, stage 1 conf vol							2044	2044		1398	1398	
vC2, stage 2 conf vol							728	1429		1346	2066	
vCu, unblocked vol	1343			1096			2696	3632	45	2657	3620	672
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	52			91			0	0	89	0	80	63
cM capacity (veh/h)	509			474			2	2	761	39	10	399

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1
Volume Total	246	1021	553	43	854	489	29	80	211
Volume Left	246	0	0	43	0	0	13	0	61
Volume Right	0	0	43	0	0	62	0	80	148
cSH	509	1700	1700	474	1700	1700	2	761	124
Volume to Capacity	0.48	0.60	0.33	0.09	0.50	0.29	14.41	0.11	1.70
Queue Length 95th (ft)	65	0	0	7	0	0	Err	9	396
Control Delay (s)	18.5	0.0	0.0	13.4	0.0	0.0	Err	10.3	407.8
Lane LOS	C			B			F	B	F
Approach Delay (s)	2.5			0.4			2667.8		407.8
Approach LOS							F		F

Intersection Summary				
Average Delay	108.3			
Intersection Capacity Utilization	65.7%	ICU Level of Service		C
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	1422	11	10	1181	70	4	4	25	127	1	57
Future Volume (Veh/h)	86	1422	11	10	1181	70	4	4	25	127	1	57
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	96	1580	12	11	1312	78	4	4	28	141	1	63
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)		1208										
pX, platoon unblocked				0.78			0.78	0.78	0.78	0.78	0.78	
vC, conflicting volume	1390			1592			2520	3190	796	2385	3157	695
vC1, stage 1 conf vol							1778	1778		1373	1373	
vC2, stage 2 conf vol							742	1412		1012	1784	
vCu, unblocked vol	1390			1202			2386	3243	185	2214	3201	695
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	80			98			95	95	96	0	99	84
cM capacity (veh/h)	488			451			78	74	646	129	93	385

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1	SB 2
Volume Total	96	1053	539	11	875	515	36	142	63
Volume Left	96	0	0	11	0	0	4	141	0
Volume Right	0	0	12	0	0	78	28	0	63
cSH	488	1700	1700	451	1700	1700	242	129	385
Volume to Capacity	0.20	0.62	0.32	0.02	0.51	0.30	0.15	1.10	0.16
Queue Length 95th (ft)	18	0	0	2	0	0	13	204	14
Control Delay (s)	14.2	0.0	0.0	13.2	0.0	0.0	22.4	174.8	16.2
Lane LOS	B			B			C	F	C
Approach Delay (s)	0.8			0.1			22.4	126.1	
Approach LOS							C	F	

Intersection Summary				
Average Delay	8.5			
Intersection Capacity Utilization	66.7%	ICU Level of Service		C
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	1584	5	4	1268	0	9	0	1	0	0	2
Future Volume (Veh/h)	2	1584	5	4	1268	0	9	0	1	0	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	1760	6	4	1409	0	10	0	1	0	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1409			1766			2482	3184	883	2302	3187	704
vC1, stage 1 conf vol							1767	1767		1417	1417	
vC2, stage 2 conf vol							714	1417		885	1770	
vCu, unblocked vol	1409			1766			2482	3184	883	2302	3187	704
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			88	100	100	100	100	99
cM capacity (veh/h)	480			349			82	106	289	125	104	379

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	882	886	4	939	470	11	2
Volume Left	2	0	4	0	0	10	0
Volume Right	0	6	0	0	0	1	2
cSH	480	1700	349	1700	1700	88	379
Volume to Capacity	0.00	0.52	0.01	0.55	0.28	0.13	0.01
Queue Length 95th (ft)	0	0	1	0	0	10	0
Control Delay (s)	0.1	0.0	15.4	0.0	0.0	51.8	14.5
Lane LOS	A		C			F	B
Approach Delay (s)	0.1		0.0			51.8	14.5
Approach LOS						F	B

Intersection Summary				
Average Delay	0.2			
Intersection Capacity Utilization	59.2%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	1552	2	4	1222	2	9	0	5	6	0	25
Future Volume (Veh/h)	7	1552	2	4	1222	2	9	0	5	6	0	25
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	8	1724	2	4	1358	2	10	0	6	7	0	28
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												12
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1360			1726			2428	3109	863	2251	3109	680
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1360			1726			2428	3109	863	2251	3109	680
tC, single (s)	4.8			4.1			7.5	6.5	7.9	7.9	6.5	7.1
tC, 2 stage (s)												
tF (s)	2.5			2.2			3.5	4.0	3.8	3.7	4.0	3.4
p0 queue free %	98			99			33	100	97	59	100	93
cM capacity (veh/h)	366			362			15	11	217	17	11	375

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	8	1149	577	4	905	455	16	35
Volume Left	8	0	0	4	0	0	10	7
Volume Right	0	0	2	0	0	2	6	28
cSH	366	1700	1700	362	1700	1700	23	85
Volume to Capacity	0.02	0.68	0.34	0.01	0.53	0.27	0.70	0.41
Queue Length 95th (ft)	2	0	0	1	0	0	51	42
Control Delay (s)	15.1	0.0	0.0	15.1	0.0	0.0	325.5	77.1
Lane LOS	C			C			F	F
Approach Delay (s)	0.1			0.0			325.5	77.1
Approach LOS							F	F

Intersection Summary				
Average Delay	2.6			
Intersection Capacity Utilization	57.1%	ICU Level of Service		B
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1545	24	0	1222	0	6
Future Volume (Veh/h)	1545	24	0	1222	0	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1717	27	0	1358	0	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)				612		
pX, platoon unblocked					0.79	
vC, conflicting volume			1744		2396	1717
vC1, stage 1 conf vol					1717	
vC2, stage 2 conf vol					679	
vCu, unblocked vol			1744		2238	1717
tC, single (s)			4.1		7.0	6.9
tC, 2 stage (s)					6.0	
tF (s)			2.2		3.6	3.3
p0 queue free %			100		100	91
cM capacity (veh/h)			356		115	79

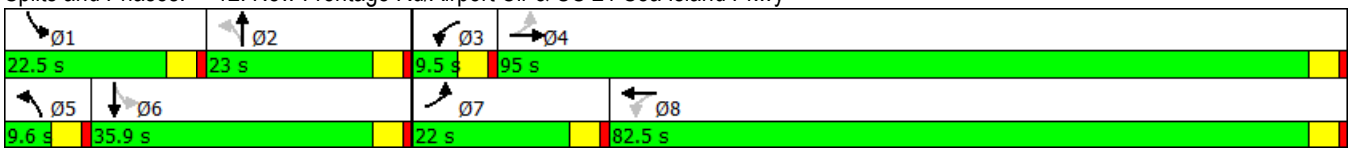
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	1717	27	453	905	7
Volume Left	0	0	0	0	0
Volume Right	0	27	0	0	7
cSH	1700	1700	356	1700	79
Volume to Capacity	1.01	0.02	0.00	0.53	0.09
Queue Length 95th (ft)	0	0	0	0	7
Control Delay (s)	0.0	0.0	0.0	0.0	55.0
Lane LOS					F
Approach Delay (s)	0.0		0.0		55.0
Approach LOS					F

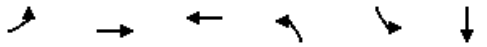
Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	91.3%	ICU Level of Service	F
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	SBL	SBT	Ø2
Lane Configurations								
Traffic Volume (vph)	249	1283	9	1027	26	207	0	
Future Volume (vph)	249	1283	9	1027	26	207	0	
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	pm+pt	NA	
Protected Phases	7	4	3	8	5	1	6	2
Permitted Phases	4		8		2	6		
Detector Phase	7	4	3	8	5	1	6	
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	22.0	95.0	9.5	82.5	9.6	22.5	35.9	23.0
Total Split (%)	14.7%	63.3%	6.3%	55.0%	6.4%	15.0%	23.9%	15%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	Min
Act Effct Green (s)	91.8	91.8		74.6	10.6	27.0	21.3	
Actuated g/C Ratio	0.72	0.72		0.58	0.08	0.21	0.17	
v/c Ratio	0.77	1.07		0.74	0.23	0.76	0.48	
Control Delay	25.8	64.1		23.9	46.8	62.7	12.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	
Total Delay	25.8	64.1		23.9	46.8	62.7	12.4	
LOS	C	E		C	D	E	B	
Approach Delay		57.9		23.9			38.9	
Approach LOS		E		C			D	

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 127.8	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 43.5	Intersection LOS: D
Intersection Capacity Utilization 126.8%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 12: New Frontage Rd/Airport Cir & US 21 Sea Island Pkwy





Lane Group	EBL	EBT	WBT	NBL	SBL	SBT
Lane Group Flow (vph)	277	1426	1152	28	230	206
v/c Ratio	0.77	1.07	0.74	0.23	0.76	0.48
Control Delay	25.8	64.1	23.9	46.8	62.7	12.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.8	64.1	23.9	46.8	62.7	12.4
Queue Length 50th (ft)	71	~1312	355	19	172	8
Queue Length 95th (ft)	160	#1620	490	47	#296	84
Internal Link Dist (ft)		532	413			381
Turn Bay Length (ft)	375				250	
Base Capacity (vph)	414	1337	1625	121	311	536
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	0.67	1.07	0.71	0.23	0.74	0.38

Intersection Summary

~ 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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	249	1283	0	9	1027	1	26	0	0	207	0	185
Future Volume (vph)	249	1283	0	9	1027	1	26	0	0	207	0	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5			4.5		4.5			4.5	4.5	
Lane Util. Factor	1.00	1.00			0.95		1.00			1.00	1.00	
Frt	1.00	1.00			1.00		1.00			1.00	0.85	
Flt Protected	0.95	1.00			1.00		0.95			0.95	1.00	
Satd. Flow (prot)	1770	1863			3537		1770			1770	1583	
Flt Permitted	0.16	1.00			0.75		0.63			0.47	1.00	
Satd. Flow (perm)	297	1863			2662		1171			873	1583	
Peak-hour factor, PHF	0.90	0.90	0.92	0.92	0.90	0.90	0.92	0.92	0.92	0.90	0.92	0.90
Adj. Flow (vph)	277	1426	0	10	1141	1	28	0	0	230	0	206
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	163	0
Lane Group Flow (vph)	277	1426	0	0	1152	0	28	0	0	230	43	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt			pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	91.7	91.7			74.6		10.3			28.8	21.3	
Effective Green, g (s)	91.7	91.7			74.6		10.3			28.8	21.3	
Actuated g/C Ratio	0.71	0.71			0.58		0.08			0.22	0.16	
Clearance Time (s)	4.5	4.5			4.5		4.5			4.5	4.5	
Vehicle Extension (s)	3.0	3.0			3.0		3.0			3.0	3.0	
Lane Grp Cap (vph)	353	1319			1533		107			311	260	
v/s Ratio Prot	0.08	c0.77					0.01			c0.10	0.03	
v/s Ratio Perm	0.48				0.43		0.01			c0.07		
v/c Ratio	0.78	1.08			0.75		0.26			0.74	0.17	
Uniform Delay, d1	14.1	18.9			20.5		55.7			45.1	46.5	
Progression Factor	1.00	1.00			1.00		1.00			1.00	1.00	
Incremental Delay, d2	10.9	49.8			2.1		1.3			8.9	0.3	
Delay (s)	25.0	68.7			22.6		57.0			54.0	46.8	
Level of Service	C	E			C		E			D	D	
Approach Delay (s)		61.6			22.6			57.0			50.6	
Approach LOS		E			C			E			D	

Intersection Summary			
HCM 2000 Control Delay	46.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	129.5	Sum of lost time (s)	18.0
Intersection Capacity Utilization	126.8%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1329	12	4	980	9	6
Future Volume (Veh/h)	1329	12	4	980	9	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1477	13	4	1089	10	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)				1133		
pX, platoon unblocked					0.23	
vC, conflicting volume			1490		2580	1484
vC1, stage 1 conf vol					1484	
vC2, stage 2 conf vol					1097	
vCu, unblocked vol			1490		6139	1484
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			99		93	95
cM capacity (veh/h)			451		144	153

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	1490	1093	17
Volume Left	0	4	10
Volume Right	13	0	7
cSH	1700	451	148
Volume to Capacity	0.88	0.01	0.12
Queue Length 95th (ft)	0	1	10
Control Delay (s)	0.0	0.4	32.6
Lane LOS		A	D
Approach Delay (s)	0.0	0.4	32.6
Approach LOS			D

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	80.7%	ICU Level of Service	D
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	50	1248	6	920	59	0	16	2
Future Volume (vph)	50	1248	6	920	59	0	16	2
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	9.5	108.0	9.5	108.0	9.5	23.0	9.5	23.0
Total Split (%)	6.3%	72.0%	6.3%	72.0%	6.3%	15.3%	6.3%	15.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)		4.5	4.5	4.5		4.5		4.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	None	Max
Act Effct Green (s)		103.6	105.4	105.4		18.5		18.5
Actuated g/C Ratio		0.78	0.79	0.79		0.14		0.14
v/c Ratio		1.19	0.02	0.69		0.34		0.20
Control Delay		111.6	3.0	9.3		30.5		29.5
Queue Delay		0.0	0.0	0.0		0.0		0.0
Total Delay		111.6	3.0	9.3		30.5		29.5
LOS		F	A	A		C		C
Approach Delay		111.6		9.3		30.5		29.5
Approach LOS		F		A		C		C

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 132.9	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.19	
Intersection Signal Delay: 68.2	Intersection LOS: E
Intersection Capacity Utilization 125.5%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 14: Chowan Creek Bluff/Eustis Landing Rd & US 21 Sea Island Pkwy



Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	1510	7	1024	78	48
v/c Ratio	1.19	0.02	0.69	0.34	0.20
Control Delay	111.6	3.0	9.3	30.5	29.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	111.6	3.0	9.3	30.5	29.5
Queue Length 50th (ft)	~1534	1	340	26	15
Queue Length 95th (ft)	#2004	4	460	81	56
Internal Link Dist (ft)	1053		490	351	331
Turn Bay Length (ft)		290			
Base Capacity (vph)	1270	301	1476	228	237
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.19	0.02	0.69	0.34	0.20

Intersection Summary

~ 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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	1248	60	6	920	2	59	0	11	16	2	25
Future Volume (vph)	50	1248	60	6	920	2	59	0	11	16	2	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5		4.5	4.5			4.5			4.5	
Lane Util. Factor		1.00		1.00	1.00			1.00			1.00	
Frt		0.99		1.00	1.00			0.98			0.92	
Flt Protected		1.00		0.95	1.00			0.96			0.98	
Satd. Flow (prot)		1840		1770	1862			1750			1684	
Flt Permitted		0.88		0.17	1.00			0.75			0.89	
Satd. Flow (perm)		1627		311	1862			1370			1532	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	56	1387	67	7	1022	2	66	0	12	18	2	28
RTOR Reduction (vph)	0	1	0	0	0	0	0	38	0	0	24	0
Lane Group Flow (vph)	0	1509	0	7	1024	0	0	40	0	0	24	0
Heavy Vehicles (%)	13%	2%	3%	2%	2%	2%	2%	7%	2%	2%	2%	2%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		103.6		109.0	109.0			18.5			18.5	
Effective Green, g (s)		103.6		109.0	109.0			18.5			18.5	
Actuated g/C Ratio		0.76		0.80	0.80			0.14			0.14	
Clearance Time (s)		4.5		4.5	4.5			4.5			4.5	
Vehicle Extension (s)		3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)		1234		257	1486			185			207	
v/s Ratio Prot				0.00	c0.55							
v/s Ratio Perm		c0.93		0.02				c0.03			0.02	
v/c Ratio		1.22		0.03	0.69			0.22			0.11	
Uniform Delay, d1		16.5		4.9	6.2			52.5			51.8	
Progression Factor		1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2		107.7		0.0	1.4			0.6			0.2	
Delay (s)		124.2		4.9	7.5			53.1			52.1	
Level of Service		F		A	A			D			D	
Approach Delay (s)		124.2			7.5			53.1			52.1	
Approach LOS		F			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	75.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	136.5	Sum of lost time (s)	18.0
Intersection Capacity Utilization	125.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	1	70	16	1	42	49	1786	15	17	1478	29
Future Volume (Veh/h)	37	1	70	16	1	42	49	1786	15	17	1478	29
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	41	1	78	18	1	47	54	1984	17	19	1642	32
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			TWLTL	
Median storage veh)											2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2828	3789	821	3038	3812	1000	1674			2001		
vC1, stage 1 conf vol	1680	1680		2100	2100							
vC2, stage 2 conf vol	1148	2109		938	1712							
vCu, unblocked vol	2828	3789	821	3038	3812	1000	1674			2001		
tC, single (s)	7.6	6.5	6.9	7.5	6.5	6.9	4.2			4.1		
tC, 2 stage (s)	6.6	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	41	98	75	57	98	81	85			93		
cM capacity (veh/h)	69	51	318	42	53	241	366			283		

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	42	78	66	54	1323	678	19	821	821	32
Volume Left	41	0	18	54	0	0	19	0	0	0
Volume Right	0	78	47	0	0	17	0	0	0	32
cSH	69	318	102	366	1700	1700	283	1700	1700	1700
Volume to Capacity	0.61	0.25	0.65	0.15	0.78	0.40	0.07	0.48	0.48	0.02
Queue Length 95th (ft)	66	24	80	13	0	0	5	0	0	0
Control Delay (s)	118.7	20.0	89.6	16.5	0.0	0.0	18.7	0.0	0.0	0.0
Lane LOS	F	C	F	C			C			
Approach Delay (s)	54.5		89.6	0.4			0.2			
Approach LOS	F		F							

Intersection Summary				
Average Delay	3.5			
Intersection Capacity Utilization	66.7%	ICU Level of Service	C	
Analysis Period (min)	15			

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (veh/h)	9	0	1864	0	1	1528
Future Volume (Veh/h)	9	0	1864	0	1	1528
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	10	0	2071	0	1	1698
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2922	1036			2071	
vC1, stage 1 conf vol	2071					
vC2, stage 2 conf vol	851					
vCu, unblocked vol	2922	1036			2071	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	87	100			100	
cM capacity (veh/h)	79	229			265	

