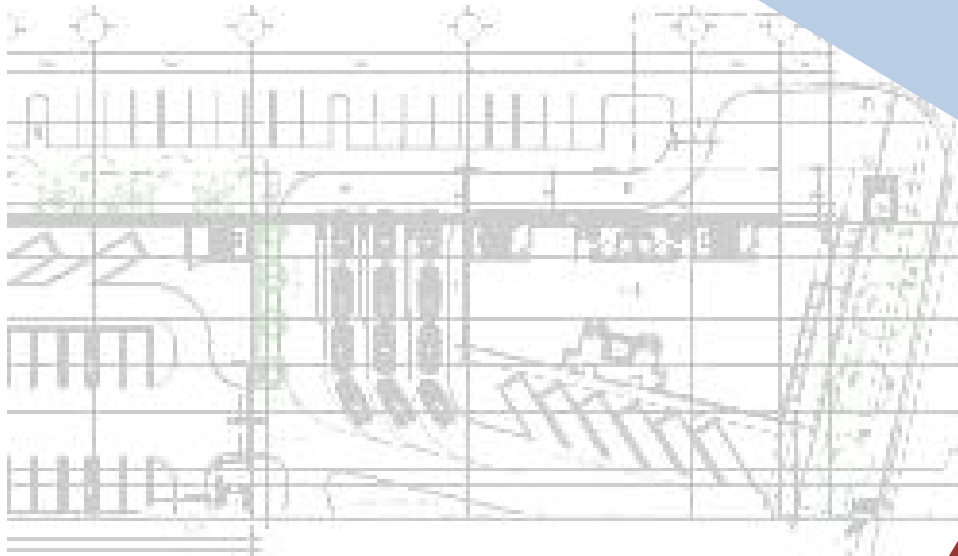


TRAFFIC IMPACT ANALYSIS

OPTIMA PLAZA NORTH HALLANDALE BEACH, FL

PLAN



PLAN



**PREPARED FOR:
CONSTRUCTIVA
ENTERPRISES, LLC**

Kimley»Horn

Project #140193000
November 2015
Revised January 6, 2016
CA 00000696
Kimley-Horn and Associates, Inc.
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West Palm Beach, Florida 33411
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TABLE OF CONTENTS

INTRODUCTION 1

DATA COLLECTION.....3

 Intersection Volume Data3

PROJECT TRAFFIC4

 Existing and Proposed Land Uses.....4

 Trip Generation4

 Trip Distribution6

 Traffic Assignment.....6

EXISTING TRAFFIC8

FUTURE TRAFFIC8

LINK ANALYSIS8

INTERSECTION ANALYSIS10

 Intersection Level of Service and Delay.....10

 Intersection Queuing14

PROJECT DRIVEWAY ACCESS.....16

CONCLUSION17

APPENDICES

- APPENDIX A: SITE PLAN
- APPENDIX B: STUDY METHODOLOGY
- APPENDIX C: LINK DATA (BROWARD COUNTY MPO)
- APPENDIX D: SERPM MODEL OUTPUT
- APPENDIX E: TURNING MOVEMENT COUNTS AND FDOT PEAK SEASON FACTORS
- APPENDIX F: GROWTH RATE CALCULATIONS AND VOLUME DEVELOPMENT WORKSHEETS
- APPENDIX G: SIGNAL TIMING WORKSHEETS
- APPENDIX H: INTERSECTION ANALYSIS
- APPENDIX I: COMMITTED DEVELOPMENT DATA
- APPENDIX J: FDOT PRE-APPLICATION LETTER

LIST OF TABLES

Table 1	Trip Generation	5
Table 2	Link Analysis	9
Table 3	Intersection Analysis (Existing Conditions)	11
Table 4	Intersection Analysis (Future Background)	12
Table 5	Intersection Analysis (Future Total)	13
Table 6	Intersection Queuing (Existing Conditions)	14
Table 7	Intersection Queuing (Future Background)	15
Table 8	Intersection Queuing (Future Total)	15

LIST OF FIGURES

Figure 1	Project Location Map.....	2
Figure 2	Site Traffic Assignment	7

INTRODUCTION

Optima Plaza North is a proposed office and bank site located on the west side of Federal Highway (US 1) just north of the Broward County/Miami-Dade County line in Hallandale Beach, Florida. *Figure 1* illustrates the location of the proposed development. The proposed ground-level site plan is included in *Appendix A*.

Kimley-Horn and Associates, Inc. has prepared this traffic impact analysis for submittal to the City of Hallandale Beach. The purpose of the study is to assess the project's impact on the surrounding roadway network and to evaluate the capacity available to support future traffic volumes. This report summarizes the data collection, project trip generation, distribution and link analysis.

The methodology for the study was based upon the City of Hallandale Beach's Development Review Procedures – Impact Evaluation submission requirements (City Code Section 32-788(g)) and a methodology meeting held on September 29, 2015 with the City's consultant. A copy of the methodology determined in that meeting is included in *Appendix B*.

DATA COLLECTION

To determine traffic conditions on the surrounding network, intersection turning movement counts were performed at the major intersections within 1,000 foot radius of the site plus additional intersections as agreed upon in the methodology determined with the City's consultant. Below is a summary of the intersections included in this analysis.

Intersection Volume Data

Turning movement counts were collected for the a.m. (7:00 a.m. to 9:00 a.m.) and p.m. peak period (4:00 p.m. to 6:00 p.m.) at the following intersections:

Major Hallandale Beach intersections within 1,000 feet of the site plus adjacent intersections:

- NE 213th Street & Biscayne Boulevard
- SE 9th Street & Federal Highway
- County Line Road & Dixie Highway
- County Line Road & SE 1st Avenue
- SE 10th Street & SE 3rd Avenue

Additional intersections:

- SE 3rd Street & Federal Highway*
- SE 3rd Street & Dixie Highway
- SE 3rd Street & SE 1st Avenue
- Hallandale Beach Boulevard & Federal Highway*
- Hallandale Beach Boulevard & Dixie Highway
- Hallandale Beach Boulevard & SE/NE 1st Avenue
- Hallandale Beach Boulevard & SE/NE 8th Avenue*
- Hallandale Beach Boulevard & SE/NE 10th Avenue*

* *Baseline turning movement count data was used from data reported in the Chateau Square Study conducted by Traf Tech, Inc (August 2015)*

The above turning movement counts were conducted during typical weekday conditions on October 28th, 2015. The volumes were collected in 15-minute intervals and the peak hour was determined for each intersection. The FDOT peak season conversion factor was applied to the traffic counts to adjust the traffic to peak season volumes. The turning movement counts and FDOT peak season factor category report are included in *Appendix E*.

PROJECT TRAFFIC

Project traffic used in this analysis is defined as the vehicle trips expected to be generated by the project, and the distribution and assignment of that traffic over the study roadway network.

Existing and Proposed Land Uses

The project site currently contains a pre-school learning center. No credit was applied for the existing use, which provided for a more conservative analysis of overall impacts. The proposed use is a 277,299 square foot office building with 6,218 square feet of drive-in bank use. For analysis purposes, the office square footage identified above includes the second story of bank use.

Trip Generation

The trip generation potential of this facility has been calculated using rates and equations published for Land Use 710 (General Office) and Land Use 912 (Drive-in Bank) by the Institute of Transportation Engineers (ITE) in the *Trip Generation Handbook, Ninth Edition*. Pass-by capture credits for the bank use were calculated based upon percentages published in the Trip Generation Handbook. As noted, the second story of the bank use identified on the site plan has been evaluated as office use because it is anticipated to function more like an office use than the customer-based first floor area of the bank.

Table 1 summarizes the trip generation potential in the weekday a.m. and p.m. peak hours.

Table 1
Optima Plaza North – Trip Generation Determination

Land Use	Intensity	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
			Total	Inbound	Outbound	Total	Inbound	Outbound
GROSS TRIPS								
Office	277,299 square ft	2850	433	381	52	389	66	323
Drive-In Bank	6,218 square ft	921	75	43	32	151	76	75
SUBTOTAL (DRIVEWAY VOLUMES)		3771	508	424	84	540	142	398
PASS-BY TRIPS								
Drive-In Bank	47%	433	35	20	15	71	36	35
TOTAL (NET NEW TRAFFIC)		3338	473	404	69	469	106	363

Trip generation rates used are published by the Institute of Transportation Engineers (ITE) in *Trip Generation, 9th Edition*

Office Daily: $\text{Ln}(T) = 0.76 * \text{Ln}(\text{ksf}) + 3.68$
 AM Peak Hour: $\text{Ln}(T) = 0.80 * \text{Ln}(\text{ksf}) + 1.57$ (88% inbound, 12% outbound)
 PM Peak Hour: $T = 1.12 * (\text{ksf}) + 78.45$ (17% inbound, 83% outbound)

Drive-In Bank Daily: $T = 148.15 * \text{ksf}$
 AM Peak Hour: $T = 12.08$ trips per ksf (57% inbound, 43% outbound)
 PM Peak Hour: $T = 24.30$ trips per ksf (50% inbound, 50% outbound)

Note: Ground floor of bank use used to determine square footage for drive-in bank use; second floor was assumed as office use

Trip Distribution

The Year 2035 Southeast Florida Regional Planning Model (SERPM 6.5.4) was used to determine project traffic distribution at project buildout. The project Select Zone created in SERPM was calibrated to generate a daily trip volume within five percent of the ITE-calculated daily trip generation. Also, the Select Zone run was performed without compressing the model analysis for any counties. The SERPM projections are included in this report in *Appendix D*.

Traffic Assignment

The site traffic was assigned to the surrounding roadway network using the 2035 SERPM model distribution described above. *Figure 2* illustrates the project traffic assignment percentages to the surrounding roadway network.

EXISTING TRAFFIC

Existing traffic conditions were determined based upon actual traffic volumes counted at the study intersections with an adjustment to peak season conditions based upon peak season conversion factors published by FDOT.

FUTURE TRAFFIC

Future background traffic volumes were calculated as the sum of the existing peak-season adjusted traffic volumes plus an additional amount of traffic to account for future growth in the study area. Future growth was calculated as the sum of a nominal background growth rate (0.5%) compounded annually plus traffic generated by approved projects in the vicinity of this site. An historical growth rate was calculated based on counts provided by FDOT for comparison purposes; this growth rate was calculated to be 1.53%. Growth rate calculations are included in *Appendix F*. Total future traffic volumes considered in the analysis for this project are the sum of the 2020 background traffic volumes plus future project traffic volumes at site buildout.

LINK ANALYSIS

A roadway link analysis has been conducted for year 2020 traffic conditions on major roadway links in the City of Hallandale Beach within one mile of the site. The roadway link analysis indicates that the segments of Federal Highway and Hallandale Beach Boulevard within the one-mile radius currently operate at Level of Service (LOS) F. The project is only projected to have greater than a 3% impact on Dixie Highway west of the project site. The only roadway links on which level of service will change due to project traffic are Hallandale Beach Boulevard and Dixie Highway.

TABLE 2
OPTIMA PLAZA NORTH
PM TWO-WAY PEAK HOUR SIGNIFICANCE CALCULATIONS (2020)

Roadway From	To	Roadway Class	Existing		Committed		Existing Base Peak Hour Volume/LOS	Growth Rate	2020 Background Growth (growth rate)	Committed Traffic	2020 Background Traffic	PIM Peak Hour Project Traffic		2020 Peak Hour Volume with Project Traffic		
			Lanes	LOS D* Service Volume	Lanes	LOS D* Service Volume						% Assignment	Project Trips		% Impact	
PIM TWO-WAY PEAK HOUR																
South Federal Highway (US 1)	Hallandale Beach Blvd	Class II	6LD	4,500	6LD	4,500	4,845	F	0.50%	172	520	5,537	19%	89	1.98%	5,626
Dixie Highway	Hallandale Beach Boulevard	Class II	2LU	3,154	2LU	3,154	798	C	0.50%	28	53	826	30%	141	4.47%	967
Hallandale Beach Boulevard	US 1	Class II	6LD	5,390	6LD	5,390	6275	C	0.50%	223	314	6,812	20%	21	0.39%	6,833
East of I-95	East of US 1	Class II	6LD	5,390	6LD	5,390	3753	C	0.50%	133	191	4,077	5%	5	0.09%	4,082

* Roadway capacity and 2013 volumes provided by Broward County MPO

INTERSECTION ANALYSIS

The operating conditions for three conditions (existing, background and future total) were analyzed at the signalized and unsignalized study intersections during the AM peak hour and PM peak hour using Trafficware's Synchro 9.0 Software. These analyses use the methodologies outlined in the *Highway Capacity Manual, 2000 Edition* in order to determine overall intersection level of service and delay, and queuing. Output from the HCM 2000 edition was provided instead of the more recent 2010 version because some discrepancies in the calculations of queuing, level of service and delay have been reported for output in the 2010 version, particularly in the analysis of shared lanes. Therefore, to maintain a consistent analysis, the HCM 2000 output has been utilized in this analysis, even for intersections not involving shared lanes.

Intersection Level of Service and Delay

Tables 3, 4 and 5 summarize the existing, future background, and future total level of service (LOS) at the study intersections.

As shown in these tables, the intersections of Hallandale Beach Boulevard & Federal Highway, SE 3rd Street & Federal Highway, SE 9th Street & Federal Highway and SE 3rd Street & Dixie Highway are projected to operate at LOS E or F during future background conditions without the project. The overall LOS at the intersection of Hallandale Beach Boulevard & Federal Highway (US-1) was determined to change from LOS E to F at future buildout conditions. Otherwise, no change in LOS is anticipated at any of these intersections with the inclusion of project traffic, and all other intersections are projected to operate at LOS D or better. It is also noted that the project will be required to contribute to a transportation mitigation payment to the City per the City's transportation mitigation payment schedule. The turning movement count data is included in *Appendix E*. Existing signal timing worksheets are included in *Appendix G*. HCS and Synchro output worksheets are included in *Appendix H*.

Table 3 2015 Existing Conditions							
Intersection	Traffic Control	Overall Delay / LOS		Approach LOS			
				NB	SB	EB	WB
AM Peak Hour							
NE 213th Street & Biscayne Boulevard	Signalized	24.7	C	C	B	-	E
SE 9th Street & Federal Highway	Signalized	16.7	B	B	B	E	E
SE 3rd Street & Federal Highway	Signalized	58.1	E	C	D	F	E
SE 3rd Street & Dixie Highway	Signalized	59.3	E	-	E	D	D
SE 3rd Street & SE 1st Avenue	Signalized	317.4	F	D	-	F	C
Hallandale Beach Boulevard & Federal Highway	Signalized	70.5	E	D	E	E	F
Hallandale Beach Boulevard & Dixie Highway	Signalized	27.6	C	-	E	C	B
Hallandale Beach Boulevard & SE/NE 1st Avenue	Signalized	23.2	C	F	-	A	C
Hallandale Beach Boulevard & SE/NE 8th Avenue	Signalized	28.8	C	E	C	D	B
Hallandale Beach Boulevard & SE/NE 10th Avenue	Signalized	23.1	C	C	-	B	C
County Line Road & Dixie highway	Signalized	27.3	C	C	C	D	B
County Line Road & SE 1st Avenue	Signalized	25.3	C	C	C	C	-
214th Terrace & 3rd Avenue	Unsignalized	-	-	-	A	A	-
SE 3rd Avenue & SE 10th Court	Unsignalized	-	-	A	A	A	-
Optima DW & Federal Highway	Unsignalized	-	-	-	-	B	-
PM Peak Hour							
NE 213th Street & Biscayne Boulevard	Signalized	27.8	C	C	B	-	E
SE 9th Street & Federal Highway	Signalized	19.1	B	B	B	E	E
SE 3rd Street & Federal Highway	Signalized	48.2	D	C	D	E	E
SE 3rd Street & Dixie Highway	Signalized	96.1	F	-	D	D	F
SE 3rd Street & SE 1st Avenue	Signalized	60.4	E	D	-	F	D
Hallandale Beach Boulevard & Federal Highway	Signalized	78.5	E	E	E	E	F
Hallandale Beach Boulevard & Dixie Highway	Signalized	28.7	C	-	E	D	B
Hallandale Beach Boulevard & SE/NE 1st Avenue	Signalized	22.2	C	E	-	A	B
Hallandale Beach Boulevard & SE/NE 8th Avenue	Signalized	26.0	C	E	D	C	C
Hallandale Beach Boulevard & SE/NE 10th Avenue	Signalized	31.8	C	D	-	B	D
County Line Road & Dixie highway	Signalized	25.6	C	C	B	D	C
County Line Road & SE 1st Avenue	Signalized	20.1	C	D	C	A	-
214th Terrace & 3rd Avenue	Unsignalized	-	-	-	A	-	-
SE 3rd Avenue & SE 10th Court	Unsignalized	-	-	A	A	A	-
Optima DW & Federal Highway	Unsignalized	-	-	-	-	A	-

Table 4 2020 Future Background Conditions							
Intersection	Traffic Control	Overall Delay / LOS		Approach LOS			
				NB	SB	EB	WB
AM Peak Hour							
NE 213th Street & Biscayne Boulevard	Signalized	25.1	C	C	B	-	E
SE 9th Street & Federal Highway	Signalized	22.7	C	B	C	E	E
SE 3rd Street & Federal Highway	Signalized	62.5	E	D	E	F	F
SE 3rd Street & Dixie Highway	Signalized	59.9	E	-	E	D	D
SE 3rd Street & SE 1st Avenue	Signalized	316.1	F	D	-	F	C
Hallandale Beach Boulevard & Federal Highway	Signalized	74.5	E	D	E	E	F
Hallandale Beach Boulevard & Dixie Highway	Signalized	28.4	C	-	E	C	B
Hallandale Beach Boulevard & SE/NE 1st Avenue	Signalized	26.9	C	F	-	S	C
Hallandale Beach Boulevard & SE/NE 8th Avenue	Signalized	30.9	C	E	D	D	B
Hallandale Beach Boulevard & SE/NE 10th Avenue	Signalized	23.3	C	C	E	B	C
County Line Road & Dixie highway	Signalized	27.2	C	C	C	D	B
County Line Road & SE 1st Avenue	Signalized	23.5	C	C	C	C	-
214th Terrace & 3rd Avenue	Unsignalized	-	-	-	A	A	-
SE 3rd Avenue & SE 10th Court	Unsignalized	-	-	A	B	A	A
Optima DW & Federal Highway	Unsignalized	-	-	A	-	B	-
PM Peak Hour							
NE 213th Street & Biscayne Boulevard	Signalized	31.3	C	D	B	-	E
SE 9th Street & Federal Highway	Signalized	25.0	C	C	C	E	E
SE 3rd Street & Federal Highway	Signalized	74.5	E	E	E	E	E
SE 3rd Street & Dixie Highway	Signalized	97.3	F	-	D	D	F
SE 3rd Street & SE 1st Avenue	Signalized	62.8	E	D	-	F	D
Hallandale Beach Boulevard & Federal Highway	Signalized	96.7	F	F	E	E	F
Hallandale Beach Boulevard & Dixie Highway	Signalized	33.1	C	-	E	D	B
Hallandale Beach Boulevard & SE/NE 1st Avenue	Signalized	33.9	C	E	-	A	D
Hallandale Beach Boulevard & SE/NE 8th Avenue	Signalized	65.9	E	F	D	D	C
Hallandale Beach Boulevard & SE/NE 10th Avenue	Signalized	31.5	C	D	E	B	D
County Line Road & Dixie highway	Signalized	26.6	C	C	B	D	C
County Line Road & SE 1st Avenue	Signalized	21.6	C	D	C	A	-
214th Terrace & 3rd Avenue	Unsignalized	-	-	-	A	A	-
SE 3rd Avenue & SE 10th Court	Unsignalized	-	-	A	A	A	A
Optima DW & Federal Highway	Unsignalized	-	-	A	-	A	-

Table 5 2020 Future Total Conditions							
Intersection	Traffic Control	Overall Delay / LOS		Approach LOS			
				NB	SB	EB	WB
AM Peak Hour							
NE 213th Street & Biscayne Boulevard	Signalized	26.0	C	C	B	-	E
SE 9th Street & Federal Highway	Signalized	28.7	C	B	D	E	E
SE 3rd Street & Federal Highway	Signalized	63.4	E	D	E	F	F
SE 3rd Street & Dixie Highway	Signalized	60.8	E	-	E	D	D
SE 3rd Street & SE 1st Avenue	Signalized	314.8	F	D	-	F	C
Hallandale Beach Boulevard & Federal Highway	Signalized	77.4	E	D	E	E	F
Hallandale Beach Boulevard & Dixie Highway	Signalized	29.6	C	-	E	C	B
Hallandale Beach Boulevard & SE/NE 1st Avenue	Signalized	31.2	31.2	F	-	A	C
Hallandale Beach Boulevard & SE/NE 8th Avenue	Signalized	30.7	C	E	D	D	B
Hallandale Beach Boulevard & SE/NE 10th Avenue	Signalized	23.4	C	C	E	B	C
County Line Road & Dixie highway	Signalized	29.6	C	C	C	D	C
County Line Road & SE 1st Avenue	Signalized	31.6	C	C	C	A	-
214th Terrace & 3rd Avenue	Unsignalized	-	-	-	A	A	-
SE 3rd Avenue & SE 10th Court	Unsignalized	-	-	B	B	A	A
Optima DW & Federal Highway	Unsignalized	-	-	B	-	B	-
PM Peak Hour							
NE 213th Street & Biscayne Boulevard	Signalized	35.5	D	D	B	-	E
SE 9th Street & Federal Highway	Signalized	27.8	C	C	C	E	E
SE 3rd Street & Federal Highway	Signalized	74.0	E	E	E	E	E
SE 3rd Street & Dixie Highway	Signalized	97.4	F	-	D	D	F
SE 3rd Street & SE 1st Avenue	Signalized	70.0	E	E	-	F	D
Hallandale Beach Boulevard & Federal Highway	Signalized	98.5	F	F	E	E	F
Hallandale Beach Boulevard & Dixie Highway	Signalized	31.9	C	-	E	D	B
Hallandale Beach Boulevard & SE/NE 1st Avenue	Signalized	39.1	D	E	-	A	D
Hallandale Beach Boulevard & SE/NE 8th Avenue	Signalized	66.1	E	F	D	D	C
Hallandale Beach Boulevard & SE/NE 10th Avenue	Signalized	31.4	C	D	E	B	D
County Line Road & Dixie highway	Signalized	28.8	C	C	B	D	D
County Line Road & SE 1st Avenue	Signalized	24.4	C	D	C	A	-
214th Terrace & 3rd Avenue	Unsignalized	-	-	-	B	A	-
SE 3rd Avenue & SE 10th Court	Unsignalized	-	-	B	B	A	A
Optima DW & Federal Highway	Unsignalized	-	-	A	-	B	-

Intersection Queuing

The projected intersection queues were determined from the Synchro output at the main project driveway intersection and intersections with failing levels of service. A summary of the existing, future background and future total queues are presented in Tables 6, 7 and 8. As shown, the projected future queues can be accommodated within the left-turn and right-turn storage provided, with the exception of US-1 & Hallandale Beach Boulevard.

As noted previously, the project will be required to contribute to the City’s transportation mitigation fund, which may be used to implement capacity and/or queuing storage throughout the overall roadway network.

Table 6									
Project Queue For Failing/Project Access Intersections									
Project /Failing Intersection		Existing AM Queue Length							
		EBL	EBR	WBL	WBR	NBL	NBR	SBL	SBR
Optima Office Drive (US 1 access)	95th Percentile Queue	-	-	-	-	-	-	-	-
	Storage Available	-	-	-	-	-	-	-	-
US 1 & Hallandale Beach Boulevard	95th Percentile Queue	-	-	-	-	-	-	-	-
	Storage Available	-	-	-	-	-	-	-	-
Project /Failing Intersection		Existing PM Queue Length							
		EBL	EBR	WBL	WBR	NBL	NBR	SBL	SBR
Optima Office Drive (US 1 access)	95th Percentile Queue	-	-	-	-	-	-	-	-
	Storage Available	-	-	-	-	-	-	-	-
US 1 & 3rd Street	95th Percentile Queue	-	-	-	-	-	-	-	-
	Storage Available	-	-	-	-	-	-	-	-
US 1 & Hallandale Beach Boulevard	95th Percentile Queue	-	-	-	-	-	-	-	-
	Storage Available	-	-	-	-	-	-	-	-

Table 7									
Project Queue For Failing/Project Access Intersections									
Project /Failing Intersection		Future Background AM Queue Length							
		EBL	EBR	WBL	WBR	NBL	NBR	SBL	SBR
Optima Office Drive (US 1 access)	95th Percentile Queue	-	17	-	-	60	-	-	-
	Storage Available	-	-	-	-	-	-	-	-
US 1 & Hallandale Beach Boulevard	95th Percentile Queue	-	-	-	-	-	-	-	-
	Storage Available	-	-	-	-	-	-	-	-
Project /Failing Intersection		Future Background PM Queue Length							
		EBL	EBR	WBL	WBR	NBL	NBR	SBL	SBR
Optima Office Drive (US 1 access)	95th Percentile Queue	-	25	-	-	9	-	-	-
	Storage Available	-	-	-	-	-	-	-	-
US 1 & 3rd Street	95th Percentile Queue	253	-	414	31	219	0	61	-
	Storage Available	380	-	430	430	312	365	597	-
US 1 & Hallandale Beach Boulevard	95th Percentile Queue	314	-	528	-	416	31	412	-
	Storage Available	483	-	435	-	531	448	415	-

Table 8									
Project Queue For Failing/Project Access Intersections									
Project /Failing Intersection		Future Total AM Queue Length							
		EBL	EBR	WBL	WBR	NBL	NBR	SBL	SBR
Optima Office Drive (US 1 access)	95th Percentile Queue	-	40	-	-	349	-	-	-
	Storage Available	-	-	-	-	-	-	-	-
US 1 & Hallandale Beach Boulevard	95th Percentile Queue	346	-	612	-	251	33	422	-
	Storage Available	483	-	435	-	531	448	415	-
Project /Failing Intersection		Future Total PM Queue Length							
		EBL	EBR	WBL	WBR	NBL	NBR	SBL	SBR
Optima Office Drive (US 1 access)	95th Percentile Queue	-	499	-	-	21	-	-	-
	Storage Available	-	-	-	-	-	-	-	-
US 1 & 3rd Street	95th Percentile Queue	254	-	414	31	219	0	61	-
	Storage Available	380	-	430	-	312	365	597	-
US 1 & Hallandale Beach Boulevard	95th Percentile Queue	347	-	612	-	253	33	422	-
	Storage Available	483	-	435	-	531	448	415	-

PROJECT DRIVEWAY ACCESS

Although the majority of site traffic will be traveling to and from the site via US-1, the site will not have any direct access connections along its US-1 frontage. Instead, the site will utilize cross-access connections on US-1 via the left-in/right-in/right-out Hampton Inn driveway to the north (serving outbound project traffic only) and via the right-in/right-out driveway at the existing Optima building to the south (in the City of Aventura). A pre-application meeting was held with the Florida Department of Transportation on December 17, 2015 to determine the allowable access configuration for the site. The draft pre-application letter is provided in Appendix J of this report.

CONCLUSION

Optima Plaza North is a proposed office and bank site located on the west side of Federal Highway (US 1) just north of the Broward County/Miami-Dade County line in Hallandale Beach, Florida. The site is proposed to be developed with 277,299 square feet of office use and 6,218 square feet of drive-in bank use.

The analysis has been conducted to evaluate future level of service on the roadway segments and intersections identified in the study methodology. The analysis includes an assumption of background growth plus traffic generated by committed projects in the area. As shown in the analyses, some roadway segments and intersections within the study area currently operate at LOS E or F during weekday peak period conditions. The analysis indicates that no additional roadways or intersections that are currently operating at LOS D or better will degrade to LOS E or F. Additionally, it is noted that the project will be required to contribute to a transportation mitigation payment to the City per the City's transportation mitigation payment schedule.

APPENDIX A: SITE PLAN

APPENDIX B: STUDY METHODOLOGY

APPENDIX C: LINK DATA (BROWARD COUNTY MPO)

APPENDIX D: SERPM MODEL OUTPUT

**APPENDIX E: TURNING MOVEMENT COUNTS AND FDOT PEAK
SEASON FACTORS**

SE 9TH STREET & S FEDERAL HIGHWAY
 HALLANDALE BEACH, FLORIDA
 COUNTED BY: A. GONZALEZ & A. PALOMINO
 SIGNALIZED

Traffic Survey Specialists, Inc.
 85 SE 4th Avenue, Unit 109
 Delray Beach, Florida 33483
 Phone (561) 272-3255

Site Code : 00150215
 Start Date: 10/28/15
 File I.D. : 9STR_US1
 Page : 1

ALL VEHICLES

Date	S FEDERAL HIGHWAY From North				SE 9TH STREET From East				S FEDERAL HIGHWAY From South				SE 9TH STREET From West				Total
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
10/28/15	-----																
07:00	3	1	222	3	0	2	0	1	0	0	203	0	0	1	0	2	438
07:15	0	2	346	2	0	2	2	1	0	0	184	4	0	2	0	2	547
07:30	1	2	344	3	0	5	0	0	0	5	205	2	0	0	0	2	569
07:45	0	3	495	2	0	3	0	0	1	14	239	7	0	2	1	2	769
Hr Total	4	8	1407	10	0	12	2	2	1	19	831	13	0	5	1	8	2323
08:00	0	4	552	0	0	7	1	3	0	26	271	3	0	2	0	3	872
08:15	0	4	538	2	0	4	0	0	0	17	332	6	0	3	0	18	924
08:30	0	5	612	6	0	8	0	1	2	5	338	8	0	9	4	23	1021
08:45	0	6	622	3	0	2	0	0	2	6	397	4	0	8	3	32	1085
Hr Total	0	19	2324	11	0	21	1	4	4	54	1338	21	0	22	7	76	3902
----- * BREAK * -----																	
16:00	0	4	429	5	0	39	0	8	2	11	491	6	0	2	2	19	1018
16:15	0	8	432	3	0	27	7	7	4	7	559	5	0	3	2	4	1068
16:30	1	10	456	2	0	34	2	10	5	13	476	9	0	4	1	6	1029
16:45	0	12	403	2	0	35	4	14	6	13	472	11	0	3	0	4	979
Hr Total	1	34	1720	12	0	135	13	39	17	44	1998	31	0	12	5	33	4094
17:00	0	9	337	5	0	36	3	13	6	13	453	9	0	4	0	7	895
17:15	0	12	448	4	0	36	6	12	1	12	499	5	0	6	2	13	1056
17:30	0	8	393	2	0	40	4	4	4	10	487	8	0	5	2	3	970
17:45	0	8	406	2	0	33	9	9	5	13	463	11	0	3	4	13	979
Hr Total	0	37	1584	13	0	145	22	38	16	48	1902	33	0	18	8	36	3900

TOTAL	5	98	7035	46	0	313	38	83	38	165	6069	98	0	57	21	153	14219

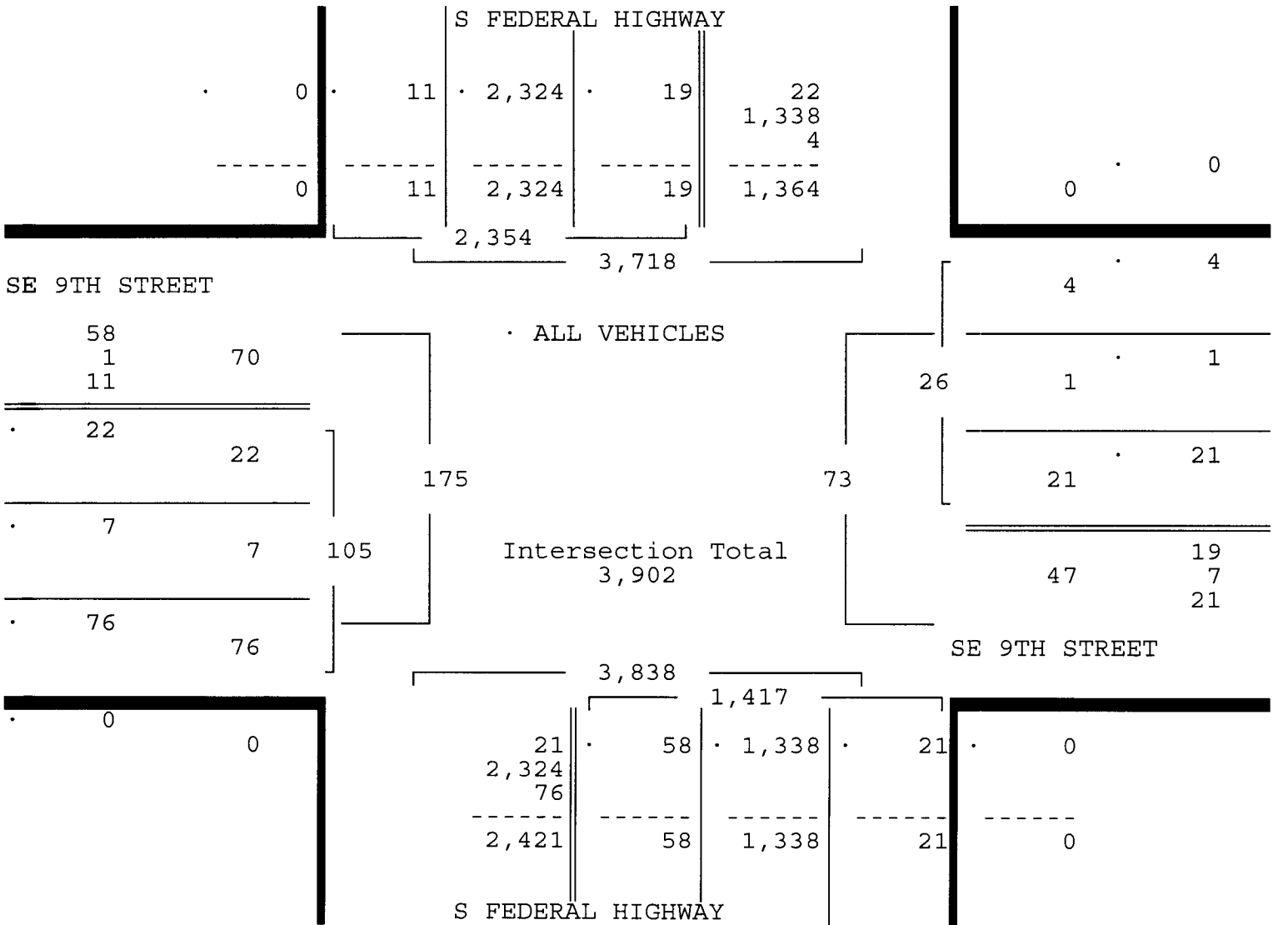
SE 9TH STREET & S FEDERAL HIGHWAY
 HALLANDALE BEACH, FLORIDA
 COUNTED BY: A. GONZALEZ & A. PALOMINO
 SIGNALIZED

Traffic Survey Specialists, Inc.
 85 SE 4th Avenue, Unit 109
 Delray Beach, Florida 33483
 Phone (561) 272-3255

Site Code : 00150215
 Start Date: 10/28/15
 File I.D. : 9STR_US1
 Page : 2

ALL VEHICLES

S FEDERAL HIGHWAY From North					SE 9TH STREET From East				S FEDERAL HIGHWAY From South				SE 9TH STREET From West				Total		
UTurn	Left	Thru	Right		UTurn	Left	Thru	Right		UTurn	Left	Thru	Right		UTurn	Left		Thru	Right
Date 10/28/15																			
Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 10/28/15																			
Peak start 08:00					08:00				08:00				08:00						
Volume	0	19	2324	11	0	21	1	4	4	54	1338	21	0	22	7	76			
Percent	0%	1%	99%	0%	0%	81%	4%	15%	0%	4%	94%	1%	0%	21%	7%	72%			
Pk total	2354				26				1417				105						
Highest 08:45					08:00				08:45				08:45						
Volume	0	6	622	3	0	7	1	3	2	6	397	4	0	8	3	32			
Hi total	631				11				409				43						
PHF	.93				.59				.87				.61						



SE 9TH STREET & S FEDERAL HIGHWAY
 HALLANDALE BEACH, FLORIDA
 COUNTED BY: A. GONZALEZ & A. PALOMINO
 SIGNALIZED

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Site Code : 00150215
 Start Date: 10/28/15
 File I.D. : 9STR_US1
 Page : 3

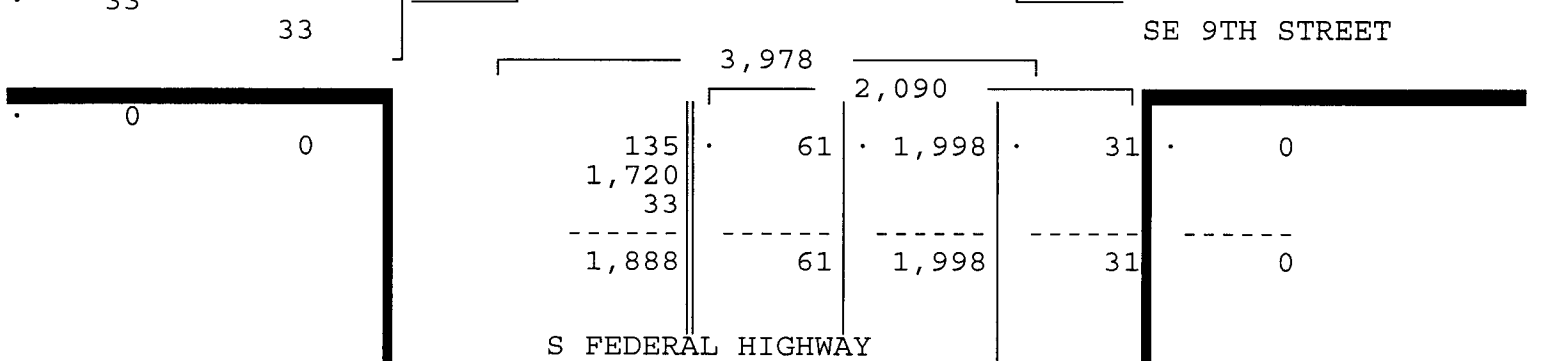
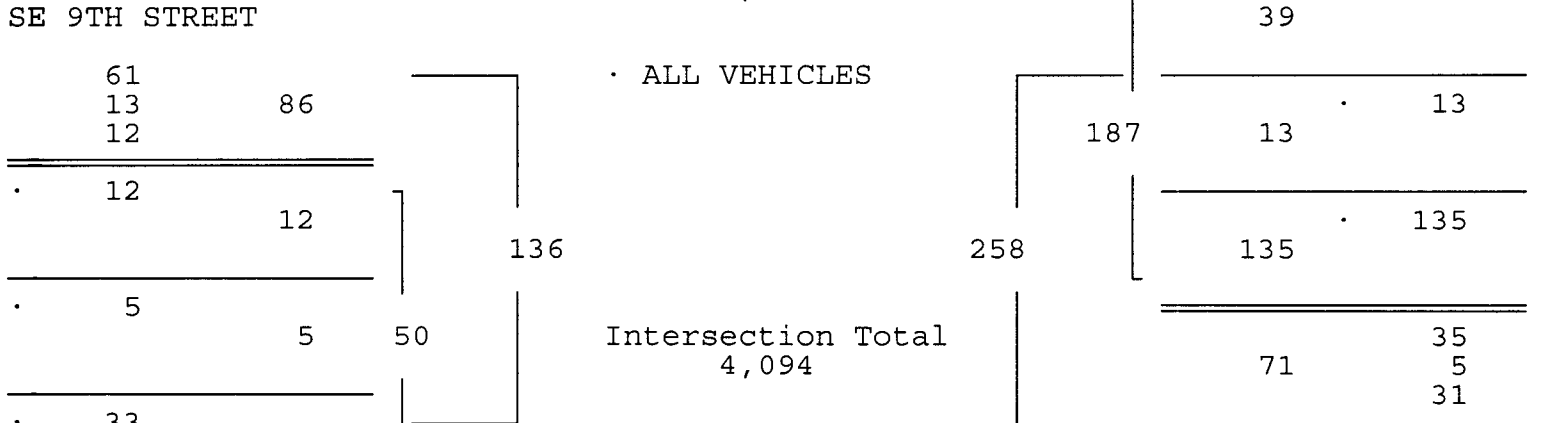
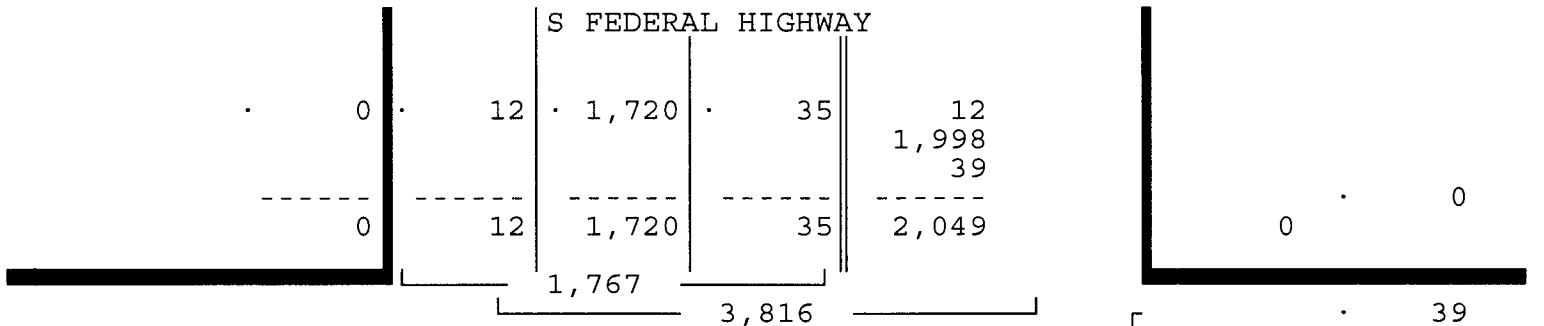
ALL VEHICLES

S FEDERAL HIGHWAY From North					SE 9TH STREET From East				S FEDERAL HIGHWAY From South				SE 9TH STREET From West				Total
UTurn	Left	Thru	Right		UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	

Date 10/28/15

Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 10/28/15

Peak start 16:00	16:00				16:00				16:00				16:00			
Volume	1	34	1720	12	0	135	13	39	17	44	1998	31	0	12	5	33
Percent	0%	2%	97%	1%	0%	72%	7%	21%	1%	2%	96%	1%	0%	24%	10%	66%
Pk total	1767				187				2090				50			
Highest	16:30				16:45				16:15				16:00			
Volume	1	10	456	2	0	35	4	14	4	7	559	5	0	2	2	19
Hi total	469				53				575				23			
PHF	.94				.88				.91				.54			



SE 9TH STREET & S FEDERAL HIGHWAY
 HALLANDALE BEACH, FLORIDA
 COUNTED BY: A. GONZALEZ & A. PALOMINO
 SIGNALIZED

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 85 SE 4th Avenue, Unit 109
 Delray Beach, Florida 33483
 Phone (561) 272-3255

Site Code : 00150215
 Start Date: 10/28/15
 File I.D. : 9STR_US1
 Page : 1

PEDESTRIANS & BIKES

Date	S FEDERAL HIGHWAY From North				SE 9TH STREET From East				S FEDERAL HIGHWAY From South				SE 9TH STREET From West				Total
	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	Left	BIKES	Right	Peds	
10/28/15	-----																
07:00	0	1	0	0	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	0	1
07:30	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	3
07:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hr Total	0	1	0	4	0	0	0	0	0	0	0	0	0	1	0	0	6
08:00	0	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	0
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	0	0	1	0	0	0	0	0	2	3
Hr Total	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	3
----- * BREAK * -----																	
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	1	0	1	0	0	0	0	0	1	0	0	0	1	0	1	5
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	0	0	0	0	0	0
Hr Total	0	1	0	1	0	0	0	0	0	1	0	0	0	1	0	1	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	0	0	0	0	1	0	0	0	1	0	0	0	0	2
17:30	0	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	4
17:45	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1	3
Hr Total	0	0	0	3	0	0	0	1	0	1	0	3	0	0	0	1	9

TOTAL	0	2	0	8	0	0	0	1	0	3	0	3	0	2	0	4	23

NE 215TH STREET & DIXIE HIGHWAY
 HALLANDALE BEACH, FLORIDA
 COUNTED BY: ANGEL LOPEZ
 SIGNALIZED

Traffic Survey Specialists, Inc.
 85 SE 4th Avenue, Unit 109
 Delray Beach, Florida 33483
 Phone (561) 272-3255

