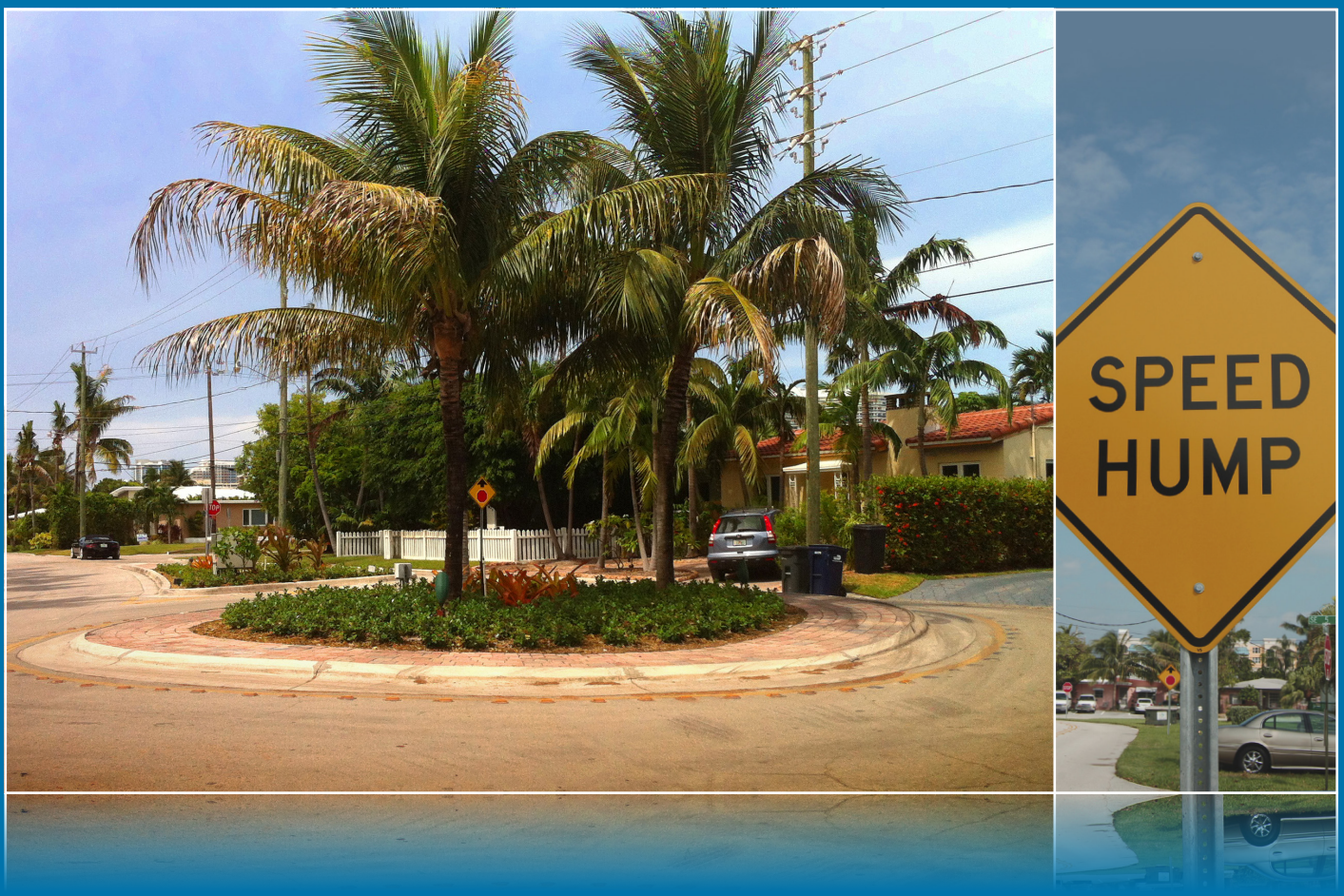
TOWN OF SURFSIDE - TOWN WIDE TRAFFIC STUDY

DECEMBER 2012



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Executive Summary

Calvin, Giordano & Associates, Inc. (CGA) was commissioned on May 8, 2012 by the Town of Surfside to complete a traffic study to assess existing and future traffic conditions throughout the Town. A Town-wide traffic analysis was performed to determine appropriate applications for traffic calming and traffic control measures. In addition to the traffic calming analysis, several signalized intersections along 96th Street, Harding Avenue, and Collins Avenue were evaluated to determine if modifications could improve the operational efficiency of the intersections. The signalized intersections analyzed for this traffic study include the following:

- 96th Street at 500 Block (Bal Harbour Shops)
- 96th Street at Byron Avenue
- 96th Street at Harding Avenue
- 96th Street at Collins Avenue
- 95th Street at Harding Avenue
- 95th Street at Collins Avenue
- 94th Street at Harding Avenue
- 94th Street at Collins Avenue

Turning movement traffic counts were collected during the AM (7:00-9:00) and PM (4:00-6:00) peak hours for seventeen intersections within the Town. Additionally, 24-hour bi-directional tube counts along with speed data were collected at ten locations throughout the Town. The traffic counts collected for this study are depicted in Figure 2.1. The traffic counts were conducted on a typical Tuesday through Thursday between August 28, 2012 and September 6, 2012 and on Tuesday, October 30, 2012. The traffic counts were utilized to analyze existing and future traffic operations of the major intersections and to develop new and upgrade existing traffic calming locations.

A computer-based traffic simulation of the Town's current roadway network was developed using the nationally recognized VISSIM micro-simulation modeling software. The VISSIM model was calibrated to match existing traffic conditions based on field reviews and traffic data collected for the study intersections. This VISSIM model will enable the Town to efficiently analyze future traffic conditions including intersection and roadway alternatives. Examples of the benefits of the VISSIM model include determining the net impact of future developments such as the expansion of Bal Harbour Shops and for future traffic flow modifications such as

street closures. Additionally, the VISSIM model has an advanced 3D interface which allows for accurate visual representation of existing and future traffic conditions.

OPERATIONAL ANALYSIS

Level of Service (LOS) is a term used to describe the conditions of a roadway in relation to vehicle delay and traffic congestion. LOS are broken down with six LOS designations (LOS A – LOS F). LOS A represents the most ideal situation with minimal if any delay at all while LOS F represents the worst conditions with high vehicular delay. The Town Comprehensive Plan identifies the LOS thresholds for state roads as LOS E+20% and LOS D for local roads. 96th Street, Harding Avenue, and Collins Avenue are each considered state roads.

Existing Conditions

The operational analysis for the aforementioned major intersections along 96th Street, Harding Avenue, and Collins Avenue demonstrated that each of the study intersections were currently operating at an acceptable LOS during the AM and PM peak hours when evaluating the overall intersection delay. However, several of the study intersection approaches had high vehicular delays resulting in a LOS E or LOS F for the intersection approach and long vehicular queues extending to the upstream traffic signal. Due to the close proximity of the signalized intersections, the operations of each signal are greatly affected by the upstream and downstream traffic signals. It was observed that vehicle queues would occasionally extend to and past the upstream traffic signals on 96th Street.

Optimized Conditions

CGA evaluated several alternatives to determine if improvements could help reduce vehicle congestion in the Town. It was determined that the most cost effective alternatives included signal timing improvements at each of the study signalized intersections. The signal timing improvements showed a substantial benefit to the side streets of Byron Avenue, 95th Street, and 94th Street.

The Town has been proactive in the past regarding improving signal timing in the Town to benefit the residents of Surfside. The northbound approach on Byron Avenue at 96th Street has historically been very congested with high delays and vehicle queues during school days and times. However, the Town was able to mitigate much of the vehicle delay by bringing it to the County's attention and requesting an adjustment in signal timing. A comparison of the existing average delay and LOS for the existing conditions and the optimized conditions is shown in Table A.

Table A – Existing and Optimized Operational Analysis

		Existing Conditions				Signal Timing Optimization			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
Intersection	Approach	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
96th Street at Bal Harbour Shops	EB	1.9	A	2.5	A	1.9	A	2.5	A
	SB	48.5	D	43.0	D	48.5	D	43.0	D
	WB	3.4	A	3.1	A	2.4	A	1.7	A
	Total	2.9	A	5.9	A	2.5	A	5.2	A
96th Street at Byron Avenue	NB	71.7	E	72.8	E	30.9	C	32.9	C
	EB	3.1	A	4.2	A	4.2	A	6.2	A
	WB	12.2	B	13.4	B	3.6	A	2.0	A
	Total	13.6	B	14.9	B	6.8	A	7.5	A
96th Street at Harding Avenue	EB	33.9	C	30.0	C	30.5	C	22.5	C
	SB	32.7	C	28.1	C	32.7	C	31.1	C
	WB	142.6	F	98.8	F	115.0	F	36.9	D
	Total	48.2	D	39.7	D	43.3	D	29.2	C
96th Street at Collins Avenue	NB	59.0	E	43.9	D	21.9	C	22.1	C
	EB	18.6	B	15.2	B	31.4	C	28.8	C
	WB	58.6	E	54.8	D	58.6	E	54.6	D
	Total	51.1	D	39.0	D	23.9	C	23.6	C
94th Street at Harding Avenue	EB	58.0	E	57.8	E	27.0	C	24.8	C
	SB	5.8	A	6.4	A	5.3	A	9.5	A
	WB	54.6	D	64.7	E	31.0	C	24.8	C
	Total	10.0	A	14.8	B	7.3	A	11.9	B
95th Street at Harding Avenue	EB	158.3	F	72.6	E	39.5	D	26.3	C
	SB	11.2	B	9.0	A	8.8	A	8.4	A
	WB	63.6	E	76.2	E	28.3	C	29.0	C
	Total	22.8	C	15.7	B	12.6	B	10.4	B
94th Street at Collins Avenue	NB	4.2	A	10.5	B	5.9	A	7.2	A
	EB	70.6	E	19.8	B	23.2	C	28.2	C
	WB	58.2	E	20.8	C	15.5	B	19.2	B
	Total	6.6	A	11.0	B	6.6	A	8.1	A
95th Street at Collins Avenue	NB	3.5	A	12.2	B	3.8	A	11.8	B
	EB	73.4	E	22.3	C	34.5	C	20.9	C
	WB	50.4	D	25.1	C	28.2	C	22.9	C
	Total	6.4	A	12.7	B	5.4	A	12.3	B

2017 Conditions

The signalized study intersections within the Town were also evaluated under future traffic conditions. A five year planning horizon (Year 2017) was chosen for the analysis and included background growth, committed trips, and other potential future development including the expansion of Bal Harbour Shops. The background growth consisted of applying a 1.0% annual growth rate to the existing peak season adjusted traffic. Additional project trips were also added to the 2017 scenario including trips from Young Israel, 92nd Street Hotel, Grand Beach Hotel, Surf Club, the Shul, and the Bal Harbour Shops expansion. The Year 2017 conditions were evaluated under two different scenarios. The first scenario included the 2017 traffic volumes utilizing the existing signal timing plans. The second scenario included the 2017 traffic volumes utilizing the proposed signal timing improvements identified in this report. Minor adjustments were made to the signal timing splits to account for the additional traffic anticipated in 2017.

The results of the 2017 conditions with existing signal timing analysis demonstrated that there could potentially be very significant delays and traffic congestion within the Town. The existing high vehicle delays and queues currently experienced will only be exacerbated under the 2017 conditions. Several of the intersections and particularly 96th Street at Harding Avenue and Collins Avenue deteriorate significantly under this scenario. A comparison of the existing and 2017 conditions utilizing the existing signal timing patterns is shown on Table B.

The results of the 2017 optimized conditions perform significantly more efficiently than the 2017 conditions without signal timing improvements. However, even with the improved timings, there is expected to be substantial vehicle delays and queues. The westbound approach of 96th Street at Harding Avenue will operate at LOS F with 50 percentile queues extending up to Collins Avenue. This will cause further increased delay and congestion beyond what is actually calculated. Additionally, the vehicular queuing on eastbound 96th Street at Harding Avenue will only get worse than the existing conditions and it potentially could be common for vehicle queuing to extend past Byron Avenue and further impact the operations of the upstream intersections beyond what is calculated.

Table B – 2017 Operational Analysis

Intersection	Approach	2012 Existing Conditions				2017 Conditions[1]			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
96th Street at Bal Harbour Shops	EB	1.9	A	2.5	A	2.4	A	3.4	A
	SB	48.5	D	43.0	D	56.7	E	55.4	E
	WB	3.4	A	3.1	A	4.0	A	4.5	A
	Total	2.9	A	5.9	A	4.3	A	9.8	A
96th Street at Byron Avenue	NB	71.7	E	72.8	E	72.6	E	72.7	E
	EB	3.1	A	4.2	A	4.3	A	6.9	A
	WB	12.2	B	13.4	B	12.8	B	14.2	B
	Total	13.6	B	14.9	B	14.2	B	16.1	B
96th Street at Harding Avenue	EB	33.9	C	30.0	C	38.4	D	36.5	D
	SB	32.7	C	28.1	C	38.0	D	32.7	C
	WB	142.6	F	98.8	F	261.8	F	237.1	F
	Total	48.2	D	39.7	D	70.7	E	68.6	E
96th Street at Collins Avenue	NB	59.0	E	43.9	D	104.6	F	74.6	E
	EB	18.6	B	15.2	B	19.2	B	16.0	B
	WB	58.6	E	54.8	D	58.5	E	54.9	D
	Total	51.1	D	39.0	D	89.2	F	65.2	E
Harding Avenue at 95th Street	EB	107.7	F	65.7	E	331.8	F	68.3	E
	SB	14.4	B	10.1	B	17.1	B	13.7	B
	WB	241.4	F	91.2	F	1299.9	F	367.0	F
	Total	34.2	C	18.1	B	141.0	F	48.1	D
Collins Avenue at 95th Street	NB	1.5	A	2.6	A	1.9	A	16.1	B
	EB	71.7	E	19.3	B	138.8	F	26.5	C
	WB	41.5	D	15.2	B	42.2	D	18.5	B
	Total	4.8	A	3.4	A	12.7	B	16.8	B
Harding Avenue at 94th Street	EB	67.7	E	73.6	E	69.2	E	76.7	E
	SB	5.0	A	4.0	A	5.2	A	6.7	A
	WB	77.3	E	187.9	F	84.7	F	281.5	F
	Total	10.7	B	23.7	C	11.2	B	31.2	C
Collins Avenue at 94th Street	NB	5.0	A	14.1	B	5.5	A	21.2	C
	EB	80.8	F	22.0	C	91.1	F	25.3	C
	WB	37.9	D	17.0	B	36.3	D	18.0	B
	Total	7.5	A	14.4	B	9.8	A	21.4	C

(1) 2017 Conditions include existing (2012) traffic counts plus a 1% annual growth rate, committed development trips, and additional potential developments such as the Bal Harbour Shops expansion. The existing signal timings were utilized in this scenario.

TRAFFIC CALMING

Miami Dade County has authority to approve, deny or change any proposed traffic flow modifications within the Town of Surfside. Miami-Dade County has established a procedure for approving traffic calming devices that includes minimum traffic criteria that must be met. For municipalities such as Surfside that fund their own traffic calming program, minimum traffic volume requirements can potentially be reduced by 70% and minimum 85th percentile speed requirements can potentially be reduced by 50%. In addition to minimum traffic criteria, Miami-Dade County generally requires that new traffic calming proposals are supported by two-thirds of residents in the vicinity of the proposed installation. Concurrence from affected residents is typically done through ballots delivered to the residents.

The traffic data collected for this study indicates that the majority of studied roadway segments met the reduced minimum volume criteria allowed for municipalities that fund their own traffic calming program. The results of the speed data showed that four of the ten count locations had 85th percentile speeds greater than the reduced minimum speed threshold. Additionally, three of the ten count locations were within one mph of meeting the reduced minimum speed threshold. However, Miami-Dade County also requires that a street is at least 750 feet in length without an intersecting roadway to be eligible for speed humps/tables. The majority of roadways within the Town do not meet this requirement. Only 88th Street west of Hawthorne Avenue meets this requirement within the Town.

RECOMMENDATIONS

1. Signal timing improvements
2. Continue to monitor existing and future traffic patterns
3. Utilize VISSIM software as a tool to analyze future traffic conditions
4. Implement new traffic calming devices

1. The Town should coordinate with Miami Dade County and the Florida Department of Transportation to implement the signal timing modifications identified in this report at the eight study signalized intersections. In conjunction with the signal timing improvements, vehicle and pedestrian detectors should be installed on 94th Street and 95th Street at Harding and Collins Avenue. The signal timing improvements identified in this report will provide a significant benefit to the residents who consistently utilize Byron Avenue, 95th Street, and 94th Street as the vehicular delays and queues will be substantially reduced on these roadways. Residents will notice that accessing 96th Street, Collins Avenue, and Harding Avenue from the aforementioned streets will be much easier and will not be required to wait as long for the traffic lights to turn green.

   The signalized intersections on 95th Street and 94th Street at Harding Avenue and Collins Avenue are currently under pre-timed signal timing. Therefore, the maximum green time is always allotted to each phase regardless of vehicle demand. The installation of vehicle and pedestrian detectors will allow these traffic signals to operate more efficiently. Vehicle detectors are video devices installed on the traffic signal mast arms

that detect vehicles on the intersection approach. When vehicles are not present, the light will turn red and green time will be given to the other intersection approaches. The approximate cost estimate to install two vehicle detectors and four pedestrian detectors at each intersection is $20,000. Therefore, the total estimate for the installation of the detection devices at the four proposed intersections is $80,000.

2. The Town should closely monitor the traffic patterns on 96th Street, Harding Avenue, and Collins Avenue on an annual basis. The operational analysis documented in this report for Year 2017 is only an estimate of future traffic conditions. However, it is possible that the expected traffic patterns due to new development deviate from the existing conditions. In this event, signal timing modifications or other improvements may be necessary to continue efficient traffic operations within the Town.

3. The Town should utilize the VISSIM model developed for this traffic study for future traffic operations analysis. The VISSIM model provides highly accurate results and better replicates actual traffic operations than traditional methods. Infinite future scenarios can be analyzed including signal timing changes, new turn lanes, pedestrian crossings, route detours, and many others.

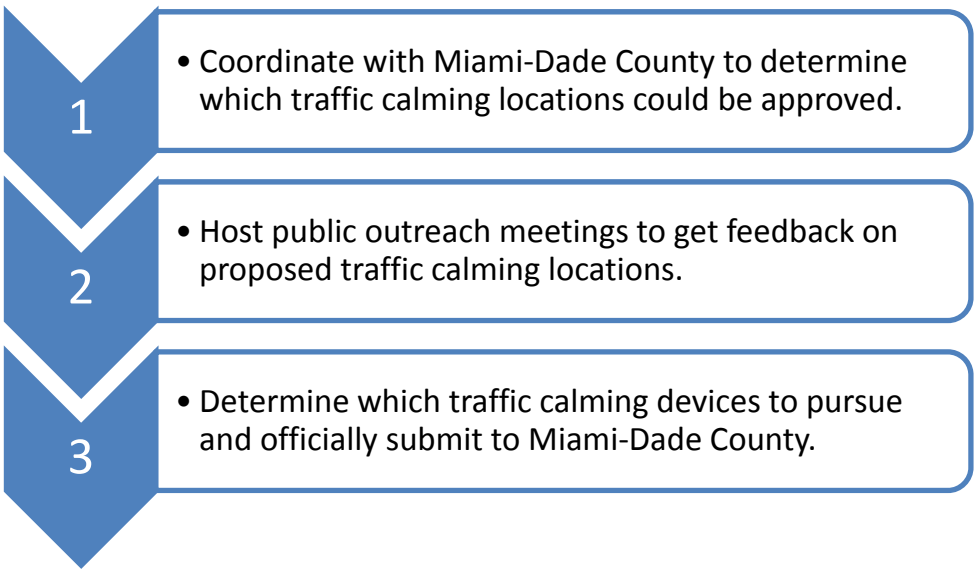
   The VISSIM model was built for the entire Town and not just for the study intersections identified in the report. Therefore, future traffic studies can be completed more cost effectively than without the pre-built traffic simulation model. Additionally, the VISSIM model has a built in 3D mode which allows for realistic simulations that can be easily converted to a video format. These 3D traffic videos can be a very beneficial tool to demonstrate to the public the changes in traffic conditions or patterns.

   The VISSIM files will be turned over to the Town as a deliverable for this traffic study. However, it is recommended that a professional traffic engineer be consulted for use of the VISSIM model.

Traffic Calming

4. This traffic study identified seven recommended traffic calming devices throughout the Town. The proposed locations are shown on Figure 8.8. The proposed traffic calming devices are either neighborhood roundabouts or traffic medians that share similarities to roundabouts. Generally, Miami-Dade County is very receptive of roundabouts since there are many benefits with few negatives. Some of the benefits of roundabouts include reduced speeds, increased safety, and increased aesthetics. Additionally, roundabouts do not require any actual traffic flow modification. The only negative is the potential small increase in emergency response time. The approximate cost of each of the traffic calming devices including design and construction is $50,000. Therefore, the total cost for the seven proposed traffic calming devices is approximately $350,000.

   The Town should coordinate with Miami-Dade County to determine which traffic calming devices could be approved. Miami-Dade County may require additional data and/or resident approval. The Town should then hold public outreach meetings with residents to get feedback on the proposed traffic calming devices and proposed locations identified in this report. The Town should then determine which traffic calming devices to pursue and officially submit to Miami-Dade County.



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SECTION ONE

INTRODUCTION

1.1 SUMMARY

Calvin, Giordano & Associates, Inc. (CGA) was commissioned by the Town of Surfside to complete a traffic study to assess existing and future traffic conditions throughout the Town including the potential traffic impact of the Bal Harbour Shops expansion and the reintroduction of traffic calming devices at the completion of the Water/Sewer/Storm Drainage (WSSD) project. In addition to the traffic calming analysis, several signalized intersections along 96th Street, Harding Avenue and Collins Avenue were evaluated to determine if modifications could improve the operational efficiency of the intersections. This traffic study documents the findings of the field review, traffic data collection, and the associated traffic analysis. The approximate limits of the Town wide traffic study are depicted in **Figure 1.1**.

Figure 1.1 – Location Map

1.2 HISTORY OF TRAFFIC CALMING

The Town of Surfside has been concerned about cut through traffic for many years. Residents from neighboring municipalities and from outside the area have historically utilized the Town's north-south local roads as alternatives to Harding Avenue and Collins Avenue. The Town has implemented numerous traffic calming measures to reduce cut through traffic. These traffic calming measures also potentially reduce vehicular speed and traffic volumes and enhance street beautification.

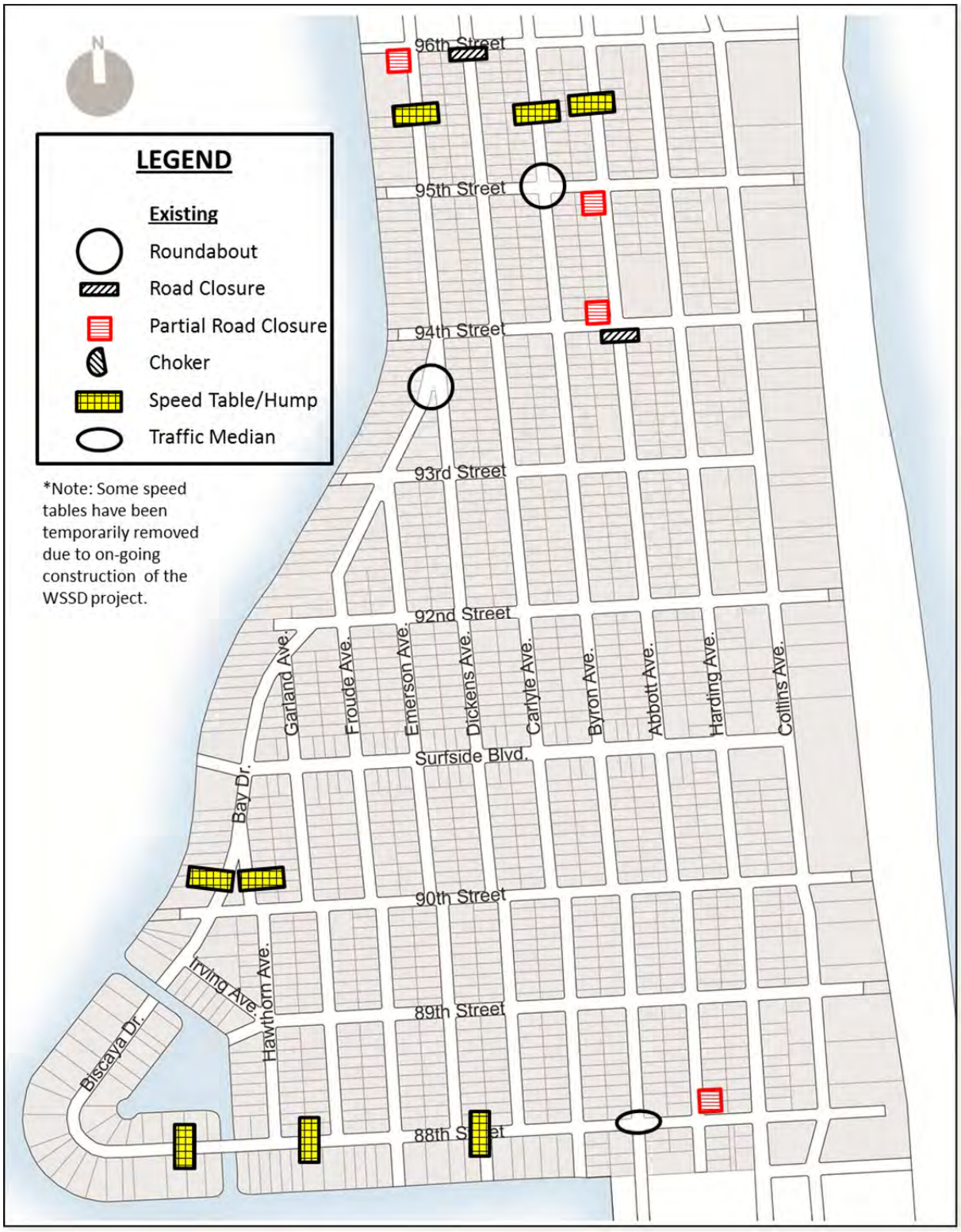
The Town currently utilizes roundabouts, road closures, traffic medians, and speed tables/humps for traffic calming. However, several speed tables/humps have been temporarily removed as part of the construction for the on-going WSSD project. The approximate locations of the existing traffic calming devices are depicted in **Figure 1.2**.

Roundabout on Dickens Avenue at Bay Drive

Road closure on Abbott Avenue at 94th Street

Speed table on Abbott Avenue

Figure 1.2 – Traffic Calming Locations



SECTION TWO

EXISTING CONDITIONS

2.1 GENERAL DESCRIPTION

For this study, eight signalized intersections were evaluated along 96th Street, Harding Avenue, and Collins Avenue. Within the study area, 96th Street is an east-west four lane divided state arterial road. It is a regionally significant roadway as it provides direct connection from inland Miami-Dade County to several municipalities along the eastern coastline including the Town of Surfside. 96th Street is identified in the Town Comprehensive Plan as a hurricane evacuation route and the posted speed limit is 30 mph within the study area. The one-way pair of Harding Avenue and Collins Avenue is part of SR A1A and has a posted speed limit of 30 mph within the study area. SR A1A serves the eastern coastline of the Town and the entire barrier island from the City of Dania Beach in Broward County to the City of Miami Beach in Miami-Dade County. Harding Avenue is a three lane roadway that travels south and Collins Avenue is a three lane roadway that travels north within the Town. The study intersections along these corridors include:

- 96th Street at 500 Block (Bal Harbour Shops)
- 96th Street at Byron Avenue
- 96th Street at Harding Avenue
- 96th Street at Collins Avenue
- 95th Street at Harding Avenue
- 95th Street at Collins Avenue
- 94th Street at Harding Avenue
- 94th Street at Collins Avenue

The intersection of 91st Street and Harding Avenue was unable to be collected as part of this traffic study due to the temporary closure of 91st Street between Harding Avenue and Collins Avenue. This segment on 91st Street at the time of this study was being utilized as an

equipment staging area for the WSSD project. However, the intersection of 91st Street at Harding Avenue was included in the traffic model for this study. This will enable the Town to cost effectively analyze this intersection once reliable traffic counts are able to be collected on 91st Street at Harding Avenue.

The local residential roadways within the Town of Surfside were also evaluated as part of this study. The local roadways have a posted speed limit of 20 mph. At the time of this traffic study, construction from the WSSD project was on-going throughout the Town.

2.2 TRAFFIC DATA COLLECTION

Turning movement counts were collected for each of the study intersections on 96th Street, Harding Avenue, and Collins Avenue. Additionally, turning movement counts were collected at nine intersections within the residential area of the Town as identified below:

- 95th Street at Byron Avenue
- 94th Street at Bay Drive
- 93rd Street at Emerson Avenue & Bay Drive
- 93rd Street at Byron Avenue
- 91st Street at Abbott Avenue
- Bay Drive at Hawthorne Avenue
- 90th Street at Carlyle Avenue
- 89th Street at Hawthorne Avenue
- 88th Street at Byron Avenue

As part of this traffic study, twenty-four (24) hour bi-directional counts including speed data were collected at eleven locations which are identified below:

- Bay Drive between 96th Street and 95th Street
- Byron Avenue between 95th Street and 94th Street
- Carlyle Avenue between 94th Street and 93rd Street
- Abbott Avenue between 93rd Street and 92nd Street
- Emerson Avenue between 91st Street and 90th Street
- 93rd Street between Carlyle Avenue and Byron Avenue
- 92nd Street between Dickens Avenue and Carlyle Avenue
- 91st Street between Carlyle Avenue and Byron Avenue
- 89th Street between Carlyle Avenue and Byron Avenue
- 88th Street west of Hawthorne Avenue
- Byron Avenue south of 88th Street (24 hour counts only)

24 hour counts without speed data were collected on Byron Avenue just south of 88th Street. The purpose of this count location was to obtain traffic data for the amount of traffic entering and exiting the Town from the City of Miami Beach. Since the traffic counter was required to be set up near the school on Byron Avenue, reliable speed data was unable to be obtained.

Traffic counts were conducted on a typical Tuesday through Thursday between August 28, 2012 and September 6, 2012 for the majority of the traffic counts. The turning movement counts collected on Byron Avenue at 95th Street and 88th Street and the 24 hour bi-directional counts collected on Byron Avenue south of 88th Street were collected on Tuesday, October 30, 2012. The location of the 24-hour counts and intersection counts are depicted in **Figure 2.1**. The peak hour turning movement counts were conducted from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM. Baseline traffic count data sheets are included in **Appendix A**.

The amount of daily traffic varies throughout the year based on seasonal conditions. This is particularly evident in South Florida due to the many residents who only inhibit South Florida for part of the year. The FDOT publishes seasonal adjustment factors each year in the annual FDOT Florida Traffic Information (FTI) DVD. These adjustment factors are commonly utilized by traffic engineers to determine peak season traffic counts. Therefore, peak season adjustment factors were applied to the existing raw traffic counts in this traffic study to replicate the peak season traffic conditions in the Town. The adjusted traffic volumes are included in **Appendix B**. Additionally, the adjusted existing turning movement counts are depicted in **Figures 2.2 and 2.3** and the bi-directional tube counts are shown in **Figure 2.4**. The 85th percentile speeds are also depicted in **Figure 2.5**.

Figure 2.1 –Traffic Count Locations

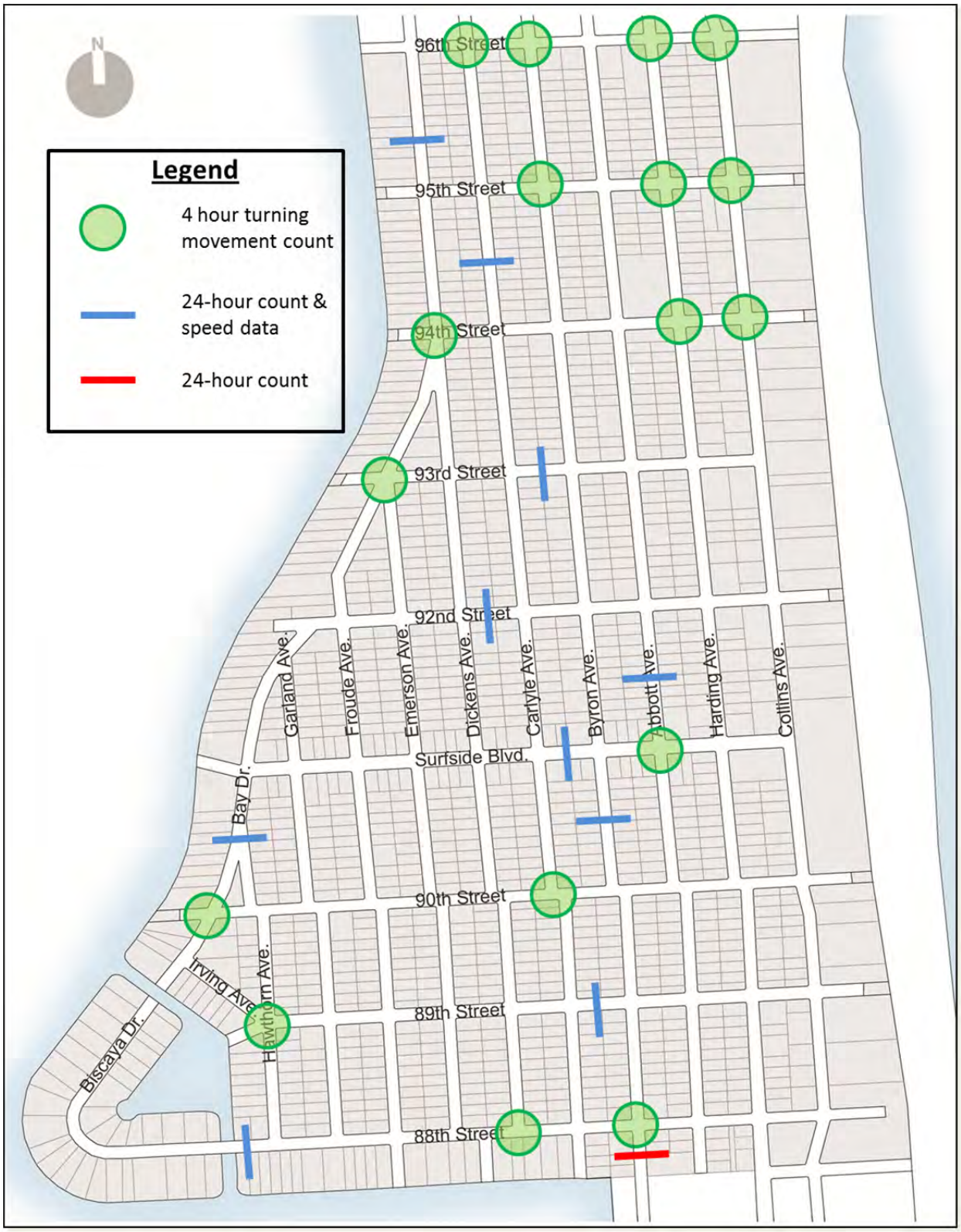


Figure 2.2 – Turning Movement Counts – Major Roadways

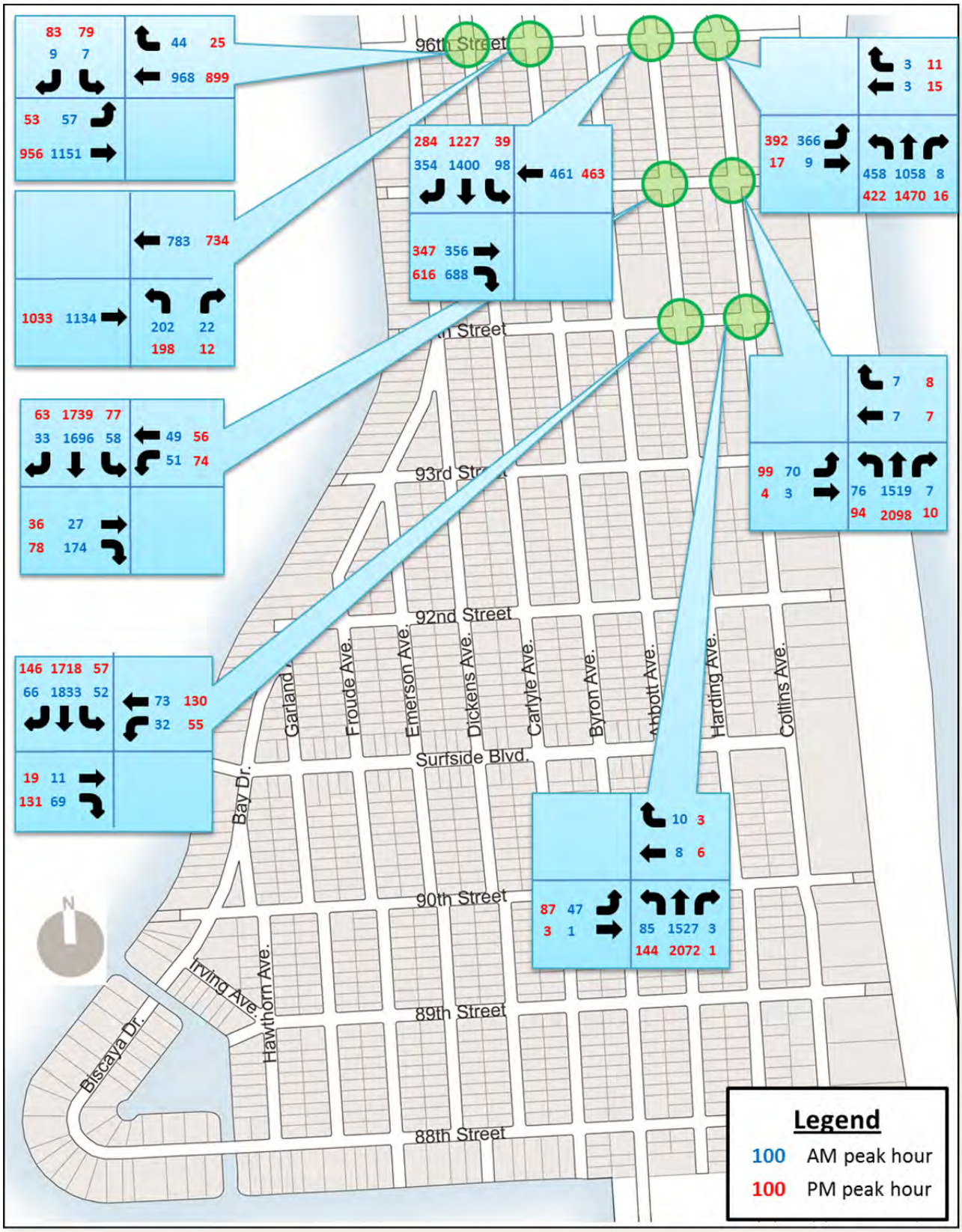


Figure 2.3 – Turning Movement Counts – Local Roadways

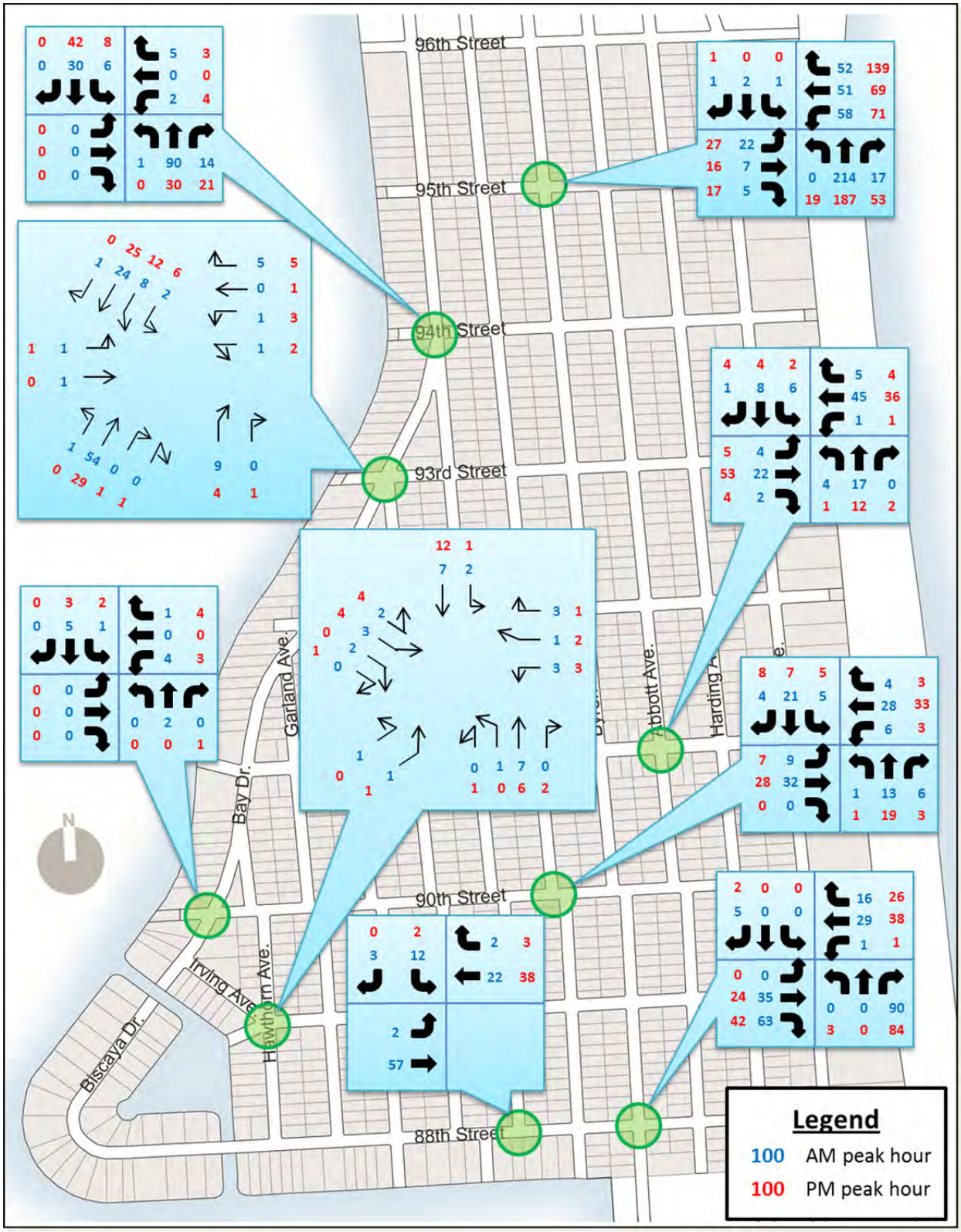
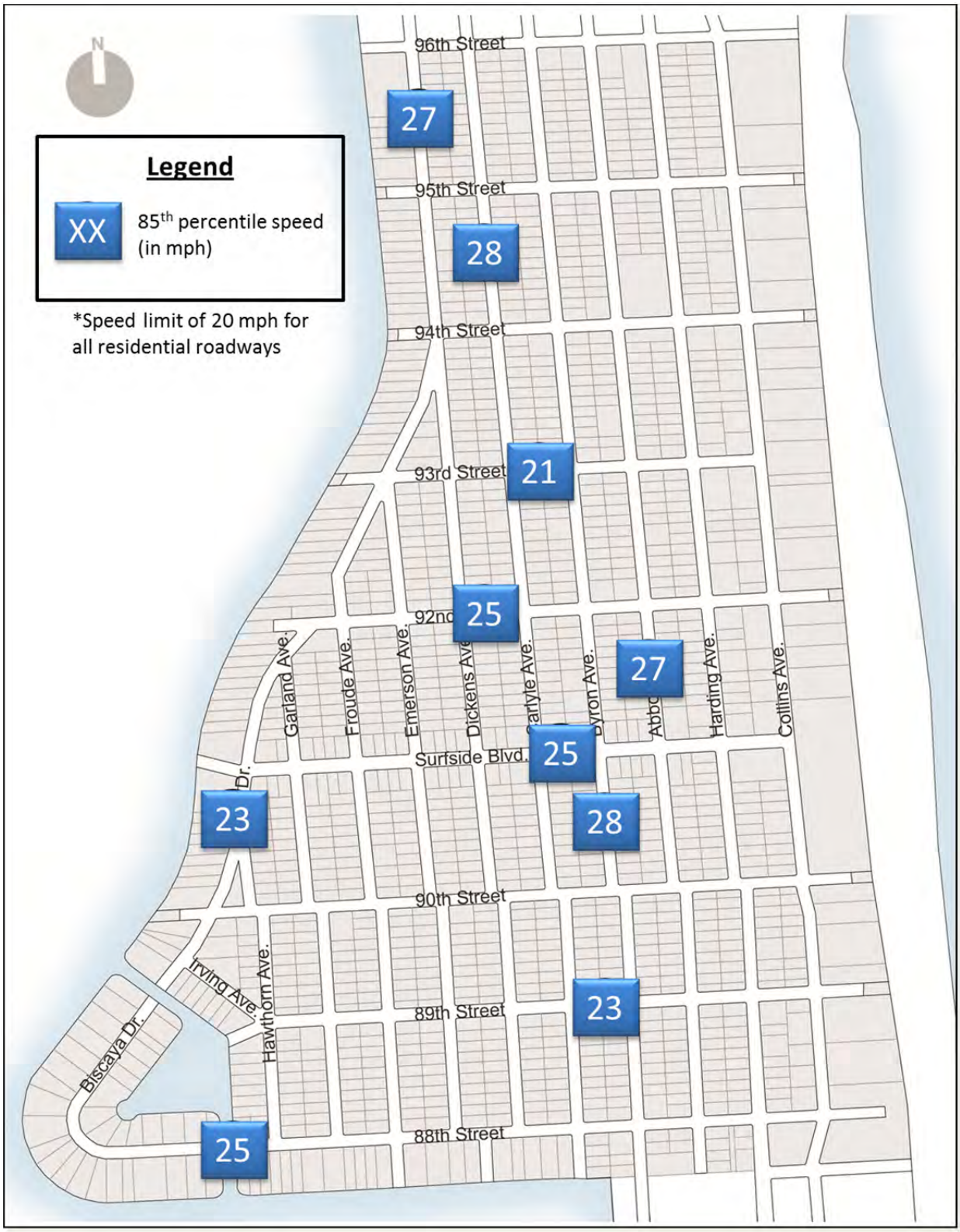


Figure 2.4 – Bi-directional Tube Counts

* Counts adjusted to peak season

Figure 2.5 – 85th Percentile Speeds

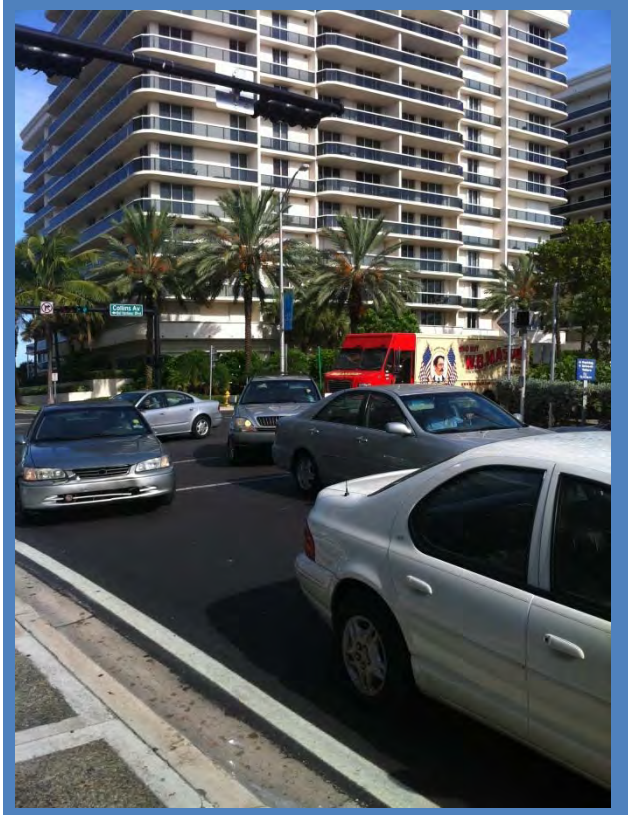


2.3 FIELD OBSERVATION

A field observation at the study locations was conducted on Wednesday, August 29, 2012 during the AM peak hour and on Thursday, August 30, 2012 during the PM peak hour. The field observation was conducted to document the existing conditions of the roadways, existing vehicular delay, and existing vehicular queuing. At the time of the field observations, Collins Avenue and Harding Avenue were being resurfaced and several of the local Town roadways were under construction for the ongoing Town-wide WSSD project. Generally speaking, minimal congestion was observed on the local residential roadways.

96th Street at Collins Avenue

The traffic operations of the northbound left turning movement on 96th Street at Collins Avenue were affected by the vehicular delay and queue of the westbound approach on 96th Street at Harding Avenue. At various times during the AM and PM peak hours, the westbound approach vehicular queue on 96th Street at Harding Avenue would extend to Collins Avenue and sometimes onto Collins Avenue. However, the queue would generally dissipate after each cycle of the traffic signal. During the PM peak hour, the northbound queue on Collins Avenue at 96th Street would occasionally extend almost to 95th Street.



Westbound queue on 96th Street at Harding Avenue extends onto Collins Avenue.

96th Street at Harding Avenue

Significant vehicular queues were observed on 96th Street at Harding Avenue. At times the eastbound vehicular queue extended past Byron Avenue and the westbound vehicular queue extended onto Collins Avenue. However the vehicular queues would generally clear after each cycle of the traffic signal.

96th Street at Byron Avenue

The eastbound vehicular queue extended past the 500 Block/Bal Harbour Shops traffic signal at times during both peak hours. Additionally, the traffic operations of 96th Street at Byron Avenue were affected by the delay and vehicular queue occurring on 96th Street at Harding Avenue. Generally, the vehicular queues would dissipate after each cycle of the traffic signal.

96th Street at 500 Block/Bal Harbour Shops

No major vehicle delays or queues were observed at this intersection. However, the traffic operations of 96th Street at the 500 Block were affected by the eastbound vehicular queue on 96th Street at Byron Avenue.

95th Street at Collins Avenue and Harding Avenue & 94th Street at Collins Avenue and Harding Avenue

The westbound vehicular queue on 94th Street and 95th Street at Harding Avenue extended almost to Collins Avenue for brief periods of time during the PM peak hour.

Eastbound queue on 96th Street at Harding Avenue extends past Byron Avenue.

Eastbound queue on 96th Street at Byron Avenue extends to Bal Harbour Shops signal.

2.4 CRASH DATA

Crash summary reports were obtained from the Town of Surfside Police Department for the three-year period from January 2009 to December 2011 for each of local residential roadways. A summary of the crash locations for Years 2009 through 2011 are shown in **Table 2.1**

Table 2.1 – Local Roadways Vehicular Crash Locations

Roadway	Year		
	2009	2010	2011
Abbott Avenue	6	5	6
Bay Drive	1	0	1
Biscaya Drive	0	1	3
Byron Avenue	1	3	1
Carlyle Avenue	4	3	3
Dickens Avenue	0	1	0
Froude Avenue	0	2	0
Hawthorne Avenue	0	0	1
95 Street	11	10	10
94 Street	7	1	5
93 Street	1	1	0
92 Street	3	1	0
91 Street	2	0	1
90 Street	1	2	0
89 Street	2	1	1
88 Street	1	2	1
Total	40	33	33

The crash data demonstrates that over the past three years there has been a negative trend in the number of vehicle crashes that have occurred at these local roadways.

2.5 FEDERAL FUNCTIONAL CLASSIFICATIONS

The Federal Functional Classification of a roadway is required by the Federal Highway Administration (FHWA). The main purpose of roadway classification is to establish an overall hierarchy of roadways. Functional classification is often used for planning purposes, budgeting, and programming. Generally, the Florida Department of Transportation (FDOT) is responsible for classifying the roadway network based on a number of individual features of the roadway. The functional classification of roadways within the Town limits are shown in **Table 2.2** and depicted in **Figure 2.3**. All roadways not identified in **Table 2.2** are considered local roads. The existing Federal Functional Classification of the roadways within the Town is also depicted in **Figure 2.6**.

The Town is currently in the process of attempting to change the functional classifications for Bay Drive, Dickens Avenue, 88th Street from Dickens Avenue to Collins Avenue and Byron Avenue from 88th Street to the southern Town limits from collector roadways to local roadways. These roadways do not provide a preferential traffic route when compared to other local roadways within the Town. This is evidenced by the existing traffic volumes on these roadways. Additionally, these roadways provide low levels of mobility, short trip lengths and low operating speeds. The change from a collector roadway classification to a local roadway classification will make it easier for the Town to meet the traffic calming thresholds required by Miami-Dade County. Miami-Dade County allows for traffic calming on both local and collector roadways; however, the minimum thresholds are generally less stringent for local roads when compared to collector roads. Traffic Calming criteria is discussed in depth in Section seven of this traffic study.

The Town met with FDOT staff on September 13, 2012 to discuss the process of changing the roadway functional classification. A letter dated September 25, 2012 was subsequently sent to the FDOT formally requesting the change in roadway functional classification. The FDOT is currently in the review process for the request which includes involvement of adjacent municipalities. The FDOT is expected to make a final determination in early 2013. If the FDOT

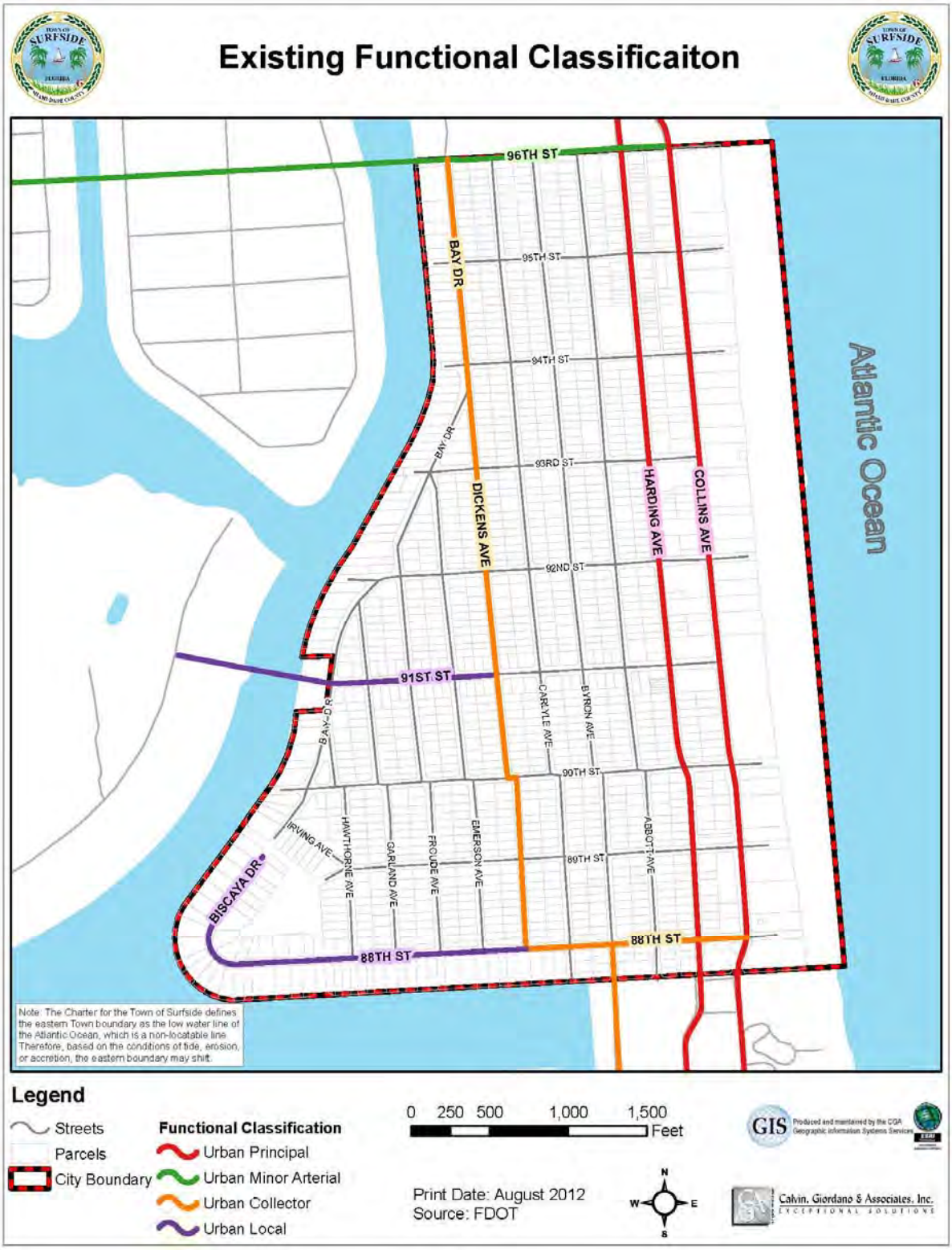
agrees with the decision to reclassify the streets, the FDOT will then submit the change to the Federal Highway Administration (FHWA).

Table 2.2 – Federal Functional Classification

Roadway	Federal Functional Classification
96th Street	Urban Minor Arterial
Harding Avenue	Urban Principal Arterial
Collins Avenue	Urban Principal Arterial
Bay Drive (96th Street to 94th Street)	Urban Collector
Dickens Avenue	Urban Collector
91st Street (Western Town Limits to Dickens Avenue)	Urban Local
88th Street (West Street Termination to Dickens Avenue)	Urban Local
88th Street (Dickens Avenue to Collins Avenue)	Urban Collector
Byron Avenue (88th Street to Southern Town Limits)	Urban Collector

Source: 2011 FDOT FTI DVD

Figure 2.6 – Existing Federal Functional Classification



SECTION THREE

ROADWAY LINK EVALUATION

3.1 LINK ANALYSIS

A roadway link analysis was performed for the peak hour conditions on 96th Street, Collins Avenue, and Harding Avenue as shown in **Table 3.1**. A link analysis is generally the initial analysis performed for a roadway. A link analysis is utilized for planning purposes and provides a "ballpark" estimate for the actual capacity of the roadway. The peak hour traffic volumes were determined from the collected turning movement counts. The Town Comprehensive Plan requires 96th Street, Harding Avenue, and Collins Avenue to maintain an adopted Level of Service (LOS) E+20%. LOS for roadways are broken down with six LOS designations (LOS A – LOS F). LOS A represents the most ideal situation with minimal if any congestion at all while LOS F represents the worst conditions with high vehicular congestion. Each roadway is assigned a LOS capacity threshold volume based on a number of factors including but not limited to roadway type, number of lanes and number of traffic signals. The capacity thresholds are derived from the 2009 FDOT Quality/Level of Service Handbook.

The results of the link analysis demonstrate that there are currently no roadways operating below the LOS E+20% threshold. The results show that there is excess capacity for each of the study roadways. However, the link analysis is only an estimate of capacity and does not take into account many of the unique characteristics of the Town such as the close traffic signal proximity and high number of turn percentage on 96th Street at Collins Avenue and Harding Avenue. Therefore, it is advantageous to review more detailed traffic analysis.

Table 3.1 – Peak Hour Link Analysis

Road	Location	Adopted LOS	Existing Number of Lanes	AM Peak Hour			PM Peak Hour		
				LOS Capacity	AM Peak Hour Volume	AM Peak Hour LOS	LOS Capacity	PM Peak Hour Volume	PM Peak Hour LOS
96th St	W. of Bay Dr to Byron Ave	E+20%	4D	3,720	2,185	D	3,720	1,991	D
96th St	Byron Ave to Harding Ave	E+20%	4D	3,720	1,939	D	3,720	1,779	D
96th St	Harding Ave to Collins Ave	E+20%	4D	3,720	915	C	3,720	849	C
Harding Ave	96th St to 94th St	E+20%	3L	3,370	2,088	C	3,370	1,921	C
Harding Ave	94th St to 88th St	E+20%	3L	3,370	1,934	C	3,370	1,904	C
Collins Ave	96th St to 94th St	E+20%	3L	3,370	1,602	C	3,370	2,205	C
Collins Ave	94th St to 88th St	E+20%	3L	3,370	1,615	C	3,370	2,217	C

SECTION FOUR

EXISTING OPERATIONAL ANALYSIS

4.1 METHODOLOGY

An operational analysis was completed for each of the study intersections during the AM and PM peak hours. Synchro 7 software and VISSIM traffic simulation software were both utilized for the analysis. Synchro 7 software is a nationally accepted software that is commonly utilized for traffic impact analysis and is generally considered one of the most prominent tools to utilize for system wide signal timing improvements. Both Synchro and VISSIM offer different benefits that can be valuable to the Town. Synchro software is very common in the industry and is easier for other agencies and professionals to review and accept as valid. Since Synchro is commonly accepted in Miami-Dade County, it was determined to utilize Synchro to analyze the major signalized intersections on 96th Street, Harding Avenue, and Collins Avenue.

The Synchro calculated delay and Level of Service results for the major intersections were used for this study as opposed to the Synchro calculated Highway Capacity Manual (HCM) results. The main difference between the Synchro and HCM results is that Synchro has a more advanced calculation to incorporate the signal timing of the corridors. Since there are numerous signalized intersections within a close proximity for the study intersections and the corridors are running on a coordinated signal timing system, it was determined that the Synchro results would be the most accurate and appropriate.

VISSIM software is a nationally recognized microscopic traffic simulation tool. One of the main advantages of VISSIM is the ability to visually depict existing and future traffic scenarios. This can be particularly beneficial when presenting the findings of the study to the Town Commission and to Town residents. A VISSIM micro-simulation model encompassing the entire Town was created for this study. The VISSIM model was then calibrated to match the existing conditions based on field review and traffic data for the study intersections. The VISSIM model can be utilized for numerous scenarios including signal timing changes, new turn lanes,

pedestrian crossings, route detours, and many others. The VISSIM model was also utilized to analyze the local roadway intersections.

4.2 MAJOR ROADWAYS

The following intersections on 96th Street, Harding Avenue, and Collins Avenue were analyzed:

1. 96th Street at Carlyle Avenue
2. 96th Street at Byron Avenue
3. 96th Street at Harding Avenue
4. 96th Street at Collins Avenue
5. Harding Avenue at 95th Street
6. Harding Avenue at 94th Street
7. Collins Avenue at 95th Street
8. Collins Avenue at 94th Street

The intersection of 91st Street and Harding Avenue was unable to be included as part of this traffic study due to the temporary closure of 91st Street between Harding Avenue and Collins Avenue. This segment on 91st Street at the time of this study was being utilized as an equipment staging area for the WSSD project. However, the intersection of 91st Street at Harding Avenue was included in the traffic model for this study. This will enable the Town to cost effectively analyze this intersection once reliable traffic counts are able to be collected on 91st Street at Harding Avenue.

Existing signal timings from Miami-Dade County were utilized in the analysis. The Miami-Dade County signal timing sheets are included in **Appendix C**.

Levels of Service (LOS) for intersections are broken down with six LOS designations (LOS A – LOS F). LOS A represents the most ideal situation with minimal if any delay at all while LOS F represents the worst conditions with high vehicular delay. The LOS designations for signalized intersections are shown on **Table 4.1**.

Table 4.1 – LOS Criteria for Signalized Intersections

LOS	Control Delay per Vehicle (s/veh)
A	≤ 10
B	> 10-20
C	>20-35
D	>35-55
E	>55-80
F	>80

Source: 2000 HCM Exhibit 16-2

In addition to average vehicle delay and LOS, the 50th percentile and 95th percentile queues were also used as a performance measure for the signalized intersections. The 95th percentile queue is the calculated back of vehicle queue that has only a 5-percent probability of being exceeded during the analysis time period.

The results of the existing conditions analysis demonstrates that many of the roadway approaches are experiencing high delays and are currently operating at LOS E or LOS F. The major congestion location within the Town occurs on the intersections of 96th Street at Harding Avenue and Collins Avenue. The traffic congestion at these locations is largely due to high traffic volumes on opposing roadways and the close proximity of signalized intersections. 96th Street, Collins Avenue, and Harding Avenue all are part of a coordinated signal timing system. The limiting factor is the short available vehicle stacking space on 96th Street between Harding Avenue and Collins Avenue. Due to the high amount of eastbound left turns on 96th Street at Collins Avenue and westbound through movements on 96th Street at Harding Avenue, it is likely that one of these approaches will consistently queue with vehicles.

The existing signal timing pattern is configured so that the eastbound through vehicles on 96th Street at Harding Avenue are able to run continuously through 96th Street and make a left turn onto northbound Collins Avenue. This timing pattern is beneficial to eastbound 96th Street but causes additional delay for westbound 96th Street at Harding Avenue and subsequently the northbound left turn lane on Collins Avenue at 96th Street. The alternative would be to provide

advantageous signal timing progression for the northbound left turn on Collins Avenue onto 96th Street and then westbound through Harding Avenue. However, this pattern would have a detrimental impact on eastbound 96th Street and may cause vehicles to block the intersection of 96th and Harding Avenue which would cause substantial delays for both southbound Harding Avenue and eastbound 96th Street. Therefore, the existing signal timing pattern is considered the better of the two options since the upstream delay generally only effects the northbound left turn lane on Collins Avenue at 96th Street.

The results of the analysis demonstrate that the westbound approach on 96th Street at Harding Avenue is currently operating at LOS F during both peak hours, which is below acceptable thresholds.

In addition to the major roadways, many of the minor street approaches for the study intersections are experiencing high vehicle delays. At an intersection, the roadway that contains the higher amount of traffic volumes is usually considered the major street. Conversely, the roadway that contains the least amount of traffic volumes is considered the minor street. For example, Harding Avenue would be considered the major street while 95th Street would be considered the minor street at that intersection. Currently, 96th Street, Harding Avenue, and Collins Avenue are utilizing a coordinated traffic signal timing pattern to increase traffic progression and minimize delay on the major thoroughfares. Therefore, the minor street approaches have minimal green time and must wait the full cycle length before receiving a green light. While this approach is beneficial for the movement of traffic on the major thoroughfare, minor street traffic experiences significant delay. The average delay for many of the minor street approaches during the peak hours exceeds the Level of Service E threshold of 55 seconds.

The results of the existing conditions analysis for the AM and PM peak hours are shown on **Table 4.2.**

In addition to the high delays experienced at many of the study intersections, many of the approaches have 95th percentile queues that exceed the available stacking area. When vehicle queuing extends past the upstream intersection, this further compounds delay at both intersections and actual vehicle delay is larger than the computed delay. The 95th percentile queues for the study intersections are shown on **Table 4.3**.

Table 4.2 – Existing Conditions Analysis – Major Roadways - Delay

Intersection	Approach	AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS
96th Street at Bal Harbour Shops	EB	1.9	A	2.5	A
	SB	48.5	D	43.0	D
	WB	3.4	A	3.1	A
	Total	2.9	A	5.9	A
96th Street at Byron Avenue	NB	71.7	E	72.8	E
	EB	3.1	A	4.2	A
	WB	12.2	B	13.4	B
	Total	13.6	B	14.9	B
96th Street at Harding Avenue	EB	33.9	C	30.0	C
	SB	32.7	C	28.1	C
	WB	142.6	F	98.8	F
	Total	48.2	D	39.7	D
96th Street at Collins Avenue	NB	59.0	E	43.9	D
	EB	18.6	B	15.2	B
	WB	58.6	E	54.8	D
	Total	51.1	D	39.0	D
Harding Avenue at 95th Street	EB	107.7	F	65.7	E
	SB	14.4	B	10.1	B
	WB	241.4	F	91.2	F
	Total	34.2	C	18.1	B
Collins Avenue at 95th Street	NB	1.5	A	2.6	A
	EB	71.7	E	19.3	B
	WB	41.5	D	15.2	B
	Total	4.8	A	3.4	A
Harding Avenue at 94th Street	EB	67.7	E	73.6	E
	SB	5.0	A	4.0	A
	WB	77.3	E	187.9	F
	Total	10.7	B	23.7	C
Collins Avenue at 94th Street	NB	5.0	A	14.1	B
	EB	80.8	F	22.0	C
	WB	37.9	D	17.0	B
	Total	7.5	A	14.4	B

Table 4.3 – Existing Conditions Analysis– Major Roadways - 50th and 95th Percentile Queues

Intersection	Approach	Approx. Approach Storage Length	AM Peak Hour		PM Peak Hour		Storage Bay Exceeded?
			50th Percentile Queue (ft)	95th Percentile Queue (ft)	50th Percentile Queue (ft)	95th Percentile Queue (ft)	
96th Street at Bal Harbour Shops	EB	880	73	170	67	137	No
	SB	N/A	3	15	41	71	N/A
	WB	150	139	161	14	150	Yes
96th Street at Byron Avenue	NB	510	109	148	103	144	No
	EB	180	141	58	154	226	Yes
	WB	450	307	352	299	343	No
96th Street at Harding Avenue	EB	450	376	453	334	397	Yes
	SB	250	474	530	363	414	Yes
	WB	210	277	338	259	321	Yes
96th Street at Collins Avenue	NB	580	474	660	557	617	Yes
	EB	210	73	114	53	110	No
	WB	250	3	20	14	48	No
Harding Avenue at 95th Street	EB	190	216	#375	107	175	Yes
	SB	570	376	419	253	300	No
	WB	220	~134	#267	136	m#211	Yes
Collins Avenue at 95th Street	NB	580	33	35	23	24	No
	EB	190	69	m110	39	65	No
	WB	210	7	32	2	16	No
Harding Avenue at 94th Street	EB	190	78	136	145	227	Yes
	SB	570	195	m177	61	65	No
	WB	240	110	174	~226	m#351	Yes
Collins Avenue at 94th Street	NB	590	176	195	269	331	No
	EB	240	49	98	46	m78	No
	WB	160	8	37	2	12	No

~ Volume exceeds capacity, queue is theoretically infinite
# 95th percentile volume exceeds capacity, queue may be longer
m Volume for 95th percentile queue is metered by upstream signal

4.3 RESIDENTIAL ROADWAYS

The main purpose of the residential intersection counts was to obtain data for traffic patterns and volumes to determine appropriate locations for traffic calming. However, an operational analysis for the intersections within the residential district of the Town was also included. The following intersections within the residential district of the Town were analyzed:

1. 95th Street at Byron Avenue
2. 94th Street at Bay Drive
3. 93rd Street at Emerson Avenue
4. 91st Street at Abbot Avenue
5. 91st Street at Abbot Avenue
6. Bay Drive at Hawthorne Avenue
7. 90th Street at Carlyle Avenue
8. 89th Street at Hawthorne Avenue
9. 88th Street at Byron Avenue

Similarly to the signalized intersections, LOS designations from LOS A to LOS F are assigned to stop controlled intersections based on average delay. However, stop controlled intersections have a different threshold for delay and LOS because of driver perception. A driver is more willing to tolerate a higher amount of delay at a signalized intersection since they know that the light will eventually turn green and they will have an opportunity to get through the intersection. This does not occur at stop controlled intersections and thus drivers are less willing to tolerate delay. The LOS designations for stop controlled intersections are shown in **Table 4.4**.

Table 4.4 – LOS Criteria for Stop Controlled Intersections

LOS	Control Delay per Vehicle (s/veh)
A	0-10
B	> 10-15
C	>15-25
D	>25-35
E	>35-50
F	>50

Source: 2000 HCM Exhibit 17-2 and 17-22

The results of the analysis demonstrate that there is minimal peak hour delay at these intersections. Results of the VISSIM analysis for the residential stop controlled intersections are

shown in **Table 4.5**. It should be noted that a LOS designation is only given to stop controlled intersection approaches in accordance with Highway Capacity Manual methodology. The Synchro printouts for the signalized intersections are included in **Appendix D** while the VISSIM printouts for the unsignalized intersections are included in **Appendix E**.

The highest traffic volumes obtained for the residential intersections was the intersection of 95th Street at Byron Avenue. This can likely be attributed to the fact that Byron Avenue serves as the only option for Town residents to travel on westbound 96th Street without having to utilize Collins Avenue.

Table 4.5 – Existing Conditions Analysis – Residential Roadways

Intersection	Approach	AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS
94th Street at Bay Drive	NB	6.2	A	5.8	A
	SB	5.5	A	5.6	A
	WB	5.8	A	5.8	A
	Total	6	A	5.7	A
93rd Street at Bay Drive	NB	5.6	A	5.2	A
	NEB	0.1	-	0	-
	EB	3	A	-	-
	SWB	0.2	-	0	-
	WB	4.6	A	5.3	A
	Total	1.2	-	1	-
88th Street at Dickens Avenue	EB	0.1	-	0	-
	SB	5.7	A	-	-
	WB	0	-	0	-
	Total	0.9	-	0	-
91st Street at Abbott Avenue	NB	6.1	A	6.3	A
	EB	0.2	-	0.1	-
	SB	5.6	A	5.6	A
	WB	0.1	-	0.1	-
	Total	2.6	-	2.1	-
90th Street at Bay Drive	SWB	0.5	A	1.8	A
	WB	4.1	A	4.5	A
	Total	2.2	A	3.7	A
90th Street at Carlyle Avenue	NB	5.5	A	5.8	A
	EB	5.7	A	5.9	A
	SB	6.1	A	5.7	A
	WB	5.5	A	5.9	A
	Total	5.8	A	5.9	A
89th Street at Hawthorne Avenue	NB	4.8	A	4.7	A
	SEB	5	A	5.3	A
	SB	4.9	A	5.4	A
	WB	4.7	A	4.2	A
	Total	5.4	A	5.3	A

Table 4.5 Continued – Existing Conditions Analysis – Residential Roadways

Intersection	Approach	AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS
95th Street at Byron Avenue	NB	10.0	A	12.9	B
	EB	6.6	A	7.2	A
	SB	5.1	A	0.0	A
	WB	16.2	C	33.3	D
	Total	12.1	B	21.4	C
88th Street at Byron Avenue	NB	5.9	A	5.7	A
	EB	0.6	-	0.5	-
	SB	3.4	A	0.0	A
	WB	0.3	-	0.3	-
	Total	2.7	-	2.6	-

SECTION FIVE

ALTERNATIVE OPERATIONAL ANALYSIS

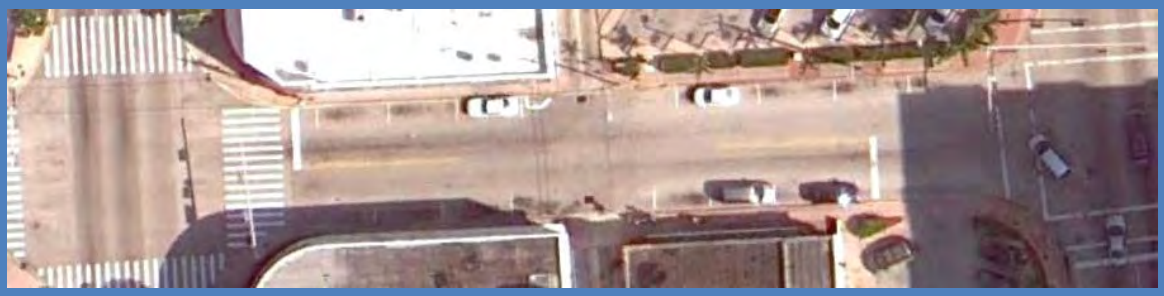
5.1 94TH STREET AND 95TH STREET EXCLUSIVE LEFT TURN LANES

As part of this traffic study, CGA evaluated the need for an exclusive left turn lane on 94th Street and 95th Street between Collins Avenue and Harding Avenue. This portion of 95th Street is approximately 40 feet wide which is sufficient width to add a turn lane. 94th Street is approximately 33 feet wide which would be just enough to accommodate an additional exclusive westbound left turn. However, several parallel parking spaces along 95th Street and 94th Street would need to be displaced to accommodate a turn lane. The 94th and 95th Street exclusive left turn lane alternative is depicted in **Figure 5.1**.

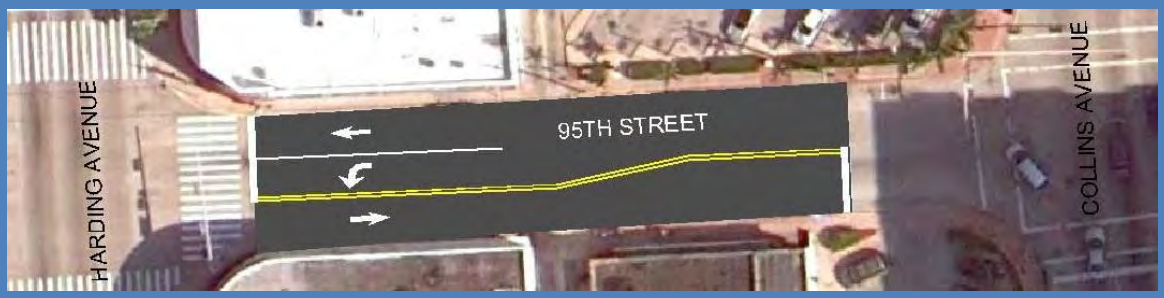
Turning movement counts were first reviewed to determine for which intersection a left turn lane would be most appropriate. The existing data collection showed that currently over 95% of vehicle trips on the eastbound approach of 95th Street and 94th Street at Collins Avenue make a left turn. Therefore, an eastbound left turn at these locations would not provide a practical benefit since the vehicle split is dominated by one movement. The existing data collection showed a much more even distribution for the westbound approach on 95th Street and 94th Street at Harding Avenue. Therefore, the roadway geometry was modified to accommodate a westbound left turn lane and a westbound through lane for both intersections in this alternative.

The results of the analysis showed an improvement for both vehicle delay and queue for the westbound approach on 94th Street and 95th Street at Harding Avenue. A comparison of the existing conditions and the proposed 95th Street and 94th Street exclusive left turn lanes are shown in **Tables 5.1 and 5.2**. The Synchro printouts for the 95th Street and 94th Street exclusive left turn lanes alternative are included in **Appendix F**.

Figure 5.1 – 94th Street and 95th Street Exclusive Left Turn Lanes



95th Street at Harding Avenue Existing Conditions



95th Street at Harding Avenue – Exclusive Left Turn Lane Alternative

94th Street at Harding Avenue Existing Conditions

94th Street at Harding Avenue – Exclusive Left Turn Lane Alternative

Table 5.1 – 94th Street and 95th Street Exclusive Left Turn Lane at Harding Avenue –Delay

95th Street at Harding Avenue		Existing Conditions				95th Street Left Turn Lane			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
Measure of Effectiveness	Approach	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Delay (s/veh)	EB	107.7	F	65.7	E	107.7	F	65.7	E
	SB	14.4	B	10.1	B	14.4	B	10.1	B
	WB	241.4	F	91.2	F	94.8	F	67.9	E
	Total	34.2	C	18.1	B	27.2	C	16.6	B

94th Street at Harding Avenue		Existing Conditions				94th Street Left Turn Lane			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
Measure of Effectiveness	Approach	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Delay (s/veh)	EB	67.7	E	73.6	E	67.7	E	73.6	E
	SB	5.0	A	4.0	A	5.1	A	4.1	A
	WB	77.3	E	187.9	F	69.2	E	68.2	E
	Total	10.7	B	23.7	C	10.5	B	14.0	B

Table 5.2 – 94th Street and 95th Street Exclusive Left Turn Lane at Harding Avenue – 50th and 95th Percentile Queues

95th Street at Harding Avenue		Existing Conditions				95th Street Left Turn Lane			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
Measure of Effectiveness	Approach	50th (ft)	95th (ft)	50th (ft)	95th (ft)	50th (ft)	95th (ft)	50th (ft)	95th (ft)
Delay (s/veh)	EB	216	#375	107	175	216	#375	107	175
	SB	376	419	253	300	376	419	253	300
	WB	~134	#267	136	m#211	54	#135	76	m111

94th Street at Harding Avenue		Existing Conditions				94th Street Left Turn Lane			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
Measure of Effectiveness	Approach	50th (ft)	95th. (ft)	50th (ft)	95th (ft)	50th (ft)	95th (ft)	50th (ft)	95th (ft)
Delay (s/veh)	EB	78	136	145	227	78	136	145	227
	SB	195	m177	61	65	202	179	62	65
	WB	110	174	~226	m#351	74	130	109	m154

~ Volume exceeds capacity, queue is theoretically infinite
# 95th percentile volume exceeds capacity, queue may be longer
m Volume for 95th percentile queue is metered by upstream signal

The results of the alternative analysis indicate that the higher vehicular delays and queues for the westbound approach at the intersections of 95th Street and 94th Street at Harding Avenue can be reduced by the addition of a westbound left turn lane. However, the high vehicular delays are mostly due to the signal timing at these intersections. The cycle lengths for these study intersections are 160 seconds during the AM peak hour and 150 seconds during the PM peak hour, which is lengthy. Additionally, most of the green time is assigned to southbound Harding Avenue. Although westbound vehicles generally clear the intersection each cycle, the addition of a westbound left turn lane on 95th Street and 94th Street at Harding Avenue would increase the available vehicle stacking area and minimize the chance of vehicle queues extending to Collins Avenue.

5.2 SIGNAL TIMING OPTIMIZATION

Each of the eight signalized study intersections was analyzed to determine if signal timing improvements would provide a benefit to the existing operational conditions.

95th Street and 94th Street Traffic Signals

The Harding Avenue and Collins Avenue corridors are currently part of a coordinated signal timing plan. This enables favorable progression on Harding Avenue and Collins Avenue through the Town and minimizes vehicle delay on the major streets. As is often a result of coordinated timing plans, the minor streets have increased vehicular delays and queues. The current timing plans for the 95th Street and 94th Street intersections are shown in **Table 5.3.**

Table 5.3 – 94th Street and 95th Street Existing Signal Timing Plans
(Values shown are in seconds)

Intersection	AM Peak Hour			PM Peak Hour		
	Cycle	NB/SB	EB/WB	Cycle	NB/SB	EB/WB
94th Street at Harding Avenue	160	133	27	150	123	27
95th Street at Harding Avenue	160	133	27	150	123	27
94th Street at Collins Avenue	160	134	26	75	49	26
95th Street at Collins Avenue	160	135	25	75	50	25

Collins Avenue at 94th Street and 95th Street during the PM peak hour is currently operating on what is commonly referred to as a "half cycle", meaning the signal cycle repeats every 80 seconds rather than every 160 seconds. A half cycle is generally used at intersections along a coordinated roadway where it is more beneficial to utilize a shorter cycle length than the longer cycle length used along the corridor. In this case, the half cycle allows more green time for the

minor streets and still allows for favorable progression on Collins Avenue by operating within a multiple of the 160 second cycle length established for the corridor. Each of the signalized intersections on 94th Street and 95th Street are pre-timed intersections without any vehicle or pedestrian detection.

In this signal timing optimization alternative, the signal timing was adjusted at each intersection. Vehicle and pedestrian detectors were assumed for the eastbound and westbound approaches on 94th Street and 95th Street to allow the assignment of only the amount of green time necessary to meet actual demand. The pedestrians timing was assumed to remain the same as the existing signal timings. Additionally, the cycle lengths for the Harding Avenue at 94th Street and 95th Street intersections were set to half cycles during the AM and PM peak hours. The cycle length for the Collins Avenue at 94th Street and 95th Street intersections were also set to half cycles during the AM peak hour. The modified signal timing is shown in **Table 5.4**. The results of the analysis are shown in **Table 5.5**

Table 5.4 – 94th Street and 95th Street Alternative Signal Timing Plans

Intersection	AM Peak Hour			PM Peak Hour		
	Cycle	NB/SB	EB/WB	Cycle	NB/SB	EB/WB
94th Street at Harding Avenue	80	55	25	75	50	25
95th Street at Harding Avenue	80	55	25	75	50	25
94th Street at Collins Avenue	80	55	25	75	49	26
95th Street at Collins Avenue	80	55	25	75	50	25

Note: Vehicle and pedestrian detectors included on minor street approaches.

Table 5.5 – 94th Street and 95th Street Signal Timing Optimization – Delay

		Existing Conditions				Signal Timing Optimization			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
Intersection	Approach	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
94th Street at Harding Avenue	EB	58.0	E	57.8	E	27.0	C	24.8	C
	SB	5.8	A	6.4	A	5.3	A	9.5	A
	WB	54.6	D	64.7	E	31.0	C	24.8	C
	Total	10.0	A	14.8	B	7.3	A	11.9	B
95th Street at Harding Avenue	EB	158.3	F	72.6	E	39.5	D	26.3	C
	SB	11.2	B	9.0	A	8.8	A	8.4	A
	WB	63.6	E	76.2	E	28.3	C	29.0	C
	Total	22.8	C	15.7	B	12.6	B	10.4	B
94th Street at Collins Avenue	NB	4.2	A	10.5	B	5.9	A	7.2	A
	EB	70.6	E	19.8	B	23.2	C	28.2	C
	WB	58.2	E	20.8	C	15.5	B	19.2	B
	Total	6.6	A	11.0	B	6.6	A	8.1	A
95th Street at Collins Avenue	NB	3.5	A	12.2	B	3.8	A	11.8	B
	EB	73.4	E	22.3	C	34.5	C	20.9	C
	WB	50.4	D	25.1	C	28.2	C	22.9	C
	Total	6.4	A	12.7	B	5.4	A	12.3	B

The results of the analysis demonstrate that the signal timing improvements made a significant impact on the study intersections. The minor street approaches of 94th Street and 95th Street showed a substantial decrease in delay all while Harding Avenue and Collins Avenue maintained a low average delay. Motorists who utilize the 94th Street and 95th Street intersections will notice that their average wait time for the traffic signals will decrease by about half from the existing conditions. The signal timing adjustments will also provide a significant reduction to the vehicle queue on 95th Street and 94th Street. The 50th and 95th percentile vehicle queues for the optimized conditions are shown in **Table 5.6**.

Table 5.6 – 94th Street and 95th Street Signal Timing Optimization – 50th and 95th Percentile Queues

Intersection	Approach	Approx. Approach Storage Length	AM Peak Hour		PM Peak Hour		Storage Bay Exceeded?
			50th Percentile Queue (ft)	95th Percentile Queue (ft)	50th Percentile Queue (ft)	95th Percentile Queue (ft)	
Harding Avenue at 95th Street	EB	190	88	154	51	84	No
	SB	570	190	153	78	181	No
	WB	220	33	48	67	m109	No
Collins Avenue at 95th Street	NB	580	2	245	17	19	No
	EB	190	41	m59	34	69	No
	WB	210	4	18	2	16	No
Harding Avenue at 94th Street	EB	190	32	67	63	113	No
	SB	570	184	258	132	33	No
	WB	240	43	81	58	m111	No
Collins Avenue at 94th Street	NB	590	169	207	269	331	No
	EB	240	25	m37	37	m55	No
	WB	160	3	20	2	12	No

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

96th Street Traffic Signals

The existing signal timing during the AM and PM peak hours was also evaluated for the signalized intersections of 96th Street at Bal Harbour Shops, Byron Avenue, Harding Avenue, and Collins Avenue. Generally, the signalized intersections on 96th Street are currently operating efficiently as possible given the high vehicle demand. However, due to the proximity of the traffic signals, some vehicular queuing extends to upstream signals at peak periods during the day. However, the vehicular queue usually dissipates after each cycle. Minor signal timing adjustments were made to the intersections of 96th Street at Bal Harbour Shops, Byron Avenue, and Collins Avenue as explained below:

- 96th Street at Bal Harbour Shops – Intersection timing splits were adjusted slightly for both the AM and PM peak hours.
- 96th Street at Byron Avenue – The cycle length was adjusted to a half cycle and the splits were optimized. The half cycles significantly reduce the delay on Byron Avenue.

- 96th Street at Harding Avenue – Intersection timing splits were adjusted slightly.
- 96th Street at Collins Avenue – The intersection timing splits were adjusted to give the northbound approach more green time and eastbound approach less green time.

The Town has been proactive in the past regarding improving signal timing in the Town to benefit the residents of Surfside. The northbound approach on Byron Avenue at 96th Street has historically been very congested with high delays and vehicle queues during school days and times. However, the Town was able to mitigate much of the delay by bringing it to the County's attention and requesting an adjustment in signal timing.

Intersection offsets were adjusted as necessary to maintain efficient progression along each of the major corridors. The results of the optimized conditions analysis for the 96th Street intersections are shown in **Tables 5.7 and 5.8**. The Synchro printouts for the signal timing optimization alternative are included in **Appendix G**.

Table 5.7 – 96th Street Signal Timing Optimization - Delay

		Existing Conditions				Signal Timing Optimization			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
Intersection	Approach	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
96th Street at Bal Harbour Shops	EB	1.9	A	2.5	A	1.9	A	2.5	A
	SB	48.5	D	43.0	D	48.5	D	43.0	D
	WB	3.4	A	3.1	A	2.4	A	1.7	A
	Total	2.9	A	5.9	A	2.5	A	5.2	A
96th Street at Byron Avenue	NB	71.7	E	72.8	E	30.9	C	32.9	C
	EB	3.1	A	4.2	A	4.2	A	6.2	A
	WB	12.2	B	13.4	B	3.6	A	2.0	A
	Total	13.6	B	14.9	B	6.8	A	7.5	A
96th Street at Harding Avenue	EB	33.9	C	30.0	C	30.5	C	22.5	C
	SB	32.7	C	28.1	C	32.7	C	31.1	C
	WB	142.6	F	98.8	F	115.0	F	36.9	D
	Total	48.2	D	39.7	D	43.3	D	29.2	C
96th Street at Collins Avenue	NB	59.0	E	43.9	D	21.9	C	22.1	C
	EB	18.6	B	15.2	B	31.4	C	28.8	C
	WB	58.6	E	54.8	D	58.6	E	54.6	D
	Total	51.1	D	39.0	D	23.9	C	23.6	C

Table 5.8 – 96th Street Signal Timing Optimization – 50th and 95th Percentile Vehicle Queues

Intersection	Approach	Approx. Approach Storage Length	AM Peak Hour		PM Peak Hour		Storage Bay Exceeded?
			50th Percentile Queue (ft)	95th Percentile Queue (ft)	50th Percentile Queue (ft)	95th Percentile Queue (ft)	
96th Street at Bal Harbour Shops	EB	880	73	170	67	137	No
	SB	N/A	3	15	41	71	N/A
	WB	150	76	87	24	40	No
96th Street at Byron Avenue	NB	510	50	69	47	75	No
	EB	180	88	186	102	252	Yes
	WB	450	19	359	17	22	No
96th Street at Harding Avenue	EB	450	341	412	285	268	No
	SB	250	474	530	382	435	Yes
	WB	210	247	338	215	275	Yes
96th Street at Collins Avenue	NB	580	293	600	413	483	Yes
	EB	210	143	182	186	220	Yes
	WB	250	3	20	14	48	No

SECTION SIX

FUTURE CONDITIONS OPERATIONAL ANALYSIS

6.1 PLANNED AND PROGRAMMED ROADWAY IMPROVEMENTS

Programmed (funded and/or committed) transportation improvements within the traffic impact study area were collected using the Florida Department of Transportation (FDOT) five year work program, Miami Dade County's Metropolitan Planning Organization (MPO) Transportation Improvement Program (TIP) and the 2035 Long Range Transportation Plan (LRTP). There were no identified roadway capacity improvements planned for or funded within the study area.

6.2 BACKGROUND TRAFFIC

Background traffic was calculated to account for committed and anticipated development in the study area. Future background traffic for the study was first developed by applying an annual growth rate to the seasonally adjusted 2012 traffic counts. Year 2017 was chosen for the future year conditions since this corresponds with the end of the FDOT five year work program. Historical FDOT traffic counts were first reviewed to determine historical growth trends. The data showed inconsistent or little traffic growth within the past ten years on Harding Avenue and Collins Avenue. Therefore, in an effort to be conservative a growth rate of 1.0% was chosen for the study area.

6.3 POTENTIAL FUTURE DEVELOPMENT

At the time of this traffic study there were three developments that had been approved by the Town but had not yet been constructed that potentially could generate a significant amount of additional traffic. The committed developments are shown in **Table 6.1**.

Table 6.1 – Committed Development

Development	Location	Intensity/Size
Young Israel	9580 Abbott Avenue	23,784 SF
92nd Street Hotel	North side of 92nd Street between Harding Avenue and Collins Avenue	175 rooms
Grand Beach Hotel	Collins Avenue north of 94th Street	341 rooms

Traffic studies submitted to the Town for the approved projects were utilized to forecast project trips. In the event that the submitted proposed development traffic study had a limited study area, assumptions were made to forecast traffic throughout the Town.

In addition to the committed development within the Town, two other projects, Surf Club and the Shul, were in the Town review process and had not yet received approval from the Town Commission at the time of the writing of this study. A traffic study for the Surf Club had been submitted but a traffic study for the Shul had not been submitted. The project trips for the Surf Club were broken out individually and included in the 2017 scenario based on the existing traffic study. Project trips for the Shul were estimated and distributed throughout the roadway network based on the buildout potential.

In addition to the anticipated growth within the Town, Bal Harbour Shops is anticipated to have a significant expansion in the future. Bal Harbour Shops is located just outside the Town borders north of 96th Street between Harding Avenue and Bay Drive. The proposed expansion is to consist of approximately 250,000 additional square feet of retail use and restaurants. Additionally, the parking garage could be expanded as well to accommodate the additional vehicle demand. The new Bal Harbour Shops trips were estimated and included in the 2017 scenario. The background traffic development sheets are included in **Appendix H**.

6.4 YEAR 2017 CONDITIONS OPERATIONAL ANALYSIS

The 2017 conditions were analyzed for two scenarios. The first scenario included utilizing the existing signal timing patterns while the second scenario included the optimized signal timing improvements previously identified. The results of the 2017 conditions with existing signal timing are shown in **Tables 6.2 and 6.3**. The Synchro printouts for the 2017 conditions with existing signal timing analysis are included in **Appendix I**.

The results of the 2017 conditions with existing signal timing analysis demonstrate that there could potentially be very significant delays and traffic congestion within the Town. The existing high vehicle delays and queues currently experienced will only be exacerbated under the 2017 conditions. Several of the intersections and particularly 96th Street at Harding Avenue and Collins Avenue deteriorate under this scenario.

The results of the 2017 optimized conditions are shown in **Tables 6.4 and 6.5**. The Synchro printouts for the 2017 optimized conditions are also included in **Appendix I**. The results demonstrate that the 2017 optimized conditions perform significantly more efficiently than the 2017 conditions without signal timing improvements. However, even with the improved timings, there is expected to be substantial vehicle delays and queues. The westbound approach of 96th Street at Harding Avenue will operate at LOS F with 50 percentile queues extending up to Collins Avenue. This will cause further increased delay and congestion beyond what is actually calculated. Additionally, the vehicular queuing on eastbound 96th Street at Harding Avenue will only get worse than the existing conditions and it potentially could be common for vehicle queuing to extend past Byron Avenue and further impact the operations of the upstream intersections beyond what is calculated.

The 2017 conditions analysis should be considered a general estimate of future conditions since it includes potential development that had not yet been approved and/or constructed at the time of this traffic study. Additionally, new developments within or outside of the Town could potentially cause a change in traffic patterns that deviate from the existing conditions.

Table 6.2 – 2017 Potential Future Conditions Analysis with Existing Signal Timing – Major Roadways - Delay

Intersection	Approach	2012 Existing Conditions				2017 Conditions[1]			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
96th Street at Bal Harbour Shops	EB	1.9	A	2.5	A	2.4	A	3.4	A
	SB	48.5	D	43.0	D	56.7	E	55.4	E
	WB	3.4	A	3.1	A	4.0	A	4.5	A
	Total	2.9	A	5.9	A	4.3	A	9.8	A
96th Street at Byron Avenue	NB	71.7	E	72.8	E	72.6	E	72.7	E
	EB	3.1	A	4.2	A	4.3	A	6.9	A
	WB	12.2	B	13.4	B	12.8	B	14.2	B
	Total	13.6	B	14.9	B	14.2	B	16.1	B
96th Street at Harding Avenue	EB	33.9	C	30.0	C	38.4	D	36.5	D
	SB	32.7	C	28.1	C	38.0	D	32.7	C
	WB	142.6	F	98.8	F	261.8	F	237.1	F
	Total	48.2	D	39.7	D	70.7	E	68.6	E
96th Street at Collins Avenue	NB	59.0	E	43.9	D	104.6	F	74.6	E
	EB	18.6	B	15.2	B	19.2	B	16.0	B
	WB	58.6	E	54.8	D	58.5	E	54.9	D
	Total	51.1	D	39.0	D	89.2	F	65.2	E
Harding Avenue at 95th Street	EB	107.7	F	65.7	E	331.8	F	68.3	E
	SB	14.4	B	10.1	B	17.1	B	13.7	B
	WB	241.4	F	91.2	F	1299.9	F	367.0	F
	Total	34.2	C	18.1	B	141.0	F	48.1	D
Collins Avenue at 95th Street	NB	1.5	A	2.6	A	1.9	A	16.1	B
	EB	71.7	E	19.3	B	138.8	F	26.5	C
	WB	41.5	D	15.2	B	42.2	D	18.5	B
	Total	4.8	A	3.4	A	12.7	B	16.8	B
Harding Avenue at 94th Street	EB	67.7	E	73.6	E	69.2	E	76.7	E
	SB	5.0	A	4.0	A	5.2	A	6.7	A
	WB	77.3	E	187.9	F	84.7	F	281.5	F
	Total	10.7	B	23.7	C	11.2	B	31.2	C
Collins Avenue at 94th Street	NB	5.0	A	14.1	B	5.5	A	21.2	C
	EB	80.8	F	22.0	C	91.1	F	25.3	C
	WB	37.9	D	17.0	B	36.3	D	18.0	B
	Total	7.5	A	14.4	B	9.8	A	21.4	C

(2) 2017 Conditions include existing (2012) traffic counts plus a 1% annual growth rate, committed development trips, and additional potential developments such as the Bal Harbour Shops expansion. The existing signal timings were utilized in this scenario.

Table 6.3 – 2017 Potential Future Conditions Analysis with Existing Signal Timing – Major Roadways – 50th and 95th Percentile - Queues

Intersection	Approach	Approx. Approach Storage Length	AM Peak Hour		PM Peak Hour		Storage Bay Exceeded?
			50th Percentile Queue (ft)	95th Percentile Queue (ft)	50th Percentile Queue (ft)	95th Percentile Queue (ft)	
96th Street at Bal Harbour Shops	EB	880	87	202	106	156	No
	SB	N/A	20	39	97	138	N/A
	WB	150	150	171	140	156	Yes
96th Street at Byron Avenue	NB	510	118	160	110	153	No
	EB	180	204	285	253	336	Yes
	WB	450	370	414	366	414	No
96th Street at Harding Avenue	EB	450	424	501	371	510	Yes
	SB	250	603	666	472	530	Yes
	WB	210	342	407	341	406	Yes
96th Street at Collins Avenue	NB	580	549	m#757	660	714	Yes
	EB	210	68	m109	56	m88	No
	WB	250	3	21	15	51	No
Harding Avenue at 95th Street	EB	190	~246	#430	124	199	Yes
	SB	570	500	554	387	447	No
	WB	220	~380	#548	~353	m#470	Yes
Collins Avenue at 95th Street	NB	580	54	58	34	33	No
	EB	190	~193	m#325	86	132	Yes
	WB	210	7	30	4	18	No
Harding Avenue at 94th Street	EB	190	91	155	159	#247	Yes
	SB	570	254	m237	515	m288	No
	WB	240	132	201	~280	m#339	Yes
Collins Avenue at 94th Street	NB	590	217	237	383	#492	No
	EB	240	107	m172	66	m99	No
	WB	160	8	37	2	12	No

~ Volume exceeds capacity, queue is theoretically infinite
# 95th percentile volume exceeds capacity, queue may be longer
m Volume for 95th percentile queue is metered by upstream signal

Table 6.4 – 2017 Potential Future Conditions Analysis with Signal Timing Improvements – Major Roadways - Delay

Intersection	Approach	2012 Optimized Conditions				2017 Optimized Conditions[1]			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
96th Street at Bal Harbour Shops	EB	1.9	A	2.5	A	2.4	A	3.4	A
	SB	48.5	D	43.0	D	56.7	E	55.4	E
	WB	2.4	A	1.7	A	2.5	A	2.3	A
	Total	2.5	A	5.2	A	3.7	A	8.9	A
96th Street at Byron Avenue	NB	30.9	C	32.9	C	31.0	C	32.9	C
	EB	4.2	A	6.2	A	5.4	A	6.0	A
	WB	3.6	A	2.0	A	5.1	A	1.3	A
	Total	6.8	A	7.5	A	7.8	A	6.8	A
96th Street at Harding Avenue	EB	30.5	C	22.5	C	34.1	C	38.0	D
	SB	32.7	C	31.1	C	39.0	D	36.2	D
	WB	115.0	F	36.9	D	131.0	F	102.0	F
	Total	43.3	D	29.2	C	50.9	D	48.0	D
96th Street at Collins Avenue	NB	21.9	C	22.1	C	15.7	B	23.6	C
	EB	31.4	C	28.8	C	45.2	D	43.2	D
	WB	58.6	E	54.6	D	58.5	E	52.7	D
	Total	23.9	C	23.6	C	21.1	C	27.0	C
Harding Avenue at 95th Street	EB	30.7	C	29.5	C	32.1	C	26.4	C
	SB	7.0	A	4.6	A	9.6	A	11.5	B
	WB	20.8	C	42.5	D	50.2	D	59.5	E
	Total	9.9	A	8.2	A	14.6	B	16.4	B
Collins Avenue at 95th Street	NB	3.8	A	1.4	A	6.1	A	4.6	A
	EB	29.5	C	27.0	C	37.9	D	32.5	C
	WB	17.9	B	15.3	B	17.7	B	19.2	B
	Total	5.0	A	2.7	A	8.6	A	6.6	A
Harding Avenue at 94th Street	EB	27.8	C	33.5	C	28.5	C	33.2	C
	SB	6.6	A	3.7	A	8.9	A	5.3	A
	WB	23.2	C	35.9	D	24.0	C	44.0	D
	Total	8.2	A	8.3	A	10.3	B	9.9	A
Collins Avenue at 94th Street	NB	7.0	A	10.0	A	7.8	A	15.2	B
	EB	30.2	C	26.5	C	33.0	C	29.5	C
	WB	16.2	B	17.1	B	15.5	B	18.0	B
	Total	7.7	A	10.6	B	9.1	A	15.9	B

(1) 2017 Conditions include existing (2012) traffic counts plus a 1% annual growth rate, committed development trips, and additional potential developments such as the Bal Harbour Shops expansion. The optimized signal timing improvements previously identified were utilized in this scenario.

Table 6.5 – 2017 Potential Future Conditions Analysis with Signal Timing Improvements – Major Roadways – 50th and 95th Percentile Queues

Intersection	Approach	Approx. Approach Storage Length	AM Peak Hour		PM Peak Hour		Storage Bay Exceeded?
			50th Percentile Queue (ft)	95th Percentile Queue (ft)	50th Percentile Queue (ft)	95th Percentile Queue (ft)	
96th Street at Bal Harbour Shops	EB	880	87	202	106	156	No
	SB	N/A	20	39	97	138	N/A
	WB	150	83	95	81	93	No
96th Street at Byron Avenue	NB	510	54	74	51	79	No
	EB	180	108	217	186	273	Yes
	WB	450	20	423	16	24	No
96th Street at Harding Avenue	EB	450	580	458	575	#680	Yes
	SB	250	610	674	495	560	Yes
	WB	210	267	407	303	401	Yes
96th Street at Collins Avenue	NB	580	196	641	429	535	Yes
	EB	210	147	m218	155	m216	Yes
	WB	250	3	21	16	52	No
Harding Avenue at 95th Street	EB	190	100	171	53	97	No
	SB	570	273	364	288	394	No
	WB	220	80	#204	122	m166	No
Collins Avenue at 95th Street	NB	580	8	310	33	31	No
	EB	190	89	m112	87	m115	No
	WB	210	3	17	5	18	No
Harding Avenue at 94th Street	EB	190	37	76	70	119	Yes
	SB	570	305	290	52	142	No
	WB	240	46	86	78	m97	No
Collins Avenue at 94th Street	NB	590	208	254	393	#515	No
	EB	240	39	m57	50	m69	No
	WB	160	3	19	2	13	No

~ Volume exceeds capacity, queue is theoretically infinite
# 95th percentile volume exceeds capacity, queue may be longer
m Volume for 95th percentile queue is metered by upstream signal

6.5 FUTURE PARKING GARAGE

The Town has expressed the possibility of a future garage located at one of three existing Town owned parking lots. The potential locations include the following and are depicted in **Figure 6.1**:

1. 3 story garage located just east of Abbott Avenue between 96th Street and 95th Street
2. 4 story garage located just south of 95th Street west of Collins Avenue
3. 3 story garage located just south of 94th Street east of Harding Avenue

The exact number of parking spaces for each of the potential parking garage locations has not been determined at this time. The potential parking garage locations could have a significant traffic impact at the adjacent intersections as it is reasonable to assume that each of the potential parking garages would increase vehicle demand at each location.

Roadway and signal timing improvements may be necessary to mitigate any potential increase in traffic at these locations. The signal timing improvements including half cycle lengths outlined previously in this report would likely be the most cost effective mitigation solution at the adjacent signalized intersections. However, the inclusion of an exclusive left turn lane on 94th Street or 95th Street between Harding Avenue and Collins Avenue should also be considered.

Figure 6.1 – Potential Parking Garage Locations

SECTION SEVEN
MIAMI-DADE COUNTY TRAFFIC CALMING CRITERIA

7.1 GENERAL CRITERIA

Miami Dade County has authority, subject to all applicable laws, to approve, modify, remove, continue or deny any traffic flow modification within the Town of Surfside. Miami-Dade County has established a procedure manual for residents and/or applicants seeking to implement traffic calming devices and it is included in **Appendix J**. The minimum criterion established in the manual is shown in **Table 7.1**. Minimum criterion includes thresholds for traffic volume, 85th percentile speed, number of correctable accidents per year, cut through traffic, pedestrian crossing volume, and concurrence of residents. However, the minimum traffic volume thresholds can be reduced to a total of 30% and the speed thresholds can be reduced to 50% at the request of those municipalities which provide funding for their traffic calming program, such as the Town of Surfside.

The manual states that the Miami-Dade Public Works Department will make the determination on which criteria needs to be met and which entities will be required for review. Miami Dade County establishes three levels of traffic calming ranging from the least restrictive (Level 1) to the most restrictive (Level 3). Miami Dade County may also require that temporary traffic calming devices be installed before more restrictive devices are constructed. In this scenario, a post implementation traffic study would be required to determine the effectiveness of the temporary device. The three levels of traffic calming devices are shown in **Table 7.2**. Traffic flow modifications are only to be constructed on residential local roads and residential collector roads. The time table for the process of implementing a traffic calming device can vary greatly depending on the type of device, what requirements Miami-Dade County necessitates, and whether a temporary traffic calming device followed by a post implementation study is necessary. Generally, the process can be completed in a few months if Miami-Dade County does not require extensive public outreach or temporary traffic calming devices followed by a post implementation study.

Table 7.1 – Miami-Dade County Traffic Flow Modification Criteria

Must meet the first criteria and at least one of the remaining criteria in order for the Public Works Department to consider Traffic Calming measures:		
Criterion	Residential Local Streets	Residential Collector Streets
Minimum Traffic Volume	>1,500 VPD <3,000***	>3,000 VPD <8,000***
	>150 VPH <300	>300 VPH <800
85th Percentile Speed+	10 MPH> Speed Limit	10 MPH> Speed Limit
Correctable Accidents per year	>3 per year	>6 per year
Cut Through Traffic	>25%	>50%
Pedestrian Crossing Volume	>25	>50
Concurrence of residence*	2/3 of total number of residents**	2/3 of total number of residents **
VPD = Vehicles per day; VPH = Vehicles per hour		
+ It is the speed at which 85% of motorists travel * Prior to community notification to submit petition, the above guidelines will first be evaluated to determine eligibility for application of calming measures.		
** For mid-block calming, total residents=All property owners between adjacent intersection ** For intersection calming, total residents=All property owners from subject intersections to the next intersections of all legs.		
*** The traffic volume within a municipal boundary could be reduced to a total of 30%, and speed to 50% at the request of and for those municipalities, which provide funding for their traffic calming program.		

Source: Table from Miami Dade County Traffic Flow Modification/Street Closure procedure

Table 7.2 – Levels of Traffic Calming

Levels of Traffic Calming		
Level 1	Level 2	Level 3
Education	Chokers	Semi Diverter
Neighborhood Speed Watch Program	Roundabouts	Diagonal Diverter
Law Enforcement	Traffic Circle	Street Closure
Movement Restrictions	Speed Humps	Speed Humps
One Way Streets	Raised Median through Intersections (Right Turn Only)	
Multi-Way Stop Control	Mid-block Raised Islands/Medians	
Textured Pavement		
Gateway Treatments		
Border Landscaping Treatment		

7.2 SPEED HUMP/TABLE CRITERIA

In addition to the general traffic flow modification procedure, Miami Dade County also has specific policies regarding speed humps/tables. One of the criterions that is most applicable to the Town is the requirement that the street must be 750 feet long with no intersecting roadways in between. Based on this minimum requirement, the majority of the Town's local roadways do not qualify for speed humps/tables. Only 88th Street segment west of Hawthorne Avenue meets this requirement. The full list of criterion for speed humps is included in **Appendix K**.

7.3 LOCAL ROAD ANALYSIS

Traffic counts were conducted throughout the Town to determine where it would be appropriate to install traffic calming devices. The ten locations selected for bi-directional tube counts and speed data were compared to the Miami-Dade County traffic calming thresholds. The results are shown in **Table 7.3**.

Table 7.3 – Traffic Calming Thresholds – Tube Counts

Location	Daily Traffic	Meet Daily Volume Thresholds?	Hourly Traffic	Meets Hourly Volume Thresholds?	MPH Over Speed Limit	Meets Speed Thresholds?
Bay Drive between 96th Street and 95th Street	534	No(2)	64	No(2)	7	Yes(1)
Bay Drive between 91st Street and Hawthorne Avenue	420	No	48	Yes(1)	3	No
Carlyle Avenue between 95th Street and 94th Street	2162	Yes	360	Yes	8	Yes(1)
93rd Street between Carlyle Avenue and Byron Avenue	554	Yes(1)	54	Yes(1)	1	No
92nd Street between Dickens Avenue and Carlyle Avenue	785	Yes(1)	64	Yes(1)	5	No
Abbott Avenue between 92nd Street and 91st Street	408	Yes(1)	38	No	7	Yes(1)
91st Street between Carlyle Avenue and Byron Avenue	1187	Yes(1)	101	Yes(1)	5	No
Byron Avenue between 91st Street and 90th Street	1068	Yes(1)	268	Yes(1)	8	Yes(1)
89th Street between Carlyle Avenue and Byron Avenue	820	Yes(1)	82	Yes(1)	3	No
88th Street west of Hawthorne Avenue	473	Yes(1)	39	No	5	No

(1) Meets reduced requirement allowed for municipalities that fund their own traffic calming program.

(2) Does not meet current thresholds since the roadway is classified as a collector. The Town is in the process of changing this roadway designation to a local roadway. Criteria would be met for a local roadway with the allowed reduced thresholds.

Intersection turning movement counts were also collected at nine intersections on the Town's local roadway system. The traffic volumes obtained for these turning movement counts were also compared to the hourly thresholds for traffic calming devices. The roadway segments that exceed the minimum requirement are shown in **Table 7.4**.

Table 7.4 – Traffic Calming Thresholds – Intersection Counts

Location	Hourly Traffic	Meet hourly volume thresholds
Byron Avenue north of 95th Street	354	Yes(1)
Byron Avenue south of 95th Street	347	Yes(1)
Byron Avenue south of 88th Street	154	Yes(1)
95th Street west of Byron Avenue	149	Yes(1)
95th Street east of Byron Avenue	348	Yes(1)
Bay Drive north of 94th Street	131	Yes(1)
Bay Drive south of 94th Street	137	Yes(1)
91st Street west of Abbott Avenue	106	Yes(1)
91st Street east of Abbott Avenue	98	Yes(1)
90th Street west of Carlyle Avenue	77	Yes(1)
90th Street east of Carlyle Avenue	81	Yes(1)
88th Street west of Dickens Avenue	84	Yes(1)
88th Street east of Dickens Avenue	93	Yes(1)
88th Street west of Byron Avenue	132	Yes(1)
88th Street east of Byron Avenue	173	Yes(1)
(1) Meets reduced requirement allowed for municipalities that fund their own traffic calming program.		

The results of the traffic counts demonstrate that the majority of the local roadway network meets the reduced minimum volume criteria allowed by Miami Dade County for municipalities that fund their own traffic calming program. Four of the ten roadway segments exceeded the reduced minimum speed criteria. Three of the ten roadway segments have an 85th percentile

speed of 5 mph over the posted speed limit and these three segments are only one mph short of meeting the minimum reduced speed requirement.

SECTION EIGHT
PROPOSED TRAFFIC CALMING IMPROVEMENTS

8.1 NEIGHBORHOOD ROUNDABOUTS

Studies have shown that roundabouts can significantly reduce the frequency of vehicle collisions at an intersection when compared to other forms of traffic control devices. Furthermore, when vehicle collisions do occur they are typically at lower speeds which often results in fewer injuries. Roundabouts used in a series have also been documented to reduce vehicle speeds on the roadway corridors in between the roundabouts. Another benefit of roundabouts is the ability to add landscaping and increase the aesthetics of an intersection.

94th Street at Bay Drive

A neighborhood roundabout is proposed on 94th Street at Bay Drive. The intersection is currently under all-way stop control. An existing roundabout is present just south of this intersection at Bay Drive and Dickens Avenue. A conceptual exhibit of the proposed roundabout on 94th Street at Bay Drive is shown on **Figure 8.1**.

Roundabouts have been proven to reduce vehicle collisions and speeds

94th Street at Bay Drive
Existing Conditions

Figure 8.1 – 94th Street at Bay Drive Conceptual Roundabout

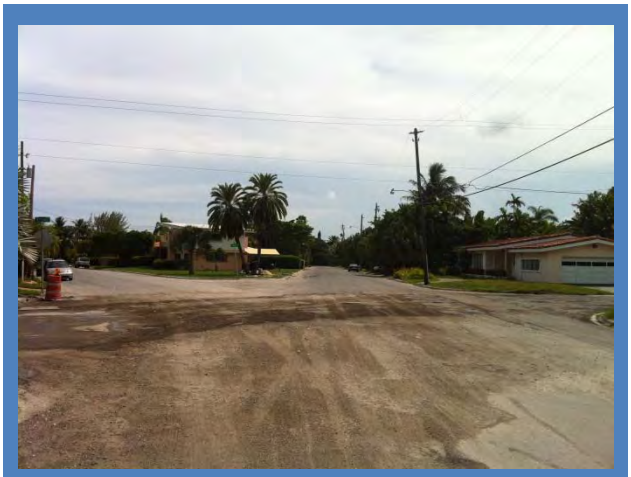
Calvin, Giordano & Associates, Inc. EXCEPTIONAL SOLUTIONS	94TH STREET AT DICKENS AVENUE CONCEPTUAL ROUNDABOUT	TOWN OF SURFSIDE TOWN WIDE TRAFFIC STUDY	FIGURE 8.1

93rd Street at Bay Drive and Emerson Avenue

A neighborhood roundabout is proposed on 93rd Street at Bay Drive and Emerson Avenue. 93rd Street at Bay Drive and Emerson Avenue is a five-leg intersection with 93rd Street and Emerson Avenue under stop control. Bay Drive is currently under free flow operations. The existing roadway configuration is uncommon and could result in confusion for unfamiliar drivers. Additionally, motorists on northbound Emerson Drive approaching the intersection may have difficulty locating northbound vehicles on Bay Drive under the existing roadway configuration. A conceptual exhibit of the proposed roundabout on 93rd Street at Bay Drive and Emerson Avenue is shown on **Figure 8.2**.

93rd Street at Byron Avenue

A neighborhood roundabout is proposed at 93rd Street at Byron Avenue. The intersection is currently under two-way stop control. Byron Avenue is under stop control while 93rd Street is under free flow operations. This proposed roundabout will be the second roundabout in a series for both the 93rd Street corridor and the Byron Avenue corridor. A conceptual exhibit of the proposed roundabout on 93rd Street at Byron Avenue is shown on **Figure 8.3**.

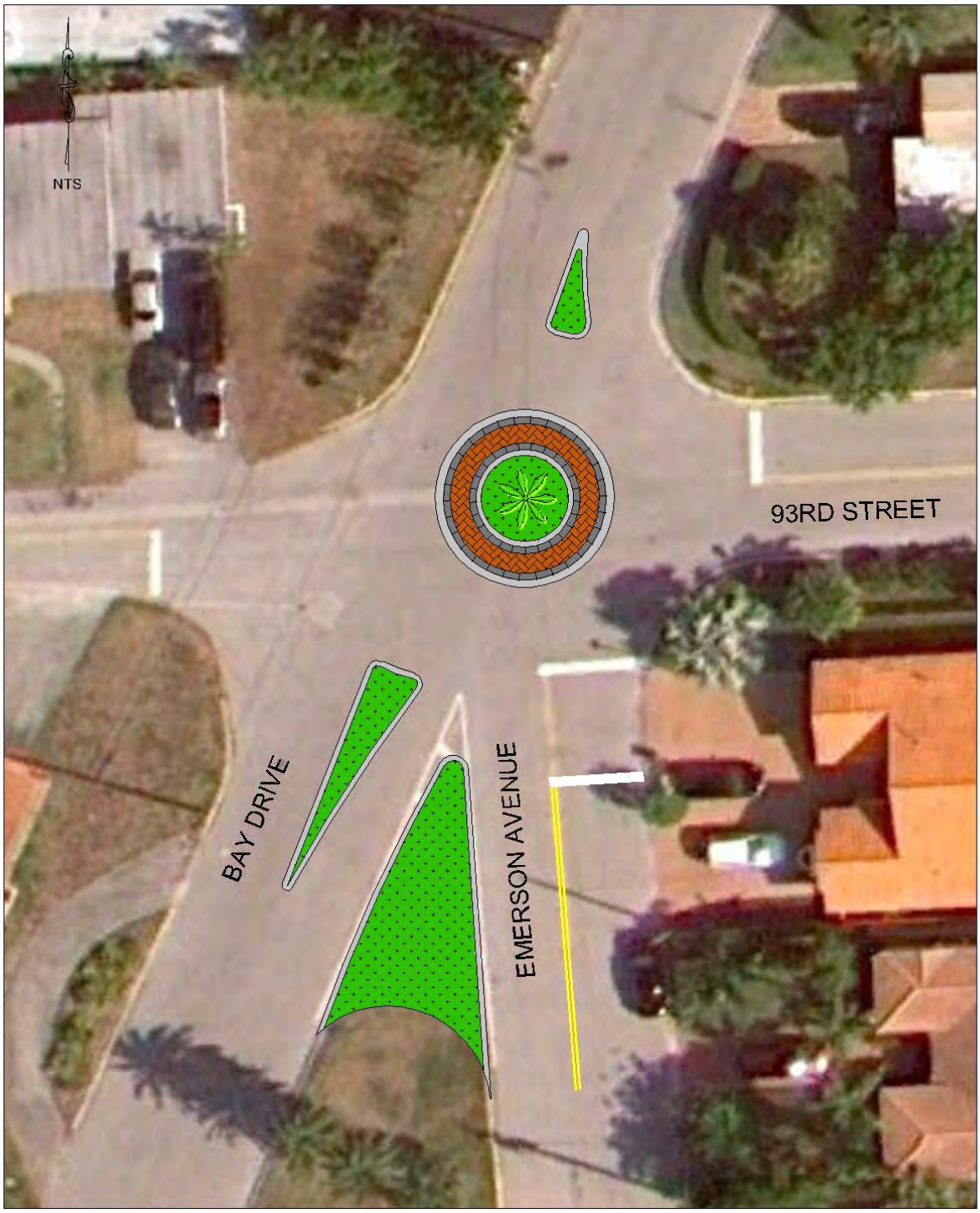


93rd Street at Bay Drive and Emerson Avenue
Existing Conditions

93rd Street at Bay Drive and Emerson Avenue
Aerial

93rd Street at Byron Avenue
Aerial

Figure 8.2 – 93rd Street at Bay Drive and Emerson Avenue Conceptual Roundabout



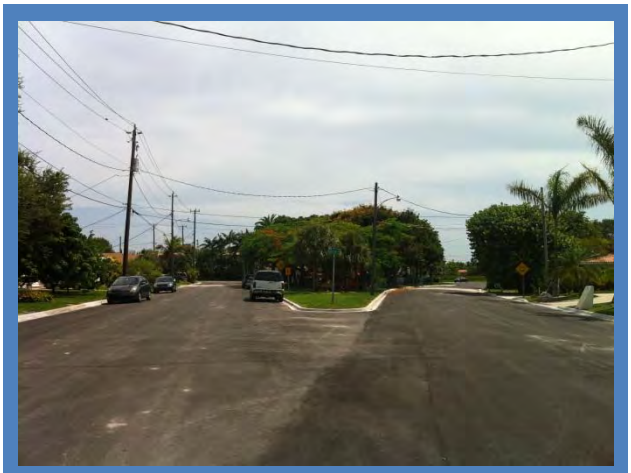
Calvin, Giordano & Associates, Inc. EXCEPTIONAL SOLUTIONS	93RD STREET AT BAY DRIVE CONCEPTUAL ROUNDABOUT	TOWN OF SURFSIDE TOWN WIDE TRAFFIC STUDY	FIGURE 8.2

Figure 8.3 – 93rd Street at Byron Avenue Conceptual Roundabout

Calvin, Giordano & Associates, Inc. EXCEPTIONAL SOLUTIONS	93RD STREET AT BYRON AVENUE CONCEPTUAL ROUNDABOUT	TOWN OF SURFSIDE TOWN WIDE TRAFFIC STUDY	FIGURE 8.3

Bay Drive at Hawthorne Avenue

A traffic median similar to a roundabout is proposed at Bay Drive and Hawthorne Avenue. Bay Drive at Hawthorne Avenue is a three-leg intersection with stop control only on Hawthorne Avenue. This intersection also serves as the northern entrance or gateway to the Hawthorne Tot Lot which is located just to the south of the intersection. The proposed traffic median will likely result in slower speeds around the park and will also serve as an aesthetic focal point for the park entrance. The existing roadway configuration is uncommon and could result in confusion for unfamiliar drivers. Additionally, motorists on northbound Hawthorne Avenue approaching the intersection may have difficulty locating northbound vehicles on Bay Drive under the existing roadway configuration. A conceptual exhibit of the proposed traffic median on Bay Drive at Hawthorne Avenue is shown on **Figure 8.4**.



Bay Drive at Hawthorne Avenue
Existing Conditions

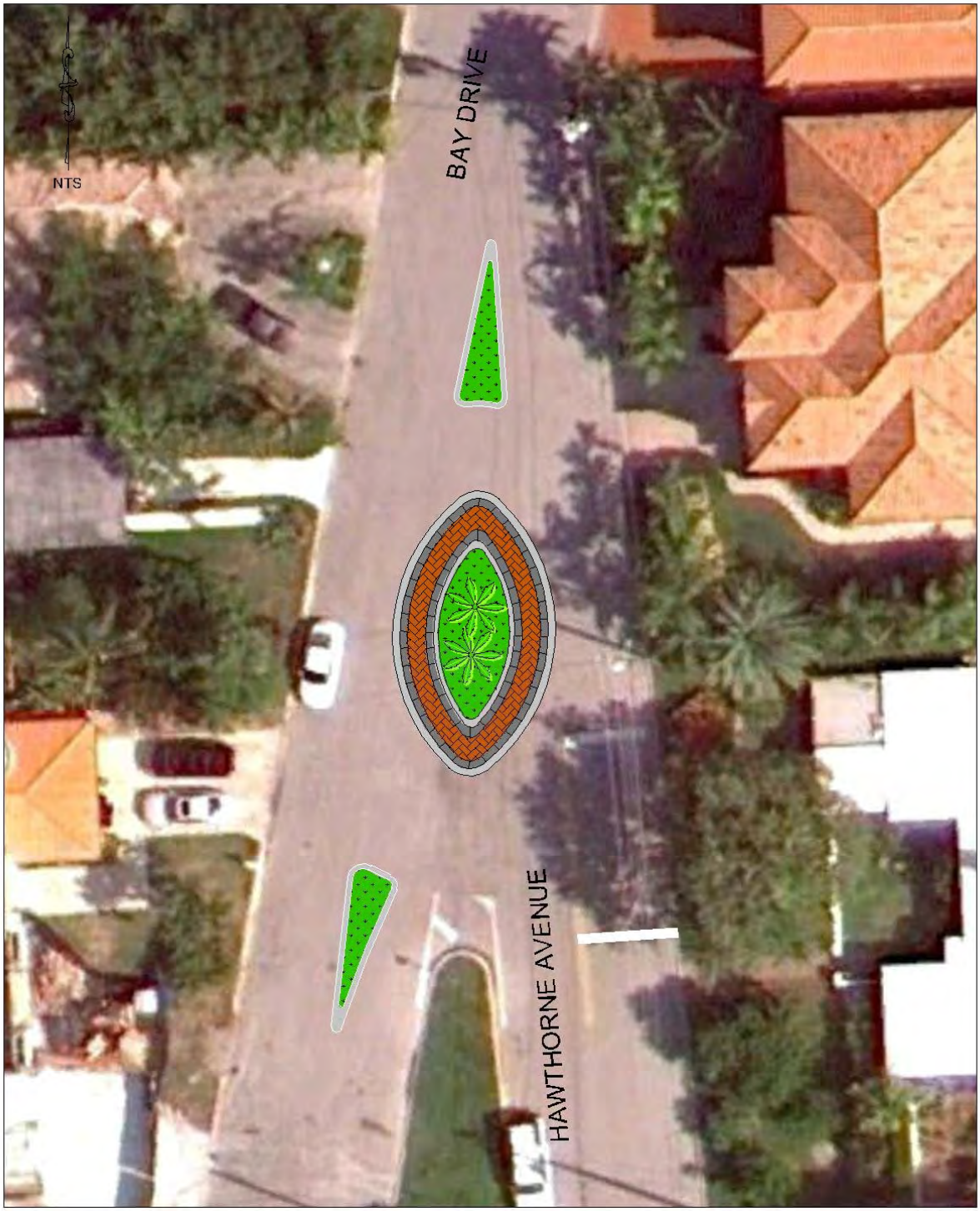
Bay Drive at Hawthorne Avenue
Aerial

90th Street at Bay Drive

A neighborhood roundabout is proposed at 90th Street and Bay Drive. 90th Street at Bay Drive is a four leg intersection with stop control on Bay Drive and westbound 90th Street. Eastbound 90th Street which serves only two residential properties is under free flow operations. A conceptual exhibit of the proposed neighborhood roundabout is shown on **Figure 8.5**.

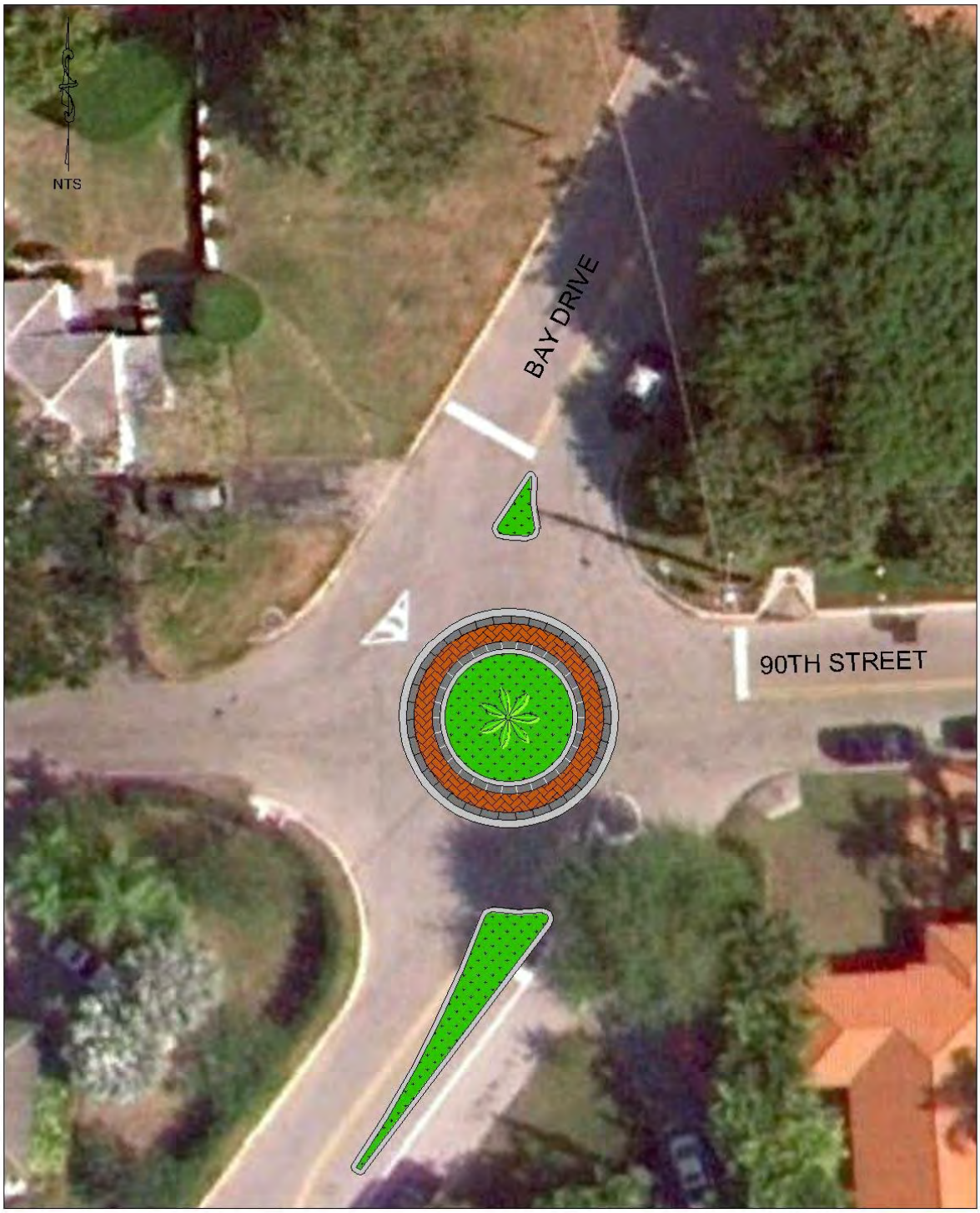
90th Street at Bay Drive
Aerial

Figure 8.4 – Bay Drive at Hawthorne Avenue Conceptual Traffic Median



Calvin, Giordano & Associates, Inc. EXCEPTIONAL SOLUTIONS	BAY DRIVE AT HAWTHORNE AVENUE CONCEPTUAL TRAFFIC ISLAND	TOWN OF SURFSIDE TOWN WIDE TRAFFIC STUDY	FIGURE 8.4

Figure 8.5 – 90th Street at Bay Drive Conceptual Roundabout



Calvin, Giordano & Associates, Inc. EXCEPTIONAL SOLUTIONS	90TH STREET AT BAY DRIVE CONCEPTUAL ROUNDABOUT	TOWN OF SURFSIDE TOWN WIDE TRAFFIC STUDY	FIGURE 8.5

89th Street at Hawthorne Avenue and Irving Avenue

A traffic median similar to a roundabout is proposed at 89th Street at Hawthorne Avenue and Irving Avenue. 89th Street at Hawthorne Avenue and Irving Avenue is a five-leg intersection with stop control on Hawthorne Avenue, Irving Avenue, and westbound 89th Street. Eastbound 89th Street, which serves only two residential properties, is under free flow operations. A conceptual exhibit of the proposed traffic median on 89th Street at Hawthorne Avenue and Irving Street is shown on **Figure 8.6**.

91st Street at Byron Avenue

A neighborhood roundabout is proposed at 91st Street at Byron Avenue. The intersection is currently under all-way stop control. This proposed roundabout will be the third roundabout in a series for the Byron Avenue corridor. A conceptual exhibit of the proposed roundabout on 91st Street at Byron Avenue is shown on **Figure 8.7**

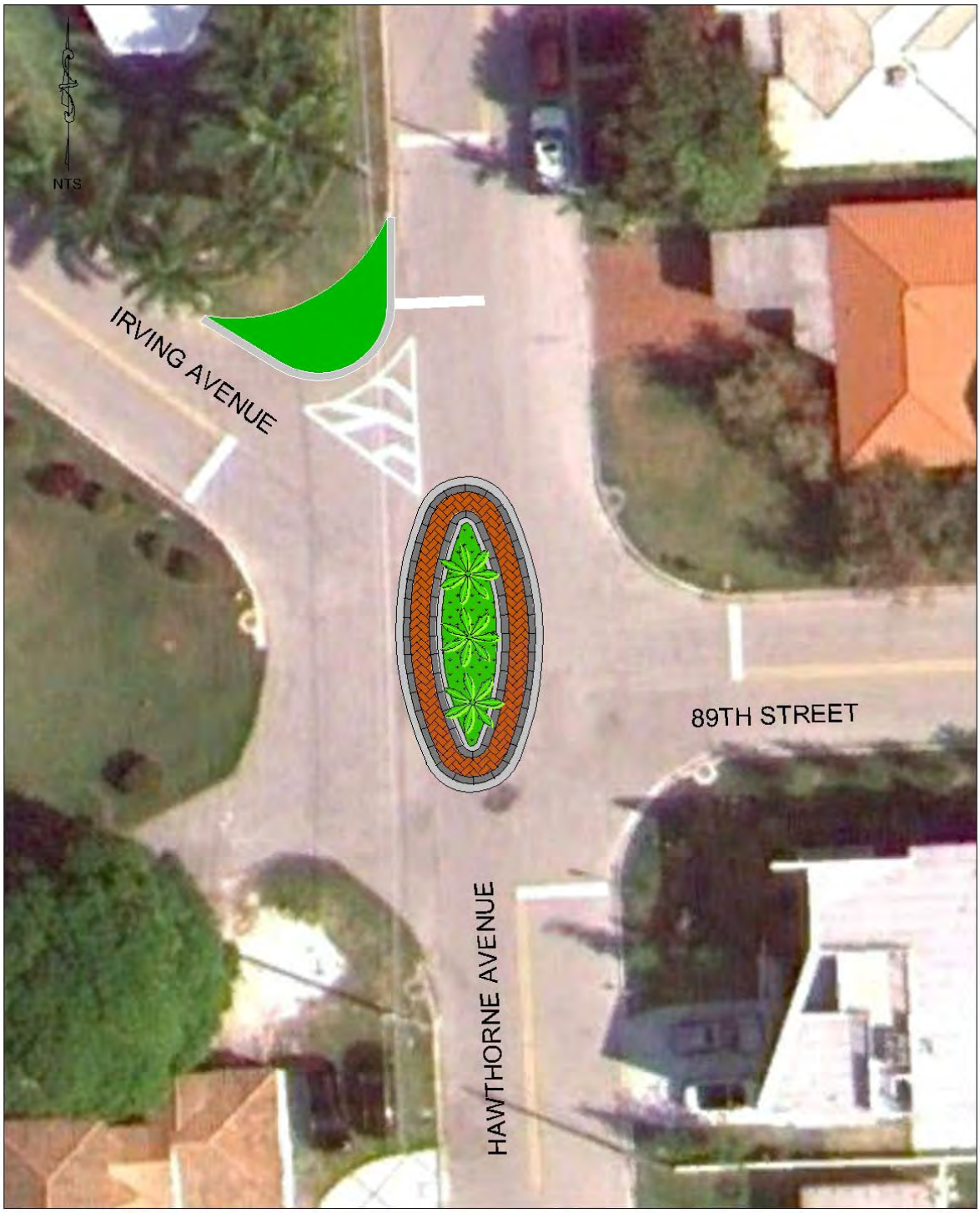
The proposed traffic calming locations are shown in **Figure 8.8**.