Direction, Lane #	WB 1	NE 1	NE 2	SW 1	SW 2
Volume Total	10	1381	690	567	1132
Volume Left	10	0	0	1	0
Volume Right	0	0	0	0	0
cSH	79	1700	1700	265	1700
Volume to Capacity	0.13	0.81	0.41	0.00	0.67
Queue Length 95th (ft)	10	0	0	0	0
Control Delay (s)	57.2	0.0	0.0	0.1	0.0
Lane LOS	F			A	
Approach Delay (s)	57.2	0.0		0.0	
Approach LOS	F				

Intersection Summary				
Average Delay	0.2			
Intersection Capacity Utilization	61.5%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	1	0	9	98	0	63	6	1735	91	122	1422	4
Future Volume (Veh/h)	1	0	9	98	0	63	6	1735	91	122	1422	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1	0	10	109	0	70	7	1928	101	136	1580	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)			5			5						
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)											1003	
pX, platoon unblocked												
vC, conflicting volume	2867	3897	792	3054	3848	1014	1584			2029		
vC1, stage 1 conf vol	1854	1854		1992	1992							
vC2, stage 2 conf vol	1013	2043		1062	1856							
vCu, unblocked vol	2867	3897	792	3054	3848	1014	1584			2029		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	100	97	0	100	70	98			51		
cM capacity (veh/h)	27	2	332	51	46	236	411			276		

Direction, Lane #	EB 1	WB 1	NE 1	NE 2	SW 1	SW 2	SW 3
Volume Total	11	179	971	1065	136	1053	531
Volume Left	1	109	7	0	136	0	0
Volume Right	10	70	0	101	0	0	4
cSH	296	75	411	1700	276	1700	1700
Volume to Capacity	0.04	2.37	0.02	0.63	0.49	0.62	0.31
Queue Length 95th (ft)	3	423	1	0	64	0	0
Control Delay (s)	27.8	744.2	0.6	0.0	30.1	0.0	0.0
Lane LOS	D	F	A		D		
Approach Delay (s)	27.8	744.2	0.3		2.4		
Approach LOS	D	F					

Intersection Summary				
Average Delay	35.0			
Intersection Capacity Utilization	112.6%	ICU Level of Service	H	
Analysis Period (min)	15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	16	253	1842	29	105	1408
Future Volume (Veh/h)	16	253	1842	29	105	1408
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	18	281	2047	32	117	1564
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	3079	1040			2079	
vC1, stage 1 conf vol	2063					
vC2, stage 2 conf vol	1016					
vCu, unblocked vol	3079	1040			2079	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	75	0			56	
cM capacity (veh/h)	72	227			263	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	299	1365	714	117	782	782
Volume Left	18	0	0	117	0	0
Volume Right	281	0	32	0	0	0
cSH	201	1700	1700	263	1700	1700
Volume to Capacity	1.49	0.80	0.42	0.44	0.46	0.46
Queue Length 95th (ft)	459	0	0	54	0	0
Control Delay (s)	287.5	0.0	0.0	29.1	0.0	0.0
Lane LOS	F			D		
Approach Delay (s)	287.5	0.0		2.0		
Approach LOS	F					

Intersection Summary				
Average Delay	22.0			
Intersection Capacity Utilization	84.2%	ICU Level of Service	E	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	0	11	0	0	0	19	2082	0	0	1550	5
Future Volume (Veh/h)	7	0	11	0	0	0	19	2082	0	0	1550	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	8	0	12	0	0	0	21	2313	0	0	1722	6
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2924	4080	864	3228	4083	1156	1728			2313		
vC1, stage 1 conf vol	1725	1725		2355	2355							
vC2, stage 2 conf vol	1198	2355		873	1728							
vCu, unblocked vol	2924	4080	864	3228	4083	1156	1728			2313		
tC, single (s)	7.5	6.5	7.1	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.4	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	90	100	96	100	100	100	94			100		
cM capacity (veh/h)	79	55	280	33	53	190	361			213		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	20	0	1178	1156	861	867
Volume Left	8	0	21	0	0	0
Volume Right	12	0	0	0	0	6
cSH	138	1700	361	1700	213	1700
Volume to Capacity	0.14	0.00	0.06	0.68	0.00	0.51
Queue Length 95th (ft)	12	0	5	0	0	0
Control Delay (s)	35.3	0.0	3.1	0.0	0.0	0.0
Lane LOS	E	A	A			
Approach Delay (s)	35.3	0.0	1.5		0.0	
Approach LOS	E	A				

Intersection Summary				
Average Delay	1.1			
Intersection Capacity Utilization	80.9%	ICU Level of Service	D	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	7	45	16	1	1	24	1998	55	2	1451	50
Future Volume (Veh/h)	40	7	45	16	1	1	24	1998	55	2	1451	50
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	44	8	50	18	1	1	27	2220	61	2	1612	56
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2810	3979	834	3168	3976	1140	1668			2281		
vC1, stage 1 conf vol	1644	1644		2304	2304							
vC2, stage 2 conf vol	1166	2335		864	1672							
vCu, unblocked vol	2810	3979	834	3168	3976	1140	1668			2281		
tC, single (s)	7.5	6.5	7.0	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	49	85	84	48	98	99	93			99		
cM capacity (veh/h)	86	55	309	35	55	194	381			219		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	102	20	27	1480	801	2	1075	593
Volume Left	44	18	27	0	0	2	0	0
Volume Right	50	1	0	0	61	0	0	56
cSH	124	37	381	1700	1700	219	1700	1700
Volume to Capacity	0.82	0.54	0.07	0.87	0.47	0.01	0.63	0.35
Queue Length 95th (ft)	123	47	6	0	0	1	0	0
Control Delay (s)	104.3	183.8	15.2	0.0	0.0	21.6	0.0	0.0
Lane LOS	F	F	C			C		
Approach Delay (s)	104.3	183.8	0.2			0.0		
Approach LOS	F	F						

Intersection Summary				
Average Delay	3.6			
Intersection Capacity Utilization	68.6%	ICU Level of Service	C	
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1551	12	0	1228	0	7
Future Volume (Veh/h)	1551	12	0	1228	0	7
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1686	13	0	1335	0	8
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			TWLTL		
Median storage veh)				2		
Upstream signal (ft)				905		
pX, platoon unblocked					0.79	
vC, conflicting volume			1699		2354	1686
vC1, stage 1 conf vol					1686	
vC2, stage 2 conf vol					668	
vCu, unblocked vol			1699		2185	1686
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	90
cM capacity (veh/h)			371		130	83

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1
Volume Total	1686	13	668	668	8
Volume Left	0	0	0	0	0
Volume Right	0	13	0	0	8
cSH	1700	1700	1700	1700	83
Volume to Capacity	0.99	0.01	0.39	0.39	0.10
Queue Length 95th (ft)	0	0	0	0	8
Control Delay (s)	0.0	0.0	0.0	0.0	53.0
Lane LOS					F
Approach Delay (s)	0.0		0.0		53.0
Approach LOS					F

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	91.6%	ICU Level of Service	F
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	162	1328	941	81	43	86
Future Volume (Veh/h)	162	1328	941	81	43	86
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	176	1443	1023	88	47	93
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						7
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (ft)		493				
pX, platoon unblocked					0.19	
vC, conflicting volume	1111				2818	1023
vC1, stage 1 conf vol					1023	
vC2, stage 2 conf vol					1795	
vCu, unblocked vol	1111				8420	1023
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.2				3.5	3.3
p0 queue free %	72				0	67
cM capacity (veh/h)	629				4	286

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	176	1443	1023	88	140
Volume Left	176	0	0	0	47
Volume Right	0	0	0	88	93
cSH	629	1700	1700	1700	13
Volume to Capacity	0.28	0.85	0.60	0.05	11.06
Queue Length 95th (ft)	29	0	0	0	Err
Control Delay (s)	12.9	0.0	0.0	0.0	Err
Lane LOS	B				F
Approach Delay (s)	1.4		0.0		Err
Approach LOS					F

Intersection Summary			
Average Delay	488.5		
Intersection Capacity Utilization	79.9%	ICU Level of Service	D
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑	↑	↱		↱
Traffic Volume (veh/h)	0	1371	979	41	0	43
Future Volume (Veh/h)	0	1371	979	41	0	43
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	1490	1064	45	0	47
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (ft)		897				
pX, platoon unblocked					0.21	
vC, conflicting volume	1109				2554	1064
vC1, stage 1 conf vol					1064	
vC2, stage 2 conf vol					1490	
vCu, unblocked vol	1109				6493	1064
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	83
cM capacity (veh/h)	630				44	271

Direction, Lane #	EB 1	WB 1	WB 2	SB 1
Volume Total	1490	1064	45	47
Volume Left	0	0	0	0
Volume Right	0	0	45	47
cSH	1700	1700	1700	271
Volume to Capacity	0.88	0.63	0.03	0.17
Queue Length 95th (ft)	0	0	0	15
Control Delay (s)	0.0	0.0	0.0	21.1
Lane LOS				C
Approach Delay (s)	0.0	0.0		21.1
Approach LOS				C

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	75.5%	ICU Level of Service	D
Analysis Period (min)	15		

Intersection Sign configuration not allowed in HCM analysis.

APPENDIX E

2038 BUILD SYNCHRO RESULTS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	854	42	64	1416	2	59	0	43	0	0	1
Future Volume (Veh/h)	1	854	42	64	1416	2	59	0	43	0	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1	949	47	71	1573	2	66	0	48	0	0	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1575			996			2690	2692	972	2738	2714	1574
vC1, stage 1 conf vol							974	974		1716	1716	
vC2, stage 2 conf vol							1716	1717		1022	998	
vCu, unblocked vol	1575			996			2690	2692	972	2738	2714	1574
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			90			29	100	84	100	100	99
cM capacity (veh/h)	418			695			93	117	306	84	112	135

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total	997	71	1575	114	1
Volume Left	1	71	0	66	0
Volume Right	47	0	2	48	1
cSH	418	695	1700	131	135
Volume to Capacity	0.00	0.10	0.93	0.87	0.01
Queue Length 95th (ft)	0	9	0	139	1
Control Delay (s)	0.1	10.8	0.0	110.7	31.8
Lane LOS	A	B		F	D
Approach Delay (s)	0.1	0.5		110.7	31.8
Approach LOS				F	D

Intersection Summary				
Average Delay	4.9			
Intersection Capacity Utilization	93.9%	ICU Level of Service		F
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	820	61	0	1499	0	0	0	0	0	0	1
Future Volume (Veh/h)	0	820	61	0	1499	0	0	0	0	0	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	911	68	0	1666	0	0	0	0	0	0	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)					497							
pX, platoon unblocked	0.44						0.44	0.44		0.44	0.44	0.44
vC, conflicting volume	1666			979			2578	2577	911	2577	2645	1666
vC1, stage 1 conf vol							911	911		1666	1666	
vC2, stage 2 conf vol							1667	1666		911	979	
vCu, unblocked vol	1874			979			3931	3929	911	3929	4082	1874
tC, single (s)	4.1			4.1			7.1	6.5	6.3	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.4	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	97
cM capacity (veh/h)	142			705			38	51	327	39	51	40

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	911	68	1666	0	1
Volume Left	0	0	0	0	0
Volume Right	0	68	0	0	1
cSH	142	1700	1700	1700	40
Volume to Capacity	0.00	0.04	0.98	0.00	0.03
Queue Length 95th (ft)	0	0	0	0	2
Control Delay (s)	0.0	0.0	0.0	0.0	98.1
Lane LOS				A	F
Approach Delay (s)	0.0		0.0	0.0	98.1
Approach LOS				A	F

Intersection Summary				
Average Delay	0.0			
Intersection Capacity Utilization	88.9%	ICU Level of Service		E
Analysis Period (min)	15			

Lane Group	EBL	EBT	WBL	WBT	NEL	NET	SWL	SWT	SWR
Lane Configurations									
Traffic Volume (vph)	213	578	165	976	46	4	19	7	616
Future Volume (vph)	213	578	165	976	46	4	19	7	616
Turn Type	pm+pt	NA	pm+pt	NA	Perm	NA	Perm	NA	pm+ov
Protected Phases	5	2	1	6		4		8	5
Permitted Phases	2		6		4		8		8
Detector Phase	5	2	1	6	4	4	8	8	5
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5	9.5
Total Split (s)	33.0	93.5	14.0	74.5	22.5	22.5	22.5	22.5	33.0
Total Split (%)	25.4%	71.9%	10.8%	57.3%	17.3%	17.3%	17.3%	17.3%	25.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5		4.5		4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag					Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes					Yes
Recall Mode	None	Min	None	Min	None	None	None	None	None
Act Effct Green (s)	103.1	90.7	78.1	70.1		12.6		12.6	45.6
Actuated g/C Ratio	0.83	0.73	0.63	0.56		0.10		0.10	0.37
v/c Ratio	0.51	0.50	0.34	1.06		0.71		0.24	1.09
Control Delay	30.0	9.5	7.4	72.6		56.3		55.8	98.2
Queue Delay	0.0	2.4	0.0	0.0		0.0		0.0	0.0
Total Delay	30.0	11.9	7.4	72.6		56.3		55.8	98.2
LOS	C	B	A	E		E		E	F
Approach Delay		16.6		63.4		56.3		96.4	
Approach LOS		B		E		E		F	

Intersection Summary	
Cycle Length: 130	
Actuated Cycle Length: 124.7	
Natural Cycle: 130	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.09	
Intersection Signal Delay: 56.9	Intersection LOS: E
Intersection Capacity Utilization 108.8%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 3: Driveway/Sunset Blvd & US 21 Sea Island Pkwy



Lane Group	EBL	EBT	WBL	WBT	NET	SWT	SWR
Lane Group Flow (vph)	237	670	183	1105	131	29	684
v/c Ratio	0.51	0.50	0.34	1.06	0.71	0.24	1.09
Control Delay	30.0	9.5	7.4	72.6	56.3	55.8	98.2
Queue Delay	0.0	2.4	0.0	0.0	0.0	0.0	0.0
Total Delay	30.0	11.9	7.4	72.6	56.3	55.8	98.2
Queue Length 50th (ft)	112	207	27	~985	68	22	~582
Queue Length 95th (ft)	208	344	46	#1326	138	53	#814
Internal Link Dist (ft)		417		641	61	384	
Turn Bay Length (ft)	215		150				150
Base Capacity (vph)	465	1347	564	1044	246	172	625
Starvation Cap Reductn	0	524	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.81	0.32	1.06	0.53	0.17	1.09

Intersection Summary

~ 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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	213	578	25	165	976	19	46	4	68	19	7	616
Future Volume (vph)	213	578	25	165	976	19	46	4	68	19	7	616
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	12	12	12	16	12	12
Total Lost time (s)	4.5	4.5		4.5	4.5			4.5			4.5	4.5
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00			0.92			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	1.00
Satd. Flow (prot)	1770	1851		1770	1857			1647			1798	1583
Flt Permitted	0.05	1.00		0.41	1.00			0.86			0.64	1.00
Satd. Flow (perm)	100	1851		764	1857			1443			1197	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	237	642	28	183	1084	21	51	4	76	21	8	684
RTOR Reduction (vph)	0	1	0	0	0	0	0	40	0	0	0	50
Lane Group Flow (vph)	237	669	0	183	1105	0	0	91	0	0	29	634
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	6%	2%	2%	2%
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	5	2		1	6			4			8	5
Permitted Phases	2			6			4			8		8
Actuated Green, G (s)	103.1	90.6		78.1	70.1			12.6			12.6	41.1
Effective Green, g (s)	103.1	90.6		78.1	70.1			12.6			12.6	41.1
Actuated g/C Ratio	0.83	0.73		0.63	0.56			0.10			0.10	0.33
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	464	1344		543	1043			145			120	578
v/s Ratio Prot	0.12	0.36		0.02	c0.59							c0.25
v/s Ratio Perm	0.31			0.19				0.06			0.02	0.15
v/c Ratio	0.51	0.50		0.34	1.06			0.63			0.24	1.10
Uniform Delay, d1	33.8	7.3		11.4	27.3			53.8			51.6	41.8
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	1.0	0.3		0.4	44.9			8.6			1.0	66.9
Delay (s)	34.7	7.6		11.8	72.2			62.4			52.7	108.7
Level of Service	C	A		B	E			E			D	F
Approach Delay (s)		14.7			63.6			62.4			106.4	
Approach LOS		B			E			E			F	

Intersection Summary			
HCM 2000 Control Delay	59.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	124.7	Sum of lost time (s)	13.5
Intersection Capacity Utilization	108.8%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	5	645	7	164	1049	10	10	1	91	0	1	4
Future Volume (Veh/h)	5	645	7	164	1049	10	10	1	91	0	1	4
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	6	717	8	182	1166	11	11	1	101	0	1	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)		721										
pX, platoon unblocked				0.84			0.84	0.84	0.84	0.84	0.84	
vC, conflicting volume	1177			725			2268	2274	721	2370	2272	1172
vC1, stage 1 conf vol							733	733		1536	1536	
vC2, stage 2 conf vol							1534	1541		834	737	
vCu, unblocked vol	1177			574			2417	2425	570	2539	2423	1172
tC, single (s)	4.1			4.2			7.2	6.5	6.3	7.1	6.5	6.2
tC, 2 stage (s)							6.2	5.5		6.1	5.5	
tF (s)	2.2			2.3			3.6	4.0	3.4	3.5	4.0	3.3
p0 queue free %	99			78			88	99	76	100	99	98
cM capacity (veh/h)	593			812			92	122	424	66	115	234

Direction, Lane #	EB 1	WB 1	WB 2	NE 1	SW 1
Volume Total	731	182	1177	113	5
Volume Left	6	182	0	11	0
Volume Right	8	0	11	101	4
cSH	593	812	1700	309	194
Volume to Capacity	0.01	0.22	0.69	0.37	0.03
Queue Length 95th (ft)	1	21	0	41	2
Control Delay (s)	0.3	10.7	0.0	23.2	24.0
Lane LOS	A	B		C	C
Approach Delay (s)	0.3	1.4		23.2	24.0
Approach LOS				C	C