Site Code : 00150215
 Start Date: 10/28/15
 File I.D. : COUNDIXI
 Page : 1

ALL VEHICLES

Date	DIXIE HIGHWAY From North				NE 215TH STREET From East				DIXIE HIGHWAY From South				NE 215TH STREET From West				Total
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	
10/28/15																	
07:00	0	40	32	8	0	5	9	0	0	0	0	15	0	0	38	2	149
07:15	0	36	46	11	0	5	23	0	0	0	0	19	0	0	44	1	185
07:30	0	66	41	7	0	26	33	0	0	0	0	18	0	0	73	3	267
07:45	0	76	67	14	0	35	22	0	0	2	0	37	0	0	80	1	334
Hr Total	0	218	186	40	0	71	87	0	0	2	0	89	0	0	235	7	935
08:00	0	88	59	22	0	58	21	0	0	3	0	65	0	0	103	2	421
08:15	0	91	39	26	0	41	58	0	0	2	0	74	0	0	77	6	414
08:30	0	103	41	20	0	17	23	0	0	2	0	84	0	0	99	3	392
08:45	0	119	55	10	0	16	17	0	0	1	0	74	0	0	97	1	390
Hr Total	0	401	194	78	0	132	119	0	0	8	0	297	0	0	376	12	1617
* BREAK *																	
16:00	0	45	48	16	0	26	61	0	0	7	0	65	0	0	41	3	312
16:15	0	55	39	17	0	32	76	0	0	7	0	71	0	0	42	2	341
16:30	0	53	36	13	0	26	59	0	0	3	0	50	0	0	52	2	294
16:45	0	52	34	13	0	20	83	0	0	5	0	66	0	0	36	2	311
Hr Total	0	205	157	59	0	104	279	0	0	22	0	252	0	0	171	9	1258
17:00	0	40	53	16	0	23	73	0	0	11	0	52	0	0	47	3	318
17:15	0	42	52	16	0	32	85	0	0	7	0	76	0	0	49	3	362
17:30	0	63	64	18	0	29	89	0	0	11	0	79	0	0	39	1	393
17:45	0	58	62	21	0	27	97	0	0	6	0	69	0	0	55	2	397
Hr Total	0	203	231	71	0	111	344	0	0	35	0	276	0	0	190	9	1470
TOTAL	0	1027	768	248	0	418	829	0	0	67	0	914	0	0	972	37	5280

NE 215TH STREET & DIXIE HIGHWAY
 HALLANDALE BEACH, FLORIDA
 COUNTED BY: ANGEL LOPEZ
 SIGNALIZED

Traffic Survey Specialists, Inc.
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 Start Date: 10/28/15
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 Page : 2

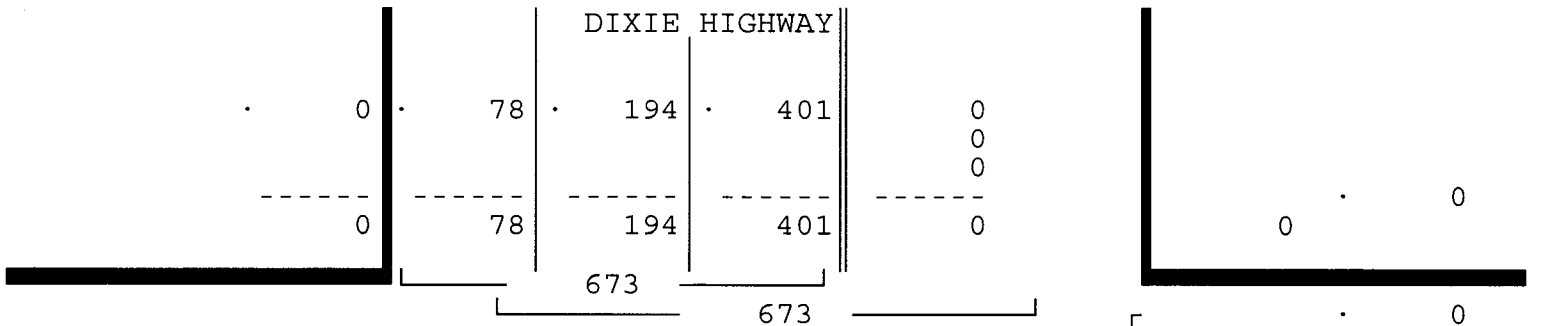
ALL VEHICLES

DIXIE HIGHWAY From North				NE 215TH STREET From East				DIXIE HIGHWAY From South				NE 215TH STREET From West				Total
UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	

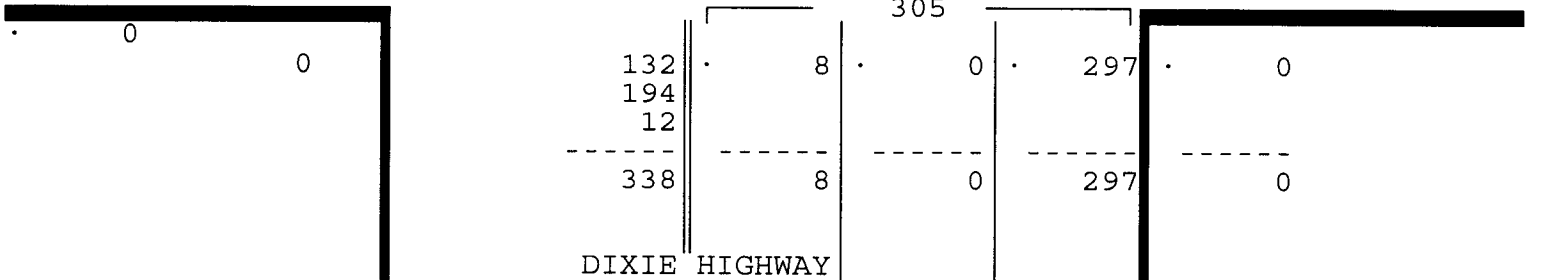
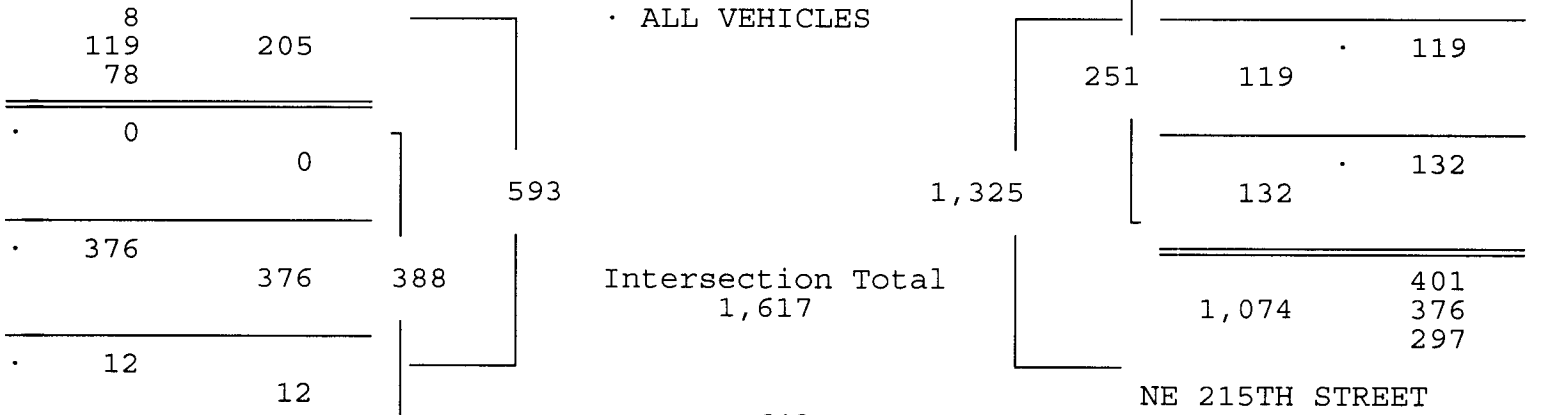
Date 10/28/15

Peak Hour Analysis By Entire Intersection for the Period: 07:00 to 09:00 on 10/28/15

Peak start	08:00				08:00				08:00				08:00			
Volume	0	401	194	78	0	132	119	0	0	8	0	297	0	0	376	12
Percent	0%	60%	29%	12%	0%	53%	47%	0%	0%	3%	0%	97%	0%	0%	97%	3%
Pk total	673				251				305				388			
Highest	08:45				08:15				08:30				08:00			
Volume	0	119	55	10	0	41	58	0	0	2	0	84	0	0	103	2
Hi total	184				99				86				105			
PHF	.91				.63				.89				.92			



NE 215TH STREET



NE 215TH STREET & DIXIE HIGHWAY
 HALLANDALE BEACH, FLORIDA
 COUNTED BY: ANGEL LOPEZ
 SIGNALIZED

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Site Code : 00150215
 Start Date: 10/28/15
 File I.D. : COUNDXI
 Page : 3

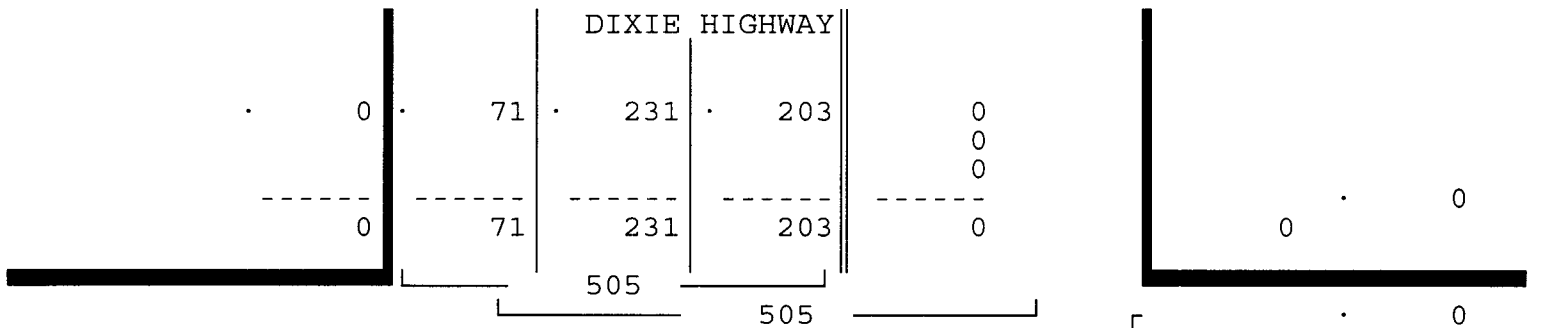
ALL VEHICLES

DIXIE HIGHWAY From North				NE 215TH STREET From East				DIXIE HIGHWAY From South				NE 215TH STREET From West				Total
UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	

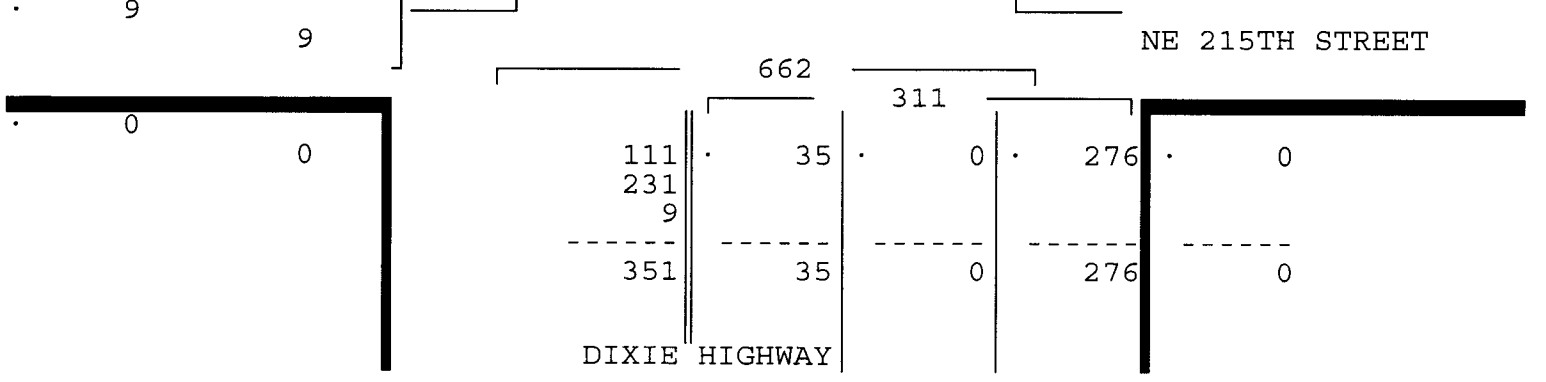
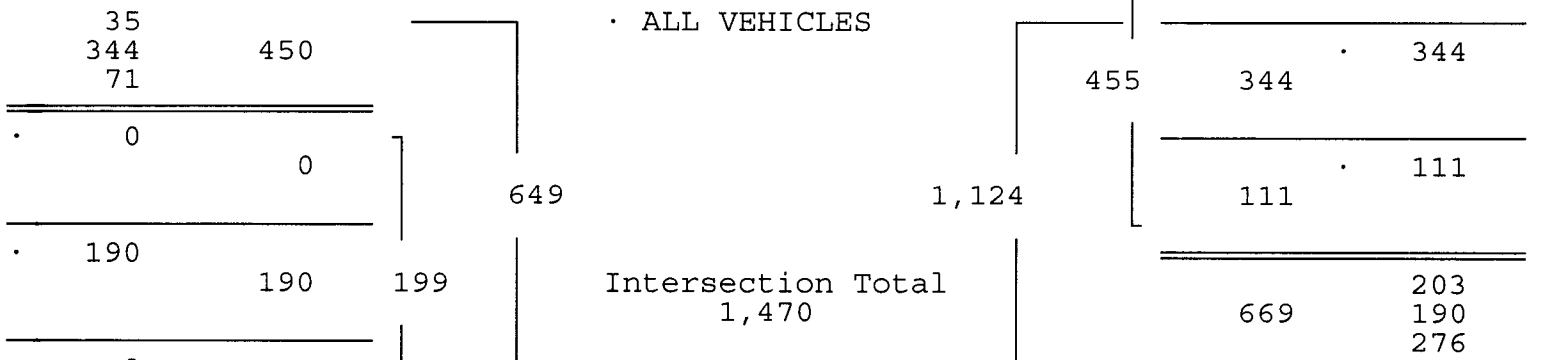
Date 10/28/15

Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 10/28/15

Peak start	17:00				17:00				17:00				17:00			
Volume	0	203	231	71	0	111	344	0	0	35	0	276	0	0	190	9
Percent	0%	40%	46%	14%	0%	24%	76%	0%	0%	11%	0%	89%	0%	0%	95%	5%
Pk total	505				455				311				199			
Highest	17:30				17:45				17:30				17:45			
Volume	0	63	64	18	0	27	97	0	0	11	0	79	0	0	55	2
Hi total	145				124				90				57			
PHF	.87				.92				.86				.87			



NE 215TH STREET



2014 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 8601 CEN.-W OF US1 TO SR7

WEEK	DATES	SF	MOCF: 0.97 PSCF
1	01/01/2014 - 01/04/2014	0.97	1.00
2	01/05/2014 - 01/11/2014	0.99	1.02
3	01/12/2014 - 01/18/2014	1.01	1.04
4	01/19/2014 - 01/25/2014	1.00	1.03
* 5	01/26/2014 - 02/01/2014	0.99	1.02
* 6	02/02/2014 - 02/08/2014	0.98	1.01
* 7	02/09/2014 - 02/15/2014	0.97	1.00
* 8	02/16/2014 - 02/22/2014	0.96	0.99
* 9	02/23/2014 - 03/01/2014	0.96	0.99
*10	03/02/2014 - 03/08/2014	0.96	0.99
*11	03/09/2014 - 03/15/2014	0.96	0.99
*12	03/16/2014 - 03/22/2014	0.96	0.99
*13	03/23/2014 - 03/29/2014	0.96	0.99
*14	03/30/2014 - 04/05/2014	0.97	1.00
*15	04/06/2014 - 04/12/2014	0.98	1.01
*16	04/13/2014 - 04/19/2014	0.98	1.01
*17	04/20/2014 - 04/26/2014	0.99	1.02
18	04/27/2014 - 05/03/2014	1.00	1.03
19	05/04/2014 - 05/10/2014	1.01	1.04
20	05/11/2014 - 05/17/2014	1.01	1.04
21	05/18/2014 - 05/24/2014	1.02	1.05
22	05/25/2014 - 05/31/2014	1.03	1.06
23	06/01/2014 - 06/07/2014	1.03	1.06
24	06/08/2014 - 06/14/2014	1.04	1.07
25	06/15/2014 - 06/21/2014	1.05	1.08
26	06/22/2014 - 06/28/2014	1.05	1.08
27	06/29/2014 - 07/05/2014	1.05	1.08
28	07/06/2014 - 07/12/2014	1.05	1.08
29	07/13/2014 - 07/19/2014	1.05	1.08
30	07/20/2014 - 07/26/2014	1.05	1.08
31	07/27/2014 - 08/02/2014	1.04	1.07
32	08/03/2014 - 08/09/2014	1.04	1.07
33	08/10/2014 - 08/16/2014	1.03	1.06
34	08/17/2014 - 08/23/2014	1.03	1.06
35	08/24/2014 - 08/30/2014	1.03	1.06
36	08/31/2014 - 09/06/2014	1.03	1.06
37	09/07/2014 - 09/13/2014	1.03	1.06
38	09/14/2014 - 09/20/2014	1.04	1.07
39	09/21/2014 - 09/27/2014	1.03	1.06
40	09/28/2014 - 10/04/2014	1.02	1.05
41	10/05/2014 - 10/11/2014	1.01	1.04
42	10/12/2014 - 10/18/2014	1.00	1.03
43	10/19/2014 - 10/25/2014	1.00	1.03
44	10/26/2014 - 11/01/2014	1.00	1.03
45	11/02/2014 - 11/08/2014	1.00	1.03
46	11/09/2014 - 11/15/2014	1.00	1.03
47	11/16/2014 - 11/22/2014	1.00	1.03
48	11/23/2014 - 11/29/2014	0.99	1.02
49	11/30/2014 - 12/06/2014	0.98	1.01
50	12/07/2014 - 12/13/2014	0.98	1.01
51	12/14/2014 - 12/20/2014	0.97	1.00
52	12/21/2014 - 12/27/2014	0.99	1.02
53	12/28/2014 - 12/31/2014	1.01	1.04

* PEAK SEASON

09-MAR-2015 16:07:53

830UPD

4_8601_PKSEASON.TXT

2014 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 8659 BROWARD I595

WEEK	DATES	SF	MOCF: 0.97 PSCF
1	01/01/2014 - 01/04/2014	0.97	1.00
2	01/05/2014 - 01/11/2014	0.99	1.02
3	01/12/2014 - 01/18/2014	1.00	1.03
* 4	01/19/2014 - 01/25/2014	0.99	1.02
* 5	01/26/2014 - 02/01/2014	0.98	1.01
* 6	02/02/2014 - 02/08/2014	0.98	1.01
* 7	02/09/2014 - 02/15/2014	0.97	1.00
* 8	02/16/2014 - 02/22/2014	0.96	0.99
* 9	02/23/2014 - 03/01/2014	0.96	0.99
*10	03/02/2014 - 03/08/2014	0.95	0.98
*11	03/09/2014 - 03/15/2014	0.95	0.98
*12	03/16/2014 - 03/22/2014	0.94	0.97
*13	03/23/2014 - 03/29/2014	0.95	0.98
*14	03/30/2014 - 04/05/2014	0.97	1.00
*15	04/06/2014 - 04/12/2014	0.98	1.01
*16	04/13/2014 - 04/19/2014	0.99	1.02
17	04/20/2014 - 04/26/2014	1.00	1.03
18	04/27/2014 - 05/03/2014	1.01	1.04
19	05/04/2014 - 05/10/2014	1.01	1.04
20	05/11/2014 - 05/17/2014	1.02	1.05
21	05/18/2014 - 05/24/2014	1.03	1.06
22	05/25/2014 - 05/31/2014	1.03	1.06
23	06/01/2014 - 06/07/2014	1.04	1.07
24	06/08/2014 - 06/14/2014	1.04	1.07
25	06/15/2014 - 06/21/2014	1.04	1.07
26	06/22/2014 - 06/28/2014	1.04	1.07
27	06/29/2014 - 07/05/2014	1.05	1.08
28	07/06/2014 - 07/12/2014	1.05	1.08
29	07/13/2014 - 07/19/2014	1.05	1.08
30	07/20/2014 - 07/26/2014	1.04	1.07
31	07/27/2014 - 08/02/2014	1.04	1.07
32	08/03/2014 - 08/09/2014	1.03	1.06
33	08/10/2014 - 08/16/2014	1.03	1.06
34	08/17/2014 - 08/23/2014	1.02	1.05
35	08/24/2014 - 08/30/2014	1.03	1.06
36	08/31/2014 - 09/06/2014	1.04	1.07
37	09/07/2014 - 09/13/2014	1.04	1.07
38	09/14/2014 - 09/20/2014	1.05	1.08
39	09/21/2014 - 09/27/2014	1.04	1.07
40	09/28/2014 - 10/04/2014	1.03	1.06
41	10/05/2014 - 10/11/2014	1.02	1.05
42	10/12/2014 - 10/18/2014	1.01	1.04
43	10/19/2014 - 10/25/2014	1.01	1.04
44	10/26/2014 - 11/01/2014	1.00	1.03
45	11/02/2014 - 11/08/2014	1.00	1.03
46	11/09/2014 - 11/15/2014	0.99	1.02
47	11/16/2014 - 11/22/2014	0.99	1.02
48	11/23/2014 - 11/29/2014	0.99	1.02
49	11/30/2014 - 12/06/2014	0.98	1.01
50	12/07/2014 - 12/13/2014	0.98	1.01
51	12/14/2014 - 12/20/2014	0.97	1.00
52	12/21/2014 - 12/27/2014	0.99	1.02
53	12/28/2014 - 12/31/2014	1.00	1.03

* PEAK SEASON

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2014 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 8675 BROWARD I75 URBAN

WEEK	DATES	SF	MOCF: 0.99 PSCF
1	01/01/2014 - 01/04/2014	1.02	1.03
2	01/05/2014 - 01/11/2014	1.03	1.04
3	01/12/2014 - 01/18/2014	1.04	1.05
4	01/19/2014 - 01/25/2014	1.03	1.04
5	01/26/2014 - 02/01/2014	1.02	1.03
6	02/02/2014 - 02/08/2014	1.01	1.02
7	02/09/2014 - 02/15/2014	1.00	1.01
* 8	02/16/2014 - 02/22/2014	0.99	1.00
* 9	02/23/2014 - 03/01/2014	0.99	1.00
*10	03/02/2014 - 03/08/2014	0.99	1.00
*11	03/09/2014 - 03/15/2014	0.98	0.99
*12	03/16/2014 - 03/22/2014	0.98	0.99
*13	03/23/2014 - 03/29/2014	0.98	0.99
*14	03/30/2014 - 04/05/2014	0.98	0.99
*15	04/06/2014 - 04/12/2014	0.98	0.99
*16	04/13/2014 - 04/19/2014	0.98	0.99
*17	04/20/2014 - 04/26/2014	0.98	0.99
*18	04/27/2014 - 05/03/2014	0.99	1.00
*19	05/04/2014 - 05/10/2014	0.99	1.00
*20	05/11/2014 - 05/17/2014	1.00	1.01
21	05/18/2014 - 05/24/2014	1.00	1.01
22	05/25/2014 - 05/31/2014	1.00	1.01
23	06/01/2014 - 06/07/2014	1.01	1.02
24	06/08/2014 - 06/14/2014	1.01	1.02
25	06/15/2014 - 06/21/2014	1.01	1.02
26	06/22/2014 - 06/28/2014	1.02	1.03
27	06/29/2014 - 07/05/2014	1.03	1.04
28	07/06/2014 - 07/12/2014	1.03	1.04
29	07/13/2014 - 07/19/2014	1.04	1.05
30	07/20/2014 - 07/26/2014	1.03	1.04
31	07/27/2014 - 08/02/2014	1.02	1.03
32	08/03/2014 - 08/09/2014	1.02	1.03
33	08/10/2014 - 08/16/2014	1.01	1.02
34	08/17/2014 - 08/23/2014	1.00	1.01
35	08/24/2014 - 08/30/2014	1.00	1.01
36	08/31/2014 - 09/06/2014	1.01	1.02
37	09/07/2014 - 09/13/2014	1.01	1.02
38	09/14/2014 - 09/20/2014	1.01	1.02
39	09/21/2014 - 09/27/2014	1.00	1.01
40	09/28/2014 - 10/04/2014	1.00	1.01
41	10/05/2014 - 10/11/2014	0.99	1.00
42	10/12/2014 - 10/18/2014	0.98	0.99
43	10/19/2014 - 10/25/2014	0.98	0.99
44	10/26/2014 - 11/01/2014	0.98	0.99
45	11/02/2014 - 11/08/2014	0.99	1.00
46	11/09/2014 - 11/15/2014	0.99	1.00
47	11/16/2014 - 11/22/2014	0.99	1.00
48	11/23/2014 - 11/29/2014	1.00	1.01
49	11/30/2014 - 12/06/2014	1.01	1.02
50	12/07/2014 - 12/13/2014	1.01	1.02
51	12/14/2014 - 12/20/2014	1.02	1.03
52	12/21/2014 - 12/27/2014	1.03	1.04
53	12/28/2014 - 12/31/2014	1.04	1.05

* PEAK SEASON

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2014 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 8676 BROWARD I75 RURAL

WEEK	DATES	SF	MOCF: 0.92 PSCF
1	01/01/2014 - 01/04/2014	0.94	1.02
2	01/05/2014 - 01/11/2014	0.98	1.07
3	01/12/2014 - 01/18/2014	1.01	1.10
4	01/19/2014 - 01/25/2014	0.99	1.08
* 5	01/26/2014 - 02/01/2014	0.97	1.05
* 6	02/02/2014 - 02/08/2014	0.95	1.03
* 7	02/09/2014 - 02/15/2014	0.93	1.01
* 8	02/16/2014 - 02/22/2014	0.91	0.99
* 9	02/23/2014 - 03/01/2014	0.90	0.98
*10	03/02/2014 - 03/08/2014	0.89	0.97
*11	03/09/2014 - 03/15/2014	0.88	0.96
*12	03/16/2014 - 03/22/2014	0.87	0.95
*13	03/23/2014 - 03/29/2014	0.90	0.98
*14	03/30/2014 - 04/05/2014	0.92	1.00
*15	04/06/2014 - 04/12/2014	0.95	1.03
*16	04/13/2014 - 04/19/2014	0.97	1.05
*17	04/20/2014 - 04/26/2014	0.98	1.07
18	04/27/2014 - 05/03/2014	0.99	1.08
19	05/04/2014 - 05/10/2014	1.01	1.10
20	05/11/2014 - 05/17/2014	1.02	1.11
21	05/18/2014 - 05/24/2014	1.03	1.12
22	05/25/2014 - 05/31/2014	1.04	1.13
23	06/01/2014 - 06/07/2014	1.06	1.15
24	06/08/2014 - 06/14/2014	1.07	1.16
25	06/15/2014 - 06/21/2014	1.09	1.18
26	06/22/2014 - 06/28/2014	1.08	1.17
27	06/29/2014 - 07/05/2014	1.07	1.16
28	07/06/2014 - 07/12/2014	1.07	1.16
29	07/13/2014 - 07/19/2014	1.06	1.15
30	07/20/2014 - 07/26/2014	1.06	1.15
31	07/27/2014 - 08/02/2014	1.06	1.15
32	08/03/2014 - 08/09/2014	1.06	1.15
33	08/10/2014 - 08/16/2014	1.06	1.15
34	08/17/2014 - 08/23/2014	1.07	1.16
35	08/24/2014 - 08/30/2014	1.09	1.18
36	08/31/2014 - 09/06/2014	1.11	1.21
37	09/07/2014 - 09/13/2014	1.13	1.23
38	09/14/2014 - 09/20/2014	1.16	1.26
39	09/21/2014 - 09/27/2014	1.13	1.23
40	09/28/2014 - 10/04/2014	1.11	1.21
41	10/05/2014 - 10/11/2014	1.09	1.18
42	10/12/2014 - 10/18/2014	1.07	1.16
43	10/19/2014 - 10/25/2014	1.05	1.14
44	10/26/2014 - 11/01/2014	1.03	1.12
45	11/02/2014 - 11/08/2014	1.00	1.09
46	11/09/2014 - 11/15/2014	0.98	1.07
47	11/16/2014 - 11/22/2014	0.96	1.04
48	11/23/2014 - 11/29/2014	0.96	1.04
49	11/30/2014 - 12/06/2014	0.95	1.03
50	12/07/2014 - 12/13/2014	0.95	1.03
51	12/14/2014 - 12/20/2014	0.94	1.02
52	12/21/2014 - 12/27/2014	0.98	1.07
53	12/28/2014 - 12/31/2014	1.01	1.10

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2014 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 8695 BROWARD I95

WEEK	DATES	SF	MOCF: 0.97 PSCF
1	01/01/2014 - 01/04/2014	0.97	1.00
2	01/05/2014 - 01/11/2014	0.99	1.02
3	01/12/2014 - 01/18/2014	1.00	1.03
* 4	01/19/2014 - 01/25/2014	0.99	1.02
* 5	01/26/2014 - 02/01/2014	0.98	1.01
* 6	02/02/2014 - 02/08/2014	0.98	1.01
* 7	02/09/2014 - 02/15/2014	0.97	1.00
* 8	02/16/2014 - 02/22/2014	0.96	0.99
* 9	02/23/2014 - 03/01/2014	0.96	0.99
*10	03/02/2014 - 03/08/2014	0.95	0.98
*11	03/09/2014 - 03/15/2014	0.95	0.98
*12	03/16/2014 - 03/22/2014	0.94	0.97
*13	03/23/2014 - 03/29/2014	0.95	0.98
*14	03/30/2014 - 04/05/2014	0.97	1.00
*15	04/06/2014 - 04/12/2014	0.98	1.01
*16	04/13/2014 - 04/19/2014	0.99	1.02
17	04/20/2014 - 04/26/2014	1.00	1.03
18	04/27/2014 - 05/03/2014	1.01	1.04
19	05/04/2014 - 05/10/2014	1.01	1.04
20	05/11/2014 - 05/17/2014	1.02	1.05
21	05/18/2014 - 05/24/2014	1.03	1.06
22	05/25/2014 - 05/31/2014	1.03	1.06
23	06/01/2014 - 06/07/2014	1.04	1.07
24	06/08/2014 - 06/14/2014	1.04	1.07
25	06/15/2014 - 06/21/2014	1.04	1.07
26	06/22/2014 - 06/28/2014	1.04	1.07
27	06/29/2014 - 07/05/2014	1.05	1.08
28	07/06/2014 - 07/12/2014	1.05	1.08
29	07/13/2014 - 07/19/2014	1.05	1.08
30	07/20/2014 - 07/26/2014	1.04	1.07
31	07/27/2014 - 08/02/2014	1.04	1.07
32	08/03/2014 - 08/09/2014	1.03	1.06
33	08/10/2014 - 08/16/2014	1.03	1.06
34	08/17/2014 - 08/23/2014	1.02	1.05
35	08/24/2014 - 08/30/2014	1.03	1.06
36	08/31/2014 - 09/06/2014	1.04	1.07
37	09/07/2014 - 09/13/2014	1.04	1.07
38	09/14/2014 - 09/20/2014	1.05	1.08
39	09/21/2014 - 09/27/2014	1.04	1.07
40	09/28/2014 - 10/04/2014	1.03	1.06
41	10/05/2014 - 10/11/2014	1.02	1.05
42	10/12/2014 - 10/18/2014	1.01	1.04
43	10/19/2014 - 10/25/2014	1.01	1.04
44	10/26/2014 - 11/01/2014	1.00	1.03
45	11/02/2014 - 11/08/2014	1.00	1.03
46	11/09/2014 - 11/15/2014	0.99	1.02
47	11/16/2014 - 11/22/2014	0.99	1.02
48	11/23/2014 - 11/29/2014	0.99	1.02
49	11/30/2014 - 12/06/2014	0.98	1.01
50	12/07/2014 - 12/13/2014	0.98	1.01
51	12/14/2014 - 12/20/2014	0.97	1.00
52	12/21/2014 - 12/27/2014	0.99	1.02
53	12/28/2014 - 12/31/2014	1.00	1.03

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**APPENDIX F: GROWTH RATE CALCULATIONS AND VOLUME
DEVELOPMENT WORKSHEETS**

VOLUME DEVELOPMENT SHEET
213th STREET & US 1/BISCAYNE

Growth Rate = 0.50% 0.50%
Peak Season = 1.03 1.03
Buildout Year = 2020 2020
Years = 5 5

AM Peak Hour												
	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 10/28/2015	0	1,213	125	362	1,986	0	0	0	0	209	0	416
Peak Season Volume	0	1,249	129	373	2,046	0	0	0	0	215	0	428
Traffic Volume Growth	0	1,281	132	382	2,098	0	0	0	0	220	0	439
7th Avenue Village Committed												
Inbound Traffic Assignment	0	5%	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	5%	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total 7th Avenue Village	0	0	0	0	0	0	0	0	0	0	0	0
CVS Committed												
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total CVS	0	0	0	0	0	0	0	0	0	0	0	0
Hallandale Oasis Committed												
Inbound Traffic Assignment	0	10%	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	4	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	10%	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	11	0	0	0	0	0	0	0
Total Hallandale Oasis	0	4	0	0	11	0	0	0	0	0	0	0
Domus Office Committed												
Inbound Traffic Assignment	0%	19%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%
Inbound Traffic Volumes	0	52	0	0	0	0	0	0	0	0	0	30
Outbound Traffic Assignment	0%	0%	0%	11%	19%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	6	10	0	0	0	0	0	0	0
Total Domus Office	0	52	0	6	10	0	0	0	0	0	0	30
Hallandale Square Committed												
Inbound Traffic Assignment	0	30%	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	16	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	5%	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	6	0	0	0	0	0	0	0
Total Hallandale Square	0	16	0	0	6	0	0	0	0	0	0	0
Hallandale Artsquare Committed												
Inbound Traffic Assignment	0	48%	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	33	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	25%	0	0	69%	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	31	0	0	85	0	0	0	0	0	0	0
Total Hallandale Artsquare	0	64	0	0	85	0	0	0	0	0	0	0
Gulfstream Point Committed												
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Gulfstream Point	0	0	0	0	0	0	0	0	0	0	0	0
2020 Background Traffic												
Inbound Traffic	0	1,417	132	388	2,210	0	0	0	0	220	0	469
Project Traffic												
Inbound Traffic Assignment	0	19.0%	0	0	0	0	0	0	0	0	0	11.0%
Inbound Traffic Volumes	0	77	0	0	0	0	0	0	0	0	0	44
Outbound Traffic Assignment	0	0	0	11.0%	19.0%	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	8	13	0	0	0	0	0	0	0
Project Traffic	0	77	0	8	13	0	0	0	0	0	0	44
TOTAL TRAFFIC	0	1,494	132	396	2,223	0	0	0	0	220	0	513
PM Peak Hour												
	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 10/28/2015	0	2,025	147	312	1,632	0	0	0	0	236	0	374
Peak Season Volume	0	2,086	151	321	1,681	0	0	0	0	243	0	385
Traffic Volume Growth	0	2,139	155	329	1,723	0	0	0	0	249	0	395
7th Avenue Village Committed												
Inbound Traffic Assignment	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	2	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	2	0	0	0	0	0	0	0
Total 7th Avenue Village	0	2	0	0	2	0	0	0	0	0	0	0
CVS Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total CVS	0	0	0	0	0	0	0	0	0	0	0	0
Hallandale Oasis Committed												
Inbound Traffic Assignment	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	9	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	21	0	0	0	0	0	0	0
Total Hallandale Oasis	0	9	0	0	21	0	0	0	0	0	0	0
Domus Office Committed												
Inbound Traffic Assignment	0%	19%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%
Inbound Traffic Volumes	0	22	0	0	0	0	0	0	0	0	0	13
Outbound Traffic Assignment	0%	0%	0%	11%	19%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	31	53	0	0	0	0	0	0	0
Total Domus Office	0	22	0	31	53	0	0	0	0	0	0	13
Hallandale Square Committed												
Inbound Traffic Assignment	0%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	105	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	36	0	0	0	0	0	0	0
Total Hallandale Square	0	105	0	0	36	0	0	0	0	0	0	0
Hallandale Artsquare Committed												
Inbound Traffic Assignment	0%	48%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	78	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	25%	0%	0%	69%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	34	0	0	92	0	0	0	0	0	0	0
Total Hallandale Artsquare	0	112	0	0	92	0	0	0	0	0	0	0
Gulfstream Point Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Gulfstream Point	0	0	0	0	0	0	0	0	0	0	0	0
2020 Background Traffic												
Inbound Traffic	0	2,389	155	360	1,927	0	0	0	0	249	0	408
Project Traffic												
Inbound Traffic Assignment	0%	19%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%
Inbound Traffic Volumes	0	20	0	0	0	0	0	0	0	0	0	12
Outbound Traffic Assignment	0%	0%	0%	11%	19%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	40	69	0	0	0	0	0	0	0
Project Traffic	0	20	0	40	69	0	0	0	0	0	0	12
TOTAL TRAFFIC	0	2,409	155	400	1,996	0	0	0	0	249	0	420

VOLUME DEVELOPMENT SHEET
3RD STREET & US 1 (FEDERAL HWY)

Growth Rate = 0.50% 0.50%
Peak Season = 1.03 1.03
Buildout Year = 2020 2020
Years = 5 5

AM Peak Hour													
	Northbound			Southbound			Eastbound			Westbound			
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	
Existing Volume on 10/28/2015	64	1,124	16	41	1,699	6	142	102	396	23	8	9	
Peak Season Volume	66	1,158	16	42	1,750	6	146	105	408	24	8	9	
Traffic Volume Growth	68	1,187	16	43	1,794	6	150	108	418	25	8	9	0
7th Avenue Village Committed													
Inbound Traffic Assignment	0	5%	0	0	0	0	0	0	0	0	0	0	5
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0	0	0	0	5%	0	0	0	0	0	0	0	
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	-5
Total 7th Avenue Village	0	0	0	0	0	0	0	0	0	0	0	0	
CVS Committed													
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	10
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	10
Total CVS	0	0	0	0	0	0	0	0	0	0	0	0	
Hallandale Oasis Committed													
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	38
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	113
Total Hallandale Oasis	0	0	0	0	0	0	0	0	0	0	0	0	
Domus Office Committed													
Inbound Traffic Assignment	0%	0%	0%	0%	17%	0%	0%	0%	0%	0%	0%	0%	275
Inbound Traffic Volumes	0	0	0	0	47	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0%	17%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Outbound Traffic Volumes	0	9	0	0	0	0	0	0	0	0	0	0	51
Total Domus Office	0	9	0	0	47	0	0	0	0	0	0	0	
Hallandale Square Committed													
Inbound Traffic Assignment	0	30%	0	7%	0	0	0	0	0	0	0	0	52
Inbound Traffic Volumes	0	16	0	4	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0	0	0	0	5%	0	0	0	0	25%	0	0	
Outbound Traffic Volumes	0	0	0	0	6	0	0	0	0	30	0	0	119
Total Hallandale Square	0	16	0	4	6	0	0	0	0	30	0	0	
Hallandale Artsquare Committed													
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	68
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	123
Total Hallandale Artsquare	0	0	0	0	0	0	0	0	0	0	0	0	
Gulfstream Point Committed													
Inbound Traffic Assignment	0	0	0	0	35%	0	0	4%	2%	1	0	0	74
Inbound Traffic Volumes	0	0	0	0	26	0	0	3	1	0	0	0	
Outbound Traffic Assignment	2%	39%	1%	0	0	0	0	0	0	0	0	0	
Outbound Traffic Volumes	2	46	1	0	0	0	0	0	0	0	0	0	117
Total Gulfstream Point	2	46	1	0	26	0	0	3	1	0	0	0	
2020 Background Traffic													
LT	70	1,258	17	47	1,873	6	150	108	421	56	8	9	0
Project Traffic													
Inbound Traffic Assignment	0	0	0	0	17.0%	0	0	0	0	0	0	0	404
Inbound Traffic Volumes	0	0	0	0	69	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0	12	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Volumes	0	12	0	0	69	0	0	0	0	0	0	0	69
Project Traffic	0	12	0	0	69	0	0	0	0	0	0	0	
TOTAL TRAFFIC	70	1,270	17	47	1,942	6	150	108	421	56	8	9	0

PM Peak Hour													
	Northbound			Southbound			Eastbound			Westbound			
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	
Existing Volume on 10/28/2015	121	1,302	17	69	1,568	13	154	54	145	106	66	120	
Peak Season Volume	125	1,341	18	71	1,615	13	159	56	149	109	68	124	
Traffic Volume Growth	128	1,375	18	73	1,656	13	163	57	153	112	70	127	0
7th Avenue Village Committed													
Inbound Traffic Assignment	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	31
Inbound Traffic Volumes	0	2	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%	
Outbound Traffic Volumes	0	0	0	0	2	0	0	0	0	0	0	0	38
Total 7th Avenue Village	0	2	0	0	2	0	0	0	0	0	0	0	
CVS Committed													
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	40
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	40
Total CVS	0	0	0	0	0	0	0	0	0	0	0	0	
Hallandale Oasis Committed													
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	88
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	208
Total Hallandale Oasis	0	0	0	0	0	0	0	0	0	0	0	0	
Domus Office Committed													
Inbound Traffic Assignment	0%	0%	0%	0%	17%	0%	0%	0%	0%	0%	0%	0%	114
Inbound Traffic Volumes	0	0	0	0	19	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0%	17%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Outbound Traffic Volumes	0	47	0	0	0	0	0	0	0	0	0	0	279
Total Domus Office	0	47	0	0	19	0	0	0	0	0	0	0	
Hallandale Square Committed													
Inbound Traffic Assignment	0%	30%	0%	7%	0%	0%	0%	0%	0%	0%	0%	0%	350
Inbound Traffic Volumes	0	105	0	25	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0%	0%	0%	0%	5%	0%	0%	0%	0%	25%	0%	0%	
Outbound Traffic Volumes	0	0	0	0	36	0	0	0	0	178	0	0	711
Total Hallandale Square	0	105	0	25	36	0	0	0	0	178	0	0	
Hallandale Artsquare Committed													
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	163
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	134
Total Hallandale Artsquare	0	0	0	0	0	0	0	0	0	0	0	0	
Gulfstream Point Committed													
Inbound Traffic Assignment	0%	0%	0%	0%	35%	0%	0%	4%	2%	0%	0%	0%	128
Inbound Traffic Volumes	0	0	0	0	45	0	0	5	3	0	0	0	
Outbound Traffic Assignment	2%	39%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Outbound Traffic Volumes	2	34	1	0	0	0	0	0	0	0	0	0	87
Total Gulfstream Point	2	34	1	0	45	0	0	5	3	0	0	0	
2020 Background Traffic													
LT	130	1,563	19	98	1,758	13	163	57	158	293	70	127	0
Project Traffic													
Inbound Traffic Assignment	0%	0%	0%	0%	17%	0%	0%	0%	0%	0%	0%	0%	106
Inbound Traffic Volumes	0	0	0	0	18	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0%	17%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Outbound Traffic Volumes	0	62	0	0	0	0	0	0	0	0	0	0	363
Project Traffic	0	62	0	0	18	0	0	0	0	0	0	0	
TOTAL TRAFFIC	130	1,625	19	98	1,776	13	163	57	158	293	70	127	0

VOLUME DEVELOPMENT SHEET
3RD STREET & DIXIE HIGHWAY

Growth Rate = 0.50% 0.50%
Peak Season = 1.03 1.03
Buildout Year = 2020 2020
Years = 5 5

AM Peak Hour												
	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 10/28/2015	0	0	0	436	579	13	0	259	7	26	123	0
Peak Season Volume	0	0	0	449	596	13	0	267	7	27	127	0
Traffic Volume Growth	0	0	0	460	611	13	0	274	7	28	130	0
7th Avenue Village Committed												
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	5%	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total 7th Avenue Village	0	0	0	0	0	0	0	0	0	0	0	0
CVS Committed												
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total CVS	0	0	0	0	0	0	0	0	0	0	0	0
Hallandale Oasis Committed												
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Oasis	0	0	0	0	0	0	0	0	0	0	0	0
Domus Office Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	21%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	58	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Domus Office	0	0	0	0	0	58	0	0	0	0	0	0
Hallandale Square Committed												
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Square	0	0	0	0	0	0	0	0	0	0	0	0
Hallandale Artsquare Committed												
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Artsquare	0	0	0	0	0	0	0	0	0	0	0	0
Gulfstream Point Committed												
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Gulfstream Point	0	0	0	0	0	0	0	0	0	0	0	0
2020 Background Traffic	0	0	0	460	611	71	0	274	7	28	130	0
Project Traffic												
Inbound Traffic Assignment	0	0	0	0	0	21.0%	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	85	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Project Traffic	0	0	0	0	0	85	0	0	0	0	0	0
TOTAL TRAFFIC	0	0	0	460	611	156	0	274	7	28	130	0

PM Peak Hour												
	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 10/28/2015	0	0	0	200	432	9	0	125	23	53	340	0
Peak Season Volume	0	0	0	206	445	9	0	129	24	55	350	0
Traffic Volume Growth	0	0	0	211	456	9	0	132	25	56	359	0
7th Avenue Village Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	2	0	0	0	0	0	0	0
Total 7th Avenue Village	0	0	0	0	2	0	0	0	0	0	0	0
CVS Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total CVS	0	0	0	0	0	0	0	0	0	0	0	0
Hallandale Oasis Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Oasis	0	0	0	0	0	0	0	0	0	0	0	0
Domus Office Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	21%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	24	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Domus Office	0	0	0	0	0	24	0	0	0	0	0	0
Hallandale Square Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Square	0	0	0	0	0	0	0	0	0	0	0	0
Hallandale Artsquare Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Artsquare	0	0	0	0	0	0	0	0	0	0	0	0
Gulfstream Point Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Gulfstream Point	0	0	0	0	0	0	0	0	0	0	0	0
2020 Background Traffic	0	0	0	211	458	33	0	132	25	56	359	0
Project Traffic												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	21%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	22	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	22	0	0	0	0	0	0
Project Traffic	0	0	0	0	0	22	0	0	0	0	0	0
TOTAL TRAFFIC	0	0	0	211	458	55	0	132	25	56	359	0