89th Street at Hawthorne Avenue and Irving Avenue
Existing Conditions

89th Street at Hawthorne Avenue and Irving Avenue
Aerial

91st Street at Byron Avenue
Aerial

Figure 8.6 – 89th Street at Hawthorne Avenue and Irving Street Conceptual Traffic Median



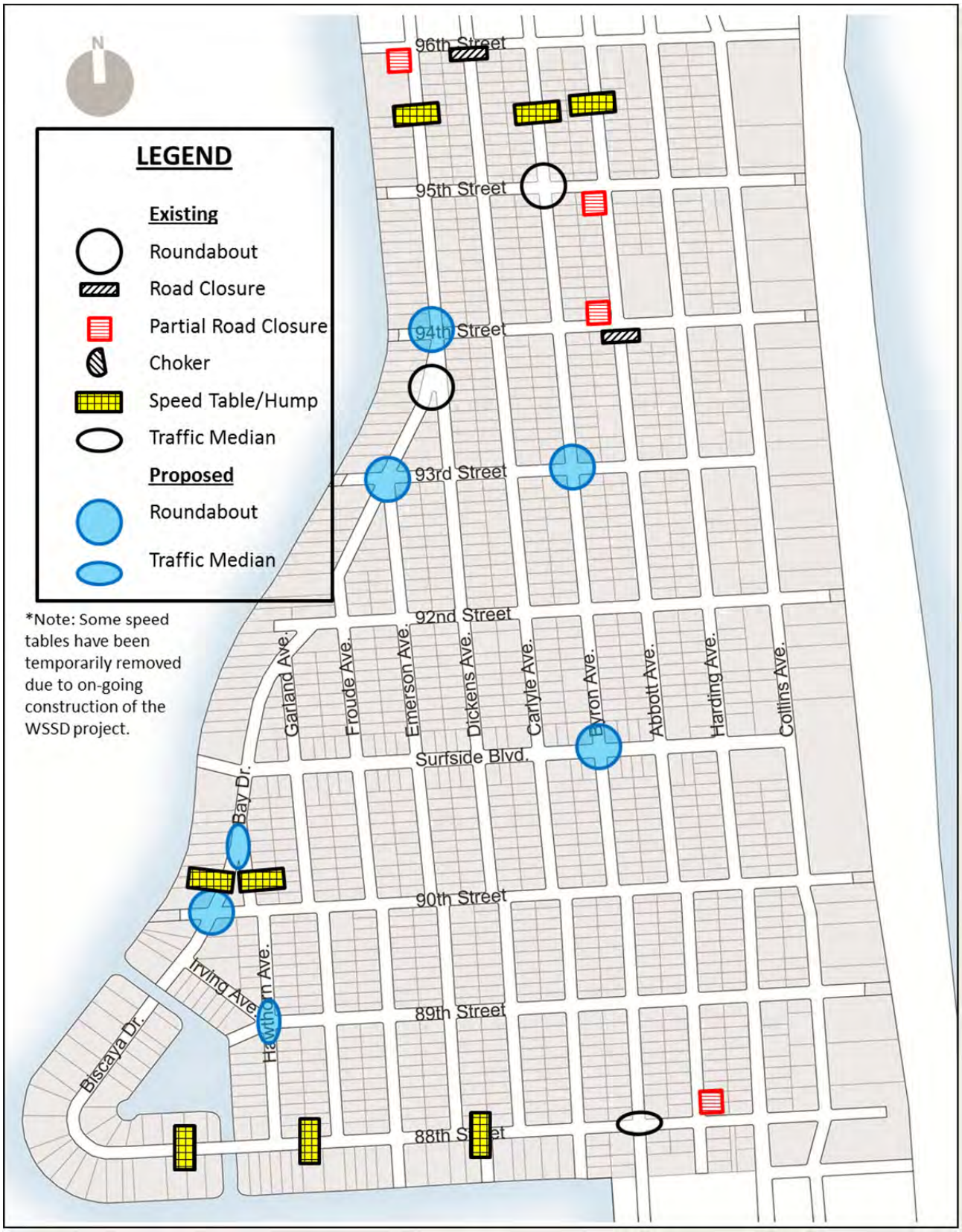
Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS

89TH STREET AT HAWTHORNE AVENUE CONCEPTUAL TRAFFIC ISLAND	TOWN OF SURFSIDE TOWN WIDE TRAFFIC STUDY	FIGURE 8.6

Figure 8.7 – 91st Street at Byron Avenue Conceptual Roundabout

Calvin, Giordano & Associates, Inc. EXCEPTIONAL SOLUTIONS	91ST STREET AT BYRON AVENUE CONCEPTUAL ROUNDABOUT	TOWN OF SURFSIDE TOWN WIDE TRAFFIC STUDY	FIGURE 8.7

Figure 8.8 – Proposed Traffic Calming Locations



SECTION NINE
CONCLUSIONS AND RECOMMENDATIONS

9.1 CONCLUSIONS

Calvin, Giordano & Associates, Inc. (CGA) was commissioned on May 8, 2012 by the Town of Surfside to complete a traffic study to assess existing and future traffic conditions throughout the Town. A Town-wide traffic analysis was performed to determine appropriate applications for traffic calming and traffic control measures. In addition to the traffic calming analysis, several signalized intersections along 96th Street, Harding Avenue, and Collins Avenue were evaluated to determine if modifications could improve the operational efficiency of the intersections. The signalized intersections analyzed for this traffic study include the following:

- 96th Street at 500 Block (Bal Harbour Shops)
- 96th Street at Byron Avenue
- 96th Street at Harding Avenue
- 96th Street at Collins Avenue
- 95th Street at Harding Avenue
- 95th Street at Collins Avenue
- 94th Street at Harding Avenue
- 94th Street at Collins Avenue

Turning movement traffic counts were collected during the AM (7:00-9:00) and PM (4:00-6:00) peak hours for seventeen intersections within the Town. Additionally, 24-hour bi-directional tube counts along with speed data were collected at ten locations throughout the Town. The traffic counts collected for this study are depicted in Figure 2.1. The traffic counts were conducted on a typical Tuesday through Thursday between August 28, 2012 and September 6, 2012 and on Tuesday, October 30, 2012. The traffic counts were utilized to analyze existing and future traffic operations of the major intersections and to develop new and upgrade existing traffic calming locations.

A computer-based traffic simulation of the Town's current roadway network was developed using the nationally recognized VISSIM micro-simulation modeling software. The VISSIM model was calibrated to match existing traffic conditions based on field reviews and traffic data

collected for the study intersections. This VISSIM model will enable the Town to efficiently analyze future traffic conditions including intersection and roadway alternatives. Examples of the benefits of the VISSIM model include determining the net impact of future developments such as the expansion of Bal Harbour Shops and for future traffic flow modifications such as street closures. Additionally, the VISSIM model has an advanced 3D interface which allows for accurate visual representation of existing and future traffic conditions.

OPERATIONAL ANALYSIS

Level of Service (LOS) is a term used to describe the conditions of a roadway in relation to vehicle delay and traffic congestion. LOS are broken down with six LOS designations (LOS A – LOS F). LOS A represents the most ideal situation with minimal if any delay at all while LOS F represents the worst conditions with high vehicular delay. The Town Comprehensive Plan identifies the LOS thresholds for state roads as LOS E+20% and LOS D for local roads. 96th Street, Harding Avenue, and Collins Avenue are each considered state roads.

Existing Conditions

The operational analysis for the aforementioned major intersections along 96th Street, Harding Avenue, and Collins Avenue demonstrated that each of the study intersections were currently operating at an acceptable LOS during the AM and PM peak hours when evaluating the overall intersection delay. However, several of the study intersection approaches had high vehicular delays resulting in a LOS E or LOS F for the intersection approach and long vehicular queues extending to the upstream traffic signal. Due to the close proximity of the signalized intersections, the operations of each signal are greatly affected by the upstream and downstream traffic signals. It was observed that vehicle queues would occasionally extend to and past the upstream traffic signals on 96th Street.

Optimized Conditions

CGA evaluated several alternatives to determine if improvements could help reduce vehicle congestion in the Town. It was determined that the most cost effective alternatives included signal timing improvements at each of the study signalized intersections. The signal timing

improvements showed a substantial benefit to the side streets of Byron Avenue, 95th Street, and 94th Street.

The Town has been proactive in the past regarding improving signal timing in the Town to benefit the residents of Surfside. The northbound approach on Byron Avenue at 96th Street has historically been very congested with high delays and vehicle queues during school days and times. However, the Town was able to mitigate much of the vehicle delay by bringing it to the County's attention and requesting an adjustment in signal timing. A comparison of the existing average delay and LOS for the existing conditions and the optimized conditions is shown in Table A.

Table A – Existing and Optimized Operational Analysis

		Existing Conditions				Signal Timing Optimization			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
Intersection	Approach	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
96th Street at Bal Harbour Shops	EB	1.9	A	2.5	A	1.9	A	2.5	A
	SB	48.5	D	43.0	D	48.5	D	43.0	D
	WB	3.4	A	3.1	A	2.4	A	1.7	A
	Total	2.9	A	5.9	A	2.5	A	5.2	A
96th Street at Byron Avenue	NB	71.7	E	72.8	E	30.9	C	32.9	C
	EB	3.1	A	4.2	A	4.2	A	6.2	A
	WB	12.2	B	13.4	B	3.6	A	2.0	A
	Total	13.6	B	14.9	B	6.8	A	7.5	A
96th Street at Harding Avenue	EB	33.9	C	30.0	C	30.5	C	22.5	C
	SB	32.7	C	28.1	C	32.7	C	31.1	C
	WB	142.6	F	98.8	F	115.0	F	36.9	D
	Total	48.2	D	39.7	D	43.3	D	29.2	C
96th Street at Collins Avenue	NB	59.0	E	43.9	D	21.9	C	22.1	C
	EB	18.6	B	15.2	B	31.4	C	28.8	C
	WB	58.6	E	54.8	D	58.6	E	54.6	D
	Total	51.1	D	39.0	D	23.9	C	23.6	C
94th Street at Harding Avenue	EB	58.0	E	57.8	E	27.0	C	24.8	C
	SB	5.8	A	6.4	A	5.3	A	9.5	A
	WB	54.6	D	64.7	E	31.0	C	24.8	C
	Total	10.0	A	14.8	B	7.3	A	11.9	B
95th Street at Harding Avenue	EB	158.3	F	72.6	E	39.5	D	26.3	C
	SB	11.2	B	9.0	A	8.8	A	8.4	A
	WB	63.6	E	76.2	E	28.3	C	29.0	C
	Total	22.8	C	15.7	B	12.6	B	10.4	B
94th Street at Collins Avenue	NB	4.2	A	10.5	B	5.9	A	7.2	A
	EB	70.6	E	19.8	B	23.2	C	28.2	C
	WB	58.2	E	20.8	C	15.5	B	19.2	B
	Total	6.6	A	11.0	B	6.6	A	8.1	A
95th Street at Collins Avenue	NB	3.5	A	12.2	B	3.8	A	11.8	B
	EB	73.4	E	22.3	C	34.5	C	20.9	C
	WB	50.4	D	25.1	C	28.2	C	22.9	C
	Total	6.4	A	12.7	B	5.4	A	12.3	B

Table

2017 Conditions

The signalized study intersections within the Town were also evaluated under future traffic conditions. A five year planning horizon (Year 2017) was chosen for the analysis and included background growth, committed trips, and other potential future development including the expansion of Bal Harbour Shops. The background growth consisted of applying a 1.0% annual growth rate to the existing peak season adjusted traffic. Additional project trips were also added to the 2017 scenario including trips from Young Israel, 92nd Street Hotel, Grand Beach Hotel, Surf Club, the Shul, and the Bal Harbour Shops expansion. The Year 2017 conditions were evaluated under two different scenarios. The first scenario included the 2017 traffic volumes utilizing the existing signal timing plans. The second scenario included the 2017 traffic volumes utilizing the proposed signal timing improvements identified in this report. Minor adjustments were made to the signal timing splits to account for the additional traffic anticipated in 2017.

The results of the 2017 conditions with existing signal timing analysis demonstrated that there could potentially be very significant delays and traffic congestion within the Town. The existing high vehicle delays and queues currently experienced will only be exacerbated under the 2017 conditions. Several of the intersections and particularly 96th Street at Harding Avenue and Collins Avenue deteriorate significantly under this scenario. A comparison of the existing and 2017 conditions utilizing the existing signal timing patterns is shown on Table B.

The results of the 2017 optimized conditions perform significantly more efficiently than the 2017 conditions without signal timing improvements. However, even with the improved timings, there is expected to be substantial vehicle delays and queues. The westbound approach of 96th Street at Harding Avenue will operate at LOS F with 50 percentile queues extending up to Collins Avenue. This will cause further increased delay and congestion beyond what is actually calculated. Additionally, the vehicular queuing on eastbound 96th Street at Harding Avenue will only get worse than the existing conditions and it potentially could be common for vehicle queuing to extend past Byron Avenue and further impact the operations of the upstream intersections beyond what is calculated.

Table B – 2017 Operational Analysis

Intersection	Approach	2012 Existing Conditions				2017 Conditions[1]			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
96th Street at Bal Harbour Shops	EB	1.9	A	2.5	A	2.4	A	3.4	A
	SB	48.5	D	43.0	D	56.7	E	55.4	E
	WB	3.4	A	3.1	A	4.0	A	4.5	A
	Total	2.9	A	5.9	A	4.3	A	9.8	A
96th Street at Byron Avenue	NB	71.7	E	72.8	E	72.6	E	72.7	E
	EB	3.1	A	4.2	A	4.3	A	6.9	A
	WB	12.2	B	13.4	B	12.8	B	14.2	B
	Total	13.6	B	14.9	B	14.2	B	16.1	B
96th Street at Harding Avenue	EB	33.9	C	30.0	C	38.4	D	36.5	D
	SB	32.7	C	28.1	C	38.0	D	32.7	C
	WB	142.6	F	98.8	F	261.8	F	237.1	F
	Total	48.2	D	39.7	D	70.7	E	68.6	E
96th Street at Collins Avenue	NB	59.0	E	43.9	D	104.6	F	74.6	E
	EB	18.6	B	15.2	B	19.2	B	16.0	B
	WB	58.6	E	54.8	D	58.5	E	54.9	D
	Total	51.1	D	39.0	D	89.2	F	65.2	E
Harding Avenue at 95th Street	EB	107.7	F	65.7	E	331.8	F	68.3	E
	SB	14.4	B	10.1	B	17.1	B	13.7	B
	WB	241.4	F	91.2	F	1299.9	F	367.0	F
	Total	34.2	C	18.1	B	141.0	F	48.1	D
Collins Avenue at 95th Street	NB	1.5	A	2.6	A	1.9	A	16.1	B
	EB	71.7	E	19.3	B	138.8	F	26.5	C
	WB	41.5	D	15.2	B	42.2	D	18.5	B
	Total	4.8	A	3.4	A	12.7	B	16.8	B
Harding Avenue at 94th Street	EB	67.7	E	73.6	E	69.2	E	76.7	E
	SB	5.0	A	4.0	A	5.2	A	6.7	A
	WB	77.3	E	187.9	F	84.7	F	281.5	F
	Total	10.7	B	23.7	C	11.2	B	31.2	C
Collins Avenue at 94th Street	NB	5.0	A	14.1	B	5.5	A	21.2	C
	EB	80.8	F	22.0	C	91.1	F	25.3	C
	WB	37.9	D	17.0	B	36.3	D	18.0	B
	Total	7.5	A	14.4	B	9.8	A	21.4	C

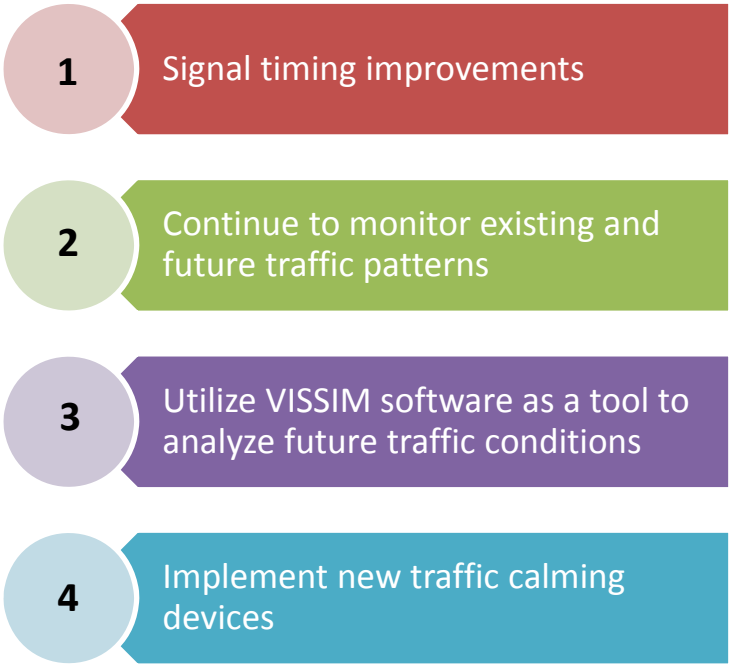
(3) 2017 Conditions include existing (2012) traffic counts plus a 1% annual growth rate, committed development trips, and additional potential developments such as the Bal Harbour Shops expansion. The existing signal timings were utilized in this scenario.

TRAFFIC CALMING

Miami Dade County has authority to approve, deny or change any proposed traffic flow modifications within the Town of Surfside. Miami-Dade County has established a procedure for approving traffic calming devices that includes minimum traffic criteria that must be met. For municipalities such as Surfside that fund their own traffic calming program, minimum traffic volume requirements can potentially be reduced by 70% and minimum 85th percentile speed requirements can potentially be reduced by 50%. In addition to minimum traffic criteria, Miami-Dade County generally requires that new traffic calming proposals are supported by two-thirds of residents in the vicinity of the proposed installation. Concurrence from affected residents is typically done through ballots delivered to the residents.

The traffic data collected for this study indicates that the majority of studied roadway segments met the reduced minimum volume criteria allowed for municipalities that fund their own traffic calming program. The results of the speed data showed that four of the ten count locations had 85th percentile speeds greater than the reduced minimum speed threshold. Additionally, three of the ten count locations were within one mph of meeting the reduced minimum speed threshold. However, Miami-Dade County also requires that a street is at least 750 feet in length without an intersecting roadway to be eligible for speed humps/tables. The majority of roadways within the Town do not meet this requirement. Only 88th Street west of Hawthorne Avenue meets this requirement within the Town.

9.2 RECOMMENDATIONS



1. The Town should coordinate with Miami Dade County and the Florida Department of Transportation to implement the signal timing modifications identified in this report at the eight study signalized intersections. In conjunction with the signal timing improvements, vehicle and pedestrian detectors should be installed on 94th Street and 95th Street at Harding and Collins Avenue. The signal timing improvements identified in this report will provide a significant benefit to the residents who consistently utilize Byron Avenue, 95th Street, and 94th Street as the vehicular delays and queues will be substantially reduced on these roadways. Residents will notice that accessing 96th Street, Collins Avenue, and Harding Avenue from the aforementioned streets will be much easier and will not be required to wait as long for the traffic lights to turn green.

   The signalized intersections on 95th Street and 94th Street at Harding Avenue and Collins Avenue are currently under pre-timed signal timing. Therefore, the maximum green time is always allotted to each phase regardless of vehicle demand. The installation of vehicle and pedestrian detectors will allow these traffic signals to operate more

efficiently. Vehicle detectors are video devices installed on the traffic signal mast arms that detect vehicles on the intersection approach. When vehicles are not present, the light will turn red and green time will be given to the other intersection approaches. The approximate cost estimate to install two vehicle detectors and four pedestrian detectors at each intersection is $20,000. Therefore, the total estimate for the installation of the detection devices at the four proposed intersections is $80,000.

2. The Town should closely monitor the traffic patterns on 96th Street, Harding Avenue, and Collins Avenue on an annual basis. The operational analysis documented in this report for Year 2017 is only an estimate of future traffic conditions. However, it is possible that the expected traffic patterns due to new development deviate from the existing conditions. In this event, signal timing modifications or other improvements may be necessary to continue efficient traffic operations within the Town.

3. The Town should utilize the VISSIM model developed for this traffic study for future traffic operations analysis. The VISSIM model provides highly accurate results and better replicates actual traffic operations than traditional methods. Infinite future scenarios can be analyzed including signal timing changes, new turn lanes, pedestrian crossings, route detours, and many others.

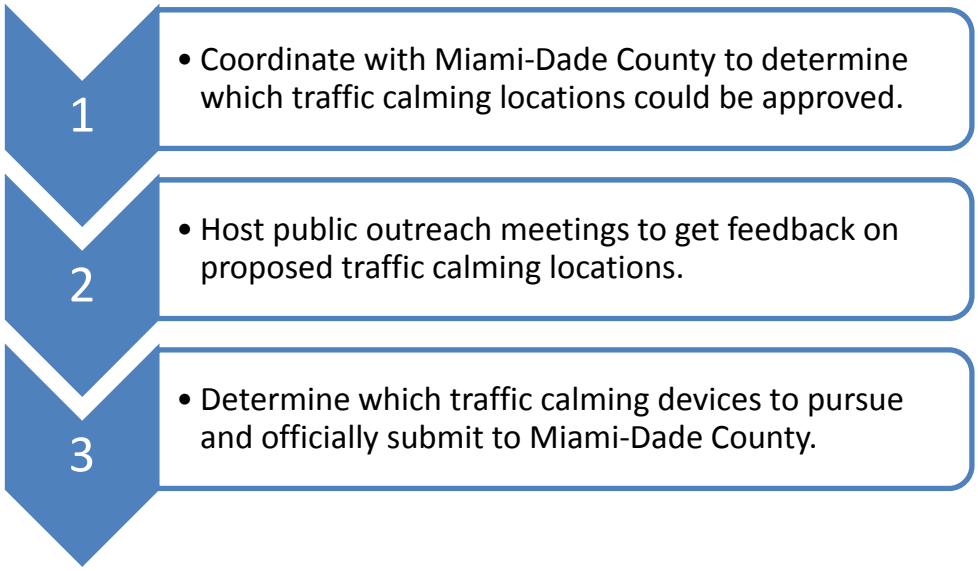
   The VISSIM model was built for the entire Town and not just for the study intersections identified in the report. Therefore, future traffic studies can be completed more cost effectively than without the pre-built traffic simulation model. Additionally, the VISSIM model has a built in 3D mode which allows for realistic simulations that can be easily converted to a video format. These 3D traffic videos can be a very beneficial tool to demonstrate to the public the changes in traffic conditions or patterns.

   The VISSIM files will be turned over to the Town as a deliverable for this traffic study. However, it is recommended that a professional traffic engineer be consulted for use of the VISSIM model.

Traffic Calming

4. This traffic study identified seven recommended traffic calming devices throughout the Town. The proposed locations are shown on Figure 8.8. The proposed traffic calming devices are either neighborhood roundabouts or traffic medians that share similarities to roundabouts. Generally, Miami-Dade County is very receptive of roundabouts since there are many benefits with few negatives. Some of the benefits of roundabouts include reduced speeds, increased safety, and increased aesthetics. Additionally, roundabouts do not require any actual traffic flow modification. The only negative is the potential small increase in emergency response time. The approximate cost of each of the traffic calming devices including design and construction is $50,000. Therefore, the total cost for the seven proposed traffic calming devices is approximately $350,000.

   The Town should coordinate with Miami-Dade County to determine which traffic calming devices could be approved. Miami-Dade County may require additional data and/or resident approval. The Town should then hold public outreach meetings with residents to get feedback on the proposed traffic calming devices and proposed locations identified in this report. The Town should then determine which traffic calming devices to pursue and officially submit to Miami-Dade County.



APPENDIX A
TRAFFIC COUNT DATA

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
88 Street West of Hawthorne Avenue

Site Code: 000000082804
Station ID: 000058410136
Date Start: 29-Aug-12

Eastbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
8/29/12	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
00:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	3
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	0	1	2	2	3	0	0	0	0	0	0	0	0	0	0	8
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08:15	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
08:30	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	4
08:45	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	4
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09:15	0	0	3	1	0	0	1	0	0	0	0	0	0	0	0	5
09:30	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
09:45	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	4
	0	1	6	5	3	0	1	0	0	0	0	0	0	0	0	16
10:00	0	2	5	1	0	0	0	0	0	0	0	0	0	0	0	8
10:15	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	6
10:30	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
10:45	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4
	2	3	7	6	0	1	0	0	0	0	0	0	0	0	0	19
11:00	2	0	3	1	2	0	0	0	0	0	0	0	0	0	0	8
11:15	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	3
11:30	0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	4
11:45	0	0	1	1	3	1	0	0	0	0	0	0	0	0	0	6
	2	2	4	5	6	2	0	0	0	0	0	0	0	0	0	21
Total	4	13	24	30	16	3	1	0	0	0	0	0	0	0	0	91

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Surfside, Florida
Dade
88 Street West of Hawthorne Avenue

Site Code: 000000082804
Station ID: 000058410136
Date Start: 29-Aug-12

Eastbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
12:15	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	6
12:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:45	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	4
	0	2	6	5	1	0	0	0	0	0	0	0	0	0	0	14
13:00	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
13:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
13:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
13:45	0	1	0	3	2	0	0	0	0	0	0	0	0	0	0	6
	0	2	4	4	2	0	0	0	0	0	0	0	0	0	0	12
14:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
14:15	0	0	2	1	0	1	0	0	0	0	0	0	0	0	0	4
14:30	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	5
14:45	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	4
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17:15	0	0	0	3	1	1	0	0	0	0	0	0	0	0	0	5
17:30	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3
17:45	1	0	2	0	1	0	0	0	0	0	0	0	0	0	0	4
	1	0	5	5	2	2	0	0	0	0	0	0	0	0	0	15
18:00	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	3
18:15	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	4
18:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
18:45	0	1	0	1	1	0	1	0	0	0	0	0	0	0	0	4
	1	2	3	2	2	1	1	0	0	0	0	0	0	0	0	12
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19:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
19:30	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	3
19:45	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	4
	1	1	2	4	2	0	0	0	0	0	0	0	0	0	0	10
20:00	1	3	1	2	0	0	0	0	0	0	0	0	0	0	0	7
20:15	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
20:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	1	3	4	2	0	0	0	0	0	0	0	0	0	0	0	10
21:00	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
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21:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	1	0	5	2	0	0	0	0	0	0	0	0	0	0	0	8
22:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
22:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	4
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	7	19	51	35	14	4	2	0	0	0	0	0	0	0	0	132
Total	11	32	75	65	30	7	3	0	0	0	0	0	0	0	0	223

Stats

15th Percentile :	14 MPH
50th Percentile :	20 MPH
85th Percentile :	24 MPH
95th Percentile :	26 MPH
Mean Speed(Average) :	19 MPH
10 MPH Pace Speed :	16-25 MPH
Number in Pace :	160
Percent in Pace :	71.7%
Number of Vehicles > 20 MPH :	105
Percent of Vehicles > 20 MPH :	47.1%

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Westbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
8/29/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
05:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
07:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4
	0	1	5	1	0	0	0	0	0	0	0	0	0	0	0	7
08:00	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
08:15	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	5
08:30	0	0	6	1	0	0	0	0	0	0	0	0	0	0	0	7
08:45	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
	0	3	11	3	0	0	0	0	0	0	0	0	0	0	0	17
09:00	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
09:15	0	0	3	3	2	1	0	0	0	0	0	0	0	0	0	9
09:30	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	3
09:45	0	0	0	5	1	0	0	0	0	0	0	0	0	0	0	6
	0	0	4	10	4	2	0	0	0	0	0	0	0	0	0	20
10:00	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	6
10:15	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
10:30	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3
10:45	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	3
	0	1	6	3	5	0	0	0	0	0	0	0	0	0	0	15
11:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
11:15	0	0	1	2	0	1	0	0	0	0	0	0	0	0	0	4
11:30	0	0	0	0	3	0	1	0	0	0	0	0	0	0	0	4
11:45	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
	0	1	2	2	5	1	1	0	0	0	0	0	0	0	0	12
Total	1	7	30	20	15	3	1	0	0	0	0	0	0	0	0	77

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
88 Street West of Hawthorne Avenue

Site Code: 000000082804
Station ID: 000058410136
Date Start: 29-Aug-12

Westbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	5
12:15	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
12:30	0	0	1	2	0	0	1	0	0	0	0	0	0	0	0	4
12:45	0	2	1	2	2	0	0	0	0	0	0	0	0	0	0	7
	0	2	3	8	4	0	1	0	0	0	0	0	0	0	0	18
13:00	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2
13:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
13:30	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
13:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	1	2	2	1	0	1	0	0	0	0	0	0	0	0	7
14:00	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	4
14:15	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	4
14:30	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
14:45	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	4
	0	3	3	3	3	2	0	0	0	0	0	0	0	0	0	14
15:00	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
15:15	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	5
15:30	0	0	2	0	1	1	0	0	0	0	0	0	0	0	0	4
15:45	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
	0	0	5	6	2	1	0	0	0	0	0	0	0	0	0	14
16:00	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3
16:15	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
16:30	0	0	0	2	2	3	0	0	0	0	0	0	0	0	0	7
16:45	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	4
	0	0	4	4	3	4	1	0	0	0	0	0	0	0	0	16
17:00	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
17:15	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	4
17:30	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	4
17:45	0	1	1	3	0	0	0	0	0	0	0	0	0	0	0	5
	0	3	4	10	1	0	0	0	0	0	0	0	0	0	0	18
18:00	1	0	3	1	0	0	0	0	0	0	0	0	0	0	0	5
18:15	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	4
18:30	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3
18:45	0	0	1	3	0	1	0	0	0	0	0	0	0	0	0	5
	1	0	6	6	2	2	0	0	0	0	0	0	0	0	0	17
19:00	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	4
19:15	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3
19:30	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
19:45	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	4
	0	0	1	8	3	1	0	0	0	0	0	0	0	0	0	13
20:00	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	4
20:15	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	5
20:30	0	1	2	1	0	0	1	0	0	0	0	0	0	0	0	5
20:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	1	2	7	2	2	0	1	0	0	0	0	0	0	0	0	15
21:00	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
21:15	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3
21:30	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
21:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
	0	1	3	2	2	0	0	0	0	0	0	0	0	0	0	8
22:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
22:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
22:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
22:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
	0	0	4	1	1	0	0	0	0	0	0	0	0	0	0	6
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	12	42	52	24	10	4	0	0	0	0	0	0	0	0	146
Total	3	19	72	72	39	13	5	0	0	0	0	0	0	0	0	223

Stats

15th Percentile :	16 MPH
50th Percentile :	21 MPH
85th Percentile :	25 MPH
95th Percentile :	28 MPH
Mean Speed(Average) :	21 MPH
10 MPH Pace Speed :	16-25 MPH
Number in Pace :	170
Percent in Pace :	76.2%
Number of Vehicles > 20 MPH :	129
Percent of Vehicles > 20 MPH :	57.8%

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Surfside, Florida
Dade
88 Street West of Hawthorne Avenue

Site Code: 000000082804
Station ID: 000058410136
Date Start: 29-Aug-12

Eastbound, Westbound

Start	0	11	16	21	24	27	30	33	36	39	42	45	48	51	54	
Time	10	15	20	23	26	29	32	35	38	41	44	47	50	53	147	Total
8/29/12	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
00:15	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	3
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	4
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
05:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	4
06:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	3
07:00	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3
07:15	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	3
07:30	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	3
07:45	0	1	4	1	0	0	0	0	0	0	0	0	0	0	0	6
	0	2	7	3	3	0	0	0	0	0	0	0	0	0	0	15
08:00	0	3	1	8	0	0	0	0	0	0	0	0	0	0	0	12
08:15	0	1	6	1	0	0	0	0	0	0	0	0	0	0	0	8
08:30	0	1	7	3	0	0	0	0	0	0	0	0	0	0	0	11
08:45	0	1	2	2	1	0	0	0	0	0	0	0	0	0	0	6
	0	6	16	14	1	0	0	0	0	0	0	0	0	0	0	37
09:00	0	0	1	1	3	1	0	0	0	0	0	0	0	0	0	6
09:15	0	0	6	4	2	1	1	0	0	0	0	0	0	0	0	14
09:30	0	0	2	3	1	0	0	0	0	0	0	0	0	0	0	6
09:45	0	1	1	7	1	0	0	0	0	0	0	0	0	0	0	10
	0	1	10	15	7	2	1	0	0	0	0	0	0	0	0	36
10:00	0	2	7	3	2	0	0	0	0	0	0	0	0	0	0	14
10:15	0	2	4	3	0	0	0	0	0	0	0	0	0	0	0	9
10:30	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	4
10:45	2	0	2	2	1	0	0	0	0	0	0	0	0	0	0	7
	2	4	13	9	5	1	0	0	0	0	0	0	0	0	0	34
11:00	2	1	3	1	3	0	0	0	0	0	0	0	0	0	0	10
11:15	0	0	1	4	0	2	0	0	0	0	0	0	0	0	0	7
11:30	0	2	0	1	4	0	1	0	0	0	0	0	0	0	0	8
11:45	0	0	2	1	4	1	0	0	0	0	0	0	0	0	0	8
	2	3	6	7	11	3	1	0	0	0	0	0	0	0	0	33
Total	5	20	54	50	31	6	2	0	0	0	0	0	0	0	0	168

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88 Street West of Hawthorne Avenue

Site Code: 000000082804
Station ID: 000058410136
Date Start: 29-Aug-12

Eastbound, Westbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	1	2	4	1	0	0	0	0	0	0	0	0	0	0	8
12:15	0	0	3	4	1	0	0	0	0	0	0	0	0	0	0	8
12:30	0	0	2	2	0	0	1	0	0	0	0	0	0	0	0	5
12:45	0	3	2	3	3	0	0	0	0	0	0	0	0	0	0	11
	0	4	9	13	5	0	1	0	0	0	0	0	0	0	0	32
13:00	0	1	1	1	1	0	1	0	0	0	0	0	0	0	0	5
13:15	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
13:30	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	5
13:45	0	1	1	3	2	0	0	0	0	0	0	0	0	0	0	7
	0	3	6	6	3	0	1	0	0	0	0	0	0	0	0	19
14:00	0	0	4	1	1	0	0	0	0	0	0	0	0	0	0	6
14:15	0	1	2	2	2	1	0	0	0	0	0	0	0	0	0	8
14:30	0	2	2	2	0	1	0	0	0	0	0	0	0	0	0	7
14:45	0	2	3	1	1	1	0	0	0	0	0	0	0	0	0	8
	0	5	11	6	4	3	0	0	0	0	0	0	0	0	0	29
15:00	1	1	2	4	0	0	0	0	0	0	0	0	0	0	0	8
15:15	1	0	1	5	1	0	0	0	0	0	0	0	0	0	0	8
15:30	0	2	3	0	1	1	0	0	0	0	0	0	0	0	0	7
15:45	0	1	6	1	2	0	0	0	0	0	0	0	0	0	0	10
	2	4	12	10	4	1	0	0	0	0	0	0	0	0	0	33
16:00	0	0	2	2	0	1	0	0	0	0	0	0	0	0	0	5
16:15	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	4
16:30	0	0	1	2	3	3	0	0	0	0	0	0	0	0	0	9
16:45	0	2	5	3	1	0	0	0	0	0	0	0	0	0	0	11
	0	2	10	7	4	4	2	0	0	0	0	0	0	0	0	29
17:00	0	0	5	3	0	0	0	0	0	0	0	0	0	0	0	8
17:15	0	2	0	5	1	1	0	0	0	0	0	0	0	0	0	9
17:30	0	0	1	4	1	1	0	0	0	0	0	0	0	0	0	7
17:45	1	1	3	3	1	0	0	0	0	0	0	0	0	0	0	9
	1	3	9	15	3	2	0	0	0	0	0	0	0	0	0	33
18:00	2	0	4	1	0	1	0	0	0	0	0	0	0	0	0	8
18:15	0	1	2	2	2	1	0	0	0	0	0	0	0	0	0	8
18:30	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	4
18:45	0	1	1	4	1	1	1	0	0	0	0	0	0	0	0	9
	2	2	9	8	4	3	1	0	0	0	0	0	0	0	0	29
19:00	0	0	1	3	2	0	0	0	0	0	0	0	0	0	0	6
19:15	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	4
19:30	1	1	1	2	0	0	0	0	0	0	0	0	0	0	0	5
19:45	0	0	1	5	1	1	0	0	0	0	0	0	0	0	0	8
	1	1	3	12	5	1	0	0	0	0	0	0	0	0	0	23
20:00	1	3	2	3	2	0	0	0	0	0	0	0	0	0	0	11
20:15	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	7
20:30	0	1	2	1	0	0	1	0	0	0	0	0	0	0	0	5
20:45	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
	2	5	11	4	2	0	1	0	0	0	0	0	0	0	0	25
21:00	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	5
21:15	0	0	3	1	1	0	0	0	0	0	0	0	0	0	0	5
21:30	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	3
21:45	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
	1	1	8	4	2	0	0	0	0	0	0	0	0	0	0	16
22:00	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	3
22:15	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
22:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
22:45	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
	0	1	5	2	2	0	0	0	0	0	0	0	0	0	0	10
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	9	31	93	87	38	14	6	0	0	0	0	0	0	0	0	278
Total	14	51	147	137	69	20	8	0	0	0	0	0	0	0	0	446

Stats

15th Percentile :	16 MPH
50th Percentile :	21 MPH
85th Percentile :	25 MPH
95th Percentile :	27 MPH
Mean Speed(Average) :	20 MPH
10 MPH Pace Speed :	16-25 MPH
Number in Pace :	330
Percent in Pace :	74.0%
Number of Vehicles > 20 MPH :	234
Percent of Vehicles > 20 MPH :	52.5%

Traffic Survey Specialists, Inc.
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Surfside, Florida
Dade
89 St Between Carlyle Ave & Byron Ave

Site Code: 000000082803
Station ID: 000110252090
Date Start: 29-Aug-12

Eastbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
8/29/12	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
06:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:15	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
06:30	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
06:45	0	3	5	1	1	0	0	0	0	0	0	0	0	0	0	10
	0	3	12	1	1	0	0	0	0	0	0	0	0	0	0	17
07:00	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5
07:15	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	5
07:30	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
07:45	0	0	4	0	1	0	0	0	0	0	0	0	0	0	0	5
	0	1	12	4	2	0	0	0	0	0	0	0	0	0	0	19
08:00	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	5
08:15	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
08:30	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	5
08:45	0	2	1	2	1	0	0	0	0	0	0	0	0	0	0	6
	0	3	8	7	1	0	0	0	0	0	0	0	0	0	0	19
09:00	0	2	3	0	0	1	0	0	0	0	0	0	0	0	0	6
09:15	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	5
09:30	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	4
09:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
	0	2	8	4	2	1	0	0	0	0	0	0	0	0	0	17
10:00	0	2	3	1	2	0	0	1	0	0	0	0	0	0	0	9
10:15	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
10:30	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
10:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
	0	3	8	1	3	0	0	1	0	0	0	0	0	0	0	16
11:00	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4
11:15	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
11:30	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	5
11:45	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
	2	2	9	1	0	0	0	0	0	0	0	0	0	0	0	14
Total	2	14	60	20	11	1	0	1	0	0	0	0	0	0	0	109

Traffic Survey Specialists, Inc.
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Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
89 St Between Carlyle Ave & Byron Ave

Site Code: 000000082803
Station ID: 000110252090
Date Start: 29-Aug-12

Eastbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
12:30	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	6
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	8
13:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
13:15	0	0	3	1	0	1	0	0	0	0	0	0	0	0	0	5
13:30	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	4
13:45	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
	1	0	5	4	1	2	0	0	0	0	0	0	0	0	0	13
14:00	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
14:15	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
14:30	1	1	3	1	1	0	0	0	0	0	0	0	0	0	0	7
14:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	1	2	7	4	1	0	0	0	0	0	0	0	0	0	0	15
15:00	1	1	2	2	0	0	0	0	0	0	0	0	0	0	0	6
15:15	0	0	5	1	1	0	0	0	0	0	0	0	0	0	0	7
15:30	0	2	10	0	0	1	0	0	0	0	0	0	0	0	0	13
15:45	0	0	10	1	0	0	0	0	0	0	0	0	0	0	0	11
	1	3	27	4	1	1	0	0	0	0	0	0	0	0	0	37
16:00	0	2	4	1	1	0	0	0	0	0	0	0	0	0	0	8
16:15	0	2	5	2	0	0	0	0	0	0	0	0	0	0	0	9
16:30	1	2	6	3	0	0	0	0	0	0	0	0	0	0	0	12
16:45	1	1	3	1	1	0	0	0	0	0	0	0	0	0	0	7
	2	7	18	7	2	0	0	0	0	0	0	0	0	0	0	36
17:00	0	0	4	1	1	0	0	0	0	0	0	0	0	0	0	6
17:15	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
17:30	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
17:45	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	5
	0	3	9	2	1	0	0	0	0	0	0	0	0	0	0	15
18:00	0	2	5	1	0	0	0	0	0	0	0	0	0	0	0	8
18:15	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3
18:30	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	4
18:45	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
	1	4	9	2	1	0	0	0	0	0	0	0	0	0	0	17
19:00	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	4
19:15	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	4
19:30	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
19:45	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	4
	2	5	6	2	0	0	0	0	0	0	0	0	0	0	0	15
20:00	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
20:15	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
20:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
20:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
	0	0	9	1	0	0	0	0	0	0	0	0	0	0	0	10
21:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
21:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
21:30	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
21:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	1	0	4	0	0	1	0	0	0	0	0	0	0	0	0	6
22:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
22:15	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
22:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
22:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
	0	0	4	1	1	0	0	0	0	0	0	0	0	0	0	6
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	9	24	103	31	8	4	0	0	0	0	0	0	0	0	0	179
Total	11	38	163	51	19	5	0	1	0	0	0	0	0	0	0	288

Stats

15th Percentile :	15 MPH
50th Percentile :	18 MPH
85th Percentile :	22 MPH
95th Percentile :	25 MPH
Mean Speed(Average) :	18 MPH
10 MPH Pace Speed :	14-23 MPH
Number in Pace :	230
Percent in Pace :	79.9%
Number of Vehicles > 20 MPH :	76
Percent of Vehicles > 20 MPH :	26.4%

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Surfside, Florida
Dade
89 St Between Carlyle Ave & Byron Ave

Site Code: 000000082803
Station ID: 000110252090
Date Start: 29-Aug-12

Westbound

Start	0	11	16	21	24	27	30	33	36	39	42	45	48	51	54	
Time	10	15	20	23	26	29	32	35	38	41	44	47	50	53	147	Total
8/29/12	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	4
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	5
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
06:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	5
07:00	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4
07:15	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
07:30	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
07:45	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
	0	2	3	7	0	0	0	0	0	0	0	0	0	0	0	12
08:00	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4
08:15	0	0	4	1	1	0	0	0	0	0	0	0	0	0	0	6
08:30	1	0	6	5	1	0	0	0	0	0	0	0	0	0	0	13
08:45	1	1	8	0	0	0	0	0	0	0	0	0	0	0	0	10
	2	1	18	10	2	0	0	0	0	0	0	0	0	0	0	33
09:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
09:15	0	0	4	0	1	0	0	0	0	0	0	0	0	0	0	5
09:30	0	1	3	1	1	0	0	0	0	0	0	0	0	0	0	6
09:45	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
	0	2	9	2	2	0	0	0	0	0	0	0	0	0	0	15
10:00	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
10:15	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
10:30	0	0	5	0	1	0	0	0	0	0	0	0	0	0	0	6
10:45	1	1	9	1	0	0	0	0	0	0	0	0	0	0	0	12
	1	2	18	3	1	0	0	0	0	0	0	0	0	0	0	25
11:00	0	0	3	1	1	0	0	0	0	0	0	0	0	0	0	5
11:15	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
11:30	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
11:45	0	1	3	2	1	0	0	0	0	0	0	0	0	0	0	7
	0	2	9	5	2	0	0	0	0	0	0	0	0	0	0	18
Total	3	13	65	29	8	0	0	0	0	0	0	0	0	0	0	118

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
89 St Between Carlyle Ave & Byron Ave

Site Code: 000000082803
Station ID: 000110252090
Date Start: 29-Aug-12

Westbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4
12:15	0	1	5	2	1	0	0	0	0	0	0	0	0	0	0	9
12:30	0	0	4	0	1	1	0	0	0	0	0	0	0	0	0	6
12:45	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	12
	0	2	24	2	2	1	0	0	0	0	0	0	0	0	0	31
13:00	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
13:15	1	0	2	1	1	0	0	0	0	0	0	0	0	0	0	5
13:30	0	0	5	1	1	0	0	0	0	0	0	0	0	0	0	7
13:45	0	1	3	1	0	1	0	0	0	0	0	0	0	0	0	6
	1	1	14	3	2	1	0	0	0	0	0	0	0	0	0	22
14:00	0	0	2	5	0	0	0	0	0	0	0	0	0	0	0	7
14:15	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3
14:30	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
14:45	1	0	4	6	0	0	0	0	0	0	0	0	0	0	0	11
	1	0	12	12	2	0	0	0	0	0	0	0	0	0	0	27
15:00	0	4	2	1	3	0	0	0	0	0	0	0	0	0	0	10
15:15	0	1	5	4	1	0	0	0	0	0	0	0	0	0	0	11
15:30	0	1	5	5	1	0	0	0	0	0	0	0	0	0	0	12
15:45	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
	0	6	14	12	5	0	0	0	0	0	0	0	0	0	0	37
16:00	0	1	5	3	0	0	0	0	0	0	0	0	0	0	0	9
16:15	1	0	8	1	1	0	0	0	0	0	0	0	0	0	0	11
16:30	0	0	2	5	3	0	0	0	0	0	0	0	0	0	0	10
16:45	1	0	4	4	1	0	1	0	0	0	0	0	0	0	0	11
	2	1	19	13	5	0	1	0	0	0	0	0	0	0	0	41
17:00	0	0	6	5	1	0	0	0	0	0	0	0	0	0	0	12
17:15	0	0	5	3	1	0	0	0	0	0	0	0	0	0	0	9
17:30	0	0	6	6	1	1	0	0	0	0	0	0	0	0	0	14
17:45	0	0	7	4	0	0	0	0	0	0	0	0	0	0	0	11
	0	0	24	18	3	1	0	0	0	0	0	0	0	0	0	46
18:00	1	0	5	2	1	0	0	0	0	0	0	0	0	0	0	9
18:15	0	1	11	1	4	0	0	0	0	0	0	0	0	0	0	17
18:30	0	0	8	2	1	0	0	0	0	0	0	0	0	0	0	11
18:45	0	1	11	2	2	0	0	0	0	0	0	0	0	0	0	16
	1	2	35	7	8	0	0	0	0	0	0	0	0	0	0	53
19:00	0	0	9	4	1	0	0	0	0	0	0	0	0	0	0	14
19:15	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
19:30	0	0	4	2	0	0	0	0	0	0	0	0	0	0	0	6
19:45	0	0	9	3	0	0	0	0	0	0	0	0	0	0	0	12
	0	0	28	9	1	0	0	0	0	0	0	0	0	0	0	38
20:00	1	0	4	1	2	0	0	0	0	0	0	0	0	0	0	8
20:15	0	0	6	1	1	0	0	0	0	0	0	0	0	0	0	8
20:30	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
20:45	0	0	8	2	0	0	0	0	0	0	0	0	0	0	0	10
	1	0	21	5	3	0	0	0	0	0	0	0	0	0	0	30
21:00	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
21:15	0	1	6	1	0	0	0	0	0	0	0	0	0	0	0	8
21:30	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
21:45	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
	0	1	12	5	0	0	0	0	0	0	0	0	0	0	0	18
22:00	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5
22:15	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
22:30	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
22:45	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	5
	0	0	9	4	1	1	0	0	0	0	0	0	0	0	0	15
23:00	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
23:15	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
23:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
23:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	7	3	0	0	0	0	0	0	0	0	0	0	0	10
Total	6	13	219	93	32	4	1	0	0	0	0	0	0	0	0	368
Total	9	26	284	122	40	4	1	0	0	0	0	0	0	0	0	486

Stats	
15th Percentile :	16 MPH
50th Percentile :	19 MPH
85th Percentile :	23 MPH
95th Percentile :	25 MPH
Mean Speed(Average) :	19 MPH
10 MPH Pace Speed :	16-25 MPH
Number in Pace :	433
Percent in Pace :	89.1%
Number of Vehicles > 20 MPH :	167
Percent of Vehicles > 20 MPH :	34.4%

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Surfside, Florida
Dade
89 St Between Carlyle Ave & Byron Ave

Site Code: 000000082803
Station ID: 000110252090
Date Start: 29-Aug-12

Eastbound, Westbound

Start	0	11	16	21	24	27	30	33	36	39	42	45	48	51	54	
Time	10	15	20	23	26	29	32	35	38	41	44	47	50	53	147	Total
8/29/12	0	1	1	2	1	0	0	0	0	0	0	0	0	0	0	5
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	3	2	1	0	0	0	0	0	0	0	0	0	0	7
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	4
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
06:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
06:15	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
06:30	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	5
06:45	0	3	7	1	1	0	0	0	0	0	0	0	0	0	0	12
	0	4	15	2	1	0	0	0	0	0	0	0	0	0	0	22
07:00	0	0	4	5	0	0	0	0	0	0	0	0	0	0	0	9
07:15	0	2	3	2	1	0	0	0	0	0	0	0	0	0	0	8
07:30	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	6
07:45	0	1	5	1	1	0	0	0	0	0	0	0	0	0	0	8
	0	3	15	11	2	0	0	0	0	0	0	0	0	0	0	31
08:00	0	1	2	6	0	0	0	0	0	0	0	0	0	0	0	9
08:15	0	0	7	1	1	0	0	0	0	0	0	0	0	0	0	9
08:30	1	0	8	8	1	0	0	0	0	0	0	0	0	0	0	18
08:45	1	3	9	2	1	0	0	0	0	0	0	0	0	0	0	16
	2	4	26	17	3	0	0	0	0	0	0	0	0	0	0	52
09:00	0	3	4	0	0	1	0	0	0	0	0	0	0	0	0	8
09:15	0	0	5	3	2	0	0	0	0	0	0	0	0	0	0	10
09:30	0	1	5	2	2	0	0	0	0	0	0	0	0	0	0	10
09:45	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
	0	4	17	6	4	1	0	0	0	0	0	0	0	0	0	32
10:00	0	3	4	2	2	0	0	1	0	0	0	0	0	0	0	12
10:15	0	0	6	1	0	0	0	0	0	0	0	0	0	0	0	7
10:30	0	1	5	0	2	0	0	0	0	0	0	0	0	0	0	8
10:45	1	1	11	1	0	0	0	0	0	0	0	0	0	0	0	14
	1	5	26	4	4	0	0	1	0	0	0	0	0	0	0	41
11:00	0	1	6	1	1	0	0	0	0	0	0	0	0	0	0	9
11:15	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
11:30	1	2	4	1	0	0	0	0	0	0	0	0	0	0	0	8
11:45	1	1	5	2	1	0	0	0	0	0	0	0	0	0	0	10
	2	4	18	6	2	0	0	0	0	0	0	0	0	0	0	32
Total	5	27	125	49	19	1	0	1	0	0	0	0	0	0	0	227

Traffic Survey Specialists, Inc.
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Surfside, Florida
Dade
89 St Between Carlyle Ave & Byron Ave

Site Code: 000000082803
Station ID: 000110252090
Date Start: 29-Aug-12

Eastbound, Westbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	5
12:15	0	1	5	3	1	0	0	0	0	0	0	0	0	0	0	10
12:30	0	0	7	3	1	1	0	0	0	0	0	0	0	0	0	12
12:45	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	12
	0	2	28	6	2	1	0	0	0	0	0	0	0	0	0	39
13:00	0	0	5	0	1	0	0	0	0	0	0	0	0	0	0	6
13:15	1	0	5	2	1	1	0	0	0	0	0	0	0	0	0	10
13:30	1	0	6	2	1	1	0	0	0	0	0	0	0	0	0	11
13:45	0	1	3	3	0	1	0	0	0	0	0	0	0	0	0	8
	2	1	19	7	3	3	0	0	0	0	0	0	0	0	0	35
14:00	0	0	4	7	0	0	0	0	0	0	0	0	0	0	0	11
14:15	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	6
14:30	1	1	9	1	1	0	0	0	0	0	0	0	0	0	0	13
14:45	1	1	4	6	0	0	0	0	0	0	0	0	0	0	0	12
	2	2	19	16	3	0	0	0	0	0	0	0	0	0	0	42
15:00	1	5	4	3	3	0	0	0	0	0	0	0	0	0	0	16
15:15	0	1	10	5	2	0	0	0	0	0	0	0	0	0	0	18
15:30	0	3	15	5	1	1	0	0	0	0	0	0	0	0	0	25
15:45	0	0	12	3	0	0	0	0	0	0	0	0	0	0	0	15
	1	9	41	16	6	1	0	0	0	0	0	0	0	0	0	74
16:00	0	3	9	4	1	0	0	0	0	0	0	0	0	0	0	17
16:15	1	2	13	3	1	0	0	0	0	0	0	0	0	0	0	20
16:30	1	2	8	8	3	0	0	0	0	0	0	0	0	0	0	22
16:45	2	1	7	5	2	0	1	0	0	0	0	0	0	0	0	18
	4	8	37	20	7	0	1	0	0	0	0	0	0	0	0	77
17:00	0	0	10	6	2	0	0	0	0	0	0	0	0	0	0	18
17:15	0	0	7	3	1	0	0	0	0	0	0	0	0	0	0	11
17:30	0	1	6	7	1	1	0	0	0	0	0	0	0	0	0	16
17:45	0	2	10	4	0	0	0	0	0	0	0	0	0	0	0	16
	0	3	33	20	4	1	0	0	0	0	0	0	0	0	0	61
18:00	1	2	10	3	1	0	0	0	0	0	0	0	0	0	0	17
18:15	1	2	12	1	4	0	0	0	0	0	0	0	0	0	0	20
18:30	0	1	10	3	1	0	0	0	0	0	0	0	0	0	0	15
18:45	0	1	12	2	3	0	0	0	0	0	0	0	0	0	0	18
	2	6	44	9	9	0	0	0	0	0	0	0	0	0	0	70
19:00	0	2	11	4	1	0	0	0	0	0	0	0	0	0	0	18
19:15	0	3	6	1	0	0	0	0	0	0	0	0	0	0	0	10
19:30	0	0	7	2	0	0	0	0	0	0	0	0	0	0	0	9
19:45	2	0	10	4	0	0	0	0	0	0	0	0	0	0	0	16
	2	5	34	11	1	0	0	0	0	0	0	0	0	0	0	53
20:00	1	0	7	2	2	0	0	0	0	0	0	0	0	0	0	12
20:15	0	0	9	1	1	0	0	0	0	0	0	0	0	0	0	11
20:30	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5
20:45	0	0	10	2	0	0	0	0	0	0	0	0	0	0	0	12
	1	0	30	6	3	0	0	0	0	0	0	0	0	0	0	40
21:00	0	0	4	2	0	0	0	0	0	0	0	0	0	0	0	6
21:15	0	1	7	1	0	0	0	0	0	0	0	0	0	0	0	9
21:30	1	0	2	1	0	1	0	0	0	0	0	0	0	0	0	5
21:45	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
	1	1	16	5	0	1	0	0	0	0	0	0	0	0	0	24
22:00	0	0	4	1	1	0	0	0	0	0	0	0	0	0	0	6
22:15	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
22:30	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	3
22:45	0	0	4	2	1	0	0	0	0	0	0	0	0	0	0	7
	0	0	13	5	2	1	0	0	0	0	0	0	0	0	0	21
23:00	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
23:15	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
23:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
23:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	8	3	0	0	0	0	0	0	0	0	0	0	0	11
Total	15	37	322	124	40	8	1	0	0	0	0	0	0	0	0	547
Total	20	64	447	173	59	9	1	1	0	0	0	0	0	0	0	774

Stats	
15th Percentile :	16 MPH
50th Percentile :	19 MPH
85th Percentile :	23 MPH
95th Percentile :	25 MPH
Mean Speed(Average) :	19 MPH
10 MPH Pace Speed :	16-25 MPH
Number in Pace :	660
Percent in Pace :	85.3%
Number of Vehicles > 20 MPH :	243
Percent of Vehicles > 20 MPH :	31.4%

Traffic Survey Specialists, Inc.
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Surfside, Florida
Dade
91 St Between Carlyle Ave & Byron Ave

Site Code: 000000082801
Station ID: 000058410087
Date Start: 29-Aug-12

Eastbound

Start	0	11	16	21	24	27	30	33	36	39	42	45	48	51	54	
Time	10	15	20	23	26	29	32	35	38	41	44	47	50	53	147	Total
8/29/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
05:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
05:45	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
	0	0	1	0	1	2	0	0	0	0	0	0	0	0	0	4
06:00	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3
06:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:30	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	4
06:45	1	1	4	2	1	0	0	0	0	0	0	0	0	0	0	9
	1	1	7	6	2	0	0	0	0	0	0	0	0	0	0	17
07:00	0	1	2	2	3	0	0	0	0	0	0	0	0	0	0	8
07:15	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	5
07:30	0	0	0	2	1	2	0	0	0	0	0	0	0	0	0	5
07:45	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3
	0	1	4	7	7	2	0	0	0	0	0	0	0	0	0	21
08:00	0	0	2	4	1	0	0	0	0	0	0	0	0	0	0	7
08:15	0	0	1	6	3	1	0	0	0	0	0	0	0	0	0	11
08:30	0	0	3	6	0	1	0	0	0	0	0	0	0	0	0	10
08:45	0	0	5	1	1	0	0	0	0	0	0	0	0	0	0	7
	0	0	11	17	5	2	0	0	0	0	0	0	0	0	0	35
09:00	0	1	2	2	3	0	0	0	0	0	0	0	0	0	0	8
09:15	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	5
09:30	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	4
09:45	0	1	7	2	0	1	0	0	0	0	0	0	0	0	0	11
	1	3	11	8	4	1	0	0	0	0	0	0	0	0	0	28
10:00	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	6
10:15	0	2	2	2	3	0	0	0	0	0	0	0	0	0	0	9
10:30	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	3
10:45	0	2	3	4	2	2	0	0	0	0	0	0	0	0	0	13
	1	5	7	9	7	2	0	0	0	0	0	0	0	0	0	31
11:00	0	1	3	4	3	0	1	0	0	0	0	0	0	0	0	12
11:15	0	1	3	1	2	0	0	0	0	0	0	0	0	0	0	7
11:30	0	0	9	2	1	0	0	0	0	0	0	0	0	0	0	12
11:45	1	2	2	4	2	0	0	0	0	0	0	0	0	0	0	11
	1	4	17	11	8	0	1	0	0	0	0	0	0	0	0	42
Total	4	14	59	59	37	9	1	0	0	0	0	0	0	0	0	183

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
91 St Between Carlyle Ave & Byron Ave

Site Code: 000000082801
Station ID: 000058410087
Date Start: 29-Aug-12

Eastbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	0	4	4	3	1	0	0	0	0	0	0	0	0	0	12
12:15	0	0	4	2	1	1	0	0	0	0	0	0	0	0	0	8
12:30	0	0	7	4	1	2	0	0	0	0	0	0	0	0	0	14
12:45	0	0	2	4	1	0	0	0	0	0	0	0	0	0	0	7
	0	0	17	14	6	4	0	0	0	0	0	0	0	0	0	41
13:00	0	1	2	4	1	0	0	0	0	0	0	0	0	0	0	8
13:15	0	1	4	2	4	2	0	0	0	0	0	0	0	0	0	13
13:30	0	2	4	1	9	0	1	0	0	0	0	0	0	0	0	17
13:45	0	0	2	5	1	2	0	0	0	0	0	0	0	0	0	10
	0	4	12	12	15	4	1	0	0	0	0	0	0	0	0	48
14:00	0	1	2	5	5	0	0	0	0	0	0	0	0	0	0	13
14:15	0	0	2	5	2	2	0	0	0	0	0	0	0	0	0	11
14:30	0	2	6	5	2	0	0	0	0	0	0	0	0	0	0	15
14:45	0	1	5	3	3	2	0	0	0	0	0	0	0	0	0	14
	0	4	15	18	12	4	0	0	0	0	0	0	0	0	0	53
15:00	1	1	4	9	1	1	0	0	0	0	0	0	0	0	0	17
15:15	0	2	3	1	3	0	0	0	0	0	0	0	0	0	0	9
15:30	0	0	4	3	1	0	0	0	0	0	0	0	0	0	0	8
15:45	2	0	2	2	3	0	0	0	0	0	0	0	0	0	0	9
	3	3	13	15	8	1	0	0	0	0	0	0	0	0	0	43
16:00	0	1	6	7	3	0	2	0	0	0	0	0	0	0	0	19
16:15	0	1	12	2	3	0	0	0	0	0	0	0	0	0	0	18
16:30	0	0	9	1	2	2	0	0	0	0	0	0	0	0	0	14
16:45	0	0	2	1	2	0	0	0	0	0	0	0	0	0	0	5
	0	2	29	11	10	2	2	0	0	0	0	0	0	0	0	56
17:00	0	3	7	3	2	0	0	0	0	0	0	0	0	0	0	15
17:15	0	0	3	5	0	1	0	0	0	0	0	0	0	0	0	9
17:30	0	0	4	2	1	1	0	0	0	0	0	0	0	0	0	8
17:45	0	3	6	4	2	1	0	0	0	0	0	0	0	0	0	16
	0	6	20	14	5	3	0	0	0	0	0	0	0	0	0	48
18:00	0	2	5	7	4	0	0	0	0	0	0	0	0	0	0	18
18:15	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	4
18:30	2	1	2	5	1	1	0	0	0	0	0	0	0	0	0	12
18:45	0	0	1	2	0	1	0	0	0	0	0	0	0	0	0	4
	2	3	10	14	7	2	0	0	0	0	0	0	0	0	0	38
19:00	0	0	5	3	1	0	1	1	0	0	0	0	0	0	0	11
19:15	0	0	3	1	1	0	0	0	0	0	0	0	0	0	0	5
19:30	0	2	3	3	0	1	0	0	0	0	0	0	0	0	0	9
19:45	0	0	3	0	1	1	0	0	0	0	0	0	0	0	0	5
	0	2	14	7	3	2	1	1	0	0	0	0	0	0	0	30
20:00	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	4
20:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:30	0	0	3	1	1	0	0	0	0	0	0	0	0	0	0	5
20:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
	0	3	5	1	2	0	0	0	0	0	0	0	0	0	0	11
21:00	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	5
21:15	0	0	2	2	2	1	0	0	0	0	0	0	0	0	0	7
21:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
21:45	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	3
	0	0	5	5	5	1	0	0	0	0	0	0	0	0	0	16
22:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
22:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
22:30	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
22:45	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
	0	0	3	2	0	1	0	0	0	0	0	0	0	0	0	6
23:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
23:15	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	0	1	0	0	3	2	0	0	0	0	0	0	0	0	0	6
Total	5	28	143	113	76	26	4	1	0	0	0	0	0	0	0	396
Total	9	42	202	172	113	35	5	1	0	0	0	0	0	0	0	579

Stats

15th Percentile :	16 MPH
50th Percentile :	21 MPH
85th Percentile :	25 MPH
95th Percentile :	27 MPH
Mean Speed(Average) :	21 MPH
10 MPH Pace Speed :	16-25 MPH
Number in Pace :	450
Percent in Pace :	77.7%
Number of Vehicles > 20 MPH :	326
Percent of Vehicles > 20 MPH :	56.3%

Traffic Survey Specialists, Inc.
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Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
91 St Between Carlyle Ave & Byron Ave

Site Code: 000000082801
Station ID: 000058410087
Date Start: 29-Aug-12

Westbound

Start	0	11	16	21	24	27	30	33	36	39	42	45	48	51	54	
Time	10	15	20	23	26	29	32	35	38	41	44	47	50	53	147	Total
8/29/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	3
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
05:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3
06:00	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3
06:15	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
06:30	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
06:45	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	5
	0	2	4	5	1	1	0	0	0	0	0	0	0	0	0	13
07:00	0	1	3	2	1	0	0	0	0	0	0	0	0	0	0	7
07:15	1	2	3	0	0	1	0	0	0	0	0	0	0	0	0	7
07:30	0	2	6	0	0	0	0	0	0	0	0	0	0	0	0	8
07:45	0	3	8	3	0	0	0	0	0	0	0	0	0	0	0	14
	1	8	20	5	1	1	0	0	0	0	0	0	0	0	0	36
08:00	0	3	4	4	2	0	0	0	0	0	0	0	0	0	0	13
08:15	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	6
08:30	0	0	6	4	1	0	0	0	0	0	0	0	0	0	0	11
08:45	0	0	8	7	0	0	0	0	0	0	0	0	0	0	0	15
	0	3	21	18	3	0	0	0	0	0	0	0	0	0	0	45
09:00	0	0	9	2	0	1	0	0	0	0	0	0	0	0	0	12
09:15	0	0	10	2	1	0	0	0	0	0	0	0	0	0	0	13
09:30	1	1	1	6	1	0	0	0	0	0	0	0	0	0	0	10
09:45	0	1	6	2	1	0	0	0	0	0	0	0	0	0	0	10
	1	2	26	12	3	1	0	0	0	0	0	0	0	0	0	45
10:00	0	1	12	1	1	1	0	0	0	0	0	0	0	0	0	16
10:15	0	1	3	2	0	0	1	0	0	0	0	0	0	0	0	7
10:30	2	0	2	1	1	0	0	0	0	0	0	0	0	0	0	6
10:45	0	0	5	4	0	0	0	0	0	0	0	0	0	0	0	9
	2	2	22	8	2	1	1	0	0	0	0	0	0	0	0	38
11:00	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
11:15	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3
11:30	0	0	4	5	1	1	0	0	0	0	0	0	0	0	0	11
11:45	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	3
	0	0	9	7	3	3	0	0	0	0	0	0	0	0	0	22
Total	4	18	106	57	15	7	1	0	0	0	0	0	0	0	0	208

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Site Code: 000000082801
Station ID: 000058410087
Date Start: 29-Aug-12

Westbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	0	3	6	1	1	0	0	0	0	0	0	0	0	0	11
12:15	0	1	4	2	2	0	0	0	0	0	0	0	0	0	0	9
12:30	0	2	5	2	2	0	0	0	0	0	0	0	0	0	0	11
12:45	0	2	5	0	0	1	1	0	0	0	0	0	0	0	0	9
	0	5	17	10	5	2	1	0	0	0	0	0	0	0	0	40
13:00	0	1	5	3	0	0	0	0	0	0	0	0	0	0	0	9
13:15	0	0	3	4	1	0	0	0	0	0	0	0	0	0	0	8
13:30	0	0	4	2	1	1	0	0	0	0	0	0	0	0	0	8
13:45	0	0	4	3	2	0	0	0	0	0	0	0	0	0	0	9
	0	1	16	12	4	1	0	0	0	0	0	0	0	0	0	34
14:00	0	2	1	1	1	0	0	2	2	0	0	0	0	0	0	9
14:15	0	1	3	4	0	0	0	0	0	0	0	0	0	0	0	8
14:30	0	2	8	1	1	1	0	0	0	0	0	0	0	0	0	13
14:45	0	1	1	1	2	0	0	0	0	0	0	0	0	0	0	5
	0	6	13	7	4	1	0	2	2	0	0	0	0	0	0	35
15:00	0	0	1	1	1	2	0	0	0	0	0	0	0	0	0	5
15:15	0	0	3	1	2	0	0	0	0	0	0	0	0	0	0	6
15:30	0	1	3	4	0	1	0	0	0	0	0	0	0	0	0	9
15:45	0	1	2	8	1	0	0	0	0	0	0	0	0	0	0	12
	0	2	9	14	4	3	0	0	0	0	0	0	0	0	0	32
16:00	0	0	2	4	3	0	0	0	0	0	0	0	0	0	0	9
16:15	0	1	8	0	0	0	1	0	0	0	0	0	0	0	0	10
16:30	0	1	4	3	1	0	0	0	0	0	0	0	0	0	0	9
16:45	0	1	2	6	1	1	0	0	0	0	0	0	0	0	0	11
	0	3	16	13	5	1	1	0	0	0	0	0	0	0	0	39
17:00	0	0	1	2	4	2	0	0	0	0	0	0	0	0	0	9
17:15	0	0	3	2	1	0	0	0	0	0	0	0	0	0	0	6
17:30	0	1	4	7	1	0	0	0	0	0	0	0	0	0	0	13
17:45	0	0	2	6	2	0	0	0	0	0	0	0	0	0	0	10
	0	1	10	17	8	2	0	0	0	0	0	0	0	0	0	38
18:00	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	5
18:15	0	0	6	1	1	0	1	0	0	0	0	0	0	0	0	9
18:30	0	0	1	1	1	0	0	0	0	0	0	2	0	0	0	5
18:45	0	2	5	5	1	1	0	0	0	0	0	0	0	0	0	14
	0	2	13	11	3	1	1	0	0	0	0	2	0	0	0	33
19:00	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
19:15	0	1	4	2	1	0	0	0	0	0	0	0	0	0	0	8
19:30	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	5
19:45	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	4
	0	2	9	7	2	1	0	0	0	0	0	0	0	0	0	21
20:00	0	1	2	2	1	0	0	0	0	0	0	0	0	0	0	6
20:15	0	2	3	2	0	0	0	0	0	0	0	0	0	0	0	7
20:30	0	1	4	3	1	1	0	0	0	0	0	0	0	0	0	10
20:45	0	0	2	3	1	1	0	0	0	0	0	0	0	0	0	7
	0	4	11	10	3	2	0	0	0	0	0	0	0	0	0	30
21:00	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	5
21:15	0	1	3	0	0	1	0	0	0	0	0	0	0	0	0	5
21:30	0	0	3	0	2	0	0	0	0	0	0	0	0	0	0	5
21:45	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
	0	1	8	4	3	1	0	0	0	0	0	0	0	0	0	17
22:00	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	6
22:15	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	3	3	2	0	0	0	0	0	0	0	0	0	0	8
23:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
23:15	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
23:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	1	2	2	0	0	0	0	0	0	0	0	0	0	6
Total	0	28	126	110	45	15	3	2	2	0	0	2	0	0	0	333
Total	4	46	232	167	60	22	4	2	2	0	0	2	0	0	0	541

Stats

15th Percentile :	16 MPH
50th Percentile :	20 MPH
85th Percentile :	24 MPH
95th Percentile :	27 MPH
Mean Speed(Average) :	20 MPH
10 MPH Pace Speed :	16-25 MPH
Number in Pace :	439
Percent in Pace :	81.1%
Number of Vehicles > 20 MPH :	259
Percent of Vehicles > 20 MPH :	47.9%

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
91 St Between Carlyle Ave & Byron Ave

Site Code: 000000082801
Station ID: 000058410087
Date Start: 29-Aug-12

Eastbound, Westbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
8/29/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	3
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
04:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	4
05:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3
05:45	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	3
	0	0	2	1	2	2	0	0	0	0	0	0	0	0	0	7
06:00	0	0	2	2	1	1	0	0	0	0	0	0	0	0	0	6
06:15	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	4
06:30	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	6
06:45	1	2	6	3	2	0	0	0	0	0	0	0	0	0	0	14
	1	3	11	11	3	1	0	0	0	0	0	0	0	0	0	30
07:00	0	2	5	4	4	0	0	0	0	0	0	0	0	0	0	15
07:15	1	2	5	2	1	1	0	0	0	0	0	0	0	0	0	12
07:30	0	2	6	2	1	2	0	0	0	0	0	0	0	0	0	13
07:45	0	3	8	4	2	0	0	0	0	0	0	0	0	0	0	17
	1	9	24	12	8	3	0	0	0	0	0	0	0	0	0	57
08:00	0	3	6	8	3	0	0	0	0	0	0	0	0	0	0	20
08:15	0	0	4	9	3	1	0	0	0	0	0	0	0	0	0	17
08:30	0	0	9	10	1	1	0	0	0	0	0	0	0	0	0	21
08:45	0	0	13	8	1	0	0	0	0	0	0	0	0	0	0	22
	0	3	32	35	8	2	0	0	0	0	0	0	0	0	0	80
09:00	0	1	11	4	3	1	0	0	0	0	0	0	0	0	0	20
09:15	1	1	11	3	2	0	0	0	0	0	0	0	0	0	0	18
09:30	1	1	2	9	1	0	0	0	0	0	0	0	0	0	0	14
09:45	0	2	13	4	1	1	0	0	0	0	0	0	0	0	0	21
	2	5	37	20	7	2	0	0	0	0	0	0	0	0	0	73
10:00	1	2	14	2	2	1	0	0	0	0	0	0	0	0	0	22
10:15	0	3	5	4	3	0	1	0	0	0	0	0	0	0	0	16
10:30	2	0	2	3	2	0	0	0	0	0	0	0	0	0	0	9
10:45	0	2	8	8	2	2	0	0	0	0	0	0	0	0	0	22
	3	7	29	17	9	3	1	0	0	0	0	0	0	0	0	69
11:00	0	1	6	6	3	0	1	0	0	0	0	0	0	0	0	17
11:15	0	1	3	1	4	1	0	0	0	0	0	0	0	0	0	10
11:30	0	0	13	7	2	1	0	0	0	0	0	0	0	0	0	23
11:45	1	2	4	4	2	1	0	0	0	0	0	0	0	0	0	14
	1	4	26	18	11	3	1	0	0	0	0	0	0	0	0	64
Total	8	32	165	116	52	16	2	0	0	0	0	0	0	0	0	391

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
91 St Between Carlyle Ave & Byron Ave

Site Code: 000000082801
Station ID: 000058410087
Date Start: 29-Aug-12

Eastbound, Westbound

Start	0	11	16	21	24	27	30	33	36	39	42	45	48	51	54	
Time	10	15	20	23	26	29	32	35	38	41	44	47	50	53	147	Total
12 PM	0	0	7	10	4	2	0	0	0	0	0	0	0	0	0	23
12:15	0	1	8	4	3	1	0	0	0	0	0	0	0	0	0	17
12:30	0	2	12	6	3	2	0	0	0	0	0	0	0	0	0	25
12:45	0	2	7	4	1	1	1	0	0	0	0	0	0	0	0	16
	0	5	34	24	11	6	1	0	0	0	0	0	0	0	0	81
13:00	0	2	7	7	1	0	0	0	0	0	0	0	0	0	0	17
13:15	0	1	7	6	5	2	0	0	0	0	0	0	0	0	0	21
13:30	0	2	8	3	10	1	1	0	0	0	0	0	0	0	0	25
13:45	0	0	6	8	3	2	0	0	0	0	0	0	0	0	0	19
	0	5	28	24	19	5	1	0	0	0	0	0	0	0	0	82
14:00	0	3	3	6	6	0	0	2	2	0	0	0	0	0	0	22
14:15	0	1	5	9	2	2	0	0	0	0	0	0	0	0	0	19
14:30	0	4	14	6	3	1	0	0	0	0	0	0	0	0	0	28
14:45	0	2	6	4	5	2	0	0	0	0	0	0	0	0	0	19
	0	10	28	25	16	5	0	2	2	0	0	0	0	0	0	88
15:00	1	1	5	10	2	3	0	0	0	0	0	0	0	0	0	22
15:15	0	2	6	2	5	0	0	0	0	0	0	0	0	0	0	15
15:30	0	1	7	7	1	1	0	0	0	0	0	0	0	0	0	17
15:45	2	1	4	10	4	0	0	0	0	0	0	0	0	0	0	21
	3	5	22	29	12	4	0	0	0	0	0	0	0	0	0	75
16:00	0	1	8	11	6	0	2	0	0	0	0	0	0	0	0	28
16:15	0	2	20	2	3	0	1	0	0	0	0	0	0	0	0	28
16:30	0	1	13	4	3	2	0	0	0	0	0	0	0	0	0	23
16:45	0	1	4	7	3	1	0	0	0	0	0	0	0	0	0	16
	0	5	45	24	15	3	3	0	0	0	0	0	0	0	0	95
17:00	0	3	8	5	6	2	0	0	0	0	0	0	0	0	0	24
17:15	0	0	6	7	1	1	0	0	0	0	0	0	0	0	0	15
17:30	0	1	8	9	2	1	0	0	0	0	0	0	0	0	0	21
17:45	0	3	8	10	4	1	0	0	0	0	0	0	0	0	0	26
	0	7	30	31	13	5	0	0	0	0	0	0	0	0	0	86
18:00	0	2	6	11	4	0	0	0	0	0	0	0	0	0	0	23
18:15	0	0	8	1	3	0	1	0	0	0	0	0	0	0	0	13
18:30	2	1	3	6	2	1	0	0	0	0	0	2	0	0	0	17
18:45	0	2	6	7	1	2	0	0	0	0	0	0	0	0	0	18
	2	5	23	25	10	3	1	0	0	0	0	2	0	0	0	71
19:00	0	0	8	4	1	0	1	1	0	0	0	0	0	0	0	15
19:15	0	1	7	3	2	0	0	0	0	0	0	0	0	0	0	13
19:30	0	2	4	7	0	1	0	0	0	0	0	0	0	0	0	14
19:45	0	1	4	0	2	2	0	0	0	0	0	0	0	0	0	9
	0	4	23	14	5	3	1	1	0	0	0	0	0	0	0	51
20:00	0	3	4	2	1	0	0	0	0	0	0	0	0	0	0	10
20:15	0	2	3	2	0	0	0	0	0	0	0	0	0	0	0	7
20:30	0	1	7	4	2	1	0	0	0	0	0	0	0	0	0	15
20:45	0	1	2	3	2	1	0	0	0	0	0	0	0	0	0	9
	0	7	16	11	5	2	0	0	0	0	0	0	0	0	0	41
21:00	0	0	2	5	3	0	0	0	0	0	0	0	0	0	0	10
21:15	0	1	5	2	2	2	0	0	0	0	0	0	0	0	0	12
21:30	0	0	3	1	2	0	0	0	0	0	0	0	0	0	0	6
21:45	0	0	3	1	1	0	0	0	0	0	0	0	0	0	0	5
	0	1	13	9	8	2	0	0	0	0	0	0	0	0	0	33
22:00	0	0	2	2	2	1	0	0	0	0	0	0	0	0	0	7
22:15	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
22:30	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
22:45	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
	0	0	6	5	2	1	0	0	0	0	0	0	0	0	0	14
23:00	0	1	0	0	3	0	0	0	0	0	0	0	0	0	0	4
23:15	0	0	1	2	1	2	0	0	0	0	0	0	0	0	0	6
23:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	0	2	1	2	5	2	0	0	0	0	0	0	0	0	0	12
Total	5	56	269	223	121	41	7	3	2	0	0	2	0	0	0	729
Total	13	88	434	339	173	57	9	3	2	0	0	2	0	0	0	1120

Stats	
15th Percentile :	16 MPH
50th Percentile :	21 MPH
85th Percentile :	25 MPH
95th Percentile :	27 MPH
Mean Speed(Average) :	20 MPH
10 MPH Pace Speed :	16-25 MPH
Number in Pace :	889
Percent in Pace :	79.4%
Number of Vehicles > 20 MPH :	585
Percent of Vehicles > 20 MPH :	52.2%

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
92 St Between Dickens Ave & Carlyle Ave

Site Code: 000000082704
Station ID: 000058410088
Date Start: 29-Aug-12

Eastbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
8/29/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
06:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
06:15	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
06:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:45	1	0	0	6	0	0	0	0	0	0	0	0	0	0	0	7
	1	0	4	7	1	0	0	0	0	0	0	0	0	0	0	13
07:00	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	8
07:15	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3
	1	1	8	4	0	0	0	0	0	0	0	0	0	0	0	14
08:00	0	1	4	5	2	0	0	0	0	0	0	0	0	0	0	12
08:15	0	0	4	1	1	0	0	0	0	0	0	0	0	0	0	6
08:30	0	1	3	1	2	0	0	0	0	0	0	0	0	0	0	7
08:45	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
	0	2	13	8	5	0	0	0	0	0	0	0	0	0	0	28
09:00	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	5
09:15	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5
09:30	0	1	5	4	0	0	0	0	0	0	0	0	0	0	0	10
09:45	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
	1	3	13	6	0	0	0	0	0	0	0	0	0	0	0	23
10:00	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	5
10:15	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
10:30	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
10:45	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
	0	1	8	6	0	0	0	0	0	0	0	0	0	0	0	15
11:00	0	1	6	0	1	0	0	0	0	0	0	0	0	0	0	8
11:15	0	0	5	3	1	0	0	0	0	0	0	0	0	0	0	9
11:30	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	3
11:45	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	4
	0	2	13	5	4	0	0	0	0	0	0	0	0	0	0	24
Total	3	9	61	39	11	0	0	0	0	0	0	0	0	0	0	123

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
92 St Between Dickens Ave & Carlyle Ave

Site Code: 000000082704
Station ID: 000058410088
Date Start: 29-Aug-12

Eastbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
12:15	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	5
12:30	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	4
12:45	1	1	0	2	1	0	0	0	0	0	0	0	0	0	0	5
	1	1	4	7	2	0	0	0	0	0	0	0	0	0	0	15
13:00	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	5
13:15	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
13:30	0	2	4	4	1	0	0	0	0	0	0	0	0	0	0	11
13:45	0	0	3	1	1	1	0	0	0	0	0	0	0	0	0	6
	0	2	11	8	3	1	0	0	0	0	0	0	0	0	0	25
14:00	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	4
14:15	0	3	1	2	0	0	0	0	0	0	0	0	0	0	0	6
14:30	0	1	4	2	0	1	0	0	0	0	0	0	0	0	0	8
14:45	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	6
	0	6	10	5	2	1	0	0	0	0	0	0	0	0	0	24
15:00	1	1	3	3	0	0	0	0	0	0	0	0	0	0	0	8
15:15	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
15:30	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
15:45	1	2	1	2	0	0	0	0	0	0	0	0	0	0	0	6
	2	3	6	7	0	1	0	0	0	0	0	0	0	0	0	19
16:00	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
16:15	0	1	1	3	2	0	0	0	0	0	0	0	0	0	0	7
16:30	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
16:45	0	2	3	0	3	0	0	0	0	0	0	0	0	0	0	8
	0	4	9	4	5	0	0	0	0	0	0	0	0	0	0	22
17:00	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
17:15	0	0	3	3	1	0	0	0	0	0	0	0	0	0	0	7
17:30	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	6
17:45	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	4
	0	0	10	6	4	0	0	0	0	0	0	0	0	0	0	20
18:00	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	5
18:15	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4
18:30	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	4
18:45	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	5
	0	5	9	2	1	1	0	0	0	0	0	0	0	0	0	18
19:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
19:15	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
19:30	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
19:45	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5
	0	1	4	4	0	1	0	0	0	0	0	0	0	0	0	10
20:00	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
20:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:30	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
20:45	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	3
	0	0	5	2	1	1	0	0	0	0	0	0	0	0	0	9
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
22:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
22:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
22:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
23:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
23:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
Total	3	22	74	47	18	6	0	0	0	0	0	0	0	0	0	170
Total	6	31	135	86	29	6	0	0	0	0	0	0	0	0	0	293

Stats

15th Percentile :	16 MPH
50th Percentile :	20 MPH
85th Percentile :	23 MPH
95th Percentile :	25 MPH
Mean Speed(Average) :	19 MPH
10 MPH Pace Speed :	16-25 MPH
Number in Pace :	241
Percent in Pace :	82.3%
Number of Vehicles > 20 MPH :	121
Percent of Vehicles > 20 MPH :	41.3%

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Surfside, Florida
Dade
92 St Between Dickens Ave & Carlyle Ave

Site Code: 000000082704
Station ID: 000058410088
Date Start: 29-Aug-12

Westbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
8/29/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	3
06:45	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3
	0	2	2	3	0	1	0	0	0	0	0	0	0	0	0	8
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
07:30	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
08:00	0	3	1	1	0	0	2	0	0	0	0	0	0	0	0	7
08:15	0	2	3	4	2	0	0	0	0	0	0	0	0	0	0	11
08:30	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
08:45	0	1	0	2	1	0	0	1	1	0	0	0	0	0	0	6
	0	7	5	8	3	0	2	1	1	0	0	0	0	0	0	27
09:00	1	1	2	3	0	1	0	0	0	0	0	0	0	0	0	8
09:15	0	3	5	0	1	1	0	0	0	0	0	0	0	0	0	10
09:30	0	1	1	2	3	0	0	0	0	0	0	0	0	0	0	7
09:45	0	1	3	1	0	1	0	0	0	0	0	0	0	0	0	6
	1	6	11	6	4	3	0	0	0	0	0	0	0	0	0	31
10:00	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
10:15	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
10:30	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	6
10:45	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	6
	1	3	6	4	3	0	0	0	0	0	0	0	0	0	0	17
11:00	0	0	3	1	0	2	0	0	0	0	0	0	0	0	0	6
11:15	0	1	1	5	1	1	0	0	0	0	0	0	0	0	0	9
11:30	0	2	5	2	2	0	0	0	0	0	0	0	0	0	0	11
11:45	0	0	3	3	3	0	0	0	0	0	0	0	0	0	0	9
	0	3	12	11	6	3	0	0	0	0	0	0	0	0	0	35
Total	2	21	42	34	17	7	2	1	1	0	0	0	0	0	0	127

Traffic Survey Specialists, Inc.
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Surfside, Florida
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Site Code: 000000082704
Station ID: 000058410088
Date Start: 29-Aug-12

Westbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	0	2	0	1	1	0	0	0	0	0	0	0	0	0	4
12:15	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	3
12:30	0	1	0	4	3	1	0	0	0	0	0	0	0	0	0	9
12:45	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	4
	0	2	2	7	5	3	1	0	0	0	0	0	0	0	0	20
13:00	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	6
13:15	0	0	2	6	2	0	0	0	0	0	0	0	0	0	0	10
13:30	1	0	2	4	2	0	0	0	0	0	0	0	0	0	0	9
13:45	0	0	3	5	1	1	0	0	0	0	0	0	0	0	0	10
	1	0	8	20	5	1	0	0	0	0	0	0	0	0	0	35
14:00	0	3	1	6	0	1	0	1	0	0	0	0	0	0	0	12
14:15	0	0	1	4	1	0	0	0	0	0	0	0	0	0	0	6
14:30	0	0	5	2	4	0	0	0	0	0	0	0	0	0	0	11
14:45	0	0	3	4	1	0	0	0	0	1	1	0	0	0	0	10
	0	3	10	16	6	1	0	1	0	1	1	0	0	0	0	39
15:00	0	0	3	4	0	0	0	0	0	1	1	0	0	0	0	9
15:15	0	0	4	4	4	0	0	0	0	0	0	0	0	0	0	12
15:30	1	0	3	5	2	1	1	0	2	0	0	0	0	0	0	15
15:45	0	2	4	2	3	0	1	0	0	0	0	0	0	0	0	12
	1	2	14	15	9	1	2	0	2	1	1	0	0	0	0	48
16:00	0	2	5	1	1	0	1	0	1	0	0	0	0	0	0	11
16:15	2	3	4	6	4	1	0	0	0	0	0	0	0	0	0	20
16:30	0	0	4	3	3	1	1	0	0	0	0	0	0	0	0	12
16:45	0	1	3	1	1	1	1	0	0	0	0	0	0	0	0	8
	2	6	16	11	9	3	3	0	1	0	0	0	0	0	0	51
17:00	0	0	4	1	2	0	0	0	0	0	0	0	0	0	0	7
17:15	0	0	1	1	5	1	0	0	3	0	0	0	0	0	0	11
17:30	0	2	4	3	4	0	0	0	0	0	0	0	0	0	0	13
17:45	0	1	3	5	0	0	0	0	0	0	0	0	0	0	0	9
	0	3	12	10	11	1	0	0	3	0	0	0	0	0	0	40
18:00	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	6
18:15	0	1	4	1	0	0	0	0	0	0	0	0	0	0	0	6
18:30	0	1	3	1	0	2	0	0	0	0	0	0	0	0	0	7
18:45	0	2	3	2	0	0	0	0	0	0	0	0	0	0	0	7
	0	4	12	6	2	2	0	0	0	0	0	0	0	0	0	26
19:00	0	0	2	1	0	0	1	0	0	0	0	0	0	0	0	4
19:15	0	0	3	4	0	0	0	0	0	0	0	0	0	0	0	7
19:30	0	0	2	1	1	1	0	0	0	0	0	0	0	0	0	5
19:45	0	0	4	2	0	0	0	0	0	0	0	0	0	0	0	6
	0	0	11	8	1	1	1	0	0	0	0	0	0	0	0	22
20:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
20:15	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	3
20:30	0	2	4	2	0	1	0	0	0	0	0	0	0	0	0	9
20:45	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3
	0	3	5	5	1	2	0	0	0	0	0	0	0	0	0	16
21:00	0	2	1	0	0	1	0	0	0	0	0	0	0	0	0	4
21:15	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4
21:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
21:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	3	6	0	0	1	0	0	0	0	0	0	0	0	0	10
22:00	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	3
22:15	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
22:30	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
22:45	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	6
	0	1	8	3	1	0	0	0	0	0	0	0	0	0	0	13
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	4	27	104	102	50	16	7	1	6	2	2	0	0	0	0	321
Total	6	48	146	136	67	23	9	2	7	2	2	0	0	0	0	448

Stats	
15th Percentile :	16 MPH
50th Percentile :	21 MPH
85th Percentile :	25 MPH
95th Percentile :	29 MPH
Mean Speed(Average) :	21 MPH
10 MPH Pace Speed :	16-25 MPH
Number in Pace :	327
Percent in Pace :	73.0%
Number of Vehicles > 20 MPH :	248
Percent of Vehicles > 20 MPH :	55.4%

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
92 St Between Dickens Ave & Carlyle Ave

Site Code: 000000082704
Station ID: 000058410088
Date Start: 29-Aug-12

Eastbound, Westbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
8/29/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
06:00	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	4
06:15	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
06:30	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	4
06:45	1	0	1	7	0	1	0	0	0	0	0	0	0	0	0	10
	1	2	6	10	1	1	0	0	0	0	0	0	0	0	0	21
07:00	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	8
07:15	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	6
07:30	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
07:45	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3
	1	1	11	6	0	0	0	0	0	0	0	0	0	0	0	19
08:00	0	4	5	6	2	0	2	0	0	0	0	0	0	0	0	19
08:15	0	2	7	5	3	0	0	0	0	0	0	0	0	0	0	17
08:30	0	2	4	2	2	0	0	0	0	0	0	0	0	0	0	10
08:45	0	1	2	3	1	0	0	1	1	0	0	0	0	0	0	9
	0	9	18	16	8	0	2	1	1	0	0	0	0	0	0	55
09:00	2	3	3	4	0	1	0	0	0	0	0	0	0	0	0	13
09:15	0	3	9	1	1	1	0	0	0	0	0	0	0	0	0	15
09:30	0	2	6	6	3	0	0	0	0	0	0	0	0	0	0	17
09:45	0	1	6	1	0	1	0	0	0	0	0	0	0	0	0	9
	2	9	24	12	4	3	0	0	0	0	0	0	0	0	0	54
10:00	0	2	3	2	0	0	0	0	0	0	0	0	0	0	0	7
10:15	0	1	3	2	0	0	0	0	0	0	0	0	0	0	0	6
10:30	1	1	5	2	1	0	0	0	0	0	0	0	0	0	0	10
10:45	0	0	3	4	2	0	0	0	0	0	0	0	0	0	0	9
	1	4	14	10	3	0	0	0	0	0	0	0	0	0	0	32
11:00	0	1	9	1	1	2	0	0	0	0	0	0	0	0	0	14
11:15	0	1	6	8	2	1	0	0	0	0	0	0	0	0	0	18
11:30	0	3	5	3	3	0	0	0	0	0	0	0	0	0	0	14
11:45	0	0	5	4	4	0	0	0	0	0	0	0	0	0	0	13
	0	5	25	16	10	3	0	0	0	0	0	0	0	0	0	59
Total	5	30	103	73	28	7	2	1	1	0	0	0	0	0	0	250

Traffic Survey Specialists, Inc.
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Surfside, Florida
Dade
92 St Between Dickens Ave & Carlyle Ave

Site Code: 000000082704
Station ID: 000058410088
Date Start: 29-Aug-12

Eastbound, Westbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	0	2	1	1	1	0	0	0	0	0	0	0	0	0	5
12:15	0	1	2	3	1	0	1	0	0	0	0	0	0	0	0	8
12:30	0	1	2	5	4	1	0	0	0	0	0	0	0	0	0	13
12:45	1	1	0	5	1	1	0	0	0	0	0	0	0	0	0	9
	1	3	6	14	7	3	1	0	0	0	0	0	0	0	0	35
13:00	0	0	2	8	1	0	0	0	0	0	0	0	0	0	0	11
13:15	0	0	5	6	2	0	0	0	0	0	0	0	0	0	0	13
13:30	1	2	6	8	3	0	0	0	0	0	0	0	0	0	0	20
13:45	0	0	6	6	2	2	0	0	0	0	0	0	0	0	0	16
	1	2	19	28	8	2	0	0	0	0	0	0	0	0	0	60
14:00	0	3	2	7	2	1	0	1	0	0	0	0	0	0	0	16
14:15	0	3	2	6	1	0	0	0	0	0	0	0	0	0	0	12
14:30	0	1	9	4	4	1	0	0	0	0	0	0	0	0	0	19
14:45	0	2	7	4	1	0	0	0	0	1	1	0	0	0	0	16
	0	9	20	21	8	2	0	1	0	1	1	0	0	0	0	63
15:00	1	1	6	7	0	0	0	0	0	1	1	0	0	0	0	17
15:15	0	0	6	5	4	0	0	0	0	0	0	0	0	0	0	15
15:30	1	0	3	6	2	2	1	0	2	0	0	0	0	0	0	17
15:45	1	4	5	4	3	0	1	0	0	0	0	0	0	0	0	18
	3	5	20	22	9	2	2	0	2	1	1	0	0	0	0	67
16:00	0	2	10	1	1	0	1	0	1	0	0	0	0	0	0	16
16:15	2	4	5	9	6	1	0	0	0	0	0	0	0	0	0	27
16:30	0	1	4	4	3	1	1	0	0	0	0	0	0	0	0	14
16:45	0	3	6	1	4	1	1	0	0	0	0	0	0	0	0	16
	2	10	25	15	14	3	3	0	1	0	0	0	0	0	0	73
17:00	0	0	6	2	2	0	0	0	0	0	0	0	0	0	0	10
17:15	0	0	4	4	6	1	0	0	3	0	0	0	0	0	0	18
17:30	0	2	6	5	6	0	0	0	0	0	0	0	0	0	0	19
17:45	0	1	6	5	1	0	0	0	0	0	0	0	0	0	0	13
	0	3	22	16	15	1	0	0	3	0	0	0	0	0	0	60
18:00	0	1	4	3	3	0	0	0	0	0	0	0	0	0	0	11
18:15	0	2	7	1	0	0	0	0	0	0	0	0	0	0	0	10
18:30	0	2	4	2	0	3	0	0	0	0	0	0	0	0	0	11
18:45	0	4	6	2	0	0	0	0	0	0	0	0	0	0	0	12
	0	9	21	8	3	3	0	0	0	0	0	0	0	0	0	44
19:00	0	0	2	1	0	1	1	0	0	0	0	0	0	0	0	5
19:15	0	0	3	6	0	0	0	0	0	0	0	0	0	0	0	9
19:30	0	1	2	2	1	1	0	0	0	0	0	0	0	0	0	7
19:45	0	0	8	3	0	0	0	0	0	0	0	0	0	0	0	11
	0	1	15	12	1	2	1	0	0	0	0	0	0	0	0	32
20:00	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	5
20:15	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	3
20:30	0	2	5	3	0	1	0	0	0	0	0	0	0	0	0	11
20:45	0	0	1	2	2	1	0	0	0	0	0	0	0	0	0	6
	0	3	10	7	2	3	0	0	0	0	0	0	0	0	0	25
21:00	0	2	1	0	0	1	0	0	0	0	0	0	0	0	0	4
21:15	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	5
21:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
21:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	3	7	0	0	1	0	0	0	0	0	0	0	0	0	11
22:00	0	1	3	0	1	0	0	0	0	0	0	0	0	0	0	5
22:15	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
22:30	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
22:45	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	6
	0	1	12	3	1	0	0	0	0	0	0	0	0	0	0	17
23:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
23:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	4
Total	7	49	178	149	68	22	7	1	6	2	2	0	0	0	0	491
Total	12	79	281	222	96	29	9	2	7	2	2	0	0	0	0	741

Stats

15th Percentile :	16 MPH
50th Percentile :	20 MPH
85th Percentile :	25 MPH
95th Percentile :	28 MPH
Mean Speed(Average) :	20 MPH
10 MPH Pace Speed :	16-25 MPH
Number in Pace :	567
Percent in Pace :	76.5%
Number of Vehicles > 20 MPH :	369
Percent of Vehicles > 20 MPH :	49.8%

Traffic Survey Specialists, Inc.
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Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
93 St Between Carlyle Ave & Byron Ave

Site Code: 000000082703
Station ID: 009601100008
Date Start: 28-Aug-12

Eastbound

Start	0	11	16	21	24	27	30	33	36	39	42	45	48	51	54	
Time	10	15	20	23	26	29	32	35	38	41	44	47	50	53	147	Total
8/28/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:45	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
	0	3	1	1	0	0	0	0	0	0	0	0	0	0	0	5
07:00	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	3
	0	2	2	1	1	0	0	0	0	0	0	0	0	0	0	6
08:00	1	1	2	0	1	0	0	0	0	0	0	0	0	0	0	5
08:15	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7
08:30	1	5	5	0	0	0	0	0	0	0	0	0	0	0	0	11
08:45	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	5
	2	7	18	0	1	0	0	0	0	0	0	0	0	0	0	28
09:00	0	3	4	2	0	0	0	0	0	0	0	0	0	0	0	9
09:15	0	3	7	0	0	0	0	0	0	0	0	0	0	0	0	10
09:30	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	4
09:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	8	13	3	0	0	0	0	0	0	0	0	0	0	0	24
10:00	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	5
10:15	0	2	1	2	0	0	0	0	0	0	0	0	0	0	0	5
10:30	1	1	3	0	1	0	0	0	0	0	0	0	0	0	0	6
10:45	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	5
	2	7	8	3	1	0	0	0	0	0	0	0	0	0	0	21
11:00	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	5
11:15	0	1	1	1	2	0	0	0	0	0	0	0	0	0	0	5
11:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
11:45	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4
	0	4	8	2	2	0	0	0	0	0	0	0	0	0	0	16
Total	4	31	50	10	5	0	0	0	0	0	0	0	0	0	0	100

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Surfside, Florida
Dade
93 St Between Carlyle Ave & Byron Ave

Site Code: 000000082703
Station ID: 009601100008
Date Start: 28-Aug-12

Eastbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	1	1	4	0	0	0	0	0	0	0	0	0	0	0	0	6
12:15	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
12:30	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	6
12:45	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	5
	3	5	9	2	0	0	0	0	0	0	0	0	0	0	0	19
13:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
13:15	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
13:30	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
13:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	4	4	2	0	0	0	0	0	0	0	0	0	0	0	10
14:00	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	4
14:15	0	1	3	0	1	1	0	0	0	0	0	0	0	0	0	6
14:30	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	5
14:45	0	1	5	2	0	0	0	0	0	0	0	0	0	0	0	8
	0	4	13	3	2	1	0	0	0	0	0	0	0	0	0	23
15:00	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
15:15	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
15:30	0	3	4	1	0	0	0	0	0	0	0	0	0	0	0	8
15:45	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
	0	3	14	4	0	0	0	0	0	0	0	0	0	0	0	21
16:00	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	5
16:15	1	0	5	1	0	0	0	0	0	0	0	0	0	0	0	7
16:30	0	1	3	2	0	0	0	0	0	0	0	0	0	0	0	6
16:45	1	2	3	0	1	0	0	0	0	0	0	0	0	0	0	7
	3	4	14	3	1	0	0	0	0	0	0	0	0	0	0	25
17:00	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	4
17:15	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	4
17:30	0	2	4	1	0	0	0	0	0	0	0	0	0	0	0	7
17:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
	2	5	8	1	1	0	0	0	0	0	0	0	0	0	0	17
18:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
18:15	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	6
18:30	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
18:45	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	5
	0	3	10	3	0	0	0	0	0	0	0	0	0	0	0	16
19:00	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	4
19:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
19:30	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
19:45	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
	0	2	7	2	0	0	0	0	0	0	0	0	0	0	0	11
20:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
20:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
20:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
20:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
21:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
21:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
21:30	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3
21:45	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
	1	3	4	1	0	0	0	0	0	0	0	0	0	0	0	9
22:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
22:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
23:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
Total	9	37	86	23	4	1	0	0	0	0	0	0	0	0	0	160
Total	13	68	136	33	9	1	0	0	0	0	0	0	0	0	0	260

Stats

15th Percentile :	12 MPH
50th Percentile :	17 MPH
85th Percentile :	21 MPH
95th Percentile :	23 MPH
Mean Speed(Average) :	17 MPH
10 MPH Pace Speed :	11-20 MPH
Number in Pace :	204
Percent in Pace :	78.5%
Number of Vehicles > 20 MPH :	43
Percent of Vehicles > 20 MPH :	16.5%

Traffic Survey Specialists, Inc.
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Surfside, Florida
Dade
93 St Between Carlyle Ave & Byron Ave

Site Code: 000000082703
Station ID: 009601100008
Date Start: 28-Aug-12

Westbound

Start	0	11	16	21	24	27	30	33	36	39	42	45	48	51	54	
Time	10	15	20	23	26	29	32	35	38	41	44	47	50	53	147	Total
8/28/12	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
08:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
08:15	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	4
08:30	0	1	6	0	1	0	0	0	0	0	0	0	0	0	0	8
08:45	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	5
	0	3	11	2	3	0	0	0	0	0	0	0	0	0	0	19
09:00	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
09:15	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	3
09:30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
09:45	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
	1	4	6	2	0	0	0	0	0	0	0	0	0	0	0	13
10:00	1	1	3	1	0	0	0	0	0	0	0	0	0	0	0	6
10:15	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	4
10:30	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	6
10:45	0	2	4	1	0	0	0	0	0	0	0	0	0	0	0	7
	1	4	15	2	1	0	0	0	0	0	0	0	0	0	0	23
11:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
11:15	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
11:30	0	1	2	0	0	1	0	0	0	0	0	0	0	0	0	4
11:45	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
	0	4	5	0	0	1	0	0	0	0	0	0	0	0	0	10
Total	2	15	43	6	4	2	0	0	0	0	0	0	0	0	0	72

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
93 St Between Carlyle Ave & Byron Ave

Site Code: 000000082703
Station ID: 009601100008
Date Start: 28-Aug-12

Westbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	1	6	2	0	0	0	0	0	0	0	0	0	0	0	9
12:15	0	0	3	0	0	0	2	0	0	0	0	0	0	0	0	5
12:30	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	5
12:45	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
	0	4	13	3	0	0	2	0	0	0	0	0	0	0	0	22
13:00	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
13:15	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
13:30	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
13:45	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3
	0	0	12	3	1	0	0	0	0	0	0	0	0	0	0	16
14:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
14:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
14:30	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
14:45	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
	0	1	5	2	1	0	0	0	0	0	0	0	0	0	0	9
15:00	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	5
15:15	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
15:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
15:45	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	4
	0	3	7	3	0	0	0	0	0	0	0	0	0	0	0	13
16:00	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	4
16:15	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
16:30	3	3	1	2	0	0	0	0	0	0	0	0	0	0	0	9
16:45	1	1	5	2	0	0	0	0	0	0	0	0	0	0	0	9
	5	4	10	7	0	0	0	0	0	0	0	0	0	0	0	26
17:00	0	1	3	2	0	0	0	0	0	0	0	0	0	0	0	6
17:15	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	4
17:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
17:45	0	1	5	1	1	0	0	0	0	0	0	0	0	0	0	8
	0	4	12	3	1	0	0	0	0	0	0	0	0	0	0	20
18:00	0	3	1	1	0	0	0	0	0	0	0	0	0	0	0	5
18:15	1	0	4	2	1	0	0	0	0	0	0	0	0	0	0	8
18:30	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	3
18:45	0	2	6	1	0	0	0	0	0	0	0	0	0	0	0	9
	1	7	11	5	1	0	0	0	0	0	0	0	0	0	0	25
19:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
19:15	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	7
19:30	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	5
19:45	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	6
	0	9	11	1	0	0	0	0	0	0	0	0	0	0	0	21
20:00	0	2	5	1	0	0	0	0	0	0	0	0	0	0	0	8
20:15	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
20:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
20:45	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
	0	4	9	3	0	0	0	0	0	0	0	0	0	0	0	16
21:00	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
21:15	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	3
21:30	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
21:45	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
	0	1	9	1	1	0	1	0	0	0	0	0	0	0	0	13
22:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22:15	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
23:00	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
23:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
23:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	2	2	0	1	0	0	0	0	0	0	0	0	0	5
Total	6	41	102	33	5	1	3	0	0	0	0	0	0	0	0	191
Total	8	56	145	39	9	3	3	0	0	0	0	0	0	0	0	263

Stats

15th Percentile :	13 MPH
50th Percentile :	18 MPH
85th Percentile :	22 MPH
95th Percentile :	24 MPH
Mean Speed(Average) :	18 MPH
10 MPH Pace Speed :	14-23 MPH
Number in Pace :	207
Percent in Pace :	78.7%
Number of Vehicles > 20 MPH :	54
Percent of Vehicles > 20 MPH :	20.5%

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Surfside, Florida
Dade
93 St Between Carlyle Ave & Byron Ave

Site Code: 000000082703
Station ID: 009601100008
Date Start: 28-Aug-12

Eastbound, Westbound

Start	0	11	16	21	24	27	30	33	36	39	42	45	48	51	54	
Time	10	15	20	23	26	29	32	35	38	41	44	47	50	53	147	Total
8/28/12	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:45	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
	0	3	1	1	0	0	0	0	0	0	0	0	0	0	0	5
07:00	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	4
07:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	1	4	0	1	0	0	0	0	0	0	0	0	0	0	6
	0	2	7	1	1	0	0	0	0	0	0	0	0	0	0	11
08:00	1	1	3	0	2	0	0	0	0	0	0	0	0	0	0	7
08:15	0	1	9	0	1	0	0	0	0	0	0	0	0	0	0	11
08:30	1	6	11	0	1	0	0	0	0	0	0	0	0	0	0	19
08:45	0	2	6	2	0	0	0	0	0	0	0	0	0	0	0	10
	2	10	29	2	4	0	0	0	0	0	0	0	0	0	0	47
09:00	0	3	9	2	0	0	0	0	0	0	0	0	0	0	0	14
09:15	1	4	7	1	0	0	0	0	0	0	0	0	0	0	0	13
09:30	0	3	2	1	0	0	0	0	0	0	0	0	0	0	0	6
09:45	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	4
	1	12	19	5	0	0	0	0	0	0	0	0	0	0	0	37
10:00	2	3	5	1	0	0	0	0	0	0	0	0	0	0	0	11
10:15	0	2	4	2	1	0	0	0	0	0	0	0	0	0	0	9
10:30	1	2	8	0	1	0	0	0	0	0	0	0	0	0	0	12
10:45	0	4	6	2	0	0	0	0	0	0	0	0	0	0	0	12
	3	11	23	5	2	0	0	0	0	0	0	0	0	0	0	44
11:00	0	3	3	1	0	0	0	0	0	0	0	0	0	0	0	7
11:15	0	2	2	1	2	0	0	0	0	0	0	0	0	0	0	7
11:30	0	1	4	0	0	1	0	0	0	0	0	0	0	0	0	6
11:45	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	6
	0	8	13	2	2	1	0	0	0	0	0	0	0	0	0	26
Total	6	46	93	16	9	2	0	0	0	0	0	0	0	0	0	172

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
93 St Between Carlyle Ave & Byron Ave

Site Code: 000000082703
Station ID: 009601100008
Date Start: 28-Aug-12

Eastbound, Westbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	1	2	10	2	0	0	0	0	0	0	0	0	0	0	0	15
12:15	0	1	4	0	0	0	2	0	0	0	0	0	0	0	0	7
12:30	1	4	4	2	0	0	0	0	0	0	0	0	0	0	0	11
12:45	1	2	4	1	0	0	0	0	0	0	0	0	0	0	0	8
	3	9	22	5	0	0	2	0	0	0	0	0	0	0	0	41
13:00	0	2	7	0	0	0	0	0	0	0	0	0	0	0	0	9
13:15	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	5
13:30	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	8
13:45	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	4
	0	4	16	5	1	0	0	0	0	0	0	0	0	0	0	26
14:00	0	1	2	0	2	0	0	0	0	0	0	0	0	0	0	5
14:15	0	1	3	1	1	1	0	0	0	0	0	0	0	0	0	7
14:30	0	2	4	2	0	0	0	0	0	0	0	0	0	0	0	8
14:45	0	1	9	2	0	0	0	0	0	0	0	0	0	0	0	12
	0	5	18	5	3	1	0	0	0	0	0	0	0	0	0	32
15:00	0	1	7	2	0	0	0	0	0	0	0	0	0	0	0	10
15:15	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	6
15:30	0	3	6	1	0	0	0	0	0	0	0	0	0	0	0	10
15:45	0	2	5	1	0	0	0	0	0	0	0	0	0	0	0	8
	0	6	21	7	0	0	0	0	0	0	0	0	0	0	0	34
16:00	1	1	4	3	0	0	0	0	0	0	0	0	0	0	0	9
16:15	2	0	8	1	0	0	0	0	0	0	0	0	0	0	0	11
16:30	3	4	4	4	0	0	0	0	0	0	0	0	0	0	0	15
16:45	2	3	8	2	1	0	0	0	0	0	0	0	0	0	0	16
	8	8	24	10	1	0	0	0	0	0	0	0	0	0	0	51
17:00	1	3	4	2	0	0	0	0	0	0	0	0	0	0	0	10
17:15	1	3	3	0	1	0	0	0	0	0	0	0	0	0	0	8
17:30	0	2	6	1	0	0	0	0	0	0	0	0	0	0	0	9
17:45	0	1	7	1	1	0	0	0	0	0	0	0	0	0	0	10
	2	9	20	4	2	0	0	0	0	0	0	0	0	0	0	37
18:00	0	3	2	2	0	0	0	0	0	0	0	0	0	0	0	7
18:15	1	2	8	2	1	0	0	0	0	0	0	0	0	0	0	14
18:30	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	6
18:45	0	3	10	1	0	0	0	0	0	0	0	0	0	0	0	14
	1	10	21	8	1	0	0	0	0	0	0	0	0	0	0	41
19:00	0	3	3	1	0	0	0	0	0	0	0	0	0	0	0	7
19:15	0	2	6	0	0	0	0	0	0	0	0	0	0	0	0	8
19:30	0	4	2	2	0	0	0	0	0	0	0	0	0	0	0	8
19:45	0	2	7	0	0	0	0	0	0	0	0	0	0	0	0	9
	0	11	18	3	0	0	0	0	0	0	0	0	0	0	0	32
20:00	0	3	5	1	0	0	0	0	0	0	0	0	0	0	0	9
20:15	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	4
20:30	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
20:45	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
	0	6	10	3	0	0	0	0	0	0	0	0	0	0	0	19
21:00	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	6
21:15	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	4
21:30	1	1	3	1	0	0	0	0	0	0	0	0	0	0	0	6
21:45	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	6
	1	4	13	2	1	0	1	0	0	0	0	0	0	0	0	22
22:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
22:15	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
22:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	8
23:00	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3
23:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
23:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
23:45	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
	0	0	3	4	0	1	0	0	0	0	0	0	0	0	0	8
Total	15	78	188	56	9	2	3	0	0	0	0	0	0	0	0	351
Total	21	124	281	72	18	4	3	0	0	0	0	0	0	0	0	523

Stats	
15th Percentile :	13 MPH
50th Percentile :	18 MPH
85th Percentile :	21 MPH
95th Percentile :	23 MPH
Mean Speed(Average) :	17 MPH
10 MPH Pace Speed :	11-20 MPH
Number in Pace :	405
Percent in Pace :	77.4%
Number of Vehicles > 20 MPH :	97
Percent of Vehicles > 20 MPH :	18.5%

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
Abbott Avenue South of 92 Street

Site Code: 000000082705
Station ID: 000110252093
Date Start: 29-Aug-12

Northbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
8/29/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	1	0	0	8	0	0	0	0	0	0	0	0	0	0	0	9
	1	0	0	8	0	0	0	0	0	0	0	0	0	0	0	9
09:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
09:15	1	0	6	2	0	0	0	0	0	0	0	0	0	0	0	9
09:30	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
09:45	1	0	6	0	0	0	0	0	0	0	0	0	0	0	0	7
	2	1	14	4	0	0	0	0	0	0	0	0	0	0	0	21
10:00	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
10:15	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
10:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
10:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
	1	0	11	0	0	0	0	0	0	0	0	0	0	0	0	12
11:00	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
11:15	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
11:30	1	0	5	1	0	0	0	0	0	0	0	0	0	0	0	7
11:45	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
	1	0	13	2	0	0	0	0	0	0	0	0	0	0	0	16
Total	5	1	38	14	0	0	0	0	0	0	0	0	0	0	0	58

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
Abbott Avenue South of 92 Street

Site Code: 000000082705
Station ID: 000110252093
Date Start: 29-Aug-12

Northbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
12:15	0	1	6	0	1	0	0	0	0	0	0	0	0	0	0	8
12:30	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5
12:45	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
	0	1	6	8	2	0	0	0	0	0	0	0	0	0	0	17
13:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
13:15	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4
13:30	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	7
13:45	0	0	1	3	0	1	0	0	0	0	0	0	0	0	0	5
	0	0	1	16	0	1	0	0	0	0	0	0	0	0	0	18
14:00	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	5
14:15	0	0	1	2	0	1	0	0	0	0	0	0	0	0	0	4
14:30	0	0	0	4	1	0	0	0	0	0	0	0	0	0	0	5
14:45	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5
	0	0	1	15	2	1	0	0	0	0	0	0	0	0	0	19
15:00	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4
15:15	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
15:30	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	6
15:45	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4
	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	16
16:00	0	0	0	6	0	0	0	1	0	0	0	0	0	0	0	7
16:15	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
16:30	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	9
16:45	0	0	0	5	0	0	1	0	0	0	0	0	0	0	0	6
	0	0	0	23	0	0	1	1	0	0	0	0	0	0	0	25
17:00	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	6
17:15	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
17:30	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
17:45	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4
	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	15
18:00	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	7
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	5	0	1	0	0	0	0	0	0	0	0	0	6
18:45	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
	0	0	0	14	0	1	0	0	0	0	0	0	0	0	0	15
19:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19:15	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4
19:30	0	1	0	0	0	3	0	0	1	0	0	0	0	0	0	5
19:45	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
	1	1	1	0	0	8	0	0	1	0	0	0	0	0	0	12
20:00	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
20:15	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3
20:30	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	5
20:45	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	0	0	0	0	1	11	0	0	0	0	0	0	0	0	0	12
21:00	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	3
21:15	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
21:30	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
21:45	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
	0	0	0	0	0	5	4	0	0	0	0	0	0	0	0	9
22:00	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
22:15	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
22:30	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
22:45	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
	0	0	0	0	0	5	2	0	0	0	0	0	0	0	0	7
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
23:30	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
23:45	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	3
Total	1	2	9	107	5	34	7	1	2	0	0	0	0	0	0	168
Total	6	3	47	121	5	34	7	1	2	0	0	0	0	0	0	226

Stats

15th Percentile :	18 MPH
50th Percentile :	22 MPH
85th Percentile :	27 MPH
95th Percentile :	29 MPH
Mean Speed(Average) :	22 MPH
10 MPH Pace Speed :	16-25 MPH
Number in Pace :	171
Percent in Pace :	75.7%
Number of Vehicles > 20 MPH :	170
Percent of Vehicles > 20 MPH :	75.2%

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
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Surfside, Florida
Dade
Abbott Avenue South of 92 Street

Site Code: 000000082705
Station ID: 000110252093
Date Start: 29-Aug-12

Southbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
8/29/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
06:00	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
06:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
06:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
06:45	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	8
	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	13
07:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
07:15	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	6
07:30	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
07:45	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5
	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	15
08:00	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	8
08:15	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5
08:30	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4
08:45	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5
	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	22
09:00	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
09:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
09:30	0	0	4	0	0	0	1	0	1	0	0	0	0	0	0	6
09:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
	0	1	6	1	0	0	1	0	1	1	0	0	0	0	0	11
10:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
10:15	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
10:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
10:45	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
	0	0	7	1	0	0	0	1	0	0	0	0	0	0	0	9
11:00	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0	4
11:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	7	0	0	0	0	0	0	0	1	0	0	0	0	8
Total	0	1	20	57	0	0	1	1	1	1	1	0	0	0	0	83

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Surfside, Florida
Dade
Abbott Avenue South of 92 Street

Site Code: 000000082705
Station ID: 000110252093
Date Start: 29-Aug-12

Southbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
12:30	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0	4
12:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	0	1	2	3	0	0	1	0	1	0	0	0	0	0	0	8
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
13:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
14:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
14:15	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	4
14:30	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5
14:45	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
	0	1	0	12	0	0	0	0	0	0	0	0	0	0	0	13
15:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
15:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
16:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
16:15	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
16:30	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	5
16:45	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
	0	0	1	9	1	0	0	0	0	0	0	0	0	0	0	11
17:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
17:15	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
17:30	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	4
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	8	0	1	0	0	0	0	0	0	0	0	0	9
18:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
18:15	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	3
18:30	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3
18:45	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2
	2	0	0	5	0	0	2	0	0	0	0	0	0	0	0	9
19:00	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3
19:15	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
19:30	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
19:45	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
	0	0	0	1	1	7	0	0	0	0	0	0	0	0	0	9
20:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
20:15	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
20:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
20:45	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
	0	1	1	0	0	2	1	0	0	0	0	0	0	0	0	5
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:15	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
21:30	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
21:45	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:30	0	0	1	0	0	3	0	0	0	0	0	0	0	0	0	4
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	0	0	3	0	0	0	0	0	0	0	0	0	4
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	3	5	43	2	16	4	0	1	0	0	0	0	0	0	76
Total	2	4	25	100	2	16	5	1	2	1	1	0	0	0	0	159

Stats

15th Percentile :	19 MPH
50th Percentile :	22 MPH
85th Percentile :	27 MPH
95th Percentile :	30 MPH
Mean Speed(Average) :	22 MPH
10 MPH Pace Speed :	14-23 MPH
Number in Pace :	127
Percent in Pace :	79.9%
Number of Vehicles > 20 MPH :	128
Percent of Vehicles > 20 MPH :	80.5%

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Surfside, Florida
Dade
Abbott Avenue South of 92 Street

Site Code: 000000082705
Station ID: 000110252093
Date Start: 29-Aug-12

Northbound, Southbound

Start	0	11	16	21	24	27	30	33	36	39	42	45	48	51	54	
Time	10	15	20	23	26	29	32	35	38	41	44	47	50	53	147	Total
8/29/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
06:00	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
06:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
06:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
06:45	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	8
	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	13
07:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
07:15	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	6
07:30	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
07:45	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5
	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	15
08:00	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	8
08:15	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5
08:30	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4
08:45	1	0	0	13	0	0	0	0	0	0	0	0	0	0	0	14
	1	0	0	30	0	0	0	0	0	0	0	0	0	0	0	31
09:00	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	4
09:15	1	0	6	2	0	0	0	0	0	1	0	0	0	0	0	10
09:30	0	1	6	0	0	0	1	0	1	0	0	0	0	0	0	9
09:45	1	0	8	0	0	0	0	0	0	0	0	0	0	0	0	9
	2	2	20	5	0	0	1	0	1	1	0	0	0	0	0	32
10:00	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7
10:15	1	0	3	0	0	0	0	1	0	0	0	0	0	0	0	5
10:30	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
10:45	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	6
	1	0	18	1	0	0	0	1	0	0	0	0	0	0	0	21
11:00	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7
11:15	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
11:30	1	0	8	1	0	0	0	0	0	0	1	0	0	0	0	11
11:45	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
	1	0	20	2	0	0	0	0	0	0	1	0	0	0	0	24
Total	5	2	58	71	0	0	1	1	1	1	1	0	0	0	0	141

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Abbott Avenue South of 92 Street

Site Code: 000000082705
Station ID: 000110252093
Date Start: 29-Aug-12

Northbound, Southbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
12:15	0	2	8	0	1	0	0	0	0	0	0	0	0	0	0	11
12:30	0	0	0	8	0	0	1	0	0	0	0	0	0	0	0	9
12:45	0	0	0	3	0	0	0	0	1	0	0	0	0	0	0	4
	0	2	8	11	2	0	1	0	1	0	0	0	0	0	0	25
13:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
13:15	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5
13:30	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	8
13:45	0	0	1	3	0	1	0	0	0	0	0	0	0	0	0	5
	0	0	1	18	0	1	0	0	0	0	0	0	0	0	0	20
14:00	0	0	0	6	1	0	0	0	0	0	0	0	0	0	0	7
14:15	0	1	1	5	0	1	0	0	0	0	0	0	0	0	0	8
14:30	0	0	0	9	1	0	0	0	0	0	0	0	0	0	0	10
14:45	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	7
	0	1	1	27	2	1	0	0	0	0	0	0	0	0	0	32
15:00	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5
15:15	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
15:30	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	6
15:45	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5
	0	0	0	19	0	0	0	0	0	0	0	0	0	0	0	19
16:00	0	0	0	7	0	0	0	1	0	0	0	0	0	0	0	8
16:15	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	6
16:30	0	0	1	12	1	0	0	0	0	0	0	0	0	0	0	14
16:45	0	0	0	7	0	0	1	0	0	0	0	0	0	0	0	8
	0	0	1	32	1	0	1	1	0	0	0	0	0	0	0	36
17:00	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	8
17:15	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5
17:30	0	0	0	6	0	1	0	0	0	0	0	0	0	0	0	7
17:45	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4
	0	0	0	23	0	1	0	0	0	0	0	0	0	0	0	24
18:00	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	8
18:15	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	3
18:30	2	0	0	6	0	1	0	0	0	0	0	0	0	0	0	9
18:45	0	0	0	3	0	0	1	0	0	0	0	0	0	0	0	4
	2	0	0	19	0	1	2	0	0	0	0	0	0	0	0	24
19:00	1	0	0	0	1	2	0	0	0	0	0	0	0	0	0	4
19:15	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	6
19:30	0	1	0	0	0	5	0	0	1	0	0	0	0	0	0	7
19:45	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	4
	1	1	1	1	1	15	0	0	1	0	0	0	0	0	0	21
20:00	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	4
20:15	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	4
20:30	0	0	1	0	0	5	0	0	0	0	0	0	0	0	0	6
20:45	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3
	0	1	1	0	1	13	1	0	0	0	0	0	0	0	0	17
21:00	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	3
21:15	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
21:30	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	3
21:45	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	3
	0	0	0	0	0	8	4	0	0	0	0	0	0	0	0	12
22:00	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
22:15	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
22:30	0	0	1	0	0	4	1	0	0	0	0	0	0	0	0	6
22:45	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
	0	0	1	0	0	8	2	0	0	0	0	0	0	0	0	11
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
23:30	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
23:45	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	3
Total	3	5	14	150	7	50	11	1	3	0	0	0	0	0	0	244
Total	8	7	72	221	7	50	12	2	4	1	1	0	0	0	0	385

Stats

15th Percentile :	19 MPH
50th Percentile :	22 MPH
85th Percentile :	27 MPH
95th Percentile :	30 MPH
Mean Speed(Average) :	22 MPH
10 MPH Pace Speed :	14-23 MPH
Number in Pace :	297
Percent in Pace :	77.1%
Number of Vehicles > 20 MPH :	298
Percent of Vehicles > 20 MPH :	77.4%

Traffic Survey Specialists, Inc.
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Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
Bay Drive South of 91st Street

Site Code: 000000090404
Station ID: 009601260020
Date Start: 05-Sep-12

Northbound

Start	0	11	16	21	24	27	30	33	36	39	42	45	48	51	54	
Time	10	15	20	23	26	29	32	35	38	41	44	47	50	53	147	Total
9/5/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
06:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:15	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
06:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4
07:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
07:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30	0	1	3	0	1	0	0	0	0	0	0	0	0	0	0	5
07:45	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	5
	0	2	8	1	2	0	0	0	0	0	0	0	0	0	0	13
08:00	0	3	8	3	1	0	0	0	0	0	0	0	0	0	0	15
08:15	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	5
08:30	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	5
08:45	1	2	2	2	0	0	0	0	0	0	0	0	0	0	0	7
	1	8	15	7	1	0	0	0	0	0	0	0	0	0	0	32
09:00	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
09:15	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	5
09:30	1	2	4	1	0	0	0	0	0	0	0	0	0	0	0	8
09:45	1	1	4	0	0	0	0	0	0	0	0	0	0	0	0	6
	2	5	11	4	0	0	0	0	0	0	0	0	0	0	0	22
10:00	2	2	6	0	0	0	0	0	0	0	0	0	0	0	0	10
10:15	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	5
10:30	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	4
10:45	0	1	4	1	1	0	0	0	0	0	0	0	0	0	0	7
	2	6	12	5	1	0	0	0	0	0	0	0	0	0	0	26
11:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
11:15	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
11:30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	3	1	1	1	1	0	0	0	0	0	0	0	0	0	7
Total	6	25	52	20	6	1	0	0	0	0	0	0	0	0	0	110

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
Bay Drive South of 91st Street

Site Code: 000000090404
Station ID: 009601260020
Date Start: 05-Sep-12

Northbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	0	4	0	1	0	0	0	0	0	0	0	0	0	0	5
12:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
12:30	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
12:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	6	2	1	0	0	0	0	0	0	0	0	0	0	9
13:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
13:15	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	5
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	3
	0	1	5	2	1	1	0	0	0	0	0	0	0	0	0	10
14:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
14:15	0	1	3	2	0	0	0	0	0	0	0	0	0	0	0	6
14:30	1	1	3	1	0	0	0	0	0	0	0	0	0	0	0	6
14:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	1	3	7	3	0	0	0	0	0	0	0	0	0	0	0	14
15:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
15:15	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
15:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
15:45	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	4
	0	0	7	2	1	0	0	0	0	0	0	0	0	0	0	10
16:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
16:15	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	4
16:30	0	0	2	2	0	0	1	0	0	0	0	0	0	0	0	5
16:45	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	4
	0	1	7	4	2	0	1	0	0	0	0	0	0	0	0	15
17:00	0	1	4	1	0	0	0	0	0	0	0	0	0	0	0	6
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	3
17:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
	0	1	6	2	1	0	0	0	0	1	0	0	0	0	0	11
18:00	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
18:15	1	0	1	3	1	0	0	0	0	0	0	0	0	0	0	6
18:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
18:45	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
	1	1	5	5	1	0	0	0	0	0	0	0	0	0	0	13
19:00	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
19:15	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
19:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
19:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
	0	1	6	3	0	0	0	0	0	0	0	0	0	0	0	10
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
20:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
20:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
21:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
21:15	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	4
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
23:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
23:15	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
23:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
23:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	5
Total	2	10	53	30	7	1	1	0	0	1	0	0	0	0	0	105
Total	8	35	105	50	13	2	1	0	0	1	0	0	0	0	0	215

Stats	
15th Percentile :	14 MPH
50th Percentile :	19 MPH
85th Percentile :	23 MPH
95th Percentile :	25 MPH
Mean Speed(Average) :	18 MPH
10 MPH Pace Speed :	14-23 MPH
Number in Pace :	169
Percent in Pace :	78.6%
Number of Vehicles > 20 MPH :	67
Percent of Vehicles > 20 MPH :	31.2%

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Surfside, Florida
Dade
Bay Drive South of 91st Street

Site Code: 000000090404
Station ID: 009601260020
Date Start: 05-Sep-12

Southbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
9/5/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
06:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
06:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3
07:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
07:15	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
07:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45	1	1	1	2	1	0	0	0	0	0	0	0	0	0	0	6
	1	1	4	3	1	0	0	0	0	0	0	0	0	0	0	10
08:00	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
08:15	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	6
08:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
08:45	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
	1	3	8	1	1	0	0	0	0	0	0	0	0	0	0	14
09:00	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
09:15	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
09:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
09:45	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
	0	0	7	3	1	0	0	0	0	0	0	0	0	0	0	11
10:00	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4
10:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
10:30	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	5
10:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	2	7	2	0	0	0	0	0	0	0	0	0	0	0	11
11:00	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
11:15	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
11:30	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
11:45	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	1	3	2	2	0	1	0	0	0	0	0	0	0	0	0	9
Total	3	11	29	13	4	1	0	0	0	0	0	0	0	0	0	61

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
Bay Drive South of 91st Street

Site Code: 000000090404
Station ID: 009601260020
Date Start: 05-Sep-12

Southbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
12:15	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
12:30	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	3
12:45	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	4
	0	1	5	4	3	0	0	0	0	0	0	0	0	0	0	13
13:00	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	4
13:15	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	3
13:30	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
13:45	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	3
	0	2	2	7	1	0	0	0	0	0	0	0	0	0	0	12
14:00	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
14:15	1	2	1	2	2	1	0	0	0	0	0	0	0	0	0	9
14:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
14:45	1	1	1	2	0	0	0	0	0	0	0	0	0	0	0	5
	2	4	3	6	2	1	0	0	0	0	0	0	0	0	0	18
15:00	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4
15:15	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0	5
15:30	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
15:45	0	1	5	2	1	0	0	0	0	0	0	0	0	0	0	9
	0	4	10	7	1	0	0	0	0	0	0	0	0	0	0	22
16:00	1	2	1	0	1	0	0	0	0	0	0	0	0	0	0	5
16:15	0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	4
16:30	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
16:45	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	4
	1	9	3	2	2	0	0	0	0	0	0	0	0	0	0	17
17:00	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	3
17:15	0	0	2	0	1	1	0	0	0	0	0	0	0	0	0	4
17:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17:45	0	2	1	0	1	0	0	0	0	0	0	0	0	0	0	4
	0	3	5	0	3	1	0	0	0	0	0	0	0	0	0	12
18:00	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	3
18:15	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
18:30	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
18:45	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
	0	0	4	5	1	0	0	0	0	0	0	0	0	0	0	10
19:00	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
19:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
19:30	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
19:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	1	2	3	0	1	0	0	0	0	0	0	0	0	0	7
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:30	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	3
20:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	4
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
21:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
22:00	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3
22:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	4
23:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3
Total	4	26	39	36	16	3	0	0	0	0	0	0	0	0	0	124
Total	7	37	68	49	20	4	0	0	0	0	0	0	0	0	0	185

Stats

15th Percentile :	13 MPH
50th Percentile :	19 MPH
85th Percentile :	23 MPH
95th Percentile :	26 MPH
Mean Speed(Average) :	19 MPH
10 MPH Pace Speed :	14-23 MPH
Number in Pace :	133
Percent in Pace :	71.9%
Number of Vehicles > 20 MPH :	73
Percent of Vehicles > 20 MPH :	39.5%

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Surfside, Florida
Dade
Bay Drive South of 91st Street

Site Code: 000000090404
Station ID: 009601260020
Date Start: 05-Sep-12

Northbound, Southbound

Start	0	11	16	21	24	27	30	33	36	39	42	45	48	51	54	
Time	10	15	20	23	26	29	32	35	38	41	44	47	50	53	147	Total
9/5/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
05:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	2	1	2	0	0	0	0	0	0	0	0	0	0	0	5
06:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
06:15	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
06:30	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
06:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	4	2	1	0	0	0	0	0	0	0	0	0	0	7
07:00	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	3
07:15	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
07:30	0	1	4	0	1	0	0	0	0	0	0	0	0	0	0	6
07:45	1	2	5	2	1	0	0	0	0	0	0	0	0	0	0	11
	1	3	12	4	3	0	0	0	0	0	0	0	0	0	0	23
08:00	0	4	9	4	1	0	0	0	0	0	0	0	0	0	0	18
08:15	1	3	5	2	0	0	0	0	0	0	0	0	0	0	0	11
08:30	0	2	4	0	1	0	0	0	0	0	0	0	0	0	0	7
08:45	1	2	5	2	0	0	0	0	0	0	0	0	0	0	0	10
	2	11	23	8	2	0	0	0	0	0	0	0	0	0	0	46
09:00	0	1	4	1	0	0	0	0	0	0	0	0	0	0	0	6
09:15	0	1	4	4	0	0	0	0	0	0	0	0	0	0	0	9
09:30	1	2	5	1	1	0	0	0	0	0	0	0	0	0	0	10
09:45	1	1	5	1	0	0	0	0	0	0	0	0	0	0	0	8
	2	5	18	7	1	0	0	0	0	0	0	0	0	0	0	33
10:00	2	3	9	0	0	0	0	0	0	0	0	0	0	0	0	14
10:15	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	6
10:30	0	4	2	3	0	0	0	0	0	0	0	0	0	0	0	9
10:45	0	1	5	1	1	0	0	0	0	0	0	0	0	0	0	8
	2	8	19	7	1	0	0	0	0	0	0	0	0	0	0	37
11:00	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	4
11:15	0	1	0	2	0	1	0	0	0	0	0	0	0	0	0	4
11:30	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
11:45	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3
	1	6	3	3	1	2	0	0	0	0	0	0	0	0	0	16
Total	9	36	81	33	10	2	0	0	0	0	0	0	0	0	0	171

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Surfside, Florida
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Bay Drive South of 91st Street

Site Code: 000000090404
Station ID: 009601260020
Date Start: 05-Sep-12

Northbound, Southbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	0	6	2	1	0	0	0	0	0	0	0	0	0	0	9
12:15	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3
12:30	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	5
12:45	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	5
	0	1	11	6	4	0	0	0	0	0	0	0	0	0	0	22
13:00	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	6
13:15	0	3	2	2	1	0	0	0	0	0	0	0	0	0	0	8
13:30	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
13:45	0	0	2	2	1	1	0	0	0	0	0	0	0	0	0	6
	0	3	7	9	2	1	0	0	0	0	0	0	0	0	0	22
14:00	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	4
14:15	1	3	4	4	2	1	0	0	0	0	0	0	0	0	0	15
14:30	1	1	3	2	0	0	0	0	0	0	0	0	0	0	0	7
14:45	1	2	1	2	0	0	0	0	0	0	0	0	0	0	0	6
	3	7	10	9	2	1	0	0	0	0	0	0	0	0	0	32
15:00	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	5
15:15	0	2	4	3	0	0	0	0	0	0	0	0	0	0	0	9
15:30	0	0	2	3	0	0	0	0	0	0	0	0	0	0	0	5
15:45	0	1	7	3	2	0	0	0	0	0	0	0	0	0	0	13
	0	4	17	9	2	0	0	0	0	0	0	0	0	0	0	32
16:00	1	3	2	0	1	0	0	0	0	0	0	0	0	0	0	7
16:15	0	2	2	2	2	0	0	0	0	0	0	0	0	0	0	8
16:30	0	3	3	2	0	0	1	0	0	0	0	0	0	0	0	9
16:45	0	2	3	2	1	0	0	0	0	0	0	0	0	0	0	8
	1	10	10	6	4	0	1	0	0	0	0	0	0	0	0	32
17:00	0	1	6	1	1	0	0	0	0	0	0	0	0	0	0	9
17:15	0	0	2	0	1	1	0	0	0	0	0	0	0	0	0	4
17:30	0	1	0	1	1	0	0	0	0	1	0	0	0	0	0	4
17:45	0	2	3	0	1	0	0	0	0	0	0	0	0	0	0	6
	0	4	11	2	4	1	0	0	0	1	0	0	0	0	0	23
18:00	0	1	2	2	1	0	0	0	0	0	0	0	0	0	0	6
18:15	1	0	3	3	1	0	0	0	0	0	0	0	0	0	0	8
18:30	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
18:45	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	6
	1	1	9	10	2	0	0	0	0	0	0	0	0	0	0	23
19:00	0	1	1	2	0	1	0	0	0	0	0	0	0	0	0	5
19:15	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	5
19:30	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4
19:45	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
	0	2	8	6	0	1	0	0	0	0	0	0	0	0	0	17
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
20:30	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	4
20:45	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
	0	1	4	1	1	0	0	0	0	0	0	0	0	0	0	7
21:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
21:15	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
21:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
21:45	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	6
22:00	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3
22:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	5
23:00	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
23:15	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
23:30	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	3
23:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	1	0	1	5	1	0	0	0	0	0	0	0	0	0	0	8
Total	6	36	92	66	23	4	1	0	0	1	0	0	0	0	0	229
Total	15	72	173	99	33	6	1	0	0	1	0	0	0	0	0	400

Stats	
15th Percentile :	14 MPH
50th Percentile :	19 MPH
85th Percentile :	23 MPH
95th Percentile :	25 MPH
Mean Speed(Average) :	18 MPH
10 MPH Pace Speed :	14-23 MPH
Number in Pace :	302
Percent in Pace :	75.5%
Number of Vehicles > 20 MPH :	140
Percent of Vehicles > 20 MPH :	35.0%

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
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Surfside, Florida
Dade
Bay Drive South of 96 Street

Site Code: 000000082701
Station ID: 000110252046
Date Start: 29-Aug-12

Northbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
8/29/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	3
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	3	1	0	0	1	0	0	0	0	0	0	0	0	5
06:45	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	3
	0	0	6	1	0	2	2	0	0	0	0	0	0	0	0	11
07:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
07:15	0	0	2	2	3	0	1	0	0	0	0	0	0	0	0	8
07:30	0	0	4	1	2	1	0	0	0	0	0	0	0	0	0	8
07:45	0	3	3	3	0	0	0	0	0	0	0	0	0	0	0	9
	0	3	9	7	6	1	1	0	0	0	0	0	0	0	0	27
08:00	3	3	7	8	3	1	0	0	0	0	0	0	0	0	0	25
08:15	0	0	4	1	6	2	0	0	0	0	0	0	0	0	0	13
08:30	1	1	4	2	2	0	0	0	0	0	0	0	0	0	0	10
08:45	0	0	4	2	2	1	0	0	0	0	0	0	0	0	0	9
	4	4	19	13	13	4	0	0	0	0	0	0	0	0	0	57
09:00	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	4
09:15	1	2	1	7	5	0	0	0	0	0	0	0	0	0	0	16
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	5	3	2	1	0	0	0	0	0	0	0	0	0	11
	1	2	8	10	9	1	0	0	0	0	0	0	0	0	0	31
10:00	0	3	1	2	0	0	1	0	0	0	0	0	0	0	0	7
10:15	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	3
10:30	0	0	2	0	0	2	1	0	0	0	0	0	0	0	0	5
10:45	1	0	1	1	2	2	0	0	0	0	0	0	0	0	0	7
	1	3	4	4	2	4	3	1	0	0	0	0	0	0	0	22
11:00	0	1	0	0	3	1	0	0	0	0	0	0	0	0	0	5
11:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30	0	0	1	4	1	1	2	0	0	0	0	0	0	0	0	9
11:45	0	0	2	2	0	1	0	1	0	0	0	0	0	0	0	6
	0	1	4	6	4	3	2	1	0	0	0	0	0	0	0	21
Total	6	13	52	42	35	15	9	2	0	0	0	0	0	0	0	174

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Bay Drive South of 96 Street

Site Code: 000000082701
Station ID: 000110252046
Date Start: 29-Aug-12

Northbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	4
12:15	0	0	1	2	3	2	0	0	0	0	0	0	0	0	0	8
12:30	1	0	1	2	3	2	0	0	0	0	0	0	0	0	0	9
12:45	0	1	1	0	1	3	1	0	0	0	0	0	0	0	0	7
	1	1	3	5	10	7	1	0	0	0	0	0	0	0	0	28
13:00	0	0	2	1	1	1	2	0	0	0	0	0	0	0	0	7
13:15	0	0	1	1	2	3	0	0	0	0	0	0	0	0	0	7
13:30	0	0	0	3	5	1	0	0	0	0	0	0	0	0	0	9
13:45	0	0	2	3	2	0	0	0	0	0	0	0	0	0	0	7
	0	0	5	8	10	5	2	0	0	0	0	0	0	0	0	30
14:00	0	3	2	2	1	1	0	0	0	0	0	0	0	0	0	9
14:15	1	5	3	2	1	2	0	0	0	0	0	0	0	0	0	14
14:30	1	4	6	2	1	3	0	0	0	0	0	0	0	0	0	17
14:45	1	0	0	1	1	1	1	0	0	0	0	0	0	0	0	5
	3	12	11	7	4	7	1	0	0	0	0	0	0	0	0	45
15:00	0	0	4	0	3	0	0	0	0	0	0	0	0	0	0	7
15:15	0	0	1	3	2	1	1	0	0	0	0	0	0	0	0	8
15:30	0	0	2	2	1	1	1	0	0	0	0	0	0	0	0	7
15:45	1	3	4	1	2	0	0	0	0	0	0	0	0	0	0	11
	1	3	11	6	8	2	2	0	0	0	0	0	0	0	0	33
16:00	0	0	3	3	0	1	0	0	0	0	0	0	0	0	0	7
16:15	0	2	1	0	2	3	0	1	0	0	0	0	0	0	0	9
16:30	0	0	5	0	1	2	0	1	0	0	0	0	0	0	0	9
16:45	1	0	1	2	2	1	1	0	0	0	0	0	0	0	0	8
	1	2	10	5	5	7	1	2	0	0	0	0	0	0	0	33
17:00	0	2	2	1	1	1	0	1	0	0	0	0	0	0	0	8
17:15	2	1	3	4	2	4	1	0	0	0	0	0	0	0	0	17
17:30	0	0	8	2	0	0	0	0	0	0	0	0	0	0	0	10
17:45	0	0	3	7	0	1	0	0	0	0	0	0	0	0	0	11
	2	3	16	14	3	6	1	1	0	0	0	0	0	0	0	46
18:00	0	2	3	3	2	0	0	0	0	0	0	0	0	0	0	10
18:15	0	0	1	3	0	1	1	0	0	0	0	0	0	0	0	6
18:30	0	0	2	1	1	1	0	0	0	0	0	0	0	0	0	5
18:45	0	1	0	2	2	0	1	0	0	0	0	0	0	0	0	6
	0	3	6	9	5	2	2	0	0	0	0	0	0	0	0	27
19:00	0	1	0	0	2	0	1	0	0	0	0	0	0	0	0	4
19:15	0	0	2	2	3	0	0	0	0	0	0	0	0	0	0	7
19:30	0	0	0	2	3	2	0	0	0	0	0	0	0	0	0	7
19:45	0	0	1	2	0	2	0	0	0	0	0	0	0	0	0	5
	0	1	3	6	8	4	1	0	0	0	0	0	0	0	0	23
20:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
20:15	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
20:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
	0	1	2	0	0	0	1	0	0	0	0	0	0	0	0	4
21:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
21:15	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
	0	1	1	0	1	1	1	0	0	0	0	0	0	0	0	5
22:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	3
23:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	8	29	69	61	55	41	13	3	0	0	0	0	0	0	0	279
Total	14	42	121	103	90	56	22	5	0	0	0	0	0	0	0	453