Intersection Summary				
Average Delay	2.2			
Intersection Capacity Utilization	113.4%	ICU Level of Service	H	
Analysis Period (min)	15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	42	696	1188	55	12	30
Future Volume (Veh/h)	42	696	1188	55	12	30
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	47	773	1320	61	13	33
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)			681			
pX, platoon unblocked	0.80				0.80	0.80
vC, conflicting volume	1381				1831	690
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	968				1533	102
tC, single (s)	4.1				7.0	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.6	3.3
p0 queue free %	92				82	96
cM capacity (veh/h)	564				72	744

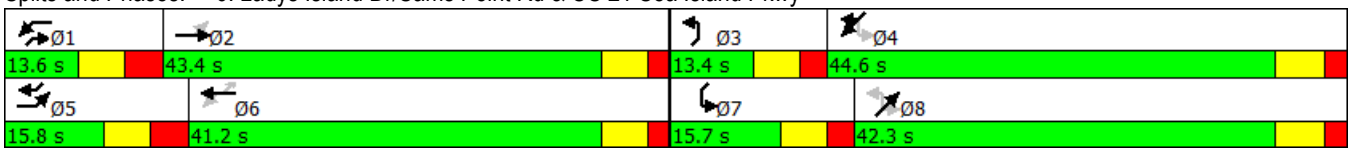
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	305	515	880	501	13	33
Volume Left	47	0	0	0	13	0
Volume Right	0	0	0	61	0	33
cSH	564	1700	1700	1700	72	744
Volume to Capacity	0.08	0.30	0.52	0.29	0.18	0.04
Queue Length 95th (ft)	7	0	0	0	15	3
Control Delay (s)	2.8	0.0	0.0	0.0	65.2	10.1
Lane LOS	A				F	B
Approach Delay (s)	1.1		0.0		25.7	
Approach LOS					D	

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	60.7%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations											
Traffic Volume (vph)	145	429	236	735	225	143	445	170	330	882	443
Future Volume (vph)	145	429	236	735	225	143	445	170	330	882	443
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	pt+ov
Protected Phases	5	2	1	6		3	8	1	7	4	4 5
Permitted Phases	2		6		6	8		8	4		
Detector Phase	5	2	1	6	6	3	8	1	7	4	4 5
Switch Phase											
Minimum Initial (s)	6.0	25.0	6.0	25.0	25.0	6.0	15.0	6.0	6.0	15.0	
Minimum Split (s)	13.3	43.0	13.3	39.0	39.0	12.3	42.3	13.3	13.3	43.3	
Total Split (s)	15.8	43.4	13.6	41.2	41.2	13.4	42.3	13.6	15.7	44.6	
Total Split (%)	13.7%	37.7%	11.8%	35.8%	35.8%	11.7%	36.8%	11.8%	13.7%	38.8%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.3	4.0	4.0	4.3	
All-Red Time (s)	3.3	2.0	3.3	2.0	2.0	2.3	2.0	3.3	2.3	2.0	
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)	7.3	6.0	7.3	6.0	6.0	6.3	6.3	7.3	6.3	6.3	
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Min	None	Max	Max	None	None	None	None	Max	
Act Effct Green (s)	44.6	37.4	40.2	35.2	35.2	43.1	36.0	48.6	47.7	38.3	54.1
Actuated g/C Ratio	0.39	0.33	0.35	0.31	0.31	0.37	0.31	0.42	0.41	0.33	0.47
v/c Ratio	0.75	0.53	0.95	0.75	0.42	0.91	0.45	0.25	1.03	0.83	0.62
Control Delay	44.1	32.0	74.5	41.3	7.0	74.3	33.2	6.5	83.2	42.8	22.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.1	32.0	74.5	41.3	7.0	74.3	33.2	6.5	83.2	42.8	22.5
LOS	D	C	E	D	A	E	C	A	F	D	C
Approach Delay		34.6		41.4			35.0			45.4	
Approach LOS		C		D			C			D	

Intersection Summary	
Cycle Length: 115	
Actuated Cycle Length: 115	
Natural Cycle: 115	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 40.7	Intersection LOS: D
Intersection Capacity Utilization 87.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 6: Ladys Island Dr/Sams Point Rd & US 21 Sea Island Pkwy



Lane Group	EBL	EBT	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	161	601	262	817	250	159	494	189	367	980	492
v/c Ratio	0.75	0.53	0.95	0.75	0.42	0.91	0.45	0.25	1.03	0.83	0.62
Control Delay	44.1	32.0	74.5	41.3	7.0	74.3	33.2	6.5	83.2	42.8	22.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.1	32.0	74.5	41.3	7.0	74.3	33.2	6.5	83.2	42.8	22.5
Queue Length 50th (ft)	73	180	127	286	7	70	153	17	~193	350	218
Queue Length 95th (ft)	#151	237	#280	361	69	#198	204	62	#403	435	333
Internal Link Dist (ft)		376		679			587			657	
Turn Bay Length (ft)	200		350		200	350		550	460		350
Base Capacity (vph)	215	1133	275	1083	601	174	1097	755	358	1178	791
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.53	0.95	0.75	0.42	0.91	0.45	0.25	1.03	0.83	0.62

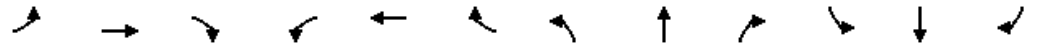
Intersection Summary

~ 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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	145	429	112	236	735	225	143	445	170	330	882	443
Future Volume (vph)	145	429	112	236	735	225	143	445	170	330	882	443
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3	6.0		7.3	6.0	6.0	6.3	6.3	7.3	6.3	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1752	3423		1770	3539	1429	1770	3505	1583	1736	3539	1583
Flt Permitted	0.15	1.00		0.32	1.00	1.00	0.11	1.00	1.00	0.36	1.00	1.00
Satd. Flow (perm)	274	3423		604	3539	1429	209	3505	1583	651	3539	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	161	477	124	262	817	250	159	494	189	367	980	492
RTOR Reduction (vph)	0	20	0	0	0	164	0	0	94	0	0	47
Lane Group Flow (vph)	161	581	0	262	817	86	159	494	95	367	980	445
Heavy Vehicles (%)	3%	2%	3%	2%	2%	13%	2%	3%	2%	4%	2%	2%
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	pt+ov
Protected Phases	5	2		1	6		3	8	1	7	4	4 5
Permitted Phases	2			6		6	8		8	4		
Actuated Green, G (s)	45.9	37.4		41.5	35.2	35.2	43.1	36.0	42.3	47.7	38.3	53.1
Effective Green, g (s)	45.9	37.4		41.5	35.2	35.2	43.1	36.0	42.3	47.7	38.3	53.1
Actuated g/C Ratio	0.40	0.33		0.36	0.31	0.31	0.37	0.31	0.37	0.41	0.33	0.46
Clearance Time (s)	7.3	6.0		7.3	6.0	6.0	6.3	6.3	7.3	6.3	6.3	
Vehicle Extension (s)	3.0	3.5		3.0	3.5	3.5	3.0	3.5	3.0	3.0	3.5	
Lane Grp Cap (vph)	218	1113		281	1083	437	174	1097	582	358	1178	730
v/s Ratio Prot	0.05	0.17		0.05	0.23		0.06	0.14	0.01	c0.08	0.28	c0.28
v/s Ratio Perm	0.24			c0.28		0.06	0.29		0.05	c0.34		
v/c Ratio	0.74	0.52		0.93	0.75	0.20	0.91	0.45	0.16	1.03	0.83	0.61
Uniform Delay, d1	25.5	31.5		34.0	36.0	29.5	27.7	31.6	24.4	31.7	35.4	23.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.3	0.5		36.0	4.9	1.0	44.0	0.3	0.1	54.1	6.9	1.4
Delay (s)	37.8	32.0		70.0	40.9	30.5	71.7	31.9	24.6	85.8	42.3	24.6
Level of Service	D	C		E	D	C	E	C	C	F	D	C
Approach Delay (s)		33.3			44.7			37.8			46.3	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	42.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	25.9
Intersection Capacity Utilization	87.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	738	15	78	1043	69	0	5	12	50	1	161
Future Volume (Veh/h)	121	738	15	78	1043	69	0	5	12	50	1	161
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	134	820	17	87	1159	77	0	6	13	56	1	179
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												10
Median type		None			TWLTL							
Median storage veh)					2							
Upstream signal (ft)		759			853							
pX, platoon unblocked	0.75			0.92			0.79	0.79	0.92	0.79	0.79	0.75
vC, conflicting volume	1236			837			1850	2506	418	2066	2476	618
vC1, stage 1 conf vol							1096	1096		1372	1372	
vC2, stage 2 conf vol							754	1410		694	1105	
vCu, unblocked vol	648			662			1112	1945	209	1385	1906	0
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	7.0
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	81			90			100	94	98	69	99	78
cM capacity (veh/h)	700			854			192	102	737	180	139	811

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1
Volume Total	134	547	290	87	773	463	6	13	236
Volume Left	134	0	0	87	0	0	0	0	56
Volume Right	0	0	17	0	0	77	0	13	179
cSH	700	1700	1700	854	1700	1700	102	737	744
Volume to Capacity	0.19	0.32	0.17	0.10	0.45	0.27	0.06	0.02	0.32
Queue Length 95th (ft)	18	0	0	8	0	0	5	1	34
Control Delay (s)	11.4	0.0	0.0	9.7	0.0	0.0	42.4	10.0	16.3
Lane LOS	B			A			E	A	C
Approach Delay (s)	1.6			0.6			20.2		16.3
Approach LOS							C		C

Intersection Summary				
Average Delay	2.6			
Intersection Capacity Utilization	57.2%	ICU Level of Service		B
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	790	5	0	1201	46	2	0	16	70	0	26
Future Volume (Veh/h)	29	790	5	0	1201	46	2	0	16	70	0	26
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	32	878	6	0	1334	51	2	0	18	78	0	29
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									14			
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)		1208			404							
pX, platoon unblocked	0.71						0.71	0.71		0.71	0.71	0.71
vC, conflicting volume	1385			884			1641	2330	442	1862	2308	692
vC1, stage 1 conf vol							945	945		1360	1360	
vC2, stage 2 conf vol							696	1385		503	948	
vCu, unblocked vol	717			884			1079	2053	442	1392	2021	0
tC, single (s)	4.2			4.1			8.5	6.5	6.9	7.5	6.5	7.0
tC, 2 stage (s)							7.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			4.0	4.0	3.3	3.5	4.0	3.3
p0 queue free %	95			100			99	100	97	68	100	96
cM capacity (veh/h)	613			761			183	203	563	246	220	760

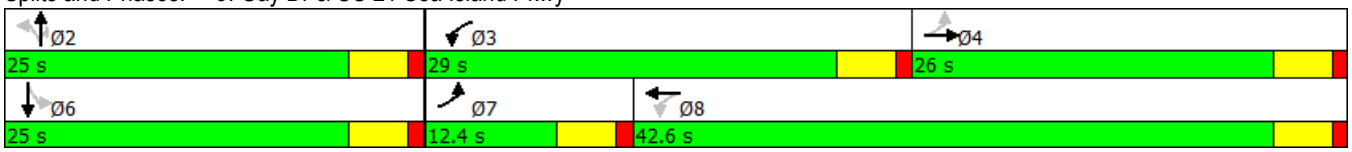
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1	SB 2
Volume Total	32	585	299	0	889	496	20	78	29
Volume Left	32	0	0	0	0	0	2	78	0
Volume Right	0	0	6	0	0	51	18	0	29
cSH	613	1700	1700	1700	1700	1700	626	246	760
Volume to Capacity	0.05	0.34	0.18	0.00	0.52	0.29	0.03	0.32	0.04
Queue Length 95th (ft)	4	0	0	0	0	0	2	33	3
Control Delay (s)	11.2	0.0	0.0	0.0	0.0	0.0	12.9	26.2	9.9
Lane LOS	B						B	D	A
Approach Delay (s)	0.4			0.0			12.9	21.8	
Approach LOS							B	C	

Intersection Summary				
Average Delay	1.2			
Intersection Capacity Utilization	51.9%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	147	773	418	1133	7	0	259	16	0
Future Volume (vph)	147	773	418	1133	7	0	259	16	0
Turn Type	pm+pt	NA	pm+pt	NA	Perm	NA	Perm	Perm	NA
Protected Phases	7	4	3	8		2			6
Permitted Phases	4		8		2		2	6	
Detector Phase	7	4	3	8	2	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	12.4	26.0	29.0	42.6	25.0	25.0	25.0	25.0	25.0
Total Split (%)	15.5%	32.5%	36.3%	53.3%	31.3%	31.3%	31.3%	31.3%	31.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5		4.5	4.5		4.5
Lead/Lag	Lead	Lag	Lead	Lag					
Lead-Lag Optimize?	Yes	Yes	Yes	Yes					
Recall Mode	None	None	None	None	Min	Min	Min	Min	Min
Act Effct Green (s)	27.9	20.5	43.9	32.0		7.6	7.6		7.6
Actuated g/C Ratio	0.46	0.34	0.72	0.53		0.12	0.12		0.12
v/c Ratio	0.49	0.74	0.79	0.73		0.07	0.64		0.53
Control Delay	16.5	24.3	22.8	14.0		26.6	11.1		12.9
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0		0.0
Total Delay	16.5	24.3	22.8	14.0		26.6	11.1		12.9
LOS	B	C	C	B		C	B		B
Approach Delay		23.1		16.3		11.6			12.9
Approach LOS		C		B		B			B

Intersection Summary	
Cycle Length: 80	
Actuated Cycle Length: 60.8	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 17.8	Intersection LOS: B
Intersection Capacity Utilization 72.8%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 9: Gay Dr & US 21 Sea Island Pkwy



Lane Group	EBL	EBT	WBL	WBT	NBT	NBR	SBT
Lane Group Flow (vph)	163	869	464	1342	8	288	182
v/c Ratio	0.49	0.74	0.79	0.73	0.07	0.64	0.53
Control Delay	16.5	24.3	22.8	14.0	26.6	11.1	12.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.5	24.3	22.8	14.0	26.6	11.1	12.9
Queue Length 50th (ft)	14	142	95	167	3	0	6
Queue Length 95th (ft)	62	#290	#275	304	14	61	57
Internal Link Dist (ft)		324		647	804		269
Turn Bay Length (ft)	150		250			350	
Base Capacity (vph)	358	1263	718	2238	338	735	653
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.69	0.65	0.60	0.02	0.39	0.28

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	147	773	9	418	1133	75	7	0	259	16	0	148
Future Volume (vph)	147	773	9	418	1133	75	7	0	259	16	0	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Frt	1.00	1.00		1.00	0.99			1.00	0.85		0.88	
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00		1.00	
Satd. Flow (prot)	1770	3481		1543	3474			1770	1583		1628	
Flt Permitted	0.20	1.00		0.16	1.00			0.53	1.00		0.97	
Satd. Flow (perm)	363	3481		260	3474			980	1583		1580	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	163	859	10	464	1259	83	8	0	288	18	0	164
RTOR Reduction (vph)	0	1	0	0	5	0	0	0	252	0	143	0
Lane Group Flow (vph)	163	868	0	464	1337	0	0	8	36	0	39	0
Heavy Vehicles (%)	2%	3%	50%	17%	3%	2%	2%	2%	2%	2%	2%	2%
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)	27.8	20.5		43.8	32.0			7.6	7.6		7.6	
Effective Green, g (s)	27.8	20.5		43.8	32.0			7.6	7.6		7.6	
Actuated g/C Ratio	0.46	0.34		0.73	0.53			0.13	0.13		0.13	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5	4.5		4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	337	1181		587	1840			123	199		198	
v/s Ratio Prot	0.06	0.25		c0.25	0.38							
v/s Ratio Perm	0.16			c0.33				0.01	0.02		c0.02	
v/c Ratio	0.48	0.74		0.79	0.73			0.07	0.18		0.20	
Uniform Delay, d1	9.8	17.6		11.9	10.9			23.3	23.6		23.7	
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	1.1	2.4		7.2	1.5			0.2	0.4		0.5	
Delay (s)	10.9	20.0		19.0	12.3			23.5	24.1		24.1	
Level of Service	B	B		B	B			C	C		C	
Approach Delay (s)		18.5			14.0			24.0			24.1	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	16.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	60.4	Sum of lost time (s)	13.5
Intersection Capacity Utilization	72.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	998	0	0	1492	0	0
Future Volume (Veh/h)	998	0	0	1492	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1109	0	0	1658	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	727					
pX, platoon unblocked			0.79		0.79	0.79
vC, conflicting volume			1109		1938	554
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			616		1661	0
tC, single (s)			5.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.7		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			552		70	860

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1
Volume Total	739	370	0	829	829	0
Volume Left	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.43	0.22	0.00	0.49	0.49	0.00
Queue Length 95th (ft)	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS						A
Approach Delay (s)	0.0		0.0			0.0
Approach LOS						A

Intersection Summary				
Average Delay	0.0			
Intersection Capacity Utilization	44.6%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	973	13	0	1597	0	1
Future Volume (Veh/h)	973	13	0	1597	0	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1081	14	0	1774	0	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)				612		
pX, platoon unblocked					0.63	
vC, conflicting volume			1095		1968	540
vC1, stage 1 conf vol					1081	
vC2, stage 2 conf vol					887	
vCu, unblocked vol			1095		1361	540
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			633		263	486

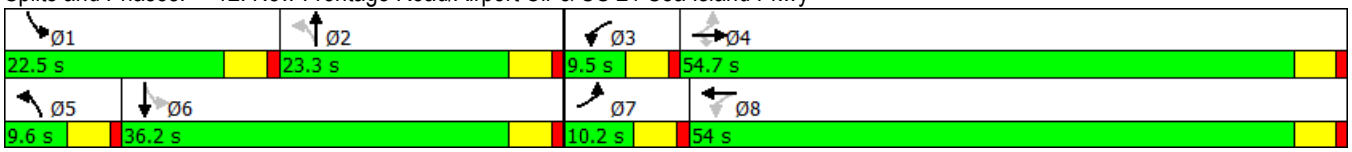
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	540	540	14	591	1183	1
Volume Left	0	0	0	0	0	0
Volume Right	0	0	14	0	0	1
cSH	1700	1700	1700	633	1700	486
Volume to Capacity	0.32	0.32	0.01	0.00	0.70	0.00
Queue Length 95th (ft)	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	12.4
Lane LOS						B
Approach Delay (s)	0.0			0.0		12.4
Approach LOS						B

