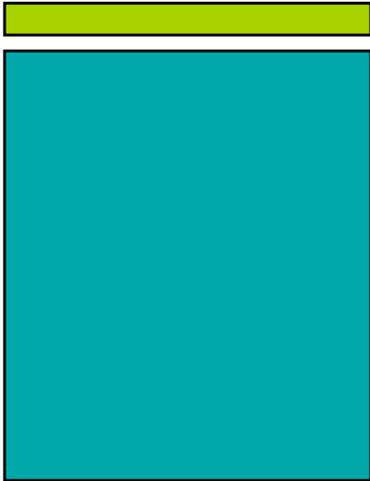


New Administration Building Complex Angela Street Site – City of Key West

traffic study



prepared for:
mbi | k2m Architecture, Inc.

Traf Tech
ENGINEERING, INC.

June 2009

June 30, 2009

Mr. William Shepler - Project Manager
mbi | k2m Architecture, Inc.
1001 Whitehead Street
Key West, Florida 33040

Re: **New Administration Building Complex (Angela Street Site) – Traffic Study**

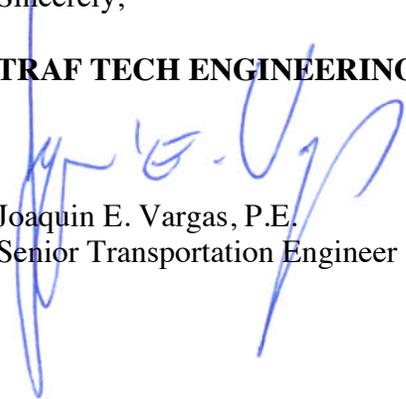
Dear Mr. Shepler:

Traf Tech Engineering, Inc. is pleased to provide you with the results of the traffic study undertaken for the City of Key West new administration building complex located on the north side of Angela Street just west of Simonton Street in Monroe County, Florida.

It has been a pleasure serving mbi | k2m Architecture, Inc. on this project.

Sincerely,

TRAF TECH ENGINEERING, INC.



Joaquin E. Vargas, P.E.
Senior Transportation Engineer

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INTRODUCTION

The City of Key West is in the process of redeveloping the existing administration building complex located on the north side of Angela Street just west of Simonton Street in Downtown Key West, Florida. The existing complex consists of two separate buildings and a surface parking lot located between the two building structures. The location of the project site is illustrated in Figure 1 on the following page.

Traf Tech Engineering, Inc. was retained by mbi | k2m Architecture, Inc. to conduct a traffic study in connection with the proposed redevelopment project. The study addresses trip generation, and the traffic impacts created by the proposed redevelopment project on the nearby transportation network. This study is divided into seven (7) sections, as listed below:

1. Inventory
2. Existing Conditions
3. Traffic Counts
4. Trip Generation
5. Trip Distribution and Traffic Assignment
6. Traffic Impact Analysis
7. Conclusions and Recommendations



INVENTORY

Existing Land Use and Access

As mentioned previously, the existing administration building complex consists of two separate buildings and a surface parking lot. The northernmost building (located on the northeast corner of the site) is known as the Madeline L. Bean building. This two-story structure houses the building department, licensing division, engineering department, planning department, and code compliance.

The primary building (Josephine Parker) is located adjacent to Angela Street and includes City Hall and the fire department. Additionally, part of the finance department is located on the second floor of an outside building (not part of the administration building complex site) located west of the surface parking lot (west of Josephine Parker Road).

The size of the existing development is summarized below:

- Madeline L Bean Building (7,000 square feet)

- Josephine Parker City Hall Building (19,000 square feet – including the fire department)

- Surface Parking Lot (approximately 104 parking spaces between the Madeline L. Bean building and the Josephine Parker City Hall building plus approximately four parking stalls located on the west side of the City Hall building)

Access to the surface parking lot is provided from Josephine Parker Road (off of Angela Street) and via four access driveways located on the west side of Simonton Street. The southernmost driveway on Simonton Street provides access to the fire station while the northern three driveways provide ingress/egress to and from the surface parking lot.

Proposed Land Use and Access

The proposed redevelopment project will replace the two existing buildings and surface parking lot with a 33,200 square-foot building (26,000 square feet for the City Hall and supporting services/departments plus 7,200 square feet for the fire station) and a 130-space parking garage. The new building will be located on the southern two-thirds of the site and the parking garage will be placed on the north portion of the site. Access to the new City Hall Complex will be provided through Josephine Parker Road (from Angela Street), one main entrance to and from the parking garage from Simonton Street, and three fire-station bays off of Simonton Street.

EXISTING CONDITIONS

This section addresses the existing roadway system located in the vicinity of the project site, nearby intersections, on-street parking, and bus stops.

Roadway System

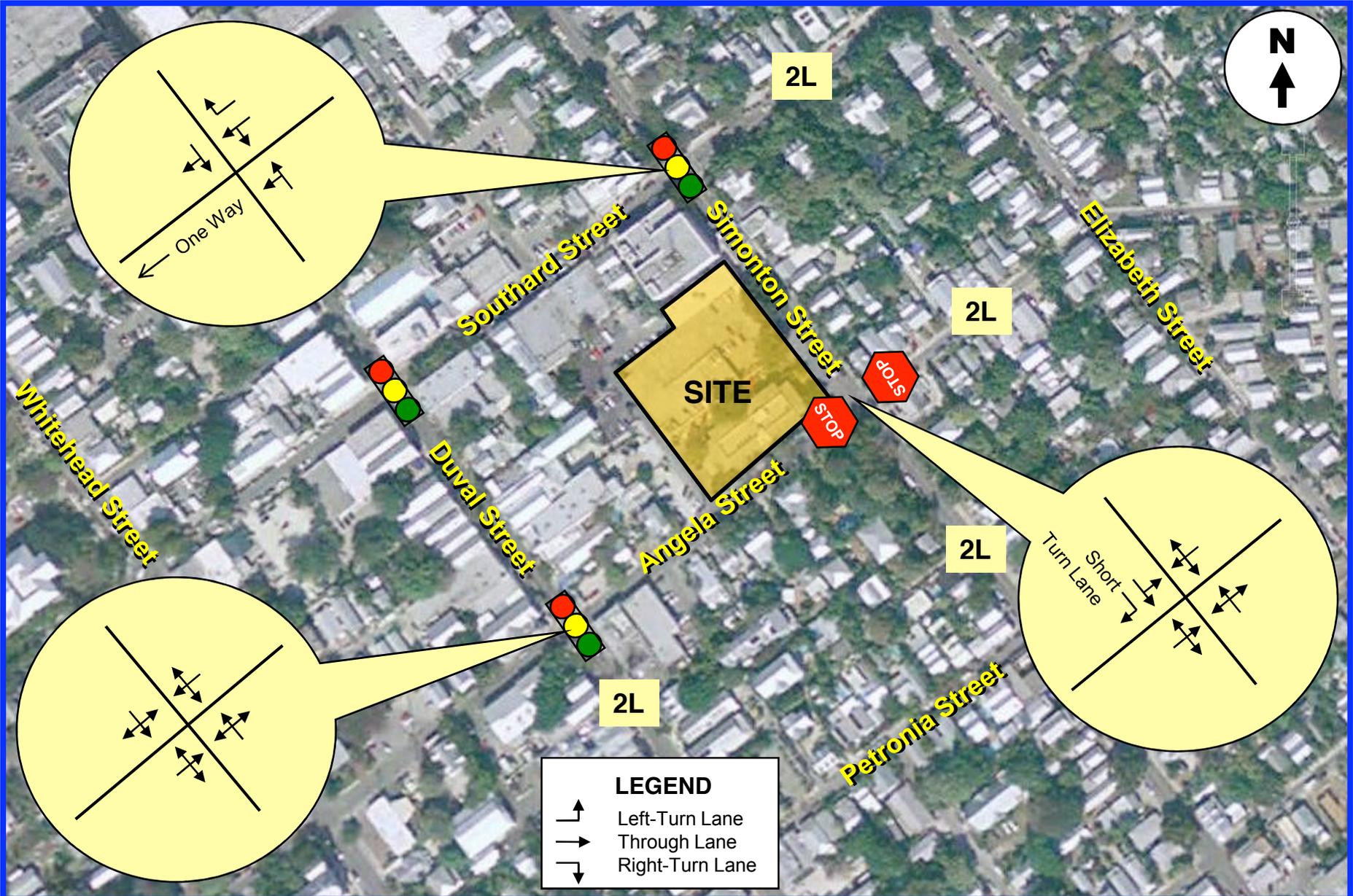
The project site is bounded by Angela Street on the south and Simonton Street on the east. As such, these two roadways will be impacted the most by the proposed redevelopment project. Additionally, other nearby streets that are anticipated to be impacted by this project include Southard Street, Duval Street, and Truman Avenue. These five nearby roadways provide one through lane in each direction (two-lane streets) near the project site, except Southard Street which operates as a one-way westbound facility near the project site.

Nearby Intersections

Three intersections were identified as the locations that will be impacted the most by the proposed redevelopment project. These intersections include:

- 1) Duval Street and Angela Street (signalized)
- 2) Angela Street and Simonton Street (stop control)
- 3) Simonton Street and Southard Street (signalized)

Figure 2 shows the existing lane geometry of the three intersections selected for analysis purposes. The number of lanes on the street system surrounding the project site is also depicted in the figure.



On-Street Parking

On-street parking is provided on both sides of Simonton Street and on the north side of Angela Street adjacent to the project site. These parking spaces are described below:

- Six (6) metered parking spaces on the east side of Simonton Street
- Three (3) parking spaces that allow free parking for up to 15 minutes on the west side of Simonton Street
- A small area designated for motorcycle parking on the west side of Simonton Street
- One parking space designated for delivery trucks located on the north side of Angela Street (adjacent to City Hall)
- Four (4) parking spaces that allow free parking for up to 15 minutes on the north side of Angela Street

Bus Stops

Two bus stops are provided on Simonton Street near the project site. A bus stop is provided on the east side of Simonton Street just north of Angela Street. The other nearby bus stop is provided in the southbound direction of Simonton Street just south of Southard Street.

TRAFFIC COUNTS

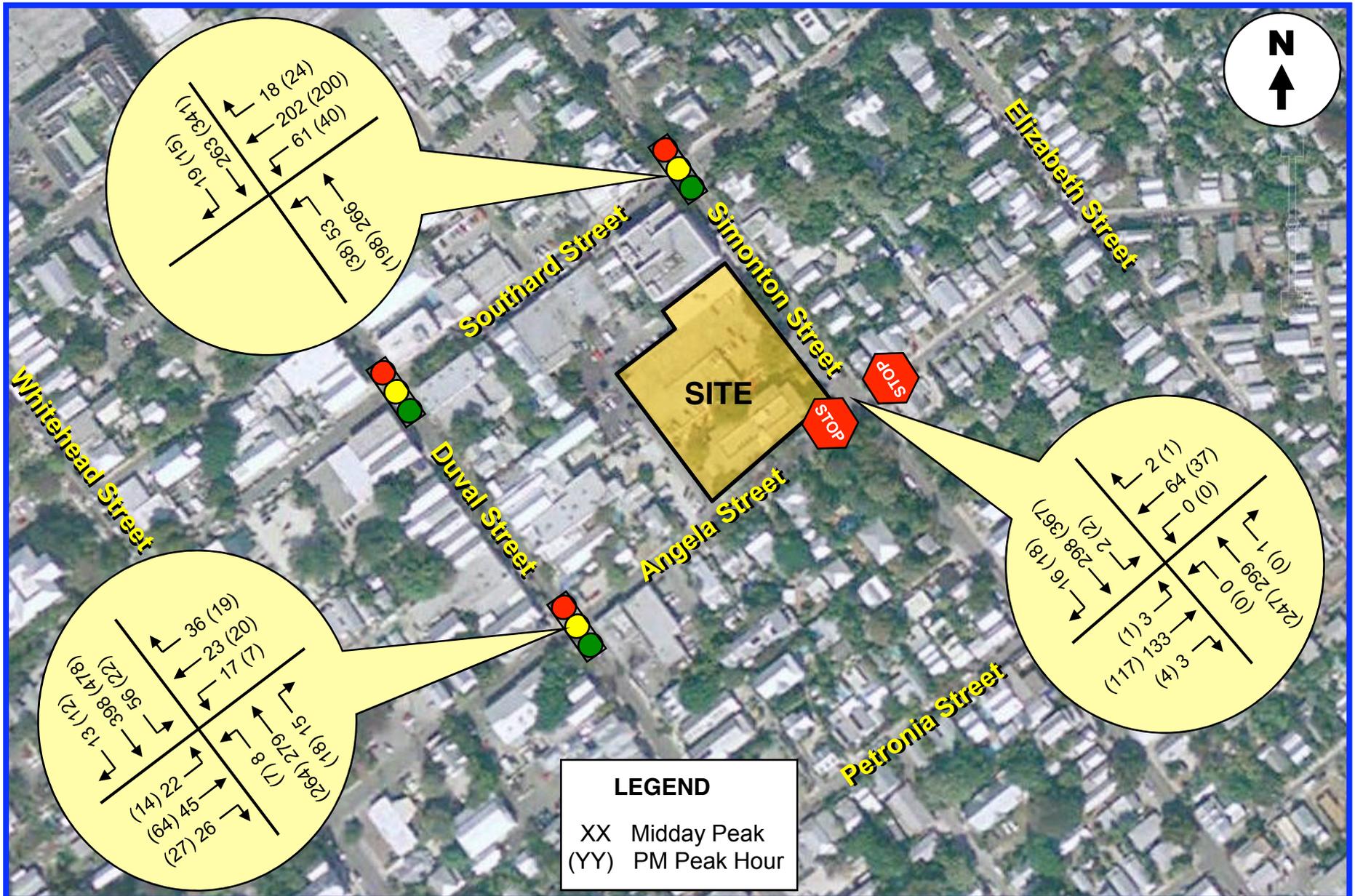
Traf Tech Engineering, Inc., in association with Crossroads Engineering Data, Inc., collected intersection turning movement counts at the three study intersections. The intersection turning movement counts were collected on Wednesday, June 17, 2009 during the midday and afternoon peak periods at the following three intersections located near the project site:

1. Duval Street and Angela Street (Signalized)
2. Angela Street and Simonton Street (Stop-control: Stop Sign on Angela Street)
3. Simonton Street and Southard Street (Signalized)

The midday peak hour counts were recorded between 11:00 AM and 1:00 PM while the afternoon counts were collected from 4:00 PM to 6:00 PM.

Additionally, machine traffic counts were recorded on all streets surrounding the project site (Duval Street, Simonton Street, Southard Street, Angela Street) and on Truman Avenue. The machine traffic counts were also collected on Wednesday, June 17, 2009.

Figure 3 summarizes the results of the intersection turning movement counts undertaken during the midday and PM peak hours. Appendix A contains the intersection turning movement counts, as collected in the field. The machine traffic counts are contained in Appendix B. The signal timing of the two signalized intersections was recorded in the field by a registered traffic engineer.



TRIP GENERATION

The trip generation for the existing and proposed City Hall Complex was based on traffic counts conducted between 8:00 AM and 6:00 PM on Wednesday, June 24, 2009. The 10-hour counts provided the number of vehicles (automobile trips) generated by the existing administration buildings and the number of patrons that arrive by other modes (i.e. walking, bicycle, scooter, transit, etc.). Tables 1 and 2 summarize the existing trip generation associated with the City of Key West Administration Building Complex (Angela Street Site) during the midday and PM peak hours.

TABLE 1							
Trip Generation Summary (Midday Peak Hour)							
City of Key West Administration Building Complex (Angela Site)							
	Auto	Walk	Bike	Bus	On-Street Parking	Scooter	Total
Total	148	37	9	0	7	10	211

Source: Crossroads Engineering Data, Inc.