VOLUME DEVELOPMENT SHEET
3RD STREET & 1ST AVE

Growth Rate = 0.50% 0.50%
Peak Season = 1.03 1.03
Buildout Year = 2020 2020
Years = 5 5

AM Peak Hour												
	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 10/28/2015	73	202	7	0	0	0	43	581	0	0	78	70
Peak Season Volume	75	208	7	0	0	0	44	598	0	0	80	72
Traffic Volume Growth	77	213	7	0	0	0	45	613	0	0	82	74
7th Avenue Village Committed												
Inbound Traffic Assignment												
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment												
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total 7th Avenue Village	0	0	0	0	0	0	0	0	0	0	0	0
CVS Committed												
Inbound Traffic Assignment												
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment												
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total CVS	0	0	0	0	0	0	0	0	0	0	0	0
Hallandale Oasis Committed												
Inbound Traffic Assignment												
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment												
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Oasis	0	0	0	0	0	0	0	0	0	0	0	0
Domus Office Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	15	0	0	0	0	0	0	0	0	0	0
Total Domus Office	0	15	0	0	0	0	0	0	0	0	0	0
Hallandale Square Committed												
Inbound Traffic Assignment												
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment												
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Square	0	0	0	0	0	0	0	0	0	0	0	0
Hallandale Artsquare Committed												
Inbound Traffic Assignment												
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment												
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Artsquare	0	0	0	0	0	0	0	0	0	0	0	0
Gulfstream Point Committed												
Inbound Traffic Assignment												
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment												
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Gulfstream Point	0	0	0	0	0	0	0	0	0	0	0	0
2020 Background Traffic												
	77	228	7	0	0	0	45	613	0	0	82	74
Project Traffic												
Inbound Traffic Assignment												
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment												
Outbound Traffic Volumes	0	21	0	0	0	0	0	0	0	0	0	0
Project Traffic	0	21	0	0	0	0	0	0	0	0	0	0
TOTAL TRAFFIC	77	249	7	0	0	0	45	613	0	0	82	74

PM Peak Hour												
	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 10/28/2015	186	442	10	0	0	0	48	268	0	0	197	119
Peak Season Volume	192	455	10	0	0	0	49	276	0	0	203	123
Traffic Volume Growth	197	466	10	0	0	0	50	283	0	0	208	126
7th Avenue Village Committed												
Inbound Traffic Assignment	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	2	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total 7th Avenue Village	0	2	0	0	0	0	0	0	0	0	0	0
CVS Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total CVS	0	0	0	0	0	0	0	0	0	0	0	0
Hallandale Oasis Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Oasis	0	0	0	0	0	0	0	0	0	0	0	0
Domus Office Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	84	0	0	0	0	0	0	0	0	0	0
Total Domus Office	0	84	0	0	0	0	0	0	0	0	0	0
Hallandale Square Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Square	0	0	0	0	0	0	0	0	0	0	0	0
Hallandale Artsquare Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Artsquare	0	0	0	0	0	0	0	0	0	0	0	0
Gulfstream Point Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Gulfstream Point	0	0	0	0	0	0	0	0	0	0	0	0
2020 Background Traffic												
	197	552	10	0	0	0	50	283	0	0	208	126
Project Traffic												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	109	0	0	0	0	0	0	0	0	0	0
Project Traffic	0	109	0	0	0	0	0	0	0	0	0	0
TOTAL TRAFFIC	197	661	10	0	0	0	50	283	0	0	208	126

VOLUME DEVELOPMENT SHEET
8TH AVENUE & HALLANDALE BEACH BOULEVARD

Growth Rate = 0.50% 0.50%
Peak Season = 1.03 1.03
Buildout Year = 2020 2020
Years = 5 5

AM Peak Hour												
	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 10/28/2015	12	0	24	161	0	174	0	1,596	20	19	1,336	0
Peak Season Volume	12	0	25	166	0	179	0	1,644	21	20	1,376	0
Traffic Volume Growth	12	0	26	170	0	184	0	1,686	22	21	1,411	0
7th Avenue Village Committed												
Inbound Traffic Assignment												
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	1	0
Outbound Traffic Assignment	3%							10%				
Outbound Traffic Volumes	0	0	0	0	0	0	0	-1	0	0	0	0
Total 7th Avenue Village	0	0	0	0	0	0	0	-1	0	0	1	0
Hallandale Oasis Committed												
Inbound Traffic Assignment												
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment												
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Oasis	0	0	0	0	0	0	0	0	0	0	0	0
Domus Office Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	14	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	3	0	0	14	0	0
Total Domus Office	0	0	0	0	0	0	3	0	0	14	0	0
Hallandale Square Committed												
Inbound Traffic Assignment					2%				51%	10%		
Inbound Traffic Volumes	0	0	0	0	1	0	0	0	27	5	0	0
Outbound Traffic Assignment	51%	2%										
Outbound Traffic Volumes	61	2	0	0	0	0	0	0	0	0	0	0
Total Hallandale Square	61	2	0	0	1	0	0	0	27	5	0	0
Hallandale Artsquare Committed												
Inbound Traffic Assignment												
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment												
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Artsquare	0	0	0	0	0	0	0	0	0	0	0	0
Gulfstream Point Committed												
Inbound Traffic Assignment												
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment												
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Gulfstream Point	0	0	0	0	0	0	0	0	0	0	0	0
2020 Background Traffic	73	2	26	170	1	184	0	1,688	49	26	1,426	0
Project Traffic												
Inbound Traffic Assignment											5.0%	
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	20	0
Outbound Traffic Assignment								5.0%				
Outbound Traffic Volumes	0	0	0	0	0	0	3	0	0	0	0	0
Project Traffic	0	0	0	0	0	0	3	0	0	0	20	0
TOTAL TRAFFIC	73	2	26	170	1	184	0	1,691	49	26	1,446	0

PM Peak Hour												
	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 10/28/2015	24	0	43	114	4	134	0	1,452	22	17	1,724	0
Peak Season Volume	25	0	44	117	4	138	0	1,496	23	18	1,776	0
Traffic Volume Growth	26	0	45	120	4	141	0	1,534	24	18	1,821	0
7th Avenue Village Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	3	0
Outbound Traffic Assignment	3%	0%	0%	0%	0%	0%	0%	10%	0%	0%	0%	0%
Outbound Traffic Volumes	1	0	0	0	0	0	0	4	0	0	0	0
Total 7th Avenue Village	1	0	0	0	0	0	0	4	0	0	3	0
CVS Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total CVS	0	0	0	0	0	0	0	0	0	0	0	0
Hallandale Oasis Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Oasis	0	0	0	0	0	0	0	0	0	0	0	0
Domus Office Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	5	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	14	0	0	0	0	0
Total Domus Office	0	0	0	0	0	0	14	0	0	0	6	0
Hallandale Square Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	2%	0%	0%	0%	51%	10%	0%	0%
Inbound Traffic Volumes	0	0	0	0	7	0	0	0	179	35	0	0
Outbound Traffic Assignment	51%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	363	14	0	0	0	0	0	0	0	0	0	0
Total Hallandale Square	363	14	0	0	7	0	0	0	179	35	0	0
Hallandale Artsquare Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Artsquare	0	0	0	0	0	0	0	0	0	0	0	0
Gulfstream Point Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Gulfstream Point	0	0	0	0	0	0	0	0	0	0	0	0
2020 Background Traffic	390	14	45	120	11	141	0	1,552	203	53	1,830	0
Project Traffic												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	5	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	18	0	0	0	0	0
Project Traffic	0	0	0	0	0	0	18	0	0	0	5	0
TOTAL TRAFFIC	390	14	45	120	11	141	0	1,570	203	53	1,835	0

VOLUME DEVELOPMENT SHEET
County Line(215th street) & Dixie Highway

Growth Rate = 0.50% 0.50%
Peak Season = 1.03 1.03
Buildout Year = 2020 2020
Years = 5 5

AM Peak Hour												
	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 10/28/2015	8	0	297	401	194	78	0	376	12	132	119	0
Peak Season Volume	8	0	306	413	200	80	0	387	12	136	123	0
Traffic Volume Growth	8	0	314	423	205	82	0	397	12	139	126	0
7th Avenue Village Committed												
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total 7th Avenue Village	0	0	0	0	0	0	0	0	0	0	0	0
CVS Committed												
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total CVS	0	0	0	0	0	0	0	0	0	0	0	0
Hallandale Oasis Committed												
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Oasis	0	0	0	0	0	0	0	0	0	0	0	0
Domus Office Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	30%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	15	0	0	0	0	0	0	0
Total Domus Office	0	0	0	0	15	0	0	0	0	0	0	0
Hallandale Square Committed												
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Square	0	0	0	0	0	0	0	0	0	0	0	0
Hallandale Artsquare Committed												
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Artsquare	0	0	0	0	0	0	0	0	0	0	0	0
Gulfstream Point Committed												
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Gulfstream Point	0	0	0	0	0	0	0	0	0	0	0	0
2020 Background Traffic												
Inbound Traffic	8	0	314	423	241	82	0	397	12	139	126	0
Project Traffic												
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	21	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	21	0	0	0	0	0	0	0
Project Traffic	0	0	0	0	21	0	0	0	0	0	0	0
TOTAL TRAFFIC	8	0	314	423	241	82	0	397	12	139	126	0

PM Peak Hour												
	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 10/28/2015	35	0	276	203	231	71	0	190	9	111	344	0
Peak Season Volume	36	0	284	209	238	73	0	196	9	114	354	0
Traffic Volume Growth	37	0	291	214	244	75	0	201	9	117	363	0
7th Avenue Village Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	2	0	0	0	0	0	0	0
Total 7th Avenue Village	0	0	0	0	2	0	0	0	0	0	0	0
CVS Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total CVS	0	0	0	0	0	0	0	0	0	0	0	0
Hallandale Oasis Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Oasis	0	0	0	0	0	0	0	0	0	0	0	0
Domus Office Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	30%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	84	0	0	0	0	0	0	0
Total Domus Office	0	0	0	0	84	0	0	0	0	0	0	0
Hallandale Square Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Square	0	0	0	0	0	0	0	0	0	0	0	0
Hallandale Artsquare Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Artsquare	0	0	0	0	0	0	0	0	0	0	0	0
Gulfstream Point Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Gulfstream Point	0	0	0	0	0	0	0	0	0	0	0	0
2020 Background Traffic												
Inbound Traffic	37	0	291	214	330	75	0	201	9	117	363	0
Project Traffic												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	30%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	109	0	0	0	0	0	0	0
Project Traffic	0	0	0	0	109	0	0	0	0	0	0	0
TOTAL TRAFFIC	37	0	291	214	439	75	0	201	9	117	363	0

VOLUME DEVELOPMENT SHEET
214TH TERRACE & SE 3RD AVENUE

Growth Rate = 0.50% 0.50%
Peak Season = 1.03 1.03
Buildout Year = 2020 2020
Years = 5 5

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound			
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	
Existing Volume on 10/28/2015	0	0	0	21	0	1	1	26	0	0	5	1	
Peak Season Volume	0	0	0	22	0	1	1	27	0	0	5	1	
Traffic Volume Growth	0	0	0	23	0	1	1	28	0	0	5	1	
7th Avenue Village Committed													
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Total 7th Avenue Village	0	0	0	0	0	0	0	0	0	0	0	0	
CVS Committed													
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Total CVS	0	0	0	0	0	0	0	0	0	0	0	0	
Hallandale Oasis Committed													
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Total Hallandale Oasis	0	0	0	0	0	0	0	0	0	0	0	0	
Domus Office Committed													
Inbound Traffic Assignment	0%	0%	0%	0%	10%	0%	0%	0%	7%	20%	0%	0%	
Inbound Traffic Volumes	0	0	0	0	28	0	0	0	19	55	0	0	
Outbound Traffic Assignment	7%	10%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Outbound Traffic Volumes	4	5	10	0	0	0	0	0	0	0	0	0	
Total Domus Office	4	5	10	0	28	0	0	19	55	0	0	0	
Hallandale Square Committed													
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Total Hallandale Square	0	0	0	0	0	0	0	0	0	0	0	0	
Hallandale Artsquare Committed													
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Total Hallandale Artsquare	0	0	0	0	0	0	0	0	0	0	0	0	
Gulfstream Point Committed													
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Total Gulfstream Point	0	0	0	0	0	0	0	0	0	0	0	0	
2020 Background Traffic	4	5	10	23	28	1	1	28	19	55	5	1	
Project Traffic													
Inbound Traffic Assignment	0	0	0	0	40	0	0	0	28	81	0	0	
Inbound Traffic Volumes	0	0	0	0	40	0	0	0	28	81	0	0	
Outbound Traffic Assignment	7.0%	10.0%	20.0%	0	0	0	0	0	0	0	0	0	
Outbound Traffic Volumes	5	7	14	0	0	0	0	0	0	0	0	0	
Project Traffic	5	7	14	0	40	0	0	28	81	0	0	0	
TOTAL TRAFFIC	9	12	24	23	68	1	1	28	47	136	5	1	

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound			
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	
Existing Volume on 10/28/2015	0	0	0	3	0	3	4	4	0	0	23	63	
Peak Season Volume	0	0	0	3	0	3	4	4	0	0	23	65	
Traffic Volume Growth	0	0	0	3	0	3	4	4	0	0	24	67	
7th Avenue Village Committed													
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Total 7th Avenue Village	0	0	0	0	0	0	0	0	0	0	0	0	
CVS Committed													
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Total CVS	0	0	0	0	0	0	0	0	0	0	0	0	
Hallandale Oasis Committed													
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Total Hallandale Oasis	0	0	0	0	0	0	0	0	0	0	0	0	
Domus Office Committed													
Inbound Traffic Assignment	0%	0%	0%	0%	10%	0%	0%	0%	7%	20%	0%	0%	
Inbound Traffic Volumes	0	0	0	0	11	0	0	0	8	23	0	0	
Outbound Traffic Assignment	7%	10%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Outbound Traffic Volumes	20	28	56	0	0	0	0	0	0	0	0	0	
Total Domus Office	20	28	56	0	11	0	0	8	23	0	0	0	
Hallandale Square Committed													
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Total Hallandale Square	0	0	0	0	0	0	0	0	0	0	0	0	
Hallandale Artsquare Committed													
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Total Hallandale Artsquare	0	0	0	0	0	0	0	0	0	0	0	0	
Gulfstream Point Committed													
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Total Gulfstream Point	0	0	0	0	0	0	0	0	0	0	0	0	
2020 Background Traffic	20	28	56	3	11	3	4	4	8	23	24	67	
Project Traffic													
Inbound Traffic Assignment	0%	0%	0%	0%	10%	0%	0%	7%	20%	0%	0%	0%	
Inbound Traffic Volumes	0	0	0	0	11	0	0	7	21	0	0	0	
Outbound Traffic Assignment	7%	10%	20%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Outbound Traffic Volumes	25	36	73	0	11	0	0	7	21	0	0	0	
Project Traffic	25	36	73	0	11	0	0	7	21	0	0	0	
TOTAL TRAFFIC	45	64	129	3	22	3	4	4	15	44	24	67	

VOLUME DEVELOPMENT SHEET
214th TRACE & OPTIMA GARAGE DRIVE

Growth Rate = 0.50% 0.50%
Peak Season = 1.03 1.03
Buildout Year = 2020 2020
Years = 5 5

AM Peak Hour

	Northbound			Southbound			Eastbound			Westbound			
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	
Existing Volume on 10/28/2015	0	0	0	0	0	1	37	10	0	0	0	5	2
Peak Season Volume	0	0	0	0	0	1	38	10	0	0	0	5	2
Traffic Volume Growth	0	0	0	0	0	1	39	10	0	0	0	5	2
7th Avenue Village Committed													
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0
Total 7th Avenue Village	0	0	0	0	0	0	0	0	0	0	0	0	0
CVS Committed													
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0
Total CVS	0	0	0	0	0	0	0	0	0	0	0	0	0
Hallandale Oasis Committed													
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Oasis	0	0	0	0	0	0	0	0	0	0	0	0	0
Domus Office Committed													
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	51%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	26	0	0	0	0	0	0	0
Total Domus Office	0	0	0	0	0	26	0	0	0	0	0	0	0
Hallandale Square Committed													
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Square	0	0	0	0	0	0	0	0	0	0	0	0	0
Hallandale Artsquare Committed													
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Artsquare	0	0	0	0	0	0	0	0	0	0	0	0	0
Gulfstream Point Committed													
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Gulfstream Point	0	0	0	0	0	0	0	0	0	0	0	0	0
2020 Background Traffic	0	0	0	0	0	27	39	10	0	0	0	5	2
Project Traffic													
Inbound Traffic Assignment	0	0	0	0	0	0	0	0	0	0	0	0	0
Inbound Traffic Volumes	0	0	0	0	0	51.0%	0	0	0	0	0	0	0
Outbound Traffic Assignment	0	0	0	0	0	35	0	0	0	0	0	0	0
Outbound Traffic Volumes	0	0	0	0	0	35	0	0	0	0	0	0	0
Project Traffic	0	0	0	0	0	0	35	0	0	0	0	0	0
TOTAL TRAFFIC	0	0	0	0	0	62	39	10	0	0	0	5	2

PM Peak Hour

	Northbound			Southbound			Eastbound			Westbound			
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	
Existing Volume on 10/28/2015	0	0	0	1	0	76	0	7	0	0	8	1	
Peak Season Volume	0	0	0	1	0	78	0	7	0	0	8	1	
Traffic Volume Growth	0	0	0	1	0	80	0	7	0	0	8	1	
7th Avenue Village Committed													
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	31
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	38
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Total 7th Avenue Village	0	0	0	0	0	0	0	0	0	0	0	0	
CVS Committed													
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	40
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	40
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Total CVS	0	0	0	0	0	0	0	0	0	0	0	0	
Hallandale Oasis Committed													
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	88
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	208
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Total Hallandale Oasis	0	0	0	0	0	0	0	0	0	0	0	0	
Domus Office Committed													
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	114
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0%	0%	0%	0%	0%	51%	0%	0%	0%	0%	0%	0%	279
Outbound Traffic Volumes	0	0	0	0	0	142	0	0	0	0	0	0	
Total Domus Office	0	0	0	0	0	142	0	0	0	0	0	0	
Hallandale Square Committed													
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	350
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	711
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Total Hallandale Square	0	0	0	0	0	0	0	0	0	0	0	0	
Hallandale Artsquare Committed													
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	163
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	134
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Total Hallandale Artsquare	0	0	0	0	0	0	0	0	0	0	0	0	
Gulfstream Point Committed													
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	128
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	87
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Total Gulfstream Point	0	0	0	0	0	0	0	0	0	0	0	0	
2020 Background Traffic	0	0	0	1	0	222	0	7	0	0	8	1	
Project Traffic													
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	106
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0	
Outbound Traffic Assignment	0%	0%	0%	0%	0%	51%	0%	0%	0%	0%	0%	0%	363
Outbound Traffic Volumes	0	0	0	0	0	185	0	0	0	0	0	0	
Project Traffic	0	0	0	0	0	185	0	0	0	0	0	0	
TOTAL TRAFFIC	0	0	0	1	0	407	0	7	0	0	0	8	1

VOLUME DEVELOPMENT SHEET
OPTIMA OFFICE DRIVEWAY & US 1

Growth Rate = 0.50% 0.50%
Peak Season = 1.03 1.03
Buildout Year = 2020 2020
Years = 5 5

AM Peak Hour												
	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 10/28/2015	0	1,413	0	0	2,421	38	0	0	5	0	0	0
Peak Season Volume	0	1,455	0	0	2,494	39	0	0	5	0	0	0
Traffic Volume Growth	0	1,492	0	0	2,557	40	0	0	5	0	0	0
7th Avenue Village Committed												
Inbound Traffic Assignment												
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment		5%			5%							
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total 7th Avenue Village	0	0	0	0	0	0	0	0	0	0	0	0
CVS Committed												
Inbound Traffic Assignment												
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment												
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total CVS	0	0	0	0	0	0	0	0	0	0	0	0
Hallandale Oasis Committed												
Inbound Traffic Assignment												
Inbound Traffic Volumes	0	4	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment					10%							
Outbound Traffic Volumes	0	0	0	0	11	0	0	0	0	0	0	0
Total Hallandale Oasis	0	4	0	0	11	0	0	0	0	0	0	0
Domus Office Committed												
Inbound Traffic Assignment	30%	0%	0%	0%	0%	70%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	83	0	0	0	0	193	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	17%	0%	30%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	9	0	15	0	0	0	0
Total Domus Office	83	0	0	0	0	193	9	15	0	0	0	0
Hallandale Square Committed												
Inbound Traffic Assignment		30%										
Inbound Traffic Volumes	0	16	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment					5%							
Outbound Traffic Volumes	0	0	0	0	6	0	0	0	0	0	0	0
Total Hallandale Square	0	16	0	0	6	0	0	0	0	0	0	0
Hallandale Artsquare Committed												
Inbound Traffic Assignment												
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment												
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Artsquare	0	0	0	0	0	0	0	0	0	0	0	0
Gulfstream Point Committed												
Inbound Traffic Assignment		48%										
Inbound Traffic Volumes	0	36	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment		25%			69%							
Outbound Traffic Volumes	0	29	0	0	81	0	0	0	0	0	0	0
Total Gulfstream Point	0	65	0	0	81	0	0	0	0	0	0	0
2020 Background Traffic												
	83	1,577	0	0	2,655	233	9	20	0	0	0	0
Project Traffic												
Inbound Traffic Assignment	30.0%					70.0%						
Inbound Traffic Volumes	121	0	0	0	0	283	0	0	0	0	0	0
Outbound Traffic Assignment							17.0%	30.0%				
Outbound Traffic Volumes	0	0	0	0	0	12	21	21	0	0	0	0
Project Traffic	121	0	0	0	0	283	12	21	0	0	0	0
TOTAL TRAFFIC	204	1,577	0	0	2,655	516	21	41	0	0	0	0

PM Peak Hour												
	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume on 10/28/2015	0	2,073	0	0	1,888	13	0	0	39	0	0	0
Peak Season Volume	0	2,135	0	0	1,945	13	0	0	40	0	0	0
Traffic Volume Growth	0	2,189	0	0	1,994	13	0	0	41	0	0	0
7th Avenue Village Committed												
Inbound Traffic Assignment	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	2	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	2	0	0	0	0	0	0	0
Total 7th Avenue Village	0	2	0	0	2	0	0	0	0	0	0	0
CVS Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total CVS	0	0	0	0	0	0	0	0	0	0	0	0
Hallandale Oasis Committed												
Inbound Traffic Assignment	0%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	9	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	21	0	0	0	0	0	0	0
Total Hallandale Oasis	0	9	0	0	21	0	0	0	0	0	0	0
Domus Office Committed												
Inbound Traffic Assignment	30%	0%	0%	0%	0%	70%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	34	0	0	0	0	80	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	17%	0%	30%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	47	0	84	0	0	0	0
Total Domus Office	34	0	0	0	0	80	47	84	0	0	0	0
Hallandale Square Committed												
Inbound Traffic Assignment	0%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	105	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	5%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	36	0	0	0	0	0	0	0
Total Hallandale Square	0	105	0	0	36	0	0	0	0	0	0	0
Hallandale Artsquare Committed												
Inbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	0	0	0	0	0	0	0
Total Hallandale Artsquare	0	0	0	0	0	0	0	0	0	0	0	0
Gulfstream Point Committed												
Inbound Traffic Assignment	0%	48%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	0	61	0	0	0	0	0	0	0	0	0	0
Outbound Traffic Assignment	0%	25%	0%	0%	69%	0%	0%	0%	0%	0%	0%	0%
Outbound Traffic Volumes	0	22	0	0	60	0	0	0	0	0	0	0
Total Gulfstream Point	0	83	0	0	60	0	0	0	0	0	0	0
2020 Background Traffic												
	34	2,388	0	0	2,113	93	47	125	0	0	0	0
Project Traffic												
Inbound Traffic Assignment	30%	0%	0%	0%	0%	70%	0%	0%	0%	0%	0%	0%
Inbound Traffic Volumes	32	0	0	0	0	74	0	0	0	0	0	0
Outbound Traffic Assignment	0%	0%	0%	0%	0%	0%	17%	0%	30%	0%	0%	0%
Outbound Traffic Volumes	0	0	0	0	0	74	62	109	0	0	0	0
Project Traffic	32	0	0	0	0	74	62	109	0	0	0	0
TOTAL TRAFFIC	66	2,388	0	0	2,113	167	109	234	0	0	0	0

APPENDIX G: SIGNAL TIMING WORKSHEETS

APPENDIX H: INTERSECTION ANALYSIS

1: Biscayne Boulevard & NE 213th Street

1/6/2016



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	271	457	2618	168	435	2170
v/c Ratio	0.69	0.63	0.99	0.20	0.87	0.52
Control Delay	76.9	9.1	53.5	14.1	72.8	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.9	9.1	53.5	14.1	72.8	4.8
Queue Length 50th (ft)	142	0	~986	50	435	209
Queue Length 95th (ft)	187	56	#1302	116	528	276
Internal Link Dist (ft)	379		211			420
Turn Bay Length (ft)						
Base Capacity (vph)	525	813	2638	856	625	4213
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.56	0.99	0.20	0.70	0.52

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis
 1: Biscayne Boulevard & NE 213th Street

Future Total PM
 1/6/2016



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	249	420	2409	155	400	1996
Future Volume (vph)	249	420	2409	155	400	1996
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	0.97	0.88	0.91	1.00	1.00	0.91
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	2787	5085	1583	1770	5085
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	2787	5085	1583	1770	5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	271	457	2618	168	435	2170
RTOR Reduction (vph)	0	404	0	35	0	0
Lane Group Flow (vph)	271	53	2618	133	435	2170
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	18.4	18.4	83.0	83.0	45.1	132.6
Effective Green, g (s)	18.4	18.4	83.0	83.0	45.1	132.6
Actuated g/C Ratio	0.11	0.11	0.52	0.52	0.28	0.83
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	394	320	2637	821	498	4214
v/s Ratio Prot	c0.08		c0.51		c0.25	0.43
v/s Ratio Perm		0.02		0.08		
v/c Ratio	0.69	0.16	0.99	0.16	0.87	0.51
Uniform Delay, d1	68.0	63.9	38.2	20.2	54.7	4.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.9	0.2	15.9	0.4	15.5	0.5
Delay (s)	73.0	64.1	54.1	20.6	70.3	4.5
Level of Service	E	E	D	C	E	A
Approach Delay (s)	67.4		52.1			15.5
Approach LOS	E		D			B

Intersection Summary

HCM 2000 Control Delay	38.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	87.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Queues
2: US 1 & SE 9th Street

Future Total PM
1/6/2016



Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	66	86	87	45	118	2859	37	39	2506
v/c Ratio	0.54	0.66	0.66	0.19	0.74	0.82	0.03	0.31	0.78
Control Delay	43.9	95.3	95.1	1.9	97.9	22.5	0.1	82.9	25.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.9	95.3	95.1	1.9	97.9	22.5	0.1	82.9	25.2
Queue Length 50th (ft)	19	95	96	0	125	763	0	21	660
Queue Length 95th (ft)	72	157	158	0	193	1031	0	42	929
Internal Link Dist (ft)	1532		73			674			1939
Turn Bay Length (ft)									
Base Capacity (vph)	225	241	244	327	192	3500	1125	356	3228
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.36	0.36	0.14	0.61	0.82	0.03	0.11	0.78

Intersection Summary

HCM Signalized Intersection Capacity Analysis

Future Total PM

2: US 1 & SE 9th Street

1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↙	↘	↗	↖	↑↑↑	↗	↖↖	↑↑↑	
Traffic Volume (vph)	12	5	44	146	13	41	109	2630	34	36	2294	12
Future Volume (vph)	12	5	44	146	13	41	109	2630	34	36	2294	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5		6.5	6.5	6.5	7.0	7.0	7.0	7.0	4.5	
Lane Util. Factor		1.00		0.95	0.95	1.00	1.00	0.91	1.00	0.97	0.91	
Frt		0.90		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.99		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1663		1681	1698	1583	1770	5085	1583	3433	5081	
Flt Permitted		0.99		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1663		1681	1698	1583	1770	5085	1583	3433	5081	
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)	13	5	48	159	14	45	118	2859	37	39	2493	13
RTOR Reduction (vph)	0	46	0	0	0	41	0	0	12	0	0	0
Lane Group Flow (vph)	0	20	0	86	87	4	118	2859	25	39	2506	0
Turn Type	Split	NA		Split	NA	Prot	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8	8	5	2		1	6	
Permitted Phases									2			
Actuated Green, G (s)		7.6		12.8	12.8	12.8	14.8	111.1	111.1	5.0	103.8	
Effective Green, g (s)		7.6		12.8	12.8	12.8	14.8	111.1	111.1	5.0	103.8	
Actuated g/C Ratio		0.05		0.08	0.08	0.08	0.09	0.68	0.68	0.03	0.63	
Clearance Time (s)		6.5		6.5	6.5	6.5	7.0	7.0	7.0	7.0	4.5	
Vehicle Extension (s)		2.0		2.0	2.0	2.0	1.5	3.0	3.0	1.5	3.0	
Lane Grp Cap (vph)		77		131	132	123	160	3455	1075	104	3225	
v/s Ratio Prot		c0.01		0.05	c0.05	0.00	c0.07	c0.56		0.01	0.49	
v/s Ratio Perm									0.02			
v/c Ratio		0.26		0.66	0.66	0.03	0.74	0.83	0.02	0.38	0.78	
Uniform Delay, d1		75.2		73.2	73.2	69.6	72.5	19.2	8.5	77.7	21.5	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.7		8.7	8.7	0.0	14.1	2.4	0.0	0.8	1.9	
Delay (s)		75.9		81.9	82.0	69.6	86.6	21.6	8.6	78.5	23.4	
Level of Service		E		F	F	E	F	C	A	E	C	
Approach Delay (s)		75.9		79.4				24.0			24.3	
Approach LOS		E		E				C			C	

Intersection Summary

HCM 2000 Control Delay	26.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	163.5	Sum of lost time (s)	27.0
Intersection Capacity Utilization	83.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Queues
3: US 1 & 3 rd Street

Future Total PM
1/6/2016



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	177	234	318	76	138	141	1766	21	107	1944
v/c Ratio	0.77	0.81	0.86	0.20	0.20	0.76	1.13	0.03	0.56	0.97
Control Delay	87.2	63.6	82.9	51.4	7.2	93.5	106.2	0.1	63.5	67.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	87.2	63.6	82.9	51.4	7.2	93.5	106.2	0.1	63.5	67.0
Queue Length 50th (ft)	182	159	325	67	0	146	~1113	0	58	685
Queue Length 95th (ft)	254	246	414	108	31	219	#1526	0	m61	m#967
Internal Link Dist (ft)		717		185			1939			1261
Turn Bay Length (ft)			150		150	300		375		
Base Capacity (vph)	442	476	430	453	782	206	1566	761	364	1996
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.49	0.74	0.17	0.18	0.68	1.13	0.03	0.29	0.97

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

Future Total PM

3: US 1 & 3 rd Street

1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↑	↗↖	↖	↑↑	↗	↖↗	↑↑↑	
Traffic Volume (vph)	163	57	158	293	70	127	130	1625	19	98	1776	13
Future Volume (vph)	163	57	158	293	70	127	130	1625	19	98	1776	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	0.88	1.00	0.95	1.00	0.97	0.91	
Frt	1.00	0.89		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1657		1770	1863	2787	1770	3539	1583	3433	5080	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1657		1770	1863	2787	1770	3539	1583	3433	5080	
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)	177	62	172	318	76	138	141	1766	21	107	1930	14
RTOR Reduction (vph)	0	72	0	0	0	109	0	0	12	0	1	0
Lane Group Flow (vph)	177	162	0	318	76	29	141	1766	9	107	1943	0
Turn Type	Split	NA		Split	NA	Prot	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8	8	5	2		1	6	
Permitted Phases									2			
Actuated Green, G (s)	21.0	21.0		33.3	33.3	33.3	16.9	70.8	70.8	8.9	62.8	
Effective Green, g (s)	21.0	21.0		33.3	33.3	33.3	16.9	70.8	70.8	8.9	62.8	
Actuated g/C Ratio	0.13	0.13		0.21	0.21	0.21	0.11	0.44	0.44	0.06	0.39	
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	1.5	3.0	3.0	1.5	3.0	
Lane Grp Cap (vph)	232	217		368	387	580	186	1566	700	190	1993	
v/s Ratio Prot	c0.10	0.10		c0.18	0.04	0.01	c0.08	c0.50		0.03	0.38	
v/s Ratio Perm									0.01			
v/c Ratio	0.76	0.75		0.86	0.20	0.05	0.76	1.13	0.01	0.56	0.98	
Uniform Delay, d1	67.1	66.9		61.2	52.3	50.7	69.6	44.6	25.0	73.7	47.8	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.85	1.49	
Incremental Delay, d2	12.5	11.5		18.0	0.1	0.0	14.5	66.3	0.0	0.2	2.6	
Delay (s)	79.6	78.4		79.1	52.4	50.7	84.0	110.9	25.0	62.9	73.7	
Level of Service	E	E		E	D	D	F	F	C	E	E	
Approach Delay (s)		78.9			67.9			108.0			73.2	
Approach LOS		E			E			F			E	

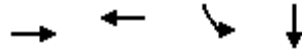
Intersection Summary

HCM 2000 Control Delay	86.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.0
Intersection Capacity Utilization	99.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

4: Dixie Highway & 3rd Street

1/6/2016



Lane Group	EBT	WBT	SBL	SBT
Lane Group Flow (vph)	170	451	229	558
v/c Ratio	0.39	0.58	0.52	0.45
Control Delay	42.6	16.1	45.1	39.5
Queue Delay	0.9	4.4	0.0	0.0
Total Delay	43.5	20.4	45.1	39.5
Queue Length 50th (ft)	113	239	161	136
Queue Length 95th (ft)	189	m296	242	173
Internal Link Dist (ft)	99	25		1263
Turn Bay Length (ft)				
Base Capacity (vph)	435	777	443	1265
Starvation Cap Reductn	0	246	0	0
Spillback Cap Reductn	105	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.52	0.85	0.52	0.44

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis

4: Dixie Highway & 3rd Street

Future Total PM
1/6/2016

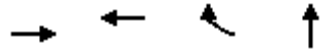


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔					↔	↔↔↔	
Traffic Volume (vph)	0	132	25	56	359	0	0	0	0	211	458	55
Future Volume (vph)	0	132	25	56	359	0	0	0	0	211	458	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5					3.0	3.0	
Lane Util. Factor		1.00			1.00					1.00	0.91	
Frt		0.98			1.00					1.00	0.98	
Flt Protected		1.00			0.99					0.95	1.00	
Satd. Flow (prot)		1823			1850					1770	5003	
Flt Permitted		1.00			0.96					0.95	1.00	
Satd. Flow (perm)		1823			1795					1770	5003	
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)	0	143	27	61	390	0	0	0	0	229	498	60
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	0	0	13	0
Lane Group Flow (vph)	0	165	0	0	451	0	0	0	0	229	545	0
Turn Type		NA		Prot	NA					Split	NA	
Protected Phases		4		2	4					1	1	
Permitted Phases												
Actuated Green, G (s)		29.5			82.1					31.0	31.0	
Effective Green, g (s)		29.5			82.1					26.5	26.5	
Actuated g/C Ratio		0.24			0.66					0.21	0.21	
Clearance Time (s)		4.5										
Vehicle Extension (s)		3.0										
Lane Grp Cap (vph)		429			1201					374	1059	
v/s Ratio Prot		c0.09			c0.16					c0.13	0.11	
v/s Ratio Perm					0.09							
v/c Ratio		0.38			0.38					0.61	0.52	
Uniform Delay, d1		40.2			9.8					44.6	43.6	
Progression Factor		1.00			0.48					1.00	1.00	
Incremental Delay, d2		0.6			0.1					3.0	0.4	
Delay (s)		40.7			4.8					47.6	44.0	
Level of Service		D			A					D	D	
Approach Delay (s)		40.7			4.8			0.0			45.1	
Approach LOS		D			A			A			D	

Intersection Summary

HCM 2000 Control Delay	31.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	125.1	Sum of lost time (s)	16.5
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBT	WBT	WBR	NBT
Lane Group Flow (vph)	362	226	137	943
v/c Ratio	0.52	0.49	0.28	0.98
Control Delay	9.1	45.4	7.8	69.4
Queue Delay	1.2	1.6	0.0	28.6
Total Delay	10.2	47.0	7.8	98.0
Queue Length 50th (ft)	93	159	0	402
Queue Length 95th (ft)	78	250	52	#576
Internal Link Dist (ft)	25	225		2634
Turn Bay Length (ft)				
Base Capacity (vph)	777	462	495	964
Starvation Cap Reductn	221	0	0	0
Spillback Cap Reductn	0	109	0	85
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.65	0.64	0.28	1.07

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
5: 1st Avenue & 3rd Street

Future Total PM
1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↑	↗		↕↗				
Traffic Volume (vph)	50	283	0	0	208	126	197	661	10	0	0	0
Future Volume (vph)	50	283	0	0	208	126	197	661	10	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			3.0	3.0		4.5				
Lane Util. Factor		1.00			1.00	1.00		0.95				
Frt		1.00			1.00	0.85		1.00				
Flt Protected		0.99			1.00	1.00		0.99				
Satd. Flow (prot)		1849			1863	1583		3493				
Flt Permitted		0.96			1.00	1.00		0.99				
Satd. Flow (perm)		1781			1863	1583		3493				
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)	54	308	0	0	226	137	214	718	11	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	103	0	1	0	0	0	0
Lane Group Flow (vph)	0	362	0	0	226	34	0	942	0	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA				
Protected Phases	8	8 7			7		10 3	10 3				
Permitted Phases						7						
Actuated Green, G (s)		78.5			31.0	31.0		36.1				
Effective Green, g (s)		78.5			31.0	31.0		36.1				
Actuated g/C Ratio		0.63			0.25	0.25		0.29				
Clearance Time (s)					3.0	3.0						
Vehicle Extension (s)					3.0	3.0						
Lane Grp Cap (vph)		1143			461	392		1007				
v/s Ratio Prot		c0.12			c0.12			c0.27				
v/s Ratio Perm		0.08				0.02						
v/c Ratio		0.32			0.49	0.09		0.94				
Uniform Delay, d1		10.8			40.3	36.2		43.4				
Progression Factor		0.22			1.00	1.00		1.00				
Incremental Delay, d2		0.1			0.8	0.1		15.2				
Delay (s)		2.5			41.1	36.3		58.5				
Level of Service		A			D	D		E				
Approach Delay (s)		2.5			39.3			58.5			0.0	
Approach LOS		A			D			E			A	

Intersection Summary

HCM 2000 Control Delay	42.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	125.1	Sum of lost time (s)	16.5
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Queues
6: US 1 & Hallandale Beach Boulevard

Future Total PM
1/6/2016



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	190	1713	663	1531	636	1193	422	508	1321
v/c Ratio	0.88	0.96	1.44	1.03	1.29	0.89	0.56	1.03	0.79
Control Delay	99.3	50.6	252.8	74.9	202.6	56.6	7.5	113.7	58.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	99.3	50.6	252.8	74.9	202.6	56.6	7.5	113.7	58.6
Queue Length 50th (ft)	161	499	~477	~630	~444	376	35	~291	374
Queue Length 95th (ft)	#312	#578	m#536	m#629	m#409	m287	m30	#412	420
Internal Link Dist (ft)		1701		611		1261			282
Turn Bay Length (ft)							445	420	
Base Capacity (vph)	237	1789	461	1489	493	1334	747	493	1671
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.96	1.44	1.03	1.29	0.89	0.56	1.03	0.79

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

6: US 1 & Hallandale Beach Boulevard

Future Total PM
1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑		↖	↑↑↑		↖	↑↑↑	↗	↖	↑↑↑	
Traffic Volume (vph)	175	1138	438	610	1205	203	585	1098	388	467	1138	77
Future Volume (vph)	175	1138	438	610	1205	203	585	1098	388	467	1138	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5		6.5	6.5		7.0	8.0	6.5	7.0	8.0	
Lane Util. Factor	1.00	0.86		0.97	0.91		0.97	0.91	1.00	0.97	0.86	
Frt	1.00	0.96		1.00	0.98		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	6141		3433	4975		3433	5085	1583	3433	6347	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	6141		3433	4975		3433	5085	1583	3433	6347	
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)	190	1237	476	663	1310	221	636	1193	422	508	1237	84
RTOR Reduction (vph)	0	44	0	0	14	0	0	0	43	0	7	0
Lane Group Flow (vph)	190	1669	0	663	1517	0	636	1193	379	508	1314	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	19.5	45.5		21.5	47.5		23.0	42.0	63.5	23.0	42.0	
Effective Green, g (s)	19.5	45.5		21.5	47.5		23.0	42.0	63.5	23.0	42.0	
Actuated g/C Ratio	0.12	0.28		0.13	0.30		0.14	0.26	0.40	0.14	0.26	
Clearance Time (s)	6.5	6.5		6.5	6.5		7.0	8.0	6.5	7.0	8.0	
Vehicle Extension (s)	1.5	2.5		1.5	2.5		1.5	2.5	1.5	1.5	2.5	
Lane Grp Cap (vph)	215	1746		461	1476		493	1334	628	493	1666	
v/s Ratio Prot	0.11	0.27		c0.19	c0.30		c0.19	c0.23	0.08	0.15	0.21	
v/s Ratio Perm									0.16			
v/c Ratio	0.88	0.96		1.44	1.03		1.29	0.89	0.60	1.03	0.79	
Uniform Delay, d1	69.1	56.3		69.2	56.2		68.5	56.9	38.3	68.5	54.9	
Progression Factor	0.92	0.69		1.09	0.95		1.36	0.93	0.23	1.00	1.00	
Incremental Delay, d2	30.7	12.4		203.5	24.3		136.2	3.9	0.4	48.6	3.9	
Delay (s)	94.2	51.0		279.2	77.4		229.5	56.5	9.4	117.1	58.8	
Level of Service	F	D		F	E		F	E	A	F	E	
Approach Delay (s)		55.3			138.4			96.6			75.0	
Approach LOS		E			F			F			E	

Intersection Summary

HCM 2000 Control Delay	93.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	99.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

7: Hallandale Beach Boulevard & Dixie Highway

1/6/2016



Lane Group	EBT	WBL	WBT	SBT
Lane Group Flow (vph)	1391	99	2253	627
v/c Ratio	0.67	0.85	0.88	0.71
Control Delay	40.3	100.2	14.6	67.7
Queue Delay	0.4	94.6	46.6	0.0
Total Delay	40.7	194.8	61.2	67.7
Queue Length 50th (ft)	429	99	917	179
Queue Length 95th (ft)	484	m94	m669	208
Internal Link Dist (ft)	2134		49	537
Turn Bay Length (ft)				
Base Capacity (vph)	2062	116	2558	1315
Starvation Cap Reductn	0	83	783	0
Spillback Cap Reductn	240	0	0	1
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.76	3.00	1.27	0.48

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
7: Hallandale Beach Boulevard & Dixie Highway

Future Total PM
1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↔	↑↑↑						↑↑↑	
Traffic Volume (vph)	0	1181	98	91	2073	0	0	0	0	155	345	77
Future Volume (vph)	0	1181	98	91	2073	0	0	0	0	155	345	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5		4.5	4.5						4.5	
Lane Util. Factor		0.91		1.00	0.91						0.86	
Frt		0.99		1.00	1.00						0.98	
Flt Protected		1.00		0.95	1.00						0.99	
Satd. Flow (prot)		5027		1770	5085						6196	
Flt Permitted		1.00		0.95	1.00						0.99	
Satd. Flow (perm)		5027		1770	5085						6196	
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)	0	1284	107	99	2253	0	0	0	0	168	375	84
RTOR Reduction (vph)	0	6	0	0	0	0	0	0	0	0	19	0
Lane Group Flow (vph)	0	1385	0	99	2253	0	0	0	0	0	608	0
Turn Type		NA		Prot	NA					Perm	NA	
Protected Phases		2 3		1	1 2 3						4	
Permitted Phases										4		
Actuated Green, G (s)		65.5		10.5	80.5						22.4	
Effective Green, g (s)		65.5		10.5	80.5						22.4	
Actuated g/C Ratio		0.41		0.07	0.50						0.14	
Clearance Time (s)				4.5							4.5	
Vehicle Extension (s)				3.0							3.0	
Lane Grp Cap (vph)		2057		116	2558						867	
v/s Ratio Prot		0.28		0.06	c0.44							
v/s Ratio Perm											0.10	
v/c Ratio		0.67		0.85	0.88						0.70	
Uniform Delay, d1		38.5		74.0	35.5						65.6	
Progression Factor		1.00		1.31	0.39						1.00	
Incremental Delay, d2		0.9		5.7	0.4						2.6	
Delay (s)		39.4		102.3	14.4						68.2	
Level of Service		D		F	B						E	
Approach Delay (s)		39.4			18.1			0.0			68.2	
Approach LOS		D			B			A			E	