Stats

15th Percentile :	16 MPH
50th Percentile :	22 MPH
85th Percentile :	27 MPH
95th Percentile :	30 MPH
Mean Speed(Average) :	21 MPH
10 MPH Pace Speed :	17-26 MPH
Number in Pace :	289
Percent in Pace :	63.8%
Number of Vehicles > 20 MPH :	276
Percent of Vehicles > 20 MPH :	60.9%

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Dade
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Site Code: 000000082701
Station ID: 000110252046
Date Start: 29-Aug-12

Southbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
8/29/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
10:15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
11:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	2	3	6	1	0	0	0	0	0	0	0	0	0	0	0	12

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Site Code: 000000082701
Station ID: 000110252046
Date Start: 29-Aug-12

Southbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
14:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
14:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
14:30	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
14:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	1	1	2	2	0	0	0	0	0	0	0	0	0	0	0	6
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
15:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
16:00	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
16:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	3
17:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17:15	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
17:30	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
17:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	6
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
18:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
18:45	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
	0	1	2	0	2	0	0	0	0	0	0	0	0	0	0	5
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:15	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
19:30	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
19:45	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
	1	0	1	3	1	0	0	0	0	0	0	0	0	0	0	6
20:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
20:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3
22:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
22:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	3	3	14	11	7	0	1	0	0	0	0	0	0	0	0	39
Total	5	6	20	12	7	0	1	0	0	0	0	0	0	0	0	51

Stats

15th Percentile :	13 MPH
50th Percentile :	19 MPH
85th Percentile :	23 MPH
95th Percentile :	25 MPH
Mean Speed(Average) :	19 MPH
10 MPH Pace Speed :	15-24 MPH
Number in Pace :	37
Percent in Pace :	72.5%
Number of Vehicles > 20 MPH :	20
Percent of Vehicles > 20 MPH :	39.2%

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
Bay Drive South of 96 Street

Site Code: 000000082701
Station ID: 000110252046
Date Start: 29-Aug-12

Northbound, Southbound

Start	0	11	16	21	24	27	30	33	36	39	42	45	48	51	54	
Time	10	15	20	23	26	29	32	35	38	41	44	47	50	53	147	Total
8/29/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	3
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	3	1	0	0	1	0	0	0	0	0	0	0	0	5
06:45	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	3
	0	0	6	1	0	2	2	0	0	0	0	0	0	0	0	11
07:00	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3
07:15	0	0	2	2	3	0	1	0	0	0	0	0	0	0	0	8
07:30	0	0	4	1	2	1	0	0	0	0	0	0	0	0	0	8
07:45	0	3	3	4	0	0	0	0	0	0	0	0	0	0	0	10
	0	3	10	8	6	1	1	0	0	0	0	0	0	0	0	29
08:00	3	3	7	8	3	1	0	0	0	0	0	0	0	0	0	25
08:15	0	1	5	1	6	2	0	0	0	0	0	0	0	0	0	15
08:30	1	1	4	2	2	0	0	0	0	0	0	0	0	0	0	10
08:45	1	0	4	2	2	1	0	0	0	0	0	0	0	0	0	10
	5	5	20	13	13	4	0	0	0	0	0	0	0	0	0	60
09:00	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	4
09:15	1	2	1	7	5	0	0	0	0	0	0	0	0	0	0	16
09:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
09:45	0	0	5	3	2	1	0	0	0	0	0	0	0	0	0	11
	1	3	8	10	9	1	0	0	0	0	0	0	0	0	0	32
10:00	0	3	3	2	0	0	1	0	0	0	0	0	0	0	0	9
10:15	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	4
10:30	0	0	3	0	0	2	1	0	0	0	0	0	0	0	0	6
10:45	1	0	1	1	2	2	0	0	0	0	0	0	0	0	0	7
	2	3	7	4	2	4	3	1	0	0	0	0	0	0	0	26
11:00	0	1	1	0	3	1	0	0	0	0	0	0	0	0	0	6
11:15	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
11:30	0	0	1	4	1	1	2	0	0	0	0	0	0	0	0	9
11:45	0	0	2	2	0	1	0	1	0	0	0	0	0	0	0	6
	0	2	5	6	4	3	2	1	0	0	0	0	0	0	0	23
Total	8	16	58	43	35	15	9	2	0	0	0	0	0	0	0	186

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
Bay Drive South of 96 Street

Site Code: 000000082701
Station ID: 000110252046
Date Start: 29-Aug-12

Northbound, Southbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	4
12:15	0	0	1	2	4	2	0	0	0	0	0	0	0	0	0	9
12:30	1	0	1	2	3	2	0	0	0	0	0	0	0	0	0	9
12:45	0	1	1	0	2	3	1	0	0	0	0	0	0	0	0	8
	1	1	3	5	12	7	1	0	0	0	0	0	0	0	0	30
13:00	0	0	2	1	1	1	2	0	0	0	0	0	0	0	0	7
13:15	0	0	1	1	2	3	0	0	0	0	0	0	0	0	0	7
13:30	0	0	0	3	5	1	0	0	0	0	0	0	0	0	0	9
13:45	0	0	3	3	2	0	0	0	0	0	0	0	0	0	0	8
	0	0	6	8	10	5	2	0	0	0	0	0	0	0	0	31
14:00	1	4	2	2	1	1	0	0	0	0	0	0	0	0	0	11
14:15	1	5	3	3	1	2	0	0	0	0	0	0	0	0	0	15
14:30	1	4	7	3	1	3	0	0	0	0	0	0	0	0	0	19
14:45	1	0	1	1	1	1	1	0	0	0	0	0	0	0	0	6
	4	13	13	9	4	7	1	0	0	0	0	0	0	0	0	51
15:00	0	0	4	0	3	0	0	0	0	0	0	0	0	0	0	7
15:15	0	0	2	3	2	1	1	0	0	0	0	0	0	0	0	9
15:30	0	0	3	2	1	1	1	0	0	0	0	0	0	0	0	8
15:45	1	3	4	1	2	0	0	0	0	0	0	0	0	0	0	11
	1	3	13	6	8	2	2	0	0	0	0	0	0	0	0	35
16:00	0	0	4	3	0	1	1	0	0	0	0	0	0	0	0	9
16:15	0	2	1	1	2	3	0	1	0	0	0	0	0	0	0	10
16:30	0	0	5	0	1	2	0	1	0	0	0	0	0	0	0	9
16:45	1	0	1	2	2	1	1	0	0	0	0	0	0	0	0	8
	1	2	11	6	5	7	2	2	0	0	0	0	0	0	0	36
17:00	0	3	2	1	1	1	0	1	0	0	0	0	0	0	0	9
17:15	2	1	4	4	3	4	1	0	0	0	0	0	0	0	0	19
17:30	1	0	8	3	0	0	0	0	0	0	0	0	0	0	0	12
17:45	0	0	4	7	0	1	0	0	0	0	0	0	0	0	0	12
	3	4	18	15	4	6	1	1	0	0	0	0	0	0	0	52
18:00	0	2	3	3	2	0	0	0	0	0	0	0	0	0	0	10
18:15	0	0	2	3	1	1	1	0	0	0	0	0	0	0	0	8
18:30	0	0	3	1	1	1	0	0	0	0	0	0	0	0	0	6
18:45	0	2	0	2	3	0	1	0	0	0	0	0	0	0	0	8
	0	4	8	9	7	2	2	0	0	0	0	0	0	0	0	32
19:00	0	1	0	0	2	0	1	0	0	0	0	0	0	0	0	4
19:15	1	0	3	2	3	0	0	0	0	0	0	0	0	0	0	9
19:30	0	0	0	2	4	2	0	0	0	0	0	0	0	0	0	8
19:45	0	0	1	5	0	2	0	0	0	0	0	0	0	0	0	8
	1	1	4	9	9	4	1	0	0	0	0	0	0	0	0	29
20:00	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
20:15	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
20:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
	0	1	3	1	0	0	1	0	0	0	0	0	0	0	0	6
21:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
21:15	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	3
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	4
	0	1	2	1	2	1	1	0	0	0	0	0	0	0	0	8
22:00	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
22:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	0	1	1	2	1	0	0	0	0	0	0	0	0	0	0	5
23:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3
Total	11	32	83	72	62	41	14	3	0	0	0	0	0	0	0	318
Total	19	48	141	115	97	56	23	5	0	0	0	0	0	0	0	504

Stats

15th Percentile :	16 MPH
50th Percentile :	22 MPH
85th Percentile :	27 MPH
95th Percentile :	30 MPH
Mean Speed(Average) :	21 MPH
10 MPH Pace Speed :	17-26 MPH
Number in Pace :	324
Percent in Pace :	64.3%
Number of Vehicles > 20 MPH :	296
Percent of Vehicles > 20 MPH :	58.7%

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
Byron Avenue Between 90th & 91st Streets

Site Code: 000000090403
Station ID: 000411692110
Date Start: 05-Sep-12

Northbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
9/5/12	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	3
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
05:15	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
05:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	3	0	1	1	0	0	0	0	0	0	0	0	0	6
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	1	1	0	0	2	1	0	0	0	0	0	0	0	0	0	5
06:45	0	1	1	3	2	1	0	0	0	0	0	0	0	0	0	8
	1	2	1	3	4	2	0	0	0	0	0	0	0	0	0	13
07:00	0	0	2	1	0	1	0	0	0	0	0	0	0	0	0	4
07:15	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	6
07:30	0	0	1	1	3	2	0	0	0	0	0	0	0	0	0	7
07:45	0	0	1	6	0	1	2	0	0	0	0	0	0	0	0	10
	0	0	6	10	5	4	2	0	0	0	0	0	0	0	0	27
08:00	1	0	2	1	2	0	1	0	0	0	0	0	0	0	0	7
08:15	0	0	1	4	4	1	1	1	0	0	0	0	0	0	0	12
08:30	1	1	1	3	2	1	0	0	0	0	0	0	0	0	0	9
08:45	0	1	3	1	4	0	0	0	0	0	0	0	0	0	0	9
	2	2	7	9	12	2	2	1	0	0	0	0	0	0	0	37
09:00	0	0	0	3	1	3	0	0	0	0	0	0	0	0	0	7
09:15	2	1	3	2	1	0	0	0	0	0	0	0	0	0	0	9
09:30	0	1	0	2	2	2	0	0	0	0	0	0	0	0	0	7
09:45	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
	2	2	3	10	4	5	0	0	0	0	0	0	0	0	0	26
10:00	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	3
10:15	0	0	2	2	0	0	2	0	0	0	0	0	0	0	0	6
10:30	0	1	3	0	1	1	0	0	0	0	0	0	0	0	0	6
10:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	1	7	3	1	1	3	0	0	0	0	0	0	0	0	16
11:00	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	3
11:15	0	1	1	0	1	2	0	0	0	0	0	0	0	0	0	5
11:30	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	4
11:45	0	0	0	2	2	1	1	0	1	0	0	0	0	0	0	7
	0	2	1	4	4	6	1	0	1	0	0	0	0	0	0	19
Total	7	11	31	41	32	21	8	1	1	0	0	0	0	0	0	153

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
Byron Avenue Between 90th & 91st Streets

Site Code: 000000090403
Station ID: 000411692110
Date Start: 05-Sep-12

Northbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	2	2	0	2	1	0	0	0	0	0	0	0	0	0	7
12:15	1	0	1	3	4	1	0	0	0	0	0	0	0	0	0	10
12:30	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	4
12:45	0	0	3	2	4	0	0	1	0	0	0	0	0	0	0	10
	1	4	6	7	10	2	0	1	0	0	0	0	0	0	0	31
13:00	0	2	0	1	0	2	0	0	0	0	0	0	0	0	0	5
13:15	0	1	2	1	3	0	1	0	0	1	0	0	0	0	0	9
13:30	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	5
13:45	0	1	1	2	6	2	4	0	0	0	0	0	0	0	0	16
	0	4	5	6	10	4	5	0	0	1	0	0	0	0	0	35
14:00	0	0	2	0	3	1	2	1	0	0	0	0	0	0	0	9
14:15	0	0	5	0	3	1	0	0	0	0	0	0	0	0	0	9
14:30	0	0	2	0	0	2	2	1	0	0	0	0	0	0	0	7
14:45	0	0	2	0	0	2	1	0	0	0	0	0	0	0	0	5
	0	0	11	0	6	6	5	2	0	0	0	0	0	0	0	30
15:00	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	3
15:15	0	0	4	3	0	1	0	0	0	0	0	0	0	0	0	8
15:30	0	0	3	4	5	3	0	0	0	0	0	0	0	0	0	15
15:45	0	2	2	5	2	0	1	0	0	0	0	0	0	0	0	12
	0	3	10	12	7	4	2	0	0	0	0	0	0	0	0	38
16:00	0	0	2	3	2	0	2	0	0	0	0	0	0	0	0	9
16:15	1	1	3	5	4	3	0	0	0	0	0	0	0	0	0	17
16:30	0	3	4	5	10	5	4	1	0	0	0	0	0	0	0	32
16:45	0	0	7	10	5	5	2	0	0	1	0	1	0	0	0	31
	1	4	16	23	21	13	8	1	0	1	0	1	0	0	0	89
17:00	0	8	18	8	10	8	1	0	0	2	0	0	0	0	0	55
17:15	0	0	9	14	19	13	7	0	0	0	0	0	0	0	0	62
17:30	0	0	8	10	20	8	3	0	1	0	0	0	0	0	0	50
17:45	1	2	10	22	23	12	2	1	1	0	0	0	0	0	0	74
	1	10	45	54	72	41	13	1	2	2	0	0	0	0	0	241
18:00	0	2	5	24	17	5	2	1	0	0	0	0	0	0	0	56
18:15	0	1	4	22	11	7	1	1	1	0	0	0	0	0	0	48
18:30	0	3	4	9	1	1	0	0	0	0	0	0	0	0	0	18
18:45	0	0	9	11	10	6	1	2	0	0	0	0	0	0	0	39
	0	6	22	66	39	19	4	4	1	0	0	0	0	0	0	161
19:00	0	1	4	3	13	5	0	1	0	0	0	0	0	0	0	27
19:15	0	1	3	4	1	0	1	0	0	0	0	0	0	0	0	10
19:30	0	1	4	2	0	2	0	0	0	0	0	0	0	0	0	9
19:45	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	4
	0	3	11	9	17	8	1	1	0	0	0	0	0	0	0	50
20:00	0	1	1	1	6	0	0	0	0	0	0	0	0	0	0	9
20:15	0	0	2	1	1	1	0	0	0	0	0	0	0	0	0	5
20:30	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3
20:45	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
	0	1	5	4	7	2	0	0	0	0	0	0	0	0	0	19
21:00	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	4
21:15	0	1	2	0	3	1	1	0	0	0	0	0	0	0	0	8
21:30	0	0	3	1	1	0	0	0	0	0	0	0	0	0	0	5
21:45	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	4
	0	1	6	2	6	4	2	0	0	0	0	0	0	0	0	21
22:00	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	3
22:15	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
22:30	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
22:45	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
	0	1	2	3	2	1	0	0	1	0	0	0	0	0	0	10
23:00	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	3
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	3
Total	3	38	139	187	198	104	40	10	4	4	0	1	0	0	0	728
Total	10	49	170	228	230	125	48	11	5	4	0	1	0	0	0	881

Stats

15th Percentile :	18 MPH
50th Percentile :	23 MPH
85th Percentile :	28 MPH
95th Percentile :	31 MPH
Mean Speed(Average) :	23 MPH
10 MPH Pace Speed :	20-29 MPH
Number in Pace :	617
Percent in Pace :	70.0%
Number of Vehicles > 20 MPH :	652
Percent of Vehicles > 20 MPH :	74.0%

Traffic Survey Specialists, Inc.
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Surfside, Florida
Dade
Byron Avenue Between 90th & 91st Streets

Site Code: 000000090403
Station ID: 000411692110
Date Start: 05-Sep-12

Southbound

Start	0	11	16	21	24	27	30	33	36	39	42	45	48	51	54	
Time	10	15	20	23	26	29	32	35	38	41	44	47	50	53	147	Total
9/5/12	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	3
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	1	3	0	1	0	0	0	0	0	0	0	0	0	5
	0	0	2	3	1	1	1	0	0	0	0	0	0	0	0	8
07:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	3
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	5
08:00	0	0	1	2	0	0	0	0	1	0	0	0	0	0	0	4
08:15	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	5
08:30	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	3
08:45	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	3
	1	0	3	6	4	0	0	0	1	0	0	0	0	0	0	15
09:00	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	3
09:15	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
09:30	1	0	0	0	0	2	1	0	0	0	0	0	0	0	0	4
09:45	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	4
	2	0	3	1	3	2	2	0	0	0	0	0	0	0	0	13
10:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
10:15	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
10:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
10:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
11:00	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3
11:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
11:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	5
Total	3	1	19	14	11	5	4	0	1	0	0	0	0	0	0	58

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Site Code: 000000090403
Station ID: 000411692110
Date Start: 05-Sep-12

Southbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3
12:15	0	0	1	2	0	1	0	0	0	0	0	0	0	0	0	4
12:30	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
12:45	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
	0	0	1	5	2	3	0	0	0	0	0	0	0	0	0	11
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
13:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
13:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
14:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
14:45	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3
	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	5
15:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
15:15	0	0	0	3	1	0	0	0	1	0	0	0	0	0	0	5
15:30	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
15:45	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	4
	0	2	0	5	3	1	0	0	1	0	0	0	0	0	0	12
16:00	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	3
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
16:45	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
	0	2	1	0	1	2	1	0	0	0	0	0	0	0	0	7
17:00	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	3
17:15	1	1	1	2	1	0	0	0	0	0	0	0	0	0	0	6
17:30	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
17:45	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3
	1	2	1	6	3	1	0	0	0	0	0	0	0	0	0	14
18:00	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
18:15	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
18:30	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
18:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	1	1	1	2	1	0	0	0	0	0	0	0	0	0	6
19:00	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	3
19:15	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	4
19:30	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
19:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	0	0	0	1	5	1	1	1	0	0	0	0	0	0	0	9
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:15	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	3
20:30	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	3
20:45	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
	0	2	2	3	1	0	0	0	0	0	0	0	0	0	0	8
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:15	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
21:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Total	1	9	7	23	24	10	2	1	1	0	0	0	0	0	0	78
Total	4	10	26	37	35	15	6	1	2	0	0	0	0	0	0	136

Stats

15th Percentile :	17 MPH
50th Percentile :	23 MPH
85th Percentile :	27 MPH
95th Percentile :	30 MPH
Mean Speed(Average) :	22 MPH
10 MPH Pace Speed :	17-26 MPH
Number in Pace :	93
Percent in Pace :	68.4%
Number of Vehicles > 20 MPH :	96
Percent of Vehicles > 20 MPH :	70.6%

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
Byron Avenue Between 90th & 91st Streets

Site Code: 000000090403
Station ID: 000411692110
Date Start: 05-Sep-12

Northbound, Southbound

Start	0	11	16	21	24	27	30	33	36	39	42	45	48	51	54	
Time	10	15	20	23	26	29	32	35	38	41	44	47	50	53	147	Total
9/5/12	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	4
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	3	0	1	0	0	0	0	0	0	0	0	0	0	5
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	3
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	3
05:00	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
05:15	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	3
05:30	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	2	3	0	1	2	0	0	0	0	0	0	0	0	0	8
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	3
06:30	1	1	0	0	2	1	0	0	0	0	0	0	0	0	0	5
06:45	0	1	2	6	2	2	0	0	0	0	0	0	0	0	0	13
	1	2	3	6	5	3	1	0	0	0	0	0	0	0	0	21
07:00	0	0	3	1	0	1	0	0	0	0	0	0	0	0	0	5
07:15	0	0	2	3	2	1	1	0	0	0	0	0	0	0	0	9
07:30	0	0	1	1	3	2	0	0	0	0	0	0	0	0	0	7
07:45	0	0	1	6	1	1	2	0	0	0	0	0	0	0	0	11
	0	0	7	11	6	5	3	0	0	0	0	0	0	0	0	32
08:00	1	0	3	3	2	0	1	0	1	0	0	0	0	0	0	11
08:15	0	0	1	7	6	1	1	1	0	0	0	0	0	0	0	17
08:30	1	1	2	3	4	1	0	0	0	0	0	0	0	0	0	12
08:45	1	1	4	2	4	0	0	0	0	0	0	0	0	0	0	12
	3	2	10	15	16	2	2	1	1	0	0	0	0	0	0	52
09:00	0	0	0	3	3	3	1	0	0	0	0	0	0	0	0	10
09:15	2	1	4	2	2	0	0	0	0	0	0	0	0	0	0	11
09:30	1	1	0	2	2	4	1	0	0	0	0	0	0	0	0	11
09:45	1	0	2	4	0	0	0	0	0	0	0	0	0	0	0	7
	4	2	6	11	7	7	2	0	0	0	0	0	0	0	0	39
10:00	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	4
10:15	0	0	4	2	0	0	2	0	0	0	0	0	0	0	0	8
10:30	0	1	4	0	1	1	0	0	0	0	0	0	0	0	0	7
10:45	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
	0	1	12	3	1	1	3	0	0	0	0	0	0	0	0	21
11:00	0	0	1	2	1	2	0	0	0	0	0	0	0	0	0	6
11:15	0	1	1	1	1	2	0	0	0	0	0	0	0	0	0	6
11:30	0	1	0	2	1	1	0	0	0	0	0	0	0	0	0	5
11:45	0	0	0	2	2	1	1	0	1	0	0	0	0	0	0	7
	0	2	2	7	5	6	1	0	1	0	0	0	0	0	0	24
Total	10	12	50	55	43	26	12	1	2	0	0	0	0	0	0	211

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
Byron Avenue Between 90th & 91st Streets

Site Code: 000000090403
Station ID: 000411692110
Date Start: 05-Sep-12

Northbound, Southbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	0	2	2	1	4	1	0	0	0	0	0	0	0	0	0	10
12:15	1	0	2	5	4	2	0	0	0	0	0	0	0	0	0	14
12:30	0	2	0	3	0	1	0	0	0	0	0	0	0	0	0	6
12:45	0	0	3	3	4	1	0	1	0	0	0	0	0	0	0	12
	1	4	7	12	12	5	0	1	0	0	0	0	0	0	0	42
13:00	0	2	0	1	0	2	0	0	0	0	0	0	0	0	0	5
13:15	0	1	2	2	3	0	1	0	0	1	0	0	0	0	0	10
13:30	0	0	2	3	1	0	0	0	0	0	0	0	0	0	0	6
13:45	0	1	2	2	6	2	4	0	0	0	0	0	0	0	0	17
	0	4	6	8	10	4	5	0	0	1	0	0	0	0	0	38
14:00	0	0	2	0	4	1	2	1	0	0	0	0	0	0	0	10
14:15	0	0	5	0	3	1	0	0	0	0	0	0	0	0	0	9
14:30	0	0	2	0	1	2	2	1	0	0	0	0	0	0	0	8
14:45	0	0	2	0	3	2	1	0	0	0	0	0	0	0	0	8
	0	0	11	0	11	6	5	2	0	0	0	0	0	0	0	35
15:00	0	3	1	0	0	0	1	0	0	0	0	0	0	0	0	5
15:15	0	0	4	6	1	1	0	0	1	0	0	0	0	0	0	13
15:30	0	0	3	4	5	4	0	0	0	0	0	0	0	0	0	16
15:45	0	2	2	7	4	0	1	0	0	0	0	0	0	0	0	16
	0	5	10	17	10	5	2	0	1	0	0	0	0	0	0	50
16:00	0	0	3	3	3	0	3	0	0	0	0	0	0	0	0	12
16:15	1	1	3	5	4	3	0	0	0	0	0	0	0	0	0	17
16:30	0	4	4	5	10	6	4	1	0	0	0	0	0	0	0	34
16:45	0	1	7	10	5	6	2	0	0	1	0	1	0	0	0	33
	1	6	17	23	22	15	9	1	0	1	0	1	0	0	0	96
17:00	0	9	18	9	10	9	1	0	0	2	0	0	0	0	0	58
17:15	1	1	10	16	20	13	7	0	0	0	0	0	0	0	0	68
17:30	0	0	8	12	20	8	3	0	1	0	0	0	0	0	0	52
17:45	1	2	10	23	25	12	2	1	1	0	0	0	0	0	0	77
	2	12	46	60	75	42	13	1	2	2	0	0	0	0	0	255
18:00	0	3	5	24	17	6	2	1	0	0	0	0	0	0	0	58
18:15	0	1	5	22	12	7	1	1	1	0	0	0	0	0	0	50
18:30	0	3	4	9	2	1	0	0	0	0	0	0	0	0	0	19
18:45	0	0	9	12	10	6	1	2	0	0	0	0	0	0	0	40
	0	7	23	67	41	20	4	4	1	0	0	0	0	0	0	167
19:00	0	1	4	3	14	5	1	2	0	0	0	0	0	0	0	30
19:15	0	1	3	5	4	0	1	0	0	0	0	0	0	0	0	14
19:30	0	1	4	2	0	3	0	0	0	0	0	0	0	0	0	10
19:45	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0	5
	0	3	11	10	22	9	2	2	0	0	0	0	0	0	0	59
20:00	0	1	1	1	6	0	0	0	0	0	0	0	0	0	0	9
20:15	0	2	2	2	1	1	0	0	0	0	0	0	0	0	0	8
20:30	0	0	3	1	1	1	0	0	0	0	0	0	0	0	0	6
20:45	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	4
	0	3	7	7	8	2	0	0	0	0	0	0	0	0	0	27
21:00	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	4
21:15	0	1	2	0	5	1	1	0	0	0	0	0	0	0	0	10
21:30	0	0	3	1	1	0	0	0	0	0	0	0	0	0	0	5
21:45	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	4
	0	1	6	2	8	4	2	0	0	0	0	0	0	0	0	23
22:00	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	3
22:15	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
22:30	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
22:45	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
	0	1	2	3	2	1	0	0	1	0	0	0	0	0	0	10
23:00	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	4
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	4
Total	4	47	146	210	222	114	42	11	5	4	0	1	0	0	0	806
Total	14	59	196	265	265	140	54	12	7	4	0	1	0	0	0	1017

Stats

15th Percentile :	18 MPH
50th Percentile :	23 MPH
85th Percentile :	28 MPH
95th Percentile :	31 MPH
Mean Speed(Average) :	23 MPH
10 MPH Pace Speed :	20-29 MPH
Number in Pace :	710
Percent in Pace :	69.8%
Number of Vehicles > 20 MPH :	748
Percent of Vehicles > 20 MPH :	73.5%

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
Carlyle Avenue Between 93rd & 94th Sts

Site Code: 000000090401
Station ID: 000210521008
Date Start: 05-Sep-12

Northbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
9/5/12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
05:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
06:00	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	3
06:15	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	4
	0	1	0	2	3	1	1	0	0	0	0	0	0	0	0	8
07:00	0	1	1	0	2	1	0	0	0	0	0	0	0	0	0	5
07:15	0	1	2	6	3	1	0	0	0	0	0	0	0	0	0	13
07:30	0	0	1	7	2	2	0	0	0	0	0	0	0	0	0	12
07:45	1	2	12	10	4	0	2	0	0	0	0	0	0	0	0	31
	1	4	16	23	11	4	2	0	0	0	0	0	0	0	0	61
08:00	1	3	11	13	7	3	2	0	0	0	0	0	0	0	0	40
08:15	0	2	7	8	7	3	1	1	0	0	0	0	0	0	0	29
08:30	0	1	10	8	3	1	0	1	0	0	0	0	0	0	0	24
08:45	0	1	9	8	5	4	3	1	0	0	0	0	0	0	0	31
	1	7	37	37	22	11	6	3	0	0	0	0	0	0	0	124
09:00	0	3	5	4	8	3	0	0	0	0	0	0	0	0	0	23
09:15	2	0	3	3	7	1	1	0	0	0	0	0	0	0	0	17
09:30	0	0	2	6	2	3	0	1	0	0	0	0	0	0	0	14
09:45	0	4	6	6	3	3	1	0	0	0	0	0	0	0	0	23
	2	7	16	19	20	10	2	1	0	0	0	0	0	0	0	77
10:00	0	0	3	4	7	0	1	0	0	0	0	0	0	0	0	15
10:15	1	0	3	5	1	1	0	0	0	0	0	0	0	0	0	11
10:30	1	1	8	2	4	2	1	0	0	0	0	0	0	0	0	19
10:45	0	1	3	2	4	2	0	0	0	0	0	0	0	0	0	12
	2	2	17	13	16	5	2	0	0	0	0	0	0	0	0	57
11:00	0	0	4	3	4	2	0	0	0	0	0	0	0	0	0	13
11:15	1	1	3	5	2	1	0	0	0	0	0	0	0	0	0	13
11:30	5	2	8	1	2	2	1	0	0	0	0	0	0	0	0	21
11:45	0	1	6	5	2	1	0	1	0	0	0	0	0	0	0	16
	6	4	21	14	10	6	1	1	0	0	0	0	0	0	0	63
Total	12	26	107	109	82	39	16	5	1	0	0	0	0	0	0	397

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
Carlyle Avenue Between 93rd & 94th Sts

Site Code: 000000090401
Station ID: 000210521008
Date Start: 05-Sep-12

Northbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	2	2	3	1	4	1	0	0	0	0	0	0	0	0	0	13
12:15	0	0	1	3	1	3	2	0	0	0	0	0	0	0	0	10
12:30	0	0	3	2	5	3	1	0	0	0	0	0	0	0	0	14
12:45	1	2	3	2	4	2	1	0	0	0	0	0	0	0	0	15
	3	4	10	8	14	9	4	0	0	0	0	0	0	0	0	52
13:00	0	1	5	4	7	4	1	0	0	0	0	0	0	0	0	22
13:15	0	0	9	6	4	6	3	0	0	0	0	0	0	0	0	28
13:30	0	0	8	5	7	6	3	0	0	0	0	0	0	0	0	29
13:45	0	2	6	6	6	5	3	1	0	0	0	0	0	0	0	29
	0	3	28	21	24	21	10	1	0	0	0	0	0	0	0	108
14:00	2	0	1	4	4	2	1	0	0	0	0	0	0	0	0	14
14:15	0	0	3	9	3	1	2	0	0	0	0	0	0	0	0	18
14:30	0	0	3	5	4	2	1	1	0	0	0	0	0	0	0	16
14:45	1	3	6	5	10	3	0	0	0	0	0	0	0	0	0	28
	3	3	13	23	21	8	4	1	0	0	0	0	0	0	0	76
15:00	0	4	1	3	9	4	4	0	0	0	0	0	0	0	0	25
15:15	1	1	4	9	5	1	2	0	0	0	0	0	0	0	0	23
15:30	0	0	5	7	3	1	1	0	0	0	0	0	0	0	0	17
15:45	0	1	7	10	3	5	1	0	1	0	0	0	0	0	0	28
	1	6	17	29	20	11	8	0	1	0	0	0	0	0	0	93
16:00	1	3	5	7	8	2	1	1	1	0	0	0	0	0	0	29
16:15	2	3	4	10	9	5	1	0	0	0	0	0	0	0	0	34
16:30	0	0	6	8	16	13	3	2	0	0	0	0	0	0	0	48
16:45	0	0	17	20	15	16	3	4	0	0	0	0	0	0	0	75
	3	6	32	45	48	36	8	7	1	0	0	0	0	0	0	186
17:00	0	2	6	31	21	25	5	1	0	0	0	0	0	0	0	91
17:15	0	1	33	33	28	17	5	0	0	0	0	0	0	0	0	117
17:30	1	0	11	15	14	8	5	2	0	0	0	0	0	0	0	56
17:45	0	1	3	6	5	3	1	1	0	0	0	0	0	0	0	20
	1	4	53	85	68	53	16	4	0	0	0	0	0	0	0	284
18:00	0	1	0	3	4	2	0	0	0	0	0	0	0	0	0	10
18:15	0	1	0	2	4	3	1	0	0	0	0	0	0	0	0	11
18:30	0	0	1	4	4	1	0	0	0	0	0	0	0	0	0	10
18:45	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3
	0	2	2	10	12	7	1	0	0	0	0	0	0	0	0	34
19:00	0	0	0	2	3	5	4	0	0	0	0	0	0	0	0	14
19:15	0	0	4	3	3	0	1	1	0	0	0	0	0	0	0	12
19:30	0	0	0	3	1	1	1	0	0	0	0	0	0	0	0	6
19:45	0	1	3	1	3	0	0	0	0	0	0	0	0	0	0	8
	0	1	7	9	10	6	6	1	0	0	0	0	0	0	0	40
20:00	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
20:15	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0	6
20:30	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
20:45	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3
	0	1	4	4	4	1	0	0	0	0	0	0	0	0	0	14
21:00	0	0	2	1	2	0	0	0	0	0	0	0	0	0	0	5
21:15	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	4
21:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
21:45	0	0	2	0	2	1	0	0	0	0	0	0	0	0	0	5
	0	0	6	1	7	1	0	0	0	0	0	0	0	0	0	15
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
22:30	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
22:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	4
23:00	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
Total	11	31	174	236	228	155	57	14	2	0	0	0	0	0	0	908
Total	23	57	281	345	310	194	73	19	3	0	0	0	0	0	0	1305

Stats

15th Percentile :	18 MPH
50th Percentile :	23 MPH
85th Percentile :	28 MPH
95th Percentile :	31 MPH
Mean Speed(Average) :	23 MPH
10 MPH Pace Speed :	20-29 MPH
Number in Pace :	906
Percent in Pace :	69.4%
Number of Vehicles > 20 MPH :	944
Percent of Vehicles > 20 MPH :	72.3%

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Site Code: 000000090401
Station ID: 000210521008
Date Start: 05-Sep-12

Southbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
9/5/12	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
00:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	3
01:00	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2
01:15	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	4
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:45	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
06:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
06:45	0	0	1	1	1	2	0	0	0	0	0	0	0	0	0	5
	0	0	2	1	2	2	0	0	0	0	0	0	0	0	0	7
07:00	0	0	2	1	0	0	1	0	0	0	0	0	0	0	0	4
07:15	1	0	1	4	1	0	0	0	0	0	0	0	0	0	0	7
07:30	0	1	6	2	1	1	1	0	0	0	0	0	0	0	0	12
07:45	0	2	4	5	2	1	0	0	0	0	0	0	0	0	0	14
	1	3	13	12	4	2	2	0	0	0	0	0	0	0	0	37
08:00	0	1	1	3	3	2	0	0	0	0	0	0	0	0	0	10
08:15	0	0	5	9	4	1	1	0	0	0	0	0	0	0	0	20
08:30	0	1	4	5	2	2	1	0	0	0	0	0	0	0	0	15
08:45	0	2	6	2	3	0	0	0	0	0	0	0	0	0	0	13
	0	4	16	19	12	5	2	0	0	0	0	0	0	0	0	58
09:00	0	1	3	6	2	3	2	0	0	0	0	0	0	0	0	17
09:15	0	2	4	9	4	4	2	0	0	0	0	0	0	0	0	25
09:30	0	0	3	6	1	1	0	0	0	0	0	0	0	0	0	11
09:45	1	0	5	4	3	0	0	0	0	0	0	0	0	0	0	13
	1	3	15	25	10	8	4	0	0	0	0	0	0	0	0	66
10:00	0	1	1	3	1	1	0	0	0	0	0	0	0	0	0	7
10:15	2	1	5	3	0	0	0	0	0	0	0	0	0	0	0	11
10:30	1	2	13	4	2	0	1	0	0	0	0	0	0	0	0	23
10:45	0	1	6	0	2	0	0	0	0	0	0	0	0	0	0	9
	3	5	25	10	5	1	1	0	0	0	0	0	0	0	0	50
11:00	1	0	2	3	0	1	0	0	0	0	0	0	0	0	0	7
11:15	0	2	3	6	1	0	0	0	0	0	0	0	0	0	0	12
11:30	2	1	2	1	2	0	0	0	0	0	0	0	0	0	0	8
11:45	1	1	4	2	2	0	0	0	0	0	0	0	0	0	0	10
	4	4	11	12	5	1	0	0	0	0	0	0	0	0	0	37
Total	9	21	84	81	39	21	11	0	0	0	0	0	0	0	0	266

Traffic Survey Specialists, Inc.
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Surfside, Florida
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Site Code: 000000090401
Station ID: 000210521008
Date Start: 05-Sep-12

Southbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	2	1	3	3	3	0	1	0	0	0	0	0	0	0	0	13
12:15	0	1	3	3	2	1	0	0	0	0	0	0	0	0	0	10
12:30	1	0	3	4	4	2	1	0	0	0	0	0	0	0	0	15
12:45	0	0	4	5	2	0	0	0	0	0	0	0	0	0	0	11
	3	2	13	15	11	3	2	0	0	0	0	0	0	0	0	49
13:00	0	2	2	3	1	0	0	0	0	0	0	0	0	0	0	8
13:15	0	0	0	4	2	4	0	0	0	0	0	0	0	0	0	10
13:30	1	1	3	3	2	0	0	0	0	0	0	0	0	0	0	10
13:45	0	0	4	5	2	2	1	0	0	0	0	0	0	0	0	14
	1	3	9	15	7	6	1	0	0	0	0	0	0	0	0	42
14:00	0	0	8	13	7	7	2	1	0	0	0	0	0	0	0	38
14:15	0	3	8	9	5	1	1	0	0	0	0	0	0	0	0	27
14:30	0	0	4	2	4	4	1	0	0	0	0	0	0	0	0	15
14:45	0	1	4	4	7	3	0	0	0	0	0	0	0	0	0	19
	0	4	24	28	23	15	4	1	0	0	0	0	0	0	0	99
15:00	0	0	5	7	3	2	0	0	0	0	0	0	0	0	0	17
15:15	1	2	9	8	2	1	0	1	0	0	0	0	0	0	0	24
15:30	1	0	3	3	1	1	1	0	0	0	0	0	0	0	0	10
15:45	0	2	1	10	0	0	0	0	0	0	0	0	0	0	0	13
	2	4	18	28	6	4	1	1	0	0	0	0	0	0	0	64
16:00	0	2	8	3	1	4	0	0	0	0	0	0	0	0	0	18
16:15	0	0	2	6	3	2	2	0	0	0	0	0	0	0	0	15
16:30	0	2	1	2	2	1	3	0	0	0	0	0	0	0	0	11
16:45	0	1	5	3	3	1	0	0	0	0	0	0	0	0	0	13
	0	5	16	14	9	8	5	0	0	0	0	0	0	0	0	57
17:00	0	0	5	1	7	4	1	0	0	0	0	0	0	0	0	18
17:15	1	1	0	6	1	2	1	0	0	0	0	0	0	0	0	12
17:30	0	1	0	1	6	3	2	0	0	0	0	0	0	0	0	13
17:45	0	0	4	4	5	3	0	0	0	0	0	0	0	0	0	16
	1	2	9	12	19	12	4	0	0	0	0	0	0	0	0	59
18:00	0	1	0	2	2	3	1	0	0	0	0	0	0	0	0	9
18:15	0	0	0	3	3	0	0	1	0	0	0	0	0	0	0	7
18:30	0	0	2	2	5	0	0	1	0	0	0	0	0	0	0	10
18:45	0	0	0	2	6	4	1	0	0	0	0	0	0	0	0	13
	0	1	2	9	16	7	2	2	0	0	0	0	0	0	0	39
19:00	0	0	1	3	5	2	0	0	0	0	0	0	0	0	0	11
19:15	0	1	1	2	1	3	0	0	0	0	0	0	0	0	0	8
19:30	0	1	2	4	2	0	0	0	0	0	0	0	0	0	0	9
19:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	0	2	5	9	8	5	0	0	0	0	0	0	0	0	0	29
20:00	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3
20:15	0	0	2	0	2	0	1	0	0	0	0	0	0	0	0	5
20:30	0	1	0	1	3	1	0	0	0	0	0	0	0	0	0	6
20:45	0	0	3	2	0	1	0	0	0	0	0	0	0	0	0	6
	0	1	6	4	6	2	1	0	0	0	0	0	0	0	0	20
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:15	0	0	1	1	3	0	1	0	0	0	0	0	0	0	0	6
21:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
21:45	0	0	1	3	2	1	3	0	0	0	0	0	0	0	0	10
	0	0	4	4	5	1	4	0	0	0	0	0	0	0	0	18
22:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
22:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
22:30	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
22:45	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3
	0	0	3	3	1	1	0	0	0	0	0	0	0	0	0	8
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
23:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
23:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	4
Total	7	24	110	144	111	64	24	4	0	0	0	0	0	0	0	488
Total	16	45	194	225	150	85	35	4	0	0	0	0	0	0	0	754

Stats

15th Percentile :	17 MPH
50th Percentile :	22 MPH
85th Percentile :	27 MPH
95th Percentile :	30 MPH
Mean Speed(Average) :	22 MPH
10 MPH Pace Speed :	17-26 MPH
Number in Pace :	531
Percent in Pace :	70.4%
Number of Vehicles > 20 MPH :	499
Percent of Vehicles > 20 MPH :	66.2%

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Surfside, Florida
Dade
Carlyle Avenue Between 93rd & 94th Sts

Site Code: 000000090401
Station ID: 000210521008
Date Start: 05-Sep-12

Northbound, Southbound

Start	0	11	16	21	24	27	30	33	36	39	42	45	48	51	54	
Time	10	15	20	23	26	29	32	35	38	41	44	47	50	53	147	Total
9/5/12	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
00:15	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	3
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
	0	0	2	1	0	1	2	0	0	0	0	0	0	0	0	6
01:00	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2
01:15	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
	0	0	0	1	1	0	2	0	1	0	0	0	0	0	0	5
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
05:30	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
05:45	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	0	1	0	1	0	2	0	0	0	0	0	0	0	0	0	4
06:00	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	4
06:15	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
06:30	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
06:45	0	1	1	2	3	2	0	0	0	0	0	0	0	0	0	9
	0	1	2	3	5	3	1	0	0	0	0	0	0	0	0	15
07:00	0	1	3	1	2	1	1	0	0	0	0	0	0	0	0	9
07:15	1	1	3	10	4	1	0	0	0	0	0	0	0	0	0	20
07:30	0	1	7	9	3	3	1	0	0	0	0	0	0	0	0	24
07:45	1	4	16	15	6	1	2	0	0	0	0	0	0	0	0	45
	2	7	29	35	15	6	4	0	0	0	0	0	0	0	0	98
08:00	1	4	12	16	10	5	2	0	0	0	0	0	0	0	0	50
08:15	0	2	12	17	11	4	2	1	0	0	0	0	0	0	0	49
08:30	0	2	14	13	5	3	1	1	0	0	0	0	0	0	0	39
08:45	0	3	15	10	8	4	3	1	0	0	0	0	0	0	0	44
	1	11	53	56	34	16	8	3	0	0	0	0	0	0	0	182
09:00	0	4	8	10	10	6	2	0	0	0	0	0	0	0	0	40
09:15	2	2	7	12	11	5	3	0	0	0	0	0	0	0	0	42
09:30	0	0	5	12	3	4	0	1	0	0	0	0	0	0	0	25
09:45	1	4	11	10	6	3	1	0	0	0	0	0	0	0	0	36
	3	10	31	44	30	18	6	1	0	0	0	0	0	0	0	143
10:00	0	1	4	7	8	1	1	0	0	0	0	0	0	0	0	22
10:15	3	1	8	8	1	1	0	0	0	0	0	0	0	0	0	22
10:30	2	3	21	6	6	2	2	0	0	0	0	0	0	0	0	42
10:45	0	2	9	2	6	2	0	0	0	0	0	0	0	0	0	21
	5	7	42	23	21	6	3	0	0	0	0	0	0	0	0	107
11:00	1	0	6	6	4	3	0	0	0	0	0	0	0	0	0	20
11:15	1	3	6	11	3	1	0	0	0	0	0	0	0	0	0	25
11:30	7	3	10	2	4	2	1	0	0	0	0	0	0	0	0	29
11:45	1	2	10	7	4	1	0	1	0	0	0	0	0	0	0	26
	10	8	32	26	15	7	1	1	0	0	0	0	0	0	0	100
Total	21	47	191	190	121	60	27	5	1	0	0	0	0	0	0	663

Traffic Survey Specialists, Inc.
624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

Surfside, Florida
Dade
Carlyle Avenue Between 93rd & 94th Sts

Site Code: 000000090401
Station ID: 000210521008
Date Start: 05-Sep-12

Northbound, Southbound

Start Time	0 10	11 15	16 20	21 23	24 26	27 29	30 32	33 35	36 38	39 41	42 44	45 47	48 50	51 53	54 147	Total
12 PM	4	3	6	4	7	1	1	0	0	0	0	0	0	0	0	26
12:15	0	1	4	6	3	4	2	0	0	0	0	0	0	0	0	20
12:30	1	0	6	6	9	5	2	0	0	0	0	0	0	0	0	29
12:45	1	2	7	7	6	2	1	0	0	0	0	0	0	0	0	26
	6	6	23	23	25	12	6	0	0	0	0	0	0	0	0	101
13:00	0	3	7	7	8	4	1	0	0	0	0	0	0	0	0	30
13:15	0	0	9	10	6	10	3	0	0	0	0	0	0	0	0	38
13:30	1	1	11	8	9	6	3	0	0	0	0	0	0	0	0	39
13:45	0	2	10	11	8	7	4	1	0	0	0	0	0	0	0	43
	1	6	37	36	31	27	11	1	0	0	0	0	0	0	0	150
14:00	2	0	9	17	11	9	3	1	0	0	0	0	0	0	0	52
14:15	0	3	11	18	8	2	3	0	0	0	0	0	0	0	0	45
14:30	0	0	7	7	8	6	2	1	0	0	0	0	0	0	0	31
14:45	1	4	10	9	17	6	0	0	0	0	0	0	0	0	0	47
	3	7	37	51	44	23	8	2	0	0	0	0	0	0	0	175
15:00	0	4	6	10	12	6	4	0	0	0	0	0	0	0	0	42
15:15	2	3	13	17	7	2	2	1	0	0	0	0	0	0	0	47
15:30	1	0	8	10	4	2	2	0	0	0	0	0	0	0	0	27
15:45	0	3	8	20	3	5	1	0	1	0	0	0	0	0	0	41
	3	10	35	57	26	15	9	1	1	0	0	0	0	0	0	157
16:00	1	5	13	10	9	6	1	1	1	0	0	0	0	0	0	47
16:15	2	3	6	16	12	7	3	0	0	0	0	0	0	0	0	49
16:30	0	2	7	10	18	14	6	2	0	0	0	0	0	0	0	59
16:45	0	1	22	23	18	17	3	4	0	0	0	0	0	0	0	88
	3	11	48	59	57	44	13	7	1	0	0	0	0	0	0	243
17:00	0	2	11	32	28	29	6	1	0	0	0	0	0	0	0	109
17:15	1	2	33	39	29	19	6	0	0	0	0	0	0	0	0	129
17:30	1	1	11	16	20	11	7	2	0	0	0	0	0	0	0	69
17:45	0	1	7	10	10	6	1	1	0	0	0	0	0	0	0	36
	2	6	62	97	87	65	20	4	0	0	0	0	0	0	0	343
18:00	0	2	0	5	6	5	1	0	0	0	0	0	0	0	0	19
18:15	0	1	0	5	7	3	1	1	0	0	0	0	0	0	0	18
18:30	0	0	3	6	9	1	0	1	0	0	0	0	0	0	0	20
18:45	0	0	1	3	6	5	1	0	0	0	0	0	0	0	0	16
	0	3	4	19	28	14	3	2	0	0	0	0	0	0	0	73
19:00	0	0	1	5	8	7	4	0	0	0	0	0	0	0	0	25
19:15	0	1	5	5	4	3	1	1	0	0	0	0	0	0	0	20
19:30	0	1	2	7	3	1	1	0	0	0	0	0	0	0	0	15
19:45	0	1	4	1	3	0	0	0	0	0	0	0	0	0	0	9
	0	3	12	18	18	11	6	1	0	0	0	0	0	0	0	69
20:00	0	1	3	1	1	0	0	0	0	0	0	0	0	0	0	6
20:15	0	0	2	2	6	0	1	0	0	0	0	0	0	0	0	11
20:30	0	1	1	2	3	1	0	0	0	0	0	0	0	0	0	8
20:45	0	0	4	3	0	2	0	0	0	0	0	0	0	0	0	9
	0	2	10	8	10	3	1	0	0	0	0	0	0	0	0	34
21:00	0	0	2	1	2	0	0	0	0	0	0	0	0	0	0	5
21:15	0	0	2	1	6	0	1	0	0	0	0	0	0	0	0	10
21:30	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
21:45	0	0	3	3	4	2	3	0	0	0	0	0	0	0	0	15
	0	0	10	5	12	2	4	0	0	0	0	0	0	0	0	33
22:00	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
22:15	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
22:30	0	0	1	2	0	1	0	0	0	0	0	0	0	0	0	4
22:45	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	4
	0	1	4	4	1	2	0	0	0	0	0	0	0	0	0	12
23:00	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2
23:15	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2
23:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
23:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	0	0	2	3	0	1	0	0	0	0	0	0	0	0	0	6
Total	18	55	284	380	339	219	81	18	2	0	0	0	0	0	0	1396
Total	39	102	475	570	460	279	108	23	3	0	0	0	0	0	0	2059

Stats

15th Percentile :	17 MPH
50th Percentile :	23 MPH
85th Percentile :	28 MPH
95th Percentile :	30 MPH
Mean Speed(Average) :	22 MPH
10 MPH Pace Speed :	17-26 MPH
Number in Pace :	1410
Percent in Pace :	68.5%
Number of Vehicles > 20 MPH :	1443
Percent of Vehicles > 20 MPH :	70.1%

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

96TH STREET & 500 BLOCK/BAL HARBOUR SHOP
SURFSIDE, FLORIDA
COUNTED BY: WAYNE ASSAM
SIGNALIZED

Site Code : 00120106
Start Date: 09/04/12
File I.D. : KANE_500
Page : 1

ALL VEHICLES

	500 BLOCK From North				96TH STREET From East				----- From South				96TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/04/12																	
07:00	0	0	0	0	0	1	114	0	0	1	0	0	0	0	81	0	197
07:15	0	1	0	0	0	0	86	1	0	0	0	0	1	0	109	0	198
07:30	0	1	0	4	0	0	120	1	0	0	0	0	1	0	171	0	298
07:45	0	1	0	1	0	0	178	0	0	0	0	0	0	0	189	0	369
Hr Total	0	3	0	5	0	1	498	2	0	1	0	0	2	0	550	0	1062
08:00	0	1	0	0	2	0	281	10	0	0	0	0	2	7	246	0	549
08:15	0	1	0	1	0	0	227	5	0	0	0	0	3	8	296	0	541
08:30	0	1	0	5	0	0	181	9	0	0	0	0	1	13	315	0	525
08:45	0	4	0	3	0	0	233	18	0	0	0	0	0	20	239	0	517
Hr Total	0	7	0	9	2	0	922	42	0	0	0	0	6	48	1096	0	2132
---------- * BREAK * ----------																	
16:00	0	11	0	13	1	0	189	4	0	0	0	0	0	13	190	0	421
16:15	0	17	0	20	1	0	213	7	0	0	0	0	0	14	197	0	469
16:30	0	17	0	16	1	0	194	5	0	0	0	0	1	11	214	0	459
16:45	0	10	0	13	1	0	211	9	0	0	0	0	0	9	210	0	463
Hr Total	0	55	0	62	4	0	807	25	0	0	0	0	1	47	811	0	1812
17:00	0	21	0	24	0	0	210	12	0	0	0	0	0	13	242	0	522
17:15	0	17	0	17	0	0	230	3	0	0	0	0	0	16	238	0	521
17:30	0	16	0	21	1	0	203	3	0	0	0	0	0	12	219	0	475
17:45	0	21	0	14	0	0	213	6	0	0	0	0	0	9	211	0	474
Hr Total	0	75	0	76	1	0	856	24	0	0	0	0	0	50	910	0	1992
TOTAL	0	140	0	152	7	1	3083	93	0	1	0	0	9	145	3367	0	6998

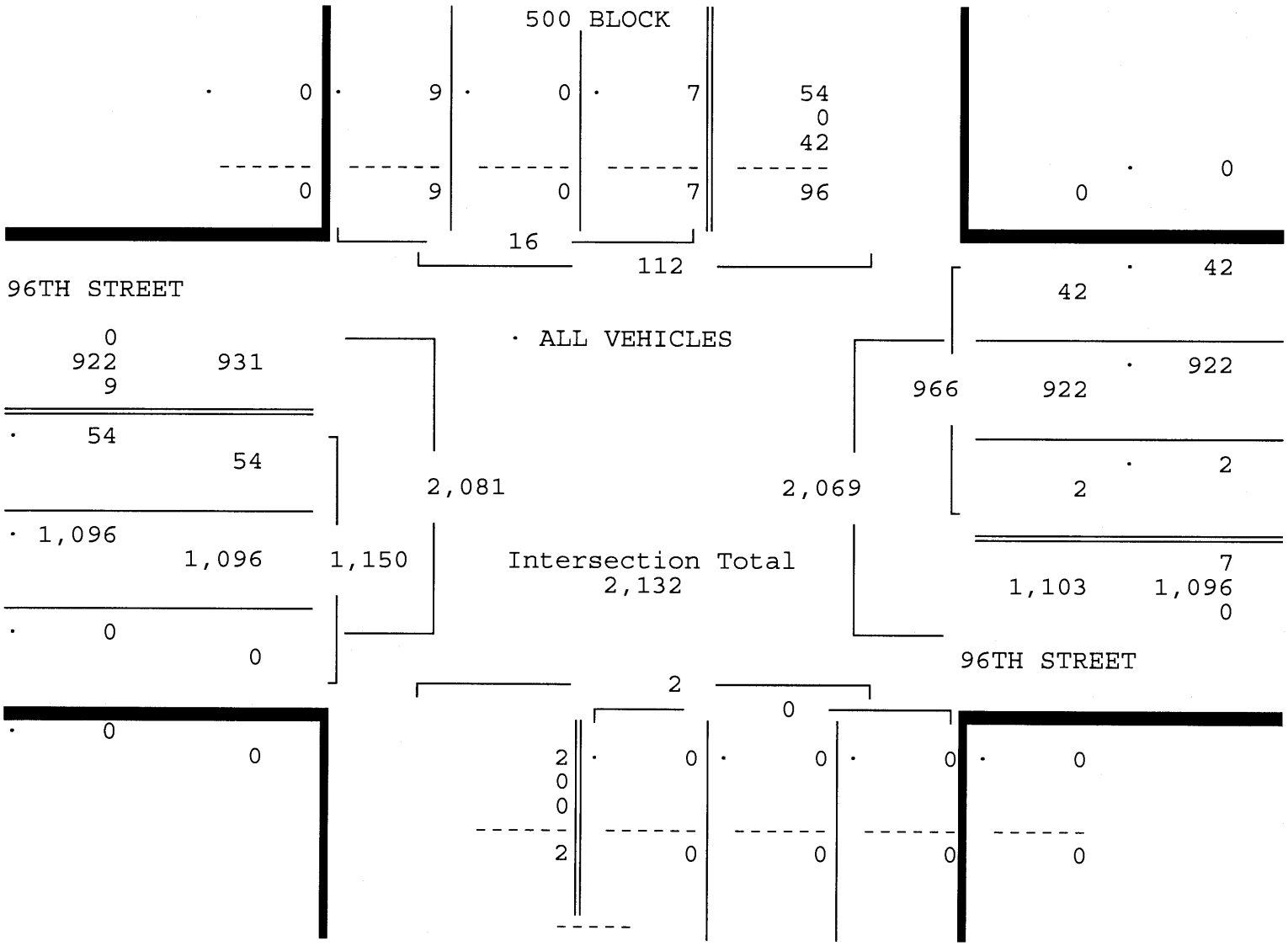
96TH STREET & 500 BLOCK/BAL HARBOUR SHOP
SURFSIDE, FLORIDA
COUNTED BY: WAYNE ASSAM
SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120106
Start Date: 09/04/12
File I.D. : KANE_500
Page : 2

ALL VEHICLES

	500 BLOCK From North				96TH STREET From East				----- From South				96TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/04/12																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 09/04/12																	
Peak start 08:00					08:00				08:00				08:00				
Volume	0	7	0	9	2	0	922	42	0	0	0	0	6	48	1096	0	
Percent	0%	44%	0%	56%	0%	0%	95%	4%	0%	0%	0%	0%	1%	4%	95%	0%	
Pk total	16				966				0				1150				
Highest	08:45				08:00				07:00				08:30				
Volume	0	4	0	3	2	0	281	10	0	1	0	0	1	13	315	0	
Hi total	7				293				0				329				
PHF	.57				.82				.0				.87				



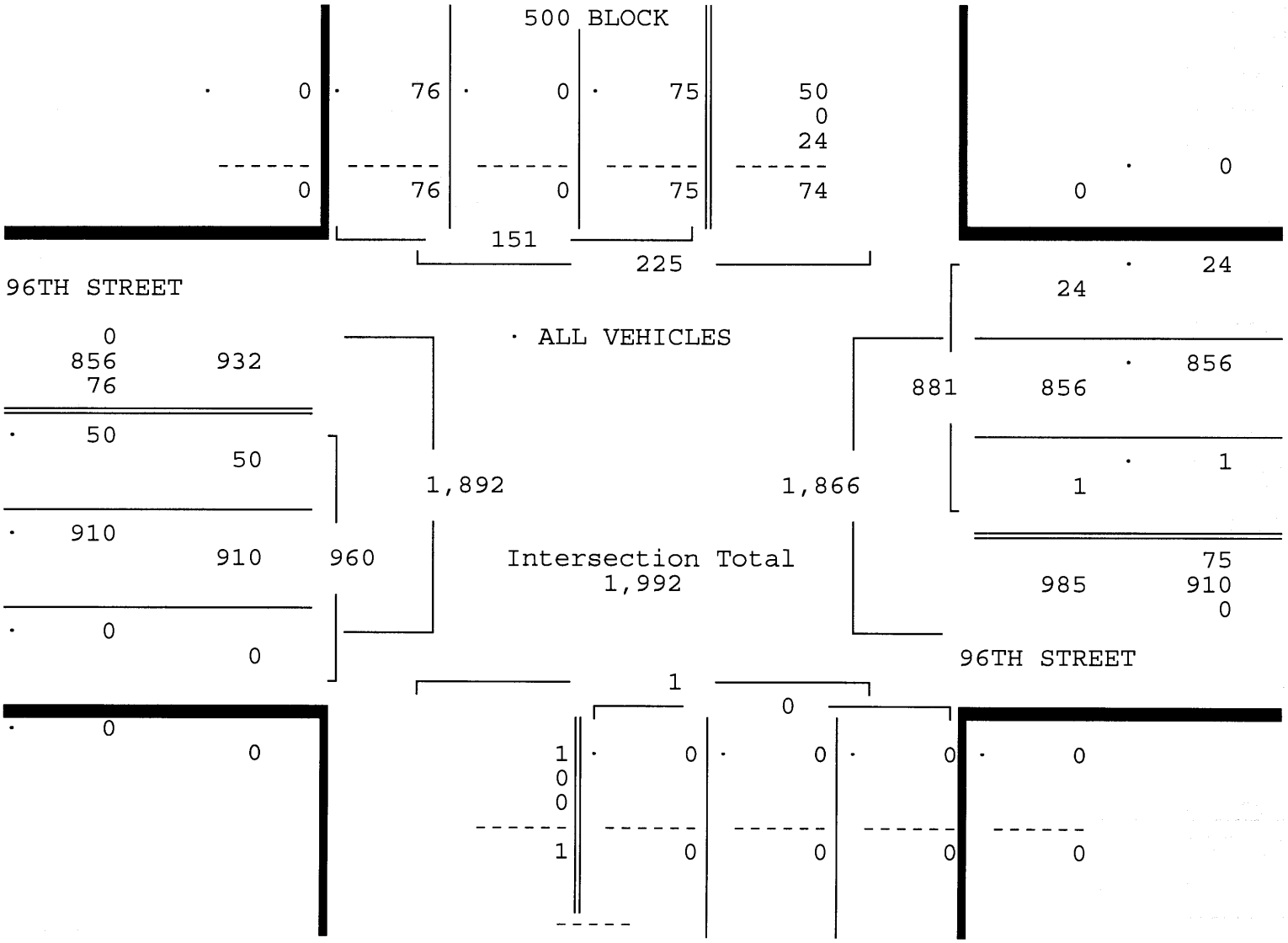
Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

96TH STREET & 500 BLOCK/BAL HARBOUR SHOP
SURFSIDE, FLORIDA
COUNTED BY: WAYNE ASSAM
SIGNALIZED

Site Code : 00120106
Start Date: 09/04/12
File I.D. : KANE_500
Page : 3

ALL VEHICLES

	500 BLOCK From North				96TH STREET From East				----- From South				96TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/04/12																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 09/04/12																	
Peak start	17:00				17:00				17:00				17:00				
Volume	0	75	0	76	1	0	856	24	0	0	0	0	0	50	910	0	
Percent	0%	50%	0%	50%	0%	0%	97%	3%	0%	0%	0%	0%	0%	5%	95%	0%	
Pk total	151				881				0				960				
Highest	17:00				17:15				07:00				17:00				
Volume	0	21	0	24	0	0	230	3	0	1	0	0	0	13	242	0	
Hi total	45				233				0				255				
PHF	.84				.95				.0				.94				



96TH STREET & 500 BLOCK/BAL HARBOUR SHOP
SURFSIDE, FLORIDA
COUNTED BY: WAYNE ASSAM
SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

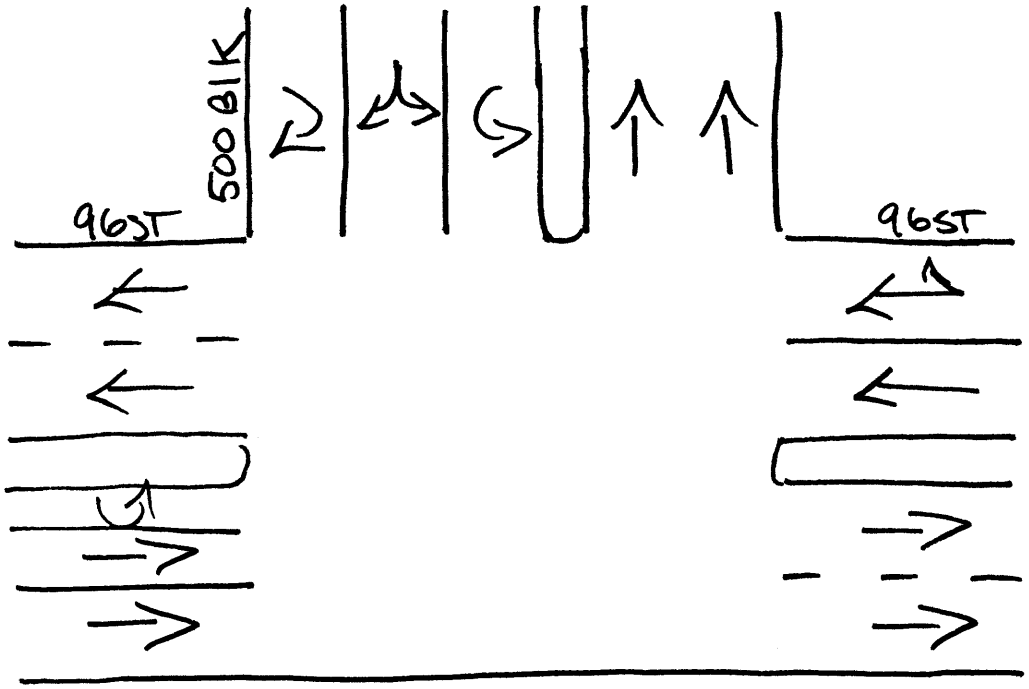
Site Code : 00120106
Start Date: 09/04/12
File I.D. : KANE_500
Page : 1

PEDESTRIANS

	500 BLOCK From North				96TH STREET From East				----- From South				96TH STREET From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 09/04/12																	
07:00	0	0	0	1	0	0	0	0	0	0	0	13	0	0	0	0	14
07:15	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	1	8
07:30	0	0	0	12	0	0	0	0	0	0	0	6	0	0	0	0	18
07:45	0	0	0	11	0	0	0	0	0	0	0	11	0	0	0	2	24
Hr Total	0	0	0	31	0	0	0	0	0	0	0	30	0	0	0	3	64
08:00	0	0	0	9	0	0	0	0	0	0	0	18	0	0	0	0	27
08:15	0	0	0	5	0	0	0	0	0	0	0	8	0	0	0	1	14
08:30	0	0	0	9	0	0	0	0	0	0	0	4	0	0	0	1	14
08:45	0	0	0	7	0	0	0	0	0	0	0	11	0	0	0	3	21
Hr Total	0	0	0	30	0	0	0	0	0	0	0	41	0	0	0	5	76
---------- * BREAK * ----------																	
16:00	0	0	0	7	0	0	0	0	0	0	0	11	0	0	0	2	20
16:15	0	0	0	3	0	0	0	0	0	0	0	20	0	0	0	0	23
16:30	0	0	0	8	0	0	0	0	0	0	0	7	0	0	0	0	15
16:45	0	0	0	4	0	0	0	0	0	0	0	5	0	0	0	0	9
Hr Total	0	0	0	22	0	0	0	0	0	0	0	43	0	0	0	2	67
17:00	0	0	0	13	0	0	0	0	0	0	0	7	0	0	0	3	23
17:15	0	0	0	9	0	0	0	0	0	0	0	14	0	0	0	3	26
17:30	0	0	0	3	0	0	0	0	0	0	0	11	0	0	0	1	15
17:45	0	0	0	9	0	0	0	0	0	0	0	8	0	0	0	0	17
Hr Total	0	0	0	34	0	0	0	0	0	0	0	40	0	0	0	7	81
TOTAL	0	0	0	117	0	0	0	0	0	0	0	154	0	0	0	17	288

North

Bal Harbour stops



Surfside, Florida

September 04, 2012

drawn by: Luis Palomino

signalized

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

96TH STREET & BYRON AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAXIE ESPINOSA
SIGNALIZED

Site Code : 00120106
Start Date: 09/04/12
File I.D. : KANEBYRO
Page : 1

ALL VEHICLES

	From North				96TH STREET From East				BYRON AVENUE From South				96TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/04/12																	
07:00	0	0	0	0	0	0	64	0	1	10	0	3	0	0	121	0	199
07:15	0	0	0	0	0	0	62	0	0	24	0	7	1	0	108	0	202
07:30	0	0	0	0	0	0	85	0	0	32	0	8	2	0	170	0	297
07:45	0	0	0	0	0	0	131	0	0	43	0	2	7	0	187	0	370
Hr Total	0	0	0	0	0	0	342	0	1	109	0	20	10	0	586	0	1068
08:00	0	0	0	0	0	0	209	0	0	65	0	5	5	0	240	0	524
08:15	0	0	0	0	0	0	179	0	0	52	0	3	2	0	289	0	525
08:30	0	0	0	0	0	0	156	0	0	22	0	8	2	0	313	0	501
08:45	0	0	0	0	0	0	202	0	0	53	0	5	3	0	238	0	501
Hr Total	0	0	0	0	0	0	746	0	0	192	0	21	12	0	1080	0	2051
* BREAK *																	
16:00	0	0	0	0	0	0	156	0	0	33	0	3	3	0	203	0	398
16:15	0	0	0	0	0	0	185	0	0	60	0	4	0	0	227	0	476
16:30	0	0	0	0	0	0	169	0	0	40	0	4	0	0	239	0	452
16:45	0	0	0	0	0	0	173	0	0	51	0	3	3	0	221	0	451
Hr Total	0	0	0	0	0	0	683	0	0	184	0	14	6	0	890	0	1777
17:00	0	0	0	0	0	0	174	0	0	51	0	3	0	0	271	0	499
17:15	0	0	0	0	0	0	183	0	0	47	0	1	1	0	253	0	485
17:30	0	0	0	0	0	0	159	0	0	49	0	3	0	0	239	0	450
17:45	0	0	0	0	0	0	170	0	0	41	0	4	4	0	225	0	444
Hr Total	0	0	0	0	0	0	686	0	0	188	0	11	5	0	988	0	1878
TOTAL	0	0	0	0	0	0	2457	0	1	673	0	66	33	0	3544	0	6774

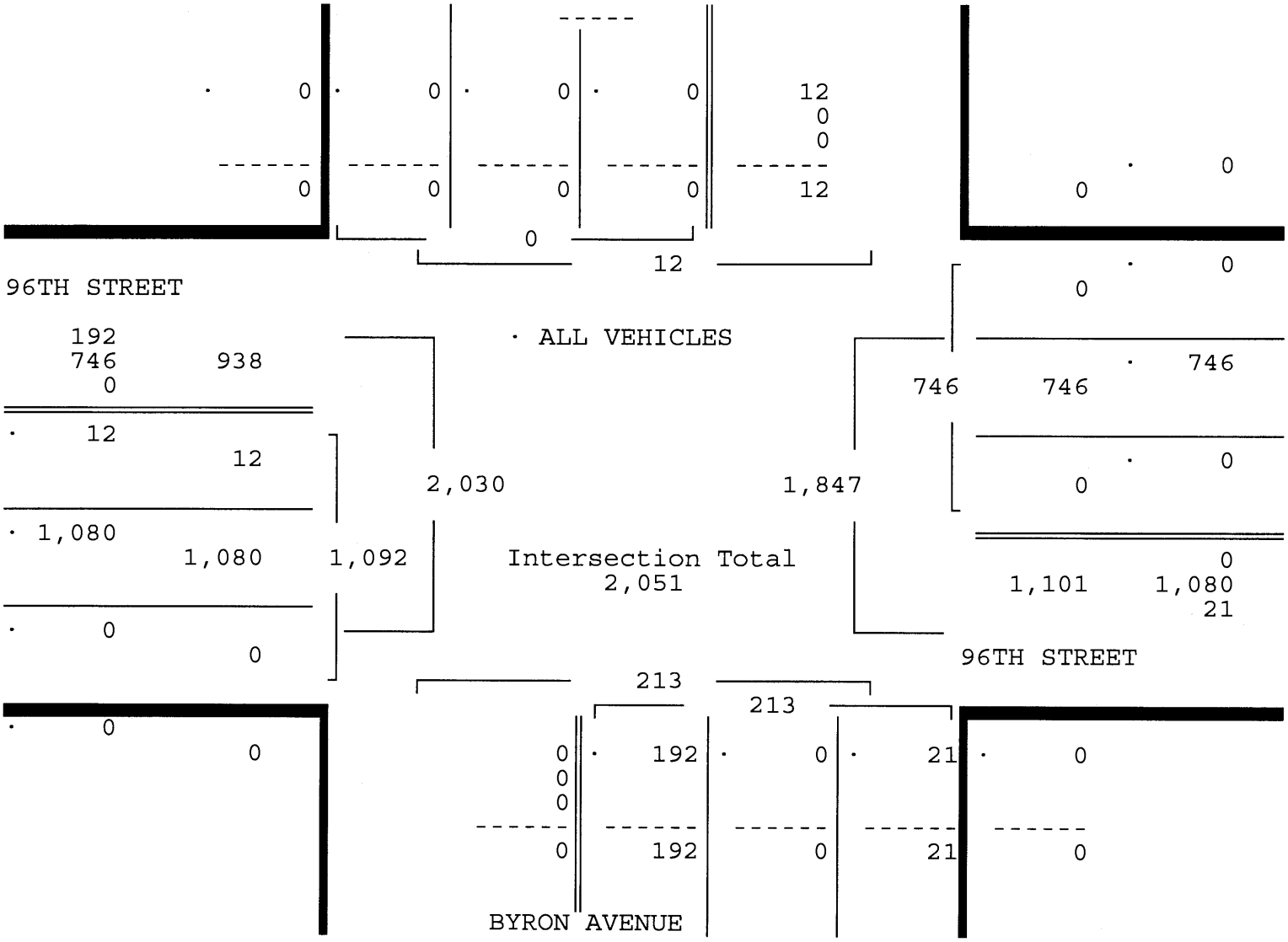
96TH STREET & BYRON AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAXIE ESPINOSA
SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120106
Start Date: 09/04/12
File I.D. : KANEBYRO
Page : 2

ALL VEHICLES

----- From North				96TH STREET From East				BYRON AVENUE From South				96TH STREET From West				
UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/04/12																
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 09/04/12																
Peak start 08:00				08:00				08:00				08:00				
Volume 0	0	0	0	0	0	746	0	0	192	0	21	12	0	1080	0	
Percent 0%	0%	0%	0%	0%	0%	100%	0%	0%	90%	0%	10%	1%	0%	99%	0%	
Pk total 0				746				213				1092				
Highest 07:00				08:00				08:00				08:30				
Volume 0	0	0	0	0	0	209	0	0	65	0	5	2	0	313	0	
Hi total 0				209				70				315				
PHF .0				.89				.76				.87				



96TH STREET & BYRON AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAXIE ESPINOSA
SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
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Site Code : 00120106
Start Date: 09/04/12
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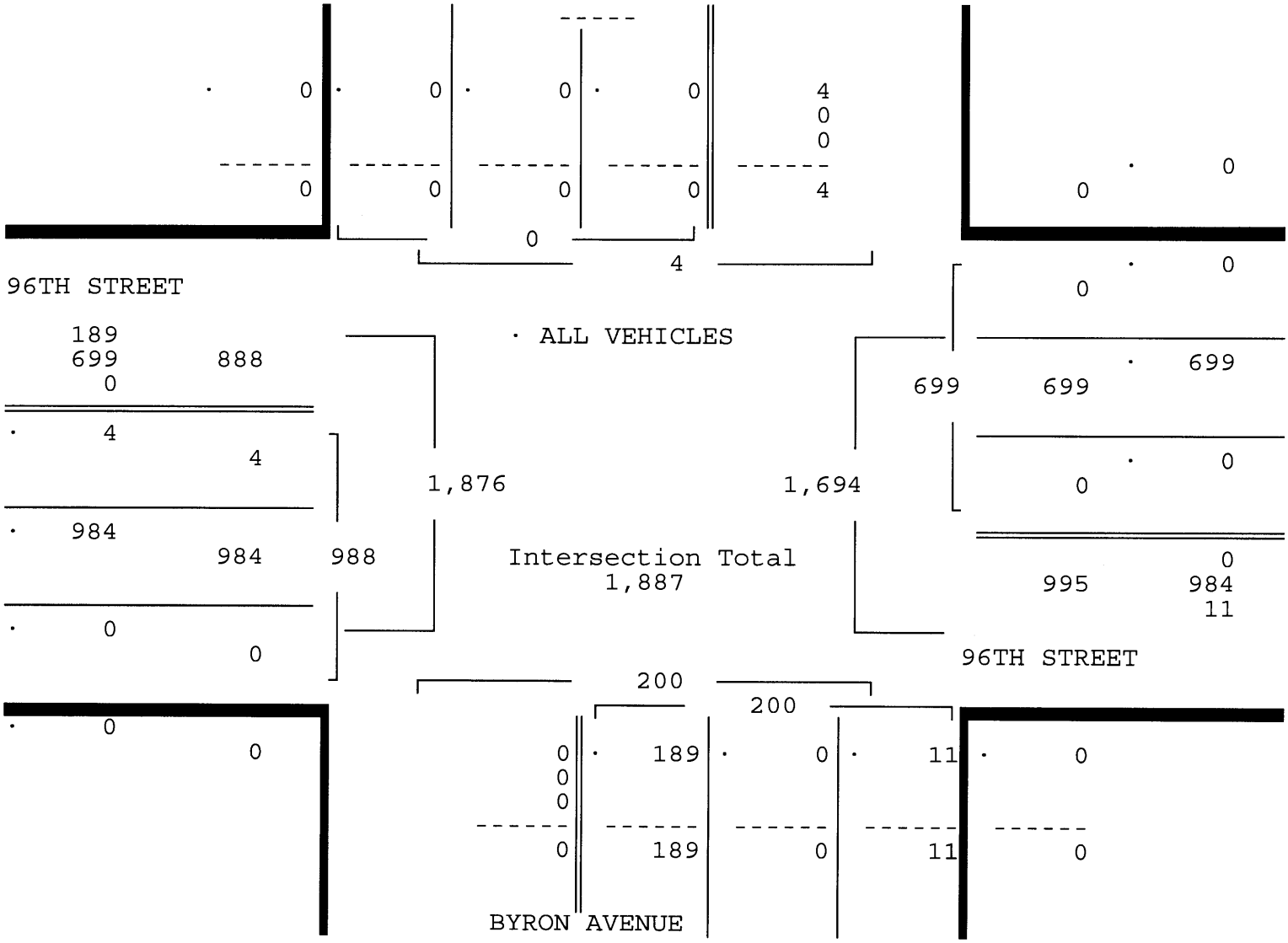
ALL VEHICLES

----- From North				96TH STREET From East				BYRON AVENUE From South				96TH STREET From West				
UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/04/12																
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 09/04/12																
Peak start 16:30				16:30				16:30				16:30				
Volume 0	0	0	0	0	0	699	0	0	189	0	11	4	0	984	0	
Percent 0%	0%	0%	0%	0%	0%	100%	0%	0%	94%	0%	6%	0%	0%	100%	0%	
Pk total 0				699				200				988				
Highest 07:00				17:15				16:45				17:00				
Volume 0	0	0	0	0	0	183	0	0	51	0	3	0	0	271	0	
Hi total 0				183				54				271				
PHF .0				.95				.93				.91				



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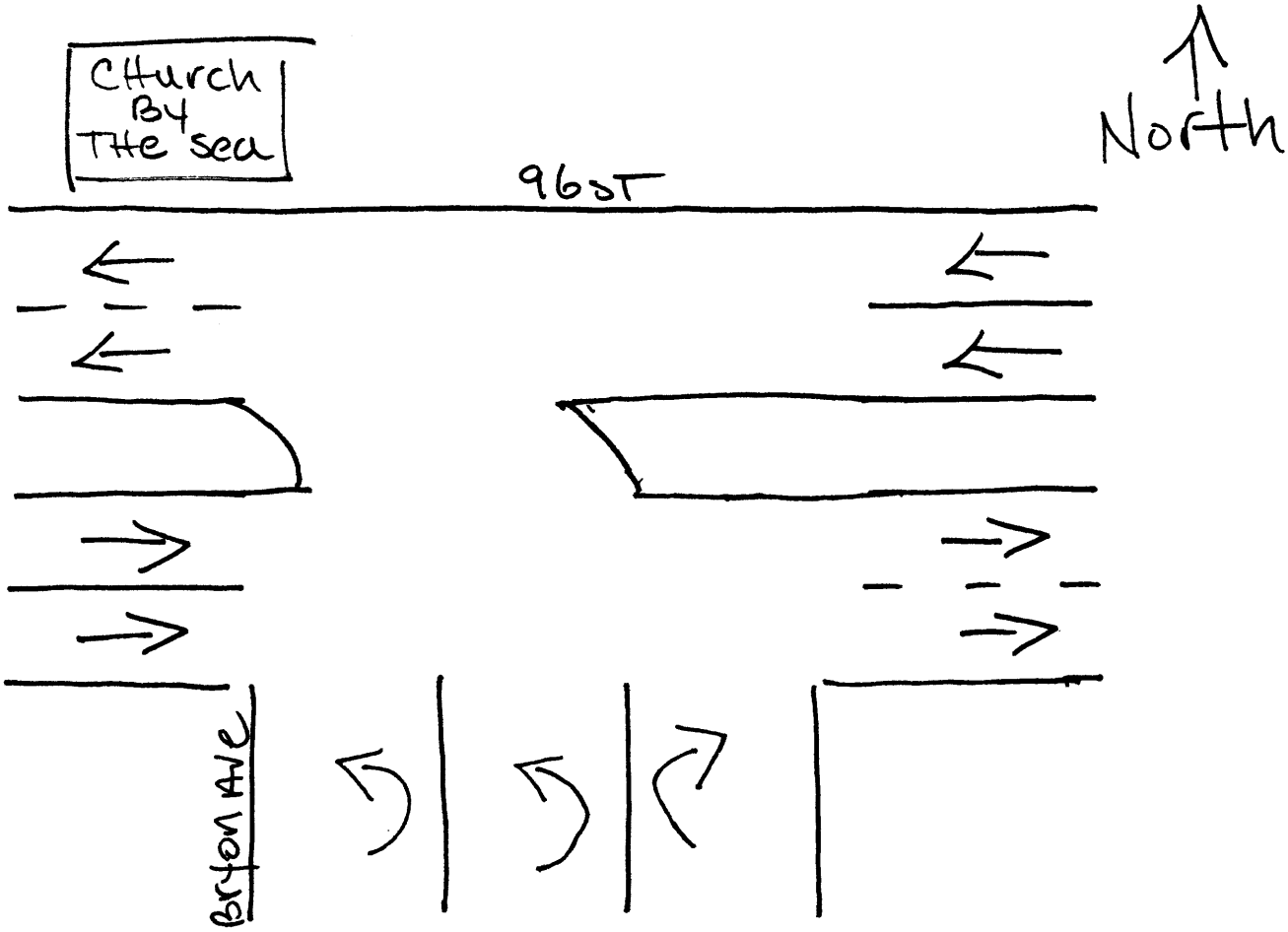
96TH STREET & BYRON AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAXIE ESPINOSA
SIGNALIZED

Site Code : 00120106
Start Date: 09/04/12
File I.D. : KANEBYRO
Page : 1

PEDESTRIANS

	----- From North				96TH STREET From East				BYRON AVENUE From South				96TH STREET From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 09/04/12																	
07:00	0	0	0	12	0	0	0	0	0	0	0	4	0	0	0	0	16
07:15	0	0	0	8	0	0	0	1	0	0	0	2	0	0	0	0	11
07:30	0	0	0	17	0	0	0	5	0	0	0	9	0	0	0	0	31
07:45	0	0	0	4	0	0	0	1	0	0	0	9	0	0	0	0	14
Hr Total	0	0	0	41	0	0	0	7	0	0	0	24	0	0	0	0	72
08:00	0	0	0	13	0	0	0	6	0	0	0	14	0	0	0	0	33
08:15	0	0	0	4	0	0	0	2	0	0	0	10	0	0	0	0	16
08:30	0	0	0	11	0	0	0	0	0	0	0	6	0	0	0	0	17
08:45	0	0	0	8	0	0	0	2	0	0	0	11	0	0	0	0	21
Hr Total	0	0	0	36	0	0	0	10	0	0	0	41	0	0	0	0	87
---------- * BREAK * ----------																	
16:00	0	0	0	7	0	0	0	0	0	0	0	13	0	0	0	0	20
16:15	0	0	0	2	0	0	0	0	0	0	0	13	0	0	0	0	15
16:30	0	0	0	7	0	0	0	0	0	0	0	6	0	0	0	0	13
16:45	0	0	0	2	0	0	0	0	0	0	0	4	0	0	0	1	7
Hr Total	0	0	0	18	0	0	0	0	0	0	0	36	0	0	0	1	55
17:00	0	0	0	6	0	0	0	0	0	0	0	5	0	0	0	0	11
17:15	0	0	0	11	0	0	0	0	0	0	0	14	0	0	0	0	25
17:30	0	0	0	6	0	0	0	0	0	0	0	17	0	0	0	0	23
17:45	0	0	0	11	0	0	0	0	0	0	0	8	0	0	0	1	20
Hr Total	0	0	0	34	0	0	0	0	0	0	0	44	0	0	0	1	79
TOTAL	0	0	0	129	0	0	0	17	0	0	0	145	0	0	0	2	293



Surfside, Florida
September 04, 2012
drawn by: Luis Palomino
signalized

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96TH STREET & HARDING AVENUE
SURFSIDE, FLORIDA
COUNTED BY: CARLOS PALOMINO
SIGNALIZED

Site Code : 00120106
Start Date: 09/04/12
File I.D. : KANEHARD
Page : 1

ALL VEHICLES

	HARDING AVENUE From North				96TH STREET From East				HARDING AVENUE From South				96TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/04/12																	
07:00	0	9	207	24	0	0	41	0	0	0	0	0	0	0	32	82	395
07:15	0	7	266	23	0	0	40	0	0	0	0	0	0	0	40	73	449
07:30	0	15	331	37	0	0	53	0	0	0	0	0	0	0	61	111	608
07:45	0	20	321	52	0	0	86	0	0	0	0	0	0	0	56	116	651
Hr Total	0	51	1125	136	0	0	220	0	0	0	0	0	0	0	189	382	2103
08:00	0	18	333	99	0	0	115	0	0	0	0	0	0	0	55	166	786
08:15	0	23	363	84	0	0	104	0	0	0	0	0	0	0	65	182	821
08:30	0	24	302	56	0	0	106	0	0	0	0	0	0	0	118	177	783
08:45	0	28	335	98	0	0	114	0	0	0	0	0	0	0	101	130	806
Hr Total	0	93	1333	337	0	0	439	0	0	0	0	0	0	0	339	655	3196
* BREAK *																	
16:00	0	8	266	70	0	0	95	0	0	0	0	0	0	0	66	118	623
16:15	0	16	298	69	0	1	104	0	0	0	0	0	0	0	89	121	698
16:30	0	13	317	66	0	2	98	0	0	0	0	0	0	0	88	124	708
16:45	0	7	236	65	0	1	115	0	0	0	0	0	0	0	84	117	625
Hr Total	0	44	1117	270	0	4	412	0	0	0	0	0	0	0	327	480	2654
17:00	0	8	299	63	0	0	114	0	0	0	0	0	0	0	104	144	732
17:15	0	7	315	70	0	0	121	0	0	0	0	0	0	0	98	145	756
17:30	0	6	275	65	0	0	98	0	0	0	0	0	0	0	64	150	658
17:45	0	16	280	72	0	0	108	0	0	0	0	0	0	0	64	148	688
Hr Total	0	37	1169	270	0	0	441	0	0	0	0	0	0	0	330	587	2834
TOTAL	0	225	4744	1013	0	4	1512	0	0	0	0	0	0	0	1185	2104	10787

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96TH STREET & HARDING AVENUE
SURFSIDE, FLORIDA
COUNTED BY: CARLOS PALOMINO
SIGNALIZED

Site Code : 00120106
Start Date: 09/04/12
File I.D. : KANEHARD
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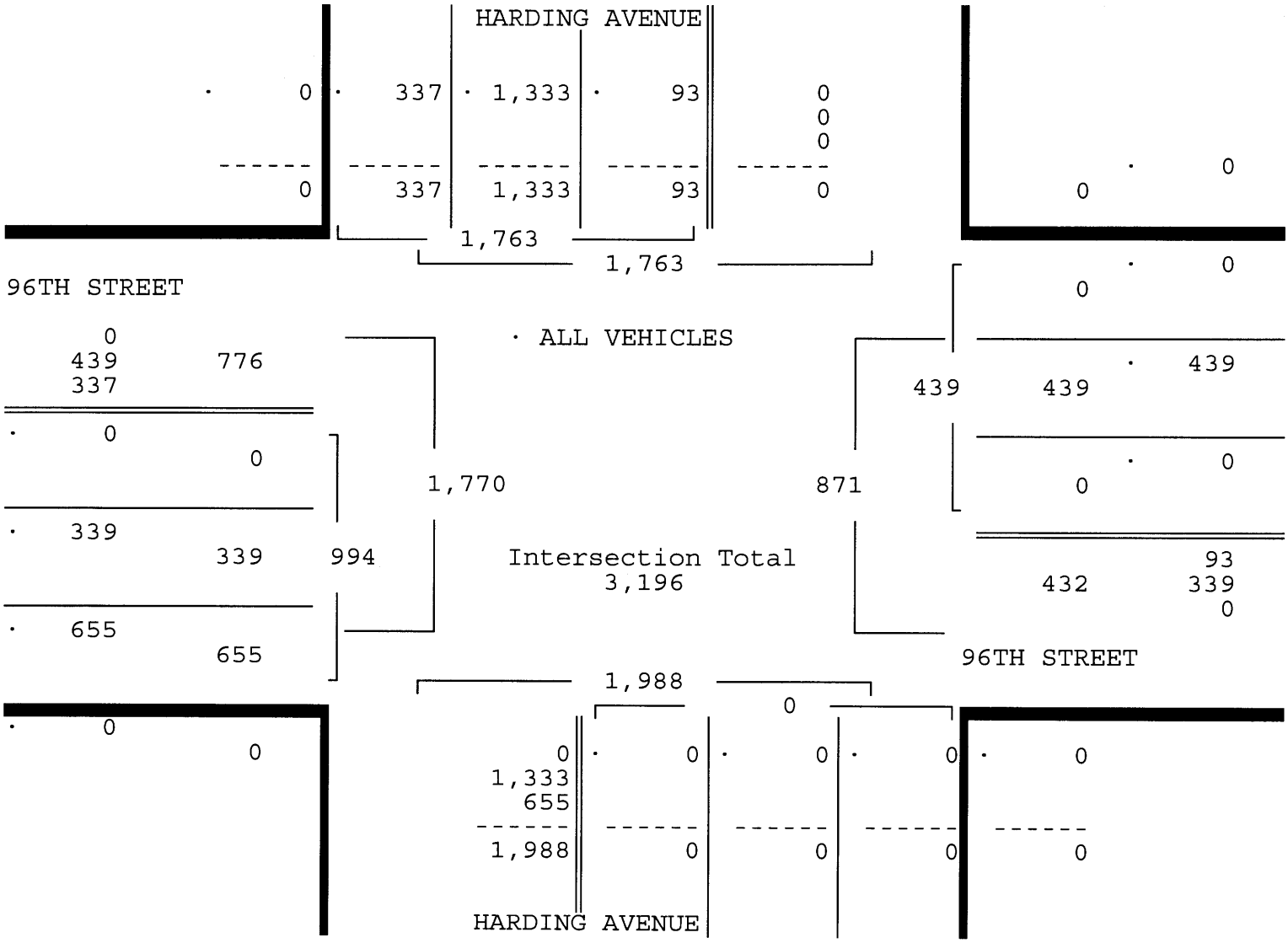
ALL VEHICLES

	HARDING AVENUE From North				96TH STREET From East				HARDING AVENUE From South				96TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/04/12																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 09/04/12																	
Peak start 08:00					08:00				08:00				08:00				
Volume	0	93	1333	337	0	0	439	0	0	0	0	0	0	0	339	655	
Percent	0%	5%	76%	19%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	34%	66%	
Pk total	1763				439				0				994				
Highest	08:15				08:00				07:00				08:30				
Volume	0	23	363	84	0	0	115	0	0	0	0	0	0	0	118	177	
Hi total	470				115				0				295				
PHF	.94				.95				.0				.84				


HARDING AVENUE
0
337
1,333
93
0
0
0
0
337
1,333
93
0
1,763
1,763
96TH STREET
0
0
0
0
439
439
0
0
0
0

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96TH STREET & HARDING AVENUE
SURFSIDE, FLORIDA
COUNTED BY: CARLOS PALOMINO
SIGNALIZED

Site Code : 00120106
Start Date: 09/04/12
File I.D. : KANEHARD
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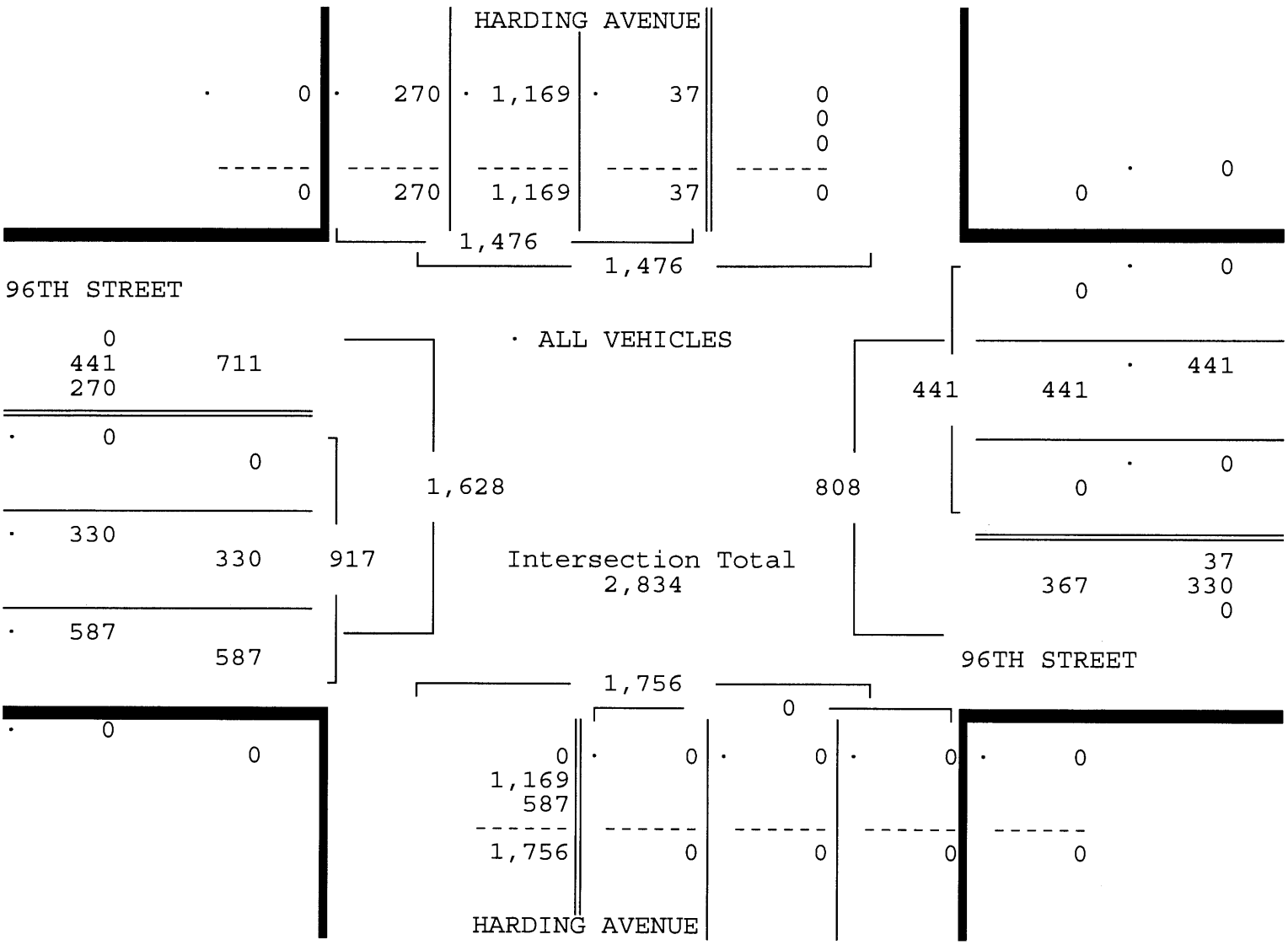
ALL VEHICLES

	HARDING AVENUE From North				96TH STREET From East				HARDING AVENUE From South				96TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/04/12																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 09/04/12																	
Peak start 17:00					17:00				17:00				17:00				
Volume	0	37	1169	270	0	0	441	0	0	0	0	0	0	0	330	587	
Percent	0%	3%	79%	18%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	36%	64%	
Pk total	1476				441				0				917				
Highest	17:15				17:15				07:00				17:00				
Volume	0	7	315	70	0	0	121	0	0	0	0	0	0	0	104	144	
Hi total	392				121				0				248				
PHF	.94				.91				.0				.92				



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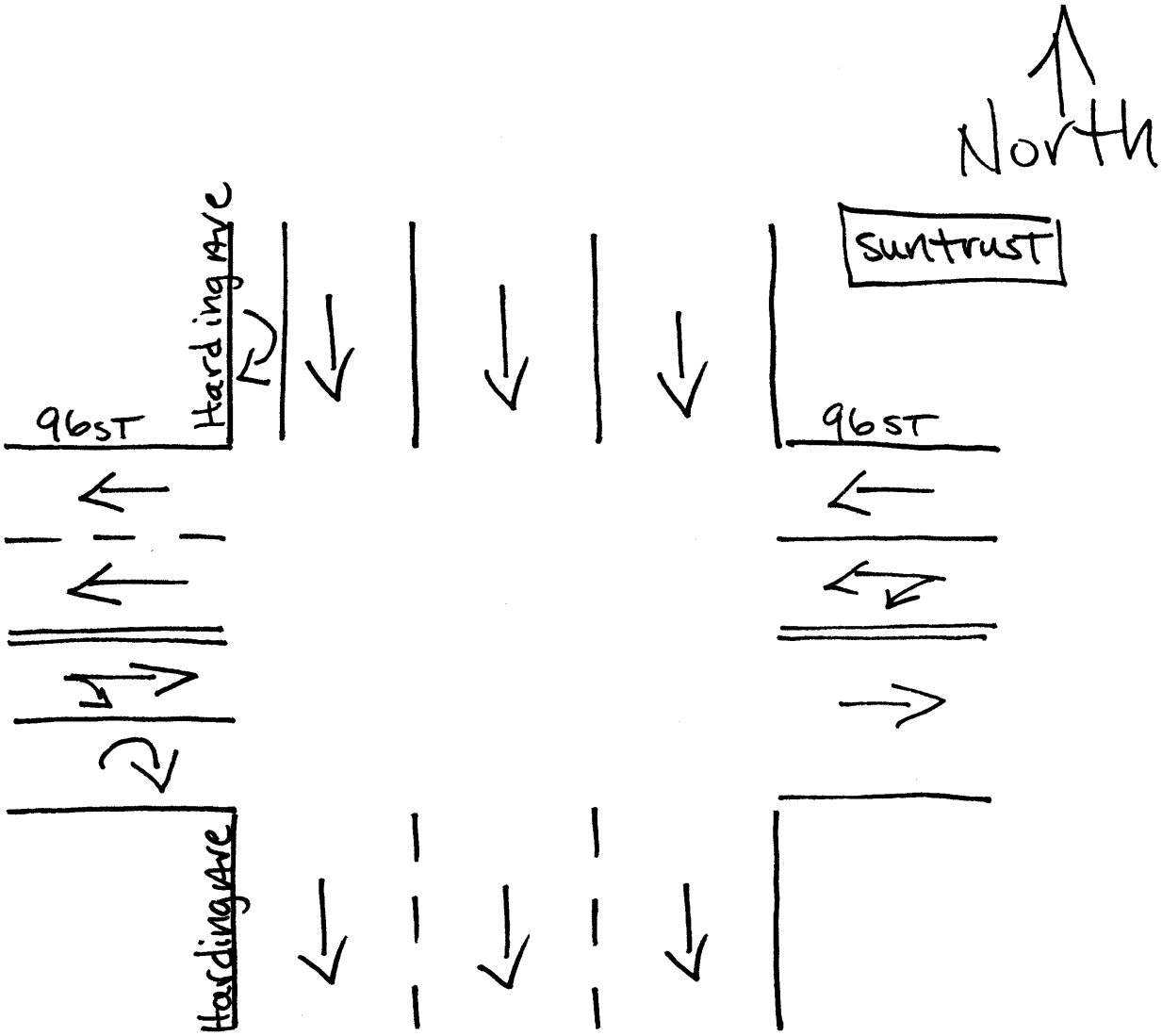
96TH STREET & HARDING AVENUE
SURFSIDE, FLORIDA
COUNTED BY: CARLOS PALOMINO
SIGNALIZED

Site Code : 00120106
Start Date: 09/04/12
File I.D. : KANEHARD
Page : 1

PEDESTRIANS

	HARDING AVENUE From North				96TH STREET From East				HARDING AVENUE From South				96TH STREET From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 09/04/12																	
07:00	0	0	0	8	0	0	0	0	0	0	0	2	0	0	0	2	12
07:15	0	0	0	4	0	0	0	2	0	0	0	1	0	0	0	2	9
07:30	0	0	0	13	0	0	0	4	0	0	0	0	0	0	0	3	20
07:45	0	0	0	7	0	0	0	3	0	0	0	4	0	0	0	12	26
Hr Total	0	0	0	32	0	0	0	9	0	0	0	7	0	0	0	19	67
08:00	0	0	0	10	0	0	0	6	0	0	0	7	0	0	0	4	27
08:15	0	0	0	11	0	0	0	2	0	0	0	5	0	0	0	14	32
08:30	0	0	0	14	0	0	0	3	0	0	0	0	0	0	0	5	22
08:45	0	0	0	12	0	0	0	4	0	0	0	5	0	0	0	7	28
Hr Total	0	0	0	47	0	0	0	15	0	0	0	17	0	0	0	30	109
---------- * BREAK * ----------																	
16:00	0	0	0	8	0	0	0	6	0	0	0	0	0	0	0	19	33
16:15	0	0	0	6	0	0	0	4	0	0	0	6	0	0	0	28	44
16:30	0	0	0	6	0	0	0	3	0	0	0	6	0	0	0	25	40
16:45	0	0	0	8	0	0	0	7	0	0	0	1	0	0	0	19	35
Hr Total	0	0	0	28	0	0	0	20	0	0	0	13	0	0	0	91	152
17:00	0	0	0	3	0	0	0	3	0	0	0	5	0	0	0	20	31
17:15	0	0	0	10	0	0	0	4	0	0	0	2	0	0	0	18	34
17:30	0	0	0	4	0	0	0	1	0	0	0	1	0	0	0	15	21
17:45	0	0	0	4	0	0	0	4	0	0	0	8	0	0	0	12	28
Hr Total	0	0	0	21	0	0	0	12	0	0	0	16	0	0	0	65	114
TOTAL	0	0	0	128	0	0	0	56	0	0	0	53	0	0	0	205	442



Surfside, Florida

September 04, 2012

drawn by: Luis Palomino

signalized

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96TH STREET & COLLINS AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAURICE GOMEZ
SIGNALIZED

Site Code : 00120106
Start Date: 09/04/12
File I.D. : KANECOLL
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ALL VEHICLES

	COLLINS AVENUE From North				96TH STREET From East				COLLINS AVENUE From South				96TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/04/12																	
07:00	0	0	0	0	0	0	1	0	0	40	111	0	0	34	4	0	190
07:15	0	0	0	0	0	0	0	1	0	39	140	2	0	40	0	0	222
07:30	0	0	0	0	0	0	1	0	0	52	157	1	0	69	0	0	280
07:45	0	0	0	0	0	0	0	0	0	90	226	5	0	64	2	0	387
Hr Total	0	0	0	0	0	0	2	1	0	221	634	8	0	207	6	0	1079
08:00	0	0	0	0	0	0	0	2	0	113	217	3	0	61	2	0	398
08:15	0	0	0	0	0	0	1	1	0	117	275	0	0	65	2	0	461
08:30	0	0	0	0	0	0	0	0	0	92	214	1	0	119	3	0	429
08:45	0	0	0	0	0	0	2	0	0	114	302	4	0	104	2	0	528
Hr Total	0	0	0	0	0	0	3	3	0	436	1008	8	0	349	9	0	1816
---------- * BREAK * ----------																	
16:00	0	0	0	0	0	0	2	3	0	88	320	4	0	73	1	0	491
16:15	0	0	0	0	0	0	2	3	0	103	360	2	0	96	4	0	570
16:30	0	0	0	0	0	0	3	3	0	92	326	4	0	90	4	0	522
16:45	0	0	0	0	0	0	4	3	0	107	366	7	0	86	4	0	577
Hr Total	0	0	0	0	0	0	11	12	0	390	1372	17	0	345	13	0	2160
17:00	0	0	0	0	0	0	5	1	0	100	348	2	0	101	4	0	561
17:15	0	0	0	0	0	0	5	4	0	106	345	2	0	88	6	0	556
17:30	0	0	0	0	0	0	1	1	0	91	364	3	0	62	1	0	523
17:45	0	0	0	0	0	0	1	0	0	102	328	2	0	68	6	0	507
Hr Total	0	0	0	0	0	0	12	6	0	399	1385	9	0	319	17	0	2147
TOTAL	0	0	0	0	0	0	28	22	0	1446	4399	42	0	1220	45	0	7202

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96TH STREET & COLLINS AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAURICE GOMEZ
SIGNALIZED

Site Code : 00120106
Start Date: 09/04/12
File I.D. : KANECOLL
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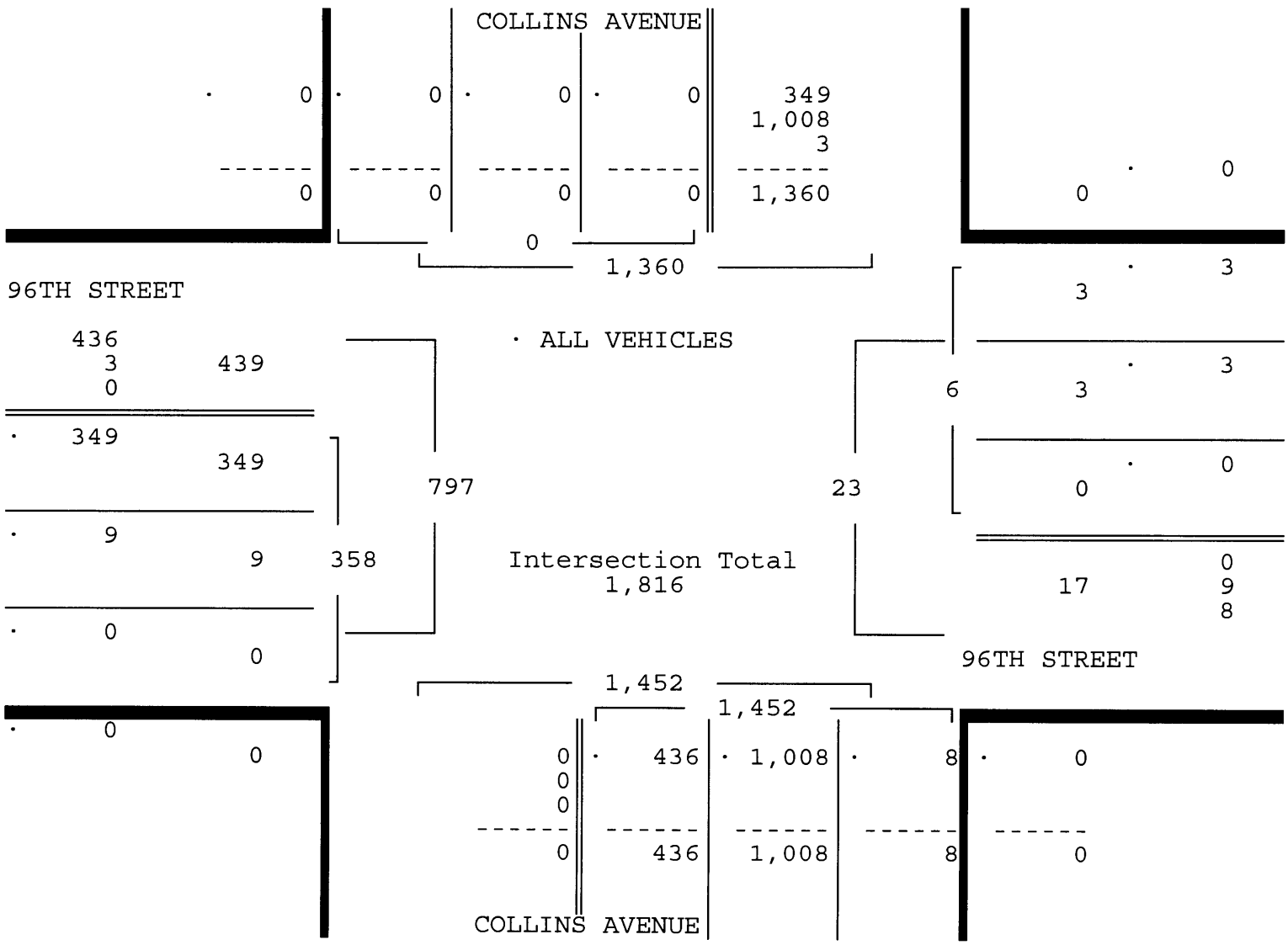
ALL VEHICLES

	COLLINS AVENUE From North				96TH STREET From East				COLLINS AVENUE From South				96TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/04/12																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 09/04/12																	
Peak start	08:00				08:00				08:00				08:00				
Volume	0	0	0	0	0	0	3	3	0	436	1008	8	0	349	9	0	
Percent	0%	0%	0%	0%	0%	0%	50%	50%	0%	30%	69%	1%	0%	97%	3%	0%	
Pk total	0				6				1452				358				
Highest	07:00				08:00				08:45				08:30				
Volume	0	0	0	0	0	0	0	2	0	114	302	4	0	119	3	0	
Hi total	0				2				420				122				
PHF	.0				.75				.86				.73				



Traffic Survey Specialists, Inc.
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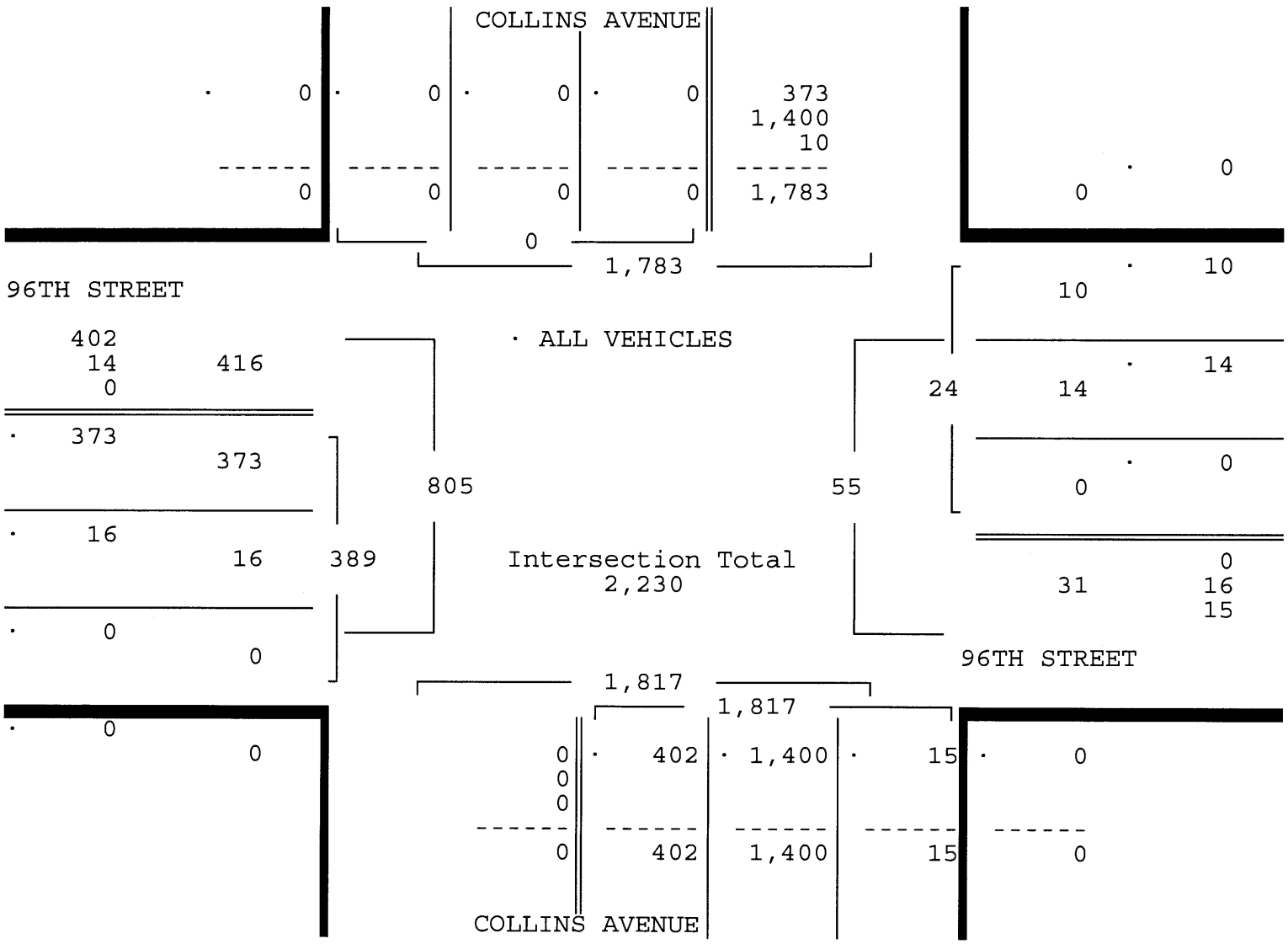
Phone (561) 272-3255

96TH STREET & COLLINS AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAURICE GOMEZ
SIGNALIZED

Site Code : 00120106
Start Date: 09/04/12
File I.D. : KANECOLL
Page : 3

ALL VEHICLES

	COLLINS AVENUE From North				96TH STREET From East				COLLINS AVENUE From South				96TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/04/12																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 09/04/12																	
Peak start 16:15					16:15				16:15				16:15				
Volume	0	0	0	0	0	0	14	10	0	402	1400	15	0	373	16	0	
Percent	0%	0%	0%	0%	0%	0%	58%	42%	0%	22%	77%	1%	0%	96%	4%	0%	
Pk total	0				24				1817				389				
Highest	07:00				16:45				16:45				17:00				
Volume	0	0	0	0	0	0	4	3	0	107	366	7	0	101	4	0	
Hi total	0				7				480				105				
PHF	.0				.86				.95				.93				



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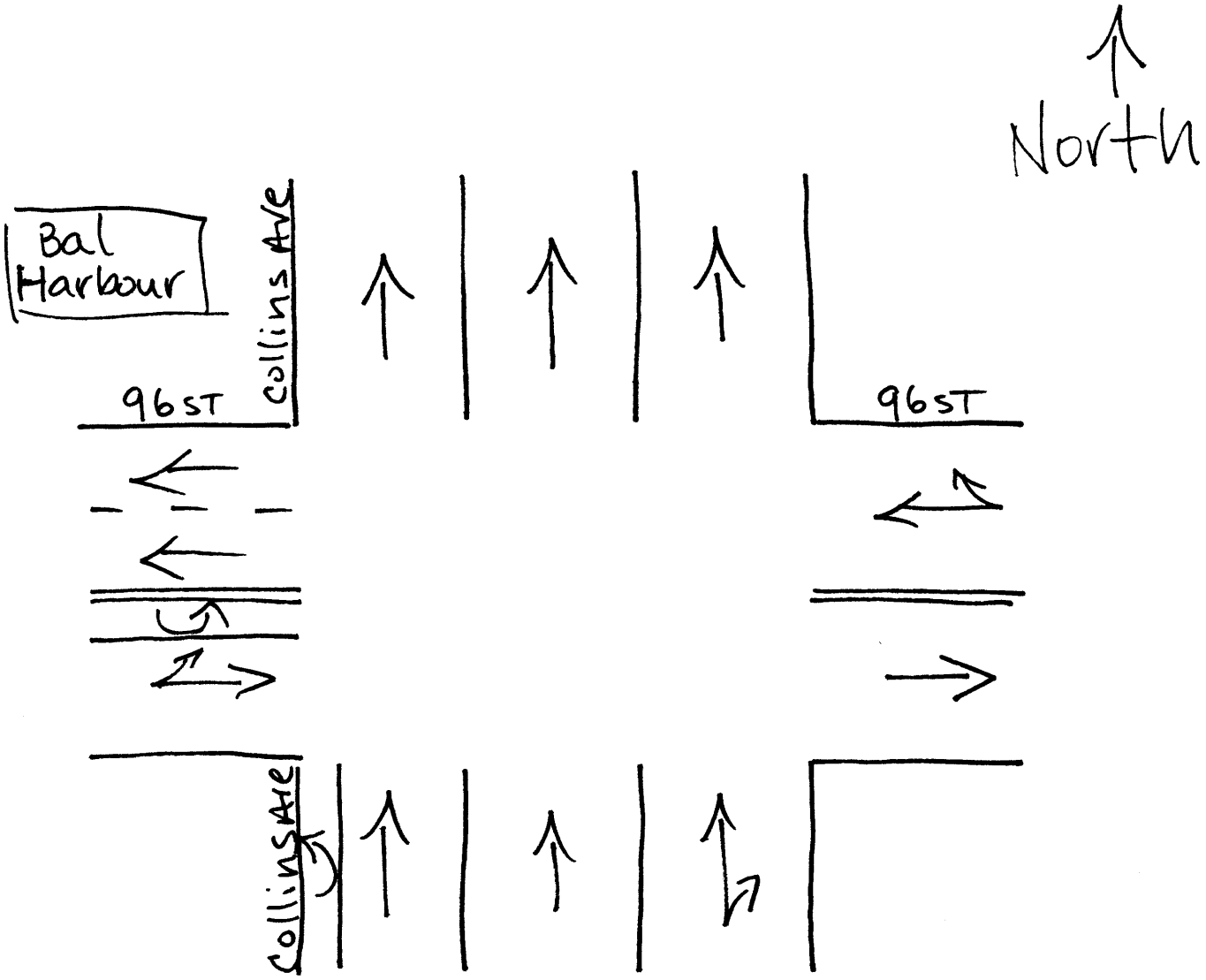
96TH STREET & COLLINS AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAURICE GOMEZ
SIGNALIZED

Site Code : 00120106
Start Date: 09/04/12
File I.D. : KANECOLL
Page : 1

PEDESTRIANS

	COLLINS AVENUE From North				96TH STREET From East				COLLINS AVENUE From South				96TH STREET From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 09/04/12																	
07:00	0	0	0	0	0	0	0	1	0	0	0	4	0	0	0	0	5
07:15	0	0	0	2	0	0	0	4	0	0	0	4	0	0	0	0	10
07:30	0	0	0	5	0	0	0	3	0	0	0	11	0	0	0	1	20
07:45	0	0	0	0	0	0	0	3	0	0	0	13	0	0	0	1	17
Hr Total	0	0	0	7	0	0	0	11	0	0	0	32	0	0	0	2	52
08:00	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
08:15	0	0	0	1	0	0	0	3	0	0	0	9	0	0	0	1	14
08:30	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	2	10
08:45	0	0	0	0	0	0	0	4	0	0	0	7	0	0	0	0	11
Hr Total	0	0	0	1	0	0	0	7	0	0	0	28	0	0	0	3	39
* BREAK *																	
16:00	0	0	0	3	0	0	0	0	0	0	0	6	0	0	0	0	9
16:15	0	0	0	0	0	0	0	2	0	0	0	10	0	0	0	0	12
16:30	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	2	8
16:45	0	0	0	2	0	0	0	4	0	0	0	2	0	0	0	2	10
Hr Total	0	0	0	5	0	0	0	6	0	0	0	24	0	0	0	4	39
17:00	0	0	0	0	0	0	0	1	0	0	0	12	0	0	0	4	17
17:15	0	0	0	5	0	0	0	1	0	0	0	5	0	0	0	0	11
17:30	0	0	0	2	0	0	0	3	0	0	0	6	0	0	0	2	13
17:45	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	2	10
Hr Total	0	0	0	7	0	0	0	5	0	0	0	31	0	0	0	8	51
TOTAL	0	0	0	20	0	0	0	29	0	0	0	115	0	0	0	17	181



Surfside, Florida
September 04, 2012
drawn by: Luis Palomino
signalized

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95TH STREET & HARDING AVENUE
SURFSIDE, FLORIDA
COUNTED BY: AMBER PALOMINO
SIGNALIZED

Site Code : 00120106
Start Date: 08/30/12
File I.D. : 95STHARD
Page : 1

ALL VEHICLES

	HARDING AVENUE From North				95TH STREET From East				HARDING AVENUE From South				95TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/30/12																	
07:00	0	4	255	5	0	3	6	0	0	0	0	0	0	0	1	4	278
07:15	0	8	355	1	0	4	3	0	0	0	0	0	0	0	2	3	376
07:30	0	6	417	2	0	8	2	0	0	0	0	0	0	0	3	3	441
07:45	0	14	402	9	0	13	6	0	0	0	0	0	0	0	3	19	466
Hr Total	0	32	1429	17	0	28	17	0	0	0	0	0	0	0	9	29	1561
08:00	0	15	426	7	0	11	6	0	0	0	0	0	0	0	3	35	503
08:15	0	12	405	5	0	8	14	0	0	0	0	0	0	0	6	42	492
08:30	0	11	392	10	0	17	10	0	0	0	0	0	0	0	11	44	495
08:45	0	17	377	9	0	12	16	0	0	0	0	0	0	0	5	43	479
Hr Total	0	55	1600	31	0	48	46	0	0	0	0	0	0	0	25	164	1969
* BREAK *																	
16:00	0	24	373	18	0	17	8	0	0	0	0	0	1	0	10	34	485
16:15	0	27	345	14	0	11	9	0	0	0	0	0	0	0	5	21	432
16:30	0	20	374	18	0	16	10	0	0	0	0	0	0	0	13	11	462
16:45	0	20	349	11	0	13	3	0	0	0	0	0	0	0	14	18	428
Hr Total	0	91	1441	61	0	57	30	0	0	0	0	0	1	0	42	84	1807
17:00	0	20	422	14	0	15	10	0	0	0	0	0	0	0	9	22	512
17:15	0	18	404	20	0	20	15	0	0	0	0	0	0	0	10	18	505
17:30	0	14	403	17	0	12	13	0	0	0	0	0	0	0	8	22	489
17:45	0	21	412	8	0	23	15	0	0	0	0	0	0	0	7	12	498
Hr Total	0	73	1641	59	0	70	53	0	0	0	0	0	0	0	34	74	2004
TOTAL	0	251	6111	168	0	203	146	0	0	0	0	0	1	0	110	351	7341

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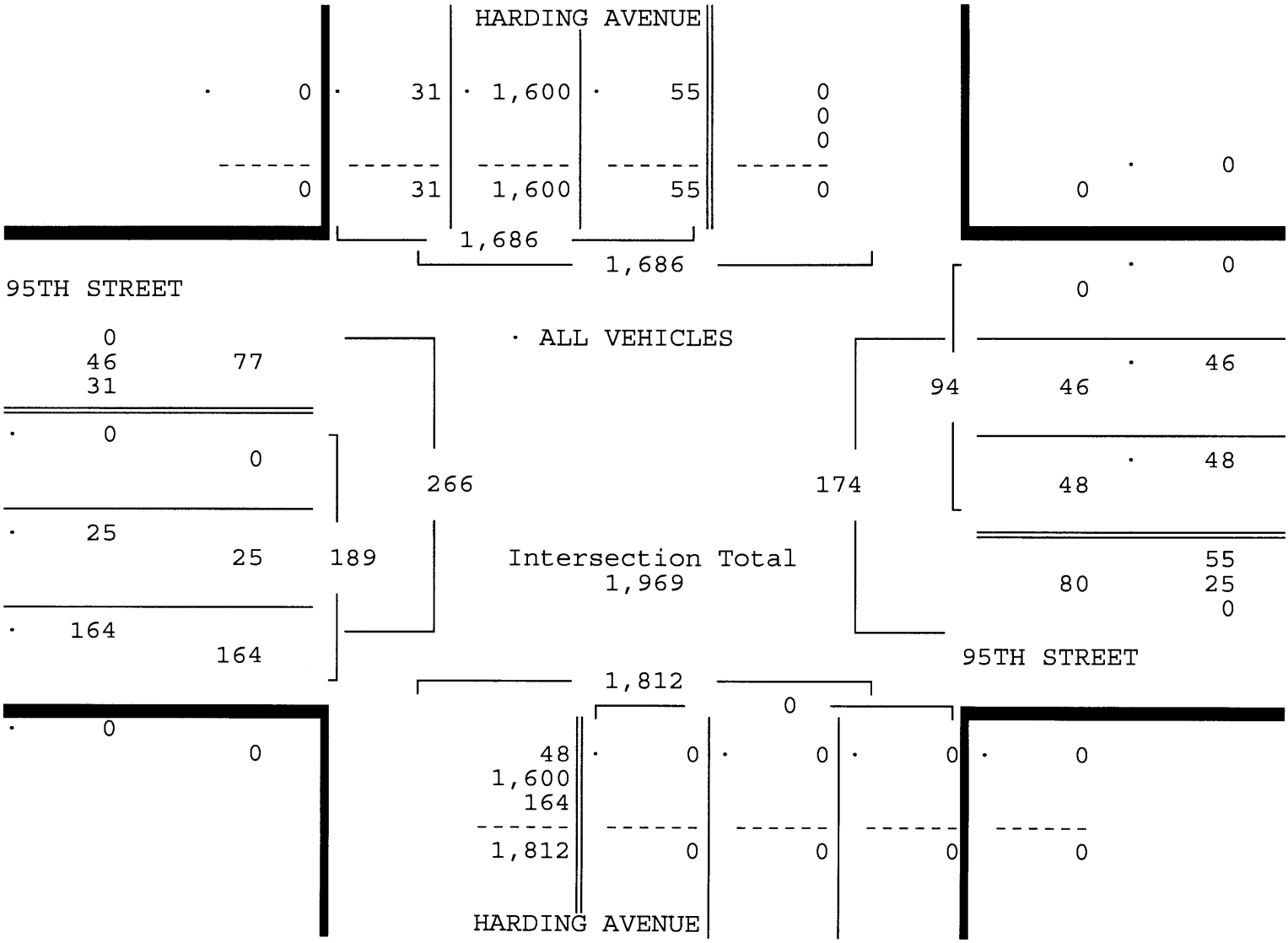
95TH STREET & HARDING AVENUE
SURFSIDE, FLORIDA
COUNTED BY: AMBER PALOMINO
SIGNALIZED

Site Code : 00120106
Start Date: 08/30/12
File I.D. : 95STHARD
Page : 2

ALL VEHICLES

	HARDING AVENUE From North				95TH STREET From East				HARDING AVENUE From South				95TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/30/12																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 08/30/12																	
Peak start 08:00					08:00				08:00				08:00				
Volume	0	55	1600	31	0	48	46	0	0	0	0	0	0	0	25	164	
Percent	0%	3%	95%	2%	0%	51%	49%	0%	0%	0%	0%	0%	0%	0%	13%	87%	
Pk total	1686				94				0				189				
Highest	08:00				08:45				07:00				08:30				
Volume	0	15	426	7	0	12	16	0	0	0	0	0	0	0	11	44	
Hi total	448				28				0				55				
PHF	.94				.84				.0				.86				



95TH STREET & HARDING AVENUE
SURFSIDE, FLORIDA
COUNTED BY: AMBER PALOMINO
SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
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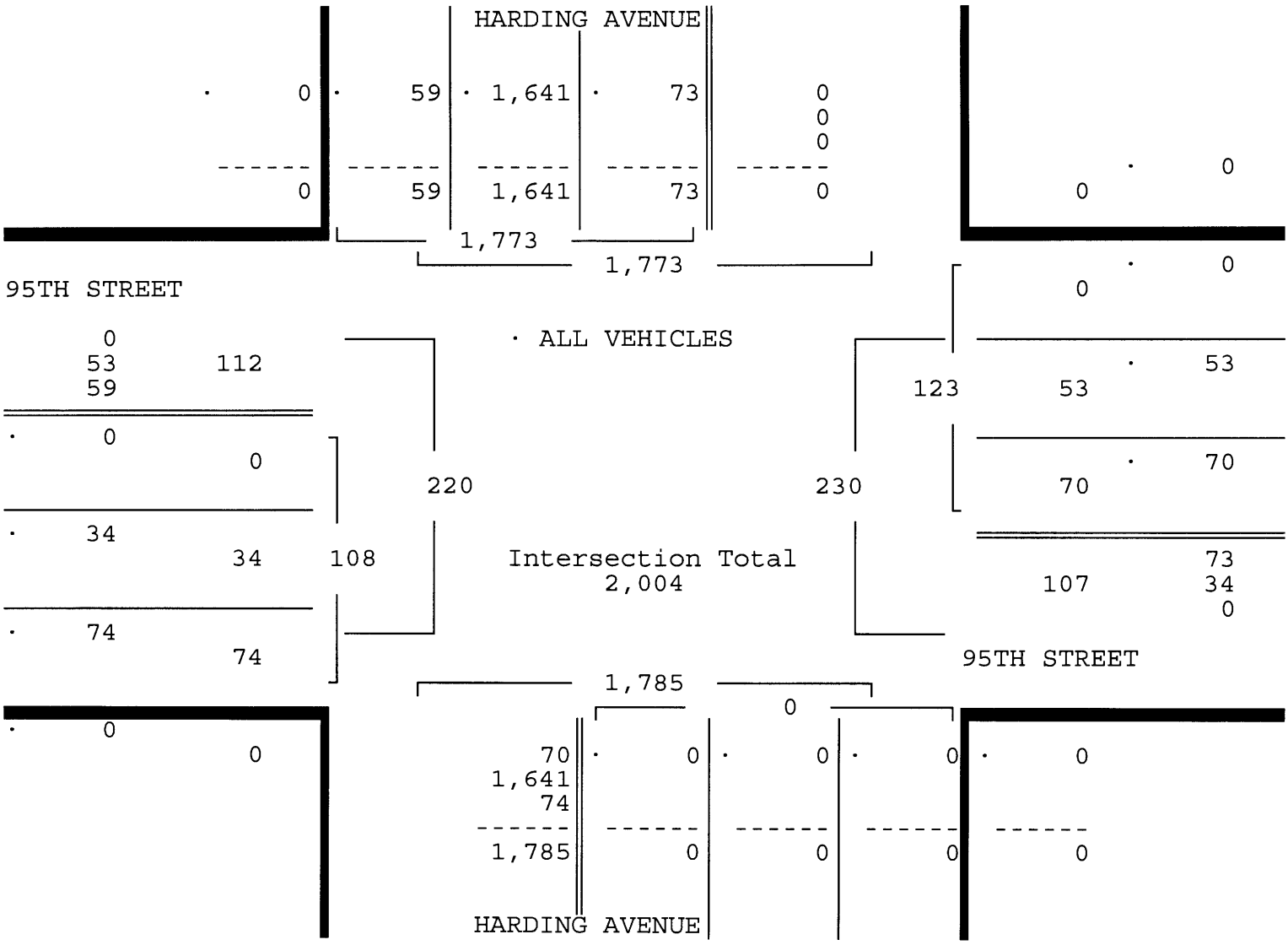
Site Code : 00120106
Start Date: 08/30/12
File I.D. : 95STHARD
Page : 3

ALL VEHICLES

	HARDING AVENUE From North				95TH STREET From East				HARDING AVENUE From South				95TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/30/12																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 08/30/12																	
Peak start 17:00					17:00				17:00				17:00				
Volume	0	73	1641	59	0	70	53	0	0	0	0	0	0	0	34	74	
Percent	0%	4%	93%	3%	0%	57%	43%	0%	0%	0%	0%	0%	0%	0%	31%	69%	
Pk total	1773				123				0				108				
Highest	17:00				17:45				07:00				17:00				
Volume	0	20	422	14	0	23	15	0	0	0	0	0	0	0	9	22	
Hi total	456				38				0				31				
PHF	.97				.81				.0				.87				



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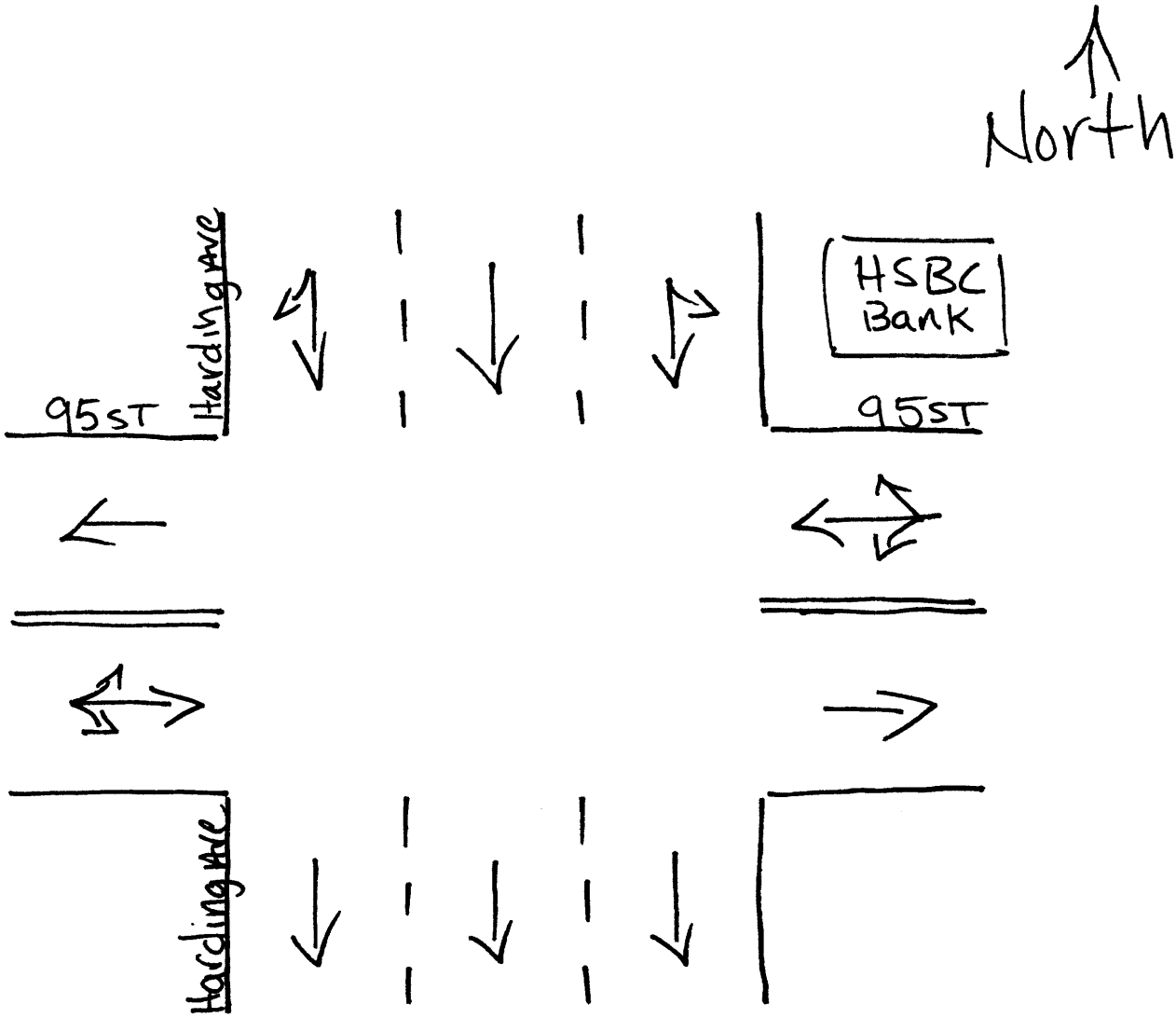
95TH STREET & HARDING AVENUE
SURFSIDE, FLORIDA
COUNTED BY: AMBER PALOMINO
SIGNALIZED

Site Code : 00120106
Start Date: 08/30/12
File I.D. : 95STHARD
Page : 1

PEDESTRIANS

	HARDING AVENUE From North				95TH STREET From East				HARDING AVENUE From South				95TH STREET From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 08/30/12																	
07:00	0	0	0	3	0	0	0	1	0	0	0	2	0	0	0	1	7
07:15	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	5	8
07:30	0	0	0	1	0	0	0	3	0	0	0	2	0	0	0	1	7
07:45	0	0	0	4	0	0	0	2	0	0	0	3	0	0	0	6	15
Hr Total	0	0	0	10	0	0	0	6	0	0	0	8	0	0	0	13	37
08:00	0	0	0	2	0	0	0	2	0	0	0	5	0	0	0	6	15
08:15	0	0	0	2	0	0	0	4	0	0	0	1	0	0	0	5	12
08:30	0	0	0	0	0	0	0	5	0	0	0	8	0	0	0	5	18
08:45	0	0	0	2	0	0	0	8	0	0	0	1	0	0	0	5	16
Hr Total	0	0	0	6	0	0	0	19	0	0	0	15	0	0	0	21	61
* BREAK *																	
16:00	0	0	0	8	0	0	0	15	0	0	0	7	0	0	0	27	57
16:15	0	0	0	7	0	0	0	13	0	0	0	6	0	0	0	19	45
16:30	0	0	0	16	0	0	0	15	0	0	0	7	0	0	0	10	48
16:45	0	0	0	11	0	0	0	5	0	0	0	8	0	0	0	17	41
Hr Total	0	0	0	42	0	0	0	48	0	0	0	28	0	0	0	73	191
17:00	0	0	0	9	0	0	0	15	0	0	0	11	0	0	0	17	52
17:15	0	0	0	5	0	0	0	7	0	0	0	8	0	0	0	15	35
17:30	0	0	0	3	0	0	0	3	0	0	0	3	0	0	0	9	18
17:45	0	0	0	10	0	0	0	7	0	0	0	9	0	0	0	13	39
Hr Total	0	0	0	27	0	0	0	32	0	0	0	31	0	0	0	54	144
TOTAL	0	0	0	85	0	0	0	105	0	0	0	82	0	0	0	161	433



Surfside, Florida
August 30, 2012
drawn by: Luis Palomino
Signalized

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95TH STREET & COLLINS AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAXIE ESPINOSA
SIGNALIZED