TABLE 2							
Trip Generation Summary (PM Peak Hour)							
City of Key West Administration Building Complex (Angela Site)							
	Auto	Walk	Bike	Bus	On-Street Parking	Scooter	Total
Total	109	13	11	0	3	0	136

Source: Crossroads Engineering Data, Inc.

As indicated in Tables 1 and 2, the existing City Hall complex is currently generating approximately 211 midday peak hour trips (161 inbound and 50 outbound) and approximately 136 trips during the typical afternoon peak hour (54 inbound and 82 outbound). Moreover, a significant amount of the trips include walking or riding a bicycle (approximately 22 percent of the midday trips and approximately 18 percent of the PM peak hour trips). Appendix C contains the trip generation counts recorded at the project site.

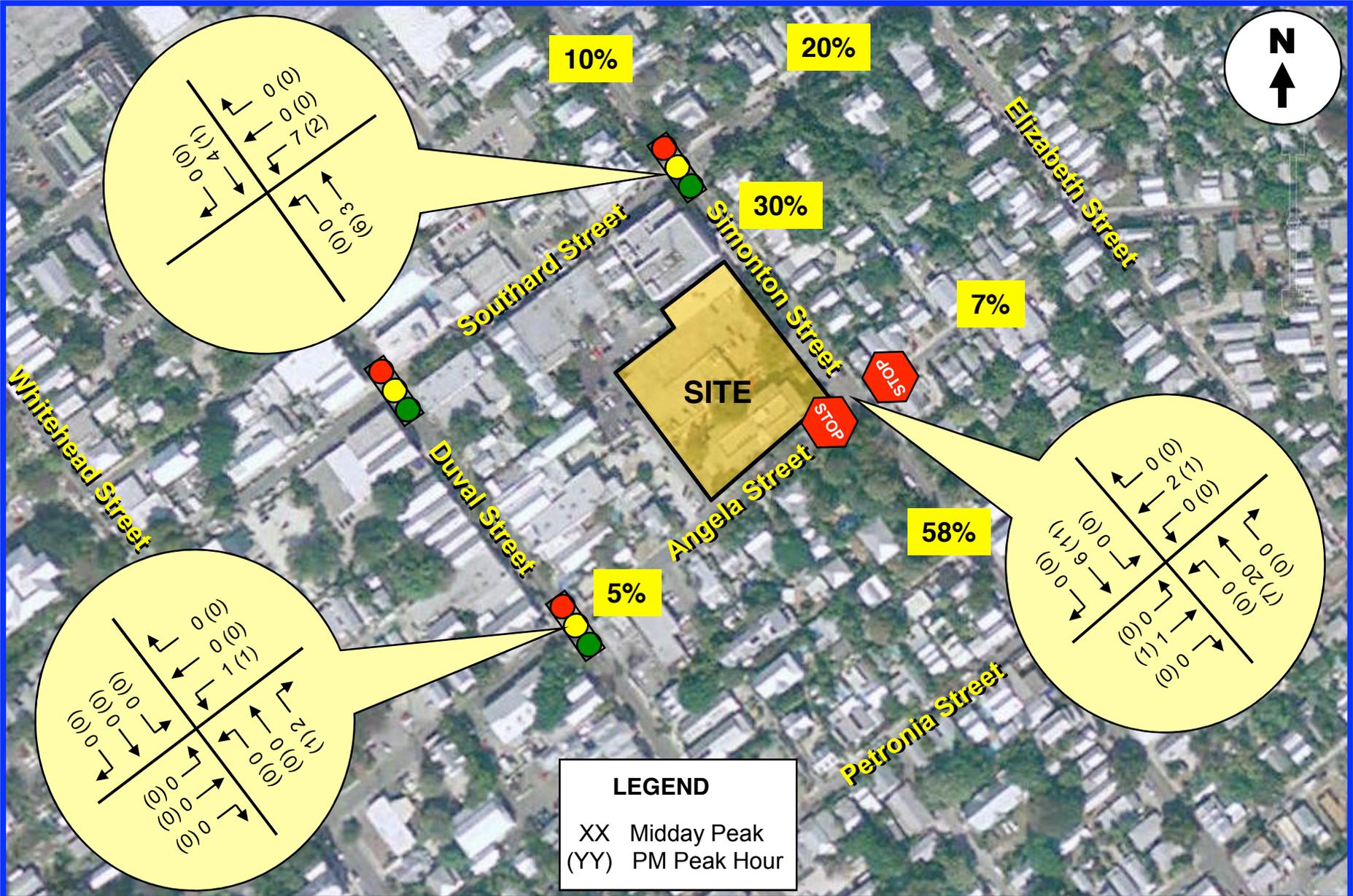
Since the proposed redevelopment project will include 7,200 square feet of additional building area (excluding the parking garage), or approximately 28 percent more building square footage than the existing City Hall Complex, the future trips associated with the redevelopment project are projected to be approximately 28 percent more than the existing traffic counts recorded in the field. Hence, the future City Hall Complex is projected to add approximately 59 new midday peak hour trips and approximately 38 new PM peak hour trips. However, based on the traffic counts conducted at the site, a significant portion of the future trips will be non-auto trips. Using the same walking and bicycle trip percentages documented for the existing facility, the proposed redevelopment project is projected to add approximately 46 new midday peak hour trips (35 inbound and 11 outbound) and approximately 31 new PM peak hour trips (12 inbound and 19 outbound) to the nearby transportation network.

TRIP DISTRIBUTION AND TRAFFIC ASSIGNMENT

The trip distribution and traffic assignment for the City Hall Complex were based on the existing traffic patterns associated with the existing development. Based on the traffic counts conducted at the site, the following traffic assignment was used for the proposed redevelopment project:

- 30% to and from the north via Simonton Street
- 58% to and from the south via Simonton Street
- 7% to and from the east via Angela Street
- 5% to and from the west via Angela Street

The new midday and PM peak hour traffic generated by the project was assigned to the nearby transportation network using the traffic assignment documented above. The project traffic assignment is summarized in Figure 4.



TRAFFIC ANALYSIS

This section of the study is divided into four parts. The first part consists of developing the future conditions traffic volumes for the study area. The second part includes level-of-service analyses for existing and future conditions. The third section evaluates the project access off of Angela Street and Simonton Street. The fourth part addresses nearby roadway links.

Future Conditions Traffic Volumes

Two sets of future traffic volumes were developed. The first set includes project buildout conditions without the proposed project and the second set adds the new trips anticipated to be generated by the proposed redevelopment project.

In order to develop year 2011 traffic volumes (project is anticipated to be built and occupied prior to December, 2011), without the proposed project, two separate analyses were undertaken. The first analysis converts the existing peak hour traffic counts collected in the field during the month of June 2009 to average peak season conditions. Based on FDOT's Peak Season Factor Category report (which includes daily counts every year near Key West), a factor of 1.14 is required to convert traffic counts collected in the third week of June to average peak season conditions (refer to Appendix D). The second analysis includes a growth factor to project 2009 peak season traffic volumes to the year 2011. Based on traffic growth data published by the FDOT for three traffic count stations located near the project site, traffic has remained relatively constant during the past five years (refer to Appendix D). However, in order to assess impacts with a conservative approach, a 1.0% growth rate, compounded annually, was assumed for the study area.

The new trips generated by the redevelopment project (refer to Figure 4) were added to the 2011 background traffic in order to develop total traffic conditions. Figure 5 presents the background traffic, without the new trips generated by the proposed redevelopment

project, and Figure 6 presents the total traffic conditions (including the new project trips) for the study area. The future traffic projections for the study intersections (peak season adjustments, growth rates, and new project traffic) are presented in tabular format in Appendix E.

Level of Service Analyses

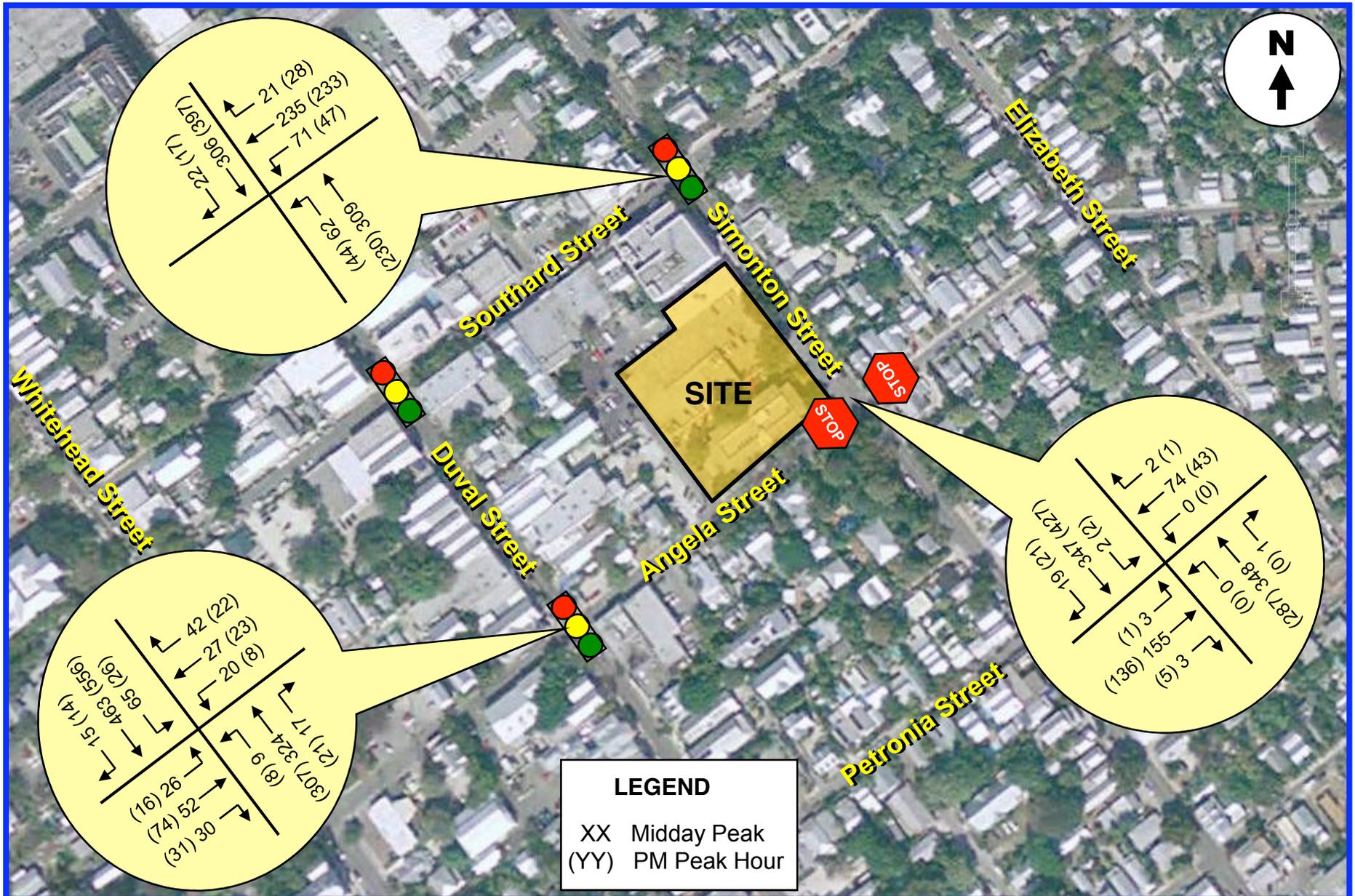
Intersection capacity/level of service analyses were performed for the three study intersections. The analyses were undertaken following the capacity/level of service procedures outlined in the Highway Capacity Manual (HCS+ Version 5.2). The results of the capacity analyses are summarized in Tables 3 and 4. As indicated in Tables 3 and 4, all intersections are currently operating at acceptable levels of services and will continue to operate adequately in the year 2011 with the proposed redevelopment project (meets the City’s adopted level of service). The adopted level of service is “D”, based on the Traffic Circulation Element of the City of Key West. Appendix F contains the computer printouts of the intersection capacity analyses and Appendix G includes the pertinent sections from the City’s Traffic Circulation Element.

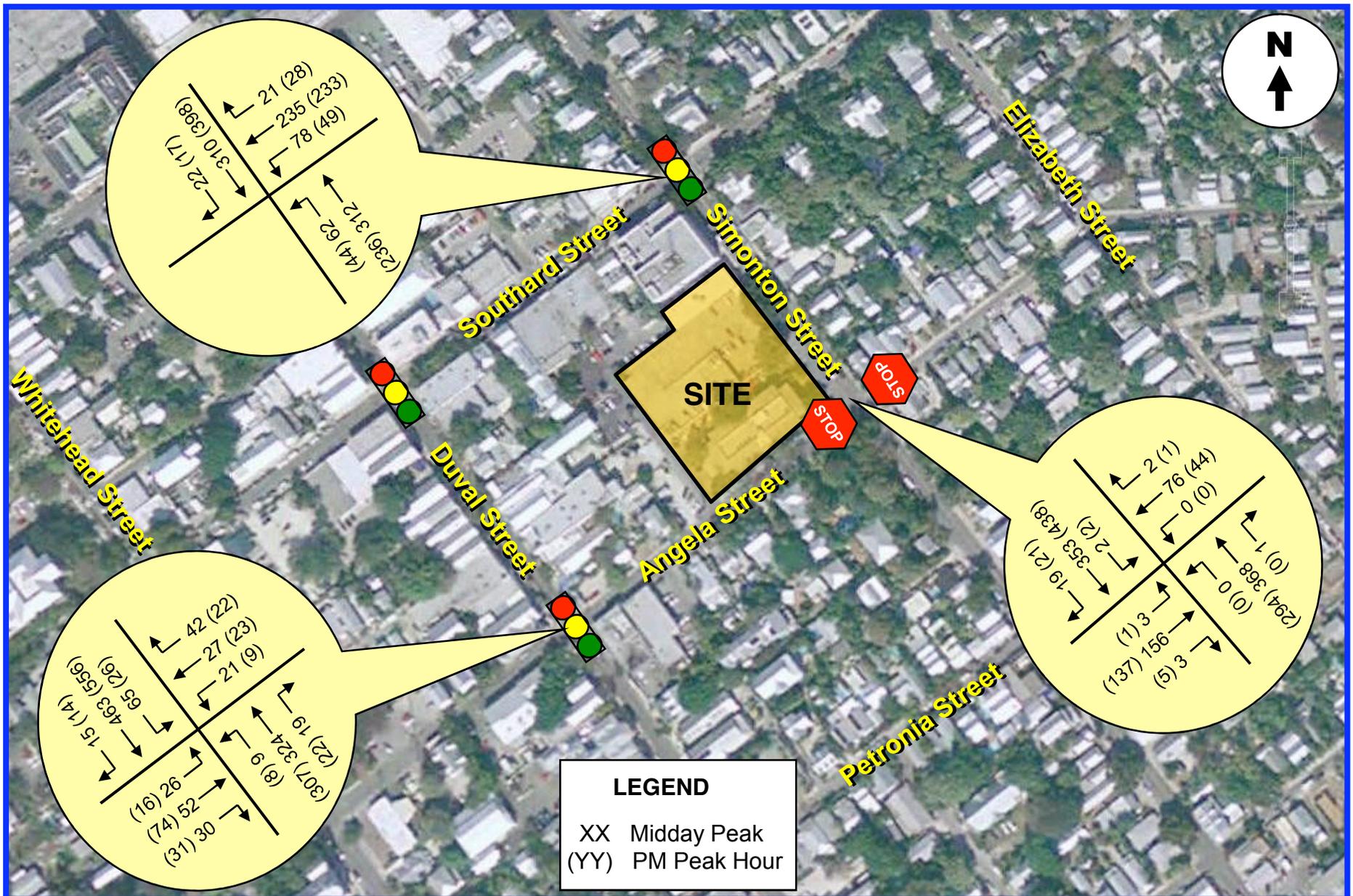
TABLE 3				
City of Key West Administration Building Complex (Angela Site)				
Signalized Intersection Capacity/Level of Service Analyses				
Intersection	Existing Conditions	Future (2011) Conditions		Adopted LOS
		w/o Project	w/Project	
Angela/Duval	B (B)	B (B)	B (B)	D
Simonton/Southard	B (B)	B (B)	B (B)	D