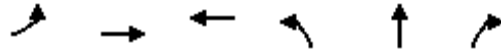
Intersection Summary

HCM 2000 Control Delay	32.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	104.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Queues
8: 1st Avenue & Hallandale Beach Boulevard

Future Total PM
1/6/2016



Lane Group	EBL	EBT	WBT	NBL	NBT	NBR
Lane Group Flow (vph)	53	1378	2041	473	475	103
v/c Ratio	0.11	0.40	1.06	0.98	0.94	0.20
Control Delay	23.5	0.5	55.9	93.1	83.1	9.1
Queue Delay	1.6	0.2	15.5	48.4	0.0	0.0
Total Delay	25.0	0.7	71.3	141.5	83.1	9.1
Queue Length 50th (ft)	45	2	-876	493	487	1
Queue Length 95th (ft)	m70	2	m755	#792	#772	52
Internal Link Dist (ft)		49	1701		1266	
Turn Bay Length (ft)						
Base Capacity (vph)	591	3766	1918	482	507	505
Starvation Cap Reductn	431	1381	0	0	0	0
Spillback Cap Reductn	0	0	301	299	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.58	1.26	2.58	0.94	0.20

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

8: 1st Avenue & Hallandale Beach Boulevard

Future Total PM
1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗↖↗			↖↖↖		↖	↖	↖			
Traffic Volume (vph)	49	1268	0	0	1842	36	435	437	95	0	0	0
Future Volume (vph)	49	1268	0	0	1842	36	435	437	95	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5			4.5		4.5	4.5	4.5			
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00	1.00			
Frt	1.00	1.00			1.00		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1770	5085			5071		1770	1863	1583			
Flt Permitted	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1770	5085			5071		1770	1863	1583			
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)	53	1378	0	0	2002	39	473	475	103	0	0	0
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	74	0	0	0
Lane Group Flow (vph)	53	1378	0	0	2040	0	473	475	29	0	0	0
Turn Type	Prot	NA			NA		Split	NA	Prot			
Protected Phases	8 9	6 7 8 9			6 7		10	10	10			
Permitted Phases												
Actuated Green, G (s)	42.4	107.4			60.5		43.6	43.6	43.6			
Effective Green, g (s)	42.4	107.4			60.5		43.6	43.6	43.6			
Actuated g/C Ratio	0.26	0.67			0.38		0.27	0.27	0.27			
Clearance Time (s)							4.5	4.5	4.5			
Vehicle Extension (s)							3.0	3.0	3.0			
Lane Grp Cap (vph)	469	3413			1917		482	507	431			
v/s Ratio Prot	0.03	c0.27			c0.40		c0.27	0.26	0.02			
v/s Ratio Perm												
v/c Ratio	0.11	0.40			1.06		0.98	0.94	0.07			
Uniform Delay, d1	44.6	11.9			49.8		57.8	56.9	43.1			
Progression Factor	0.53	0.02			0.50		1.00	1.00	1.00			
Incremental Delay, d2	0.1	0.1			30.2		36.0	24.9	0.1			
Delay (s)	23.7	0.3			55.0		93.8	81.8	43.2			
Level of Service	C	A			E		F	F	D			
Approach Delay (s)		1.1			55.0			83.4			0.0	
Approach LOS		A			E			F			A	

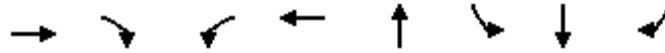
Intersection Summary

HCM 2000 Control Delay	44.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	104.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Queues
9: Hallandale Beach Boulevard & E 8th Avenue

Future Total PM
1/6/2016



Lane Group	EBT	EBR	WBL	WBT	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	1707	221	58	1995	488	130	12	153
v/c Ratio	0.72	0.27	0.42	0.74	1.71	0.32	0.03	0.37
Control Delay	35.1	10.4	48.7	22.8	368.9	53.6	48.0	30.9
Queue Delay	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.5	10.4	48.7	22.9	368.9	53.6	48.0	30.9
Queue Length 50th (ft)	373	41	33	246	-772	114	10	73
Queue Length 95th (ft)	m366	m47	m56	369	#1047	180	29	145
Internal Link Dist (ft)	611			578	210		703	
Turn Bay Length (ft)						150		150
Base Capacity (vph)	2376	824	194	2860	286	409	430	418
Starvation Cap Reductn	226	0	0	21	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.27	0.30	0.70	1.71	0.32	0.03	0.37

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
 9: Hallandale Beach Boulevard & E 8th Avenue

Future Total PM
 1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑	↑	↑↑↑			↑↓		↑	↑	↑
Traffic Volume (vph)	0	1570	203	53	1835	0	390	14	45	120	11	141
Future Volume (vph)	0	1570	203	53	1835	0	390	14	45	120	11	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.5	4.0			4.5		4.0	4.0	4.0
Lane Util. Factor		0.91	1.00	1.00	0.91			1.00		1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00			0.99		1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00			0.96		0.95	1.00	1.00
Satd. Flow (prot)		5085	1583	1770	5085			1761		1770	1863	1583
Flt Permitted		1.00	1.00	0.05	1.00			0.96		0.95	1.00	1.00
Satd. Flow (perm)		5085	1583	100	5085			1761		1770	1863	1583
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)	0	1707	221	58	1995	0	424	15	49	130	12	153
RTOR Reduction (vph)	0	0	85	0	0	0	0	3	0	0	0	53
Lane Group Flow (vph)	0	1707	136	58	1995	0	0	485	0	130	12	100
Turn Type		NA	Perm	pm+pt	NA		Split	NA		Split	NA	Perm
Protected Phases		4		3	8		2	2		6	6	
Permitted Phases			4	8								6
Actuated Green, G (s)		74.3	74.3	85.6	85.6			25.8		36.1	36.1	36.1
Effective Green, g (s)		74.3	74.3	85.6	85.6			25.8		36.1	36.1	36.1
Actuated g/C Ratio		0.46	0.46	0.53	0.53			0.16		0.23	0.23	0.23
Clearance Time (s)		4.0	4.0	4.5	4.0			4.5		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		2361	735	124	2720			283		399	420	357
v/s Ratio Prot		0.34		0.02	c0.39			c0.28		c0.07	0.01	
v/s Ratio Perm			0.09	0.23								0.06
v/c Ratio		0.72	0.18	0.47	0.73			1.72		0.33	0.03	0.28
Uniform Delay, d1		34.6	25.1	26.6	28.5			67.1		51.8	48.3	51.2
Progression Factor		0.99	1.34	2.35	0.74			1.00		1.00	1.00	1.00
Incremental Delay, d2		0.5	0.1	1.9	0.7			336.6		2.2	0.1	2.0
Delay (s)		34.6	33.7	64.5	21.9			403.7		53.9	48.4	53.2
Level of Service		C	C	E	C			F		D	D	D
Approach Delay (s)		34.5			23.1			403.7			53.3	
Approach LOS		C			C			F			D	

Intersection Summary

HCM 2000 Control Delay	68.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		

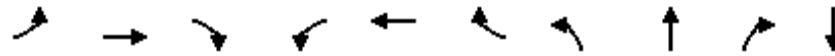
c Critical Lane Group

Queues

Future Total PM

10: Hallandale Beach Boulevard & E 10th Avenue

1/6/2016



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	142	1714	58	251	1897	110	74	237	384	8
v/c Ratio	0.71	0.68	0.07	0.73	0.78	0.14	0.14	0.42	0.59	0.08
Control Delay	117.0	8.6	0.3	83.0	37.0	8.5	43.1	47.9	26.7	0.0
Queue Delay	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	117.0	8.8	0.3	83.0	37.0	8.5	43.1	47.9	26.7	0.0
Queue Length 50th (ft)	158	69	1	132	574	20	60	210	164	0
Queue Length 95th (ft)	m216	m68	m1	183	625	55	112	323	304	0
Internal Link Dist (ft)		578			589			252		700
Turn Bay Length (ft)	180		65	475		180				
Base Capacity (vph)	459	2780	884	375	2436	796	542	569	647	102
Starvation Cap Reductn	0	300	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.69	0.07	0.67	0.78	0.14	0.14	0.42	0.59	0.08

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
 10: Hallandale Beach Boulevard & E 10th Avenue

Future Total PM
 1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑	↗	↘↗	↑↑↑	↗	↘	↑	↗			
Traffic Volume (vph)	131	1577	53	231	1745	101	75	211	353	0	0	7
Future Volume (vph)	131	1577	53	231	1745	101	75	211	353	0	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.95	0.95	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5085	1583	1681	1767	1583		0	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5085	1583	1681	1767	1583		0	
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)	142	1714	58	251	1897	110	82	229	384	0	0	8
RTOR Reduction (vph)	0	0	21	0	0	37	0	0	137	0	8	0
Lane Group Flow (vph)	142	1714	37	251	1897	73	74	237	247	0	0	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm			
Protected Phases	7	4		3	8		5	2				
Permitted Phases			4			8			2			
Actuated Green, G (s)	18.2	79.0	79.0	15.9	76.7	76.7	51.6	51.6	51.6		0.0	
Effective Green, g (s)	18.2	79.0	79.0	15.9	76.7	76.7	51.6	51.6	51.6		0.0	
Actuated g/C Ratio	0.11	0.49	0.49	0.10	0.48	0.48	0.32	0.32	0.32		0.00	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5			
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	201	2510	781	341	2437	758	542	569	510		0	
v/s Ratio Prot	c0.08	0.34		0.07	c0.37		0.04	0.13				
v/s Ratio Perm			0.02			0.05			c0.16			
v/c Ratio	0.71	0.68	0.05	0.74	0.78	0.10	0.14	0.42	0.48		0.00	
Uniform Delay, d1	68.3	30.9	21.0	70.0	34.6	22.7	38.4	42.4	43.5		80.0	
Progression Factor	1.53	0.25	0.03	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2	7.6	0.5	0.0	8.0	1.6	0.1	0.5	2.2	3.3		0.0	
Delay (s)	112.4	8.2	0.6	78.0	36.2	22.8	38.9	44.7	46.8		80.0	
Level of Service	F	A	A	E	D	C	D	D	D		E	
Approach Delay (s)		15.7			40.2			45.2			80.0	
Approach LOS		B			D			D			E	

Intersection Summary

HCM 2000 Control Delay	31.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

11: Dixie Highway & County Line Road

1/6/2016



Lane Group	EBT	WBT	NBL	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	228	522	40	316	233	477	82
v/c Ratio	0.52	1.01	0.34	0.47	0.29	0.57	0.11
Control Delay	42.0	53.2	38.0	6.1	17.5	22.2	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.0	53.2	38.0	6.1	17.5	22.2	4.0
Queue Length 50th (ft)	64	-85	18	0	82	197	0
Queue Length 95th (ft)	109	m#471	57	66	143	312	25
Internal Link Dist (ft)	628	59				2638	
Turn Bay Length (ft)							
Base Capacity (vph)	795	516	119	671	1082	1139	999
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	16	0	0	6	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	1.01	0.34	0.48	0.22	0.42	0.08

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
 11: Dixie Highway & County Line Road

Future Total PM
 1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑		↑		↑	↑	↑	↑
Traffic Volume (vph)	0	201	9	117	363	0	37	0	291	214	439	75
Future Volume (vph)	0	201	9	117	363	0	37	0	291	214	439	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5		4.5		4.5	4.5	4.5	4.5
Lane Util. Factor		0.95			1.00		1.00		1.00	1.00	1.00	1.00
Frt		0.99			1.00		1.00		0.85	1.00	1.00	0.85
Flt Protected		1.00			0.99		0.95		1.00	0.95	1.00	1.00
Satd. Flow (prot)		3516			1840		1770		1583	1770	1863	1583
Flt Permitted		1.00			0.99		0.23		1.00	0.95	1.00	1.00
Satd. Flow (perm)		3516			1840		427		1583	1770	1863	1583
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)	0	218	10	127	395	0	40	0	316	233	477	82
RTOR Reduction (vph)	0	3	0	0	0	0	0	0	227	0	0	45
Lane Group Flow (vph)	0	225	0	0	522	0	40	0	89	233	477	37
Turn Type		NA		Split	NA		D.Pm		Prot	custom	NA	Perm
Protected Phases		1		4	4				2		3	2 3
Permitted Phases							2			2		2 3
Actuated Green, G (s)		11.2			25.6		25.6		25.6	36.3	40.8	40.8
Effective Green, g (s)		11.2			25.6		25.6		25.6	36.3	40.8	40.8
Actuated g/C Ratio		0.12			0.28		0.28		0.28	0.40	0.45	0.45
Clearance Time (s)		4.5			4.5		4.5		4.5	4.5		
Vehicle Extension (s)		3.0			3.0		3.0		3.0	3.0		
Lane Grp Cap (vph)		432			517		119		444	792	834	708
v/s Ratio Prot		c0.06			c0.28				0.06	0.03	c0.26	
v/s Ratio Perm							0.09			0.10		0.02
v/c Ratio		0.52			1.01		0.34		0.20	0.29	0.57	0.05
Uniform Delay, d1		37.4			32.8		26.0		24.9	19.0	18.7	14.2
Progression Factor		1.00			0.38		1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2		1.1			34.8		7.5		1.0	0.2	1.0	0.0
Delay (s)		38.6			47.2		33.5		26.0	19.2	19.6	14.2
Level of Service		D			D		C		C	B	B	B
Approach Delay (s)		38.6			47.2			26.8			18.9	
Approach LOS		D			D			C			B	

Intersection Summary		
HCM 2000 Control Delay	30.6	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.75	C
Actuated Cycle Length (s)	91.1	Sum of lost time (s)
Intersection Capacity Utilization	72.4%	18.0
Analysis Period (min)	15	ICU Level of Service
		C

c Critical Lane Group

Queues
12: County Line Road & 1st Avenue

Future Total PM
1/6/2016



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	468	304	361	371	12	166
v/c Ratio	0.43	0.28	0.92	0.71	0.02	0.29
Control Delay	4.8	0.6	64.2	39.6	26.9	6.3
Queue Delay	0.1	0.2	2.7	0.0	0.0	0.2
Total Delay	4.9	0.8	66.9	39.6	26.9	6.5
Queue Length 50th (ft)	48	0	198	188	5	0
Queue Length 95th (ft)	45	0	#431	#366	21	51
Internal Link Dist (ft)	59			64	2634	
Turn Bay Length (ft)						
Base Capacity (vph)	1569	1438	392	523	523	563
Starvation Cap Reductn	289	470	0	0	0	0
Spillback Cap Reductn	0	0	9	0	0	90
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.31	0.94	0.71	0.02	0.35

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
 12: County Line Road & 1st Avenue

Future Total PM
 1/6/2016



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	431	280	332	341	11	153
Future Volume (vph)	431	280	332	341	11	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1583	1770	1863	1863	1583
Flt Permitted	0.95	1.00	0.75	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583	1397	1863	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	468	304	361	371	12	166
RTOR Reduction (vph)	0	115	0	0	0	119
Lane Group Flow (vph)	468	189	361	371	12	47
Turn Type	Prot	Prot	Perm	NA	NA	Prot
Protected Phases	5	5		8	8	8
Permitted Phases			8			
Actuated Green, G (s)	56.5	56.5	25.6	25.6	25.6	25.6
Effective Green, g (s)	56.5	56.5	25.6	25.6	25.6	25.6
Actuated g/C Ratio	0.62	0.62	0.28	0.28	0.28	0.28
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1097	981	392	523	523	444
v/s Ratio Prot	c0.26	0.12		0.20	0.01	0.03
v/s Ratio Perm			c0.26			
v/c Ratio	0.43	0.19	0.92	0.71	0.02	0.11
Uniform Delay, d1	8.9	7.5	31.8	29.4	23.7	24.3
Progression Factor	0.40	0.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.1	29.3	7.9	0.1	0.5
Delay (s)	3.8	0.1	61.1	37.3	23.8	24.7
Level of Service	A	A	E	D	C	C
Approach Delay (s)	2.4			49.0	24.7	
Approach LOS	A			D	C	

Intersection Summary

HCM 2000 Control Delay	25.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	91.1	Sum of lost time (s)	18.0
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
 13: E 1st Avenue & NE 214th Terr

Future Total PM
 1/6/2016



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)	144					
pX, platoon unblocked						
vC, conflicting volume	0	0	0			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0	0	0			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	1023	1085	1623			

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	0	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS	A		
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A		

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

HCM Unsignalized Intersection Capacity Analysis
 14: SE 3rd Ave & SE 10th Ct

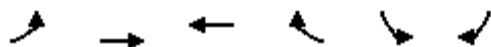
Future Total PM
 1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	4	4	15	44	24	67	45	64	129	3	22	3
Future Volume (Veh/h)	4	4	15	44	24	67	45	64	129	3	22	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	4	4	16	48	26	73	49	70	140	3	24	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	99			20			194	215	12	354	186	62
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	99			20			194	215	12	354	186	62
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			93	89	87	99	96	100
cM capacity (veh/h)	1494			1596			725	660	1069	468	685	1002
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	24	147	259	30								
Volume Left	4	48	49	3								
Volume Right	16	73	140	3								
cSH	1494	1596	850	675								
Volume to Capacity	0.00	0.03	0.30	0.04								
Queue Length 95th (ft)	0	2	32	3								
Control Delay (s)	1.3	2.5	11.1	10.6								
Lane LOS	A	A	B	B								
Approach Delay (s)	1.3	2.5	11.1	10.6								
Approach LOS			B	B								
Intersection Summary												
Average Delay			7.8									
Intersection Capacity Utilization			40.9%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 37: NE 214th Terr & SE 3rd Ave

Future Total PM
 1/6/2016



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↖	↗		↘	
Traffic Volume (veh/h)	0	7	8	1	1	407
Future Volume (Veh/h)	0	7	8	1	1	407
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	8	9	1	1	442
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	10				18	10
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	10				18	10
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	59
cM capacity (veh/h)	1610				1000	1072
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	8	10	443			
Volume Left	0	0	1			
Volume Right	0	1	442			
cSH	1610	1700	1072			
Volume to Capacity	0.00	0.01	0.41			
Queue Length 95th (ft)	0	0	51			
Control Delay (s)	0.0	0.0	10.7			
Lane LOS			B			
Approach Delay (s)	0.0	0.0	10.7			
Approach LOS			B			
Intersection Summary						
Average Delay			10.3			
Intersection Capacity Utilization		35.3%		ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis
41: Optima Office Drive

Future Total PM
1/6/2016



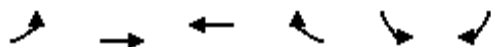
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗	↘	↑↑↑	↑↑↑	↘
Traffic Volume (veh/h)	0	683	66	2388	2113	167
Future Volume (Veh/h)	0	683	66	2388	2113	167
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	742	72	2596	2297	182
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)				500	754	
pX, platoon unblocked	0.68	0.64	0.64			
vC, conflicting volume	3397	857	2479			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0	0	1341			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	78			
cM capacity (veh/h)	544	694	326			

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	742	72	865	865	865	919	919	641
Volume Left	0	72	0	0	0	0	0	0
Volume Right	742	0	0	0	0	0	0	182
cSH	694	326	1700	1700	1700	1700	1700	1700
Volume to Capacity	1.07	0.22	0.51	0.51	0.51	0.54	0.54	0.38
Queue Length 95th (ft)	499	21	0	0	0	0	0	0
Control Delay (s)	78.2	19.1	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	C						
Approach Delay (s)	78.2	0.5				0.0		
Approach LOS	F							

Intersection Summary		
Average Delay		10.1
Intersection Capacity Utilization	93.5%	ICU Level of Service
Analysis Period (min)	15	F

HCM Unsignalized Intersection Capacity Analysis
46: Optima Drive

Future Total PM
1/6/2016



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↘	
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	0				0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0				0	0
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1623				1023	1085
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS			A			
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS			A			
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)			15			

1: Biscayne Boulevard & NE 213th Street



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	271	443	2597	168	391	2095
v/c Ratio	0.69	0.62	0.94	0.19	0.86	0.50
Control Delay	76.9	9.1	42.7	12.7	74.2	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.9	9.1	42.7	12.7	74.2	4.7
Queue Length 50th (ft)	142	0	916	47	392	197
Queue Length 95th (ft)	187	55	#1238	110	483	260
Internal Link Dist (ft)	379		211			420
Turn Bay Length (ft)						
Base Capacity (vph)	525	801	2758	892	625	4213
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.55	0.94	0.19	0.63	0.50

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
 1: Biscayne Boulevard & NE 213th Street

Future Background PM

1/6/2016



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	249	408	2389	155	360	1927
Future Volume (vph)	249	408	2389	155	360	1927
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	0.97	0.88	0.91	1.00	1.00	0.91
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	2787	5085	1583	1770	5085
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	2787	5085	1583	1770	5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	271	443	2597	168	391	2095
RTOR Reduction (vph)	0	392	0	34	0	0
Lane Group Flow (vph)	271	51	2597	134	391	2095
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	18.4	18.4	86.8	86.8	41.3	132.6
Effective Green, g (s)	18.4	18.4	86.8	86.8	41.3	132.6
Actuated g/C Ratio	0.11	0.11	0.54	0.54	0.26	0.83
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	394	320	2758	858	456	4214
v/s Ratio Prot	c0.08		c0.51		c0.22	0.41
v/s Ratio Perm		0.02		0.08		
v/c Ratio	0.69	0.16	0.94	0.16	0.86	0.50
Uniform Delay, d1	68.0	63.8	34.2	18.3	56.5	4.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.9	0.2	8.1	0.4	14.7	0.4
Delay (s)	73.0	64.1	42.3	18.7	71.2	4.4
Level of Service	E	E	D	B	E	A
Approach Delay (s)	67.4		40.9			14.9
Approach LOS	E		D			B

Intersection Summary

HCM 2000 Control Delay	33.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	84.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Queues
2: US 1 & SE 9th Street

Future Background PM
1/6/2016



Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	66	86	87	45	118	2551	37	39	2199
v/c Ratio	0.54	0.66	0.66	0.19	0.74	0.73	0.03	0.31	0.68
Control Delay	43.9	95.3	95.1	1.9	97.9	19.1	0.1	82.9	22.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.9	95.3	95.1	1.9	97.9	19.1	0.1	82.9	22.0
Queue Length 50th (ft)	19	95	96	0	125	597	0	21	516
Queue Length 95th (ft)	72	157	158	0	193	813	0	42	734
Internal Link Dist (ft)	1532		73			674			1939
Turn Bay Length (ft)									
Base Capacity (vph)	225	241	244	327	192	3500	1125	356	3228
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.36	0.36	0.14	0.61	0.73	0.03	0.11	0.68

Intersection Summary

HCM Signalized Intersection Capacity Analysis

Future Background PM

2: US 1 & SE 9th Street

1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↙	↘	↗	↖	↑↑↑	↗	↖↗	↑↑↑	
Traffic Volume (vph)	12	5	44	146	13	41	109	2347	34	36	2011	12
Future Volume (vph)	12	5	44	146	13	41	109	2347	34	36	2011	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5		6.5	6.5	6.5	7.0	7.0	7.0	7.0	4.5	
Lane Util. Factor		1.00		0.95	0.95	1.00	1.00	0.91	1.00	0.97	0.91	
Frt		0.90		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.99		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1663		1681	1698	1583	1770	5085	1583	3433	5081	
Flt Permitted		0.99		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1663		1681	1698	1583	1770	5085	1583	3433	5081	
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)	13	5	48	159	14	45	118	2551	37	39	2186	13
RTOR Reduction (vph)	0	46	0	0	0	41	0	0	12	0	0	0
Lane Group Flow (vph)	0	20	0	86	87	4	118	2551	25	39	2199	0
Turn Type	Split	NA		Split	NA	Prot	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8	8	5	2		1	6	
Permitted Phases									2			
Actuated Green, G (s)		7.6		12.8	12.8	12.8	14.8	111.1	111.1	5.0	103.8	
Effective Green, g (s)		7.6		12.8	12.8	12.8	14.8	111.1	111.1	5.0	103.8	
Actuated g/C Ratio		0.05		0.08	0.08	0.08	0.09	0.68	0.68	0.03	0.63	
Clearance Time (s)		6.5		6.5	6.5	6.5	7.0	7.0	7.0	7.0	4.5	
Vehicle Extension (s)		2.0		2.0	2.0	2.0	1.5	3.0	3.0	1.5	3.0	
Lane Grp Cap (vph)		77		131	132	123	160	3455	1075	104	3225	
v/s Ratio Prot		c0.01		0.05	c0.05	0.00	c0.07	c0.50		0.01	0.43	
v/s Ratio Perm									0.02			
v/c Ratio		0.26		0.66	0.66	0.03	0.74	0.74	0.02	0.38	0.68	
Uniform Delay, d1		75.2		73.2	73.2	69.6	72.5	16.9	8.5	77.7	19.2	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.7		8.7	8.7	0.0	14.1	1.5	0.0	0.8	1.2	
Delay (s)		75.9		81.9	82.0	69.6	86.6	18.3	8.6	78.5	20.4	
Level of Service		E		F	F	E	F	B	A	E	C	
Approach Delay (s)		75.9			79.4			21.1			21.4	
Approach LOS		E			E			C			C	

Intersection Summary

HCM 2000 Control Delay	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	163.5	Sum of lost time (s)	27.0
Intersection Capacity Utilization	77.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Queues
3: US 1 & 3 rd Street



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	177	234	318	76	138	141	1699	21	107	1925
v/c Ratio	0.77	0.81	0.86	0.20	0.20	0.76	1.08	0.03	0.56	0.96
Control Delay	87.2	63.6	82.9	51.4	7.2	93.5	90.5	0.1	65.3	68.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	87.2	63.6	82.9	51.4	7.2	93.5	90.5	0.1	65.3	68.8
Queue Length 50th (ft)	182	159	325	67	0	146	~1037	0	58	677
Queue Length 95th (ft)	254	246	414	108	31	219	#1451	0	m62	m#957
Internal Link Dist (ft)		717		185			1939			1261
Turn Bay Length (ft)			150		150	300		375		
Base Capacity (vph)	442	476	430	453	782	206	1566	761	364	1996
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.49	0.74	0.17	0.18	0.68	1.08	0.03	0.29	0.96

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

Future Background PM

3: US 1 & 3 rd Street

1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↘		↖	↗	↘	↖	↗	↘	↖	↗	↘
Traffic Volume (vph)	163	57	158	293	70	127	130	1563	19	98	1758	13
Future Volume (vph)	163	57	158	293	70	127	130	1563	19	98	1758	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	0.88	1.00	0.95	1.00	0.97	0.91	
Frt	1.00	0.89		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1657		1770	1863	2787	1770	3539	1583	3433	5080	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1657		1770	1863	2787	1770	3539	1583	3433	5080	
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)	177	62	172	318	76	138	141	1699	21	107	1911	14
RTOR Reduction (vph)	0	72	0	0	0	109	0	0	12	0	1	0
Lane Group Flow (vph)	177	162	0	318	76	29	141	1699	9	107	1924	0
Turn Type	Split	NA		Split	NA	Prot	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8	8	5	2		1	6	
Permitted Phases									2			
Actuated Green, G (s)	21.0	21.0		33.3	33.3	33.3	16.9	70.8	70.8	8.9	62.8	
Effective Green, g (s)	21.0	21.0		33.3	33.3	33.3	16.9	70.8	70.8	8.9	62.8	
Actuated g/C Ratio	0.13	0.13		0.21	0.21	0.21	0.11	0.44	0.44	0.06	0.39	
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	1.5	3.0	3.0	1.5	3.0	
Lane Grp Cap (vph)	232	217		368	387	580	186	1566	700	190	1993	
v/s Ratio Prot	c0.10	0.10		c0.18	0.04	0.01	c0.08	c0.48		0.03	0.38	
v/s Ratio Perm									0.01			
v/c Ratio	0.76	0.75		0.86	0.20	0.05	0.76	1.08	0.01	0.56	0.97	
Uniform Delay, d1	67.1	66.9		61.2	52.3	50.7	69.6	44.6	25.0	73.7	47.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.85	1.48	
Incremental Delay, d2	12.5	11.5		18.0	0.1	0.0	14.5	49.5	0.0	0.5	4.6	
Delay (s)	79.6	78.4		79.1	52.4	50.7	84.0	94.1	25.0	63.4	75.2	
Level of Service	E	E		E	D	D	F	F	C	E	E	
Approach Delay (s)		78.9			67.9			92.6			74.6	
Approach LOS		E			E			F			E	

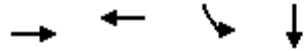
Intersection Summary

HCM 2000 Control Delay	81.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.0
Intersection Capacity Utilization	98.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

4: Dixie Highway & 3rd Street

1/6/2016



Lane Group	EBT	WBT	SBL	SBT
Lane Group Flow (vph)	170	451	229	534
v/c Ratio	0.39	0.58	0.53	0.43
Control Delay	42.3	14.4	45.4	39.9
Queue Delay	0.9	3.2	0.0	0.0
Total Delay	43.3	17.6	45.4	39.9
Queue Length 50th (ft)	111	213	161	131
Queue Length 95th (ft)	189	m316	242	167
Internal Link Dist (ft)	99	25		1263
Turn Bay Length (ft)				
Base Capacity (vph)	437	780	442	1264
Starvation Cap Reductn	0	228	0	0
Spillback Cap Reductn	106	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.51	0.82	0.52	0.42

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis

4: Dixie Highway & 3rd Street

Future Background PM

1/6/2016



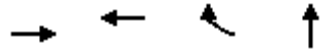
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻			↻					↻	↻↻↻	
Traffic Volume (vph)	0	132	25	56	359	0	0	0	0	211	458	33
Future Volume (vph)	0	132	25	56	359	0	0	0	0	211	458	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5					3.0	3.0	
Lane Util. Factor		1.00			1.00					1.00	0.91	
Frt		0.98			1.00					1.00	0.99	
Flt Protected		1.00			0.99					0.95	1.00	
Satd. Flow (prot)		1823			1850					1770	5034	
Flt Permitted		1.00			0.96					0.95	1.00	
Satd. Flow (perm)		1823			1795					1770	5034	
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)	0	143	27	61	390	0	0	0	0	229	498	36
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	0	0	7	0
Lane Group Flow (vph)	0	165	0	0	451	0	0	0	0	229	527	0
Turn Type		NA		Prot	NA					Split	NA	
Protected Phases		4		2	2	4				1	1	9
Permitted Phases												
Actuated Green, G (s)		29.5			82.1					30.6	30.6	
Effective Green, g (s)		29.5			82.1					26.1	26.1	
Actuated g/C Ratio		0.24			0.66					0.21	0.21	
Clearance Time (s)		4.5										
Vehicle Extension (s)		3.0										
Lane Grp Cap (vph)		431			1204					370	1053	
v/s Ratio Prot		c0.09			c0.16					c0.13	0.10	
v/s Ratio Perm					0.09							
v/c Ratio		0.38			0.37					0.62	0.50	
Uniform Delay, d1		39.9			9.7					44.8	43.5	
Progression Factor		1.00			0.42					1.00	1.00	
Incremental Delay, d2		0.6			0.1					3.1	0.4	
Delay (s)		40.5			4.2					47.9	43.9	
Level of Service		D			A					D	D	
Approach Delay (s)		40.5			4.2			0.0			45.1	
Approach LOS		D			A			A			D	

Intersection Summary

HCM 2000 Control Delay	31.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	124.7	Sum of lost time (s)	16.5
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Queues
5: 1st Avenue & 3rd Street



Lane Group	EBT	WBT	WBR	NBT
Lane Group Flow (vph)	362	226	137	825
v/c Ratio	0.52	0.49	0.28	0.85
Control Delay	9.1	45.1	7.8	53.0
Queue Delay	1.2	1.5	0.0	4.4
Total Delay	10.3	46.7	7.8	57.4
Queue Length 50th (ft)	92	157	0	333
Queue Length 95th (ft)	78	250	52	#464
Internal Link Dist (ft)	25	225		2634
Turn Bay Length (ft)				
Base Capacity (vph)	780	463	496	966
Starvation Cap Reductn	223	0	0	0
Spillback Cap Reductn	0	109	0	88
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.65	0.64	0.28	0.94

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis

5: 1st Avenue & 3rd Street

Future Background PM

1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↑	↗		↕↗				
Traffic Volume (vph)	50	283	0	0	208	126	197	552	10	0	0	0
Future Volume (vph)	50	283	0	0	208	126	197	552	10	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			3.0	3.0		4.5				
Lane Util. Factor		1.00			1.00	1.00		0.95				
Frt		1.00			1.00	0.85		1.00				
Flt Protected		0.99			1.00	1.00		0.99				
Satd. Flow (prot)		1849			1863	1583		3487				
Flt Permitted		0.96			1.00	1.00		0.99				
Satd. Flow (perm)		1781			1863	1583		3487				
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)	54	308	0	0	226	137	214	600	11	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	103	0	1	0	0	0	0
Lane Group Flow (vph)	0	362	0	0	226	34	0	824	0	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA				
Protected Phases	8	8 7			7		10 3	10 3				
Permitted Phases						7						
Actuated Green, G (s)		78.1			31.0	31.0		36.1				
Effective Green, g (s)		78.1			31.0	31.0		36.1				
Actuated g/C Ratio		0.63			0.25	0.25		0.29				
Clearance Time (s)					3.0	3.0						
Vehicle Extension (s)					3.0	3.0						
Lane Grp Cap (vph)		1141			463	393		1009				
v/s Ratio Prot		c0.12			c0.12			c0.24				
v/s Ratio Perm		0.08				0.02						
v/c Ratio		0.32			0.49	0.09		0.82				
Uniform Delay, d1		10.9			40.1	36.0		41.2				
Progression Factor		0.22			1.00	1.00		1.00				
Incremental Delay, d2		0.1			0.8	0.1		5.2				
Delay (s)		2.5			40.9	36.1		46.4				
Level of Service		A			D	D		D				
Approach Delay (s)		2.5			39.1			46.4			0.0	
Approach LOS		A			D			D			A	

Intersection Summary

HCM 2000 Control Delay	34.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	124.7	Sum of lost time (s)	16.5
Intersection Capacity Utilization	60.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Queues
6: US 1 & Hallandale Beach Boulevard

Future Background PM
1/6/2016



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	190	1709	655	1531	623	1154	400	508	1307
v/c Ratio	0.88	0.95	1.42	1.03	1.26	0.87	0.54	1.03	0.78
Control Delay	98.3	50.2	246.1	74.6	193.8	55.8	7.6	113.7	58.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	98.3	50.2	246.1	74.6	193.8	55.8	7.6	113.7	58.3
Queue Length 50th (ft)	161	497	~467	~629	~429	356	33	~291	369
Queue Length 95th (ft)	#315	#576	m#529	m#630	m#416	m287	m31	#412	414
Internal Link Dist (ft)		1701		611		1261			282
Turn Bay Length (ft)							445	420	
Base Capacity (vph)	237	1790	461	1489	493	1334	747	493	1671
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.95	1.42	1.03	1.26	0.87	0.54	1.03	0.78

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

6: US 1 & Hallandale Beach Boulevard

Future Background PM

1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑		↖↖	↑↑↑		↖↖	↑↑↑	↖	↖↖	↑↑↑	
Traffic Volume (vph)	175	1138	434	603	1205	203	573	1062	368	467	1125	77
Future Volume (vph)	175	1138	434	603	1205	203	573	1062	368	467	1125	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5		6.5	6.5		7.0	8.0	6.5	7.0	8.0	
Lane Util. Factor	1.00	0.86		0.97	0.91		0.97	0.91	1.00	0.97	0.86	
Frt	1.00	0.96		1.00	0.98		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	6142		3433	4975		3433	5085	1583	3433	6346	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	6142		3433	4975		3433	5085	1583	3433	6346	
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)	190	1237	472	655	1310	221	623	1154	400	508	1223	84
RTOR Reduction (vph)	0	43	0	0	14	0	0	0	43	0	7	0
Lane Group Flow (vph)	190	1666	0	655	1517	0	623	1154	357	508	1300	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	19.5	45.5		21.5	47.5		23.0	42.0	63.5	23.0	42.0	
Effective Green, g (s)	19.5	45.5		21.5	47.5		23.0	42.0	63.5	23.0	42.0	
Actuated g/C Ratio	0.12	0.28		0.13	0.30		0.14	0.26	0.40	0.14	0.26	
Clearance Time (s)	6.5	6.5		6.5	6.5		7.0	8.0	6.5	7.0	8.0	
Vehicle Extension (s)	1.5	2.5		1.5	2.5		1.5	2.5	1.5	1.5	2.5	
Lane Grp Cap (vph)	215	1746		461	1476		493	1334	628	493	1665	
v/s Ratio Prot	0.11	0.27		c0.19	c0.30		c0.18	c0.23	0.08	0.15	0.20	
v/s Ratio Perm									0.15			
v/c Ratio	0.88	0.95		1.42	1.03		1.26	0.87	0.57	1.03	0.78	
Uniform Delay, d1	69.1	56.2		69.2	56.2		68.5	56.3	37.6	68.5	54.7	
Progression Factor	0.90	0.69		1.10	0.94		1.36	0.92	0.24	1.00	1.00	
Incremental Delay, d2	30.7	12.1		196.0	24.4		125.8	3.5	0.3	48.6	3.7	
Delay (s)	93.2	50.7		272.0	77.1		219.0	55.6	9.4	117.1	58.4	
Level of Service	F	D		F	E		F	E	A	F	E	
Approach Delay (s)		54.9			135.5			93.9			74.9	
Approach LOS		D			F			F			E	

Intersection Summary

HCM 2000 Control Delay	91.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	98.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

7: Hallandale Beach Boulevard & Dixie Highway



Lane Group	EBT	WBL	WBT	SBT
Lane Group Flow (vph)	1363	99	2253	613
v/c Ratio	0.66	0.85	0.88	0.72
Control Delay	39.9	102.1	13.6	68.4
Queue Delay	0.4	94.6	46.5	0.0
Total Delay	40.2	196.7	60.1	68.4
Queue Length 50th (ft)	418	98	917	174
Queue Length 95th (ft)	471	m97	m618	204
Internal Link Dist (ft)	2134		49	537
Turn Bay Length (ft)				
Base Capacity (vph)	2067	116	2558	1313
Starvation Cap Reductn	0	83	732	0
Spillback Cap Reductn	243	0	0	1
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.75	3.00	1.23	0.47

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
7: Hallandale Beach Boulevard & Dixie Highway

Future Background PM

1/6/2016



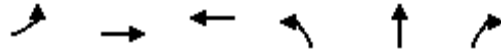
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↔	↑↑↑						↑↑↑	
Traffic Volume (vph)	0	1178	76	91	2073	0	0	0	0	155	332	77
Future Volume (vph)	0	1178	76	91	2073	0	0	0	0	155	332	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5		4.5	4.5						4.5	
Lane Util. Factor		0.91		1.00	0.91						0.86	
Frt		0.99		1.00	1.00						0.98	
Flt Protected		1.00		0.95	1.00						0.99	
Satd. Flow (prot)		5039		1770	5085						6191	
Flt Permitted		1.00		0.95	1.00						0.99	
Satd. Flow (perm)		5039		1770	5085						6191	
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)	0	1280	83	99	2253	0	0	0	0	168	361	84
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	0	0	20	0
Lane Group Flow (vph)	0	1358	0	99	2253	0	0	0	0	0	593	0
Turn Type		NA		Prot	NA					Perm	NA	
Protected Phases		2 3		1	1 2 3						4	
Permitted Phases										4		
Actuated Green, G (s)		65.5		10.5	80.5						21.7	
Effective Green, g (s)		65.5		10.5	80.5						21.7	
Actuated g/C Ratio		0.41		0.07	0.50						0.14	
Clearance Time (s)				4.5							4.5	
Vehicle Extension (s)				3.0							3.0	
Lane Grp Cap (vph)		2062		116	2558						839	
v/s Ratio Prot		0.27		0.06	c0.44							
v/s Ratio Perm											0.10	
v/c Ratio		0.66		0.85	0.88						0.71	
Uniform Delay, d1		38.2		74.0	35.5						66.1	
Progression Factor		1.00		1.34	0.37						1.00	
Incremental Delay, d2		0.8		5.7	0.4						2.7	
Delay (s)		39.0		104.5	13.4						68.8	
Level of Service		D		F	B						E	
Approach Delay (s)		39.0			17.2			0.0			68.8	
Approach LOS		D			B			A			E	

Intersection Summary

HCM 2000 Control Delay	31.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	100.2%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Queues
8: 1st Avenue & Hallandale Beach Boulevard



Lane Group	EBL	EBT	WBT	NBL	NBT	NBR
Lane Group Flow (vph)	53	1378	2041	402	427	103
v/c Ratio	0.12	0.41	1.06	0.82	0.83	0.20
Control Delay	23.7	0.5	56.2	69.0	69.0	9.0
Queue Delay	1.4	0.2	15.5	61.7	0.0	0.0
Total Delay	25.1	0.7	71.6	130.8	69.0	9.0
Queue Length 50th (ft)	45	2	-876	396	421	1
Queue Length 95th (ft)	m71	2	m760	#611	#644	51
Internal Link Dist (ft)		49	1701		1266	
Turn Bay Length (ft)						
Base Capacity (vph)	591	3766	1918	490	516	512
Starvation Cap Reductn	423	1321	0	0	0	0
Spillback Cap Reductn	0	0	304	303	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.56	1.26	2.15	0.83	0.20

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

8: 1st Avenue & Hallandale Beach Boulevard

Future Background PM

1/6/2016

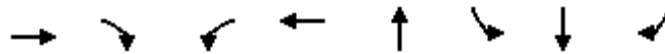


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑			↑↑↑		↖	↑	↗			
Traffic Volume (vph)	49	1268	0	0	1842	36	370	393	95	0	0	0
Future Volume (vph)	49	1268	0	0	1842	36	370	393	95	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5			4.5		4.5	4.5	4.5			
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00	1.00			
Frt	1.00	1.00			1.00		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1770	5085			5071		1770	1863	1583			
Flt Permitted	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1770	5085			5071		1770	1863	1583			
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)	53	1378	0	0	2002	39	402	427	103	0	0	0
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	74	0	0	0
Lane Group Flow (vph)	53	1378	0	0	2040	0	402	427	29	0	0	0
Turn Type	Prot	NA			NA		Perm	NA	Perm			
Protected Phases	8 9	6 7 8 9			6 7			10				
Permitted Phases							10		10			
Actuated Green, G (s)	41.7	106.7			60.5		44.3	44.3	44.3			
Effective Green, g (s)	41.7	106.7			60.5		44.3	44.3	44.3			
Actuated g/C Ratio	0.26	0.67			0.38		0.28	0.28	0.28			
Clearance Time (s)							4.5	4.5	4.5			
Vehicle Extension (s)							3.0	3.0	3.0			
Lane Grp Cap (vph)	461	3391			1917		490	515	438			
v/s Ratio Prot	0.03	c0.27			c0.40			c0.23				
v/s Ratio Perm							0.23		0.02			
v/c Ratio	0.11	0.41			1.06		0.82	0.83	0.07			
Uniform Delay, d1	45.1	12.2			49.8		54.1	54.3	42.6			
Progression Factor	0.53	0.02			0.51		1.00	1.00	1.00			
Incremental Delay, d2	0.1	0.1			30.2		10.6	10.6	0.1			
Delay (s)	23.9	0.3			55.4		64.7	64.9	42.7			
Level of Service	C	A			E		E	E	D			
Approach Delay (s)		1.1			55.4			62.4			0.0	
Approach LOS		A			E			E			A	

Intersection Summary

HCM 2000 Control Delay	39.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	100.2%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBT	EBR	WBL	WBT	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	1687	221	58	1989	488	130	12	153
v/c Ratio	0.72	0.27	0.42	0.74	1.68	0.32	0.03	0.37
Control Delay	35.9	10.6	48.0	23.4	355.9	53.6	48.0	30.9
Queue Delay	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.2	10.6	48.0	23.4	355.9	53.6	48.0	30.9
Queue Length 50th (ft)	372	43	32	253	-762	114	10	73
Queue Length 95th (ft)	m358	m47	m55	366	#1047	180	29	145
Internal Link Dist (ft)	611			578	210		703	
Turn Bay Length (ft)						150		150
Base Capacity (vph)	2367	822	194	2860	291	409	430	418
Starvation Cap Reductn	219	0	0	20	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.27	0.30	0.70	1.68	0.32	0.03	0.37

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
 9: Hallandale Beach Boulevard & E 8th Avenue

Future Background PM
 1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑	↑	↑↑↑			↑↓		↑	↑	↑
Traffic Volume (vph)	0	1552	203	53	1830	0	390	14	45	120	11	141
Future Volume (vph)	0	1552	203	53	1830	0	390	14	45	120	11	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.5	4.0			4.5		4.0	4.0	4.0
Lane Util. Factor		0.91	1.00	1.00	0.91			1.00		1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00			0.99		1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00			0.96		0.95	1.00	1.00
Satd. Flow (prot)		5085	1583	1770	5085			1761		1770	1863	1583
Flt Permitted		1.00	1.00	0.06	1.00			0.96		0.95	1.00	1.00
Satd. Flow (perm)		5085	1583	103	5085			1761		1770	1863	1583
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)	0	1687	221	58	1989	0	424	15	49	130	12	153
RTOR Reduction (vph)	0	0	87	0	0	0	0	3	0	0	0	53
Lane Group Flow (vph)	0	1687	134	58	1989	0	0	485	0	130	12	100
Turn Type		NA	Perm	pm+pt	NA		Split	NA		Split	NA	Perm
Protected Phases		4		3	8		2	2		6	6	
Permitted Phases			4	8								6
Actuated Green, G (s)		73.8	73.8	85.1	85.1			26.3		36.1	36.1	36.1
Effective Green, g (s)		73.8	73.8	85.1	85.1			26.3		36.1	36.1	36.1
Actuated g/C Ratio		0.46	0.46	0.53	0.53			0.16		0.23	0.23	0.23
Clearance Time (s)		4.0	4.0	4.5	4.0			4.5		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		2345	730	125	2704			289		399	420	357
v/s Ratio Prot		0.33		0.02	c0.39			c0.28		c0.07	0.01	
v/s Ratio Perm			0.08	0.23								0.06
v/c Ratio		0.72	0.18	0.46	0.74			1.68		0.33	0.03	0.28
Uniform Delay, d1		34.8	25.4	26.6	28.8			66.8		51.8	48.3	51.2
Progression Factor		1.00	1.40	2.38	0.76			1.00		1.00	1.00	1.00
Incremental Delay, d2		0.5	0.1	1.8	0.7			320.6		2.2	0.1	2.0
Delay (s)		35.3	35.7	65.1	22.5			387.5		53.9	48.4	53.2
Level of Service		D	D	E	C			F		D	D	D
Approach Delay (s)		35.4			23.7			387.5			53.3	
Approach LOS		D			C			F			D	

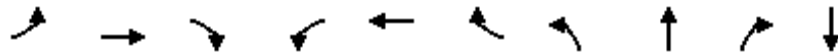
Intersection Summary

HCM 2000 Control Delay	67.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	79.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

10: Hallandale Beach Boulevard & E 10th Avenue

1/6/2016



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	142	1692	58	251	1889	110	74	237	384	8
v/c Ratio	0.71	0.68	0.07	0.73	0.78	0.14	0.14	0.41	0.59	0.08
Control Delay	117.0	8.6	0.3	83.0	37.2	8.5	42.8	47.5	26.4	0.0
Queue Delay	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	117.0	8.7	0.3	83.0	37.2	8.5	42.8	47.5	26.4	0.0
Queue Length 50th (ft)	158	69	1	132	582	21	58	207	161	0
Queue Length 95th (ft)	m220	m68	m1	183	621	55	112	323	303	0
Internal Link Dist (ft)		578			589			252		700
Turn Bay Length (ft)	180		65	475		180				
Base Capacity (vph)	459	2780	884	375	2422	791	546	574	651	102
Starvation Cap Reductn	0	284	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.68	0.07	0.67	0.78	0.14	0.14	0.41	0.59	0.08

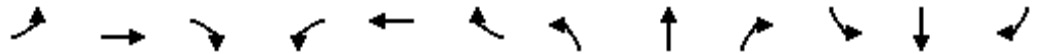
Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
 10: Hallandale Beach Boulevard & E 10th Avenue

Future Background PM

1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑	↗	↖↗	↑↑↑	↗	↖	↑	↗			
Traffic Volume (vph)	131	1557	53	231	1738	101	75	211	353	0	0	7
Future Volume (vph)	131	1557	53	231	1738	101	75	211	353	0	0	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.95	0.95	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5085	1583	1681	1767	1583		0	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5085	1583	1681	1767	1583		0	
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)	142	1692	58	251	1889	110	82	229	384	0	0	8
RTOR Reduction (vph)	0	0	21	0	0	38	0	0	137	0	8	0
Lane Group Flow (vph)	142	1692	37	251	1889	72	74	237	247	0	0	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm			
Protected Phases	7	4		3	8		5	2				
Permitted Phases			4			8			2			
Actuated Green, G (s)	18.2	78.5	78.5	15.9	76.2	76.2	52.1	52.1	52.1		0.0	
Effective Green, g (s)	18.2	78.5	78.5	15.9	76.2	76.2	52.1	52.1	52.1		0.0	
Actuated g/C Ratio	0.11	0.49	0.49	0.10	0.48	0.48	0.33	0.33	0.33		0.00	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5			
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	201	2494	776	341	2421	753	547	575	515		0	
v/s Ratio Prot	c0.08	0.33		0.07	c0.37		0.04	0.13				
v/s Ratio Perm			0.02			0.05			c0.16			
v/c Ratio	0.71	0.68	0.05	0.74	0.78	0.10	0.14	0.41	0.48		0.00	
Uniform Delay, d1	68.3	31.1	21.3	70.0	34.9	23.0	38.1	42.0	43.1		80.0	
Progression Factor	1.53	0.25	0.03	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2	7.7	0.5	0.0	8.0	1.7	0.1	0.5	2.2	3.2		0.0	
Delay (s)	112.4	8.2	0.6	78.0	36.6	23.1	38.6	44.2	46.3		80.0	
Level of Service	F	A	A	E	D	C	D	D	D		E	
Approach Delay (s)		15.7			40.6			44.8			80.0	
Approach LOS		B			D			D			E	

Intersection Summary

HCM 2000 Control Delay	31.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

11: Dixie Highway & County Line Road



Lane Group	EBT	WBT	NBL	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	228	522	40	316	233	359	82
v/c Ratio	0.53	0.98	0.20	0.46	0.30	0.44	0.11
Control Delay	40.7	45.8	28.4	5.7	17.9	19.9	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.7	45.8	28.4	5.7	17.9	19.9	4.2
Queue Length 50th (ft)	62	80	17	0	82	136	0
Queue Length 95th (ft)	102	m#429	47	62	141	221	26
Internal Link Dist (ft)	628	59				2638	
Turn Bay Length (ft)							
Base Capacity (vph)	817	531	202	681	1112	1170	1025
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	15	0	0	6	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.98	0.20	0.47	0.21	0.31	0.08

Intersection Summary

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

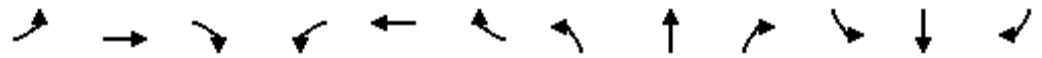
Queue shown is maximum after two cycles.