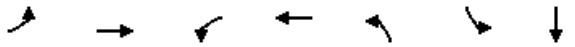
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	54.1%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	SBL	SBT	Ø2
Lane Configurations								
Traffic Volume (vph)	119	854	14	1423	50	60	0	
Future Volume (vph)	119	854	14	1423	50	60	0	
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	pm+pt	NA	
Protected Phases	7	4	3	8	5	1	6	2
Permitted Phases	4		8		2	6		
Detector Phase	7	4	3	8	5	1	6	
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	10.2	54.7	9.5	54.0	9.6	22.5	36.2	23.3
Total Split (%)	9.3%	49.7%	8.6%	49.1%	8.7%	20.5%	32.9%	21%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	Min
Act Effct Green (s)	59.0	57.9	54.5	49.5	10.6	17.3	10.5	
Actuated g/C Ratio	0.68	0.67	0.63	0.57	0.12	0.20	0.12	
v/c Ratio	0.74	0.41	0.04	0.80	0.30	0.26	0.42	
Control Delay	40.6	8.1	5.1	19.0	32.7	30.8	8.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	40.6	8.1	5.1	19.0	32.7	30.8	8.8	
LOS	D	A	A	B	C	C	A	
Approach Delay		12.1		18.9			16.0	
Approach LOS		B		B			B	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 86.9	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 16.4	Intersection LOS: B
Intersection Capacity Utilization 72.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 12: New Frontage Road/Airport Cir & US 21 Sea Island Pkwy

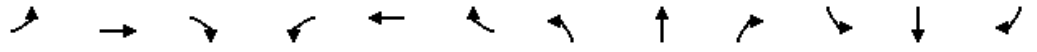




Lane Group	EBL	EBT	WBL	WBT	NBL	SBL	SBT
Lane Group Flow (vph)	132	949	15	1581	54	67	140
v/c Ratio	0.74	0.41	0.04	0.80	0.30	0.26	0.42
Control Delay	40.6	8.1	5.1	19.0	32.7	30.8	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.6	8.1	5.1	19.0	32.7	30.8	8.8
Queue Length 50th (ft)	27	101	2	333	24	30	0
Queue Length 95th (ft)	#129	207	9	463	55	65	41
Internal Link Dist (ft)		532		392			381
Turn Bay Length (ft)	375		75			250	
Base Capacity (vph)	178	2311	399	1977	182	374	679
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.41	0.04	0.80	0.30	0.18	0.21

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	119	854	0	14	1423	0	50	0	0	60	0	126
Future Volume (vph)	119	854	0	14	1423	0	50	0	0	60	0	126
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5			4.5	4.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00			1.00	1.00	
Frt	1.00	1.00		1.00	1.00		1.00			1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95			0.95	1.00	
Satd. Flow (prot)	1626	3471		1770	3471		1770			1770	1583	
Flt Permitted	0.07	1.00		0.28	1.00		0.67			0.46	1.00	
Satd. Flow (perm)	119	3471		522	3471		1244			860	1583	
Peak-hour factor, PHF	0.90	0.90	0.92	0.92	0.90	0.90	0.92	0.92	0.92	0.90	0.92	0.90
Adj. Flow (vph)	132	949	0	15	1581	0	54	0	0	67	0	140
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	124	0
Lane Group Flow (vph)	132	949	0	15	1581	0	54	0	0	67	16	0
Heavy Vehicles (%)	11%	4%	2%	2%	4%	2%	2%	2%	2%	2%	2%	2%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt			pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	63.4	57.9		54.2	53.2		10.5			18.7	10.5	
Effective Green, g (s)	63.4	57.9		54.2	53.2		10.5			18.7	10.5	
Actuated g/C Ratio	0.69	0.63		0.59	0.58		0.11			0.20	0.11	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5			4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0			3.0	3.0	
Lane Grp Cap (vph)	176	2196		322	2018		166			257	181	
v/s Ratio Prot	c0.05	0.27		0.00	0.46		0.01			c0.02	0.01	
v/s Ratio Perm	c0.47			0.03			0.02			c0.03		
v/c Ratio	0.75	0.43		0.05	0.78		0.33			0.26	0.09	
Uniform Delay, d1	17.8	8.5		7.7	14.7		37.0			30.2	36.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00			1.00	1.00	
Incremental Delay, d2	16.3	0.1		0.1	2.1		1.1			0.5	0.2	
Delay (s)	34.2	8.6		7.8	16.8		38.1			30.7	36.4	
Level of Service	C	A		A	B		D			C	D	
Approach Delay (s)		11.7			16.7			38.1			34.6	
Approach LOS		B			B			D			C	

Intersection Summary			
HCM 2000 Control Delay	16.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	91.5	Sum of lost time (s)	18.0
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	774	7	6	1399	15	2
Future Volume (Veh/h)	774	7	6	1399	15	2
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	860	8	7	1554	17	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)				1133		
pX, platoon unblocked					0.22	
vC, conflicting volume			868		2432	864
vC1, stage 1 conf vol					864	
vC2, stage 2 conf vol					1568	
vCu, unblocked vol			868		5798	864
tC, single (s)			4.1		6.5	6.2
tC, 2 stage (s)					5.5	
tF (s)			2.2		3.6	3.3
p0 queue free %			99		41	99
cM capacity (veh/h)			776		29	354

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	868	1561	19
Volume Left	0	7	17
Volume Right	8	0	2
cSH	1700	776	32
Volume to Capacity	0.51	0.01	0.60
Queue Length 95th (ft)	0	1	50
Control Delay (s)	0.0	1.1	224.7
Lane LOS		A	F
Approach Delay (s)	0.0	1.1	224.7
Approach LOS			F

Intersection Summary			
Average Delay	2.4		
Intersection Capacity Utilization	88.4%	ICU Level of Service	E
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	24	625	56	1241	152	4	16	2
Future Volume (vph)	24	625	56	1241	152	4	16	2
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	9.5	108.0	9.5	108.0	9.5	23.0	9.5	23.0
Total Split (%)	6.3%	72.0%	6.3%	72.0%	6.3%	15.3%	6.3%	15.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)		4.5	4.5	4.5		4.5		4.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	None	Max
Act Effct Green (s)		103.6	111.1	111.1		18.5		18.5
Actuated g/C Ratio		0.75	0.80	0.80		0.13		0.13
v/c Ratio		1.09	0.13	0.94		1.24		0.27
Control Delay		80.5	3.4	25.6		191.3		26.7
Queue Delay		0.0	0.0	0.0		0.0		0.0
Total Delay		80.5	3.4	25.6		191.3		26.7
LOS		F	A	C		F		C
Approach Delay		80.5		24.7		191.3		26.7
Approach LOS		F		C		F		C

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 138.6	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.24	
Intersection Signal Delay: 57.7	Intersection LOS: E
Intersection Capacity Utilization 90.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 14: Chowan Creek Bluff/Eustis Landing Rd & US 21 Sea Island Pkwy



Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	868	62	1379	223	61
v/c Ratio	1.09	0.13	0.94	1.24	0.27
Control Delay	80.5	3.4	25.6	191.3	26.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	80.5	3.4	25.6	191.3	26.7
Queue Length 50th (ft)	~902	10	841	~248	16
Queue Length 95th (ft)	#1160	18	#1487	#420	61
Internal Link Dist (ft)	1053		490	351	331
Turn Bay Length (ft)		290			
Base Capacity (vph)	793	493	1464	180	229
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.09	0.13	0.94	1.24	0.27

Intersection Summary

~ 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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	625	132	56	1241	0	152	4	45	16	2	37
Future Volume (vph)	24	625	132	56	1241	0	152	4	45	16	2	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5		4.5	4.5			4.5			4.5	
Lane Util. Factor		1.00		1.00	1.00			1.00			1.00	
Frt		0.98		1.00	1.00			0.97			0.91	
Flt Protected		1.00		0.95	1.00			0.96			0.99	
Satd. Flow (prot)		1776		1736	1827			1724			1532	
Flt Permitted		0.59		0.31	1.00			0.73			0.93	
Satd. Flow (perm)		1056		563	1827			1301			1447	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	27	694	147	62	1379	0	169	4	50	18	2	41
RTOR Reduction (vph)	0	5	0	0	0	0	0	7	0	0	36	0
Lane Group Flow (vph)	0	863	0	62	1379	0	0	216	0	0	25	0
Heavy Vehicles (%)	2%	5%	2%	4%	4%	2%	3%	2%	3%	8%	2%	13%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		103.6		112.0	112.0			18.5			18.5	
Effective Green, g (s)		103.6		112.0	112.0			18.5			18.5	
Actuated g/C Ratio		0.74		0.80	0.80			0.13			0.13	
Clearance Time (s)		4.5		4.5	4.5			4.5			4.5	
Vehicle Extension (s)		3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)		784		484	1466			172			191	
v/s Ratio Prot				0.00	c0.75							
v/s Ratio Perm		c0.82		0.10				c0.17			0.02	
v/c Ratio		1.10		0.13	0.94			1.26			0.13	
Uniform Delay, d1		18.0		4.0	11.1			60.5			53.4	
Progression Factor		1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2		63.5		0.1	12.1			153.8			0.3	
Delay (s)		81.4		4.1	23.2			214.3			53.7	
Level of Service		F		A	C			F			D	
Approach Delay (s)		81.4			22.4			214.3			53.7	
Approach LOS		F			C			F			D	

Intersection Summary			
HCM 2000 Control Delay	59.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	139.5	Sum of lost time (s)	18.0
Intersection Capacity Utilization	90.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	1	54	4	0	7	80	1065	22	34	1842	47
Future Volume (Veh/h)	22	1	54	4	0	7	80	1065	22	34	1842	47
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	24	1	60	4	0	8	89	1183	24	38	2047	52
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			TWLTL	
Median storage veh)											2	
Upstream signal (ft)											1063	
pX, platoon unblocked	0.52	0.52	0.52	0.52	0.52		0.52					
vC, conflicting volume	2900	3508	1024	2533	3548	604	2099			1207		
vC1, stage 1 conf vol	2123	2123		1373	1373							
vC2, stage 2 conf vol	778	1385		1160	2175							
vCu, unblocked vol	2809	3973	0	2105	4050	604	1274			1207		
tC, single (s)	7.6	8.5	6.9	7.5	6.5	6.9	4.2			4.1		
tC, 2 stage (s)	6.6	7.5		6.5	5.5							
tF (s)	3.6	5.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	65	95	89	96	100	98	68			93		
cM capacity (veh/h)	69	20	566	96	9	442	274			574		

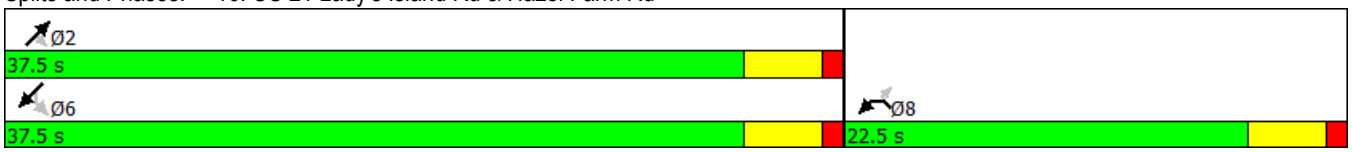
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	25	60	12	89	789	418	38	1024	1024	52
Volume Left	24	0	4	89	0	0	38	0	0	0
Volume Right	0	60	8	0	0	24	0	0	0	52
cSH	62	566	201	274	1700	1700	574	1700	1700	1700
Volume to Capacity	0.40	0.11	0.06	0.32	0.46	0.25	0.07	0.60	0.60	0.03
Queue Length 95th (ft)	38	9	5	34	0	0	5	0	0	0
Control Delay (s)	96.9	12.1	24.1	24.3	0.0	0.0	11.7	0.0	0.0	0.0
Lane LOS	F	B	C	C			B			
Approach Delay (s)	37.0		24.1	1.7			0.2			
Approach LOS	E		C							

Intersection Summary				
Average Delay	1.7			
Intersection Capacity Utilization	69.7%	ICU Level of Service	C	
Analysis Period (min)	15			

Lane Group	NWL	NWR	NET	NER	SWT
Lane Configurations					
Traffic Volume (vph)	371	1	842	260	1556
Future Volume (vph)	371	1	842	260	1556
Turn Type	Prot	Perm	NA	Perm	NA
Protected Phases	8		2		6
Permitted Phases		8		2	
Detector Phase	8	8	2	2	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5
Total Split (s)	22.5	22.5	37.5	37.5	37.5
Total Split (%)	37.5%	37.5%	62.5%	62.5%	62.5%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	None	None	Min
Act Effct Green (s)	16.4	16.4	32.1	32.1	32.1
Actuated g/C Ratio	0.28	0.28	0.56	0.56	0.56
v/c Ratio	0.82	0.00	0.47	0.34	0.88
Control Delay	34.8	12.0	8.9	2.3	18.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	34.8	12.0	8.9	2.3	18.3
LOS	C	B	A	A	B
Approach Delay	34.8		7.3		18.3
Approach LOS	C		A		B

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 57.6	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 16.4	Intersection LOS: B
Intersection Capacity Utilization 71.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 16: US 21 Lady's Island Rd & Hazel Farm Rd



Lane Group	NWL	NWR	NET	NER	SWT
Lane Group Flow (vph)	412	1	936	289	1729
v/c Ratio	0.82	0.00	0.47	0.34	0.88
Control Delay	34.8	12.0	8.9	2.3	18.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	34.8	12.0	8.9	2.3	18.3
Queue Length 50th (ft)	134	0	97	0	260
Queue Length 95th (ft)	#264	3	138	28	#434
Internal Link Dist (ft)	1323		983		904
Turn Bay Length (ft)		100		350	
Base Capacity (vph)	556	497	2037	866	2037
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.74	0.00	0.46	0.33	0.85

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	371	1	842	260	0	1556
Future Volume (vph)	371	1	842	260	0	1556
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5		4.5
Lane Util. Factor	1.00	1.00	0.95	1.00		0.95
Frt	1.00	0.85	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00	1.00		1.00
Satd. Flow (prot)	1770	1583	3539	1292		3539
Flt Permitted	0.95	1.00	1.00	1.00		1.00
Satd. Flow (perm)	1770	1583	3539	1292		3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	412	1	936	289	0	1729
RTOR Reduction (vph)	0	1	0	127	0	0
Lane Group Flow (vph)	412	0	936	162	0	1729
Heavy Vehicles (%)	2%	2%	2%	25%	2%	2%
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	8		2			6
Permitted Phases		8		2	6	
Actuated Green, G (s)	16.4	16.4	32.2	32.2		32.2
Effective Green, g (s)	16.4	16.4	32.2	32.2		32.2
Actuated g/C Ratio	0.28	0.28	0.56	0.56		0.56
Clearance Time (s)	4.5	4.5	4.5	4.5		4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	503	450	1978	722		1978
v/s Ratio Prot	c0.23		0.26			c0.49
v/s Ratio Perm		0.00		0.13		
v/c Ratio	0.82	0.00	0.47	0.22		0.87
Uniform Delay, d1	19.2	14.7	7.6	6.4		11.0
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	10.0	0.0	0.2	0.2		4.6
Delay (s)	29.3	14.7	7.8	6.6		15.6
Level of Service	C	B	A	A		B
Approach Delay (s)	29.2		7.5			15.6
Approach LOS	C		A			B

Intersection Summary			
HCM 2000 Control Delay	14.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	9.0
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	4	0	21	134	1	22	39	770	26	26	1409	63
Future Volume (Veh/h)	4	0	21	134	1	22	39	770	26	26	1409	63
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	4	0	23	149	1	24	43	856	29	29	1566	70
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)			5			5						
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)								984			1003	
pX, platoon unblocked	0.82	0.82	0.74	0.82	0.82	0.85	0.74			0.85		
vC, conflicting volume	2186	2630	818	1798	2650	442	1636			885		
vC1, stage 1 conf vol	1659	1659		956	956							
vC2, stage 2 conf vol	526	971		841	1694							
vCu, unblocked vol	1192	1736	65	718	1762	1	1165			520		
tC, single (s)	7.5	6.5	7.0	7.5	6.5	7.0	4.1			4.2		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.4	3.5	4.0	3.4	2.2			2.2		
p0 queue free %	97	100	97	55	99	97	90			97		
cM capacity (veh/h)	138	166	723	330	127	912	443			871		

Direction, Lane #	EB 1	WB 1	NE 1	NE 2	SW 1	SW 2	SW 3
Volume Total	27	174	471	457	29	1044	592
Volume Left	4	149	43	0	29	0	0
Volume Right	23	24	0	29	0	0	70
cSH	849	382	443	1700	871	1700	1700
Volume to Capacity	0.03	0.46	0.10	0.27	0.03	0.61	0.35
Queue Length 95th (ft)	2	58	8	0	3	0	0
Control Delay (s)	13.4	22.6	2.9	0.0	9.3	0.0	0.0
Lane LOS	B	C	A		A		
Approach Delay (s)	13.4	22.6	1.5		0.2		
Approach LOS	B	C					

Intersection Summary				
Average Delay	2.1			
Intersection Capacity Utilization	71.9%	ICU Level of Service	C	
Analysis Period (min)	15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	11	112	777	22	189	1715
Future Volume (Veh/h)	11	112	777	22	189	1715
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	12	124	863	24	210	1906
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2248	444			887	
vC1, stage 1 conf vol	875					
vC2, stage 2 conf vol	1373					
vCu, unblocked vol	2248	444			887	
tC, single (s)	7.2	6.9			4.2	
tC, 2 stage (s)	6.2					
tF (s)	3.7	3.3			2.2	
p0 queue free %	89	78			72	
cM capacity (veh/h)	110	562			747	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	136	575	312	210	953	953
Volume Left	12	0	0	210	0	0
Volume Right	124	0	24	0	0	0
cSH	412	1700	1700	747	1700	1700
Volume to Capacity	0.33	0.34	0.18	0.28	0.56	0.56
Queue Length 95th (ft)	35	0	0	29	0	0
Control Delay (s)	18.0	0.0	0.0	11.7	0.0	0.0
Lane LOS	C			B		
Approach Delay (s)	18.0	0.0		1.2		
Approach LOS	C					