Source: Highway Capacity Software (HCS+ Version 5.2). LEGEND: AM Peak Hour (PM Peak Hour)

TABLE 4				
City of Key West Administration Building Complex (Angela Site)				
Stop-Control Intersection Capacity/Level of Service Analyses (Angela/Simonton)				
Approach/Movement	Existing Conditions	Future (2011) Conditions		Adopted LOS
		w/o Project	w/Project	
Eastbound	D (D)	D (D)	D (D)	D
Westbound	C (C)	C (C)	C (C)	D
NB Left	A (A)	A (A)	A (A)	D
SB Left	A (A)	A (A)	A (A)	D

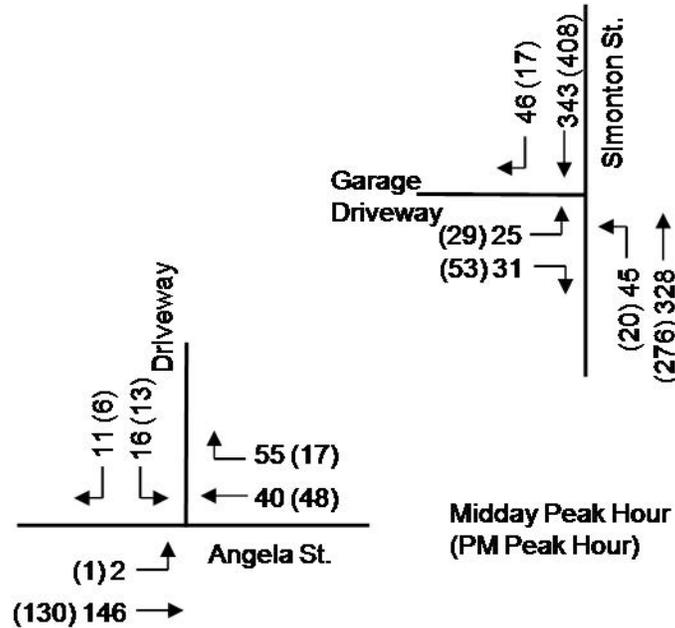
Source: Highway Capacity Software (HCS+ Version 5.2). LEGEND: AM Peak Hour (PM Peak Hour)





Project Access

The main project driveway on Angela Street and the entrance/exit driveway off of Simonton Street were also evaluated using the stopped-controlled procedures of the 2000 Highway Capacity Manual. The projected turning movement volumes are presented below:



The results of the analysis indicate that the both project driveways are projected to operate at a very good level of service (“A” and “B”) with one ingress lane and one egress lane. No turn lanes are required on Angela Street or on Simonton Street. The results of the driveway analysis are also contained in Appendix F.

Roadway Link Analysis

Five roadway links located in the vicinity of the project were evaluated. The link analysis is presented on Table 5. As indicated in Table 5, all nearby roadways have ample capacity to absorb the additional traffic impacts generated by the proposed redevelopment project.

TABLE 5
Roadway Link Analysis (Peak Hour)
City of Key West Administration Building Complex (Angela Site)

Roadway Link	Existing Traffic (June 2009)	Peak Season Year 2011 Traffic		Roadway Capacity	Meets LOS
		Without Project	With Project		
Duval Street north of Angela Street	1,010	1,175	1,175	1,390	Yes
Simonton Street north of Angela Street	612	712	738	1,390	Yes
Angela Street east of Duval Street	195	227	230	950	Yes
Southard Street east of Duval Street	292	340	340	530	Yes
Truman Avenue east of Duval Street	846	984	997	1,390	Yes

Source: Florida DOT, Traf Tech Engineering, Inc., Crossroads Engineering Data, Inc., and City of Key West

NOTES: Roadway Capacity based on FDOT's Generalized Volume Tables

Southard Street is a one-way westbound facility (directional capacity used)

Truman Avenue is classified as a constrained facility.

CONCLUSIONS AND RECOMMENDATIONS

The City of Key West is in the process of redeveloping the existing administration building complex located on the north side of Angela Street just west of Simonton Street in Downtown Key West, Florida. The existing complex consists of two separate buildings and a surface parking lot located between the two building structures.

The proposed redevelopment project will replace the two existing buildings and surface parking lot with a 33,200 square-foot building (26,000 square feet for the City Hall and supporting services/departments plus 7,200 square feet for the fire station) and a 130-space parking garage. The new building will be located on the southern two-thirds of the site and the parking garage will be placed on the north portion of the site. Access to the new City Hall Complex will be provided through Josephine Parker Road (from Angela Street), one main entrance to and from the parking garage from Simonton Street, and three fire-station bays off of Simonton Street.

The proposed redevelopment project is projected to add approximately 46 new midday peak hour trips (35 inbound and 11 outbound) and approximately 31 new PM peak hour trips (12 inbound and 19 outbound) to the nearby transportation network.

All study intersections are currently operating at acceptable levels of services and will continue to operate adequately in the year 2011 with the proposed project in place (meets the City's adopted level of service). Both project driveways are projected to operate at a very good level of service ("A" and "B") with one ingress lane and one egress lane. No turn lanes are required on Angela Street or on Simonton Street.

All nearby roadways have ample capacity to absorb the additional traffic impacts generated by the proposed redevelopment project.

APPENDIX A

Intersection Turning Movement Counts

Crossroads Engineering
13284 SW 120th Street
Miami, FL 33186

CLIENT : TRAFTECH
JOB NO.: 2009-045
PROJECT: KEYWEST ADMINISTRATION BUIDLING
COUNTY : MONROE

Tel: 305-233-3997 Fax: 305-233-7720

File Name : angela@duval
Site Code : 00000000
Start Date : 6/17/2009
Page No : 1

Groups Printed- AUTOS - HEAVY VEHICLES

Start Time	DUVAL ST From North				ANGELA ST From East				DUVAL ST From South				ANGELA ST From West				Int. Total
	Right	Thru	Left	Peds													
11:00 AM	1	68	13	39	13	3	2	8	0	51	4	43	2	13	4	12	276
11:15 AM	3	83	14	55	12	5	0	10	2	64	3	38	2	16	5	12	324
11:30 AM	3	87	12	31	10	2	0	15	4	52	5	28	4	12	1	6	272
11:45 AM	8	101	12	39	13	5	4	8	6	68	1	39	1	8	9	15	337
Total	15	339	51	164	48	15	6	41	12	235	13	148	9	49	19	45	1209
12:00 PM	2	102	11	33	13	7	1	5	2	68	2	42	10	21	12	18	349
12:15 PM	9	106	17	61	11	5	5	6	4	70	1	63	9	6	2	10	385
12:30 PM	1	98	12	54	10	5	7	8	4	66	3	59	5	6	2	14	354
12:45 PM	1	92	16	41	2	6	4	15	5	75	2	48	2	12	6	16	343
Total	13	398	56	189	36	23	17	34	15	279	8	212	26	45	22	58	1431
*** BREAK ***																	
04:00 PM	4	124	4	59	2	4	0	11	7	67	3	38	7	24	2	13	369
04:15 PM	2	118	5	51	4	5	1	13	5	49	2	74	8	10	4	5	356
04:30 PM	3	118	6	42	6	5	2	9	5	85	2	56	6	15	7	9	376
04:45 PM	3	118	7	58	7	6	4	14	1	63	0	63	6	15	1	9	375
Total	12	478	22	210	19	20	7	47	18	264	7	231	27	64	14	36	1476
05:00 PM	3	109	6	40	1	4	7	12	4	70	4	25	7	23	6	6	327
05:15 PM	4	99	6	48	2	5	6	3	3	62	2	39	2	13	2	22	318
05:30 PM	2	92	7	55	3	6	8	22	4	75	2	79	5	6	3	24	393
05:45 PM	0	84	10	55	0	1	6	13	2	68	1	47	2	6	0	12	307
Total	9	384	29	198	6	16	27	50	13	275	9	190	16	48	11	64	1345
Grand Total	49	1599	158	761	109	74	57	172	58	1053	37	781	78	206	66	203	5461
Apprch %	1.9	62.3	6.2	29.6	26.5	18	13.8	41.7	3	54.6	1.9	40.5	14.1	37.3	11.9	36.7	
Total %	0.9	29.3	2.9	13.9	2	1.4	1	3.1	1.1	19.3	0.7	14.3	1.4	3.8	1.2	3.7	
AUTOS	41	1582	157	759	109	73	57	172	58	1044	33	781	74	202	65	203	5410
% AUTOS	83.7	98.9	99.4	99.7	100	98.6	100	100	100	99.1	89.2	100	94.9	98.1	98.5	100	99.1
HEAVY VEHICLES	8	17	1	2	0	1	0	0	0	9	4	0	4	4	1	0	51
% HEAVY VEHICLES	16.3	1.1	0.6	0.3	0	1.4	0	0	0	0.9	10.8	0	5.1	1.9	1.5	0	0.9

Crossroads Engineering
13284 SW 120th Street
Miami, FL 33186

CLIENT : TRAFTECH
JOB NO.: 2009-045
PROJECT: KEYWEST ADMINISTRATION BUIDLING
COUNTY : MONROE

Tel: 305-233-3997 Fax: 305-233-7720

File Name : angela@duval
Site Code : 00000000
Start Date : 6/17/2009
Page No : 1

Groups Printed- HEAVY VEHICLES

Start Time	DUVAL ST From North				ANGELA ST From East				DUVAL ST From South				ANGELA ST From West				Int. Total	
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds		
11:00 AM	0	1	0	0	0	1	0	0	0	3	0	0	0	1	0	0	0	6
11:15 AM	1	2	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	6
11:30 AM	1	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	4
11:45 AM	1	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5
Total	3	6	0	2	0	1	0	0	0	4	1	0	2	2	0	0	0	21
12:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
12:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2
12:30 PM	1	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4
12:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	3
Total	2	2	1	0	0	0	0	0	0	1	1	0	2	1	1	0	0	11
*** BREAK ***																		
04:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
04:15 PM	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	3
04:30 PM	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
04:45 PM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	3	5	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	11
05:00 PM	0	1	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	4
05:15 PM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
05:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
*** BREAK ***																		
Total	0	4	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	8
Grand Total	8	17	1	2	0	1	0	0	0	9	4	0	4	4	1	0	0	51
Apprch %	28.6	60.7	3.6	7.1	0	100	0	0	0	69.2	30.8	0	44.4	44.4	11.1	0	0	
Total %	15.7	33.3	2	3.9	0	2	0	0	0	17.6	7.8	0	7.8	7.8	2	0	0	

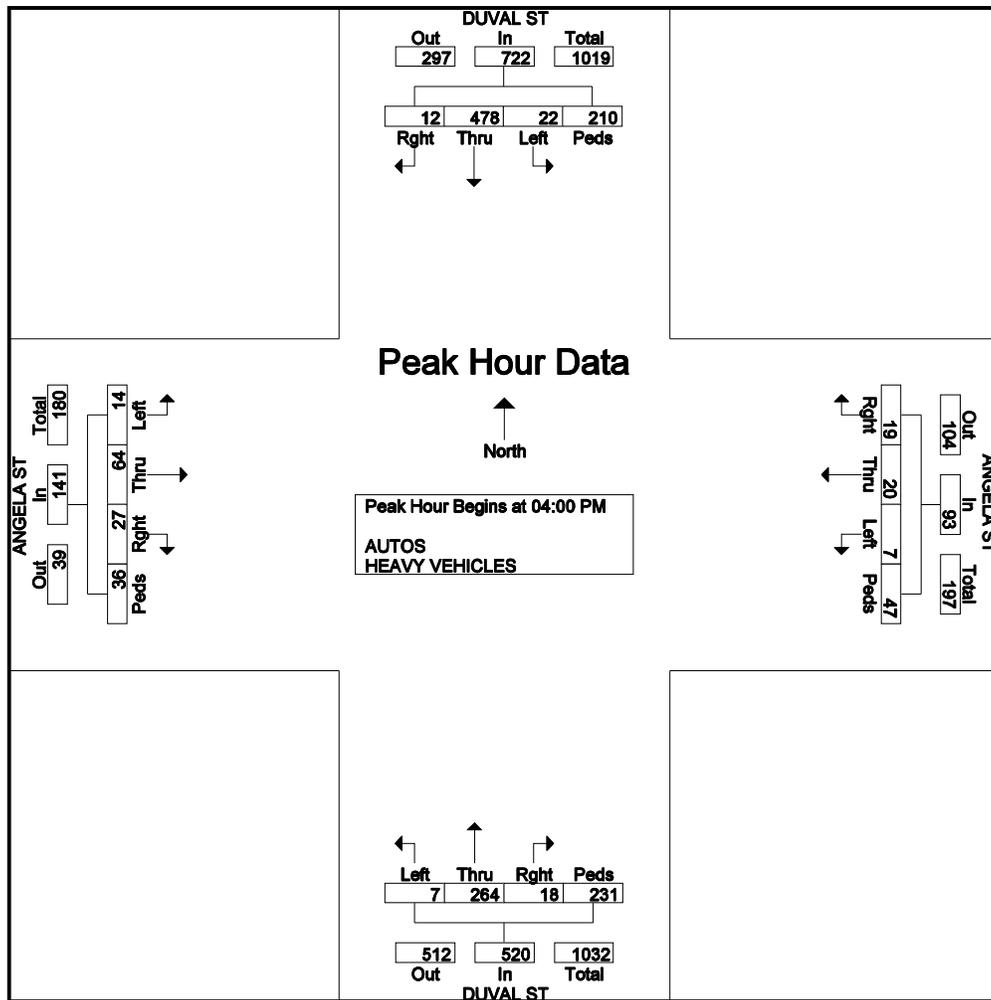
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File Name : angela@duval
 Site Code : 00000000
 Start Date : 6/17/2009
 Page No : 2

Start Time	DUVAL ST From North					ANGELA ST From East					DUVAL ST From South					ANGELA ST From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 11:00 AM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	4	124	4	59	191	2	4	0	11	17	7	67	3	38	115	7	24	2	13	46	369
04:15 PM	2	118	5	51	176	4	5	1	13	23	5	49	2	74	130	8	10	4	5	27	356
04:30 PM	3	118	6	42	169	6	5	2	9	22	5	85	2	56	148	6	15	7	9	37	376
04:45 PM	3	118	7	58	186	7	6	4	14	31	1	63	0	63	127	6	15	1	9	31	375
Total Volume	12	478	22	210	722	19	20	7	47	93	18	264	7	231	520	27	64	14	36	141	1476
% App. Total	1.7	66.2	3	29.1		20.4	21.5	7.5	50.5		3.5	50.8	1.3	44.4		19.1	45.4	9.9	25.5		
PHF	.750	.964	.786	.890	.945	.679	.833	.438	.839	.750	.643	.776	.583	.780	.878	.844	.667	.500	.692	.766	.981