Site Code : 00120106
Start Date: 08/30/12
File I.D. : 95ST_A1A
Page : 1

ALL VEHICLES

	COLLINS AVENUE From North				95TH STREET From East				COLLINS AVENUE From South				95TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/30/12																	
07:00	0	0	0	0	0	0	1	1	0	8	165	2	0	8	0	0	185
07:15	0	0	0	0	0	0	0	0	0	6	194	1	0	9	0	0	210
07:30	0	0	0	0	0	0	2	0	0	9	208	3	0	6	0	0	228
07:45	0	0	0	0	0	0	3	1	0	18	292	3	0	11	1	0	329
Hr Total	0	0	0	0	0	0	6	2	0	41	859	9	0	34	1	0	952
08:00	0	0	0	0	0	0	2	4	0	16	350	2	0	10	1	0	385
08:15	0	0	0	0	0	0	2	1	0	19	360	2	0	14	2	0	400
08:30	0	0	0	0	0	0	3	2	0	21	328	2	0	22	0	0	378
08:45	0	0	0	0	0	0	0	0	0	16	395	1	0	20	0	0	432
Hr Total	0	0	0	0	0	0	7	7	0	72	1433	7	0	66	3	0	1595
* BREAK *																	
16:00	0	0	0	0	0	0	1	1	0	19	391	4	0	32	0	0	448
16:15	0	0	0	0	0	0	2	3	0	22	374	1	0	24	3	0	429
16:30	0	0	0	0	0	0	1	2	0	23	465	2	0	20	2	0	515
16:45	0	0	0	0	0	0	0	0	0	16	497	2	0	30	1	0	546
Hr Total	0	0	0	0	0	0	4	6	0	80	1727	9	0	106	6	0	1938
17:00	0	0	0	0	0	0	1	2	0	19	474	1	0	29	1	0	527
17:15	0	0	0	0	0	0	5	5	0	29	501	4	0	16	1	0	561
17:30	0	0	0	0	0	0	1	1	0	25	507	2	0	18	1	0	555
17:45	0	0	0	0	0	0	3	0	0	34	424	4	0	17	2	0	484
Hr Total	0	0	0	0	0	0	10	8	0	107	1906	11	0	80	5	0	2127
TOTAL	0	0	0	0	0	0	27	23	0	300	5925	36	0	286	15	0	6612

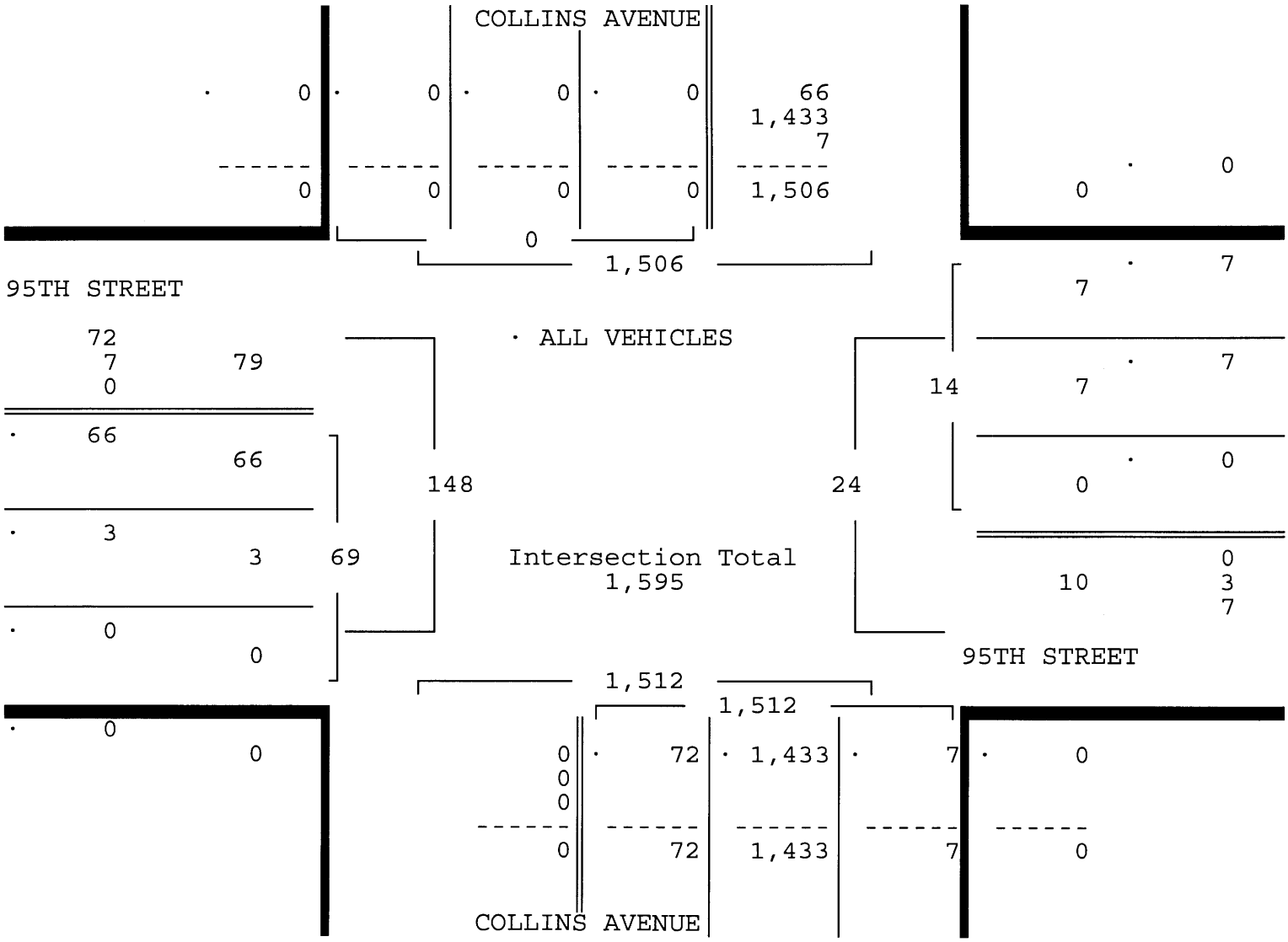
95TH STREET & COLLINS AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAXIE ESPINOSA
SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120106
Start Date: 08/30/12
File I.D. : 95ST_A1A
Page : 2

ALL VEHICLES

	COLLINS AVENUE From North				95TH STREET From East				COLLINS AVENUE From South				95TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/30/12																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 08/30/12																	
Peak start 08:00					08:00				08:00				08:00				
Volume	0	0	0	0	0	0	7	7	0	72	1433	7	0	66	3	0	
Percent	0%	0%	0%	0%	0%	0%	50%	50%	0%	5%	95%	0%	0%	96%	4%	0%	
Pk total	0				14				1512				69				
Highest	07:00				08:00				08:45				08:30				
Volume	0	0	0	0	0	0	2	4	0	16	395	1	0	22	0	0	
Hi total	0				6				412				22				
PHF	.0				.58				.92				.78				



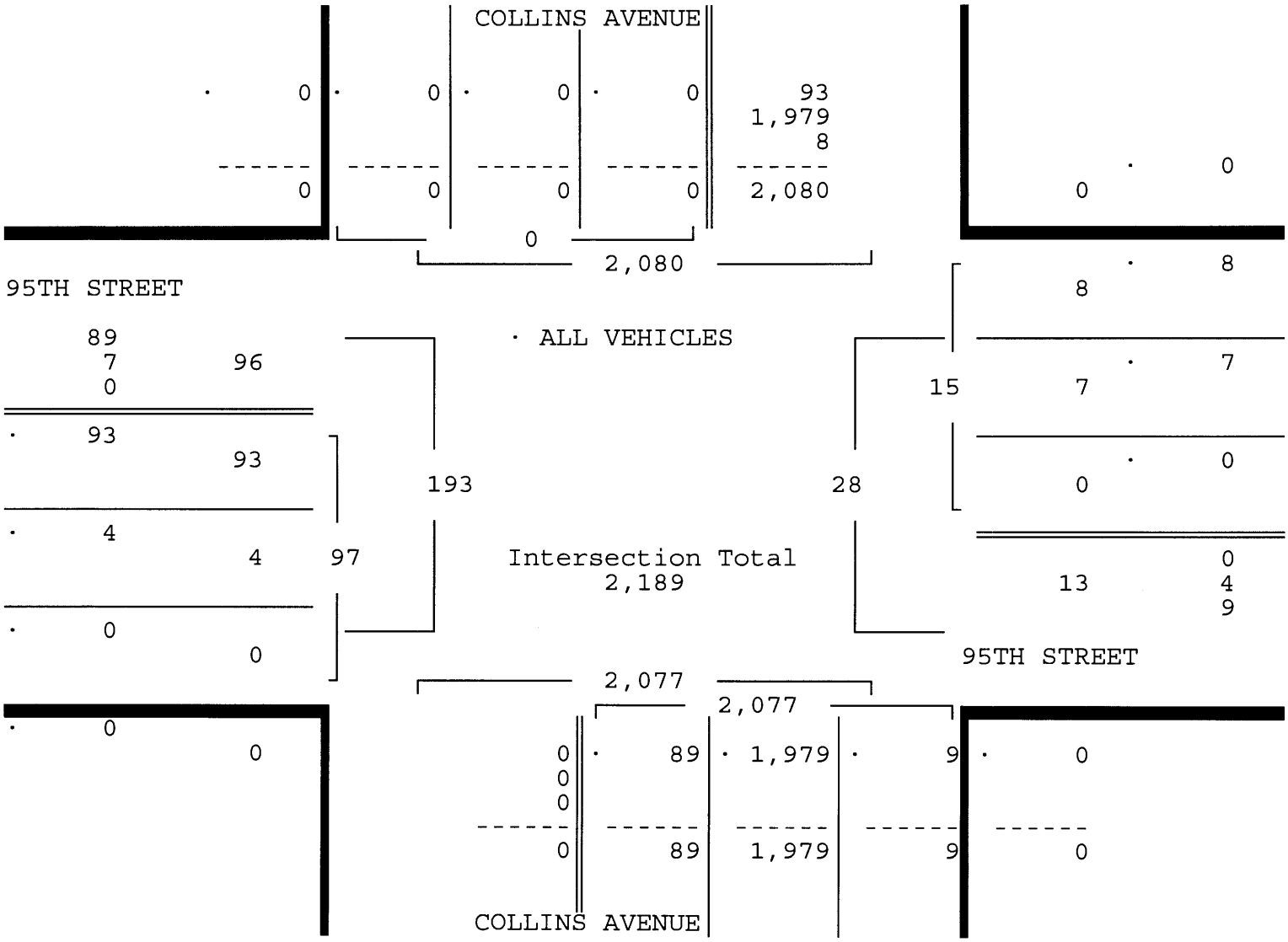
95TH STREET & COLLINS AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAXIE ESPINOSA
SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120106
Start Date: 08/30/12
File I.D. : 95ST_A1A
Page : 3

ALL VEHICLES

	COLLINS AVENUE From North				95TH STREET From East				COLLINS AVENUE From South				95TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/30/12																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 08/30/12																	
Peak start	16:45				16:45				16:45				16:45				
Volume	0	0	0	0	0	0	7	8	0	89	1979	9	0	93	4	0	
Percent	0%	0%	0%	0%	0%	0%	47%	53%	0%	4%	95%	0%	0%	96%	4%	0%	
Pk total	0				15				2077				97				
Highest	07:00				17:15				17:15				16:45				
Volume	0	0	0	0	0	0	5	5	0	29	501	4	0	30	1	0	
Hi total	0				10				534				31				
PHF	.0				.38				.97				.78				



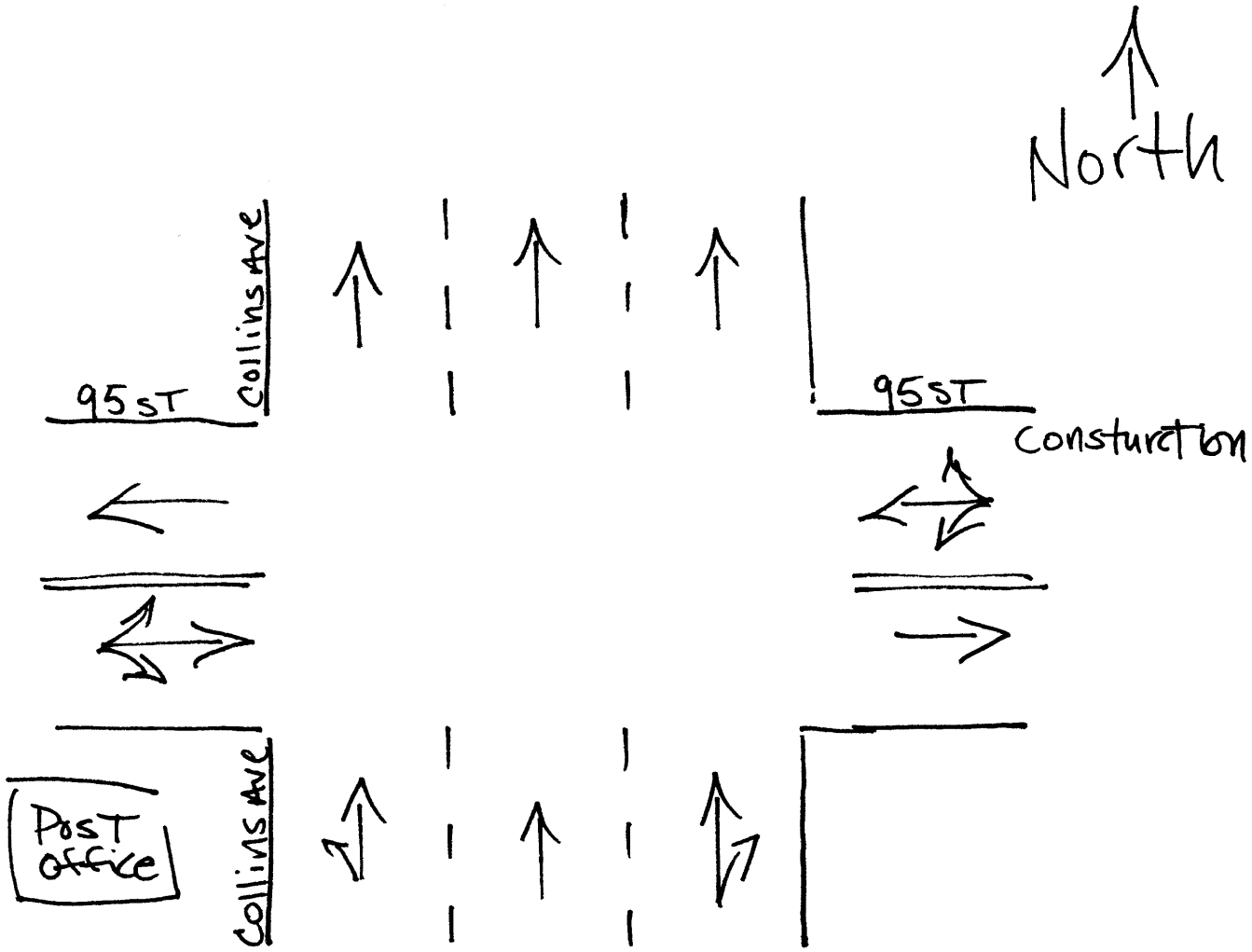
95TH STREET & COLLINS AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAXIE ESPINOSA
SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120106
Start Date: 08/30/12
File I.D. : 95ST_A1A
Page : 1

PEDESTRIANS

	COLLINS AVENUE From North				95TH STREET From East				COLLINS AVENUE From South				95TH STREET From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 08/30/12																	
07:00	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
07:15	0	0	0	2	0	0	0	4	0	0	0	4	0	0	0	3	13
07:30	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	2
07:45	0	0	0	1	0	0	0	0	0	0	0	6	0	0	0	7	14
Hr Total	0	0	0	4	0	0	0	4	0	0	0	15	0	0	0	10	33
08:00	0	0	0	1	0	0	0	2	0	0	0	5	0	0	0	1	9
08:15	0	0	0	0	0	0	0	4	0	0	0	6	0	0	0	6	16
08:30	0	0	0	3	0	0	0	5	0	0	0	3	0	0	0	4	15
08:45	0	0	0	3	0	0	0	7	0	0	0	5	0	0	0	5	20
Hr Total	0	0	0	7	0	0	0	18	0	0	0	19	0	0	0	16	60
* BREAK *																	
16:00	0	0	0	4	0	0	0	2	0	0	0	17	0	0	0	7	30
16:15	0	0	0	1	0	0	0	2	0	0	0	3	0	0	0	0	6
16:30	0	0	0	2	0	0	0	8	0	0	0	12	0	0	0	3	25
16:45	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	2	10
Hr Total	0	0	0	7	0	0	0	12	0	0	0	40	0	0	0	12	71
17:00	0	0	0	0	0	0	0	4	0	0	0	7	0	0	0	2	13
17:15	0	0	0	1	0	0	0	3	0	0	0	29	0	0	0	3	36
17:30	0	0	0	6	0	0	0	8	0	0	0	5	0	0	0	0	19
17:45	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	3	7
Hr Total	0	0	0	7	0	0	0	15	0	0	0	45	0	0	0	8	75
TOTAL	0	0	0	25	0	0	0	49	0	0	0	119	0	0	0	46	239



Surfside, Florida
August 30, 2012
drawn by: Luis Palomino
Signalized

94TH STREET & HARDING AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MARISA CRUZ
SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120106
Start Date: 08/30/12
File I.D. : 94STHARD
Page : 1

ALL VEHICLES

	HARDING AVENUE From North				94TH STREET From East				HARDING AVENUE From South				94TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/30/12																	
07:00	0	9	252	8	0	4	6	0	0	0	0	0	0	0	2	2	283
07:15	0	25	326	10	0	9	4	0	0	0	0	0	0	0	2	6	382
07:30	0	9	411	10	0	7	4	0	0	0	0	0	0	0	1	14	456
07:45	0	15	392	9	0	7	6	0	0	0	0	0	0	0	3	14	446
Hr Total	0	58	1381	37	0	27	20	0	0	0	0	0	0	0	8	36	1567
08:00	0	11	453	12	0	7	19	0	0	0	0	0	0	0	1	13	516
08:15	0	13	439	10	0	8	10	0	0	0	0	0	0	0	4	20	504
08:30	0	13	429	14	0	7	12	0	0	0	0	0	0	0	3	18	496
08:45	0	12	408	26	0	8	28	0	0	0	0	0	0	0	2	14	498
Hr Total	0	49	1729	62	0	30	69	0	0	0	0	0	0	0	10	65	2014
* BREAK *																	
16:00	0	9	387	29	0	18	27	0	0	0	0	0	0	0	4	29	503
16:15	0	19	352	20	0	9	18	0	0	0	0	0	0	0	1	27	446
16:30	0	14	358	16	0	18	33	0	0	0	0	0	0	0	8	22	469
16:45	0	12	336	30	0	10	30	0	0	0	0	0	0	0	5	21	444
Hr Total	0	54	1433	95	0	55	108	0	0	0	0	0	0	0	18	99	1862
17:00	0	9	409	39	0	11	34	0	0	0	0	0	0	0	4	28	534
17:15	0	14	403	33	0	14	28	0	0	0	0	0	0	0	4	26	522
17:30	0	14	411	34	0	18	29	0	0	0	0	0	0	0	4	38	548
17:45	0	17	398	32	0	9	32	0	0	0	0	0	0	0	6	32	526
Hr Total	0	54	1621	138	0	52	123	0	0	0	0	0	0	0	18	124	2130
TOTAL	0	215	6164	332	0	164	320	0	0	0	0	0	0	0	54	324	7573

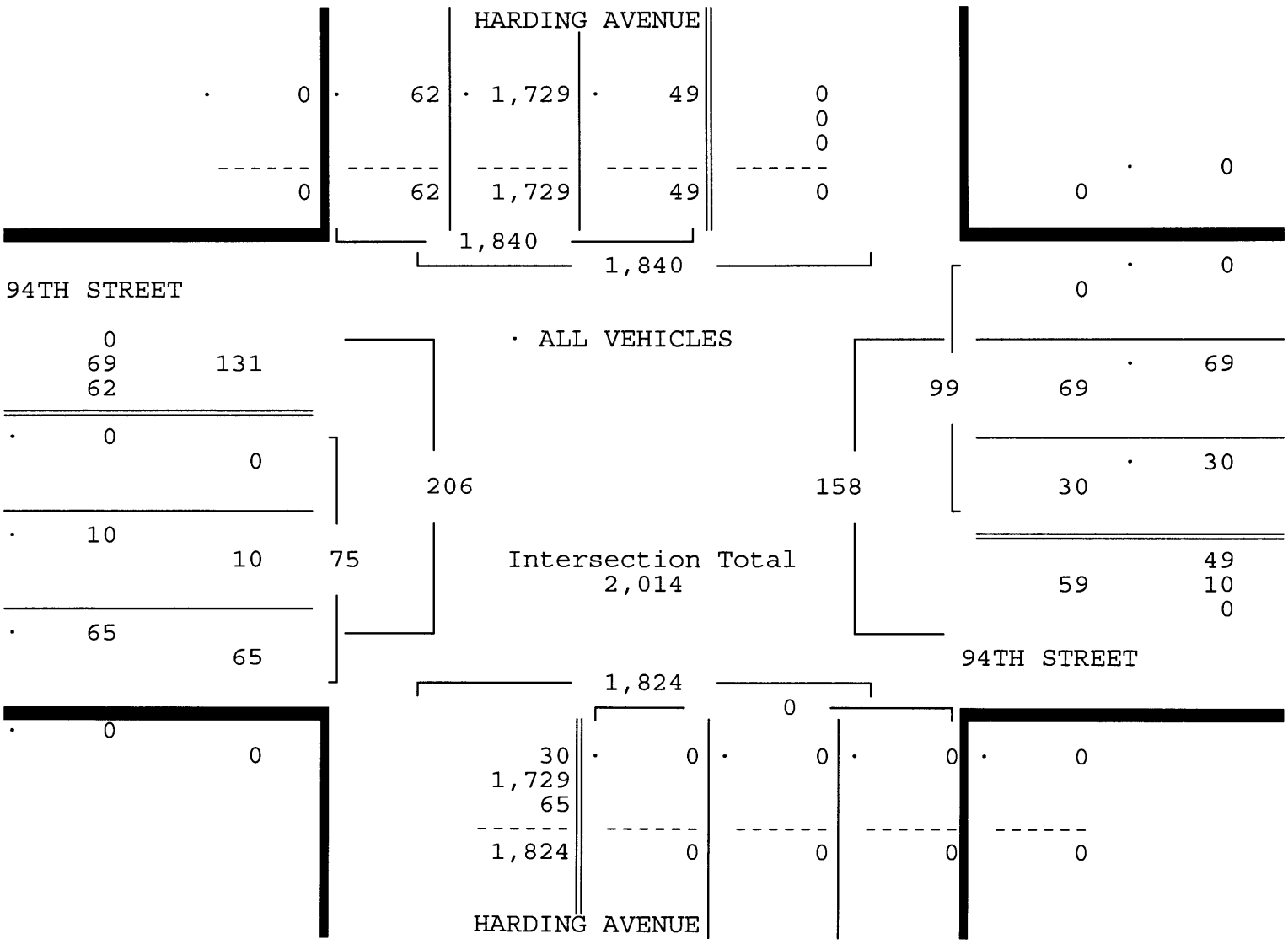
94TH STREET & HARDING AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MARISA CRUZ
SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120106
Start Date: 08/30/12
File I.D. : 94STHARD
Page : 2

ALL VEHICLES

	HARDING AVENUE From North				94TH STREET From East				HARDING AVENUE From South				94TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/30/12																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 08/30/12																	
Peak start 08:00					08:00				08:00				08:00				
Volume	0	49	1729	62	0	30	69	0	0	0	0	0	0	0	10	65	
Percent	0%	3%	94%	3%	0%	30%	70%	0%	0%	0%	0%	0%	0%	0%	13%	87%	
Pk total	1840				99				0				75				
Highest	08:00				08:45				07:00				08:15				
Volume	0	11	453	12	0	8	28	0	0	0	0	0	0	0	4	20	
Hi total	476				36				0				24				
PHF	.97				.69				.0				.78				



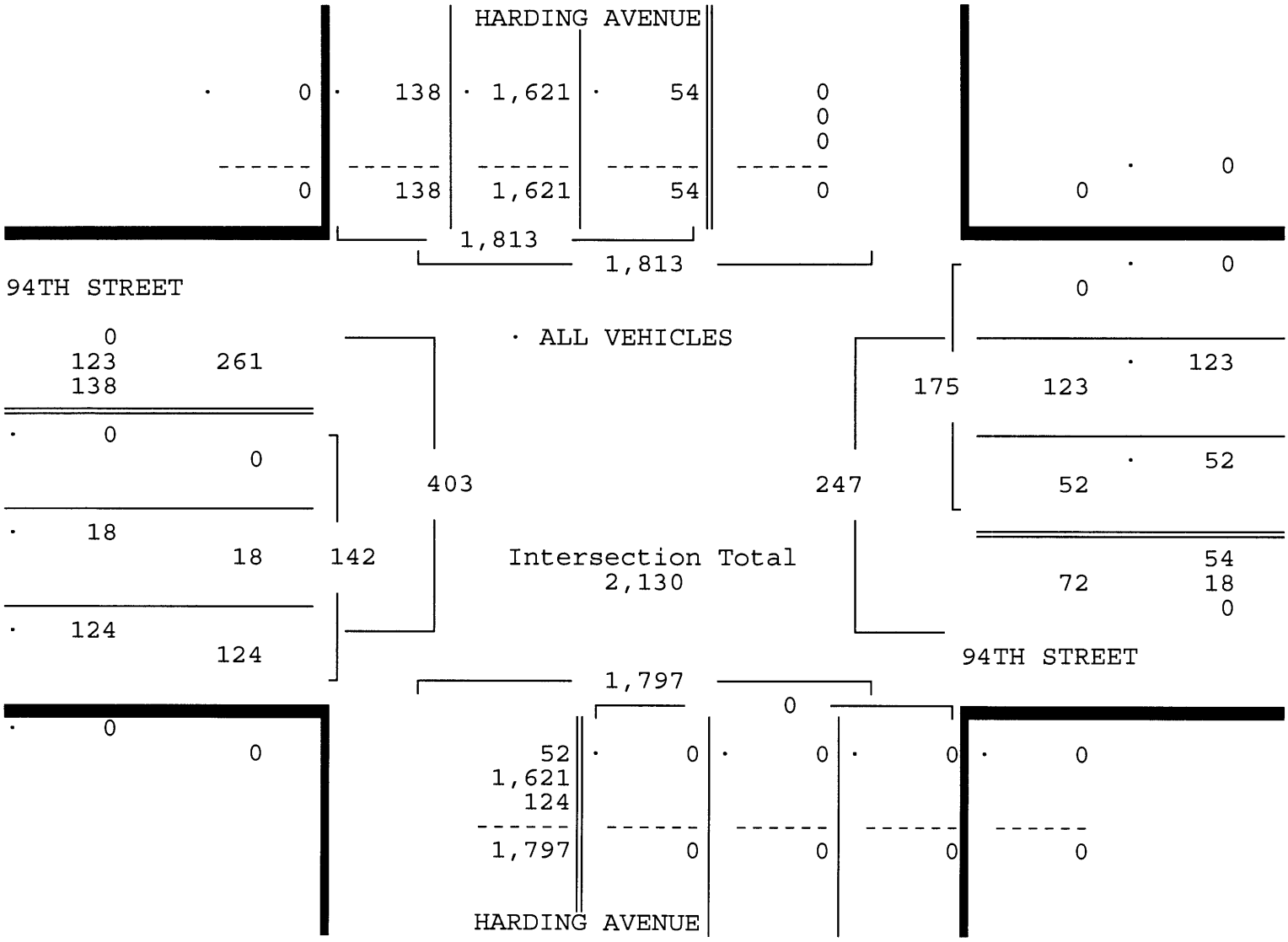
94TH STREET & HARDING AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MARISA CRUZ
SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120106
Start Date: 08/30/12
File I.D. : 94STHARD
Page : 3

ALL VEHICLES

	HARDING AVENUE From North				94TH STREET From East				HARDING AVENUE From South				94TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/30/12																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 08/30/12																	
Peak start 17:00					17:00				17:00				17:00				
Volume	0	54	1621	138	0	52	123	0	0	0	0	0	0	0	18	124	
Percent	0%	3%	89%	8%	0%	30%	70%	0%	0%	0%	0%	0%	0%	0%	13%	87%	
Pk total	1813				175				0				142				
Highest	17:30				17:30				07:00				17:30				
Volume	0	14	411	34	0	18	29	0	0	0	0	0	0	0	4	38	
Hi total	459				47				0				42				
PHF	.99				.93				.0				.85				



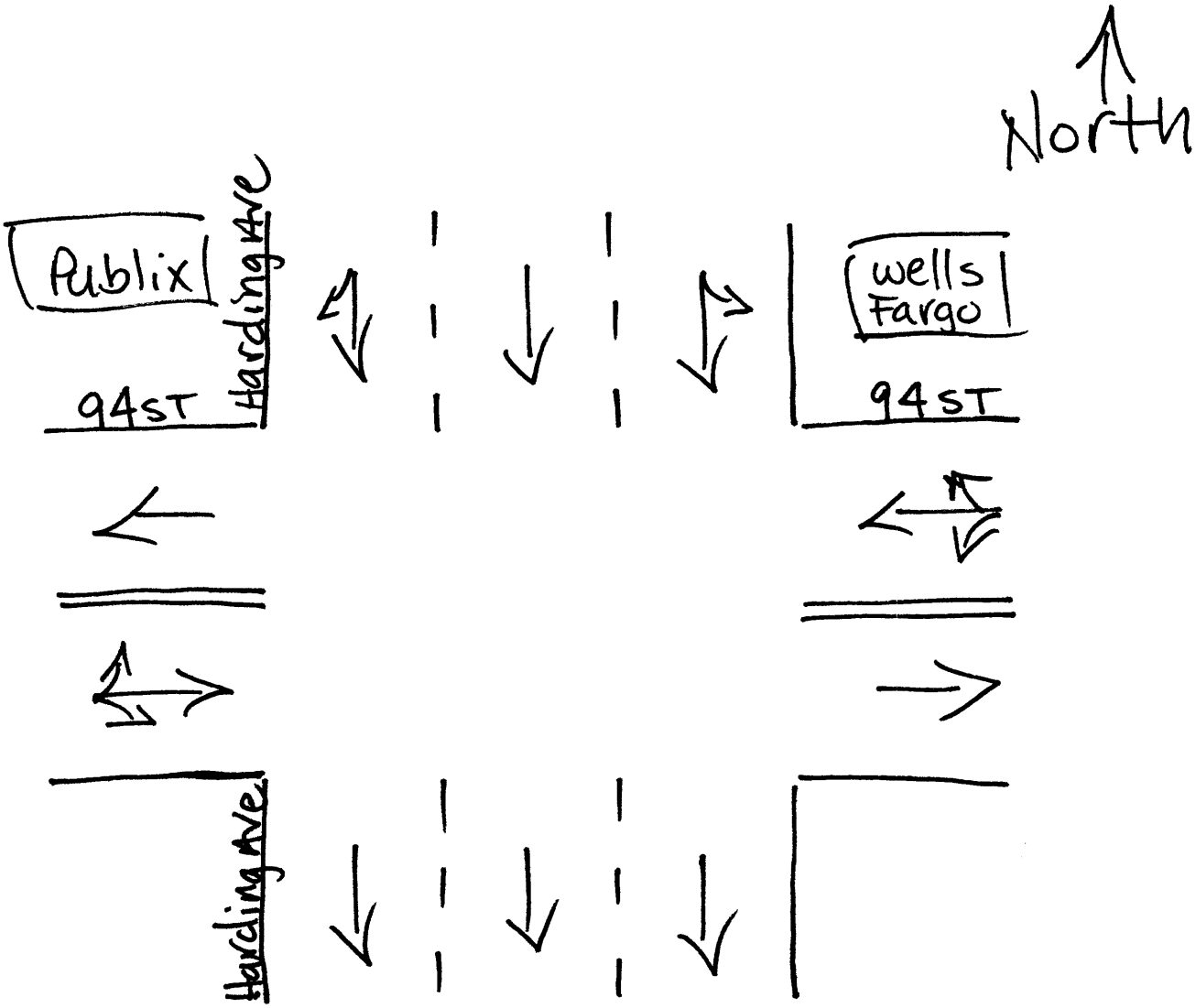
94TH STREET & HARDING AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MARISA CRUZ
SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120106
Start Date: 08/30/12
File I.D. : 94STHARD
Page : 1

PEDESTRIANS

	HARDING AVENUE From North				94TH STREET From East				HARDING AVENUE From South				94TH STREET From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 08/30/12																	
07:00	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	1	6
07:15	0	0	0	5	0	0	0	0	0	0	0	1	0	0	0	2	8
07:30	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	3
07:45	0	0	0	14	0	0	0	1	0	0	0	1	0	0	0	1	17
Hr Total	0	0	0	25	0	0	0	2	0	0	0	2	0	0	0	5	34
08:00	0	0	0	9	0	0	0	4	0	0	0	1	0	0	0	3	17
08:15	0	0	0	17	0	0	0	3	0	0	0	2	0	0	0	3	25
08:30	0	0	0	13	0	0	0	5	0	0	0	1	0	0	0	0	19
08:45	0	0	0	13	0	0	0	6	0	0	0	2	0	0	0	4	25
Hr Total	0	0	0	52	0	0	0	18	0	0	0	6	0	0	0	10	86
* BREAK *																	
16:00	0	0	0	15	0	0	0	1	0	0	0	1	0	0	0	6	23
16:15	0	0	0	6	0	0	0	8	0	0	0	0	0	0	0	1	15
16:30	0	0	0	17	0	0	0	7	0	0	0	8	0	0	0	4	36
16:45	0	0	0	10	0	0	0	2	0	0	0	0	0	0	0	5	17
Hr Total	0	0	0	48	0	0	0	18	0	0	0	9	0	0	0	16	91
17:00	0	0	0	25	0	0	0	18	0	0	0	2	0	0	0	6	51
17:15	0	0	0	6	0	0	0	4	0	0	0	0	0	0	0	7	17
17:30	0	0	0	2	0	0	0	3	0	0	0	1	0	0	0	11	17
17:45	0	0	0	6	0	0	0	3	0	0	0	0	0	0	0	4	13
Hr Total	0	0	0	39	0	0	0	28	0	0	0	3	0	0	0	28	98
TOTAL	0	0	0	164	0	0	0	66	0	0	0	20	0	0	0	59	309



Surfside, Florida
August 30, 2012
drawn by: Luis Palomino
Signalized

94TH STREET & COLLINS AVENUE
SURFSIDE, FLORIDA
COUNTED BY: LUIS PALOMINO
SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120106
Start Date: 08/30/12
File I.D. : 94STCOLL
Page : 1

ALL VEHICLES

	COLLINS AVENUE From North				94TH STREET From East				COLLINS AVENUE From South				94TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/30/12																	
07:00	0	0	0	0	0	0	2	1	0	11	175	0	0	4	0	0	193
07:15	0	0	0	0	0	0	3	2	0	23	183	0	0	7	2	0	220
07:30	0	0	0	0	0	0	2	0	0	26	218	1	0	4	0	0	251
07:45	0	0	0	0	0	0	0	1	0	12	293	0	0	8	0	0	314
Hr Total	0	0	0	0	0	0	7	4	0	72	869	1	0	23	2	0	978
08:00	0	0	0	0	0	0	1	3	0	21	335	2	0	8	1	0	371
08:15	0	0	0	0	0	0	2	2	0	15	376	0	0	15	0	0	410
08:30	0	0	0	0	0	0	2	2	0	16	330	1	0	13	0	0	364
08:45	0	0	0	0	0	0	3	2	0	28	400	0	0	8	0	0	441
Hr Total	0	0	0	0	0	0	8	9	0	80	1441	3	0	44	1	0	1586
* BREAK *																	
16:00	0	0	0	0	0	0	0	2	0	30	403	0	0	10	2	0	447
16:15	0	0	0	0	0	0	1	0	0	26	361	0	0	25	1	0	414
16:30	0	0	0	0	0	0	2	2	0	31	446	0	0	24	0	0	505
16:45	0	0	0	0	0	0	1	1	0	35	476	0	0	14	1	0	528
Hr Total	0	0	0	0	0	0	4	5	0	122	1686	0	0	73	4	0	1894
17:00	0	0	0	0	0	0	1	0	0	42	467	1	0	17	1	0	529
17:15	0	0	0	0	0	0	1	2	0	32	500	0	0	24	0	0	559
17:30	0	0	0	0	0	0	3	0	0	27	512	0	0	27	1	0	570
17:45	0	0	0	0	0	0	4	3	0	30	429	2	0	23	0	0	491
Hr Total	0	0	0	0	0	0	9	5	0	131	1908	3	0	91	2	0	2149
TOTAL	0	0	0	0	0	0	28	23	0	405	5904	7	0	231	9	0	6607

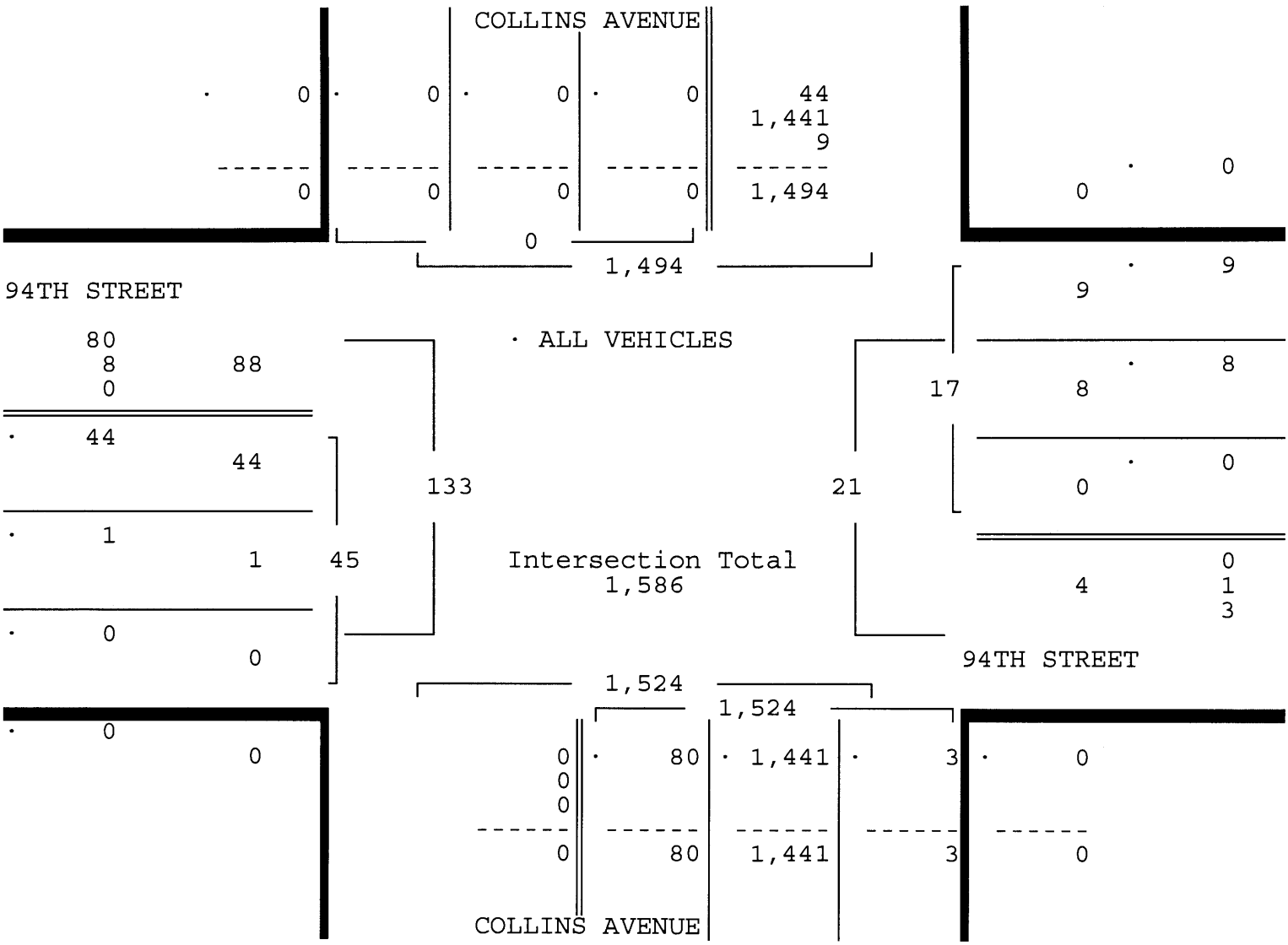
94TH STREET & COLLINS AVENUE
SURFSIDE, FLORIDA
COUNTED BY: LUIS PALOMINO
SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120106
Start Date: 08/30/12
File I.D. : 94STCOLL
Page : 2

ALL VEHICLES

	COLLINS AVENUE From North				94TH STREET From East				COLLINS AVENUE From South				94TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/30/12																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 08/30/12																	
Peak start 08:00					08:00				08:00				08:00				
Volume	0	0	0	0	0	0	8	9	0	80	1441	3	0	44	1	0	
Percent	0%	0%	0%	0%	0%	0%	47%	53%	0%	5%	95%	0%	0%	98%	2%	0%	
Pk total	0				17				1524				45				
Highest	07:00				08:45				08:45				08:15				
Volume	0	0	0	0	0	0	3	2	0	28	400	0	0	15	0	0	
Hi total	0				5				428				15				
PHF	.0				.85				.89				.75				



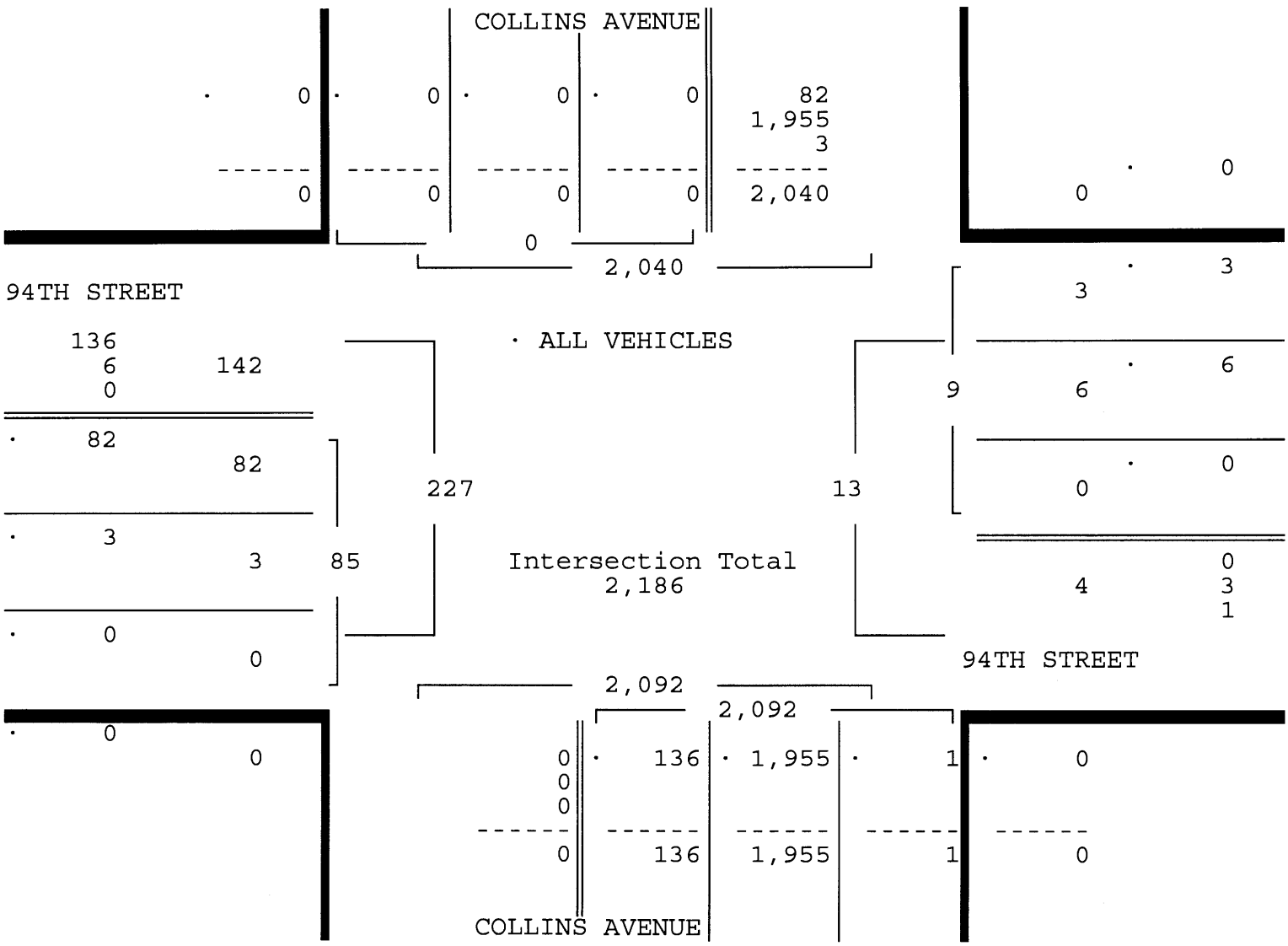
94TH STREET & COLLINS AVENUE
SURFSIDE, FLORIDA
COUNTED BY: LUIS PALOMINO
SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120106
Start Date: 08/30/12
File I.D. : 94STCOLL
Page : 3

ALL VEHICLES

	COLLINS AVENUE From North				94TH STREET From East				COLLINS AVENUE From South				94TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 08/30/12																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 08/30/12																	
Peak start 16:45					16:45				16:45				16:45				
Volume	0	0	0	0	0	0	6	3	0	136	1955	1	0	82	3	0	
Percent	0%	0%	0%	0%	0%	0%	67%	33%	0%	7%	93%	0%	0%	96%	4%	0%	
Pk total	0				9				2092				85				
Highest	07:00				17:15				17:30				17:30				
Volume	0	0	0	0	0	0	1	2	0	27	512	0	0	27	1	0	
Hi total	0				3				539				28				
PHF	.0				.75				.97				.76				



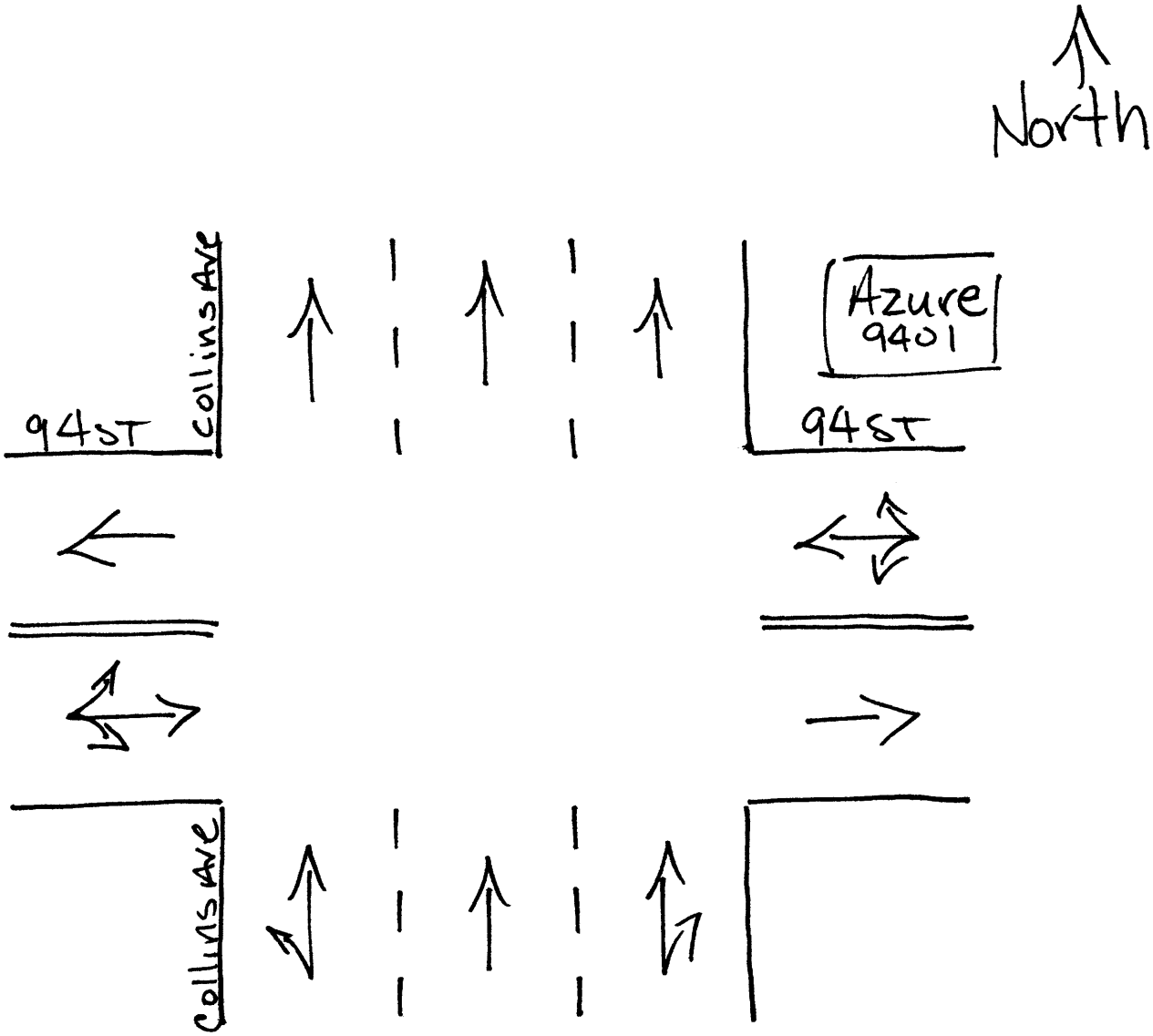
94TH STREET & COLLINS AVENUE
SURFSIDE, FLORIDA
COUNTED BY: LUIS PALOMINO
SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120106
Start Date: 08/30/12
File I.D. : 94STCOLL
Page : 1

PEDESTRIANS

	COLLINS AVENUE From North				94TH STREET From East				COLLINS AVENUE From South				94TH STREET From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 08/30/12																	
07:00	0	0	0	1	0	0	0	2	0	0	0	4	0	0	0	4	11
07:15	0	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	5
07:30	0	0	0	3	0	0	0	2	0	0	0	9	0	0	0	7	21
07:45	0	0	0	8	0	0	0	3	0	0	0	10	0	0	0	5	26
Hr Total	0	0	0	14	0	0	0	7	0	0	0	26	0	0	0	16	63
08:00	0	0	0	5	0	0	0	1	0	0	0	9	0	0	0	3	18
08:15	0	0	0	0	0	0	0	2	0	0	0	13	0	0	0	2	17
08:30	0	0	0	2	0	0	0	3	0	0	0	8	0	0	0	1	14
08:45	0	0	0	2	0	0	0	4	0	0	0	12	0	0	0	4	22
Hr Total	0	0	0	9	0	0	0	10	0	0	0	42	0	0	0	10	71
* BREAK *																	
16:00	0	0	0	5	0	0	0	0	0	0	0	15	0	0	0	5	25
16:15	0	0	0	6	0	0	0	2	0	0	0	10	0	0	0	3	21
16:30	0	0	0	5	0	0	0	8	0	0	0	16	0	0	0	3	32
16:45	0	0	0	1	0	0	0	4	0	0	0	10	0	0	0	5	20
Hr Total	0	0	0	17	0	0	0	14	0	0	0	51	0	0	0	16	98
17:00	0	0	0	1	0	0	0	4	0	0	0	8	0	0	0	2	15
17:15	0	0	0	7	0	0	0	4	0	0	0	12	0	0	0	0	23
17:30	0	0	0	5	0	0	0	1	0	0	0	14	0	0	0	4	24
17:45	0	0	0	3	0	0	0	2	0	0	0	2	0	0	0	3	10
Hr Total	0	0	0	16	0	0	0	11	0	0	0	36	0	0	0	9	72
TOTAL	0	0	0	56	0	0	0	42	0	0	0	155	0	0	0	51	304



Surfside, Florida
August 30, 2012
drawn by: Luis Palomino
signalized

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

94TH STREET & BAY DRIVE
SURFSIDE, FLORIDA
COUNTED BY: MARISA CRUZ
NOT SIGNALIZED

Site Code : 00120107
Start Date: 09/04/12
File I.D. : 94ST_BAY
Page : 1

ALL VEHICLES

	BAY DRIVE From North				94TH STREET From East				BAY DRIVE From South				94TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/04/12																	
07:00	0	0	2	0	0	0	0	0	0	0	3	1	0	0	0	0	6
07:15	0	1	2	0	0	0	0	0	0	0	9	2	0	0	0	0	14
07:30	0	1	4	0	0	1	0	0	0	0	24	2	0	0	0	0	32
07:45	0	1	7	0	0	0	0	0	0	0	21	5	0	0	0	0	34
Hr Total	0	3	15	0	0	1	0	0	0	0	57	10	0	0	0	0	86
08:00	0	2	7	0	0	0	0	2	1	0	27	2	0	0	0	0	41
08:15	0	2	11	0	0	1	0	3	0	0	14	4	0	0	0	0	35
08:30	0	2	11	0	0	0	0	1	0	0	3	3	0	0	0	0	20
08:45	0	0	9	0	0	0	0	1	0	0	14	2	0	0	0	0	26
Hr Total	0	6	38	0	0	1	0	7	1	0	58	11	0	0	0	0	122
---------- * BREAK * ----------																	
16:00	0	2	12	0	0	1	0	1	0	0	8	1	0	0	0	0	25
16:15	0	1	14	0	0	0	0	1	0	0	9	5	0	0	0	0	30
16:30	0	2	10	0	0	2	0	1	1	0	3	0	0	0	0	0	19
16:45	0	0	8	0	0	0	0	1	0	0	5	1	0	0	0	0	15
Hr Total	0	5	44	0	0	3	0	4	1	0	25	7	0	0	0	0	89
17:00	0	5	10	0	0	2	0	0	0	0	5	3	0	0	0	0	25
17:15	0	2	12	0	1	0	0	2	0	0	8	10	0	0	0	0	35
17:30	0	1	9	0	0	1	0	0	0	0	8	2	0	0	0	0	21
17:45	0	0	9	0	0	0	0	1	0	0	8	5	0	0	0	0	23
Hr Total	0	8	40	0	1	3	0	3	0	0	29	20	0	0	0	0	104
TOTAL	0	22	137	0	1	8	0	14	2	0	169	48	0	0	0	0	401

Traffic Survey Specialists, Inc.
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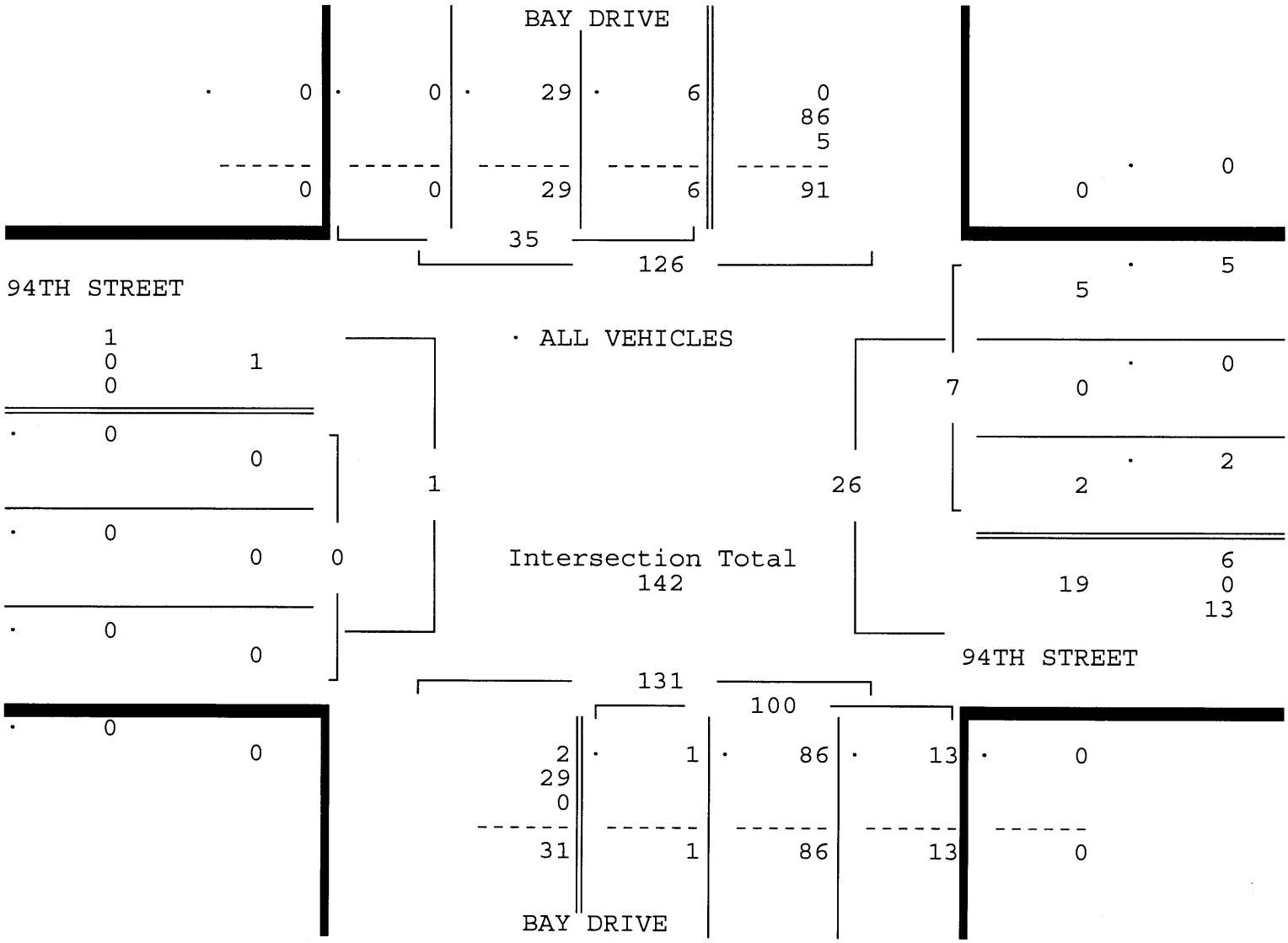
Delray Beach, Florida 33444
Phone (561) 272-3255

94TH STREET & BAY DRIVE
SURFSIDE, FLORIDA
COUNTED BY: MARISA CRUZ
NOT SIGNALIZED

Site Code : 00120107
Start Date: 09/04/12
File I.D. : 94ST_BAY
Page : 2

ALL VEHICLES

	BAY DRIVE From North				94TH STREET From East				BAY DRIVE From South				94TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/04/12																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 09/04/12																	
Peak start 07:30					07:30				07:30				07:30				
Volume	0	6	29	0	0	2	0	5	1	0	86	13	0	0	0	0	
Percent	0%	17%	83%	0%	0%	29%	0%	71%	1%	0%	86%	13%	0%	0%	0%	0%	
Pk total	35				7				100				0				
Highest	08:15				08:15				08:00				07:00				
Volume	0	2	11	0	0	1	0	3	1	0	27	2	0	0	0	0	
Hi total	13				4				30				0				
PHF	.67				.44				.83				.0				



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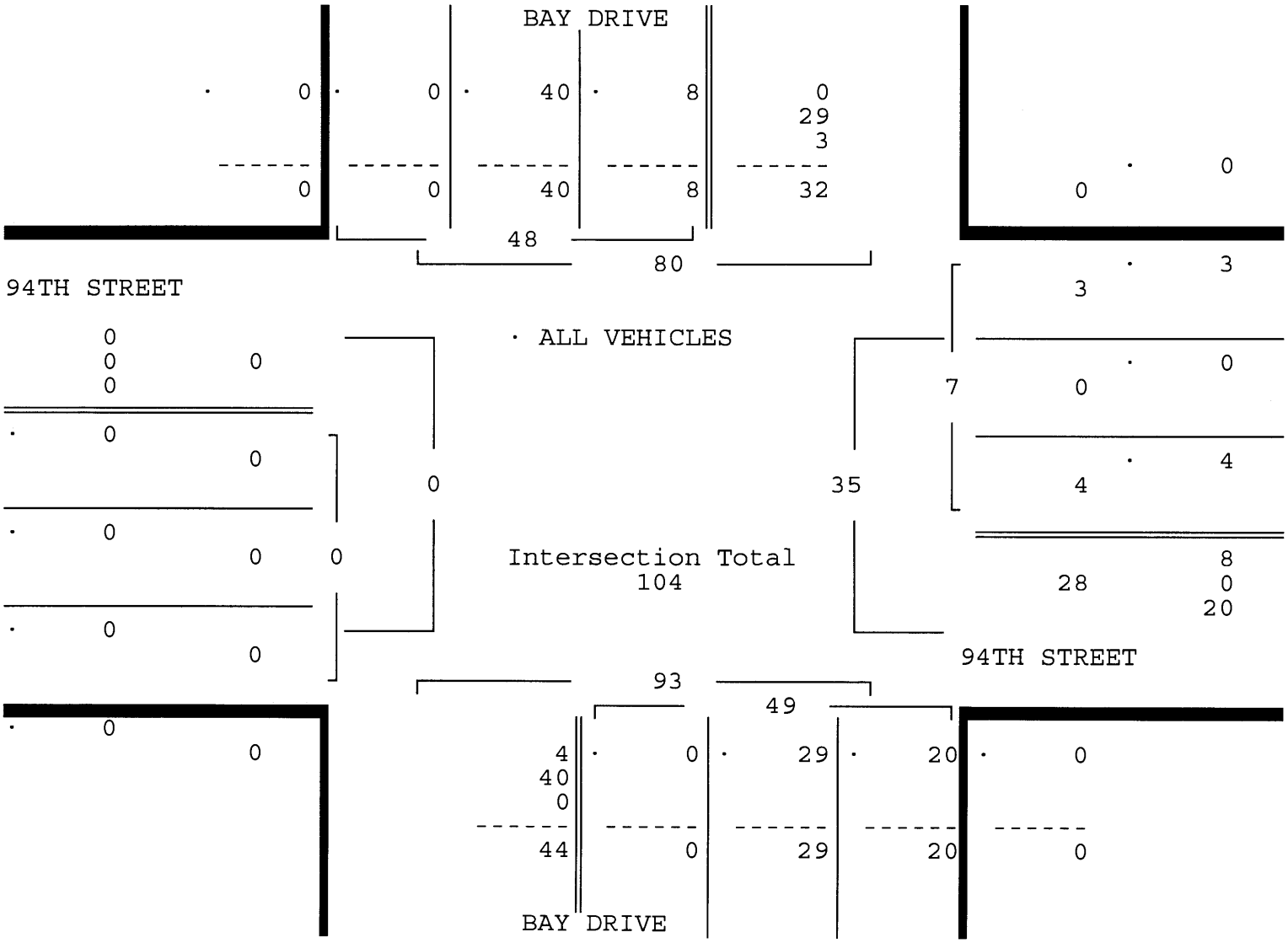
94TH STREET & BAY DRIVE
SURFSIDE, FLORIDA
COUNTED BY: MARISA CRUZ
NOT SIGNALIZED

Site Code : 00120107
Start Date: 09/04/12
File I.D. : 94ST_BAY
Page : 3

ALL VEHICLES

	BAY DRIVE From North				94TH STREET From East				BAY DRIVE From South				94TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/04/12																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 09/04/12																	
Peak start 17:00					17:00				17:00				17:00				
Volume	0	8	40	0	1	3	0	3	0	0	29	20	0	0	0	0	
Percent	0%	17%	83%	0%	14%	43%	0%	43%	0%	0%	59%	41%	0%	0%	0%	0%	
Pk total	48				7				49				0				
Highest	17:00				17:15				17:15				07:00				
Volume	0	5	10	0	1	0	0	2	0	0	8	10	0	0	0	0	
Hi total	15				3				18				0				
PHF	.80				.58				.68				.0				


BAY DRIVE
0
0
40
8
0
29
3
0
0
40
8
32
48
80
94TH STREET
0
0
0

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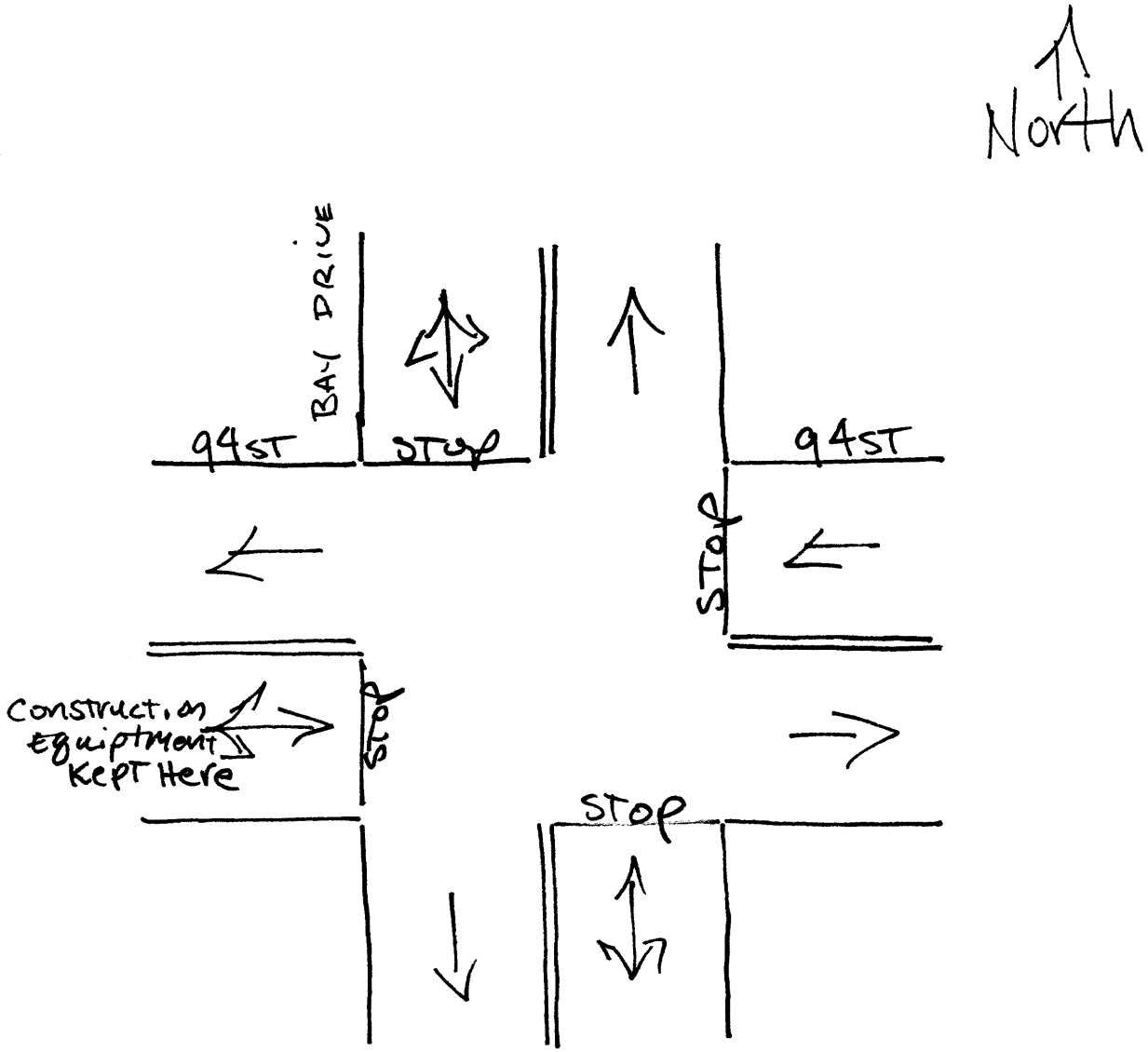
94TH STREET & BAY DRIVE
SURFSIDE, FLORIDA
COUNTED BY: MARISA CRUZ
NOT SIGNALIZED

Site Code : 00120107
Start Date: 09/04/12
File I.D. : 94ST_BAY
Page : 1

PEDESTRIANS

	BAY DRIVE From North				94TH STREET From East				BAY DRIVE From South				94TH STREET From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 09/04/12																	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	9
Hr Total	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	11
08:00	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	6
08:15	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5
08:30	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	13
---------- * BREAK * ----------																	
16:00	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
16:45	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Hr Total	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3
17:45	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2
Hr Total	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	1	5
TOTAL	0	0	0	0	0	0	0	32	0	0	0	0	0	0	0	1	33



Surfside, Florida

September 04, 2012

drawn by: Luis Palomino

NOT Signalized

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
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91ST STREET & ABBOTT AVENUE
SURFSIDE, FLORIDA
COUNTED BY: AMBER PALOMINO
NOT SIGNALIZED

Site Code : 00120106
Start Date: 09/04/12
File I.D. : 91STABBO
Page : 1

ALL VEHICLES

	ABBOTT AVENUE From North				91ST STREET From East				ABBOTT AVENUE From South				91ST STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/04/12																	
07:00	0	0	0	1	0	1	5	0	0	0	2	0	0	0	9	0	18
07:15	0	2	0	0	1	0	2	1	0	0	2	1	0	1	3	0	13
07:30	0	0	0	1	0	1	9	1	0	1	0	0	0	0	1	0	14
07:45	0	2	1	0	0	0	7	3	0	2	3	1	0	1	6	1	27
Hr Total	0	4	1	2	1	2	23	5	0	3	7	2	0	2	19	1	72
08:00	0	2	1	0	0	0	12	4	0	3	3	0	0	1	3	1	30
08:15	0	1	7	1	0	1	12	0	0	0	6	0	0	0	6	0	34
08:30	0	0	0	0	0	0	7	0	0	0	5	0	0	1	6	1	20
08:45	0	3	0	0	0	0	12	1	0	1	2	0	0	2	6	0	27
Hr Total	0	6	8	1	0	1	43	5	0	4	16	0	0	4	21	2	111
* BREAK *																	
16:00	0	0	1	1	0	0	9	1	0	1	1	1	0	1	14	1	31
16:15	0	0	1	1	0	0	8	0	0	0	2	0	0	1	9	0	22
16:30	0	1	2	1	0	1	6	0	0	0	3	0	0	2	14	2	32
16:45	0	1	0	1	0	0	11	3	0	0	5	1	0	1	13	1	37
Hr Total	0	2	4	4	0	1	34	4	0	1	11	2	0	5	50	4	122
17:00	0	0	0	1	0	0	9	1	0	2	2	2	0	0	8	3	28
17:15	0	1	1	0	0	0	8	0	0	2	0	0	0	0	8	0	20
17:30	0	2	0	0	0	1	11	2	0	0	0	1	0	1	8	1	27
17:45	0	0	1	1	0	0	11	1	0	0	2	0	0	0	8	1	25
Hr Total	0	3	2	2	0	1	39	4	0	4	4	3	0	1	32	5	100
TOTAL	0	15	15	9	1	5	139	18	0	12	38	7	0	12	122	12	405

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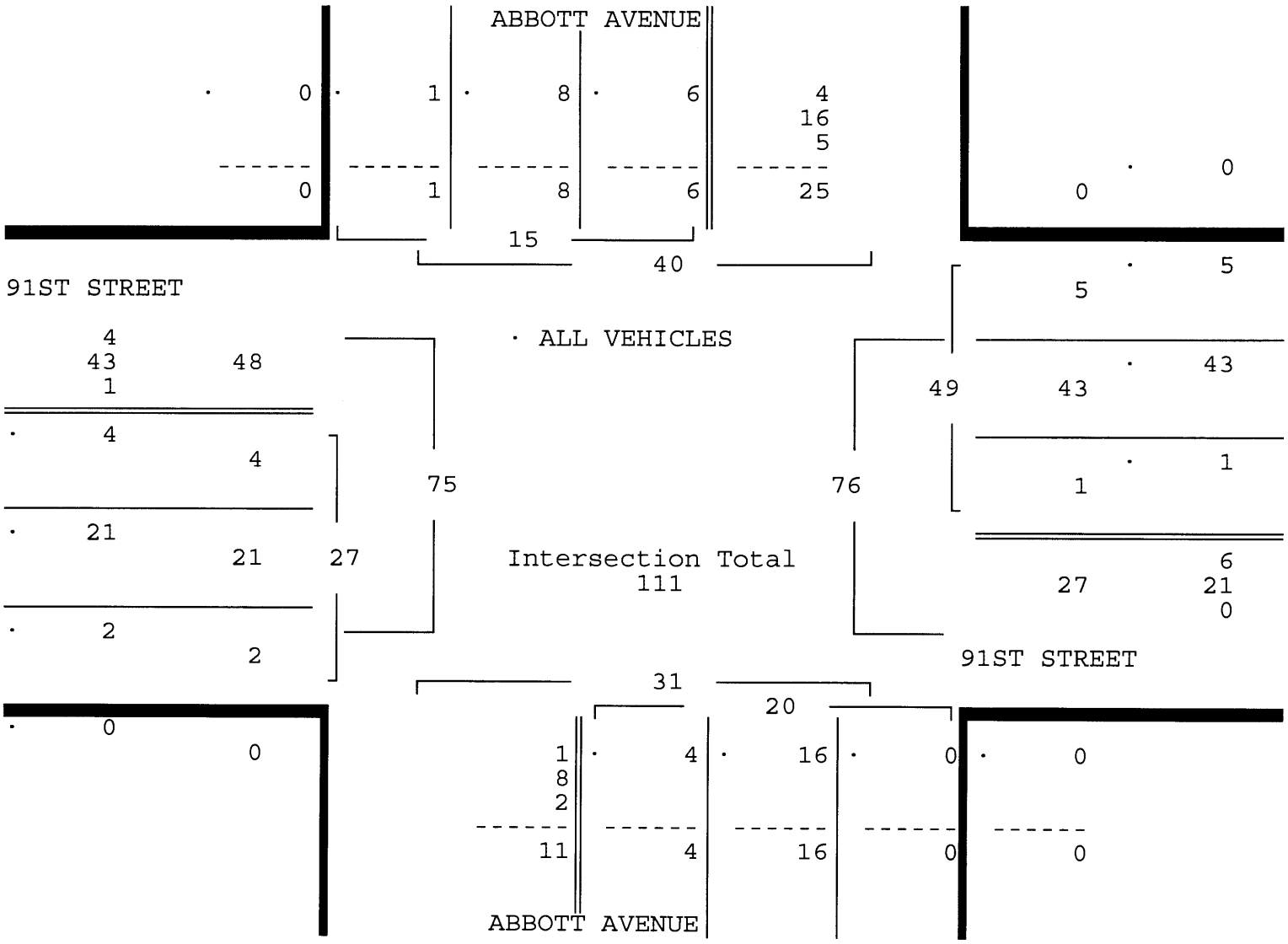
91ST STREET & ABBOTT AVENUE
SURFSIDE, FLORIDA
COUNTED BY: AMBER PALOMINO
NOT SIGNALIZED

Site Code : 00120106
Start Date: 09/04/12
File I.D. : 91STABBO
Page : 2

ALL VEHICLES

	ABBOTT AVENUE From North				91ST STREET From East				ABBOTT AVENUE From South				91ST STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/04/12																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 09/04/12																	
Peak start 08:00					08:00				08:00				08:00				
Volume	0	6	8	1	0	1	43	5	0	4	16	0	0	4	21	2	
Percent	0%	40%	53%	7%	0%	2%	88%	10%	0%	20%	80%	0%	0%	15%	78%	7%	
Pk total	15				49				20				27				
Highest	08:15				08:00				08:00				08:30				
Volume	0	1	7	1	0	0	12	4	0	3	3	0	0	1	6	1	
Hi total	9				16				6				8				
PHF	.42				.77				.83				.84				



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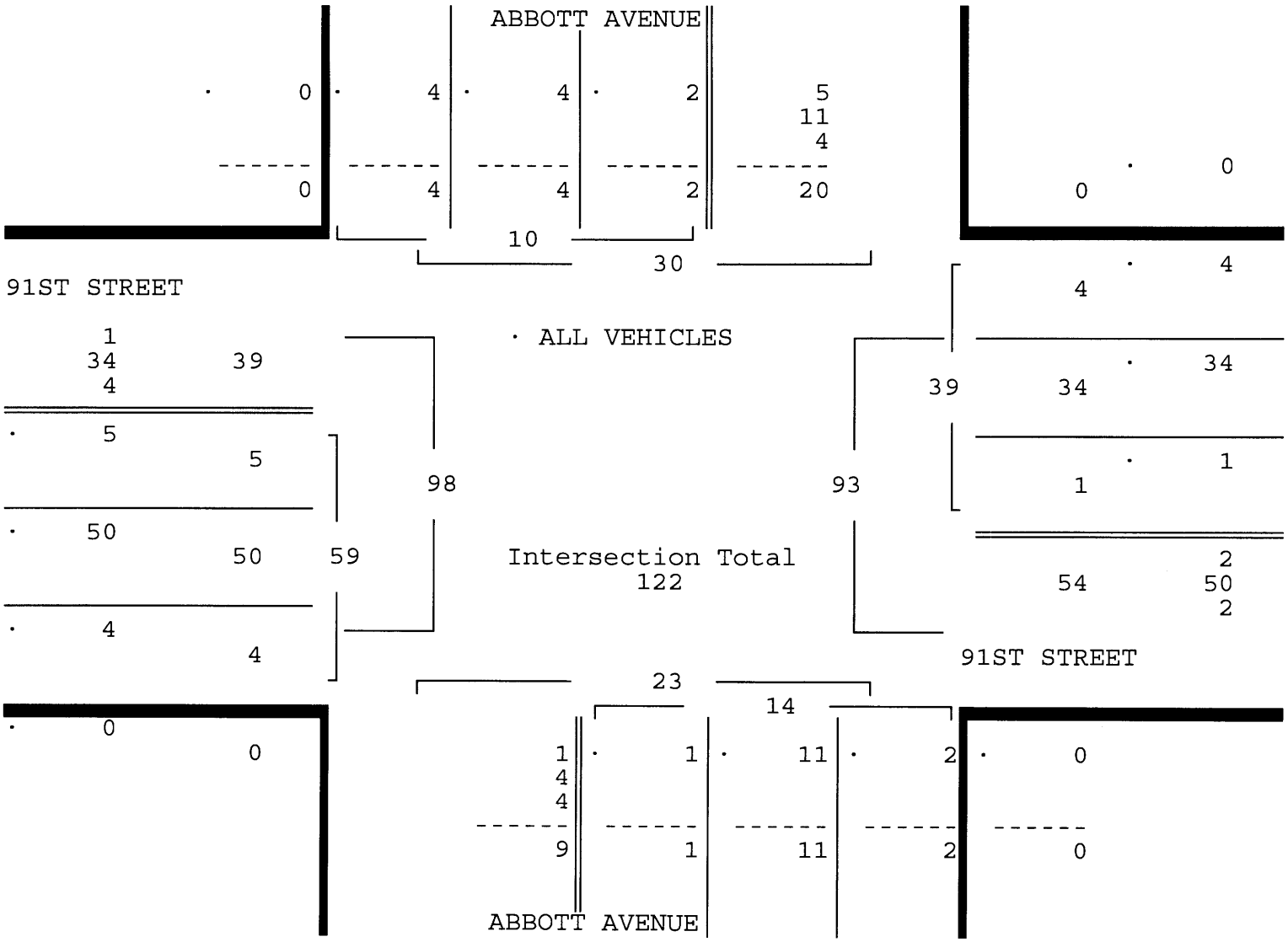
91ST STREET & ABBOTT AVENUE
SURFSIDE, FLORIDA
COUNTED BY: AMBER PALOMINO
NOT SIGNALIZED

Site Code : 00120106
Start Date: 09/04/12
File I.D. : 91STABBO
Page : 3

ALL VEHICLES

	ABBOTT AVENUE From North				91ST STREET From East				ABBOTT AVENUE From South				91ST STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/04/12																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 09/04/12																	
Peak start 16:00					16:00				16:00				16:00				
Volume	0	2	4	4	0	1	34	4	0	1	11	2	0	5	50	4	
Percent	0%	20%	40%	40%	0%	3%	87%	10%	0%	7%	79%	14%	0%	8%	85%	7%	
Pk total	10				39				14				59				
Highest	16:30				16:45				16:45				16:30				
Volume	0	1	2	1	0	0	11	3	0	0	5	1	0	2	14	2	
Hi total	4				14				6				18				
PHF	.62				.70				.58				.82				



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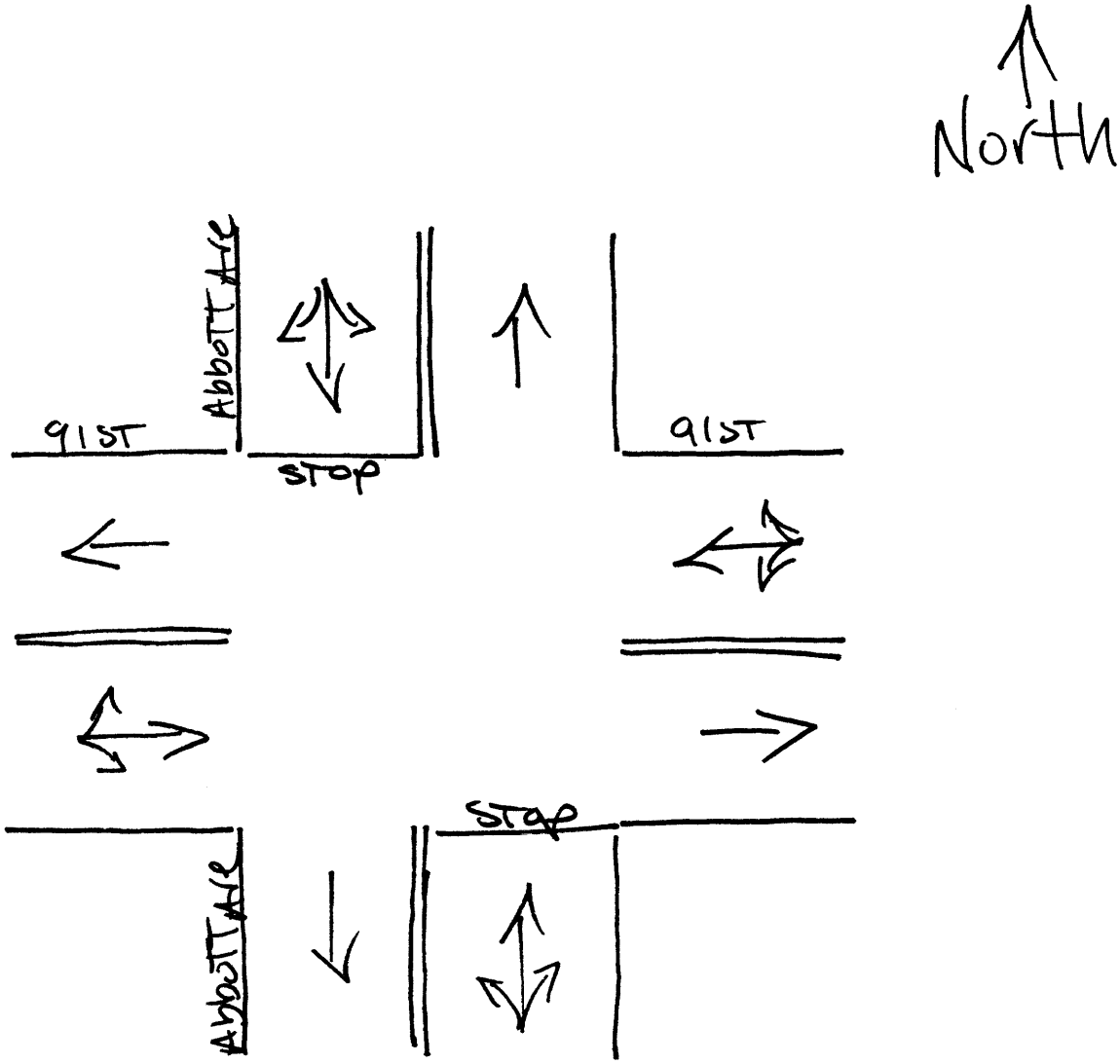
91ST STREET & ABBOTT AVENUE
SURFSIDE, FLORIDA
COUNTED BY: AMBER PALOMINO
NOT SIGNALIZED

Site Code : 00120106
Start Date: 09/04/12
File I.D. : 91STABBO
Page : 1

PEDESTRIANS

	ABBOTT AVENUE From North				91ST STREET From East				ABBOTT AVENUE From South				91ST STREET From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 09/04/12																	
07:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	2	5
07:45	0	0	0	1	0	0	0	2	0	0	0	3	0	0	0	1	7
Hr Total	0	0	0	2	0	0	0	5	0	0	0	3	0	0	0	3	13
08:00	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	4
08:15	0	0	0	0	0	0	0	3	0	0	0	2	0	0	0	0	5
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	4
Hr Total	0	0	0	4	0	0	0	5	0	0	0	3	0	0	0	1	13
* BREAK *																	
16:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
16:15	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	3
Hr Total	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	2	5
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	4	6
17:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hr Total	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	5	8
TOTAL	0	0	0	7	0	0	0	14	0	0	0	7	0	0	0	11	39



Surfside, Florida

September 04, 2012

drawn by: Luis Palomino

NOT Signalized

90TH STREET & BAY DRIVE
SURFSIDE, FLORIDA
COUNTED BY: MARISA CRUZ
NOT SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120106
Start Date: 09/06/12
File I.D. : 90ST_BAY
Page : 1

ALL VEHICLES

	BAY DRIVE From North				90TH STREET From East				BAY DRIVE From South				90TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/06/12																	
07:00	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	3
07:15	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	2
07:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
07:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Hr Total	0	0	2	0	0	0	0	1	0	0	4	0	0	0	0	0	7
08:00	0	1	2	0	0	0	0	0	0	0	1	0	0	0	0	0	4
08:15	0	0	2	0	0	3	0	0	0	0	0	0	0	0	0	0	5
08:30	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2
08:45	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	2
Hr Total	0	1	5	0	0	4	0	1	0	0	2	0	0	0	0	0	13
* BREAK *																	
16:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
16:15	0	0	1	0	0	2	0	1	0	0	0	0	0	0	0	0	4
16:30	0	1	1	0	0	1	0	3	0	0	0	0	0	0	0	0	6
16:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Hr Total	0	2	3	0	0	3	0	4	0	0	0	1	0	0	0	0	13
17:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2
Hr Total	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	3
TOTAL	0	3	11	0	0	8	0	6	0	0	7	1	0	0	0	0	36

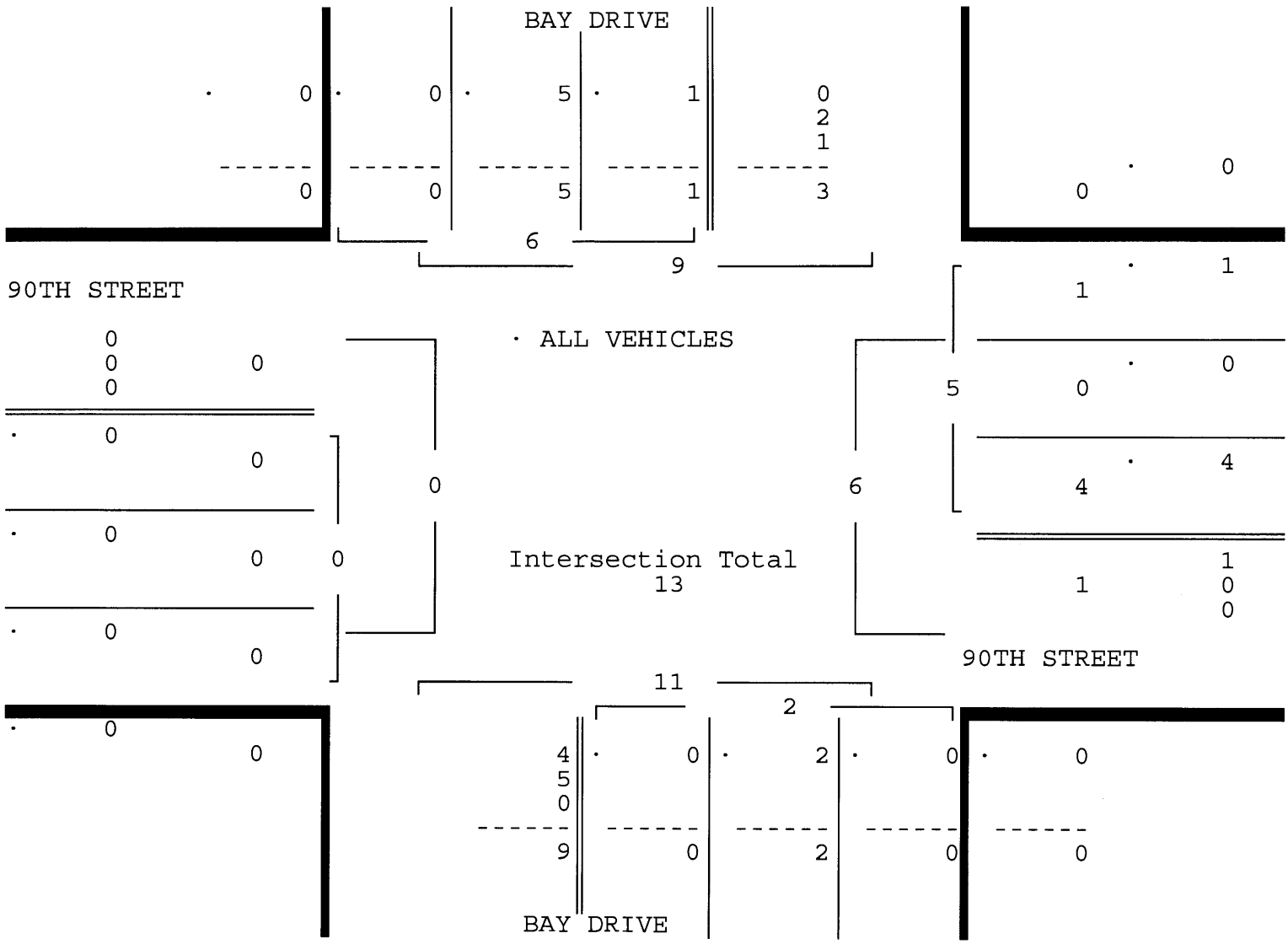
90TH STREET & BAY DRIVE
SURFSIDE, FLORIDA
COUNTED BY: MARISA CRUZ
NOT SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120106
Start Date: 09/06/12
File I.D. : 90ST_BAY
Page : 2

ALL VEHICLES

	BAY DRIVE From North				90TH STREET From East				BAY DRIVE From South				90TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/06/12																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 09/06/12																	
Peak start 08:00					08:00				08:00				08:00				
Volume	0	1	5	0	0	4	0	1	0	0	2	0	0	0	0	0	
Percent	0%	17%	83%	0%	0%	80%	0%	20%	0%	0%	100%	0%	0%	0%	0%	0%	
Pk total	6				5				2				0				
Highest	08:00				08:15				08:00				07:00				
Volume	0	1	2	0	0	3	0	0	0	0	1	0	0	0	0	0	
Hi total	3				3				1				0				
PHF	.50				.42				.50				.0				



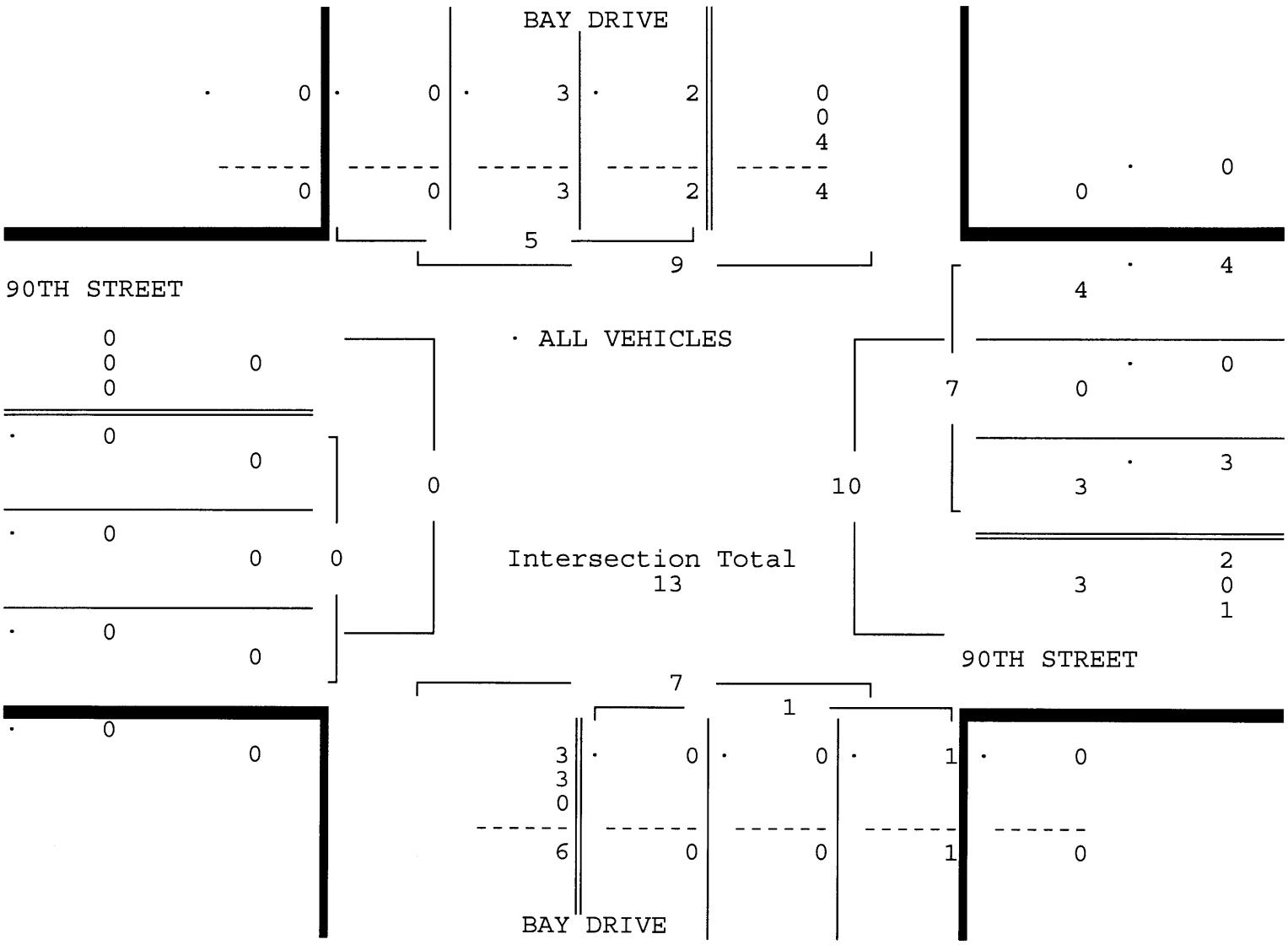
90TH STREET & BAY DRIVE
SURFSIDE, FLORIDA
COUNTED BY: MARISA CRUZ
NOT SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120106
Start Date: 09/06/12
File I.D. : 90ST_BAY
Page : 3

ALL VEHICLES

	BAY DRIVE From North				90TH STREET From East				BAY DRIVE From South				90TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/06/12																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 09/06/12																	
Peak start 16:00					16:00				16:00				16:00				
Volume	0	2	3	0	0	3	0	4	0	0	0	1	0	0	0	0	
Percent	0%	40%	60%	0%	0%	43%	0%	57%	0%	0%	0%	100%	0%	0%	0%	0%	
Pk total	5				7				1				0				
Highest	16:00				16:30				16:45				07:00				
Volume	0	1	1	0	0	1	0	3	0	0	0	1	0	0	0	0	
Hi total	2				4				1				0				
PHF	.62				.44				.25				.0				



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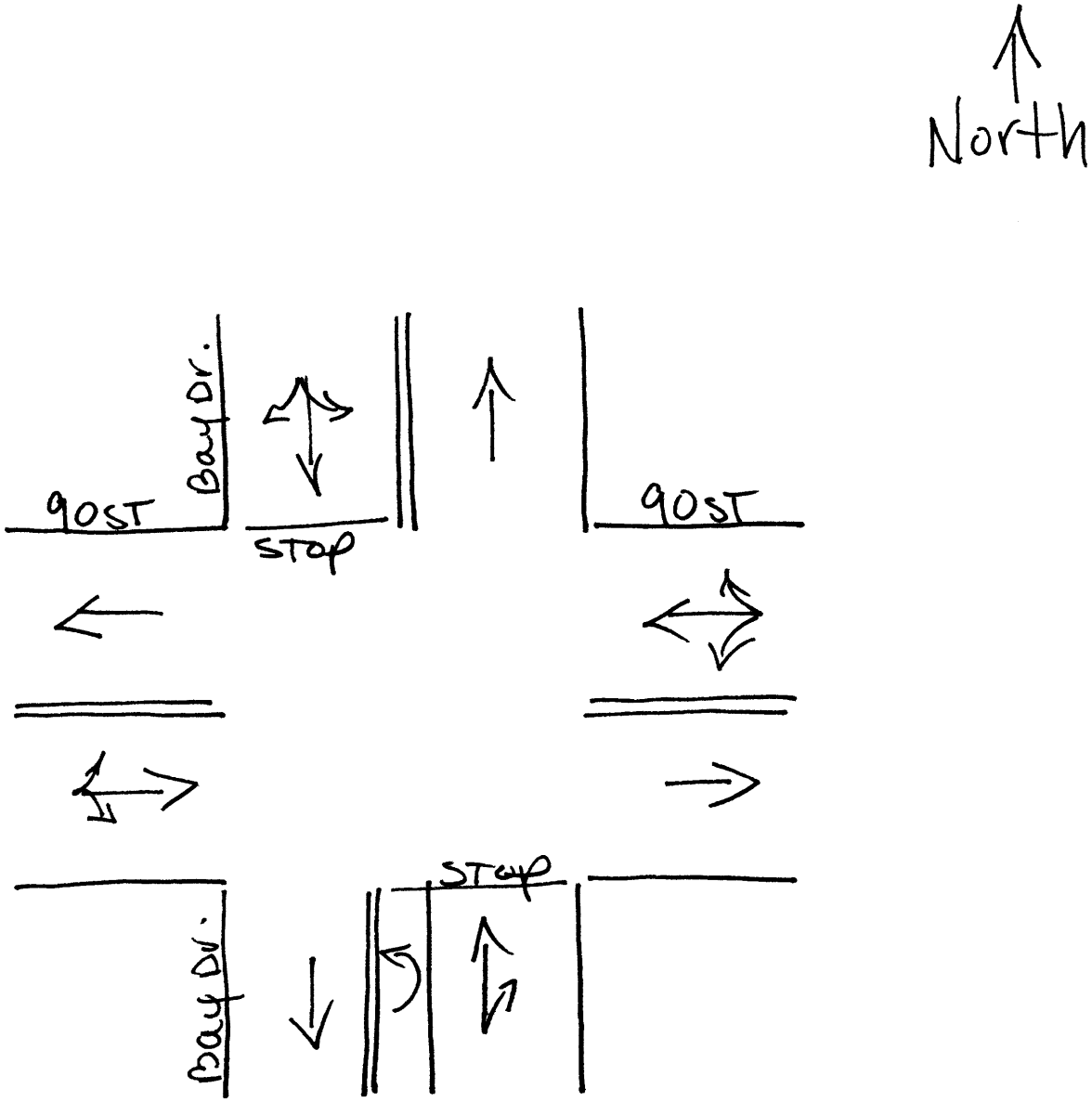
90TH STREET & BAY DRIVE
SURFSIDE, FLORIDA
COUNTED BY: MARISA CRUZ
NOT SIGNALIZED

Site Code : 00120106
Start Date: 09/06/12
File I.D. : 90ST_BAY
Page : 1

PEDESTRIANS

	BAY DRIVE From North				90TH STREET From East				BAY DRIVE From South				90TH STREET From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 09/06/12																	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4
07:30	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5
08:00	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3
08:15	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
Hr Total	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	6
---------- * BREAK * ----------																	
TOTAL	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	11



Surfside, Florida

September 05, 2012

drawn by: Luis Palomino

NOT Signalized

90TH STREET & CARLYLE AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAURICE GOMEZ
NOT SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120106
Start Date: 09/06/12
File I.D. : 90STCARL
Page : 1

ALL VEHICLES

	CARLYLE AVENUE From North				90TH STREET From East				CARLYLE AVENUE From South				90TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/06/12																	
07:00	0	2	0	0	0	0	0	1	0	0	0	1	0	1	5	0	10
07:15	0	2	2	0	0	0	5	0	0	0	1	1	0	1	5	0	17
07:30	0	2	1	0	0	0	4	2	0	0	0	1	0	2	5	0	17
07:45	0	0	2	0	0	1	7	3	0	0	2	4	0	1	9	0	29
Hr Total	0	6	5	0	0	1	16	6	0	0	3	7	0	5	24	0	73
08:00	0	2	4	0	0	1	7	0	0	1	7	1	0	4	7	0	34
08:15	0	2	9	2	0	2	9	0	0	0	2	0	0	2	8	0	36
08:30	0	1	5	2	1	1	4	1	0	0	1	1	0	2	6	0	25
08:45	0	2	4	2	0	1	5	0	0	0	2	2	0	2	4	0	24
Hr Total	0	7	22	6	1	5	25	1	0	1	12	4	0	10	25	0	119
* BREAK *																	
16:00	0	0	3	1	0	0	7	0	0	1	1	0	0	1	5	0	19
16:15	0	1	1	0	0	0	7	1	0	1	1	3	0	0	4	0	19
16:30	0	1	1	2	0	1	13	1	0	0	7	2	0	1	4	0	33
16:45	0	0	3	4	0	1	8	1	0	0	4	0	0	1	11	0	33
Hr Total	0	2	8	7	0	2	35	3	0	2	13	5	0	3	24	0	104
17:00	0	2	1	0	0	1	3	1	0	1	3	0	0	3	7	0	22
17:15	0	2	2	2	0	0	7	0	0	0	4	1	0	2	5	0	25
17:30	0	1	5	0	0	1	3	2	0	1	2	2	0	1	1	0	19
17:45	0	3	1	5	0	0	5	1	0	0	2	4	0	2	8	0	31
Hr Total	0	8	9	7	0	2	18	4	0	2	11	7	0	8	21	0	97
TOTAL	0	23	44	20	1	10	94	14	0	5	39	23	0	26	94	0	393

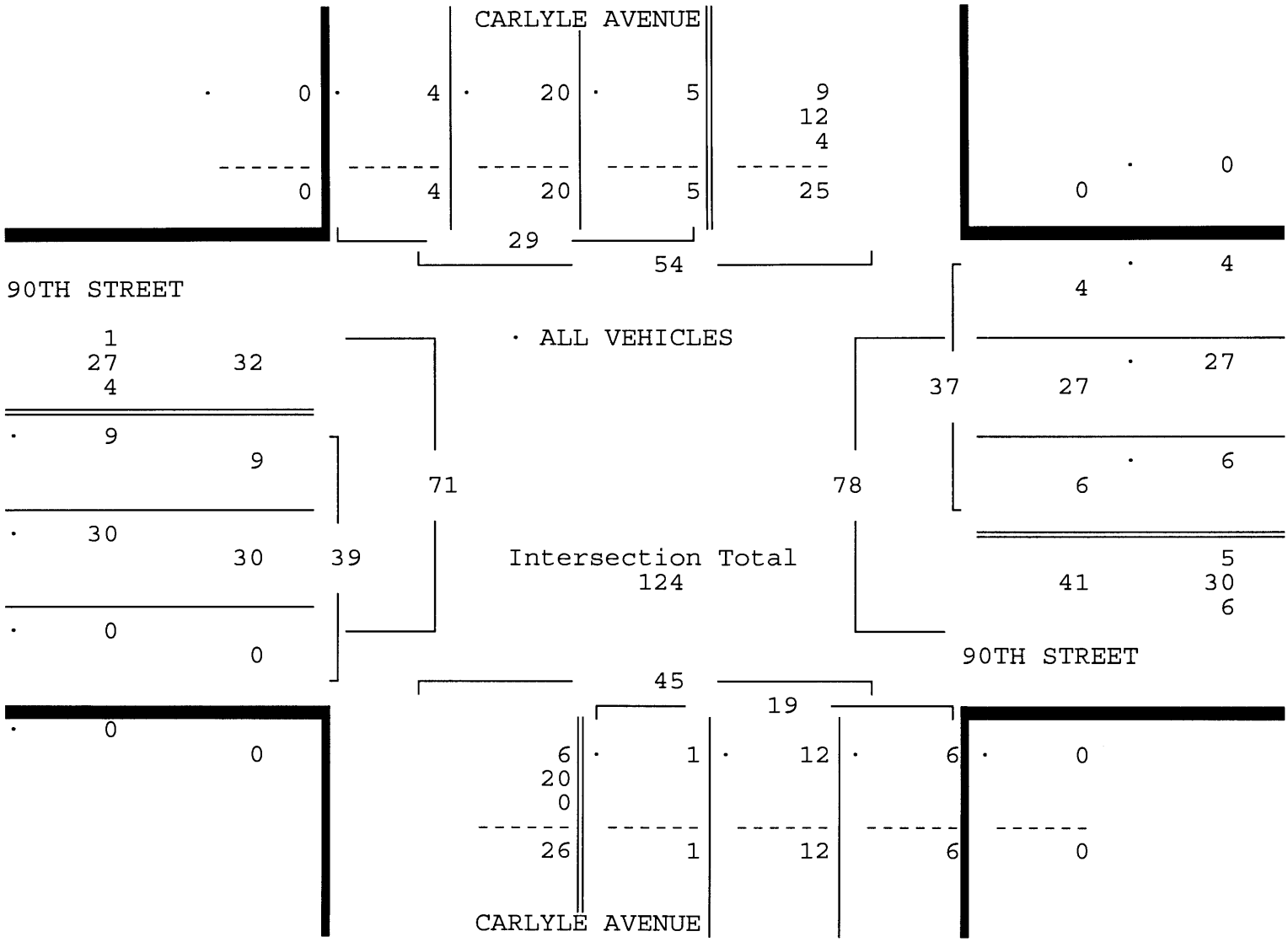
90TH STREET & CARLYLE AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAURICE GOMEZ
NOT SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120106
Start Date: 09/06/12
File I.D. : 90STCARL
Page : 2

ALL VEHICLES

	CARLYLE AVENUE From North				90TH STREET From East				CARLYLE AVENUE From South				90TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/06/12																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 09/06/12																	
Peak start 07:45					07:45				07:45				07:45				
Volume	0	5	20	4	1	5	27	4	0	1	12	6	0	9	30	0	
Percent	0%	17%	69%	14%	3%	14%	73%	11%	0%	5%	63%	32%	0%	23%	77%	0%	
Pk total	29				37				19				39				
Highest	08:15				07:45				08:00				08:00				
Volume	0	2	9	2	0	1	7	3	0	1	7	1	0	4	7	0	
Hi total	13				11				9				11				
PHF	.56				.84				.53				.89				



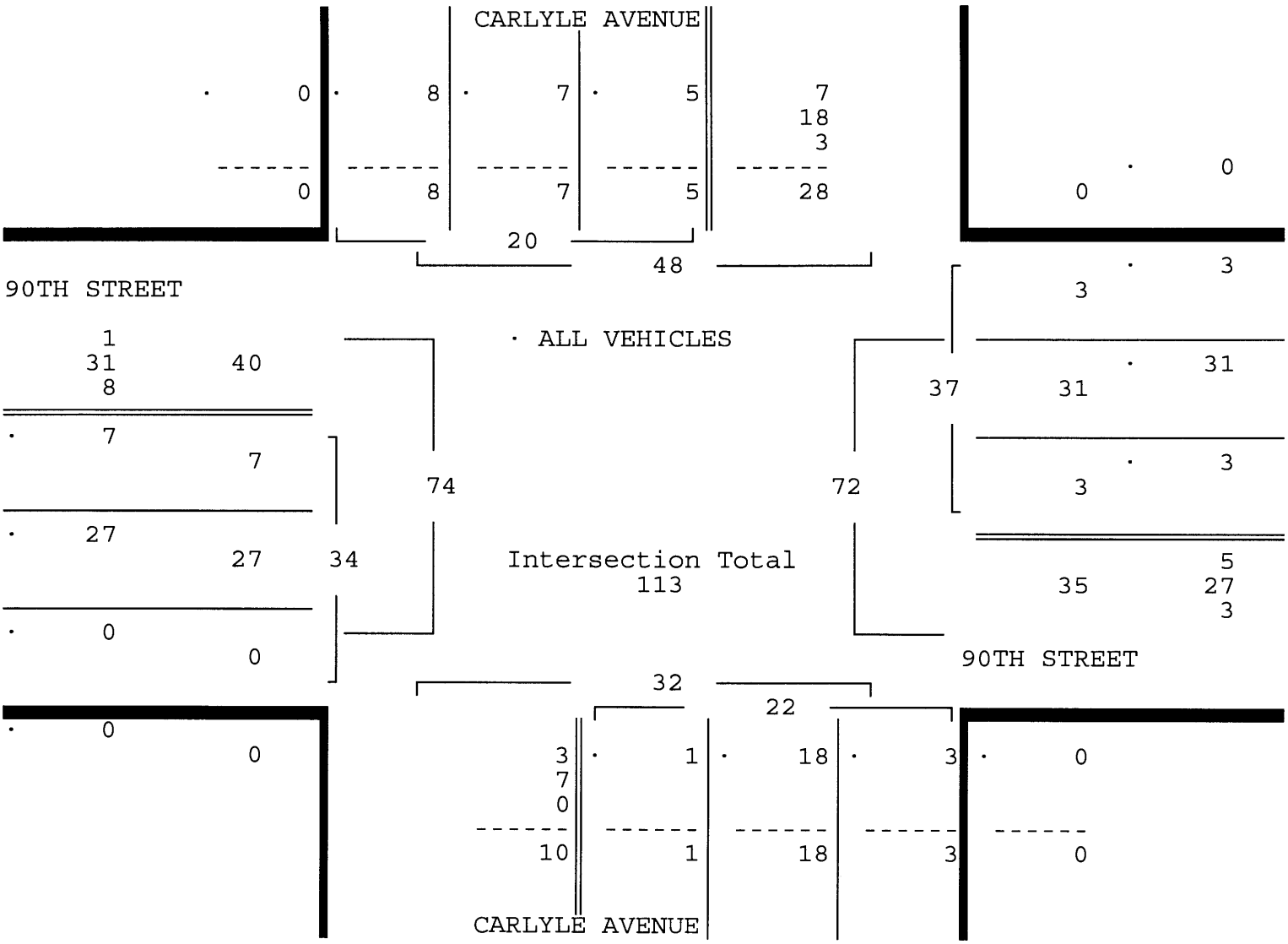
90TH STREET & CARLYLE AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAURICE GOMEZ
NOT SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120106
Start Date: 09/06/12
File I.D. : 90STCARL
Page : 3

ALL VEHICLES

	CARLYLE AVENUE From North				90TH STREET From East				CARLYLE AVENUE From South				90TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/06/12																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 09/06/12																	
Peak start 16:30					16:30				16:30				16:30				
Volume	0	5	7	8	0	3	31	3	0	1	18	3	0	7	27	0	
Percent	0%	25%	35%	40%	0%	8%	84%	8%	0%	5%	82%	14%	0%	21%	79%	0%	
Pk total	20				37				22				34				
Highest	16:45				16:30				16:30				16:45				
Volume	0	0	3	4	0	1	13	1	0	0	7	2	0	1	11	0	
Hi total	7				15				9				12				
PHF	.71				.62				.61				.71				



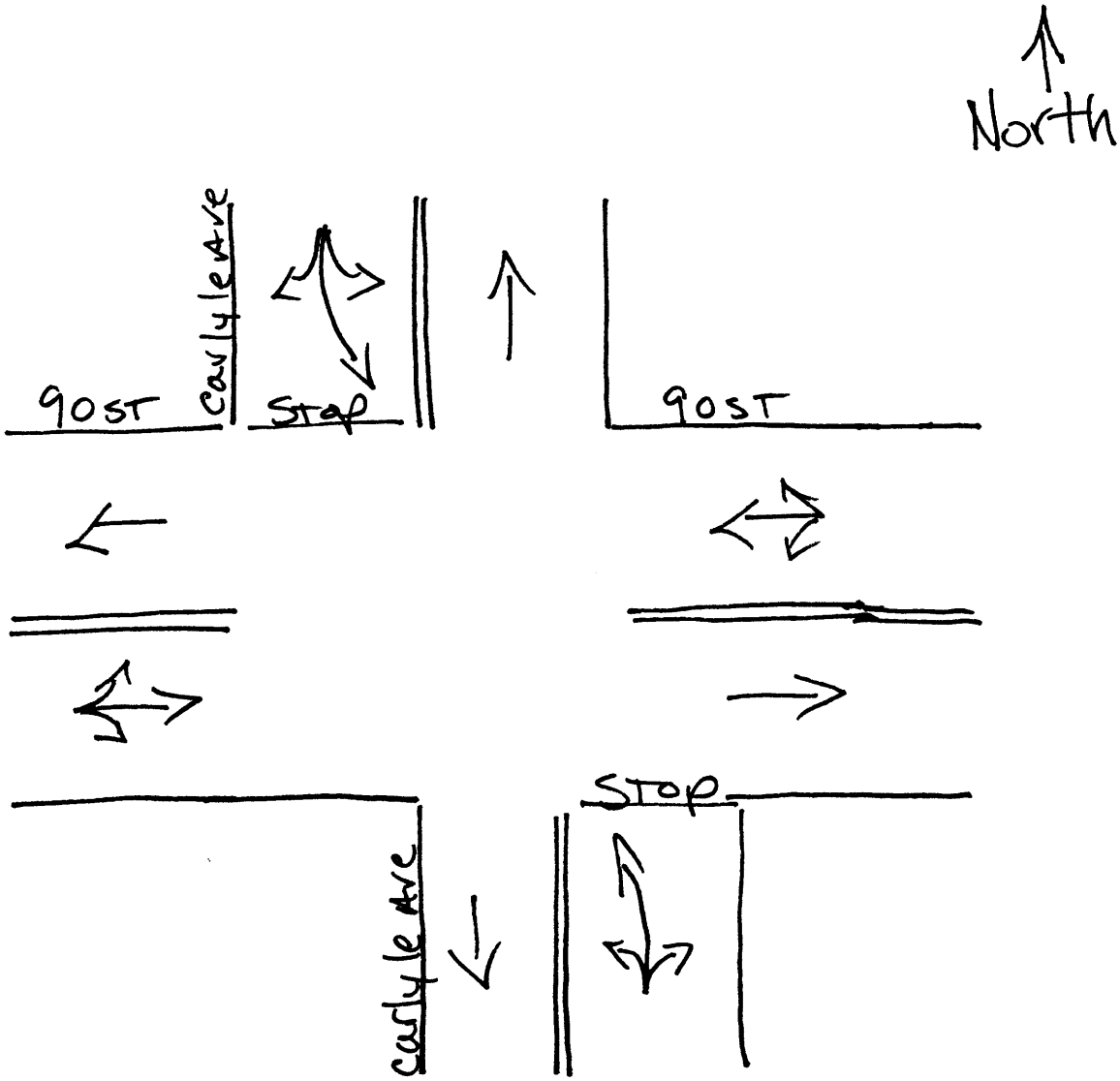
90TH STREET & CARLYLE AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAURICE GOMEZ
NOT SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120106
Start Date: 09/06/12
File I.D. : 90STCARL
Page : 1

PEDESTRIANS

	CARLYLE AVENUE From North				90TH STREET From East				CARLYLE AVENUE From South				90TH STREET From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 09/06/12																	
07:00	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	3
07:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
07:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hr Total	0	0	0	3	0	0	0	0	0	0	0	3	0	0	0	0	6
08:00	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	2
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	2
08:45	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	3
Hr Total	0	0	0	3	0	0	0	0	0	0	0	3	0	0	0	1	7
* BREAK *																	
16:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
16:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
16:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hr Total	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	2	5
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
17:30	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2
17:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hr Total	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	1	4
TOTAL	0	0	0	11	0	0	0	1	0	0	0	6	0	0	0	4	22



Surfside, Florida

September 05, 2012

drawn by: Luis Palomino

NOT signalized

88TH STREET & DICKENS AVENUE
SURFSIDE, FLORIDA
COUNTED BY: AMBER PALOMINO
NOT SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120106
Start Date: 09/06/12
File I.D. : 88STDICK
Page : 1

ALL VEHICLES

	DICKENS AVENUE From North				88TH STREET From East				----- From South				88TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/06/12																	
07:00	0	2	0	1	0	0	2	1	0	0	0	0	0	0	6	0	12
07:15	0	2	0	0	0	0	2	1	0	0	0	0	0	0	5	0	10
07:30	0	1	0	0	0	0	1	3	0	0	0	0	0	2	12	0	19
07:45	0	2	0	0	0	0	6	1	0	0	0	0	0	1	9	0	19
Hr Total	0	7	0	1	0	0	11	6	0	0	0	0	0	3	32	0	60
08:00	0	5	0	0	0	0	5	2	0	0	0	0	0	1	14	0	27
08:15	0	0	0	2	0	0	5	0	0	0	0	0	0	1	13	0	21
08:30	1	2	0	1	0	0	4	0	0	0	0	0	0	0	15	0	23
08:45	0	3	0	0	0	0	7	0	0	0	0	0	0	0	12	0	22
Hr Total	1	10	0	3	0	0	21	2	0	0	0	0	0	2	54	0	93
---------- * BREAK * ----------																	
16:00	0	0	0	0	0	0	9	1	0	0	0	0	1	0	5	0	16
16:15	0	0	0	0	0	0	6	1	0	0	0	0	0	0	10	0	17
16:30	0	0	0	0	0	0	13	1	0	0	0	0	0	0	13	0	27
16:45	0	2	0	0	0	0	8	0	0	0	0	0	0	0	7	0	17
Hr Total	0	2	0	0	0	0	36	3	0	0	0	0	1	0	35	0	77
17:00	0	2	0	0	0	0	10	0	0	0	0	0	0	0	3	0	15
17:15	0	1	0	0	0	0	5	0	0	0	0	0	0	1	10	0	17
17:30	0	1	0	1	0	0	7	1	0	0	0	0	0	0	9	0	19
17:45	0	1	0	0	0	0	5	0	0	0	0	0	0	0	8	0	14
Hr Total	0	5	0	1	0	0	27	1	0	0	0	0	0	1	30	0	65
TOTAL	1	24	0	5	0	0	95	12	0	0	0	0	1	6	151	0	295

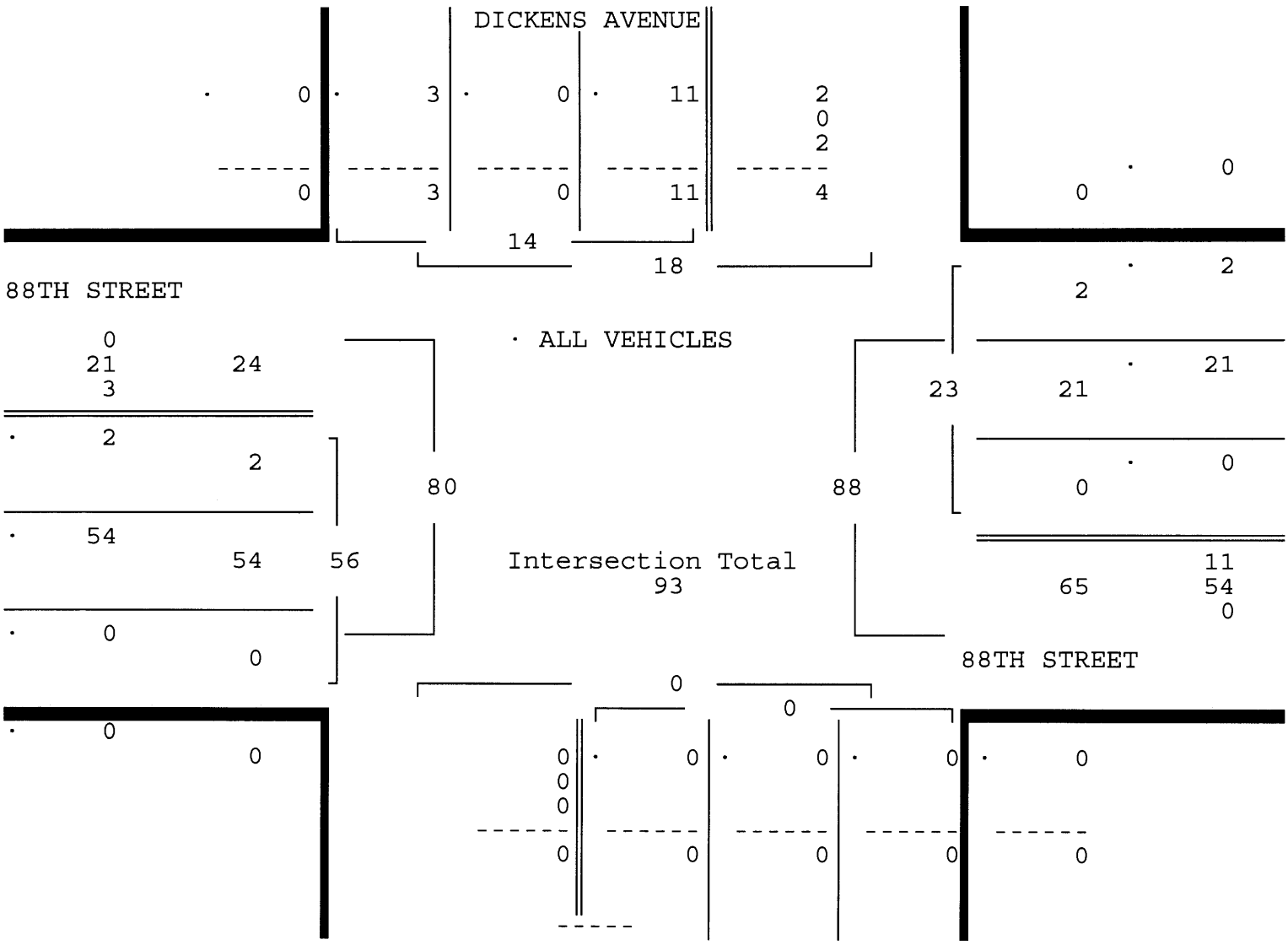
88TH STREET & DICKENS AVENUE
SURFSIDE, FLORIDA
COUNTED BY: AMBER PALOMINO
NOT SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120106
Start Date: 09/06/12
File I.D. : 88STDICK
Page : 2

ALL VEHICLES

	DICKENS AVENUE From North				88TH STREET From East				----- From South				88TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/06/12																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 09/06/12																	
Peak start 08:00					08:00				08:00				08:00				
Volume	1	10	0	3	0	0	21	2	0	0	0	0	0	2	54	0	
Percent	7%	71%	0%	21%	0%	0%	91%	9%	0%	0%	0%	0%	0%	4%	96%	0%	
Pk total	14				23				0				56				
Highest	08:00				08:00				07:00				08:00				
Volume	0	5	0	0	0	0	5	2	0	0	0	0	0	1	14	0	
Hi total	5				7				0				15				
PHF	.70				.82				.0				.93				



88TH STREET & DICKENS AVENUE
SURFSIDE, FLORIDA
COUNTED BY: AMBER PALOMINO
NOT SIGNALIZED

Traffic Survey Specialists, Inc.
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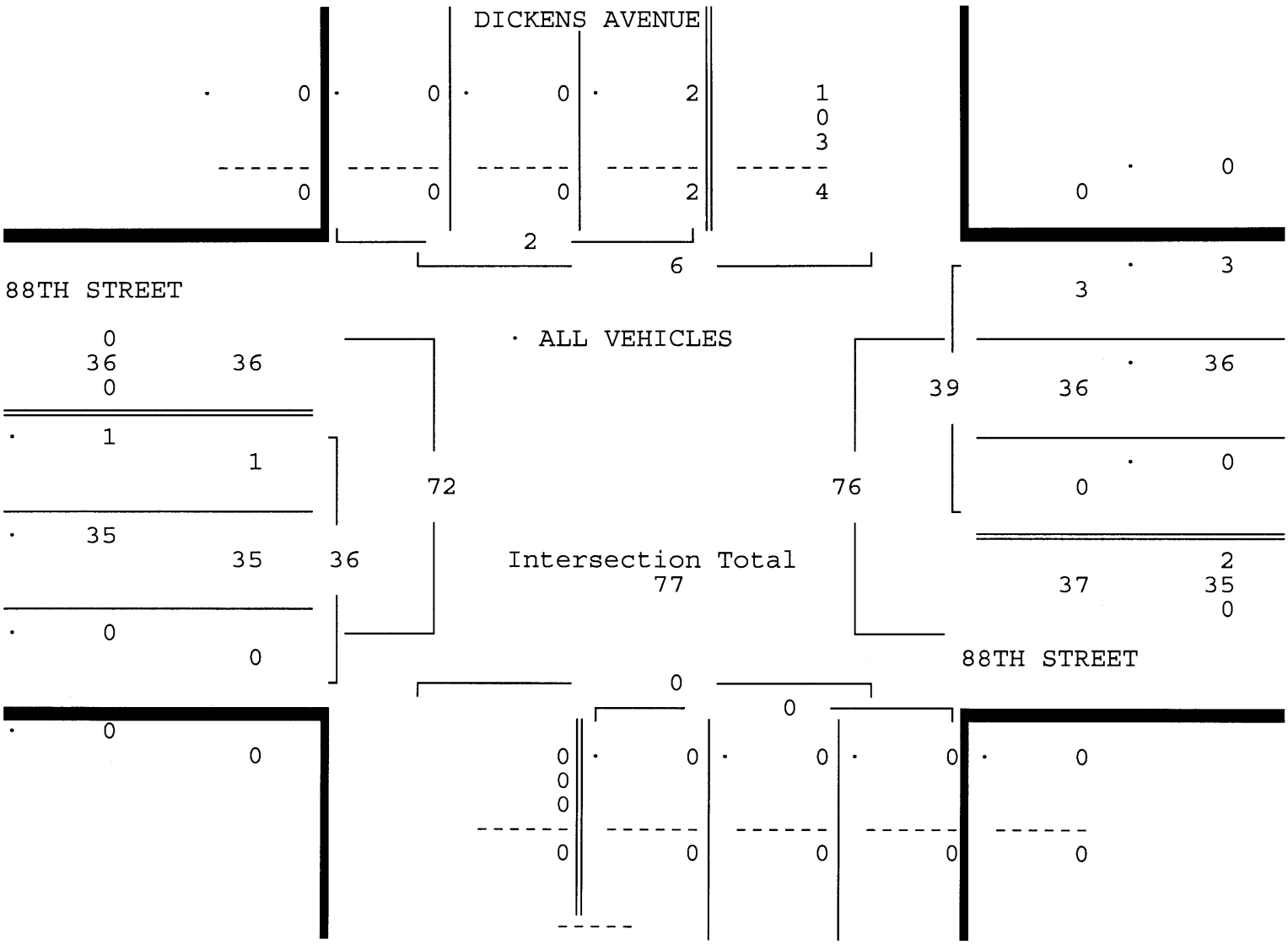
Phone (561) 272-3255

Site Code : 00120106
Start Date: 09/06/12
File I.D. : 88STDICK
Page : 3

ALL VEHICLES

	DICKENS AVENUE From North				88TH STREET From East				----- From South				88TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 09/06/12																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 09/06/12																	
Peak start 16:00					16:00				16:00				16:00				
Volume	0	2	0	0	0	0	36	3	0	0	0	0	1	0	35	0	
Percent	0%	100%	0%	0%	0%	0%	92%	8%	0%	0%	0%	0%	3%	0%	97%	0%	
Pk total	2				39				0				36				
Highest	16:45				16:30				07:00				16:30				
Volume	0	2	0	0	0	0	13	1	0	0	0	0	0	0	13	0	
Hi total	2				14				0				13				
PHF	.25				.70				.0				.69				



88TH STREET & DICKENS AVENUE
SURFSIDE, FLORIDA
COUNTED BY: AMBER PALOMINO
NOT SIGNALIZED

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
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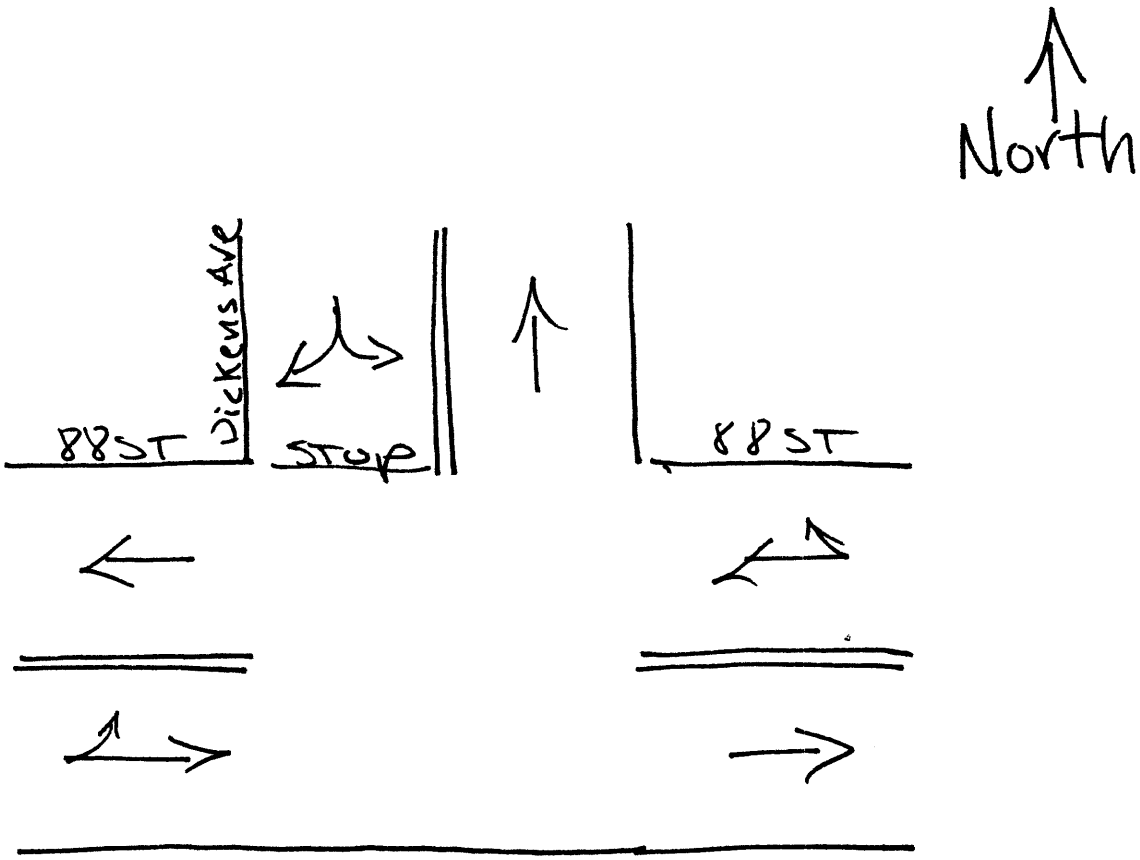
Phone (561) 272-3255

Site Code : 00120106
Start Date: 09/06/12
File I.D. : 88STDICK
Page : 1

PEDESTRIANS

	DICKENS AVENUE From North				88TH STREET From East				----- From South				88TH STREET From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 09/06/12																	
07:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	3
08:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	3
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	2
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	2	5
---------- * BREAK * ----------																	
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hr Total	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
17:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
17:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hr Total	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	6
TOTAL	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	4	18



Surfside, Florida
september 05, 2012
drawn by: Luis Palomino
NOT signalized

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93RD STREET & BAY DRIVE & EMERSON AVENUE
SURFSIDE, FLORIDA
COUNTED BY: LUIS PALOMINO
NOT SIGNALIZED

Study Name: 93ST_BAY
Site Code : 00120106
Start Date: 09/04/12
Page : 1

ALL VEHICLES

	BAY DRIVE From North				93RD STREET From East				EMERSON AVENUE From Southeast				BAY DRIVE From South				93RD STREET From West				
Start Time	Left	Thru EMER	Thru	Right	Left EMER	Left	Thru	Right	LEFT BAY	Left	Thru	Right	Left	Thru	Right	RIGHT EMER	Left	Thru	Right EMER	Right	Intvl Total
09/04/12																					
07:00	0	0	2	0	0	0	0	1	0	0	1	0	0	3	0	0	0	0	0	0	7
07:15	1	1	0	0	0	2	0	0	0	0	6	0	0	6	0	0	1	0	0	0	17
07:30	0	2	3	0	0	0	0	1	0	0	2	0	1	9	0	0	1	1	0	0	20
07:45	0	4	3	0	1	0	0	0	0	0	5	0	0	16	0	0	0	0	0	0	29
Hour	1	7	8	0	1	2	0	2	0	0	14	0	1	34	0	0	2	1	0	0	73
08:00	0	1	7	0	0	0	0	1	0	0	1	0	0	17	0	0	0	0	0	0	27
08:15	2	1	10	1	0	1	0	3	0	0	1	0	0	9	0	0	0	0	0	0	28
08:30	0	1	8	0	0	0	0	0	0	0	1	0	0	7	3	0	0	0	0	0	20
08:45	1	3	8	0	0	1	0	2	0	0	2	0	0	9	0	0	0	1	0	0	27
Hour	3	6	33	1	0	2	0	6	0	0	5	0	0	42	3	0	0	1	0	0	102
[BREAK]																					
16:00	1	3	6	0	1	1	0	0	0	0	4	0	0	5	0	0	0	0	0	0	21
16:15	1	5	8	0	1	0	0	2	0	0	2	0	0	8	2	0	0	0	0	0	29
16:30	1	3	5	1	0	0	0	1	0	0	0	0	1	3	0	0	1	0	1	0	17
16:45	1	2	6	0	0	0	0	2	0	0	1	1	0	3	0	0	0	0	0	0	16
Hour	4	13	25	1	2	1	0	5	0	0	7	1	1	19	2	0	1	0	1	0	83
17:00	3	2	6	0	0	0	1	0	0	0	1	0	0	4	1	0	0	0	0	0	18
17:15	2	2	8	0	1	2	0	2	0	0	2	1	0	8	0	0	1	0	0	0	29
17:30	0	3	8	0	0	0	0	1	0	0	0	0	0	6	0	0	0	0	0	0	18
17:45	1	4	2	0	1	1	0	2	0	0	1	0	0	10	0	1	0	0	0	0	23
Hour	6	11	24	0	2	3	1	5	0	0	4	1	0	28	1	1	1	0	0	0	88
Total	14	37	90	2	5	8	1	18	0	0	30	2	2	123	6	1	4	2	1	0	346
% Apr.	9.7	25.8	62.9	1.3	15.6	25.0	3.1	56.2	-	-	93.7	6.2	1.5	93.1	4.5	0.7	57.1	28.5	14.2	-	-
% Int.	4.0	10.6	26.0	0.5	1.4	2.3	0.2	5.2	-	-	8.6	0.5	0.5	35.5	1.7	0.2	1.1	0.5	0.2	-	-

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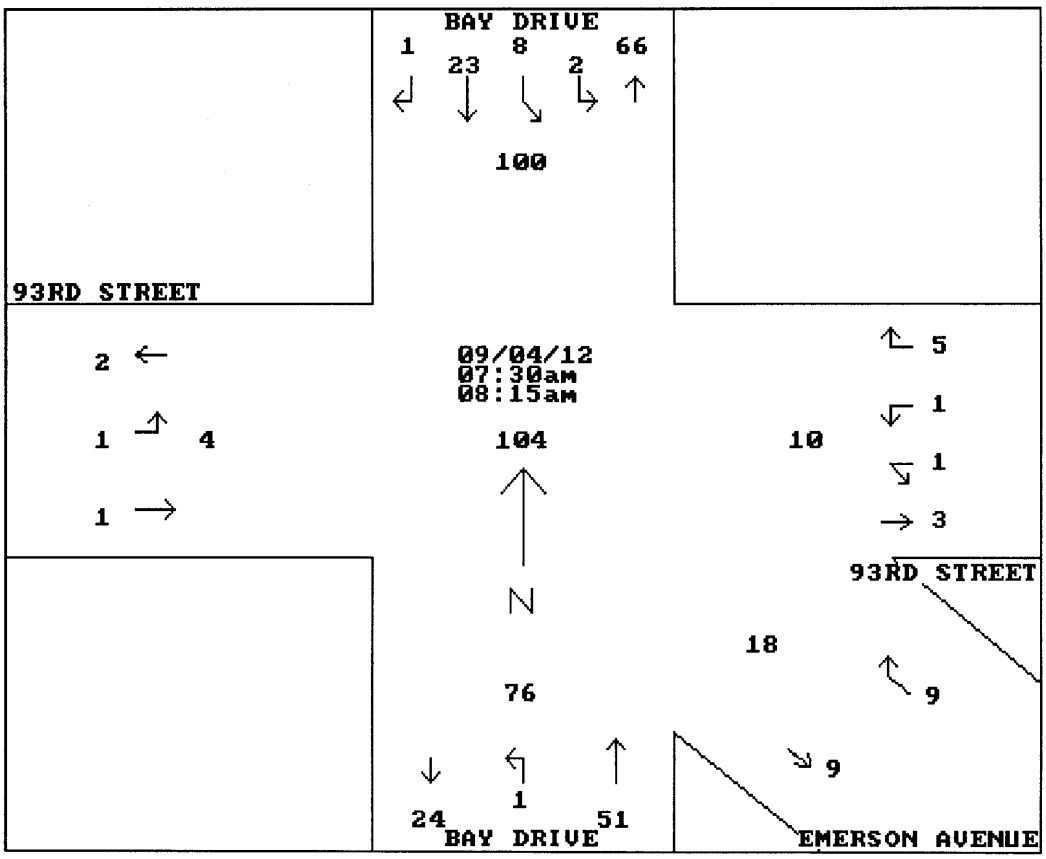
93RD STREET & BAY DRIVE & EMERSON AVENUE
SURFSIDE, FLORIDA
COUNTED BY: LUIS PALOMINO
NOT SIGNALIZED

Study Name: 93ST_BAY
Site Code : 00120106
Start Date: 09/04/12
Page : 2

ALL VEHICLES

	BAY DRIVE From North				93RD STREET From East				EMERSON AVENUE From Southeast				BAY DRIVE From South				93RD STREET From West				
Start Time	Left	Thru EMER	Thru	Right	EMER	Left	Thru	Right	BAY	LEFT Left	Thru	Right	Left	Thru	Right	RIGHT EMER	Left	Right Thru	EMER	Right	Intvl Total
Peak Hour Analysis By Entire Intersection for the Period: 07:00 on 09/04/12 to 08:45 on 09/04/12																					
Time	07:30				07:30				07:30				07:30				07:30				
Vol.	2	8	23	1	1	1	0	5	0	0	9	0	1	51	0	0	1	1	0	0	
Pct.	5.8	23.5	67.6	2.9	14.2	14.2	0.0	71.4	0.0	0.0	100.0	0.0	1.9	98.0	0.0	0.0	50.0	50.0	0.0	0.0	
Total	34				7				9				52				2				
High	08:15				08:15				07:45				08:00				07:30				
Vol.	2	1	10	1	0	1	0	3	0	0	5	0	0	17	0	0	1	1	0	0	
Total	14				4				5				17				2				
PHF	0.607				0.438				0.450				0.765				0.250				