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

HCM Signalized Intersection Capacity Analysis
 11: Dixie Highway & County Line Road

Future Background PM

1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑		↑		↑	↑	↑	↑
Traffic Volume (vph)	0	201	9	117	363	0	37	0	291	214	330	75
Future Volume (vph)	0	201	9	117	363	0	37	0	291	214	330	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5		4.5		4.5	4.5	4.5	4.5
Lane Util. Factor		0.95			1.00		1.00		1.00	1.00	1.00	1.00
Frt		0.99			1.00		1.00		0.85	1.00	1.00	0.85
Flt Protected		1.00			0.99		0.95		1.00	0.95	1.00	1.00
Satd. Flow (prot)		3516			1840		1770		1583	1770	1863	1583
Flt Permitted		1.00			0.99		0.38		1.00	0.95	1.00	1.00
Satd. Flow (perm)		3516			1840		702		1583	1770	1863	1583
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)	0	218	10	127	395	0	40	0	316	233	359	82
RTOR Reduction (vph)	0	3	0	0	0	0	0	0	225	0	0	46
Lane Group Flow (vph)	0	225	0	0	522	0	40	0	91	233	359	36
Turn Type		NA		Split	NA		D.Pm		Prot	custom	NA	Perm
Protected Phases		1		4	4				2		3	2 3
Permitted Phases							2			2		2 3
Actuated Green, G (s)		10.9			25.5		25.5		25.5	34.0	38.5	38.5
Effective Green, g (s)		10.9			25.5		25.5		25.5	34.0	38.5	38.5
Actuated g/C Ratio		0.12			0.29		0.29		0.29	0.38	0.44	0.44
Clearance Time (s)		4.5			4.5		4.5		4.5	4.5		
Vehicle Extension (s)		3.0			3.0		3.0		3.0	3.0		
Lane Grp Cap (vph)		433			530		202		456	770	811	689
v/s Ratio Prot		c0.06			c0.28				0.06	0.03	c0.19	
v/s Ratio Perm							0.06			0.10		0.02
v/c Ratio		0.52			0.98		0.20		0.20	0.30	0.44	0.05
Uniform Delay, d1		36.3			31.3		23.7		23.7	19.3	17.4	14.4
Progression Factor		1.00			0.38		1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2		1.1			28.6		2.2		1.0	0.2	0.4	0.0
Delay (s)		37.4			40.4		25.9		24.7	19.5	17.8	14.4
Level of Service		D			D		C		C	B	B	B
Approach Delay (s)		37.4			40.4			24.9			18.0	
Approach LOS		D			D			C			B	

Intersection Summary

HCM 2000 Control Delay	28.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	88.4	Sum of lost time (s)	18.0
Intersection Capacity Utilization	66.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Queues
12: County Line Road & 1st Avenue

Future Background PM
1/6/2016



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	468	304	361	336	12	166
v/c Ratio	0.43	0.28	0.90	0.63	0.02	0.29
Control Delay	4.9	0.6	58.1	34.2	24.5	5.9
Queue Delay	0.1	0.1	2.2	0.0	0.0	0.2
Total Delay	5.0	0.8	60.3	34.2	24.5	6.1
Queue Length 50th (ft)	47	0	192	162	5	0
Queue Length 95th (ft)	45	0	#387	274	19	47
Internal Link Dist (ft)	59			64	2634	
Turn Bay Length (ft)						
Base Capacity (vph)	1613	1469	403	537	537	575
Starvation Cap Reductn	264	450	0	0	0	0
Spillback Cap Reductn	0	0	10	0	0	85
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.30	0.92	0.63	0.02	0.34

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
 12: County Line Road & 1st Avenue

Future Background PM

1/6/2016



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	431	280	332	309	11	153
Future Volume (vph)	431	280	332	309	11	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1583	1770	1863	1863	1583
Flt Permitted	0.95	1.00	0.75	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583	1397	1863	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	468	304	361	336	12	166
RTOR Reduction (vph)	0	119	0	0	0	118
Lane Group Flow (vph)	468	185	361	336	12	48
Turn Type	Prot	Prot	Perm	NA	NA	Prot
Protected Phases	5	5		8	8	8
Permitted Phases			8			
Actuated Green, G (s)	53.9	53.9	25.5	25.5	25.5	25.5
Effective Green, g (s)	53.9	53.9	25.5	25.5	25.5	25.5
Actuated g/C Ratio	0.61	0.61	0.29	0.29	0.29	0.29
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1079	965	402	537	537	456
v/s Ratio Prot	c0.26	0.12		0.18	0.01	0.03
v/s Ratio Perm			c0.26			
v/c Ratio	0.43	0.19	0.90	0.63	0.02	0.11
Uniform Delay, d1	9.2	7.6	30.2	27.3	22.5	23.1
Progression Factor	0.40	0.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.1	25.4	5.4	0.1	0.5
Delay (s)	3.9	0.1	55.6	32.7	22.6	23.5
Level of Service	A	A	E	C	C	C
Approach Delay (s)	2.4			44.6	23.5	
Approach LOS	A			D	C	

Intersection Summary

HCM 2000 Control Delay	22.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	88.4	Sum of lost time (s)	18.0
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
 13: E 1st Avenue & NE 214th Terr

Future Background PM

1/6/2016



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						144
pX, platoon unblocked						
vC, conflicting volume	0	0			0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0	0			0	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	1023	1085			1623	

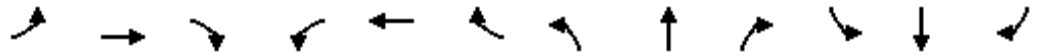
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	0	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS	A		
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A		

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

HCM Unsignalized Intersection Capacity Analysis
 14: SE 3rd Ave & SE 10th Ct

Future Background PM

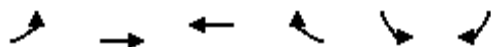
1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	4	4	8	23	24	67	20	28	56	3	11	3
Future Volume (Veh/h)	4	4	8	23	24	67	20	28	56	3	11	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	4	4	9	25	26	73	22	30	61	3	12	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	99			13			138	166	8	205	134	62
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	99			13			138	166	8	205	134	62
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			97	96	94	100	98	100
cM capacity (veh/h)	1494			1606			809	714	1073	678	743	1002
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	17	124	113	18								
Volume Left	4	25	22	3								
Volume Right	9	73	61	3								
cSH	1494	1606	896	764								
Volume to Capacity	0.00	0.02	0.13	0.02								
Queue Length 95th (ft)	0	1	11	2								
Control Delay (s)	1.8	1.6	9.6	9.8								
Lane LOS	A	A	A	A								
Approach Delay (s)	1.8	1.6	9.6	9.8								
Approach LOS			A	A								
Intersection Summary												
Average Delay			5.5									
Intersection Capacity Utilization			23.3%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 37: NE 214th Terr & SE 3rd Ave

Future Background PM
 1/6/2016



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Volume (veh/h)	0	7	8	1	1	222
Future Volume (Veh/h)	0	7	8	1	1	222
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	8	9	1	1	241
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	10				18	10
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	10				18	10
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	78
cM capacity (veh/h)	1610				1000	1072
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	8	10	242			
Volume Left	0	0	1			
Volume Right	0	1	241			
cSH	1610	1700	1072			
Volume to Capacity	0.00	0.01	0.23			
Queue Length 95th (ft)	0	0	22			
Control Delay (s)	0.0	0.0	9.3			
Lane LOS			A			
Approach Delay (s)	0.0	0.0	9.3			
Approach LOS			A			
Intersection Summary						
Average Delay			8.7			
Intersection Capacity Utilization		23.8%		ICU Level of Service		A
Analysis Period (min)		15				

HCM Unsignalized Intersection Capacity Analysis
41: Optima Office Drive

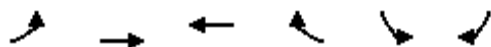
Future Background PM
1/6/2016



Movement	EBL	EBR	NBL	NBT	SBT	SBR			
Lane Configurations		↗	↘	↑↑↑	↑↑↑				
Traffic Volume (veh/h)	47	125	34	2388	2113	93			
Future Volume (Veh/h)	47	125	34	2388	2113	93			
Sign Control	Stop			Free		Free			
Grade	0%			0%		0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Hourly flow rate (vph)	51	136	37	2596	2297	101			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type				None	None				
Median storage (veh)									
Upstream signal (ft)				500	754				
pX, platoon unblocked	0.67	0.71	0.71						
vC, conflicting volume	3287	816	2398						
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	0	0	1542						
tC, single (s)	6.8	6.9	4.1						
tC, 2 stage (s)									
tF (s)	3.5	3.3	2.2						
p0 queue free %	92	82	88						
cM capacity (veh/h)	602	771	303						
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	
Volume Total	187	37	865	865	865	919	919	560	
Volume Left	51	37	0	0	0	0	0	0	
Volume Right	136	0	0	0	0	0	0	101	
cSH	716	303	1700	1700	1700	1700	1700	1700	
Volume to Capacity	0.26	0.12	0.51	0.51	0.51	0.54	0.54	0.33	
Queue Length 95th (ft)	26	10	0	0	0	0	0	0	
Control Delay (s)	11.8	18.5	0.0	0.0	0.0	0.0	0.0	0.0	
Lane LOS	B	C							
Approach Delay (s)	11.8	0.3					0.0		
Approach LOS	B								
Intersection Summary									
Average Delay			0.6						
Intersection Capacity Utilization			Err%	ICU Level of Service				H	
Analysis Period (min)			15						

HCM Unsignalized Intersection Capacity Analysis
46: Optima Drive

Future Background PM
1/6/2016



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↘	
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	0				0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0				0	0
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1623				1023	1085
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS			A			
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS			A			
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			

Queues

Existing PM

1: Biscayne Boulevard & NE 213th Street

1/5/2016



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	264	418	2267	164	349	1827
v/c Ratio	0.69	0.61	0.78	0.18	0.84	0.43
Control Delay	77.5	9.3	30.9	10.2	76.0	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	77.5	9.3	30.9	10.2	76.0	4.1
Queue Length 50th (ft)	139	0	652	37	351	149
Queue Length 95th (ft)	184	54	887	95	440	208
Internal Link Dist (ft)	379		211			420
Turn Bay Length (ft)						
Base Capacity (vph)	525	780	2893	936	625	4229
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.54	0.78	0.18	0.56	0.43

Intersection Summary

HCM Signalized Intersection Capacity Analysis
 1: Biscayne Boulevard & NE 213th Street

Existing PM
 1/5/2016



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	243	385	2086	151	321	1681
Future Volume (vph)	243	385	2086	151	321	1681
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	0.97	0.88	0.91	1.00	1.00	0.91
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	2787	5085	1583	1770	5085
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	2787	5085	1583	1770	5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	264	418	2267	164	349	1827
RTOR Reduction (vph)	0	371	0	36	0	0
Lane Group Flow (vph)	264	47	2267	128	349	1827
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	17.9	17.9	91.1	91.1	37.5	133.1
Effective Green, g (s)	17.9	17.9	91.1	91.1	37.5	133.1
Actuated g/C Ratio	0.11	0.11	0.57	0.57	0.23	0.83
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	384	311	2895	901	414	4230
v/s Ratio Prot	c0.08		c0.45		c0.20	0.36
v/s Ratio Perm		0.02		0.08		
v/c Ratio	0.69	0.15	0.78	0.14	0.84	0.43
Uniform Delay, d1	68.4	64.2	26.8	16.1	58.4	3.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.1	0.2	2.2	0.3	14.4	0.3
Delay (s)	73.4	64.4	29.0	16.5	72.9	3.9
Level of Service	E	E	C	B	E	A
Approach Delay (s)	67.9		28.1			14.9
Approach LOS	E		C			B

Intersection Summary

HCM 2000 Control Delay	27.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	76.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Queues
2: US 1 & SE 9th Street

Existing PM
1/5/2016



Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	55	82	83	43	49	2237	35	38	1939
v/c Ratio	0.50	0.65	0.65	0.19	0.53	0.62	0.03	0.31	0.54
Control Delay	46.9	95.4	95.3	1.8	95.3	15.5	0.1	82.8	14.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.9	95.4	95.3	1.8	95.3	15.5	0.1	82.8	14.2
Queue Length 50th (ft)	19	91	92	0	52	460	0	21	362
Queue Length 95th (ft)	68	152	153	0	99	627	0	42	516
Internal Link Dist (ft)	1532		73			674			1939
Turn Bay Length (ft)									
Base Capacity (vph)	217	241	244	327	184	3598	1153	356	3592
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.34	0.34	0.13	0.27	0.62	0.03	0.11	0.54

Intersection Summary

HCM Signalized Intersection Capacity Analysis

2: US 1 & SE 9th Street

Existing PM
1/5/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↙	↘	↗	↖	↑↑↑	↗	↖↖	↑↑↑	
Traffic Volume (vph)	12	5	34	139	13	40	45	2058	32	35	1772	12
Future Volume (vph)	12	5	34	139	13	40	45	2058	32	35	1772	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5		6.5	6.5	6.5	7.0	7.0	7.0	7.0	4.5	
Lane Util. Factor		1.00		0.95	0.95	1.00	1.00	0.91	1.00	0.97	0.91	
Frt		0.91		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.99		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1674		1681	1699	1583	1770	5085	1583	3433	5080	
Flt Permitted		0.99		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1674		1681	1699	1583	1770	5085	1583	3433	5080	
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)	13	5	37	151	14	43	49	2237	35	38	1926	13
RTOR Reduction (vph)	0	36	0	0	0	40	0	0	11	0	0	0
Lane Group Flow (vph)	0	19	0	82	83	3	49	2237	24	38	1939	0
Turn Type	Split	NA		Split	NA	Prot	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8	8	5	2		1	6	
Permitted Phases									2			
Actuated Green, G (s)		6.2		12.4	12.4	12.4	7.5	113.0	113.0	4.9	112.9	
Effective Green, g (s)		6.2		12.4	12.4	12.4	7.5	113.0	113.0	4.9	112.9	
Actuated g/C Ratio		0.04		0.08	0.08	0.08	0.05	0.69	0.69	0.03	0.69	
Clearance Time (s)		6.5		6.5	6.5	6.5	7.0	7.0	7.0	7.0	4.5	
Vehicle Extension (s)		2.0		2.0	2.0	2.0	1.5	3.0	3.0	1.5	3.0	
Lane Grp Cap (vph)		63		127	128	120	81	3514	1094	102	3507	
v/s Ratio Prot		c0.01		0.05	c0.05	0.00	c0.03	c0.44		0.01	0.38	
v/s Ratio Perm									0.02			
v/c Ratio		0.31		0.65	0.65	0.03	0.60	0.64	0.02	0.37	0.55	
Uniform Delay, d1		76.6		73.4	73.4	70.0	76.5	13.9	7.9	77.8	12.7	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		1.0		8.2	8.2	0.0	8.4	0.9	0.0	0.8	0.6	
Delay (s)		77.6		81.6	81.6	70.0	85.0	14.8	8.0	78.6	13.3	
Level of Service		E		F	F	E	F	B	A	E	B	
Approach Delay (s)		77.6			79.2			16.2			14.6	
Approach LOS		E			E			B			B	

Intersection Summary

HCM 2000 Control Delay	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	163.5	Sum of lost time (s)	27.0
Intersection Capacity Utilization	66.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Queues
3: US 1 & 3 rd Street

Existing PM
1/5/2016



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	173	223	118	74	135	136	1458	20	77	1769
v/c Ratio	0.77	0.80	0.71	0.42	0.35	0.75	0.72	0.02	0.48	0.68
Control Delay	89.3	63.1	91.8	74.4	11.8	93.4	29.9	0.1	57.9	55.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	89.3	63.1	91.8	74.4	11.8	93.4	29.9	0.1	57.9	55.4
Queue Length 50th (ft)	178	150	122	74	0	141	568	0	37	608
Queue Length 95th (ft)	252	238	188	126	36	211	827	0	m49	m603
Internal Link Dist (ft)		717		185			1939			1261
Turn Bay Length (ft)			150		150	300		375		
Base Capacity (vph)	442	475	420	442	764	204	2015	948	364	2609
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.47	0.28	0.17	0.18	0.67	0.72	0.02	0.21	0.68

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis

Existing PM

3: US 1 & 3 rd Street

1/5/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↖↗	↖	↗↗	↖	↖↗	↗↗↗	
Traffic Volume (vph)	159	56	149	109	68	124	125	1341	18	71	1615	13
Future Volume (vph)	159	56	149	109	68	124	125	1341	18	71	1615	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	0.88	1.00	0.95	1.00	0.97	0.91	
Frt	1.00	0.89		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1660		1770	1863	2787	1770	3539	1583	3433	5079	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1660		1770	1863	2787	1770	3539	1583	3433	5079	
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)	173	61	162	118	74	135	136	1458	20	77	1755	14
RTOR Reduction (vph)	0	70	0	0	0	122	0	0	9	0	0	0
Lane Group Flow (vph)	173	153	0	118	74	13	136	1458	11	77	1769	0
Turn Type	Split	NA		Split	NA	Prot	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8	8	5	2		1	6	
Permitted Phases									2			
Actuated Green, G (s)	20.3	20.3		15.1	15.1	15.1	16.5	91.1	91.1	7.5	82.1	
Effective Green, g (s)	20.3	20.3		15.1	15.1	15.1	16.5	91.1	91.1	7.5	82.1	
Actuated g/C Ratio	0.13	0.13		0.09	0.09	0.09	0.10	0.57	0.57	0.05	0.51	
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	1.5	3.0	3.0	1.5	3.0	
Lane Grp Cap (vph)	224	210		167	175	263	182	2015	901	160	2606	
v/s Ratio Prot	c0.10	0.09		c0.07	0.04	0.00	c0.08	c0.41		0.02	0.35	
v/s Ratio Perm									0.01			
v/c Ratio	0.77	0.73		0.71	0.42	0.05	0.75	0.72	0.01	0.48	0.68	
Uniform Delay, d1	67.6	67.2		70.3	68.3	65.9	69.7	25.2	14.9	74.4	29.1	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.73	1.75	
Incremental Delay, d2	13.9	10.2		10.6	0.6	0.0	13.6	2.3	0.0	0.3	0.5	
Delay (s)	81.5	77.4		80.9	68.9	65.9	83.3	27.5	15.0	54.8	51.3	
Level of Service	F	E		F	E	E	F	C	B	D	D	
Approach Delay (s)		79.2			72.0			32.1			51.5	
Approach LOS		E			E			C			D	

Intersection Summary

HCM 2000 Control Delay	48.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.0
Intersection Capacity Utilization	81.1%	ICU Level of Service	D
Analysis Period (min)	15		

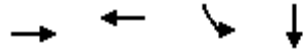
c Critical Lane Group

Queues

Existing PM

4: Dixie Highway & 3rd Street

1/5/2016



Lane Group	EBT	WBT	SBL	SBT
Lane Group Flow (vph)	166	440	224	494
v/c Ratio	0.38	0.56	0.53	0.40
Control Delay	41.8	12.1	45.5	40.2
Queue Delay	0.8	2.2	0.0	0.0
Total Delay	42.6	14.3	45.5	40.2
Queue Length 50th (ft)	108	186	157	121
Queue Length 95th (ft)	185	317	238	156
Internal Link Dist (ft)	99	25		1263
Turn Bay Length (ft)				
Base Capacity (vph)	440	784	443	1271
Starvation Cap Reductn	0	213	0	0
Spillback Cap Reductn	101	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.49	0.77	0.51	0.39

Intersection Summary

HCM Signalized Intersection Capacity Analysis

4: Dixie Highway & 3rd Street

Existing PM
1/5/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻			↻					↻	↻↻↻	
Traffic Volume (vph)	0	129	24	55	350	0	0	0	0	206	445	9
Future Volume (vph)	0	129	24	55	350	0	0	0	0	206	445	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5					3.0	3.0	
Lane Util. Factor		1.00			1.00					1.00	0.91	
Frt		0.98			1.00					1.00	1.00	
Flt Protected		1.00			0.99					0.95	1.00	
Satd. Flow (prot)		1823			1850					1770	5070	
Flt Permitted		1.00			0.96					0.95	1.00	
Satd. Flow (perm)		1823			1797					1770	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)	0	140	26	60	380	0	0	0	0	224	484	10
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	161	0	0	440	0	0	0	0	224	492	0
Turn Type		NA		Prot	NA					Split	NA	
Protected Phases		4		2	2	4				1	9	1
Permitted Phases												
Actuated Green, G (s)		29.6			82.2					29.8	29.8	
Effective Green, g (s)		29.6			82.2					25.3	25.3	
Actuated g/C Ratio		0.24			0.66					0.20	0.20	
Clearance Time (s)		4.5										
Vehicle Extension (s)		3.0										
Lane Grp Cap (vph)		435			1213					361	1034	
v/s Ratio Prot		c0.09			c0.15					c0.13	0.10	
v/s Ratio Perm					0.09							
v/c Ratio		0.37			0.36					0.62	0.48	
Uniform Delay, d1		39.4			9.3					45.0	43.5	
Progression Factor		1.00			0.34					1.00	1.00	
Incremental Delay, d2		0.5			0.2					3.3	0.3	
Delay (s)		39.9			3.3					48.3	43.9	
Level of Service		D			A					D	D	
Approach Delay (s)		39.9			3.3			0.0			45.2	
Approach LOS		D			A			A			D	

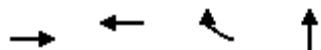
Intersection Summary

HCM 2000 Control Delay	30.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	124.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Queues
5: 1st Avenue & 3rd Street

Existing PM
1/5/2016



Lane Group	EBT	WBT	WBR	NBT
Lane Group Flow (vph)	353	221	134	715
v/c Ratio	0.50	0.47	0.27	0.74
Control Delay	8.2	44.5	7.8	46.5
Queue Delay	1.0	1.3	0.0	0.3
Total Delay	9.2	45.8	7.8	46.8
Queue Length 50th (ft)	79	152	0	276
Queue Length 95th (ft)	66	245	52	367
Internal Link Dist (ft)	25	225		2634
Turn Bay Length (ft)				
Base Capacity (vph)	807	466	496	971
Starvation Cap Reductn	233	0	0	0
Spillback Cap Reductn	0	106	0	31
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.61	0.61	0.27	0.76

Intersection Summary

HCM Signalized Intersection Capacity Analysis

5: 1st Avenue & 3rd Street

Existing PM
1/5/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↑	↗		↕↗				
Traffic Volume (vph)	49	276	0	0	203	123	192	455	10	0	0	0
Future Volume (vph)	49	276	0	0	203	123	192	455	10	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0			3.0	3.0		4.5				
Lane Util. Factor		1.00			1.00	1.00		0.95				
Frt		1.00			1.00	0.85		1.00				
Flt Protected		0.99			1.00	1.00		0.99				
Satd. Flow (prot)		1849			1863	1583		3480				
Flt Permitted		0.96			1.00	1.00		0.99				
Satd. Flow (perm)		1791			1863	1583		3480				
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)	53	300	0	0	221	134	209	495	11	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	100	0	1	0	0	0	0
Lane Group Flow (vph)	0	353	0	0	221	34	0	714	0	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA				
Protected Phases	8	7 8			7		10 3	10 3				
Permitted Phases						7						
Actuated Green, G (s)		77.5			31.1	31.1		36.0				
Effective Green, g (s)		77.5			31.1	31.1		36.0				
Actuated g/C Ratio		0.62			0.25	0.25		0.29				
Clearance Time (s)					3.0	3.0						
Vehicle Extension (s)					3.0	3.0						
Lane Grp Cap (vph)		1141			467	397		1010				
v/s Ratio Prot		c0.12			c0.12			c0.21				
v/s Ratio Perm		0.08				0.02						
v/c Ratio		0.31			0.47	0.08		0.71				
Uniform Delay, d1		10.8			39.5	35.6		39.3				
Progression Factor		0.21			1.00	1.00		1.00				
Incremental Delay, d2		0.1			0.8	0.1		2.3				
Delay (s)		2.4			40.2	35.6		41.6				
Level of Service		A			D	D		D				
Approach Delay (s)		2.4			38.5			41.6			0.0	
Approach LOS		A			D			D			A	

Intersection Summary

HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	124.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Queues
6: US 1 & Hallandale Beach Boulevard

Existing PM
1/5/2016



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	189	1279	629	1322	575	1048	362	404	1233
v/c Ratio	0.88	0.74	1.36	0.92	1.08	0.73	0.46	0.88	0.74
Control Delay	87.8	36.2	228.4	52.8	129.7	44.1	12.4	88.4	56.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	87.8	36.2	228.4	52.8	129.7	44.1	12.4	88.4	56.7
Queue Length 50th (ft)	140	343	~434	328	~359	368	181	214	343
Queue Length 95th (ft)	#308	396	#565	#480	#503	381	99	#288	387
Internal Link Dist (ft)		1701		611		1261			282
Turn Bay Length (ft)							445	420	
Base Capacity (vph)	237	1794	461	1447	532	1443	779	493	1671
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.71	1.36	0.91	1.08	0.73	0.46	0.82	0.74

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

6: US 1 & Hallandale Beach Boulevard

Existing PM
1/5/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑		↖	↑↑↑		↖	↑↑↑	↗	↖	↑↑↑	
Traffic Volume (vph)	174	925	252	579	1052	165	529	964	333	372	1059	75
Future Volume (vph)	174	925	252	579	1052	165	529	964	333	372	1059	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5		6.5	6.5		7.0	8.0	6.5	7.0	8.0	
Lane Util. Factor	1.00	0.86		0.97	0.91		0.97	0.91	1.00	0.97	0.86	
Frt	1.00	0.97		1.00	0.98		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	6202		3433	4982		3433	5085	1583	3433	6344	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	6202		3433	4982		3433	5085	1583	3433	6344	
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)	189	1005	274	629	1143	179	575	1048	362	404	1151	82
RTOR Reduction (vph)	0	31	0	0	13	0	0	0	42	0	7	0
Lane Group Flow (vph)	189	1248	0	629	1309	0	575	1048	320	404	1226	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	19.5	43.7		21.5	45.7		24.8	45.4	66.9	21.4	42.0	
Effective Green, g (s)	19.5	43.7		21.5	45.7		24.8	45.4	66.9	21.4	42.0	
Actuated g/C Ratio	0.12	0.27		0.13	0.29		0.16	0.28	0.42	0.13	0.26	
Clearance Time (s)	6.5	6.5		6.5	6.5		7.0	8.0	6.5	7.0	8.0	
Vehicle Extension (s)	1.5	2.5		1.5	2.5		1.5	2.5	1.5	1.5	2.5	
Lane Grp Cap (vph)	215	1693		461	1422		532	1442	661	459	1665	
v/s Ratio Prot	0.11	0.20		c0.18	c0.26		c0.17	c0.21	0.06	0.12	0.19	
v/s Ratio Perm									0.14			
v/c Ratio	0.88	0.74		1.36	0.92		1.08	0.73	0.48	0.88	0.74	
Uniform Delay, d1	69.1	52.9		69.2	55.4		67.6	51.7	34.0	68.0	53.9	
Progression Factor	0.75	0.65		1.13	0.80		1.20	0.79	0.45	1.00	1.00	
Incremental Delay, d2	29.5	1.6		174.5	8.0		59.2	2.7	0.2	17.1	2.9	
Delay (s)	81.3	36.1		253.0	52.3		140.1	43.4	15.6	85.2	56.9	
Level of Service	F	D		F	D		F	D	B	F	E	
Approach Delay (s)		42.0			117.0			66.3			63.9	
Approach LOS		D			F			E			E	

Intersection Summary

HCM 2000 Control Delay	74.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	89.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Queues
7: Hallandale Beach Boulevard & Dixie Highway

Existing PM
1/5/2016



Lane Group	EBT	WBL	WBT	SBT
Lane Group Flow (vph)	1170	97	1991	560
v/c Ratio	0.57	0.51	0.72	0.70
Control Delay	37.5	91.0	10.4	68.9
Queue Delay	0.2	82.3	4.9	0.0
Total Delay	37.7	173.3	15.4	68.9
Queue Length 50th (ft)	341	88	367	159
Queue Length 95th (ft)	389	m#119	416	189
Internal Link Dist (ft)	2134		49	537
Turn Bay Length (ft)				
Base Capacity (vph)	2070	191	2773	1313
Starvation Cap Reductn	0	113	711	0
Spillback Cap Reductn	255	0	0	1
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.64	1.24	0.97	0.43

Intersection Summary

- # 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.

HCM Signalized Intersection Capacity Analysis
7: Hallandale Beach Boulevard & Dixie Highway

Existing PM
1/5/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↔	↑↑↑						↑↑↑	
Traffic Volume (vph)	0	1028	49	89	1832	0	0	0	0	151	292	73
Future Volume (vph)	0	1028	49	89	1832	0	0	0	0	151	292	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5		4.5	4.5						4.5	
Lane Util. Factor		0.91		1.00	0.91						0.86	
Frt		0.99		1.00	1.00						0.98	
Flt Protected		1.00		0.95	1.00						0.99	
Satd. Flow (prot)		5051		1770	5085						6182	
Flt Permitted		1.00		0.95	1.00						0.99	
Satd. Flow (perm)		5051		1770	5085						6182	
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)	0	1117	53	97	1991	0	0	0	0	164	317	79
RTOR Reduction (vph)	0	3	0	0	0	0	0	0	0	0	20	0
Lane Group Flow (vph)	0	1167	0	97	1991	0	0	0	0	0	540	0
Turn Type		NA		Prot	NA					Perm	NA	
Protected Phases		2 3		1	1 2 3						4	
Permitted Phases										4		
Actuated Green, G (s)		65.4		17.3	87.2						20.2	
Effective Green, g (s)		65.4		17.3	87.2						20.2	
Actuated g/C Ratio		0.41		0.11	0.55						0.13	
Clearance Time (s)				4.5							4.5	
Vehicle Extension (s)				3.0							3.0	
Lane Grp Cap (vph)		2064		191	2771						780	
v/s Ratio Prot		0.23		0.05	c0.39							
v/s Ratio Perm											0.09	
v/c Ratio		0.57		0.51	0.72						0.69	
Uniform Delay, d1		36.4		67.3	27.2						66.9	
Progression Factor		1.00		1.27	0.34						1.00	
Incremental Delay, d2		0.4		1.1	0.5						2.7	
Delay (s)		36.7		86.4	9.6						69.6	
Level of Service		D		F	A						E	
Approach Delay (s)		36.7			13.2			0.0			69.6	
Approach LOS		D			B			A			E	

Intersection Summary

HCM 2000 Control Delay	28.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	88.0%	ICU Level of Service	E
Analysis Period (min)	15		

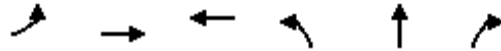
c Critical Lane Group

Queues

Existing PM

8: 1st Avenue & Hallandale Beach Boulevard

1/5/2016



Lane Group	EBL	EBT	WBT	NBL	NBT	NBR
Lane Group Flow (vph)	50	1218	1786	337	358	101
v/c Ratio	0.11	0.34	0.84	0.78	0.79	0.22
Control Delay	25.3	0.4	20.2	69.5	69.5	8.5
Queue Delay	1.0	0.1	6.4	66.4	0.0	0.0
Total Delay	26.3	0.5	26.6	135.9	69.5	8.5
Queue Length 50th (ft)	42	2	562	327	348	0
Queue Length 95th (ft)	m77	2	m737	447	471	48
Internal Link Dist (ft)		49	1701		1266	
Turn Bay Length (ft)						
Base Capacity (vph)	591	3981	2132	434	457	466
Starvation Cap Reductn	406	1349	0	0	0	0
Spillback Cap Reductn	0	0	308	286	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.46	0.98	2.28	0.78	0.22

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis

8: 1st Avenue & Hallandale Beach Boulevard

Existing PM
1/5/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑			↑↑↑		↖	↑	↗			
Traffic Volume (vph)	46	1121	0	0	1608	35	310	329	93	0	0	0
Future Volume (vph)	46	1121	0	0	1608	35	310	329	93	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5			4.5		4.5	4.5	4.5			
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00	1.00			
Frt	1.00	1.00			1.00		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1770	5085			5069		1770	1863	1583			
Flt Permitted	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1770	5085			5069		1770	1863	1583			
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)	50	1218	0	0	1748	38	337	358	101	0	0	0
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	76	0	0	0
Lane Group Flow (vph)	50	1218	0	0	1785	0	337	358	25	0	0	0
Turn Type	Prot	NA			NA		Perm	NA	Perm			
Protected Phases	8 9	6 7 8 9			6 7			10				
Permitted Phases							10		10			
Actuated Green, G (s)	40.1	111.9			67.3		39.1	39.1	39.1			
Effective Green, g (s)	40.1	111.9			67.3		39.1	39.1	39.1			
Actuated g/C Ratio	0.25	0.70			0.42		0.24	0.24	0.24			
Clearance Time (s)							4.5	4.5	4.5			
Vehicle Extension (s)							3.0	3.0	3.0			
Lane Grp Cap (vph)	443	3556			2132		432	455	386			
v/s Ratio Prot	0.03	c0.24			c0.35			c0.19				
v/s Ratio Perm							0.19		0.02			
v/c Ratio	0.11	0.34			0.84		0.78	0.79	0.06			
Uniform Delay, d1	46.2	9.5			41.4		56.4	56.6	46.4			
Progression Factor	0.55	0.02			0.43		1.00	1.00	1.00			
Incremental Delay, d2	0.1	0.0			1.0		8.8	8.7	0.1			
Delay (s)	25.5	0.2			18.9		65.3	65.3	46.5			
Level of Service	C	A			B		E	E	D			
Approach Delay (s)		1.2			18.9			62.9			0.0	
Approach LOS		A			B			E			A	

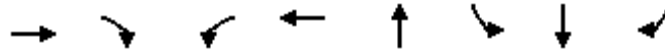
Intersection Summary

HCM 2000 Control Delay	22.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	88.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Queues
 9: Hallandale Beach Boulevard & E 8th Avenue

Existing PM
 1/5/2016



Lane Group	EBT	EBR	WBL	WBT	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	1626	25	20	1930	75	127	4	150
v/c Ratio	0.67	0.03	0.15	0.73	0.54	0.20	0.01	0.23
Control Delay	27.8	0.4	21.3	23.3	34.1	39.2	38.8	6.5
Queue Delay	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.9	0.4	21.3	23.3	34.1	39.2	38.8	6.5
Queue Length 50th (ft)	309	0	7	242	10	92	3	0
Queue Length 95th (ft)	307	m0	m12	333	66	164	14	56
Internal Link Dist (ft)	611			578	210		703	
Turn Bay Length (ft)						150		150
Base Capacity (vph)	2418	788	203	2860	270	631	664	661
Starvation Cap Reductn	86	0	0	2	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.03	0.10	0.68	0.28	0.20	0.01	0.23

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
 9: Hallandale Beach Boulevard & E 8th Avenue

Existing PM
 1/5/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑	↑	↑↑↑			↑↓		↑	↑	↑
Traffic Volume (vph)	0	1496	23	18	1776	0	25	0	44	117	4	138
Future Volume (vph)	0	1496	23	18	1776	0	25	0	44	117	4	138
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.5	4.0			4.5		4.0	4.0	4.0
Lane Util. Factor		0.91	1.00	1.00	0.91			1.00		1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00			0.91		1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00			0.98		0.95	1.00	1.00
Satd. Flow (prot)		5085	1583	1770	5085			1672		1770	1863	1583
Flt Permitted		1.00	1.00	0.07	1.00			0.98		0.95	1.00	1.00
Satd. Flow (perm)		5085	1583	126	5085			1672		1770	1863	1583
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)	0	1626	25	20	1930	0	27	0	48	127	4	150
RTOR Reduction (vph)	0	0	13	0	0	0	0	62	0	0	0	98
Lane Group Flow (vph)	0	1626	12	20	1930	0	0	13	0	127	4	52
Turn Type		NA	Perm	pm+pt	NA		Split	NA		Split	NA	Perm
Protected Phases		4		3	8		2	2		6	6	
Permitted Phases			4	8								6
Actuated Green, G (s)		76.1	76.1	84.7	84.7			7.5		55.3	55.3	55.3
Effective Green, g (s)		76.1	76.1	84.7	84.7			7.5		55.3	55.3	55.3
Actuated g/C Ratio		0.48	0.48	0.53	0.53			0.05		0.35	0.35	0.35
Clearance Time (s)		4.0	4.0	4.5	4.0			4.5		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		2418	752	108	2691			78		611	643	547
v/s Ratio Prot		0.32		0.00	c0.38			c0.01		c0.07	0.00	
v/s Ratio Perm			0.01	0.09								0.03
v/c Ratio		0.67	0.02	0.19	0.72			0.17		0.21	0.01	0.09
Uniform Delay, d1		32.3	22.2	23.9	28.6			73.3		36.9	34.3	35.4
Progression Factor		0.82	1.00	1.15	0.74			1.00		1.00	1.00	1.00
Incremental Delay, d2		0.5	0.0	0.6	0.6			1.0		0.8	0.0	0.3
Delay (s)		27.1	22.2	28.0	21.8			74.3		37.7	34.3	35.8
Level of Service		C	C	C	C			E		D	C	D
Approach Delay (s)		27.1			21.9			74.3			36.6	
Approach LOS		C			C			E			D	

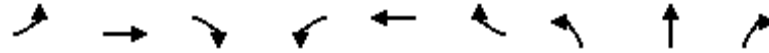
Intersection Summary

HCM 2000 Control Delay	26.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	57.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Queues
10: Hallandale Beach Boulevard & E 10th Avenue

Existing PM
1/5/2016



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	139	1632	57	245	1814	108	71	217	314
v/c Ratio	0.70	0.68	0.07	0.72	0.77	0.14	0.12	0.36	0.46
Control Delay	115.9	10.6	0.4	82.6	38.4	8.6	41.2	44.7	18.0
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	115.9	10.7	0.4	82.6	38.4	8.6	41.2	44.7	18.0
Queue Length 50th (ft)	154	61	1	129	580	21	53	177	83
Queue Length 95th (ft)	m220	59	m1	178	581	53	109	295	201
Internal Link Dist (ft)		578			589			252	
Turn Bay Length (ft)	180		65	475		180			
Base Capacity (vph)	459	2780	884	375	2345	768	575	604	676
Starvation Cap Reductn	0	203	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.63	0.06	0.65	0.77	0.14	0.12	0.36	0.46

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
 10: Hallandale Beach Boulevard & E 10th Avenue

Existing PM
 1/5/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑↑	↗	↘↗	↑↑↑	↗	↘	↗	↗			
Traffic Volume (vph)	128	1501	52	225	1669	99	73	192	289	0	0	0
Future Volume (vph)	128	1501	52	225	1669	99	73	192	289	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5			
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.95	0.95	1.00			
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1770	5085	1583	3433	5085	1583	1681	1766	1583			
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1770	5085	1583	3433	5085	1583	1681	1766	1583			
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)	139	1632	57	245	1814	108	79	209	314	0	0	0
RTOR Reduction (vph)	0	0	22	0	0	39	0	0	135	0	0	0
Lane Group Flow (vph)	139	1632	35	245	1814	69	71	217	179	0	0	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm			
Protected Phases	7	4		3	8		5	2				
Permitted Phases			4			8			2			
Actuated Green, G (s)	18.0	76.0	76.0	15.8	73.8	73.8	54.7	54.7	54.7			
Effective Green, g (s)	18.0	76.0	76.0	15.8	73.8	73.8	54.7	54.7	54.7			
Actuated g/C Ratio	0.11	0.48	0.48	0.10	0.46	0.46	0.34	0.34	0.34			
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5			
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	199	2415	751	339	2345	730	574	603	541			
v/s Ratio Prot	c0.08	0.32		0.07	c0.36		0.04	c0.12				
v/s Ratio Perm			0.02			0.04			0.11			
v/c Ratio	0.70	0.68	0.05	0.72	0.77	0.09	0.12	0.36	0.33			
Uniform Delay, d1	68.4	32.5	22.6	70.0	36.1	24.3	36.2	39.5	39.1			
Progression Factor	1.49	0.29	0.03	1.00	1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	8.1	0.6	0.0	7.4	1.6	0.1	0.4	1.7	1.6			
Delay (s)	110.2	10.1	0.8	77.4	37.7	24.3	36.6	41.2	40.7			
Level of Service	F	B	A	E	D	C	D	D	D			
Approach Delay (s)		17.4			41.6			40.4			0.0	
Approach LOS		B			D			D			A	

Intersection Summary

HCM 2000 Control Delay	31.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	60.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Queues
11: Dixie Highway & County Line Road

Existing PM
1/5/2016



Lane Group	EBT	WBT	NBL	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	223	509	39	309	227	259	79
v/c Ratio	0.52	0.94	0.14	0.45	0.30	0.32	0.11
Control Delay	39.8	37.8	25.7	5.6	17.9	18.2	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.8	37.8	25.7	5.6	17.9	18.2	4.3
Queue Length 50th (ft)	60	76	16	0	79	91	0
Queue Length 95th (ft)	97	m#417	44	61	138	156	25
Internal Link Dist (ft)	628	59				2638	
Turn Bay Length (ft)							
Base Capacity (vph)	831	539	278	682	1129	1189	1038
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	17	0	0	5	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.94	0.14	0.46	0.20	0.22	0.08

Intersection Summary

- # 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.