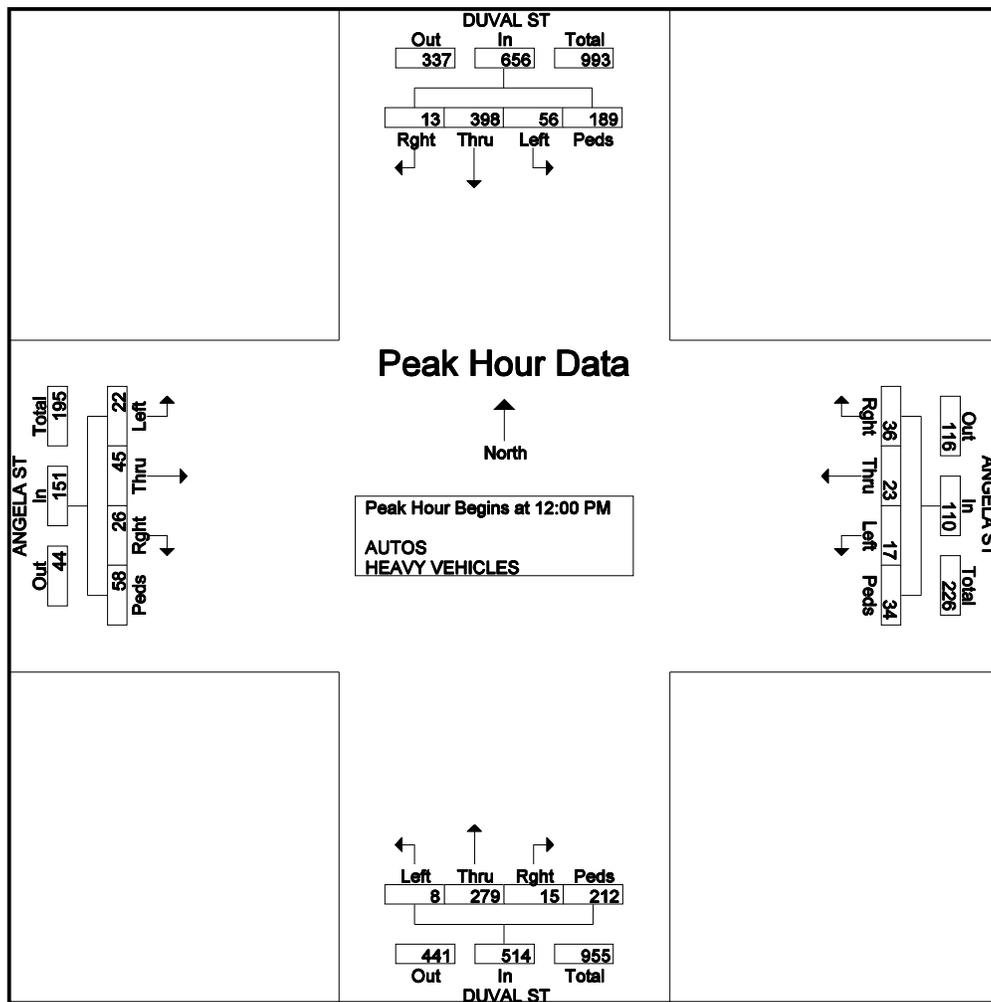
Crossroads Engineering
 13284 SW 120th Street
 Miami, FL 33186

CLIENT : TRAFTECH
 JOB NO.: 2009-045
 PROJECT: KEYWEST ADMINISTRATION BUIDLING
 COUNTY : MONROE

Tel: 305-233-3997 Fax: 305-233-7720

File Name : angela@duval
 Site Code : 00000000
 Start Date : 6/17/2009
 Page No : 3

Start Time	DUVAL ST From North					ANGELA ST From East					DUVAL ST From South					ANGELA ST From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	2	102	11	33	148	13	7	1	5	26	2	68	2	42	114	10	21	12	18	61	349
12:15 PM	9	106	17	61	193	11	5	5	6	27	4	70	1	63	138	9	6	2	10	27	385
12:30 PM	1	98	12	54	165	10	5	7	8	30	4	66	3	59	132	5	6	2	14	27	354
12:45 PM	1	92	16	41	150	2	6	4	15	27	5	75	2	48	130	2	12	6	16	36	343
Total Volume	13	398	56	189	656	36	23	17	34	110	15	279	8	212	514	26	45	22	58	151	1431
% App. Total	2	60.7	8.5	28.8		32.7	20.9	15.5	30.9		2.9	54.3	1.6	41.2		17.2	29.8	14.6	38.4		
PHF	.361	.939	.824	.775	.850	.692	.821	.607	.567	.917	.750	.930	.667	.841	.931	.650	.536	.458	.806	.619	.929



Crossroads Engineering
13284 SW 120th Street
Miami, FL 33186

CLIENT : TRAFTECH
JOB NO.: 2009-045
PROJECT: KEYWEST ADMINISTRATION BUIDLING
COUNTY : MONROE

Tel: 305-233-3997 Fax: 305-233-7720

File Name : simonton@angela
Site Code : 00000000
Start Date : 6/17/2009
Page No : 1

Groups Printed- AUTOS - HEAVY VEHICLES

Start Time	SIMONTON ST From North				ANGELA ST From East				SIMONTON ST From South				ANGELA ST From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
11:00 AM	4	58	1	0	1	9	0	0	0	54	0	0	0	13	0	0	140
11:15 AM	5	62	3	0	0	11	0	0	0	67	0	0	0	31	0	0	179
11:30 AM	4	75	1	0	1	14	0	0	0	70	0	0	0	32	1	0	198
11:45 AM	6	77	1	0	1	17	0	0	0	92	0	0	1	34	0	0	229
Total	19	272	6	0	3	51	0	0	0	283	0	0	1	110	1	0	746
12:00 PM	5	73	0	0	0	17	0	0	1	70	0	0	0	35	2	0	203
12:15 PM	1	73	0	0	0	16	0	0	0	67	0	0	2	32	0	0	191
12:30 PM	2	62	4	0	0	19	0	0	0	68	0	0	2	21	1	0	179
12:45 PM	0	56	0	0	1	15	1	0	0	63	0	0	1	17	0	0	154
Total	8	264	4	0	1	67	1	0	1	268	0	0	5	105	3	0	727
*** BREAK ***																	
04:00 PM	4	86	0	0	1	5	0	0	1	53	0	0	1	21	0	0	172
04:15 PM	4	88	0	0	0	7	0	0	0	50	0	0	0	24	0	0	173
04:30 PM	6	92	0	0	1	7	0	0	0	62	0	0	1	29	1	0	199
04:45 PM	7	97	0	0	0	8	0	0	0	69	0	0	0	30	0	0	211
Total	21	363	0	0	2	27	0	0	1	234	0	0	2	104	1	0	755
05:00 PM	2	89	2	0	0	10	0	0	0	58	0	0	3	33	0	0	197
05:15 PM	3	89	0	0	0	12	0	0	0	58	0	0	0	25	0	0	187
05:30 PM	1	80	0	0	0	12	0	0	0	40	0	0	2	18	1	0	154
05:45 PM	1	77	0	0	2	9	1	0	0	31	0	0	0	17	0	0	138
Total	7	335	2	0	2	43	1	0	0	187	0	0	5	93	1	0	676
Grand Total	55	1234	12	0	8	188	2	0	2	972	0	0	13	412	6	0	2904
Apprch %	4.2	94.9	0.9	0	4	94.9	1	0	0.2	99.8	0	0	3	95.6	1.4	0	
Total %	1.9	42.5	0.4	0	0.3	6.5	0.1	0	0.1	33.5	0	0	0.4	14.2	0.2	0	
AUTOS	55	1217	9	0	8	166	2	0	1	959	0	0	12	407	6	0	2842
% AUTOS	100	98.6	75	0	100	88.3	100	0	50	98.7	0	0	92.3	98.8	100	0	97.9
HEAVY VEHICLES	0	17	3	0	0	22	0	0	1	13	0	0	1	5	0	0	62
% HEAVY VEHICLES	0	1.4	25	0	0	11.7	0	0	50	1.3	0	0	7.7	1.2	0	0	2.1

Crossroads Engineering
13284 SW 120th Street
Miami, FL 33186

CLIENT : TRAFTECH
JOB NO.: 2009-045
PROJECT: KEYWEST ADMINISTRATION BUIDLING
COUNTY : MONROE

Tel: 305-233-3997 Fax: 305-233-7720

File Name : simonton@angela
Site Code : 00000000
Start Date : 6/17/2009
Page No : 1

Groups Printed- HEAVY VEHICLES

Start Time	SIMONTON ST From North				ANGELA ST From East				SIMONTON ST From South				ANGELA ST From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
11:00 AM	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	3
11:15 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	2	0	0	4
11:30 AM	0	2	1	0	0	2	0	0	0	1	0	0	0	0	0	0	6
11:45 AM	0	3	0	0	0	3	0	0	0	2	0	0	0	0	0	0	8
Total	0	7	1	0	0	6	0	0	0	4	0	0	0	3	0	0	21
12:00 PM	0	2	0	0	0	2	0	0	1	1	0	0	0	0	0	0	6
12:15 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
12:30 PM	0	1	1	0	0	1	0	0	0	2	0	0	0	0	0	0	5
12:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	3
Total	0	4	1	0	0	4	0	0	1	4	0	0	1	1	0	0	16
*** BREAK ***																	
04:00 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	1	0	0	4
04:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	1	0	0	0	2	0	0	0	3	0	0	0	0	0	0	6
04:45 PM	0	1	0	0	0	2	0	0	0	1	0	0	0	0	0	0	4
Total	0	4	0	0	0	6	0	0	0	4	0	0	0	1	0	0	15
05:00 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
05:15 PM	0	1	0	0	0	2	0	0	0	1	0	0	0	0	0	0	4
05:30 PM	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
*** BREAK ***																	
Total	0	2	1	0	0	6	0	0	0	1	0	0	0	0	0	0	10
Grand Total	0	17	3	0	0	22	0	0	1	13	0	0	1	5	0	0	62
Apprch %	0	85	15	0	0	100	0	0	7.1	92.9	0	0	16.7	83.3	0	0	
Total %	0	27.4	4.8	0	0	35.5	0	0	1.6	21	0	0	1.6	8.1	0	0	

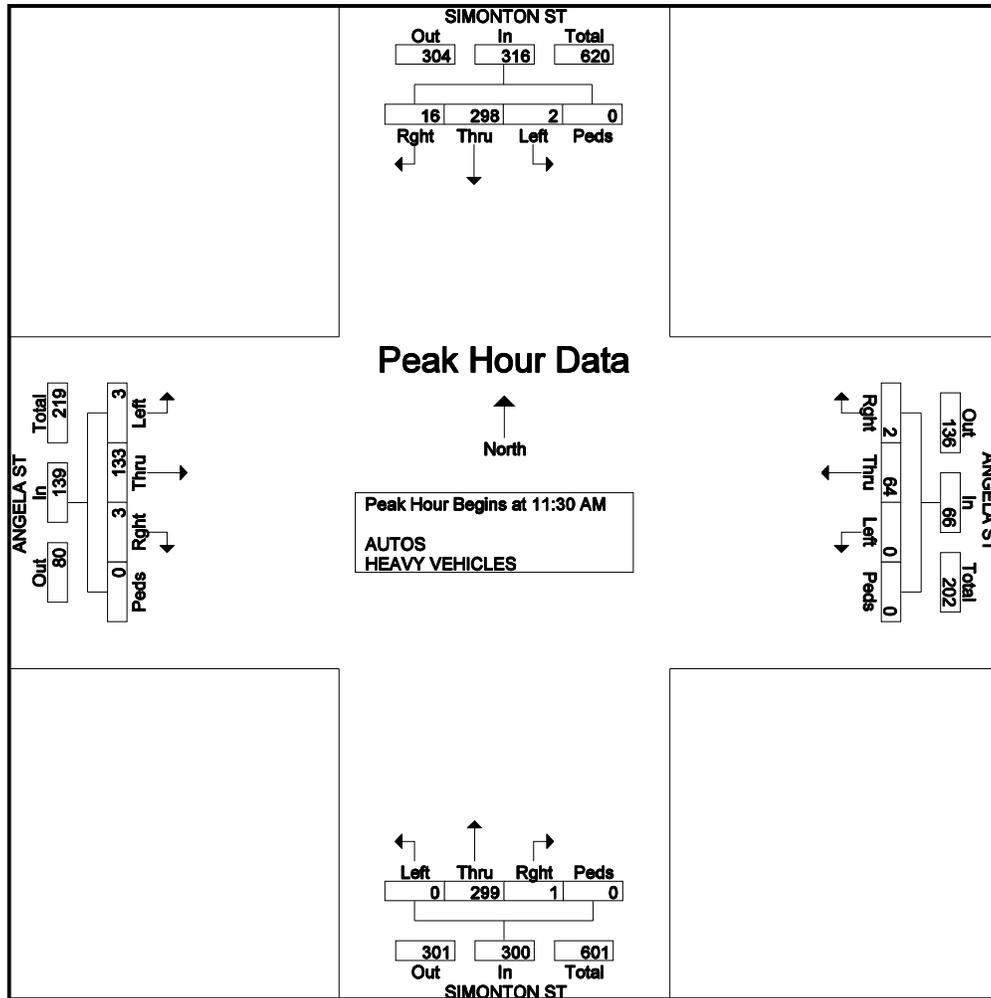
Crossroads Engineering
 13284 SW 120th Street
 Miami, FL 33186

CLIENT : TRAFTECH
 JOB NO.: 2009-045
 PROJECT: KEYWEST ADMINISTRATION BUIDLING
 COUNTY : MONROE

Tel: 305-233-3997 Fax: 305-233-7720

File Name : simonton@angela
 Site Code : 00000000
 Start Date : 6/17/2009
 Page No : 2

Start Time	SIMONTON ST From North					ANGELA ST From East					SIMONTON ST From South					ANGELA ST From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 11:00 AM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:30 AM																					
11:30 AM	4	75	1	0	80	1	14	0	0	15	0	70	0	0	70	0	32	1	0	33	198
11:45 AM	6	77	1	0	84	1	17	0	0	18	0	92	0	0	92	1	34	0	0	35	229
12:00 PM	5	73	0	0	78	0	17	0	0	17	1	70	0	0	71	0	35	2	0	37	203
12:15 PM	1	73	0	0	74	0	16	0	0	16	0	67	0	0	67	2	32	0	0	34	191
Total Volume	16	298	2	0	316	2	64	0	0	66	1	299	0	0	300	3	133	3	0	139	821
% App. Total	5.1	94.3	0.6	0		3	97	0	0		0.3	99.7	0	0		2.2	95.7	2.2	0		
PHF	.667	.968	.500	.000	.940	.500	.941	.000	.000	.917	.250	.813	.000	.000	.815	.375	.950	.375	.000	.939	.886