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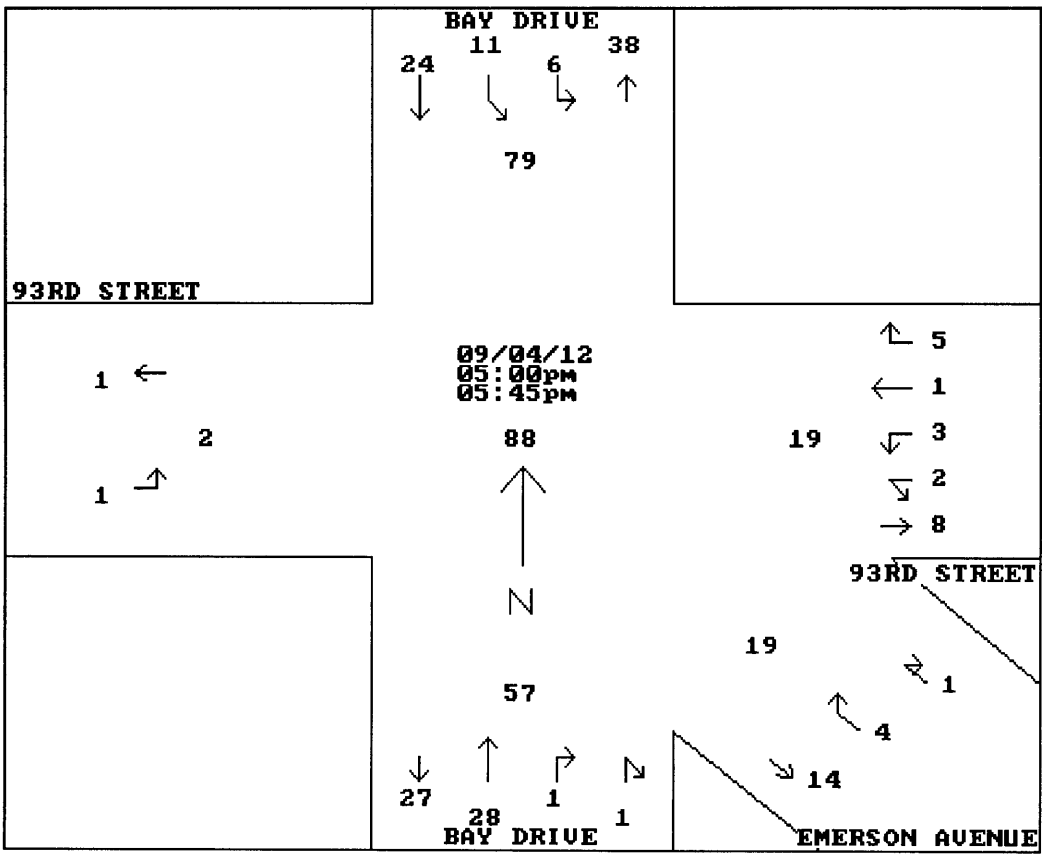
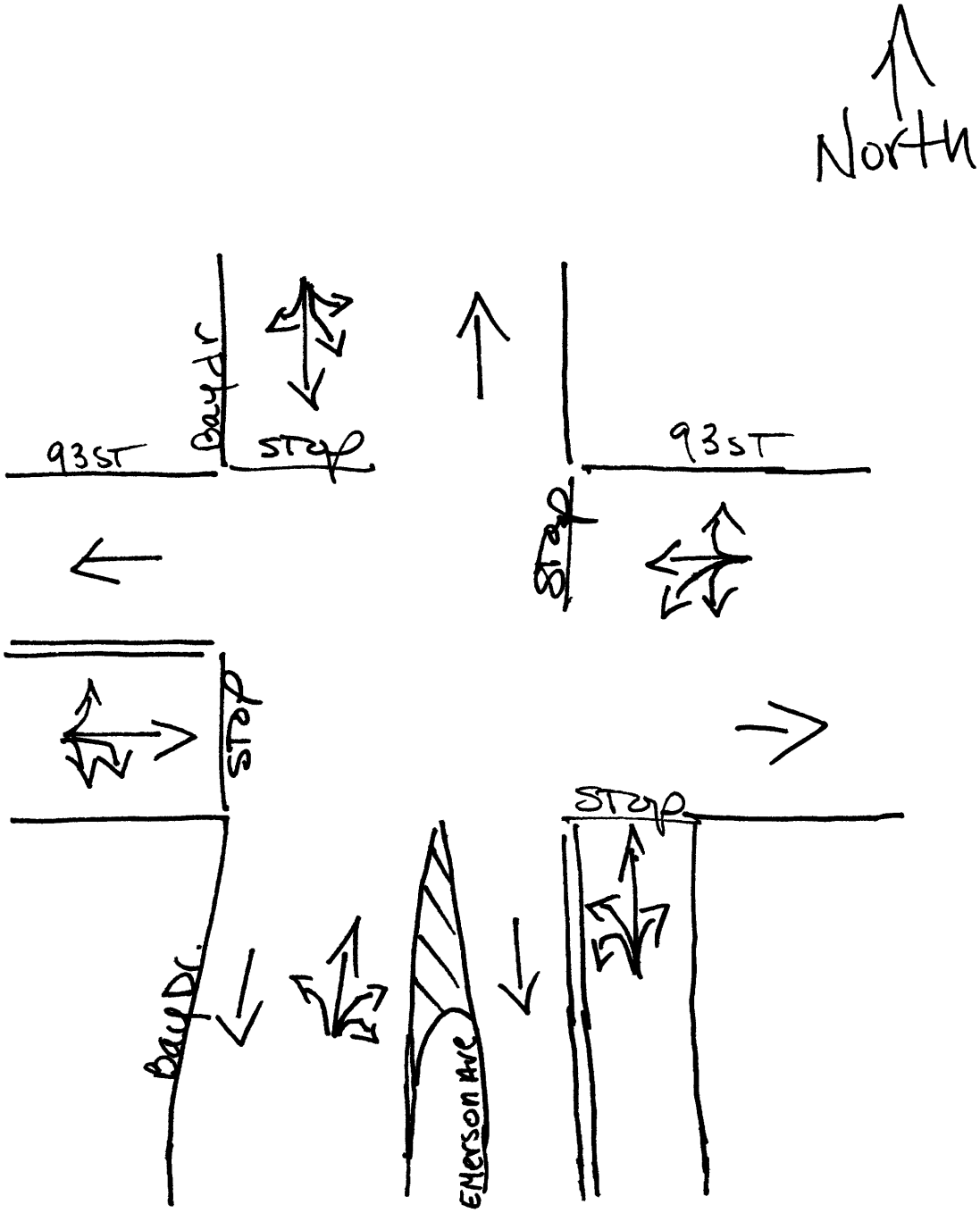
93RD STREET & BAY DRIVE & EMERSON AVENUE
SURFSIDE, FLORIDA
COUNTED BY: LUIS PALOMINO
NOT SIGNALIZED

Study Name: 93ST_BAY
Site Code : 00120106
Start Date: 09/04/12
Page : 3

ALL VEHICLES

	BAY DRIVE From North				93RD STREET From East				EMERSON AVENUE From Southeast				BAY DRIVE From South				93RD STREET From West				
Start Time	Left	Thru EMER	Thru	Right	Left EMER	Left	Thru	Right	LEFT BAY	Left	Thru	Right	Left	Thru	RIGHT	Right EMER	Left	Thru	Right EMER	Right	Intvl Total
Peak Hour Analysis By Entire Intersection for the Period: 16:00 on 09/04/12 to 17:45 on 09/04/12																					
Time	17:00				17:00				17:00				17:00				17:00				
Vol.	6	11	24	0	2	3	1	5	0	0	4	1	0	28	1	1	1	0	0	0	
Pct.	14.6	26.8	58.5	0.0	18.1	27.2	9.0	45.4	0.0	0.0	80.0	20.0	0.0	93.3	3.3	3.3	100.0	0.0	0.0	0.0	
Total	41				11				5				30				1				
High	17:15				17:15				17:15				17:45				17:15				
Vol.	2	2	8	0	1	2	0	2	0	0	2	1	0	10	0	1	1	0	0	0	
Total	12				5				3				11				1				
PHF	0.854				0.550				0.417				0.682				0.250				





Surfside, Florida

September 04, 2012

drawn by: Luis Palomino

not signalized

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89TH STREET & HAWETHORNE AVENUE
SURFSIDE, FLORIDA
COUNTED BY: LUIS PALOMINO
NOT SIGNALIZED

Study Name: 89STHAWT
Site Code : 00120106
Start Date: 09/06/12

ALL VEHICLES

	HAWTHORNE AVENUE From North				89TH STREET From East				HAWTHORNE AVENUE From South				89TH STREET From Southwest				IRVING AVENUE From West				
Start Time	Left	Thru	RIGHT 89 ST	Right	Left	LEFT 89 ST	Thru	Right	LEFT 89 ST	Left	Thru	Right	Left IRVNG	LEFT HAWTH	Right 89 ST	RIGHT HAWTH	Left	Thru	Right	RIGHT 89 ST	Intvl Total
09/06/12																					
07:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	2
07:15	1	2	0	0	0	0	0	1	0	0	1	1	0	0	1	0	0	1	0	0	8
07:30	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	3
07:45	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	4
Hour	1	2	0	0	0	0	2	2	0	0	4	3	0	0	1	0	0	1	1	0	17
08:00	1	1	0	0	0	0	0	1	0	0	3	0	0	0	0	0	1	1	0	0	8
08:15	0	2	0	0	2	0	1	0	0	1	2	0	0	0	0	0	0	0	2	0	10
08:30	1	2	0	0	1	0	0	1	0	0	0	0	1	0	0	0	1	1	0	0	8
08:45	0	2	0	0	0	0	0	1	0	0	2	0	0	1	0	0	0	1	0	0	7
Hour	2	7	0	0	3	0	1	3	0	1	7	0	1	1	0	0	2	3	2	0	33
[BREAK																					
16:00	0	4	0	0	1	0	0	1	1	0	2	0	0	0	0	0	0	0	0	1	10
16:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	5
16:30	0	4	0	0	1	0	1	0	0	0	4	1	0	0	0	0	1	1	0	0	13
16:45	1	1	0	0	1	0	1	0	0	0	0	1	0	1	0	0	3	0	0	0	9
Hour	1	11	0	0	3	0	2	1	1	0	6	2	0	1	0	0	4	4	0	1	37
17:00	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	4
17:15	1	2	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	6
17:30	0	2	0	0	1	0	0	0	0	1	2	0	0	0	0	0	1	0	0	0	7
17:45	0	1	0	0	0	0	0	2	0	0	6	0	0	0	0	0	0	0	0	0	9
Hour	1	7	0	0	2	0	0	2	0	1	11	0	0	0	0	0	2	0	0	0	26
Total	5	27	0	0	8	0	5	8	1	2	28	5	1	2	1	0	8	8	3	1	113
% Apr.	15.6	84.3	-	-	38.0	-	23.8	38.0	2.7	5.5	77.7	13.8	25.0	50.0	25.0	-	40.0	40.0	15.0	5.0	-
% Int.	4.4	23.8	-	-	7.0	-	4.4	7.0	0.8	1.7	24.7	4.4	0.8	1.7	0.8	-	7.0	7.0	2.6	0.8	-

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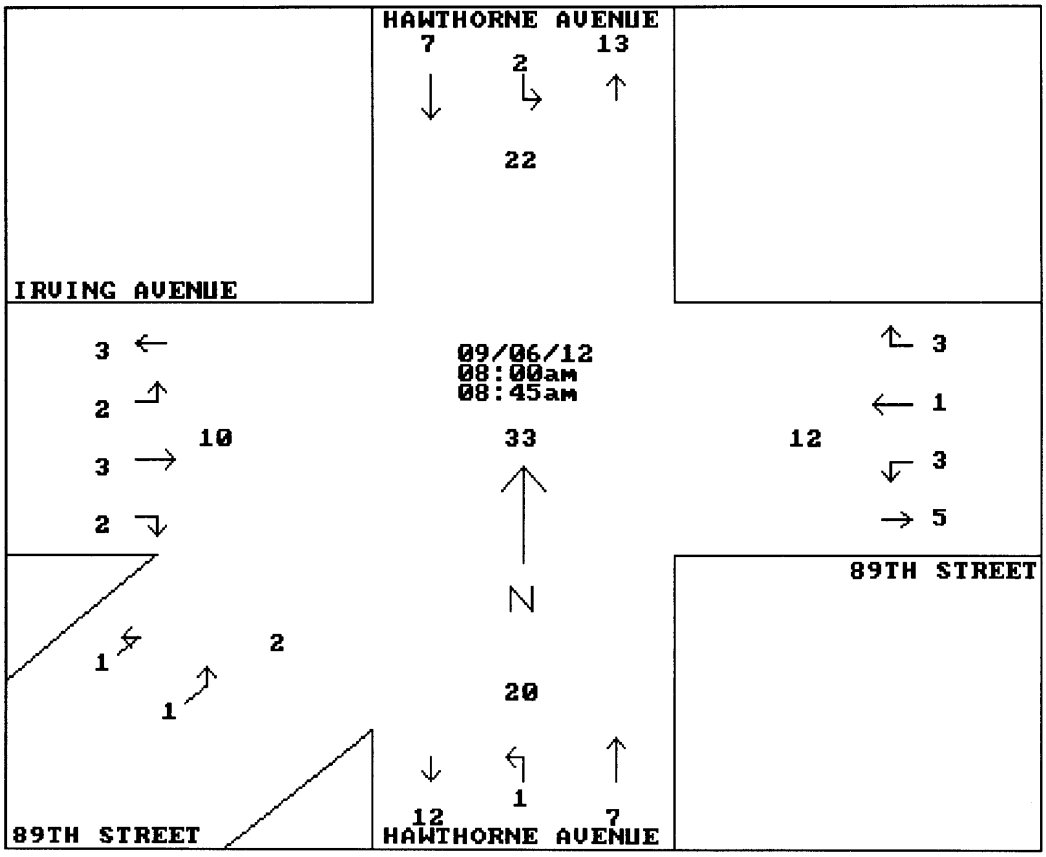
89TH STREET & HAWETHORNE AVENUE
SURFSIDE, FLORIDA
COUNTED BY: LUIS PALOMINO
NOT SIGNALIZED

Study Name: 89STHAWT
Site Code : 00120106
Start Date: 09/06/12

ALL VEHICLES

Start	HAWTHORNE AVENUE From North				89TH STREET From East				HAWTHORNE AVENUE From South				89TH STREET From Southwest				IRVING AVENUE From West				Intvl
			RIGHT			LEFT			LEFT				Left	LEFT	Right	RIGHT				RIGHT	
Time	Left	Thru	89 ST	Right	Left	89 ST	Thru	Right	89 ST	Left	Thru	Right	IRVNG	HAWTH	89 ST	HAWTH	Left	Thru	Right	89 ST	Total
Peak Hour Analysis By Entire Intersection for the Period: 07:00 on 09/06/12 to 08:45 on 09/06/12																					
Time	08:00				08:00				08:00				08:00				08:00				
Vol.	2	7	0	0	3	0	1	3	0	1	7	0	1	1	0	0	2	3	2	0	
Pct.	22.2	77.7	0.0	0.0	42.8	0.0	14.2	42.8	0.0	12.5	87.5	0.0	50.0	50.0	0.0	0.0	28.5	42.8	28.5	0.0	
Total	9				7				8				2				7				
High	08:30				08:15				08:00				08:30				08:00				
Vol.	1	2	0	0	2	0	1	0	0	0	3	0	1	0	0	0	1	1	0	0	
Total	3				3				3				1				2				
PHF	0.750				0.583				0.667				0.500				0.875				



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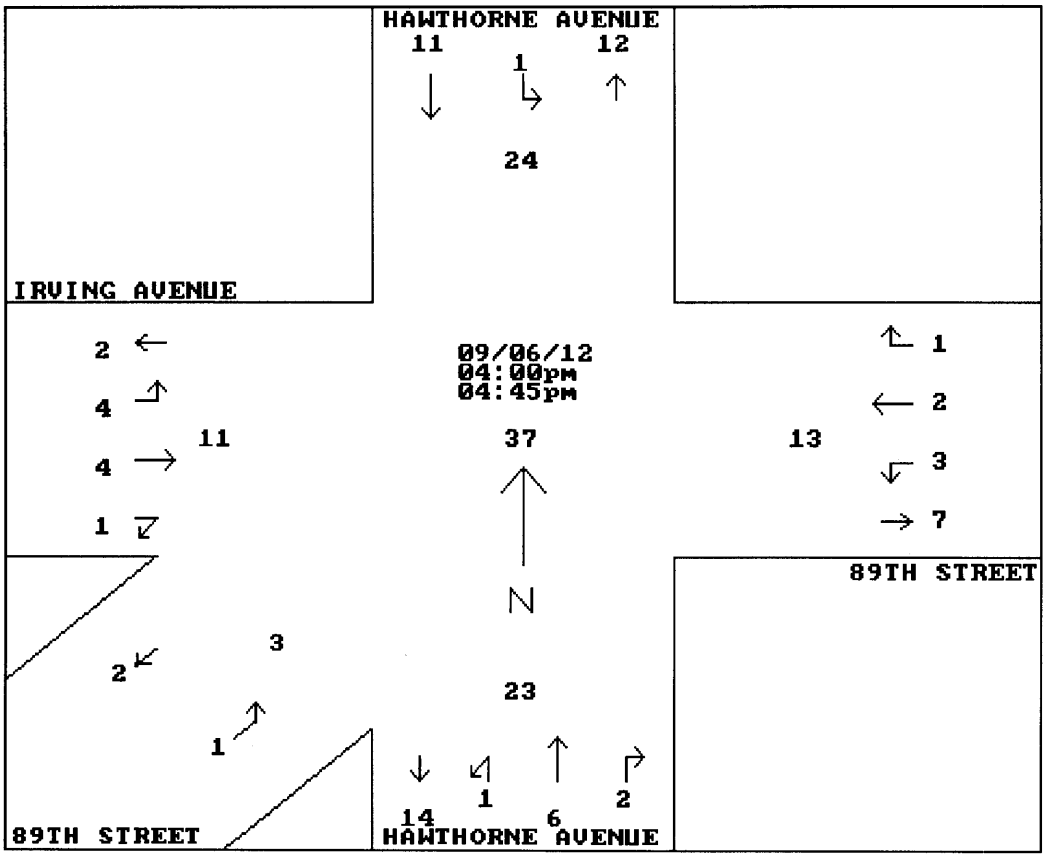
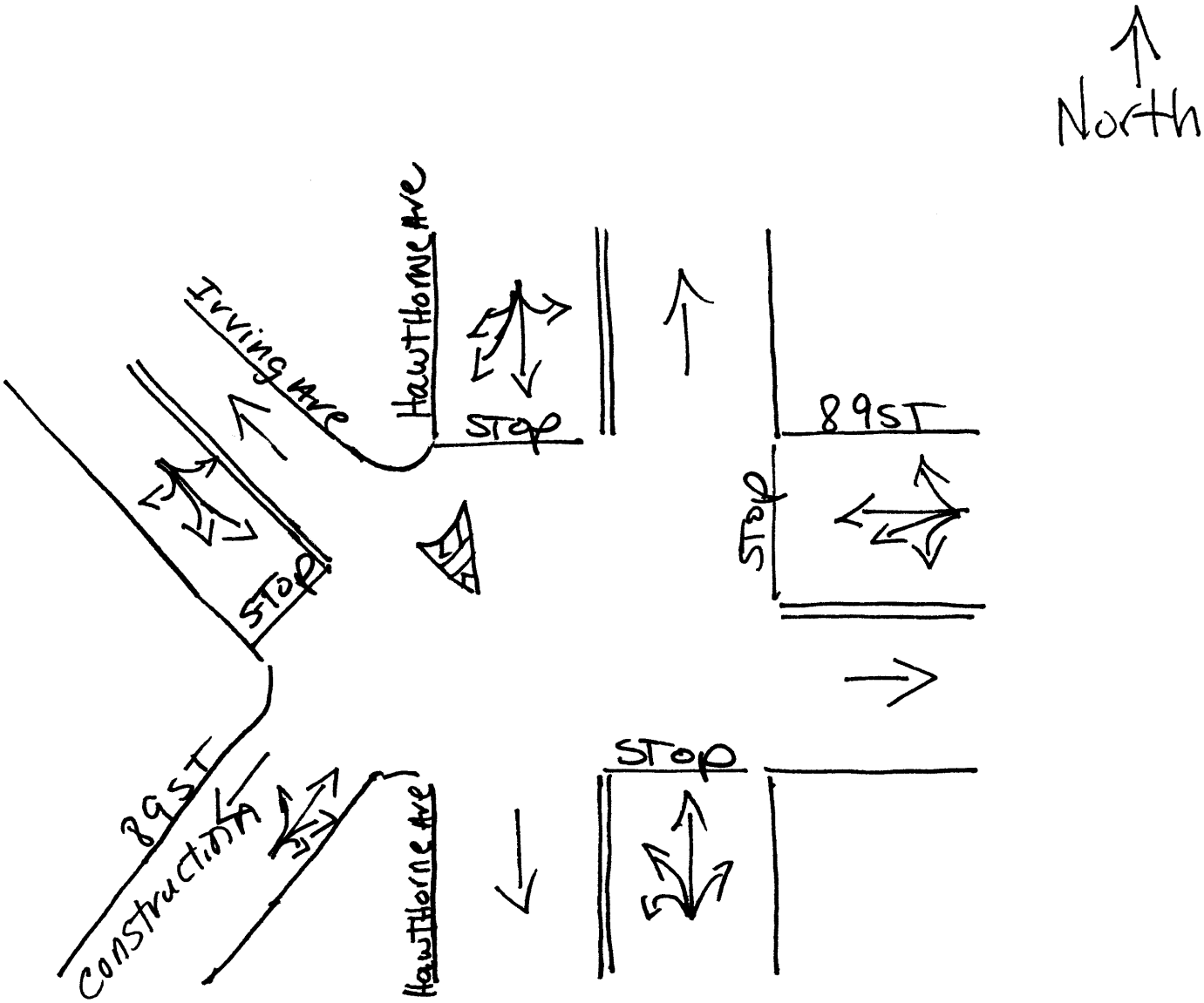
89TH STREET & HAWETHORNE AVENUE
SURFSIDE, FLORIDA
COUNTED BY: LUIS PALOMINO
NOT SIGNALIZED

Study Name: 89STHAWT
Site Code : 00120106
Start Date: 09/06/12

ALL VEHICLES

Start Time	HAWTHORNE AVENUE From North Left	Thru	RIGHT 89 ST	Right	89TH STREET From East Left 89 ST	Thru	LEFT	Right	HAWTHORNE AVENUE From South 89 ST Left	Thru	LEFT	Right	89TH STREET From Southwest Left IRVNG	LEFT HAWTH	Right 89 ST	RIGHT HAWTH	IRVING AVENUE From West Left	Thru	Right	RIGHT 89 ST	Intvl Total
Peak Hour Analysis By Entire Intersection for the Period: 16:00 on 09/06/12 to 17:45 on 09/06/12																					
Time	16:00				16:00				16:00				16:00				16:00				
Vol.	1	11	0	0	3	0	2	1	1	0	6	2	0	1	0	0	4	4	0	1	
Pct.	8.3	91.6	0.0	0.0	50.0	0.0	33.3	16.6	11.1	0.0	66.6	22.2	0.0	100.0	0.0	0.0	44.4	44.4	0.0	11.1	
Total	12				6				9				1				9				
High	16:00				16:30				16:30				16:45				16:45				
Vol.	0	4	0	0	1	0	1	0	0	0	4	1	0	1	0	0	3	0	0	0	
Total	4				2				5				1				3				
PHF	0.750				0.750				0.450				0.250				0.750				





Surfside, FLorida

Septembe 05, 2012

drawn by: Luis Palomino

NoT SignaLized

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95TH STREET & BYRON AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAXIE ESPINOSA
NOT SIGNALIZED, ROUNDABOUT WITH YIELDS

Site Code : 00120139
Start Date: 10/30/12
File I.D. : 95STBYRO
Page : 1

ALL VEHICLES

	BYRON AVENUE From North				95TH STREET From East				BYRON AVENUE From South				95TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 10/30/12																	
07:00	0	0	0	0	0	1	2	2	0	2	17	2	0	2	3	0	31
07:15	0	0	0	0	0	4	5	8	0	1	15	4	0	3	1	0	41
07:30	0	0	0	0	0	8	8	3	0	2	28	0	0	5	2	3	59
07:45	0	0	0	0	0	5	9	8	0	2	24	3	0	3	2	2	58
Hr Total	0	0	0	0	0	18	24	21	0	7	84	9	0	13	8	5	189
08:00	0	0	1	0	0	8	7	15	0	0	88	7	0	8	3	1	138
08:15	1	0	0	0	0	22	10	12	0	0	52	2	0	5	1	0	105
08:30	0	0	0	0	0	13	16	12	0	0	28	0	0	2	0	2	73
08:45	0	0	1	1	0	13	16	11	0	0	38	7	0	6	3	2	98
Hr Total	1	0	2	1	0	56	49	50	0	0	206	16	0	21	7	5	414
* BREAK *																	
16:00	0	0	0	0	0	19	11	23	0	2	25	8	0	3	1	1	93
16:15	0	0	0	0	0	14	19	30	0	1	43	7	0	9	1	6	130
16:30	0	0	0	1	0	15	13	34	0	7	45	17	0	8	5	5	150
16:45	0	0	0	0	0	16	18	39	0	5	50	10	0	7	4	3	152
Hr Total	0	0	0	1	0	64	61	126	0	15	163	42	0	27	11	15	525
17:00	0	0	0	0	1	22	16	31	0	5	42	17	0	2	5	2	143
17:15	0	0	1	0	0	19	13	28	0	0	36	17	0	5	3	1	123
17:30	0	0	0	0	0	14	10	42	0	1	36	4	0	2	3	0	112
17:45	0	0	0	1	1	19	19	29	0	1	24	3	0	2	6	0	105
Hr Total	0	0	1	1	2	74	58	130	0	7	138	41	0	11	17	3	483
TOTAL	1	0	3	3	2	212	192	327	0	29	591	108	0	72	43	28	1611

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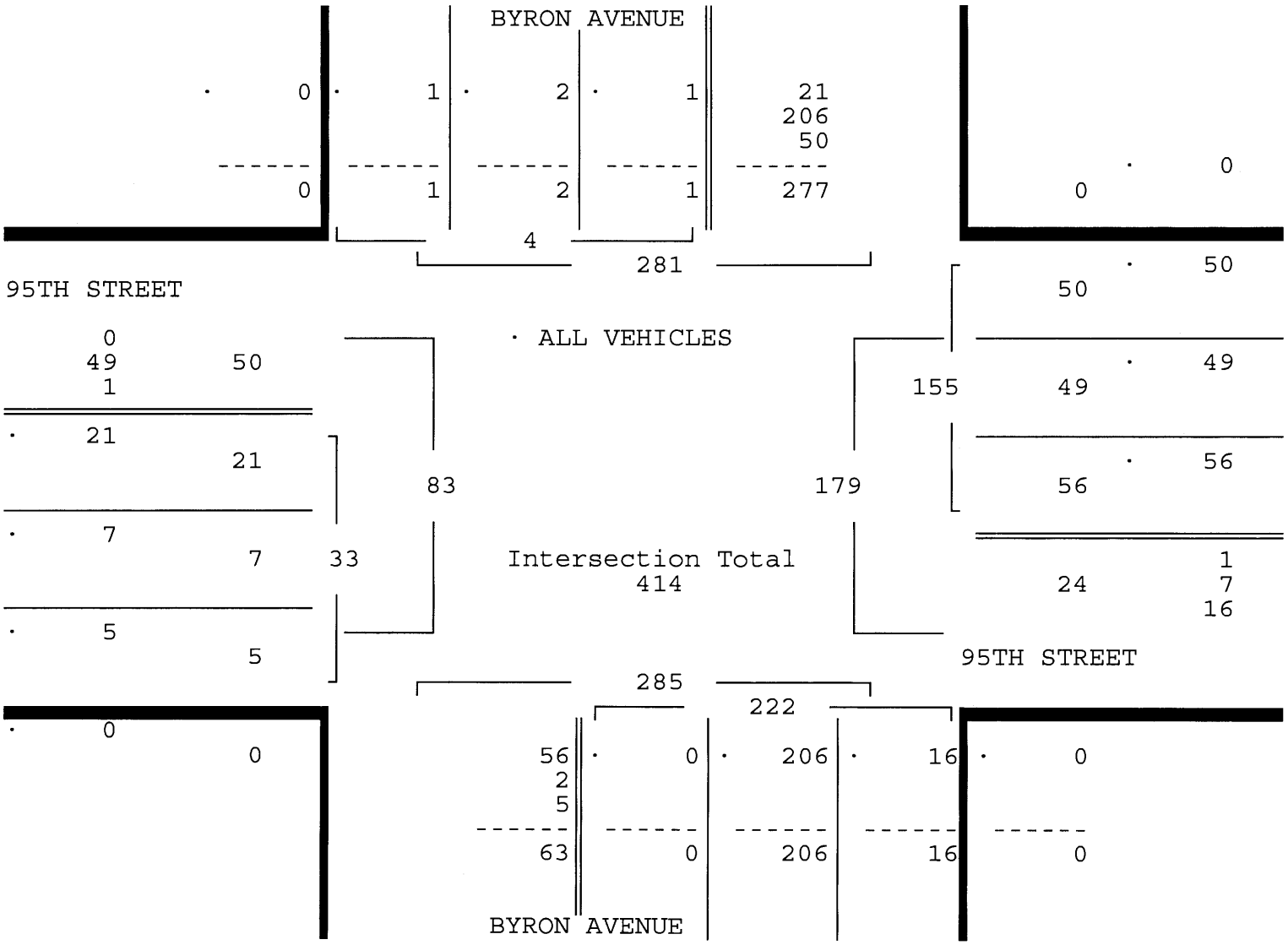
95TH STREET & BYRON AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAXIE ESPINOSA
NOT SIGNALIZED, ROUNDABOUT WITH YIELDS

Site Code : 00120139
Start Date: 10/30/12
File I.D. : 95STBYRO
Page : 2

ALL VEHICLES

	BYRON AVENUE From North				95TH STREET From East				BYRON AVENUE From South				95TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 10/30/12																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 10/30/12																	
Peak start 08:00					08:00				08:00				08:00				
Volume	1	0	2	1	0	56	49	50	0	0	206	16	0	21	7	5	
Percent	25%	0%	50%	25%	0%	36%	32%	32%	0%	0%	93%	7%	0%	64%	21%	15%	
Pk total	4				155				222				33				
Highest	08:45				08:15				08:00				08:00				
Volume	0	0	1	1	0	22	10	12	0	0	88	7	0	8	3	1	
Hi total	2				44				95				12				
PHF	.50				.88				.58				.69				



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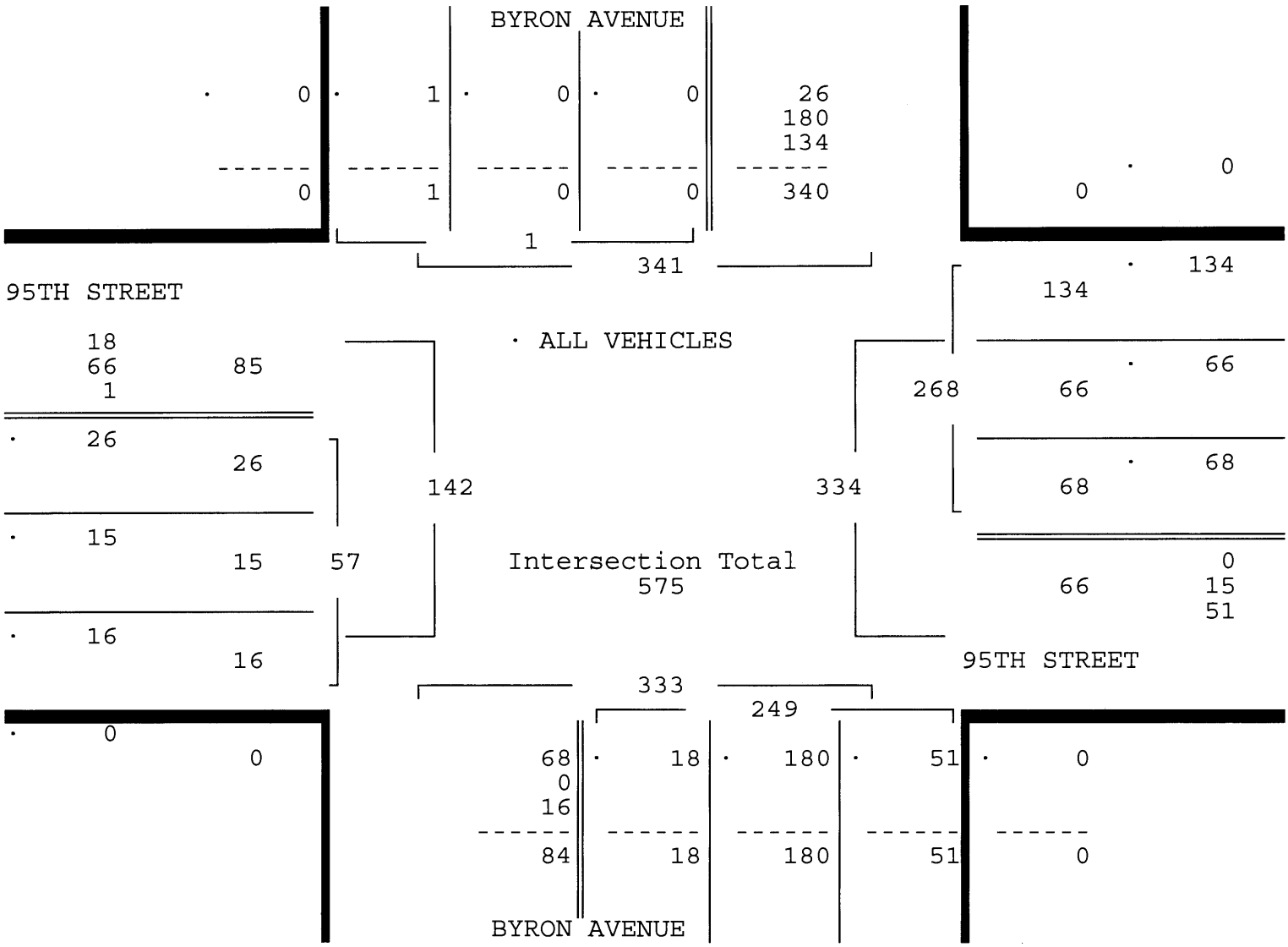
95TH STREET & BYRON AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAXIE ESPINOSA
NOT SIGNALIZED, ROUNDABOUT WITH YIELDS

Site Code : 00120139
Start Date: 10/30/12
File I.D. : 95STBYRO
Page : 3

ALL VEHICLES

	BYRON AVENUE From North				95TH STREET From East				BYRON AVENUE From South				95TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 10/30/12																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 10/30/12																	
Peak start 16:15					16:15				16:15				16:15				
Volume	0	0	0	1	1	67	66	134	0	18	180	51	0	26	15	16	
Percent	0%	0%	0%	100%	0%	25%	25%	50%	0%	7%	72%	20%	0%	46%	26%	28%	
Pk total	1				268				249				57				
Highest	16:30				16:45				16:30				16:30				
Volume	0	0	0	1	0	16	18	39	0	7	45	17	0	8	5	5	
Hi total	1				73				69				18				
PHF	.25				.92				.90				.79				



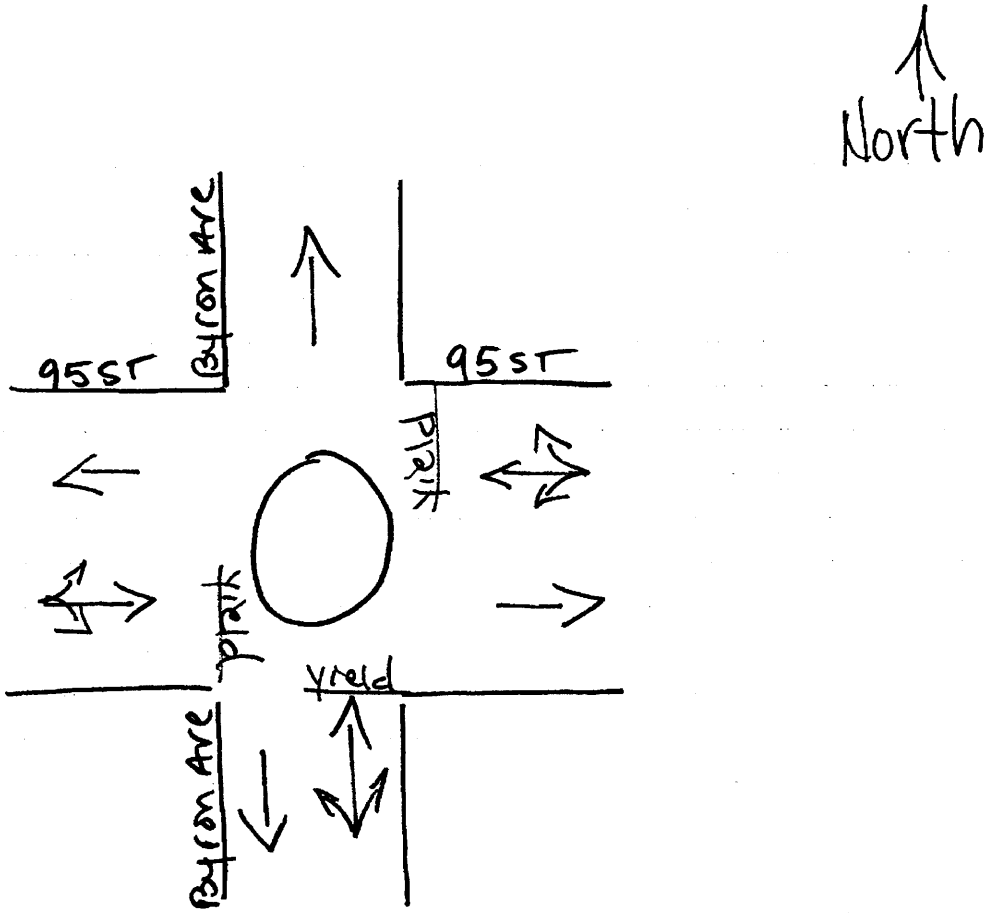
Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

95TH STREET & BYRON AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAXIE ESPINOSA
NOT SIGNALIZED, ROUNDABOUT WITH YIELDS

Site Code : 00120139
Start Date: 10/30/12
File I.D. : 95STBYRO
Page : 1

PEDESTRIANS

	BYRON AVENUE From North				95TH STREET From East				BYRON AVENUE From South				95TH STREET From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 10/30/12																	
07:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
07:15	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	4
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	1	0	0	0	1	0	0	0	3	0	0	0	1	6
08:00	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3
08:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
08:30	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	2	0	0	0	0	0	0	0	5	0	0	0	0	7
* BREAK *																	
16:00	0	0	0	4	0	0	0	0	0	0	0	2	0	0	0	0	6
16:15	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
Hr Total	0	0	0	7	0	0	0	0	0	0	0	4	0	0	0	0	11
17:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
17:15	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
17:30	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7
17:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Hr Total	0	0	0	3	0	0	0	0	0	0	0	8	0	0	0	0	11
TOTAL	0	0	0	13	0	0	0	1	0	0	0	20	0	0	0	1	35



Surfside, Florida
October 31, 2012
drawn by: Luis Palomino
NOT Signalized

88TH STREET & BYRON AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAURICE GOMEZ
NOT SIGNALIZED, N/S STOP

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120139
Start Date: 10/30/12
File I.D. : 88STBYRO
Page : 1

ALL VEHICLES

	BYRON AVENUE From North				88TH STREET From East				BYRON AVENUE From South				88TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 10/30/12																	
07:00	0	0	0	1	0	0	0	2	0	0	0	3	0	0	3	6	15
07:15	0	0	0	0	0	0	5	1	0	0	0	3	0	0	3	3	15
07:30	0	0	0	0	0	0	8	3	0	0	0	2	0	0	2	10	25
07:45	0	0	0	0	0	0	4	0	0	0	0	4	0	0	6	8	22
Hr Total	0	0	0	1	0	0	17	6	0	0	0	12	0	0	14	27	77
08:00	0	0	0	1	0	0	6	5	0	0	0	18	0	0	7	12	49
08:15	0	0	0	1	0	1	5	3	0	0	0	27	0	0	9	23	69
08:30	0	0	0	1	0	0	8	4	0	0	0	28	0	0	5	15	61
08:45	0	0	0	2	0	0	9	3	0	0	0	14	0	0	13	11	52
Hr Total	0	0	0	5	0	1	28	15	0	0	0	87	0	0	34	61	231
* BREAK *																	
16:00	0	0	0	0	0	0	10	6	0	2	0	17	0	0	5	11	51
16:15	0	0	0	1	0	0	12	3	0	1	0	23	0	0	3	13	56
16:30	0	0	0	1	0	0	8	14	0	0	0	23	0	0	7	8	61
16:45	0	0	0	0	0	1	7	2	0	0	0	18	0	0	8	8	44
Hr Total	0	0	0	2	0	1	37	25	0	3	0	81	0	0	23	40	212
17:00	0	0	0	1	0	0	12	1	0	0	0	10	0	0	3	9	36
17:15	0	0	0	3	0	0	10	2	0	0	0	19	0	0	2	7	43
17:30	0	0	0	1	0	0	12	3	0	0	0	17	0	0	2	11	46
17:45	0	0	0	1	0	0	8	5	0	1	0	21	0	0	8	3	47
Hr Total	0	0	0	6	0	0	42	11	0	1	0	67	0	0	15	30	172
TOTAL	0	0	0	14	0	2	124	57	0	4	0	247	0	0	86	158	692

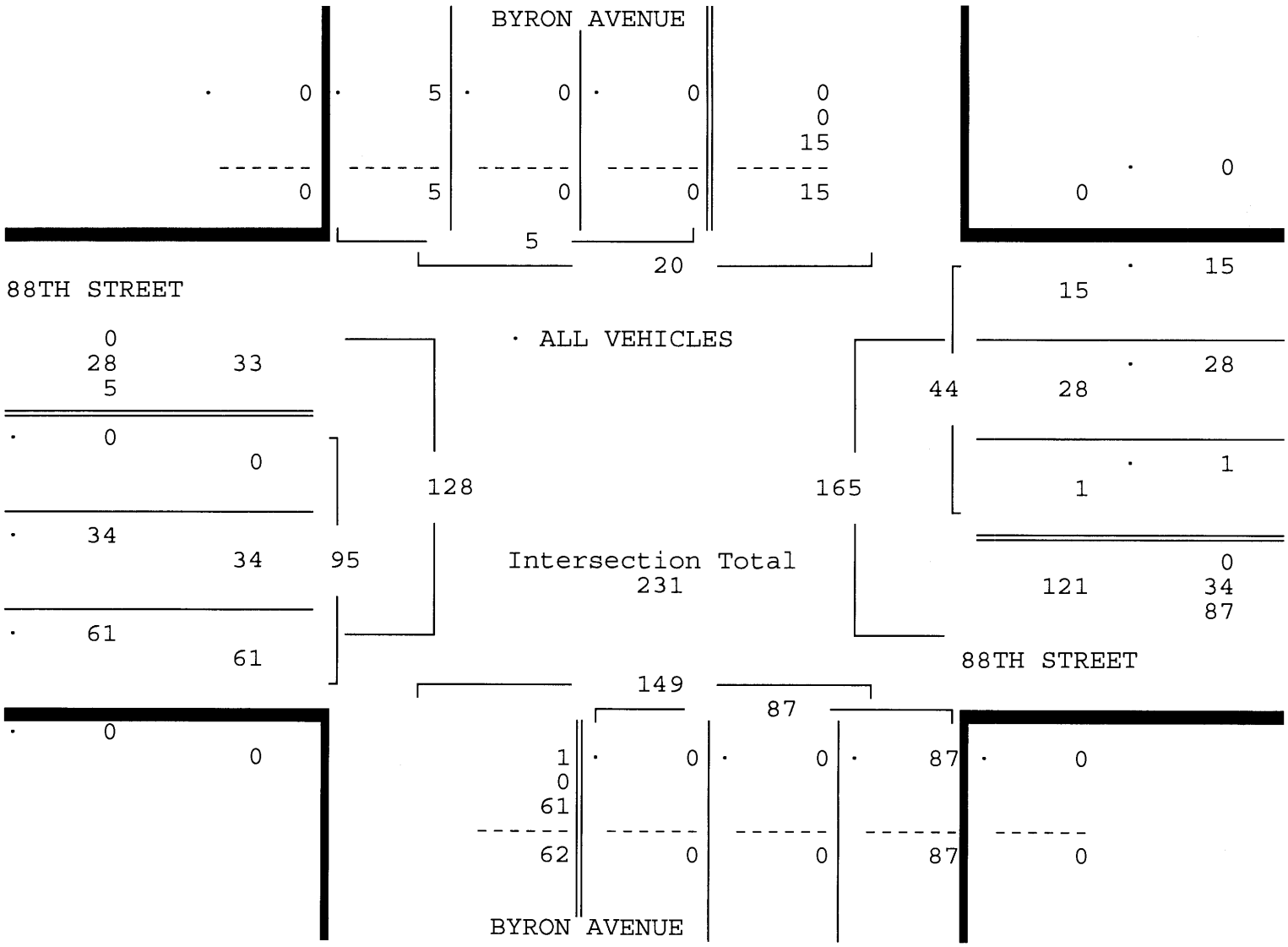
88TH STREET & BYRON AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAURICE GOMEZ
NOT SIGNALIZED, N/S STOP

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120139
Start Date: 10/30/12
File I.D. : 88STBYRO
Page : 2

ALL VEHICLES

	BYRON AVENUE From North				88TH STREET From East				BYRON AVENUE From South				88TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 10/30/12																	
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 10/30/12																	
Peak start 08:00					08:00				08:00				08:00				
Volume	0	0	0	5	0	1	28	15	0	0	0	87	0	0	34	61	
Percent	0%	0%	0%	100%	0%	2%	64%	34%	0%	0%	0%	100%	0%	0%	36%	64%	
Pk total	5				44				87				95				
Highest	08:45				08:30				08:30				08:15				
Volume	0	0	0	2	0	0	8	4	0	0	0	28	0	0	9	23	
Hi total	2				12				28				32				
PHF	.62				.92				.78				.74				



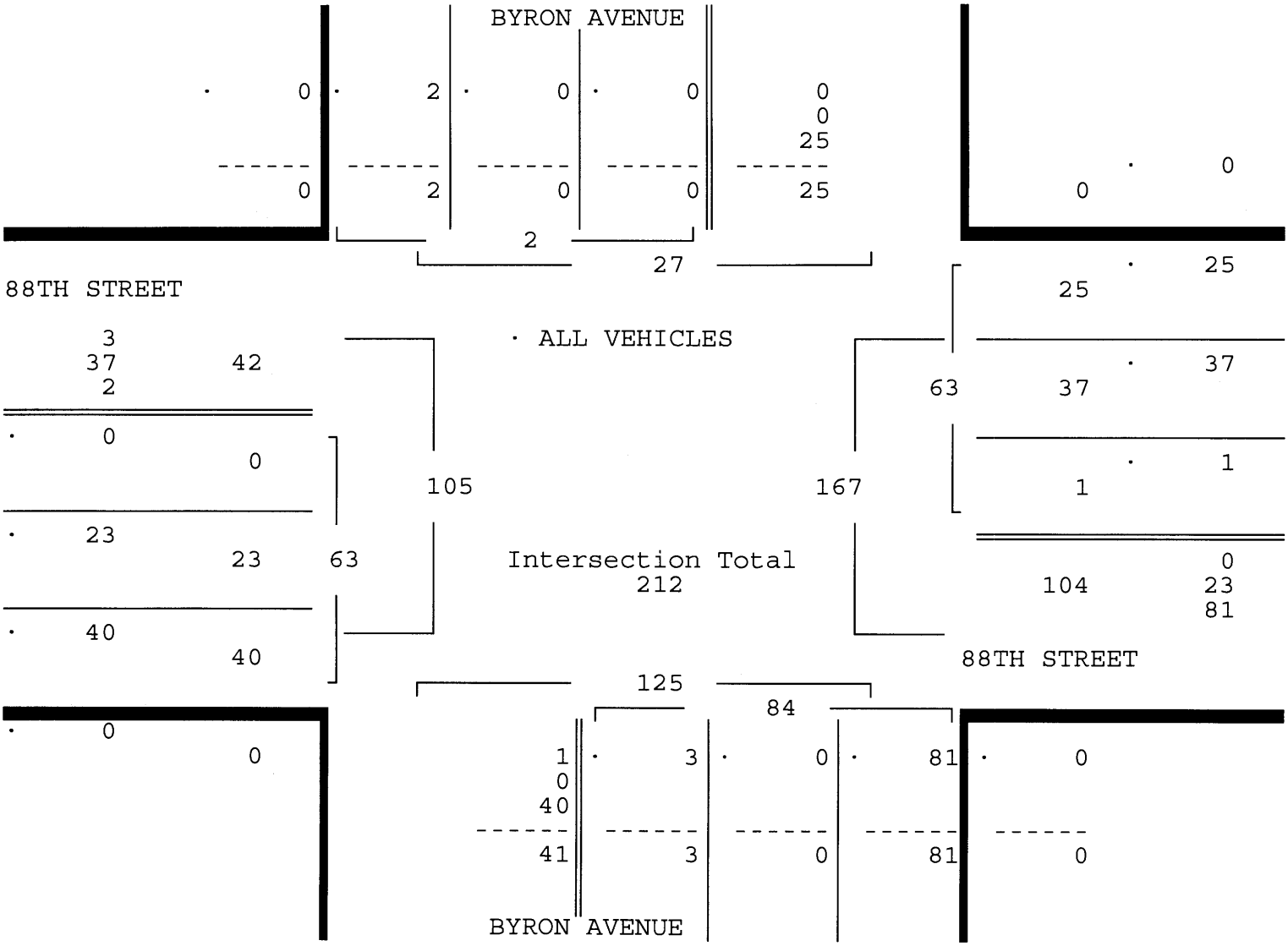
88TH STREET & BYRON AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAURICE GOMEZ
NOT SIGNALIZED, N/S STOP

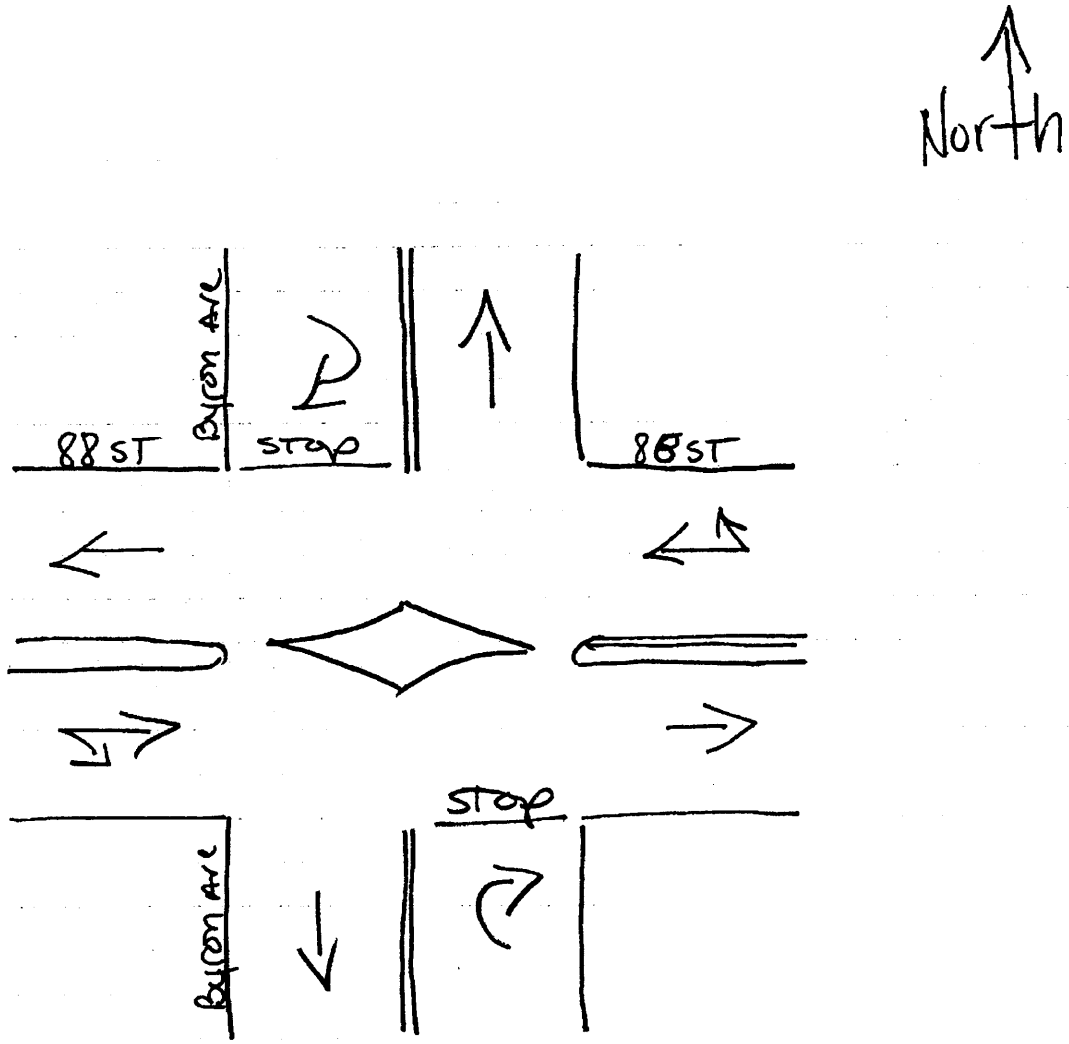
Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120139
Start Date: 10/30/12
File I.D. : 88STBYRO
Page : 3

ALL VEHICLES

	BYRON AVENUE From North				88TH STREET From East				BYRON AVENUE From South				88TH STREET From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 10/30/12																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 10/30/12																	
Peak start 16:00					16:00				16:00				16:00				
Volume	0	0	0	2	0	1	37	25	0	3	0	81	0	0	23	40	
Percent	0%	0%	0%	100%	0%	2%	59%	40%	0%	4%	0%	96%	0%	0%	37%	63%	
Pk total	2				63				84				63				
Highest	16:15				16:30				16:15				16:00				
Volume	0	0	0	1	0	0	8	14	0	1	0	23	0	0	5	11	
Hi total	1				22				24				16				
PHF	.50				.72				.88				.98				





Surfside, Florida

October 31, 2012

drawn by: Luis Palomino

NOT Signalized

88TH STREET & BYRON AVENUE
SURFSIDE, FLORIDA
COUNTED BY: MAURICE GOMEZ
NOT SIGNALIZED, N/S STOP

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00120139
Start Date: 10/30/12
File I.D. : 88STBYRO
Page : 1

PEDESTRIANS

	BYRON AVENUE From North				88TH STREET From East				BYRON AVENUE From South				88TH STREET From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 10/30/12																	
07:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	1	4
07:30	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
07:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
Hr Total	0	0	0	3	0	0	0	2	0	0	0	1	0	0	0	2	8
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	3
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Hr Total	0	0	0	1	0	0	0	1	0	0	0	2	0	0	0	0	4
* BREAK *																	
16:00	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	2	5
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	2	0	0	0	1	0	0	0	2	0	0	0	2	7
17:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
17:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
17:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
17:45	0	0	0	6	0	0	0	0	0	0	0	1	0	0	0	2	9
Hr Total	0	0	0	6	0	0	0	0	0	0	0	4	0	0	0	4	14
TOTAL	0	0	0	12	0	0	0	4	0	0	0	9	0	0	0	8	33

Traffic Survey Specialists, Inc. 624 Gardenia Terrace
Delray Beach, Florida 33444 Phone (561) 272-3255
Volume Report with 24 Hour Totals

****

Data File : D1030004.PRN
Station : 000000102906
Identification : 000058410148
Start date : Oct 30, 12
Stop date : Oct 30, 12
City/Town : Surfside, Florida
Location : Byron Avenue South of 88th Street

Interval : 15 minutes
Start time : 00:00
Stop time : 24:00
County : Dade

****

Oct 30 Southbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	0	0	0	0	0	1	2	6	15	9	10	9
30	0	0	0	0	0	1	2	3	23	10	9	4
45	1	1	0	0	0	0	1	10	12	8	5	6
00	0	0	0	1	0	0	4	8	14	8	10	2
Hr Total	1	1	0	1	0	2	9	27	64	35	34	21

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	9	14	7	9	15	7	8	9	1	1	0	0
30	7	5	13	8	11	10	6	9	2	1	0	2
45	5	7	8	7	9	9	3	7	4	2	2	3
00	5	7	7	24	10	4	11	7	1	2	3	2
Hr Total	26	33	35	48	45	30	28	32	8	6	5	7

24 Hour Total : 498
AM peak hour begins : 08:00 AM peak volume : 64 Peak hour factor : 0.70
PM peak hour begins : 15:45 PM peak volume : 59 Peak hour factor : 0.61

****

Oct 30 Northbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	2	0	0	0	1	0	1	3	20	6	8	12
30	1	0	2	0	2	0	2	3	30	16	4	19
45	2	2	0	0	0	1	5	2	24	4	12	7
00	0	0	1	0	0	1	3	5	13	4	9	12
Hr Total	5	2	3	0	3	2	11	13	87	30	33	50

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	14	16	19	16	20	12	18	19	3	8	3	2
30	13	9	13	24	23	21	23	14	4	2	6	2
45	11	12	16	20	21	17	6	10	5	8	2	1
00	6	12	7	13	17	26	13	5	7	3	1	2
Hr Total	44	49	55	73	81	76	60	48	19	21	12	7

24 Hour Total : 784
AM peak hour begins : 08:00 AM peak volume : 87 Peak hour factor : 0.73
PM peak hour begins : 17:30 PM peak volume : 84 Peak hour factor : 0.81

****

Traffic Survey Specialists, Inc. 624 Gardenia Terrace
Delray Beach, Florida 33444 Phone (561) 272-3255
Volume Report with 24 Hour Totals

****

Data File : D1030004.PRN
Station : 000000102906
Identification : 000058410148
Start date : Oct 30, 12
Stop date : Oct 30, 12
City/Town : Surfside, Florida
Location : Byron Avenue South of 88th Street

Interval : 15 minutes
Start time : 00:00
Stop time : 24:00
County : Dade

****

Oct 30 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	2	0	0	0	1	1	3	9	35	15	18	21
30	1	0	2	0	2	1	4	6	53	26	13	23
45	3	3	0	0	0	1	6	12	36	12	17	13
00	0	0	1	1	0	1	7	13	27	12	19	14
Hr Total	6	3	3	1	3	4	20	40	151	65	67	71

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	23	30	26	25	35	19	26	28	4	9	3	2
30	20	14	26	32	34	31	29	23	6	3	6	4
45	16	19	24	27	30	26	9	17	9	10	4	4
00	11	19	14	37	27	30	24	12	8	5	4	4
Hr Total	70	82	90	121	126	106	88	80	27	27	17	14

24 Hour Total : 1282
AM peak hour begins : 08:00 AM peak volume : 151 Peak hour factor : 0.71
PM peak hour begins : 15:45 PM peak volume : 136 Peak hour factor : 0.92

****

APPENDIX B
TRAFFIC DEVELOPMENT SHEETS

2011 Peak Season Factor Category Report - Report Type: ALL
Category: 8700 MIAMI-DADE NORTH

MOCF: 0.96

Week	Dates	SF	PSCF
1	01/01/2011 - 01/01/2011	1.03	1.07
2	01/02/2011 - 01/08/2011	1.02	1.06
3	01/09/2011 - 01/15/2011	1.01	1.05
4	01/16/2011 - 01/22/2011	1.00	1.04
5	01/23/2011 - 01/29/2011	0.99	1.03
* 6	01/30/2011 - 02/05/2011	0.97	1.01
* 7	02/06/2011 - 02/12/2011	0.96	1.00
* 8	02/13/2011 - 02/19/2011	0.95	0.98
* 9	02/20/2011 - 02/26/2011	0.95	0.98
*10	02/27/2011 - 03/05/2011	0.96	1.00
*11	03/06/2011 - 03/12/2011	0.96	1.00
*12	03/13/2011 - 03/19/2011	0.96	1.00
*13	03/20/2011 - 03/26/2011	0.96	1.00
*14	03/27/2011 - 04/02/2011	0.97	1.01
*15	04/03/2011 - 04/09/2011	0.97	1.01
*16	04/10/2011 - 04/16/2011	0.97	1.01
*17	04/17/2011 - 04/23/2011	0.98	1.02
*18	04/24/2011 - 04/30/2011	0.98	1.02
19	05/01/2011 - 05/07/2011	0.99	1.03
20	05/08/2011 - 05/14/2011	0.99	1.03
21	05/15/2011 - 05/21/2011	0.99	1.03
22	05/22/2011 - 05/28/2011	1.00	1.04
23	05/29/2011 - 06/04/2011	1.00	1.04
24	06/05/2011 - 06/11/2011	1.00	1.04
25	06/12/2011 - 06/18/2011	1.00	1.04
26	06/19/2011 - 06/25/2011	1.01	1.05
27	06/26/2011 - 07/02/2011	1.02	1.06
28	07/03/2011 - 07/09/2011	1.03	1.07
29	07/10/2011 - 07/16/2011	1.03	1.07
30	07/17/2011 - 07/23/2011	1.03	1.07
31	07/24/2011 - 07/30/2011	1.03	1.07
32	07/31/2011 - 08/06/2011	1.03	1.07
33	08/07/2011 - 08/13/2011	1.03	1.07
34	08/14/2011 - 08/20/2011	1.03	1.07
35	08/21/2011 - 08/27/2011	1.02	1.06
36	08/28/2011 - 09/03/2011	1.02	1.06
37	09/04/2011 - 09/10/2011	1.01	1.05
38	09/11/2011 - 09/17/2011	1.01	1.05
39	09/18/2011 - 09/24/2011	1.01	1.05
40	09/25/2011 - 10/01/2011	1.01	1.05
41	10/02/2011 - 10/08/2011	1.00	1.04
42	10/09/2011 - 10/15/2011	1.00	1.04
43	10/16/2011 - 10/22/2011	1.00	1.04
44	10/23/2011 - 10/29/2011	1.00	1.04
45	10/30/2011 - 11/05/2011	1.00	1.04
46	11/06/2011 - 11/12/2011	1.00	1.04
47	11/13/2011 - 11/19/2011	1.00	1.04
48	11/20/2011 - 11/26/2011	1.01	1.05
49	11/27/2011 - 12/03/2011	1.01	1.05
50	12/04/2011 - 12/10/2011	1.02	1.06
51	12/11/2011 - 12/17/2011	1.03	1.07
52	12/18/2011 - 12/24/2011	1.02	1.06
53	12/25/2011 - 12/31/2011	1.01	1.05

* Peak Season

Turning Movement Counts (AM Peak Hour)

	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
96th Street at Bal Harbour Shops	2012 Raw Counts	54	1096	0	0	922	42	7	0	9	0	0	0
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	57	1151	0	0	968	44	7	0	9	0	0	0
96th Street at Byron Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	0	1080	0	0	746	0	0	0	0	192	0	21
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	0	1134	0	0	783	0	0	0	0	202	0	22
96th Street at Harding Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	0	339	655	0	439	0	93	1333	337	0	0	0
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	0	356	688	0	461	0	98	1400	354	0	0	0
96th Street at Collins Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	349	9	0	0	3	3	0	0	0	436	1008	8
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	366	9	0	0	3	3	0	0	0	458	1058	8
95th Street at Harding Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	0	25	164	48	46	0	55	1600	31	0	0	0
	Peak Seasonal Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
	2012 Adjusted Existing Volumes	0	27	174	51	49	0	58	1696	33	0	0	0
95th Street at Collins Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	66	3	0	0	7	7	0	0	0	72	1433	7
	Peak Seasonal Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
	2012 Adjusted Existing Volumes	70	3	0	0	7	7	0	0	0	76	1519	7
94th Street at Harding Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	0	10	65	30	69	0	49	1729	62	0	0	0
	Peak Seasonal Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
	2012 Adjusted Existing Volumes	0	11	69	32	73	0	52	1833	66	0	0	0
94th Street at Collins Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	44	1	0	0	8	9	0	0	0	80	1441	3
	Peak Seasonal Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
	2012 Adjusted Existing Volumes	47	1	0	0	8	10	0	0	0	85	1527	3
94th Street at Bay Drive	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	0	0	0	2	0	5	6	29	0	1	86	13
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	0	0	0	2	0	5	6	30	0	1	90	14
88th Street at Dickens Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	2	54	0	0	21	2	11	0	3	0	0	0
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	2	57	0	0	22	2	12	0	3	0	0	0
91st Street at Abbott Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	4	21	2	1	43	5	6	8	1	4	16	0
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	4	22	2	1	45	5	6	8	1	4	17	0
90th Street at Bay Drive	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	0	0	0	4	0	1	1	5	0	0	2	0
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	0	0	0	4	0	1	1	5	0	0	2	0
90th Street at Carlyle Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	9	30	0	6	27	4	5	20	4	1	12	6
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	9	32	0	6	28	4	5	21	4	1	13	6
95th Street at Byron Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	21	7	5	56	49	50	1	2	1	0	206	16
	Peak Seasonal Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
	2012 Adjusted Existing Volumes	22	7	5	58	51	52	1	2	1	0	214	17
88th Street at Byron Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	0	34	61	1	28	15	0	0	5	0	0	87
	Peak Seasonal Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
	2012 Adjusted Existing Volumes	0	35	63	1	29	16	0	0	5	0	0	90

Turning Movement Counts (PM Peak Hour)

96th Street at Bal Harbour Shops	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	50	910	0	0	856	24	75	0	79	0	0	0
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	53	956	0	0	899	25	79	0	83	0	0	0
96th Street at Byron Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	0	984	0	0	699	0	0	0	0	189	0	11
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	0	1033	0	0	734	0	0	0	0	198	0	12
96th Street at Harding Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	0	330	587	0	441	0	37	1169	270	0	0	0
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	0	347	616	0	463	0	39	1227	284	0	0	0
96th Street at Collins Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	373	16	0	0	14	10	0	0	0	402	1400	15
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	392	17	0	0	15	11	0	0	0	422	1470	16
95th Street at Harding Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	0	34	74	70	53	0	73	1641	59	0	0	0
	Peak Seasonal Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
	2012 Adjusted Existing Volumes	0	36	78	74	56	0	77	1739	63	0	0	0
95th Street at Collins Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	93	4	0	0	7	8	0	0	0	89	1979	9
	Peak Seasonal Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
	2012 Adjusted Existing Volumes	99	4	0	0	7	8	0	0	0	94	2098	10
94th Street at Harding Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	0	18	124	52	123	0	54	1621	138	0	0	0
	Peak Seasonal Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
	2012 Adjusted Existing Volumes	0	19	131	55	130	0	57	1718	146	0	0	0
94th Street at Collins Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	82	3	0	0	6	3	0	0	0	136	1955	1
	Peak Seasonal Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
	2012 Adjusted Existing Volumes	87	3	0	0	6	3	0	0	0	144	2072	1
94th Street at Bay Drive	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	0	0	0	4	0	3	8	40	0	0	29	20
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	0	0	0	4	0	3	8	42	0	0	30	21
88th Street at Dickens Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	1	35	0	0	36	3	2	0	0	0	0	0
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	1	37	0	0	38	3	2	0	0	0	0	0
91st Street at Abbott Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	5	50	4	1	34	4	2	4	4	1	11	2
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	5	53	4	1	36	4	2	4	4	1	12	2
90th Street at Bay Drive	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	0	0	0	3	0	4	2	3	0	0	0	1
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	0	0	0	3	0	4	2	3	0	0	0	1
90th Street at Carlyle Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	7	27	0	3	31	3	5	7	8	1	18	3
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	7	28	0	3	33	3	5	7	8	1	19	3
95th Street at Byron Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	26	15	16	68	66	134	0	0	1	18	180	51
	Peak Seasonal Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
	2012 Adjusted Existing Volumes	27	16	17	71	69	139	0	0	1	19	187	53
88th Street at Byron Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	0	23	40	1	37	25	0	0	2	3	0	81
	Peak Seasonal Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
	2012 Adjusted Existing Volumes	0	24	42	1	38	26	0	0	2	3	0	84

24-hour counts

Segment		Daily	AM	PM
Bay Drive between 96th Street and 95th Street	Raw	504	60	52
	PSCF	1.06	1.06	1.06
	Adjusted	534	64	55
Carlyle Avenue between 95th Street and 94th Street	Raw	2059	182	343
	PSCF	1.05	1.05	1.05
	Adjusted	2162	191	360
93rd Street between Carlyle Avenue and Byron Avenue	Raw	523	47	51
	PSCF	1.06	1.06	1.06
	Adjusted	554	50	54
92nd Street between Dickens Avenue and Carlyle Avenue	Raw	741	55	60
	PSCF	1.06	1.06	1.06
	Adjusted	785	58	64
Abbott Avenue between 92nd Street and Surfside Boulevard	Raw	385	31	36
	PSCF	1.06	1.06	1.06
	Adjusted	408	33	38
Surfside Boulevard between Carlyle Avenue Byron Avenue	Raw	1120	80	95
	PSCF	1.06	1.06	1.06
	Adjusted	1187	85	101
Bay Drive between Surfside Boulevard and 90th Street	Raw	400	46	32
	PSCF	1.05	1.05	1.05
	Adjusted	420	48	34
Byron Avenue between Surfside Boulevard and 90th Street	Raw	1017	52	255
	PSCF	1.05	1.05	1.05
	Adjusted	1068	55	268
89th Street between Carlyle Avenue and Byron Avenue	Raw	774	52	77
	PSCF	1.06	1.06	1.06
	Adjusted	820	55	82
88th Street west of Hawthorne Avenue	Raw	446	37	33
	PSCF	1.06	1.06	1.06
	Adjusted	473	39	35

APPENDIX C
EXISTING SIGNAL TIMING SHEETS

TOD Schedule Report

for 4344: 96 St@500 Blk

Print Date: 5/2/2012

Print Time: 11:39 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
4344	96 St@500 Blk	DOW-4		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
EBL	WBT	-	-	-	EBT	-	SBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase		Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1	EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	10 - 10 - 10	20 - 10 - 10	3	0
2	WBT	0 - 0 - 0	0 - 0 - 0	15 - 15 - 15	1 - 1 - 1	40 - 40 - 40	0 - 0 - 40	4	1
3	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
5	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6	EBT	0 - 0 - 0	0 - 0 - 0	15 - 15 - 15	1 - 1 - 1	40 - 40 - 40	0 - 0 - 40	4	1
7	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8	SBT	4 - 4 - 4	14 - 14 - 14	7 - 7 - 7	2.5 - 2.5 - 2.5	12 - 12 - 7	35 - 12 - 7	4	1

Last In Service Date: unknown

Permitted Phases

	12345678
Default	12---6-8
External Permit 0	--------
External Permit 1	-2---6-8
External Permit 2	-2---6-8

Current TOD Schedule	Plan	Cycle	Green Time 1 EBL	2 WBT	3 -	4 -	5 -	6 EBT	7 -	8 SBT	Ring Offset	Offset
	1	90	11	42	0	0	0	56	0	24	0	9
	3	90	11	42	0	0	0	56	0	24	0	10
	4	90	11	42	0	0	0	56	0	24	0	10
	5	110	10	65	0	0	0	78	0	22	0	99
	6	120	10	74	0	0	0	87	0	23	0	117
	7	90	10	44	0	0	0	57	0	23	0	6
	8	90	10	44	0	0	0	57	0	23	0	19
	9	150	10	105	0	0	0	118	0	22	0	16
	10	70	8	27	0	0	0	38	0	22	0	31
	11	70	8	27	0	0	0	38	0	22	0	60
	13	130	10	85	0	0	0	98	0	22	0	7
	14	120	7	78	0	0	0	88	0	22	0	13
	15	75	8	32	0	0	0	43	0	22	0	68
	16	150	10	105	0	0	0	118	0	22	0	16
	17	75	8	32	0	0	0	43	0	22	0	0
	18	120	8	77	0	0	0	88	0	22	0	78
	19	120	8	77	0	0	0	88	0	22	0	63
	20	160	10	115	0	0	0	128	0	22	0	153

Local TOD Schedule

Time	Plan	DOW
0000	10	Su M T W Th F S
0030	Flash	M T W Th F
0100	Flash	Su S
0600	5	M T W Th F
0630	13	M T W Th F
0700	16	M T W Th F
0745	20	M T W Th F
0800	11	Su S
0845	14	M T W Th F
1000	14	Su S
1400	13	M T W Th F
1530	9	M T W Th F
1830	5	M T W Th F
2100	11	M T W Th F
2200	11	Su S

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	----4---	SuM T W ThF S
0900	TOD OUTPUTS	------2-	SuM T W ThF S
1030	TOD OUTPUTS	--------	SuM T W ThF S
2100	TOD OUTPUTS	------2-	SuM T W ThF S
2330	TOD OUTPUTS	----4---	SuM T W ThF

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	----4---	SuM T W ThF S
0900	TOD OUTPUTS	------2-	SuM T W ThF S
1030	TOD OUTPUTS	--------	SuM T W ThF S
2100	TOD OUTPUTS	------2-	SuM T W ThF S
2330	TOD OUTPUTS	----4---	SuM T W ThF

*** Settings**

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 3648: Byron Av&96 St

Print Date: 5/2/2012

Print Time: 10:39 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
3648	Byron Av&96 St	DOW-4		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
-	WBT	-	NBT	-	EBT	-	-
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase		Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2	WBT	0 - 0 - 0	0 - 0 - 0	15 - 15 - 15	1 - 1 - 1	40 - 40 - 40	0 - 0 - 0	4	1
3	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4	NBT	4 - 4 - 4	17 - 17 - 17	7 - 7 - 7	2.5 - 2.5 - 2.5	18 - 20 - 20	35 - 0 - 0	4	1
5	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6	EBT	0 - 0 - 0	0 - 0 - 0	15 - 15 - 15	1 - 1 - 1	40 - 40 - 40	0 - 0 - 0	4	1
7	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0

Last In Service Date: unknown

Permitted Phases

	12345678
Default	-2-4-6--
External Permit 0	--------
External Permit 1	--------
External Permit 2	--------

Current TOD Schedule	Plan	Cycle	Green Time 1 -	2 WBT	3 -	4 NBT	5 -	6 EBT	7 -	8 -	Ring Offset	Offset
	1	90	0	62	0	18	0	62	0	0	0	12
	3	90	0	62	0	18	0	62	0	0	0	12
	4	90	0	62	0	18	0	62	0	0	0	12
	5	110	0	75	0	25	0	75	0	0	0	102
	6	120	0	87	0	23	0	87	0	0	0	1
	7	90	0	57	0	23	0	57	0	0	0	1
	8	90	0	57	0	23	0	57	0	0	0	15
	9	150	0	115	0	25	0	115	0	0	0	19
	10	70	0	42	0	18	0	42	0	0	0	30
	11	70	0	42	0	18	0	42	0	0	0	0
	13	130	0	95	0	25	0	95	0	0	0	10
	14	120	0	90	0	20	0	90	0	0	0	16
	15	75	0	47	0	18	0	47	0	0	0	2
	16	150	0	115	0	25	0	115	0	0	0	19
	17	75	0	47	0	18	0	47	0	0	0	10
	18	120	0	88	0	22	0	88	0	0	0	83
	19	120	0	88	0	22	0	88	0	0	0	71
	20	160	0	125	0	25	0	125	0	0	0	152

Local TOD Schedule

Time	Plan	DOW
0000	10	Su M T W Th F S
0030	Flash	M T W Th F
0100	Flash	Su S
0600	5	M T W Th F
0630	13	M T W Th F
0700	16	M T W Th F
0745	20	M T W Th F
0800	11	Su S
0845	14	M T W Th F
1000	14	Su S
1400	13	M T W Th F
1530	9	M T W Th F
1830	5	M T W Th F
2100	11	M T W Th F
2200	11	Su S

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

*** Settings**

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report
for 2919: Harding Av&96 St

Print Date: 5/2/2012

Print Time: 9:37 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2919	Harding Av&96 St	DOW-4		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
-	SBT	-	WBT	-	-	-	EBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase		Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2	SBT	7 - 7 - 7	17 - 17 - 17	7 - 7 - 7	1 - 1 - 1	54 - 54 - 54	0 - 58 - 54	4	1
3	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4	WBT	7 - 7 - 7	12 - 12 - 12	7 - 7 - 7	1 - 1 - 1	19 - 26 - 22	91 - 24 - 91	4	1
5	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 54 - 0	0 - 58 - 0	0	0
7	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8	EBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	1 - 1 - 1	19 - 26 - 22	91 - 24 - 91	4	1

Last In Service Date: unknown

Permitted Phases

	12345678
Default	-2-4---8
External Permit 0	--------
External Permit 1	--------
External Permit 2	--------

Current TOD Schedule	Plan	Cycle	Green Time 1 -	2 SBT	3 -	4 WBT	5 -	6 -	7 -	8 EBT	Ring Offset	Offset
	1	130	0	65	0	55	0	0	0	55	0	81
	3	120	0	53	0	57	0	0	0	57	0	48
	4	120	0	66	0	44	0	0	0	44	0	63
	5	110	0	71	0	29	0	0	0	29	0	40
	7	130	0	60	0	60	0	0	0	60	0	54
	10	120	0	53	0	57	0	0	0	57	0	48
	12	120	0	53	0	57	0	0	0	57	0	48
	13	130	0	72	0	48	0	0	0	48	0	50
	14	120	0	68	0	42	0	0	0	42	0	51
	16	150	0	72	0	68	0	0	0	68	0	61
	17	160	0	70	0	80	0	0	0	80	0	39
	18	150	0	66	0	74	0	0	0	74	0	57
	19	130	0	72	0	48	0	0	0	48	0	53
	20	110	0	71	0	29	0	0	0	29	0	24

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0600	5	M T W Th F
0630	19	M T W Th F
0700	16	M T W Th F
0745	17	M T W Th F
0800	Free	Su S
0900	14	M T W Th F
1000	14	Su S
1400	13	M T W Th F
1530	18	M T W Th F
1830	20	M T W Th F
2100	Free	M T W Th F
2200	Free	Su S

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-----3--	SuM T W ThF S
0200	TOD OUTPUTS	-------1	SuM T W ThF S
0600	TOD OUTPUTS	--------	M T W ThF
2100	TOD OUTPUTS	------2-	M T W ThF

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-----3--	SuM T W ThF S
0200	TOD OUTPUTS	-------1	SuM T W ThF S
0600	TOD OUTPUTS	--------	M T W ThF
0800	TOD OUTPUTS	------2-	Su S
1000	TOD OUTPUTS	--------	Su S
2100	TOD OUTPUTS	------2-	M T W ThF
2200	TOD OUTPUTS	------2-	Su S

*** Settings**

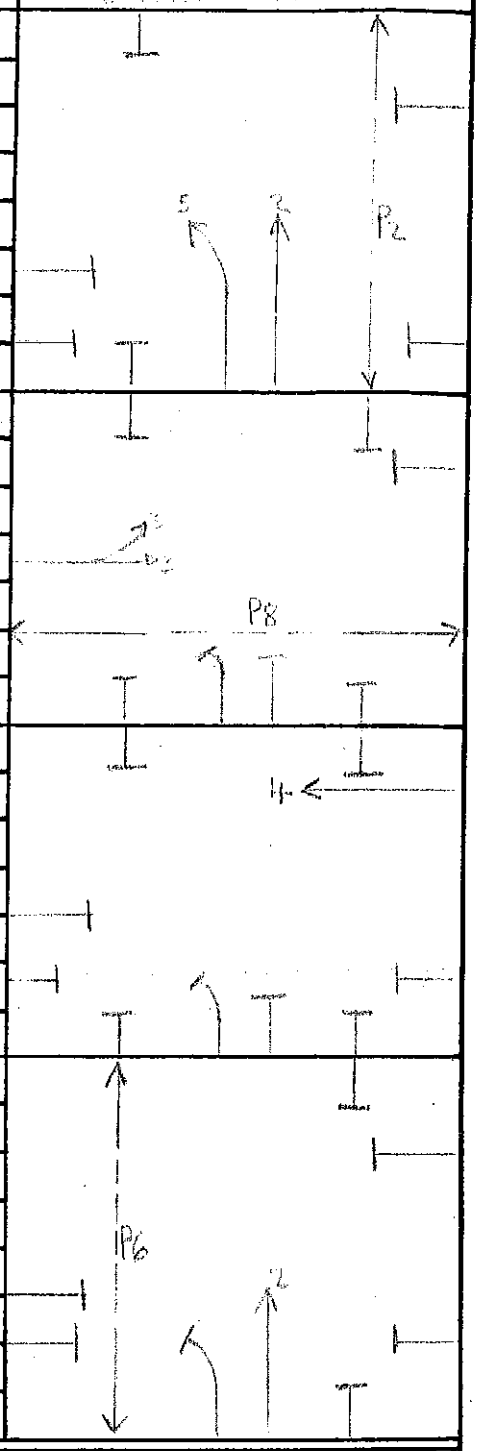
Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

SIGNAL OPERATING PLAN

N

PHASE		INT	2	3	4	5		P2	P6	P8				
Φ2+5 (2+5+P2) NBND & NL COLLINS AV. RECALL		R/W	G	R	R	G		W	DW	DW				
		PED. CL.	G	R	R	FG		FW	DW	DW				
	TO	Φ3	Y	R	R	Y		DW	DW	DW				
		Φ4	Y	R	R	Y		DW	DW	DW				
		Φ1	G	R	R	Y		DW	DW	DW				
	CLEAR													
Φ3 (3+P8) EBND & EL 96 ST RECALL		R/W	R	G	R	R		DW	DW	W				
		PED. CL.	R	G	R	R		DW	DW	FDW				
	TO	Φ4	R	Y	R	R		DW	DW	DW				
		Φ1	R	Y	R	R		DW	DW	DW				
		Φ2+5	R	Y	R	R		DW	DW	DW				
	CLEAR													
Φ4 (4) WBND 96 ST ACTUATED BY L4		R/W	R	R	G	R		DW	DW	DW				
		PED. CL.						DW	DW	DW				
	TO	Φ1	R	R	Y	R		DW	DW	DW				
		Φ2+5	R	R	Y	R		DW	DW	DW				
	CLEAR													
Φ1 (P6+2) NBND & PED. SIGNAL to CROSS 96 ST ON THE WEST SIDE ACTUATED BY P6		R/W	G	R	R	R		DW	W	DW				
		PED. CL.	G	R	R	R		DW	FDW	DW				
	TO	Φ2+5	G	R	R	R		DW	DW	DW				
	CLEAR													
			FY	FR	FR	FY								



Drawn	Date
H. FRANCILLON	2/11/98
Check	**Date**
H. HERNANDEZ	2/19/98
Division Engineer	**Date**

METROPOLITAN DADE COUNTY
DEPARTMENT OF TRAFFIC AND TRANSPORTATION

ASSET NO. 3005

Collins Av & 96 ST

Placed in Service		Phasing Number
Date: – 95	By: MITCHELL	6

TOD Schedule Report

for 3005: Collins Av&96 St

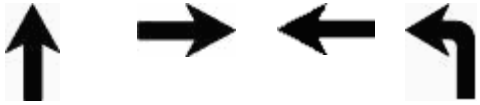
Print Date: 5/2/2012

Print Time: 9:44 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
3005	Collins Av&96 St	DOW-4		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
ICL	NBT	EBT	WBT	NBL	-	-	-
0	0	0	0	0	0	0	0

N/A 

Active Phase Bank: Phase Bank 1

Phase		Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1	ICL	4 - 4 - 4	11 - 11 - 11	4 - 4 - 4	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	1
2	NBT	4 - 4 - 4	7 - 7 - 7	4 - 4 - 4	1 - 1 - 1	30 - 30 - 30	30 - 0 - 0	4	1
3	EBT	4 - 4 - 4	13 - 13 - 13	4 - 4 - 4	2.5 - 2.5 - 2.5	18 - 25 - 25	77 - 0 - 0	4	1
4	WBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2.5 - 2.5 - 2.5	7 - 10 - 10	7 - 0 - 0	4	1
5	NBL	0 - 0 - 0	0 - 0 - 0	4 - 4 - 4	2 - 2 - 2	30 - 30 - 30	30 - 0 - 0	4	1
6	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
7	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0

Last In Service Date: unknown

Permitted Phases

	12345678
Default	12345---
External Permit 0	--------
External Permit 1	--------
External Permit 2	--------

Current TOD Schedule	Plan	Cycle	Green Time 1 ICL	2 NBT	3 EBT	4 WBT	5 NBL	6 -	7 -	8 -	Ring Offset	Offset
	1	130	15	34	58	7	34	0	0	0	0	78
	2	80	15	21	21	7	21	0	0	0	0	69
	3	120	15	37	45	7	37	0	0	0	0	58
	4	120	15	57	25	7	57	0	0	0	0	18
	5	110	15	43	29	7	43	0	0	0	0	49
	7	130	15	52	40	7	52	0	0	0	0	62
	8	70	15	14	18	7	14	0	0	0	0	7
	9	70	15	11	21	7	11	0	0	0	0	29
	10	120	15	37	45	7	37	0	0	0	0	58
	11	70	15	14	18	7	14	0	0	0	0	1
	12	120	15	37	45	7	37	0	0	0	0	58
	13	130	15	44	48	7	44	0	0	0	0	61
	14	120	15	40	42	7	40	0	0	0	0	61
	16	150	15	52	60	7	52	0	0	0	0	69
	17	160	15	45	77	7	45	0	0	0	0	43
	18	150	15	50	62	7	50	0	0	0	0	69
	19	130	15	44	48	7	44	0	0	0	0	61
	20	110	15	43	29	7	43	0	0	0	0	59

Local TOD Schedule

Time	Plan	DOW
0000	11	Su M T W Th F S
0200	8	Su M T W Th F S
0600	5	M T W Th F
0630	19	M T W Th F
0700	16	M T W Th F
0745	17	M T W Th F
0800	11	Su S
0900	14	M T W Th F
1000	14	Su S
1400	13	M T W Th F
1530	18	M T W Th F
1830	20	M T W Th F
2100	11	M T W Th F
2200	11	Su S

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

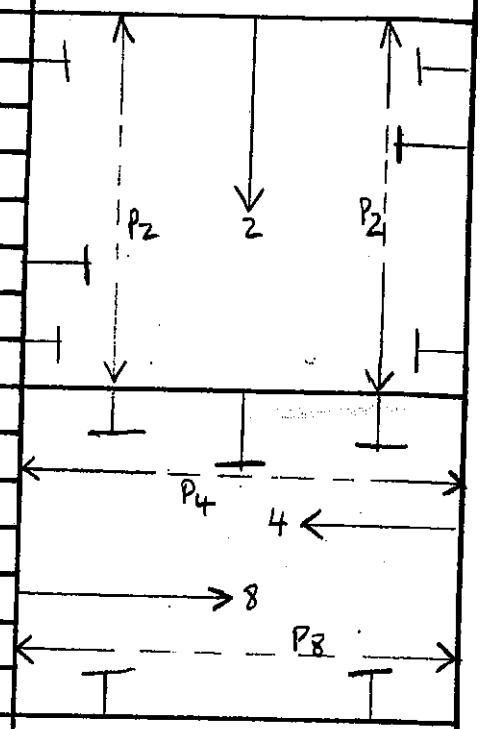
*** Settings**

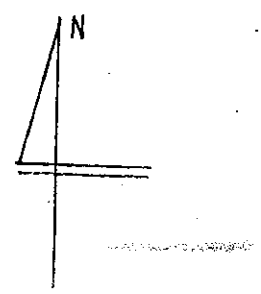
Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

SIGNAL OPERATING PLAN

PHASE		SIGNAL HEAD NUMBER											
	INT	2	4	8	·	P2	P4	P8					
Φ2 (2+P2)	R/W	G	R	R		W	DW	DW					
SBND	PED. CL	G	R	R		FDW	DW	DW					
HARDING AV	TO CLEAR Φ4+8	Y	R	R		DW	DW	DW					
RECALL													
Φ4+8 (4+8, P4, P8)	R/W	R	G	G		DW	W	W					
EBND & WBND	PED. CL	R	G	G		DW	FDW	FDW					
95 ST.	TO CLEAR Φ2	R	Y	Y		DW	DW	DW					
RECALL													
	R/W												
	PED. CL												
	TO CLEAR												
	R/W												
	PED. CL												
	TO CLEAR												
FLASH OPERATION		FY	FR	FR									





Drawn	Date	METROPOLITAN DADE COUNTY DEPARTMENT OF TRAFFIC AND TRANSPORTATION
H. FRANCILLON	2/10/98	ASSET NO. 2918
Check: H. HERNANDEZ	Date: 4/23/98	HARDING AV & 95 ST.
Division Engineer	Date	

Placed in Service		Phasing Number
Date: -/94	By: MITCHELL	5

TOD Schedule Report

for 2918: Harding Av&95 St

Print Date: 5/2/2012

Print Time: 9:36 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2918	Harding Av&95 St	DOW-4		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
-	SBT	-	WBT	-	-	-	EBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase		Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2	SBT	7 - 7 - 7	13 - 13 - 13	7 - 7 - 7	1 - 1 - 1	40 - 40 - 40	0 - 0 - 0	4	1
3	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4	WBT	7 - 7 - 7	15 - 15 - 15	7 - 7 - 7	1 - 2.5 - 2.5	20 - 20 - 20	30 - 0 - 0	4	1
5	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
7	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8	EBT	7 - 7 - 7	15 - 15 - 15	7 - 7 - 7	1 - 2.5 - 2.5	20 - 20 - 20	30 - 0 - 0	4	1

Last In Service Date: unknown

Permitted Phases

	12345678
Default	-2-4---8
External Permit 0	--------
External Permit 1	--------
External Permit 2	--------

Current TOD Schedule	Plan	Cycle	Green Time 1 -	2 SBT	3 -	4 WBT	5 -	6 -	7 -	8 EBT	Ring Offset	Offset
	1	130	0	98	0	22	0	0	0	22	0	98
	2	80	0	48	0	22	0	0	0	22	0	8
	3	120	0	88	0	22	0	0	0	22	0	81
	4	120	0	88	0	22	0	0	0	22	0	79
	5	110	0	78	0	22	0	0	0	22	0	58
	7	130	0	98	0	22	0	0	0	22	0	90
	8	70	0	38	0	22	0	0	0	22	0	15
	9	70	0	38	0	22	0	0	0	22	0	46
	10	120	0	88	0	22	0	0	0	22	0	81
	11	70	0	38	0	22	0	0	0	22	0	24
	12	120	0	88	0	22	0	0	0	22	0	81
	13	130	0	98	0	22	0	0	0	22	0	66
	14	120	0	88	0	22	0	0	0	22	0	84
	16	150	0	118	0	22	0	0	0	22	0	75
	17	160	0	128	0	22	0	0	0	22	0	98
	18	150	0	118	0	22	0	0	0	22	0	124
	19	130	0	98	0	22	0	0	0	22	0	68
	20	110	0	78	0	22	0	0	0	22	0	29

Local TOD Schedule

Time	Plan	DOW
0000	11	Su M T W Th F S
0200	8	Su M T W Th F S
0600	5	M T W Th F
0630	19	M T W Th F
0700	16	M T W Th F
0745	17	M T W Th F
0800	11	Su S
0900	14	M T W Th F
1000	14	Su S
1400	13	M T W Th F
1500	18	M W
1530	18	T Th F
1830	20	M T W Th F
2100	11	M T W Th F
2200	11	Su S

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

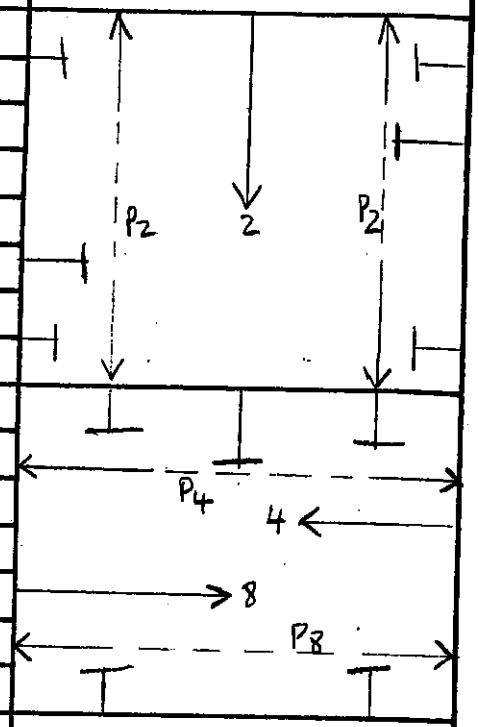
*** Settings**

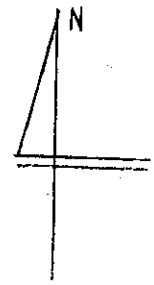
Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

SIGNAL OPERATING PLAN

PHASE		SIGNAL HEAD NUMBER												
	INT	2	4	8	·	P2	P4	P8						
Φ2 (2+P2)	R/W	G	R	R		W	DW	DW						
	PED. CL	G	R	R		FW	DW	DW						
SBND	TO Φ4+8	Y	R	R		DW	DW	DW						
HARDING AV.	CLEAR													
RECALL														
Φ4+8 (4+8, P4, P8)	R/W	R	G	G		DW	W	W						
	PED. CL	R	G	G		DW	FW	FW						
EBND & WBND	TO Φ2	R	Y	Y		DW	DW	DW						
94 ST	CLEAR													
RECALL														
	R/W													
	PED. CL													
	TO CLEAR													
	R/W													
	PED. CL													
	TO CLEAR													
FLASH OPERATION		FY	FR	FR										





Drawn	Date	METROPOLITAN DADE COUNTY DEPARTMENT OF TRAFFIC AND TRANSPORTATION
H. FRANCILLON	2/10/98	ASSET NO. 2917
Check	Date	
H. HERNANDEZ	4/23/98	HARDING AV & 94 ST
Division Engineer	Date	

Placed in Service		Phasing Number
Date: -/94	By: MITCHELL	5

TOD Schedule Report

for 2917: Harding Av&94 St

Print Date: 5/2/2012

Print Time: 9:36 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2917	Harding Av&94 St	DOW-4		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
-	SBT	-	WBT	-	-	-	EBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase		Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2	SBT	7 - 7 - 7	13 - 13 - 13	7 - 7 - 7	1 - 1 - 1	40 - 40 - 40	0 - 40 - 40	4	1
3	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4	WBT	7 - 7 - 7	15 - 15 - 15	7 - 7 - 7	1 - 1 - 1	22 - 22 - 22	25 - 25 - 25	4	1
5	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
7	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8	EBT	7 - 7 - 7	15 - 15 - 15	7 - 7 - 7	1 - 1 - 1	22 - 22 - 22	25 - 25 - 25	4	1

Last In Service Date: unknown

Permitted Phases

	12345678
Default	-2-4---8
External Permit 0	--------
External Permit 1	--------
External Permit 2	--------

Current TOD Schedule	Plan	Cycle	Green Time 1 -	2 SBT	3 -	4 WBT	5 -	6 -	7 -	8 EBT	Ring Offset	Offset
	1	130	0	98	0	22	0	0	0	22	0	111
	2	80	0	48	0	22	0	0	0	22	0	23
	3	120	0	88	0	22	0	0	0	22	0	88
	4	120	0	88	0	22	0	0	0	22	0	106
	5	110	0	78	0	22	0	0	0	22	0	68
	7	130	0	98	0	22	0	0	0	22	0	97
	9	70	0	38	0	22	0	0	0	22	0	64
	10	120	0	88	0	22	0	0	0	22	0	88
	11	70	0	38	0	22	0	0	0	22	0	37
	12	120	0	88	0	22	0	0	0	22	0	88
	13	130	0	98	0	22	0	0	0	22	0	80
	14	120	0	88	0	22	0	0	0	22	0	105
	16	150	0	118	0	22	0	0	0	22	0	90
	17	160	0	128	0	22	0	0	0	22	0	91
	18	150	0	118	0	22	0	0	0	22	0	139
	19	130	0	98	0	22	0	0	0	22	0	81
	20	110	0	78	0	22	0	0	0	22	0	44

Local TOD Schedule

Time	Plan	DOW
0000	11	Su M T W Th F S
0200	Flash	Su M T W Th F S
0600	5	M T W Th F
0630	19	M T W Th F
0700	16	M T W Th F
0745	17	M T W Th F
0800	11	Su S
0900	14	M T W Th F
1000	14	Su S
1400	13	M T W Th F
1500	18	M W
1530	18	T Th F
1830	20	M T W Th F
2100	11	M T W Th F
2200	11	Su S

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

*** Settings**

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

TOD Schedule Report

for 3319: Collins Av&95 St

Print Date: 5/2/2012

Print Time: 10:06 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
3319	Collins Av&95 St	DOW-4		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
-	NBT	-	EBT	-	-	-	WBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase		Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2	NBT	7 - 7 - 7	14 - 14 - 14	7 - 7 - 7	2.5 - 2.5 - 2.5	40 - 50 - 50	0 - 0 - 0	4	1
3	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4	EBT	4 - 4 - 4	16 - 16 - 16	4 - 4 - 4	2.5 - 2.5 - 2.5	22 - 25 - 25	27 - 0 - 0	4	1
5	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
7	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8	WBT	4 - 4 - 4	16 - 16 - 16	4 - 4 - 4	2.5 - 2.5 - 2.5	22 - 25 - 25	27 - 0 - 0	4	1

Last In Service Date: unknown

Permitted Phases

	12345678
Default	-2-4---8
External Permit 0	--------
External Permit 1	--------
External Permit 2	--------

Current TOD Schedule	Plan	Cycle	Green Time 1 -	2 NBT	3 -	4 EBT	5 -	6 -	7 -	8 WBT	Ring Offset	Offset
	1	130	0	100	0	20	0	0	0	20	0	108
	2	80	0	50	0	20	0	0	0	20	0	60
	3	120	0	90	0	20	0	0	0	20	0	71
	4	120	0	90	0	20	0	0	0	20	0	18
	5	110	0	80	0	20	0	0	0	20	0	71
	7	130	0	100	0	20	0	0	0	20	0	90
	9	70	0	40	0	20	0	0	0	20	0	14
	10	120	0	90	0	20	0	0	0	20	0	71
	11	70	0	40	0	20	0	0	0	20	0	68
	12	120	0	90	0	20	0	0	0	20	0	71
	13	65	0	35	0	20	0	0	0	20	0	37
	14	60	0	30	0	20	0	0	0	20	0	37
	16	150	0	113	0	27	0	0	0	27	0	114
	17	160	0	130	0	20	0	0	0	20	0	108
	18	75	0	45	0	20	0	0	0	20	0	50
	19	130	0	100	0	20	0	0	0	20	0	98
	20	65	0	35	0	20	0	0	0	20	0	16

Local TOD Schedule

Time	Plan	DOW
0000	11	Su M T W Th F S
0200	Flash	Su M T W Th F S
0600	5	M T W Th F
0630	19	M T W Th F
0700	16	M T W Th F
0745	17	M T W Th F
0800	11	Su S
0900	14	M T W Th F
1000	14	Su S
1400	13	M T W Th F
1500	18	M W
1530	18	T Th F
1830	20	M T W Th F
2100	11	M T W Th F
2200	11	Su S

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

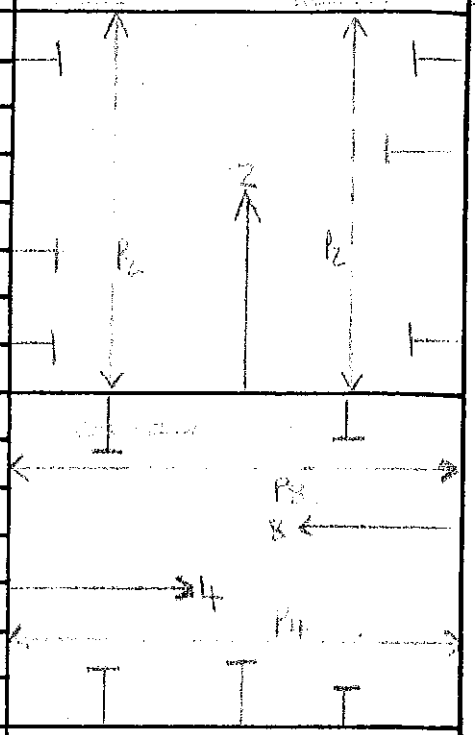
*** Settings**

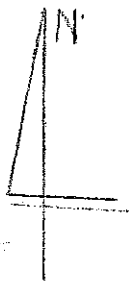
Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

SIGNAL OPERATING PLAN

PHASE		SIGNAL HEAD NUMBER												
	INT	2	4	8	·	12	14	18						
Φ2 (Φ4 Φ8)	R/W	G	R	R		W	DW	DW						
	PED. CL.	G	R	R		DW	DW	DW						
NEED	TO	Φ2 DW	Y	R	R		DW	DW	DW					
COLLINS AV	CLEAR													
RECALL														
Φ4 18 (Φ4 Φ18)	R/W	R	G	G		DW	W	W						
LEND & NEW	PED. CL.	R	G	G		DW	FDW	FDW						
94 ST	TO	Φ2	R	Y	Y		DW	DW	DW					
RECALL	CLEAR													
	R/W													
	PED. CL.													
	TO													
	CLEAR													
	R/W													
	PED. CL.													
	TO													
	CLEAR													
FLASH OPERATION		FY	FR	FR										





Drawn	Date
H. FRANCILLON	3/11/92
Check	**Date**
H. HERNANDEZ	5/20/98
Division Engineer	**Date**

METROPOLITAN DADE COUNTY
DEPARTMENT OF TRAFFIC AND TRANSPORTATION

ASSET NO. 2912

Collins AV & 94 St

Placed In Service		Phasing Number
Date: ~/95	By: MITCHELL	4

TOD Schedule Report
for 2912: Collins Av&94 St

Print Date: 5/2/2012

Print Time: 9:36 AM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2912	Collins Av&94 St	DOW-4		N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
-	NBT	-	EBT	-	-	-	WBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase		Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2	NBT	7 - 7 - 7	14 - 14 - 14	7 - 7 - 7	1 - 1 - 1	40 - 40 - 40	0 - 0 - 0	4	1
3	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4	EBT	4 - 4 - 4	17 - 17 - 17	4 - 4 - 4	2.5 - 2.5 - 2.5	21 - 21 - 21	40 - 0 - 0	4	1
5	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
7	-	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8	WBT	4 - 4 - 4	17 - 17 - 17	4 - 4 - 4	2.5 - 2.5 - 2.5	21 - 21 - 21	40 - 0 - 0	4	1

Last In Service Date: unknown

Permitted Phases

	12345678
Default	-2-4---8
External Permit 0	--------
External Permit 1	--------
External Permit 2	--------

Current TOD Schedule	Plan	Cycle	Green Time 1 -	2 NBT	3 -	4 EBT	5 -	6 -	7 -	8 WBT	Ring Offset	Offset
	1	130	0	99	0	21	0	0	0	21	0	96
	2	80	0	49	0	21	0	0	0	21	0	49
	3	120	0	89	0	21	0	0	0	21	0	36
	4	120	0	89	0	21	0	0	0	21	0	115
	5	110	0	79	0	21	0	0	0	21	0	57
	7	130	0	99	0	21	0	0	0	21	0	84
	8	70	0	39	0	21	0	0	0	21	0	56
	9	70	0	39	0	21	0	0	0	21	0	67
	10	120	0	89	0	21	0	0	0	21	0	36
	11	70	0	39	0	21	0	0	0	21	0	56
	12	120	0	89	0	21	0	0	0	21	0	36
	13	65	0	34	0	21	0	0	0	21	0	22
	14	60	0	29	0	21	0	0	0	21	0	20
	16	150	0	119	0	21	0	0	0	21	0	105
	17	160	0	129	0	21	0	0	0	21	0	97
	18	75	0	44	0	21	0	0	0	21	0	35
	19	130	0	99	0	21	0	0	0	21	0	85
	20	65	0	34	0	21	0	0	0	21	0	1

Local TOD Schedule

Time	Plan	DOW
0000	11	Su M T W Th F S
0200	8	Su M T W Th F S
0600	5	M T W Th F
0630	19	M T W Th F
0700	16	M T W Th F
0745	17	M T W Th F
0800	11	Su S
0900	14	M T W Th F
1000	14	Su S
1400	13	M T W Th F
1500	18	M W
1530	18	T Th F
1830	20	M T W Th F
2100	11	M T W Th F
2200	11	Su S

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

*** Settings**

Blank - FREE - Phase Bank 1, Max 1
Blank - Plan - Phase Bank 1, Max 2
1 - Phase Bank 2, Max 1
2 - Phase Bank 2, Max 2
3 - Phase Bank 3, Max 1
4 - Phase Bank 3, Max 2
5 - EXTERNAL PERMIT 1
6 - EXTERNAL PERMIT 2
7 - X-PED OMIT
8 - TBA

No Calendar Defined/Enabled

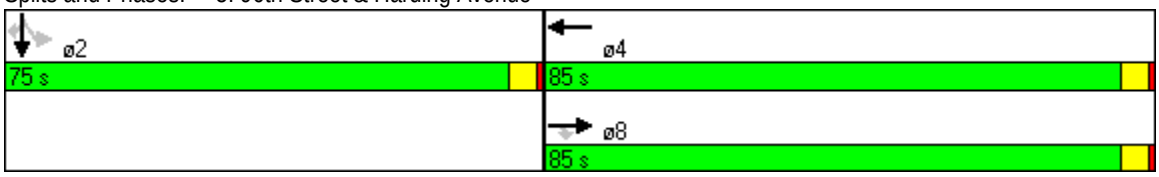
APPENDIX D
EXISTING CONDITIONS – MAJOR INTERSECTIONS - SYNCHRO PRINTOUTS

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	356	688	0	461	0	0	0	0	98	1400	354
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	10	10	12	12	12	12	12	12
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt		0.947	0.850									0.850
Flt Protected											0.997	
Satd. Flow (prot)	0	1620	1454	0	3303	0	0	0	0	0	5070	1583
Flt Permitted											0.997	
Satd. Flow (perm)	0	1620	1454	0	3303	0	0	0	0	0	5070	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12	12									284
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		556			324			668			466	
Travel Time (s)		12.6			7.4			15.2			10.6	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	367	709	0	475	0	0	0	0	101	1443	365
Shared Lane Traffic (%)			28%									
Lane Group Flow (vph)	0	566	510	0	475	0	0	0	0	0	1544	365
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.09	1.09	1.09	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type			Perm							Perm		Perm
Protected Phases		8			4						2	
Permitted Phases			8							2		2
Detector Phase		8	8		4					2	2	2
Switch Phase												
Minimum Initial (s)		7.0	7.0		7.0					7.0	7.0	7.0
Minimum Split (s)		21.0	21.0		24.0					29.0	29.0	29.0
Total Split (s)	0.0	85.0	85.0	0.0	85.0	0.0	0.0	0.0	0.0	75.0	75.0	75.0
Total Split (%)	0.0%	53.1%	53.1%	0.0%	53.1%	0.0%	0.0%	0.0%	0.0%	46.9%	46.9%	46.9%
Maximum Green (s)		80.0	80.0		80.0					70.0	70.0	70.0
Yellow Time (s)		4.0	4.0		4.0					4.0	4.0	4.0
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	5.0	4.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0	1.0		1.0					1.0	1.0	1.0
Recall Mode		Max	Max		Max					C-Max	C-Max	C-Max
Walk Time (s)					7.0					7.0	7.0	7.0
Flash Dont Walk (s)					12.0					17.0	17.0	17.0
Pedestrian Calls (#/hr)					47					30	30	30
Act Effct Green (s)		80.0	80.0		80.0						70.0	70.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.50	0.50		0.50						0.44	0.44
v/c Ratio		0.69	0.70		0.29						0.70	0.43
Control Delay		33.0	33.5		58.0						38.5	8.4
Queue Delay		0.8	0.5		84.6						0.0	0.0
Total Delay		33.8	34.1		142.6						38.5	8.4
LOS		C	C		F						D	A
Approach Delay		33.9			142.6						32.7	
Approach LOS		C			F						C	
Queue Length 50th (ft)		376	338		277						474	50
Queue Length 95th (ft)		453	412		338						530	131
Internal Link Dist (ft)		476			244			588			386	
Turn Bay Length (ft)												
Base Capacity (vph)		816	733		1652						2218	852
Starvation Cap Reductn		73	44		1246						0	0
Spillback Cap Reductn		0	0		0						0	0
Storage Cap Reductn		0	0		0						0	0
Reduced v/c Ratio		0.76	0.74		1.17						0.70	0.43

Intersection Summary	
Area Type: Other	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 39 (24%), Referenced to phase 2:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 48.2	Intersection LOS: D
Intersection Capacity Utilization 97.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 5: 96th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	356	688	0	461	0	0	0	0	98	1400	354
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	10	10	12	12	12	12	12	12
Total Lost time (s)		5.0	5.0		5.0						5.0	5.0
Lane Util. Factor		0.95	0.95		0.95						0.91	1.00
Frt		0.95	0.85		1.00						1.00	0.85
Flt Protected		1.00	1.00		1.00						1.00	1.00
Satd. Flow (prot)		1620	1454		3303						5069	1583
Flt Permitted		1.00	1.00		1.00						1.00	1.00
Satd. Flow (perm)		1620	1454		3303						5069	1583
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	367	709	0	475	0	0	0	0	101	1443	365
RTOR Reduction (vph)	0	6	6	0	0	0	0	0	0	0	0	160
Lane Group Flow (vph)	0	560	504	0	475	0	0	0	0	0	1544	205
Turn Type			Perm							Perm		Perm
Protected Phases		8			4						2	
Permitted Phases			8							2		2
Actuated Green, G (s)		80.0	80.0		80.0						70.0	70.0
Effective Green, g (s)		80.0	80.0		80.0						70.0	70.0
Actuated g/C Ratio		0.50	0.50		0.50						0.44	0.44
Clearance Time (s)		5.0	5.0		5.0						5.0	5.0
Vehicle Extension (s)		1.0	1.0		1.0						1.0	1.0
Lane Grp Cap (vph)		810	727		1652						2218	693
v/s Ratio Prot		0.35			0.14							
v/s Ratio Perm			c0.35								0.30	0.13
v/c Ratio		0.69	0.69		0.29						0.70	0.30
Uniform Delay, d1		30.6	30.6		23.4						36.4	29.1
Progression Factor		0.93	0.93		2.45						1.00	1.00
Incremental Delay, d2		4.5	5.0		0.3						1.8	1.1
Delay (s)		32.9	33.5		57.7						38.2	30.2
Level of Service		C	C		E						D	C
Approach Delay (s)		33.2			57.7			0.0			36.7	
Approach LOS		C			E			A			D	

Intersection Summary			
HCM Average Control Delay	38.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	97.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	366	9	0	0	3	3	458	1058	8	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	12	12	12	12	12	12
Storage Length (ft)	0		0	0		0	250		0	0		0
Storage Lanes	1		0	0		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Frt					0.932			0.999				
Flt Protected	0.950	0.954					0.950					
Satd. Flow (prot)	1569	1576	0	0	1736	0	1770	5080	0	0	0	0
Flt Permitted	0.950	0.954					0.950					
Satd. Flow (perm)	1569	1576	0	0	1736	0	1770	5080	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3			1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		324			224			667			480	
Travel Time (s)		7.4			5.1			15.2			10.9	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	426	10	0	0	3	3	533	1230	9	0	0	0
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	217	219	0	0	6	0	533	1239	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split						pm+pt					
Protected Phases	3	3			4		5	2				
Permitted Phases							2					
Detector Phase	3	3			4		5	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			7.0		4.0	4.0				
Minimum Split (s)	22.0	22.0			21.0		11.0	23.0				
Total Split (s)	82.0	82.0	0.0	0.0	12.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0
Total Split (%)	51.3%	51.3%	0.0%	0.0%	7.5%	0.0%	31.3%	31.3%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	77.0	77.0			7.0		45.0	45.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead			Lag		Lag					
Lead-Lag Optimize?	Yes	Yes			Yes		Yes					
Vehicle Extension (s)	2.5	2.5			2.5		2.0	1.0				
Recall Mode	Max	Max			None		C-Max	C-Max				
Walk Time (s)	4.0	4.0						4.0				

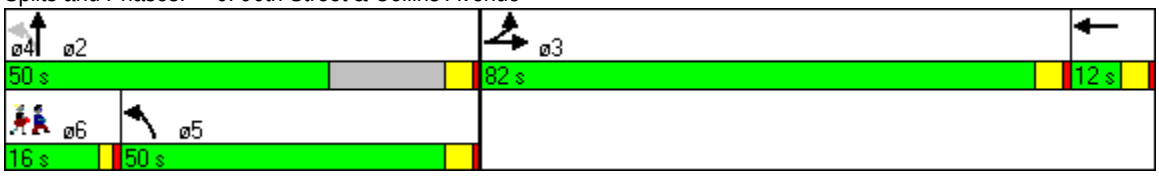
Lane Group	ø6
Lane Configurations	
Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	20.0
Total Split (s)	16.0
Total Split (%)	10%
Maximum Green (s)	13.0
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	4.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	13.0	13.0						7.0				
Pedestrian Calls (#/hr)	28	28						7				
Act Effct Green (s)	77.0	77.0			7.0		70.6	70.6				
Actuated g/C Ratio	0.48	0.48			0.04		0.44	0.44				
v/c Ratio	0.29	0.29			0.08		0.68	0.55				
Control Delay	17.1	17.1			58.6		46.8	39.0				
Queue Delay	1.6	1.6			0.0		58.6	0.0				
Total Delay	18.6	18.7			58.6		105.5	39.0				
LOS	B	B			E		F	D				
Approach Delay		18.6			58.6			59.0				
Approach LOS		B			E			E				
Queue Length 50th (ft)	73	73			3		474	374				
Queue Length 95th (ft)	114	114			20		660	456				
Internal Link Dist (ft)		244			144			587			400	
Turn Bay Length (ft)							250					
Base Capacity (vph)	755	758			79		781	2242				
Starvation Cap Reductn	373	375			0		143	0				
Spillback Cap Reductn	0	0			0		302	0				
Storage Cap Reductn	0	0			0		0	0				
Reduced v/c Ratio	0.57	0.57			0.08		1.11	0.55				

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 59 (37%), Referenced to phase 2:NBTL and 5:NBL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.68
Intersection Signal Delay: 51.1 — Intersection LOS: D
Intersection Capacity Utilization 97.3% — ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 6: 96th Street & Collins Avenue



Lane Group	ø6
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	3
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	366	9	0	0	3	3	458	1058	8	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	12	12	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			5.0		5.0	5.0				
Lane Util. Factor	0.95	0.95			1.00		1.00	0.91				
Frt	1.00	1.00			0.93		1.00	1.00				
Flt Protected	0.95	0.95			1.00		0.95	1.00				
Satd. Flow (prot)	1569	1576			1737		1770	5080				
Flt Permitted	0.95	0.95			1.00		0.95	1.00				
Satd. Flow (perm)	1569	1576			1737		1770	5080				
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	426	10	0	0	3	3	533	1230	9	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	1	0	0	0	0
Lane Group Flow (vph)	217	219	0	0	3	0	533	1238	0	0	0	0
Turn Type	Split						pm+pt					
Protected Phases	3	3			4		5	2				
Permitted Phases							2					
Actuated Green, G (s)	77.0	77.0			1.4		66.6	66.6				
Effective Green, g (s)	77.0	77.0			1.4		66.6	66.6				
Actuated g/C Ratio	0.48	0.48			0.01		0.42	0.42				
Clearance Time (s)	5.0	5.0			5.0		5.0	5.0				
Vehicle Extension (s)	2.5	2.5			2.5		2.0	1.0				
Lane Grp Cap (vph)	755	758			15		737	2115				
v/s Ratio Prot	0.14	c0.14			c0.00		c0.28	0.24				
v/s Ratio Perm							0.03					
v/c Ratio	0.29	0.29			0.20		0.72	0.59				
Uniform Delay, d1	25.0	25.0			78.7		37.6	36.0				
Progression Factor	0.65	0.65			1.00		1.13	1.13				
Incremental Delay, d2	0.7	0.7			4.8		5.7	1.1				
Delay (s)	16.8	16.9			83.5		48.3	41.9				
Level of Service	B	B			F		D	D				
Approach Delay (s)		16.9			83.5			43.8			0.0	
Approach LOS		B			F			D			A	

Intersection Summary			
HCM Average Control Delay	38.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	97.3%	ICU Level of Service	F
Analysis Period (min)	15		

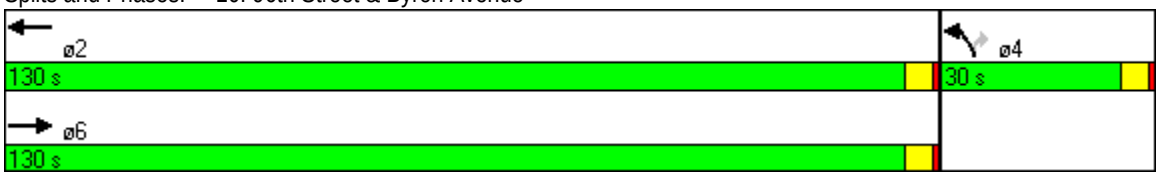
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1134	0	0	783	202	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	1.00
Frt						0.850
Flt Protected					0.950	
Satd. Flow (prot)	3421	0	0	3421	3319	1531
Flt Permitted					0.950	
Satd. Flow (perm)	3421	0	0	3421	3319	1531
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						22
Link Speed (mph)	30			30	30	
Link Distance (ft)	250			556	390	
Travel Time (s)	5.7			12.6	8.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1157	0	0	799	206	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1157	0	0	799	206	22
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	22	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Turn Type						Perm
Protected Phases	6			2	4	
Permitted Phases						4
Detector Phase	6			2	4	4
Switch Phase						
Minimum Initial (s)	15.0			15.0	7.0	7.0
Minimum Split (s)	21.0			21.0	26.0	26.0
Total Split (s)	130.0	0.0	0.0	130.0	30.0	30.0
Total Split (%)	81.3%	0.0%	0.0%	81.3%	18.8%	18.8%
Maximum Green (s)	125.0			125.0	25.0	25.0
Yellow Time (s)	4.0			4.0	4.0	4.0
All-Red Time (s)	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)	5.0	4.0	4.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	1.0			1.0	2.5	2.5
Recall Mode	C-Max			C-Max	None	None
Walk Time (s)					4.0	4.0
Flash Dont Walk (s)					17.0	17.0
Pedestrian Calls (#/hr)					10	10
Act Effct Green (s)	133.9			133.9	16.1	16.1

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Actuated g/C Ratio	0.84			0.84	0.10	0.10
v/c Ratio	0.40			0.28	0.62	0.13
Control Delay	3.0			12.0	76.5	23.0
Queue Delay	0.1			0.2	0.4	0.0
Total Delay	3.1			12.2	76.9	23.0
LOS	A			B	E	C
Approach Delay	3.1			12.2	71.7	
Approach LOS	A			B	E	
Queue Length 50th (ft)	141			307	109	0
Queue Length 95th (ft)	58			352	148	29
Internal Link Dist (ft)	170			476	310	
Turn Bay Length (ft)						
Base Capacity (vph)	2863			2863	519	258
Starvation Cap Reductn	633			1185	0	0
Spillback Cap Reductn	0			30	83	0
Storage Cap Reductn	0			0	0	0
Reduced v/c Ratio	0.52			0.48	0.47	0.09

Intersection Summary	
Area Type: Other	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 152 (95%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 13.6	Intersection LOS: B
Intersection Capacity Utilization 45.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 10: 96th Street & Byron Avenue



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1134	0	0	783	202	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	5.0			5.0	5.0	5.0
Lane Util. Factor	0.95			0.95	0.97	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	3421			3421	3319	1531
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	3421			3421	3319	1531
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1157	0	0	799	206	22
RTOR Reduction (vph)	0	0	0	0	0	20
Lane Group Flow (vph)	1157	0	0	799	206	2
Turn Type						Perm
Protected Phases	6			2	4	
Permitted Phases						4
Actuated Green, G (s)	133.9			133.9	16.1	16.1
Effective Green, g (s)	133.9			133.9	16.1	16.1
Actuated g/C Ratio	0.84			0.84	0.10	0.10
Clearance Time (s)	5.0			5.0	5.0	5.0
Vehicle Extension (s)	1.0			1.0	2.5	2.5
Lane Grp Cap (vph)	2863			2863	334	154
v/s Ratio Prot	c0.34			0.23	c0.06	
v/s Ratio Perm						0.00
v/c Ratio	0.40			0.28	0.62	0.01
Uniform Delay, d1	3.2			2.8	69.0	64.8
Progression Factor	0.74			3.88	1.00	1.00
Incremental Delay, d2	0.4			0.2	2.9	0.0
Delay (s)	2.8			11.0	71.9	64.8
Level of Service	A			B	E	E
Approach Delay (s)	2.8			11.0	71.2	
Approach LOS	A			B	E	

Intersection Summary			
HCM Average Control Delay	12.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

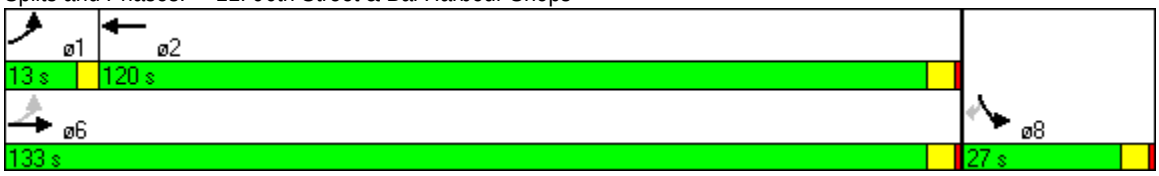
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	57	1151	968	44	7	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	2	1
Taper Length (ft)	25			25	25	25
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	0.91
Frt			0.994		0.945	0.850
Flt Protected	0.950				0.969	
Satd. Flow (prot)	1711	3421	3401	0	3199	1393
Flt Permitted	0.258				0.969	
Satd. Flow (perm)	465	3421	3401	0	3199	1393
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			7		4	5
Link Speed (mph)		30	30		30	
Link Distance (ft)		494	250		351	
Travel Time (s)		11.2	5.7		8.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	59	1187	998	45	7	9
Shared Lane Traffic (%)						44%
Lane Group Flow (vph)	59	1187	1043	0	11	5
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		22	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt					Perm
Protected Phases	1	6	2		8	
Permitted Phases	6					8
Detector Phase	1	6	2		8	8
Switch Phase						
Minimum Initial (s)	5.0	15.0	15.0		7.0	7.0
Minimum Split (s)	19.0	21.0	21.0		23.0	23.0
Total Split (s)	13.0	133.0	120.0	0.0	27.0	27.0
Total Split (%)	8.1%	83.1%	75.0%	0.0%	16.9%	16.9%
Maximum Green (s)	10.0	128.0	115.0		22.0	22.0
Yellow Time (s)	3.0	4.0	4.0		4.0	4.0
All-Red Time (s)	0.0	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)	3.0	5.0	5.0	4.0	5.0	5.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	2.0	1.0	1.0		2.5	2.5
Recall Mode	None	C-Max	C-Max		None	None
Walk Time (s)					4.0	4.0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Flash Dont Walk (s)					14.0	14.0
Pedestrian Calls (#/hr)					5	5
Act Effct Green (s)	147.6	147.6	139.9		9.2	9.2
Actuated g/C Ratio	0.92	0.92	0.87		0.06	0.06
v/c Ratio	0.13	0.38	0.35		0.06	0.06
Control Delay	1.7	1.9	3.1		52.6	39.4
Queue Delay	0.0	0.0	0.3		0.0	0.0
Total Delay	1.7	1.9	3.4		52.6	39.4
LOS	A	A	A		D	D
Approach Delay		1.9	3.4		48.5	
Approach LOS		A	A		D	
Queue Length 50th (ft)	4	73	139		3	0
Queue Length 95th (ft)	16	170	161		14	15
Internal Link Dist (ft)		414	170		271	
Turn Bay Length (ft)	100					
Base Capacity (vph)	507	3156	2975		443	196
Starvation Cap Reductn	0	0	1090		0	0
Spillback Cap Reductn	0	90	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.12	0.39	0.55		0.02	0.03

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 153 (96%), Referenced to phase 2:WBT and 6:EBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.38
Intersection Signal Delay: 2.9 — Intersection LOS: A
Intersection Capacity Utilization 49.8% — ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 11: 96th Street & Bal Harbour Shops



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	57	1151	968	44	7	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	3.0	5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	0.95	0.95		0.97	0.91
Frt	1.00	1.00	0.99		0.95	0.85
Flt Protected	0.95	1.00	1.00		0.97	1.00
Satd. Flow (prot)	1711	3421	3399		3201	1393
Flt Permitted	0.26	1.00	1.00		0.97	1.00
Satd. Flow (perm)	465	3421	3399		3201	1393
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	59	1187	998	45	7	9
RTOR Reduction (vph)	0	0	1	0	4	5
Lane Group Flow (vph)	59	1187	1042	0	7	0
Turn Type	pm+pt					Perm
Protected Phases	1	6	2		8	
Permitted Phases	6					8
Actuated Green, G (s)	143.6	143.6	136.3		6.4	6.4
Effective Green, g (s)	143.6	143.6	136.3		6.4	6.4
Actuated g/C Ratio	0.90	0.90	0.85		0.04	0.04
Clearance Time (s)	3.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)	2.0	1.0	1.0		2.5	2.5
Lane Grp Cap (vph)	451	3070	2896		128	56
v/s Ratio Prot	0.00	c0.35	0.31		c0.00	
v/s Ratio Perm	0.11					0.00
v/c Ratio	0.13	0.39	0.36		0.06	0.00
Uniform Delay, d1	1.1	1.3	2.5		73.9	73.7
Progression Factor	1.00	1.00	0.96		1.00	1.00
Incremental Delay, d2	0.0	0.4	0.3		0.1	0.0
Delay (s)	1.2	1.7	2.8		74.0	73.8
Level of Service	A	A	A		E	E
Approach Delay (s)		1.6	2.8		73.9	
Approach LOS		A	A		E	

Intersection Summary			
HCM Average Control Delay	2.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	49.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

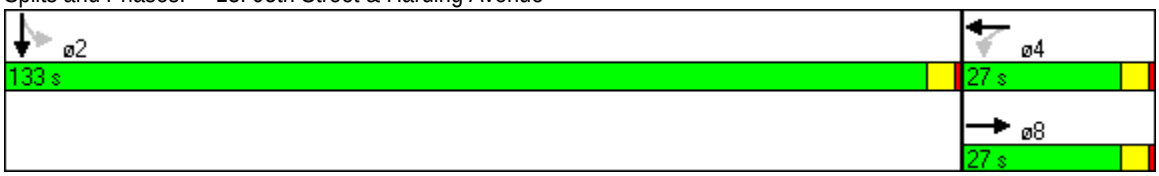
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	27	174	51	49	0	0	0	0	58	1696	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.883									0.997	
Flt Protected					0.975						0.998	
Satd. Flow (prot)	0	1645	0	0	1816	0	0	0	0	0	4723	0
Flt Permitted					0.312						0.998	
Satd. Flow (perm)	0	1645	*1	0	581	0	0	0	0	0	4723	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)											6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		261			299			655			668	
Travel Time (s)		5.9			6.8			14.9			15.2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Parking (#/hr)											20	
Adj. Flow (vph)	0	28	178	52	50	0	0	0	0	59	1731	34
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	206	0	0	102	0	0	0	0	0	1824	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Detector Phase		8		4	4					2	2	
Switch Phase												
Minimum Initial (s)		7.0		7.0	7.0					7.0	7.0	
Minimum Split (s)		27.0		27.0	27.0					25.0	25.0	
Total Split (s)	0.0	27.0	0.0	27.0	27.0	0.0	0.0	0.0	0.0	133.0	133.0	0.0
Total Split (%)	0.0%	16.9%	0.0%	16.9%	16.9%	0.0%	0.0%	0.0%	0.0%	83.1%	83.1%	0.0%
Maximum Green (s)		22.0		22.0	22.0					128.0	128.0	
Yellow Time (s)		4.0		4.0	4.0					4.0	4.0	
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0		1.0	1.0					1.0	1.0	
Recall Mode		Max		Max	Max					C-Max	C-Max	
Walk Time (s)		7.0		7.0	7.0					7.0	7.0	
Flash Dont Walk (s)		15.0		15.0	15.0					13.0	13.0	
Pedestrian Calls (#/hr)		15		6	6					21	21	
Act Effct Green (s)		22.0			22.0						128.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.14			0.14						0.80	
v/c Ratio		0.91			1.27						0.48	
Control Delay		107.7			241.4						13.9	
Queue Delay		0.0			0.0						0.5	
Total Delay		107.7			241.4						14.4	
LOS		F			F						B	
Approach Delay		107.7			241.4						14.4	
Approach LOS		F			F						B	
Queue Length 50th (ft)		216			~134						376	
Queue Length 95th (ft)		#375			#267						419	
Internal Link Dist (ft)		181			219			575			588	
Turn Bay Length (ft)												
Base Capacity (vph)		226			80						3780	
Starvation Cap Reductn		0			0						1321	
Spillback Cap Reductn		0			0						0	
Storage Cap Reductn		0			0						0	
Reduced v/c Ratio		0.91			1.27						0.74	

Intersection Summary	
Area Type: Other	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 98 (61%), Referenced to phase 2:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.27	
Intersection Signal Delay: 34.2	Intersection LOS: C
Intersection Capacity Utilization 65.2%	ICU Level of Service C
Analysis Period (min) 15	

* User Entered Value
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: 95th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	27	174	51	49	0	0	0	0	58	1696	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.88			1.00						1.00	
Flt Protected		1.00			0.98						1.00	
Satd. Flow (prot)		1645			1816						4725	
Flt Permitted		1.00			0.31						1.00	
Satd. Flow (perm)		1645			581						4725	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	28	178	52	50	0	0	0	0	59	1731	34
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	206	0	0	102	0	0	0	0	0	1823	0
Parking (#/hr)											20	
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		22.0			22.0						128.0	
Effective Green, g (s)		22.0			22.0						128.0	
Actuated g/C Ratio		0.14			0.14						0.80	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		1.0			1.0						1.0	
Lane Grp Cap (vph)		226			80						3780	
v/s Ratio Prot		0.13										
v/s Ratio Perm					c0.18						0.39	
v/c Ratio		0.91			1.27						0.48	
Uniform Delay, d1		68.0			69.0						5.2	
Progression Factor		1.00			1.02						2.59	
Incremental Delay, d2		40.6			188.9						0.3	
Delay (s)		108.7			259.4						13.8	
Level of Service		F			F						B	
Approach Delay (s)		108.7			259.4			0.0			13.8	
Approach LOS		F			F			A			B	

Intersection Summary			
HCM Average Control Delay	34.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	65.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

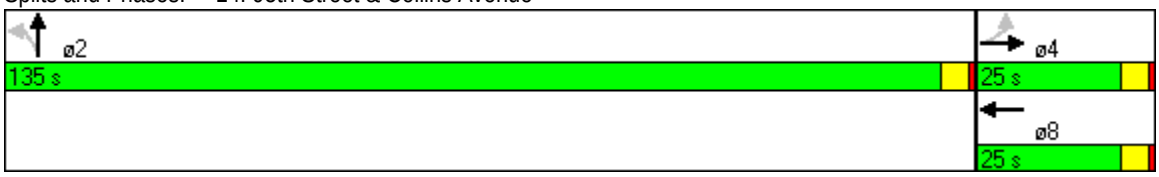
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	70	3	0	0	7	7	76	1519	7	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Frt					0.932			0.999				
Flt Protected		0.954						0.998				
Satd. Flow (prot)	0	1777	0	0	1736	0	0	5070	0	0	0	0
Flt Permitted		0.723						0.998				
Satd. Flow (perm)	0	1347	0	0	1736	0	0	5070	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					8			2				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		299			255			652			667	
Travel Time (s)		6.8			5.8			14.8			15.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	3	0	0	8	8	83	1651	8	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	79	0	0	16	0	0	1742	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Detector Phase	4	4			8		2	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		7.0	7.0				
Minimum Split (s)	25.0	25.0			25.0		26.0	26.0				
Total Split (s)	25.0	25.0	0.0	0.0	25.0	0.0	135.0	135.0	0.0	0.0	0.0	0.0
Total Split (%)	15.6%	15.6%	0.0%	0.0%	15.6%	0.0%	84.4%	84.4%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	20.0	20.0			20.0		130.0	130.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5			2.5		2.5	2.5				
Recall Mode	Max	Max			Max		C-Max	C-Max				
Walk Time (s)	4.0	4.0			4.0		7.0	7.0				
Flash Dont Walk (s)	16.0	16.0			16.0		14.0	14.0				
Pedestrian Calls (#/hr)	19	19			7		18	18				
Act Effct Green (s)		20.0			20.0			130.0				
Actuated g/C Ratio		0.12			0.12			0.81				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.47			0.07			0.42				
Control Delay		71.7			41.5			1.4				
Queue Delay		0.0			0.0			0.0				
Total Delay		71.7			41.5			1.5				
LOS		E			D			A				
Approach Delay		71.7			41.5			1.5				
Approach LOS		E			D			A				
Queue Length 50th (ft)		69			7			33				
Queue Length 95th (ft)		m110			32			35				
Internal Link Dist (ft)		219			175			572			587	
Turn Bay Length (ft)												
Base Capacity (vph)		168			224			4120				
Starvation Cap Reductn		0			0			462				
Spillback Cap Reductn		0			0			117				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.47			0.07			0.48				

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 108 (68%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.47
Intersection Signal Delay: 4.8 Intersection LOS: A
Intersection Capacity Utilization 50.1% ICU Level of Service A
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 14: 95th Street & Collins Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	70	3	0	0	7	7	76	1519	7	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.93			1.00				
Flt Protected		0.95			1.00			1.00				
Satd. Flow (prot)		1777			1737			5070				
Flt Permitted		0.72			1.00			1.00				
Satd. Flow (perm)		1346			1737			5070				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	3	0	0	8	8	83	1651	8	0	0	0
RTOR Reduction (vph)	0	0	0	0	7	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	79	0	0	9	0	0	1742	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		20.0			20.0			130.0				
Effective Green, g (s)		20.0			20.0			130.0				
Actuated g/C Ratio		0.12			0.12			0.81				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		2.5			2.5			2.5				
Lane Grp Cap (vph)		168			217			4119				
v/s Ratio Prot					0.01							
v/s Ratio Perm		c0.06						0.34				
v/c Ratio		0.47			0.04			0.42				
Uniform Delay, d1		65.1			61.6			4.3				
Progression Factor		0.98			1.00			0.26				
Incremental Delay, d2		7.2			0.4			0.3				
Delay (s)		70.9			61.9			1.4				
Level of Service		E			E			A				
Approach Delay (s)		70.9			61.9			1.4			0.0	
Approach LOS		E			E			A			A	

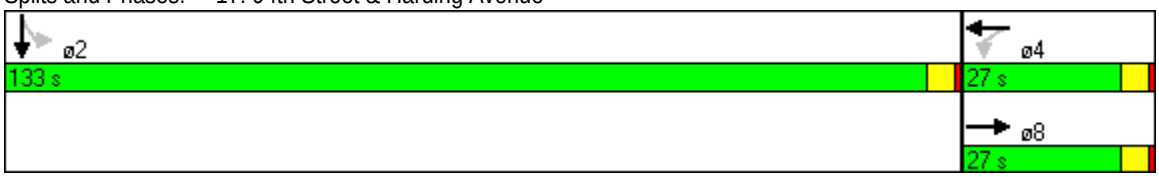
Intersection Summary			
HCM Average Control Delay	4.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	50.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	11	69	32	73	0	0	0	0	52	1833	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.883									0.995	
Flt Protected					0.985						0.999	
Satd. Flow (prot)	0	1645	0	0	1835	0	0	0	0	0	4718	0
Flt Permitted					0.881						0.999	
Satd. Flow (perm)	0	1645	0	0	1641	0	0	0	0	0	4718	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)											11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			299			894			655	
Travel Time (s)		6.0			6.8			20.3			14.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Parking (#/hr)											20	
Adj. Flow (vph)	0	11	70	33	74	0	0	0	0	53	1870	67
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	81	0	0	107	0	0	0	0	0	1990	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Detector Phase		8		4	4					2	2	
Switch Phase												
Minimum Initial (s)		7.0		7.0	7.0					7.0	7.0	
Minimum Split (s)		27.0		27.0	27.0					25.0	25.0	
Total Split (s)	0.0	27.0	0.0	27.0	27.0	0.0	0.0	0.0	0.0	133.0	133.0	0.0
Total Split (%)	0.0%	16.9%	0.0%	16.9%	16.9%	0.0%	0.0%	0.0%	0.0%	83.1%	83.1%	0.0%
Maximum Green (s)		22.0		22.0	22.0					128.0	128.0	
Yellow Time (s)		4.0		4.0	4.0					4.0	4.0	
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0		1.0	1.0					1.0	1.0	
Recall Mode		Max		Max	Max					C-Max	C-Max	
Walk Time (s)		7.0		7.0	7.0					7.0	7.0	
Flash Dont Walk (s)		15.0		15.0	15.0					13.0	13.0	
Pedestrian Calls (#/hr)		6		52	52					10	10	
Act Effct Green (s)		22.0			22.0						128.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.14			0.14						0.80	
v/c Ratio		0.36			0.47						0.53	
Control Delay		67.7			75.5						5.0	
Queue Delay		0.0			1.8						0.0	
Total Delay		67.7			77.3						5.0	
LOS		E			E						A	
Approach Delay		67.7			77.3						5.0	
Approach LOS		E			E						A	
Queue Length 50th (ft)		78			110						195	
Queue Length 95th (ft)		136			174						m177	
Internal Link Dist (ft)		186			219			814			575	
Turn Bay Length (ft)												
Base Capacity (vph)		226			226						3777	
Starvation Cap Reductn		0			41						175	
Spillback Cap Reductn		0			0						0	
Storage Cap Reductn		0			0						0	
Reduced v/c Ratio		0.36			0.58						0.55	