HCM Signalized Intersection Capacity Analysis
 11: Dixie Highway & County Line Road

Existing PM
 1/5/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↔		↔		↔	↔	↑	↔
Traffic Volume (vph)	0	196	9	114	354	0	36	0	284	209	238	73
Future Volume (vph)	0	196	9	114	354	0	36	0	284	209	238	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5		4.5		4.5	4.5	4.5	4.5
Lane Util. Factor		0.95			1.00		1.00		1.00	1.00	1.00	1.00
Frt		0.99			1.00		1.00		0.85	1.00	1.00	0.85
Flt Protected		1.00			0.99		0.95		1.00	0.95	1.00	1.00
Satd. Flow (prot)		3515			1840		1770		1583	1770	1863	1583
Flt Permitted		1.00			0.99		0.51		1.00	0.95	1.00	1.00
Satd. Flow (perm)		3515			1840		948		1583	1770	1863	1583
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)	0	213	10	124	385	0	39	0	309	227	259	79
RTOR Reduction (vph)	0	4	0	0	0	0	0	0	218	0	0	45
Lane Group Flow (vph)	0	219	0	0	509	0	39	0	91	227	259	34
Turn Type		NA		Split	NA		D.Pm		Prot	custom	NA	Perm
Protected Phases		1		4	4				2		3	2 3
Permitted Phases							2			2		2 3
Actuated Green, G (s)		10.6			25.5		25.5		25.5	32.9	37.4	37.4
Effective Green, g (s)		10.6			25.5		25.5		25.5	32.9	37.4	37.4
Actuated g/C Ratio		0.12			0.29		0.29		0.29	0.38	0.43	0.43
Clearance Time (s)		4.5			4.5		4.5		4.5	4.5		
Vehicle Extension (s)		3.0			3.0		3.0		3.0	3.0		
Lane Grp Cap (vph)		428			539		277		463	760	800	680
v/s Ratio Prot		c0.06			c0.28				0.06	0.03	c0.14	
v/s Ratio Perm							0.04			0.10		0.02
v/c Ratio		0.51			0.94		0.14		0.20	0.30	0.32	0.05
Uniform Delay, d1		35.8			30.1		22.7		23.1	19.3	16.4	14.4
Progression Factor		1.00			0.38		1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2		1.0			20.5		1.1		0.9	0.2	0.2	0.0
Delay (s)		36.8			31.8		23.7		24.0	19.5	16.7	14.5
Level of Service		D			C		C		C	B	B	B
Approach Delay (s)		36.8			31.8			24.0			17.5	
Approach LOS		D			C			C			B	

Intersection Summary		
HCM 2000 Control Delay	25.9	HCM 2000 Level of Service C
HCM 2000 Volume to Capacity ratio	0.60	
Actuated Cycle Length (s)	87.0	Sum of lost time (s) 18.0
Intersection Capacity Utilization	61.1%	ICU Level of Service B
Analysis Period (min)	15	

c Critical Lane Group

Queues
12: County Line Road & 1st Avenue

Existing PM
1/5/2016



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	457	297	352	289	9	162
v/c Ratio	0.43	0.28	0.86	0.53	0.02	0.28
Control Delay	4.9	0.6	51.9	30.7	23.6	5.7
Queue Delay	0.1	0.1	1.4	0.0	0.0	0.2
Total Delay	5.0	0.7	53.2	30.7	23.6	5.9
Queue Length 50th (ft)	46	0	181	131	3	0
Queue Length 95th (ft)	44	0	#364	227	16	46
Internal Link Dist (ft)	59			64	2634	
Turn Bay Length (ft)						
Base Capacity (vph)	1638	1487	410	546	546	578
Starvation Cap Reductn	266	449	0	0	0	0
Spillback Cap Reductn	0	0	10	0	0	79
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.29	0.88	0.53	0.02	0.32

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
 12: County Line Road & 1st Avenue

Existing PM
 1/5/2016



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	420	273	324	266	8	149
Future Volume (vph)	420	273	324	266	8	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1583	1770	1863	1863	1583
Flt Permitted	0.95	1.00	0.75	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583	1400	1863	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	457	297	352	289	9	162
RTOR Reduction (vph)	0	118	0	0	0	115
Lane Group Flow (vph)	457	179	352	289	9	47
Turn Type	Prot	Prot	Perm	NA	NA	Prot
Protected Phases	5	5		8	8	8
Permitted Phases			8			
Actuated Green, G (s)	52.5	52.5	25.5	25.5	25.5	25.5
Effective Green, g (s)	52.5	52.5	25.5	25.5	25.5	25.5
Actuated g/C Ratio	0.60	0.60	0.29	0.29	0.29	0.29
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1068	955	410	546	546	463
v/s Ratio Prot	c0.26	0.11		0.16	0.00	0.03
v/s Ratio Perm			c0.25			
v/c Ratio	0.43	0.19	0.86	0.53	0.02	0.10
Uniform Delay, d1	9.2	7.7	29.0	25.7	21.8	22.4
Progression Factor	0.39	0.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.1	20.2	3.6	0.1	0.4
Delay (s)	3.9	0.1	49.3	29.4	21.9	22.9
Level of Service	A	A	D	C	C	C
Approach Delay (s)	2.4			40.3	22.8	
Approach LOS	A			D	C	

Intersection Summary

HCM 2000 Control Delay	20.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	87.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	55.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
 13: E 1st Avenue & NE 214th Terr

Existing PM
 1/5/2016



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						144
pX, platoon unblocked						
vC, conflicting volume	0	0			0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0	0			0	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	1023	1085			1623	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	0	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS	A		
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A		

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

HCM Unsignalized Intersection Capacity Analysis
 14: SE 3rd Ave & SE 10th Ct

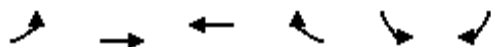
Existing PM
 1/5/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	4	4	0	0	23	65	0	0	0	3	0	3
Future Volume (Veh/h)	4	4	0	0	23	65	0	0	0	3	0	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	4	4	0	0	25	71	0	0	0	3	0	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	96			4			76	108	4	72	72	60
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	96			4			76	108	4	72	72	60
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	100	100	100
cM capacity (veh/h)	1498			1618			910	780	1080	917	816	1005
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	8	96	0	6								
Volume Left	4	0	0	3								
Volume Right	0	71	0	3								
cSH	1498	1618	1700	959								
Volume to Capacity	0.00	0.00	0.00	0.01								
Queue Length 95th (ft)	0	0	0	0								
Control Delay (s)	3.7	0.0	0.0	8.8								
Lane LOS	A		A	A								
Approach Delay (s)	3.7	0.0	0.0	8.8								
Approach LOS			A	A								
Intersection Summary												
Average Delay			0.7									
Intersection Capacity Utilization			15.2%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 37: NE 214th Terr & SE 3rd Ave

Existing PM
 1/5/2016



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↘	↙
Traffic Volume (veh/h)	0	7	8	1	1	78
Future Volume (Veh/h)	0	7	8	1	1	78
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	8	9	1	1	85
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	10				18	10
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	10				18	10
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	92
cM capacity (veh/h)	1610				1000	1072

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	8	10	86
Volume Left	0	0	1
Volume Right	0	1	85
cSH	1610	1700	1071
Volume to Capacity	0.00	0.01	0.08
Queue Length 95th (ft)	0	0	7
Control Delay (s)	0.0	0.0	8.7
Lane LOS			A
Approach Delay (s)	0.0	0.0	8.7
Approach LOS			A

Intersection Summary			
Average Delay		7.2	
Intersection Capacity Utilization		14.9%	ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis

41: Optima Office Drive

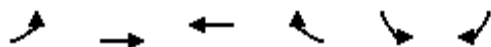
Existing PM
1/5/2016



Movement	EBL	EBR	NBL	NBT	SBT	SBR			
Lane Configurations		↗	↖	↑↑↑	↑↑↑				
Traffic Volume (veh/h)	0	40	0	2135	1945	13			
Future Volume (Veh/h)	0	40	0	2135	1945	13			
Sign Control	Stop			Free		Free			
Grade	0%			0%		0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Hourly flow rate (vph)	0	43	0	2321	2114	14			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type				None	None				
Median storage (veh)									
Upstream signal (ft)				500	754				
pX, platoon unblocked	0.76	0.80	0.80						
vC, conflicting volume	2895	712	2128						
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	637	0	1550						
tC, single (s)	6.8	6.9	4.1						
tC, 2 stage (s)									
tF (s)	3.5	3.3	2.2						
p0 queue free %	100	95	100						
cM capacity (veh/h)	310	872	341						
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	
Volume Total	43	0	774	774	774	846	846	437	
Volume Left	0	0	0	0	0	0	0	0	
Volume Right	43	0	0	0	0	0	0	14	
cSH	872	1700	1700	1700	1700	1700	1700	1700	
Volume to Capacity	0.05	0.00	0.46	0.46	0.46	0.50	0.50	0.26	
Queue Length 95th (ft)	4	0	0	0	0	0	0	0	
Control Delay (s)	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Lane LOS	A								
Approach Delay (s)	9.3	0.0					0.0		
Approach LOS	A								
Intersection Summary									
Average Delay			0.1						
Intersection Capacity Utilization			47.9%		ICU Level of Service		A		
Analysis Period (min)	15								

HCM Unsignalized Intersection Capacity Analysis
46: Optima Drive

Existing PM
1/5/2016



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	0				0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0				0	0
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1623				1023	1085

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	0	0	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS			A
Approach Delay (s)	0.0	0.0	0.0
Approach LOS			A

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

Queues

Future Total AM

1: Biscayne Boulevard & NE 213th Street

1/6/2016



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	239	558	1624	143	430	2416
v/c Ratio	0.65	0.70	0.60	0.16	0.87	0.57
Control Delay	76.6	9.7	28.9	8.5	73.0	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	76.6	9.7	28.9	8.5	73.0	4.9
Queue Length 50th (ft)	125	0	423	21	430	239
Queue Length 95th (ft)	168	59	574	71	524	324
Internal Link Dist (ft)	379		211			420
Turn Bay Length (ft)						
Base Capacity (vph)	525	899	2691	885	625	4253
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.62	0.60	0.16	0.69	0.57

Intersection Summary

HCM Signalized Intersection Capacity Analysis
 1: Biscayne Boulevard & NE 213th Street

Future Total AM
 1/6/2016



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↶↶	↷↷	↑↑↑	↷	↶	↑↑↑
Traffic Volume (vph)	220	513	1494	132	396	2223
Future Volume (vph)	220	513	1494	132	396	2223
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	0.97	0.88	0.91	1.00	1.00	0.91
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	2787	5085	1583	1770	5085
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	2787	5085	1583	1770	5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	239	558	1624	143	430	2416
RTOR Reduction (vph)	0	498	0	48	0	0
Lane Group Flow (vph)	239	60	1624	95	430	2416
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	17.2	17.2	84.7	84.7	44.6	133.8
Effective Green, g (s)	17.2	17.2	84.7	84.7	44.6	133.8
Actuated g/C Ratio	0.11	0.11	0.53	0.53	0.28	0.84
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	369	299	2691	838	493	4252
v/s Ratio Prot	c0.07		c0.32		c0.24	0.48
v/s Ratio Perm		0.02		0.06		
v/c Ratio	0.65	0.20	0.60	0.11	0.87	0.57
Uniform Delay, d1	68.5	65.1	26.0	18.9	55.0	4.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.9	0.3	1.0	0.3	15.5	0.6
Delay (s)	72.4	65.5	27.0	19.1	70.5	4.6
Level of Service	E	E	C	B	E	A
Approach Delay (s)	67.5		26.4			14.6
Approach LOS	E		C			B

Intersection Summary

HCM 2000 Control Delay	26.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Queues
2: US 1 & SE 9th Street

Future Total AM
1/6/2016



Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	126	14	13	4	103	2135	26	23	3250
v/c Ratio	0.73	0.21	0.19	0.02	0.72	0.56	0.02	0.20	0.92
Control Delay	58.5	83.0	82.2	0.2	98.2	11.5	0.0	81.0	29.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.5	83.0	82.2	0.2	98.2	11.5	0.0	81.0	29.0
Queue Length 50th (ft)	63	15	14	0	109	397	0	12	1109
Queue Length 95th (ft)	134	43	41	0	173	538	0	29	#1500
Internal Link Dist (ft)	1532		73			674			1939
Turn Bay Length (ft)									
Base Capacity (vph)	242	241	243	327	188	3839	1222	356	3515
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.06	0.05	0.01	0.55	0.56	0.02	0.06	0.92

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis

Future Total AM

2: US 1 & SE 9th Street

1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↖	↖	↖	↖	↑↑↑	↖	↖↖	↑↑↑	
Traffic Volume (vph)	24	7	85	24	1	4	95	1964	24	21	2979	11
Future Volume (vph)	24	7	85	24	1	4	95	1964	24	21	2979	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5		6.5	6.5	6.5	7.0	7.0	7.0	7.0	4.5	
Lane Util. Factor		1.00		0.95	0.95	1.00	1.00	0.91	1.00	0.97	0.91	
Frt		0.90		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.99		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1662		1681	1692	1583	1770	5085	1583	3433	5082	
Flt Permitted		0.99		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1662		1681	1692	1583	1770	5085	1583	3433	5082	
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)	26	8	92	26	1	4	103	2135	26	23	3238	12
RTOR Reduction (vph)	0	63	0	0	0	4	0	0	7	0	0	0
Lane Group Flow (vph)	0	63	0	14	13	0	103	2135	19	23	3250	0
Turn Type	Split	NA		Split	NA	Prot	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8	8	5	2		1	6	
Permitted Phases									2			
Actuated Green, G (s)		10.9		4.1	4.1	4.1	13.4	118.1	118.1	3.4	110.6	
Effective Green, g (s)		10.9		4.1	4.1	4.1	13.4	118.1	118.1	3.4	110.6	
Actuated g/C Ratio		0.07		0.03	0.03	0.03	0.08	0.72	0.72	0.02	0.68	
Clearance Time (s)		6.5		6.5	6.5	6.5	7.0	7.0	7.0	7.0	4.5	
Vehicle Extension (s)		2.0		2.0	2.0	2.0	1.5	3.0	3.0	1.5	3.0	
Lane Grp Cap (vph)		110		42	42	39	145	3673	1143	71	3437	
v/s Ratio Prot		c0.04		c0.01	0.01	0.00	c0.06	c0.42		0.01	c0.64	
v/s Ratio Perm									0.01			
v/c Ratio		0.58		0.33	0.31	0.00	0.71	0.58	0.02	0.32	0.95	
Uniform Delay, d1		74.1		78.4	78.3	77.7	73.2	10.9	6.4	78.9	23.7	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		4.5		1.7	1.5	0.0	12.8	0.7	0.0	1.0	7.1	
Delay (s)		78.6		80.1	79.8	77.7	85.9	11.5	6.4	79.9	30.8	
Level of Service		E		F	E	E	F	B	A	E	C	
Approach Delay (s)		78.6			79.7			14.9			31.2	
Approach LOS		E			E			B			C	

Intersection Summary

HCM 2000 Control Delay	26.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	163.5	Sum of lost time (s)	27.0
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Queues
3: US 1 & 3 rd Street

Future Total AM
1/6/2016



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	163	575	61	9	10	76	1380	18	51	2118
v/c Ratio	0.37	1.15	0.55	0.08	0.04	0.64	0.76	0.02	0.37	0.88
Control Delay	52.5	131.4	90.6	70.0	0.2	95.6	36.5	0.1	62.5	57.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.5	131.4	90.6	70.0	0.2	95.6	36.5	0.1	62.5	57.6
Queue Length 50th (ft)	142	-611	63	9	0	79	630	0	28	713
Queue Length 95th (ft)	217	#855	114	29	0	135	787	0	m32	m715
Internal Link Dist (ft)		717		185			1939			1261
Turn Bay Length (ft)			150		150	300		375		
Base Capacity (vph)	442	498	420	442	750	188	1821	867	364	2403
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	1.15	0.15	0.02	0.01	0.40	0.76	0.02	0.14	0.88

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

Future Total AM

3: US 1 & 3 rd Street

1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↗↖	↖	↗↗	↗	↖↗	↗↗↗	↗↗↗
Traffic Volume (vph)	150	108	421	56	8	9	70	1270	17	47	1942	6
Future Volume (vph)	150	108	421	56	8	9	70	1270	17	47	1942	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	0.88	1.00	0.95	1.00	0.97	0.91	
Frt	1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1640		1770	1863	2787	1770	3539	1583	3433	5083	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1640		1770	1863	2787	1770	3539	1583	3433	5083	
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)	163	117	458	61	9	10	76	1380	18	51	2111	7
RTOR Reduction (vph)	0	88	0	0	0	9	0	0	9	0	0	0
Lane Group Flow (vph)	163	487	0	61	9	1	76	1380	9	51	2118	0
Turn Type	Split	NA		Split	NA	Prot	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8	8	5	2		1	6	
Permitted Phases									2			
Actuated Green, G (s)	40.0	40.0		8.8	8.8	8.8	10.8	79.8	79.8	5.4	74.4	
Effective Green, g (s)	40.0	40.0		8.8	8.8	8.8	10.8	79.8	79.8	5.4	74.4	
Actuated g/C Ratio	0.25	0.25		0.06	0.06	0.06	0.07	0.50	0.50	0.03	0.47	
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	1.5	3.0	3.0	1.5	3.0	
Lane Grp Cap (vph)	442	410		97	102	153	119	1765	789	115	2363	
v/s Ratio Prot	0.09	c0.30		c0.03	0.00	0.00	c0.04	c0.39		0.01	c0.42	
v/s Ratio Perm									0.01			
v/c Ratio	0.37	1.19		0.63	0.09	0.00	0.64	0.78	0.01	0.44	0.90	
Uniform Delay, d1	49.6	60.0		74.0	71.8	71.5	72.7	32.9	20.2	75.8	39.3	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.80	1.44	
Incremental Delay, d2	0.2	106.8		8.8	0.1	0.0	8.0	3.5	0.0	0.3	2.2	
Delay (s)	49.8	166.8		82.8	71.9	71.5	80.7	36.5	20.2	61.3	58.8	
Level of Service	D	F		F	E	E	F	D	C	E	E	
Approach Delay (s)		140.9			80.2			38.6			58.9	
Approach LOS		F			F			D			E	

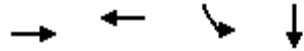
Intersection Summary

HCM 2000 Control Delay	66.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.0
Intersection Capacity Utilization	100.1%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

4: Dixie Highway & 3rd Street

1/6/2016



Lane Group	EBT	WBT	SBL	SBT
Lane Group Flow (vph)	306	171	500	834
v/c Ratio	0.84	0.22	0.96	0.56
Control Delay	69.8	6.0	75.7	38.3
Queue Delay	16.7	4.3	43.0	0.0
Total Delay	86.5	10.3	118.8	38.3
Queue Length 50th (ft)	247	6	417	206
Queue Length 95th (ft)	346	9	#677	261
Internal Link Dist (ft)	99	25		1263
Turn Bay Length (ft)				
Base Capacity (vph)	425	767	522	1487
Starvation Cap Reductn	0	516	0	0
Spillback Cap Reductn	107	0	119	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.96	0.68	1.24	0.56

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis

4: Dixie Highway & 3rd Street

Future Total AM

1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔					↔	↔↔↔	
Traffic Volume (vph)	0	274	7	28	130	0	0	0	0	460	611	156
Future Volume (vph)	0	274	7	28	130	0	0	0	0	460	611	156
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5					3.0	3.0	
Lane Util. Factor		1.00			1.00					1.00	0.91	
Frt		1.00			1.00					1.00	0.97	
Flt Protected		1.00			0.99					0.95	1.00	
Satd. Flow (prot)		1856			1847					1770	4930	
Flt Permitted		1.00			0.99					0.95	1.00	
Satd. Flow (perm)		1856			1847					1770	4930	
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)	0	298	8	30	141	0	0	0	0	500	664	170
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	0	0	36	0
Lane Group Flow (vph)	0	305	0	0	171	0	0	0	0	500	798	0
Turn Type		NA		Split	NA					Split	NA	
Protected Phases		4		2	2					1 9	1 9	
Permitted Phases												
Actuated Green, G (s)		25.3			53.5					38.0	38.0	
Effective Green, g (s)		25.3			53.5					33.5	33.5	
Actuated g/C Ratio		0.20			0.42					0.26	0.26	
Clearance Time (s)		4.5			4.5							
Vehicle Extension (s)		3.0			3.0							
Lane Grp Cap (vph)		364			767					460	1282	
v/s Ratio Prot		c0.16			c0.09					c0.28	0.16	
v/s Ratio Perm												
v/c Ratio		0.84			0.22					1.09	0.62	
Uniform Delay, d1		49.8			24.3					47.7	42.1	
Progression Factor		1.00			0.21					1.00	1.00	
Incremental Delay, d2		15.4			0.7					67.5	0.9	
Delay (s)		65.2			5.9					115.1	43.0	
Level of Service		E			A					F	D	
Approach Delay (s)		65.2			5.9			0.0			70.1	
Approach LOS		E			A			A			E	

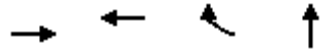
Intersection Summary

HCM 2000 Control Delay	63.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	128.8	Sum of lost time (s)	16.5
Intersection Capacity Utilization	59.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Queues
5: 1st Avenue & 3rd Street

Future Total AM
1/6/2016



Lane Group	EBT	WBT	WBR	NBT
Lane Group Flow (vph)	715	89	80	363
v/c Ratio	0.97	0.53	0.33	0.25
Control Delay	33.6	67.4	7.0	25.5
Queue Delay	44.5	0.1	0.0	0.0
Total Delay	78.1	67.6	7.0	25.5
Queue Length 50th (ft)	347	73	0	103
Queue Length 95th (ft)	m#694	126	21	148
Internal Link Dist (ft)	25	225		2634
Turn Bay Length (ft)				
Base Capacity (vph)	757	448	467	1464
Starvation Cap Reductn	167	0	0	0
Spillback Cap Reductn	0	71	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	1.21	0.24	0.17	0.25

Intersection Summary

- # 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.

HCM Signalized Intersection Capacity Analysis

5: 1st Avenue & 3rd Street

Future Total AM
1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↑	↗		↕↗				
Traffic Volume (vph)	45	613	0	0	82	74	77	249	7	0	0	0
Future Volume (vph)	45	613	0	0	82	74	77	249	7	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			3.0	3.0		4.5				
Lane Util. Factor		1.00			1.00	1.00		0.95				
Frt		1.00			1.00	0.85		1.00				
Flt Protected		1.00			1.00	1.00		0.99				
Satd. Flow (prot)		1856			1863	1583		3487				
Flt Permitted		1.00			1.00	1.00		0.99				
Satd. Flow (perm)		1856			1863	1583		3487				
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)	49	666	0	0	89	80	84	271	8	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	73	0	1	0	0	0	0
Lane Group Flow (vph)	0	715	0	0	89	7	0	362	0	0	0	0
Turn Type	Split	NA			NA	Perm	Split	NA				
Protected Phases	8	8			7		10 3	10 3				
Permitted Phases						7						
Actuated Green, G (s)		51.3			11.5	11.5		55.5				
Effective Green, g (s)		51.3			11.5	11.5		55.5				
Actuated g/C Ratio		0.40			0.09	0.09		0.43				
Clearance Time (s)		4.5			3.0	3.0						
Vehicle Extension (s)		3.0			3.0	3.0						
Lane Grp Cap (vph)		739			166	141		1502				
v/s Ratio Prot		c0.39			c0.05			c0.10				
v/s Ratio Perm						0.00						
v/c Ratio		0.97			0.54	0.05		0.24				
Uniform Delay, d1		37.9			56.1	53.7		23.3				
Progression Factor		0.40			1.00	1.00		1.00				
Incremental Delay, d2		15.4			3.3	0.1		0.1				
Delay (s)		30.6			59.4	53.8		23.4				
Level of Service		C			E	D		C				
Approach Delay (s)		30.6			56.8			23.4			0.0	
Approach LOS		C			E			C			A	

Intersection Summary

HCM 2000 Control Delay	32.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	128.8	Sum of lost time (s)	16.5
Intersection Capacity Utilization	59.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

6: US 1 & Hallandale Beach Boulevard

1/6/2016



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	200	1444	672	1229	346	777	378	517	1293
v/c Ratio	0.90	0.83	1.46	0.86	0.83	0.58	0.51	0.99	0.69
Control Delay	108.0	57.0	266.2	42.5	112.6	39.3	8.2	102.7	53.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	108.0	57.0	266.2	42.5	112.6	39.3	8.2	102.7	53.0
Queue Length 50th (ft)	207	396	~505	248	197	153	36	~302	356
Queue Length 95th (ft)	#347	443	#612	355	253	226	33	#422	410
Internal Link Dist (ft)		1701		611		1261			282
Turn Bay Length (ft)							445	420	
Base Capacity (vph)	237	1790	461	1436	493	1334	747	523	1867
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.81	1.46	0.86	0.70	0.58	0.51	0.99	0.69

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis
6: US 1 & Hallandale Beach Boulevard

Future Total AM
1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑		↖↖	↑↑↑		↖↖	↑↑↑	↗	↖↖	↑↑↑	
Traffic Volume (vph)	184	977	351	618	1025	106	318	715	348	476	1145	44
Future Volume (vph)	184	977	351	618	1025	106	318	715	348	476	1145	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5		6.5	6.5		7.0	8.0	6.5	7.0	8.0	
Lane Util. Factor	1.00	0.86		0.97	0.91		0.97	0.91	1.00	0.97	0.86	
Frt	1.00	0.96		1.00	0.99		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	6154		3433	5014		3433	5085	1583	3433	6372	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	6154		3433	5014		3433	5085	1583	3433	6372	
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)	200	1062	382	672	1114	115	346	777	378	517	1245	48
RTOR Reduction (vph)	0	41	0	0	8	0	0	0	43	0	3	0
Lane Group Flow (vph)	200	1403	0	672	1221	0	346	777	335	517	1290	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	20.1	44.1		21.5	45.5		19.6	42.0	63.5	24.4	46.8	
Effective Green, g (s)	20.1	44.1		21.5	45.5		19.6	42.0	63.5	24.4	46.8	
Actuated g/C Ratio	0.13	0.28		0.13	0.28		0.12	0.26	0.40	0.15	0.29	
Clearance Time (s)	6.5	6.5		6.5	6.5		7.0	8.0	6.5	7.0	8.0	
Vehicle Extension (s)	1.5	2.5		1.5	2.5		1.5	2.5	1.5	1.5	2.5	
Lane Grp Cap (vph)	222	1696		461	1425		420	1334	628	523	1863	
v/s Ratio Prot	0.11	0.23		c0.20	c0.24		0.10	0.15	0.07	c0.15	c0.20	
v/s Ratio Perm									0.14			
v/c Ratio	0.90	0.83		1.46	0.86		0.82	0.58	0.53	0.99	0.69	
Uniform Delay, d1	69.0	54.4		69.2	54.2		68.5	51.4	36.9	67.7	50.2	
Progression Factor	1.00	1.00		1.14	0.68		1.47	0.74	0.26	1.00	1.00	
Incremental Delay, d2	34.2	3.4		216.3	4.6		8.4	1.3	0.3	35.9	2.1	
Delay (s)	103.2	57.8		294.9	41.3		109.3	39.1	9.8	103.6	52.4	
Level of Service	F	E		F	D		F	D	A	F	D	
Approach Delay (s)		63.3			131.0			47.9			67.0	
Approach LOS		E			F			D			E	

Intersection Summary

HCM 2000 Control Delay	79.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	88.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

7: Hallandale Beach Boulevard & Dixie Highway

1/6/2016



Lane Group	EBT	WBL	WBT	SBT
Lane Group Flow (vph)	1598	117	1543	1026
v/c Ratio	0.62	0.86	0.49	0.88
Control Delay	26.8	120.7	3.0	68.6
Queue Delay	0.1	82.4	0.3	0.0
Total Delay	26.9	203.0	3.3	68.6
Queue Length 50th (ft)	391	100	75	284
Queue Length 95th (ft)	440	m#204	m79	329
Internal Link Dist (ft)	2134		49	537
Turn Bay Length (ft)				
Base Capacity (vph)	2575	136	3156	1165
Starvation Cap Reductn	0	89	855	0
Spillback Cap Reductn	155	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.66	2.49	0.67	0.88

Intersection Summary

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.

HCM Signalized Intersection Capacity Analysis
7: Hallandale Beach Boulevard & Dixie Highway

Future Total AM
1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↔	↑↑↑						↑↑↑	
Traffic Volume (vph)	0	1293	178	108	1420	0	0	0	0	224	682	39
Future Volume (vph)	0	1293	178	108	1420	0	0	0	0	224	682	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5		4.5	4.5						4.5	
Lane Util. Factor		0.91		1.00	0.91						0.86	
Frt		0.98		1.00	1.00						0.99	
Flt Protected		1.00		0.95	1.00						0.99	
Satd. Flow (prot)		4993		1770	5085						6294	
Flt Permitted		1.00		0.95	1.00						0.99	
Satd. Flow (perm)		4993		1770	5085						6294	
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)	0	1405	193	117	1543	0	0	0	0	243	741	42
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	1586	0	117	1543	0	0	0	0	0	1022	0
Turn Type		NA		Prot	NA					Perm	NA	
Protected Phases		2 3		1	1 2 3						4	
Permitted Phases										4		
Actuated Green, G (s)		76.5		11.5	92.5						27.5	
Effective Green, g (s)		76.5		11.5	92.5						27.5	
Actuated g/C Ratio		0.51		0.08	0.62						0.18	
Clearance Time (s)				4.5							4.5	
Vehicle Extension (s)				3.0							3.0	
Lane Grp Cap (vph)		2563		136	3156						1161	
v/s Ratio Prot		c0.32		c0.07	0.30							
v/s Ratio Perm											0.16	
v/c Ratio		0.62		0.86	0.49						0.88	
Uniform Delay, d1		25.9		68.0	15.4						59.1	
Progression Factor		1.00		1.27	0.17						1.00	
Incremental Delay, d2		0.5		30.9	0.1						8.0	
Delay (s)		26.3		116.9	2.7						67.2	
Level of Service		C		F	A						E	
Approach Delay (s)		26.3			10.7			0.0			67.2	
Approach LOS		C			B			A			E	

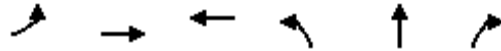
Intersection Summary

HCM 2000 Control Delay	30.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	149.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	90.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Queues
8: 1st Avenue & Hallandale Beach Boulevard

Future Total AM
1/6/2016



Lane Group	EBL	EBT	WBT	NBL	NBT	NBR
Lane Group Flow (vph)	34	1578	1486	216	173	74
v/c Ratio	0.06	0.37	0.60	1.17	0.90	0.28
Control Delay	28.7	0.4	29.0	176.3	107.5	5.6
Queue Delay	34.6	0.3	0.4	13.6	0.0	0.0
Total Delay	63.3	0.7	29.5	189.9	107.5	5.6
Queue Length 50th (ft)	25	2	376	~250	169	0
Queue Length 95th (ft)	m41	10	425	#423	#310	18
Internal Link Dist (ft)		49	1701		1266	
Turn Bay Length (ft)						
Base Capacity (vph)	564	4248	2467	184	193	263
Starvation Cap Reductn	521	1778	0	0	0	0
Spillback Cap Reductn	0	0	463	90	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.64	0.74	2.30	0.90	0.28

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
8: 1st Avenue & Hallandale Beach Boulevard

Future Total AM
1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑			↑↑↑		↖	↑	↗			
Traffic Volume (vph)	31	1452	0	0	1344	23	199	159	68	0	0	0
Future Volume (vph)	31	1452	0	0	1344	23	199	159	68	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5			4.5		4.5	4.5	4.5			
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00	1.00			
Frt	1.00	1.00			1.00		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1770	5085			5072		1770	1863	1583			
Flt Permitted	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1770	5085			5072		1770	1863	1583			
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)	34	1578	0	0	1461	25	216	173	74	0	0	0
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	66	0	0	0
Lane Group Flow (vph)	34	1578	0	0	1485	0	216	173	8	0	0	0
Turn Type	Prot	NA			NA		Perm	NA	Perm			
Protected Phases	8 9	6 7 8 9			6 7			10				
Permitted Phases							10		10			
Actuated Green, G (s)	47.5	124.5			72.5		15.5	15.5	15.5			
Effective Green, g (s)	47.5	124.5			72.5		15.5	15.5	15.5			
Actuated g/C Ratio	0.32	0.84			0.49		0.10	0.10	0.10			
Clearance Time (s)							4.5	4.5	4.5			
Vehicle Extension (s)							3.0	3.0	3.0			
Lane Grp Cap (vph)	564	4248			2467		184	193	164			
v/s Ratio Prot	0.02	c0.31			c0.29			0.09				
v/s Ratio Perm							c0.12		0.00			
v/c Ratio	0.06	0.37			0.60		1.17	0.90	0.05			
Uniform Delay, d1	35.2	2.9			27.8		66.8	66.0	60.1			
Progression Factor	0.80	0.07			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.0			0.4		121.0	37.0	0.1			
Delay (s)	28.3	0.2			28.2		187.7	103.0	60.2			
Level of Service	C	A			C		F	F	E			
Approach Delay (s)		0.8			28.2			135.7			0.0	
Approach LOS		A			C			F			A	

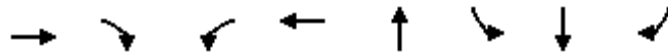
Intersection Summary

HCM 2000 Control Delay	29.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	149.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	90.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

9: Hallandale Beach Boulevard & E 8th Avenue

1/6/2016



Lane Group	EBT	EBR	WBL	WBT	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	1838	53	28	1572	109	185	1	200
v/c Ratio	0.78	0.07	0.24	0.61	0.66	0.32	0.00	0.34
Control Delay	38.1	4.6	30.4	15.9	82.3	46.6	46.0	21.6
Queue Delay	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.4	4.6	30.4	15.9	82.3	46.6	46.0	21.6
Queue Length 50th (ft)	365	4	7	128	103	155	1	68
Queue Length 95th (ft)	m401	m8	m20	183	167	250	7	156
Internal Link Dist (ft)	611			578	210		703	
Turn Bay Length (ft)						150		150
Base Capacity (vph)	2388	779	188	2860	230	576	607	593
Starvation Cap Reductn	126	0	0	11	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.07	0.15	0.55	0.47	0.32	0.00	0.34

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
 9: Hallandale Beach Boulevard & E 8th Avenue

Future Total AM
 1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑	↑	↑↑↑			↑↓		↑	↑	↑
Traffic Volume (vph)	0	1691	49	26	1446	0	73	2	26	170	1	184
Future Volume (vph)	0	1691	49	26	1446	0	73	2	26	170	1	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.5	4.0			4.5		4.0	4.0	4.0
Lane Util. Factor		0.91	1.00	1.00	0.91			1.00		1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00			0.97		1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00			0.97		0.95	1.00	1.00
Satd. Flow (prot)		5085	1583	1770	5085			1735		1770	1863	1583
Flt Permitted		1.00	1.00	0.05	1.00			0.97		0.95	1.00	1.00
Satd. Flow (perm)		5085	1583	95	5085			1735		1770	1863	1583
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)	0	1838	53	28	1572	0	79	2	28	185	1	200
RTOR Reduction (vph)	0	0	29	0	0	0	0	8	0	0	0	79
Lane Group Flow (vph)	0	1838	24	28	1572	0	0	101	0	185	1	121
Turn Type		NA	Perm	pm+pt	NA		Split	NA		Split	NA	Perm
Protected Phases		4		3	8		2	2		6	6	
Permitted Phases			4	8								6
Actuated Green, G (s)		73.8	73.8	82.6	82.6			14.6		50.3	50.3	50.3
Effective Green, g (s)		73.8	73.8	82.6	82.6			14.6		50.3	50.3	50.3
Actuated g/C Ratio		0.46	0.46	0.52	0.52			0.09		0.31	0.31	0.31
Clearance Time (s)		4.0	4.0	4.5	4.0			4.5		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		2345	730	94	2625			158		556	585	497
v/s Ratio Prot		c0.36		0.01	c0.31			c0.06		c0.10	0.00	
v/s Ratio Perm			0.02	0.15								0.08
v/c Ratio		0.78	0.03	0.30	0.60			0.64		0.33	0.00	0.24
Uniform Delay, d1		36.4	23.6	28.4	27.1			70.2		42.0	37.6	40.7
Progression Factor		1.01	1.73	1.55	0.54			1.00		1.00	1.00	1.00
Incremental Delay, d2		1.0	0.0	1.4	0.3			8.2		1.6	0.0	1.2
Delay (s)		37.7	40.9	45.3	14.8			78.3		43.6	37.6	41.9
Level of Service		D	D	D	B			E		D	D	D
Approach Delay (s)		37.8			15.4			78.3			42.7	
Approach LOS		D			B			E			D	

Intersection Summary

HCM 2000 Control Delay	30.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	55.5%	ICU Level of Service	B
Analysis Period (min)	15		

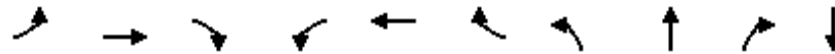
c Critical Lane Group

Queues

Future Total AM

10: Hallandale Beach Boulevard & E 10th Avenue

1/6/2016



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	89	1829	50	120	1529	63	29	30	128	1
v/c Ratio	0.60	0.72	0.06	0.51	0.62	0.08	0.05	0.05	0.20	0.01
Control Delay	114.0	8.3	0.3	79.3	31.4	3.0	40.1	40.0	7.4	0.0
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	114.0	8.5	0.3	79.3	31.4	3.0	40.1	40.0	7.4	0.0
Queue Length 50th (ft)	99	87	0	63	424	0	21	22	0	0
Queue Length 95th (ft)	m132	78	m0	97	420	20	54	56	54	0
Internal Link Dist (ft)		578			589			252		700
Turn Bay Length (ft)	180		65	475		180				
Base Capacity (vph)	459	2802	891	375	2456	801	586	606	635	102
Starvation Cap Reductn	0	206	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.70	0.06	0.32	0.62	0.08	0.05	0.05	0.20	0.01

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
 10: Hallandale Beach Boulevard & E 10th Avenue

Future Total AM
 1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	1683	46	110	1407	58	36	18	118	0	0	1
Future Volume (vph)	82	1683	46	110	1407	58	36	18	118	0	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.95	0.95	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.98	1.00		1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5085	1583	1681	1741	1583		0	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.98	1.00		1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5085	1583	1681	1741	1583		0	
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)	89	1829	50	120	1529	63	39	20	128	0	0	1
RTOR Reduction (vph)	0	0	21	0	0	33	0	0	83	0	1	0
Lane Group Flow (vph)	89	1829	29	120	1529	30	29	30	45	0	0	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm			
Protected Phases	7	4		3	8		5	2				
Permitted Phases			4			8			2			
Actuated Green, G (s)	13.4	79.8	79.8	10.9	77.3	77.3	55.8	55.8	55.8		0.0	
Effective Green, g (s)	13.4	79.8	79.8	10.9	77.3	77.3	55.8	55.8	55.8		0.0	
Actuated g/C Ratio	0.08	0.50	0.50	0.07	0.48	0.48	0.35	0.35	0.35		0.00	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5			
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	148	2536	789	233	2456	764	586	607	552		0	
v/s Ratio Prot	c0.05	c0.36		0.03	0.30		0.02	0.02				
v/s Ratio Perm			0.02			0.02			c0.03			
v/c Ratio	0.60	0.72	0.04	0.52	0.62	0.04	0.05	0.05	0.08		0.00	
Uniform Delay, d1	70.7	31.4	20.5	72.0	30.6	21.8	34.5	34.5	34.9		80.0	
Progression Factor	1.47	0.23	0.03	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2	4.6	0.7	0.0	1.9	0.5	0.0	0.2	0.2	0.3		0.0	
Delay (s)	108.3	7.9	0.7	73.9	31.1	21.8	34.7	34.7	35.2		80.0	
Level of Service	F	A	A	E	C	C	C	C	D		E	
Approach Delay (s)		12.2			33.7			35.0			80.0	
Approach LOS		B			C			D			E	

Intersection Summary

HCM 2000 Control Delay	22.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Queues

Future Total AM

11: Dixie Highway & County Line Road

1/6/2016

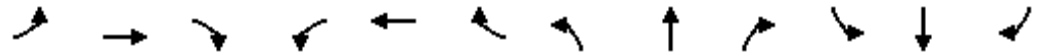


Lane Group	EBT	WBT	NBL	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	445	288	9	341	460	262	89
v/c Ratio	0.73	0.61	0.04	0.51	0.61	0.33	0.12
Control Delay	46.1	20.2	31.5	6.8	26.2	20.4	4.2
Queue Delay	0.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.9	20.2	31.5	6.8	26.2	20.4	4.2
Queue Length 50th (ft)	135	71	4	0	216	106	0
Queue Length 95th (ft)	212	78	19	75	333	173	27
Internal Link Dist (ft)	628	59				2638	
Turn Bay Length (ft)							
Base Capacity (vph)	743	474	233	665	1008	1061	940
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	102	0	0	10	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.61	0.04	0.52	0.46	0.25	0.09

Intersection Summary

HCM Signalized Intersection Capacity Analysis
 11: Dixie Highway & County Line Road

Future Total AM
 1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑		↑		↑	↑	↑	↑
Traffic Volume (vph)	0	397	12	139	126	0	8	0	314	423	241	82
Future Volume (vph)	0	397	12	139	126	0	8	0	314	423	241	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5		4.5		4.5	4.5	4.5	4.5
Lane Util. Factor		0.95			1.00		1.00		1.00	1.00	1.00	1.00
Frt		1.00			1.00		1.00		0.85	1.00	1.00	0.85
Flt Protected		1.00			0.97		0.95		1.00	0.95	1.00	1.00
Satd. Flow (prot)		3524			1815		1770		1583	1770	1863	1583
Flt Permitted		1.00			0.97		0.48		1.00	0.95	1.00	1.00
Satd. Flow (perm)		3524			1815		893		1583	1770	1863	1583
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)	0	432	13	151	137	0	9	0	341	460	262	89
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	252	0	0	51
Lane Group Flow (vph)	0	443	0	0	288	0	9	0	89	460	262	38
Turn Type		NA		Split	NA		D.Pm		Prot	custom	NA	Perm
Protected Phases		1		4	4				2		3	2 3
Permitted Phases							2			2		2 3
Actuated Green, G (s)		17.0			25.6		25.6		25.6	37.3	41.8	41.8
Effective Green, g (s)		17.0			25.6		25.6		25.6	37.3	41.8	41.8
Actuated g/C Ratio		0.17			0.26		0.26		0.26	0.38	0.43	0.43
Clearance Time (s)		4.5			4.5		4.5		4.5	4.5		
Vehicle Extension (s)		3.0			3.0		3.0		3.0	3.0		
Lane Grp Cap (vph)		611			474		233		413	755	795	675
v/s Ratio Prot		c0.13			c0.16				0.06	c0.07	0.14	
v/s Ratio Perm							0.01			0.19		0.02
v/c Ratio		0.73			0.61		0.04		0.22	0.61	0.33	0.06
Uniform Delay, d1		38.2			31.7		27.0		28.3	25.3	18.7	16.5
Progression Factor		1.00			0.44		1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2		4.3			2.1		0.3		1.2	1.4	0.2	0.0
Delay (s)		42.5			15.9		27.3		29.5	26.7	19.0	16.5
Level of Service		D			B		C		C	C	B	B
Approach Delay (s)		42.5			15.9			29.4			23.1	
Approach LOS		D			B			C			C	