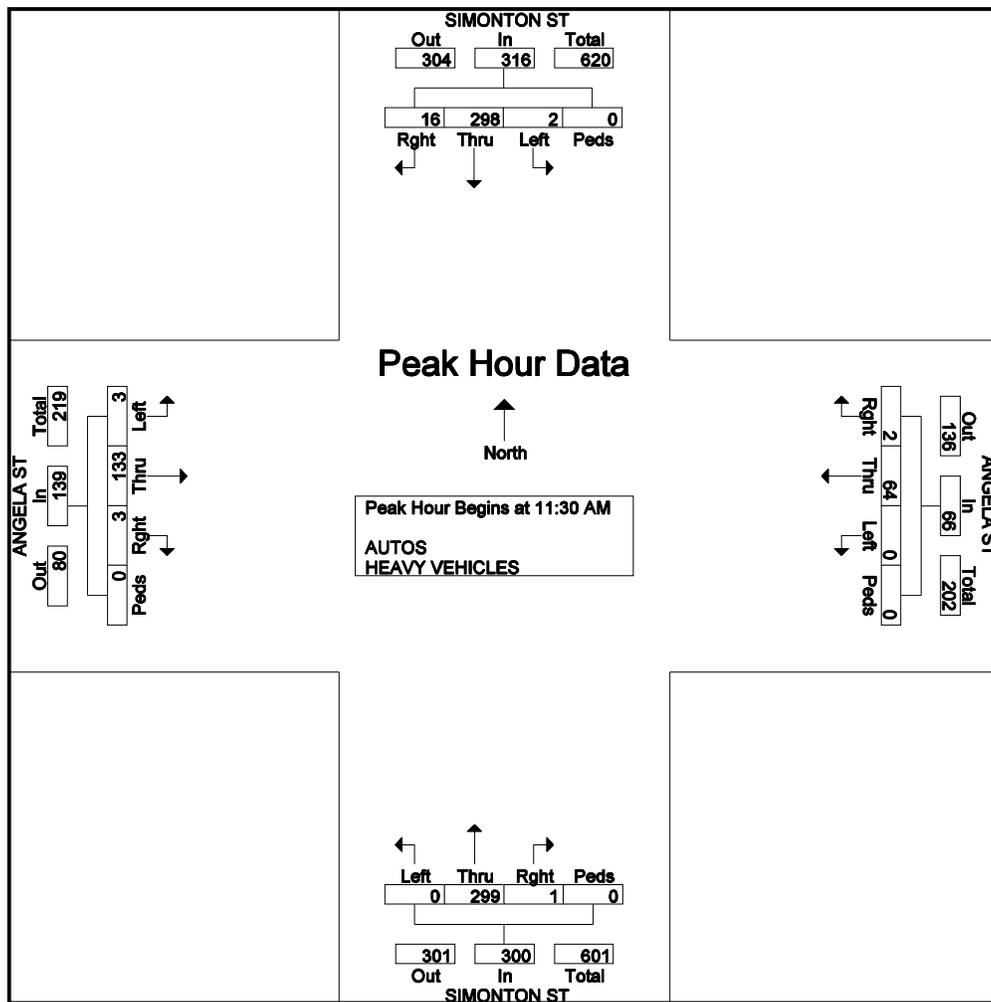
Crossroads Engineering
 13284 SW 120th Street
 Miami, FL 33186

CLIENT : TRAFTECH
 JOB NO.: 2009-045
 PROJECT: KEYWEST ADMINISTRATION BUIDLING
 COUNTY : MONROE

Tel: 305-233-3997 Fax: 305-233-7720

File Name : simonton@angela
 Site Code : 00000000
 Start Date : 6/17/2009
 Page No : 3

Start Time	SIMONTON ST From North					ANGELA ST From East					SIMONTON ST From South					ANGELA ST From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:30 AM																					
11:30 AM	4	75	1	0	80	1	14	0	0	15	0	70	0	0	70	0	32	1	0	33	198
11:45 AM	6	77	1	0	84	1	17	0	0	18	0	92	0	0	92	1	34	0	0	35	229
12:00 PM	5	73	0	0	78	0	17	0	0	17	1	70	0	0	71	0	35	2	0	37	203
12:15 PM	1	73	0	0	74	0	16	0	0	16	0	67	0	0	67	2	32	0	0	34	191
Total Volume	16	298	2	0	316	2	64	0	0	66	1	299	0	0	300	3	133	3	0	139	821
% App. Total	5.1	94.3	0.6	0		3	97	0	0		0.3	99.7	0	0		2.2	95.7	2.2	0		
PHF	.667	.968	.500	.000	.940	.500	.941	.000	.000	.917	.250	.813	.000	.000	.815	.375	.950	.375	.000	.939	.896



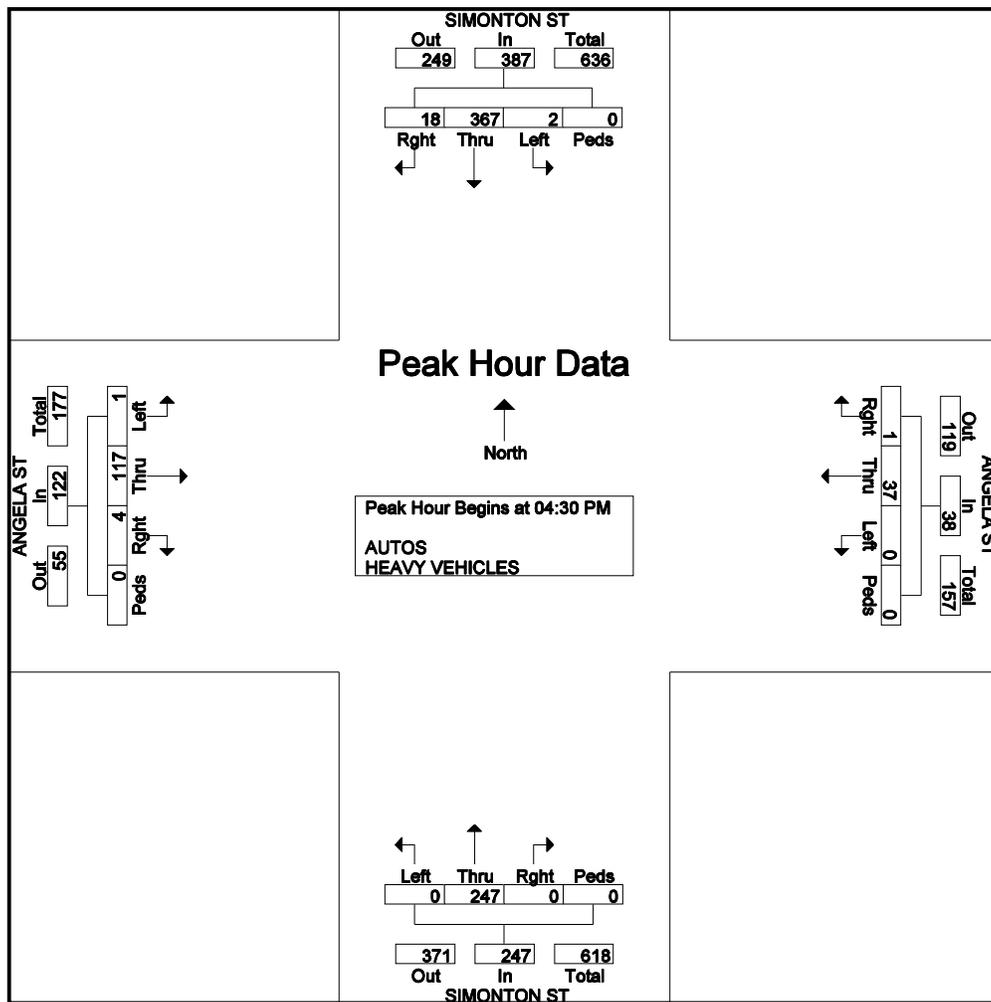
Crossroads Engineering
 13284 SW 120th Street
 Miami, FL 33186

CLIENT : TRAFTECH
 JOB NO.: 2009-045
 PROJECT: KEYWEST ADMINISTRATION BUIDLING
 COUNTY : MONROE

Tel: 305-233-3997 Fax: 305-233-7720

File Name : simonton@angela
 Site Code : 00000000
 Start Date : 6/17/2009
 Page No : 4

Start Time	SIMONTON ST From North					ANGELA ST From East					SIMONTON ST From South					ANGELA ST From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	6	92	0	0	98	1	7	0	0	8	0	62	0	0	62	1	29	1	0	31	199
04:45 PM	7	97	0	0	104	0	8	0	0	8	0	69	0	0	69	0	30	0	0	30	211
05:00 PM	2	89	2	0	93	0	10	0	0	10	0	58	0	0	58	3	33	0	0	36	197
05:15 PM	3	89	0	0	92	0	12	0	0	12	0	58	0	0	58	0	25	0	0	25	187
Total Volume	18	367	2	0	387	1	37	0	0	38	0	247	0	0	247	4	117	1	0	122	794
% App. Total	4.7	94.8	0.5	0		2.6	97.4	0	0		0	100	0	0		3.3	95.9	0.8	0		
PHF	.643	.946	.250	.000	.930	.250	.771	.000	.000	.792	.000	.895	.000	.000	.895	.333	.886	.250	.000	.847	.941



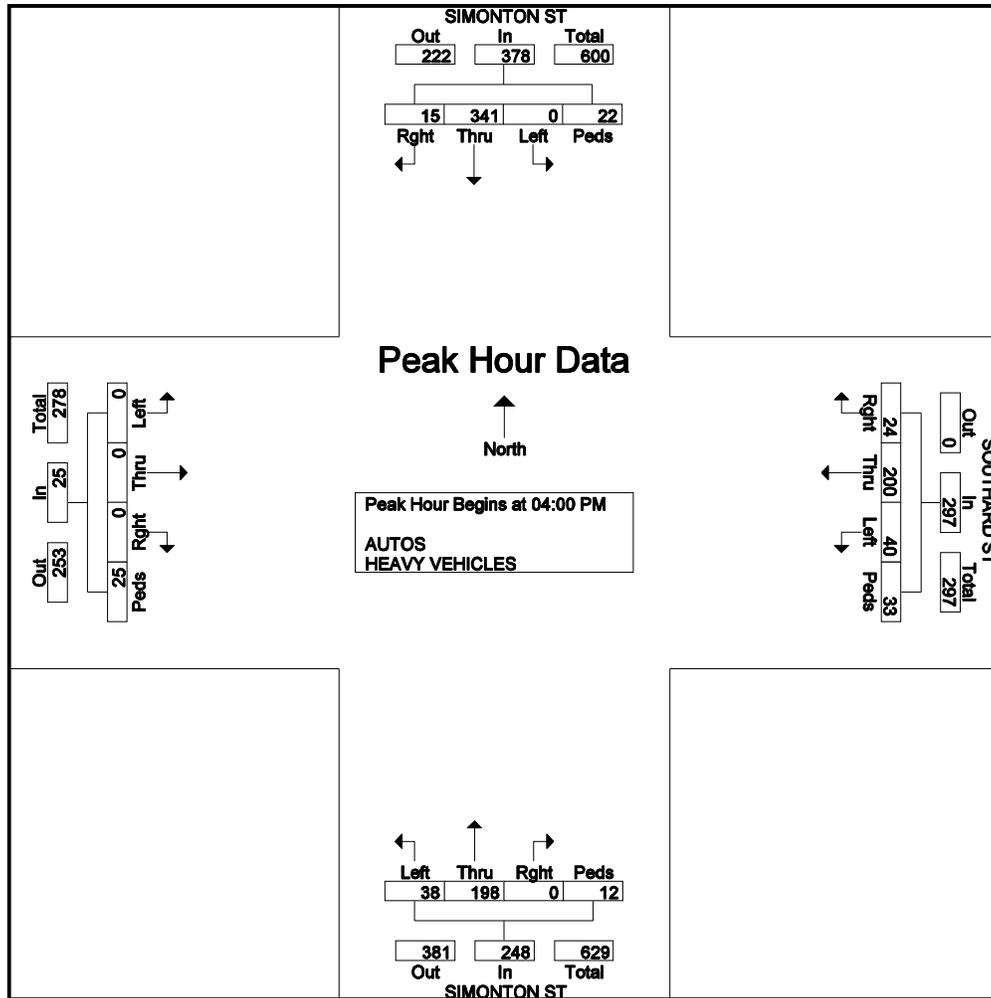
Crossroads Engineering
 13284 SW 120th Street
 Miami, FL 33186

CLIENT : TRAFTECH
 JOB NO.: 2009-045
 PROJECT: KEYWEST ADMINISTRATION BUIDLING
 COUNTY : MONROE

Tel: 305-233-3997 Fax: 305-233-7720

File Name : simonton@southard
 Site Code : 00000000
 Start Date : 6/17/2009
 Page No : 2

Start Time	SIMONTON ST From North					SOUTHARD ST From East					SIMONTON ST From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 11:00 AM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	4	80	0	5	89	5	46	13	7	71	0	42	11	7	60	0	0	0	3	3	223
04:15 PM	5	83	0	3	91	3	45	12	14	74	0	49	3	1	53	0	0	0	11	11	229
04:30 PM	3	84	0	3	90	9	51	6	3	69	0	50	13	0	63	0	0	0	2	2	224
04:45 PM	3	94	0	11	108	7	58	9	9	83	0	57	11	4	72	0	0	0	9	9	272
Total Volume	15	341	0	22	378	24	200	40	33	297	0	198	38	12	248	0	0	0	25	25	948
% App. Total	4	90.2	0	5.8		8.1	67.3	13.5	11.1		0	79.8	15.3	4.8		0	0	0	100		
PHF	.750	.907	.000	.500	.875	.667	.862	.769	.589	.895	.000	.868	.731	.429	.861	.000	.000	.000	.568	.568	.871



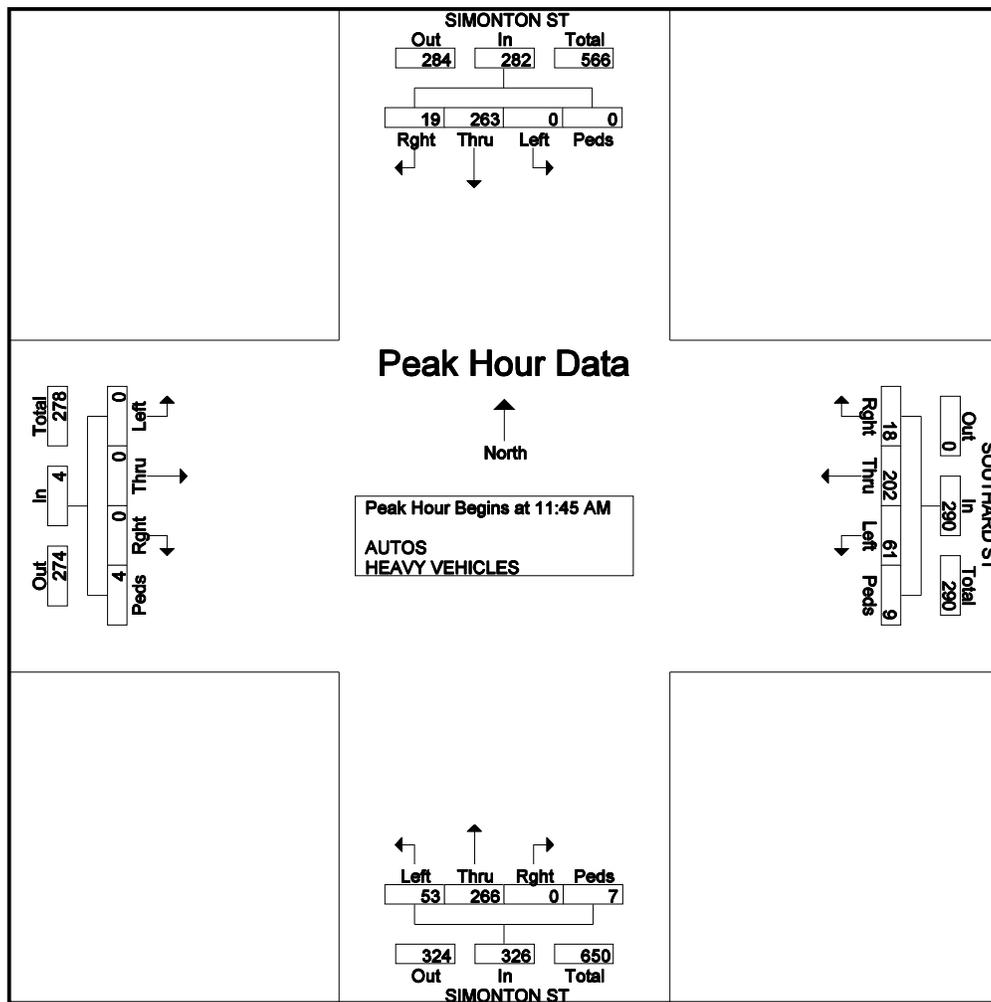
Crossroads Engineering
 13284 SW 120th Street
 Miami, FL 33186