Intersection Summary	
Area Type:	Other
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 91 (57%), Referenced to phase 2:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 10.9	Intersection LOS: B
Intersection Capacity Utilization 58.6%	ICU Level of Service B
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 17: 94th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	11	69	32	73	0	0	0	0	52	1833	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.88			1.00						0.99	
Flt Protected		1.00			0.98						1.00	
Satd. Flow (prot)		1645			1834						4716	
Flt Permitted		1.00			0.88						1.00	
Satd. Flow (perm)		1645			1641						4716	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	11	70	33	74	0	0	0	0	53	1870	67
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	81	0	0	107	0	0	0	0	0	1988	0
Parking (#/hr)											20	
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		22.0			22.0						128.0	
Effective Green, g (s)		22.0			22.0						128.0	
Actuated g/C Ratio		0.14			0.14						0.80	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		1.0			1.0						1.0	
Lane Grp Cap (vph)		226			226						3773	
v/s Ratio Prot		0.05										
v/s Ratio Perm					c0.07						0.42	
v/c Ratio		0.36			0.47						0.53	
Uniform Delay, d1		62.6			63.7						5.5	
Progression Factor		1.00			1.07						0.82	
Incremental Delay, d2		4.4			6.5						0.5	
Delay (s)		67.0			74.7						5.0	
Level of Service		E			E						A	
Approach Delay (s)		67.0			74.7			0.0			5.0	
Approach LOS		E			E			A			A	

Intersection Summary			
HCM Average Control Delay	10.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

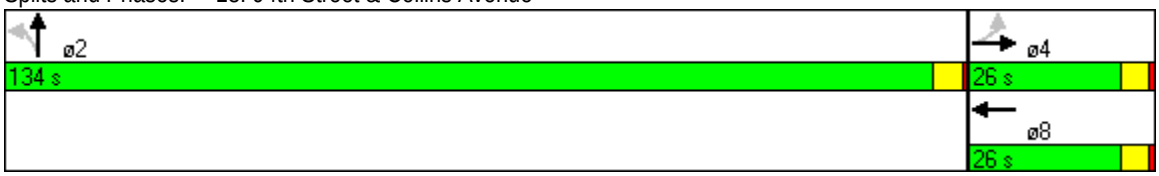
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	1	0	0	8	10	85	1527	3	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Frt					0.926							
Flt Protected		0.953						0.997				
Satd. Flow (prot)	0	1775	0	0	1725	0	0	5070	0	0	0	0
Flt Permitted		0.716						0.997				
Satd. Flow (perm)	0	1334	0	0	1725	0	0	5070	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					11			1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		299			236			993			652	
Travel Time (s)		6.8			5.4			22.6			14.8	
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
Adj. Flow (vph)	52	1	0	0	9	11	94	1697	3	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	53	0	0	20	0	0	1794	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Detector Phase	4	4			8		2	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		7.0	7.0				
Minimum Split (s)	26.0	26.0			26.0		26.0	26.0				
Total Split (s)	26.0	26.0	0.0	0.0	26.0	0.0	134.0	134.0	0.0	0.0	0.0	0.0
Total Split (%)	16.3%	16.3%	0.0%	0.0%	16.3%	0.0%	83.8%	83.8%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	21.0	21.0			21.0		129.0	129.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5			2.5		1.0	1.0				
Recall Mode	Max	Max			Max		C-Max	C-Max				
Walk Time (s)	4.0	4.0			4.0		7.0	7.0				
Flash Dont Walk (s)	17.0	17.0			17.0		14.0	14.0				
Pedestrian Calls (#/hr)	42	42			9		10	10				
Act Effct Green (s)		21.0			21.0			129.0				
Actuated g/C Ratio		0.13			0.13			0.81				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.30			0.08			0.44				
Control Delay		80.8			37.9			5.0				
Queue Delay		0.0			0.0			0.0				
Total Delay		80.8			37.9			5.0				
LOS		F			D			A				
Approach Delay		80.8			37.9			5.0				
Approach LOS		F			D			A				
Queue Length 50th (ft)		49			8			176				
Queue Length 95th (ft)		98			37			195				
Internal Link Dist (ft)		219			156			913			572	
Turn Bay Length (ft)												
Base Capacity (vph)		175			236			4088				
Starvation Cap Reductn		0			0			0				
Spillback Cap Reductn		0			0			0				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.30			0.08			0.44				

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 97 (61%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.44
Intersection Signal Delay: 7.5 — Intersection LOS: A
Intersection Capacity Utilization 49.0% — ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 18: 94th Street & Collins Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	1	0	0	8	10	85	1527	3	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.93			1.00				
Flt Protected		0.95			1.00			1.00				
Satd. Flow (prot)		1776			1724			5071				
Flt Permitted		0.72			1.00			1.00				
Satd. Flow (perm)		1333			1724			5071				
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)	52	1	0	0	9	11	94	1697	3	0	0	0
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	53	0	0	10	0	0	1794	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		21.0			21.0			129.0				
Effective Green, g (s)		21.0			21.0			129.0				
Actuated g/C Ratio		0.13			0.13			0.81				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		2.5			2.5			1.0				
Lane Grp Cap (vph)		175			226			4088				
v/s Ratio Prot					0.01							
v/s Ratio Perm		c0.04						0.35				
v/c Ratio		0.30			0.05			0.44				
Uniform Delay, d1		62.9			60.7			4.6				
Progression Factor		1.21			1.00			1.00				
Incremental Delay, d2		3.9			0.4			0.3				
Delay (s)		79.8			61.1			5.0				
Level of Service		E			E			A				
Approach Delay (s)		79.8			61.1			5.0			0.0	
Approach LOS		E			E			A			A	

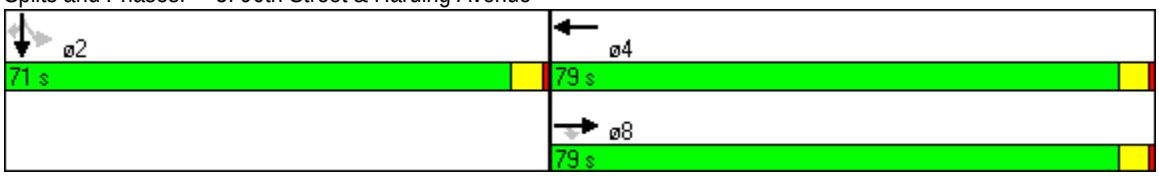
Intersection Summary			
HCM Average Control Delay	7.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	49.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	347	616	0	463	0	0	0	0	39	1227	284
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	10	10	12	12	12	12	12	12
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt		0.953	0.850									0.850
Flt Protected											0.998	
Satd. Flow (prot)	0	1630	1454	0	3303	0	0	0	0	0	5075	1583
Flt Permitted											0.998	
Satd. Flow (perm)	0	1630	1454	0	3303	0	0	0	0	0	5075	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19	19									289
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		556			324			668			466	
Travel Time (s)		12.6			7.4			15.2			10.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	369	655	0	493	0	0	0	0	41	1305	302
Shared Lane Traffic (%)			26%									
Lane Group Flow (vph)	0	539	485	0	493	0	0	0	0	0	1346	302
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.09	1.09	1.09	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type			Perm							Perm		Perm
Protected Phases		8			4						2	
Permitted Phases			8							2		2
Detector Phase		8	8		4					2	2	2
Switch Phase												
Minimum Initial (s)		7.0	7.0		7.0					7.0	7.0	7.0
Minimum Split (s)		21.0	21.0		24.0					29.0	29.0	29.0
Total Split (s)	0.0	79.0	79.0	0.0	79.0	0.0	0.0	0.0	0.0	71.0	71.0	71.0
Total Split (%)	0.0%	52.7%	52.7%	0.0%	52.7%	0.0%	0.0%	0.0%	0.0%	47.3%	47.3%	47.3%
Maximum Green (s)		74.0	74.0		74.0					66.0	66.0	66.0
Yellow Time (s)		4.0	4.0		4.0					4.0	4.0	4.0
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	5.0	4.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0	1.0		1.0					1.0	1.0	1.0
Recall Mode		Max	Max		Max					C-Max	C-Max	C-Max
Walk Time (s)					7.0					7.0	7.0	7.0
Flash Dont Walk (s)					12.0					17.0	17.0	17.0
Pedestrian Calls (#/hr)					21					65	65	65
Act Effct Green (s)		74.0	74.0		74.0						66.0	66.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.49	0.49		0.49						0.44	0.44
v/c Ratio		0.66	0.67		0.30						0.60	0.35
Control Delay		29.0	29.7		45.0						33.4	4.4
Queue Delay		0.8	0.5		53.8						0.0	0.0
Total Delay		29.8	30.2		98.8						33.4	4.4
LOS		C	C		F						C	A
Approach Delay		30.0			98.8						28.1	
Approach LOS		C			F						C	
Queue Length 50th (ft)		334	301		259						363	7
Queue Length 95th (ft)		397	363		321						414	63
Internal Link Dist (ft)		476			244			588			386	
Turn Bay Length (ft)												
Base Capacity (vph)		814	727		1629						2233	858
Starvation Cap Reductn		86	47		1179						0	0
Spillback Cap Reductn		0	0		0						0	0
Storage Cap Reductn		0	0		0						0	0
Reduced v/c Ratio		0.74	0.71		1.10						0.60	0.35

Intersection Summary	
Area Type: Other	
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 57 (38%), Referenced to phase 2:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 39.7	Intersection LOS: D
Intersection Capacity Utilization 63.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 5: 96th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	347	616	0	463	0	0	0	0	39	1227	284
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	10	10	12	12	12	12	12	12
Total Lost time (s)		5.0	5.0		5.0						5.0	5.0
Lane Util. Factor		0.95	0.95		0.95						0.91	1.00
Frt		0.95	0.85		1.00						1.00	0.85
Flt Protected		1.00	1.00		1.00						1.00	1.00
Satd. Flow (prot)		1630	1454		3303						5078	1583
Flt Permitted		1.00	1.00		1.00						1.00	1.00
Satd. Flow (perm)		1630	1454		3303						5078	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	369	655	0	493	0	0	0	0	41	1305	302
RTOR Reduction (vph)	0	10	10	0	0	0	0	0	0	0	0	162
Lane Group Flow (vph)	0	529	475	0	493	0	0	0	0	0	1346	140
Turn Type			Perm							Perm		Perm
Protected Phases		8			4						2	
Permitted Phases			8							2		2
Actuated Green, G (s)		74.0	74.0		74.0						66.0	66.0
Effective Green, g (s)		74.0	74.0		74.0						66.0	66.0
Actuated g/C Ratio		0.49	0.49		0.49						0.44	0.44
Clearance Time (s)		5.0	5.0		5.0						5.0	5.0
Vehicle Extension (s)		1.0	1.0		1.0						1.0	1.0
Lane Grp Cap (vph)		804	717		1629						2234	697
v/s Ratio Prot		0.32			0.15							
v/s Ratio Perm			c0.33								0.27	0.09
v/c Ratio		0.66	0.66		0.30						0.60	0.20
Uniform Delay, d1		28.5	28.6		22.6						32.0	25.8
Progression Factor		0.89	0.89		1.95						1.00	1.00
Incremental Delay, d2		4.0	4.5		0.4						1.2	0.6
Delay (s)		29.3	30.1		44.6						33.2	26.5
Level of Service		C	C		D						C	C
Approach Delay (s)		29.7			44.6			0.0			32.0	
Approach LOS		C			D			A			C	

Intersection Summary			
HCM Average Control Delay	33.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	63.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	392	17	0	0	15	11	422	1470	16	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	12	12	12	12	12	12
Storage Length (ft)	0		0	0		0	250		0	0		0
Storage Lanes	1		0	0		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Frt					0.943			0.998				
Flt Protected	0.950	0.956					0.950					
Satd. Flow (prot)	1569	1579	0	0	1757	0	1770	5075	0	0	0	0
Flt Permitted	0.950	0.956					0.950					
Satd. Flow (perm)	1569	1579	0	0	1757	0	1770	5075	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					11			1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		324			224			667			480	
Travel Time (s)		7.4			5.1			15.2			10.9	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	404	18	0	0	15	11	435	1515	16	0	0	0
Shared Lane Traffic (%)	48%											
Lane Group Flow (vph)	210	212	0	0	26	0	435	1531	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split						pm+pt					
Protected Phases	3	3			4		5	2				
Permitted Phases							2					
Detector Phase	3	3			4		5	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			7.0		4.0	4.0				
Minimum Split (s)	22.0	22.0			21.0		11.0	23.0				
Total Split (s)	67.0	67.0	0.0	0.0	12.0	0.0	55.0	55.0	0.0	0.0	0.0	0.0
Total Split (%)	44.7%	44.7%	0.0%	0.0%	8.0%	0.0%	36.7%	36.7%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	62.0	62.0			7.0		50.0	50.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead			Lag		Lag					
Lead-Lag Optimize?	Yes	Yes			Yes		Yes					
Vehicle Extension (s)	2.5	2.5			2.5		2.0	1.0				
Recall Mode	Max	Max			None		C-Max	C-Max				
Walk Time (s)	4.0	4.0						4.0				

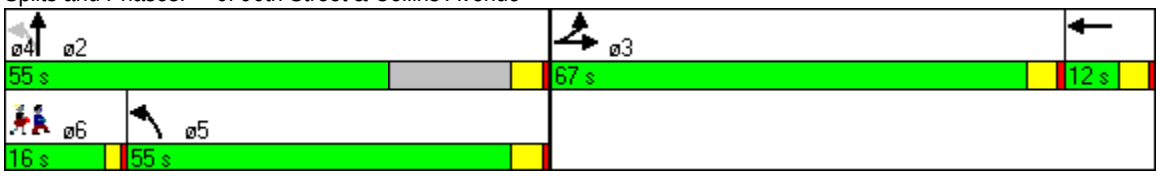
Lane Group	ø6
Lane Configurations	
Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	20.0
Total Split (s)	16.0
Total Split (%)	11%
Maximum Green (s)	13.0
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	4.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	13.0	13.0						7.0				
Pedestrian Calls (#/hr)	31	31						5				
Act Effct Green (s)	62.0	62.0			7.0		70.8	70.8				
Actuated g/C Ratio	0.41	0.41			0.05		0.47	0.47				
v/c Ratio	0.32	0.32			0.28		0.52	0.64				
Control Delay	13.8	13.8			54.6		38.9	40.8				
Queue Delay	1.4	1.4			0.2		12.8	0.9				
Total Delay	15.2	15.2			54.8		51.7	41.7				
LOS	B	B			D		D	D				
Approach Delay		15.2			54.8			43.9				
Approach LOS		B			D			D				
Queue Length 50th (ft)	51	53			14		404	557				
Queue Length 95th (ft)	110	110			48		544	617				
Internal Link Dist (ft)		244			144			587			400	
Turn Bay Length (ft)							250					
Base Capacity (vph)	649	653			92		835	2396				
Starvation Cap Reductn	271	273			0		209	524				
Spillback Cap Reductn	0	0			3		376	0				
Storage Cap Reductn	0	0			0		0	0				
Reduced v/c Ratio	0.56	0.56			0.29		0.95	0.82				

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 85 (57%), Referenced to phase 2:NBTL and 5:NBL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.64
Intersection Signal Delay: 39.0 — Intersection LOS: D
Intersection Capacity Utilization 63.6% — ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 6: 96th Street & Collins Avenue



Lane Group	ø6
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	8
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	392	17	0	0	15	11	422	1470	16	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	12	12	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			5.0		5.0	5.0				
Lane Util. Factor	0.95	0.95			1.00		1.00	0.91				
Frt	1.00	1.00			0.94		1.00	1.00				
Flt Protected	0.95	0.96			1.00		0.95	1.00				
Satd. Flow (prot)	1569	1579			1756		1770	5077				
Flt Permitted	0.95	0.96			1.00		0.95	1.00				
Satd. Flow (perm)	1569	1579			1756		1770	5077				
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	404	18	0	0	15	11	435	1515	16	0	0	0
RTOR Reduction (vph)	0	0	0	0	11	0	0	1	0	0	0	0
Lane Group Flow (vph)	210	212	0	0	15	0	435	1530	0	0	0	0
Turn Type	Split						pm+pt					
Protected Phases	3	3			4		5	2				
Permitted Phases							2					
Actuated Green, G (s)	62.0	62.0			4.2		68.8	68.8				
Effective Green, g (s)	62.0	62.0			4.2		68.8	68.8				
Actuated g/C Ratio	0.41	0.41			0.03		0.46	0.46				
Clearance Time (s)	5.0	5.0			5.0		5.0	5.0				
Vehicle Extension (s)	2.5	2.5			2.5		2.0	1.0				
Lane Grp Cap (vph)	649	653			49		812	2329				
v/s Ratio Prot	0.13	c0.13			c0.01		0.23	c0.30				
v/s Ratio Perm							0.02					
v/c Ratio	0.32	0.32			0.31		0.54	0.66				
Uniform Delay, d1	29.8	29.8			71.5		28.0	31.5				
Progression Factor	0.42	0.42			1.00		1.27	1.29				
Incremental Delay, d2	1.0	1.0			2.6		1.7	1.0				
Delay (s)	13.6	13.6			74.1		37.3	41.7				
Level of Service	B	B			E		D	D				
Approach Delay (s)		13.6			74.1			40.7			0.0	
Approach LOS		B			E			D			A	

Intersection Summary			
HCM Average Control Delay	36.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	63.6%	ICU Level of Service	B
Analysis Period (min)	15		

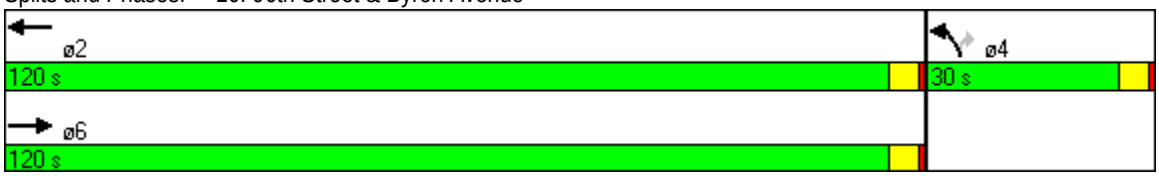
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1033	0	0	734	198	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	1.00
Frt						0.850
Flt Protected					0.950	
Satd. Flow (prot)	3421	0	0	3421	3319	1531
Flt Permitted					0.950	
Satd. Flow (perm)	3421	0	0	3421	3319	1531
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						13
Link Speed (mph)	30			30	30	
Link Distance (ft)	250			556	390	
Travel Time (s)	5.7			12.6	8.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1087	0	0	773	208	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1087	0	0	773	208	13
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	22	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Turn Type						Perm
Protected Phases	6			2	4	
Permitted Phases						4
Detector Phase	6			2	4	4
Switch Phase						
Minimum Initial (s)	15.0			15.0	7.0	7.0
Minimum Split (s)	21.0			21.0	26.0	26.0
Total Split (s)	120.0	0.0	0.0	120.0	30.0	30.0
Total Split (%)	80.0%	0.0%	0.0%	80.0%	20.0%	20.0%
Maximum Green (s)	115.0			115.0	25.0	25.0
Yellow Time (s)	4.0			4.0	4.0	4.0
All-Red Time (s)	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)	5.0	4.0	4.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	1.0			1.0	2.5	2.5
Recall Mode	C-Max			C-Max	None	None
Walk Time (s)					4.0	4.0
Flash Dont Walk (s)					17.0	17.0
Pedestrian Calls (#/hr)					0	0
Act Effct Green (s)	125.8			125.8	14.2	14.2

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Actuated g/C Ratio	0.84			0.84	0.09	0.09
v/c Ratio	0.38			0.27	0.66	0.08
Control Delay	3.9			13.2	75.5	26.2
Queue Delay	0.2			0.2	0.2	0.0
Total Delay	4.2			13.4	75.7	26.2
LOS	A			B	E	C
Approach Delay	4.2			13.4	72.8	
Approach LOS	A			B	E	
Queue Length 50th (ft)	154			299	103	0
Queue Length 95th (ft)	226			343	144	22
Internal Link Dist (ft)	170			476	310	
Turn Bay Length (ft)						
Base Capacity (vph)	2868			2868	553	266
Starvation Cap Reductn	872			1257	0	0
Spillback Cap Reductn	0			20	60	0
Storage Cap Reductn	0			0	0	0
Reduced v/c Ratio	0.54			0.48	0.42	0.05

Intersection Summary	
Area Type: Other	
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 19 (13%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 14.9	Intersection LOS: B
Intersection Capacity Utilization 42.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 10: 96th Street & Byron Avenue



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1033	0	0	734	198	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	5.0			5.0	5.0	5.0
Lane Util. Factor	0.95			0.95	0.97	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	3421			3421	3319	1531
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	3421			3421	3319	1531
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1087	0	0	773	208	13
RTOR Reduction (vph)	0	0	0	0	0	12
Lane Group Flow (vph)	1087	0	0	773	208	1
Turn Type						Perm
Protected Phases	6			2	4	
Permitted Phases						4
Actuated Green, G (s)	125.8			125.8	14.2	14.2
Effective Green, g (s)	125.8			125.8	14.2	14.2
Actuated g/C Ratio	0.84			0.84	0.09	0.09
Clearance Time (s)	5.0			5.0	5.0	5.0
Vehicle Extension (s)	1.0			1.0	2.5	2.5
Lane Grp Cap (vph)	2869			2869	314	145
v/s Ratio Prot	c0.32			0.23	c0.06	
v/s Ratio Perm						0.00
v/c Ratio	0.38			0.27	0.66	0.01
Uniform Delay, d1	2.9			2.5	65.6	61.5
Progression Factor	1.17			4.80	1.00	1.00
Incremental Delay, d2	0.4			0.2	4.7	0.0
Delay (s)	3.7			12.3	70.3	61.5
Level of Service	A			B	E	E
Approach Delay (s)	3.7			12.3	69.7	
Approach LOS	A			B	E	

Intersection Summary			
HCM Average Control Delay	13.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	42.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

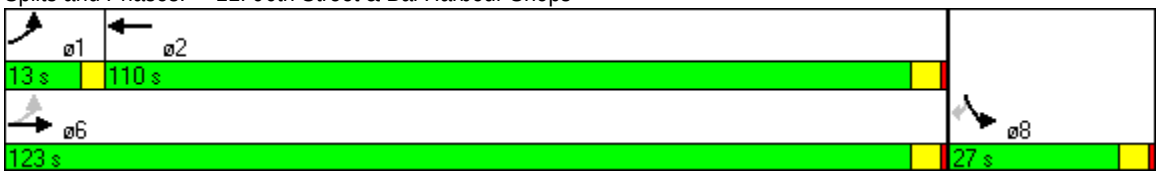
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	53	956	899	25	79	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	2	1
Taper Length (ft)	25			25	25	25
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	0.91
Frt			0.996		0.957	0.850
Flt Protected	0.950				0.965	
Satd. Flow (prot)	1711	3421	3408	0	3226	1393
Flt Permitted	0.274				0.965	
Satd. Flow (perm)	493	3421	3408	0	3226	1393
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			4		33	54
Link Speed (mph)		30	30		30	
Link Distance (ft)		484	250		351	
Travel Time (s)		11.0	5.7		8.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	56	1006	946	26	83	87
Shared Lane Traffic (%)						38%
Lane Group Flow (vph)	56	1006	972	0	116	54
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		22	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt					Perm
Protected Phases	1	6	2		8	
Permitted Phases	6					8
Detector Phase	1	6	2		8	8
Switch Phase						
Minimum Initial (s)	5.0	15.0	15.0		7.0	7.0
Minimum Split (s)	19.0	21.0	21.0		23.0	23.0
Total Split (s)	13.0	123.0	110.0	0.0	27.0	27.0
Total Split (%)	8.7%	82.0%	73.3%	0.0%	18.0%	18.0%
Maximum Green (s)	10.0	118.0	105.0		22.0	22.0
Yellow Time (s)	3.0	4.0	4.0		4.0	4.0
All-Red Time (s)	0.0	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)	3.0	5.0	5.0	4.0	5.0	5.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	2.0	1.0	1.0		2.5	2.5
Recall Mode	None	C-Max	C-Max		None	None
Walk Time (s)					4.0	4.0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Flash Dont Walk (s)					14.0	14.0
Pedestrian Calls (#/hr)					7	7
Act Effct Green (s)	131.7	129.7	123.0		10.3	10.3
Actuated g/C Ratio	0.88	0.86	0.82		0.07	0.07
v/c Ratio	0.12	0.34	0.35		0.46	0.37
Control Delay	2.0	2.5	2.7		52.8	22.0
Queue Delay	0.0	0.0	0.4		0.0	0.0
Total Delay	2.0	2.5	3.1		52.8	22.0
LOS	A	A	A		D	C
Approach Delay		2.5	3.1		43.0	
Approach LOS		A	A		D	
Queue Length 50th (ft)	4	67	14		41	0
Queue Length 95th (ft)	15	137	150		71	48
Internal Link Dist (ft)		404	170		271	
Turn Bay Length (ft)	100					
Base Capacity (vph)	514	2958	2796		501	250
Starvation Cap Reductn	0	0	1151		0	0
Spillback Cap Reductn	0	156	0		1	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.11	0.36	0.59		0.23	0.22

Intersection Summary

Area Type: Other	
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 16 (11%), Referenced to phase 2:WBT and 6:EBTL, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.46	
Intersection Signal Delay: 5.9	Intersection LOS: A
Intersection Capacity Utilization 47.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 11: 96th Street & Bal Harbour Shops



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	53	956	899	25	79	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	3.0	5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	0.95	0.95		0.97	0.91
Frt	1.00	1.00	1.00		0.96	0.85
Flt Protected	0.95	1.00	1.00		0.97	1.00
Satd. Flow (prot)	1711	3421	3408		3229	1393
Flt Permitted	0.27	1.00	1.00		0.97	1.00
Satd. Flow (perm)	493	3421	3408		3229	1393
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	56	1006	946	26	83	87
RTOR Reduction (vph)	0	0	1	0	31	50
Lane Group Flow (vph)	56	1006	971	0	85	4
Turn Type	pm+pt					Perm
Protected Phases	1	6	2		8	
Permitted Phases	6					8
Actuated Green, G (s)	129.7	129.7	122.4		10.3	10.3
Effective Green, g (s)	129.7	129.7	122.4		10.3	10.3
Actuated g/C Ratio	0.86	0.86	0.82		0.07	0.07
Clearance Time (s)	3.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)	2.0	1.0	1.0		2.5	2.5
Lane Grp Cap (vph)	461	2958	2781		222	96
v/s Ratio Prot	0.00	c0.29	c0.29		c0.03	
v/s Ratio Perm	0.10					0.00
v/c Ratio	0.12	0.34	0.35		0.38	0.04
Uniform Delay, d1	1.7	1.9	3.6		66.8	65.2
Progression Factor	1.00	1.00	0.62		1.00	1.00
Incremental Delay, d2	0.0	0.3	0.3		0.8	0.1
Delay (s)	1.8	2.3	2.5		67.6	65.3
Level of Service	A	A	A		E	E
Approach Delay (s)		2.2	2.5		66.9	
Approach LOS		A	A		E	

Intersection Summary			
HCM Average Control Delay	7.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	47.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

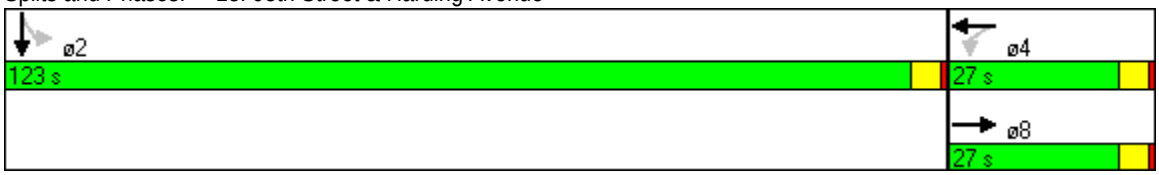
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	36	78	74	56	0	0	0	0	77	1739	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.908									0.995	
Flt Protected					0.972						0.998	
Satd. Flow (prot)	0	1691	0	0	1811	0	0	0	0	0	4713	0
Flt Permitted					0.624						0.998	
Satd. Flow (perm)	0	1691	*1	0	1162	0	0	0	0	0	4713	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)											11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		261			299			655			668	
Travel Time (s)		5.9			6.8			14.9			15.2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Parking (#/hr)											20	
Adj. Flow (vph)	0	37	80	76	57	0	0	0	0	79	1774	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	117	0	0	133	0	0	0	0	0	1917	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Detector Phase		8		4	4					2	2	
Switch Phase												
Minimum Initial (s)		7.0		7.0	7.0					7.0	7.0	
Minimum Split (s)		27.0		27.0	27.0					25.0	25.0	
Total Split (s)	0.0	27.0	0.0	27.0	27.0	0.0	0.0	0.0	0.0	123.0	123.0	0.0
Total Split (%)	0.0%	18.0%	0.0%	18.0%	18.0%	0.0%	0.0%	0.0%	0.0%	82.0%	82.0%	0.0%
Maximum Green (s)		22.0		22.0	22.0					118.0	118.0	
Yellow Time (s)		4.0		4.0	4.0					4.0	4.0	
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0		1.0	1.0					1.0	1.0	
Recall Mode		Max		Max	Max					C-Max	C-Max	
Walk Time (s)		7.0		7.0	7.0					7.0	7.0	
Flash Dont Walk (s)		15.0		15.0	15.0					13.0	13.0	
Pedestrian Calls (#/hr)		31		27	27					54	54	
Act Effct Green (s)		22.0			22.0						118.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.15			0.15						0.79	
v/c Ratio		0.47			0.78						0.52	
Control Delay		65.7			91.2						9.8	
Queue Delay		0.0			0.0						0.3	
Total Delay		65.7			91.2						10.1	
LOS		E			F						B	
Approach Delay		65.7			91.2						10.1	
Approach LOS		E			F						B	
Queue Length 50th (ft)		107			136						253	
Queue Length 95th (ft)		175			m#211						300	
Internal Link Dist (ft)		181			219			575			588	
Turn Bay Length (ft)												
Base Capacity (vph)		248			170						3710	
Starvation Cap Reductn		0			0						927	
Spillback Cap Reductn		0			0						0	
Storage Cap Reductn		0			0						0	
Reduced v/c Ratio		0.47			0.78						0.69	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 124 (83%), Referenced to phase 2:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.78
Intersection Signal Delay: 18.1 Intersection LOS: B
Intersection Capacity Utilization 58.6% ICU Level of Service B
Analysis Period (min) 15
* User Entered Value
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: 95th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	36	78	74	56	0	0	0	0	77	1739	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.91			1.00						0.99	
Flt Protected		1.00			0.97						1.00	
Satd. Flow (prot)		1691			1811						4713	
Flt Permitted		1.00			0.62						1.00	
Satd. Flow (perm)		1691			1162						4713	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	37	80	76	57	0	0	0	0	79	1774	64
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	117	0	0	133	0	0	0	0	0	1915	0
Parking (#/hr)											20	
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		22.0			22.0						118.0	
Effective Green, g (s)		22.0			22.0						118.0	
Actuated g/C Ratio		0.15			0.15						0.79	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		1.0			1.0						1.0	
Lane Grp Cap (vph)		248			170						3708	
v/s Ratio Prot		0.07										
v/s Ratio Perm					c0.11						0.41	
v/c Ratio		0.47			0.78						0.52	
Uniform Delay, d1		58.7			61.7						5.7	
Progression Factor		1.00			1.06						1.63	
Incremental Delay, d2		6.3			25.8						0.4	
Delay (s)		65.0			91.1						9.8	
Level of Service		E			F						A	
Approach Delay (s)		65.0			91.1			0.0			9.8	
Approach LOS		E			F			A			A	

Intersection Summary			
HCM Average Control Delay	17.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

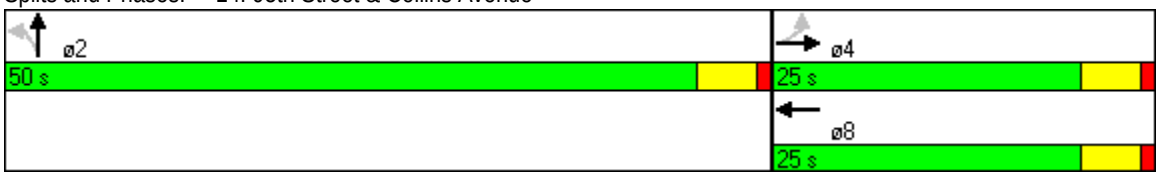
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	99	4	0	0	7	8	94	2098	10	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Frt					0.928			0.999				
Flt Protected		0.954						0.998				
Satd. Flow (prot)	0	1777	0	0	1729	0	0	5070	0	0	0	0
Flt Permitted		0.724						0.998				
Satd. Flow (perm)	0	1349	0	0	1729	0	0	5070	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					8			1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		299			255			652			667	
Travel Time (s)		6.8			5.8			14.8			15.2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	101	4	0	0	7	8	96	2141	10	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	105	0	0	15	0	0	2247	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Detector Phase	4	4			8		2	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		7.0	7.0				
Minimum Split (s)	25.0	25.0			25.0		26.0	26.0				
Total Split (s)	25.0	25.0	0.0	0.0	25.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0
Total Split (%)	33.3%	33.3%	0.0%	0.0%	33.3%	0.0%	66.7%	66.7%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	20.0	20.0			20.0		45.0	45.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5			2.5		2.5	2.5				
Recall Mode	Max	Max			Max		C-Max	C-Max				
Walk Time (s)	4.0	4.0			4.0		7.0	7.0				
Flash Dont Walk (s)	16.0	16.0			16.0		14.0	14.0				
Pedestrian Calls (#/hr)	45	45			7		15	15				
Act Effct Green (s)		20.0			20.0			45.0				
Actuated g/C Ratio		0.27			0.27			0.60				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.29			0.03			0.74				
Control Delay		19.2			15.2			2.5				
Queue Delay		0.0			0.0			0.1				
Total Delay		19.3			15.2			2.6				
LOS		B			B			A				
Approach Delay		19.3			15.2			2.6				
Approach LOS		B			B			A				
Queue Length 50th (ft)		39			2			23				
Queue Length 95th (ft)		65			16			24				
Internal Link Dist (ft)		219			175			572			587	
Turn Bay Length (ft)												
Base Capacity (vph)		360			467			3042				
Starvation Cap Reductn		0			0			0				
Spillback Cap Reductn		8			54			89				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.30			0.04			0.76				

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 50 (67%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.74
Intersection Signal Delay: 3.4 — Intersection LOS: A
Intersection Capacity Utilization 63.4% — ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 14: 95th Street & Collins Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	99	4	0	0	7	8	94	2098	10	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.93			1.00				
Flt Protected		0.95			1.00			1.00				
Satd. Flow (prot)		1777			1729			5071				
Flt Permitted		0.72			1.00			1.00				
Satd. Flow (perm)		1349			1729			5071				
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	101	4	0	0	7	8	96	2141	10	0	0	0
RTOR Reduction (vph)	0	0	0	0	6	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	105	0	0	9	0	0	2247	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		20.0			20.0			45.0				
Effective Green, g (s)		20.0			20.0			45.0				
Actuated g/C Ratio		0.27			0.27			0.60				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		2.5			2.5			2.5				
Lane Grp Cap (vph)		360			461			3043				
v/s Ratio Prot					0.01							
v/s Ratio Perm		c0.08						0.44				
v/c Ratio		0.29			0.02			0.74				
Uniform Delay, d1		21.9			20.3			10.8				
Progression Factor		0.79			1.00			0.13				
Incremental Delay, d2		1.8			0.1			1.1				
Delay (s)		19.0			20.4			2.5				
Level of Service		B			C			A				
Approach Delay (s)		19.0			20.4			2.5			0.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	3.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	63.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

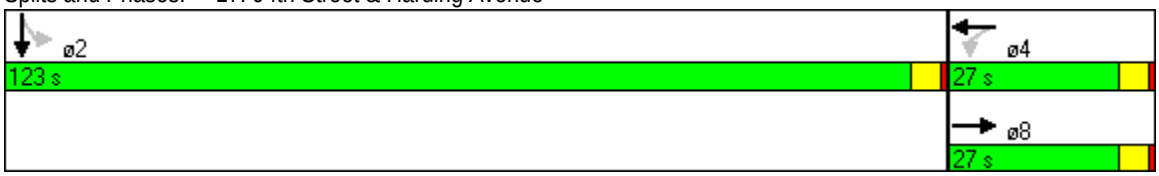
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	19	131	55	130	0	0	0	0	57	1718	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.882									0.989	
Flt Protected					0.985						0.999	
Satd. Flow (prot)	0	1643	0	0	1835	0	0	0	0	0	4689	0
Flt Permitted					0.573						0.999	
Satd. Flow (perm)	0	1643	0	0	1067	0	0	0	0	0	4689	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)											30	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			299			681			655	
Travel Time (s)		6.0			6.8			15.5			14.9	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Parking (#/hr)											20	
Adj. Flow (vph)	0	20	135	57	134	0	0	0	0	59	1771	151
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	155	0	0	191	0	0	0	0	0	1981	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Detector Phase		8		4	4					2	2	
Switch Phase												
Minimum Initial (s)		7.0		7.0	7.0					7.0	7.0	
Minimum Split (s)		21.0		21.0	21.0					21.0	21.0	
Total Split (s)	0.0	27.0	0.0	27.0	27.0	0.0	0.0	0.0	0.0	123.0	123.0	0.0
Total Split (%)	0.0%	18.0%	0.0%	18.0%	18.0%	0.0%	0.0%	0.0%	0.0%	82.0%	82.0%	0.0%
Maximum Green (s)		22.0		22.0	22.0					118.0	118.0	
Yellow Time (s)		4.0		4.0	4.0					4.0	4.0	
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0		1.0	1.0					1.0	1.0	
Recall Mode		Max		Max	Max					C-Max	C-Max	
Walk Time (s)		5.0		5.0	5.0					5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0					11.0	11.0	
Pedestrian Calls (#/hr)		3		39	39					28	28	
Act Effct Green (s)		22.0			22.0						118.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.15			0.15						0.79	
v/c Ratio		0.64			1.22						0.54	
Control Delay		73.6			187.9						4.0	
Queue Delay		0.0			0.0						0.0	
Total Delay		73.6			187.9						4.0	
LOS		E			F						A	
Approach Delay		73.6			187.9						4.0	
Approach LOS		E			F						A	
Queue Length 50th (ft)		145			~226						61	
Queue Length 95th (ft)		227			m#351						65	
Internal Link Dist (ft)		186			219			601			575	
Turn Bay Length (ft)												
Base Capacity (vph)		241			156						3695	
Starvation Cap Reductn		0			0						123	
Spillback Cap Reductn		0			0						0	
Storage Cap Reductn		0			0						0	
Reduced v/c Ratio		0.64			1.22						0.55	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 139 (93%), Referenced to phase 2:SBTL, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.22
Intersection Signal Delay: 23.7 Intersection LOS: C
Intersection Capacity Utilization 69.1% ICU Level of Service C
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 17: 94th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	19	131	55	130	0	0	0	0	57	1718	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.88			1.00						0.99	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		1644			1835						4685	
Flt Permitted		1.00			0.57						1.00	
Satd. Flow (perm)		1644			1067						4685	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	20	135	57	134	0	0	0	0	59	1771	151
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	6	0
Lane Group Flow (vph)	0	155	0	0	191	0	0	0	0	0	1975	0
Parking (#/hr)											20	
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		22.0			22.0						118.0	
Effective Green, g (s)		22.0			22.0						118.0	
Actuated g/C Ratio		0.15			0.15						0.79	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		1.0			1.0						1.0	
Lane Grp Cap (vph)		241			156						3686	
v/s Ratio Prot		0.09										
v/s Ratio Perm					c0.18						0.42	
v/c Ratio		0.64			1.22						0.54	
Uniform Delay, d1		60.3			64.0						5.9	
Progression Factor		1.00			0.98						0.60	
Incremental Delay, d2		12.5			137.6						0.5	
Delay (s)		72.8			200.3						4.0	
Level of Service		E			F						A	
Approach Delay (s)		72.8			200.3			0.0			4.0	
Approach LOS		E			F			A			A	

Intersection Summary			
HCM Average Control Delay	24.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	69.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

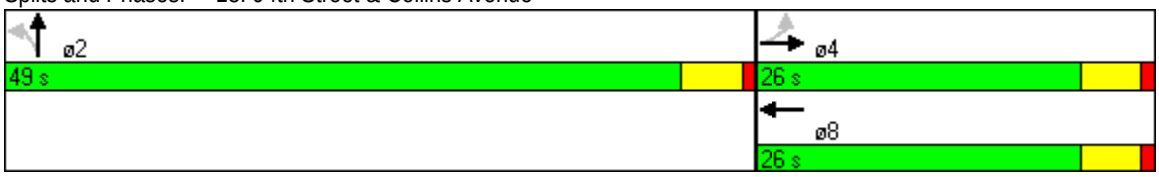
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	87	3	0	0	6	3	144	2072	1	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Frt					0.955							
Flt Protected		0.954						0.997				
Satd. Flow (prot)	0	1777	0	0	1779	0	0	5070	0	0	0	0
Flt Permitted		0.737						0.997				
Satd. Flow (perm)	0	1373	0	0	1779	0	0	5070	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		299			236			669			652	
Travel Time (s)		6.8			5.4			15.2			14.8	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	91	3	0	0	6	3	150	2158	1	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	94	0	0	9	0	0	2309	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Detector Phase	4	4			8		2	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		7.0	7.0				
Minimum Split (s)	26.0	26.0			26.0		26.0	26.0				
Total Split (s)	26.0	26.0	0.0	0.0	26.0	0.0	49.0	49.0	0.0	0.0	0.0	0.0
Total Split (%)	34.7%	34.7%	0.0%	0.0%	34.7%	0.0%	65.3%	65.3%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	21.0	21.0			21.0		44.0	44.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5			2.5		1.0	1.0				
Recall Mode	Max	Max			Max		C-Max	C-Max				
Walk Time (s)	4.0	4.0			4.0		7.0	7.0				
Flash Dont Walk (s)	17.0	17.0			17.0		14.0	14.0				
Pedestrian Calls (#/hr)	36	36			16		11	11				
Act Effct Green (s)		21.0			21.0			44.0				
Actuated g/C Ratio		0.28			0.28			0.59				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.24			0.02			0.78				
Control Delay		22.0			17.0			14.1				
Queue Delay		0.0			0.0			0.0				
Total Delay		22.0			17.0			14.1				
LOS		C			B			B				
Approach Delay		22.0			17.0			14.1				
Approach LOS		C			B			B				
Queue Length 50th (ft)		46			2			269				
Queue Length 95th (ft)		m76			12			331				
Internal Link Dist (ft)		219			156			589			572	
Turn Bay Length (ft)												
Base Capacity (vph)		384			500			2974				
Starvation Cap Reductn		0			0			0				
Spillback Cap Reductn		0			0			0				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.24			0.02			0.78				

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 35 (47%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.78
Intersection Signal Delay: 14.4 Intersection LOS: B
Intersection Capacity Utilization 63.0% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 18: 94th Street & Collins Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	87	3	0	0	6	3	144	2072	1	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.95			1.00				
Flt Protected		0.95			1.00			1.00				
Satd. Flow (prot)		1777			1779			5069				
Flt Permitted		0.74			1.00			1.00				
Satd. Flow (perm)		1373			1779			5069				
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	91	3	0	0	6	3	150	2158	1	0	0	0
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	94	0	0	7	0	0	2309	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		21.0			21.0			44.0				
Effective Green, g (s)		21.0			21.0			44.0				
Actuated g/C Ratio		0.28			0.28			0.59				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		2.5			2.5			1.0				
Lane Grp Cap (vph)		384			498			2974				
v/s Ratio Prot					0.00							
v/s Ratio Perm		c0.07						0.46				
v/c Ratio		0.24			0.01			0.78				
Uniform Delay, d1		20.9			19.5			11.8				
Progression Factor		0.97			1.00			1.00				
Incremental Delay, d2		1.4			0.1			2.1				
Delay (s)		21.7			19.6			13.8				
Level of Service		C			B			B				
Approach Delay (s)		21.7			19.6			13.8			0.0	
Approach LOS		C			B			B			A	

Intersection Summary			
HCM Average Control Delay	14.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	63.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

APPENDIX E
EXISTING CONDITIONS – RESIDENTIAL INTERSECTIONS - VISSIM PRINTOUTS

Existing Conditions - Average Delay - AM Peak Hour

Intersection	Approach	Movement	Run 1		Run 2		Run 3		Run 4		Run 5		Run 6		Run 7		Run 8		Run 9		Run 10		AVERAGE Delay	Standard Deviation(s)	Min(s)	Max(s)
			Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume				
94th Street at Bay Drive	NB	Left 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.3	1	0	0	0.5	0	5.3	5.3
		Through	5.7	21	5.8	22	6.2	18	6.8	24	5.9	23	5.8	27	6	23	6.1	24	6.9	18	6.7	25	6.2	1.9	4.5	14.4
		Right 2	5.1	2	5.5	1	6.9	3	10.1	1	5.3	3	5.6	3	6.2	7	5.4	3	7.4	5	5.4	2	6.3	1.6	4.6	10.5
		Total	5.6	23	5.8	23	6.3	21	6.9	25	5.8	26	5.8	30	6	30	6	27	6.9	24	6.6	27	6.2	1.7	4.5	14.4
	SB	Left 2	5.2	2	10.3	1	5.2	2	5.1	3	0	0	5	1	7	3	4.9	1	0	0	0	0	4.3	2.1	4.8	11
		Through	5.3	7	6	8	5.4	7	5.4	6	5.8	10	5.5	7	5.5	8	5	4	5.1	7	5.6	3	5.5	1	4.3	11.9
		Total	5.3	9	6.5	9	5.4	9	5.3	9	5.8	10	5.4	8	5.9	11	5	5	5.1	7	5.6	3	5.5	1.3	4.3	11.9
	WB	Left 2	7.8	1	0	0	10.1	1	0	0	10.1	1	0	0	5.5	1	0	0	0	0	0	0	3.4	2.2	5.5	10.1
		Right 2	0	0	5.1	1	0	0	5.5	1	5.3	1	0	0	5.3	1	5.8	2	5.2	1	5.4	2	3.8	0.2	5.1	5.8
		Total	7.8	1	5.1	1	10.1	1	5.5	1	7.7	2	0	0	5.4	2	5.8	2	5.2	1	5.4	2	5.8	1.4	5.1	10.1
	Total		5.6	33	6	33	6.2	31	6.4	35	5.9	38	5.7	38	5.9	43	5.8	34	6.5	32	6.4	32	6	1.7	4.3	14.4
93rd Street at Bay Drive	NB	Right 1	5.8	3	5.3	5	5.2	1	5	2	5.4	1	6.9	4	5.4	5	5.9	6	5.7	5	5.7	7	5.6	1	4.8	10.5
		Total	5.8	3	5.3	5	5.2	1	5	2	5.4	1	6.9	4	5.4	5	5.9	6	5.7	5	5.7	7	5.6	1	4.8	10.5
	NEB	Left 3	0.1	1	0	0	0	0	0	0	0	0	0	0	0.1	1	0	0	0	0	0	0	0	0	0.1	0.1
		Through	0	9	0	14	0	9	0.2	15	0	17	0	12	0	15	0	14	0.3	15	0	12	0.1	0.4	0	3.2
		Total	0	10	0	14	0	9	0.2	15	0	17	0	12	0	16	0	14	0.3	15	0	12	0.1	0.3	0	3.2
	EB	Left 1	5.5	1	0	0	5.7	1	0	0	7.1	1	0	0	5.7	1	0	0	6	1	0	0	3	0.6	5.5	7.1
		Total	5.5	1	0	0	5.7	1	0	0	7.1	1	0	0	5.7	1	0	0	6	1	0	0	3	0.6	5.5	7.1
	SWB	Left 3	0.1	1	0.3	1	0	0	0	0	0	0	0	1	0	0	0	0	0.1	1	0	0	0.1	0.1	0	0.3
		Left 1	0	3	4.8	2	0	2	0	0	0	2	0	1	0	2	0	3	0	1	6.6	2	1.1	3.8	0	13.3
		Through	0	6	0	6	0	7	0	6	0	6	0	6	0	4	0	5	0	3	0	8	0	0	0	0
		Right 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1	0	0	0.2	1	0.1	0	0.2	0.3
		Total	0	10	1.1	9	0	9	0	6	0	8	0	8	0	6	0	9	0	5	1.2	11	0.2	1	0	13.3
	WB	Left 2	5.2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.4	1	0	0	1.1	0.1	5.2	5.4
		Left 1	0	0	0	0	0	0	5.7	1	0	0	0	0	0	0	0	0	0	0	0	0	0.6	0	5.7	5.7
		Right 3	0	0	4.9	1	4.9	1	0	0	5	1	4.8	2	0	0	4.8	2	0	0	5	1	2.9	0.1	4.7	5
		Total	5.2	1	4.9	1	4.9	1	5.7	1	5	1	4.8	2	0	0	4.8	2	5.4	1	5	1	4.6	0.8	4.7	5.7
	Total		1.1	25	1.4	29	0.8	21	0.8	24	0.6	28	1.4	26	1.2	28	1.5	31	1.6	27	1.9	31	1.2	2.5	0	13.3
88th Street at Dickens Avenue	EB	Left 2	0.1	2	0	0	0.1	1	0	1	0	0	0	0	0	0	0.1	1	0	0	0.1	3	0	0	0	0.1
		Through	0	10	0.1	17	0.1	12	0.2	16	0.2	16	0.1	15	0	8	0.2	11	0	16	0.1	12	0.1	0.3	0	1.7
		Total	0	12	0.1	17	0.1	13	0.2	17	0.2	16	0.1	15	0	8	0.2	12	0	16	0.1	15	0.1	0.2	0	1.7
	SB	Left 2	5.6	4	5.2	2	7.5	3	6.5	4	6.5	2	6.4	5	5.2	2	5.2	3	5.4	1	5.4	1	5.9	1.8	4.9	12
		Right 2	4.8	1	5.1	2	5	2	5.2	1	5.1	1	0	0	0	0	0	0	4.9	1	5.1	1	3.5	0.2	4.8	5.2
		Total	5.4	5	5.2	4	6.5	5	6.2	5	6	3	6.4	5	5.2	2	5.2	3	5.2	2	5.2	2	5.7	1.8	4.8	12
	WB	Through	0	6	0	8	0	9	0	5	0	6	0	7	0	4	0	6	0	4	0	3	0	0	0	0
		Right 2	0.2	1	0.2	1	0	0	0	0	0	0	0	0	0	0	0.3	1	0	0	0.2	1	0.1	0	0.2	0.3
		Total	0	7	0	9	0	9	0	5	0	6	0	7	0	4	0	7	0	4	0	4	0	0.2	0	0.3
	Total		1.1	24	0.8	30	1.3	27	1.3	27	0.8	25	1.2	27	0.7	14	0.8	22	0.5	22	0.6	21	0.9	2.1	0	12
91st Street at Abbott Avenue	NB	Left 2	5.6	1	6	4	4.8	1	5.7	2	0	0	5	1	5.1	1	5.2	4	6.6	3	5.2	3	4.9	1.3	4.7	10.1
		Through	7.7	7	5.8	4	5.6	5	6.5	5	6.3	12	5.5	12	5.9	9	6	10	7.9	8	5.5	11	6.3	1.9	4.6	13.5
		Total	7.4	8	5.9	8	5.5	6	6.3	7	6.3	12	5.5	13	5.8	10	5.8	14	7.5	11	5.4	14	6.1	1.8	4.6	13.5
	EB	Left 2	0.1	2	3.5	2	0	0	0	0	0.3	1	0	0	0.1	1	0	0	0.1	1	0	0	0.4	2.6	0.1	6.9
		Through	0	5	0	3	0	7	0	8	0	5	0	4	0	2	0	8	0	8	0	4	0	0	0	0.2
		Right 2	0.2	1	0	0	0.3	2	0	0	0	0	0	0	0.2	1	0	0	0	0	0.3	1	0.1	0.1	0.2	0.3
		Total	0	8	1.4	5	0.1	9	0	8	0	6	0	4	0.1	4	0	8	0	9	0.1	5	0.2	0.5	0	6.9
	SB	Left 2	5.3	4	5.2	2	7.5	2	6.1	3	0	0	0	0	0	0	5.5	1	5.8	2	6.1	1	4.2	1.2	5	9.6
		Through	4.9	1	5.3	2	5.4	3	6	1	6	3	5.2	3	6.4	3	5.2	1	4.7	2	4.9	2	5.4	1.1	4.6	9.7
		Right 2	5.1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5.1	1	5.4	1	1.6	0.2	5.1	5.4
		Total	5.2	6	5.2	4	6.2	5	6.1	4	6	3	5.2	3	6.4	3	5.4	2	5.2	5	5.3	4	5.6	1.4	4.6	9.7
	WB	Left 2	0	0	0	0	0	0	0	0	0	0	0.1	1	0	0	0	0	0	0	0	0	0	0	0.1	0.1
		Through	0.2	14	0	12	0	10	0.2	12	0	12	0.1	7	0	11	0.2	12	0	12	0.1	11	0.1	0.3	0	2
		Right 2	0	0	0.4	3	0.3	1	0	0	0.3	1	0.3	1	0.3	2	0.2	1	0	0	0.3	2	0.2	0.1	0.2	0.7
		Total	0.2	14	0.1	15	0	11	0.2	12	0	13	0.1	9	0	13	0.2	13	0	12	0.1	13	0.1	0.3	0	2
	Total		2.6	36	2.4	32	2.1	31	2.3	31	2.8	34	3	29	2.6	30	2.6	37	2.9	37	2.7	36	2.6	3.1	0	13.5

Existing Conditions - Average Delay - AM Peak Hour

Intersection	Approach	Movement	Run 1		Run 2		Run 3		Run 4		Run 5		Run 6		Run 7		Run 8		Run 9		Run 10		AVERAGE Delay	Standard Deviation(s)	Min(s)	Max(s)
			Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume				
90th Street at Bay Drive	SWB	Left 3	0	0	0	0	0	0	0	0	5.2	1	0	0	0	0	0	0	0	0	5	1	1	0.2	5	5.2
		Through	0	2	0	2	0	1	0	2	0	1	0	1	0	2	0	1	0	1	0	1	0	0	0	0
		Total	0	2	0	2	0	1	0	2	2.6	2	0	1	0	2	0	1	0	1	2.5	2	0.5	2.3	0	5.2
	WB	Left 1	0	0	4.9	1	0	0	5.1	1	4.9	1	0	0	5.2	1	5	1	0	0	5	1	3	0.1	4.9	5.2
		Right 3	0	0	5.2	1	5.2	1	0	0	0	0	5.7	1	0	0	5.2	1	0	0	5.1	1	2.6	0.2	5.1	5.7
		Total	0	0	5.1	2	5.2	1	5.1	1	4.9	1	5.7	1	5.2	1	5.1	2	0	0	5	2	4.1	0.3	4.9	5.7
	Total		0	2	2.6	4	2.6	2	1.7	3	3.4	3	2.8	2	1.7	3	3.4	3	0	1	3.8	4	2.2	2.6	0	5.7
90th Street at Carlyle Avenue	NB	Left 2	0	0	0	0	0	0	0	0	0	0	0	0	5.5	1	0	0	6.9	1	0	0	1.2	0.9	5.5	6.9
		Through	5.6	6	5.6	3	6.7	6	5.4	3	5.6	3	5.2	1	5.9	1	5.8	2	5.7	2	5.5	3	5.7	1.2	5.1	11.9
		Right 2	0	0	5.1	1	0	0	0	0	5	1	4.9	3	4.6	2	4.9	4	5.1	1	0	0	3	0.2	4.6	5.1
		Total	5.6	6	5.5	4	6.7	6	5.4	3	5.4	4	5	4	5.2	4	5.2	6	5.8	4	5.5	3	5.5	1.1	4.6	11.9
	EB	Left 2	5.3	4	0	0	0	0	5	1	5.2	3	4.9	1	5.4	2	5.2	2	6.6	3	6.2	3	4.4	1.1	4.9	9.2
		Through	4.9	4	5.9	9	5.6	9	5.5	8	6	8	5.5	6	6.1	11	5.7	4	5.6	7	7	11	5.8	1.6	4.6	12.8
		Total	5.1	8	5.9	9	5.6	9	5.4	9	5.8	11	5.4	7	6	13	5.5	6	5.9	10	6.8	14	5.7	1.4	4.6	12.8
	SB	Left 2	5.3	1	6.1	1	0	0	0	0	5.2	1	0	0	0	0	5.7	6	5.3	2	8.6	1	3.6	1.1	5.1	8.6
		Through	5.8	7	6.6	8	6.2	5	5.6	5	5.5	4	7	7	6.3	8	5	1	7.8	3	5.6	6	6.1	1.4	5	12.3
		Right 2	0	0	5.4	1	7.4	1	5.1	1	0	0	0	0	5.2	1	5.3	1	7	3	5.5	1	4.1	1.3	5.1	9
		Total	5.7	8	6.4	10	6.4	6	5.5	6	5.4	5	7	7	6.2	9	5.6	8	6.9	8	6	8	6.1	1.2	5	12.3
	WB	Left 2	5.5	2	5.3	1	0	0	0	0	4.9	1	5.1	2	5.1	3	4.9	3	0	0	5.2	2	3.6	0.3	4.8	5.8
		Through	5.7	9	5.3	10	6	8	4.9	5	5.7	5	5.6	9	6.4	6	5.1	4	5.4	8	6	9	5.6	1.2	4.3	10.9
		Right 2	0	0	0	0	5.5	2	0	0	5.5	1	0	0	5.5	2	0	0	6	1	0	0	2.3	0.2	5.5	6
		Total	5.7	11	5.3	11	5.9	10	4.9	5	5.6	7	5.5	11	5.9	11	5	7	5.5	9	5.9	11	5.5	1.1	4.3	10.9
	Total		5.5	33	5.8	34	6.1	31	5.3	23	5.6	27	5.8	29	5.9	37	5.3	27	6	31	6.2	36	5.8	1.3	4.3	12.8
89th Street at Hawthorne Avenue	NB	Left 1	5.3	1	0	0	0	0	5.3	1	0	0	0	0	0	0	0	0	0	0	0	0	1.1	0	5.3	5.3
		Through	5.5	2	5.5	1	4.8	2	5.5	1	5.2	1	5.4	3	0	0	5.5	3	5.4	1	5.3	2	4.8	0.3	4.6	5.9
		Total	5.4	3	5.5	1	4.8	2	5.4	2	5.2	1	5.4	3	0	0	5.5	3	5.4	1	5.3	2	4.8	0.3	4.6	5.9
	SEB	Left 3	5.3	2	0	0	0	0	5.3	1	0	0	0	0	0	0	0	0	5.5	1	0	0	1.6	0.2	5.1	5.5
		Left 1	5.6	1	5.4	1	0	0	4.8	1	0	0	0	0	5.3	1	5.5	1	5.8	2	0	0	3.2	0.4	4.8	6.2
		Right 1	5.5	1	5.7	1	5.6	3	0	0	5.9	1	5.6	2	5.9	1	0	0	0	0	0	0	3.4	0.2	5.3	5.9
		Total	5.4	4	5.6	2	5.6	3	5	2	5.9	1	5.6	2	5.6	2	5.5	1	5.7	3	0	0	5	0.5	4.8	6.2
	SB	Left 2	0	0	0	0	0	0	0	0	5.9	3	0	0	0	0	6	2	0	0	0	0	1.2	0.4	5.5	6.4
		Through	5.2	2	6.5	1	5.2	2	0	0	0	0	5.2	1	5.1	2	0	0	5.4	2	4.7	1	3.7	0.5	4.7	6.5
		Total	5.2	2	6.5	1	5.2	2	0	0	5.9	3	5.2	1	5.1	2	6	2	5.4	2	4.7	1	4.9	0.5	4.7	6.5
	WB	Left 2	0	0	0	0	5.2	1	5.4	1	0	0	5	1	0	0	5.3	1	0	0	5.2	1	2.6	0.1	5	5.4
		Right 1	0	0	5.6	1	0	0	0	0	0	0	0	0	5.7	1	0	0	0	0	0	0	1.1	0.1	5.6	5.7
		Right 2	4.9	1	0	0	0	0	4.6	1	0	0	4.8	1	0	0	0	0	4.8	1	0	0	1.9	0.1	4.6	4.9
		Total	4.9	1	5.6	1	5.2	1	5	2	0	0	4.9	2	5.7	1	5.3	1	4.8	1	5.2	1	4.7	0.6	4.6	5.7
	Total		5.3	10	5.8	5	5.2	8	5.1	6	5.8	5	5.3	8	5.4	5	5.6	7	5.4	7	5.1	4	5.4	0.4	4.6	6.5
95th Street at Byron Avenue	NB	Through	11.5	55	9.2	52	10	59	9	58	9.4	52	7.7	57	10.4	50	12	59	9.5	56	10.8	60	10	6.4	4.4	45.8
		Right 2	14.5	4	7.6	7	0	0	11.3	3	12.6	2	7.7	2	9.2	7	12	7	13.9	4	7.4	6	9.6	7	4.4	41.4
		Total	11.7	59	9	59	10	59	9.1	61	9.5	54	7.7	59	10.3	57	12	66	9.8	60	10.5	66	10	7.4	4.4	45.8
	EB	Left 2	7.8	5	7.3	6	6.4	5	5.9	6	7.5	8	6	8	8	7	6	4	5.5	4	5.7	6	6.6	2	4.9	15
		Through	0	0	5.4	2	5.7	3	5.5	2	0	0	6.2	1	7.7	3	5.6	2	9.2	2	0	0	4.5	2.3	5.1	13.3
		Right 2	5.3	1	0	0	5.4	3	5.7	1	5.5	1	6.6	1	5.4	1	9.6	1	5.7	1	5.6	1	5.5	1.3	5.3	9.6
		Total	7.4	6	6.8	8	5.9	11	5.8	9	7.3	9	6.1	10	7.7	11	6.4	7	6.6	7	5.7	7	6.6	3	4.9	15
	SB	Left 2	0	0	0	0	6	1	0	0	5.9	1	0	0	7.3	1	0	0	6.6	1	0	0	2.6	0.7	5.9	7.3
		Right 2	25.5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.6	0	25.5	25.5
		Total	25.5	1	0	0	6	1	0	0	5.9	1	0	0	7.3	1	0	0	6.6	1	0	0	5.1	8.5	5.9	25.5
	WB	Left 2	16.9	8	17.3	7	13.3	5	12.8	9	16.7	7	13	6	11.8	6	17.7	11	11.4	9	20	9	15.1	13.1	5	69.9
		Through	15.3	21	17.8	29	18.1	14	13.6	16	18.8	27	13.8	22	16.5	25	19.5	25	11.4	22	20.8	23	16.6	14.1	4.8	77.5
		Right 2	11.8	11	23.3	8	13.4	15	13.1	13	21.2	11	13.3	14	14.8	14	22.6	7	18.2	11	14	8	16.6	12.3	5.2	66.3
		Total	14.7	40	18.7	44	15.3	34	13.2	38	19.1	45	13.5	42	15.3	45	19.5	43	13.2	42	19.3	40	16.2	20.1	4.8	77.5
	Total		12.7	106	12.7	111	11.2	105	10.3	108	13.2	109	9.8	111	12	114	14.4	116	10.9	110	13.3	113	12.1	10.1	4.4	77.5
88th Street at Byron Avenue	NB	Right 2	6.2	26	5.9	22	5.6	27	6.3	25	6.1	21	5.6	21	5.5	25	6.1	25	5.8	21	5.6	22	5.9	2.5	3.9	17.1
		Total	6.2	26	5.9	22	5.6	27	6.3	25	6.1	21	5.6	21	5.5	25	6.1	25	5.8	21	5.6	22	5.9	2.6	3.9	17.1
	EB	Through	1	7	0.7	6	1.2	9	0.5	13	0.7	9	0.6	11	0.9	7	0.8	5	0.9	15	0.9	10	0.8	0.7	0.2	3.9
		Right 2	0.3	16	0.2	13	0.5	12	0.4	9	0.5	14	0.4	17	0.2	17	0.7	20	0.5	17	0.4	17	0.4	0.4	0.1	2.4
		Total	0.5	23	0.4	19	0.8	21	0.5	22	0.6	23	0.5	28	0.4	24	0.7	25	0.7	32	0.6	27	0.6	0.6	0.1	3.9
	SB	Right 2	0	0	5	2	4.8	1	4.8	1	5	1	4.8	2	0	0	4.8	2	0	0	4.8	2	3.4	0.2	4.5	5.1
		Total	0	0	5	2	4.8	1	4.8	1	5	1	4.8	2	0	0	4.8	2	0	0	4.8	2	3.4	0.2	4.5	5.1
	WB	Through	0.3	4	0.7	6	0.3	8	0.5	11	0.7	12	0.9	9	0.4	10	0.4	5	0.3	5	0.4	7	0.5	0.7	0.1	4.7
		Right 2	0	4	0	6	0	4	0	4	0	4	0.1	3	0	5	0	7	0	3	0	1	0	0.3	0	1
		Total	0.2	8	0.3	12	0.2	12	0.4	15	0.5	16	0.7	12	0.3	15	0.2	12	0.2	8	0.4	8	0.3	0.7	0	4.7
	Total		3.1	57	2.7	55	2.9	61	2.8	63	2.5	61	2.4	63	2.4	64	2.8	64	2.4	61	2.6	59	2.7	3.1	0	17.1

Existing Conditions - Average Delay - PM Peak Hour

Intersection	Approach	Movement	Run 1		Run 2		Run 3		Run 4		Run 5		Run 6		Run 7		Run 8		Run 9		Run 10		AVERAGE DELAY	Standard Deviation(s)	Min(s)	Max(s)
			Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume				
94th Street at Bay Drive	NB	Through	5.9	4	5.3	5	5.3	6	5.6	9	6.2	9	6	8	5.6	9	5.4	8	5.4	5	5.6	7	5.6	1.2	4.7	13.1
		Right 2	5.3	7	5.3	9	5.4	6	5.2	1	9.3	6	6.2	7	5.6	3	5.3	6	5.1	3	7.1	6	6	1.9	4.8	14.1
		Total	5.5	11	5.3	14	5.4	12	5.6	10	7.4	15	6.1	15	5.6	12	5.4	14	5.3	8	6.3	13	5.8	1.7	4.7	14.1
	SB	Left 2	4.9	3	5.1	1	5.2	3	4.9	3	0	0	7.1	2	5.4	1	10.4	1	5	1	4.9	1	5.3	1.6	4.7	10.4
		Through	6.4	10	5.1	8	5.8	12	5.2	8	6	13	5.5	13	6	10	4.9	5	5.6	9	5.5	12	5.6	1.1	4.6	10.7
		Total	6.1	13	5.1	9	5.7	15	5.1	11	6	13	5.7	15	5.9	11	5.8	6	5.5	10	5.5	13	5.6	1.3	4.6	10.7
	WB	Left 2	5.3	2	5.8	1	7	1	6.6	2	6.4	1	6.1	2	5.3	2	5.3	1	5.3	1	6.5	1	6	0.8	5.3	7.6
		Right 2	0	0	0	0	4.7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0	4.7	4.7
		Total	5.3	2	5.8	1	5.8	2	6.6	2	6.4	1	6.1	2	5.3	2	5.3	1	5.3	1	6.5	1	5.8	1.4	4.7	7.6
	Total		5.8	26	5.2	24	5.6	29	5.4	23	6.7	29	5.9	32	5.7	25	5.5	21	5.4	19	5.9	27	5.7	1.3	4.6	14.1
93rd Street at Bay Drive	NB	Right 1	5.3	1	5.3	1	5.9	1	5.7	1	6.5	1	5.4	2	0	0	5.7	2	8.1	1	5.2	1	5.3	0.9	4.9	8.1
		Right 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0.5	0	5	5
		Total	5.3	1	5.3	1	5.9	1	5.7	1	6.5	1	5.4	2	0	0	5.7	2	6.6	2	5.2	1	5.2	1	4.9	8.1
	NEB	Through	0	8	0	8	0	4	0	6	0	5	0	4	0	7	0	5	0	9	0	6	0	0	0	0
		Right 1	0	0	0	0	0	0	0	1	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0
		Total	0	8	0	8	0	4	0	7	0	7	0	5	0	7	0	5	0	9	0	6	0	0.3	0	0
	SWB	Left 3	0.1	1	0.4	1	0	0	0.1	2	0	0	0.1	2	0	0	0	1	0.1	3	0.1	3	0.1	0.1	0	0.4
		Left 1	0	0	0.4	4	0	4	0	6	0	1	0	3	0	0	0	4	0	2	0	2	0	0.3	0	1.6
		Through	0	8	0	4	0	5	0	3	0	6	0	8	0	6	0	5	0	9	0	5	0	0	0	0.4
		Total	0	9	0.2	9	0	9	0	11	0	7	0	13	0	6	0	10	0	14	0	10	0	1	0	1.6
	WB	Left 2	0	0	5.3	1	5.2	1	7.3	2	5.5	1	0	0	0	0	0	0	0	0	0	0	2.3	2	5	9.6
		Left 1	5.4	1	5.6	1	0	0	0	0	5.4	1	0	0	6.3	1	5.8	1	0	0	6.2	2	3.5	0.4	5.4	6.4
		Through	0	0	0	0	0	0	5.1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0	5.1	5.1
		Right 3	4.8	1	4.8	2	5	1	0	0	0	0	4.6	1	4.3	1	4.7	1	5	1	4.9	1	3.8	0.2	4.3	5
		Total	5.1	2	5.1	4	5.1	2	6.6	3	5.4	2	4.6	1	5.3	2	5.2	2	5	1	5.8	3	5.3	0.8	4.3	9.6
	Total		0.8	20	1.2	22	1	16	1.2	22	1	17	0.7	21	0.7	15	1.1	19	0.7	26	1.1	20	1	2.1	0	9.6
88th Street at Dickens Avenue	EB	Left 2	0	0	0	0	0	1	0.2	1	0	0	0	0	0.1	1	0	0	0	0	0	1	0	0.1	0	0.2
		Through	0	11	0	11	0	8	0	12	0.2	6	0	9	0	7	0	9	0	12	0	8	0	0.1	0	1.2
		Total	0	11	0	11	0	9	0	13	0.2	6	0	9	0	8	0	9	0	12	0	9	0	0.2	0	1.2
	WB	Through	0	7	0	9	0	7	0	9	0	8	0	8	0	10	0	7	0	12	0	6	0	0	0	0
		Right 2	0.3	3	0	0	0.3	1	0	0	0.4	1	0.3	1	0.3	1	0	0	0.2	1	0	0	0.2	0.1	0.2	0.4
		Total	0.1	10	0	9	0	8	0	9	0	9	0	9	0	11	0	7	0	13	0	6	0	0.2	0	0.4
	Total		0	21	0	20	0	17	0	22	0.1	15	0	18	0	19	0	16	0	25	0	15	0	0.1	0	1.2
91st Street at Abbott Avenue	NB	Left 2	5.3	1	0	0	5.5	1	5.5	1	5.1	1	0	0	5.2	1	5.3	1	8.8	1	0	0	4.1	1.3	5.1	8.8
		Through	6.2	9	6	12	7	11	6.1	7	6.9	7	6.6	8	6.3	9	6.1	8	5.7	13	7	9	6.4	2.1	4.6	16
		Right 2	0	0	0	0	5.2	1	5	2	5	1	0	0	5.5	1	0	0	5.1	1	5.1	1	3.1	0.2	5	5.5
		Total	6.1	10	6	12	6.7	13	5.8	10	6.5	9	6.6	8	6.1	11	6	9	5.9	15	6.8	10	6.3	1.8	4.6	16
	EB	Left 2	0	0	0.1	1	0.1	1	0	0	0.2	3	0.1	2	0.1	1	0	0	0.1	2	3.5	2	0.4	1.9	0.1	6.9
		Through	0	14	0	14	0	15	0	12	0	10	0	11	0	14	0	17	0	9	0	15	0	0	0	0.3
		Right 2	0.3	1	0	0	0	0	0	0	0.3	2	0	0	0.3	2	0.4	2	0.8	1	0.3	1	0.2	0.2	0.2	0.8
		Total	0	15	0	15	0	16	0	12	0.1	15	0	13	0	17	0	19	0.1	12	0.4	18	0.1	0.5	0	6.9
	SB	Left 2	0	0	0	0	0	0	0	0	5.5	1	0	0	5.4	2	0	0	0	0	0	0	1.1	0.2	5.3	5.6
		Through	5.2	1	5.4	1	0	0	5.2	1	5.1	2	5.3	1	0	0	0	0	5.1	1	5.1	1	3.6	0.1	4.9	5.4
		Right 2	5.1	1	4.9	1	8.1	2	0	0	0	0	0	0	0	0	5	1	6.3	1	5.2	1	3.5	2.1	4.9	10.8
		Total	5.2	2	5.2	2	8.1	2	5.2	1	5.2	3	5.3	1	5.4	2	5	1	5.7	2	5.2	2	5.6	1.4	4.9	10.8
	WB	Left 2	0.1	1	0	0	0	0	0.1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1
		Through	0	6	0.2	11	0.1	9	0	7	0	9	0	9	0	11	0	11	0	10	0.3	10	0.1	0.3	0	1.7
		Right 2	0.3	1	0	0	0	0	0	0	0.2	1	0	0	0	0	0.3	1	0.2	1	0.3	3	0.1	0.1	0.2	0.4
		Total	0	8	0.2	11	0.1	9	0	8	0	10	0	9	0	11	0	12	0	11	0.3	13	0.1	0.3	0	1.7
	Total		2	35	2.1	40	2.6	40	2	31	2	37	1.9	31	1.9	41	1.4	41	2.5	40	2.1	43	2.1	3.1	0	16

Existing Conditions - Average Delay - PM Peak Hour

Intersection	Approach	Movement	Run 1		Run 2		Run 3		Run 4		Run 5		Run 6		Run 7		Run 8		Run 9		Run 10		AVERAGE DELAY	Standard Deviation(s)	Min(s)	Max(s)
			Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume	Delay(s)	Volume				
90th Street at Bay Drive	SWB	Left 3	0	0	0	0	0	0	0	0	0	0	4.8	1	0	0	5.2	2	5.1	1	5.2	1	2	0.2	4.8	5.3
		Through	0	1	0	1	0	1	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
		Total	0	1	0	1	0	1	0	2	0	0	2.4	2	0	0	5.2	2	5.1	1	5.2	1	1.8	2.3	0	5.3
	WB	Left 1	0	0	5.4	1	0	0	0	0	5.1	1	5.1	1	4.9	1	5.1	1	4.8	1	5.2	2	3.6	0.2	4.8	5.4
		Right 3	5	1	5.1	1	0	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	1.5	0.3	4.6	5.3
		Total	5	1	5.2	2	0	0	5	2	5.1	1	5.1	1	4.9	1	5.1	1	4.8	1	5.2	2	4.5	0.3	4.6	5.4
	Total		2.5	2	3.5	3	0	1	2.5	4	5.1	1	3.3	3	4.9	1	5.2	3	4.9	2	5.2	3	3.7	2.3	0	5.4
90th Street at Carlyle Avenue	NB	Left 2	0	0	0	0	0	0	0	0	5.2	1	0	0	0	0	0	0	0	0	0	0	0.5	0	5.2	5.2
		Through	5.5	5	5.9	5	5.7	5	5.4	1	5.7	1	5.7	1	7.2	5	5.9	6	5.9	6	6.7	6	6	1.2	5	10.4
		Right 2	4.8	1	0	0	4.7	1	0	0	0	0	4.8	2	4.8	1	0	0	0	0	0	0	1.9	0.2	4.7	5
		Total	5.4	6	5.9	5	5.5	6	5.4	1	5.4	2	5.1	3	6.8	6	5.9	6	5.9	6	6.7	6	5.8	1.1	4.7	10.4
	EB	Left 2	7.1	1	7.6	2	5.2	2	5.1	1	6.2	2	5	1	8.6	1	5.9	3	6.2	5	9.1	2	6.6	2.2	4.9	12.7
		Through	5.9	6	6.4	9	5.6	7	5.7	7	5.5	6	5.1	3	5.5	7	5.9	6	5.6	6	6	9	5.7	1.2	4.9	10.6
		Total	6.1	7	6.6	11	5.5	9	5.6	8	5.7	8	5.1	4	5.9	8	5.9	9	5.9	11	6.6	11	5.9	1.4	4.9	12.7
	SB	Left 2	5.2	4	6.8	1	5.6	2	5.4	3	0	0	5.1	1	5	1	0	0	5.3	2	0	0	3.8	0.5	4.9	6.8
		Through	5.6	2	5.4	1	5.7	2	5.3	1	5.5	1	6.1	2	5.9	1	0	0	5.5	3	5.6	2	5.1	0.3	5.3	6.7
		Right 2	7.4	2	5.4	3	9.7	1	5.5	1	5.6	2	6.8	1	0	0	5.4	2	5.3	1	5.5	1	5.7	1.5	5.2	9.7
		Total	5.8	8	5.7	5	6.5	5	5.4	5	5.6	3	6	4	5.4	2	5.4	2	5.4	6	5.6	3	5.7	1.2	4.9	9.7
	WB	Left 2	0	0	0	0	5.3	1	5.4	1	0	0	0	0	5.1	2	6.1	2	8	1	10.1	1	4	1.9	4.7	10.1
		Through	5.8	12	5.7	5	5.7	9	6.1	7	5.5	10	5.5	11	6.2	7	5.3	8	5.4	9	6.9	9	5.8	1.3	4.6	10.8
		Right 2	7.6	2	7	2	0	0	0	0	0	0	6.2	1	5.7	1	0	0	6.3	1	6	2	3.9	1.3	5.7	9.4
		Total	6.1	14	6.1	7	5.7	10	6	8	5.5	10	5.6	12	5.9	10	5.5	10	5.7	11	7	12	5.9	1.1	4.6	10.8
	Total		5.9	35	6.2	28	5.7	30	5.7	22	5.6	23	5.5	23	6.1	26	5.7	27	5.7	34	6.7	32	5.9	1.3	4.6	12.7
89th Street at Hawthorne Avenue	NB	Left 3	0	0	0	0	0	0	0	0	0	0	5.1	2	5.1	1	0	0	0	0	0	0	1	0.1	5	5.2
		Through	6.2	1	5.2	2	0	0	5.4	2	0	0	0	0	0	0	5.1	1	4.6	1	5.2	3	3.2	0.5	4.6	6.2
		Right 2	0	0	0	0	0	0	5.1	1	5	1	0	0	5.4	1	5.6	1	0	0	0	0	2.1	0.2	5	5.6
		Total	6.2	1	5.2	2	0	0	5.3	3	5	1	5.1	2	5.2	2	5.4	2	4.6	1	5.2	3	4.7	0.3	4.6	6.2
	SEB	Left 3	5.2	1	0	0	5.3	1	0	0	5.4	2	5	2	5.2	1	0	0	5.4	1	5.1	1	3.7	0.3	4.9	5.8
		Left 1	5.1	2	4.9	1	5	1	0	0	0	0	0	0	5.5	1	5.4	2	6.3	2	5.2	1	3.7	0.6	4.9	6.8
		Right 2	0	0	0	0	0	0	5.3	1	0	0	0	0	5.2	1	0	0	5.1	1	0	0	1.6	0.1	5.1	5.3
		Total	5.1	3	4.9	1	5.2	2	5.3	1	5.4	2	5	2	5.3	3	5.4	2	5.8	4	5.2	2	5.3	0.5	4.9	6.8
	SB	Left 2	0	0	0	0	0	0	0	0	4.8	1	5.8	1	0	0	0	0	0	0	0	0	1.1	0.7	4.8	5.8
		Through	5.7	3	5.7	3	5.3	3	5.4	2	5.1	3	5	2	5.5	4	5.4	4	5.3	3	5.1	3	5.4	0.5	4.6	7.4
		Total	5.7	3	5.7	3	5.3	3	5.4	2	5	4	5.3	3	5.5	4	5.4	4	5.3	3	5.1	3	5.4	0.5	4.6	7.4
	WB	Left 2	5.5	1	5.1	1	4.9	1	5.1	1	5.1	1	5.4	2	0	0	5.3	2	0	0	5.6	1	4.2	0.2	4.9	5.6
		Right 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4.7	1	0.5	0	4.7	4.7
		Total	5.5	1	5.1	1	4.9	1	5.1	1	5.1	1	5.4	2	0	0	5.3	2	0	0	5.2	2	4.2	0.6	4.7	5.6
	Total		5.5	8	5.4	7	5.2	6	5.3	7	5.1	8	5.2	9	5.4	9	5.4	10	5.5	8	5.2	10	5.3	0.4	4.6	7.4
95th Street at Byron Avenue	NB	Left 2	9.5	3	7.3	1	11.2	5	15.6	6	12.2	7	18.2	5	9.6	4	9	1	15.1	2	14.6	6	12.2	10	4.8	39.7
		Through	10.4	49	9	57	13.2	56	20	57	10.4	55	16	66	10.1	44	10	41	15.9	53	12.7	52	12.8	9.4	4.3	52.1
		Right 2	12.8	12	9.1	10	14.3	11	24.6	11	8.3	8	10.9	8	10.4	17	10.7	18	21.8	15	9.9	10	13.3	10.4	4.7	57.6
		Total	10.8	64	9	68	13.2	72	20.3	74	10.3	70	15.6	79	10.1	65	10.2	60	17.1	70	12.5	68	12.9	7.5	4.3	57.6
	EB	Left 2	8.1	6	6.6	8	5.6	3	5.4	3	6.7	6	7.8	5	9.4	10	6.7	9	5.6	5	8.2	8	7	2.6	4.8	15.5
		Through	6.3	4	9	2	6.9	7	8.2	4	8.2	4	7.8	6	8.4	2	5.6	3	7.9	5	5.7	5	7.4	2.9	5.1	14.9
		Right 2	6.4	4	5.9	4	6.1	5	10.7	4	7.7	5	7.3	3	6.4	6	6.4	4	6.9	8	6.2	6	7	2.7	5	20.7
		Total	7.1	14	6.7	14	6.4	15	8.3	11	7.4	15	7.7	14	8.3	18	6.4	16	6.8	18	6.9	19	7.2	3	4.8	20.7
	WB	Left 2	24.9	12	14.3	10	51.9	9	38.5	10	24.9	12	48.5	10	41.2	13	25.9	2	49.7	8	12.8	10	33.3	23.3	5.1	100.5
		Through	19.6	47	17.5	45	47.8	40	37.1	40	21.5	39	54.1	40	46.1	42	17.7	42	40.3	45	29.1	40	33.1	24.9	5.1	126.7
		Right 2	22.7	18	14.3	10	37.3	17	34.4	14	24.1	14	53.1	20	55.7	16	17.8	23	55.8	20	27.7	13	34.3	28.2	5.3	129.6
		Total	21.2	77	16.5	65	45.7	66	36.7	64	22.7	65	53	70	47.4	71	18	67	45.6	73	26.2	63	33.3	20.1	5.1	129.6
	Total		15.6	155	12.1	147	26.6	153	26.5	149	15.4	150	31	163	27.1	154	13.4	143	28.9	161	17.5	150	21.4	21.2	4.3	129.6
88th Street at Byron Avenue	NB	Right 2	5.7	20	6.2	26	5.4	25	5.4	15	5.7	22	5.2	23	5.2	23	5.8	27	6.1	22	6.2	21	5.7	2.2	3.9	18.1
		Total	5.7	20	6.2	26	5.4	25	5.4	15	5.7	22	5.2	23	5.2	23	5.8	27	6.1	22	6.2	21	5.7	2.6	3.9	18.1
	EB	Through	1	3	0.8	8	0.7	3	1.3	7	1.2	6	0.4	4	0.8	6	0.8	8	0.6	4	0.5	8	0.8	0.8	0.2	3.2
		Right 2	0.3	10	0.5	10	0.2	6	0.5	11	0.6	14	0.3	14	0.3	10	0.2	14	0.5	9	0.3	9	0.4	0.4	0.1	2.1
		Total	0.5	13	0.6	18	0.4	9	0.8	18	0.8	20	0.3	18	0.5	16	0.4	22	0.5	13	0.4	17	0.5	0.6	0.1	3.2
	WB	Through	0.5	7	0.3	9	0.3	9	0.7	11	0.3	6	1.3	9	0.3	11	0.4	9	0.4	10	0.3	9	0.5	0.7	0.1	4
		Right 2	0	9	0	8	0	4	0	3	0	7	0	6	0	7	0	9	0	6	0	6	0	0.3	0	1
		Total	0.2	16	0.2	17	0.2	13	0.5	14	0.1	13	0.8	15	0.2	18	0.2	18	0.2	16	0.2	15	0.3	0.7	0	4
	Total		2.5	49	2.9	61	3	47	2.2	47	2.6	55	2.4	56	2.3	57	2.5	67	2.8	51	2.6	53	2.6	3	0	18.1

APPENDIX F
94TH AND 95TH STREET LEFT TURN ALTERNATIVE

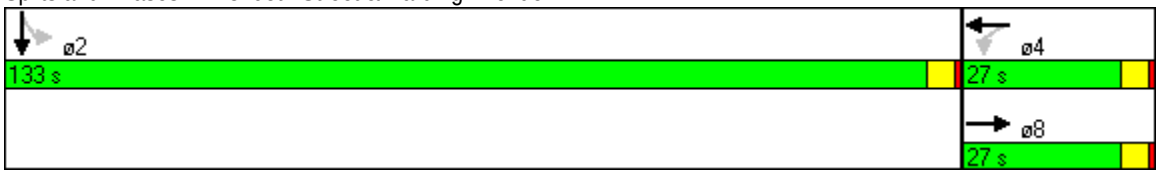
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	27	174	51	49	0	0	0	0	58	1696	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25		25	50		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.883									0.997	
Flt Protected				0.950							0.998	
Satd. Flow (prot)	0	1645	0	1770	1863	0	0	0	0	0	4723	0
Flt Permitted				0.262							0.998	
Satd. Flow (perm)	0	1645	*1	488	1863	0	0	0	0	0	4723	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)											6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		261			299			655			668	
Travel Time (s)		5.9			6.8			14.9			15.2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Parking (#/hr)											20	
Adj. Flow (vph)	0	28	178	52	50	0	0	0	0	59	1731	34
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	206	0	52	50	0	0	0	0	0	1824	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Detector Phase		8		4	4					2	2	
Switch Phase												
Minimum Initial (s)		7.0		7.0	7.0					7.0	7.0	
Minimum Split (s)		27.0		27.0	27.0					25.0	25.0	
Total Split (s)	0.0	27.0	0.0	27.0	27.0	0.0	0.0	0.0	0.0	133.0	133.0	0.0
Total Split (%)	0.0%	16.9%	0.0%	16.9%	16.9%	0.0%	0.0%	0.0%	0.0%	83.1%	83.1%	0.0%
Maximum Green (s)		22.0		22.0	22.0					128.0	128.0	
Yellow Time (s)		4.0		4.0	4.0					4.0	4.0	
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0		1.0	1.0					1.0	1.0	
Recall Mode		Max		Max	Max					C-Max	C-Max	
Walk Time (s)		7.0		7.0	7.0					7.0	7.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		15.0		15.0	15.0					13.0	13.0	
Pedestrian Calls (#/hr)		15		6	6					21	21	
Act Effct Green (s)		22.0		22.0	22.0						128.0	
Actuated g/C Ratio		0.14		0.14	0.14						0.80	
v/c Ratio		0.91		0.78	0.20						0.48	
Control Delay		107.7		124.2	64.1						13.9	
Queue Delay		0.0		0.0	0.0						0.5	
Total Delay		107.7		124.2	64.1						14.4	
LOS		F		F	E						B	
Approach Delay		107.7			94.8						14.4	
Approach LOS		F			F						B	
Queue Length 50th (ft)		216		54	48						376	
Queue Length 95th (ft)		#375		#135	90						419	
Internal Link Dist (ft)		181			219			575			588	
Turn Bay Length (ft)				150								
Base Capacity (vph)		226		67	256						3780	
Starvation Cap Reductn		0		0	0						1321	
Spillback Cap Reductn		0		0	0						0	
Storage Cap Reductn		0		0	0						0	
Reduced v/c Ratio		0.91		0.78	0.20						0.74	

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 98 (61%), Referenced to phase 2:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.91
Intersection Signal Delay: 27.2 Intersection LOS: C
Intersection Capacity Utilization 65.2% ICU Level of Service C
Analysis Period (min) 15
* User Entered Value
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: 95th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	27	174	51	49	0	0	0	0	58	1696	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0		5.0	5.0						5.0	
Lane Util. Factor		1.00		1.00	1.00						0.91	
Frt		0.88		1.00	1.00						1.00	
Flt Protected		1.00		0.95	1.00						1.00	
Satd. Flow (prot)		1645		1770	1863						4725	
Flt Permitted		1.00		0.26	1.00						1.00	
Satd. Flow (perm)		1645		488	1863						4725	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	28	178	52	50	0	0	0	0	59	1731	34
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	206	0	52	50	0	0	0	0	0	1823	0
Parking (#/hr)											20	
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		22.0		22.0	22.0						128.0	
Effective Green, g (s)		22.0		22.0	22.0						128.0	
Actuated g/C Ratio		0.14		0.14	0.14						0.80	
Clearance Time (s)		5.0		5.0	5.0						5.0	
Vehicle Extension (s)		1.0		1.0	1.0						1.0	
Lane Grp Cap (vph)		226		67	256						3780	
v/s Ratio Prot		c0.13			0.03							
v/s Ratio Perm				0.11							0.39	
v/c Ratio		0.91		0.78	0.20						0.48	
Uniform Delay, d1		68.0		66.6	61.2						5.2	
Progression Factor		1.00		1.02	1.01						2.59	
Incremental Delay, d2		40.6		56.8	1.6						0.3	
Delay (s)		108.7		124.5	63.5						13.8	
Level of Service		F		F	E						B	
Approach Delay (s)		108.7			94.6			0.0			13.8	
Approach LOS		F			F			A			B	

Intersection Summary			
HCM Average Control Delay	26.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	65.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

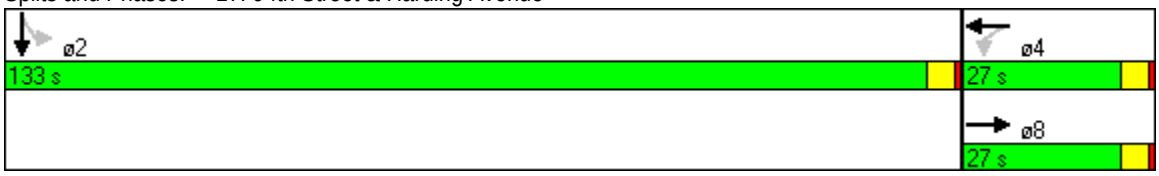
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	11	69	32	73	0	0	0	0	52	1833	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	100		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25		25	50		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.883									0.995	
Flt Protected				0.950							0.999	
Satd. Flow (prot)	0	1645	0	1770	1863	0	0	0	0	0	4718	0
Flt Permitted				0.656							0.999	
Satd. Flow (perm)	0	1645	0	1222	1863	0	0	0	0	0	4718	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)											11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			299			894			655	
Travel Time (s)		6.0			6.8			20.3			14.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Parking (#/hr)											20	
Adj. Flow (vph)	0	11	70	33	74	0	0	0	0	53	1870	67
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	81	0	33	74	0	0	0	0	0	1990	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Detector Phase		8		4	4					2	2	
Switch Phase												
Minimum Initial (s)		7.0		7.0	7.0					7.0	7.0	
Minimum Split (s)		27.0		27.0	27.0					25.0	25.0	
Total Split (s)	0.0	27.0	0.0	27.0	27.0	0.0	0.0	0.0	0.0	133.0	133.0	0.0
Total Split (%)	0.0%	16.9%	0.0%	16.9%	16.9%	0.0%	0.0%	0.0%	0.0%	83.1%	83.1%	0.0%
Maximum Green (s)		22.0		22.0	22.0					128.0	128.0	
Yellow Time (s)		4.0		4.0	4.0					4.0	4.0	
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0		1.0	1.0					1.0	1.0	
Recall Mode		Max		Max	Max					C-Max	C-Max	
Walk Time (s)		7.0		7.0	7.0					7.0	7.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		15.0		15.0	15.0					13.0	13.0	
Pedestrian Calls (#/hr)		6		52	52					10	10	
Act Effct Green (s)		22.0		22.0	22.0						128.0	
Actuated g/C Ratio		0.14		0.14	0.14						0.80	
v/c Ratio		0.36		0.20	0.29						0.53	
Control Delay		67.7		68.5	69.5						5.0	
Queue Delay		0.0		0.0	0.0						0.0	
Total Delay		67.7		68.5	69.5						5.1	
LOS		E		E	E						A	
Approach Delay		67.7			69.2						5.1	
Approach LOS		E			E						A	
Queue Length 50th (ft)		78		33	74						202	
Queue Length 95th (ft)		136		70	130						179	
Internal Link Dist (ft)		186			219			814			575	
Turn Bay Length (ft)				100								
Base Capacity (vph)		226		168	256						3777	
Starvation Cap Reductn		0		0	0						175	
Spillback Cap Reductn		0		0	0						0	
Storage Cap Reductn		0		0	0						0	
Reduced v/c Ratio		0.36		0.20	0.29						0.55	

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 91 (57%), Referenced to phase 2:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.53
Intersection Signal Delay: 10.5 Intersection LOS: B
Intersection Capacity Utilization 54.7% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 17: 94th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	11	69	32	73	0	0	0	0	52	1833	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0		5.0	5.0						5.0	
Lane Util. Factor		1.00		1.00	1.00						0.91	
Frt		0.88		1.00	1.00						0.99	
Flt Protected		1.00		0.95	1.00						1.00	
Satd. Flow (prot)		1645		1770	1863						4716	
Flt Permitted		1.00		0.66	1.00						1.00	
Satd. Flow (perm)		1645		1222	1863						4716	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	11	70	33	74	0	0	0	0	53	1870	67
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	81	0	33	74	0	0	0	0	0	1988	0
Parking (#/hr)											20	
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		22.0		22.0	22.0						128.0	
Effective Green, g (s)		22.0		22.0	22.0						128.0	
Actuated g/C Ratio		0.14		0.14	0.14						0.80	
Clearance Time (s)		5.0		5.0	5.0						5.0	
Vehicle Extension (s)		1.0		1.0	1.0						1.0	
Lane Grp Cap (vph)		226		168	256						3773	
v/s Ratio Prot		c0.05			0.04							
v/s Ratio Perm				0.03							0.42	
v/c Ratio		0.36		0.20	0.29						0.53	
Uniform Delay, d1		62.6		61.2	62.0						5.5	
Progression Factor		1.00		1.06	1.07						0.83	
Incremental Delay, d2		4.4		2.4	2.7						0.5	
Delay (s)		67.0		67.5	68.9						5.0	
Level of Service		E		E	E						A	
Approach Delay (s)		67.0			68.5			0.0			5.0	
Approach LOS		E			E			A			A	

Intersection Summary			
HCM Average Control Delay	10.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	54.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

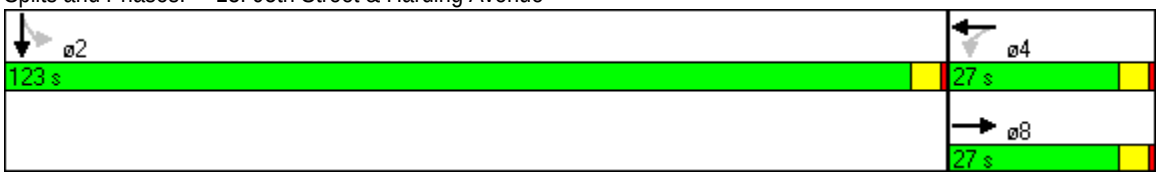
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	36	78	74	56	0	0	0	0	77	1739	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25		25	50		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.908									0.995	
Flt Protected				0.950							0.998	
Satd. Flow (prot)	0	1691	0	1770	1863	0	0	0	0	0	4713	0
Flt Permitted				0.561							0.998	
Satd. Flow (perm)	0	1691	*1	1045	1863	0	0	0	0	0	4713	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)											11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		261			299			655			668	
Travel Time (s)		5.9			6.8			14.9			15.2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Parking (#/hr)											20	
Adj. Flow (vph)	0	37	80	76	57	0	0	0	0	79	1774	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	117	0	76	57	0	0	0	0	0	1917	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Detector Phase		8		4	4					2	2	
Switch Phase												
Minimum Initial (s)		7.0		7.0	7.0					7.0	7.0	
Minimum Split (s)		27.0		27.0	27.0					25.0	25.0	
Total Split (s)	0.0	27.0	0.0	27.0	27.0	0.0	0.0	0.0	0.0	123.0	123.0	0.0
Total Split (%)	0.0%	18.0%	0.0%	18.0%	18.0%	0.0%	0.0%	0.0%	0.0%	82.0%	82.0%	0.0%
Maximum Green (s)		22.0		22.0	22.0					118.0	118.0	
Yellow Time (s)		4.0		4.0	4.0					4.0	4.0	
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0		1.0	1.0					1.0	1.0	
Recall Mode		Max		Max	Max					C-Max	C-Max	
Walk Time (s)		7.0		7.0	7.0					7.0	7.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		15.0		15.0	15.0					13.0	13.0	
Pedestrian Calls (#/hr)		31		27	27					54	54	
Act Effct Green (s)		22.0		22.0	22.0						118.0	
Actuated g/C Ratio		0.15		0.15	0.15						0.79	
v/c Ratio		0.47		0.50	0.21						0.52	
Control Delay		65.7		73.0	61.1						9.8	
Queue Delay		0.0		0.0	0.0						0.3	
Total Delay		65.7		73.0	61.1						10.1	
LOS		E		E	E						B	
Approach Delay		65.7			67.9						10.1	
Approach LOS		E			E						B	
Queue Length 50th (ft)		107		76	55						253	
Queue Length 95th (ft)		175		m111	m83						300	
Internal Link Dist (ft)		181			219			575			588	
Turn Bay Length (ft)				150								
Base Capacity (vph)		248		153	273						3710	
Starvation Cap Reductn		0		0	0						927	
Spillback Cap Reductn		0		0	0						0	
Storage Cap Reductn		0		0	0						0	
Reduced v/c Ratio		0.47		0.50	0.21						0.69	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 124 (83%), Referenced to phase 2:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.52
Intersection Signal Delay: 16.6 Intersection LOS: B
Intersection Capacity Utilization 55.7% ICU Level of Service B
Analysis Period (min) 15
* User Entered Value
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: 95th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	36	78	74	56	0	0	0	0	77	1739	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0		5.0	5.0						5.0	
Lane Util. Factor		1.00		1.00	1.00						0.91	
Frt		0.91		1.00	1.00						0.99	
Flt Protected		1.00		0.95	1.00						1.00	
Satd. Flow (prot)		1691		1770	1863						4713	
Flt Permitted		1.00		0.56	1.00						1.00	
Satd. Flow (perm)		1691		1045	1863						4713	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	37	80	76	57	0	0	0	0	79	1774	64
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	117	0	76	57	0	0	0	0	0	1915	0
Parking (#/hr)											20	
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		22.0		22.0	22.0						118.0	
Effective Green, g (s)		22.0		22.0	22.0						118.0	
Actuated g/C Ratio		0.15		0.15	0.15						0.79	
Clearance Time (s)		5.0		5.0	5.0						5.0	
Vehicle Extension (s)		1.0		1.0	1.0						1.0	
Lane Grp Cap (vph)		248		153	273						3708	
v/s Ratio Prot		0.07			0.03							
v/s Ratio Perm				c0.07							0.41	
v/c Ratio		0.47		0.50	0.21						0.52	
Uniform Delay, d1		58.7		58.9	56.3						5.7	
Progression Factor		1.00		1.06	1.05						1.63	
Incremental Delay, d2		6.3		9.5	1.5						0.4	
Delay (s)		65.0		71.7	60.5						9.8	
Level of Service		E		E	E						A	
Approach Delay (s)		65.0			66.9			0.0			9.8	
Approach LOS		E			E			A			A	

Intersection Summary			
HCM Average Control Delay	16.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	19	131	55	130	0	0	0	0	57	1718	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	150		0	0		0	0		0
Storage Lanes	0		0	1		0	0		0	0		0
Taper Length (ft)	25		25	50		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.882									0.989	
Flt Protected				0.950							0.999	
Satd. Flow (prot)	0	1643	0	1770	1863	0	0	0	0	0	4689	0
Flt Permitted				0.447							0.999	
Satd. Flow (perm)	0	1643	0	833	1863	0	0	0	0	0	4689	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)											30	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			299			681			655	
Travel Time (s)		6.0			6.8			15.5			14.9	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Parking (#/hr)											20	
Adj. Flow (vph)	0	20	135	57	134	0	0	0	0	59	1771	151
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	155	0	57	134	0	0	0	0	0	1981	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Detector Phase		8		4	4					2	2	
Switch Phase												
Minimum Initial (s)		7.0		7.0	7.0					7.0	7.0	
Minimum Split (s)		21.0		21.0	21.0					21.0	21.0	
Total Split (s)	0.0	27.0	0.0	27.0	27.0	0.0	0.0	0.0	0.0	123.0	123.0	0.0
Total Split (%)	0.0%	18.0%	0.0%	18.0%	18.0%	0.0%	0.0%	0.0%	0.0%	82.0%	82.0%	0.0%
Maximum Green (s)		22.0		22.0	22.0					118.0	118.0	
Yellow Time (s)		4.0		4.0	4.0					4.0	4.0	
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0		1.0	1.0					1.0	1.0	
Recall Mode		Max		Max	Max					C-Max	C-Max	
Walk Time (s)		5.0		5.0	5.0					5.0	5.0	

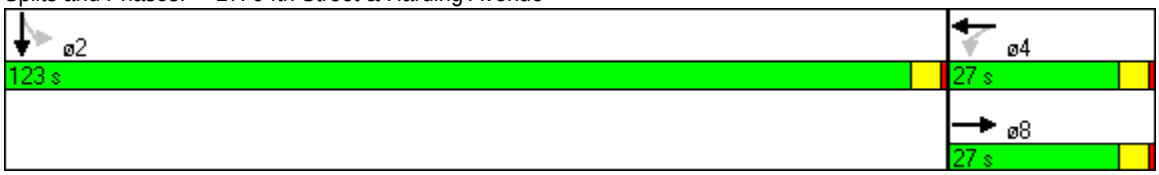
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)		11.0		11.0	11.0					11.0	11.0	
Pedestrian Calls (#/hr)		3		39	39					28	28	
Act Effct Green (s)		22.0		22.0	22.0						118.0	
Actuated g/C Ratio		0.15		0.15	0.15						0.79	
v/c Ratio		0.64		0.47	0.49						0.54	
Control Delay		73.6		70.1	64.4						4.1	
Queue Delay		0.0		0.0	2.9						0.0	
Total Delay		73.6		70.1	67.3						4.1	
LOS		E		E	E						A	
Approach Delay		73.6			68.2						4.1	
Approach LOS		E			E						A	
Queue Length 50th (ft)		145		46	109						62	
Queue Length 95th (ft)		227		m69	m154						65	
Internal Link Dist (ft)		186			219			601			575	
Turn Bay Length (ft)				150								
Base Capacity (vph)		241		122	273						3695	
Starvation Cap Reductn		0		0	68						123	
Spillback Cap Reductn		0		0	0						0	
Storage Cap Reductn		0		0	0						0	
Reduced v/c Ratio		0.64		0.47	0.65						0.55	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 139 (93%), Referenced to phase 2:SBTL, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.64
Intersection Signal Delay: 14.0 Intersection LOS: B
Intersection Capacity Utilization 65.0% ICU Level of Service C
Analysis Period (min) 15

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

Splits and Phases: 17: 94th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	19	131	55	130	0	0	0	0	57	1718	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0		5.0	5.0						5.0	
Lane Util. Factor		1.00		1.00	1.00						0.91	
Frt		0.88		1.00	1.00						0.99	
Flt Protected		1.00		0.95	1.00						1.00	
Satd. Flow (prot)		1644		1770	1863						4685	
Flt Permitted		1.00		0.45	1.00						1.00	
Satd. Flow (perm)		1644		833	1863						4685	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	20	135	57	134	0	0	0	0	59	1771	151
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	6	0
Lane Group Flow (vph)	0	155	0	57	134	0	0	0	0	0	1975	0
Parking (#/hr)											20	
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		22.0		22.0	22.0						118.0	
Effective Green, g (s)		22.0		22.0	22.0						118.0	
Actuated g/C Ratio		0.15		0.15	0.15						0.79	
Clearance Time (s)		5.0		5.0	5.0						5.0	
Vehicle Extension (s)		1.0		1.0	1.0						1.0	
Lane Grp Cap (vph)		241		122	273						3686	
v/s Ratio Prot		c0.09			0.07							
v/s Ratio Perm				0.07							0.42	
v/c Ratio		0.64		0.47	0.49						0.54	
Uniform Delay, d1		60.3		58.6	58.8						5.9	
Progression Factor		1.00		1.00	1.00						0.61	
Incremental Delay, d2		12.5		9.9	4.9						0.5	
Delay (s)		72.8		68.6	63.7						4.1	
Level of Service		E		E	E						A	
Approach Delay (s)		72.8			65.2			0.0			4.1	
Approach LOS		E			E			A			A	

Intersection Summary			
HCM Average Control Delay	13.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	65.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

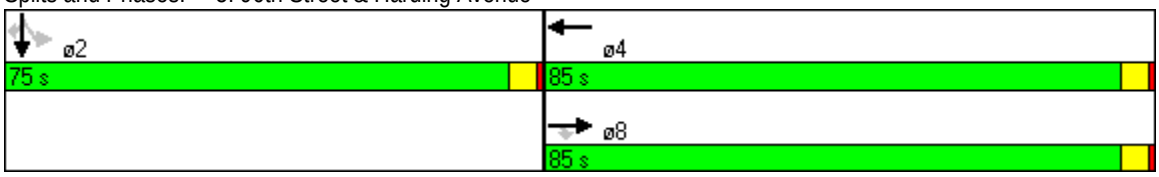
APPENDIX G
OPTIMIZED SIGNAL TIMING – SYNCHRO PRINTOUTS

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	356	688	0	461	0	0	0	0	98	1400	354
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	10	10	12	12	12	12	12	12
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt		0.947	0.850									0.850
Flt Protected											0.997	
Satd. Flow (prot)	0	1620	1454	0	3303	0	0	0	0	0	5070	1583
Flt Permitted											0.997	
Satd. Flow (perm)	0	1620	1454	0	3303	0	0	0	0	0	5070	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12	12									284
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		556			324			668			466	
Travel Time (s)		12.6			7.4			15.2			10.6	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	367	709	0	475	0	0	0	0	101	1443	365
Shared Lane Traffic (%)			28%									
Lane Group Flow (vph)	0	566	510	0	475	0	0	0	0	0	1544	365
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.09	1.09	1.09	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type			Perm							Perm		Perm
Protected Phases		8			4						2	
Permitted Phases			8							2		2
Detector Phase		8	8		4					2	2	2
Switch Phase												
Minimum Initial (s)		7.0	7.0		7.0					7.0	7.0	7.0
Minimum Split (s)		21.0	21.0		24.0					29.0	29.0	29.0
Total Split (s)	0.0	85.0	85.0	0.0	85.0	0.0	0.0	0.0	0.0	75.0	75.0	75.0
Total Split (%)	0.0%	53.1%	53.1%	0.0%	53.1%	0.0%	0.0%	0.0%	0.0%	46.9%	46.9%	46.9%
Maximum Green (s)		80.0	80.0		80.0					70.0	70.0	70.0
Yellow Time (s)		4.0	4.0		4.0					4.0	4.0	4.0
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	5.0	4.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0	1.0		1.0					1.0	1.0	1.0
Recall Mode		Max	Max		Max					C-Max	C-Max	C-Max
Walk Time (s)					7.0					7.0	7.0	7.0
Flash Dont Walk (s)					12.0					17.0	17.0	17.0
Pedestrian Calls (#/hr)					47					30	30	30
Act Effct Green (s)		80.0	80.0		80.0						70.0	70.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.50	0.50		0.50						0.44	0.44
v/c Ratio		0.69	0.70		0.29						0.70	0.43
Control Delay		30.0	30.6		51.0						38.5	8.4
Queue Delay		0.2	0.2		64.0						0.0	0.0
Total Delay		30.2	30.8		115.0						38.5	8.4
LOS		C	C		F						D	A
Approach Delay		30.5			115.0						32.7	
Approach LOS		C			F						C	
Queue Length 50th (ft)		341	306		247						474	50
Queue Length 95th (ft)		412	374		338						530	131
Internal Link Dist (ft)		476			244			588			386	
Turn Bay Length (ft)												
Base Capacity (vph)		816	733		1652						2218	852
Starvation Cap Reductn		23	17		1228						0	0
Spillback Cap Reductn		1	0		0						0	0
Storage Cap Reductn		0	0		0						0	0
Reduced v/c Ratio		0.71	0.71		1.12						0.70	0.43

Intersection Summary	
Area Type: Other	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 39 (24%), Referenced to phase 2:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 43.3	Intersection LOS: D
Intersection Capacity Utilization 97.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 5: 96th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	356	688	0	461	0	0	0	0	98	1400	354
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	10	10	12	12	12	12	12	12
Total Lost time (s)		5.0	5.0		5.0						5.0	5.0
Lane Util. Factor		0.95	0.95		0.95						0.91	1.00
Frt		0.95	0.85		1.00						1.00	0.85
Flt Protected		1.00	1.00		1.00						1.00	1.00
Satd. Flow (prot)		1620	1454		3303						5069	1583
Flt Permitted		1.00	1.00		1.00						1.00	1.00
Satd. Flow (perm)		1620	1454		3303						5069	1583
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	367	709	0	475	0	0	0	0	101	1443	365
RTOR Reduction (vph)	0	6	6	0	0	0	0	0	0	0	0	160
Lane Group Flow (vph)	0	560	504	0	475	0	0	0	0	0	1544	205
Turn Type			Perm							Perm		Perm
Protected Phases		8			4						2	
Permitted Phases			8							2		2
Actuated Green, G (s)		80.0	80.0		80.0						70.0	70.0
Effective Green, g (s)		80.0	80.0		80.0						70.0	70.0
Actuated g/C Ratio		0.50	0.50		0.50						0.44	0.44
Clearance Time (s)		5.0	5.0		5.0						5.0	5.0
Vehicle Extension (s)		1.0	1.0		1.0						1.0	1.0
Lane Grp Cap (vph)		810	727		1652						2218	693
v/s Ratio Prot		0.35			0.14							
v/s Ratio Perm			c0.35								0.30	0.13
v/c Ratio		0.69	0.69		0.29						0.70	0.30
Uniform Delay, d1		30.6	30.6		23.4						36.4	29.1
Progression Factor		0.84	0.84		2.15						1.00	1.00
Incremental Delay, d2		4.4	4.9		0.4						1.8	1.1
Delay (s)		30.0	30.5		50.7						38.2	30.2
Level of Service		C	C		D						D	C
Approach Delay (s)		30.2			50.7			0.0			36.7	
Approach LOS		C			D			A			D	

Intersection Summary			
HCM Average Control Delay	36.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	97.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	366	9	0	0	3	3	458	1058	8	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	12	12	12	12	12	12
Storage Length (ft)	0		0	0		0	250		0	0		0
Storage Lanes	1		0	0		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Frt					0.932			0.999				
Flt Protected	0.950	0.954					0.950					
Satd. Flow (prot)	1569	1576	0	0	1736	0	1770	5080	0	0	0	0
Flt Permitted	0.950	0.954					0.950					
Satd. Flow (perm)	1569	1576	0	0	1736	0	1770	5080	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3			1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		324			224			667			480	
Travel Time (s)		7.4			5.1			15.2			10.9	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	426	10	0	0	3	3	533	1230	9	0	0	0
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	217	219	0	0	6	0	533	1239	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split						pm+pt					
Protected Phases	3	3			4		5	2				
Permitted Phases							2					
Detector Phase	3	3			4		5	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			7.0		4.0	4.0				
Minimum Split (s)	22.0	22.0			21.0		11.0	23.0				
Total Split (s)	57.0	57.0	0.0	0.0	12.0	0.0	75.0	91.0	0.0	0.0	0.0	0.0
Total Split (%)	35.6%	35.6%	0.0%	0.0%	7.5%	0.0%	46.9%	56.9%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	52.0	52.0			7.0		70.0	86.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead			Lag		Lag					
Lead-Lag Optimize?	Yes	Yes			Yes		Yes					
Vehicle Extension (s)	2.5	2.5			2.5		2.0	1.0				
Recall Mode	Max	Max			None		C-Max	C-Max				
Walk Time (s)	4.0	4.0						4.0				

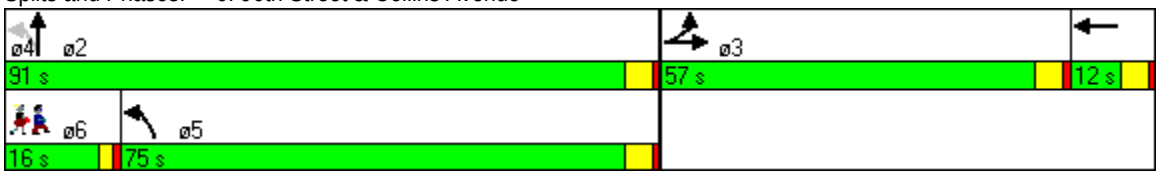
Lane Group	ø6
Lane Configurations	
Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	20.0
Total Split (s)	16.0
Total Split (%)	10%
Maximum Green (s)	13.0
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	4.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	13.0	13.0						7.0				
Pedestrian Calls (#/hr)	28	28						7				
Act Effct Green (s)	52.0	52.0			7.0		95.6	95.6				
Actuated g/C Ratio	0.32	0.32			0.04		0.60	0.60				
v/c Ratio	0.43	0.43			0.08		0.50	0.41				
Control Delay	27.7	27.8			58.6		24.6	20.3				
Queue Delay	3.6	3.6			0.0		1.1	0.0				
Total Delay	31.3	31.4			58.6		25.7	20.3				
LOS	C	C			E		C	C				
Approach Delay		31.4			58.6			21.9				
Approach LOS		C			E			C				
Queue Length 50th (ft)	141	143			3		293	151				
Queue Length 95th (ft)	181	182			20		600	416				
Internal Link Dist (ft)		244			144			587			400	
Turn Bay Length (ft)							250					
Base Capacity (vph)	510	512			79		1057	3036				
Starvation Cap Reductn	208	208			0		292	0				
Spillback Cap Reductn	0	0			0		216	0				
Storage Cap Reductn	0	0			0		0	0				
Reduced v/c Ratio	0.72	0.72			0.08		0.70	0.41				

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 58 (36%), Referenced to phase 2:NBTL and 5:NBL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.50
Intersection Signal Delay: 23.9 — Intersection LOS: C
Intersection Capacity Utilization 97.3% — ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 6: 96th Street & Collins Avenue



Lane Group	ø6
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	3
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	366	9	0	0	3	3	458	1058	8	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	12	12	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			5.0		5.0	5.0				
Lane Util. Factor	0.95	0.95			1.00		1.00	0.91				
Frt	1.00	1.00			0.93		1.00	1.00				
Flt Protected	0.95	0.95			1.00		0.95	1.00				
Satd. Flow (prot)	1569	1576			1737		1770	5080				
Flt Permitted	0.95	0.95			1.00		0.95	1.00				
Satd. Flow (perm)	1569	1576			1737		1770	5080				
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	426	10	0	0	3	3	533	1230	9	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	0	0	0	0
Lane Group Flow (vph)	217	219	0	0	3	0	533	1239	0	0	0	0
Turn Type	Split						pm+pt					
Protected Phases	3	3			4		5	2				
Permitted Phases							2					
Actuated Green, G (s)	52.0	52.0			1.4		91.6	91.6				
Effective Green, g (s)	52.0	52.0			1.4		91.6	91.6				
Actuated g/C Ratio	0.32	0.32			0.01		0.57	0.57				
Clearance Time (s)	5.0	5.0			5.0		5.0	5.0				
Vehicle Extension (s)	2.5	2.5			2.5		2.0	1.0				
Lane Grp Cap (vph)	510	512			15		1013	2908				
v/s Ratio Prot	0.14	c0.14			c0.00		c0.28	0.24				
v/s Ratio Perm							0.02					
v/c Ratio	0.43	0.43			0.20		0.53	0.43				
Uniform Delay, d1	42.3	42.3			78.7		20.0	19.3				
Progression Factor	0.60	0.60			1.00		1.17	1.13				
Incremental Delay, d2	1.8	1.8			4.8		1.8	0.4				
Delay (s)	27.3	27.4			83.5		25.3	22.2				
Level of Service	C	C			F		C	C				
Approach Delay (s)		27.4			83.5			23.1			0.0	
Approach LOS		C			F			C			A	

Intersection Summary			
HCM Average Control Delay	24.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	97.3%	ICU Level of Service	F
Analysis Period (min)	15		

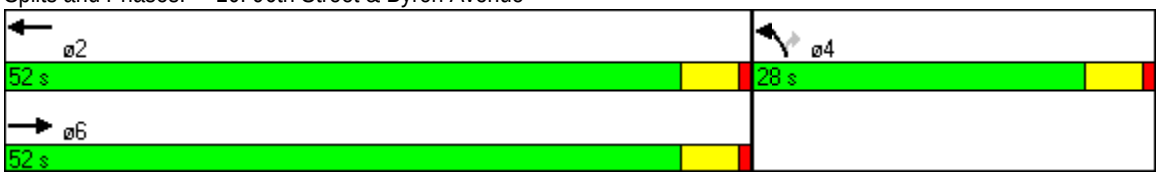
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1134	0	0	783	202	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	1.00
Frt						0.850
Flt Protected					0.950	
Satd. Flow (prot)	3421	0	0	3421	3319	1531
Flt Permitted					0.950	
Satd. Flow (perm)	3421	0	0	3421	3319	1531
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						22
Link Speed (mph)	30			30	30	
Link Distance (ft)	250			556	390	
Travel Time (s)	5.7			12.6	8.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1157	0	0	799	206	22
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1157	0	0	799	206	22
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	22	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Turn Type						Perm
Protected Phases	6			2	4	
Permitted Phases						4
Detector Phase	6			2	4	4
Switch Phase						
Minimum Initial (s)	15.0			15.0	7.0	7.0
Minimum Split (s)	21.0			21.0	26.0	26.0
Total Split (s)	52.0	0.0	0.0	52.0	28.0	28.0
Total Split (%)	65.0%	0.0%	0.0%	65.0%	35.0%	35.0%
Maximum Green (s)	47.0			47.0	23.0	23.0
Yellow Time (s)	4.0			4.0	4.0	4.0
All-Red Time (s)	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)	5.0	4.0	4.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	1.0			1.0	2.5	2.5
Recall Mode	C-Max			C-Max	None	None
Walk Time (s)					4.0	4.0
Flash Dont Walk (s)					17.0	17.0
Pedestrian Calls (#/hr)					10	10
Act Effct Green (s)	58.5			58.5	11.5	11.5

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Actuated g/C Ratio	0.73			0.73	0.14	0.14
v/c Ratio	0.46			0.32	0.43	0.09
Control Delay	4.0			3.6	32.9	11.7
Queue Delay	0.1			0.0	0.0	0.0
Total Delay	4.2			3.6	32.9	11.7
LOS	A			A	C	B
Approach Delay	4.2			3.6	30.9	
Approach LOS	A			A	C	
Queue Length 50th (ft)	88			19	50	0
Queue Length 95th (ft)	186			359	69	17
Internal Link Dist (ft)	170			476	310	
Turn Bay Length (ft)						
Base Capacity (vph)	2502			2502	954	456
Starvation Cap Reductn	427			0	0	0
Spillback Cap Reductn	9			30	11	0
Storage Cap Reductn	0			0	0	0
Reduced v/c Ratio	0.56			0.32	0.22	0.05

Intersection Summary	
Area Type: Other	
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 58 (73%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.46	
Intersection Signal Delay: 6.8	Intersection LOS: A
Intersection Capacity Utilization 45.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 10: 96th Street & Byron Avenue



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1134	0	0	783	202	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	5.0			5.0	5.0	5.0
Lane Util. Factor	0.95			0.95	0.97	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	3421			3421	3319	1531
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	3421			3421	3319	1531
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1157	0	0	799	206	22
RTOR Reduction (vph)	0	0	0	0	0	19
Lane Group Flow (vph)	1157	0	0	799	206	3
Turn Type						Perm
Protected Phases	6			2	4	
Permitted Phases						4
Actuated Green, G (s)	58.5			58.5	11.5	11.5
Effective Green, g (s)	58.5			58.5	11.5	11.5
Actuated g/C Ratio	0.73			0.73	0.14	0.14
Clearance Time (s)	5.0			5.0	5.0	5.0
Vehicle Extension (s)	1.0			1.0	2.5	2.5
Lane Grp Cap (vph)	2502			2502	477	220
v/s Ratio Prot	c0.34			0.23	c0.06	
v/s Ratio Perm						0.00
v/c Ratio	0.46			0.32	0.43	0.01
Uniform Delay, d1	4.4			3.8	31.3	29.4
Progression Factor	0.69			0.76	1.00	1.00
Incremental Delay, d2	0.6			0.3	0.5	0.0
Delay (s)	3.6			3.2	31.7	29.4
Level of Service	A			A	C	C
Approach Delay (s)	3.6			3.2	31.5	
Approach LOS	A			A	C	

Intersection Summary			
HCM Average Control Delay	6.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

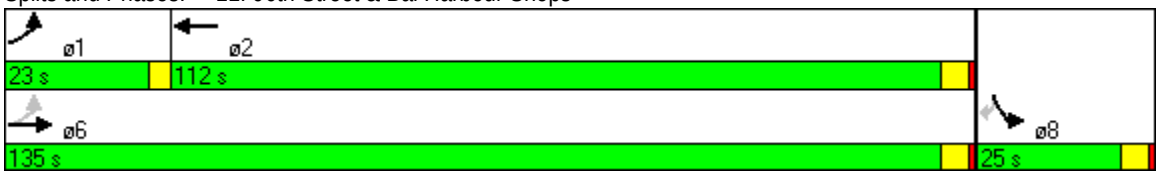
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	57	1151	968	44	7	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	2	1
Taper Length (ft)	25			25	25	25
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	0.91
Frt			0.994		0.945	0.850
Flt Protected	0.950				0.969	
Satd. Flow (prot)	1711	3421	3401	0	3199	1393
Flt Permitted	0.258				0.969	
Satd. Flow (perm)	465	3421	3401	0	3199	1393
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			6		4	5
Link Speed (mph)		30	30		30	
Link Distance (ft)		494	250		351	
Travel Time (s)		11.2	5.7		8.0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	59	1187	998	45	7	9
Shared Lane Traffic (%)						44%
Lane Group Flow (vph)	59	1187	1043	0	11	5
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		22	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt					Perm
Protected Phases	1	6	2		8	
Permitted Phases	6					8
Detector Phase	1	6	2		8	8
Switch Phase						
Minimum Initial (s)	5.0	15.0	15.0		7.0	7.0
Minimum Split (s)	19.0	21.0	21.0		23.0	23.0
Total Split (s)	23.0	135.0	112.0	0.0	25.0	25.0
Total Split (%)	14.4%	84.4%	70.0%	0.0%	15.6%	15.6%
Maximum Green (s)	20.0	130.0	107.0		20.0	20.0
Yellow Time (s)	3.0	4.0	4.0		4.0	4.0
All-Red Time (s)	0.0	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)	3.0	5.0	5.0	4.0	5.0	5.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	2.0	1.0	1.0		2.5	2.5
Recall Mode	None	C-Max	C-Max		None	None
Walk Time (s)					4.0	4.0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Flash Dont Walk (s)					14.0	14.0
Pedestrian Calls (#/hr)					5	5
Act Effct Green (s)	147.6	147.6	139.9		9.2	9.2
Actuated g/C Ratio	0.92	0.92	0.87		0.06	0.06
v/c Ratio	0.13	0.38	0.35		0.06	0.06
Control Delay	1.7	1.9	2.2		52.6	39.4
Queue Delay	0.0	0.0	0.2		0.0	0.0
Total Delay	1.7	1.9	2.4		52.6	39.4
LOS	A	A	A		D	D
Approach Delay		1.9	2.4		48.5	
Approach LOS		A	A		D	
Queue Length 50th (ft)	4	73	76		3	0
Queue Length 95th (ft)	16	170	87		14	15
Internal Link Dist (ft)		414	170		271	
Turn Bay Length (ft)	100					
Base Capacity (vph)	585	3156	2975		403	179
Starvation Cap Reductn	0	0	963		0	0
Spillback Cap Reductn	0	101	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.10	0.39	0.52		0.03	0.03

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 153 (96%), Referenced to phase 2:WBT and 6:EBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.38
Intersection Signal Delay: 2.5 — Intersection LOS: A
Intersection Capacity Utilization 49.8% — ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 11: 96th Street & Bal Harbour Shops



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	57	1151	968	44	7	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	3.0	5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	0.95	0.95		0.97	0.91
Frt	1.00	1.00	0.99		0.95	0.85
Flt Protected	0.95	1.00	1.00		0.97	1.00
Satd. Flow (prot)	1711	3421	3399		3201	1393
Flt Permitted	0.26	1.00	1.00		0.97	1.00
Satd. Flow (perm)	465	3421	3399		3201	1393
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	59	1187	998	45	7	9
RTOR Reduction (vph)	0	0	1	0	4	5
Lane Group Flow (vph)	59	1187	1042	0	7	0
Turn Type	pm+pt					Perm
Protected Phases	1	6	2		8	
Permitted Phases	6					8
Actuated Green, G (s)	143.6	143.6	136.3		6.4	6.4
Effective Green, g (s)	143.6	143.6	136.3		6.4	6.4
Actuated g/C Ratio	0.90	0.90	0.85		0.04	0.04
Clearance Time (s)	3.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)	2.0	1.0	1.0		2.5	2.5
Lane Grp Cap (vph)	451	3070	2896		128	56
v/s Ratio Prot	0.00	c0.35	0.31		c0.00	
v/s Ratio Perm	0.11					0.00
v/c Ratio	0.13	0.39	0.36		0.06	0.00
Uniform Delay, d1	1.1	1.3	2.5		73.9	73.7
Progression Factor	1.00	1.00	0.65		1.00	1.00
Incremental Delay, d2	0.0	0.4	0.3		0.1	0.0
Delay (s)	1.2	1.7	2.0		74.0	73.8
Level of Service	A	A	A		E	E
Approach Delay (s)		1.6	2.0		73.9	
Approach LOS		A	A		E	

Intersection Summary			
HCM Average Control Delay	2.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	49.8%	ICU Level of Service	A
Analysis Period (min)	15		

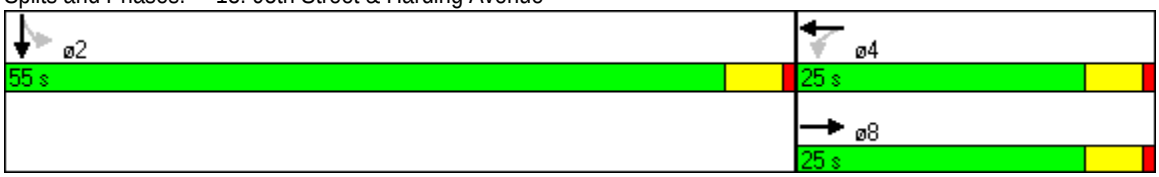
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	27	174	51	49	0	0	0	0	58	1696	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.883									0.997	
Flt Protected					0.975						0.998	
Satd. Flow (prot)	0	1645	0	0	1816	0	0	0	0	0	4723	0
Flt Permitted					0.772						0.998	
Satd. Flow (perm)	0	1645	*1	0	1438	0	0	0	0	0	4723	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)											6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		261			299			655			668	
Travel Time (s)		5.9			6.8			14.9			15.2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Parking (#/hr)											20	
Adj. Flow (vph)	0	28	178	52	50	0	0	0	0	59	1731	34
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	206	0	0	102	0	0	0	0	0	1824	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Detector Phase		8		4	4					2	2	
Switch Phase												
Minimum Initial (s)		7.0		7.0	7.0					7.0	7.0	
Minimum Split (s)		27.0		27.0	27.0					25.0	25.0	
Total Split (s)	0.0	25.0	0.0	25.0	25.0	0.0	0.0	0.0	0.0	55.0	55.0	0.0
Total Split (%)	0.0%	31.3%	0.0%	31.3%	31.3%	0.0%	0.0%	0.0%	0.0%	68.8%	68.8%	0.0%
Maximum Green (s)		20.0		20.0	20.0					50.0	50.0	
Yellow Time (s)		4.0		4.0	4.0					4.0	4.0	
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0		1.0	1.0					1.0	1.0	
Recall Mode		Max		None	None					C-Max	C-Max	
Walk Time (s)		7.0		7.0	7.0					7.0	7.0	
Flash Dont Walk (s)		15.0		15.0	15.0					13.0	13.0	
Pedestrian Calls (#/hr)		15		6	6					21	21	
Act Effct Green (s)		20.0			20.0						50.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.25			0.25						0.62	
v/c Ratio		0.50			0.28						0.62	
Control Delay		30.7			20.8						7.0	
Queue Delay		0.0			0.0						0.0	
Total Delay		30.7			20.8						7.0	
LOS		C			C						A	
Approach Delay		30.7			20.8						7.0	
Approach LOS		C			C						A	
Queue Length 50th (ft)		88			33						190	
Queue Length 95th (ft)		154			48						153	
Internal Link Dist (ft)		181			219			575			588	
Turn Bay Length (ft)												
Base Capacity (vph)		411			360						2954	
Starvation Cap Reductn		0			0						0	
Spillback Cap Reductn		0			0						0	
Storage Cap Reductn		0			0						0	
Reduced v/c Ratio		0.50			0.28						0.62	

Intersection Summary	
Area Type:	Other
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 60 (75%), Referenced to phase 2:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 9.9	Intersection LOS: A
Intersection Capacity Utilization 65.2%	ICU Level of Service C
Analysis Period (min) 15	
* User Entered Value	

Splits and Phases: 13: 95th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	27	174	51	49	0	0	0	0	58	1696	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.88			1.00						1.00	
Flt Protected		1.00			0.98						1.00	
Satd. Flow (prot)		1645			1816						4725	
Flt Permitted		1.00			0.77						1.00	
Satd. Flow (perm)		1645			1437						4725	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	28	178	52	50	0	0	0	0	59	1731	34
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	206	0	0	102	0	0	0	0	0	1822	0
Parking (#/hr)											20	
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		20.0			20.0						50.0	
Effective Green, g (s)		20.0			20.0						50.0	
Actuated g/C Ratio		0.25			0.25						0.62	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		1.0			1.0						1.0	
Lane Grp Cap (vph)		411			359						2953	
v/s Ratio Prot		c0.13										
v/s Ratio Perm					0.07						0.39	
v/c Ratio		0.50			0.28						0.62	
Uniform Delay, d1		25.7			24.2						9.2	
Progression Factor		1.00			0.76						0.68	
Incremental Delay, d2		4.3			0.2						0.7	
Delay (s)		30.0			18.5						7.0	
Level of Service		C			B						A	
Approach Delay (s)		30.0			18.5			0.0			7.0	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	65.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

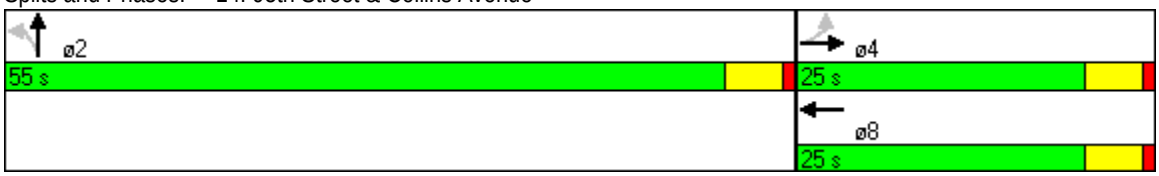
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	70	3	0	0	7	7	76	1519	7	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Frt					0.932			0.999				
Flt Protected		0.954						0.998				
Satd. Flow (prot)	0	1777	0	0	1736	0	0	5070	0	0	0	0
Flt Permitted		0.723						0.998				
Satd. Flow (perm)	0	1347	0	0	1736	0	0	5070	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					8			2				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		299			255			652			667	
Travel Time (s)		6.8			5.8			14.8			15.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	3	0	0	8	8	83	1651	8	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	79	0	0	16	0	0	1742	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Detector Phase	4	4			8		2	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		7.0	7.0				
Minimum Split (s)	25.0	25.0			25.0		26.0	26.0				
Total Split (s)	25.0	25.0	0.0	0.0	25.0	0.0	55.0	55.0	0.0	0.0	0.0	0.0
Total Split (%)	31.3%	31.3%	0.0%	0.0%	31.3%	0.0%	68.8%	68.8%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	20.0	20.0			20.0		50.0	50.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5			2.5		2.5	2.5				
Recall Mode	None	None			None		C-Max	C-Max				
Walk Time (s)	4.0	4.0			4.0		7.0	7.0				
Flash Dont Walk (s)	16.0	16.0			16.0		14.0	14.0				
Pedestrian Calls (#/hr)	19	19			7		18	18				
Act Effct Green (s)		12.4			12.4			60.6				
Actuated g/C Ratio		0.16			0.16			0.76				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.38			0.06			0.45				
Control Delay		29.5			17.9			3.8				
Queue Delay		0.0			0.0			0.0				
Total Delay		29.5			17.9			3.8				
LOS		C			B			A				
Approach Delay		29.5			17.9			3.8				
Approach LOS		C			B			A				
Queue Length 50th (ft)		41			4			2				
Queue Length 95th (ft)		m59			18			245				
Internal Link Dist (ft)		219			175			572			587	
Turn Bay Length (ft)												
Base Capacity (vph)		337			440			3840				
Starvation Cap Reductn		0			0			0				
Spillback Cap Reductn		0			0			76				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.23			0.04			0.46				

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 27 (34%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.45
Intersection Signal Delay: 5.0 Intersection LOS: A
Intersection Capacity Utilization 50.1% ICU Level of Service A
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 14: 95th Street & Collins Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	70	3	0	0	7	7	76	1519	7	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.93			1.00				
Flt Protected		0.95			1.00			1.00				
Satd. Flow (prot)		1777			1737			5070				
Flt Permitted		0.72			1.00			1.00				
Satd. Flow (perm)		1346			1737			5070				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	3	0	0	8	8	83	1651	8	0	0	0
RTOR Reduction (vph)	0	0	0	0	7	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	79	0	0	9	0	0	1741	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		11.4			11.4			58.6				
Effective Green, g (s)		11.4			11.4			58.6				
Actuated g/C Ratio		0.14			0.14			0.73				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		2.5			2.5			2.5				
Lane Grp Cap (vph)		192			248			3714				
v/s Ratio Prot					0.01							
v/s Ratio Perm		c0.06						0.34				
v/c Ratio		0.41			0.04			0.47				
Uniform Delay, d1		31.2			29.6			4.4				
Progression Factor		0.89			1.00			0.65				
Incremental Delay, d2		0.9			0.0			0.4				
Delay (s)		28.7			29.6			3.2				
Level of Service		C			C			A				
Approach Delay (s)		28.7			29.6			3.2			0.0	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	4.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	50.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

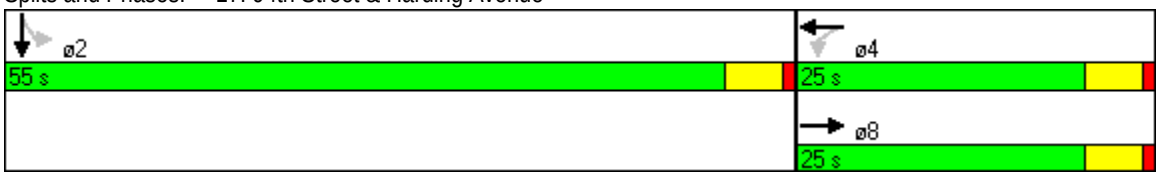
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	11	69	32	73	0	0	0	0	52	1833	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.883									0.995	
Flt Protected					0.985						0.999	
Satd. Flow (prot)	0	1645	0	0	1835	0	0	0	0	0	4718	0
Flt Permitted					0.883						0.999	
Satd. Flow (perm)	0	1645	0	0	1645	0	0	0	0	0	4718	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)											12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			299			683			655	
Travel Time (s)		6.0			6.8			15.5			14.9	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Parking (#/hr)											20	
Adj. Flow (vph)	0	11	70	33	74	0	0	0	0	53	1870	67
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	81	0	0	107	0	0	0	0	0	1990	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Detector Phase		8		4	4					2	2	
Switch Phase												
Minimum Initial (s)		7.0		7.0	7.0					7.0	7.0	
Minimum Split (s)		27.0		27.0	27.0					25.0	25.0	
Total Split (s)	0.0	25.0	0.0	25.0	25.0	0.0	0.0	0.0	0.0	55.0	55.0	0.0
Total Split (%)	0.0%	31.3%	0.0%	31.3%	31.3%	0.0%	0.0%	0.0%	0.0%	68.8%	68.8%	0.0%
Maximum Green (s)		20.0		20.0	20.0					50.0	50.0	
Yellow Time (s)		4.0		4.0	4.0					4.0	4.0	
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0		1.0	1.0					1.0	1.0	
Recall Mode		None		None	None					C-Max	C-Max	
Walk Time (s)		7.0		7.0	7.0					7.0	7.0	
Flash Dont Walk (s)		15.0		15.0	15.0					13.0	13.0	
Pedestrian Calls (#/hr)		6		52	52					10	10	
Act Effct Green (s)		14.8			14.8						58.6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.18			0.18						0.73	
v/c Ratio		0.27			0.35						0.58	
Control Delay		27.8			23.2						6.6	
Queue Delay		0.0			0.0						0.0	
Total Delay		27.8			23.2						6.6	
LOS		C			C						A	
Approach Delay		27.8			23.2						6.6	
Approach LOS		C			C						A	
Queue Length 50th (ft)		32			43						184	
Queue Length 95th (ft)		67			81						258	
Internal Link Dist (ft)		186			219			603			575	
Turn Bay Length (ft)												
Base Capacity (vph)		411			411						3459	
Starvation Cap Reductn		0			0						0	
Spillback Cap Reductn		0			0						0	
Storage Cap Reductn		0			0						0	
Reduced v/c Ratio		0.20			0.26						0.58	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 53 (66%), Referenced to phase 2:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.58
Intersection Signal Delay: 8.2 Intersection LOS: A
Intersection Capacity Utilization 58.6% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 17: 94th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	11	69	32	73	0	0	0	0	52	1833	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.88			1.00						0.99	
Flt Protected		1.00			0.98						1.00	
Satd. Flow (prot)		1645			1834						4716	
Flt Permitted		1.00			0.88						1.00	
Satd. Flow (perm)		1645			1644						4716	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	11	70	33	74	0	0	0	0	53	1870	67
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	81	0	0	107	0	0	0	0	0	1986	0
Parking (#/hr)											20	
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		13.4			13.4						56.6	
Effective Green, g (s)		13.4			13.4						56.6	
Actuated g/C Ratio		0.17			0.17						0.71	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		1.0			1.0						1.0	
Lane Grp Cap (vph)		276			275						3337	
v/s Ratio Prot		0.05										
v/s Ratio Perm					c0.07						0.42	
v/c Ratio		0.29			0.39						0.60	
Uniform Delay, d1		29.2			29.7						5.9	
Progression Factor		1.00			0.77						0.86	
Incremental Delay, d2		0.2			0.3						0.6	
Delay (s)		29.4			23.1						5.7	
Level of Service		C			C						A	
Approach Delay (s)		29.4			23.1			0.0			5.7	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	7.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