Intersection Summary		
HCM 2000 Control Delay	27.7	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.67	C
Actuated Cycle Length (s)	97.9	Sum of lost time (s)
Intersection Capacity Utilization	65.5%	18.0
Analysis Period (min)	15	ICU Level of Service
		C

c Critical Lane Group

Queues
12: County Line Road & 1st Avenue

Future Total AM
1/6/2016



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	391	845	152	335	57	140
v/c Ratio	0.34	0.65	0.43	0.69	0.12	0.27
Control Delay	2.7	4.5	36.8	42.6	31.1	7.2
Queue Delay	0.3	0.6	0.1	0.0	0.0	0.1
Total Delay	3.0	5.1	36.9	42.6	31.1	7.3
Queue Length 50th (ft)	27	86	77	183	26	0
Queue Length 95th (ft)	27	98	162	#359	68	50
Internal Link Dist (ft)	59			64	2634	
Turn Bay Length (ft)						
Base Capacity (vph)	1462	1444	350	487	487	517
Starvation Cap Reductn	512	261	0	0	0	0
Spillback Cap Reductn	0	0	10	0	0	52
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.71	0.45	0.69	0.12	0.30

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
 12: County Line Road & 1st Avenue

Future Total AM
 1/6/2016



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	360	777	140	308	52	129
Future Volume (vph)	360	777	140	308	52	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1583	1770	1863	1863	1583
Flt Permitted	0.95	1.00	0.72	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583	1341	1863	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	391	845	152	335	57	140
RTOR Reduction (vph)	0	278	0	0	0	103
Lane Group Flow (vph)	391	567	152	335	57	37
Turn Type	Prot	Prot	Perm	NA	NA	Prot
Protected Phases	5	5		8	8	8
Permitted Phases			8			
Actuated Green, G (s)	63.3	63.3	25.6	25.6	25.6	25.6
Effective Green, g (s)	63.3	63.3	25.6	25.6	25.6	25.6
Actuated g/C Ratio	0.65	0.65	0.26	0.26	0.26	0.26
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1144	1023	350	487	487	413
v/s Ratio Prot	0.22	c0.36		c0.18	0.03	0.02
v/s Ratio Perm			0.11			
v/c Ratio	0.34	0.55	0.43	0.69	0.12	0.09
Uniform Delay, d1	7.8	9.5	30.1	32.6	27.5	27.3
Progression Factor	0.26	2.65	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.6	3.9	7.7	0.5	0.4
Delay (s)	2.2	25.8	34.0	40.3	28.0	27.8
Level of Service	A	C	C	D	C	C
Approach Delay (s)	18.3			38.3	27.8	
Approach LOS	B			D	C	

Intersection Summary

HCM 2000 Control Delay	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	97.9	Sum of lost time (s)	18.0
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
 13: E 1st Avenue & NE 214th Terr

Future Total AM
 1/6/2016



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						144
pX, platoon unblocked						
vC, conflicting volume	0	0			0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0	0			0	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	1023	1085			1623	

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	0	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS	A		
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A		

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

HCM Unsignalized Intersection Capacity Analysis
 14: SE 3rd Ave & SE 10th Ct

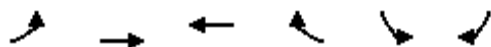
Future Total AM
 1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	1	28	47	136	5	1	9	12	24	23	68	1
Future Volume (Veh/h)	1	28	47	136	5	1	9	12	24	23	68	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	1	30	51	148	5	1	10	13	26	25	74	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	6			81			397	360	56	392	384	6
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	6			81			397	360	56	392	384	6
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			90			98	97	97	95	85	100
cM capacity (veh/h)	1615			1517			462	512	1011	502	495	1077
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	82	154	49	100								
Volume Left	1	148	10	25								
Volume Right	51	1	26	1								
cSH	1615	1517	673	500								
Volume to Capacity	0.00	0.10	0.07	0.20								
Queue Length 95th (ft)	0	8	6	18								
Control Delay (s)	0.1	7.4	10.8	14.0								
Lane LOS	A	A	B	B								
Approach Delay (s)	0.1	7.4	10.8	14.0								
Approach LOS			B	B								
Intersection Summary												
Average Delay			8.0									
Intersection Capacity Utilization			28.3%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 37: NE 214th Terr & SE 3rd Ave

Future Total AM
 1/6/2016



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↗	↖		↘	
Traffic Volume (veh/h)	39	10	5	2	0	62
Future Volume (Veh/h)	39	10	5	2	0	62
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	42	11	5	2	0	67
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	7				101	6
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	7				101	6
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				100	94
cM capacity (veh/h)	1614				874	1077

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	53	7	67
Volume Left	42	0	0
Volume Right	0	2	67
cSH	1614	1700	1077
Volume to Capacity	0.03	0.00	0.06
Queue Length 95th (ft)	2	0	5
Control Delay (s)	5.8	0.0	8.6
Lane LOS	A		A
Approach Delay (s)	5.8	0.0	8.6
Approach LOS			A

Intersection Summary			
Average Delay		6.9	
Intersection Capacity Utilization	19.9%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
41: Optima Office Drive

Future Total AM
1/6/2016



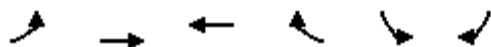
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗	↘	↑↑↑	↑↑↑	↘
Traffic Volume (veh/h)	0	125	204	1577	2655	516
Future Volume (Veh/h)	0	125	204	1577	2655	516
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	136	222	1714	2886	561
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)				500	754	
pX, platoon unblocked	0.45	0.35	0.35			
vC, conflicting volume	4182	1242	3447			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	765	0	1471			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	64	0			
cM capacity (veh/h)	0	377	158			

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	136	222	571	571	571	1154	1154	1138
Volume Left	0	222	0	0	0	0	0	0
Volume Right	136	0	0	0	0	0	0	561
cSH	377	158	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.36	1.41	0.34	0.34	0.34	0.68	0.68	0.67
Queue Length 95th (ft)	40	349	0	0	0	0	0	0
Control Delay (s)	19.8	269.9	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	C	F						
Approach Delay (s)	19.8	30.9				0.0		
Approach LOS	C							

Intersection Summary		
Average Delay		11.3
Intersection Capacity Utilization	80.8%	ICU Level of Service
Analysis Period (min)		15
		D

HCM Unsignalized Intersection Capacity Analysis
46: Optima Drive

Future Total AM
1/6/2016



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↖	↗		↘	
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	0				0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0				0	0
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1623				1023	1085
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS			A			
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS			A			
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			

Queues

Future Background AM

1/6/2016

1: Biscayne Boulevard & NE 213th Street



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	239	510	1540	143	422	2402
v/c Ratio	0.66	0.68	0.57	0.16	0.87	0.56
Control Delay	77.2	9.7	27.5	7.7	73.2	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	77.2	9.7	27.5	7.7	73.2	4.8
Queue Length 50th (ft)	125	0	388	18	422	236
Queue Length 95th (ft)	169	57	524	66	514	310
Internal Link Dist (ft)	379		211			420
Turn Bay Length (ft)						
Base Capacity (vph)	525	858	2719	895	625	4259
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.59	0.57	0.16	0.68	0.56

Intersection Summary

HCM Signalized Intersection Capacity Analysis

1: Biscayne Boulevard & NE 213th Street

Future Background AM

1/6/2016



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	220	469	1417	132	388	2210
Future Volume (vph)	220	469	1417	132	388	2210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	0.97	0.88	0.91	1.00	1.00	0.91
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	2787	5085	1583	1770	5085
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	2787	5085	1583	1770	5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	239	510	1540	143	422	2402
RTOR Reduction (vph)	0	456	0	49	0	0
Lane Group Flow (vph)	239	54	1540	94	422	2402
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	17.0	17.0	85.6	85.6	43.9	134.0
Effective Green, g (s)	17.0	17.0	85.6	85.6	43.9	134.0
Actuated g/C Ratio	0.11	0.11	0.53	0.53	0.27	0.84
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	364	296	2720	846	485	4258
v/s Ratio Prot	c0.07		0.30		c0.24	c0.47
v/s Ratio Perm		0.02		0.06		
v/c Ratio	0.66	0.18	0.57	0.11	0.87	0.56
Uniform Delay, d1	68.7	65.2	24.8	18.4	55.3	4.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.2	0.3	0.9	0.3	15.6	0.5
Delay (s)	72.9	65.5	25.7	18.7	70.9	4.5
Level of Service	E	E	C	B	E	A
Approach Delay (s)	67.9		25.1			14.5
Approach LOS	E		C			B

Intersection Summary

HCM 2000 Control Delay	25.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	66.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Queues
2: US 1 & SE 9th Street

Future Background AM

1/6/2016



Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	126	14	13	4	103	1827	26	23	2942
v/c Ratio	0.73	0.21	0.19	0.02	0.72	0.48	0.02	0.20	0.84
Control Delay	58.5	83.0	82.2	0.2	98.2	10.3	0.0	81.0	23.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.5	83.0	82.2	0.2	98.2	10.3	0.0	81.0	23.8
Queue Length 50th (ft)	63	15	14	0	109	308	0	12	860
Queue Length 95th (ft)	134	43	41	0	173	420	0	29	#1260
Internal Link Dist (ft)	1532		73			674			1939
Turn Bay Length (ft)									
Base Capacity (vph)	242	241	243	327	188	3839	1222	356	3515
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.06	0.05	0.01	0.55	0.48	0.02	0.06	0.84

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis

Future Background AM

2: US 1 & SE 9th Street

1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↙	↘	↗	↖	↑↑↑	↗	↖↗	↑↑↑	
Traffic Volume (vph)	24	7	85	24	1	4	95	1681	24	21	2696	11
Future Volume (vph)	24	7	85	24	1	4	95	1681	24	21	2696	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5		6.5	6.5	6.5	7.0	7.0	7.0	7.0	4.5	
Lane Util. Factor		1.00		0.95	0.95	1.00	1.00	0.91	1.00	0.97	0.91	
Frt		0.90		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.99		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1662		1681	1692	1583	1770	5085	1583	3433	5082	
Flt Permitted		0.99		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1662		1681	1692	1583	1770	5085	1583	3433	5082	
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)	26	8	92	26	1	4	103	1827	26	23	2930	12
RTOR Reduction (vph)	0	63	0	0	0	4	0	0	7	0	0	0
Lane Group Flow (vph)	0	63	0	14	13	0	103	1827	19	23	2942	0
Turn Type	Split	NA		Split	NA	Prot	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8	8	5	2		1	6	
Permitted Phases									2			
Actuated Green, G (s)		10.9		4.1	4.1	4.1	13.4	118.1	118.1	3.4	110.6	
Effective Green, g (s)		10.9		4.1	4.1	4.1	13.4	118.1	118.1	3.4	110.6	
Actuated g/C Ratio		0.07		0.03	0.03	0.03	0.08	0.72	0.72	0.02	0.68	
Clearance Time (s)		6.5		6.5	6.5	6.5	7.0	7.0	7.0	7.0	4.5	
Vehicle Extension (s)		2.0		2.0	2.0	2.0	1.5	3.0	3.0	1.5	3.0	
Lane Grp Cap (vph)		110		42	42	39	145	3673	1143	71	3437	
v/s Ratio Prot		c0.04		c0.01	0.01	0.00	c0.06	0.36		0.01	c0.58	
v/s Ratio Perm									0.01			
v/c Ratio		0.58		0.33	0.31	0.00	0.71	0.50	0.02	0.32	0.86	
Uniform Delay, d1		74.1		78.4	78.3	77.7	73.2	9.8	6.4	78.9	20.3	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		4.5		1.7	1.5	0.0	12.8	0.5	0.0	1.0	3.0	
Delay (s)		78.6		80.1	79.8	77.7	85.9	10.3	6.4	79.9	23.3	
Level of Service		E		F	E	E	F	B	A	E	C	
Approach Delay (s)		78.6			79.7			14.3			23.7	
Approach LOS		E			E			B			C	

Intersection Summary

HCM 2000 Control Delay	21.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	163.5	Sum of lost time (s)	27.0
Intersection Capacity Utilization	86.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Queues
3: US 1 & 3 rd Street

Future Background AM
1/6/2016



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	163	575	61	9	10	76	1367	18	51	2043
v/c Ratio	0.37	1.15	0.55	0.08	0.04	0.64	0.75	0.02	0.37	0.85
Control Delay	52.5	131.4	90.6	70.0	0.2	95.6	36.2	0.1	63.2	55.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.5	131.4	90.6	70.0	0.2	95.6	36.2	0.1	63.2	55.7
Queue Length 50th (ft)	142	-611	63	9	0	79	621	0	28	679
Queue Length 95th (ft)	217	#855	114	29	0	135	776	0	m35	m694
Internal Link Dist (ft)		717		185			1939			1261
Turn Bay Length (ft)			150		150	300		375		
Base Capacity (vph)	442	498	420	442	750	188	1821	867	364	2401
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	1.15	0.15	0.02	0.01	0.40	0.75	0.02	0.14	0.85

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

Future Background AM

3: US 1 & 3 rd Street

1/6/2016



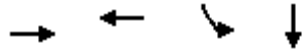
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↖↗	↖	↗↗	↖	↖↗	↗↗↗	↗↗↗
Traffic Volume (vph)	150	108	421	56	8	9	70	1258	17	47	1873	6
Future Volume (vph)	150	108	421	56	8	9	70	1258	17	47	1873	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	0.88	1.00	0.95	1.00	0.97	0.91	
Frt	1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1640		1770	1863	2787	1770	3539	1583	3433	5083	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1640		1770	1863	2787	1770	3539	1583	3433	5083	
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)	163	117	458	61	9	10	76	1367	18	51	2036	7
RTOR Reduction (vph)	0	88	0	0	0	9	0	0	9	0	0	0
Lane Group Flow (vph)	163	487	0	61	9	1	76	1367	9	51	2043	0
Turn Type	Split	NA		Split	NA	Prot	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8	8	5	2		1	6	
Permitted Phases									2			
Actuated Green, G (s)	40.0	40.0		8.8	8.8	8.8	10.8	79.8	79.8	5.4	74.4	
Effective Green, g (s)	40.0	40.0		8.8	8.8	8.8	10.8	79.8	79.8	5.4	74.4	
Actuated g/C Ratio	0.25	0.25		0.06	0.06	0.06	0.07	0.50	0.50	0.03	0.47	
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	1.5	3.0	3.0	1.5	3.0	
Lane Grp Cap (vph)	442	410		97	102	153	119	1765	789	115	2363	
v/s Ratio Prot	0.09	c0.30		c0.03	0.00	0.00	c0.04	c0.39		0.01	c0.40	
v/s Ratio Perm									0.01			
v/c Ratio	0.37	1.19		0.63	0.09	0.00	0.64	0.77	0.01	0.44	0.86	
Uniform Delay, d1	49.6	60.0		74.0	71.8	71.5	72.7	32.8	20.2	75.8	38.3	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.81	1.42	
Incremental Delay, d2	0.2	106.8		8.8	0.1	0.0	8.0	3.4	0.0	0.4	1.9	
Delay (s)	49.8	166.8		82.8	71.9	71.5	80.7	36.1	20.2	61.6	56.2	
Level of Service	D	F		F	E	E	F	D	C	E	E	
Approach Delay (s)		140.9			80.2			38.3			56.3	
Approach LOS		F			F			D			E	

Intersection Summary

HCM 2000 Control Delay	65.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.0
Intersection Capacity Utilization	98.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

4: Dixie Highway & 3rd Street



Lane Group	EBT	WBT	SBL	SBT
Lane Group Flow (vph)	306	171	500	741
v/c Ratio	0.84	0.23	0.93	0.49
Control Delay	69.8	6.6	70.0	37.8
Queue Delay	16.7	5.3	46.3	0.0
Total Delay	86.5	11.9	116.3	37.8
Queue Length 50th (ft)	247	82	412	183
Queue Length 95th (ft)	346	39	#665	234
Internal Link Dist (ft)	99	25		1263
Turn Bay Length (ft)				
Base Capacity (vph)	425	752	536	1525
Starvation Cap Reductn	0	514	0	0
Spillback Cap Reductn	107	0	132	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.96	0.72	1.24	0.49

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis

4: Dixie Highway & 3rd Street

Future Background AM

1/6/2016



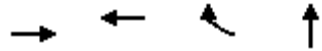
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔					↔	↔↔↔	
Traffic Volume (vph)	0	274	7	28	130	0	0	0	0	460	611	71
Future Volume (vph)	0	274	7	28	130	0	0	0	0	460	611	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5					3.0	3.0	
Lane Util. Factor		1.00			1.00					1.00	0.91	
Frt		1.00			1.00					1.00	0.98	
Flt Protected		1.00			0.99					0.95	1.00	
Satd. Flow (prot)		1856			1847					1770	5006	
Flt Permitted		1.00			0.99					0.95	1.00	
Satd. Flow (perm)		1856			1847					1770	5006	
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)	0	298	8	30	141	0	0	0	0	500	664	77
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	0	0	11	0
Lane Group Flow (vph)	0	305	0	0	171	0	0	0	0	500	730	0
Turn Type		NA		Split	NA					Split	NA	
Protected Phases		4		2	2					1 9	1 9	
Permitted Phases												
Actuated Green, G (s)		25.3			52.5					39.0	39.0	
Effective Green, g (s)		25.3			52.5					34.5	34.5	
Actuated g/C Ratio		0.20			0.41					0.27	0.27	
Clearance Time (s)		4.5			4.5							
Vehicle Extension (s)		3.0			3.0							
Lane Grp Cap (vph)		364			752					474	1340	
v/s Ratio Prot		c0.16			c0.09					c0.28	0.15	
v/s Ratio Perm												
v/c Ratio		0.84			0.23					1.05	0.54	
Uniform Delay, d1		49.8			24.9					47.2	40.4	
Progression Factor		1.00			0.23					1.00	1.00	
Incremental Delay, d2		15.4			0.7					56.6	0.5	
Delay (s)		65.2			6.5					103.7	40.9	
Level of Service		E			A					F	D	
Approach Delay (s)		65.2			6.5			0.0			66.2	
Approach LOS		E			A			A			E	

Intersection Summary

HCM 2000 Control Delay	60.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	128.8	Sum of lost time (s)	16.5
Intersection Capacity Utilization	59.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Queues
5: 1st Avenue & 3rd Street



Lane Group	EBT	WBT	WBR	NBT
Lane Group Flow (vph)	715	89	80	340
v/c Ratio	0.97	0.53	0.33	0.23
Control Delay	34.7	67.4	7.0	25.3
Queue Delay	44.5	0.2	0.0	0.0
Total Delay	79.2	67.6	7.0	25.3
Queue Length 50th (ft)	347	73	0	95
Queue Length 95th (ft)	m#714	126	21	140
Internal Link Dist (ft)	25	225		2634
Turn Bay Length (ft)				
Base Capacity (vph)	757	448	467	1461
Starvation Cap Reductn	167	0	0	0
Spillback Cap Reductn	0	85	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	1.21	0.25	0.17	0.23

Intersection Summary

- # 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.

HCM Signalized Intersection Capacity Analysis

5: 1st Avenue & 3rd Street

Future Background AM

1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↑	↗		↕↗				
Traffic Volume (vph)	45	613	0	0	82	74	77	228	7	0	0	0
Future Volume (vph)	45	613	0	0	82	74	77	228	7	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			3.0	3.0		4.5				
Lane Util. Factor		1.00			1.00	1.00		0.95				
Frt		1.00			1.00	0.85		1.00				
Flt Protected		1.00			1.00	1.00		0.99				
Satd. Flow (prot)		1856			1863	1583		3484				
Flt Permitted		1.00			1.00	1.00		0.99				
Satd. Flow (perm)		1856			1863	1583		3484				
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)	49	666	0	0	89	80	84	248	8	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	73	0	1	0	0	0	0
Lane Group Flow (vph)	0	715	0	0	89	7	0	339	0	0	0	0
Turn Type	Split	NA			NA	Perm	Split	NA				
Protected Phases	8	8			7		10 3	10 3				
Permitted Phases						7						
Actuated Green, G (s)		51.3			11.5	11.5		55.5				
Effective Green, g (s)		51.3			11.5	11.5		55.5				
Actuated g/C Ratio		0.40			0.09	0.09		0.43				
Clearance Time (s)		4.5			3.0	3.0						
Vehicle Extension (s)		3.0			3.0	3.0						
Lane Grp Cap (vph)		739			166	141		1501				
v/s Ratio Prot		c0.39			c0.05			c0.10				
v/s Ratio Perm						0.00						
v/c Ratio		0.97			0.54	0.05		0.23				
Uniform Delay, d1		37.9			56.1	53.7		23.1				
Progression Factor		0.42			1.00	1.00		1.00				
Incremental Delay, d2		16.0			3.3	0.1		0.1				
Delay (s)		31.8			59.4	53.8		23.2				
Level of Service		C			E	D		C				
Approach Delay (s)		31.8			56.8			23.2			0.0	
Approach LOS		C			E			C			A	

Intersection Summary

HCM 2000 Control Delay	32.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	128.8	Sum of lost time (s)	16.5
Intersection Capacity Utilization	58.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Queues
6: US 1 & Hallandale Beach Boulevard

Future Background AM
1/6/2016



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	200	1430	650	1229	343	771	375	517	1253
v/c Ratio	0.90	0.83	1.41	0.86	0.82	0.58	0.50	0.98	0.66
Control Delay	108.0	57.1	247.6	42.8	113.1	38.9	8.2	99.7	52.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	108.0	57.1	247.6	42.8	113.1	38.9	8.2	99.7	52.0
Queue Length 50th (ft)	207	391	~478	245	196	149	36	~302	341
Queue Length 95th (ft)	#347	438	#584	352	251	223	33	#422	395
Internal Link Dist (ft)		1701		611		1261			282
Turn Bay Length (ft)							445	420	
Base Capacity (vph)	237	1790	461	1433	493	1334	747	529	1885
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.80	1.41	0.86	0.70	0.58	0.50	0.98	0.66

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

6: US 1 & Hallandale Beach Boulevard

Future Background AM

1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑		↖↖	↑↑↑		↖↖	↑↑↑	↖	↖↖	↑↑↑	
Traffic Volume (vph)	184	977	339	598	1025	106	316	709	345	476	1109	44
Future Volume (vph)	184	977	339	598	1025	106	316	709	345	476	1109	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5		6.5	6.5		7.0	8.0	6.5	7.0	8.0	
Lane Util. Factor	1.00	0.86		0.97	0.91		0.97	0.91	1.00	0.97	0.86	
Frt	1.00	0.96		1.00	0.99		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	6160		3433	5014		3433	5085	1583	3433	6371	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	6160		3433	5014		3433	5085	1583	3433	6371	
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)	200	1062	368	650	1114	115	343	771	375	517	1205	48
RTOR Reduction (vph)	0	40	0	0	8	0	0	0	43	0	4	0
Lane Group Flow (vph)	200	1390	0	650	1221	0	343	771	332	517	1249	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	20.1	43.9		21.5	45.3		19.4	41.9	63.4	24.7	47.2	
Effective Green, g (s)	20.1	43.9		21.5	45.3		19.4	41.9	63.4	24.7	47.2	
Actuated g/C Ratio	0.13	0.27		0.13	0.28		0.12	0.26	0.40	0.15	0.30	
Clearance Time (s)	6.5	6.5		6.5	6.5		7.0	8.0	6.5	7.0	8.0	
Vehicle Extension (s)	1.5	2.5		1.5	2.5		1.5	2.5	1.5	1.5	2.5	
Lane Grp Cap (vph)	222	1690		461	1419		416	1331	627	529	1879	
v/s Ratio Prot	0.11	0.23		c0.19	c0.24		0.10	0.15	0.07	c0.15	c0.20	
v/s Ratio Perm									0.14			
v/c Ratio	0.90	0.82		1.41	0.86		0.82	0.58	0.53	0.98	0.66	
Uniform Delay, d1	69.0	54.4		69.2	54.4		68.6	51.4	36.9	67.4	49.5	
Progression Factor	1.00	1.00		1.14	0.67		1.47	0.73	0.26	1.00	1.00	
Incremental Delay, d2	34.2	3.3		195.6	4.9		8.6	1.3	0.3	32.9	1.9	
Delay (s)	103.2	57.7		274.3	41.5		109.8	38.9	9.8	100.2	51.3	
Level of Service	F	E		F	D		F	D	A	F	D	
Approach Delay (s)		63.3			122.0			47.9			65.6	
Approach LOS		E			F			D			E	

Intersection Summary

HCM 2000 Control Delay	76.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Queues
7: Hallandale Beach Boulevard & Dixie Highway



Lane Group	EBT	WBL	WBT	SBT
Lane Group Flow (vph)	1493	117	1543	974
v/c Ratio	0.58	0.86	0.49	0.84
Control Delay	26.0	121.9	2.8	66.3
Queue Delay	0.1	82.4	0.3	0.0
Total Delay	26.0	204.3	3.1	66.3
Queue Length 50th (ft)	356	100	71	267
Queue Length 95th (ft)	403	m#209	m76	310
Internal Link Dist (ft)	2134		49	537
Turn Bay Length (ft)				
Base Capacity (vph)	2589	136	3156	1165
Starvation Cap Reductn	0	89	838	0
Spillback Cap Reductn	161	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.61	2.49	0.67	0.84

Intersection Summary

- # 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.

HCM Signalized Intersection Capacity Analysis
7: Hallandale Beach Boulevard & Dixie Highway

Future Background AM

1/6/2016



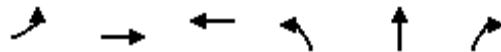
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↔	↑↑↑						↑↑↑	
Traffic Volume (vph)	0	1281	93	108	1420	0	0	0	0	224	634	39
Future Volume (vph)	0	1281	93	108	1420	0	0	0	0	224	634	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5		4.5	4.5						4.5	
Lane Util. Factor		0.91		1.00	0.91						0.86	
Frt		0.99		1.00	1.00						0.99	
Flt Protected		1.00		0.95	1.00						0.99	
Satd. Flow (prot)		5034		1770	5085						6288	
Flt Permitted		1.00		0.95	1.00						0.99	
Satd. Flow (perm)		5034		1770	5085						6288	
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)	0	1392	101	117	1543	0	0	0	0	243	689	42
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	1488	0	117	1543	0	0	0	0	0	970	0
Turn Type		NA		Prot	NA					Perm	NA	
Protected Phases		2 3		1	1 2 3						4	
Permitted Phases										4		
Actuated Green, G (s)		76.5		11.5	92.5						27.2	
Effective Green, g (s)		76.5		11.5	92.5						27.2	
Actuated g/C Ratio		0.51		0.08	0.62						0.18	
Clearance Time (s)				4.5							4.5	
Vehicle Extension (s)				3.0							3.0	
Lane Grp Cap (vph)		2584		136	3156						1147	
v/s Ratio Prot		c0.30		c0.07	0.30							
v/s Ratio Perm											0.15	
v/c Ratio		0.58		0.86	0.49						0.85	
Uniform Delay, d1		25.0		68.0	15.4						58.9	
Progression Factor		1.00		1.28	0.16						1.00	
Incremental Delay, d2		0.3		31.4	0.1						5.9	
Delay (s)		25.4		118.2	2.5						64.8	
Level of Service		C		F	A						E	
Approach Delay (s)		25.4			10.7			0.0			64.8	
Approach LOS		C			B			A			E	

Intersection Summary

HCM 2000 Control Delay	28.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	149.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	87.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Queues
8: 1st Avenue & Hallandale Beach Boulevard



Lane Group	EBL	EBT	WBT	NBL	NBT	NBR
Lane Group Flow (vph)	34	1578	1486	203	164	74
v/c Ratio	0.06	0.37	0.60	1.09	0.83	0.28
Control Delay	29.3	0.3	29.0	149.9	97.3	5.5
Queue Delay	31.8	0.2	0.4	17.4	0.0	0.0
Total Delay	61.1	0.6	29.5	167.4	97.3	5.5
Queue Length 50th (ft)	26	2	376	-224	159	0
Queue Length 95th (ft)	m43	10	425	#391	#290	18
Internal Link Dist (ft)		49	1701		1266	
Turn Bay Length (ft)						
Base Capacity (vph)	564	4248	2467	187	197	266
Starvation Cap Reductn	520	1604	0	0	0	0
Spillback Cap Reductn	0	0	463	87	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.60	0.74	2.03	0.83	0.28

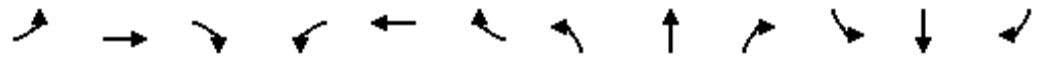
Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
8: 1st Avenue & Hallandale Beach Boulevard

Future Background AM

1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕↕↕			↕↕↕		↖	↕	↖			
Traffic Volume (vph)	31	1452	0	0	1344	23	187	151	68	0	0	0
Future Volume (vph)	31	1452	0	0	1344	23	187	151	68	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5			4.5		4.5	4.5	4.5			
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00	1.00			
Frt	1.00	1.00			1.00		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1770	5085			5072		1770	1863	1583			
Flt Permitted	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1770	5085			5072		1770	1863	1583			
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)	34	1578	0	0	1461	25	203	164	74	0	0	0
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	66	0	0	0
Lane Group Flow (vph)	34	1578	0	0	1485	0	203	164	8	0	0	0
Turn Type	Prot	NA			NA		Perm	NA	Perm			
Protected Phases	8 9	6 7 8 9			6 7			10				
Permitted Phases							10		10			
Actuated Green, G (s)	47.2	124.2			72.5		15.8	15.8	15.8			
Effective Green, g (s)	47.2	124.2			72.5		15.8	15.8	15.8			
Actuated g/C Ratio	0.32	0.83			0.49		0.11	0.11	0.11			
Clearance Time (s)							4.5	4.5	4.5			
Vehicle Extension (s)							3.0	3.0	3.0			
Lane Grp Cap (vph)	560	4238			2467		187	197	167			
v/s Ratio Prot	0.02	c0.31			c0.29			0.09				
v/s Ratio Perm							c0.11		0.00			
v/c Ratio	0.06	0.37			0.60		1.09	0.83	0.05			
Uniform Delay, d1	35.5	3.0			27.8		66.6	65.3	59.8			
Progression Factor	0.82	0.05			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.0			0.4		90.5	24.9	0.1			
Delay (s)	29.1	0.2			28.2		157.1	90.2	60.0			
Level of Service	C	A			C		F	F	E			
Approach Delay (s)		0.8			28.2			115.9			0.0	
Approach LOS		A			C			F			A	

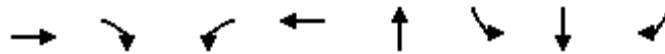
Intersection Summary

HCM 2000 Control Delay	26.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	149.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	87.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Queues
9: Hallandale Beach Boulevard & E 8th Avenue

Future Background AM
1/6/2016



Lane Group	EBT	EBR	WBL	WBT	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	1835	53	28	1550	109	185	1	200
v/c Ratio	0.78	0.07	0.24	0.60	0.66	0.32	0.00	0.34
Control Delay	38.1	4.5	30.7	15.8	82.3	46.5	46.0	21.4
Queue Delay	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.4	4.5	30.7	15.8	82.3	46.5	46.0	21.4
Queue Length 50th (ft)	364	4	7	126	103	155	1	67
Queue Length 95th (ft)	m397	m8	m21	180	167	250	7	155
Internal Link Dist (ft)	611			578	210		703	
Turn Bay Length (ft)						150		150
Base Capacity (vph)	2388	779	188	2860	230	577	607	594
Starvation Cap Reductn	118	0	0	12	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.07	0.15	0.54	0.47	0.32	0.00	0.34

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
 9: Hallandale Beach Boulevard & E 8th Avenue

Future Background AM

1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑	↑	↑↑↑			↕		↑	↑	↑
Traffic Volume (vph)	0	1688	49	26	1426	0	73	2	26	170	1	184
Future Volume (vph)	0	1688	49	26	1426	0	73	2	26	170	1	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.5	4.0			4.5		4.0	4.0	4.0
Lane Util. Factor		0.91	1.00	1.00	0.91			1.00		1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00			0.97		1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00			0.97		0.95	1.00	1.00
Satd. Flow (prot)		5085	1583	1770	5085			1735		1770	1863	1583
Flt Permitted		1.00	1.00	0.05	1.00			0.97		0.95	1.00	1.00
Satd. Flow (perm)		5085	1583	95	5085			1735		1770	1863	1583
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)	0	1835	53	28	1550	0	79	2	28	185	1	200
RTOR Reduction (vph)	0	0	29	0	0	0	0	8	0	0	0	79
Lane Group Flow (vph)	0	1835	24	28	1550	0	0	101	0	185	1	121
Turn Type		NA	Perm	pm+pt	NA		Split	NA		Split	NA	Perm
Protected Phases		4		3	8		2	2		6	6	
Permitted Phases			4	8								6
Actuated Green, G (s)		73.7	73.7	82.5	82.5			14.6		50.4	50.4	50.4
Effective Green, g (s)		73.7	73.7	82.5	82.5			14.6		50.4	50.4	50.4
Actuated g/C Ratio		0.46	0.46	0.52	0.52			0.09		0.31	0.31	0.31
Clearance Time (s)		4.0	4.0	4.5	4.0			4.5		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		2342	729	94	2621			158		557	586	498
v/s Ratio Prot		c0.36		0.01	c0.30			c0.06		c0.10	0.00	
v/s Ratio Perm			0.02	0.15								0.08
v/c Ratio		0.78	0.03	0.30	0.59			0.64		0.33	0.00	0.24
Uniform Delay, d1		36.4	23.6	28.4	27.0			70.2		41.9	37.6	40.6
Progression Factor		1.01	1.70	1.56	0.54			1.00		1.00	1.00	1.00
Incremental Delay, d2		1.1	0.0	1.4	0.3			8.2		1.6	0.0	1.2
Delay (s)		37.7	40.1	45.8	14.8			78.3		43.5	37.6	41.8
Level of Service		D	D	D	B			E		D	D	D
Approach Delay (s)		37.8			15.4			78.3			42.6	
Approach LOS		D			B			E			D	

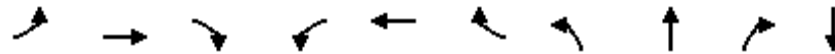
Intersection Summary

HCM 2000 Control Delay	30.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Queues
10: Hallandale Beach Boulevard & E 10th Avenue

Future Background AM
1/6/2016



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	89	1826	50	120	1508	63	29	30	128	1
v/c Ratio	0.60	0.72	0.06	0.51	0.62	0.08	0.05	0.05	0.20	0.01
Control Delay	114.2	8.3	0.3	79.3	31.3	3.0	40.0	40.0	7.3	0.0
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	114.2	8.4	0.3	79.3	31.3	3.0	40.0	40.0	7.3	0.0
Queue Length 50th (ft)	99	84	0	63	417	0	21	22	0	0
Queue Length 95th (ft)	m132	78	m0	97	412	20	54	56	54	0
Internal Link Dist (ft)		578			589			252		700
Turn Bay Length (ft)	180		65	475		180				
Base Capacity (vph)	459	2802	891	375	2451	800	587	608	636	102
Starvation Cap Reductn	0	206	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.70	0.06	0.32	0.62	0.08	0.05	0.05	0.20	0.01

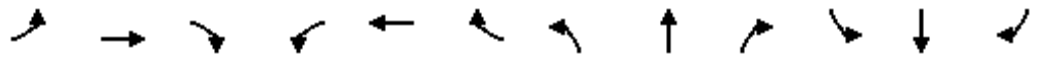
Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
 10: Hallandale Beach Boulevard & E 10th Avenue

Future Background AM

1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙	↑↑↑	↗	↙↗	↑↑↑	↗	↙	↑	↗			
Traffic Volume (vph)	82	1680	46	110	1387	58	36	18	118	0	0	1
Future Volume (vph)	82	1680	46	110	1387	58	36	18	118	0	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.95	0.95	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.98	1.00		1.00	
Satd. Flow (prot)	1770	5085	1583	3433	5085	1583	1681	1741	1583		0	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.98	1.00		1.00	
Satd. Flow (perm)	1770	5085	1583	3433	5085	1583	1681	1741	1583		0	
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)	89	1826	50	120	1508	63	39	20	128	0	0	1
RTOR Reduction (vph)	0	0	21	0	0	33	0	0	83	0	1	0
Lane Group Flow (vph)	89	1826	29	120	1508	30	29	30	45	0	0	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm			
Protected Phases	7	4		3	8		5	2				
Permitted Phases			4			8			2			
Actuated Green, G (s)	13.4	79.6	79.6	10.9	77.1	77.1	56.0	56.0	56.0		0.0	
Effective Green, g (s)	13.4	79.6	79.6	10.9	77.1	77.1	56.0	56.0	56.0		0.0	
Actuated g/C Ratio	0.08	0.50	0.50	0.07	0.48	0.48	0.35	0.35	0.35		0.00	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5			
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	148	2529	787	233	2450	762	588	609	554		0	
v/s Ratio Prot	c0.05	c0.36		0.03	0.30		0.02	0.02				
v/s Ratio Perm			0.02			0.02			c0.03			
v/c Ratio	0.60	0.72	0.04	0.52	0.62	0.04	0.05	0.05	0.08		0.00	
Uniform Delay, d1	70.7	31.5	20.6	72.0	30.5	21.9	34.4	34.4	34.8		80.0	
Progression Factor	1.47	0.23	0.03	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2	4.6	0.7	0.0	1.9	0.5	0.0	0.2	0.2	0.3		0.0	
Delay (s)	108.4	7.8	0.7	73.9	31.0	21.9	34.6	34.5	35.1		80.0	
Level of Service	F	A	A	E	C	C	C	C	D		E	
Approach Delay (s)		12.2			33.7			34.9			80.0	
Approach LOS		B			C			C			E	

Intersection Summary

HCM 2000 Control Delay	22.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	Err%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Queues
11: Dixie Highway & County Line Road

Future Background AM
1/6/2016



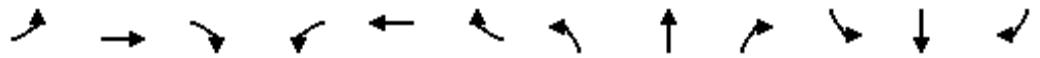
Lane Group	EBT	WBT	NBL	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	445	288	9	341	460	239	89
v/c Ratio	0.73	0.61	0.04	0.51	0.61	0.30	0.12
Control Delay	46.0	20.2	31.4	6.8	26.2	20.0	4.2
Queue Delay	0.8	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.8	20.2	31.4	6.8	26.2	20.0	4.2
Queue Length 50th (ft)	135	71	4	0	216	95	0
Queue Length 95th (ft)	212	78	19	75	333	158	27
Internal Link Dist (ft)	628	59				2638	
Turn Bay Length (ft)							
Base Capacity (vph)	745	476	250	666	1011	1064	942
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	102	0	0	10	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.61	0.04	0.52	0.45	0.22	0.09

Intersection Summary

HCM Signalized Intersection Capacity Analysis
 11: Dixie Highway & County Line Road

Future Background AM

1/6/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑		↑		↑	↑	↑	↑
Traffic Volume (vph)	0	397	12	139	126	0	8	0	314	423	220	82
Future Volume (vph)	0	397	12	139	126	0	8	0	314	423	220	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5		4.5		4.5	4.5	4.5	4.5
Lane Util. Factor		0.95			1.00		1.00		1.00	1.00	1.00	1.00
Frt		1.00			1.00		1.00		0.85	1.00	1.00	0.85
Flt Protected		1.00			0.97		0.95		1.00	0.95	1.00	1.00
Satd. Flow (prot)		3524			1815		1770		1583	1770	1863	1583
Flt Permitted		1.00			0.97		0.51		1.00	0.95	1.00	1.00
Satd. Flow (perm)		3524			1815		955		1583	1770	1863	1583
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)	0	432	13	151	137	0	9	0	341	460	239	89
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	251	0	0	51
Lane Group Flow (vph)	0	443	0	0	288	0	9	0	90	460	239	38
Turn Type		NA		Split	NA		D.Pm		Prot	custom	NA	Perm
Protected Phases		1		4	4				2		3	2 3
Permitted Phases							2			2		2 3
Actuated Green, G (s)		17.0			25.7		25.7		25.7	37.1	41.6	41.6
Effective Green, g (s)		17.0			25.7		25.7		25.7	37.1	41.6	41.6
Actuated g/C Ratio		0.17			0.26		0.26		0.26	0.38	0.43	0.43
Clearance Time (s)		4.5			4.5		4.5		4.5	4.5		
Vehicle Extension (s)		3.0			3.0		3.0		3.0	3.0		
Lane Grp Cap (vph)		612			476		250		415	752	792	673
v/s Ratio Prot		c0.13			c0.16				0.06	c0.07	0.13	
v/s Ratio Perm							0.01			0.19		0.02
v/c Ratio		0.72			0.61		0.04		0.22	0.61	0.30	0.06
Uniform Delay, d1		38.2			31.6		26.8		28.2	25.5	18.5	16.5
Progression Factor		1.00			0.44		1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2		4.2			2.1		0.3		1.2	1.5	0.2	0.0
Delay (s)		42.4			15.8		27.1		29.4	26.9	18.7	16.6
Level of Service		D			B		C		C	C	B	B
Approach Delay (s)		42.4			15.8			29.3			23.3	
Approach LOS		D			B			C			C	

Intersection Summary

HCM 2000 Control Delay	27.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	97.8	Sum of lost time (s)	18.0
Intersection Capacity Utilization	65.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Queues
12: County Line Road & 1st Avenue

Future Background AM
1/6/2016



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	391	845	152	203	57	140
v/c Ratio	0.34	0.65	0.43	0.42	0.12	0.27
Control Delay	2.7	4.5	36.7	34.8	31.1	7.2
Queue Delay	0.3	0.6	0.1	0.0	0.0	0.1
Total Delay	3.0	5.1	36.8	34.8	31.1	7.3
Queue Length 50th (ft)	27	86	77	102	26	0
Queue Length 95th (ft)	27	98	162	199	68	50
Internal Link Dist (ft)	59			64	2634	
Turn Bay Length (ft)						
Base Capacity (vph)	1466	1446	351	489	489	518
Starvation Cap Reductn	512	261	0	0	0	0
Spillback Cap Reductn	0	0	10	0	0	52
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.71	0.45	0.42	0.12	0.30

Intersection Summary

HCM Signalized Intersection Capacity Analysis
 12: County Line Road & 1st Avenue

Future Background AM

1/6/2016



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	360	777	140	187	52	129
Future Volume (vph)	360	777	140	187	52	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1583	1770	1863	1863	1583
Flt Permitted	0.95	1.00	0.72	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583	1341	1863	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	391	845	152	203	57	140
RTOR Reduction (vph)	0	279	0	0	0	103
Lane Group Flow (vph)	391	566	152	203	57	37
Turn Type	Prot	Prot	Perm	NA	NA	Prot
Protected Phases	5	5		8	8	8
Permitted Phases			8			
Actuated Green, G (s)	63.1	63.1	25.7	25.7	25.7	25.7
Effective Green, g (s)	63.1	63.1	25.7	25.7	25.7	25.7
Actuated g/C Ratio	0.65	0.65	0.26	0.26	0.26	0.26
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1141	1021	352	489	489	415
v/s Ratio Prot	0.22	c0.36		0.11	0.03	0.02
v/s Ratio Perm			c0.11			
v/c Ratio	0.34	0.55	0.43	0.42	0.12	0.09
Uniform Delay, d1	7.9	9.6	30.0	29.8	27.4	27.2
Progression Factor	0.26	2.65	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.6	3.8	2.6	0.5	0.4
Delay (s)	2.2	25.9	33.8	32.4	27.9	27.6
Level of Service	A	C	C	C	C	C
Approach Delay (s)	18.4			33.0	27.7	
Approach LOS	B			C	C	

Intersection Summary

HCM 2000 Control Delay	22.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	97.8	Sum of lost time (s)	18.0
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
 13: E 1st Avenue & NE 214th Terr

Future Background AM

1/6/2016



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						144
pX, platoon unblocked						
vC, conflicting volume	0	0			0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0	0			0	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	1023	1085			1623	

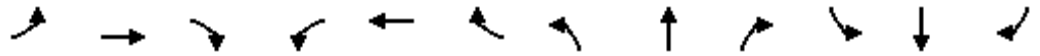
Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	0	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS	A		
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A		

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

HCM Unsignalized Intersection Capacity Analysis
 14: SE 3rd Ave & SE 10th Ct

Future Background AM

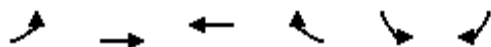
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	1	28	19	55	5	1	4	5	10	23	28	1
Future Volume (Veh/h)	1	28	19	55	5	1	4	5	10	23	28	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	1	30	21	60	5	1	4	5	11	25	30	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	6			51			184	168	40	182	178	6
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	6			51			184	168	40	182	178	6
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			96			99	99	99	97	96	100
cM capacity (veh/h)	1615			1555			728	696	1031	744	687	1077
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	52	66	20	56								
Volume Left	1	60	4	25								
Volume Right	21	1	11	1								
cSH	1615	1555	857	716								
Volume to Capacity	0.00	0.04	0.02	0.08								
Queue Length 95th (ft)	0	3	2	6								
Control Delay (s)	0.1	6.8	9.3	10.5								
Lane LOS	A	A	A	B								
Approach Delay (s)	0.1	6.8	9.3	10.5								
Approach LOS			A	B								
Intersection Summary												
Average Delay			6.3									
Intersection Capacity Utilization			22.1%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 37: NE 214th Terr & SE 3rd Ave