CLIENT : TRAFTECH
 JOB NO.: 2009-045
 PROJECT: KEYWEST ADMINISTRATION BUIDLING
 COUNTY : MONROE

Tel: 305-233-3997 Fax: 305-233-7720

File Name : simonton@southard
 Site Code : 00000000
 Start Date : 6/17/2009
 Page No : 3

Start Time	SIMONTON ST From North					SOUTHARD ST From East					SIMONTON ST From South					From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:45 AM																					
11:45 AM	4	67	0	0	71	7	50	20	0	77	0	74	12	3	89	0	0	0	2	2	239
12:00 PM	6	64	0	0	70	3	56	12	1	72	0	64	10	1	75	0	0	0	0	0	217
12:15 PM	4	68	0	0	72	4	52	12	2	70	0	65	14	0	79	0	0	0	2	2	223
12:30 PM	5	64	0	0	69	4	44	17	6	71	0	63	17	3	83	0	0	0	0	0	223
Total Volume	19	263	0	0	282	18	202	61	9	290	0	266	53	7	326	0	0	0	4	4	902
% App. Total	6.7	93.3	0	0		6.2	69.7	21	3.1		0	81.6	16.3	2.1		0	0	0	100		
PHF	.792	.967	.000	.000	.979	.643	.902	.763	.375	.942	.000	.899	.779	.583	.916	.000	.000	.000	.500	.500	.944



APPENDIX B

Machine Traffic Counts

CLIENT : TRAFTECH
 JOB NO : 2009-045
 PROJECT: KEYWEST ADMINISTRATION BUIDLING
 COUNTY : MONROE

CROSSROADS ENGINEERING
 13284 SW 120ST
 MIAMI, FLORIDA
 305-233-3997

Site Code : 901200121100
 Start Date: 06/17/2009
 File I.D. : 901200-R

Street name :DUVAL ST BTWN Cross street:ANGELA ST AND SOUTHARD ST. ,

Page : 1

Begin	NB		SB		Combined		Wednesday
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
12:00 06/18	25	95	66	111	91	206	
12:15	25	90	49	123	74	213	
12:30	30	84	50	127	80	211	
12:45	22	102	85	354	41	206	112 473 63 308 197 827
01:00	20	63	32	125	52	188	
01:15	23	87	28	139	51	226	
01:30	15	71	22	103	37	174	
01:45	14	72	81	302	28	110	144 511 42 182 225 813
02:00	12	103	33	135	45	238	
02:15	13	90	26	114	39	204	
02:30	14	85	24	127	38	212	
02:45	14	53	91	369	23	106	128 504 37 159 219 873
03:00	14	94	30	135	44	229	
03:15	11	104	23	147	34	251	
03:30	15	99	19	177	34	276	
03:45	8	48	90	387	18	90	149 608 26 138 239 995
04:00	13	86	29	158	42	244	
04:15	10	75	21	118	31	193	
04:30	5	74	9	124	14	198	
04:45	6	34	89	324	4	63	129 529 10 97 218 853
05:00	3	76	9	113	12	189	
05:15	5	76	9	111	14	187	
05:30	2	62	2	99	4	161	
05:45	6	16	62	276	4	24	112 435 10 40 174 711
06:00	8	62	8	102	16	164	
06:15	7	70	12	113	19	183	
06:30	14	85	12	135	26	220	
06:45	7	36	86	303	17	49	135 485 24 85 221 788
07:00	9	76	18	108	27	184	
07:15	18	75	21	108	39	183	
07:30	8	95	21	134	29	229	
07:45	14	49	76	322	24	84	111 461 38 133 187 783
08:00	22	82	35	115	57	197	
08:15	29	64	36	101	65	165	
08:30	36	64	35	134	71	198	
08:45	30	117	65	275	51	157	126 476 81 274 191 751
09:00	55	66	51	145	106	211	
09:15	41	50	53	136	94	186	
09:30	55	70	61	154	116	224	
09:45	55	206	62	248	69	234	112 547 124 440 174 795
10:00	55	66	73	136	128	202	
10:15	67	55	89	116	156	171	
10:30	42	52	91	118	133	170	
10:45	64	228	33	206	95	348	128 498 159 576 161 704
11:00	63	40	75	102	138	142	
11:15	54	38	119	86	173	124	
11:30	90	33	102	83	192	116	
11:45	105	312	38	149	117	413	86 357 222 725 124 506
Totals	1273	3515	1884	5884	3157	9399	
Day Totals		4788		7768		12556	
Split %	40.3%	37.4%	59.6%	62.6%			
Peak Hour	11:00	02:45	11:00	03:15	11:00	03:15	
Volume	312	388	413	631	725	1010	
P.H.F.	.74	.93	.86	.89	.81	.91	

CLIENT : TRAFTECH
 JOB NO : 2009-045
 PROJECT: KEYWEST ADMINISTRATION BUIDLING
 COUNTY : MONROE

CROSSROADS ENGINEERING
 13284 SW 120ST
 MIAMI, FLORIDA
 305-233-3997

Site Code : 901000121100
 Start Date: 06/17/2009
 File I.D. : 901000-R

Street name :SIMONTON ST BTWN Cross street:SOUTHARD AND ANGELA ST. ,

Page : 1

Begin Time	NB		SB		Combined		Wednesday
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
12:00 06/18	5	66	14	97	19	163	
12:15	10	68	9	71	19	139	
12:30	2	75	8	63	10	138	
12:45	4	21 84	293	10 41	60 291	14 62 144	584
01:00	6	76	6	57	12	133	
01:15	5	62	10	78	15	140	
01:30	7	71	8	86	15	157	
01:45	7	25 57	266	8 32	73 294	15 57 130	560
02:00	2	54	5	89	7	143	
02:15	6	58	12	67	18	125	
02:30	4	60	12	87	16	147	
02:45	2	14 62	234	9 38	95 338	11 52 157	572
03:00	3	48	9	95	12	143	
03:15	6	77	4	68	10	145	
03:30	2	63	5	65	7	128	
03:45	3	14 53	241	5 23	102 330	8 37 155	571
04:00	3	60	6	109	9	169	
04:15	4	61	3	77	7	138	
04:30	1	56	1	87	2	143	
04:45	5	13 58	235	2 12	95 368	7 25 153	603
05:00	1	59	4	114	5	173	
05:15	5	37	4	94	9	131	
05:30	1	47	5	65	6	112	
05:45	3	10 57	200	3 16	81 354	6 26 138	554
06:00	4	55	6	75	10	130	
06:15	8	47	5	50	13	97	
06:30	9	31	8	60	17	91	
06:45	21	42 45	178	8 27	50 235	29 69 95	413
07:00	18	50	10	48	28	98	
07:15	32	52	9	45	41	97	
07:30	27	42	25	48	52	90	
07:45	78	155 32	176	27 71	40 181	105 226 72	357
08:00	37	42	29	49	66	91	
08:15	34	22	46	61	80	83	
08:30	39	41	34	66	73	107	
08:45	52	162 34	139	26 135	81 257	78 297 115	396
09:00	52	36	56	74	108	110	
09:15	47	29	59	67	106	96	
09:30	56	26	44	54	100	80	
09:45	64	219 22	113	52 211	48 243	116 430 70	356
10:00	55	22	53	44	108	66	
10:15	38	15	54	54	92	69	
10:30	50	20	49	53	99	73	
10:45	45	188 15	72	73 229	48 199	118 417 63	271
11:00	79	14	73	23	152	37	
11:15	60	10	67	17	127	27	
11:30	85	11	75	28	160	39	
11:45	87	311 14	49	86 301	18 86	173 612 32	135
Totals	1174	2196	1136	3176	2310	5372	
Day Totals		3370		4312		7682	
Split %	50.8%	40.8%	49.1%	59.1%			
Peak Hour	11:00	12:15	11:00	04:30	11:00	04:15	
Volume	311	303	301	390	612	607	
P.H.F.	.89	.90	.87	.85	.88	.87	

CLIENT : TRAFTECH
 JOB NO : 2009-045
 PROJECT: KEYWEST ADMINISTRATION BUIDLING
 COUNTY : MONROE

CROSSROADS ENGINEERING
 13284 SW 120ST
 MIAMI, FLORIDA
 305-233-3997

Site Code : 901300321100
 Start Date: 06/17/2009
 File I.D. : 901300-R

Street name :ANGELA ST BTWN Cross street:DUVAL ST AND SIMONTON ST. ,

Page : 1

Begin Time	EB		WB		Combined		Wednesday					
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.						
12:00 06/18	3	39	3	12	6	51						
12:15	1	23	5	23	6	46						
12:30	7	25	3	19	10	44						
12:45	6	17	30	117	2	13	24	78	8	30	54	195
01:00	5	28	0	17	5	45						
01:15	4	24	1	20	5	44						
01:30	3	34	0	16	3	50						
01:45	2	14	40	126	2	3	16	69	4	17	56	195
02:00	4	21	3	16	7	37						
02:15	2	19	1	18	3	37						
02:30	3	25	2	21	5	46						
02:45	3	12	23	88	0	6	25	80	3	18	48	168
03:00	1	31	3	25	4	56						
03:15	3	25	0	13	3	38						
03:30	4	21	3	3	7	24						
03:45	4	12	34	111	1	7	28	69	5	19	62	180
04:00	2	32	0	9	2	41						
04:15	2	28	2	17	4	45						
04:30	1	18	1	12	2	30						
04:45	5	10	28	106	1	4	12	50	6	14	40	156
05:00	2	30	1	22	3	52						
05:15	0	22	0	3	0	25						
05:30	2	27	0	11	2	38						
05:45	1	5	22	101	0	1	13	49	1	6	35	150
06:00	1	18	4	11	5	29						
06:15	6	16	12	7	18	23						
06:30	8	12	1	7	9	19						
06:45	8	23	17	63	2	19	3	28	10	42	20	91
07:00	4	15	2	5	6	20						
07:15	13	13	7	7	20	20						
07:30	10	12	9	8	19	20						
07:45	8	35	10	50	11	29	6	26	19	64	16	76
08:00	14	10	19	7	33	17						
08:15	11	12	18	6	29	18						
08:30	14	12	11	10	25	22						
08:45	13	52	12	46	11	59	10	33	24	111	22	79
09:00	11	19	19	10	30	29						
09:15	30	14	21	10	51	24						
09:30	22	8	11	12	33	20						
09:45	15	78	15	56	17	68	12	44	32	146	27	100
10:00	9	11	21	5	30	16						
10:15	17	8	23	4	40	12						
10:30	21	5	12	5	33	10						
10:45	31	78	13	37	17	73	8	22	48	151	21	59
11:00	25	14	13	8	38	22						
11:15	27	8	17	3	44	11						
11:30	36	9	28	4	64	13						
11:45	27	115	6	37	16	74	2	17	43	189	8	54
Totals	451	938	356	565	807	1503						
Day Totals		1389		921		2310						
Split %	55.8%	62.4%	44.1%	37.5%								
Peak Hour	10:45	01:00	10:45	02:15	10:45	12:00						
Volume	119	126	75	89	194	195						
P.H.F.	.82	.78	.66	.89	.75	.90						

CLIENT : CROOSROADS ENGINEERING
 JOB NO : 13284 SW 120ST Site Code : 901100711100
 PROJECT: MIAMI, FLORIDA Start Date: 06/18/2009
 COUNTY : 305-233-3997 File I.D. : 901100-N
 Street name :SOUTHARD ST BTWN Cross street:DUVAL ST AND SIMONTON ST. WB Page : 1

Begin	<-----Quarter Hour ----->				Hour		
Time	1st	2nd	3rd	4th	Total	Each	* Equals 25 Vehicles
12:00 06/18	15	7	7	8	37	*	
01:00	7	9	5	4	25	*	
02:00	5	5	5	5	20	*	
03:00	5	6	6	3	20	*	
04:00	8	6	3	3	20	*	
05:00	4	3	4	9	20	*	
06:00	5	18	11	26	60	**	
07:00	23	44	52	65	184	*****	
08:00	52	53	51	46	202	*****	
09:00	67	40	52	66	225	*****	
10:00	47	62	49	61	219	*****	
11:00	64	48	61	63	236	*****	
12:00	80	59	77	75	291	*****	
01:00	81	52	57	92	282	*****	
02:00	57	68	67	61	253	*****	
03:00	57	56	54	56	223	*****	
04:00	60	65	80	61	266	*****	
05:00	67	45	40	42	194	*****	
06:00	43	40	37	35	155	*****	
07:00	27	49	47	25	148	*****	
08:00	27	28	30	32	117	*****	
09:00	42	18	22	20	102	****	
10:00	19	20	17	29	85	***	
11:00	37	7	15	12	71	***	
Total					3455		

AM Peak The AM peak hour began 11:45.
 The peak volume was 279.
 The largest interval began 12:00,
 and contained 80 vehicles.
 The peak hour factor was .87

PM Peak The PM peak hour began 12:15.
 The peak volume was 292.
 The largest interval began 01:00,
 and contained 81 vehicles.
 The peak hour factor was .90

CLIENT : TRAFTECH
 JOB NO : 2009-045
 PROJECT: KEYWEST ADMINISTRATION BUIDLING
 COUNTY : MONROE

CROSSROADS ENGINEERING
 13284 SW 120ST
 MIAMI, FLORIDA
 305-233-3997

Site Code : 901500321100
 Start Date: 06/17/2009
 File I.D. : 901500-R

Street name :TRUMAN AVE BTWN Cross street:DUVAL ST AND SIMONTON ST. ,

Page : 1

Begin Time	EB		WB		Combined		Wednesday					
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.						
12:00 06/18	34	83	11	112	45	195						
12:15	21	79	22	154	43	233						
12:30	19	83	17	128	36	211						
12:45	16	90	93	338	20	70	109	503	36	160	202	841
01:00	15	95	16	104	31	199						
01:15	19	82	13	103	32	185						
01:30	15	74	13	137	28	211						
01:45	13	62	88	339	11	53	101	445	24	115	189	784
02:00	8	84	13	151	21	235						
02:15	9	70	5	141	14	211						
02:30	11	79	9	101	20	180						
02:45	14	42	83	316	6	33	83	476	20	75	166	792
03:00	7	92	15	140	22	232						
03:15	10	65	6	117	16	182						
03:30	9	80	5	104	14	184						
03:45	15	41	79	316	11	37	134	495	26	78	213	811
04:00	15	71	12	102	27	173						
04:15	10	96	9	118	19	214						
04:30	8	86	10	98	18	184						
04:45	14	47	76	329	5	36	148	466	19	83	224	795
05:00	8	91	7	133	15	224						
05:15	9	79	10	116	19	195						
05:30	12	81	5	86	17	167						
05:45	5	34	86	337	13	35	96	431	18	69	182	768
06:00	13	66	13	89	26	155						
06:15	7	70	21	108	28	178						
06:30	18	69	21	89	39	158						
06:45	29	67	64	269	20	75	63	349	49	142	127	618
07:00	29	55	28	99	57	154						
07:15	28	52	36	112	64	164						
07:30	33	50	35	90	68	140						
07:45	30	120	48	205	55	154	69	370	85	274	117	575
08:00	33	37	47	78	80	115						
08:15	42	68	58	82	100	150						
08:30	38	81	43	95	81	176						
08:45	42	155	83	269	48	196	83	338	90	351	166	607
09:00	53	70	68	65	121	135						
09:15	60	68	80	88	140	156						
09:30	57	52	102	74	159	126						
09:45	63	233	66	256	102	352	45	272	165	585	111	528
10:00	65	62	105	69	170	131						
10:15	66	67	85	46	151	113						
10:30	83	63	113	45	196	108						
10:45	74	288	39	231	79	382	46	206	153	670	85	437
11:00	80	38	100	35	180	73						
11:15	81	30	124	35	205	65						
11:30	91	28	96	36	187	64						
11:45	83	335	32	128	127	447	22	128	210	782	54	256
Totals	1514	3333	1870	4479	3384	7812						
Day Totals	4847	6349	11196									
Split %	44.7%	42.6%	55.2%	57.3%								
Peak Hour	11:00	12:30	11:00	01:30	11:00	01:30						
Volume	335	353	447	530	782	846						
P.H.F.	.92	.92	.87	.87	.93	.9						