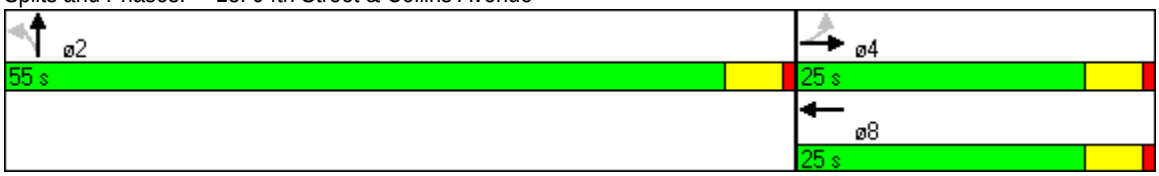
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	1	0	0	8	10	85	1527	3	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Frt					0.926							
Flt Protected		0.953						0.997				
Satd. Flow (prot)	0	1775	0	0	1725	0	0	5070	0	0	0	0
Flt Permitted		0.720						0.997				
Satd. Flow (perm)	0	1341	0	0	1725	0	0	5070	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					11			1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		299			236			680			652	
Travel Time (s)		6.8			5.4			15.5			14.8	
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
Adj. Flow (vph)	52	1	0	0	9	11	94	1697	3	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	53	0	0	20	0	0	1794	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Detector Phase	4	4			8		2	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		7.0	7.0				
Minimum Split (s)	26.0	26.0			26.0		26.0	26.0				
Total Split (s)	25.0	25.0	0.0	0.0	25.0	0.0	55.0	55.0	0.0	0.0	0.0	0.0
Total Split (%)	31.3%	31.3%	0.0%	0.0%	31.3%	0.0%	68.8%	68.8%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	20.0	20.0			20.0		50.0	50.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5			2.5		1.0	1.0				
Recall Mode	None	None			None		C-Max	C-Max				
Walk Time (s)	4.0	4.0			4.0		7.0	7.0				
Flash Dont Walk (s)	17.0	17.0			17.0		14.0	14.0				
Pedestrian Calls (#/hr)	42	42			9		10	10				
Act Effct Green (s)		14.3			14.3			58.7				
Actuated g/C Ratio		0.18			0.18			0.73				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.22			0.06			0.48				
Control Delay		30.2			16.2			7.0				
Queue Delay		0.0			0.0			0.0				
Total Delay		30.2			16.2			7.0				
LOS		C			B			A				
Approach Delay		30.2			16.2			7.0				
Approach LOS		C			B			A				
Queue Length 50th (ft)		25			3			169				
Queue Length 95th (ft)		m37			20			207				
Internal Link Dist (ft)		219			156			600			572	
Turn Bay Length (ft)												
Base Capacity (vph)		335			440			3722				
Starvation Cap Reductn		0			0			0				
Spillback Cap Reductn		0			0			0				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.16			0.05			0.48				

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 3 (4%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.48
Intersection Signal Delay: 7.7 Intersection LOS: A
Intersection Capacity Utilization 49.0% ICU Level of Service A
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 18: 94th Street & Collins Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	47	1	0	0	8	10	85	1527	3	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.93			1.00				
Flt Protected		0.95			1.00			1.00				
Satd. Flow (prot)		1776			1724			5071				
Flt Permitted		0.72			1.00			1.00				
Satd. Flow (perm)		1340			1724			5071				
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)	52	1	0	0	9	11	94	1697	3	0	0	0
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	53	0	0	11	0	0	1794	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		13.3			13.3			56.7				
Effective Green, g (s)		13.3			13.3			56.7				
Actuated g/C Ratio		0.17			0.17			0.71				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		2.5			2.5			1.0				
Lane Grp Cap (vph)		223			287			3594				
v/s Ratio Prot					0.01							
v/s Ratio Perm		c0.04						0.35				
v/c Ratio		0.24			0.04			0.50				
Uniform Delay, d1		28.9			28.0			5.3				
Progression Factor		1.10			1.00			1.00				
Incremental Delay, d2		0.4			0.0			0.5				
Delay (s)		32.3			28.0			5.7				
Level of Service		C			C			A				
Approach Delay (s)		32.3			28.0			5.7			0.0	
Approach LOS		C			C			A			A	

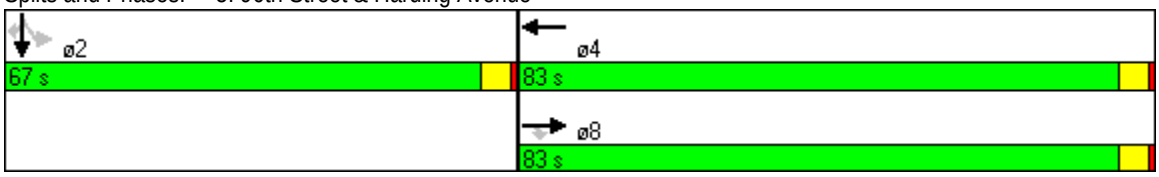
Intersection Summary			
HCM Average Control Delay	6.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	49.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	347	616	0	463	0	0	0	0	39	1227	284
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	10	10	12	12	12	12	12	12
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt		0.953	0.850									0.850
Flt Protected											0.998	
Satd. Flow (prot)	0	1630	1454	0	3303	0	0	0	0	0	5075	1583
Flt Permitted											0.998	
Satd. Flow (perm)	0	1630	1454	0	3303	0	0	0	0	0	5075	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15	15									276
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		556			324			668			466	
Travel Time (s)		12.6			7.4			15.2			10.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	369	655	0	493	0	0	0	0	41	1305	302
Shared Lane Traffic (%)			26%									
Lane Group Flow (vph)	0	539	485	0	493	0	0	0	0	0	1346	302
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.09	1.09	1.09	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type			Perm							Perm		Perm
Protected Phases		8			4						2	
Permitted Phases			8							2		2
Detector Phase		8	8		4					2	2	2
Switch Phase												
Minimum Initial (s)		7.0	7.0		7.0					7.0	7.0	7.0
Minimum Split (s)		21.0	21.0		24.0					29.0	29.0	29.0
Total Split (s)	0.0	83.0	83.0	0.0	83.0	0.0	0.0	0.0	0.0	67.0	67.0	67.0
Total Split (%)	0.0%	55.3%	55.3%	0.0%	55.3%	0.0%	0.0%	0.0%	0.0%	44.7%	44.7%	44.7%
Maximum Green (s)		78.0	78.0		78.0					62.0	62.0	62.0
Yellow Time (s)		4.0	4.0		4.0					4.0	4.0	4.0
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	5.0	4.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0	1.0		1.0					1.0	1.0	1.0
Recall Mode		Max	Max		Max					C-Max	C-Max	C-Max
Walk Time (s)					7.0					7.0	7.0	7.0
Flash Dont Walk (s)					12.0					17.0	17.0	17.0
Pedestrian Calls (#/hr)					21					65	65	65
Act Effct Green (s)		78.0	78.0		78.0						62.0	62.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.52	0.52		0.52						0.41	0.41
v/c Ratio		0.63	0.64		0.29						0.64	0.37
Control Delay		22.1	22.6		33.6						36.9	5.6
Queue Delay		0.2	0.1		3.2						0.0	0.0
Total Delay		22.3	22.8		36.9						36.9	5.6
LOS		C	C		D						D	A
Approach Delay		22.5			36.9						31.1	
Approach LOS		C			D						C	
Queue Length 50th (ft)		285	256		215						382	15
Queue Length 95th (ft)		268	245		275						435	77
Internal Link Dist (ft)		476			244			588			386	
Turn Bay Length (ft)												
Base Capacity (vph)		855	763		1718						2098	816
Starvation Cap Reductn		31	23		1101						0	0
Spillback Cap Reductn		9	0		0						0	0
Storage Cap Reductn		0	0		0						0	0
Reduced v/c Ratio		0.65	0.66		0.80						0.64	0.37

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 57 (38%), Referenced to phase 2:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay: 29.2	Intersection LOS: C
Intersection Capacity Utilization 63.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 5: 96th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	347	616	0	463	0	0	0	0	39	1227	284
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	10	10	12	12	12	12	12	12
Total Lost time (s)		5.0	5.0		5.0						5.0	5.0
Lane Util. Factor		0.95	0.95		0.95						0.91	1.00
Frt		0.95	0.85		1.00						1.00	0.85
Flt Protected		1.00	1.00		1.00						1.00	1.00
Satd. Flow (prot)		1630	1454		3303						5078	1583
Flt Permitted		1.00	1.00		1.00						1.00	1.00
Satd. Flow (perm)		1630	1454		3303						5078	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	369	655	0	493	0	0	0	0	41	1305	302
RTOR Reduction (vph)	0	7	7	0	0	0	0	0	0	0	0	162
Lane Group Flow (vph)	0	532	478	0	493	0	0	0	0	0	1346	140
Turn Type			Perm							Perm		Perm
Protected Phases		8			4						2	
Permitted Phases			8							2		2
Actuated Green, G (s)		78.0	78.0		78.0						62.0	62.0
Effective Green, g (s)		78.0	78.0		78.0						62.0	62.0
Actuated g/C Ratio		0.52	0.52		0.52						0.41	0.41
Clearance Time (s)		5.0	5.0		5.0						5.0	5.0
Vehicle Extension (s)		1.0	1.0		1.0						1.0	1.0
Lane Grp Cap (vph)		848	756		1718						2099	654
v/s Ratio Prot		0.33			0.15							
v/s Ratio Perm			c0.33								0.27	0.09
v/c Ratio		0.63	0.63		0.29						0.64	0.21
Uniform Delay, d1		25.6	25.7		20.3						35.1	28.3
Progression Factor		0.74	0.74		1.62						1.00	1.00
Incremental Delay, d2		3.2	3.7		0.4						1.5	0.7
Delay (s)		22.2	22.7		33.4						36.6	29.1
Level of Service		C	C		C						D	C
Approach Delay (s)		22.5			33.4			0.0			35.3	
Approach LOS		C			C			A			D	

Intersection Summary			
HCM Average Control Delay	30.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	63.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	392	17	0	0	15	11	422	1470	16	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	12	12	12	12	12	12
Storage Length (ft)	0		0	0		0	250		0	0		0
Storage Lanes	1		0	0		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Frt					0.943			0.998				
Flt Protected	0.950	0.956					0.950					
Satd. Flow (prot)	1569	1579	0	0	1757	0	1770	5075	0	0	0	0
Flt Permitted	0.950	0.956					0.950					
Satd. Flow (perm)	1569	1579	0	0	1757	0	1770	5075	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					11			2				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		324			224			667			480	
Travel Time (s)		7.4			5.1			15.2			10.9	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	404	18	0	0	15	11	435	1515	16	0	0	0
Shared Lane Traffic (%)	48%											
Lane Group Flow (vph)	210	212	0	0	26	0	435	1531	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split						pm+pt					
Protected Phases	3	3			4		5	2				
Permitted Phases							2					
Detector Phase	3	3			4		5	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			7.0		4.0	4.0				
Minimum Split (s)	22.0	22.0			21.0		11.0	23.0				
Total Split (s)	50.0	50.0	0.0	0.0	12.0	0.0	72.0	72.0	0.0	0.0	0.0	0.0
Total Split (%)	33.3%	33.3%	0.0%	0.0%	8.0%	0.0%	48.0%	48.0%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	45.0	45.0			7.0		67.0	67.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead			Lag		Lag					
Lead-Lag Optimize?	Yes	Yes			Yes		Yes					
Vehicle Extension (s)	2.5	2.5			2.5		2.0	1.0				
Recall Mode	Max	Max			None		C-Max	C-Max				
Walk Time (s)	4.0	4.0						4.0				

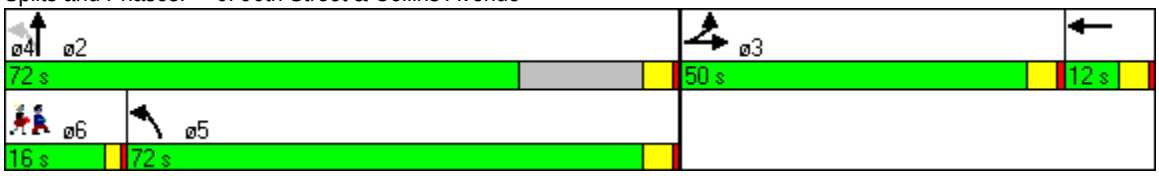
Lane Group	ø6
Lane Configurations	
Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	20.0
Total Split (s)	16.0
Total Split (%)	11%
Maximum Green (s)	13.0
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	4.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	13.0	13.0						7.0				
Pedestrian Calls (#/hr)	31	31						5				
Act Effct Green (s)	45.0	45.0			7.0		87.8	87.8				
Actuated g/C Ratio	0.30	0.30			0.05		0.59	0.59				
v/c Ratio	0.45	0.45			0.28		0.42	0.52				
Control Delay	26.2	26.2			54.6		21.1	21.7				
Queue Delay	2.6	2.6			0.0		0.8	0.4				
Total Delay	28.7	28.8			54.6		21.9	22.1				
LOS	C	C			D		C	C				
Approach Delay		28.8			54.6			22.1				
Approach LOS		C			D			C				
Queue Length 50th (ft)	184	186			14		277	413				
Queue Length 95th (ft)	217	220			48		401	483				
Internal Link Dist (ft)		244			144			587			400	
Turn Bay Length (ft)							250					
Base Capacity (vph)	471	474			92		1036	2971				
Starvation Cap Reductn	159	161			0		326	819				
Spillback Cap Reductn	0	0			0		131	0				
Storage Cap Reductn	0	0			0		0	0				
Reduced v/c Ratio	0.67	0.68			0.28		0.61	0.71				

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 85 (57%), Referenced to phase 2:NBTL and 5:NBL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.52
Intersection Signal Delay: 23.6 — Intersection LOS: C
Intersection Capacity Utilization 63.6% — ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 6: 96th Street & Collins Avenue



Lane Group	ø6
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	8
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	392	17	0	0	15	11	422	1470	16	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	12	12	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			5.0		5.0	5.0				
Lane Util. Factor	0.95	0.95			1.00		1.00	0.91				
Frt	1.00	1.00			0.94		1.00	1.00				
Flt Protected	0.95	0.96			1.00		0.95	1.00				
Satd. Flow (prot)	1569	1579			1756		1770	5077				
Flt Permitted	0.95	0.96			1.00		0.95	1.00				
Satd. Flow (perm)	1569	1579			1756		1770	5077				
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	404	18	0	0	15	11	435	1515	16	0	0	0
RTOR Reduction (vph)	0	0	0	0	11	0	0	1	0	0	0	0
Lane Group Flow (vph)	210	212	0	0	15	0	435	1530	0	0	0	0
Turn Type	Split						pm+pt					
Protected Phases	3	3			4		5	2				
Permitted Phases							2					
Actuated Green, G (s)	45.0	45.0			4.2		85.8	85.8				
Effective Green, g (s)	45.0	45.0			4.2		85.8	85.8				
Actuated g/C Ratio	0.30	0.30			0.03		0.57	0.57				
Clearance Time (s)	5.0	5.0			5.0		5.0	5.0				
Vehicle Extension (s)	2.5	2.5			2.5		2.0	1.0				
Lane Grp Cap (vph)	471	474			49		1012	2904				
v/s Ratio Prot	0.13	c0.13			c0.01		0.23	c0.30				
v/s Ratio Perm							0.02					
v/c Ratio	0.45	0.45			0.31		0.43	0.53				
Uniform Delay, d1	42.4	42.4			71.5		17.4	19.7				
Progression Factor	0.55	0.55			1.00		1.10	1.10				
Incremental Delay, d2	2.4	2.4			2.6		1.1	0.5				
Delay (s)	25.8	25.8			74.1		20.1	22.2				
Level of Service	C	C			E		C	C				
Approach Delay (s)		25.8			74.1			21.8			0.0	
Approach LOS		C			E			C			A	

Intersection Summary			
HCM Average Control Delay	23.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	63.6%	ICU Level of Service	B
Analysis Period (min)	15		

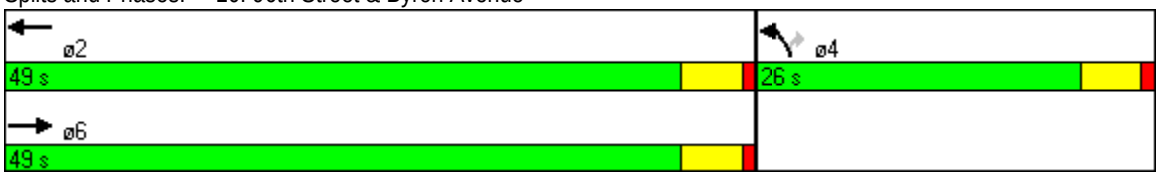
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1033	0	0	734	198	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	1.00
Frt						0.850
Flt Protected					0.950	
Satd. Flow (prot)	3421	0	0	3421	3319	1531
Flt Permitted					0.950	
Satd. Flow (perm)	3421	0	0	3421	3319	1531
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						13
Link Speed (mph)	30			30	30	
Link Distance (ft)	250			556	390	
Travel Time (s)	5.7			12.6	8.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1087	0	0	773	208	13
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1087	0	0	773	208	13
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	22	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Turn Type						Perm
Protected Phases	6			2	4	
Permitted Phases						4
Detector Phase	6			2	4	4
Switch Phase						
Minimum Initial (s)	15.0			15.0	7.0	7.0
Minimum Split (s)	21.0			21.0	26.0	26.0
Total Split (s)	49.0	0.0	0.0	49.0	26.0	26.0
Total Split (%)	65.3%	0.0%	0.0%	65.3%	34.7%	34.7%
Maximum Green (s)	44.0			44.0	21.0	21.0
Yellow Time (s)	4.0			4.0	4.0	4.0
All-Red Time (s)	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)	5.0	4.0	4.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	1.0			1.0	2.5	2.5
Recall Mode	C-Max			C-Max	None	None
Walk Time (s)					4.0	4.0
Flash Dont Walk (s)					17.0	17.0
Pedestrian Calls (#/hr)					0	0
Act Effct Green (s)	55.4			55.4	9.6	9.6

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Actuated g/C Ratio	0.74			0.74	0.13	0.13
v/c Ratio	0.43			0.31	0.49	0.06
Control Delay	5.8			2.0	34.0	15.0
Queue Delay	0.4			0.0	0.0	0.0
Total Delay	6.2			2.0	34.0	15.0
LOS	A			A	C	B
Approach Delay	6.2			2.0	32.9	
Approach LOS	A			A	C	
Queue Length 50th (ft)	102			17	47	0
Queue Length 95th (ft)	252			22	75	14
Internal Link Dist (ft)	170			476	310	
Turn Bay Length (ft)						
Base Capacity (vph)	2527			2527	929	438
Starvation Cap Reductn	787			0	0	0
Spillback Cap Reductn	0			0	0	0
Storage Cap Reductn	0			0	0	0
Reduced v/c Ratio	0.62			0.31	0.22	0.03

Intersection Summary	
Area Type: Other	
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 71 (95%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Natural Cycle: 50	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	
Intersection Signal Delay: 7.5	Intersection LOS: A
Intersection Capacity Utilization 42.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 10: 96th Street & Byron Avenue



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1033	0	0	734	198	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	5.0			5.0	5.0	5.0
Lane Util. Factor	0.95			0.95	0.97	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	3421			3421	3319	1531
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	3421			3421	3319	1531
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1087	0	0	773	208	13
RTOR Reduction (vph)	0	0	0	0	0	11
Lane Group Flow (vph)	1087	0	0	773	208	2
Turn Type						Perm
Protected Phases	6			2	4	
Permitted Phases						4
Actuated Green, G (s)	55.4			55.4	9.6	9.6
Effective Green, g (s)	55.4			55.4	9.6	9.6
Actuated g/C Ratio	0.74			0.74	0.13	0.13
Clearance Time (s)	5.0			5.0	5.0	5.0
Vehicle Extension (s)	1.0			1.0	2.5	2.5
Lane Grp Cap (vph)	2527			2527	425	196
v/s Ratio Prot	c0.32			0.23	c0.06	
v/s Ratio Perm						0.00
v/c Ratio	0.43			0.31	0.49	0.01
Uniform Delay, d1	3.8			3.3	30.4	28.5
Progression Factor	1.34			0.48	1.00	1.00
Incremental Delay, d2	0.5			0.3	0.6	0.0
Delay (s)	5.5			1.9	31.1	28.6
Level of Service	A			A	C	C
Approach Delay (s)	5.5			1.9	30.9	
Approach LOS	A			A	C	

Intersection Summary			
HCM Average Control Delay	6.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	42.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

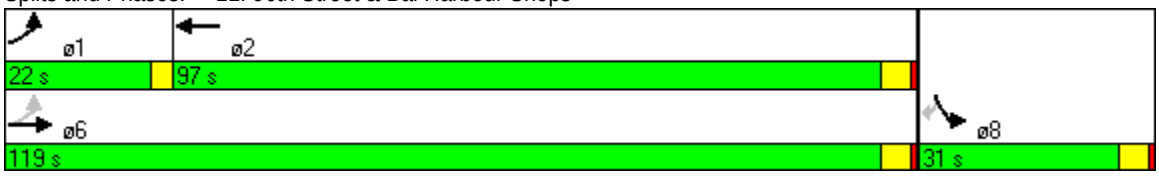
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	53	956	899	25	79	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	2	1
Taper Length (ft)	25			25	25	25
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	0.91
Frt			0.996		0.957	0.850
Flt Protected	0.950				0.965	
Satd. Flow (prot)	1711	3421	3408	0	3226	1393
Flt Permitted	0.274				0.965	
Satd. Flow (perm)	493	3421	3408	0	3226	1393
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			3		33	54
Link Speed (mph)		30	30		30	
Link Distance (ft)		484	250		351	
Travel Time (s)		11.0	5.7		8.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	56	1006	946	26	83	87
Shared Lane Traffic (%)						38%
Lane Group Flow (vph)	56	1006	972	0	116	54
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		22	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt					Perm
Protected Phases	1	6	2		8	
Permitted Phases	6					8
Detector Phase	1	6	2		8	8
Switch Phase						
Minimum Initial (s)	5.0	15.0	15.0		7.0	7.0
Minimum Split (s)	19.0	21.0	21.0		23.0	23.0
Total Split (s)	22.0	119.0	97.0	0.0	31.0	31.0
Total Split (%)	14.7%	79.3%	64.7%	0.0%	20.7%	20.7%
Maximum Green (s)	19.0	114.0	92.0		26.0	26.0
Yellow Time (s)	3.0	4.0	4.0		4.0	4.0
All-Red Time (s)	0.0	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)	3.0	5.0	5.0	4.0	5.0	5.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	2.0	1.0	1.0		2.5	2.5
Recall Mode	None	C-Max	C-Max		None	None
Walk Time (s)					4.0	4.0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Flash Dont Walk (s)					14.0	14.0
Pedestrian Calls (#/hr)					7	7
Act Effct Green (s)	131.7	129.7	123.0		10.3	10.3
Actuated g/C Ratio	0.88	0.86	0.82		0.07	0.07
v/c Ratio	0.12	0.34	0.35		0.46	0.37
Control Delay	2.0	2.5	1.4		52.8	22.0
Queue Delay	0.0	0.0	0.3		0.0	0.0
Total Delay	2.0	2.5	1.7		52.8	22.0
LOS	A	A	A		D	C
Approach Delay		2.5	1.7		43.0	
Approach LOS		A	A		D	
Queue Length 50th (ft)	4	67	24		41	0
Queue Length 95th (ft)	15	137	40		71	48
Internal Link Dist (ft)		404	170		271	
Turn Bay Length (ft)	100					
Base Capacity (vph)	587	2958	2796		586	286
Starvation Cap Reductn	0	0	1061		0	0
Spillback Cap Reductn	0	142	0		1	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.10	0.36	0.56		0.20	0.19

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 143 (95%), Referenced to phase 2:WBT and 6:EBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.46
Intersection Signal Delay: 5.2 — Intersection LOS: A
Intersection Capacity Utilization 47.3% — ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 11: 96th Street & Bal Harbour Shops



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	53	956	899	25	79	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	3.0	5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	0.95	0.95		0.97	0.91
Frt	1.00	1.00	1.00		0.96	0.85
Flt Protected	0.95	1.00	1.00		0.97	1.00
Satd. Flow (prot)	1711	3421	3408		3229	1393
Flt Permitted	0.27	1.00	1.00		0.97	1.00
Satd. Flow (perm)	493	3421	3408		3229	1393
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	56	1006	946	26	83	87
RTOR Reduction (vph)	0	0	1	0	31	50
Lane Group Flow (vph)	56	1006	971	0	85	4
Turn Type	pm+pt					Perm
Protected Phases	1	6	2		8	
Permitted Phases	6					8
Actuated Green, G (s)	129.7	129.7	122.4		10.3	10.3
Effective Green, g (s)	129.7	129.7	122.4		10.3	10.3
Actuated g/C Ratio	0.86	0.86	0.82		0.07	0.07
Clearance Time (s)	3.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)	2.0	1.0	1.0		2.5	2.5
Lane Grp Cap (vph)	461	2958	2781		222	96
v/s Ratio Prot	0.00	c0.29	c0.29		c0.03	
v/s Ratio Perm	0.10					0.00
v/c Ratio	0.12	0.34	0.35		0.38	0.04
Uniform Delay, d1	1.7	1.9	3.6		66.8	65.2
Progression Factor	1.00	1.00	0.26		1.00	1.00
Incremental Delay, d2	0.0	0.3	0.3		0.8	0.1
Delay (s)	1.8	2.3	1.3		67.6	65.3
Level of Service	A	A	A		E	E
Approach Delay (s)		2.2	1.3		66.9	
Approach LOS		A	A		E	

Intersection Summary			
HCM Average Control Delay	6.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	47.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

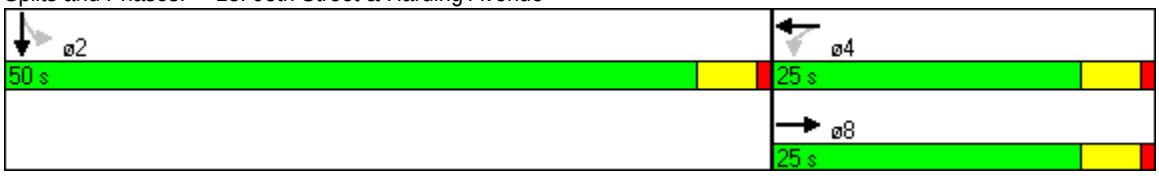
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	36	78	74	56	0	0	0	0	77	1739	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.908									0.995	
Flt Protected					0.972						0.998	
Satd. Flow (prot)	0	1691	0	0	1811	0	0	0	0	0	4713	0
Flt Permitted					0.758						0.998	
Satd. Flow (perm)	0	1691	*1	0	1412	0	0	0	0	0	4713	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)											12	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		261			299			655			668	
Travel Time (s)		5.9			6.8			14.9			15.2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Parking (#/hr)											20	
Adj. Flow (vph)	0	37	80	76	57	0	0	0	0	79	1774	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	117	0	0	133	0	0	0	0	0	1917	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Detector Phase		8		4	4					2	2	
Switch Phase												
Minimum Initial (s)		7.0		7.0	7.0					7.0	7.0	
Minimum Split (s)		27.0		27.0	27.0					25.0	25.0	
Total Split (s)	0.0	25.0	0.0	25.0	25.0	0.0	0.0	0.0	0.0	50.0	50.0	0.0
Total Split (%)	0.0%	33.3%	0.0%	33.3%	33.3%	0.0%	0.0%	0.0%	0.0%	66.7%	66.7%	0.0%
Maximum Green (s)		20.0		20.0	20.0					45.0	45.0	
Yellow Time (s)		4.0		4.0	4.0					4.0	4.0	
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0		1.0	1.0					1.0	1.0	
Recall Mode		None		None	None					C-Max	C-Max	
Walk Time (s)		7.0		7.0	7.0					7.0	7.0	
Flash Dont Walk (s)		15.0		15.0	15.0					13.0	13.0	
Pedestrian Calls (#/hr)		31		27	27					54	54	
Act Effct Green (s)		13.1			13.1						55.3	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.17			0.17						0.74	
v/c Ratio		0.40			0.54						0.55	
Control Delay		29.5			42.5						4.6	
Queue Delay		0.0			0.0						0.0	
Total Delay		29.5			42.5						4.6	
LOS		C			D						A	
Approach Delay		29.5			42.5						4.6	
Approach LOS		C			D						A	
Queue Length 50th (ft)		51			67						78	
Queue Length 95th (ft)		84			m109						181	
Internal Link Dist (ft)		181			219			575			588	
Turn Bay Length (ft)												
Base Capacity (vph)		451			377						3477	
Starvation Cap Reductn		0			0						0	
Spillback Cap Reductn		0			0						0	
Storage Cap Reductn		0			0						0	
Reduced v/c Ratio		0.26			0.35						0.55	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 59 (79%), Referenced to phase 2:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.55
Intersection Signal Delay: 8.2 — Intersection LOS: A
Intersection Capacity Utilization 58.6% — ICU Level of Service B
Analysis Period (min) 15
* User Entered Value
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: 95th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	36	78	74	56	0	0	0	0	77	1739	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.91			1.00						0.99	
Flt Protected		1.00			0.97						1.00	
Satd. Flow (prot)		1691			1811						4713	
Flt Permitted		1.00			0.76						1.00	
Satd. Flow (perm)		1691			1413						4713	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	37	80	76	57	0	0	0	0	79	1774	64
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	3	0
Lane Group Flow (vph)	0	117	0	0	133	0	0	0	0	0	1914	0
Parking (#/hr)											20	
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		11.7			11.7						53.3	
Effective Green, g (s)		11.7			11.7						53.3	
Actuated g/C Ratio		0.16			0.16						0.71	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		1.0			1.0						1.0	
Lane Grp Cap (vph)		264			220						3349	
v/s Ratio Prot		0.07										
v/s Ratio Perm					c0.09						0.41	
v/c Ratio		0.44			0.60						0.57	
Uniform Delay, d1		28.7			29.5						5.3	
Progression Factor		1.00			1.32						0.64	
Incremental Delay, d2		0.4			2.9						0.5	
Delay (s)		29.1			41.8						3.9	
Level of Service		C			D						A	
Approach Delay (s)		29.1			41.8			0.0			3.9	
Approach LOS		C			D			A			A	

Intersection Summary			
HCM Average Control Delay	7.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

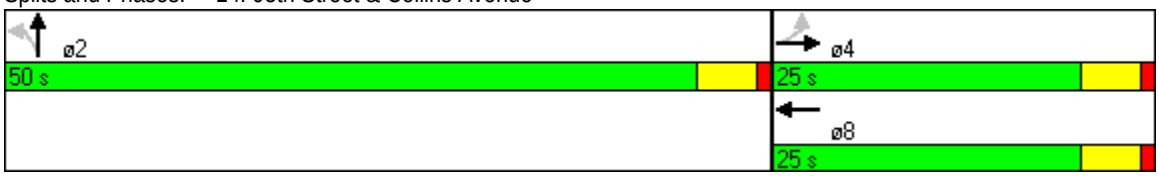
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	99	4	0	0	7	8	94	2098	10	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Frt					0.928			0.999				
Flt Protected		0.954						0.998				
Satd. Flow (prot)	0	1777	0	0	1729	0	0	5070	0	0	0	0
Flt Permitted		0.723						0.998				
Satd. Flow (perm)	0	1347	0	0	1729	0	0	5070	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					8			1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		299			255			652			667	
Travel Time (s)		6.8			5.8			14.8			15.2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	101	4	0	0	7	8	96	2141	10	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	105	0	0	15	0	0	2247	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Detector Phase	4	4			8		2	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		7.0	7.0				
Minimum Split (s)	25.0	25.0			25.0		26.0	26.0				
Total Split (s)	25.0	25.0	0.0	0.0	25.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0
Total Split (%)	33.3%	33.3%	0.0%	0.0%	33.3%	0.0%	66.7%	66.7%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	20.0	20.0			20.0		45.0	45.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5			2.5		2.5	2.5				
Recall Mode	None	None			None		C-Max	C-Max				
Walk Time (s)	4.0	4.0			4.0		7.0	7.0				
Flash Dont Walk (s)	16.0	16.0			16.0		14.0	14.0				
Pedestrian Calls (#/hr)	45	45			7		15	15				
Act Effct Green (s)		14.9			14.7			53.3				
Actuated g/C Ratio		0.20			0.20			0.71				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.39			0.04			0.62				
Control Delay		27.0			15.3			1.4				
Queue Delay		0.0			0.0			0.0				
Total Delay		27.0			15.3			1.4				
LOS		C			B			A				
Approach Delay		27.0			15.3			1.4				
Approach LOS		C			B			A				
Queue Length 50th (ft)		34			2			17				
Queue Length 95th (ft)		69			16			19				
Internal Link Dist (ft)		219			175			572			587	
Turn Bay Length (ft)												
Base Capacity (vph)		359			467			3602				
Starvation Cap Reductn		0			0			0				
Spillback Cap Reductn		0			0			0				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.29			0.03			0.62				

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 49 (65%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.62
Intersection Signal Delay: 2.7 — Intersection LOS: A
Intersection Capacity Utilization 63.4% — ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 14: 95th Street & Collins Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	99	4	0	0	7	8	94	2098	10	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.93			1.00				
Flt Protected		0.95			1.00			1.00				
Satd. Flow (prot)		1777			1729			5071				
Flt Permitted		0.72			1.00			1.00				
Satd. Flow (perm)		1348			1729			5071				
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	101	4	0	0	7	8	96	2141	10	0	0	0
RTOR Reduction (vph)	0	0	0	0	7	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	105	0	0	8	0	0	2247	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		13.7			13.7			51.3				
Effective Green, g (s)		13.7			13.7			51.3				
Actuated g/C Ratio		0.18			0.18			0.68				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		2.5			2.5			2.5				
Lane Grp Cap (vph)		246			316			3469				
v/s Ratio Prot					0.00							
v/s Ratio Perm		c0.08						0.44				
v/c Ratio		0.43			0.03			0.65				
Uniform Delay, d1		27.2			25.2			6.7				
Progression Factor		0.94			1.00			0.10				
Incremental Delay, d2		0.8			0.0			0.7				
Delay (s)		26.3			25.2			1.4				
Level of Service		C			C			A				
Approach Delay (s)		26.3			25.2			1.4			0.0	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	2.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	63.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

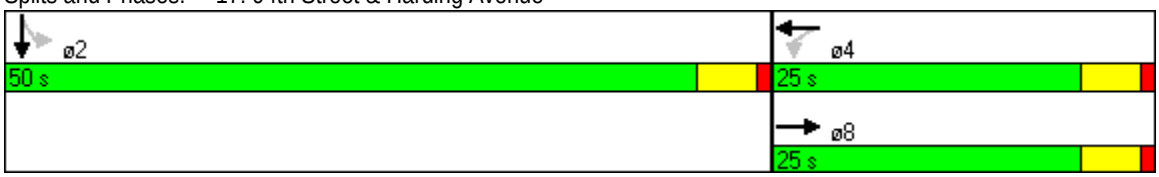
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	19	131	55	130	0	0	0	0	57	1718	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.882									0.989	
Flt Protected					0.985						0.999	
Satd. Flow (prot)	0	1643	0	0	1835	0	0	0	0	0	4689	0
Flt Permitted					0.804						0.999	
Satd. Flow (perm)	0	1643	0	0	1498	0	0	0	0	0	4689	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)											32	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			299			681			655	
Travel Time (s)		6.0			6.8			15.5			14.9	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Parking (#/hr)											20	
Adj. Flow (vph)	0	20	135	57	134	0	0	0	0	59	1771	151
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	155	0	0	191	0	0	0	0	0	1981	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Detector Phase		8		4	4					2	2	
Switch Phase												
Minimum Initial (s)		7.0		7.0	7.0					7.0	7.0	
Minimum Split (s)		21.0		21.0	21.0					21.0	21.0	
Total Split (s)	0.0	25.0	0.0	25.0	25.0	0.0	0.0	0.0	0.0	50.0	50.0	0.0
Total Split (%)	0.0%	33.3%	0.0%	33.3%	33.3%	0.0%	0.0%	0.0%	0.0%	66.7%	66.7%	0.0%
Maximum Green (s)		20.0		20.0	20.0					45.0	45.0	
Yellow Time (s)		4.0		4.0	4.0					4.0	4.0	
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0		1.0	1.0					1.0	1.0	
Recall Mode		None		None	None					C-Max	C-Max	
Walk Time (s)		5.0		5.0	5.0					5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0					11.0	11.0	
Pedestrian Calls (#/hr)		3		39	39					28	28	
Act Effct Green (s)		13.4			13.4						51.6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.18			0.18						0.69	
v/c Ratio		0.53			0.71						0.61	
Control Delay		33.5			35.9						3.7	
Queue Delay		0.0			0.0						0.0	
Total Delay		33.5			35.9						3.7	
LOS		C			D						A	
Approach Delay		33.5			35.9						3.7	
Approach LOS		C			D						A	
Queue Length 50th (ft)		63			58						132	
Queue Length 95th (ft)		113			m111						33	
Internal Link Dist (ft)		186			219			601			575	
Turn Bay Length (ft)												
Base Capacity (vph)		438			399						3236	
Starvation Cap Reductn		0			0						0	
Spillback Cap Reductn		0			0						0	
Storage Cap Reductn		0			0						0	
Reduced v/c Ratio		0.35			0.48						0.61	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 2 (3%), Referenced to phase 2:SBTL, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 8.3 — Intersection LOS: A
Intersection Capacity Utilization 69.1% — ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 17: 94th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	19	131	55	130	0	0	0	0	57	1718	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.88			1.00						0.99	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		1644			1835						4685	
Flt Permitted		1.00			0.80						1.00	
Satd. Flow (perm)		1644			1497						4685	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	20	135	57	134	0	0	0	0	59	1771	151
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	10	0
Lane Group Flow (vph)	0	155	0	0	191	0	0	0	0	0	1971	0
Parking (#/hr)											20	
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		13.4			13.4						51.6	
Effective Green, g (s)		13.4			13.4						51.6	
Actuated g/C Ratio		0.18			0.18						0.69	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		1.0			1.0						1.0	
Lane Grp Cap (vph)		294			267						3223	
v/s Ratio Prot		0.09										
v/s Ratio Perm					c0.13						0.42	
v/c Ratio		0.53			0.72						0.61	
Uniform Delay, d1		27.9			29.0						6.3	
Progression Factor		1.00			0.80						0.43	
Incremental Delay, d2		0.8			6.5						0.8	
Delay (s)		28.7			29.8						3.5	
Level of Service		C			C						A	
Approach Delay (s)		28.7			29.8			0.0			3.5	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	7.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	69.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

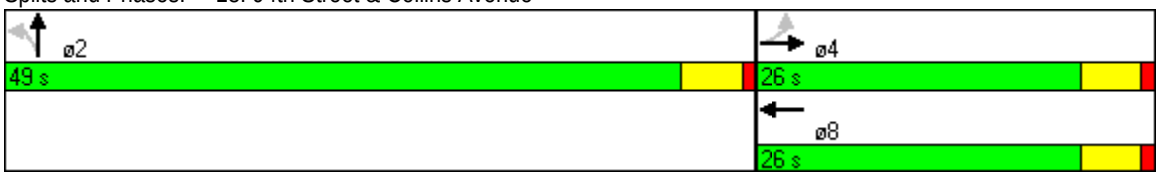
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	87	3	0	0	6	3	144	2072	1	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Frt					0.955							
Flt Protected		0.954						0.997				
Satd. Flow (prot)	0	1777	0	0	1779	0	0	5070	0	0	0	0
Flt Permitted		0.727						0.997				
Satd. Flow (perm)	0	1354	0	0	1779	0	0	5070	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		299			236			672			652	
Travel Time (s)		6.8			5.4			15.3			14.8	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	91	3	0	0	6	3	150	2158	1	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	94	0	0	9	0	0	2309	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Detector Phase	4	4			8		2	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		7.0	7.0				
Minimum Split (s)	26.0	26.0			26.0		26.0	26.0				
Total Split (s)	26.0	26.0	0.0	0.0	26.0	0.0	49.0	49.0	0.0	0.0	0.0	0.0
Total Split (%)	34.7%	34.7%	0.0%	0.0%	34.7%	0.0%	65.3%	65.3%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	21.0	21.0			21.0		44.0	44.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5			2.5		1.0	1.0				
Recall Mode	None	None			None		C-Max	C-Max				
Walk Time (s)	4.0	4.0			4.0		7.0	7.0				
Flash Dont Walk (s)	17.0	17.0			17.0		14.0	14.0				
Pedestrian Calls (#/hr)	36	36			16		11	11				
Act Effct Green (s)		15.3			15.2			52.8				
Actuated g/C Ratio		0.20			0.20			0.70				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.34			0.02			0.65				
Control Delay		26.5			17.1			10.0				
Queue Delay		0.0			0.0			0.0				
Total Delay		26.5			17.1			10.0				
LOS		C			B			A				
Approach Delay		26.5			17.1			10.0				
Approach LOS		C			B			A				
Queue Length 50th (ft)		37			2			269				
Queue Length 95th (ft)		m55			12			331				
Internal Link Dist (ft)		219			156			592			572	
Turn Bay Length (ft)												
Base Capacity (vph)		379			500			3568				
Starvation Cap Reductn		0			0			0				
Spillback Cap Reductn		0			0			0				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.25			0.02			0.65				

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 35 (47%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.65
Intersection Signal Delay: 10.6 Intersection LOS: B
Intersection Capacity Utilization 63.0% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 18: 94th Street & Collins Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	87	3	0	0	6	3	144	2072	1	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.95			1.00				
Flt Protected		0.95			1.00			1.00				
Satd. Flow (prot)		1777			1779			5069				
Flt Permitted		0.73			1.00			1.00				
Satd. Flow (perm)		1354			1779			5069				
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	91	3	0	0	6	3	150	2158	1	0	0	0
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	94	0	0	7	0	0	2309	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		14.2			14.2			50.8				
Effective Green, g (s)		14.2			14.2			50.8				
Actuated g/C Ratio		0.19			0.19			0.68				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		2.5			2.5			1.0				
Lane Grp Cap (vph)		256			337			3433				
v/s Ratio Prot					0.00							
v/s Ratio Perm		c0.07						0.46				
v/c Ratio		0.37			0.02			0.67				
Uniform Delay, d1		26.5			24.7			7.2				
Progression Factor		0.99			1.00			1.00				
Incremental Delay, d2		0.6			0.0			1.1				
Delay (s)		26.7			24.8			8.2				
Level of Service		C			C			A				
Approach Delay (s)		26.7			24.8			8.2			0.0	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	9.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	63.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

APPENDIX H
BACKGROUND TRAFFIC DEVELOPMENT SHEETS

TRAFFIC DEVELOPMENT SHEET - Turning Movement Counts (AM Peak Hour)

	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
96th Street at Bal Harbour Shops	2012 Raw Counts	54	1096	0	0	922	42	7	0	9	0	0	0
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	57	1151	0	0	968	44	7	0	9	0	0	0
	Background Growth (1%)	3	58	0	0	48	2	0	0	0	0	0	0
	Committed/Planned Development Trips	15	49	0	0	27	46	29	0	10	0	0	0
	2017 Traffic Counts	75	1258	0	0	1043	92	36	0	19	0	0	0
96th Street at Byron Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	0	1080	0	0	746	0	0	0	0	192	0	21
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	0	1134	0	0	783	0	0	0	0	202	0	22
	Background Growth (1%)	0	57	0	0	39	0	0	0	0	10	0	1
	Committed/Planned Development Trips	0	63	0	0	65	0	0	0	0	0	0	0
	2017 Traffic Counts	0	1254	0	0	887	0	0	0	0	212	0	23
96th Street at Harding Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	0	339	655	0	439	0	93	1333	337	0	0	0
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	0	356	688	0	461	0	98	1400	354	0	0	0
	Background Growth (1%)	0	18	34	0	23	0	5	70	18	0	0	0
	Committed/Planned Development Trips	0	0	77	0	73	0	0	151	0	0	0	0
	2017 Traffic Counts	0	374	799	0	557	0	103	1621	372	0	0	0
96th Street at Collins Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	349	9	0	0	3	3	0	0	0	436	1008	8
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	366	9	0	0	3	3	0	0	0	458	1058	8
	Background Growth (1%)	18	0	0	0	0	0	0	0	0	23	53	0
	Committed/Planned Development Trips	0	0	0	0	0	0	0	0	0	73	129	0
	2017 Traffic Counts	384	9	0	0	3	3	0	0	0	554	1240	8
95th Street at Harding Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	0	25	164	48	46	0	55	1600	31	0	0	0
	Peak Seasonal Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
	2012 Adjusted Existing Volumes	0	27	174	51	49	0	58	1696	33	0	0	0
	Background Growth (1%)	0	1	9	3	2	0	3	85	2	0	0	0
	Committed/Planned Development Trips	0	6	0	79	5	0	42	184	0	0	0	0
	2017 Traffic Counts	0	34	183	133	56	0	103	1965	35	0	0	0
95th Street at Collins Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	66	3	0	0	7	7	0	0	0	72	1433	7
	Peak Seasonal Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
	2012 Adjusted Existing Volumes	70	3	0	0	7	7	0	0	0	76	1519	7
	Background Growth (1%)	4	0	0	0	0	0	0	0	0	4	76	0
	Committed/Planned Development Trips	87	0	0	0	0	0	0	0	0	27	223	0
	2017 Traffic Counts	161	3	0	0	7	7	0	0	0	107	1818	7
94th Street at Harding Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	0	10	65	30	69	0	49	1729	62	0	0	0
	Peak Seasonal Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
	2012 Adjusted Existing Volumes	0	11	69	32	73	0	52	1833	66	0	0	0
	Background Growth (1%)	0	1	3	2	4	0	3	92	3	0	0	0
	Committed/Planned Development Trips	0	5	0	7	0	0	52	206	5	0	0	0
	2017 Traffic Counts	0	17	72	41	77	0	107	2131	74	0	0	0
94th Street at Collins Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	44	1	0	0	8	9	0	0	0	80	1441	3
	Peak Seasonal Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
	2012 Adjusted Existing Volumes	47	1	0	0	8	10	0	0	0	85	1527	3
	Background Growth (1%)	2	0	0	0	0	1	0	0	0	4	76	0
	Committed/Planned Development Trips	46	0	0	0	0	0	0	0	0	11	231	0
	2017 Traffic Counts	95	1	0	0	8	11	0	0	0	100	1834	3

TRAFFIC DEVELOPMENT SHEET - Turning Movement Counts (PM Peak Hour)

	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
96th Street at Bal Harbour Shops	2012 Raw Counts	50	910	0	0	856	24	75	0	79	0	0	0
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	53	956	0	0	899	25	79	0	83	0	0	0
	Background Growth (1%)	3	48	0	0	45	1	4	0	4	0	0	0
	Committed/Planned Development Trips	27	47	0	0	35	82	86	0	29	0	0	0
	2017 Traffic Counts	83	1051	0	0	979	108	169	0	116	0	0	0
96th Street at Byron Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	0	984	0	0	699	0	0	0	0	189	0	11
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	0	1033	0	0	734	0	0	0	0	198	0	12
	Background Growth (1%)	0	52	0	0	37	0	0	0	0	10	0	1
	Committed/Planned Development Trips	0	113	0	0	106	0	0	0	0	5	0	0
	2017 Traffic Counts	0	1198	0	0	877	0	0	0	0	213	0	13
96th Street at Harding Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	0	330	587	0	441	0	37	1169	270	0	0	0
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	0	347	616	0	463	0	39	1227	284	0	0	0
	Background Growth (1%)	0	17	31	0	23	0	2	61	14	0	0	0
	Committed/Planned Development Trips	0	1	120	0	117	0	0	193	0	0	0	0
	2017 Traffic Counts	0	365	767	0	603	0	41	1481	298	0	0	0
96th Street at Collins Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	373	16	0	0	14	10	0	0	0	402	1400	15
	Peak Seasonal Factor	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
	2012 Adjusted Existing Volumes	392	17	0	0	15	11	0	0	0	422	1470	16
	Background Growth (1%)	20	1	0	0	1	1	0	0	0	21	74	1
	Committed/Planned Development Trips	1	0	0	0	0	0	0	0	0	117	187	0
	2017 Traffic Counts	413	18	0	0	16	12	0	0	0	560	1731	17
95th Street at Harding Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	0	34	74	70	53	0	73	1641	59	0	0	0
	Peak Seasonal Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
	2012 Adjusted Existing Volumes	0	36	78	74	56	0	77	1739	63	0	0	0
	Background Growth (1%)	0	2	4	4	3	0	4	87	3	0	0	0
	Committed/Planned Development Trips	0	9	3	94	7	0	38	269	5	0	0	0
	2017 Traffic Counts	0	47	85	172	66	0	119	2095	71	0	0	0
95th Street at Collins Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	93	4	0	0	7	8	0	0	0	89	1979	9
	Peak Seasonal Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
	2012 Adjusted Existing Volumes	99	4	0	0	7	8	0	0	0	94	2098	10
	Background Growth (1%)	5	0	0	0	0	0	0	0	0	5	105	1
	Committed/Planned Development Trips	91	0	0	0	0	0	0	0	0	36	308	0
	2017 Traffic Counts	195	4	0	0	7	8	0	0	0	135	2511	11
94th Street at Harding Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	0	18	124	52	123	0	54	1621	138	0	0	0
	Peak Seasonal Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
	2012 Adjusted Existing Volumes	0	19	131	55	130	0	57	1718	146	0	0	0
	Background Growth (1%)	0	1	7	3	7	0	3	86	7	0	0	0
	Committed/Planned Development Trips	0	5	0	9	0	0	47	314	5	0	0	0
	2017 Traffic Counts	0	25	138	67	137	0	107	2118	158	0	0	0
94th Street at Collins Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	2012 Raw Counts	82	3	0	0	6	3	0	0	0	136	1955	1
	Peak Seasonal Factor	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
	2012 Adjusted Existing Volumes	87	3	0	0	6	3	0	0	0	144	2072	1
	Background Growth (1%)	4	0	0	0	0	0	0	0	0	7	104	0
	Committed/Planned Development Trips	51	0	0	0	0	0	0	0	0	10	306	0
	2017 Traffic Counts	142	3	0	0	6	3	0	0	0	161	2482	1

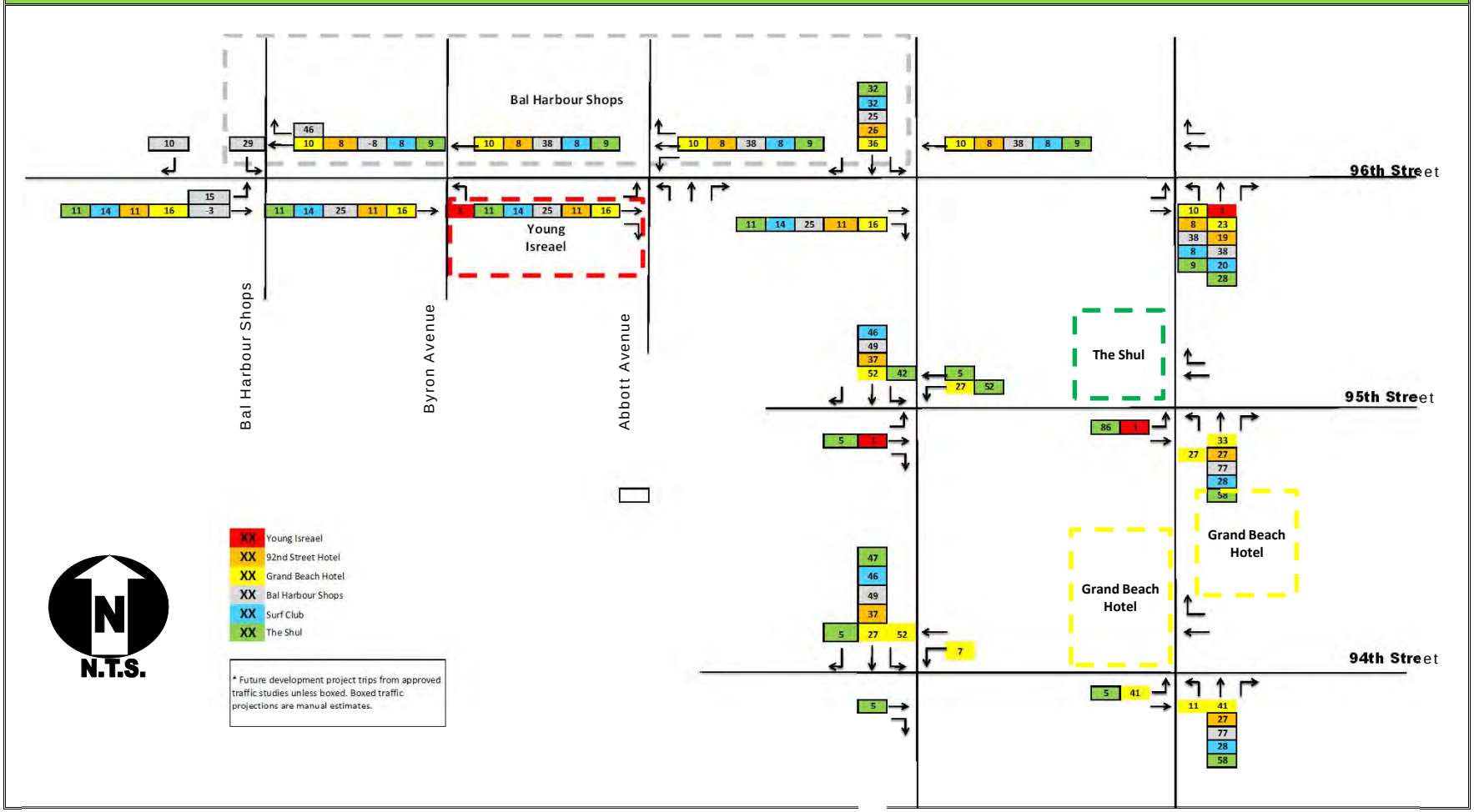
Potential Development Trips (AM Peak Hour)

	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
96th Street at Bal Harbour Shops	Young Isreael	0	0	0	0	0	0	0	0	0	0	0	0
	92nd Street Hotel	0	11	0	0	8	0	0	0	0	0	0	0
	Grand Beach Hotel	0	16	0	0	10	0	0	0	0	0	0	0
	Surf Club	0	14	0	0	8	0	0	0	0	0	0	0
	The Shul	0	11	0	0	9	0	0	0	0	0	0	0
	Bal Harbour Shops	15	-3	0	0	-8	46	29	0	10	0	0	0
	Total	15	49	0	0	27	46	29	0	10	0	0	0
96th Street at Byron Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	Young Isreael	0	0	0	0	0	0	0	0	0	0	0	0
	92nd Street Hotel	0	11	0	0	8	0	0	0	0	0	0	0
	Grand Beach Hotel	0	16	0	0	10	0	0	0	0	0	0	0
	Surf Club	0	0	0	0	0	0	0	0	0	0	0	0
	The Shul	0	11	0	0	9	0	0	0	0	0	0	0
	Bal Harbour Shops	0	25	0	0	38	0	0	0	0	0	0	0
	Total	0	63	0	0	65	0	0	0	0	0	0	0
96th Street at Harding Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	Young Isreael	0	0	0	0	0	0	0	0	0	0	0	0
	92nd Street Hotel	0	0	11	0	8	0	0	26	0	0	0	0
	Grand Beach Hotel	0	0	16	0	10	0	0	36	0	0	0	0
	Surf Club	0	0	14	0	8	0	0	32	0	0	0	0
	The Shul	0	0	11	0	9	0	0	32	0	0	0	0
	Bal Harbour Shops	0	0	25	0	38	0	0	25	0	0	0	0
	Total	0	0	77	0	73	0	0	151	0	0	0	0
96th Street at Collins Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	Young Isreael	0	0	0	0	0	0	0	0	0	0	1	0
	92nd Street Hotel	0	0	0	0	0	0	0	0	0	8	19	0
	Grand Beach Hotel	0	0	0	0	0	0	0	0	0	10	23	0
	Surf Club	0	0	0	0	0	0	0	0	0	8	20	0
	The Shul	0	0	0	0	0	0	0	0	0	9	28	0
	Bal Harbour Shops	0	0	0	0	0	0	0	0	0	38	38	0
	Total	0	0	0	0	0	0	0	0	0	73	129	0
95th Street at Harding Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	Young Isreael	0	1	0	0	0	0	0	0	0	0	0	0
	92nd Street Hotel	0	0	0	0	0	0	0	37	0	0	0	0
	Grand Beach Hotel	0	0	0	27	0	0	0	52	0	0	0	0
	Surf Club	0	0	0	0	0	0	0	46	0	0	0	0
	The Shul	0	5	0	52	5	0	42	0	0	0	0	0
	Bal Harbour Shops	0	0	0	0	0	0	0	49	0	0	0	0
	Total	0	6	0	79	5	0	42	184	0	0	0	0
95th Street at Collins Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	Young Isreael	1	0	0	0	0	0	0	0	0	0	0	0
	92nd Street Hotel	0	0	0	0	0	0	0	0	0	0	27	0
	Grand Beach Hotel	0	0	0	0	0	0	0	0	0	27	33	0
	Surf Club	0	0	0	0	0	0	0	0	0	0	28	0
	The Shul	86	0	0	0	0	0	0	0	0	0	58	0
	Bal Harbour Shops	0	0	0	0	0	0	0	0	0	0	77	0
	Total	87	0	0	0	0	0	0	0	0	27	223	0
94th Street at Harding Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	Young Isreael	0	0	0	0	0	0	0	0	0	0	0	0
	92nd Street Hotel	0	0	0	0	0	0	0	37	0	0	0	0
	Grand Beach Hotel	0	0	0	7	0	0	52	27	0	0	0	0
	Surf Club	0	0	0	0	0	0	0	46	0	0	0	0
	The Shul	0	5	0	0	0	0	0	47	5	0	0	0
	Bal Harbour Shops	0	0	0	0	0	0	0	49	0	0	0	0
	Total	0	5	0	7	0	0	52	206	5	0	0	0
94th Street at Collins Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	Young Isreael	0	0	0	0	0	0	0	0	0	0	0	0
	92nd Street Hotel	0	0	0	0	0	0	0	0	0	0	27	0
	Grand Beach Hotel	41	0	0	0	0	0	0	0	0	11	41	0
	Surf Club	0	0	0	0	0	0	0	0	0	0	28	0
	The Shul	5	0	0	0	0	0	0	0	0	0	58	0
	Bal Harbour Shops	0	0	0	0	0	0	0	0	0	0	77	0
	Total	46	0	0	0	0	0	0	0	0	11	231	0

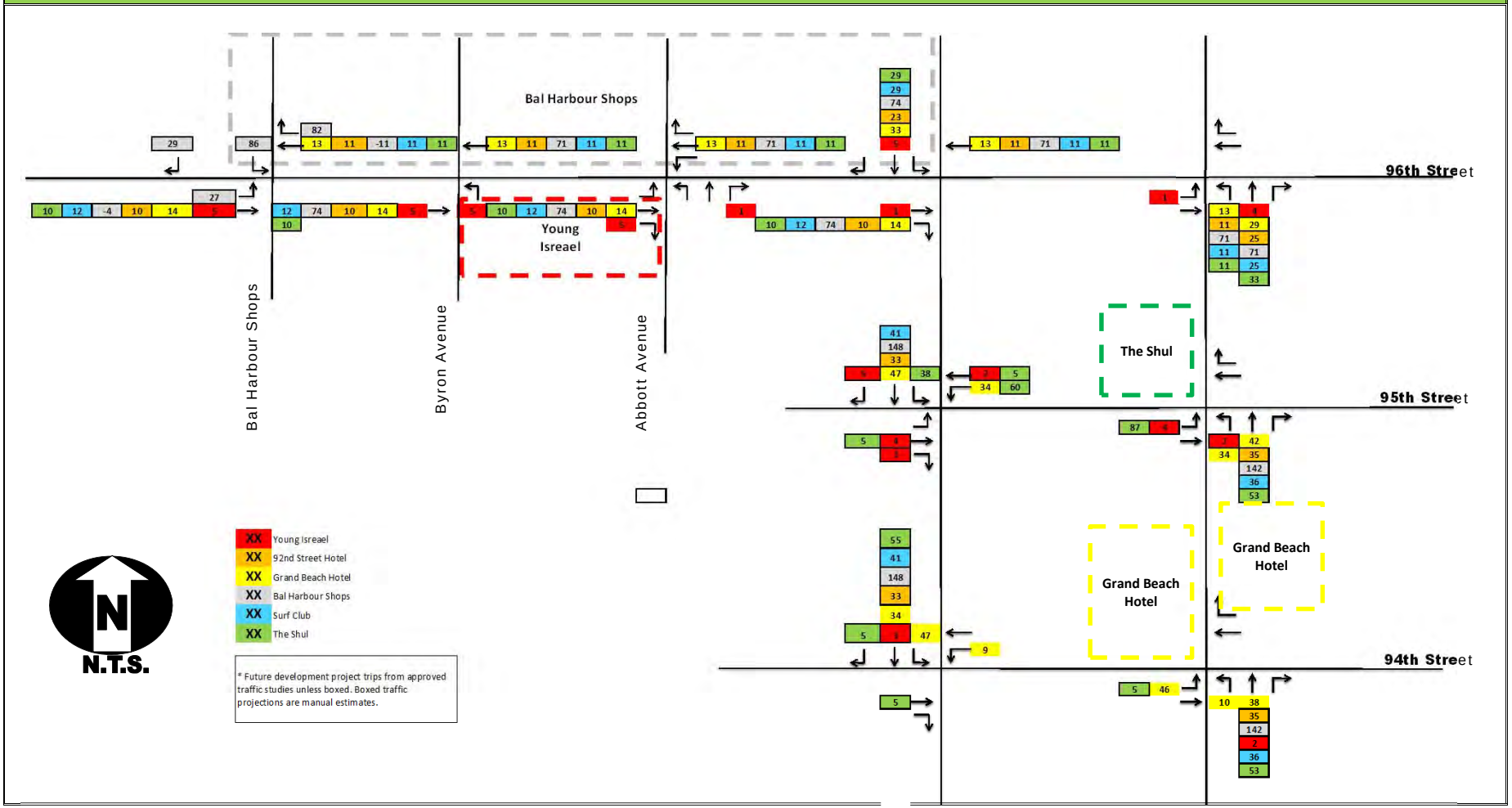
Potential Development Trips (PM Peak Hour)

	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
96th Street at Bal Harbour Shops	Young Isreael	0	5	0	0	0	0	0	0	0	0	0	0
	92nd Street Hotel	0	10	0	0	11	0	0	0	0	0	0	0
	Grand Beach Hotel	0	14	0	0	13	0	0	0	0	0	0	0
	Surf Club	0	12	0	0	11	0	0	0	0	0	0	0
	The Shul	0	10	0	0	11	0	0	0	0	0	0	0
	Bal Harbour Shops	27	-4	0	0	-11	82	86	0	29	0	0	0
	Total	27	47	0	0	35	82	86	0	29	0	0	0
96th Street at Byron Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	Young Isreael	0	5	0	0	0	0	0	0	0	5	0	0
	92nd Street Hotel	0	10	0	0	11	0	0	0	0	0	0	0
	Grand Beach Hotel	0	14	0	0	13	0	0	0	0	0	0	0
	Surf Club	0	0	0	0	0	0	0	0	0	0	0	0
	The Shul	0	10	0	0	11	0	0	0	0	0	0	0
	Bal Harbour Shops	0	74	0	0	71	0	0	0	0	0	0	0
	Total	0	113	0	0	106	0	0	0	0	5	0	0
96th Street at Harding Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	Young Isreael	0	1	0	0	0	0	0	5	0	0	0	0
	92nd Street Hotel	0	0	10	0	11	0	0	23	0	0	0	0
	Grand Beach Hotel	0	0	14	0	13	0	0	33	0	0	0	0
	Surf Club	0	0	12	0	11	0	0	29	0	0	0	0
	The Shul	0	0	10	0	11	0	0	29	0	0	0	0
	Bal Harbour Shops	0	0	74	0	71	0	0	74	0	0	0	0
	Total	0	1	120	0	117	0	0	193	0	0	0	0
96th Street at Collins Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	Young Isreael	1	0	0	0	0	0	0	0	0	0	4	0
	92nd Street Hotel	0	0	0	0	0	0	0	0	0	11	25	0
	Grand Beach Hotel	0	0	0	0	0	0	0	0	0	13	29	0
	Surf Club	0	0	0	0	0	0	0	0	0	11	25	0
	The Shul	0	0	0	0	0	0	0	0	0	11	33	0
	Bal Harbour Shops	0	0	0	0	0	0	0	0	0	71	71	0
	Total	1	0	0	0	0	0	0	0	0	117	187	0
95th Street at Harding Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	Young Isreael	0	4	3	0	2	0	0	0	5	0	0	0
	92nd Street Hotel	0	0	0	0	0	0	0	33	0	0	0	0
	Grand Beach Hotel	0	0	0	34	0	0	0	47	0	0	0	0
	Surf Club	0	0	0	0	0	0	0	41	0	0	0	0
	The Shul	0	5	0	60	5	0	38	0	0	0	0	0
	Bal Harbour Shops	0	0	0	0	0	0	0	148	0	0	0	0
	Total	0	9	3	94	7	0	38	269	5	0	0	0
95th Street at Collins Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	Young Isreael	4	0	0	0	0	0	0	0	0	2	0	0
	92nd Street Hotel	0	0	0	0	0	0	0	0	0	0	35	0
	Grand Beach Hotel	0	0	0	0	0	0	0	0	0	34	42	0
	Surf Club	0	0	0	0	0	0	0	0	0	0	36	0
	The Shul	87	0	0	0	0	0	0	0	0	0	53	0
	Bal Harbour Shops	0	0	0	0	0	0	0	0	0	0	142	0
	Total	91	0	0	0	0	0	0	0	0	36	308	0
94th Street at Harding Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	Young Isreael	0	0	0	0	0	0	0	3	0	0	0	0
	92nd Street Hotel	0	0	0	0	0	0	0	33	0	0	0	0
	Grand Beach Hotel	0	0	0	9	0	0	47	34	0	0	0	0
	Surf Club	0	0	0	0	0	0	0	41	0	0	0	0
	The Shul	0	5	0	0	0	0	0	55	5	0	0	0
	Bal Harbour Shops	0	0	0	0	0	0	0	148	0	0	0	0
	Total	0	5	0	9	0	0	47	314	5	0	0	0
94th Street at Collins Avenue	Scenario	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBT	SBR	NBL	NBT	NBR
	Young Isreael	0	0	0	0	0	0	0	0	0	0	2	0
	92nd Street Hotel	0	0	0	0	0	0	0	0	0	0	35	0
	Grand Beach Hotel	46	0	0	0	0	0	0	0	0	10	38	0
	Surf Club	0	0	0	0	0	0	0	0	0	0	36	0
	The Shul	5	0	0	0	0	0	0	0	0	0	53	0
	Bal Harbour Shops	0	0	0	0	0	0	0	0	0	0	142	0
	Total	51	0	0	0	0	0	0	0	0	10	306	0

Potential Future Development - AM Peak Hour



Potential Future Development - PM Peak Hour



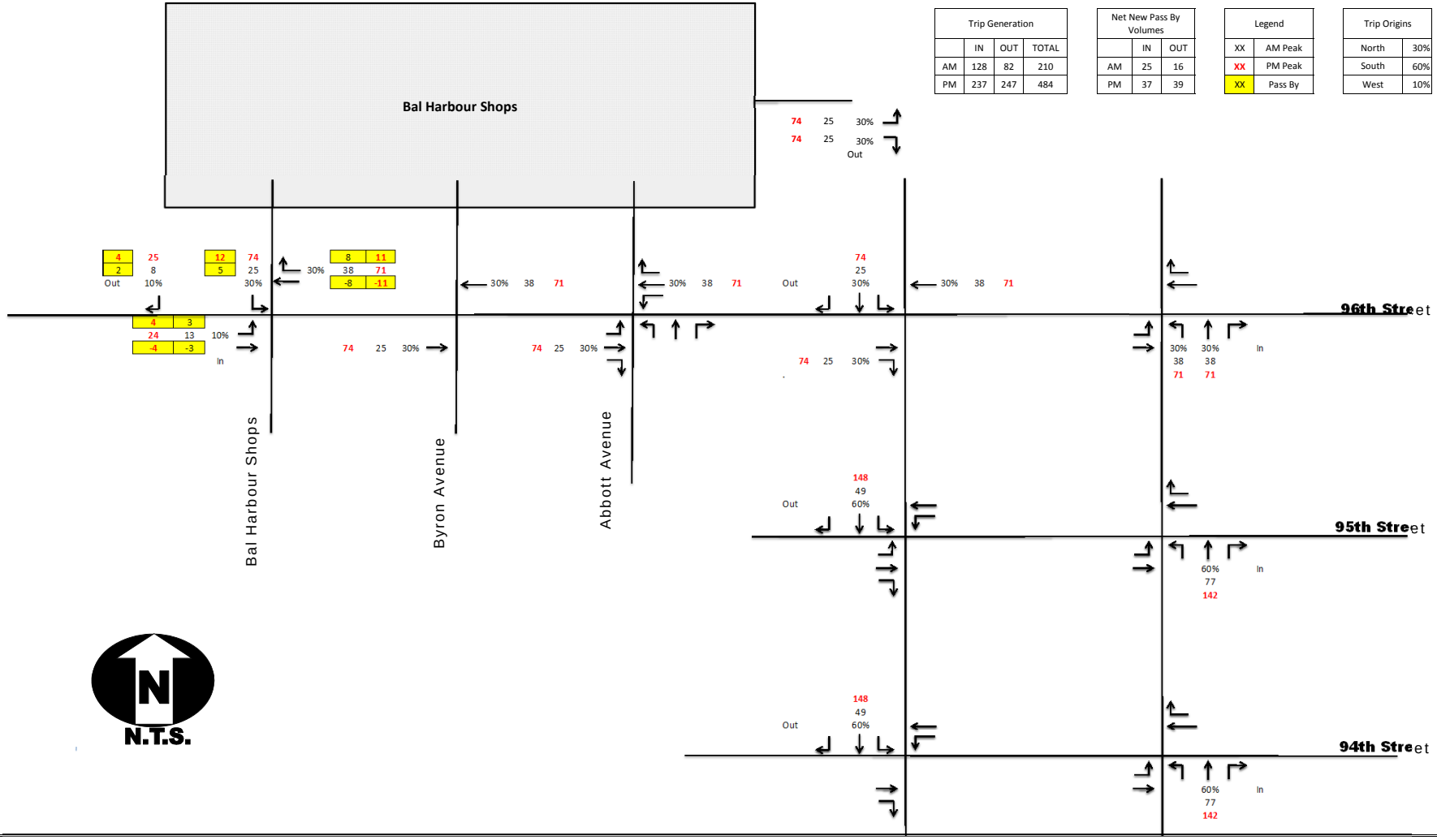
Bal Harbour Shops - Estimated Trip Distribution

Trip Generation			
	IN	OUT	TOTAL
AM	128	82	210
PM	237	247	484

Net New Pass By Volumes		
	IN	OUT
AM	25	16
PM	37	39

Legend	
XX	AM Peak
XX	PM Peak
XX	Pass By

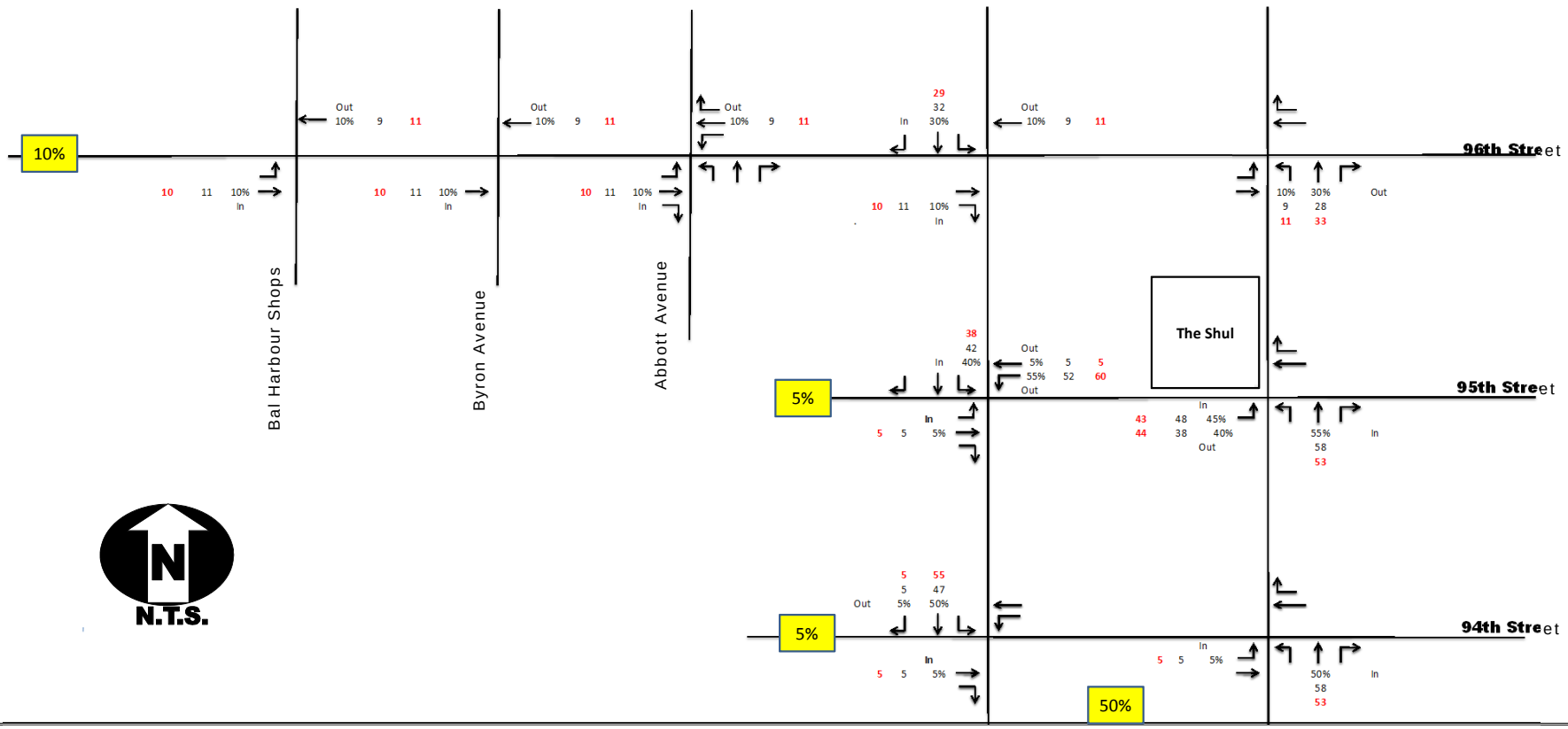
Trip Origins	
North	30%
South	60%
West	10%



Shul - Estimated Trip Distribution

Trip Generation			
	IN	OUT	TOTAL
AM	106	94	200
PM	96	109	205

Legend	
XX	AM Peak
XX	PM Peak



Potential Bal Harbour Shops Mall Expansion - Trip Generation

Land Use	ITE Land Use Code	Intensity		Daily Trips	AM Peak Hour			PM Peak Hour Trips		
					Total	In	Out	Total	In	Out
Proposed Use										
Shopping Center	820	833.829	SF	26,955	834	509	325	2,634	1,291	1,344
Pass By			21%	5,661	175	107	68	553	271	282
Net Trips				21,294	659	402	257	2,081	1,020	1,061
Existing Use										
Shopping Center	820	583.829	SF	21,381	584	356	228	2,075	1,017	1,058
Pass By			23%	4,918	134	82	52	477	234	243
Net Trips				16,463	450	274	175	1,598	783	815
TOTAL NEW PASS BY				743	41	25	16	76	37	39
TOTAL NEW TRIPS				**4,831**	**209**	**128**	**82**	**484**	**237**	**247**

Trip Gen Rates
Daily: Ln(T) = 0.65Ln(X)+5.83
AM Peak: T = 1.0(X), 61% In, 39% Out
PM Peak: Ln(T) = 0.67Ln(X)+3.37, 49% In, 51% Out
Pass By % = Ln(T) = -0.291Ln(X)+5.001

Notes: Existing square footage: 583,829 according to property appraiser

Proposed Shul Daycare

Land Use	ITE Land Use Code	Intensity		Daily Trips	AM Peak Hour			PM Peak Hour Trips		
					Total	In	Out	Total	In	Out
Proposed Use										
Daycare	565	250	Students	1,120	200	106	94	205	96	109
TOTAL NEW TRIPS				**1,120**	**200**	**106**	**94**	**205**	**96**	**109**

Trip Gen Rates
Daily: T = 4.48(X)
AM Peak: T = 0.80(X), 53% In, 47% Out
PM Peak: T = 0.82(X), 47% In, 53% Out

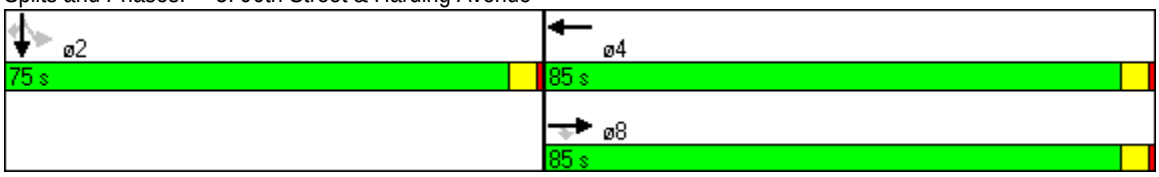
APPENDIX I
2017 CONDITIONS – SYNCHRO PRINTOUTS

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	374	799	0	557	0	0	0	0	103	1621	372
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	10	10	12	12	12	12	12	12
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt		0.941	0.850									0.850
Flt Protected											0.997	
Satd. Flow (prot)	0	1610	1454	0	3303	0	0	0	0	0	5070	1583
Flt Permitted											0.997	
Satd. Flow (perm)	0	1610	1454	0	3303	0	0	0	0	0	5070	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5	5									236
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		556			324			668			466	
Travel Time (s)		12.6			7.4			15.2			10.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	394	841	0	586	0	0	0	0	108	1706	392
Shared Lane Traffic (%)			30%									
Lane Group Flow (vph)	0	646	589	0	586	0	0	0	0	0	1814	392
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.09	1.09	1.09	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type			Perm							Perm		Perm
Protected Phases		8			4						2	
Permitted Phases			8							2		2
Detector Phase		8	8		4					2	2	2
Switch Phase												
Minimum Initial (s)		7.0	7.0		7.0					7.0	7.0	7.0
Minimum Split (s)		21.0	21.0		24.0					29.0	29.0	29.0
Total Split (s)	0.0	85.0	85.0	0.0	85.0	0.0	0.0	0.0	0.0	75.0	75.0	75.0
Total Split (%)	0.0%	53.1%	53.1%	0.0%	53.1%	0.0%	0.0%	0.0%	0.0%	46.9%	46.9%	46.9%
Maximum Green (s)		80.0	80.0		80.0					70.0	70.0	70.0
Yellow Time (s)		4.0	4.0		4.0					4.0	4.0	4.0
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	5.0	4.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0	1.0		1.0					1.0	1.0	1.0
Recall Mode		Max	Max		Max					C-Max	C-Max	C-Max
Walk Time (s)					7.0					7.0	7.0	7.0
Flash Dont Walk (s)					12.0					17.0	17.0	17.0
Pedestrian Calls (#/hr)					47					30	30	30
Act Effct Green (s)		80.0	80.0		80.0						70.0	70.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.50	0.50		0.50						0.44	0.44
v/c Ratio		0.80	0.81		0.35						0.82	0.48
Control Delay		37.3	38.7		59.8						43.2	13.8
Queue Delay		0.6	0.3		202.0						0.0	0.0
Total Delay		37.9	39.0		261.8						43.2	13.8
LOS		D	D		F						D	B
Approach Delay		38.4			261.8						38.0	
Approach LOS		D			F						D	
Queue Length 50th (ft)		424	386		342						603	108
Queue Length 95th (ft)		501	461		407						666	202
Internal Link Dist (ft)		476			244			588			386	
Turn Bay Length (ft)												
Base Capacity (vph)		808	730		1652						2218	825
Starvation Cap Reductn		29	10		1245						0	0
Spillback Cap Reductn		13	12		0						0	0
Storage Cap Reductn		0	0		0						0	0
Reduced v/c Ratio		0.83	0.82		1.44						0.82	0.48

Intersection Summary	
Area Type: Other	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 39 (24%), Referenced to phase 2:SBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 70.7	Intersection LOS: E
Intersection Capacity Utilization 110.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 5: 96th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	374	799	0	557	0	0	0	0	103	1621	372
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	10	10	12	12	12	12	12	12
Total Lost time (s)		5.0	5.0		5.0						5.0	5.0
Lane Util. Factor		0.95	0.95		0.95						0.91	1.00
Frt		0.94	0.85		1.00						1.00	0.85
Flt Protected		1.00	1.00		1.00						1.00	1.00
Satd. Flow (prot)		1611	1454		3303						5070	1583
Flt Permitted		1.00	1.00		1.00						1.00	1.00
Satd. Flow (perm)		1611	1454		3303						5070	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	394	841	0	586	0	0	0	0	108	1706	392
RTOR Reduction (vph)	0	3	3	0	0	0	0	0	0	0	0	133
Lane Group Flow (vph)	0	644	587	0	586	0	0	0	0	0	1814	259
Turn Type			Perm							Perm		Perm
Protected Phases		8			4						2	
Permitted Phases			8							2		2
Actuated Green, G (s)		80.0	80.0		80.0						70.0	70.0
Effective Green, g (s)		80.0	80.0		80.0						70.0	70.0
Actuated g/C Ratio		0.50	0.50		0.50						0.44	0.44
Clearance Time (s)		5.0	5.0		5.0						5.0	5.0
Vehicle Extension (s)		1.0	1.0		1.0						1.0	1.0
Lane Grp Cap (vph)		806	727		1652						2218	693
v/s Ratio Prot		0.40			0.18							
v/s Ratio Perm			c0.40								0.36	0.16
v/c Ratio		0.80	0.81		0.35						0.82	0.37
Uniform Delay, d1		33.3	33.5		24.3						39.4	30.3
Progression Factor		0.88	0.88		2.43						1.00	1.00
Incremental Delay, d2		7.4	8.5		0.4						3.5	1.5
Delay (s)		36.6	38.0		59.4						42.9	31.8
Level of Service		D	D		E						D	C
Approach Delay (s)		37.3			59.4			0.0			40.9	
Approach LOS		D			E			A			D	

Intersection Summary			
HCM Average Control Delay	42.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	110.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	384	9	0	0	3	3	554	1240	8	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	12	12	12	12	12	12
Storage Length (ft)	0		0	0		0	250		0	0		0
Storage Lanes	1		0	0		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Frt					0.932			0.999				
Flt Protected	0.950	0.954					0.950					
Satd. Flow (prot)	1569	1576	0	0	1736	0	1770	5080	0	0	0	0
Flt Permitted	0.950	0.954					0.950					
Satd. Flow (perm)	1569	1576	0	0	1736	0	1770	5080	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3			1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		324			224			667			480	
Travel Time (s)		7.4			5.1			15.2			10.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	404	9	0	0	3	3	583	1305	8	0	0	0
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	206	207	0	0	6	0	583	1313	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split						pm+pt					
Protected Phases	3	3			4		5	2				
Permitted Phases							2					
Detector Phase	3	3			4		5	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			7.0		4.0	4.0				
Minimum Split (s)	22.0	22.0			21.0		11.0	23.0				
Total Split (s)	82.0	82.0	0.0	0.0	12.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0
Total Split (%)	51.3%	51.3%	0.0%	0.0%	7.5%	0.0%	31.3%	31.3%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	77.0	77.0			7.0		45.0	45.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead			Lag		Lag					
Lead-Lag Optimize?	Yes	Yes			Yes		Yes					
Vehicle Extension (s)	2.5	2.5			2.5		2.0	1.0				
Recall Mode	Max	Max			None		C-Max	C-Max				
Walk Time (s)	4.0	4.0						4.0				

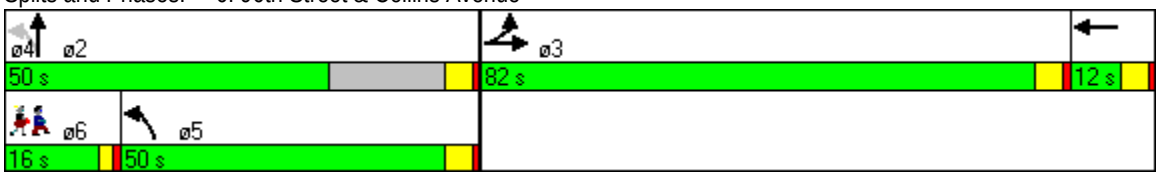
Lane Group	ø6
Lane Configurations	
Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	20.0
Total Split (s)	16.0
Total Split (%)	10%
Maximum Green (s)	13.0
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	4.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	13.0	13.0						7.0				
Pedestrian Calls (#/hr)	28	28						7				
Act Effct Green (s)	77.0	77.0			7.0		70.6	70.6				
Actuated g/C Ratio	0.48	0.48			0.04		0.44	0.44				
v/c Ratio	0.27	0.27			0.08		0.75	0.59				
Control Delay	17.3	17.3			58.5		52.0	42.8				
Queue Delay	1.9	1.9			0.0		190.7	0.5				
Total Delay	19.2	19.2			58.5		242.7	43.3				
LOS	B	B			E		F	D				
Approach Delay		19.2			58.5			104.6				
Approach LOS		B			E			F				
Queue Length 50th (ft)	67	68			3		549	416				
Queue Length 95th (ft)	m109	m109			21		m#757	m513				
Internal Link Dist (ft)		244			144			587			400	
Turn Bay Length (ft)							250					
Base Capacity (vph)	755	758			79		781	2242				
Starvation Cap Reductn	403	406			0		138	437				
Spillback Cap Reductn	0	0			0		370	0				
Storage Cap Reductn	0	0			0		0	0				
Reduced v/c Ratio	0.59	0.59			0.08		1.42	0.73				

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 59 (37%), Referenced to phase 2:NBTL and 5:NBL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.75
Intersection Signal Delay: 89.2 Intersection LOS: F
Intersection Capacity Utilization 110.2% ICU Level of Service H
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: 96th Street & Collins Avenue



Lane Group	ø6
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	3
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	384	9	0	0	3	3	554	1240	8	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	12	12	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			5.0		5.0	5.0				
Lane Util. Factor	0.95	0.95			1.00		1.00	0.91				
Frt	1.00	1.00			0.93		1.00	1.00				
Flt Protected	0.95	0.95			1.00		0.95	1.00				
Satd. Flow (prot)	1569	1576			1737		1770	5081				
Flt Permitted	0.95	0.95			1.00		0.95	1.00				
Satd. Flow (perm)	1569	1576			1737		1770	5081				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	404	9	0	0	3	3	583	1305	8	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	1	0	0	0	0
Lane Group Flow (vph)	206	207	0	0	3	0	583	1312	0	0	0	0
Turn Type	Split						pm+pt					
Protected Phases	3	3			4		5	2				
Permitted Phases							2					
Actuated Green, G (s)	77.0	77.0			1.4		66.6	66.6				
Effective Green, g (s)	77.0	77.0			1.4		66.6	66.6				
Actuated g/C Ratio	0.48	0.48			0.01		0.42	0.42				
Clearance Time (s)	5.0	5.0			5.0		5.0	5.0				
Vehicle Extension (s)	2.5	2.5			2.5		2.0	1.0				
Lane Grp Cap (vph)	755	758			15		737	2115				
v/s Ratio Prot	0.13	c0.13			c0.00		c0.30	0.26				
v/s Ratio Perm							0.03					
v/c Ratio	0.27	0.27			0.20		0.79	0.62				
Uniform Delay, d1	24.8	24.8			78.7		39.2	36.8				
Progression Factor	0.67	0.67			1.00		1.21	1.22				
Incremental Delay, d2	0.5	0.5			4.8		7.3	1.2				
Delay (s)	17.1	17.1			83.5		54.9	45.9				
Level of Service	B	B			F		D	D				
Approach Delay (s)		17.1			83.5			48.7			0.0	
Approach LOS		B			F			D			A	

Intersection Summary			
HCM Average Control Delay	43.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	110.2%	ICU Level of Service	H
Analysis Period (min)	15		

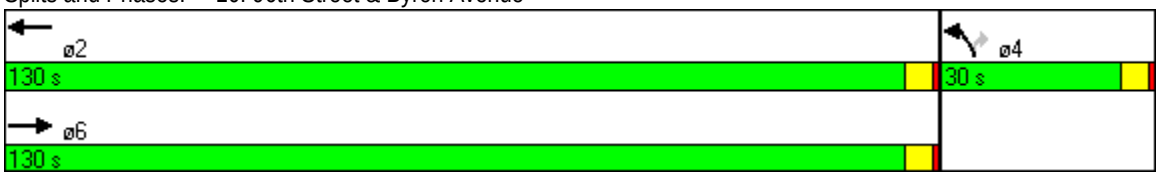
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1254	0	0	887	212	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	1.00
Frt						0.850
Flt Protected					0.950	
Satd. Flow (prot)	3421	0	0	3421	3319	1531
Flt Permitted					0.950	
Satd. Flow (perm)	3421	0	0	3421	3319	1531
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						24
Link Speed (mph)	30			30	30	
Link Distance (ft)	250			556	390	
Travel Time (s)	5.7			12.6	8.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1320	0	0	934	223	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1320	0	0	934	223	24
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	22	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Turn Type						Perm
Protected Phases	6			2	4	
Permitted Phases						4
Detector Phase	6			2	4	4
Switch Phase						
Minimum Initial (s)	15.0			15.0	7.0	7.0
Minimum Split (s)	21.0			21.0	26.0	26.0
Total Split (s)	130.0	0.0	0.0	130.0	30.0	30.0
Total Split (%)	81.3%	0.0%	0.0%	81.3%	18.8%	18.8%
Maximum Green (s)	125.0			125.0	25.0	25.0
Yellow Time (s)	4.0			4.0	4.0	4.0
All-Red Time (s)	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)	5.0	4.0	4.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	1.0			1.0	2.5	2.5
Recall Mode	C-Max			C-Max	None	None
Walk Time (s)					4.0	4.0
Flash Dont Walk (s)					17.0	17.0
Pedestrian Calls (#/hr)					10	10
Act Effct Green (s)	133.5			133.5	16.5	16.5

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Actuated g/C Ratio	0.83			0.83	0.10	0.10
v/c Ratio	0.46			0.33	0.65	0.13
Control Delay	4.2			12.5	77.6	22.0
Queue Delay	0.1			0.2	0.5	0.1
Total Delay	4.3			12.8	78.1	22.1
LOS	A			B	E	C
Approach Delay	4.3			12.8	72.6	
Approach LOS	A			B	E	
Queue Length 50th (ft)	204			370	118	0
Queue Length 95th (ft)	285			414	160	30
Internal Link Dist (ft)	170			476	310	
Turn Bay Length (ft)						
Base Capacity (vph)	2854			2854	519	259
Starvation Cap Reductn	414			1066	0	0
Spillback Cap Reductn	30			33	82	37
Storage Cap Reductn	0			0	0	0
Reduced v/c Ratio	0.54			0.52	0.51	0.11

Intersection Summary	
Area Type: Other	
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 152 (95%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 14.2	Intersection LOS: B
Intersection Capacity Utilization 49.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 10: 96th Street & Byron Avenue



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1254	0	0	887	212	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	5.0			5.0	5.0	5.0
Lane Util. Factor	0.95			0.95	0.97	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	3421			3421	3319	1531
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	3421			3421	3319	1531
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1320	0	0	934	223	24
RTOR Reduction (vph)	0	0	0	0	0	22
Lane Group Flow (vph)	1320	0	0	934	223	2
Turn Type						Perm
Protected Phases	6			2	4	
Permitted Phases						4
Actuated Green, G (s)	133.5			133.5	16.5	16.5
Effective Green, g (s)	133.5			133.5	16.5	16.5
Actuated g/C Ratio	0.83			0.83	0.10	0.10
Clearance Time (s)	5.0			5.0	5.0	5.0
Vehicle Extension (s)	1.0			1.0	2.5	2.5
Lane Grp Cap (vph)	2854			2854	342	158
v/s Ratio Prot	c0.39			0.27	c0.07	
v/s Ratio Perm						0.00
v/c Ratio	0.46			0.33	0.65	0.02
Uniform Delay, d1	3.6			3.0	69.0	64.5
Progression Factor	0.95			3.74	1.00	1.00
Incremental Delay, d2	0.5			0.3	3.9	0.0
Delay (s)	3.9			11.6	72.9	64.5
Level of Service	A			B	E	E
Approach Delay (s)	3.9			11.6	72.1	
Approach LOS	A			B	E	

Intersection Summary			
HCM Average Control Delay	13.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	49.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

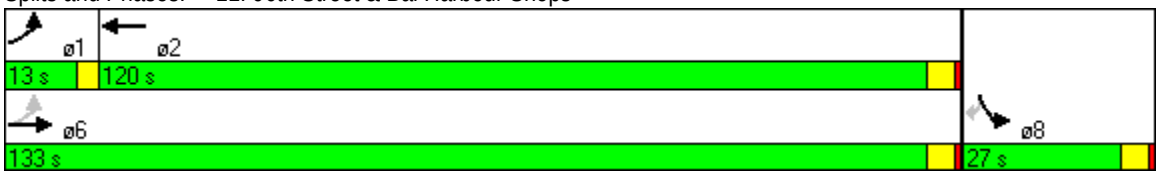
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	75	1258	1043	92	36	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	2	1
Taper Length (ft)	25			25	25	25
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	0.91
Frt			0.988		0.992	0.850
Flt Protected	0.950				0.955	
Satd. Flow (prot)	1711	3421	3380	0	3309	1393
Flt Permitted	0.215				0.955	
Satd. Flow (perm)	387	3421	3380	0	3309	1393
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			15		2	18
Link Speed (mph)		30	30		30	
Link Distance (ft)		494	250		351	
Travel Time (s)		11.2	5.7		8.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	79	1324	1098	97	38	20
Shared Lane Traffic (%)						10%
Lane Group Flow (vph)	79	1324	1195	0	40	18
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		22	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt					Perm
Protected Phases	1	6	2		8	
Permitted Phases	6					8
Detector Phase	1	6	2		8	8
Switch Phase						
Minimum Initial (s)	5.0	15.0	15.0		7.0	7.0
Minimum Split (s)	19.0	21.0	21.0		23.0	23.0
Total Split (s)	13.0	133.0	120.0	0.0	27.0	27.0
Total Split (%)	8.1%	83.1%	75.0%	0.0%	16.9%	16.9%
Maximum Green (s)	10.0	128.0	115.0		22.0	22.0
Yellow Time (s)	3.0	4.0	4.0		4.0	4.0
All-Red Time (s)	0.0	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)	3.0	5.0	5.0	4.0	5.0	5.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	2.0	1.0	1.0		2.5	2.5
Recall Mode	None	C-Max	C-Max		None	None
Walk Time (s)					4.0	4.0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Flash Dont Walk (s)					14.0	14.0
Pedestrian Calls (#/hr)					5	5
Act Effct Green (s)	145.1	144.1	134.7		9.3	9.3
Actuated g/C Ratio	0.91	0.90	0.84		0.06	0.06
v/c Ratio	0.20	0.43	0.42		0.21	0.18
Control Delay	2.4	2.4	3.8		69.0	29.4
Queue Delay	0.0	0.0	0.3		0.0	0.0
Total Delay	2.4	2.4	4.0		69.0	29.4
LOS	A	A	A		E	C
Approach Delay		2.4	4.0		56.7	
Approach LOS		A	A		E	
Queue Length 50th (ft)	5	87	150		20	0
Queue Length 95th (ft)	20	202	171		39	29
Internal Link Dist (ft)		414	170		271	
Turn Bay Length (ft)	100					
Base Capacity (vph)	433	3081	2847		457	207
Starvation Cap Reductn	0	0	832		0	0
Spillback Cap Reductn	0	230	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.18	0.46	0.59		0.09	0.09

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 153 (96%), Referenced to phase 2:WBT and 6:EBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.43
Intersection Signal Delay: 4.3 — Intersection LOS: A
Intersection Capacity Utilization 53.4% — ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 11: 96th Street & Bal Harbour Shops



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	75	1258	1043	92	36	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	3.0	5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	0.95	0.95		0.97	0.91
Frt	1.00	1.00	0.99		0.99	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1711	3421	3380		3310	1393
Flt Permitted	0.21	1.00	1.00		0.95	1.00
Satd. Flow (perm)	387	3421	3380		3310	1393
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	79	1324	1098	97	38	20
RTOR Reduction (vph)	0	0	2	0	2	17
Lane Group Flow (vph)	79	1324	1193	0	38	1
Turn Type	pm+pt					Perm
Protected Phases	1	6	2		8	
Permitted Phases	6					8
Actuated Green, G (s)	142.1	142.1	133.7		7.9	7.9
Effective Green, g (s)	142.1	142.1	133.7		7.9	7.9
Actuated g/C Ratio	0.89	0.89	0.84		0.05	0.05
Clearance Time (s)	3.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)	2.0	1.0	1.0		2.5	2.5
Lane Grp Cap (vph)	388	3038	2824		163	69
v/s Ratio Prot	0.01	c0.39	0.35		c0.01	
v/s Ratio Perm	0.17					0.00
v/c Ratio	0.20	0.44	0.42		0.23	0.01
Uniform Delay, d1	1.6	1.6	3.3		73.1	72.3
Progression Factor	1.00	1.00	0.90		1.00	1.00
Incremental Delay, d2	0.1	0.5	0.4		0.5	0.1
Delay (s)	1.7	2.1	3.4		73.7	72.4
Level of Service	A	A	A		E	E
Approach Delay (s)		2.1	3.4		73.3	
Approach LOS		A	A		E	

Intersection Summary			
HCM Average Control Delay	4.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

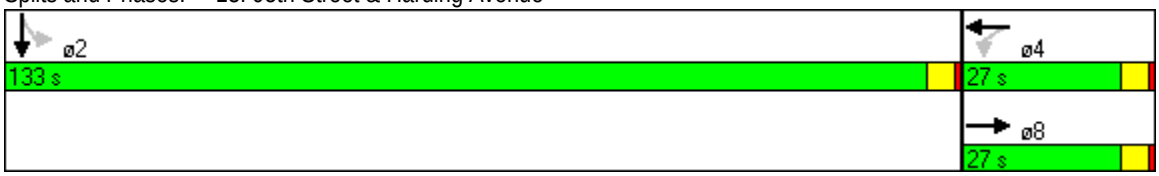
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	34	183	133	56	0	0	0	0	103	1965	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.886									0.997	
Flt Protected					0.966						0.998	
Satd. Flow (prot)	0	1650	0	0	1799	0	0	0	0	0	4723	0
Flt Permitted					0.205						0.998	
Satd. Flow (perm)	0	1650	*1	0	382	0	0	0	0	0	4723	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)											5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		261			299			655			668	
Travel Time (s)		5.9			6.8			14.9			15.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)											20	
Adj. Flow (vph)	0	36	193	140	59	0	0	0	0	108	2068	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	229	0	0	199	0	0	0	0	0	2213	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Detector Phase		8		4	4					2	2	
Switch Phase												
Minimum Initial (s)		7.0		7.0	7.0					7.0	7.0	
Minimum Split (s)		27.0		27.0	27.0					25.0	25.0	
Total Split (s)	0.0	27.0	0.0	27.0	27.0	0.0	0.0	0.0	0.0	133.0	133.0	0.0
Total Split (%)	0.0%	16.9%	0.0%	16.9%	16.9%	0.0%	0.0%	0.0%	0.0%	83.1%	83.1%	0.0%
Maximum Green (s)		22.0		22.0	22.0					128.0	128.0	
Yellow Time (s)		4.0		4.0	4.0					4.0	4.0	
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0		1.0	1.0					1.0	1.0	
Recall Mode		Max		Max	Max					C-Max	C-Max	
Walk Time (s)		7.0		7.0	7.0					7.0	7.0	
Flash Dont Walk (s)		15.0		15.0	15.0					13.0	13.0	
Pedestrian Calls (#/hr)		15		6	6					21	21	
Act Effct Green (s)		22.0			22.0						128.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.14			0.14						0.80	
v/c Ratio		1.01			3.75						0.59	
Control Delay		128.6			1299.9						15.7	
Queue Delay		203.2			0.0						1.4	
Total Delay		331.8			1299.9						17.1	
LOS		F			F						B	
Approach Delay		331.8			1299.9						17.1	
Approach LOS		F			F						B	
Queue Length 50th (ft)		~246			~380						500	
Queue Length 95th (ft)		#430			#548						554	
Internal Link Dist (ft)		181			219			575			588	
Turn Bay Length (ft)												
Base Capacity (vph)		227			53						3779	
Starvation Cap Reductn		0			0						1279	
Spillback Cap Reductn		75			0						20	
Storage Cap Reductn		0			0						0	
Reduced v/c Ratio		1.51			3.75						0.89	

Intersection Summary	
Area Type:	Other
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 98 (61%), Referenced to phase 2:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 3.75	
Intersection Signal Delay: 141.0	Intersection LOS: F
Intersection Capacity Utilization 76.7%	ICU Level of Service D
Analysis Period (min) 15	

* User Entered Value
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: 95th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	34	183	133	56	0	0	0	0	103	1965	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.89			1.00						1.00	
Flt Protected		1.00			0.97						1.00	
Satd. Flow (prot)		1651			1799						4723	
Flt Permitted		1.00			0.20						1.00	
Satd. Flow (perm)		1651			382						4723	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	36	193	140	59	0	0	0	0	108	2068	37
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	1	0
Lane Group Flow (vph)	0	229	0	0	199	0	0	0	0	0	2212	0
Parking (#/hr)											20	
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		22.0			22.0						128.0	
Effective Green, g (s)		22.0			22.0						128.0	
Actuated g/C Ratio		0.14			0.14						0.80	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		1.0			1.0						1.0	
Lane Grp Cap (vph)		227			53						3778	
v/s Ratio Prot		0.14										
v/s Ratio Perm					c0.52						0.47	
v/c Ratio		1.01			3.75						0.59	
Uniform Delay, d1		69.0			69.0						6.0	
Progression Factor		1.00			1.03						2.52	
Incremental Delay, d2		62.0			1283.2						0.4	
Delay (s)		131.0			1354.4						15.5	
Level of Service		F			F						B	
Approach Delay (s)		131.0			1354.4			0.0			15.5	
Approach LOS		F			F			A			B	

Intersection Summary			
HCM Average Control Delay	126.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	76.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	161	3	0	0	7	7	107	1818	7	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Frt					0.932			0.999				
Flt Protected		0.953						0.997				
Satd. Flow (prot)	0	1775	0	0	1736	0	0	5065	0	0	0	0
Flt Permitted		0.720						0.997				
Satd. Flow (perm)	0	1341	0	0	1736	0	0	5065	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					7			1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		299			255			652			667	
Travel Time (s)		6.8			5.8			14.8			15.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	169	3	0	0	7	7	113	1914	7	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	172	0	0	14	0	0	2034	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Detector Phase	4	4			8		2	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		7.0	7.0				
Minimum Split (s)	25.0	25.0			25.0		26.0	26.0				
Total Split (s)	25.0	25.0	0.0	0.0	25.0	0.0	135.0	135.0	0.0	0.0	0.0	0.0
Total Split (%)	15.6%	15.6%	0.0%	0.0%	15.6%	0.0%	84.4%	84.4%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	20.0	20.0			20.0		130.0	130.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5			2.5		2.5	2.5				
Recall Mode	Max	Max			Max		C-Max	C-Max				
Walk Time (s)	4.0	4.0			4.0		7.0	7.0				
Flash Dont Walk (s)	16.0	16.0			16.0		14.0	14.0				
Pedestrian Calls (#/hr)	19	19			7		18	18				
Act Effct Green (s)		20.0			20.0			130.0				
Actuated g/C Ratio		0.12			0.12			0.81				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		1.02			0.06			0.49				
Control Delay		138.8			42.2			1.8				
Queue Delay		0.0			0.0			0.0				
Total Delay		138.8			42.2			1.9				
LOS		F			D			A				
Approach Delay		138.8			42.2			1.9				
Approach LOS		F			D			A				
Queue Length 50th (ft)		~193			7			54				
Queue Length 95th (ft)		m#325			30			58				
Internal Link Dist (ft)		219			175			572			587	
Turn Bay Length (ft)												
Base Capacity (vph)		168			223			4116				
Starvation Cap Reductn		0			0			147				
Spillback Cap Reductn		0			0			164				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		1.02			0.06			0.51				

Intersection Summary

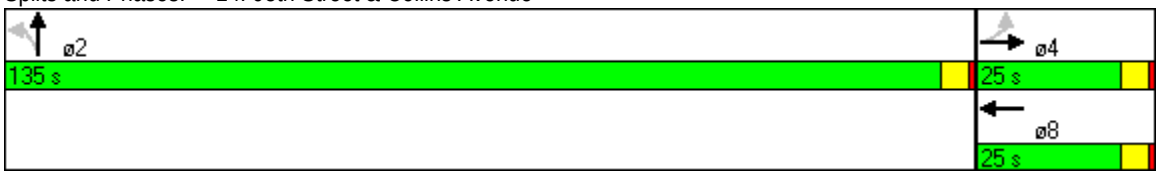
Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 108 (68%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.02
Intersection Signal Delay: 12.7 Intersection LOS: B
Intersection Capacity Utilization 61.5% ICU Level of Service B
Analysis Period (min) 15

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

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

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

Splits and Phases: 14: 95th Street & Collins Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	161	3	0	0	7	7	107	1818	7	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.93			1.00				
Flt Protected		0.95			1.00			1.00				
Satd. Flow (prot)		1776			1737			5069				
Flt Permitted		0.72			1.00			1.00				
Satd. Flow (perm)		1341			1737			5069				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	169	3	0	0	7	7	113	1914	7	0	0	0
RTOR Reduction (vph)	0	0	0	0	6	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	172	0	0	8	0	0	2034	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		20.0			20.0			130.0				
Effective Green, g (s)		20.0			20.0			130.0				
Actuated g/C Ratio		0.12			0.12			0.81				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		2.5			2.5			2.5				
Lane Grp Cap (vph)		168			217			4119				
v/s Ratio Prot					0.00							
v/s Ratio Perm		c0.13						0.40				
v/c Ratio		1.02			0.04			0.49				
Uniform Delay, d1		70.0			61.5			4.7				
Progression Factor		1.06			1.00			0.31				
Incremental Delay, d2		69.2			0.3			0.4				
Delay (s)		143.3			61.8			1.8				
Level of Service		F			E			A				
Approach Delay (s)		143.3			61.8			1.8			0.0	
Approach LOS		F			E			A			A	

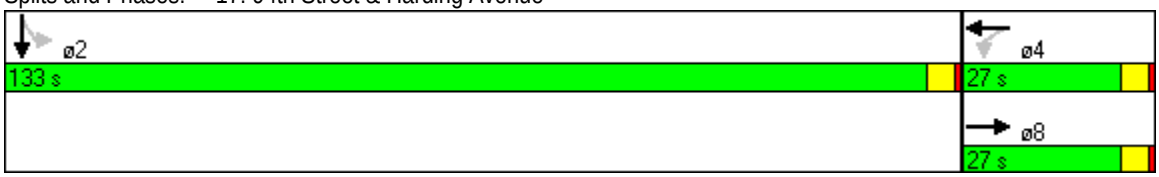
Intersection Summary			
HCM Average Control Delay	13.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	61.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	17	72	41	77	0	0	0	0	107	2131	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.891									0.995	
Flt Protected					0.983						0.998	
Satd. Flow (prot)	0	1660	0	0	1831	0	0	0	0	0	4713	0
Flt Permitted					0.794						0.998	
Satd. Flow (perm)	0	1660	0	0	1479	0	0	0	0	0	4713	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)											11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			299			894			655	
Travel Time (s)		6.0			6.8			20.3			14.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)											20	
Adj. Flow (vph)	0	18	76	43	81	0	0	0	0	113	2243	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	94	0	0	124	0	0	0	0	0	2434	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Detector Phase		8		4	4					2	2	
Switch Phase												
Minimum Initial (s)		7.0		7.0	7.0					7.0	7.0	
Minimum Split (s)		27.0		27.0	27.0					25.0	25.0	
Total Split (s)	0.0	27.0	0.0	27.0	27.0	0.0	0.0	0.0	0.0	133.0	133.0	0.0
Total Split (%)	0.0%	16.9%	0.0%	16.9%	16.9%	0.0%	0.0%	0.0%	0.0%	83.1%	83.1%	0.0%
Maximum Green (s)		22.0		22.0	22.0					128.0	128.0	
Yellow Time (s)		4.0		4.0	4.0					4.0	4.0	
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0		1.0	1.0					1.0	1.0	
Recall Mode		Max		Max	Max					C-Max	C-Max	
Walk Time (s)		7.0		7.0	7.0					7.0	7.0	
Flash Dont Walk (s)		15.0		15.0	15.0					13.0	13.0	
Pedestrian Calls (#/hr)		6		52	52					10	10	
Act Effct Green (s)		22.0			22.0						128.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.14			0.14						0.80	
v/c Ratio		0.41			0.61						0.65	
Control Delay		69.2			82.7						5.1	
Queue Delay		0.0			2.0						0.0	
Total Delay		69.2			84.7						5.2	
LOS		E			F						A	
Approach Delay		69.2			84.7						5.2	
Approach LOS		E			F						A	
Queue Length 50th (ft)		91			132						254	
Queue Length 95th (ft)		155			201						m237	
Internal Link Dist (ft)		186			219			814			575	
Turn Bay Length (ft)												
Base Capacity (vph)		228			203						3773	
Starvation Cap Reductn		0			21						128	
Spillback Cap Reductn		0			0						0	
Storage Cap Reductn		0			0						0	
Reduced v/c Ratio		0.41			0.68						0.67	

Intersection Summary	
Area Type:	Other
Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 91 (57%), Referenced to phase 2:SBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 66.3%	ICU Level of Service C
Analysis Period (min) 15	
m Volume for 95th percentile queue is metered by upstream signal.	

Splits and Phases: 17: 94th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	17	72	41	77	0	0	0	0	107	2131	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.89			1.00						1.00	
Flt Protected		1.00			0.98						1.00	
Satd. Flow (prot)		1659			1831						4713	
Flt Permitted		1.00			0.79						1.00	
Satd. Flow (perm)		1659			1479						4713	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	18	76	43	81	0	0	0	0	113	2243	78
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	94	0	0	124	0	0	0	0	0	2432	0
Parking (#/hr)											20	
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		22.0			22.0						128.0	
Effective Green, g (s)		22.0			22.0						128.0	
Actuated g/C Ratio		0.14			0.14						0.80	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		1.0			1.0						1.0	
Lane Grp Cap (vph)		228			203						3770	
v/s Ratio Prot		0.06										
v/s Ratio Perm					c0.08						0.52	
v/c Ratio		0.41			0.61						0.65	
Uniform Delay, d1		63.1			65.0						6.6	
Progression Factor		1.00			1.07						0.69	
Incremental Delay, d2		5.4			12.0						0.5	
Delay (s)		68.5			81.7						5.1	
Level of Service		E			F						A	
Approach Delay (s)		68.5			81.7			0.0			5.1	
Approach LOS		E			F			A			A	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	66.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

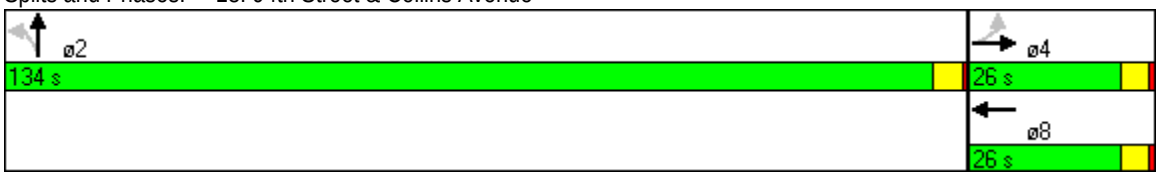
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	1	0	0	8	11	100	1834	3	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Frt					0.919							
Flt Protected		0.953						0.997				
Satd. Flow (prot)	0	1775	0	0	1712	0	0	5070	0	0	0	0
Flt Permitted		0.714						0.997				
Satd. Flow (perm)	0	1330	0	0	1712	0	0	5070	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					12							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		299			236			993			652	
Travel Time (s)		6.8			5.4			22.6			14.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	100	1	0	0	8	12	105	1931	3	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	101	0	0	20	0	0	2039	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Detector Phase	4	4			8		2	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		7.0	7.0				
Minimum Split (s)	26.0	26.0			26.0		26.0	26.0				
Total Split (s)	26.0	26.0	0.0	0.0	26.0	0.0	134.0	134.0	0.0	0.0	0.0	0.0
Total Split (%)	16.3%	16.3%	0.0%	0.0%	16.3%	0.0%	83.8%	83.8%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	21.0	21.0			21.0		129.0	129.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5			2.5		1.0	1.0				
Recall Mode	Max	Max			Max		C-Max	C-Max				
Walk Time (s)	4.0	4.0			4.0		7.0	7.0				
Flash Dont Walk (s)	17.0	17.0			17.0		14.0	14.0				
Pedestrian Calls (#/hr)	42	42			9		10	10				
Act Effct Green (s)		21.0			21.0			129.0				
Actuated g/C Ratio		0.13			0.13			0.81				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.58			0.09			0.50				
Control Delay		91.1			36.3			5.5				
Queue Delay		0.0			0.1			0.0				
Total Delay		91.1			36.3			5.5				
LOS		F			D			A				
Approach Delay		91.1			36.3			5.5				
Approach LOS		F			D			A				
Queue Length 50th (ft)		107			7			217				
Queue Length 95th (ft)		m172			36			237				
Internal Link Dist (ft)		219			156			913			572	
Turn Bay Length (ft)												
Base Capacity (vph)		175			235			4088				
Starvation Cap Reductn		0			0			0				
Spillback Cap Reductn		0			20			5				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.58			0.09			0.50				

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 97 (61%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.58
Intersection Signal Delay: 9.8 Intersection LOS: A
Intersection Capacity Utilization 57.8% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 18: 94th Street & Collins Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	1	0	0	8	11	100	1834	3	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.92			1.00				
Flt Protected		0.95			1.00			1.00				
Satd. Flow (prot)		1775			1712			5071				
Flt Permitted		0.71			1.00			1.00				
Satd. Flow (perm)		1330			1712			5071				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	100	1	0	0	8	12	105	1931	3	0	0	0
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	101	0	0	10	0	0	2039	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		21.0			21.0			129.0				
Effective Green, g (s)		21.0			21.0			129.0				
Actuated g/C Ratio		0.13			0.13			0.81				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		2.5			2.5			1.0				
Lane Grp Cap (vph)		175			225			4088				
v/s Ratio Prot					0.01							
v/s Ratio Perm		c0.08						0.40				
v/c Ratio		0.58			0.04			0.50				
Uniform Delay, d1		65.3			60.7			5.0				
Progression Factor		1.21			1.00			1.00				
Incremental Delay, d2		10.5			0.4			0.4				
Delay (s)		89.9			61.1			5.5				
Level of Service		F			E			A				
Approach Delay (s)		89.9			61.1			5.5			0.0	
Approach LOS		F			E			A			A	

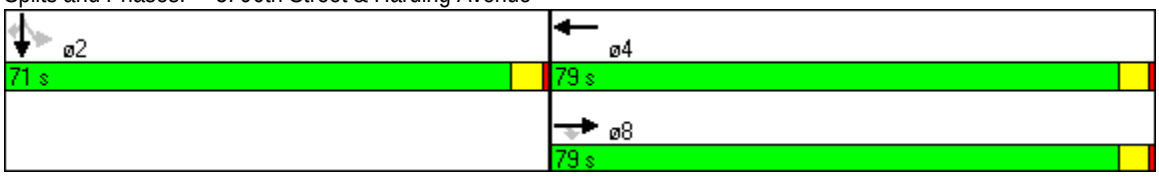
Intersection Summary			
HCM Average Control Delay	9.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	57.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	365	767	0	603	0	0	0	0	41	1481	298
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	10	10	12	12	12	12	12	12
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt		0.942	0.850									0.850
Flt Protected											0.999	
Satd. Flow (prot)	0	1611	1454	0	3303	0	0	0	0	0	5080	1583
Flt Permitted											0.999	
Satd. Flow (perm)	0	1611	1454	0	3303	0	0	0	0	0	5080	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8	8									199
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		556			324			668			466	
Travel Time (s)		12.6			7.4			15.2			10.6	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	388	816	0	641	0	0	0	0	44	1576	317
Shared Lane Traffic (%)			30%									
Lane Group Flow (vph)	0	633	571	0	641	0	0	0	0	0	1620	317
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.09	1.09	1.09	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type			Perm							Perm		Perm
Protected Phases		8			4						2	
Permitted Phases			8							2		2
Detector Phase		8	8		4					2	2	2
Switch Phase												
Minimum Initial (s)		7.0	7.0		7.0					7.0	7.0	7.0
Minimum Split (s)		21.0	21.0		24.0					29.0	29.0	29.0
Total Split (s)	0.0	79.0	79.0	0.0	79.0	0.0	0.0	0.0	0.0	71.0	71.0	71.0
Total Split (%)	0.0%	52.7%	52.7%	0.0%	52.7%	0.0%	0.0%	0.0%	0.0%	47.3%	47.3%	47.3%
Maximum Green (s)		74.0	74.0		74.0					66.0	66.0	66.0
Yellow Time (s)		4.0	4.0		4.0					4.0	4.0	4.0
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	5.0	4.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0	1.0		1.0					1.0	1.0	1.0
Recall Mode		Max	Max		Max					C-Max	C-Max	C-Max
Walk Time (s)					7.0					7.0	7.0	7.0
Flash Dont Walk (s)					12.0					17.0	17.0	17.0
Pedestrian Calls (#/hr)					21					65	65	65
Act Effct Green (s)		74.0	74.0		74.0						66.0	66.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.49	0.49		0.49						0.44	0.44
v/c Ratio		0.79	0.79		0.39						0.72	0.39
Control Delay		35.5	36.3		43.7						36.9	11.4
Queue Delay		0.9	0.3		193.3						0.0	0.0
Total Delay		36.4	36.7		237.1						36.9	11.4
LOS		D	D		F						D	B
Approach Delay		36.5			237.1						32.7	
Approach LOS		D			F						C	
Queue Length 50th (ft)		371	334		341						472	70
Queue Length 95th (ft)		510	470		406						530	147
Internal Link Dist (ft)		476			244			588			386	
Turn Bay Length (ft)												
Base Capacity (vph)		799	721		1629						2235	808
Starvation Cap Reductn		40	14		1178						0	0
Spillback Cap Reductn		0	0		0						0	0
Storage Cap Reductn		0	0		0						0	0
Reduced v/c Ratio		0.83	0.81		1.42						0.72	0.39

Intersection Summary	
Area Type: Other	
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 57 (38%), Referenced to phase 2:SBTL, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 68.6	Intersection LOS: E
Intersection Capacity Utilization 108.3%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 5: 96th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	365	767	0	603	0	0	0	0	41	1481	298
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	10	10	12	12	12	12	12	12
Total Lost time (s)		5.0	5.0		5.0						5.0	5.0
Lane Util. Factor		0.95	0.95		0.95						0.91	1.00
Frt		0.94	0.85		1.00						1.00	0.85
Flt Protected		1.00	1.00		1.00						1.00	1.00
Satd. Flow (prot)		1611	1454		3303						5078	1583
Flt Permitted		1.00	1.00		1.00						1.00	1.00
Satd. Flow (perm)		1611	1454		3303						5078	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	388	816	0	641	0	0	0	0	44	1576	317
RTOR Reduction (vph)	0	4	4	0	0	0	0	0	0	0	0	111
Lane Group Flow (vph)	0	629	567	0	641	0	0	0	0	0	1620	206
Turn Type			Perm							Perm		Perm
Protected Phases		8			4						2	
Permitted Phases			8							2		2
Actuated Green, G (s)		74.0	74.0		74.0						66.0	66.0
Effective Green, g (s)		74.0	74.0		74.0						66.0	66.0
Actuated g/C Ratio		0.49	0.49		0.49						0.44	0.44
Clearance Time (s)		5.0	5.0		5.0						5.0	5.0
Vehicle Extension (s)		1.0	1.0		1.0						1.0	1.0
Lane Grp Cap (vph)		795	717		1629						2234	697
v/s Ratio Prot		c0.39			0.19							
v/s Ratio Perm			0.39								0.32	0.13
v/c Ratio		0.79	0.79		0.39						0.73	0.29
Uniform Delay, d1		31.6	31.6		23.9						34.5	27.0
Progression Factor		0.88	0.88		1.79						1.00	1.00
Incremental Delay, d2		7.3	8.0		0.6						2.1	1.1
Delay (s)		34.9	35.8		43.4						36.6	28.1
Level of Service		C	D		D						D	C
Approach Delay (s)		35.3			43.4			0.0			35.2	
Approach LOS		D			D			A			D	

Intersection Summary			
HCM Average Control Delay	36.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	108.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	413	18	0	0	16	12	560	1731	17	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	12	12	12	12	12	12
Storage Length (ft)	0		0	0		0	250		0	0		0
Storage Lanes	1		0	0		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Frt					0.942			0.999				
Flt Protected	0.950	0.956					0.950					
Satd. Flow (prot)	1569	1579	0	0	1755	0	1770	5080	0	0	0	0
Flt Permitted	0.950	0.956					0.950					
Satd. Flow (perm)	1569	1579	0	0	1755	0	1770	5080	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					12			1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		324			224			667			480	
Travel Time (s)		7.4			5.1			15.2			10.9	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	426	19	0	0	16	12	577	1785	18	0	0	0
Shared Lane Traffic (%)	48%											
Lane Group Flow (vph)	222	223	0	0	28	0	577	1803	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split						pm+pt					
Protected Phases	3	3			4		5	2				
Permitted Phases							2					
Detector Phase	3	3			4		5	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			7.0		4.0	4.0				
Minimum Split (s)	22.0	22.0			21.0		11.0	23.0				
Total Split (s)	67.0	67.0	0.0	0.0	12.0	0.0	55.0	55.0	0.0	0.0	0.0	0.0
Total Split (%)	44.7%	44.7%	0.0%	0.0%	8.0%	0.0%	36.7%	36.7%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	62.0	62.0			7.0		50.0	50.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead			Lag		Lag					
Lead-Lag Optimize?	Yes	Yes			Yes		Yes					
Vehicle Extension (s)	2.5	2.5			2.5		2.0	1.0				
Recall Mode	Max	Max			None		C-Max	C-Max				
Walk Time (s)	4.0	4.0						4.0				

Lane Group	ø6
Lane Configurations	
Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	20.0
Total Split (s)	16.0
Total Split (%)	11%
Maximum Green (s)	13.0
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	4.0

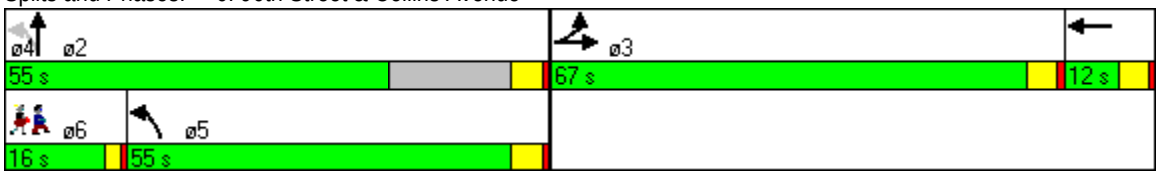
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	13.0	13.0						7.0				
Pedestrian Calls (#/hr)	31	31						5				
Act Effct Green (s)	62.0	62.0			7.0		70.8	70.8				
Actuated g/C Ratio	0.41	0.41			0.05		0.47	0.47				
v/c Ratio	0.34	0.34			0.30		0.69	0.75				
Control Delay	14.1	14.0			54.7		41.9	41.8				
Queue Delay	1.9	1.9			0.2		124.6	3.4				
Total Delay	16.0	16.0			54.9		166.5	45.1				
LOS	B	B			D		F	D				
Approach Delay		16.0			54.9			74.6				
Approach LOS		B			D			E				
Queue Length 50th (ft)	55	56			15		578	660				
Queue Length 95th (ft)	m87	m88			51		m653	714				
Internal Link Dist (ft)		244			144			587			400	
Turn Bay Length (ft)							250					
Base Capacity (vph)	649	653			93		835	2398				
Starvation Cap Reductn	288	291			0		193	487				
Spillback Cap Reductn	0	0			3		380	0				
Storage Cap Reductn	0	0			0		0	0				
Reduced v/c Ratio	0.61	0.62			0.31		1.27	0.94				

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 85 (57%), Referenced to phase 2:NBTL and 5:NBL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.75
Intersection Signal Delay: 65.2 Intersection LOS: E
Intersection Capacity Utilization 108.3% ICU Level of Service G
Analysis Period (min) 15

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

Splits and Phases: 6: 96th Street & Collins Avenue



Lane Group	ø6
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	8
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	413	18	0	0	16	12	560	1731	17	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	12	12	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			5.0		5.0	5.0				
Lane Util. Factor	0.95	0.95			1.00		1.00	0.91				
Frt	1.00	1.00			0.94		1.00	1.00				
Flt Protected	0.95	0.96			1.00		0.95	1.00				
Satd. Flow (prot)	1569	1579			1755		1770	5078				
Flt Permitted	0.95	0.96			1.00		0.95	1.00				
Satd. Flow (perm)	1569	1579			1755		1770	5078				
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	426	19	0	0	16	12	577	1785	18	0	0	0
RTOR Reduction (vph)	0	0	0	0	12	0	0	1	0	0	0	0
Lane Group Flow (vph)	222	223	0	0	16	0	577	1802	0	0	0	0
Turn Type	Split						pm+pt					
Protected Phases	3	3			4		5	2				
Permitted Phases							2					
Actuated Green, G (s)	62.0	62.0			4.2		68.8	68.8				
Effective Green, g (s)	62.0	62.0			4.2		68.8	68.8				
Actuated g/C Ratio	0.41	0.41			0.03		0.46	0.46				
Clearance Time (s)	5.0	5.0			5.0		5.0	5.0				
Vehicle Extension (s)	2.5	2.5			2.5		2.0	1.0				
Lane Grp Cap (vph)	649	653			49		812	2329				
v/s Ratio Prot	c0.14	0.14			c0.01		0.30	c0.35				
v/s Ratio Perm							0.03					
v/c Ratio	0.34	0.34			0.33		0.71	0.77				
Uniform Delay, d1	30.1	30.1			71.5		31.3	34.1				
Progression Factor	0.43	0.43			1.00		1.20	1.22				
Incremental Delay, d2	0.9	0.9			2.9		2.5	1.2				
Delay (s)	13.9	13.8			74.4		40.3	42.7				
Level of Service	B	B			E		D	D				
Approach Delay (s)		13.8			74.4			42.1			0.0	
Approach LOS		B			E			D			A	

Intersection Summary			
HCM Average Control Delay	38.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	108.3%	ICU Level of Service	G
Analysis Period (min)	15		

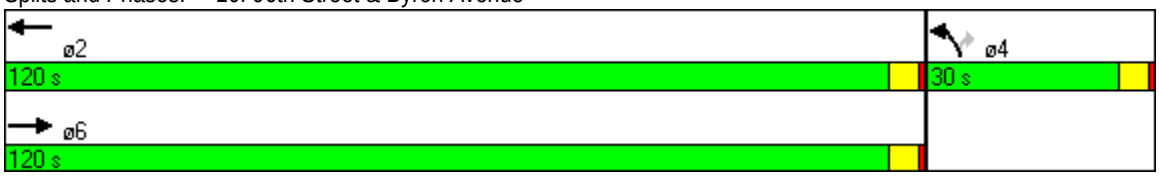
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1198	0	0	877	213	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	1.00
Frt						0.850
Flt Protected					0.950	
Satd. Flow (prot)	3421	0	0	3421	3319	1531
Flt Permitted					0.950	
Satd. Flow (perm)	3421	0	0	3421	3319	1531
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						14
Link Speed (mph)	30			30	30	
Link Distance (ft)	250			556	390	
Travel Time (s)	5.7			12.6	8.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1261	0	0	923	224	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1261	0	0	923	224	14
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	22	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Turn Type						Perm
Protected Phases	6			2	4	
Permitted Phases						4
Detector Phase	6			2	4	4
Switch Phase						
Minimum Initial (s)	15.0			15.0	7.0	7.0
Minimum Split (s)	21.0			21.0	26.0	26.0
Total Split (s)	120.0	0.0	0.0	120.0	30.0	30.0
Total Split (%)	80.0%	0.0%	0.0%	80.0%	20.0%	20.0%
Maximum Green (s)	115.0			115.0	25.0	25.0
Yellow Time (s)	4.0			4.0	4.0	4.0
All-Red Time (s)	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)	5.0	4.0	4.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	1.0			1.0	2.5	2.5
Recall Mode	C-Max			C-Max	None	None
Walk Time (s)					4.0	4.0
Flash Dont Walk (s)					17.0	17.0
Pedestrian Calls (#/hr)					0	0
Act Effct Green (s)	125.0			125.0	15.0	15.0

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Actuated g/C Ratio	0.83			0.83	0.10	0.10
v/c Ratio	0.44			0.32	0.67	0.08
Control Delay	6.7			13.9	75.3	25.5
Queue Delay	0.2			0.3	0.4	0.1
Total Delay	6.9			14.2	75.7	25.5
LOS	A			B	E	C
Approach Delay	6.9			14.2	72.7	
Approach LOS	A			B	E	
Queue Length 50th (ft)	253			366	110	0
Queue Length 95th (ft)	336			414	153	23
Internal Link Dist (ft)	170			476	310	
Turn Bay Length (ft)						
Base Capacity (vph)	2851			2851	553	267
Starvation Cap Reductn	686			1158	0	0
Spillback Cap Reductn	47			23	86	40
Storage Cap Reductn	0			0	0	0
Reduced v/c Ratio	0.58			0.55	0.48	0.06

Intersection Summary	
Area Type: Other	
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 19 (13%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 16.1	Intersection LOS: B
Intersection Capacity Utilization 47.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 10: 96th Street & Byron Avenue



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1198	0	0	877	213	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	5.0			5.0	5.0	5.0
Lane Util. Factor	0.95			0.95	0.97	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	3421			3421	3319	1531
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	3421			3421	3319	1531
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1261	0	0	923	224	14
RTOR Reduction (vph)	0	0	0	0	0	13
Lane Group Flow (vph)	1261	0	0	923	224	1
Turn Type						Perm
Protected Phases	6			2	4	
Permitted Phases						4
Actuated Green, G (s)	125.0			125.0	15.0	15.0
Effective Green, g (s)	125.0			125.0	15.0	15.0
Actuated g/C Ratio	0.83			0.83	0.10	0.10
Clearance Time (s)	5.0			5.0	5.0	5.0
Vehicle Extension (s)	1.0			1.0	2.5	2.5
Lane Grp Cap (vph)	2851			2851	332	153
v/s Ratio Prot	c0.37			0.27	c0.07	
v/s Ratio Perm						0.00
v/c Ratio	0.44			0.32	0.67	0.01
Uniform Delay, d1	3.3			2.9	65.1	60.8
Progression Factor	1.76			4.50	1.00	1.00
Incremental Delay, d2	0.5			0.3	4.9	0.0
Delay (s)	6.3			13.1	70.0	60.8
Level of Service	A			B	E	E
Approach Delay (s)	6.3			13.1	69.5	
Approach LOS	A			B	E	

Intersection Summary			
HCM Average Control Delay	15.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	47.5%	ICU Level of Service	A
Analysis Period (min)	15		

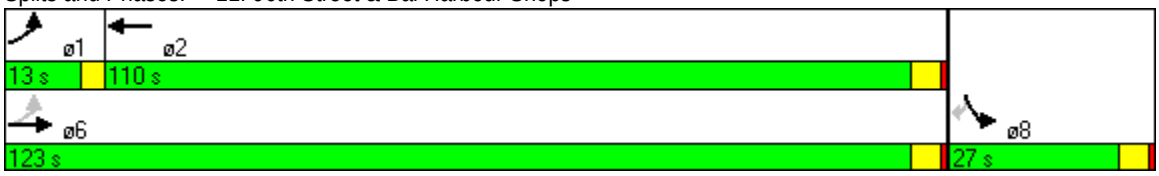
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	83	1051	979	108	169	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	2	1
Taper Length (ft)	25			25	25	25
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	0.91
Frt			0.985		0.980	0.850
Flt Protected	0.950				0.959	
Satd. Flow (prot)	1711	3421	3370	0	3283	1393
Flt Permitted	0.218				0.959	
Satd. Flow (perm)	393	3421	3370	0	3283	1393
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			19		10	94
Link Speed (mph)		30	30		30	
Link Distance (ft)		484	250		351	
Travel Time (s)		11.0	5.7		8.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	87	1106	1031	114	178	122
Shared Lane Traffic (%)						23%
Lane Group Flow (vph)	87	1106	1145	0	206	94
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		22	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt					Perm
Protected Phases	1	6	2		8	
Permitted Phases	6					8
Detector Phase	1	6	2		8	8
Switch Phase						
Minimum Initial (s)	5.0	15.0	15.0		7.0	7.0
Minimum Split (s)	19.0	21.0	21.0		23.0	23.0
Total Split (s)	13.0	123.0	110.0	0.0	27.0	27.0
Total Split (%)	8.7%	82.0%	73.3%	0.0%	18.0%	18.0%
Maximum Green (s)	10.0	118.0	105.0		22.0	22.0
Yellow Time (s)	3.0	4.0	4.0		4.0	4.0
All-Red Time (s)	0.0	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)	3.0	5.0	5.0	4.0	5.0	5.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	2.0	1.0	1.0		2.5	2.5
Recall Mode	None	C-Max	C-Max		None	None
Walk Time (s)					4.0	4.0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Flash Dont Walk (s)					14.0	14.0
Pedestrian Calls (#/hr)					7	7
Act Effct Green (s)	128.2	126.2	117.4		13.8	13.8
Actuated g/C Ratio	0.85	0.84	0.78		0.09	0.09
v/c Ratio	0.22	0.38	0.43		0.66	0.44
Control Delay	3.3	3.4	4.2		72.7	17.6
Queue Delay	0.0	0.0	0.3		0.0	0.0
Total Delay	3.3	3.4	4.5		72.7	17.6
LOS	A	A	A		E	B
Approach Delay		3.4	4.5		55.4	
Approach LOS		A	A		E	
Queue Length 50th (ft)	10	106	140		97	0
Queue Length 95th (ft)	22	156	156		138	61
Internal Link Dist (ft)		404	170		271	
Turn Bay Length (ft)	100					
Base Capacity (vph)	424	2878	2642		490	285
Starvation Cap Reductn	0	0	788		0	0
Spillback Cap Reductn	0	328	0		1	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.21	0.43	0.62		0.42	0.33

Intersection Summary	
Area Type: Other	
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 16 (11%), Referenced to phase 2:WBT and 6:EBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 9.8	Intersection LOS: A
Intersection Capacity Utilization 52.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 11: 96th Street & Bal Harbour Shops



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	83	1051	979	108	169	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	3.0	5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	0.95	0.95		0.97	0.91
Frt	1.00	1.00	0.99		0.98	0.85
Flt Protected	0.95	1.00	1.00		0.96	1.00
Satd. Flow (prot)	1711	3421	3370		3280	1393
Flt Permitted	0.22	1.00	1.00		0.96	1.00
Satd. Flow (perm)	393	3421	3370		3280	1393
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	87	1106	1031	114	178	122
RTOR Reduction (vph)	0	0	4	0	9	85
Lane Group Flow (vph)	87	1106	1141	0	197	9
Turn Type	pm+pt					Perm
Protected Phases	1	6	2		8	
Permitted Phases	6					8
Actuated Green, G (s)	126.2	126.2	117.4		13.8	13.8
Effective Green, g (s)	126.2	126.2	117.4		13.8	13.8
Actuated g/C Ratio	0.84	0.84	0.78		0.09	0.09
Clearance Time (s)	3.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)	2.0	1.0	1.0		2.5	2.5
Lane Grp Cap (vph)	382	2878	2638		302	128
v/s Ratio Prot	0.01	c0.32	c0.34		c0.06	
v/s Ratio Perm	0.18					0.01
v/c Ratio	0.23	0.38	0.43		0.65	0.07
Uniform Delay, d1	2.8	2.8	5.4		65.8	62.2
Progression Factor	1.00	1.00	0.66		1.00	1.00
Incremental Delay, d2	0.1	0.4	0.5		4.5	0.2
Delay (s)	3.0	3.2	4.0		70.2	62.4
Level of Service	A	A	A		E	E
Approach Delay (s)		3.2	4.0		67.8	
Approach LOS		A	A		E	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