Intersection Summary				
Average Delay	1.6			
Intersection Capacity Utilization	61.6%	ICU Level of Service		B
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	11	0	0	0	14	859	0	1	1930	7
Future Volume (Veh/h)	1	0	11	0	0	0	14	859	0	1	1930	7
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1	0	12	0	0	0	16	954	0	1	2144	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)											530	
pX, platoon unblocked	0.26	0.26	0.26	0.26	0.26		0.26					
vC, conflicting volume	2659	3136	1076	2072	3140	477	2152			954		
vC1, stage 1 conf vol	2150	2150		986	986							
vC2, stage 2 conf vol	509	986		1086	2154							
vCu, unblocked vol	1680	3526	0	0	3542	477	0			954		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	96	100	100	100	96			100		
cM capacity (veh/h)	221	172	280	245	164	534	419			716		

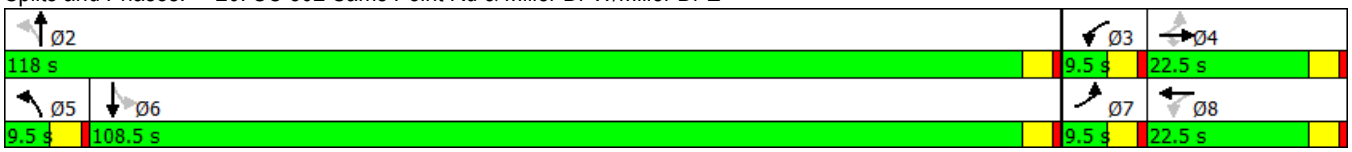
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	13	0	493	477	1073	1080
Volume Left	1	0	16	0	1	0
Volume Right	12	0	0	0	0	8
cSH	275	1700	419	1700	716	1700
Volume to Capacity	0.05	0.00	0.04	0.28	0.00	0.64
Queue Length 95th (ft)	4	0	3	0	0	0
Control Delay (s)	18.8	0.0	1.2	0.0	0.0	0.0
Lane LOS	C	A	A		A	
Approach Delay (s)	18.8	0.0	0.6		0.0	
Approach LOS	C	A				

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	64.3%	ICU Level of Service	C	
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	153	0	41	19	1	16	814	4	1835
Future Volume (vph)	153	0	41	19	1	16	814	4	1835
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	NA
Protected Phases	7	4		3	8	5	2		6
Permitted Phases	4		4	8		2		6	
Detector Phase	7	4	4	3	8	5	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	9.5	22.5	22.5	9.5	22.5	9.5	118.0	108.5	108.5
Total Split (%)	6.3%	15.0%	15.0%	6.3%	15.0%	6.3%	78.7%	72.3%	72.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	4.5		4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead		Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Recall Mode	None	None	None	None	None	None	Min	Min	Min
Act Effct Green (s)		17.2	17.2		17.2	107.8	107.8	104.2	104.2
Actuated g/C Ratio		0.13	0.13		0.13	0.80	0.80	0.78	0.78
v/c Ratio		0.97	0.18		0.20	0.16	0.33	0.01	1.01
Control Delay		116.9	4.8		48.8	5.8	3.9	4.5	34.4
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		116.9	4.8		48.8	5.8	3.9	4.5	34.4
LOS		F	A		D	A	A	A	C
Approach Delay		93.0			48.8		3.9		34.3
Approach LOS		F			D		A		C

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 134	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 30.2	Intersection LOS: C
Intersection Capacity Utilization 88.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 20: SC 802 Sams Point Rd & Miller Dr W/Miller Dr E



Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	170	46	28	18	931	4	2681
v/c Ratio	0.97	0.18	0.20	0.16	0.33	0.01	1.01
Control Delay	116.9	4.8	48.8	5.8	3.9	4.5	34.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	116.9	4.8	48.8	5.8	3.9	4.5	34.4
Queue Length 50th (ft)	144	0	17	3	96	1	933
Queue Length 95th (ft)	#309	13	51	7	117	4	#1522
Internal Link Dist (ft)	466		412		450		410
Turn Bay Length (ft)		100		230		265	
Base Capacity (vph)	185	270	144	112	2955	444	2666
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.92	0.17	0.19	0.16	0.32	0.01	1.01

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	153	0	41	19	1	5	16	814	24	4	1835	578
Future Volume (vph)	153	0	41	19	1	5	16	814	24	4	1835	578
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5		4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85		0.97		1.00	1.00		1.00	0.96	
Flt Protected		0.95	1.00		0.96		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1770	1524		1743		1671	3482		1770	3412	
Flt Permitted		0.74	1.00		0.57		0.04	1.00		0.31	1.00	
Satd. Flow (perm)		1377	1524		1038		65	3482		572	3412	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	170	0	46	21	1	6	18	904	27	4	2039	642
RTOR Reduction (vph)	0	0	40	0	5	0	0	1	0	0	15	0
Lane Group Flow (vph)	0	170	6	0	23	0	18	930	0	4	2666	0
Heavy Vehicles (%)	2%	2%	6%	2%	2%	2%	8%	3%	11%	2%	2%	2%
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA		Perm	NA	
Protected Phases	7	4		3	8		5	2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		17.2	17.2		17.2		110.6	110.6		104.2	104.2	
Effective Green, g (s)		17.2	17.2		17.2		110.6	110.6		104.2	104.2	
Actuated g/C Ratio		0.13	0.13		0.13		0.81	0.81		0.76	0.76	
Clearance Time (s)		4.5	4.5		4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		173	191		130		74	2815		435	2598	
v/s Ratio Prot							0.00	c0.27			c0.78	
v/s Ratio Perm		c0.12	0.00		0.02		0.19			0.01		
v/c Ratio		0.98	0.03		0.18		0.24	0.33		0.01	1.03	
Uniform Delay, d1		59.7	52.5		53.5		43.0	3.4		3.9	16.3	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		62.9	0.1		0.6		1.7	0.1		0.0	24.7	
Delay (s)		122.6	52.5		54.1		44.7	3.5		3.9	41.0	
Level of Service		F	D		D		D	A		A	D	
Approach Delay (s)		107.7			54.1			4.3			40.9	
Approach LOS		F			D			A			D	

Intersection Summary			
HCM 2000 Control Delay	35.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	136.8	Sum of lost time (s)	18.0
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↱		↑↑		↱
Traffic Volume (veh/h)	981	17	0	1569	0	10
Future Volume (Veh/h)	981	17	0	1569	0	10
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1066	18	0	1705	0	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			TWLTL		
Median storage veh)				2		
Upstream signal (ft)				897		
pX, platoon unblocked					0.63	
vC, conflicting volume			1084		1918	533
vC1, stage 1 conf vol					1066	
vC2, stage 2 conf vol					852	
vCu, unblocked vol			1084		1288	533
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	98
cM capacity (veh/h)			639		269	491

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	533	533	18	852	852	11
Volume Left	0	0	0	0	0	0
Volume Right	0	0	18	0	0	11
cSH	1700	1700	1700	1700	1700	491
Volume to Capacity	0.31	0.31	0.01	0.50	0.50	0.02
Queue Length 95th (ft)	0	0	0	0	0	2
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	12.5
Lane LOS						B
Approach Delay (s)	0.0			0.0		12.5
Approach LOS						B

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	145	769	1363	72	30	60
Future Volume (Veh/h)	145	769	1363	72	30	60
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	158	836	1482	78	33	65
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						7
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (ft)		472				
pX, platoon unblocked					0.88	
vC, conflicting volume	1560				2255	780
vC1, stage 1 conf vol					1521	
vC2, stage 2 conf vol					734	
vCu, unblocked vol	1560				2153	780
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	62				77	81
cM capacity (veh/h)	420				146	338

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	158	418	418	988	572	98
Volume Left	158	0	0	0	0	33
Volume Right	0	0	0	0	78	65
cSH	420	1700	1700	1700	1700	432
Volume to Capacity	0.38	0.25	0.25	0.58	0.34	0.23
Queue Length 95th (ft)	43	0	0	0	0	22
Control Delay (s)	18.7	0.0	0.0	0.0	0.0	24.4
Lane LOS	C					C
Approach Delay (s)	3.0			0.0		24.4
Approach LOS						C

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	61.3%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑↱			↱
Traffic Volume (veh/h)	0	799	1405	36	0	30
Future Volume (Veh/h)	0	799	1405	36	0	30
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	868	1527	39	0	33
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (ft)		911				
pX, platoon unblocked					0.89	
vC, conflicting volume	1566				1980	783
vC1, stage 1 conf vol					1546	
vC2, stage 2 conf vol					434	
vCu, unblocked vol	1566				1861	783
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	90
cM capacity (veh/h)	418				156	337

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	434	434	1018	548	33
Volume Left	0	0	0	0	0
Volume Right	0	0	0	39	33
cSH	1700	1700	1700	1700	337
Volume to Capacity	0.26	0.26	0.60	0.32	0.10
Queue Length 95th (ft)	0	0	0	0	8
Control Delay (s)	0.0	0.0	0.0	0.0	16.9
Lane LOS					C
Approach Delay (s)	0.0		0.0		16.9
Approach LOS					C

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	50.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1418	71	61	1061	2	63	1	69	1	0	1
Future Volume (Veh/h)	0	1418	71	61	1061	2	63	1	69	1	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	1576	79	68	1179	2	70	1	77	1	0	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	1181			1655			2932	2932	1616	3009	2971	1180
vC1, stage 1 conf vol							1616	1616		1316	1316	
vC2, stage 2 conf vol							1316	1317		1693	1655	
vCu, unblocked vol	1181			1655			2932	2932	1616	3009	2971	1180
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			83			27	99	40	65	100	100
cM capacity (veh/h)	591			390			96	117	128	3	77	232

Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1
Volume Total	1655	68	1181	148	2
Volume Left	0	68	0	70	1
Volume Right	79	0	2	77	1
cSH	591	390	1700	110	6
Volume to Capacity	0.00	0.17	0.69	1.34	0.36
Queue Length 95th (ft)	0	16	0	254	17
Control Delay (s)	0.0	16.2	0.0	274.4	855.8
Lane LOS		C		F	F
Approach Delay (s)	0.0	0.9		274.4	855.8
Approach LOS				F	F

Intersection Summary				
Average Delay	14.2			
Intersection Capacity Utilization	95.1%	ICU Level of Service		F
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	1481	19	0	1149	8	0	0	0	5	0	2
Future Volume (Veh/h)	2	1481	19	0	1149	8	0	0	0	5	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	1646	21	0	1277	9	0	0	0	6	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)					497							
pX, platoon unblocked	0.53						0.53	0.53		0.53	0.53	0.53
vC, conflicting volume	1286			1667			2934	2936	1646	2932	2952	1282
vC1, stage 1 conf vol							1650	1650		1282	1282	
vC2, stage 2 conf vol							1284	1286		1650	1671	
vCu, unblocked vol	1097			1667			4198	4203	1646	4195	4234	1089
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			100	100	100	93	100	99
cM capacity (veh/h)	338			385			84	100	123	85	100	139

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total	1648	21	1286	0	8
Volume Left	2	0	0	0	6
Volume Right	0	21	9	0	2
cSH	338	1700	1700	1700	94
Volume to Capacity	0.01	0.01	0.76	0.00	0.08
Queue Length 95th (ft)	0	0	0	0	7
Control Delay (s)	2.9	0.0	0.0	0.0	46.6
Lane LOS	A			A	E
Approach Delay (s)	2.9		0.0	0.0	46.6
Approach LOS				A	E

Intersection Summary				
Average Delay	1.8			
Intersection Capacity Utilization	89.5%	ICU Level of Service		E
Analysis Period (min)	15			

Lane Group	EBL	EBT	WBL	WBT	NEL	NET	SWL	SWT	SWR
Lane Configurations									
Traffic Volume (vph)	460	940	71	762	99	19	29	17	328
Future Volume (vph)	460	940	71	762	99	19	29	17	328
Turn Type	pm+pt	NA	pm+pt	NA	Perm	NA	Perm	NA	pm+ov
Protected Phases	5	2	1	6		4		8	5
Permitted Phases	2		6		4		8		8
Detector Phase	5	2	1	6	4	4	8	8	5
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5	9.5
Total Split (s)	31.0	77.8	9.6	56.4	22.6	22.6	22.6	22.6	31.0
Total Split (%)	28.2%	70.7%	8.7%	51.3%	20.5%	20.5%	20.5%	20.5%	28.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5		4.5		4.5	4.5
Lead/Lag	Lead	Lag	Lead	Lag					Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes					Yes
Recall Mode	None	Min	None	Min	None	None	None	None	None
Act Effct Green (s)	82.9	75.2	57.0	51.9		18.1		18.1	49.1
Actuated g/C Ratio	0.75	0.68	0.52	0.47		0.16		0.16	0.45
v/c Ratio	1.04	0.89	0.48	1.04		0.99		0.26	0.48
Control Delay	83.3	25.7	22.0	71.3		90.8		44.3	17.5
Queue Delay	0.0	47.0	0.0	0.0		0.0		0.0	0.0
Total Delay	83.3	72.6	22.0	71.3		90.8		44.3	17.5
LOS	F	E	C	E		F		D	B
Approach Delay		76.0		67.4		90.8		20.8	
Approach LOS		E		E		F		C	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.04	
Intersection Signal Delay: 67.7	Intersection LOS: E
Intersection Capacity Utilization 100.9%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 3: Driveway/Sunset Blvd & US 21 Sea Island Pkwy



Lane Group	EBL	EBT	WBL	WBT	NET	SWT	SWR
Lane Group Flow (vph)	511	1123	79	908	269	51	364
v/c Ratio	1.04	0.89	0.48	1.04	0.99	0.26	0.48
Control Delay	83.3	25.7	22.0	71.3	90.8	44.3	17.5
Queue Delay	0.0	47.0	0.0	0.0	0.0	0.0	0.0
Total Delay	83.3	72.6	22.0	71.3	90.8	44.3	17.5
Queue Length 50th (ft)	~339	609	12	~695	165	32	125
Queue Length 95th (ft)	#551	#1000	34	#942	#336	69	209
Internal Link Dist (ft)		417		641	61	384	
Turn Bay Length (ft)	215		150				150
Base Capacity (vph)	493	1261	166	872	273	194	762
Starvation Cap Reductn	0	242	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	1.04	1.10	0.48	1.04	0.99	0.26	0.48

Intersection Summary

~ 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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	460	940	71	71	762	55	99	19	124	29	17	328
Future Volume (vph)	460	940	71	71	762	55	99	19	124	29	17	328
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	12	12	12	16	12	12
Total Lost time (s)	4.5	4.5		4.5	4.5			4.5			4.5	4.5
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Frt	1.00	0.99		1.00	0.99			0.93			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	1.00
Satd. Flow (prot)	1770	1843		1703	1844			1690			1806	1583
Flt Permitted	0.07	1.00		0.10	1.00			0.84			0.64	1.00
Satd. Flow (perm)	130	1843		186	1844			1456			1183	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	511	1044	79	79	847	61	110	21	138	32	19	364
RTOR Reduction (vph)	0	2	0	0	2	0	0	34	0	0	0	60
Lane Group Flow (vph)	511	1121	0	79	906	0	0	235	0	0	51	304
Heavy Vehicles (%)	2%	2%	2%	6%	2%	2%	2%	2%	3%	2%	2%	2%
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	pm+ov
Protected Phases	5	2		1	6			4			8	5
Permitted Phases	2			6			4			8		8
Actuated Green, G (s)	83.8	75.2		56.9	52.8			18.1			18.1	44.6
Effective Green, g (s)	83.8	75.2		56.9	52.8			18.1			18.1	44.6
Actuated g/C Ratio	0.76	0.68		0.51	0.48			0.16			0.16	0.40
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	490	1249		151	877			237			193	700
v/s Ratio Prot	c0.25	0.61		0.02	0.49							0.10
v/s Ratio Perm	c0.54			0.25				c0.16			0.04	0.09
v/c Ratio	1.04	0.90		0.52	1.03			0.99			0.26	0.43
Uniform Delay, d1	36.4	14.7		19.4	29.1			46.3			40.6	24.0
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	52.3	8.7		3.2	39.2			55.6			0.7	0.4
Delay (s)	88.7	23.4		22.7	68.2			101.9			41.3	24.4
Level of Service	F	C		C	E			F			D	C
Approach Delay (s)		43.8			64.6			101.9			26.5	
Approach LOS		D			E			F			C	

Intersection Summary			
HCM 2000 Control Delay	52.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	110.9	Sum of lost time (s)	13.5
Intersection Capacity Utilization	100.9%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	4	1118	20	75	896	6	16	1	117	5	1	9
Future Volume (Veh/h)	4	1118	20	75	896	6	16	1	117	5	1	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	4	1242	22	83	996	7	18	1	130	6	1	10
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		TWLTL			None							
Median storage veh)		2										
Upstream signal (ft)		721										
pX, platoon unblocked				0.35			0.35	0.35	0.35	0.35	0.35	
vC, conflicting volume	1003			1264			2434	2430	1253	2557	2438	1000
vC1, stage 1 conf vol							1261	1261		1166	1166	
vC2, stage 2 conf vol							1172	1169		1392	1272	
vCu, unblocked vol	1003			823			4176	4166	792	4530	4188	1000
tC, single (s)	4.1			4.2			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)							6.1	5.5		6.1	5.5	
tF (s)	2.2			2.3			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			69			80	99	4	0	98	97
cM capacity (veh/h)	690			270			91	100	136	0	45	295

Direction, Lane #	EB 1	WB 1	WB 2	NE 1	SW 1
Volume Total	1268	83	1003	149	17
Volume Left	4	83	0	18	6
Volume Right	22	0	7	130	10
cSH	690	270	1700	128	0
Volume to Capacity	0.01	0.31	0.59	1.17	917.05
Queue Length 95th (ft)	0	32	0	223	Err
Control Delay (s)	0.3	24.2	0.0	197.9	Err
Lane LOS	A	C		F	F
Approach Delay (s)	0.3	1.8		197.9	Err
Approach LOS				F	F