APPENDIX C
Trip Generation Counts

CROSSROADS ENGINEERING

	in	out	Total	Ped	Bike	Bus	On-Street	Scooter
8:00 AM to 8:30 AM	30	8	38	0	0	0	0	0
8:30 AM to 9:00 AM	13	9	22	3	1	0	0	1
	11	9	20	0	0	0	1	2

CROSSROADS ENGINEERING

Time: 8:00 Location: Angela St
Movement

Driveway	Right In	Left In	Right Out	Left Out	Peds	Bikes	Buses	ON-Street Parking	Scoters
5	0	13	5	2	6	2			
	IN	OUT							
6		5			6				
7									

Time: 8:30 Location: Angela St
Movement

Driveway	Right In	Left In	Right Out	Left Out	Peds	Bikes	Buses	ON-Street Parking	Scoters
5	5	15		5	8	1			
	IN	OUT							
6					2				
7		5							

Time: 9:00 Location: Angela St
Movement

Driveway	Right In	Left In	Right Out	Left Out	Peds	Bikes	Buses	ON-Street Parking	Scoters
5	16	2	10	3	16	2			
	IN	OUT							
6									
7		6							

Time: 9:30 Location: Angela St
Movement

Driveway	Right In	Left In	Right Out	Left Out	Peds	Bikes	Buses	ON-Street Parking	Scoters
5	13			7		13	1		
	IN	OUT							
6									
7		6							

Time: 10:00 Location: Angela St
Movement

Driveway	Right In	Left In	Right Out	Left Out	Peds	Bikes	Buses	ON-Street Parking	Scoters
5	11		10	11	7	1			
	IN	OUT							
6									
7		2							

Time: 10:30 Location: Angela St
Movement

Driveway	Right In	Left In	Right Out	Left Out	Peds	Bikes	Buses	ON-Street Parking	Scoters
5	10		10	7	18	2			
	IN	OUT							
6									
7		5							

CROSSROADS ENGINEERING

Time: 11:00 Location: Angela St
Movement

Driveway	Right In	Left In	Right Out	Left Out	Peds	Bikes	Buses	ON-Street Parking	Scoters
5	13		5	8	18	5			
	IN	OUT							
6									
7		5							

Time: 11:30 Location: Angela St
Movement

Driveway	Right In	Left In	Right Out	Left Out	Peds	Bikes	Buses	ON-Street Parking	Scoters
5	20		6	15	22	8			
	IN	OUT							
6									
7		8							

Time: 12:00 Location: Angela St
Movement

Driveway	Right In	Left In	Right Out	Left Out	Peds	Bikes	Buses	ON-Street Parking	Scoters
5	20		5	10	16	6		2	
	IN	OUT							
6									
7		10							

Time: 12:30 Location: Angela St
Movement

Driveway	Right In	Left In	Right Out	Left Out	Peds	Bikes	Buses	ON-Street Parking	Scoters
5	30		10	8	17	6			
	IN	OUT							
6									
7		20							

Time: 13:00 Location: Angela St
Movement

Driveway	Right In	Left In	Right Out	Left Out	Peds	Bikes	Buses	ON-Street Parking	Scoters
5	23			7	20	3		1	
	IN	OUT							
6									
7		17							

Time: 13:30 Location: Angela St
Movement

Driveway	Right In	Left In	Right Out	Left Out	Peds	Bikes	Buses	ON-Street Parking	Scoters
5	26		5	18	32	10			
	IN	OUT							
6									
7		12							

CROSSROADS ENGINEERING

Time: 14:00 Location: Angela St
Movement

Driveway	Right In	Left In	Right Out	Left Out	Peds	Bikes	Buses	ON-Street Parking	Scoters
5	17		5	10	15	5			
	IN	OUT							
6									
7		10							

Time: 14:30 Location: Angela St
Movement

Driveway	Right In	Left In	Right Out	Left Out	Peds	Bikes	Buses	ON-Street Parking	Scoters
5	9		19	20	21	11		1	
	IN	OUT							
6									
7		10							

Time: 15:00 Location: Angela St
Movement

Driveway	Right In	Left In	Right Out	Left Out	Peds	Bikes	Buses	ON-Street Parking	Scoters
5	16		5	18	15	12			
	IN	OUT							
6									
7		10							

Time: 15:30 Location: Angela St
Movement

Driveway	Right In	Left In	Right Out	Left Out	Peds	Bikes	Buses	ON-Street Parking	Scoters
5	15			12	10	6			
	IN	OUT							
6									
7		10							

Time: 16:00 Location: Angela St
Movement

Driveway	Right In	Left In	Right Out	Left Out	Peds	Bikes	Buses	ON-Street Parking	Scoters
5	13		5	11	13	11			
	IN	OUT							
6									
7		16							

Time: 16:30 Location: Angela St
Movement

Driveway	Right In	Left In	Right Out	Left Out	Peds	Bikes	Buses	ON-Street Parking	Scoters
5	5			5	8	6		2	
	IN	OUT							
6									
7		5							

CROSSROADS ENGINEERING

Time: 17:00 Location: Angela St
Movement

Driveway	Right In	Left In	Right Out	Left Out	Peds	Bikes	Buses	ON-Street Parking	Scoters	
5	10		5	10	3	10		3		
	IN	OUT								
6										
7		11								

Time: 17:30 Location: Angela St
Movement

Driveway	Right In	Left In	Right Out	Left Out	Peds	Bikes	Buses	ON-Street Parking	Scoters	
5	6			2	10	1				
	IN	OUT								
6										
7		5								

Time: 18:00 Location: Angela St
Movement

Driveway	Right In	Left In	Right Out	Left Out	Peds	Bikes	Buses	ON-Street Parking	Scoters	
5	10			6	4	1		1		
	IN	OUT								
6										
7		5								

APPENDIX D

Historical Traffic Counts and Peak Season Conversion Factors

2008 Peak Season Factor Category Report - Report Type: ALL
 Category: 9000 MONROE COUNTYWIDE

Week	Dates	SF	MOCF: 0.89 PSCF
1	01/01/2008 - 01/05/2008	1.02	1.15
2	01/06/2008 - 01/12/2008	0.99	1.12
3	01/13/2008 - 01/19/2008	0.95	1.07
* 4	01/20/2008 - 01/26/2008	0.93	1.05
* 5	01/27/2008 - 02/02/2008	0.91	1.03
* 6	02/03/2008 - 02/09/2008	0.89	1.01
* 7	02/10/2008 - 02/16/2008	0.87	0.98
* 8	02/17/2008 - 02/23/2008	0.86	0.97
* 9	02/24/2008 - 03/01/2008	0.86	0.97
*10	03/02/2008 - 03/08/2008	0.85	0.96
*11	03/09/2008 - 03/15/2008	0.85	0.96
*12	03/16/2008 - 03/22/2008	0.87	0.98
*13	03/23/2008 - 03/29/2008	0.88	0.99
*14	03/30/2008 - 04/05/2008	0.90	1.02
*15	04/06/2008 - 04/12/2008	0.91	1.03
*16	04/13/2008 - 04/19/2008	0.93	1.05
17	04/20/2008 - 04/26/2008	0.94	1.06
18	04/27/2008 - 05/03/2008	0.95	1.07
19	05/04/2008 - 05/10/2008	0.96	1.08
20	05/11/2008 - 05/17/2008	0.98	1.11
21	05/18/2008 - 05/24/2008	0.98	1.11
22	05/25/2008 - 05/31/2008	0.99	1.12
23	06/01/2008 - 06/07/2008	1.00	1.13
24	06/08/2008 - 06/14/2008	1.00	1.13
25	06/15/2008 - 06/21/2008	1.01	1.14
26	06/22/2008 - 06/28/2008	1.01	1.14
27	06/29/2008 - 07/05/2008	1.00	1.13
28	07/06/2008 - 07/12/2008	1.00	1.13
29	07/13/2008 - 07/19/2008	0.99	1.12
30	07/20/2008 - 07/26/2008	1.01	1.14
31	07/27/2008 - 08/02/2008	1.03	1.16
32	08/03/2008 - 08/09/2008	1.05	1.19
33	08/10/2008 - 08/16/2008	1.07	1.21
34	08/17/2008 - 08/23/2008	1.12	1.26
35	08/24/2008 - 08/30/2008	1.16	1.31
36	08/31/2008 - 09/06/2008	1.20	1.36
37	09/07/2008 - 09/13/2008	1.24	1.40
38	09/14/2008 - 09/20/2008	1.28	1.45
39	09/21/2008 - 09/27/2008	1.24	1.40
40	09/28/2008 - 10/04/2008	1.20	1.36
41	10/05/2008 - 10/11/2008	1.16	1.31
42	10/12/2008 - 10/18/2008	1.12	1.26
43	10/19/2008 - 10/25/2008	1.11	1.25
44	10/26/2008 - 11/01/2008	1.10	1.24
45	11/02/2008 - 11/08/2008	1.09	1.23
46	11/09/2008 - 11/15/2008	1.08	1.22
47	11/16/2008 - 11/22/2008	1.07	1.21
48	11/23/2008 - 11/29/2008	1.06	1.20
49	11/30/2008 - 12/06/2008	1.05	1.19
50	12/07/2008 - 12/13/2008	1.04	1.17
51	12/14/2008 - 12/20/2008	1.02	1.15
52	12/21/2008 - 12/27/2008	0.99	1.12
53	12/28/2008 - 12/31/2008	0.95	1.07

* Peak Season

Florida Department of Transportation
 Transportation Statistics Office
 2008 Historical AADT Report

County: 90 - MONROE

Site: 5011 - SR 5/US-1/TRUMAN AV, 200' E DUVAL ST

Year	AADT		Direction 1		Direction 2	K Factor	D Factor	T Factor
-----	-----		-----		-----	-----	-----	-----
2008	8600 C	N	4400	S	4200	10.45	54.98	8.60
2007	8600 C	N	4600	S	4000	10.00	55.10	9.80
2006	7600 C	N	3700	S	3900	10.08	55.69	12.30
2005	8200 C	N	4300	S	3900	10.40	55.70	5.50
2004	10400 C	N	5000	S	5400	10.00	56.00	3.10
2003	9000 C	N		S		10.10	56.30	4.40
2002	8800 C	N	4300	S	4500	10.00	54.20	5.60
2001	12000 C	N		S		10.00	55.90	6.80
2000	9200 C	N	5100	S	4100	9.90	54.80	6.60
1999	9300 C	N		S		9.50	56.70	4.80
1998	12000 C	N		S		9.50	56.60	2.80
1997	11000 C	N		S		9.60	55.90	3.70
1996	5300 C	N		S		10.00	55.60	5.50
1995	13500 F	N		S		9.90	54.40	5.20
1994	12500 C	N		S		10.00	54.80	3.00
1993	10000 C	N		S		0.00	0.00	0.00

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
 S = Second Year Estimate; T = Third Year Estimate; X = Unknown

Florida Department of Transportation
 Transportation Statistics Office
 2008 Historical AADT Report

County: 90 - MONROE

Site: 0023 - DUVAL ST, 200' N SR 5/US-1/TRUMAN AV

Year	AADT	Direction 1		Direction 2		K Factor	D Factor	T Factor
-----	-----	-----	-----	-----	-----	-----	-----	-----
2008	6600 C	N	3300	S	3300	10.45	54.98	8.60
2007	6600 C	N	3200	S	3400	10.00	55.10	9.80
2006	7500 C	N	3900	S	3600	10.08	55.69	12.30
2005	8900 C	N	4200	S	4700	10.40	55.70	2.40
2004	9400 C	N	4800	S	4600	10.00	56.00	3.10
2003	10500 C	N		S		10.10	56.30	4.40
2002	8900 C	N	4600	S	4300	10.00	54.20	5.60
2001	10500 C	N		S		10.00	55.90	6.80
2000	8000 C	N	3100	S	4900	9.90	54.80	6.60
1999	5100 C	N		S		9.50	56.70	4.80
1998	10500 C	N		S		9.50	56.60	2.80
1997	11000 C	N		S		9.60	55.90	3.70
1996	7200 C	N		S		10.00	55.60	5.50
1995	11000 C	N		S		9.90	54.40	5.20
1994	11000 C	N		S		10.00	54.80	3.00
1993	11500 C	N		S		0.00	0.00	0.00

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
 S = Second Year Estimate; T = Third Year Estimate; X = Unknown

Florida Department of Transportation
 Transportation Statistics Office
 2008 Historical AADT Report

County: 90 - MONROE

Site: 5013 - SR 5/US-1/WHITEHEAD ST, 100' S OLIVIA ST

Year	AADT	Direction 1		Direction 2		K Factor	D Factor	T Factor
-----	-----	-----	-----	-----	-----	-----	-----	-----
2008	6400 C	N	3100	S	3300	10.45	54.98	8.60
2007	5300 C	N	2500	S	2800	10.00	55.10	9.80
2006	5900 C	N	2700	S	3200	10.08	55.69	12.30
2005	6700 C	N	3100	S	3600	10.40	55.70	5.50
2004	8300 C	N	4200	S	4100	10.00	56.00	3.10
2003	8800 C	N		S		10.10	56.30	4.40
2002	8100 C	N	3900	S	4200	10.00	54.20	5.60
2001	9600 C	N		S		10.00	55.90	6.80
2000	10100 C	N	6100	S	4000	9.90	54.80	6.60
1999	9100 C	N		S		9.50	56.70	4.80
1998	7400 C	N		S		9.50	56.60	2.80
1997	9800 C	N		S		9.60	55.90	3.70
1996	6100 C	N		S		10.00	55.60	5.50
1995	6700 C	N		S		9.90	54.40	5.20
1994	9300 C	N		S		10.00	54.80	3.00
1993	8000 C	N		S		0.00	0.00	0.00

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
 S = Second Year Estimate; T = Third Year Estimate; X = Unknown

APPENDIX E

Projected Turning Movement Volumes

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

Duval Street and Angela Street Midday Peak Hour Analysis

Description	Duval Street Northbound			Duval Street Southbound			Angela Street Eastbound			Angela Street Westbound		
	Left	Through	Right									
2009 Existing Traffic (6/17/09)	8	279	15	56	398	13	22	45	26	17	23	36
Season Adjustment Factor	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
2009 Peak Season Traffic	9	318	17	64	454	15	25	51	30	19	26	41
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
2011 Growth Traffic	9	324	17	65	463	15	26	52	30	20	27	42
2011 Background Traffic	9	324	17	65	463	15	26	52	30	20	27	42
Net New Project Trips			2							1		
2011 Total Traffic	9	324	19	65	463	15	26	52	30	21	27	42

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

Duval Street and Angela Street PM Peak Hour Analysis

Description	Duval Street Northbound			Duval Street Southbound			Angela Street Eastbound			Angela Street Westbound		
	Left	Through	Right									
2009 Existing Traffic (6/17/09)	7	264	18	22	478	12	14	64	27	7	20	19
Season Adjustment Factor	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
2009 Peak Season Traffic	8	301	21	25	545	14	16	73	31	8	23	22
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
2011 Growth Traffic	8	307	21	26	556	14	16	74	31	8	23	22
2011 Background Traffic	8	307	21	26	556	14	16	74	31	8	23	22
Net New Project Trips			1							1		
2011 Total Traffic	8	307	22	26	556	14	16	74	31	9	23	22