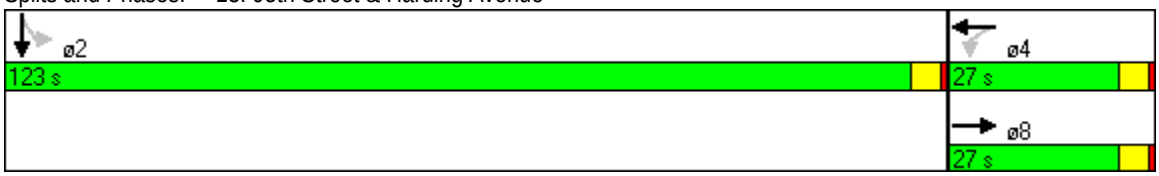
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	47	85	172	66	0	0	0	0	119	2095	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.913									0.995	
Flt Protected					0.965						0.997	
Satd. Flow (prot)	0	1701	0	0	1798	0	0	0	0	0	4708	0
Flt Permitted					0.530						0.997	
Satd. Flow (perm)	0	1701	*1	0	987	0	0	0	0	0	4708	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)											10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		261			299			655			668	
Travel Time (s)		5.9			6.8			14.9			15.2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Parking (#/hr)											20	
Adj. Flow (vph)	0	48	87	176	67	0	0	0	0	121	2138	72
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	135	0	0	243	0	0	0	0	0	2331	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Detector Phase		8		4	4					2	2	
Switch Phase												
Minimum Initial (s)		7.0		7.0	7.0					7.0	7.0	
Minimum Split (s)		27.0		27.0	27.0					25.0	25.0	
Total Split (s)	0.0	27.0	0.0	27.0	27.0	0.0	0.0	0.0	0.0	123.0	123.0	0.0
Total Split (%)	0.0%	18.0%	0.0%	18.0%	18.0%	0.0%	0.0%	0.0%	0.0%	82.0%	82.0%	0.0%
Maximum Green (s)		22.0		22.0	22.0					118.0	118.0	
Yellow Time (s)		4.0		4.0	4.0					4.0	4.0	
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0		1.0	1.0					1.0	1.0	
Recall Mode		Max		Max	Max					C-Max	C-Max	
Walk Time (s)		7.0		7.0	7.0					7.0	7.0	
Flash Dont Walk (s)		15.0		15.0	15.0					13.0	13.0	
Pedestrian Calls (#/hr)		31		27	27					54	54	
Act Effct Green (s)		22.0			22.0						118.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.15			0.15						0.79	
v/c Ratio		0.54			1.68						0.63	
Control Delay		68.3			367.0						13.0	
Queue Delay		0.0			0.0						0.7	
Total Delay		68.3			367.0						13.7	
LOS		E			F						B	
Approach Delay		68.3			367.0						13.7	
Approach LOS		E			F						B	
Queue Length 50th (ft)		124			~353						387	
Queue Length 95th (ft)		199			m#470						447	
Internal Link Dist (ft)		181			219			575			588	
Turn Bay Length (ft)												
Base Capacity (vph)		249			145						3706	
Starvation Cap Reductn		0			0						898	
Spillback Cap Reductn		0			0						61	
Storage Cap Reductn		0			0						0	
Reduced v/c Ratio		0.54			1.68						0.83	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 124 (83%), Referenced to phase 2:SBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.68
Intersection Signal Delay: 48.1 Intersection LOS: D
Intersection Capacity Utilization 77.7% ICU Level of Service D
Analysis Period (min) 15
* User Entered Value
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: 95th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	47	85	172	66	0	0	0	0	119	2095	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.91			1.00						1.00	
Flt Protected		1.00			0.97						1.00	
Satd. Flow (prot)		1701			1798						4712	
Flt Permitted		1.00			0.53						1.00	
Satd. Flow (perm)		1701			987						4712	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	48	87	176	67	0	0	0	0	121	2138	72
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	135	0	0	243	0	0	0	0	0	2329	0
Parking (#/hr)											20	
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		22.0			22.0						118.0	
Effective Green, g (s)		22.0			22.0						118.0	
Actuated g/C Ratio		0.15			0.15						0.79	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		1.0			1.0						1.0	
Lane Grp Cap (vph)		249			145						3707	
v/s Ratio Prot		0.08										
v/s Ratio Perm					c0.25						0.49	
v/c Ratio		0.54			1.68						0.63	
Uniform Delay, d1		59.3			64.0						6.7	
Progression Factor		1.00			1.03						1.83	
Incremental Delay, d2		8.2			329.0						0.5	
Delay (s)		67.6			395.2						12.8	
Level of Service		E			F						B	
Approach Delay (s)		67.6			395.2			0.0			12.8	
Approach LOS		E			F			A			B	

Intersection Summary			
HCM Average Control Delay	49.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	77.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

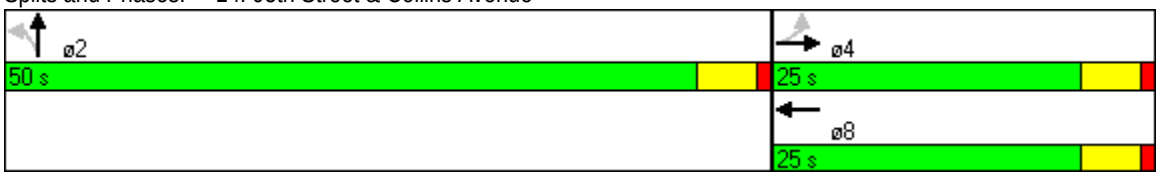
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	195	4	0	0	7	8	135	2511	11	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Frt					0.928			0.999				
Flt Protected		0.953						0.997				
Satd. Flow (prot)	0	1775	0	0	1729	0	0	5065	0	0	0	0
Flt Permitted		0.720						0.997				
Satd. Flow (perm)	0	1341	0	0	1729	0	0	5065	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3			1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		299			255			652			667	
Travel Time (s)		6.8			5.8			14.8			15.2	
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	199	4	0	0	7	8	138	2562	11	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	203	0	0	15	0	0	2711	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Detector Phase	4	4			8		2	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		7.0	7.0				
Minimum Split (s)	25.0	25.0			25.0		26.0	26.0				
Total Split (s)	25.0	25.0	0.0	0.0	25.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0
Total Split (%)	33.3%	33.3%	0.0%	0.0%	33.3%	0.0%	66.7%	66.7%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	20.0	20.0			20.0		45.0	45.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5			2.5		2.5	2.5				
Recall Mode	Max	Max			Max		C-Max	C-Max				
Walk Time (s)	4.0	4.0			4.0		7.0	7.0				
Flash Dont Walk (s)	16.0	16.0			16.0		14.0	14.0				
Pedestrian Calls (#/hr)	45	45			7		15	15				
Act Effct Green (s)		20.0			20.0			45.0				
Actuated g/C Ratio		0.27			0.27			0.60				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.57			0.03			0.89				
Control Delay		26.0			18.5			4.4				
Queue Delay		0.5			0.0			11.7				
Total Delay		26.5			18.5			16.1				
LOS		C			B			B				
Approach Delay		26.5			18.5			16.1				
Approach LOS		C			B			B				
Queue Length 50th (ft)		86			4			34				
Queue Length 95th (ft)		132			18			33				
Internal Link Dist (ft)		219			175			572			587	
Turn Bay Length (ft)												
Base Capacity (vph)		358			463			3039				
Starvation Cap Reductn		0			0			0				
Spillback Cap Reductn		23			0			364				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.61			0.03			1.01				

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 50 (67%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.89
Intersection Signal Delay: 16.8 Intersection LOS: B
Intersection Capacity Utilization 77.5% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 14: 95th Street & Collins Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	195	4	0	0	7	8	135	2511	11	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.93			1.00				
Flt Protected		0.95			1.00			1.00				
Satd. Flow (prot)		1776			1729			5069				
Flt Permitted		0.72			1.00			1.00				
Satd. Flow (perm)		1341			1729			5069				
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	199	4	0	0	7	8	138	2562	11	0	0	0
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	203	0	0	13	0	0	2711	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		20.0			20.0			45.0				
Effective Green, g (s)		20.0			20.0			45.0				
Actuated g/C Ratio		0.27			0.27			0.60				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		2.5			2.5			2.5				
Lane Grp Cap (vph)		358			461			3041				
v/s Ratio Prot					0.01							
v/s Ratio Perm		c0.15						0.53				
v/c Ratio		0.57			0.03			0.89				
Uniform Delay, d1		23.8			20.3			12.9				
Progression Factor		0.84			1.00			0.19				
Incremental Delay, d2		5.6			0.1			2.0				
Delay (s)		25.6			20.4			4.4				
Level of Service		C			C			A				
Approach Delay (s)		25.6			20.4			4.4			0.0	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	5.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	77.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

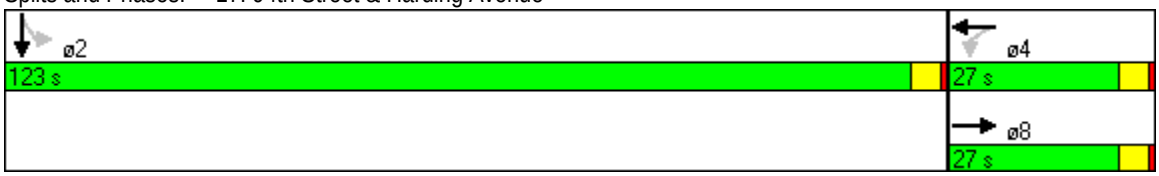
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	25	138	67	137	0	0	0	0	107	2118	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.886									0.990	
Flt Protected					0.984						0.998	
Satd. Flow (prot)	0	1650	0	0	1833	0	0	0	0	0	4689	0
Flt Permitted					0.519						0.998	
Satd. Flow (perm)	0	1650	0	0	967	0	0	0	0	0	4689	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)											25	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			299			676			655	
Travel Time (s)		6.0			6.8			15.4			14.9	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Parking (#/hr)											20	
Adj. Flow (vph)	0	26	142	69	141	0	0	0	0	110	2184	163
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	168	0	0	210	0	0	0	0	0	2457	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Detector Phase		8		4	4					2	2	
Switch Phase												
Minimum Initial (s)		7.0		7.0	7.0					7.0	7.0	
Minimum Split (s)		21.0		21.0	21.0					21.0	21.0	
Total Split (s)	0.0	27.0	0.0	27.0	27.0	0.0	0.0	0.0	0.0	123.0	123.0	0.0
Total Split (%)	0.0%	18.0%	0.0%	18.0%	18.0%	0.0%	0.0%	0.0%	0.0%	82.0%	82.0%	0.0%
Maximum Green (s)		22.0		22.0	22.0					118.0	118.0	
Yellow Time (s)		4.0		4.0	4.0					4.0	4.0	
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0		1.0	1.0					1.0	1.0	
Recall Mode		Max		Max	Max					C-Max	C-Max	
Walk Time (s)		5.0		5.0	5.0					5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0					11.0	11.0	
Pedestrian Calls (#/hr)		3		39	39					28	28	
Act Effct Green (s)		22.0			22.0						118.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.15			0.15						0.79	
v/c Ratio		0.69			1.48						0.67	
Control Delay		76.7			281.5						6.6	
Queue Delay		0.0			0.0						0.0	
Total Delay		76.7			281.5						6.7	
LOS		E			F						A	
Approach Delay		76.7			281.5						6.7	
Approach LOS		E			F						A	
Queue Length 50th (ft)		159			~280						515	
Queue Length 95th (ft)		#247			m#339						m288	
Internal Link Dist (ft)		186			219			596			575	
Turn Bay Length (ft)												
Base Capacity (vph)		242			142						3694	
Starvation Cap Reductn		0			0						140	
Spillback Cap Reductn		0			0						0	
Storage Cap Reductn		0			0						0	
Reduced v/c Ratio		0.69			1.48						0.69	

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 139 (93%), Referenced to phase 2:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.48
Intersection Signal Delay: 31.2 Intersection LOS: C
Intersection Capacity Utilization 79.9% ICU Level of Service D
Analysis Period (min) 15
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 17: 94th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	25	138	67	137	0	0	0	0	107	2118	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.89			1.00						0.99	
Flt Protected		1.00			0.98						1.00	
Satd. Flow (prot)		1650			1833						4689	
Flt Permitted		1.00			0.52						1.00	
Satd. Flow (perm)		1650			966						4689	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	26	142	69	141	0	0	0	0	110	2184	163
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	5	0
Lane Group Flow (vph)	0	168	0	0	210	0	0	0	0	0	2452	0
Parking (#/hr)											20	
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		22.0			22.0						118.0	
Effective Green, g (s)		22.0			22.0						118.0	
Actuated g/C Ratio		0.15			0.15						0.79	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		1.0			1.0						1.0	
Lane Grp Cap (vph)		242			142						3689	
v/s Ratio Prot		0.10										
v/s Ratio Perm					c0.22						0.52	
v/c Ratio		0.69			1.48						0.66	
Uniform Delay, d1		60.8			64.0						7.2	
Progression Factor		1.00			1.03						0.82	
Incremental Delay, d2		15.2			238.5						0.7	
Delay (s)		76.0			304.2						6.6	
Level of Service		E			F						A	
Approach Delay (s)		76.0			304.2			0.0			6.6	
Approach LOS		E			F			A			A	

Intersection Summary			
HCM Average Control Delay	32.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	79.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

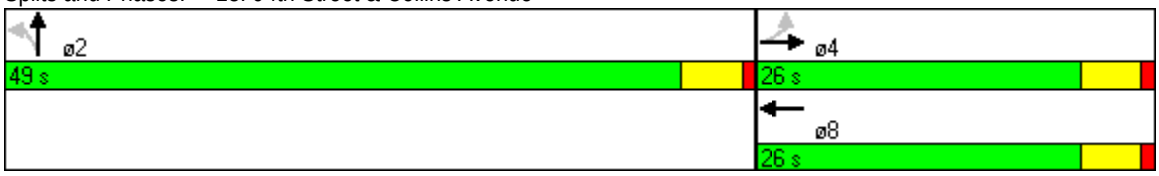
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	142	3	0	0	6	3	161	2482	1	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Frt					0.955							
Flt Protected		0.953						0.997				
Satd. Flow (prot)	0	1775	0	0	1779	0	0	5070	0	0	0	0
Flt Permitted		0.724						0.997				
Satd. Flow (perm)	0	1349	0	0	1779	0	0	5070	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		299			236			662			652	
Travel Time (s)		6.8			5.4			15.0			14.8	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	148	3	0	0	6	3	168	2585	1	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	151	0	0	9	0	0	2754	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Detector Phase	4	4			8		2	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		7.0	7.0				
Minimum Split (s)	26.0	26.0			26.0		26.0	26.0				
Total Split (s)	26.0	26.0	0.0	0.0	26.0	0.0	49.0	49.0	0.0	0.0	0.0	0.0
Total Split (%)	34.7%	34.7%	0.0%	0.0%	34.7%	0.0%	65.3%	65.3%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	21.0	21.0			21.0		44.0	44.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5			2.5		1.0	1.0				
Recall Mode	Max	Max			Max		C-Max	C-Max				
Walk Time (s)	4.0	4.0			4.0		7.0	7.0				
Flash Dont Walk (s)	17.0	17.0			17.0		14.0	14.0				
Pedestrian Calls (#/hr)	36	36			16		11	11				
Act Effct Green (s)		21.0			21.0			44.0				
Actuated g/C Ratio		0.28			0.28			0.59				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.40			0.02			0.93				
Control Delay		25.3			18.0			21.2				
Queue Delay		0.0			0.0			0.0				
Total Delay		25.3			18.0			21.2				
LOS		C			B			C				
Approach Delay		25.3			18.0			21.2				
Approach LOS		C			B			C				
Queue Length 50th (ft)		66			2			383				
Queue Length 95th (ft)		m99			13			#492				
Internal Link Dist (ft)		219			156			582			572	
Turn Bay Length (ft)												
Base Capacity (vph)		378			500			2974				
Starvation Cap Reductn		0			0			0				
Spillback Cap Reductn		0			0			0				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.40			0.02			0.93				

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 35 (47%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 21.4 Intersection LOS: C
Intersection Capacity Utilization 74.3% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 18: 94th Street & Collins Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	142	3	0	0	6	3	161	2482	1	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.95			1.00				
Flt Protected		0.95			1.00			1.00				
Satd. Flow (prot)		1776			1779			5070				
Flt Permitted		0.72			1.00			1.00				
Satd. Flow (perm)		1349			1779			5070				
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	148	3	0	0	6	3	168	2585	1	0	0	0
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	151	0	0	8	0	0	2754	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		21.0			21.0			44.0				
Effective Green, g (s)		21.0			21.0			44.0				
Actuated g/C Ratio		0.28			0.28			0.59				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		2.5			2.5			1.0				
Lane Grp Cap (vph)		378			498			2974				
v/s Ratio Prot					0.00							
v/s Ratio Perm		c0.11						0.54				
v/c Ratio		0.40			0.02			0.93				
Uniform Delay, d1		21.9			19.5			14.0				
Progression Factor		1.02			1.00			1.00				
Incremental Delay, d2		2.5			0.1			6.4				
Delay (s)		24.9			19.6			20.4				
Level of Service		C			B			C				
Approach Delay (s)		24.9			19.6			20.4			0.0	
Approach LOS		C			B			C			A	

Intersection Summary			
HCM Average Control Delay	20.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

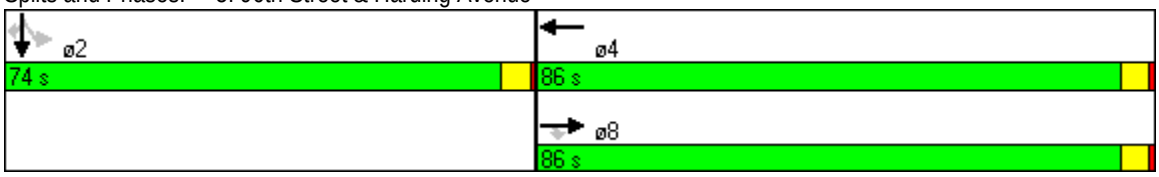
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	374	799	0	557	0	0	0	0	103	1621	372
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	10	10	12	12	12	12	12	12
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt		0.941	0.850									0.850
Flt Protected											0.997	
Satd. Flow (prot)	0	1610	1454	0	3303	0	0	0	0	0	5070	1583
Flt Permitted											0.997	
Satd. Flow (perm)	0	1610	1454	0	3303	0	0	0	0	0	5070	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4	4									241
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		556			324			668			466	
Travel Time (s)		12.6			7.4			15.2			10.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	394	841	0	586	0	0	0	0	108	1706	392
Shared Lane Traffic (%)			30%									
Lane Group Flow (vph)	0	646	589	0	586	0	0	0	0	0	1814	392
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.04	1.04	1.04	1.09	1.09	1.09	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type			Perm							Perm		Perm
Protected Phases		8			4						2	
Permitted Phases			8							2		2
Detector Phase		8	8		4					2	2	2
Switch Phase												
Minimum Initial (s)		7.0	7.0		7.0					7.0	7.0	7.0
Minimum Split (s)		21.0	21.0		24.0					29.0	29.0	29.0
Total Split (s)	0.0	86.0	86.0	0.0	86.0	0.0	0.0	0.0	0.0	74.0	74.0	74.0
Total Split (%)	0.0%	53.8%	53.8%	0.0%	53.8%	0.0%	0.0%	0.0%	0.0%	46.3%	46.3%	46.3%
Maximum Green (s)		81.0	81.0		81.0					69.0	69.0	69.0
Yellow Time (s)		4.0	4.0		4.0					4.0	4.0	4.0
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	5.0	4.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0	1.0		1.0					1.0	1.0	1.0
Recall Mode		Max	Max		Max					C-Max	C-Max	C-Max
Walk Time (s)					7.0					7.0	7.0	7.0
Flash Dont Walk (s)					12.0					17.0	17.0	17.0
Pedestrian Calls (#/hr)					47					30	30	30
Act Effct Green (s)		81.0	81.0		81.0						69.0	69.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.51	0.51		0.51						0.43	0.43
v/c Ratio		0.79	0.80		0.35						0.83	0.48
Control Delay		33.3	34.6		48.0						44.4	13.7
Queue Delay		0.3	0.0		83.0						0.0	0.0
Total Delay		33.6	34.6		131.0						44.4	13.7
LOS		C	C		F						D	B
Approach Delay		34.1			131.0						39.0	
Approach LOS		C			F						D	
Queue Length 50th (ft)		580	531		267						610	105
Queue Length 95th (ft)		458	423		407						674	199
Internal Link Dist (ft)		476			244			588			386	
Turn Bay Length (ft)												
Base Capacity (vph)		817	738		1672						2186	820
Starvation Cap Reductn		0	0		1171						0	0
Spillback Cap Reductn		18	0		0						0	0
Storage Cap Reductn		0	0		0						0	0
Reduced v/c Ratio		0.81	0.80		1.17						0.83	0.48

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 39 (24%), Referenced to phase 2:SBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 50.9 — Intersection LOS: D
Intersection Capacity Utilization 110.2% — ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 5: 96th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	374	799	0	557	0	0	0	0	103	1621	372
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	10	10	12	12	12	12	12	12
Total Lost time (s)		5.0	5.0		5.0						5.0	5.0
Lane Util. Factor		0.95	0.95		0.95						0.91	1.00
Frt		0.94	0.85		1.00						1.00	0.85
Flt Protected		1.00	1.00		1.00						1.00	1.00
Satd. Flow (prot)		1611	1454		3303						5070	1583
Flt Permitted		1.00	1.00		1.00						1.00	1.00
Satd. Flow (perm)		1611	1454		3303						5070	1583
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	394	841	0	586	0	0	0	0	108	1706	392
RTOR Reduction (vph)	0	2	2	0	0	0	0	0	0	0	0	137
Lane Group Flow (vph)	0	644	587	0	586	0	0	0	0	0	1814	255
Turn Type			Perm							Perm		Perm
Protected Phases		8			4						2	
Permitted Phases			8							2		2
Actuated Green, G (s)		81.0	81.0		81.0						69.0	69.0
Effective Green, g (s)		81.0	81.0		81.0						69.0	69.0
Actuated g/C Ratio		0.51	0.51		0.51						0.43	0.43
Clearance Time (s)		5.0	5.0		5.0						5.0	5.0
Vehicle Extension (s)		1.0	1.0		1.0						1.0	1.0
Lane Grp Cap (vph)		816	736		1672						2186	683
v/s Ratio Prot		0.40			0.18							
v/s Ratio Perm			c0.40								0.36	0.16
v/c Ratio		0.79	0.80		0.35						0.83	0.37
Uniform Delay, d1		32.5	32.7		23.7						40.3	30.8
Progression Factor		0.80	0.80		1.99						1.00	1.00
Incremental Delay, d2		6.7	7.7		0.5						3.8	1.6
Delay (s)		32.6	33.9		47.7						44.1	32.4
Level of Service		C	C		D						D	C
Approach Delay (s)		33.2			47.7			0.0			42.0	
Approach LOS		C			D			A			D	

Intersection Summary			
HCM Average Control Delay	40.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	110.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	384	9	0	0	3	3	554	1240	8	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	12	12	12	12	12	12
Storage Length (ft)	0		0	0		0	250		0	0		0
Storage Lanes	1		0	0		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Frt					0.932			0.999				
Flt Protected	0.950	0.954					0.950					
Satd. Flow (prot)	1569	1576	0	0	1736	0	1770	5080	0	0	0	0
Flt Permitted	0.950	0.954					0.950					
Satd. Flow (perm)	1569	1576	0	0	1736	0	1770	5080	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					3			1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		324			318			667			480	
Travel Time (s)		7.4			7.2			15.2			10.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	404	9	0	0	3	3	583	1305	8	0	0	0
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	206	207	0	0	6	0	583	1313	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split						pm+pt					
Protected Phases	3	3			4		5	2				
Permitted Phases							2					
Detector Phase	3	3			4		5	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			7.0		4.0	4.0				
Minimum Split (s)	22.0	22.0			21.0		11.0	23.0				
Total Split (s)	46.0	46.0	0.0	0.0	21.0	0.0	77.0	93.0	0.0	0.0	0.0	0.0
Total Split (%)	28.8%	28.8%	0.0%	0.0%	13.1%	0.0%	48.1%	58.1%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	41.0	41.0			16.0		72.0	88.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead			Lag		Lag					
Lead-Lag Optimize?	Yes	Yes			Yes		Yes					
Vehicle Extension (s)	2.5	2.5			2.5		2.0	1.0				
Recall Mode	Max	Max			None		C-Max	C-Max				
Walk Time (s)	4.0	4.0						4.0				

Lane Group	ø6
Lane Configurations	
Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	20.0
Total Split (s)	16.0
Total Split (%)	10%
Maximum Green (s)	13.0
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	4.0

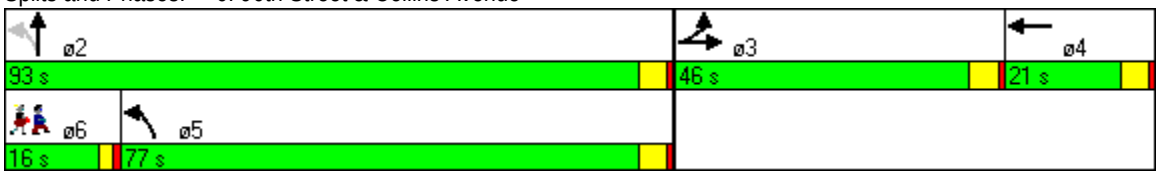
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	13.0	13.0						7.0				
Pedestrian Calls (#/hr)	28	28						7				
Act Effct Green (s)	41.0	41.0			7.0		106.6	106.6				
Actuated g/C Ratio	0.26	0.26			0.04		0.67	0.67				
v/c Ratio	0.51	0.51			0.08		0.49	0.39				
Control Delay	38.8	38.8			58.5		17.4	14.2				
Queue Delay	6.4	6.4			0.0		1.3	0.2				
Total Delay	45.2	45.2			58.5		18.7	14.4				
LOS	D	D			E		B	B				
Approach Delay		45.2			58.5			15.7				
Approach LOS		D			E			B				
Queue Length 50th (ft)	146	147			3		196	161				
Queue Length 95th (ft)	m216	m218			21		641	289				
Internal Link Dist (ft)		244			238			587			400	
Turn Bay Length (ft)							250					
Base Capacity (vph)	402	404			176		1179	3385				
Starvation Cap Reductn	145	146			0		338	1146				
Spillback Cap Reductn	0	0			0		373	0				
Storage Cap Reductn	0	0			0		0	0				
Reduced v/c Ratio	0.80	0.80			0.03		0.72	0.59				

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 59 (37%), Referenced to phase 2:NBTL and 5:NBL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.51
Intersection Signal Delay: 21.1 — Intersection LOS: C
Intersection Capacity Utilization 110.2% — ICU Level of Service H
Analysis Period (min) 15

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

Splits and Phases: 6: 96th Street & Collins Avenue



Lane Group	ø6
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	3
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	384	9	0	0	3	3	554	1240	8	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	12	12	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			5.0		5.0	5.0				
Lane Util. Factor	0.95	0.95			1.00		1.00	0.91				
Frt	1.00	1.00			0.93		1.00	1.00				
Flt Protected	0.95	0.95			1.00		0.95	1.00				
Satd. Flow (prot)	1569	1576			1737		1770	5081				
Flt Permitted	0.95	0.95			1.00		0.95	1.00				
Satd. Flow (perm)	1569	1576			1737		1770	5081				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	404	9	0	0	3	3	583	1305	8	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	0	0	0	0
Lane Group Flow (vph)	206	207	0	0	3	0	583	1313	0	0	0	0
Turn Type	Split						pm+pt					
Protected Phases	3	3			4		5	2				
Permitted Phases							2					
Actuated Green, G (s)	41.0	41.0			1.4		102.6	102.6				
Effective Green, g (s)	41.0	41.0			1.4		102.6	102.6				
Actuated g/C Ratio	0.26	0.26			0.01		0.64	0.64				
Clearance Time (s)	5.0	5.0			5.0		5.0	5.0				
Vehicle Extension (s)	2.5	2.5			2.5		2.0	1.0				
Lane Grp Cap (vph)	402	404			15		1135	3258				
v/s Ratio Prot	0.13	c0.13			c0.00		c0.31	0.26				
v/s Ratio Perm							0.02					
v/c Ratio	0.51	0.51			0.20		0.51	0.40				
Uniform Delay, d1	50.9	50.9			78.7		14.5	13.9				
Progression Factor	0.70	0.70			1.00		1.14	1.12				
Incremental Delay, d2	2.7	2.7			4.8		1.4	0.3				
Delay (s)	38.3	38.3			83.5		17.9	15.8				
Level of Service	D	D			F		B	B				
Approach Delay (s)		38.3			83.5			16.5			0.0	
Approach LOS		D			F			B			A	

Intersection Summary			
HCM Average Control Delay	20.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	110.2%	ICU Level of Service	H
Analysis Period (min)	15		

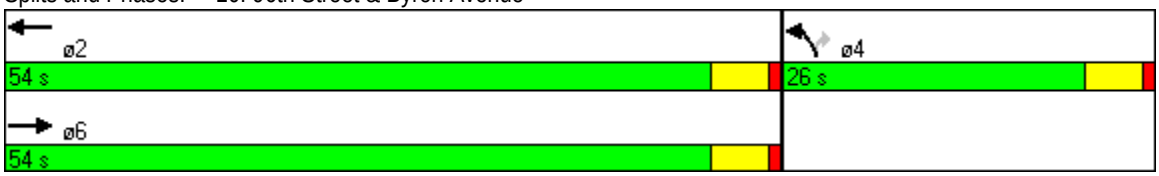
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1254	0	0	887	212	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	1.00
Frt						0.850
Flt Protected					0.950	
Satd. Flow (prot)	3421	0	0	3421	3319	1531
Flt Permitted					0.950	
Satd. Flow (perm)	3421	0	0	3421	3319	1531
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						24
Link Speed (mph)	30			30	30	
Link Distance (ft)	250			556	390	
Travel Time (s)	5.7			12.6	8.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1320	0	0	934	223	24
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1320	0	0	934	223	24
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	22	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Turn Type						Perm
Protected Phases	6			2	4	
Permitted Phases						4
Detector Phase	6			2	4	4
Switch Phase						
Minimum Initial (s)	15.0			15.0	7.0	7.0
Minimum Split (s)	21.0			21.0	26.0	26.0
Total Split (s)	54.0	0.0	0.0	54.0	26.0	26.0
Total Split (%)	67.5%	0.0%	0.0%	67.5%	32.5%	32.5%
Maximum Green (s)	49.0			49.0	21.0	21.0
Yellow Time (s)	4.0			4.0	4.0	4.0
All-Red Time (s)	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)	5.0	4.0	4.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	1.0			1.0	2.5	2.5
Recall Mode	C-Max			C-Max	None	None
Walk Time (s)					4.0	4.0
Flash Dont Walk (s)					17.0	17.0
Pedestrian Calls (#/hr)					10	10
Act Effct Green (s)	58.2			58.2	11.8	11.8

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Actuated g/C Ratio	0.73			0.73	0.15	0.15
v/c Ratio	0.53			0.38	0.46	0.10
Control Delay	5.2			5.1	33.1	11.3
Queue Delay	0.1			0.0	0.0	0.0
Total Delay	5.4			5.1	33.1	11.3
LOS	A			A	C	B
Approach Delay	5.4			5.1	31.0	
Approach LOS	A			A	C	
Queue Length 50th (ft)	108			20	54	0
Queue Length 95th (ft)	217			423	74	18
Internal Link Dist (ft)	170			476	310	
Turn Bay Length (ft)						
Base Capacity (vph)	2490			2490	871	420
Starvation Cap Reductn	286			0	0	0
Spillback Cap Reductn	65			14	0	0
Storage Cap Reductn	0			0	0	0
Reduced v/c Ratio	0.60			0.38	0.26	0.06

Intersection Summary	
Area Type: Other	
Cycle Length: 80	
Actuated Cycle Length: 80	
Offset: 58 (73%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 7.8	Intersection LOS: A
Intersection Capacity Utilization 49.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 10: 96th Street & Byron Avenue



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1254	0	0	887	212	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	5.0			5.0	5.0	5.0
Lane Util. Factor	0.95			0.95	0.97	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	3421			3421	3319	1531
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	3421			3421	3319	1531
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1320	0	0	934	223	24
RTOR Reduction (vph)	0	0	0	0	0	20
Lane Group Flow (vph)	1320	0	0	934	223	4
Turn Type						Perm
Protected Phases	6			2	4	
Permitted Phases						4
Actuated Green, G (s)	58.2			58.2	11.8	11.8
Effective Green, g (s)	58.2			58.2	11.8	11.8
Actuated g/C Ratio	0.73			0.73	0.15	0.15
Clearance Time (s)	5.0			5.0	5.0	5.0
Vehicle Extension (s)	1.0			1.0	2.5	2.5
Lane Grp Cap (vph)	2489			2489	490	226
v/s Ratio Prot	c0.39			0.27	c0.07	
v/s Ratio Perm						0.00
v/c Ratio	0.53			0.38	0.46	0.02
Uniform Delay, d1	4.8			4.1	31.2	29.1
Progression Factor	0.81			1.01	1.00	1.00
Incremental Delay, d2	0.8			0.4	0.5	0.0
Delay (s)	4.7			4.5	31.7	29.2
Level of Service	A			A	C	C
Approach Delay (s)	4.7			4.5	31.4	
Approach LOS	A			A	C	

Intersection Summary			
HCM Average Control Delay	7.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	49.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

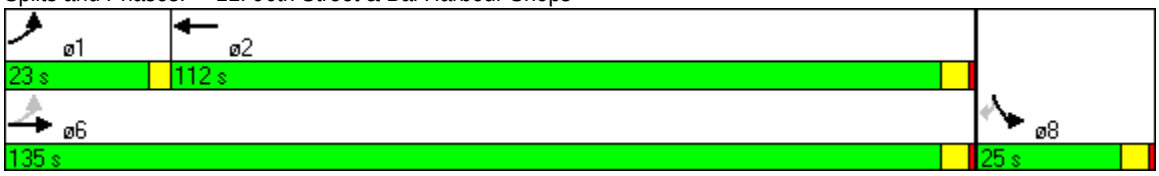
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	75	1258	1043	92	36	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	2	1
Taper Length (ft)	25			25	25	25
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	0.91
Frt			0.988		0.992	0.850
Flt Protected	0.950				0.955	
Satd. Flow (prot)	1711	3421	3380	0	3309	1393
Flt Permitted	0.215				0.955	
Satd. Flow (perm)	387	3421	3380	0	3309	1393
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			12		2	18
Link Speed (mph)		30	30		30	
Link Distance (ft)		494	250		351	
Travel Time (s)		11.2	5.7		8.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	79	1324	1098	97	38	20
Shared Lane Traffic (%)						10%
Lane Group Flow (vph)	79	1324	1195	0	40	18
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		22	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt					Perm
Protected Phases	1	6	2		8	
Permitted Phases	6					8
Detector Phase	1	6	2		8	8
Switch Phase						
Minimum Initial (s)	5.0	15.0	15.0		7.0	7.0
Minimum Split (s)	19.0	21.0	21.0		23.0	23.0
Total Split (s)	23.0	135.0	112.0	0.0	25.0	25.0
Total Split (%)	14.4%	84.4%	70.0%	0.0%	15.6%	15.6%
Maximum Green (s)	20.0	130.0	107.0		20.0	20.0
Yellow Time (s)	3.0	4.0	4.0		4.0	4.0
All-Red Time (s)	0.0	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)	3.0	5.0	5.0	4.0	5.0	5.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	2.0	1.0	1.0		2.5	2.5
Recall Mode	None	C-Max	C-Max		None	None
Walk Time (s)					4.0	4.0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Flash Dont Walk (s)					14.0	14.0
Pedestrian Calls (#/hr)					5	5
Act Effct Green (s)	145.1	144.1	134.7		9.3	9.3
Actuated g/C Ratio	0.91	0.90	0.84		0.06	0.06
v/c Ratio	0.20	0.43	0.42		0.21	0.18
Control Delay	2.4	2.4	2.4		69.0	29.4
Queue Delay	0.0	0.0	0.2		0.0	0.0
Total Delay	2.4	2.4	2.5		69.0	29.4
LOS	A	A	A		E	C
Approach Delay		2.4	2.5		56.7	
Approach LOS		A	A		E	
Queue Length 50th (ft)	5	87	83		20	0
Queue Length 95th (ft)	20	202	95		39	29
Internal Link Dist (ft)		414	170		271	
Turn Bay Length (ft)	100					
Base Capacity (vph)	516	3081	2847		415	190
Starvation Cap Reductn	0	0	707		0	0
Spillback Cap Reductn	0	216	0		0	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.15	0.46	0.56		0.10	0.09

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 153 (96%), Referenced to phase 2:WBT and 6:EBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.43
Intersection Signal Delay: 3.7 — Intersection LOS: A
Intersection Capacity Utilization 53.4% — ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 11: 96th Street & Bal Harbour Shops



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	75	1258	1043	92	36	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	3.0	5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	0.95	0.95		0.97	0.91
Frt	1.00	1.00	0.99		0.99	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1711	3421	3380		3310	1393
Flt Permitted	0.21	1.00	1.00		0.95	1.00
Satd. Flow (perm)	387	3421	3380		3310	1393
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	79	1324	1098	97	38	20
RTOR Reduction (vph)	0	0	2	0	2	17
Lane Group Flow (vph)	79	1324	1193	0	38	1
Turn Type	pm+pt					Perm
Protected Phases	1	6	2		8	
Permitted Phases	6					8
Actuated Green, G (s)	142.1	142.1	133.7		7.9	7.9
Effective Green, g (s)	142.1	142.1	133.7		7.9	7.9
Actuated g/C Ratio	0.89	0.89	0.84		0.05	0.05
Clearance Time (s)	3.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)	2.0	1.0	1.0		2.5	2.5
Lane Grp Cap (vph)	388	3038	2824		163	69
v/s Ratio Prot	0.01	c0.39	0.35		c0.01	
v/s Ratio Perm	0.17					0.00
v/c Ratio	0.20	0.44	0.42		0.23	0.01
Uniform Delay, d1	1.6	1.6	3.3		73.1	72.3
Progression Factor	1.00	1.00	0.51		1.00	1.00
Incremental Delay, d2	0.1	0.5	0.4		0.5	0.1
Delay (s)	1.7	2.1	2.2		73.7	72.4
Level of Service	A	A	A		E	E
Approach Delay (s)		2.1	2.2		73.3	
Approach LOS		A	A		E	

Intersection Summary			
HCM Average Control Delay	3.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

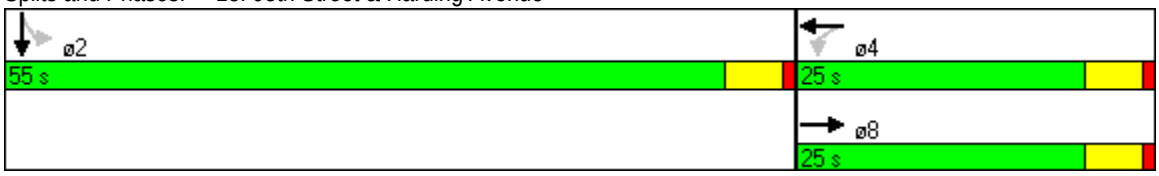
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	34	183	133	56	0	0	0	0	103	1965	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.886									0.997	
Flt Protected					0.966						0.998	
Satd. Flow (prot)	0	1650	0	0	1799	0	0	0	0	0	4723	0
Flt Permitted					0.532						0.998	
Satd. Flow (perm)	0	1650	*1	0	991	0	0	0	0	0	4723	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)											6	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		261			299			655			668	
Travel Time (s)		5.9			6.8			14.9			15.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)											20	
Adj. Flow (vph)	0	36	193	140	59	0	0	0	0	108	2068	37
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	229	0	0	199	0	0	0	0	0	2213	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Detector Phase		8		4	4					2	2	
Switch Phase												
Minimum Initial (s)		7.0		7.0	7.0					7.0	7.0	
Minimum Split (s)		27.0		27.0	27.0					25.0	25.0	
Total Split (s)	0.0	25.0	0.0	25.0	25.0	0.0	0.0	0.0	0.0	55.0	55.0	0.0
Total Split (%)	0.0%	31.3%	0.0%	31.3%	31.3%	0.0%	0.0%	0.0%	0.0%	68.8%	68.8%	0.0%
Maximum Green (s)		20.0		20.0	20.0					50.0	50.0	
Yellow Time (s)		4.0		4.0	4.0					4.0	4.0	
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0		1.0	1.0					1.0	1.0	
Recall Mode		Max		None	None					C-Max	C-Max	
Walk Time (s)		7.0		7.0	7.0					7.0	7.0	
Flash Dont Walk (s)		15.0		15.0	15.0					13.0	13.0	
Pedestrian Calls (#/hr)		15		6	6					21	21	
Act Effct Green (s)		20.0			20.0						50.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.25			0.25						0.62	
v/c Ratio		0.55			0.80						0.75	
Control Delay		32.1			50.2						9.6	
Queue Delay		0.0			0.0						0.0	
Total Delay		32.1			50.2						9.6	
LOS		C			D						A	
Approach Delay		32.1			50.2						9.6	
Approach LOS		C			D						A	
Queue Length 50th (ft)		100			80						273	
Queue Length 95th (ft)		171			#204						364	
Internal Link Dist (ft)		181			219			575			588	
Turn Bay Length (ft)												
Base Capacity (vph)		413			248						2954	
Starvation Cap Reductn		0			0						0	
Spillback Cap Reductn		0			0						0	
Storage Cap Reductn		0			0						0	
Reduced v/c Ratio		0.55			0.80						0.75	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 60 (75%), Referenced to phase 2:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 14.6 Intersection LOS: B
Intersection Capacity Utilization 76.7% ICU Level of Service D
Analysis Period (min) 15
* User Entered Value
\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 13: 95th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	34	183	133	56	0	0	0	0	103	1965	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.89			1.00						1.00	
Flt Protected		1.00			0.97						1.00	
Satd. Flow (prot)		1651			1799						4723	
Flt Permitted		1.00			0.53						1.00	
Satd. Flow (perm)		1651			991						4723	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	36	193	140	59	0	0	0	0	108	2068	37
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	229	0	0	199	0	0	0	0	0	2211	0
Parking (#/hr)											20	
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		20.0			20.0						50.0	
Effective Green, g (s)		20.0			20.0						50.0	
Actuated g/C Ratio		0.25			0.25						0.62	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		1.0			1.0						1.0	
Lane Grp Cap (vph)		413			248						2952	
v/s Ratio Prot		0.14										
v/s Ratio Perm					c0.20						0.47	
v/c Ratio		0.55			0.80						0.75	
Uniform Delay, d1		26.1			28.1						10.6	
Progression Factor		1.00			0.88						0.81	
Incremental Delay, d2		5.3			15.4						1.0	
Delay (s)		31.4			40.1						9.5	
Level of Service		C			D						A	
Approach Delay (s)		31.4			40.1			0.0			9.5	
Approach LOS		C			D			A			A	

Intersection Summary			
HCM Average Control Delay	13.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	76.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

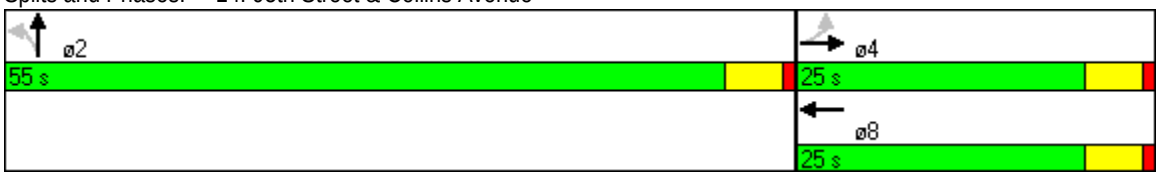
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	161	3	0	0	7	7	107	1818	7	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Frt					0.932			0.999				
Flt Protected		0.953						0.997				
Satd. Flow (prot)	0	1775	0	0	1736	0	0	5065	0	0	0	0
Flt Permitted		0.720						0.997				
Satd. Flow (perm)	0	1341	0	0	1736	0	0	5065	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					7			1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		299			255			652			667	
Travel Time (s)		6.8			5.8			14.8			15.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	169	3	0	0	7	7	113	1914	7	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	172	0	0	14	0	0	2034	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Detector Phase	4	4			8		2	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		7.0	7.0				
Minimum Split (s)	25.0	25.0			25.0		26.0	26.0				
Total Split (s)	25.0	25.0	0.0	0.0	25.0	0.0	55.0	55.0	0.0	0.0	0.0	0.0
Total Split (%)	31.3%	31.3%	0.0%	0.0%	31.3%	0.0%	68.8%	68.8%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	20.0	20.0			20.0		50.0	50.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5			2.5		2.5	2.5				
Recall Mode	None	None			None		C-Max	C-Max				
Walk Time (s)	4.0	4.0			4.0		7.0	7.0				
Flash Dont Walk (s)	16.0	16.0			16.0		14.0	14.0				
Pedestrian Calls (#/hr)	19	19			7		18	18				
Act Effct Green (s)		15.1			15.1			54.9				
Actuated g/C Ratio		0.19			0.19			0.69				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.68			0.04			0.59				
Control Delay		37.9			17.7			6.1				
Queue Delay		0.0			0.0			0.0				
Total Delay		37.9			17.7			6.1				
LOS		D			B			A				
Approach Delay		37.9			17.7			6.1				
Approach LOS		D			B			A				
Queue Length 50th (ft)		89			3			8				
Queue Length 95th (ft)		m112			17			310				
Internal Link Dist (ft)		219			175			572			587	
Turn Bay Length (ft)												
Base Capacity (vph)		335			439			3474				
Starvation Cap Reductn		0			0			0				
Spillback Cap Reductn		0			0			44				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.51			0.03			0.59				

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 27 (34%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.68
Intersection Signal Delay: 8.6 Intersection LOS: A
Intersection Capacity Utilization 61.5% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 14: 95th Street & Collins Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	161	3	0	0	7	7	107	1818	7	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.93			1.00				
Flt Protected		0.95			1.00			1.00				
Satd. Flow (prot)		1776			1737			5069				
Flt Permitted		0.72			1.00			1.00				
Satd. Flow (perm)		1341			1737			5069				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	169	3	0	0	7	7	113	1914	7	0	0	0
RTOR Reduction (vph)	0	0	0	0	6	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	172	0	0	8	0	0	2034	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		15.1			15.1			54.9				
Effective Green, g (s)		15.1			15.1			54.9				
Actuated g/C Ratio		0.19			0.19			0.69				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		2.5			2.5			2.5				
Lane Grp Cap (vph)		253			328			3479				
v/s Ratio Prot					0.00							
v/s Ratio Perm		c0.13						0.40				
v/c Ratio		0.68			0.03			0.58				
Uniform Delay, d1		30.2			26.5			6.6				
Progression Factor		0.91			1.00			0.76				
Incremental Delay, d2		5.3			0.0			0.6				
Delay (s)		32.7			26.5			5.6				
Level of Service		C			C			A				
Approach Delay (s)		32.7			26.5			5.6			0.0	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	7.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	61.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

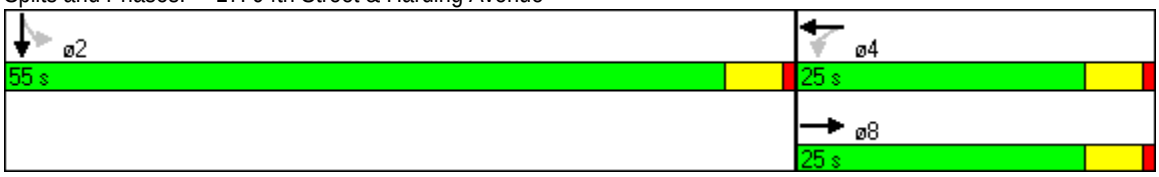
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	17	72	41	77	0	0	0	0	107	2131	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.891									0.995	
Flt Protected					0.983						0.998	
Satd. Flow (prot)	0	1660	0	0	1831	0	0	0	0	0	4713	0
Flt Permitted					0.857						0.998	
Satd. Flow (perm)	0	1660	0	0	1596	0	0	0	0	0	4713	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)											11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			299			680			655	
Travel Time (s)		6.0			6.8			15.5			14.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)											20	
Adj. Flow (vph)	0	18	76	43	81	0	0	0	0	113	2243	78
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	94	0	0	124	0	0	0	0	0	2434	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Detector Phase		8		4	4					2	2	
Switch Phase												
Minimum Initial (s)		7.0		7.0	7.0					7.0	7.0	
Minimum Split (s)		27.0		27.0	27.0					25.0	25.0	
Total Split (s)	0.0	25.0	0.0	25.0	25.0	0.0	0.0	0.0	0.0	55.0	55.0	0.0
Total Split (%)	0.0%	31.3%	0.0%	31.3%	31.3%	0.0%	0.0%	0.0%	0.0%	68.8%	68.8%	0.0%
Maximum Green (s)		20.0		20.0	20.0					50.0	50.0	
Yellow Time (s)		4.0		4.0	4.0					4.0	4.0	
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0		1.0	1.0					1.0	1.0	
Recall Mode		None		None	None					C-Max	C-Max	
Walk Time (s)		7.0		7.0	7.0					7.0	7.0	
Flash Dont Walk (s)		15.0		15.0	15.0					13.0	13.0	
Pedestrian Calls (#/hr)		6		52	52					10	10	
Act Effct Green (s)		14.9			14.9						58.5	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.19			0.19						0.73	
v/c Ratio		0.30			0.42						0.71	
Control Delay		28.5			24.0						8.9	
Queue Delay		0.0			0.0						0.0	
Total Delay		28.5			24.0						8.9	
LOS		C			C						A	
Approach Delay		28.5			24.0						8.9	
Approach LOS		C			C						A	
Queue Length 50th (ft)		37			46						305	
Queue Length 95th (ft)		76			86						290	
Internal Link Dist (ft)		186			219			600			575	
Turn Bay Length (ft)												
Base Capacity (vph)		415			399						3448	
Starvation Cap Reductn		0			0						0	
Spillback Cap Reductn		0			0						0	
Storage Cap Reductn		0			0						0	
Reduced v/c Ratio		0.23			0.31						0.71	

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 53 (66%), Referenced to phase 2:SBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 10.3 Intersection LOS: B
Intersection Capacity Utilization 66.3% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 17: 94th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	17	72	41	77	0	0	0	0	107	2131	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.89			1.00						1.00	
Flt Protected		1.00			0.98						1.00	
Satd. Flow (prot)		1659			1831						4713	
Flt Permitted		1.00			0.86						1.00	
Satd. Flow (perm)		1659			1596						4713	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	18	76	43	81	0	0	0	0	113	2243	78
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	3	0
Lane Group Flow (vph)	0	94	0	0	124	0	0	0	0	0	2431	0
Parking (#/hr)											20	
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		13.5			13.5						56.5	
Effective Green, g (s)		13.5			13.5						56.5	
Actuated g/C Ratio		0.17			0.17						0.71	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		1.0			1.0						1.0	
Lane Grp Cap (vph)		280			269						3329	
v/s Ratio Prot		0.06										
v/s Ratio Perm					c0.08						0.52	
v/c Ratio		0.34			0.46						0.73	
Uniform Delay, d1		29.3			30.0						7.1	
Progression Factor		1.00			0.75						0.95	
Incremental Delay, d2		0.3			0.4						1.0	
Delay (s)		29.6			22.8						7.7	
Level of Service		C			C						A	
Approach Delay (s)		29.6			22.8			0.0			7.7	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	9.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	66.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

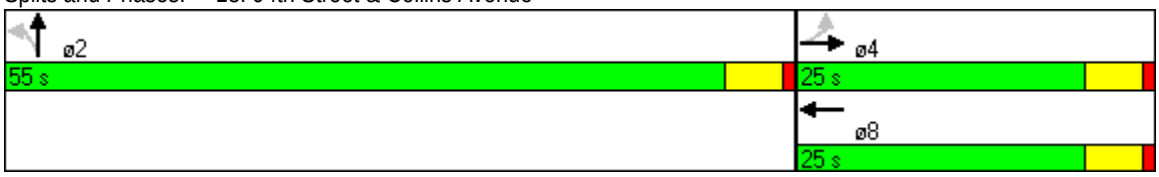
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	1	0	0	8	11	100	1834	3	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Frt					0.919							
Flt Protected		0.953						0.997				
Satd. Flow (prot)	0	1775	0	0	1712	0	0	5070	0	0	0	0
Flt Permitted		0.714						0.997				
Satd. Flow (perm)	0	1330	0	0	1712	0	0	5070	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					12							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		299			236			668			652	
Travel Time (s)		6.8			5.4			15.2			14.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	100	1	0	0	8	12	105	1931	3	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	101	0	0	20	0	0	2039	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Detector Phase	4	4			8		2	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		7.0	7.0				
Minimum Split (s)	26.0	26.0			26.0		26.0	26.0				
Total Split (s)	25.0	25.0	0.0	0.0	25.0	0.0	55.0	55.0	0.0	0.0	0.0	0.0
Total Split (%)	31.3%	31.3%	0.0%	0.0%	31.3%	0.0%	68.8%	68.8%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	20.0	20.0			20.0		50.0	50.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5			2.5		1.0	1.0				
Recall Mode	None	None			None		C-Max	C-Max				
Walk Time (s)	4.0	4.0			4.0		7.0	7.0				
Flash Dont Walk (s)	17.0	17.0			17.0		14.0	14.0				
Pedestrian Calls (#/hr)	42	42			9		10	10				
Act Effct Green (s)		14.9			14.8			58.2				
Actuated g/C Ratio		0.19			0.18			0.73				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.41			0.06			0.55				
Control Delay		33.0			15.5			7.8				
Queue Delay		0.0			0.0			0.0				
Total Delay		33.0			15.5			7.8				
LOS		C			B			A				
Approach Delay		33.0			15.5			7.8				
Approach LOS		C			B			A				
Queue Length 50th (ft)		39			3			208				
Queue Length 95th (ft)		m57			19			254				
Internal Link Dist (ft)		219			156			588			572	
Turn Bay Length (ft)												
Base Capacity (vph)		333			437			3691				
Starvation Cap Reductn		0			0			0				
Spillback Cap Reductn		0			0			0				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.30			0.05			0.55				

Intersection Summary

Area Type: Other
Cycle Length: 80
Actuated Cycle Length: 80
Offset: 3 (4%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.55
Intersection Signal Delay: 9.1 Intersection LOS: A
Intersection Capacity Utilization 57.8% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 18: 94th Street & Collins Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	95	1	0	0	8	11	100	1834	3	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.92			1.00				
Flt Protected		0.95			1.00			1.00				
Satd. Flow (prot)		1775			1712			5071				
Flt Permitted		0.71			1.00			1.00				
Satd. Flow (perm)		1330			1712			5071				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	100	1	0	0	8	12	105	1931	3	0	0	0
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	101	0	0	10	0	0	2039	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		13.8			13.8			56.2				
Effective Green, g (s)		13.8			13.8			56.2				
Actuated g/C Ratio		0.17			0.17			0.70				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		2.5			2.5			1.0				
Lane Grp Cap (vph)		229			295			3562				
v/s Ratio Prot					0.01							
v/s Ratio Perm		c0.08						0.40				
v/c Ratio		0.44			0.03			0.57				
Uniform Delay, d1		29.6			27.6			5.9				
Progression Factor		1.08			1.00			1.00				
Incremental Delay, d2		0.8			0.0			0.7				
Delay (s)		32.7			27.6			6.6				
Level of Service		C			C			A				
Approach Delay (s)		32.7			27.6			6.6			0.0	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	8.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	57.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

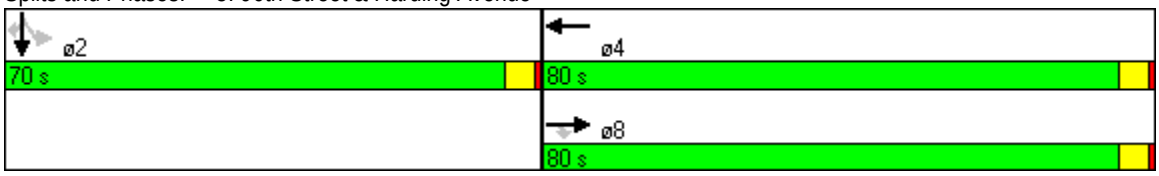
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	365	767	0	603	0	0	0	0	41	1481	298
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	10	10	10	12	12	12	12	12	12
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.91	0.91	1.00
Frt		0.942	0.850									0.850
Flt Protected											0.999	
Satd. Flow (prot)	0	1450	1309	0	2973	0	0	0	0	0	4572	1425
Flt Permitted											0.999	
Satd. Flow (perm)	0	1450	1309	0	2973	0	0	0	0	0	4572	1425
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8	8									207
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		556			324			668			466	
Travel Time (s)		12.6			7.4			15.2			10.6	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	384	807	0	635	0	0	0	0	43	1559	314
Shared Lane Traffic (%)			30%									
Lane Group Flow (vph)	0	626	565	0	635	0	0	0	0	0	1602	314
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.19	1.19	1.19	1.25	1.25	1.25	1.14	1.14	1.14	1.14	1.14	1.14
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type			Perm							Perm		Perm
Protected Phases		8			4						2	
Permitted Phases			8							2		2
Detector Phase		8	8		4					2	2	2
Switch Phase												
Minimum Initial (s)		7.0	7.0		7.0					7.0	7.0	7.0
Minimum Split (s)		21.0	21.0		24.0					29.0	29.0	29.0
Total Split (s)	0.0	80.0	80.0	0.0	80.0	0.0	0.0	0.0	0.0	70.0	70.0	70.0
Total Split (%)	0.0%	53.3%	53.3%	0.0%	53.3%	0.0%	0.0%	0.0%	0.0%	46.7%	46.7%	46.7%
Maximum Green (s)		75.0	75.0		75.0					65.0	65.0	65.0
Yellow Time (s)		4.0	4.0		4.0					4.0	4.0	4.0
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	5.0	4.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0	1.0		1.0					1.0	1.0	1.0
Recall Mode		Max	Max		Max					C-Max	C-Max	C-Max
Walk Time (s)					7.0					7.0	7.0	7.0
Flash Dont Walk (s)					12.0					17.0	17.0	17.0
Pedestrian Calls (#/hr)					21					65	65	65
Act Effct Green (s)		75.0	75.0		75.0						65.0	65.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.50	0.50		0.50						0.43	0.43
v/c Ratio		0.86	0.86		0.43						0.81	0.43
Control Delay		37.1	38.0		43.7						41.1	11.4
Queue Delay		1.0	0.0		58.3						0.0	0.0
Total Delay		38.1	38.0		102.0						41.1	11.4
LOS		D	D		F						D	B
Approach Delay		38.0			102.0						36.2	
Approach LOS		D			F						D	
Queue Length 50th (ft)		575	517		303						495	64
Queue Length 95th (ft)		#375	#680		401						560	145
Internal Link Dist (ft)		476			244			588			386	
Turn Bay Length (ft)												
Base Capacity (vph)		729	659		1487						1981	735
Starvation Cap Reductn		1	0		916						0	0
Spillback Cap Reductn		20	0		0						0	0
Storage Cap Reductn		0	0		0						0	0
Reduced v/c Ratio		0.88	0.86		1.11						0.81	0.43

Intersection Summary

Area Type: CBD
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 57 (38%), Referenced to phase 2:SBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 48.0 Intersection LOS: D
Intersection Capacity Utilization 115.4% ICU Level of Service H
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 5: 96th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	365	767	0	603	0	0	0	0	41	1481	298
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	10	10	10	12	12	12	12	12	12
Total Lost time (s)		5.0	5.0		5.0						5.0	5.0
Lane Util. Factor		0.95	0.95		0.95						0.91	1.00
Frt		0.94	0.85		1.00						1.00	0.85
Flt Protected		1.00	1.00		1.00						1.00	1.00
Satd. Flow (prot)		1450	1309		2973						4571	1425
Flt Permitted		1.00	1.00		1.00						1.00	1.00
Satd. Flow (perm)		1450	1309		2973						4571	1425
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	384	807	0	635	0	0	0	0	43	1559	314
RTOR Reduction (vph)	0	4	4	0	0	0	0	0	0	0	0	117
Lane Group Flow (vph)	0	622	561	0	635	0	0	0	0	0	1602	197
Turn Type			Perm							Perm		Perm
Protected Phases		8			4						2	
Permitted Phases			8							2		2
Actuated Green, G (s)		75.0	75.0		75.0						65.0	65.0
Effective Green, g (s)		75.0	75.0		75.0						65.0	65.0
Actuated g/C Ratio		0.50	0.50		0.50						0.43	0.43
Clearance Time (s)		5.0	5.0		5.0						5.0	5.0
Vehicle Extension (s)		1.0	1.0		1.0						1.0	1.0
Lane Grp Cap (vph)		725	655		1487						1981	618
v/s Ratio Prot		c0.43			0.21							
v/s Ratio Perm			0.43								0.35	0.14
v/c Ratio		0.86	0.86		0.43						0.81	0.32
Uniform Delay, d1		32.8	32.8		23.8						37.1	27.9
Progression Factor		0.77	0.77		1.78						1.00	1.00
Incremental Delay, d2		11.2	12.2		0.8						3.7	1.4
Delay (s)		36.4	37.3		43.3						40.8	29.3
Level of Service		D	D		D						D	C
Approach Delay (s)		36.8			43.3			0.0			38.9	
Approach LOS		D			D			A			D	

Intersection Summary			
HCM Average Control Delay	39.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	115.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	413	18	0	0	16	12	560	1731	17	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	12	12	12	12	12	12	12	12	12
Storage Length (ft)	0		0	0		0	250		0	0		0
Storage Lanes	1		0	0		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00
Frt					0.941			0.999				
Flt Protected	0.950	0.956					0.950					
Satd. Flow (prot)	1569	1579	0	0	1753	0	1770	5080	0	0	0	0
Flt Permitted	0.950	0.956					0.950					
Satd. Flow (perm)	1569	1579	0	0	1753	0	1770	5080	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					13			1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		324			331			667			480	
Travel Time (s)		7.4			7.5			15.2			10.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	435	19	0	0	17	13	589	1822	18	0	0	0
Shared Lane Traffic (%)	48%											
Lane Group Flow (vph)	226	228	0	0	30	0	589	1840	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		10			10			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.09	1.09	1.09	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split						pm+pt					
Protected Phases	3	3			4		5	2				
Permitted Phases							2					
Detector Phase	3	3			4		5	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			7.0		4.0	4.0				
Minimum Split (s)	22.0	22.0			21.0		11.0	23.0				
Total Split (s)	41.0	41.0	0.0	0.0	21.0	0.0	72.0	88.0	0.0	0.0	0.0	0.0
Total Split (%)	27.3%	27.3%	0.0%	0.0%	14.0%	0.0%	48.0%	58.7%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	36.0	36.0			16.0		67.0	83.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lead			Lag		Lag					
Lead-Lag Optimize?	Yes	Yes			Yes		Yes					
Vehicle Extension (s)	2.5	2.5			2.5		2.0	1.0				
Recall Mode	Max	Max			None		C-Max	C-Max				
Walk Time (s)	4.0	4.0						4.0				

Lane Group	ø6
Lane Configurations	
Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Peak Hour Factor	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Turn Type	
Protected Phases	6
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	20.0
Total Split (s)	16.0
Total Split (%)	11%
Maximum Green (s)	13.0
Yellow Time (s)	2.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Vehicle Extension (s)	3.0
Recall Mode	None
Walk Time (s)	4.0

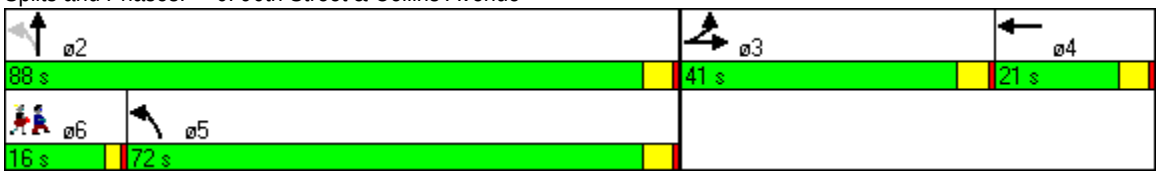
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Flash Dont Walk (s)	13.0	13.0						7.0				
Pedestrian Calls (#/hr)	31	31						5				
Act Effct Green (s)	36.0	36.0			7.6		96.2	96.2				
Actuated g/C Ratio	0.24	0.24			0.05		0.64	0.64				
v/c Ratio	0.60	0.60			0.30		0.52	0.56				
Control Delay	35.1	35.2			52.7		18.7	18.2				
Queue Delay	7.9	8.3			0.0		18.6	1.0				
Total Delay	42.9	43.5			52.7		37.3	19.2				
LOS	D	D			D		D	B				
Approach Delay		43.2			52.7			23.6				
Approach LOS		D			D			C				
Queue Length 50th (ft)	152	155			16		334	429				
Queue Length 95th (ft)	m214	m216			52		m518	535				
Internal Link Dist (ft)		244			251			587			400	
Turn Bay Length (ft)							250					
Base Capacity (vph)	377	379			199		1135	3259				
Starvation Cap Reductn	111	113			0		390	1057				
Spillback Cap Reductn	0	0			4		543	0				
Storage Cap Reductn	0	0			0		0	0				
Reduced v/c Ratio	0.85	0.86			0.15		0.99	0.84				

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 85 (57%), Referenced to phase 2:NBTL and 5:NBL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.60
Intersection Signal Delay: 27.0 Intersection LOS: C
Intersection Capacity Utilization 115.4% ICU Level of Service H
Analysis Period (min) 15

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

Splits and Phases: 6: 96th Street & Collins Avenue



Lane Group	ø6
Flash Dont Walk (s)	11.0
Pedestrian Calls (#/hr)	8
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	413	18	0	0	16	12	560	1731	17	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	10	10	10	12	12	12	12	12	12	12	12	12
Total Lost time (s)	5.0	5.0			5.0		5.0	5.0				
Lane Util. Factor	0.95	0.95			1.00		1.00	0.91				
Frt	1.00	1.00			0.94		1.00	1.00				
Flt Protected	0.95	0.96			1.00		0.95	1.00				
Satd. Flow (prot)	1569	1579			1754		1770	5078				
Flt Permitted	0.95	0.96			1.00		0.95	1.00				
Satd. Flow (perm)	1569	1579			1754		1770	5078				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	435	19	0	0	17	13	589	1822	18	0	0	0
RTOR Reduction (vph)	0	0	0	0	13	0	0	0	0	0	0	0
Lane Group Flow (vph)	226	228	0	0	17	0	589	1840	0	0	0	0
Turn Type	Split						pm+pt					
Protected Phases	3	3			4		5	2				
Permitted Phases							2					
Actuated Green, G (s)	36.0	36.0			4.8		94.2	94.2				
Effective Green, g (s)	36.0	36.0			4.8		94.2	94.2				
Actuated g/C Ratio	0.24	0.24			0.03		0.63	0.63				
Clearance Time (s)	5.0	5.0			5.0		5.0	5.0				
Vehicle Extension (s)	2.5	2.5			2.5		2.0	1.0				
Lane Grp Cap (vph)	377	379			56		1112	3189				
v/s Ratio Prot	0.14	c0.14			c0.01		0.31	c0.36				
v/s Ratio Perm							0.02					
v/c Ratio	0.60	0.60			0.31		0.53	0.58				
Uniform Delay, d1	50.6	50.6			71.0		14.7	16.3				
Progression Factor	0.60	0.61			1.00		1.13	1.12				
Incremental Delay, d2	4.0	4.0			2.3		0.9	0.4				
Delay (s)	34.6	34.7			73.3		17.6	18.6				
Level of Service	C	C			E		B	B				
Approach Delay (s)		34.6			73.3			18.4			0.0	
Approach LOS		C			E			B			A	

Intersection Summary			
HCM Average Control Delay	21.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	115.4%	ICU Level of Service	H
Analysis Period (min)	15		

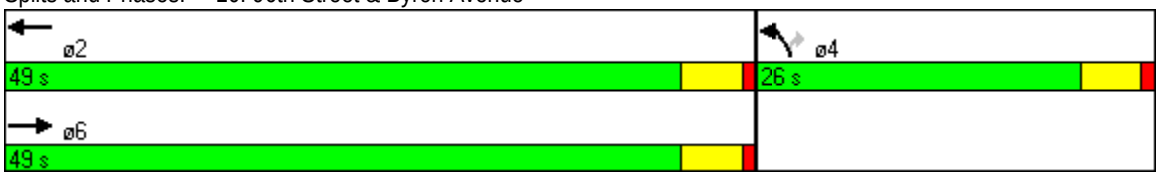
c Critical Lane Group

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1198	0	0	877	213	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	1.00
Frt						0.850
Flt Protected					0.950	
Satd. Flow (prot)	3421	0	0	3421	3319	1531
Flt Permitted					0.950	
Satd. Flow (perm)	3421	0	0	3421	3319	1531
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						14
Link Speed (mph)	30			30	30	
Link Distance (ft)	250			556	390	
Travel Time (s)	5.7			12.6	8.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1261	0	0	923	224	14
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1261	0	0	923	224	14
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	22	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)		9	15		15	9
Turn Type						Perm
Protected Phases	6			2	4	
Permitted Phases						4
Detector Phase	6			2	4	4
Switch Phase						
Minimum Initial (s)	15.0			15.0	7.0	7.0
Minimum Split (s)	21.0			21.0	26.0	26.0
Total Split (s)	49.0	0.0	0.0	49.0	26.0	26.0
Total Split (%)	65.3%	0.0%	0.0%	65.3%	34.7%	34.7%
Maximum Green (s)	44.0			44.0	21.0	21.0
Yellow Time (s)	4.0			4.0	4.0	4.0
All-Red Time (s)	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)	5.0	4.0	4.0	5.0	5.0	5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	1.0			1.0	2.5	2.5
Recall Mode	C-Max			C-Max	None	None
Walk Time (s)					4.0	4.0
Flash Dont Walk (s)					17.0	17.0
Pedestrian Calls (#/hr)					0	0
Act Effct Green (s)	55.1			55.1	9.9	9.9

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Actuated g/C Ratio	0.73			0.73	0.13	0.13
v/c Ratio	0.50			0.37	0.51	0.07
Control Delay	5.7			1.3	34.1	14.6
Queue Delay	0.3			0.0	0.0	0.0
Total Delay	6.0			1.3	34.1	14.6
LOS	A			A	C	B
Approach Delay	6.0			1.3	32.9	
Approach LOS	A			A	C	
Queue Length 50th (ft)	186			16	51	0
Queue Length 95th (ft)	273			24	79	15
Internal Link Dist (ft)	170			476	310	
Turn Bay Length (ft)						
Base Capacity (vph)	2512			2512	929	439
Starvation Cap Reductn	535			0	0	0
Spillback Cap Reductn	90			0	0	0
Storage Cap Reductn	0			0	0	0
Reduced v/c Ratio	0.64			0.37	0.24	0.03

Intersection Summary	
Area Type: Other	
Cycle Length: 75	
Actuated Cycle Length: 75	
Offset: 71 (95%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 6.8	Intersection LOS: A
Intersection Capacity Utilization 47.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 10: 96th Street & Byron Avenue



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1198	0	0	877	213	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	5.0			5.0	5.0	5.0
Lane Util. Factor	0.95			0.95	0.97	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	3421			3421	3319	1531
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	3421			3421	3319	1531
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1261	0	0	923	224	14
RTOR Reduction (vph)	0	0	0	0	0	12
Lane Group Flow (vph)	1261	0	0	923	224	2
Turn Type						Perm
Protected Phases	6			2	4	
Permitted Phases						4
Actuated Green, G (s)	55.1			55.1	9.9	9.9
Effective Green, g (s)	55.1			55.1	9.9	9.9
Actuated g/C Ratio	0.73			0.73	0.13	0.13
Clearance Time (s)	5.0			5.0	5.0	5.0
Vehicle Extension (s)	1.0			1.0	2.5	2.5
Lane Grp Cap (vph)	2513			2513	438	202
v/s Ratio Prot	c0.37			0.27	c0.07	
v/s Ratio Perm						0.00
v/c Ratio	0.50			0.37	0.51	0.01
Uniform Delay, d1	4.2			3.6	30.3	28.3
Progression Factor	1.13			0.23	1.00	1.00
Incremental Delay, d2	0.7			0.4	0.8	0.0
Delay (s)	5.4			1.2	31.1	28.3
Level of Service	A			A	C	C
Approach Delay (s)	5.4			1.2	30.9	
Approach LOS	A			A	C	

Intersection Summary			
HCM Average Control Delay	6.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	47.5%	ICU Level of Service	A
Analysis Period (min)	15		

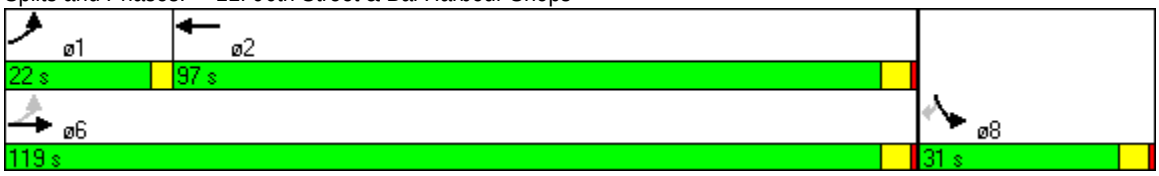
c Critical Lane Group

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	83	1051	979	108	169	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	11	11	11	11
Storage Length (ft)	100			0	0	0
Storage Lanes	1			0	2	1
Taper Length (ft)	25			25	25	25
Lane Util. Factor	1.00	0.95	0.95	0.95	0.97	0.91
Frt			0.985		0.980	0.850
Flt Protected	0.950				0.959	
Satd. Flow (prot)	1711	3421	3370	0	3283	1393
Flt Permitted	0.218				0.959	
Satd. Flow (perm)	393	3421	3370	0	3283	1393
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			14		10	94
Link Speed (mph)		30	30		30	
Link Distance (ft)		484	250		351	
Travel Time (s)		11.0	5.7		8.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	87	1106	1031	114	178	122
Shared Lane Traffic (%)						23%
Lane Group Flow (vph)	87	1106	1145	0	206	94
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		11	11		22	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.04	1.04	1.04	1.04	1.04	1.04
Turning Speed (mph)	15			9	15	9
Turn Type	pm+pt					Perm
Protected Phases	1	6	2		8	
Permitted Phases	6					8
Detector Phase	1	6	2		8	8
Switch Phase						
Minimum Initial (s)	5.0	15.0	15.0		7.0	7.0
Minimum Split (s)	19.0	21.0	21.0		23.0	23.0
Total Split (s)	22.0	119.0	97.0	0.0	31.0	31.0
Total Split (%)	14.7%	79.3%	64.7%	0.0%	20.7%	20.7%
Maximum Green (s)	19.0	114.0	92.0		26.0	26.0
Yellow Time (s)	3.0	4.0	4.0		4.0	4.0
All-Red Time (s)	0.0	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)	3.0	5.0	5.0	4.0	5.0	5.0
Lead/Lag	Lead		Lag			
Lead-Lag Optimize?	Yes		Yes			
Vehicle Extension (s)	2.0	1.0	1.0		2.5	2.5
Recall Mode	None	C-Max	C-Max		None	None
Walk Time (s)					4.0	4.0

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Flash Dont Walk (s)					14.0	14.0
Pedestrian Calls (#/hr)					7	7
Act Effct Green (s)	128.2	126.2	117.4		13.8	13.8
Actuated g/C Ratio	0.85	0.84	0.78		0.09	0.09
v/c Ratio	0.22	0.38	0.43		0.66	0.44
Control Delay	3.3	3.4	2.1		72.6	17.6
Queue Delay	0.0	0.0	0.3		0.0	0.0
Total Delay	3.3	3.4	2.3		72.6	17.6
LOS	A	A	A		E	B
Approach Delay		3.4	2.3		55.4	
Approach LOS		A	A		E	
Queue Length 50th (ft)	10	106	81		97	0
Queue Length 95th (ft)	22	156	93		138	61
Internal Link Dist (ft)		404	170		271	
Turn Bay Length (ft)	100					
Base Capacity (vph)	503	2877	2641		577	319
Starvation Cap Reductn	0	0	716		0	0
Spillback Cap Reductn	0	237	0		1	0
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.17	0.42	0.59		0.36	0.29

Intersection Summary	
Area Type: Other	
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 6 (4%), Referenced to phase 2:WBT and 6:EBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 8.9	Intersection LOS: A
Intersection Capacity Utilization 52.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 11: 96th Street & Bal Harbour Shops



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	83	1051	979	108	169	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	11	11	11	11	11
Total Lost time (s)	3.0	5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	0.95	0.95		0.97	0.91
Frt	1.00	1.00	0.99		0.98	0.85
Flt Protected	0.95	1.00	1.00		0.96	1.00
Satd. Flow (prot)	1711	3421	3370		3280	1393
Flt Permitted	0.22	1.00	1.00		0.96	1.00
Satd. Flow (perm)	393	3421	3370		3280	1393
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	87	1106	1031	114	178	122
RTOR Reduction (vph)	0	0	3	0	9	85
Lane Group Flow (vph)	87	1106	1142	0	197	9
Turn Type	pm+pt					Perm
Protected Phases	1	6	2		8	
Permitted Phases	6					8
Actuated Green, G (s)	126.2	126.2	117.4		13.8	13.8
Effective Green, g (s)	126.2	126.2	117.4		13.8	13.8
Actuated g/C Ratio	0.84	0.84	0.78		0.09	0.09
Clearance Time (s)	3.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)	2.0	1.0	1.0		2.5	2.5
Lane Grp Cap (vph)	382	2878	2638		302	128
v/s Ratio Prot	0.01	c0.32	c0.34		c0.06	
v/s Ratio Perm	0.18					0.01
v/c Ratio	0.23	0.38	0.43		0.65	0.07
Uniform Delay, d1	2.8	2.8	5.4		65.8	62.2
Progression Factor	1.00	1.00	0.28		1.00	1.00
Incremental Delay, d2	0.1	0.4	0.5		4.5	0.2
Delay (s)	3.0	3.2	2.0		70.2	62.4
Level of Service	A	A	A		E	E
Approach Delay (s)		3.2	2.0		67.8	
Approach LOS		A	A		E	

Intersection Summary			
HCM Average Control Delay	10.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

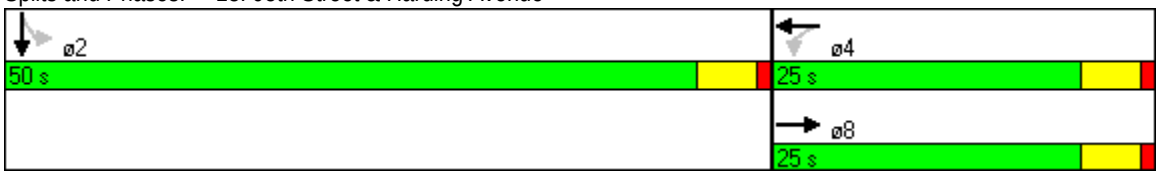
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	47	85	172	66	0	0	0	0	119	2095	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.913									0.995	
Flt Protected					0.965						0.996	
Satd. Flow (prot)	0	1701	0	0	1798	0	0	0	0	0	4704	0
Flt Permitted					0.700						0.996	
Satd. Flow (perm)	0	1701	*1	0	1304	0	0	0	0	0	4704	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)											11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		261			299			655			668	
Travel Time (s)		5.9			6.8			14.9			15.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.59	0.95	0.95
Parking (#/hr)											20	
Adj. Flow (vph)	0	49	89	181	69	0	0	0	0	202	2205	75
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	138	0	0	250	0	0	0	0	0	2482	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Detector Phase		8		4	4					2	2	
Switch Phase												
Minimum Initial (s)		7.0		7.0	7.0					7.0	7.0	
Minimum Split (s)		27.0		27.0	27.0					25.0	25.0	
Total Split (s)	0.0	25.0	0.0	25.0	25.0	0.0	0.0	0.0	0.0	50.0	50.0	0.0
Total Split (%)	0.0%	33.3%	0.0%	33.3%	33.3%	0.0%	0.0%	0.0%	0.0%	66.7%	66.7%	0.0%
Maximum Green (s)		20.0		20.0	20.0					45.0	45.0	
Yellow Time (s)		4.0		4.0	4.0					4.0	4.0	
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0		1.0	1.0					1.0	1.0	
Recall Mode		None		None	None					C-Max	C-Max	
Walk Time (s)		7.0		7.0	7.0					7.0	7.0	
Flash Dont Walk (s)		15.0		15.0	15.0					13.0	13.0	
Pedestrian Calls (#/hr)		31		27	27					54	54	
Act Effct Green (s)		16.8			16.8						48.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.22			0.22						0.64	
v/c Ratio		0.36			0.86						0.82	
Control Delay		26.4			59.5						11.5	
Queue Delay		0.0			0.0						0.0	
Total Delay		26.4			59.5						11.5	
LOS		C			E						B	
Approach Delay		26.4			59.5						11.5	
Approach LOS		C			E						B	
Queue Length 50th (ft)		53			122						288	
Queue Length 95th (ft)		97			m166						394	
Internal Link Dist (ft)		181			219			575			588	
Turn Bay Length (ft)												
Base Capacity (vph)		454			348						3028	
Starvation Cap Reductn		0			0						0	
Spillback Cap Reductn		0			0						0	
Storage Cap Reductn		0			0						0	
Reduced v/c Ratio		0.30			0.72						0.82	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 59 (79%), Referenced to phase 2:SBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 16.4 Intersection LOS: B
Intersection Capacity Utilization 77.7% ICU Level of Service D
Analysis Period (min) 15
* User Entered Value
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 13: 95th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	47	85	172	66	0	0	0	0	119	2095	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.91			1.00						1.00	
Flt Protected		1.00			0.97						1.00	
Satd. Flow (prot)		1701			1798						4706	
Flt Permitted		1.00			0.70						1.00	
Satd. Flow (perm)		1701			1304						4706	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.59	0.95	0.95
Adj. Flow (vph)	0	49	89	181	69	0	0	0	0	202	2205	75
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	138	0	0	250	0	0	0	0	0	2478	0
Parking (#/hr)											20	
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		16.8			16.8						48.2	
Effective Green, g (s)		16.8			16.8						48.2	
Actuated g/C Ratio		0.22			0.22						0.64	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		1.0			1.0						1.0	
Lane Grp Cap (vph)		381			292						3024	
v/s Ratio Prot		0.08										
v/s Ratio Perm					c0.19						0.53	
v/c Ratio		0.36			0.86						0.82	
Uniform Delay, d1		24.6			27.9						10.1	
Progression Factor		1.00			1.27						0.92	
Incremental Delay, d2		0.2			18.5						1.6	
Delay (s)		24.8			54.1						10.8	
Level of Service		C			D						B	
Approach Delay (s)		24.8			54.1			0.0			10.8	
Approach LOS		C			D			A			B	

Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	77.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

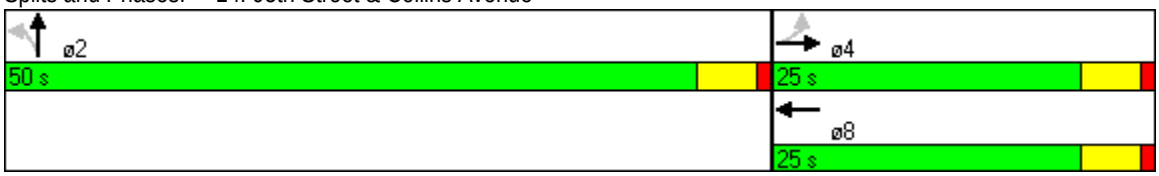
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	195	4	0	0	7	8	135	2511	11	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Frt					0.928			0.999				
Flt Protected		0.953						0.997				
Satd. Flow (prot)	0	1775	0	0	1729	0	0	5065	0	0	0	0
Flt Permitted		0.720						0.997				
Satd. Flow (perm)	0	1341	0	0	1729	0	0	5065	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2			1				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		299			255			652			667	
Travel Time (s)		6.8			5.8			14.8			15.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	205	4	0	0	7	8	142	2643	12	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	209	0	0	15	0	0	2797	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Detector Phase	4	4			8		2	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		7.0	7.0				
Minimum Split (s)	25.0	25.0			25.0		26.0	26.0				
Total Split (s)	25.0	25.0	0.0	0.0	25.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0
Total Split (%)	33.3%	33.3%	0.0%	0.0%	33.3%	0.0%	66.7%	66.7%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	20.0	20.0			20.0		45.0	45.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5			2.5		2.5	2.5				
Recall Mode	None	None			None		C-Max	C-Max				
Walk Time (s)	4.0	4.0			4.0		7.0	7.0				
Flash Dont Walk (s)	16.0	16.0			16.0		14.0	14.0				
Pedestrian Calls (#/hr)	45	45			7		15	15				
Act Effct Green (s)		16.6			16.6			48.4				
Actuated g/C Ratio		0.22			0.22			0.65				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.70			0.04			0.86				
Control Delay		32.5			19.2			4.5				
Queue Delay		0.0			0.0			0.1				
Total Delay		32.5			19.2			4.6				
LOS		C			B			A				
Approach Delay		32.5			19.2			4.6				
Approach LOS		C			B			A				
Queue Length 50th (ft)		87			5			33				
Queue Length 95th (ft)		m115			18			31				
Internal Link Dist (ft)		219			175			572			587	
Turn Bay Length (ft)												
Base Capacity (vph)		358			463			3270				
Starvation Cap Reductn		0			0			0				
Spillback Cap Reductn		0			0			50				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.58			0.03			0.87				

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 49 (65%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 6.6 Intersection LOS: A
Intersection Capacity Utilization 77.5% ICU Level of Service D
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 14: 95th Street & Collins Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	195	4	0	0	7	8	135	2511	11	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.93			1.00				
Flt Protected		0.95			1.00			1.00				
Satd. Flow (prot)		1776			1729			5069				
Flt Permitted		0.72			1.00			1.00				
Satd. Flow (perm)		1340			1729			5069				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	205	4	0	0	7	8	142	2643	12	0	0	0
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	209	0	0	13	0	0	2797	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		16.6			16.6			48.4				
Effective Green, g (s)		16.6			16.6			48.4				
Actuated g/C Ratio		0.22			0.22			0.65				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		2.5			2.5			2.5				
Lane Grp Cap (vph)		297			383			3271				
v/s Ratio Prot					0.01							
v/s Ratio Perm		c0.16						0.55				
v/c Ratio		0.70			0.04			0.85				
Uniform Delay, d1		26.9			22.9			10.5				
Progression Factor		0.88			1.00			0.21				
Incremental Delay, d2		4.7			0.0			1.8				
Delay (s)		28.5			22.9			3.9				
Level of Service		C			C			A				
Approach Delay (s)		28.5			22.9			3.9			0.0	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	5.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	77.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

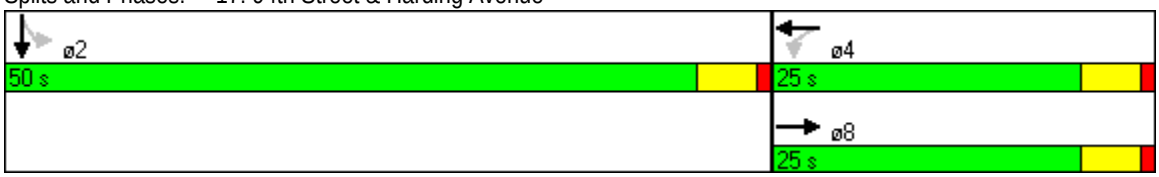
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	25	138	67	137	0	0	0	0	107	2118	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91
Frt		0.886									0.990	
Flt Protected					0.984						0.998	
Satd. Flow (prot)	0	1650	0	0	1833	0	0	0	0	0	4689	0
Flt Permitted					0.744						0.998	
Satd. Flow (perm)	0	1650	0	0	1386	0	0	0	0	0	4689	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)											26	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		266			299			670			655	
Travel Time (s)		6.0			6.8			15.2			14.9	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Parking (#/hr)											20	
Adj. Flow (vph)	0	26	145	71	144	0	0	0	0	113	2229	166
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	171	0	0	215	0	0	0	0	0	2508	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Detector Phase		8		4	4					2	2	
Switch Phase												
Minimum Initial (s)		7.0		7.0	7.0					7.0	7.0	
Minimum Split (s)		21.0		21.0	21.0					21.0	21.0	
Total Split (s)	0.0	25.0	0.0	25.0	25.0	0.0	0.0	0.0	0.0	50.0	50.0	0.0
Total Split (%)	0.0%	33.3%	0.0%	33.3%	33.3%	0.0%	0.0%	0.0%	0.0%	66.7%	66.7%	0.0%
Maximum Green (s)		20.0		20.0	20.0					45.0	45.0	
Yellow Time (s)		4.0		4.0	4.0					4.0	4.0	
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)		1.0		1.0	1.0					1.0	1.0	
Recall Mode		None		None	None					C-Max	C-Max	
Walk Time (s)		5.0		5.0	5.0					5.0	5.0	
Flash Dont Walk (s)		11.0		11.0	11.0					11.0	11.0	
Pedestrian Calls (#/hr)		3		39	39					28	28	
Act Effct Green (s)		14.2			14.2						50.8	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Actuated g/C Ratio		0.19			0.19						0.68	
v/c Ratio		0.55			0.82						0.79	
Control Delay		33.2			44.0						5.3	
Queue Delay		0.0			0.0						0.0	
Total Delay		33.2			44.0						5.3	
LOS		C			D						A	
Approach Delay		33.2			44.0						5.3	
Approach LOS		C			D						A	
Queue Length 50th (ft)		70			78						52	
Queue Length 95th (ft)		119			m97						142	
Internal Link Dist (ft)		186			219			590			575	
Turn Bay Length (ft)												
Base Capacity (vph)		440			370						3187	
Starvation Cap Reductn		0			0						0	
Spillback Cap Reductn		0			0						0	
Storage Cap Reductn		0			0						0	
Reduced v/c Ratio		0.39			0.58						0.79	

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 2 (3%), Referenced to phase 2:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 9.9 Intersection LOS: A
Intersection Capacity Utilization 79.9% ICU Level of Service D
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 17: 94th Street & Harding Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	25	138	67	137	0	0	0	0	107	2118	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		1.00			1.00						0.91	
Frt		0.89			1.00						0.99	
Flt Protected		1.00			0.98						1.00	
Satd. Flow (prot)		1650			1832						4689	
Flt Permitted		1.00			0.74						1.00	
Satd. Flow (perm)		1650			1385						4689	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	26	145	71	144	0	0	0	0	113	2229	166
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	8	0
Lane Group Flow (vph)	0	171	0	0	215	0	0	0	0	0	2500	0
Parking (#/hr)											20	
Turn Type				Perm						Perm		
Protected Phases		8			4						2	
Permitted Phases				4						2		
Actuated Green, G (s)		14.2			14.2						50.8	
Effective Green, g (s)		14.2			14.2						50.8	
Actuated g/C Ratio		0.19			0.19						0.68	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		1.0			1.0						1.0	
Lane Grp Cap (vph)		312			262						3176	
v/s Ratio Prot		0.10										
v/s Ratio Perm					c0.16						0.53	
v/c Ratio		0.55			0.82						0.79	
Uniform Delay, d1		27.5			29.2						8.4	
Progression Factor		1.00			0.88						0.45	
Incremental Delay, d2		1.1			13.5						1.2	
Delay (s)		28.6			39.2						5.0	
Level of Service		C			D						A	
Approach Delay (s)		28.6			39.2			0.0			5.0	
Approach LOS		C			D			A			A	

Intersection Summary			
HCM Average Control Delay	8.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	79.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

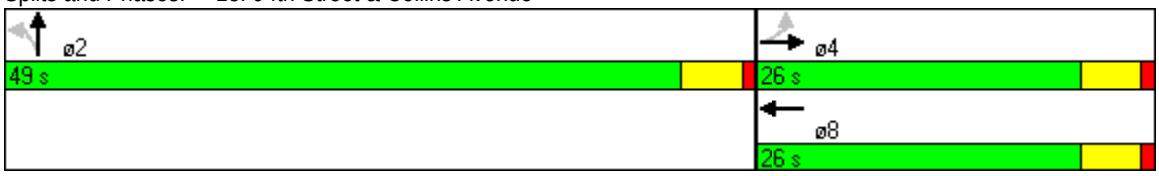
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	142	3	0	0	6	3	161	2482	1	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	1.00	1.00	1.00
Frt					0.955							
Flt Protected		0.953						0.997				
Satd. Flow (prot)	0	1775	0	0	1779	0	0	5070	0	0	0	0
Flt Permitted		0.724						0.997				
Satd. Flow (perm)	0	1349	0	0	1779	0	0	5070	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					2							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		299			236			661			652	
Travel Time (s)		6.8			5.4			15.0			14.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	149	3	0	0	6	3	169	2613	1	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	152	0	0	9	0	0	2783	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Detector Phase	4	4			8		2	2				
Switch Phase												
Minimum Initial (s)	4.0	4.0			4.0		7.0	7.0				
Minimum Split (s)	26.0	26.0			26.0		26.0	26.0				
Total Split (s)	26.0	26.0	0.0	0.0	26.0	0.0	49.0	49.0	0.0	0.0	0.0	0.0
Total Split (%)	34.7%	34.7%	0.0%	0.0%	34.7%	0.0%	65.3%	65.3%	0.0%	0.0%	0.0%	0.0%
Maximum Green (s)	21.0	21.0			21.0		44.0	44.0				
Yellow Time (s)	4.0	4.0			4.0		4.0	4.0				
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.5	2.5			2.5		1.0	1.0				
Recall Mode	None	None			None		C-Max	C-Max				
Walk Time (s)	4.0	4.0			4.0		7.0	7.0				
Flash Dont Walk (s)	17.0	17.0			17.0		14.0	14.0				
Pedestrian Calls (#/hr)	36	36			16		11	11				
Act Effct Green (s)		16.2			16.2			48.8				
Actuated g/C Ratio		0.22			0.22			0.65				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.52			0.02			0.84				
Control Delay		29.5			18.0			15.2				
Queue Delay		0.0			0.0			0.0				
Total Delay		29.5			18.0			15.2				
LOS		C			B			B				
Approach Delay		29.5			18.0			15.2				
Approach LOS		C			B			B				
Queue Length 50th (ft)		50			2			393				
Queue Length 95th (ft)		m69			13			#515				
Internal Link Dist (ft)		219			156			581			572	
Turn Bay Length (ft)												
Base Capacity (vph)		378			500			3299				
Starvation Cap Reductn		0			0			0				
Spillback Cap Reductn		0			0			0				
Storage Cap Reductn		0			0			0				
Reduced v/c Ratio		0.40			0.02			0.84				

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 75
Offset: 35 (47%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.84
Intersection Signal Delay: 15.9 Intersection LOS: B
Intersection Capacity Utilization 74.3% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 18: 94th Street & Collins Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	142	3	0	0	6	3	161	2482	1	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0			5.0				
Lane Util. Factor		1.00			1.00			0.91				
Frt		1.00			0.95			1.00				
Flt Protected		0.95			1.00			1.00				
Satd. Flow (prot)		1776			1779			5070				
Flt Permitted		0.72			1.00			1.00				
Satd. Flow (perm)		1349			1779			5070				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	149	3	0	0	6	3	169	2613	1	0	0	0
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	152	0	0	7	0	0	2783	0	0	0	0
Turn Type	Perm						Perm					
Protected Phases		4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)		16.2			16.2			48.8				
Effective Green, g (s)		16.2			16.2			48.8				
Actuated g/C Ratio		0.22			0.22			0.65				
Clearance Time (s)		5.0			5.0			5.0				
Vehicle Extension (s)		2.5			2.5			1.0				
Lane Grp Cap (vph)		291			384			3299				
v/s Ratio Prot					0.00							
v/s Ratio Perm		c0.11						0.55				
v/c Ratio		0.52			0.02			0.84				
Uniform Delay, d1		26.0			23.1			10.1				
Progression Factor		0.99			1.00			1.00				
Incremental Delay, d2		1.0			0.0			2.8				
Delay (s)		26.6			23.2			13.0				
Level of Service		C			C			B				
Approach Delay (s)		26.6			23.2			13.0			0.0	
Approach LOS		C			C			B			A	

Intersection Summary			
HCM Average Control Delay	13.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

APPENDIX J
MIAMI-DADE COUNTY TRAFFIC CALMING MANUAL

TRAFFIC FLOW MODIFICATION(S) / STREET CLOSURE(S)

SUMMARY OF STAGE 1 PROCEDURE
SUMMARY OF STAGE 2 PROCEDURE
DETAILS OF STAGE 1 PROCEDURE
DETAILS OF STAGE 2 PROCEDURE
POLICY ON SPEED HUMPS

PUBLIC WORKS DEPARTMENT
TRAFFIC ENGINEERING DIVISION

TRAFFIC FLOW MODIFICATION(S)/STREET CLOSURE(S)

SUMMARY OF STAGE 1 PROCEDURE

INITIAL TRAFFIC STUDY BY MIAMI-DADE COUNTY PUBLIC WORKS

1.1 All applicants, whether residing within unincorporated Miami-Dade County or a municipality, may submit a request for a traffic flow modification(s)/street closure(s) to the Miami-Dade County Public Works Department (PWD) in the form of a letter or complete the application on Page 4.

1.2 PWD will conduct the initial traffic study to confirm the applicant's concerns and to identify and recommend traffic calming measures.

1.3 PWD will make the determination of whether the location(s) falls within unincorporated Miami-Dade County or a municipality.

1.4 PWD will make the determination of whether the review from various affected entities, such as Police, Fire, etc, is required. If review is not required, proceed to Step # 1.6.

1.5 Preliminary review will be performed by affected entities, including but not limited to, Police, Fire, respective municipality, etc. If review by any of the entities results in denial or if the proposed traffic flow modification(s)/street closure(s) does not meet all criteria outlined under this process or applicable State laws, then the application will be denied.

1.6. PWD will make the determination if concurrence from two-thirds of the affected residents and/or property owners is required. If concurrence is not required, proceed to Step # 1.8.

A municipal jurisdiction, in lieu of two-thirds concurrence, may pass a resolution after a public hearing requesting PWD to consider the proposed traffic flow modification(s)/street closure(s).

1.7 PWD will mail out ballots to obtain concurrence from two-thirds of the affected residents and/or property owners. If the residents and/or property owners desire to reinitiate the process, such a process can be reinitiated after ninety (90) calendar days from the previous opening date of the ballots. However, the applicant will be charged with the processing and mailing cost to be determined on a case-by-case basis. In those instances where the affected residents and/or property owners do not approve the proposed improvement, the process stops.

1.8 PWD will request People's Transportation Plan (PTP) funding approval from the District Commissioner for the implementation of the improvements.

1.9 Determination is to be made to ascertain whether improvements implemented by PWD did not cause any adverse impact to traffic and are acceptable to the affected area residents and/or property owners. In the event that the action taken by PWD is unacceptable to affected area residents and/or property owners, they may proceed to Stage 2, Step # 2.1.

If residents and/or property owners are satisfied with the temporary improvement, then proceed to Step # 1.10.

1.10 PWD will design permanent traffic calming devices.

1.11 PWD will install permanent traffic calming devices.

SUMMARY OF STAGE 2 PROCEDURE

TRAFFIC STUDY BY APPLICANT'S CONSULTANT

2.1 In the event that the action taken by PWD is unacceptable to affected area residents and/or property owners, they have an option of engaging a traffic consultant, at their cost, to perform a traffic study.

If the location falls within a municipality, applicant must re-submit the request to respective municipality for further consideration.

2.2 The consultant conducts pre-implementation traffic study to identify and confirm traffic concerns (i.e., traffic intrusion, excessive traffic volume, speeding, traffic accidents, etc.) and to determine if the collected traffic data meets the PWD traffic calming devices.

2.3 Traffic calming alternatives are identified and staged alternative plans generated.

2.4 Pre-implementation study performed to determine potential impacts of proposed traffic calming devices on roadways within and outside study areas.

2.5 PWD will make determination if the location is within a municipality or unincorporated Miami-Dade County.

2.6 PWD will make determination if the review from various affected entities, such as Police, Fire, etc., is required.

2.7 Preliminary review will be performed by various affected entities, to include Police, Fire, etc.

2.8 PWD reviews comments from various entities and makes determination whether to approve or deny the request.

2.9 PWD will make determination if concurrence from two-thirds of the affected residents and/or property owners is required.

If concurrence is not required, proceed to Step # 2.11.

2.10 Applicant obtains concurrence from two-thirds of the affected residents and/or property owners, if required. In the event that the affected residents and/or property owners do not approve the proposed improvements, return to Step # 2.3.

2.11 Applicant's contractor installs temporary traffic calming devices.

2.12 Applicant's consultant conducts post-implementation study to determine if traffic calming measures are operating at an acceptable level to the residents and/or property owners.

2.13 If the post-implementation study results, as well as the traffic calming devices are acceptable to residents and/or property owners, the process is completed. However, if the post-implementation study results are unacceptable, return to Step # 2.3.

If the residents and/or property owners desire aesthetic enhancements, proceed to Step # 2.14.

2.14 Applicant's consultant designs permanent traffic calming devices if the temporary devices are acceptable to residents.

2.15 Applicant's contractor installs permanent traffic calming devices.

DETAILS OF STAGE 1 PROCEDURE

INITIAL STUDY BY MIAMI-DADE COUNTY PUBLIC WORKS (PWD)

1.1 Submittal of Application for Traffic Flow Modification(s)/Street Closure(s)

In order for an applicant to submit an application for a traffic flow modification(s)/street closure(s), including the **reopening of a previously closed street(s)**, the applicant, whether residing in unincorporated Miami-Dade County or within a municipality, shall follow the procedures outlined herein:

1.1.a Submit the request in the form of a letter or complete the application form on Page 4 and

1.1.a.1 Identify the traffic concerns, such as:

- Traffic Intrusion
- Excessive Traffic Volume
- Speeding
- Traffic Accidents
- Other

1.1.a.2 Explain how long these problems have existed and the conditions that have caused these problems.

1.1.a.3 Identify the type of traffic control measure that is being requested and include a map illustrating the location(s) of proposed traffic flow modification(s)/street closure(s).

1.1.a.4 Identify on whose behalf the application is being made.

- Homeowners Association
- Individual
- Other

1.1.a.5 All applicants, **whether residing in unincorporated Miami-Dade County or within a municipality,** must submit their letter or a completed application to PWD at the following address:

Chief, Traffic Engineering Division
Miami-Dade County Public Works Department
111 N.W. First Street, Suite 1510
Miami, Florida 33128-1970

Traffic Flow Modification/Street Closure
Applicant Form

Applicant: _____ Date: _____

Contact Name: _____ Phone: _____

Local Address: _____

Location: _____

1.a.1 Rank your neighborhood's traffic problems and provide a brief description of each (for instance, time when the problem is most serious, or specific issue, such as a pothole).

- Traffic Intrusion_____
- Excessive traffic volume_____
- Speeding_____
- Accidents_____
- Other (please explain)

_____

_____

1.a.2 How long have these problems existed? What conditions have caused these problems?

_____

_____

1.a.3 Please check the type of action requested.

- Traffic Circle
- Median Treatment
- Street Closure
- Special Taxing District
- Reverting the right-of-way
- Other (please specify)_____

List locations where traffic flow modification(s)/street closure(s) is requested and provide an area map identifying these devices_____

_____

1.a.4 This request is made on behalf of homeowners by:

- ˆ Homeowners Association
- ˆ Individual
- ˆ Other (please specify) _____

1.a.5 Please return the completed application form to:

Chief, Traffic Engineering Department
Miami-Dade County Public Works Department
111 N.W. First Street, Suite 1510
Miami, Florida 33128-1970

For Office Use Only

Project Number _____ Date Application Received: _____

Date Preliminary Analysis Completed _____ Identified Problems: ˆ Exist ˆ Perceived

Date of First Neighborhood Workshop _____ Traffic Team: ˆ Yes ˆ No

Director Action: ˆ Favorable ˆ Unfavorable Consensus Reached: ˆ Yes ˆ No

Date of Project Implementation _____

Project Review Date: _____ Project Successful: ˆ Yes ˆ No

1.1.b. If the request for traffic flow modification(s)/street closure(s) is due to reasons other than traffic, such as crime, etc., the following two procedures shall be utilized:

1.1.b.1 **Special Taxing District:** Contact the Special Taxing District Division, PWD, at 305-375-2203 to obtain procedure details.

1.1.b.2 **Reverting of the public right-of-way** to adjacent property owners:

1.1.b.2.1 If the location falls within unincorporated Miami- Dade County, contact the Right-of-Way Division, PWD, at 305-375-2714 to obtain additional information.

1.1.b.2.2 If the location falls within a municipality, contact the respective municipality and follow their established procedures.

Miami-Dade County has exclusive jurisdiction over traffic control within a municipality. As such, the municipal jurisdictions are required to submit a traffic study to PWD for their review and approval. The study must support the proposed traffic flow modification(s)/street closure(s) and show that County and State roadways would not be adversely impacted as a result of reverting of the right-of-way.

1.2 Initial traffic study by PWD

PWD will conduct an initial study to confirm traffic concerns and to identify and recommend the traffic calming measures. The scope of the initial study, depending on the nature of the complaint, may include 24 hour counts, turning movement counts, license plate survey, spot speed studies, etc.

Requests for traffic flow modification(s)/street closure(s) and reopening of previously closed streets, will be considered by PWD on a case-by-case basis, for streets meeting the following criterion.

1.2.a The streets for which modification(s) are proposed must be **a local or a collector residential street(s) and not an arterial roadway or part of the State Highway System.**

1.2.b The proposed closure(s) **shall not create street(s) longer than 600 feet**, as per Miami-Dade County Code, Section 28-14.6.

1.2.c The street(s) proposed for closure **shall have sufficient right-of-way** to adequately construct T-turn around or cul-de-sacs as per PWD Standards Details.

1.2.d Pre-implementation **data confirms that a problem exists.**

1.2.e The traffic study reveals that the proposed traffic flow modification(s)/street closure(s) meets the criteria for the installation of traffic calming devices on Page No. 8 and the proposed measures will not adversely affect the traffic on nearby streets, by the diverted traffic.

1.2.f The projected vehicular volumes on any other adjoining street do not exceed the threshold limits stated in Stage 2, Step # 2.4.a.

1.2.g The changes in traffic flow will not create any liability to the County.

1.3 Is request within a municipality?

1.3.a If the request for traffic flow modification(s)/street closure(s) falls within unincorporated Miami-Dade County, PWD coordinates the review as per Step # 1.5.a.

1.3.bIf request for traffic flow modification(s)/street closure(s) falls within a municipality, PWD will request affected entity to coordinate the review, as per Step # 1.5.b.

1.4 Is review from various entities required?

PWD will make the determination if the proposed traffic calming measures will impact other entities and if review is required from affected entities, to include Police, Fire, etc.

If review is required, proceed to next step. If review is not required, proceed to Step # 1.6.

1.5 Preliminary review by various entities

1.5.a **If the request for traffic flow modification (s) or street closure(s) falls within unincorporated Miami-Dade County**, then PWD, Traffic Engineering Division, shall coordinate a review with agencies potentially affected by the traffic flow modification(s)/street closure(s), which may include but not be limited to the following entities:

- Miami-Dade County Fire Rescue (MDFR).
- Affected Municipal Fire Department.
- Miami-Dade Police Department (MDPD).
- Affected Municipal Police Department.
- Miami-Dade County Planning and Zoning Department (MDP&Z).
- Miami-Dade County Public Schools (MDCPS).

- Miami-Dade Transit (MDT).
- Florida Department of Transportation (FDOT).

1.5.a.1 PWD, Traffic Engineering Division, shall review all comments brought forth by the aforementioned entities. If all agencies and departments concur, then the Director of PWD will approve the application.

Public Works Department – Traffic Engineering Division
Policy for Traffic Calming Measures

Must meet the first criteria and at least one of the remaining criteria in order for the Public Works Department to consider Traffic Calming measures:

Criterion	Residential Local Streets	Residential Collector Streets
Minimum Traffic Volume	>1,500 VPD <3,000***	>3,000 VPD <8,000***
	>150 VPH <300	>300 VPH <800
85th Percentile Speed+	10 MPH> Speed Limit	10 MPH> Speed Limit
Correctable Accidents per year	>3 per year	>6 per year
Cut Through Traffic	>25%	>50%
Pedestrian Crossing Volume	>25	>50
Concurrence of residence*	2/3 of total number of residents**	2/3 of total number of residents **

VPD = Vehicles per day;
VPH = Vehicles per hour

\+ It is the speed at which 85% of motorists travel
* Prior to community notification to submit petition, the above guidelines will first be evaluated to determine eligibility for application of calming measures.

** For mid-block calming, total residents=All property owners between adjacent intersection
** For intersection calming, total residents=All property owners from subject intersections to the next intersections of all legs.

*** The traffic volume within a municipal boundary could be reduced to a total of 30%, and speed to 50% at the request of and for those municipalities, which provide funding for their traffic calming program.

Traffic Flow Modification/Street Closure
Interdepartment Review

To: Director, Public Works Department
111 N.W. 1st Street, Suite 1610
Miami, Florida 33128-1970

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

We have reviewed this request and based on the reasoning stated above, we recommend the following action:

ˆ Request Approved ˆ Request Denied

Signature: _____ Date: _____

Print Name: _____

Reviewing Agency: _____

Address: _____

_____

Please attach additional sheets as necessary.

However, under the following conditions the application for traffic flow modification(s)/street closure(s) will be denied.

1.5.a.1.1 Comments made by any entity revealed concerns, which cannot be resolved.

1.5.a.1.2 The proposed traffic flow modification(s)/street closure(s) or extenuating circumstances do not meet all criteria outlined under this process or applicable State laws.

These reviews shall be relevant to the agency reviewing the proposed traffic flow modification(s)/street closure(s). The scope of the traffic review shall be determined on a case-by-case basis by PWD.

1.5.b **If the request affects local streets within a municipality**, then the PWD will request the municipality to coordinate the review with agencies potentially affected by the traffic flow modification(s)/street closure(s), which may include, but not be limited to the following entities:

- Municipal Fire Department.
- Miami-Dade County Fire & Rescue (MDFR).
- Municipal Police Department.
- Miami-Dade County Police Department (MDPD).
- Miami-Dade County Planning and Zoning Department (MDP&Z).
- Miami-Dade County Public Schools (MDCPS).
- Miami-Dade Transit (MDT).
- Florida Department of Transportation (FDOT).
- PWD, Traffic Engineering Division.

These reviews shall be relevant to the agency reviewing the proposed traffic flow modification(s)/street closures(s). The scope of the traffic review shall be determined on a case-by-case basis by PWD.

1.5.b.1 The municipal representative shall review all comments brought forth by the aforementioned entities. The Municipality under the following conditions shall deny the application for traffic flow modification(s)/street closure(s):

1.5.b.1.1 Comments made by any entity revealed concerns, which cannot be resolved.

1.5.b.1.2 The proposed locations or extenuating circumstances do not meet all criteria outlined under this process or applicable State laws.

1.5.c If the preliminary review performed by the various affected entities results in denial of the request, the process stops.

1.5.d If the preliminary review performed by the various affected entities results in concurrence of the request, then the municipality endorses the request and forwards it to PWD, Traffic Engineering Division, for their review and approval. If the request is approved by PWD, proceed to the next step.

1.6. Is concurrence from two-thirds of the affected residents and/or property owners required?

PWD, depending on the proposed traffic calming devices, will determine if concurrence from two-thirds of the affected residents and/or property owners is required.

A municipal jurisdiction, in lieu of two-thirds concurrence, may pass a resolution after a public hearing requesting PWD to consider the proposed traffic flow modification(s)/street closure(s).

The affected area with an unincorporated Miami- Dade will be established by the county's staff.

If the location fall within a municipality the affected area will be established by both the city's and the county's staff.

The affected area may include, and is not limited to, those properties where normal travel routes, to and from the affected area, are to be altered by the traffic flow modification(s)/street closure(s) and/or properties that are significantly impacted by the diverted traffic.

1.6.a If concurrence of two-thirds of the affected residents and/or property owners is required, proceed to next step.

1.6.b If concurrence of two-thirds of affected residents and/or property owners is not required, proceed to Step # 1.8.

1.7. Approval of the plan by Homeowners

1.7.a PWD, under certain circumstances, may elect to obtain concurrence from the affected residents and/or property owners.

1.7.b PWD will mail out ballots to obtain concurrence of two-thirds of the affected residents and/or property owners.

1.7.c If the location is within a municipality, that jurisdiction in lieu of the two-thirds concurrence may elect to have their elected body vote on the proposed traffic flow modification(s)/street closure(s) after a public hearing and may submit the resolution to PWD requesting to consider the proposed traffic flow modification(s)/street closure(s).

1.7.d If two-thirds of the affected residents and/or property owners do not approve the proposed improvements by PWD, then the process stops.

1.7.e If the residents and/or property owners desire to reinitiate the process, such process can be reinitiated after ninety (90) calendar days from the previous opening date of the ballots. However, the applicant will be charged with the mailing and processing cost, which will be determined on a case-by-case basis.

1.8 ` Implementation of temporary traffic calming measures

PWD implements the improvements.

1.8.a **If the request for traffic flow modification(s)/street closure(s) falls within unincorporated Miami-Dade County**, PWD will implement the improvements.

1.8.b **If the request falls within a municipality**, PWD will coordinate with the municipality for the installation of the traffic calming devices.

1.9 Action by PWD

1.9.a If the improvements implemented by PWD did not cause an adverse impact to traffic and are acceptable to the residents and/or property owners, proceed to Step # 1.10.

1.9.b If the improvements implemented by PWD are unacceptable to the residents and/or property owners, then a more restrictive traffic flow modification(s)/street closure(s) may be considered. Please proceed to Stage 2, Step # 2.1.

1.10 Design of Permanent Traffic Calming Devices

1.10.a **If the location falls within unincorporated Miami-Dade County**, PWD will develop construction plans for permanent traffic calming devices.

1.10.b **If the location falls within a municipality**, PWD will coordinate the design of

permanent traffic calming devices with the municipality.

1.11 Installation of Permanent Traffic Calming Devices

1.11.a If the location falls within unincorporated Miami-Dade County, PWD will install permanent traffic calming devices.

1.11.b If the location falls within a municipality, PWD will coordinate the installation with the municipality.

DETAILS OF STAGE 2 PROCEDURE

TRAFFIC STUDY BY APPLICANT'S CONSULTANT

2.1. Applicant engages a traffic consultant to perform a traffic study

If the improvements implemented by PWD, pursuant to Stage 1 procedures, are unacceptable to the municipal jurisdiction, the residents and/or property owners, they have the option of engaging a traffic consultant, at their cost, to conduct an independent traffic study.

2.1.a If the location falls within unincorporated Miami-Dade County, this study is coordinated by PWD.

2.1.b If the location falls within a municipality, the applicant **must first make a formal request to the municipality** where he resides, prior to proceeding with a formal study. Note that both the County and the City must coordinate the study.

2.2. Conduct pre-implementation traffic study

The traffic consultant hired by the applicants shall perform **a pre-implementation traffic study.** This study shall identify and confirm the applicant's concerns (i.e., traffic intrusion, excessive traffic volume, speeding, traffic accidents, etc.) and determine if the collected traffic data meets PWD traffic calming criteria.

On a case-by-case basis, PWD, Traffic Engineering Division, may require the following **data** depending on the type, and complexity of the concerns:

2.2.a **License Plate Survey:** If the reason for the request is due to traffic intrusions, this survey will be required for confirmation of cut-through traffic. Sampling during the AM and PM peak hour periods will be considered adequate.

2.2.b **Average Daily Traffic:** If the reason for the request is due to an excessive amount of traffic in the area, a sampling of a 24 hour period will be considered adequate.

2.2.c **Speed Studies:** If the reason for the request is due to speeding, then speed studies are required to confirm vehicular speed. A speeding problem can be verified when the 85th percentile speed of all vehicles is at least 10 MPH greater than the posted speed limit. A non-peak hour daytime minimum sampling of 100 vehicles will be considered adequate.

2.2.d **Traffic Accident History:** If the reason for the request is due to traffic accidents, then traffic accident reports for the last three (3) years are reviewed to confirm accident history.

2.2.e **Other data and/or studies** as needed.

PWD, on a case-by-case basis, may require additional traffic data or studies if needed.

2.2.f. If the pre-implementation study reveals that the traffic data does not meet PWD guidelines for traffic calming measures on Page # 8, then a final decision of denial is rendered and the process stops.

If the location falls within unincorporated Miami-Dade County, PWD will notify the applicant of the denial.

If the location falls within a municipality, the municipality shall notify the applicant of the denial.

2.2.g If the pre-implementation study confirms that a problem exists and the traffic data meets PWD guidelines for traffic calming measures on Page # 8, the applicant may proceed to the next step.

2.3. Identify Traffic Calming Alternatives

It would be necessary for the consultant to adopt an area-wide systematic approach to the development of traffic calming alternatives. This approach must work within the overall framework of the existing roadway classification system and encourage community participation.

There are three (3) levels of traffic calming ranging from I to III to distinguish those least restrictive (passive) traffic control measures from those that are most restrictive (active). It should be noted that among the categories, there could be many design variations unique to each device. Ideally, the least restrictive measures to address traffic concerns should be employed first, followed by more active and physical traffic calming devices. This incremental approach would allow a cost effective opportunity to identify the real traffic problem, if any, and better evaluate the impacts of more restrictive measures.

Keeping the above staged approach in mind and a handful of traffic calming alternatives available for use on local roads, a typical request for a traffic flow modification(s)/street closure(s) might proceed accordingly:

2.3.a The traffic consultant will assess the community's needs.

2.3.b The consultant will generate staged alternative traffic calming plans, including design plans for temporary and permanent traffic calming measures, for approval by PWD.

2.3.b.1 PWD will implement the lowest level (Level I through Level III) traffic control measures on a temporary basis; measures that, in the consultant's opinion, will satisfy the applicant's concerns.

2.3.b.2 Allow traffic to stabilize and reevaluate traffic patterns after six (6) months.

2.3.b.3 If Stage 1 impacts are unacceptable, then proceed to Stage 2 and reevaluate more restrictive traffic calming alternatives.

2.3.b.4 If Stage 1 impacts are acceptable, PWD will implement permanent traffic control measures.

The following categories of traffic calming alternatives are most effective when used in combination with each other:

LEVELS OF TRAFFIC CALMING		
LEVEL I	**LEVEL II**	**LEVEL III**
Education Neighborhood Speed Watch Program Law Enforcement Movement Restrictions One-Way Streets Multi-Way Stop Control Textured Pavement Gateway Treatments Border Landscaping Treatment	Chokers Roundabouts Traffic Circle Speed Humps Raised Median through Intersections (Right Turn Only) Mid-block Raised Islands/Medians	Semi Diverter Diagonal Diverter Street Closure Speed Humps

Using the above-referenced staged approach, there are several traffic calming alternatives available for use on local streets. The consultant, along with citizen participation, will generate staged alternative traffic calming plans, including construction plans for temporary traffic calming measures, for approval by PWD.

The consultant shall also prepare a cost-estimate for the traffic calming alternatives identified above and proceed to the next step for a pre-implementation study.

2.4. Perform Pre-implementation Study to determine the potential impact of traffic calming measures on roadways within and outside study area

The consultant shall conduct a pre-implementation study to determine the potential impact of the proposed traffic calming devices/street closure(s), within and outside study area.

PWD, depending on the type, complexity and requirements of the area in question, on a case-by-case basis, may require analysis per section 2.4.d and 2.4.e, which must conform to the following criterion.

2.4.a **Volume Criteria:**

2.4.a.1 Future traffic volumes due to traffic diversion on any of the **Residential Local Streets** may not exceed 1,500 vehicles per day (150 vph during the peak hours) if a traffic flow modification(s) / street closure is implemented. The threshold values define those limits when a local residential street begins to lose its livability and are used for analysis purposes only. They do not guarantee that the traffic flow modification(s) or a closure(s) will be approved.

2.4.a.2 Future traffic volumes due to traffic diversion on any of the **Residential Collector Streets** may not exceed 3,000 vehicles per day (300 vph during the peak hours) if a traffic flow modification(s) / street closure is implemented. These threshold values define those limits when a residential collector street begins to lose its livability and are used for analysis purposes only. They do not guarantee that the traffic flow modification(s) or a closure(s) will be approved.

2.4.b **L.O.S. Criteria**:

2.4.b.l Future overall intersection Level Of Service (LOS) must not exceed LOS “D” or if operating at LOS "E" must not degrade to LOS "F". Also,

2.4.b.2 The same criterion applies for an individual intersection approach or lane group within the critical intersection approach.

2.4.b.3 If intersection or approach or lane group is already at LOS “F”, then diverted traffic volumes must not be more than 5% of the existing traffic volumes without diversion.

2.4.c **Determine Affected Area:**

The affected area may include, and is not limited to, those properties where normal travel routes, to and from the affected area, are to be altered by the traffic flow modification(s)/street closure(s) and/or properties that are significantly impacted by the diverted traffic.

2.4.c.1 **If the request for traffic flow modification(s)/street closure(s) falls within unincorporated Miami-Dade County**, PWD will establish affected area boundaries on a case-by-case basis.

2.4.c.2 **If the request for traffic flow modification(s)/street closure(s) falls within a municipality,** both the city's, and county's staff will determine the boundaries of the affected area on a case-by-case basis and obtain the concurrence from the Florida Department of Transportation (FDOT), if their facilities are impacted.

2.4.d **Conduct Traffic Analysis within the Study Area:**

For critical locations, if any, provide projection of the expected diverted traffic within the study area. This will require the following steps:

2.4.d.1 Peak hour turning movement counts.

2.4.d.2 24 hour counts on those streets that are proposed to be closed or modified.

2.4.d.3 24 hour counts on those streets that may be impacted by proposed traffic flow modification(s)/street closure(s).

2.4.d.4 Level of service (LOS) analysis at critical locations that will be affected by redistributed traffic.

2.4.d.5 A schematic diagram for both AM and PM peak hours showing existing and redistributed traffic and Average Daily Traffic (ADT's).

2.4.e **Conduct Traffic Analysis outside the Study Area**

Projection of the expected diverted traffic at critical intersections, if any, adjacent to and surrounding the affected area. Particular attention shall be made to the impacts on the State highway system and County roadways, including:

2.4.e.1 Peak hour turning movement counts (TMC).

2.4.e.2 Queuing analysis and storage requirements at signalized intersections.

2.4.e.3 LOS analysis at critical signalized and un-signalized existing intersections.

2.4.e.4 A schematic diagram showing the results of the TMC and ADT analyses for critical locations.

2.4.e.5 Phasing modification requirements at existing signalized intersection.

2.4.e.6 A detailed evaluation of the impacts caused by the traffic flow modification(s)/street closure(s) on emergency vehicle response times and fire hydrant accessibility, as well as other services such as mail delivery, school bus routing, transit service, trash pick-up, etc.

Each individual case will dictate, which of the above items are required, depending on the complexity and requirements of the study area.

2.4.f **The Report:**

The consultant will document the study in the form of a report. PWD will require as part of the report the following items:

- A drawing that shows the exact location of existing and proposed traffic flow modification(s)/street closure(s).
- Boundary of the affected area.
- Critical intersection geometries.
- Analysis of the critical intersections per section 2.4.d and 2.4.e.
- Comparison of before and after LOS.

The consultant will indicate the optimum traffic calming measure from each of Levels I, II and III, which adequately satisfies the applicant's concern. The Level I measure will be implemented first. If the results are not satisfactory, then the next level measure will be implemented until Level III is reached.

Any traffic study performed for traffic flow modification(s)/street closure(s) should be compiled by the traffic consultant in the form of a formal report, **signed and sealed** by a Florida registered Professional Engineer.

If the location falls within unincorporated Miami-Dade County, applicant shall

submit three (3) copies of the report to PWD, which, in turn, forwards a report to FDOT if State facilities are impacted.

If the location falls within a municipality, applicant shall submit three (3) copies of the report to the municipality, which in turn, forwards a report to PWD and the FDOT if State facilities are impacted.

2.5 Is request within a municipality?

2.5.a If the request for traffic flow modification(s)/street closure(s) falls within unincorporated Miami-Dade County, PWD coordinates the review as per Step # 2.7.a.

2.5.b If request for traffic flow modification(s)/street closure(s) falls within a municipality, PWD will request affected entity to coordinate the review as per Step # 2.7.b

2.6 Is review from various entities required?

PWD will make the determination if the proposed traffic calming measures will impact other user entities and if review is required from affected user entities, such as Police, Fire, etc.

If review is required, proceed to next step. If review is not required, proceed to Step # 2.8.

2.7 Preliminary review by various entities

2.7.a **If the request for traffic flow modification(s)/street closure(s) falls within unincorporated Miami-Dade County**, then PWD, Traffic Engineering Division, shall coordinate a review with agencies potentially affected by the traffic flow modification(s)/street closure(s), which may include but not be limited to affected Municipal Police and Fire Departments, MDFR, MDPD, MDP&Z, MDCPS, MDT, FDOT.

2.7.a.1 PWD, Traffic Engineering Division, shall review all comments brought forth by the aforementioned entities. If all agencies and departments concur, then the Director of PWD will approve the application.

However, under the following conditions, the application for traffic flow modification(s)/street closure(s) will be denied.

2.7.a.1.1 Comments made by any entity revealed concerns, which cannot be resolved.

2.7.a.1.2 The proposed locations or extenuating circumstances do not meet all criteria outlined under this process or applicable State laws.

2.7.b **If the request affects local streets within a municipality**, then the municipality coordinates review with other agencies potentially affected by the traffic flow modification(s)/street closure(s), which may include but not be limited to affected Municipal Fire and Police Departments, MDFR, MDPD, MDP&Z, MDCPS, MDT, FDOT, PWD, Traffic Engineering Division.

2.7.b.1 The municipal representative shall review all comments brought forth by the aforementioned entities. The municipality under the following conditions shall deny the application for traffic flow modification(s)/street closure(s):

2.7.b.1.1 Comments made by any entity revealed concerns, which cannot be resolved.

2.7.b.1.2 The proposed locations or extenuating circumstances do not meet all criteria outlined under this process or applicable State laws.

2.7.c If the preliminary review performed by the various affected entities results in denial of the request, the process stops.

2.7.d If the preliminary review performed by the various affected entities results in concurrence of the request, then the municipality endorses the request and forwards it to PWD, Traffic Engineering Division.

These reviews shall be relevant to the agency reviewing the proposed traffic flow modification(s)/street closure(s). The scope of the traffic review shall be determined on a case-by-case basis by PWD.

2.8 Determination by PWD

2.8.a **If the location falls within an unincorporated area**, PWD makes determination on the traffic flow modification(s)/street closure(s).

2.8.a.1 If the traffic flow modification(s)/street closure(s) is denied by PWD, the process stops.

2.8.a.2 If the traffic flow modification(s)/street closure(s) is approved by PWD, then proceed to the next step.

2.8.b **If the location falls within a municipality,** that entity makes recommendations on traffic flow modification(s)/street closure(s).

2.8.b.1 If the municipality denies the traffic flow modification(s)/street closure(s), the process stops.

2.8.b.2 If the traffic flow modification(s)/street closure(s) is **endorsed by the municipality,** the request is forwarded to PWD for review and approval.

2.9 Is concurrence from two-thirds of the affected property owners required?

PWD, depending on the traffic calming devices, will determine if concurrence from two-thirds of the affected residents and/or property owners is required.

2.9.a If concurrence of two-thirds of the affected residents and/or property owners is required, proceed to next step.

2.9.b If concurrence of two-thirds of the affected residents and/or property owners is not required, proceed to Step # 2.11.

2.10 Approval of Plan

The affected residents and/or property owners, as a result of the above referenced steps, must support the traffic calming flow modifications derived. Residents (one per household) must be either property or business owners, or tenant, within the affected area by the proposed traffic flow modification(s)/street closure(s).

A public workshop organized by the applicant's traffic consultant will be held to which affected residents and/or property owners and business owners will be invited to participate. The purpose of the workshop will be to determine the proposed alternative(s) having the greatest community support. The public workshop should include participation by the municipality, PWD and FDOT officials.

2.10.a If the location is within the unincorporated Miami-Dade PWD will mail out ballots to obtain concurrence of two-thirds of the affected residents and/or property owners.

2.10.b If the location is within unincorporated within a municipality, the municipality shall mail out ballots to obtain concurrence of two-thirds of the affected residents and/or property owners.

2.10.c A municipality, in lieu of the two-thirds concurrence may elect to have their elected body vote on the proposed traffic flow modification(s)/street closure(s) after a public

hearing and may submit the resolution to PWD requesting to consider the proposed traffic flow modification(s)/street closure(s).

2.10.c If two-thirds of the affected residents and/or property owners do not approve the proposed improvements, then the process stops.

2.10.d If the residents and/or property owners desire to reinitiate the process, such process can be reinitiated after ninety (90) calendar days from the previous opening date of the ballots. However, the applicant will be charged with the mailing and processing cost, which will be determined on a case-by-case basis.

2.10.e **If the request for traffic flow modification(s)/street closure(s) falls within unincorporated Miami-Dade County**, then the applicant agrees to pay for all costs directly associated with the traffic flow modification(s)/street closure(s) **beyond the installation signs and markings.**

2.10.e **If the request affects local streets within a municipality**, then determination will be made by the local entity and either the applicant or the municipality will share the costs directly associated with the traffic flow modification(s)/street closure(s) **beyond the installation signs and markings**.

2.10.f Depending on the complexity of the traffic flow modification(s)/street closure(s), PWD may direct the Citizens Transportation Advisory Committee (CTAC), Transportation Planning Technical Advisory Committee (TPTAC), or MPO, to provide input prior to the final recommendations by PWD.

2.10.g If CTAC, TPTAC or MPO technical reviews recommend against the proposed traffic calming alternative(s), that decision will be final.

2.10.h **If the location falls within unincorporated Miami-Dade County,** then PWD will notify the applicant of the approval or denial of the traffic flow modification(s)/street closure(s) request.

2.10.i **If the location falls within a municipality,** then PWD will notify the municipality, which, in turn, will notify the applicant, of the approval or denial of the traffic flow modification(s)/street closure(s) request.

2.10.j If two-thirds of the affected residents and/or property owners do not approve the proposed improvements by PWD, then the process stops.

2.10.j If the residents and/or property owners desire to reinitiate the process, such process can be reinitiated after ninety (90) calendar days from the previous opening date of

the ballots. However, the applicant will be charged with the mailing and processing cost, which will be determined on a case-by-case basis.

2.10.k If two-thirds of the affected residents and/or property owners concur with the traffic flow modification(s)/street closure(s) plan and approved by PWD, proceed to Step # 2.11

2.11 Installation of Temporary Traffic Calming Devices

2.11.a the applicant's consultant develops plan for the temporary and permanent traffic flow modification(s)/street closure(s).

2.11.b **If the jurisdiction falls within unincorporated Miami-Dade County,** then the applicant submits construction plans to PWD, Traffic Engineering Division, for approval of the temporary traffic flow modification(s)/street closure(s), including all signs and markings.

2.11.c **If the jurisdiction falls within a municipality,** then the applicant submits construction plans to the municipality for approval of the temporary traffic flow modification(s)/street closure(s) including all signs and markings.

2.11.d Municipality forwards plans to PWD, Traffic Engineering Division, for traffic engineering review and approval.

2.11.e Applicant engages a contractor to install temporary traffic control devices, which will be allowed only for a 90-day trial period.

2.11.f The applicant, at the expiration of the 90-day trial period, shall remove the temporary traffic calming devices, unless the Director of the Public Works Department grants an extension.

2.12 Conduct Post-Implementation Study to assess if the impact of implemented devices is acceptable

Once the temporary traffic calming devices are implemented, they need to be evaluated prior to the installation of the permanent traffic calming devices.

2.12.a Applicant requests traffic consultant to collect traffic data after the traffic pattern has been established over a period of 30 days and shall be completed **within the remaining 60 days.**

2.12.b Traffic consultant analyzes the data and submits reports either to PWD or the

municipality, whichever has jurisdiction.

2.13 Post-Impact Analysis Results

If study reveals that the impact of the temporary traffic control devices are unacceptable, then the consultant shall **go back to Step # 2.3** to **identify more restrictive traffic calming alternatives.**

If it is determined that the temporary traffic control devices adversely impacted traffic, then the request for permanent installation shall be denied and the **applicant shall direct contractor to remove the temporary traffic control devices at the expiration of the 90-day trial period.**

2.13.a **If the location falls within unincorporated Miami- Dade County,** then PWD will notify the applicant of the approval or denial of the permanent traffic flow modification(s)/street closure(s).

2.13.b **If the location falls within a municipality,** then PWD will notify the municipality. The municipality, in turn, will notify the applicant of the approval or denial of the permanent traffic flow modification(s)/street closure(s).

If the study reveals no adverse impacts and temporary devices are acceptable, then proceed to Step # 2.14.

2.14 Design of Permanent Traffic Control Devices

2.14.a **If the location falls within unincorporated Miami-Dade County,** then construction plans are submitted to PWD for approval of the permanent traffic flow modifications or street closures, including all signs and markings

2.14.b **If the location falls within a municipality,** then construction plans are submitted to a municipality for approval of the permanent traffic flow modifications or street closures, including all signs and markings. Municipality shall then forward plans to PWD, Traffic Engineering Division, for traffic engineering review and approval.

2.15 Installation of Permanent Traffic Calming Devices

Applicant directs private contractor(s) to install permanent closure, **at their expense**, upon obtaining necessary approvals and permits from the appropriate agencies.

In situations where a traffic flow modification(s)/street closure(s) in one municipality affects an adjacent municipality, then both municipalities shall mutually agree to such

modification(s).

Miami-Dade County has the sole discretion, subject to all applicable laws, to approve, modify, remove, continue or deny any traffic flow modification(s)/street closure(s) request regardless of any support or lack thereof via the petition process. The approval or denial issued by the Director of PWD for a traffic flow modification(s)/street closure(s) is final.

APPENDIX K
MIAMI-DADE COUNTY SPEED HUMPS POLICY

POLICY ON SPEED HUMPS

PURPOSE:

The purpose of this policy is to provide guidelines for the installation of speed humps along local residential streets within Miami-Dade County.

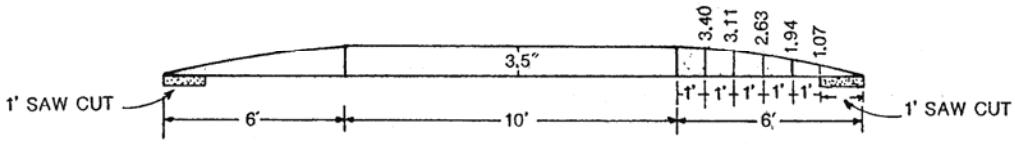
POLICY:

Speed humps will be considered, on a case-by-case basis, and only on local residential streets which meet the following criterion:

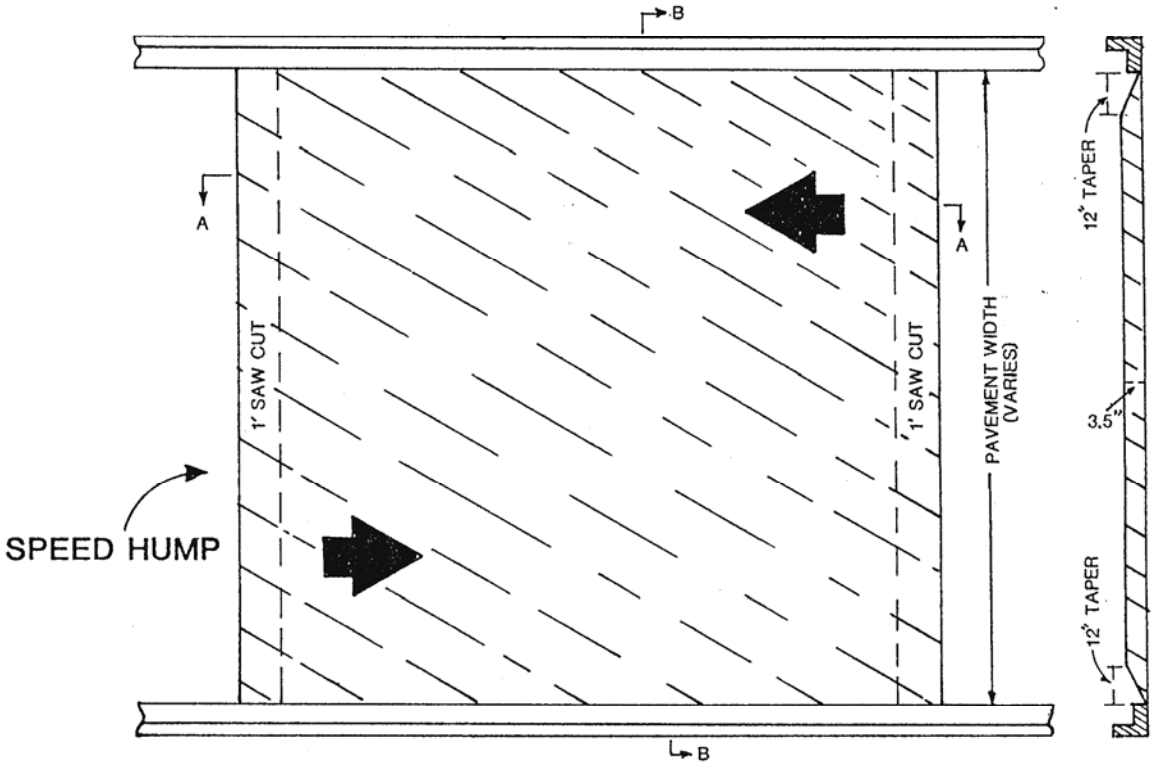
CRITERION:

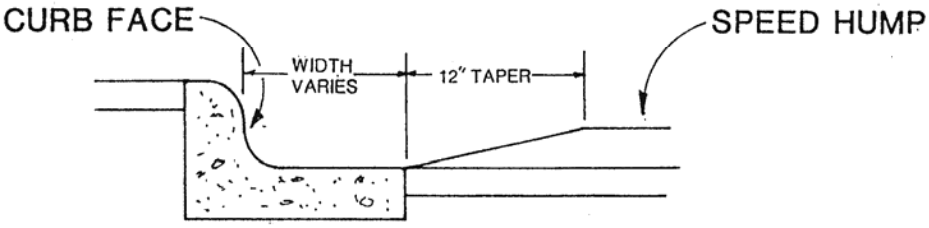
- The street must be a local residential street.
- The street shall not have more than one traffic lane in each direction.
- The street must be at least 750 feet long, with no intersecting roadways in between.
- Traffic volumes on the street must equal or exceed 750 vehicles per day.
- The street is posted at or has a speed limit of 30 MPH or less.
- The traffic engineering study has determined that the 85th percentile speed on the street is at least 10MPH over the speed limit.
- The speed humps will not be considered within 250 feet of a traffic signal, within 50 feet of an intersection, in front of a driveway, within an intersection or adjacent to fire hydrants.
- The speed humps will not be considered in, or on the approaches, to a horizontal or a vertical curve where visibility of the hump is restricted.
- The street should not be located along an emergency response route, Regional Transit or school bus route and must be approved by the respective agencies for the installation of speed humps.
- Installation of these devices shall not cause the traffic to divert to other neighborhood streets.
- 2/3 of the residents/property owners of the block(s) concur with the installation of the speed hump.
- The District Commissioner approve the use of PTP funding for the installation.

FLAT-TOPPED SPEED HUMP DESIGN



SECTION AA





SPEED HUMP TAPER AT CURB