Intersection Summary				
Average Delay	80.1			
Intersection Capacity Utilization	78.6%	ICU Level of Service		D
Analysis Period (min)	15			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	17	1263	945	39	44	54
Future Volume (Veh/h)	17	1263	945	39	44	54
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	19	1403	1050	43	49	60
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)			681			
pX, platoon unblocked	0.86				0.86	0.86
vC, conflicting volume	1093				1811	546
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	770				1609	130
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				38	92
cM capacity (veh/h)	719				79	765

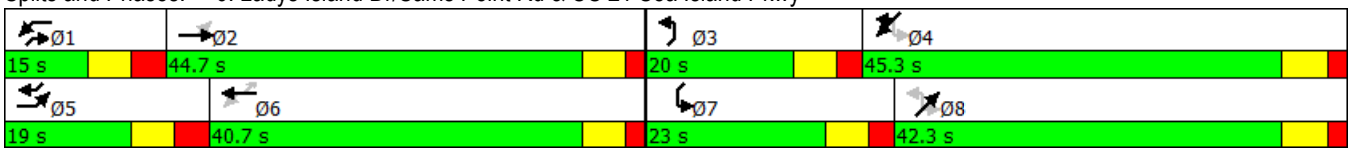
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1	SB 2
Volume Total	487	935	700	393	49	60
Volume Left	19	0	0	0	49	0
Volume Right	0	0	0	43	0	60
cSH	719	1700	1700	1700	79	765
Volume to Capacity	0.03	0.55	0.41	0.23	0.62	0.08
Queue Length 95th (ft)	2	0	0	0	70	6
Control Delay (s)	0.8	0.0	0.0	0.0	105.6	10.1
Lane LOS	A				F	B
Approach Delay (s)	0.3		0.0		53.0	
Approach LOS					F	

Intersection Summary			
Average Delay	2.3		
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations											
Traffic Volume (vph)	325	774	160	546	253	198	922	241	325	575	254
Future Volume (vph)	325	774	160	546	253	198	922	241	325	575	254
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	pt+ov
Protected Phases	5	2	1	6		3	8	1	7	4	4 5
Permitted Phases	2		6		6	8		8	4		
Detector Phase	5	2	1	6	6	3	8	1	7	4	4 5
Switch Phase											
Minimum Initial (s)	6.0	25.0	6.0	25.0	25.0	6.0	15.0	6.0	6.0	15.0	
Minimum Split (s)	13.3	43.0	13.3	39.0	39.0	12.3	42.3	13.3	13.3	43.3	
Total Split (s)	19.0	44.7	15.0	40.7	40.7	20.0	42.3	15.0	23.0	45.3	
Total Split (%)	15.2%	35.8%	12.0%	32.6%	32.6%	16.0%	33.8%	12.0%	18.4%	36.2%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.3	4.0	4.0	4.3	
All-Red Time (s)	3.3	2.0	3.3	2.0	2.0	2.3	2.0	3.3	2.3	2.0	
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)	7.3	6.0	7.3	6.0	6.0	6.3	6.3	7.3	6.3	6.3	
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Min	None	Max	Max	None	None	None	None	Max	
Act Effct Green (s)	49.1	38.7	41.1	34.7	34.7	48.8	36.0	50.0	56.5	39.9	58.9
Actuated g/C Ratio	0.39	0.31	0.33	0.28	0.28	0.39	0.29	0.40	0.45	0.32	0.47
v/c Ratio	1.23	0.99	1.09	0.62	0.44	0.64	1.00	0.39	1.24	0.57	0.35
Control Delay	157.0	67.6	124.6	42.6	6.9	30.0	73.8	20.1	164.2	37.9	13.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	157.0	67.6	124.6	42.6	6.9	30.0	73.8	20.1	164.2	37.9	13.4
LOS	F	E	F	D	A	C	E	C	F	D	B
Approach Delay		90.1		46.9			57.9			68.1	
Approach LOS		F		D			E			E	

Intersection Summary	
Cycle Length: 125	
Actuated Cycle Length: 125	
Natural Cycle: 145	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.24	
Intersection Signal Delay: 66.9	Intersection LOS: E
Intersection Capacity Utilization 103.9%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 6: Ladys Island Dr/Sams Point Rd & US 21 Sea Island Pkwy



Lane Group	EBL	EBT	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Group Flow (vph)	361	1071	178	607	281	220	1024	268	361	639	282
v/c Ratio	1.23	0.99	1.09	0.62	0.44	0.64	1.00	0.39	1.24	0.57	0.35
Control Delay	157.0	67.6	124.6	42.6	6.9	30.0	73.8	20.1	164.2	37.9	13.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	157.0	67.6	124.6	42.6	6.9	30.0	73.8	20.1	164.2	37.9	13.4
Queue Length 50th (ft)	~247	445	~111	225	5	105	~440	104	~314	227	80
Queue Length 95th (ft)	#446	#599	#262	289	73	161	#588	178	#510	290	146
Internal Link Dist (ft)		376		679			587			517	
Turn Bay Length (ft)	200		350		200	350		550	460		350
Base Capacity (vph)	294	1080	164	982	636	356	1019	681	292	1129	806
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.23	0.99	1.09	0.62	0.44	0.62	1.00	0.39	1.24	0.57	0.35

Intersection Summary

~ 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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	325	774	190	160	546	253	198	922	241	325	575	254
Future Volume (vph)	325	774	190	160	546	253	198	922	241	325	575	254
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.3	6.0		7.3	6.0	6.0	6.3	6.3	7.3	6.3	6.3	6.3
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3435		1752	3539	1583	1770	3539	1583	1752	3539	1583
Flt Permitted	0.23	1.00		0.12	1.00	1.00	0.30	1.00	1.00	0.10	1.00	1.00
Satd. Flow (perm)	431	3435		213	3539	1583	564	3539	1583	185	3539	1583
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	361	860	211	178	607	281	220	1024	268	361	639	282
RTOR Reduction (vph)	0	17	0	0	0	197	0	0	53	0	0	62
Lane Group Flow (vph)	361	1054	0	178	607	84	220	1024	215	361	639	220
Heavy Vehicles (%)	2%	2%	2%	3%	2%	2%	2%	2%	2%	3%	2%	2%
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	pt+ov
Protected Phases	5	2		1	6		3	8	1	7	4	4 5
Permitted Phases	2			6		6	8		8	4		
Actuated Green, G (s)	50.4	38.7		42.4	34.7	34.7	48.8	36.0	43.7	56.6	39.9	57.9
Effective Green, g (s)	50.4	38.7		42.4	34.7	34.7	48.8	36.0	43.7	56.6	39.9	57.9
Actuated g/C Ratio	0.40	0.31		0.34	0.28	0.28	0.39	0.29	0.35	0.45	0.32	0.46
Clearance Time (s)	7.3	6.0		7.3	6.0	6.0	6.3	6.3	7.3	6.3	6.3	
Vehicle Extension (s)	3.0	3.5		3.0	3.5	3.5	3.0	3.5	3.0	3.0	3.5	
Lane Grp Cap (vph)	299	1063		167	982	439	343	1019	553	293	1129	733
v/s Ratio Prot	c0.11	0.31		0.07	0.17		0.07	0.29	0.02	c0.16	c0.18	0.14
v/s Ratio Perm	c0.37			0.30		0.05	0.18		0.11	c0.39		
v/c Ratio	1.21	0.99		1.07	0.62	0.19	0.64	1.00	0.39	1.23	0.57	0.30
Uniform Delay, d1	33.1	43.0		36.6	39.4	34.4	27.0	44.5	30.6	38.3	35.4	20.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	120.5	25.4		88.2	2.9	1.0	4.1	29.4	0.5	130.5	2.1	0.2
Delay (s)	153.5	68.4		124.9	42.3	35.4	31.1	73.9	31.1	168.8	37.4	21.1
Level of Service	F	E		F	D	D	C	E	C	F	D	C
Approach Delay (s)		89.9			54.3			60.1			70.8	
Approach LOS		F			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	69.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.31		
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	25.9
Intersection Capacity Utilization	103.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	221	1017	39	39	778	56	12	14	72	55	2	133
Future Volume (Veh/h)	221	1017	39	39	778	56	12	14	72	55	2	133
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	246	1130	43	43	864	62	13	16	80	61	2	148
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												10
Median type		None			TWLTL							
Median storage veh)					2							
Upstream signal (ft)		759			853							
pX, platoon unblocked	0.91			0.76			0.80	0.80	0.76	0.80	0.80	0.91
vC, conflicting volume	926			1173			2162	2656	586	2126	2646	463
vC1, stage 1 conf vol							1644	1644		981	981	
vC2, stage 2 conf vol							519	1012		1145	1665	
vCu, unblocked vol	724			583			1453	2070	0	1408	2058	215
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	69			94			86	79	90	57	98	79
cM capacity (veh/h)	797			747			95	75	819	143	83	719

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1
Volume Total	246	753	420	43	576	350	29	80	211
Volume Left	246	0	0	43	0	0	13	0	61
Volume Right	0	0	43	0	0	62	0	80	148
cSH	797	1700	1700	747	1700	1700	83	819	471
Volume to Capacity	0.31	0.44	0.25	0.06	0.34	0.21	0.35	0.10	0.45
Queue Length 95th (ft)	33	0	0	5	0	0	34	8	57
Control Delay (s)	11.5	0.0	0.0	10.1	0.0	0.0	69.9	9.9	22.8
Lane LOS	B			B			F	A	C
Approach Delay (s)	2.0			0.4			25.8		22.8
Approach LOS							D		C

Intersection Summary				
Average Delay	4.0			
Intersection Capacity Utilization	55.4%	ICU Level of Service		B
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	1061	11	0	806	70	4	4	25	127	1	57
Future Volume (Veh/h)	86	1061	11	0	806	70	4	4	25	127	1	57
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	96	1179	12	0	896	78	4	4	28	141	1	63
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									14			
Median type		TWLTL			TWLTL							
Median storage veh)		2			2							
Upstream signal (ft)		1208			404							
pX, platoon unblocked	0.88						0.88	0.88		0.88	0.88	0.88
vC, conflicting volume	974			1191			1888	2351	596	1718	2318	487
vC1, stage 1 conf vol							1377	1377		935	935	
vC2, stage 2 conf vol							512	974		784	1383	
vCu, unblocked vol	707			1191			1742	2266	596	1550	2228	156
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)							6.5	5.5		6.5	5.5	
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	88			100			97	97	94	37	99	92
cM capacity (veh/h)	784			582			128	153	447	225	164	761

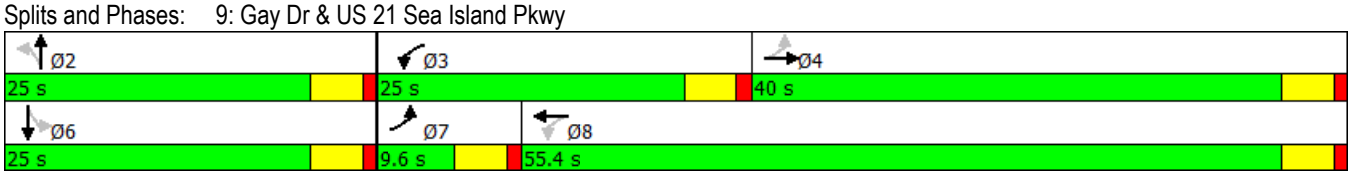
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1	SB 2
Volume Total	96	786	405	0	597	377	36	142	63
Volume Left	96	0	0	0	0	0	4	141	0
Volume Right	0	0	12	0	0	78	28	0	63
cSH	784	1700	1700	1700	1700	1700	575	224	761
Volume to Capacity	0.12	0.46	0.24	0.00	0.35	0.22	0.06	0.63	0.08
Queue Length 95th (ft)	10	0	0	0	0	0	5	95	7
Control Delay (s)	10.2	0.0	0.0	0.0	0.0	0.0	17.7	45.2	10.2
Lane LOS	B						C	E	B
Approach Delay (s)	0.8			0.0			17.7	34.4	
Approach LOS							C	D	

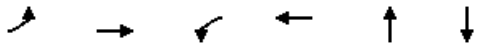
Intersection Summary				
Average Delay	3.5			
Intersection Capacity Utilization	56.8%	ICU Level of Service		B
Analysis Period (min)	15			

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	9	1214	393	868	18	0	6	0
Future Volume (vph)	9	1214	393	868	18	0	6	0
Turn Type	pm+pt	NA	pm+pt	NA	Perm	NA	Perm	NA
Protected Phases	7	4	3	8		2		6
Permitted Phases	4		8		2		6	
Detector Phase	7	4	3	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	9.6	40.0	25.0	55.4	25.0	25.0	25.0	25.0
Total Split (%)	10.7%	44.4%	27.8%	61.6%	27.8%	27.8%	27.8%	27.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5		4.5		4.5
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	Min	Min	Min	Min
Act Effct Green (s)	39.8	34.6	57.7	56.0		11.3		11.3
Actuated g/C Ratio	0.51	0.44	0.74	0.72		0.14		0.14
v/c Ratio	0.03	0.87	0.87	0.38		0.81		0.12
Control Delay	6.7	28.8	39.3	6.3		20.6		0.8
Queue Delay	0.0	0.0	0.0	0.0		0.0		0.0
Total Delay	6.7	28.8	39.3	6.3		20.6		0.8
LOS	A	C	D	A		C		A
Approach Delay		28.6		16.6		20.6		0.8
Approach LOS		C		B		C		A

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 78.1	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 22.0	Intersection LOS: C
Intersection Capacity Utilization 92.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 9: Gay Dr & US 21 Sea Island Pkwy





Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	10	1357	437	966	428	37
v/c Ratio	0.03	0.87	0.87	0.38	0.81	0.12
Control Delay	6.7	28.8	39.3	6.3	20.6	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.7	28.8	39.3	6.3	20.6	0.8
Queue Length 50th (ft)	1	309	152	65	38	0
Queue Length 95th (ft)	7	#548	#372	208	139	0
Internal Link Dist (ft)		324		647	1158	269
Turn Bay Length (ft)	150		250			
Base Capacity (vph)	361	1635	554	2579	679	449
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	0.03	0.83	0.79	0.37	0.63	0.08

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	1214	7	393	868	2	18	0	367	6	0	27
Future Volume (vph)	9	1214	7	393	868	2	18	0	367	6	0	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.87			0.89	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1770	3536		1770	3538			1619			1643	
Flt Permitted	0.30	1.00		0.09	1.00			0.98			0.80	
Satd. Flow (perm)	552	3536		174	3538			1597			1332	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	10	1349	8	437	964	2	20	0	408	7	0	30
RTOR Reduction (vph)	0	1	0	0	0	0	0	298	0	0	32	0
Lane Group Flow (vph)	10	1356	0	437	966	0	0	130	0	0	5	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	39.3	38.4		61.4	56.0			11.3			11.3	
Effective Green, g (s)	39.3	38.4		61.4	56.0			11.3			11.3	
Actuated g/C Ratio	0.48	0.47		0.75	0.69			0.14			0.14	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	278	1661		492	2425			220			184	
v/s Ratio Prot	0.00	0.38		c0.20	0.27							
v/s Ratio Perm	0.02			c0.47				c0.08			0.00	
v/c Ratio	0.04	0.82		0.89	0.40			0.59			0.03	
Uniform Delay, d1	11.2	18.6		23.0	5.6			33.0			30.4	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	3.2		17.4	0.1			4.2			0.1	
Delay (s)	11.3	21.9		40.4	5.7			37.2			30.5	
Level of Service	B	C		D	A			D			C	
Approach Delay (s)		21.8			16.5			37.2			30.5	
Approach LOS		C			B			D			C	

Intersection Summary			
HCM 2000 Control Delay	21.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	81.7	Sum of lost time (s)	13.5
Intersection Capacity Utilization	92.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1558	0	0	1222	0	0
Future Volume (Veh/h)	1558	0	0	1222	0	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1731	0	0	1358	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	727					
pX, platoon unblocked			0.66		0.66	0.66
vC, conflicting volume			1731		2410	866
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1073		2104	0
tC, single (s)			4.1		6.8	7.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.8
p0 queue free %			100		100	100
cM capacity (veh/h)			425		29	624

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1
Volume Total	1154	577	0	679	679	0
Volume Left	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.68	0.34	0.00	0.40	0.40	0.00
Queue Length 95th (ft)	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS						A
Approach Delay (s)	0.0		0.0			0.0
Approach LOS						A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	46.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↱		↑↑		↱
Traffic Volume (veh/h)	1546	24	0	1222	0	6
Future Volume (Veh/h)	1546	24	0	1222	0	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1718	27	0	1358	0	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)				612		
pX, platoon unblocked					0.71	
vC, conflicting volume			1745		2397	859
vC1, stage 1 conf vol					1718	
vC2, stage 2 conf vol					679	
vCu, unblocked vol			1745		2154	859
tC, single (s)			4.1		7.0	6.9
tC, 2 stage (s)					6.0	
tF (s)			2.2		3.6	3.3
p0 queue free %			100		100	98
cM capacity (veh/h)			356		115	300

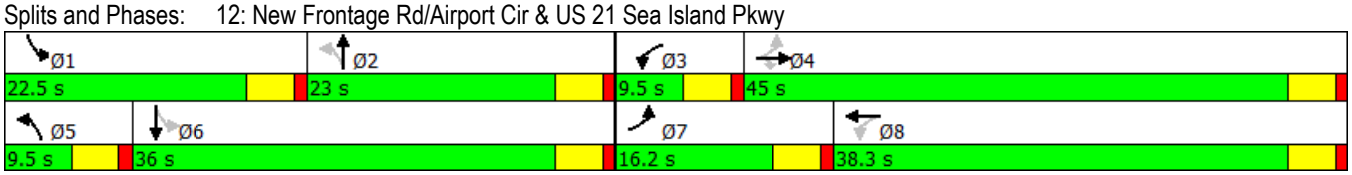
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	859	859	27	679	679	7
Volume Left	0	0	0	0	0	0
Volume Right	0	0	27	0	0	7
cSH	1700	1700	1700	1700	1700	300
Volume to Capacity	0.51	0.51	0.02	0.40	0.40	0.02
Queue Length 95th (ft)	0	0	0	0	0	2
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	17.3
Lane LOS						C
Approach Delay (s)	0.0			0.0		17.3
Approach LOS						C