Future Background AM
 1/6/2016



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	39	10	5	2	0	27
Future Volume (Veh/h)	39	10	5	2	0	27
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	42	11	5	2	0	29
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	7				101	6
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	7				101	6
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				100	97
cM capacity (veh/h)	1614				874	1077

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	53	7	29
Volume Left	42	0	0
Volume Right	0	2	29
cSH	1614	1700	1077
Volume to Capacity	0.03	0.00	0.03
Queue Length 95th (ft)	2	0	2
Control Delay (s)	5.8	0.0	8.4
Lane LOS	A		A
Approach Delay (s)	5.8	0.0	8.4
Approach LOS			A

Intersection Summary			
Average Delay		6.2	
Intersection Capacity Utilization	19.4%	ICU Level of Service	A
Analysis Period (min)	15		

HCM Unsignalized Intersection Capacity Analysis
41: Optima Office Drive

Future Background AM
1/6/2016



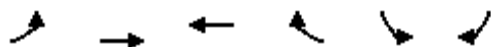
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗	↘	↑↑↑	↑↑↑	↘
Traffic Volume (veh/h)	9	20	83	1577	2655	233
Future Volume (Veh/h)	9	20	83	1577	2655	233
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	22	90	1714	2886	253
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)				500	754	
pX, platoon unblocked	0.57	0.48	0.48			
vC, conflicting volume	3764	1088	3139			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1006	0	1660			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	86	96	51			
cM capacity (veh/h)	70	520	184			

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	
Volume Total	32	90	571	571	571	1154	1154	830	
Volume Left	10	90	0	0	0	0	0	0	
Volume Right	22	0	0	0	0	0	0	253	
cSH	172	184	1700	1700	1700	1700	1700	1700	
Volume to Capacity	0.19	0.49	0.34	0.34	0.34	0.68	0.68	0.49	
Queue Length 95th (ft)	17	60	0	0	0	0	0	0	
Control Delay (s)	30.6	41.9	0.0	0.0	0.0	0.0	0.0	0.0	
Lane LOS	D	E							
Approach Delay (s)	30.6	2.1					0.0		
Approach LOS	D								

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

HCM Unsignalized Intersection Capacity Analysis
46: Optima Drive

Future Background AM
1/6/2016



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	0				0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0				0	0
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1623				1023	1085
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS			A			
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS			A			
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)			15			

Queues

AM Existing

1: Biscayne Boulevard & NE 213th Street

1/5/2016



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	234	465	1358	140	405	2224
v/c Ratio	0.66	0.66	0.49	0.15	0.86	0.52
Control Delay	77.8	9.9	24.7	5.8	73.6	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	77.8	9.9	24.7	5.8	73.6	4.3
Queue Length 50th (ft)	123	0	312	10	406	193
Queue Length 95th (ft)	166	57	434	55	497	266
Internal Link Dist (ft)	379		211			420
Turn Bay Length (ft)						
Base Capacity (vph)	525	820	2779	918	625	4272
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.57	0.49	0.15	0.65	0.52

Intersection Summary

HCM Signalized Intersection Capacity Analysis

1: Biscayne Boulevard & NE 213th Street

AM Existing
1/5/2016



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	215	428	1249	129	373	2046
Future Volume (vph)	215	428	1249	129	373	2046
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	0.97	0.88	0.91	1.00	1.00	0.91
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3433	2787	5085	1583	1770	5085
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3433	2787	5085	1583	1770	5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	234	465	1358	140	405	2224
RTOR Reduction (vph)	0	417	0	54	0	0
Lane Group Flow (vph)	234	48	1358	86	405	2224
Turn Type	Prot	Perm	NA	Perm	Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8		2		
Actuated Green, G (s)	16.6	16.6	87.4	87.4	42.5	134.4
Effective Green, g (s)	16.6	16.6	87.4	87.4	42.5	134.4
Actuated g/C Ratio	0.10	0.10	0.55	0.55	0.27	0.84
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	356	289	2777	864	470	4271
v/s Ratio Prot	c0.07		0.27		c0.23	c0.44
v/s Ratio Perm		0.02		0.05		
v/c Ratio	0.66	0.17	0.49	0.10	0.86	0.52
Uniform Delay, d1	69.0	65.4	22.5	17.4	56.0	3.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.3	0.3	0.6	0.2	14.9	0.5
Delay (s)	73.3	65.7	23.1	17.7	70.9	4.1
Level of Service	E	E	C	B	E	A
Approach Delay (s)	68.2		22.6			14.4
Approach LOS	E		C			B

Intersection Summary

HCM 2000 Control Delay	24.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	62.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Queues
2: US 1 & SE 9th Street

AM Existing
1/5/2016



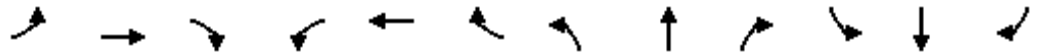
Lane Group	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	118	12	13	4	61	1498	24	22	2614
v/c Ratio	0.71	0.18	0.19	0.02	0.59	0.39	0.02	0.20	0.70
Control Delay	57.7	81.9	82.4	0.2	97.0	9.0	0.0	80.8	16.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.7	81.9	82.4	0.2	97.0	9.0	0.0	80.8	16.3
Queue Length 50th (ft)	57	13	14	0	65	226	0	11	601
Queue Length 95th (ft)	127	38	41	0	116	311	0	28	836
Internal Link Dist (ft)	1532		73			674			1939
Turn Bay Length (ft)									
Base Capacity (vph)	240	241	243	327	184	3856	1227	356	3727
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.05	0.05	0.01	0.33	0.39	0.02	0.06	0.70

Intersection Summary

HCM Signalized Intersection Capacity Analysis

2: US 1 & SE 9th Street

AM Existing
1/5/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↖	↖	↖	↖	↑↑↑	↖	↖↖	↑↑↑	
Traffic Volume (vph)	23	7	78	22	1	4	56	1378	22	20	2394	11
Future Volume (vph)	23	7	78	22	1	4	56	1378	22	20	2394	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5		6.5	6.5	6.5	7.0	7.0	7.0	7.0	4.5	
Lane Util. Factor		1.00		0.95	0.95	1.00	1.00	0.91	1.00	0.97	0.91	
Frt		0.90		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.99		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1664		1681	1692	1583	1770	5085	1583	3433	5082	
Flt Permitted		0.99		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1664		1681	1692	1583	1770	5085	1583	3433	5082	
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)	25	8	85	24	1	4	61	1498	24	22	2602	12
RTOR Reduction (vph)	0	60	0	0	0	4	0	0	7	0	0	0
Lane Group Flow (vph)	0	58	0	12	13	0	61	1498	17	22	2614	0
Turn Type	Split	NA		Split	NA	Prot	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8	8	5	2		1	6	
Permitted Phases									2			
Actuated Green, G (s)		10.4		4.1	4.1	4.1	8.5	118.6	118.6	3.4	116.0	
Effective Green, g (s)		10.4		4.1	4.1	4.1	8.5	118.6	118.6	3.4	116.0	
Actuated g/C Ratio		0.06		0.03	0.03	0.03	0.05	0.73	0.73	0.02	0.71	
Clearance Time (s)		6.5		6.5	6.5	6.5	7.0	7.0	7.0	7.0	4.5	
Vehicle Extension (s)		2.0		2.0	2.0	2.0	1.5	3.0	3.0	1.5	3.0	
Lane Grp Cap (vph)		105		42	42	39	92	3688	1148	71	3605	
v/s Ratio Prot		c0.03		0.01	c0.01	0.00	c0.03	c0.29		0.01	c0.51	
v/s Ratio Perm									0.01			
v/c Ratio		0.55		0.29	0.31	0.00	0.66	0.41	0.02	0.31	0.73	
Uniform Delay, d1		74.3		78.3	78.3	77.7	76.1	8.7	6.2	78.9	14.2	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		3.5		1.4	1.5	0.0	13.0	0.3	0.0	0.9	1.3	
Delay (s)		77.8		79.6	79.8	77.7	89.1	9.1	6.3	79.8	15.5	
Level of Service		E		E	E	E	F	A	A	E	B	
Approach Delay (s)		77.8			79.5			12.1			16.0	
Approach LOS		E			E			B			B	

Intersection Summary

HCM 2000 Control Delay	16.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	163.5	Sum of lost time (s)	27.0
Intersection Capacity Utilization	70.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Queues
3: US 1 & 3 rd Street

AM Existing
1/5/2016



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	159	557	26	9	10	72	1259	17	46	1909
v/c Ratio	0.36	1.12	0.33	0.11	0.04	0.63	0.67	0.02	0.34	0.76
Control Delay	52.3	118.9	84.2	75.0	0.3	95.1	31.0	0.1	63.1	49.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.3	118.9	84.2	75.0	0.3	95.1	31.0	0.1	63.1	49.5
Queue Length 50th (ft)	138	~572	27	9	0	75	520	0	25	599
Queue Length 95th (ft)	210	#813	61	30	0	129	643	0	m35	m650
Internal Link Dist (ft)		717		185			1939			1261
Turn Bay Length (ft)			150		150	300		375		
Base Capacity (vph)	442	498	420	442	750	188	1886	894	364	2500
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	1.12	0.06	0.02	0.01	0.38	0.67	0.02	0.13	0.76

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis

AM Existing

3: US 1 & 3 rd Street

1/5/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↖↗	↖	↗↗	↖	↖↗	↗↗↗	↗↗↗
Traffic Volume (vph)	146	105	408	24	8	9	66	1158	16	42	1750	6
Future Volume (vph)	146	105	408	24	8	9	66	1158	16	42	1750	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	0.88	1.00	0.95	1.00	0.97	0.91	
Frt	1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	1641		1770	1863	2787	1770	3539	1583	3433	5082	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	1641		1770	1863	2787	1770	3539	1583	3433	5082	
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)	159	114	443	26	9	10	72	1259	17	46	1902	7
RTOR Reduction (vph)	0	88	0	0	0	10	0	0	8	0	0	0
Lane Group Flow (vph)	159	469	0	26	9	0	72	1259	9	46	1909	0
Turn Type	Split	NA		Split	NA	Prot	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8	8	5	2		1	6	
Permitted Phases									2			
Actuated Green, G (s)	40.0	40.0		6.1	6.1	6.1	10.4	82.6	82.6	5.3	77.5	
Effective Green, g (s)	40.0	40.0		6.1	6.1	6.1	10.4	82.6	82.6	5.3	77.5	
Actuated g/C Ratio	0.25	0.25		0.04	0.04	0.04	0.07	0.52	0.52	0.03	0.48	
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	1.5	3.0	3.0	1.5	3.0	
Lane Grp Cap (vph)	442	410		67	71	106	115	1827	817	113	2461	
v/s Ratio Prot	0.09	c0.29		c0.01	0.00	0.00	c0.04	c0.36		0.01	c0.38	
v/s Ratio Perm									0.01			
v/c Ratio	0.36	1.14		0.39	0.13	0.00	0.63	0.69	0.01	0.41	0.78	
Uniform Delay, d1	49.4	60.0		75.1	74.4	74.0	72.9	29.1	18.8	75.8	34.1	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.80	1.39	
Incremental Delay, d2	0.2	90.1		1.4	0.3	0.0	7.4	2.2	0.0	0.5	1.3	
Delay (s)	49.6	150.1		76.5	74.7	74.0	80.3	31.2	18.8	60.8	48.8	
Level of Service	D	F		E	E	E	F	C	B	E	D	
Approach Delay (s)		127.8			75.6			33.7			49.0	
Approach LOS		F			E			C			D	

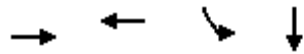
Intersection Summary

HCM 2000 Control Delay	58.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.0
Intersection Capacity Utilization	85.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

4: Dixie Highway & 3rd Street

1/5/2016



Lane Group	EBT	WBT	SBL	SBT
Lane Group Flow (vph)	298	167	488	662
v/c Ratio	0.71	0.22	1.00	0.47
Control Delay	56.5	3.4	86.6	40.3
Queue Delay	14.9	2.6	37.1	0.0
Total Delay	71.4	6.0	123.8	40.3
Queue Length 50th (ft)	232	3	412	169
Queue Length 95th (ft)	336	4	#641	210
Internal Link Dist (ft)	99	25		1263
Turn Bay Length (ft)				
Base Capacity (vph)	421	759	490	1405
Starvation Cap Reductn	0	480	0	0
Spillback Cap Reductn	107	0	150	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.95	0.60	1.44	0.47

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis

4: Dixie Highway & 3rd Street

AM Existing
1/5/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔					↔	↕↕↕	
Traffic Volume (vph)	0	267	7	27	127	0	0	0	0	449	596	13
Future Volume (vph)	0	267	7	27	127	0	0	0	0	449	596	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5					3.0	3.0	
Lane Util. Factor		1.00			1.00					1.00	0.91	
Frt		1.00			1.00					1.00	1.00	
Flt Protected		1.00			0.99					0.95	1.00	
Satd. Flow (prot)		1856			1847					1770	5069	
Flt Permitted		1.00			1.00					0.95	1.00	
Satd. Flow (perm)		1856			1861					1770	5069	
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)	0	290	8	29	138	0	0	0	0	488	648	14
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	297	0	0	167	0	0	0	0	488	660	0
Turn Type		NA		Prot	NA					Split	NA	
Protected Phases		4		2	2	4				1	1	9
Permitted Phases												
Actuated Green, G (s)		29.5			82.0					36.0	36.0	
Effective Green, g (s)		29.5			82.0					31.5	31.5	
Actuated g/C Ratio		0.23			0.63					0.24	0.24	
Clearance Time (s)		4.5										
Vehicle Extension (s)		3.0										
Lane Grp Cap (vph)		421			1168					428	1228	
v/s Ratio Prot		c0.16			c0.06					c0.28	0.13	
v/s Ratio Perm					0.03							
v/c Ratio		0.71			0.14					1.14	0.54	
Uniform Delay, d1		46.3			9.7					49.2	42.9	
Progression Factor		1.00			0.13					1.00	1.00	
Incremental Delay, d2		5.3			0.1					87.7	0.5	
Delay (s)		51.6			1.4					136.9	43.4	
Level of Service		D			A					F	D	
Approach Delay (s)		51.6			1.4			0.0			83.1	
Approach LOS		D			A			A			F	

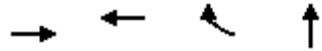
Intersection Summary

HCM 2000 Control Delay	68.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	58.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Queues
5: 1st Avenue & 3rd Street

AM Existing
1/5/2016



Lane Group	EBT	WBT	WBR	NBT
Lane Group Flow (vph)	698	87	78	316
v/c Ratio	0.95	0.22	0.18	0.34
Control Delay	33.9	43.7	2.1	39.6
Queue Delay	43.7	0.2	0.0	0.0
Total Delay	77.5	44.0	2.1	39.6
Queue Length 50th (ft)	371	61	0	113
Queue Length 95th (ft)	m#418	110	9	156
Internal Link Dist (ft)	25	225		2634
Turn Bay Length (ft)				
Base Capacity (vph)	736	401	439	924
Starvation Cap Reductn	124	0	0	0
Spillback Cap Reductn	0	78	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	1.14	0.27	0.18	0.34

Intersection Summary

- # 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.

HCM Signalized Intersection Capacity Analysis

5: 1st Avenue & 3rd Street

AM Existing
1/5/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↑	↗		↕↗				
Traffic Volume (vph)	44	598	0	0	80	72	75	208	7	0	0	0
Future Volume (vph)	44	598	0	0	80	72	75	208	7	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0	6.0		4.5				
Lane Util. Factor		1.00			1.00	1.00		0.95				
Frt		1.00			1.00	0.85		1.00				
Flt Protected		1.00			1.00	1.00		0.99				
Satd. Flow (prot)		1856			1863	1583		3481				
Flt Permitted		0.99			1.00	1.00		0.99				
Satd. Flow (perm)		1839			1863	1583		3481				
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)	48	650	0	0	87	78	82	226	8	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	61	0	1	0	0	0	0
Lane Group Flow (vph)	0	698	0	0	87	17	0	315	0	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA				
Protected Phases	8	7 8			7		10 3	10 3				
Permitted Phases						7						
Actuated Green, G (s)		79.0			28.0	28.0		36.0				
Effective Green, g (s)		79.0			28.0	28.0		36.0				
Actuated g/C Ratio		0.61			0.22	0.22		0.28				
Clearance Time (s)					6.0	6.0						
Vehicle Extension (s)					3.0	3.0						
Lane Grp Cap (vph)		1124			401	340		963				
v/s Ratio Prot		c0.24			0.05			c0.09				
v/s Ratio Perm		c0.13				0.01						
v/c Ratio		0.62			0.22	0.05		0.33				
Uniform Delay, d1		16.1			42.0	40.4		37.4				
Progression Factor		0.52			1.00	1.00		1.00				
Incremental Delay, d2		0.5			0.3	0.1		0.2				
Delay (s)		8.9			42.3	40.5		37.6				
Level of Service		A			D	D		D				
Approach Delay (s)		8.9			41.4			37.6			0.0	
Approach LOS		A			D			D			A	

Intersection Summary

HCM 2000 Control Delay	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	60.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Queues
6: US 1 & Hallandale Beach Boulevard

AM Existing
1/5/2016



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	195	1312	608	1133	326	722	357	487	1144
v/c Ratio	0.89	0.79	1.32	0.82	0.81	0.52	0.47	0.92	0.58
Control Delay	107.0	56.1	214.1	38.9	116.1	33.2	8.9	89.6	48.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	107.0	56.1	214.1	38.9	116.1	33.2	8.9	89.6	48.7
Queue Length 50th (ft)	202	354	~430	210	186	161	87	263	299
Queue Length 95th (ft)	#336	394	#543	306	0	191	49	#386	356
Internal Link Dist (ft)		1701		611		1261			282
Turn Bay Length (ft)							445	420	
Base Capacity (vph)	237	1791	461	1434	493	1386	762	529	1972
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.73	1.32	0.79	0.66	0.52	0.47	0.92	0.58

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

6: US 1 & Hallandale Beach Boulevard

AM Existing
1/5/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑		↖↗	↑↑↑		↖↗	↑↑↑	↗	↖↗	↑↑↑	
Traffic Volume (vph)	179	913	294	559	952	90	300	664	328	448	1009	43
Future Volume (vph)	179	913	294	559	952	90	300	664	328	448	1009	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5		6.5	6.5		7.0	8.0	6.5	7.0	8.0	
Lane Util. Factor	1.00	0.86		0.97	0.91		0.97	0.91	1.00	0.97	0.86	
Frt	1.00	0.96		1.00	0.99		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	6173		3433	5019		3433	5085	1583	3433	6368	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	6173		3433	5019		3433	5085	1583	3433	6368	
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)	195	992	320	608	1035	98	326	722	357	487	1097	47
RTOR Reduction (vph)	0	38	0	0	7	0	0	0	43	0	3	0
Lane Group Flow (vph)	195	1274	0	608	1126	0	326	722	314	487	1141	0
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	19.8	42.3		21.5	44.0		18.8	43.5	65.0	24.7	49.4	
Effective Green, g (s)	19.8	42.3		21.5	44.0		18.8	43.5	65.0	24.7	49.4	
Actuated g/C Ratio	0.12	0.26		0.13	0.28		0.12	0.27	0.41	0.15	0.31	
Clearance Time (s)	6.5	6.5		6.5	6.5		7.0	8.0	6.5	7.0	8.0	
Vehicle Extension (s)	1.5	2.5		1.5	2.5		1.5	2.5	1.5	1.5	2.5	
Lane Grp Cap (vph)	219	1631		461	1380		403	1382	643	529	1966	
v/s Ratio Prot	0.11	0.21		c0.18	c0.22		0.09	0.14	0.07	c0.14	c0.18	
v/s Ratio Perm									0.13			
v/c Ratio	0.89	0.78		1.32	0.82		0.81	0.52	0.49	0.92	0.58	
Uniform Delay, d1	69.0	54.6		69.2	54.2		68.8	49.4	35.2	66.7	46.6	
Progression Factor	1.00	1.00		1.17	0.63		1.51	0.64	0.30	1.00	1.00	
Incremental Delay, d2	32.3	2.4		156.7	3.4		8.5	1.1	0.2	21.2	1.3	
Delay (s)	101.4	57.0		237.5	37.6		112.5	32.9	10.7	87.9	47.8	
Level of Service	F	E		F	D		F	C	B	F	D	
Approach Delay (s)		62.7			107.4			45.8			59.8	
Approach LOS		E			F			D			E	

Intersection Summary

HCM 2000 Control Delay	70.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	83.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Queues
7: Hallandale Beach Boulevard & Dixie Highway

AM Existing
1/5/2016



Lane Group	EBT	WBL	WBT	SBT
Lane Group Flow (vph)	1372	114	1471	898
v/c Ratio	0.53	0.84	0.47	0.80
Control Delay	25.0	119.9	2.7	64.1
Queue Delay	0.0	84.5	0.3	0.0
Total Delay	25.1	204.3	3.0	64.1
Queue Length 50th (ft)	317	96	67	242
Queue Length 95th (ft)	361	m#204	m72	284
Internal Link Dist (ft)	2134		49	537
Turn Bay Length (ft)				
Base Capacity (vph)	2602	136	3156	1163
Starvation Cap Reductn	0	89	833	0
Spillback Cap Reductn	142	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.56	2.43	0.63	0.77

Intersection Summary

- # 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.

HCM Signalized Intersection Capacity Analysis
 7: Hallandale Beach Boulevard & Dixie Highway

AM Existing
 1/5/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑		↔	↑↑↑						↑↑↑	
Traffic Volume (vph)	0	1228	34	105	1353	0	0	0	0	218	570	38
Future Volume (vph)	0	1228	34	105	1353	0	0	0	0	218	570	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5		4.5	4.5						4.5	
Lane Util. Factor		0.91		1.00	0.91						0.86	
Frt		1.00		1.00	1.00						0.99	
Flt Protected		1.00		0.95	1.00						0.99	
Satd. Flow (prot)		5065		1770	5085						6281	
Flt Permitted		1.00		0.95	1.00						0.99	
Satd. Flow (perm)		5065		1770	5085						6281	
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)	0	1335	37	114	1471	0	0	0	0	237	620	41
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	5	0
Lane Group Flow (vph)	0	1370	0	114	1471	0	0	0	0	0	893	0
Turn Type		NA		Prot	NA					Perm	NA	
Protected Phases		2 3		1	1 2 3						4	
Permitted Phases										4		
Actuated Green, G (s)		76.5		11.5	92.5						26.6	
Effective Green, g (s)		76.5		11.5	92.5						26.6	
Actuated g/C Ratio		0.51		0.08	0.62						0.18	
Clearance Time (s)				4.5							4.5	
Vehicle Extension (s)				3.0							3.0	
Lane Grp Cap (vph)		2600		136	3156						1121	
v/s Ratio Prot		c0.27		c0.06	0.29							
v/s Ratio Perm											0.14	
v/c Ratio		0.53		0.84	0.47						0.80	
Uniform Delay, d1		24.2		67.8	15.1						58.6	
Progression Factor		1.00		1.27	0.15						1.00	
Incremental Delay, d2		0.2		28.2	0.1						4.0	
Delay (s)		24.4		114.4	2.4						62.6	
Level of Service		C		F	A						E	
Approach Delay (s)		24.4			10.5			0.0			62.6	
Approach LOS		C			B			A			E	

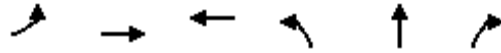
Intersection Summary

HCM 2000 Control Delay	27.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	149.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	81.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Queues
8: 1st Avenue & Hallandale Beach Boulevard

AM Existing
1/5/2016



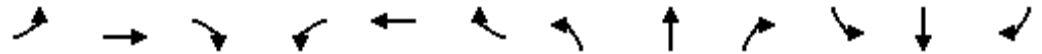
Lane Group	EBL	EBT	WBT	NBL	NBT	NBR
Lane Group Flow (vph)	33	1524	1415	189	143	72
v/c Ratio	0.06	0.36	0.57	0.97	0.70	0.27
Control Delay	29.6	0.3	28.3	122.7	82.8	4.9
Queue Delay	24.9	0.2	0.4	47.1	0.0	0.0
Total Delay	54.4	0.5	28.7	169.8	82.8	4.9
Queue Length 50th (ft)	25	1	351	~195	137	0
Queue Length 95th (ft)	m45	4	398	#359	#240	15
Internal Link Dist (ft)		49	1701		1266	
Turn Bay Length (ft)						
Base Capacity (vph)	564	4248	2467	194	204	271
Starvation Cap Reductn	518	1466	0	0	0	0
Spillback Cap Reductn	0	0	465	84	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.55	0.71	1.72	0.70	0.27

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
 8: 1st Avenue & Hallandale Beach Boulevard

AM Existing
 1/5/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑			↑↑↑		↖	↑	↗			
Traffic Volume (vph)	30	1402	0	0	1280	22	174	132	66	0	0	0
Future Volume (vph)	30	1402	0	0	1280	22	174	132	66	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5			4.5		4.5	4.5	4.5			
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00	1.00			
Frt	1.00	1.00			1.00		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (prot)	1770	5085			5072		1770	1863	1583			
Flt Permitted	0.95	1.00			1.00		0.95	1.00	1.00			
Satd. Flow (perm)	1770	5085			5072		1770	1863	1583			
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)	33	1524	0	0	1391	24	189	143	72	0	0	0
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	64	0	0	0
Lane Group Flow (vph)	33	1524	0	0	1414	0	189	143	8	0	0	0
Turn Type	Prot	NA			NA		Perm	NA	Perm			
Protected Phases	8 9	6 7 8 9			6 7			10				
Permitted Phases							10		10			
Actuated Green, G (s)	46.6	123.6			72.5		16.4	16.4	16.4			
Effective Green, g (s)	46.6	123.6			72.5		16.4	16.4	16.4			
Actuated g/C Ratio	0.31	0.83			0.49		0.11	0.11	0.11			
Clearance Time (s)							4.5	4.5	4.5			
Vehicle Extension (s)							3.0	3.0	3.0			
Lane Grp Cap (vph)	553	4218			2467		194	205	174			
v/s Ratio Prot	0.02	c0.30			c0.28			0.08				
v/s Ratio Perm							c0.11		0.01			
v/c Ratio	0.06	0.36			0.57		0.97	0.70	0.05			
Uniform Delay, d1	35.9	3.1			27.2		66.1	63.9	59.3			
Progression Factor	0.82	0.03			1.00		1.00	1.00	1.00			
Incremental Delay, d2	0.0	0.0			0.3		56.7	9.9	0.1			
Delay (s)	29.6	0.1			27.6		122.8	73.8	59.4			
Level of Service	C	A			C		F	E	E			
Approach Delay (s)		0.8			27.6			94.2			0.0	
Approach LOS		A			C			F			A	

Intersection Summary

HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	149.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	81.7%	ICU Level of Service	D
Analysis Period (min)	15		

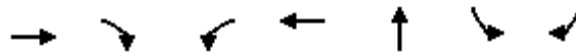
c Critical Lane Group

Queues

AM Existing

9: Hallandale Beach Boulevard & E 8th Avenue

1/5/2016



Lane Group	EBT	EBR	WBL	WBT	NBT	SBL	SBR
Lane Group Flow (vph)	1787	23	22	1496	40	180	195
v/c Ratio	0.77	0.03	0.19	0.59	0.33	0.25	0.26
Control Delay	39.0	0.7	24.8	15.7	11.8	36.7	4.5
Queue Delay	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.1	0.7	24.8	15.7	11.8	36.7	4.5
Queue Length 50th (ft)	360	0	5	124	0	134	0
Queue Length 95th (ft)	373	m0	m10	163	15	216	49
Internal Link Dist (ft)	611			578	210		
Turn Bay Length (ft)						150	150
Base Capacity (vph)	2376	775	189	2860	270	711	761
Starvation Cap Reductn	76	0	0	8	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.03	0.12	0.52	0.15	0.25	0.26

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
 9: Hallandale Beach Boulevard & E 8th Avenue

AM Existing
 1/5/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↑	↑	↑↑↑			↑↓		↑	↑	↑
Traffic Volume (vph)	0	1644	21	20	1376	0	12	0	25	166	0	179
Future Volume (vph)	0	1644	21	20	1376	0	12	0	25	166	0	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.5	4.0			4.5		4.0		4.0
Lane Util. Factor		0.91	1.00	1.00	0.91			1.00		1.00		1.00
Frt		1.00	0.85	1.00	1.00			0.91		1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00			0.98		0.95		1.00
Satd. Flow (prot)		5085	1583	1770	5085			1666		1770		1583
Flt Permitted		1.00	1.00	0.05	1.00			0.98		0.95		1.00
Satd. Flow (perm)		5085	1583	97	5085			1666		1770		1583
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)	0	1787	23	22	1496	0	13	0	27	180	0	195
RTOR Reduction (vph)	0	0	13	0	0	0	0	39	0	0	0	120
Lane Group Flow (vph)	0	1787	10	22	1496	0	0	1	0	180	0	75
Turn Type		NA	Perm	pm+pt	NA		Split	NA		Split		Perm
Protected Phases		4		3	8		2	2		6	6	
Permitted Phases			4	8								6
Actuated Green, G (s)		72.6	72.6	81.2	81.2			4.6		61.7		61.7
Effective Green, g (s)		72.6	72.6	81.2	81.2			4.6		61.7		61.7
Actuated g/C Ratio		0.45	0.45	0.51	0.51			0.03		0.39		0.39
Clearance Time (s)		4.0	4.0	4.5	4.0			4.5		4.0		4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0		3.0		3.0
Lane Grp Cap (vph)		2307	718	92	2580			47		682		610
v/s Ratio Prot		c0.35		0.01	c0.29			c0.00		c0.10		
v/s Ratio Perm			0.01	0.12								0.05
v/c Ratio		0.77	0.01	0.24	0.58			0.02		0.26		0.12
Uniform Delay, d1		36.8	24.0	28.3	27.5			75.5		33.6		31.7
Progression Factor		1.02	1.00	1.26	0.53			1.00		1.00		1.00
Incremental Delay, d2		1.1	0.0	1.1	0.3			0.2		0.9		0.4
Delay (s)		38.6	24.0	36.8	14.7			75.7		34.6		32.1
Level of Service		D	C	D	B			E		C		C
Approach Delay (s)		38.4			15.0			75.7			33.3	
Approach LOS		D			B			E			C	

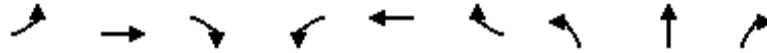
Intersection Summary

HCM 2000 Control Delay	28.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	54.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Queues
10: Hallandale Beach Boulevard & E 10th Avenue

AM Existing
1/5/2016



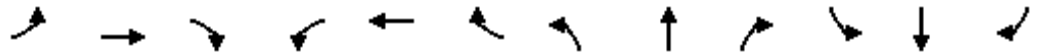
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	87	1779	49	116	1451	62	27	28	114
v/c Ratio	0.60	0.72	0.06	0.50	0.61	0.08	0.04	0.04	0.18
Control Delay	115.8	8.4	0.3	79.3	32.4	3.2	38.2	38.2	7.3
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	115.8	8.5	0.3	79.3	32.4	3.2	38.2	38.2	7.3
Queue Length 50th (ft)	96	72	0	61	405	0	18	20	0
Queue Length 95th (ft)	m132	73	m0	95	408	20	50	51	50
Internal Link Dist (ft)		578			589			252	
Turn Bay Length (ft)	180		65	475		180			
Base Capacity (vph)	459	2785	885	375	2385	781	611	631	648
Starvation Cap Reductn	0	166	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.68	0.06	0.31	0.61	0.08	0.04	0.04	0.18

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
 10: Hallandale Beach Boulevard & E 10th Avenue

AM Existing
 1/5/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	1637	45	107	1335	57	35	16	105	0	0	0
Future Volume (vph)	80	1637	45	107	1335	57	35	16	105	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5			
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.95	0.95	1.00			
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.98	1.00			
Satd. Flow (prot)	1770	5085	1583	3433	5085	1583	1681	1736	1583			
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.98	1.00			
Satd. Flow (perm)	1770	5085	1583	3433	5085	1583	1681	1736	1583			
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)	87	1779	49	116	1451	62	38	17	114	0	0	0
RTOR Reduction (vph)	0	0	21	0	0	33	0	0	73	0	0	0
Lane Group Flow (vph)	87	1779	28	116	1451	29	27	28	41	0	0	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm			
Protected Phases	7	4		3	8		5	2				
Permitted Phases			4			8			2			
Actuated Green, G (s)	13.2	77.5	77.5	10.8	75.1	75.1	58.2	58.2	58.2			
Effective Green, g (s)	13.2	77.5	77.5	10.8	75.1	75.1	58.2	58.2	58.2			
Actuated g/C Ratio	0.08	0.48	0.48	0.07	0.47	0.47	0.36	0.36	0.36			
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5			
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	146	2463	766	231	2386	743	611	631	575			
v/s Ratio Prot	c0.05	c0.35		0.03	0.29		0.02	0.02				
v/s Ratio Perm			0.02			0.02			c0.03			
v/c Ratio	0.60	0.72	0.04	0.50	0.61	0.04	0.04	0.04	0.07			
Uniform Delay, d1	70.8	32.7	21.7	72.0	31.5	22.9	32.9	32.9	33.3			
Progression Factor	1.48	0.22	0.03	1.00	1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	4.5	0.8	0.0	1.7	0.4	0.0	0.1	0.1	0.2			
Delay (s)	109.6	7.9	0.6	73.7	32.0	23.0	33.1	33.0	33.5			
Level of Service	F	A	A	E	C	C	C	C	C			
Approach Delay (s)		12.3			34.6			33.4			0.0	
Approach LOS		B			C			C			A	

Intersection Summary

HCM 2000 Control Delay	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	51.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Queues

AM Existing

11: Dixie Highway & County Line Road

1/5/2016



Lane Group	EBT	WBT	NBL	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	434	282	9	333	449	217	87
v/c Ratio	0.71	0.58	0.03	0.50	0.60	0.28	0.12
Control Delay	44.8	19.1	30.4	6.6	26.1	19.8	4.4
Queue Delay	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.5	19.1	30.4	6.6	26.1	19.8	4.4
Queue Length 50th (ft)	130	68	4	0	207	85	0
Queue Length 95th (ft)	202	74	18	72	325	144	28
Internal Link Dist (ft)	628	59				2638	
Turn Bay Length (ft)							
Base Capacity (vph)	756	483	270	665	1026	1080	954
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	104	0	0	10	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.58	0.03	0.51	0.44	0.20	0.09

Intersection Summary

HCM Signalized Intersection Capacity Analysis
 11: Dixie Highway & County Line Road

AM Existing
 1/5/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑		↑		↑	↑	↑	↑
Traffic Volume (vph)	0	387	12	136	123	0	8	0	306	413	200	80
Future Volume (vph)	0	387	12	136	123	0	8	0	306	413	200	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5		4.5		4.5	4.5	4.5	4.5
Lane Util. Factor		0.95			1.00		1.00		1.00	1.00	1.00	1.00
Frt		1.00			1.00		1.00		0.85	1.00	1.00	0.85
Flt Protected		1.00			0.97		0.95		1.00	0.95	1.00	1.00
Satd. Flow (prot)		3523			1815		1770		1583	1770	1863	1583
Flt Permitted		1.00			0.97		0.55		1.00	0.95	1.00	1.00
Satd. Flow (perm)		3523			1815		1017		1583	1770	1863	1583
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)	0	421	13	148	134	0	9	0	333	449	217	87
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	244	0	0	50
Lane Group Flow (vph)	0	432	0	0	282	0	9	0	89	449	217	37
Turn Type		NA		Split	NA		D.Pm		Prot	custom	NA	Perm
Protected Phases		1		4	4				2		3	2 3
Permitted Phases							2			2		2 3
Actuated Green, G (s)		16.6			25.6		25.6		25.6	36.0	40.5	40.5
Effective Green, g (s)		16.6			25.6		25.6		25.6	36.0	40.5	40.5
Actuated g/C Ratio		0.17			0.27		0.27		0.27	0.37	0.42	0.42
Clearance Time (s)		4.5			4.5		4.5		4.5	4.5		
Vehicle Extension (s)		3.0			3.0		3.0		3.0	3.0		
Lane Grp Cap (vph)		607			482		270		421	745	784	666
v/s Ratio Prot		c0.12			c0.16				0.06	c0.07	0.12	
v/s Ratio Perm							0.01			0.19		0.02
v/c Ratio		0.71			0.59		0.03		0.21	0.60	0.28	0.05
Uniform Delay, d1		37.5			30.7		26.1		27.4	25.2	18.3	16.5
Progression Factor		1.00			0.43		1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2		3.9			1.7		0.2		1.1	1.4	0.2	0.0
Delay (s)		41.5			15.0		26.4		28.6	26.6	18.4	16.5
Level of Service		D			B		C		C	C	B	B
Approach Delay (s)		41.5			15.0			28.5			23.1	
Approach LOS		D			B			C			C	

Intersection Summary		
HCM 2000 Control Delay	27.3	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.65	C
Actuated Cycle Length (s)	96.2	Sum of lost time (s)
Intersection Capacity Utilization	64.2%	18.0
Analysis Period (min)	15	ICU Level of Service
		C

c Critical Lane Group

Queues
12: County Line Road & 1st Avenue

AM Existing
1/5/2016



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	382	824	149	110	50	137
v/c Ratio	0.34	0.63	0.42	0.22	0.10	0.26
Control Delay	2.8	4.1	35.3	31.0	30.0	7.1
Queue Delay	0.2	0.6	0.1	0.0	0.0	0.1
Total Delay	3.0	4.7	35.4	31.0	30.0	7.2
Queue Length 50th (ft)	26	79	73	51	23	0
Queue Length 95th (ft)	26	92	155	112	60	49
Internal Link Dist (ft)	59			64	2634	
Turn Bay Length (ft)						
Base Capacity (vph)	1488	1461	359	496	496	522
Starvation Cap Reductn	504	275	0	0	0	0
Spillback Cap Reductn	0	0	10	0	0	48
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.69	0.43	0.22	0.10	0.29

Intersection Summary

HCM Signalized Intersection Capacity Analysis

12: County Line Road & 1st Avenue

AM Existing
1/5/2016



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	351	758	137	101	46	126
Future Volume (vph)	351	758	137	101	46	126
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1583	1770	1863	1863	1583
Flt Permitted	0.95	1.00	0.72	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583	1349	1863	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	382	824	149	110	50	137
RTOR Reduction (vph)	0	294	0	0	0	101
Lane Group Flow (vph)	382	530	149	110	50	36
Turn Type	Prot	Prot	Perm	NA	NA	Prot
Protected Phases	5	5		8	8	8
Permitted Phases			8			
Actuated Green, G (s)	61.6	61.6	25.6	25.6	25.6	25.6
Effective Green, g (s)	61.6	61.6	25.6	25.6	25.6	25.6
Actuated g/C Ratio	0.64	0.64	0.27	0.27	0.27	0.27
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1133	1013	358	495	495	421
v/s Ratio Prot	0.22	c0.33		0.06	0.03	0.02
v/s Ratio Perm			c0.11			
v/c Ratio	0.34	0.52	0.42	0.22	0.10	0.09
Uniform Delay, d1	7.9	9.4	29.1	27.5	26.6	26.5
Progression Factor	0.26	3.58	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.4	3.5	1.0	0.4	0.4
Delay (s)	2.2	34.0	32.7	28.6	27.0	26.9
Level of Service	A	C	C	C	C	C
Approach Delay (s)	23.9			30.9	27.0	
Approach LOS	C			C	C	

Intersection Summary

HCM 2000 Control Delay	25.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	96.2	Sum of lost time (s)	18.0
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
 13: E 1st Avenue & NE 214th Terr

AM Existing
 1/5/2016



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						144
pX, platoon unblocked						
vC, conflicting volume	0	0				0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0	0				0
tC, single (s)	6.4	6.2				4.1
tC, 2 stage (s)						
tF (s)	3.5	3.3				2.2
p0 queue free %	100	100				100
cM capacity (veh/h)	1023	1085				1623

Direction, Lane #	WB 1	NB 1	SB 1
Volume Total	0	0	0
Volume Left	0	0	0
Volume Right	0	0	0
cSH	1700	1700	1700
Volume to Capacity	0.00	0.00	0.00
Queue Length 95th (ft)	0	0	0
Control Delay (s)	0.0	0.0	0.0
Lane LOS	A		
Approach Delay (s)	0.0	0.0	0.0
Approach LOS	A		

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

HCM Unsignalized Intersection Capacity Analysis
 14: SE 3rd Ave & SE 10th Ct

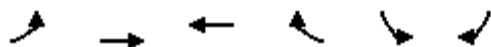
AM Existing
 1/5/2016



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Volume (veh/h)	1	27	0	0	5	1	0	0	0	22	0	1
Future Volume (Veh/h)	1	27	0	0	5	1	0	0	0	22	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	1	29	0	0	5	1	0	0	0	24	0	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	6			29			38	37	29	36	36	6
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	6			29			38	37	29	36	36	6
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	98	100	100
cM capacity (veh/h)	1615			1584			966	855	1046	969	855	1077
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	30	6	0	25								
Volume Left	1	0	0	24								
Volume Right	0	1	0	1								
cSH	1615	1584	1700	973								
Volume to Capacity	0.00	0.00	0.00	0.03								
Queue Length 95th (ft)	0	0	0	2								
Control Delay (s)	0.2	0.0	0.0	8.8								
Lane LOS	A		A	A								
Approach Delay (s)	0.2	0.0	0.0	8.8								
Approach LOS			A	A								
Intersection Summary												
Average Delay			3.7									
Intersection Capacity Utilization			13.3%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis
 37: NE 214th Terr & SE 3rd Ave

AM Existing
 1/5/2016



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↘	
Traffic Volume (veh/h)	38	10	5	2	0	1
Future Volume (Veh/h)	38	10	5	2	0	1
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	41	11	5	2	0	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	7				99	6
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	7				99	6
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				100	100
cM capacity (veh/h)	1614				877	1077

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	52	7	1
Volume Left	41	0	0
Volume Right	0	2	1
cSH	1614	1700	1077
Volume to Capacity	0.03	0.00	0.00
Queue Length 95th (ft)	2	0	0
Control Delay (s)	5.8	0.0	8.3
Lane LOS	A		A
Approach Delay (s)	5.8	0.0	8.3
Approach LOS			A

Intersection Summary			
Average Delay		5.2	
Intersection Capacity Utilization		19.3%	ICU Level of Service A
Analysis Period (min)		15	

HCM Unsignalized Intersection Capacity Analysis
41: Optima Office Drive

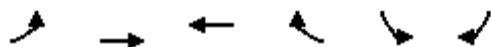
AM Existing
1/5/2016



Movement	EBL	EBR	NBL	NBT	SBT	SBR			
Lane Configurations		↗	↘	↑↑↑	↑↑↑				
Traffic Volume (veh/h)	0	5	0	1455	2494	39			
Future Volume (Veh/h)	0	5	0	1455	2494	39			
Sign Control	Stop			Free		Free			
Grade	0%			0%		0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Hourly flow rate (vph)	0	5	0	1582	2711	42			
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type				None	None				
Median storage veh									
Upstream signal (ft)				500	754				
pX, platoon unblocked	0.74	0.66	0.66						
vC, conflicting volume	3259	925	2753						
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	1430	0	1871						
tC, single (s)	6.8	6.9	4.1						
tC, 2 stage (s)									
tF (s)	3.5	3.3	2.2						
p0 queue free %	100	99	100						
cM capacity (veh/h)	93	720	211						
Direction, Lane #	EB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	
Volume Total	5	0	527	527	527	1084	1084	584	
Volume Left	0	0	0	0	0	0	0	0	
Volume Right	5	0	0	0	0	0	0	42	
cSH	720	1700	1700	1700	1700	1700	1700	1700	
Volume to Capacity	0.01	0.00	0.31	0.31	0.31	0.64	0.64	0.34	
Queue Length 95th (ft)	1	0	0	0	0	0	0	0	
Control Delay (s)	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Lane LOS	B								
Approach Delay (s)	10.0	0.0					0.0		
Approach LOS	B								
Intersection Summary									
Average Delay			0.0						
Intersection Capacity Utilization			59.1%		ICU Level of Service			B	
Analysis Period (min)	15								

HCM Unsignalized Intersection Capacity Analysis
46: Optima Drive

AM Existing
1/5/2016



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	0				0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0				0	0
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1623				1023	1085
Direction, Lane #	EB 1	WB 1	SB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS			A			
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS			A			
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization		0.0%		ICU Level of Service		A
Analysis Period (min)			15			

APPENDIX I: COMMITTED DEVELOPMENT DATA

APPENDIX J: FDOT PRE-APPLICATION LETTER