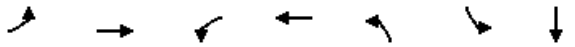
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	52.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	SBL	SBT	Ø2
Lane Configurations								
Traffic Volume (vph)	249	1283	9	1027	26	207	0	
Future Volume (vph)	249	1283	9	1027	26	207	0	
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	pm+pt	NA	
Protected Phases	7	4	3	8	5	1	6	2
Permitted Phases	4		8		2	6		
Detector Phase	7	4	3	8	5	1	6	
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	22.5	22.5
Total Split (s)	16.2	45.0	9.5	38.3	9.5	22.5	36.0	23.0
Total Split (%)	16.2%	45.0%	9.5%	38.3%	9.5%	22.5%	36.0%	23%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	Min	Min
Act Effct Green (s)	48.6	46.8	37.3	32.3	10.5	24.0	20.4	
Actuated g/C Ratio	0.60	0.57	0.46	0.40	0.13	0.29	0.25	
v/c Ratio	0.82	0.70	0.05	0.82	0.15	0.55	0.34	
Control Delay	40.1	16.3	9.0	28.2	24.2	29.2	2.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	40.1	16.3	9.0	28.2	24.2	29.2	2.9	
LOS	D	B	A	C	C	C	A	
Approach Delay		20.2		28.0			16.8	
Approach LOS		C		C			B	

Intersection Summary	
Cycle Length: 100	
Actuated Cycle Length: 81.6	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 22.5	Intersection LOS: C
Intersection Capacity Utilization 72.9%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 12: New Frontage Rd/Airport Cir & US 21 Sea Island Pkwy





Lane Group	EBL	EBT	WBL	WBT	NBL	SBL	SBT
Lane Group Flow (vph)	277	1426	10	1142	28	230	206
v/c Ratio	0.82	0.70	0.05	0.82	0.15	0.55	0.34
Control Delay	40.1	16.3	9.0	28.2	24.2	29.2	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.1	16.3	9.0	28.2	24.2	29.2	2.9
Queue Length 50th (ft)	92	238	2	268	11	97	0
Queue Length 95th (ft)	#240	454	9	376	29	161	21
Internal Link Dist (ft)		532		413			381
Turn Bay Length (ft)	375		75			250	
Base Capacity (vph)	338	2029	193	1472	188	458	782
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.70	0.05	0.78	0.15	0.50	0.26

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	249	1283	0	9	1027	1	26	0	0	207	0	185
Future Volume (vph)	249	1283	0	9	1027	1	26	0	0	207	0	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5			4.5	4.5	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00			1.00	1.00	
Frt	1.00	1.00		1.00	1.00		1.00			1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95			0.95	1.00	
Satd. Flow (prot)	1770	3539		1770	3539		1770			1770	1583	
Flt Permitted	0.10	1.00		0.11	1.00		0.63			0.49	1.00	
Satd. Flow (perm)	184	3539		212	3539		1171			918	1583	
Peak-hour factor, PHF	0.90	0.90	0.92	0.92	0.90	0.90	0.92	0.92	0.92	0.90	0.92	0.90
Adj. Flow (vph)	277	1426	0	10	1141	1	28	0	0	230	0	206
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	158	0
Lane Group Flow (vph)	277	1426	0	10	1142	0	28	0	0	230	48	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA		pm+pt			pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	52.2	46.8		36.8	35.9		10.3			26.8	20.4	
Effective Green, g (s)	52.2	46.8		36.8	35.9		10.3			26.8	20.4	
Actuated g/C Ratio	0.59	0.53		0.42	0.41		0.12			0.30	0.23	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5			4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0			3.0	3.0	
Lane Grp Cap (vph)	321	1882		104	1443		149			414	366	
v/s Ratio Prot	c0.12	0.40		0.00	0.32		0.00			c0.09	0.03	
v/s Ratio Perm	c0.39			0.04			0.02			c0.08		
v/c Ratio	0.86	0.76		0.10	0.79		0.19			0.56	0.13	
Uniform Delay, d1	22.4	16.2		16.1	22.8		34.9			24.6	26.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00			1.00	1.00	
Incremental Delay, d2	20.5	1.8		0.4	3.1		0.6			1.6	0.2	
Delay (s)	43.0	17.9		16.5	25.8		35.5			26.2	26.9	
Level of Service	D	B		B	C		D			C	C	
Approach Delay (s)		22.0			25.7			35.5			26.6	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	24.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	88.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1329	12	4	980	9	6
Future Volume (Veh/h)	1329	12	4	980	9	6
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1477	13	4	1089	10	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	TWLTL			TWLTL		
Median storage veh)	2			2		
Upstream signal (ft)				1133		
pX, platoon unblocked					0.23	
vC, conflicting volume			1490		2580	1484
vC1, stage 1 conf vol					1484	
vC2, stage 2 conf vol					1097	
vCu, unblocked vol			1490		6139	1484
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)					5.4	
tF (s)			2.2		3.5	3.3
p0 queue free %			99		93	95
cM capacity (veh/h)			451		144	153

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total	1490	1093	17
Volume Left	0	4	10
Volume Right	13	0	7
cSH	1700	451	148
Volume to Capacity	0.88	0.01	0.12
Queue Length 95th (ft)	0	1	10
Control Delay (s)	0.0	0.4	32.6
Lane LOS		A	D
Approach Delay (s)	0.0	0.4	32.6
Approach LOS			D

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	80.7%	ICU Level of Service	D
Analysis Period (min)	15		

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	50	1248	6	920	59	0	16	2
Future Volume (vph)	50	1248	6	920	59	0	16	2
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8		2		6	
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	9.5	22.5	9.5	22.5	9.5	22.5
Total Split (s)	9.5	108.0	9.5	108.0	9.5	23.0	9.5	23.0
Total Split (%)	6.3%	72.0%	6.3%	72.0%	6.3%	15.3%	6.3%	15.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0		0.0
Total Lost Time (s)		4.5	4.5	4.5		4.5		4.5
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	None	Max
Act Effct Green (s)		103.6	105.4	105.4		18.5		18.5
Actuated g/C Ratio		0.78	0.79	0.79		0.14		0.14
v/c Ratio		1.19	0.02	0.69		0.34		0.20
Control Delay		111.6	3.0	9.3		30.5		29.5
Queue Delay		0.0	0.0	0.0		0.0		0.0
Total Delay		111.6	3.0	9.3		30.5		29.5
LOS		F	A	A		C		C
Approach Delay		111.6		9.3		30.5		29.5
Approach LOS		F		A		C		C

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 132.9	
Natural Cycle: 150	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.19	
Intersection Signal Delay: 68.2	Intersection LOS: E
Intersection Capacity Utilization 125.5%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 14: Chowan Creek Bluff/Eustis Landing Rd & US 21 Sea Island Pkwy



Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	1510	7	1024	78	48
v/c Ratio	1.19	0.02	0.69	0.34	0.20
Control Delay	111.6	3.0	9.3	30.5	29.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	111.6	3.0	9.3	30.5	29.5
Queue Length 50th (ft)	~1534	1	340	26	15
Queue Length 95th (ft)	#2004	4	460	81	56
Internal Link Dist (ft)	1053		490	351	331
Turn Bay Length (ft)		290			
Base Capacity (vph)	1270	301	1476	228	237
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.19	0.02	0.69	0.34	0.20

Intersection Summary

~ 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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	1248	60	6	920	2	59	0	11	16	2	25
Future Volume (vph)	50	1248	60	6	920	2	59	0	11	16	2	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5		4.5	4.5			4.5			4.5	
Lane Util. Factor		1.00		1.00	1.00			1.00			1.00	
Frt		0.99		1.00	1.00			0.98			0.92	
Flt Protected		1.00		0.95	1.00			0.96			0.98	
Satd. Flow (prot)		1840		1770	1862			1750			1684	
Flt Permitted		0.88		0.17	1.00			0.75			0.89	
Satd. Flow (perm)		1627		311	1862			1370			1532	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	56	1387	67	7	1022	2	66	0	12	18	2	28
RTOR Reduction (vph)	0	1	0	0	0	0	0	38	0	0	24	0
Lane Group Flow (vph)	0	1509	0	7	1024	0	0	40	0	0	24	0
Heavy Vehicles (%)	13%	2%	3%	2%	2%	2%	2%	7%	2%	2%	2%	2%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		103.6		109.0	109.0			18.5			18.5	
Effective Green, g (s)		103.6		109.0	109.0			18.5			18.5	
Actuated g/C Ratio		0.76		0.80	0.80			0.14			0.14	
Clearance Time (s)		4.5		4.5	4.5			4.5			4.5	
Vehicle Extension (s)		3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)		1234		257	1486			185			207	
v/s Ratio Prot				0.00	c0.55							
v/s Ratio Perm		c0.93		0.02				c0.03			0.02	
v/c Ratio		1.22		0.03	0.69			0.22			0.11	
Uniform Delay, d1		16.5		4.9	6.2			52.5			51.8	
Progression Factor		1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2		107.7		0.0	1.4			0.6			0.2	
Delay (s)		124.2		4.9	7.5			53.1			52.1	
Level of Service		F		A	A			D			D	
Approach Delay (s)		124.2			7.5			53.1			52.1	
Approach LOS		F			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	75.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	136.5	Sum of lost time (s)	18.0
Intersection Capacity Utilization	125.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	1	70	16	1	42	49	1786	15	17	1478	29
Future Volume (Veh/h)	37	1	70	16	1	42	49	1786	15	17	1478	29
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	41	1	78	18	1	47	54	1984	17	19	1642	32
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			TWLTL	
Median storage veh)											2	
Upstream signal (ft)											1063	
pX, platoon unblocked	0.74	0.74	0.74	0.74	0.74		0.74					
vC, conflicting volume	2828	3789	821	3038	3812	1000	1674			2001		
vC1, stage 1 conf vol	1680	1680		2100	2100							
vC2, stage 2 conf vol	1148	2109		938	1712							
vCu, unblocked vol	2766	4071	42	3052	4103	1000	1200			2001		
tC, single (s)	7.6	6.5	6.9	7.5	6.5	6.9	4.2			4.1		
tC, 2 stage (s)	6.6	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	52	98	90	60	98	81	87			93		
cM capacity (veh/h)	85	54	751	45	61	241	413			283		

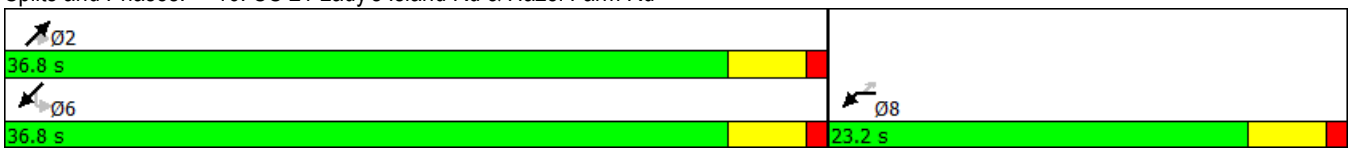
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	42	78	66	54	1323	678	19	821	821	32
Volume Left	41	0	18	54	0	0	19	0	0	0
Volume Right	0	78	47	0	0	17	0	0	0	32
cSH	84	751	107	413	1700	1700	283	1700	1700	1700
Volume to Capacity	0.50	0.10	0.61	0.13	0.78	0.40	0.07	0.48	0.48	0.02
Queue Length 95th (ft)	53	9	76	11	0	0	5	0	0	0
Control Delay (s)	84.2	10.3	81.4	15.0	0.0	0.0	18.7	0.0	0.0	0.0
Lane LOS	F	B	F	C			C			
Approach Delay (s)	36.2		81.4	0.4			0.2			
Approach LOS	E		F							

Intersection Summary					
Average Delay	2.8				
Intersection Capacity Utilization	66.7%	ICU Level of Service		C	
Analysis Period (min)	15				

Lane Group	WBL	NET	NER	SWL	SWT
Lane Configurations					
Traffic Volume (vph)	384	1503	361	1	1153
Future Volume (vph)	384	1503	361	1	1153
Turn Type	Prot	NA	Perm	Perm	NA
Protected Phases	8	2			6
Permitted Phases			2	6	
Detector Phase	8	2	2	6	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5
Total Split (s)	23.2	36.8	36.8	36.8	36.8
Total Split (%)	38.7%	61.3%	61.3%	61.3%	61.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	None	Min	Min
Act Effct Green (s)	17.0	31.5	31.5	31.5	31.5
Actuated g/C Ratio	0.30	0.55	0.55	0.55	0.55
v/c Ratio	0.82	0.86	0.38	0.01	0.66
Control Delay	34.1	18.0	2.1	7.0	11.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	34.1	18.0	2.1	7.0	11.6
LOS	C	B	A	A	B
Approach Delay	34.1	14.9			11.6
Approach LOS	C	B			B

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 57.5	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 15.9	Intersection LOS: B
Intersection Capacity Utilization 70.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 16: US 21 Lady's Island Rd & Hazel Farm Rd



Lane Group	WBL	NET	NER	SWL	SWT
Lane Group Flow (vph)	427	1670	401	1	1281
v/c Ratio	0.82	0.86	0.38	0.01	0.66
Control Delay	34.1	18.0	2.1	7.0	11.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	34.1	18.0	2.1	7.0	11.6
Queue Length 50th (ft)	138	251	0	0	160
Queue Length 95th (ft)	#269	#382	32	2	222
Internal Link Dist (ft)	1308	983			904
Turn Bay Length (ft)			350	150	
Base Capacity (vph)	578	1999	1068	133	1999
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.74	0.84	0.38	0.01	0.64

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	384	0	1503	361	1	1153
Future Volume (vph)	384	0	1503	361	1	1153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5	4.5	4.5	4.5
Lane Util. Factor	1.00		0.95	1.00	1.00	0.95
Frt	1.00		1.00	0.85	1.00	1.00
Flt Protected	0.95		1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770		3539	1583	1770	3539
Flt Permitted	0.95		1.00	1.00	0.13	1.00
Satd. Flow (perm)	1770		3539	1583	237	3539
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	427	0	1670	401	1	1281
RTOR Reduction (vph)	0	0	0	181	0	0
Lane Group Flow (vph)	427	0	1670	220	1	1281
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	8		2			6
Permitted Phases		8		2	6	
Actuated Green, G (s)	17.0		31.5	31.5	31.5	31.5
Effective Green, g (s)	17.0		31.5	31.5	31.5	31.5
Actuated g/C Ratio	0.30		0.55	0.55	0.55	0.55
Clearance Time (s)	4.5		4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	523		1938	867	129	1938
v/s Ratio Prot	c0.24		c0.47			0.36
v/s Ratio Perm				0.14	0.00	
v/c Ratio	0.82		0.86	0.25	0.01	0.66
Uniform Delay, d1	18.8		11.1	6.8	5.9	9.2
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	9.6		4.2	0.2	0.0	0.9
Delay (s)	28.4		15.3	7.0	5.9	10.1
Level of Service	C		B	A	A	B
Approach Delay (s)	28.4		13.7			10.1
Approach LOS	C		B			B

Intersection Summary			
HCM 2000 Control Delay	14.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	57.5	Sum of lost time (s)	9.0
Intersection Capacity Utilization	70.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	1	0	9	98	0	63	6	1374	91	122	1047	4
Future Volume (Veh/h)	1	0	9	98	0	63	6	1374	91	122	1047	4
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1	0	10	109	0	70	7	1527	101	136	1163	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)			5			5						
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)								984			1003	
pX, platoon unblocked	0.60	0.60	0.87	0.60	0.60	0.54	0.87			0.54		
vC, conflicting volume	2250	3079	584	2445	3030	814	1167			1628		
vC1, stage 1 conf vol	1437	1437		1592	1592							
vC2, stage 2 conf vol	812	1642		854	1439							
vCu, unblocked vol	795	2167	224	1118	2087	0	894			459		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	100	99	54	100	88	99			77		
cM capacity (veh/h)	128	114	678	235	142	585	657			593		

Direction, Lane #	EB 1	WB 1	NE 1	NE 2	SW 1	SW 2	SW 3
Volume Total	11	179	770	864	136	775	392
Volume Left	1	109	7	0	136	0	0
Volume Right	10	70	0	101	0	0	4
cSH	746	387	657	1700	593	1700	1700
Volume to Capacity	0.01	0.46	0.01	0.51	0.23	0.46	0.23
Queue Length 95th (ft)	1	59	1	0	22	0	0
Control Delay (s)	12.5	24.7	0.3	0.0	12.9	0.0	0.0
Lane LOS	B	C	A		B		
Approach Delay (s)	12.5	24.7	0.1		1.3		
Approach LOS	B	C					

Intersection Summary				
Average Delay	2.1			
Intersection Capacity Utilization	92.2%	ICU Level of Service	F	
Analysis Period (min)	15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	16	253	1521	29	105	1157
Future Volume (Veh/h)	16	253	1521	29	105	1157
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	18	281	1690	32	117	1286
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2583	861			1722	
vC1, stage 1 conf vol	1706					
vC2, stage 2 conf vol	877					
vCu, unblocked vol	2583	861			1722	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	84	6			68	
cM capacity (veh/h)	112	299			363	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	299	1127	595	117	643	643
Volume Left	18	0	0	117	0	0
Volume Right	281	0	32	0	0	0
cSH	272	1700	1700	363	1700	1700
Volume to Capacity	1.10	0.66	0.35	0.32	0.38	0.38
Queue Length 95th (ft)	311	0	0	34	0	0
Control Delay (s)	125.0	0.0	0.0	19.5	0.0	0.0
Lane LOS	F			C		
Approach Delay (s)	125.0	0.0		1.6		
Approach LOS	F					

Intersection Summary			
Average Delay	11.6		
Intersection Capacity Utilization	75.3%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	0	11	0	0	0	19	1761	0	0	1299	5
Future Volume (Veh/h)	7	0	11	0	0	0	19	1761	0	0	1299	5
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	8	0	12	0	0	0	21	1957	0	0	1443	6
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh)								2			2	
Upstream signal (ft)											530	
pX, platoon unblocked	0.63	0.63	0.63	0.63	0.63		0.63					
vC, conflicting volume	2466	3445	724	2732	3448	978	1449			1957		
vC1, stage 1 conf vol	1446	1446		1999	1999							
vC2, stage 2 conf vol	1020	1999		734	1449							
vCu, unblocked vol	2155	3705	0	2576	3710	978	544			1957		
tC, single (s)	7.5	6.5	7.1	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.4	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	96	100	98	100	100	100	97			100		
cM capacity (veh/h)	183	91	667	58	91	250	645			294		

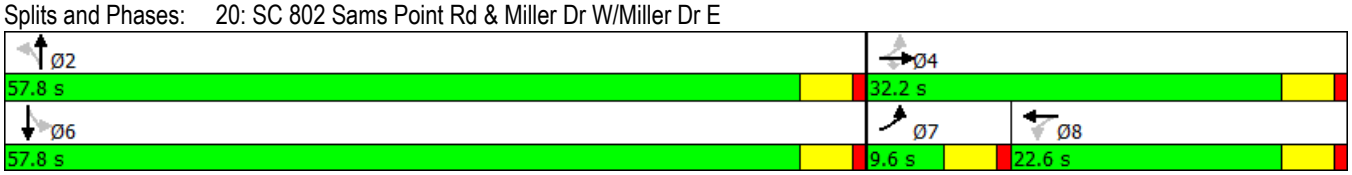
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	20	0	1000	978	722	728
Volume Left	8	0	21	0	0	0
Volume Right	12	0	0	0	0	6
cSH	324	1700	645	1700	294	1700
Volume to Capacity	0.06	0.00	0.03	0.58	0.00	0.43
Queue Length 95th (ft)	5	0	3	0	0	0
Control Delay (s)	16.8	0.0	1.0	0.0	0.0	0.0
Lane LOS	C	A	A			
Approach Delay (s)	16.8	0.0	0.5		0.0	
Approach LOS	C	A				

Intersection Summary				
Average Delay	0.4			
Intersection Capacity Utilization	72.0%	ICU Level of Service	C	
Analysis Period (min)	15			

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	361	7	45	16	1	24	1677	2	1200
Future Volume (vph)	361	7	45	16	1	24	1677	2	1200
Turn Type	pm+pt	NA	Perm	Perm	NA	Perm	NA	Perm	NA
Protected Phases	7	4			8		2		6
Permitted Phases	4		4	8		2		6	
Detector Phase	7	4	4	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	9.6	32.2	32.2	22.6	22.6	57.8	57.8	57.8	57.8
Total Split (%)	10.7%	35.8%	35.8%	25.1%	25.1%	64.2%	64.2%	64.2%	64.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	4.5		4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead			Lag	Lag				
Lead-Lag Optimize?	Yes			Yes	Yes				
Recall Mode	None	None	None	None	None	Min	Min	Min	Min
Act Effct Green (s)		26.5	26.5		26.5	51.6	51.6	51.6	51.6
Actuated g/C Ratio		0.30	0.30		0.30	0.59	0.59	0.59	0.59
v/c Ratio		1.01	0.10		0.05	0.32	0.92	0.02	0.81
Control Delay		79.7	11.3		21.8	21.5	25.2	8.5	17.6
Queue Delay		0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		79.7	11.3		21.8	21.5	25.2	8.5	17.6
LOS		E	B		C	C	C	A	B
Approach Delay		72.3			21.8		25.1		17.6
Approach LOS		E			C		C		B

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 87.1	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 27.3	Intersection LOS: C
Intersection Capacity Utilization 76.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 20: SC 802 Sams Point Rd & Miller Dr W/Miller Dr E



Lane Group	EBT	EBR	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	409	50	20	27	1924	2	1667
v/c Ratio	1.01	0.10	0.05	0.32	0.92	0.02	0.81
Control Delay	79.7	11.3	21.8	21.5	25.2	8.5	17.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.7	11.3	21.8	21.5	25.2	8.5	17.6
Queue Length 50th (ft)	231	6	8	7	474	0	347
Queue Length 95th (ft)	#420	32	24	31	#690	4	450
Internal Link Dist (ft)	466		412		450		410
Turn Bay Length (ft)		100		230		265	
Base Capacity (vph)	426	524	384	88	2167	88	2132
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.96	0.10	0.05	0.31	0.89	0.02	0.78

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	361	7	45	16	1	1	24	1677	55	2	1200	301
Future Volume (vph)	361	7	45	16	1	1	24	1677	55	2	1200	301
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5		4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95		1.00	0.95	
Frt		1.00	0.85		0.99		1.00	1.00		1.00	0.97	
Flt Protected		0.95	1.00		0.96		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1776	1568		1770		1770	3522		1770	3433	
Flt Permitted		0.72	1.00		0.68		0.08	1.00		0.08	1.00	
Satd. Flow (perm)		1333	1568		1259		144	3522		144	3433	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	401	8	50	18	1	1	27	1863	61	2	1333	334
RTOR Reduction (vph)	0	0	24	0	1	0	0	2	0	0	24	0
Lane Group Flow (vph)	0	409	26	0	19	0	27	1922	0	2	1643	0
Heavy Vehicles (%)	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	pm+pt	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	7	4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)		26.5	26.5		26.5		51.6	51.6		51.6	51.6	
Effective Green, g (s)		26.5	26.5		26.5		51.6	51.6		51.6	51.6	
Actuated g/C Ratio		0.30	0.30		0.30		0.59	0.59		0.59	0.59	
Clearance Time (s)		4.5	4.5		4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		405	477		383		85	2086		85	2033	
v/s Ratio Prot								c0.55			0.48	
v/s Ratio Perm		c0.31	0.02		0.02		0.19			0.01		
v/c Ratio		1.01	0.05		0.05		0.32	0.92		0.02	0.81	
Uniform Delay, d1		30.3	21.4		21.4		8.9	15.9		7.3	13.9	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		47.2	0.0		0.1		2.2	7.3		0.1	2.5	
Delay (s)		77.5	21.5		21.5		11.1	23.2		7.4	16.3	
Level of Service		E	C		C		B	C		A	B	
Approach Delay (s)		71.4			21.5			23.1			16.3	
Approach LOS		E			C			C			B	

Intersection Summary			
HCM 2000 Control Delay	25.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	87.1	Sum of lost time (s)	13.5
Intersection Capacity Utilization	76.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↱		↑↑		↱
Traffic Volume (veh/h)	1551	12	0	1228	0	7
Future Volume (Veh/h)	1551	12	0	1228	0	7
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1686	13	0	1335	0	8
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			TWLTL		
Median storage veh)				2		
Upstream signal (ft)				905		
pX, platoon unblocked					0.71	
vC, conflicting volume			1699		2354	843
vC1, stage 1 conf vol					1686	
vC2, stage 2 conf vol					668	
vCu, unblocked vol			1699		2094	843
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	97
cM capacity (veh/h)			371		130	307

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	843	843	13	668	668	8
Volume Left	0	0	0	0	0	0
Volume Right	0	0	13	0	0	8
cSH	1700	1700	1700	1700	1700	307
Volume to Capacity	0.50	0.50	0.01	0.39	0.39	0.03
Queue Length 95th (ft)	0	0	0	0	0	2
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	17.0
Lane LOS						C
Approach Delay (s)	0.0			0.0		17.0
Approach LOS						C

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	52.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	162	1328	941	81	43	86
Future Volume (Veh/h)	162	1328	941	81	43	86
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	176	1443	1023	88	47	93
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						7
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (ft)		493				
pX, platoon unblocked					0.69	
vC, conflicting volume	1111				2140	556
vC1, stage 1 conf vol					1067	
vC2, stage 2 conf vol					1074	
vCu, unblocked vol	1111				1755	556
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	72				79	80
cM capacity (veh/h)	624				229	475

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	176	722	722	682	429	140
Volume Left	176	0	0	0	0	47
Volume Right	0	0	0	0	88	93
cSH	624	1700	1700	1700	1700	683
Volume to Capacity	0.28	0.42	0.42	0.40	0.25	0.21
Queue Length 95th (ft)	29	0	0	0	0	19
Control Delay (s)	13.0	0.0	0.0	0.0	0.0	17.9
Lane LOS	B					C
Approach Delay (s)	1.4			0.0		17.9
Approach LOS						C

Intersection Summary			
Average Delay	1.7		
Intersection Capacity Utilization	50.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑↱			↱
Traffic Volume (veh/h)	0	1371	979	41	0	43
Future Volume (Veh/h)	0	1371	979	41	0	43
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	1490	1064	45	0	47
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		TWLTL	TWLTL			
Median storage veh)		2	2			
Upstream signal (ft)		897				
pX, platoon unblocked					0.70	
vC, conflicting volume	1109				1832	554
vC1, stage 1 conf vol					1086	
vC2, stage 2 conf vol					745	
vCu, unblocked vol	1109				1319	554
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	90
cM capacity (veh/h)	625				267	476

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	SB 1
Volume Total	745	745	709	400	47
Volume Left	0	0	0	0	0
Volume Right	0	0	0	45	47
cSH	1700	1700	1700	1700	476
Volume to Capacity	0.44	0.44	0.42	0.24	0.10
Queue Length 95th (ft)	0	0	0	0	8
Control Delay (s)	0.0	0.0	0.0	0.0	13.4
Lane LOS					B
Approach Delay (s)	0.0		0.0		13.4
Approach LOS					B

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	41.2%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection Sign configuration not allowed in HCM analysis.



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total (vph)	0	0	0
Volume Left (vph)	0	0	0
Volume Right (vph)	0	0	0
Hadj (s)	0.00	0.00	0.00
Departure Headway (s)	3.9	3.9	3.9
Degree Utilization, x	0.00	0.00	0.00
Capacity (veh/h)	917	917	917
Control Delay (s)	6.9	6.9	6.9
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A	A	A

Intersection Summary			
Delay	0.0		
Level of Service	A		
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

APPENDIX F

2038 BUILD INTERSECTION ALTERNATIVES LOS AND DELAY RESULTS



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	595	1	43	193	1	47
Future Volume (vph)	595	1	43	193	1	47
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	647	1	47	210	1	51

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total (vph)	648	257	52
Volume Left (vph)	647	0	1
Volume Right (vph)	1	210	0
Hadj (s)	0.23	-0.46	0.04
Departure Headway (s)	5.0	5.3	6.2
Degree Utilization, x	0.90	0.38	0.09
Capacity (veh/h)	709	656	555
Control Delay (s)	36.0	11.5	9.8
Approach Delay (s)	36.0	11.5	9.8
Approach LOS	E	B	A

Intersection Summary			
Delay	28.0		
Level of Service	D		
Intersection Capacity Utilization	53.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	326	1	121	413	1	48
Future Volume (vph)	326	1	121	413	1	48
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	354	1	132	449	1	52

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total (vph)	355	581	53
Volume Left (vph)	354	0	1
Volume Right (vph)	1	449	0
Hadj (s)	0.23	-0.43	0.04
Departure Headway (s)	5.7	4.7	5.8
Degree Utilization, x	0.56	0.75	0.09
Capacity (veh/h)	598	752	556
Control Delay (s)	15.7	20.3	9.4
Approach Delay (s)	15.7	20.3	9.4
Approach LOS	C	C	A

Intersection Summary			
Delay	18.1		
Level of Service	C		
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	595	1	43	193	1	47
Future Volume (Veh/h)	595	1	43	193	1	47
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	647	1	47	210	1	51
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	205	152			257	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	205	152			257	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	17	100			100	
cM capacity (veh/h)	783	894			1308	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	648	257	52
Volume Left	647	0	1
Volume Right	1	210	0
cSH	783	1700	1308
Volume to Capacity	0.83	0.15	0.00
Queue Length 95th (ft)	232	0	0
Control Delay (s)	27.5	0.0	0.2
Lane LOS	D		A
Approach Delay (s)	27.5	0.0	0.2
Approach LOS	D		

Intersection Summary			
Average Delay	18.6		
Intersection Capacity Utilization	53.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	326	1	121	413	1	48
Future Volume (Veh/h)	326	1	121	413	1	48
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	354	1	132	449	1	52
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	410	356			581	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	410	356			581	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	41	100			100	
cM capacity (veh/h)	597	688			993	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	355	581	53
Volume Left	354	0	1
Volume Right	1	449	0
cSH	597	1700	993
Volume to Capacity	0.59	0.34	0.00
Queue Length 95th (ft)	97	0	0
Control Delay (s)	19.5	0.0	0.2
Lane LOS	C		A
Approach Delay (s)	19.5	0.0	0.2
Approach LOS	C		

Intersection Summary			
Average Delay	7.0		
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		

MOVEMENT SUMMARY

Site: Hazel Farm Dr/Gay Dr AM Peak

Hazel Farm Rd/Gay Dr
Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
East: Gay Dr											
6	T1	464	1.0	0.527	9.7	LOS A	3.5	88.4	0.24	0.20	23.4
16	R2	101	1.0	0.527	9.7	LOS A	3.5	88.4	0.24	0.20	23.4
Approach		565	1.0	0.527	9.7	LOS A	3.5	88.4	0.24	0.10	23.4
North: Hazel Farm Rd											
7	L2	47	3.0	0.127	6.6	LOS A	0.4	11.1	0.48	0.88	25.2
14	R2	40	3.0	0.127	6.6	LOS A	0.4	11.1	0.48	0.88	25.2
Approach		87	3.0	0.127	6.6	LOS A	0.4	11.1	0.48	0.44	25.2
West: Hazel Farm Rd											
5	L2	40	3.0	0.309	6.5	LOS A	1.4	36.1	0.18	0.16	26.6
2	T1	283	3.0	0.309	6.5	LOS A	1.4	36.1	0.18	0.16	26.6
Approach		323	3.0	0.309	6.5	LOS A	1.4	36.1	0.18	0.08	26.6
All Vehicles		975	1.8	0.527	8.3	LOS A	3.5	88.4	0.24	0.12	24.5

Level of Service (LOS) Method: Delay & v/c (HCM 2010).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: US HCM 2010.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: Miller Dr/Sunset Blvd AM Peak

Miller Dr/Sunset Blvd
Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
East: Miller Dr											
6	T1	647	1.0	0.607	11.5	LOS B	4.7	119.3	0.30	0.27	22.7
16	R2	1	1.0	0.607	11.5	LOS B	4.7	119.3	0.30	0.27	22.7
Approach		648	1.0	0.607	11.5	LOS B	4.7	119.3	0.30	0.14	22.7
North: Sunset Blvd											
7	L2	1	3.0	0.091	7.4	LOS A	0.3	7.6	0.54	1.06	26.0
14	R2	51	3.0	0.091	7.4	LOS A	0.3	7.6	0.54	1.06	26.0
Approach		52	3.0	0.091	7.4	LOS A	0.3	7.6	0.54	0.53	26.0
West: Sunset Blvd											
5	L2	46	3.0	0.234	5.5	LOS A	1.0	25.4	0.02	0.00	27.0
2	T1	211	3.0	0.234	5.5	LOS A	1.0	25.4	0.02	0.00	27.0
Approach		257	3.0	0.234	5.5	LOS A	1.0	25.4	0.02	0.00	27.0
All Vehicles		957	1.6	0.607	9.6	LOS A	4.7	119.3	0.24	0.12	23.9

Level of Service (LOS) Method: Delay & v/c (HCM 2010).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: US HCM 2010.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: Hazel Farm Dr/Gay Dr PM Peak

Hazel Farm Rd/Gay Dr
Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
East: Gay Dr											
6	T1	435	1.0	0.459	8.5	LOS A	2.7	68.2	0.21	0.18	23.9
16	R2	58	1.0	0.459	8.5	LOS A	2.7	68.2	0.21	0.18	23.9
Approach		492	1.0	0.459	8.5	LOS A	2.7	68.2	0.21	0.09	23.9
North: Hazel Farm Rd											
7	L2	66	3.0	0.151	6.7	LOS A	0.5	13.5	0.48	0.87	25.0
14	R2	40	3.0	0.151	6.7	LOS A	0.5	13.5	0.48	0.87	25.0
Approach		107	3.0	0.151	6.7	LOS A	0.5	13.5	0.48	0.44	25.0
West: Hazel Farm Rd											
5	L2	40	3.0	0.422	8.2	LOS A	2.2	57.1	0.26	0.26	25.8
2	T1	392	3.0	0.422	8.2	LOS A	2.2	57.1	0.26	0.26	25.8
Approach		433	3.0	0.422	8.2	LOS A	2.2	57.1	0.26	0.13	25.8
All Vehicles		1032	2.0	0.459	8.2	LOS A	2.7	68.2	0.26	0.14	24.7

Level of Service (LOS) Method: Delay & v/c (HCM 2010).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: US HCM 2010.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: Miller Dr/Sunset Blvd PM Peak

Miller Dr/Sunset Blvd
Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate per veh	Average Speed mph
East: Miller Dr											
6	T1	354	1.0	0.364	7.6	LOS A	1.8	44.2	0.34	0.45	24.3
16	R2	1	1.0	0.364	7.6	LOS A	1.8	44.2	0.34	0.45	24.3
Approach		355	1.0	0.364	7.6	LOS A	1.8	44.2	0.34	0.22	24.3
North: Sunset Blvd											
7	L2	1	3.0	0.069	5.4	LOS A	0.2	5.9	0.41	0.65	27.1
14	R2	52	3.0	0.069	5.4	LOS A	0.2	5.9	0.41	0.65	27.1
Approach		53	3.0	0.069	5.4	LOS A	0.2	5.9	0.41	0.32	27.1
West: Sunset Blvd											
5	L2	132	3.0	0.530	9.6	LOS A	3.6	91.2	0.03	0.01	24.7
2	T1	449	3.0	0.530	9.6	LOS A	3.6	91.2	0.03	0.01	24.7
Approach		580	3.0	0.530	9.6	LOS A	3.6	91.2	0.03	0.00	24.7
All Vehicles		989	2.3	0.530	8.6	LOS A	3.6	91.2	0.16	0.10	24.7

Level of Service (LOS) Method: Delay & v/c (HCM 2010).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: US HCM 2010.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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