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

Angela Street and Simonton Street Midday Peak Hour Analysis

Description	Simonton Street Northbound			Simonton Street Southbound			Angela Street Eastbound			Angela Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2009 Existing Traffic (6/17/09)	0	299	1	2	298	16	3	133	3	0	64	2
Season Adjustment Factor	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
2009 Peak Season Traffic	0	341	1	2	340	18	3	152	3	0	73	2
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
2011 Growth Traffic	0	348	1	2	347	19	3	155	3	0	74	2
2011 Background Traffic	0	348	1	2	347	19	3	155	3	0	74	2
Net New Project Trips		20			6			1			2	
2011 Total Traffic	0	368	1	2	353	19	3	156	3	0	76	2

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

Angela Street and Simonton Street PM Peak Hour Analysis

Description	Simonton Street Northbound			Simonton Street Southbound			Angela Street Eastbound			Angela Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2009 Existing Traffic (6/17/09)	0	247	0	2	367	18	1	117	4	0	37	1
Season Adjustment Factor	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
2009 Peak Season Traffic	0	282	0	2	418	21	1	133	5	0	42	1
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
2011 Growth Traffic	0	287	0	2	427	21	1	136	5	0	43	1
2011 Background Traffic	0	287	0	2	427	21	1	136	5	0	43	1
Net New Project Trips		7			11			1			1	
2011 Total Traffic	0	294	0	2	438	21	1	137	5	0	44	1

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

Southard Street and Simonton Street Midday Peak Hour Analysis

Description	Simonton Street Northbound			Simonton Street Southbound			Eastbound			Southard Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2009 Existing Traffic (6/17/09)	53	266	0	0	263	19	0	0	0	61	202	18
Season Adjustment Factor	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
2009 Peak Season Traffic	60	303	0	0	300	22	0	0	0	70	230	21
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
2011 Growth Traffic	62	309	0	0	306	22	0	0	0	71	235	21
2011 Background Traffic	62	309	0	0	306	22	0	0	0	71	235	21
Net New Project Trips		3			4					7		
2011 Total Traffic	62	312	0	0	310	22	0	0	0	78	235	21

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

Southard Street and Simonton Street PM Peak Hour Analysis

Description	Simonton Street Northbound			Simonton Street Southbound			Eastbound			Southard Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
2009 Existing Traffic (6/17/09)	38	198	0	0	341	15	0	0	0	40	200	24
Season Adjustment Factor	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14
2009 Peak Season Traffic	43	226	0	0	389	17	0	0	0	46	228	27
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
2011 Growth Traffic	44	230	0	0	397	17	0	0	0	47	233	28
2011 Background Traffic	44	230	0	0	397	17	0	0	0	47	233	28
Net New Project Trips		6			1					2		
2011 Total Traffic	44	236	0	0	398	17	0	0	0	49	233	28

APPENDIX F

Intersection Capacity Analyses

HCS+: Signalized Intersections Release 5.2

Analyst: Vargas Inter.: Duval/Angela
 Agency: Traf Tech Engineering, Inc. Area Type: CBD or Similar
 Date: 6/29/2009 Jurisd: Key West
 Period: Midday Peak Year : 2009 Existing
 Project ID:
 E/W St: Angela Street N/S St: Duval Street

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	1	0	0	1	0	0	1	0
LGConfig	LTR			LTR			LTR			LTR		
Volume	25	51	30	19	26	41	9	318	17	64	454	15
Lane Width	12.0			12.0			12.0			12.0		
RTOR Vol	0			0			0			0		

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				NB Left	A		
Thru	A				Thru	A		
Right	A				Right	A		
Peds					Peds			
WB Left	A				SB Left	A		
Thru	A				Thru	A		
Right	A				Right	A		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	25.0				30.0			
Yellow	4.0				4.0			
All Red	0.0				0.0			

Cycle Length: 63.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
LTR	600	1512	0.28	0.40	13.2	B	13.2	B
Westbound								
LTR	587	1478	0.16	0.40	12.4	B	12.4	B
Northbound								
LTR	788	1655	0.47	0.48	11.6	B	11.6	B
Southbound								
LTR	736	1545	0.85	0.48	24.0	C	24.0	C

Intersection Delay = 18.0 (sec/veh) Intersection LOS = B

HCS+: Signalized Intersections Release 5.2

Analyst: Vargas Inter.: Duval/Angela
 Agency: Traf Tech Engineering, Inc. Area Type: CBD or Similar
 Date: 6/29/2009 Jurisd: Key West
 Period: Midday Peak Year : 2011 Background
 Project ID:
 E/W St: Angela Street N/S St: Duval Street

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	1	0	0	1	0	0	1	0
LGConfig	LTR			LTR			LTR			LTR		
Volume	26	52	30	20	27	42	9	324	17	65	463	15
Lane Width	12.0			12.0			12.0			12.0		
RTOR Vol	0			0			0			0		

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				NB Left	A		
Thru	A				Thru	A		
Right	A				Right	A		
Peds					Peds			
WB Left	A				SB Left	A		
Thru	A				Thru	A		
Right	A				Right	A		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	25.0				30.0			
Yellow	4.0				4.0			
All Red	0.0				0.0			

Cycle Length: 63.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
LTR	598	1508	0.29	0.40	13.2	B	13.2	B
Westbound								
LTR	585	1475	0.17	0.40	12.4	B	12.4	B
Northbound								
LTR	788	1655	0.48	0.48	11.6	B	11.6	B
Southbound								
LTR	735	1544	0.87	0.48	25.7	C	25.7	C

Intersection Delay = 18.9 (sec/veh) Intersection LOS = B

HCS+: Signalized Intersections Release 5.2

Analyst: Vargas Inter.: Duval/Angela
 Agency: Traf Tech Engineering, Inc. Area Type: CBD or Similar
 Date: 6/29/2009 Jurisd: Key West
 Period: Midday Peak Year : 2011 Total w/Project
 Project ID:
 E/W St: Angela Street N/S St: Duval Street

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	1	0	0	1	0	0	1	0
LGConfig	LTR			LTR			LTR			LTR		
Volume	26	52	30	21	27	42	9	324	19	65	463	15
Lane Width	12.0			12.0			12.0			12.0		
RTOR Vol	0			0			0			0		

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				NB Left	A		
Thru	A				Thru	A		
Right	A				Right	A		
Peds					Peds			
WB Left	A				SB Left	A		
Thru	A				Thru	A		
Right	A				Right	A		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	25.0				30.0			
Yellow	4.0				4.0			
All Red	0.0				0.0			

Cycle Length: 63.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
LTR	598	1507	0.29	0.40	13.2	B	13.2	B
Westbound								
LTR	584	1471	0.17	0.40	12.4	B	12.4	B
Northbound								
LTR	788	1654	0.48	0.48	11.7	B	11.7	B
Southbound								
LTR	735	1543	0.87	0.48	25.7	C	25.7	C

Intersection Delay = 18.9 (sec/veh) Intersection LOS = B

HCS+: Signalized Intersections Release 5.2

Analyst: Vargas Inter.: Duval/Angela
 Agency: Traf Tech Engineering, Inc. Area Type: CBD or Similar
 Date: 6/29/2009 Jurisd: Key West
 Period: PM Peak Year : 2009 Existing
 Project ID:
 E/W St: Angela Street N/S St: Duval Street

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	1	0	0	1	0	0	1	0
LGConfig	LTR			LTR			LTR			LTR		
Volume	16	73	31	8	23	22	8	301	21	25	545	14
Lane Width	12.0			12.0			12.0			12.0		
RTOR Vol	0			0			0			0		

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				NB Left	A		
Thru	A				Thru	A		
Right	A				Right	A		
Peds					Peds			
WB Left	A				SB Left	A		
Thru	A				Thru	A		
Right	A				Right	A		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	25.0				30.0			
Yellow	4.0				4.0			
All Red	0.0				0.0			

Cycle Length: 63.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
LTR	628	1582	0.25	0.40	12.9	B	12.9	B
Westbound								
LTR	611	1540	0.12	0.40	12.1	B	12.1	B
Northbound								
LTR	789	1656	0.48	0.48	11.6	B	11.6	B
Southbound								
LTR	785	1649	0.78	0.48	19.0	B	19.0	B

Intersection Delay = 15.5 (sec/veh) Intersection LOS = B

HCS+: Signalized Intersections Release 5.2

Analyst: Vargas Inter.: Duval/Angela
 Agency: Traf Tech Engineering, Inc. Area Type: CBD or Similar
 Date: 6/29/2009 Jurisd: Key West
 Period: PM Peak Year : 2011 Background
 Project ID:
 E/W St: Angela Street N/S St: Duval Street

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	1	0	0	1	0	0	1	0
LGConfig	LTR			LTR			LTR			LTR		
Volume	16	74	31	8	23	22	8	307	21	26	556	14
Lane Width	12.0			12.0			12.0			12.0		
RTOR Vol	0			0			0			0		

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				NB Left	A		
Thru	A				Thru	A		
Right	A				Right	A		
Peds					Peds			
WB Left	A				SB Left	A		
Thru	A				Thru	A		
Right	A				Right	A		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	25.0				30.0			
Yellow	4.0				4.0			
All Red	0.0				0.0			

Cycle Length: 63.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
LTR	628	1582	0.25	0.40	12.9	B	12.9	B
Westbound								
LTR	611	1540	0.12	0.40	12.1	B	12.1	B
Northbound								
LTR	789	1656	0.48	0.48	11.7	B	11.7	B
Southbound								
LTR	785	1648	0.80	0.48	19.8	B	19.8	B

Intersection Delay = 16.0 (sec/veh) Intersection LOS = B

HCS+: Signalized Intersections Release 5.2

Analyst: Vargas Inter.: Duval/Angela
 Agency: Traf Tech Engineering, Inc. Area Type: CBD or Similar
 Date: 6/29/2009 Jurisd: Key West
 Period: PM Peak Year : 2011 Total w/Project
 Project ID:
 E/W St: Angela Street N/S St: Duval Street

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	0	0	1	0	0	1	0	0	1	0
LGConfig	LTR			LTR			LTR			LTR		
Volume	16	74	31	9	23	22	8	307	22	26	556	14
Lane Width	12.0			12.0			12.0			12.0		
RTOR Vol	0			0			0			0		

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	A				NB Left	A		
Thru	A				Thru	A		
Right	A				Right	A		
Peds					Peds			
WB Left	A				SB Left	A		
Thru	A				Thru	A		
Right	A				Right	A		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	25.0				30.0			
Yellow	4.0				4.0			
All Red	0.0				0.0			

Cycle Length: 63.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
LTR	628	1582	0.25	0.40	12.9	B	12.9	B
Westbound								
LTR	609	1535	0.12	0.40	12.1	B	12.1	B
Northbound								
LTR	789	1656	0.49	0.48	11.7	B	11.7	B
Southbound								
LTR	785	1648	0.80	0.48	19.8	B	19.8	B

Intersection Delay = 16.0 (sec/veh) Intersection LOS = B

HCS+: Signalized Intersections Release 5.2

Analyst: Vargas Inter.: Southard/Simonton
 Agency: Traf Tech Engineering, Inc. Area Type: CBD or Similar
 Date: 6/29/2009 Jurisd: Key West
 Period: Midday Peak Year : 2009 Existing
 Project ID:
 E/W St: Southard Street N/S St: Simonton Street

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	0	1	1	0	1	0	0	1	0
LGConfig					LT	R		LT			TR	
Volume				70	230	21	60	303			300	22
Lane Width					12.0	12.0		12.0			12.0	
RTOR Vol						0					0	

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	A		
Thru					Thru	A		
Right					Right			
Peds					Peds			
WB Left		A			SB Left			
Thru		A			Thru	A		
Right		A			Right	A		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green		25.0				34.0		
Yellow		4.0				4.0		
All Red		0.0				0.0		

Cycle Length: 67.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
Westbound								
LT	631	1690	0.51	0.37	16.9	B	16.7	B
R	543	1454	0.04	0.37	13.4	B		
Northbound								
LT	780	1537	0.51	0.51	11.5	B	11.5	B
Southbound								
TR	860	1694	0.39	0.51	10.5	B	10.5	B

Intersection Delay = 12.8 (sec/veh) Intersection LOS = B

HCS+: Signalized Intersections Release 5.2

Analyst: Vargas Inter.: Southard/Simonton
 Agency: Traf Tech Engineering, Inc. Area Type: CBD or Similar
 Date: 6/29/2009 Jurisd: Key West
 Period: Midday Peak Year : 2011 Background
 Project ID:
 E/W St: Southard Street N/S St: Simonton Street

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	0	1	1	0	1	0	0	1	0
LGConfig					LT	R		LT			TR	
Volume				71	235	21	62	309			306	22
Lane Width					12.0	12.0		12.0			12.0	
RTOR Vol						0					0	

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	A		
Thru					Thru	A		
Right					Right			
Peds					Peds			
WB Left		A			SB Left			
Thru		A			Thru	A		
Right		A			Right	A		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green		25.0				34.0		
Yellow		4.0				4.0		
All Red		0.0				0.0		

Cycle Length: 67.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
Westbound								
LT	631	1690	0.52	0.37	17.1	B	16.8	B
R	543	1454	0.04	0.37	13.4	B		
Northbound								
LT	777	1532	0.53	0.51	11.7	B	11.7	B
Southbound								
TR	860	1695	0.40	0.51	10.5	B	10.5	B

Intersection Delay = 13.0 (sec/veh) Intersection LOS = B

HCS+: Signalized Intersections Release 5.2

Analyst: Vargas Inter.: Southard/Simonton
 Agency: Traf Tech Engineering, Inc. Area Type: CBD or Similar
 Date: 6/29/2009 Jurisd: Key West
 Period: Midday Peak Year : 2011 Total w/Project
 Project ID:
 E/W St: Southard Street N/S St: Simonton Street

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	0	1	1	0	1	0	0	1	0
LGConfig					LT	R		LT			TR	
Volume				78	235	21	62	312			310	22
Lane Width					12.0	12.0		12.0			12.0	
RTOR Vol						0					0	

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	A		
Thru					Thru	A		
Right					Right			
Peds					Peds			
WB Left		A			SB Left			
Thru		A			Thru	A		
Right		A			Right	A		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green		25.0				34.0		
Yellow		4.0				4.0		
All Red		0.0				0.0		

Cycle Length: 67.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
Westbound								
LT	630	1689	0.53	0.37	17.2	B	17.0	B
R	543	1454	0.04	0.37	13.4	B		
Northbound								
LT	777	1532	0.53	0.51	11.8	B	11.8	B
Southbound								
TR	860	1695	0.41	0.51	10.5	B	10.5	B

Intersection Delay = 13.1 (sec/veh) Intersection LOS = B

HCS+: Signalized Intersections Release 5.2

Analyst: Vargas Inter.: Southard/Simonton
 Agency: Traf Tech Engineering, Inc. Area Type: CBD or Similar
 Date: 6/29/2009 Jurisd: Key West
 Period: PM Peak Year : 2009 Existing
 Project ID:
 E/W St: Southard Street N/S St: Simonton Street

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	0	1	1	0	1	0	0	1	0
LGConfig					LT	R		LT			TR	
Volume				46	228	27	43	226			389	17
Lane Width					12.0	12.0		12.0			12.0	
RTOR Vol						0					0	

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	A		
Thru					Thru	A		
Right					Right			
Peds					Peds			
WB Left		A			SB Left			
Thru		A			Thru	A		
Right		A			Right	A		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green		25.0				34.0		
Yellow		4.0				4.0		
All Red		0.0				0.0		
								Cycle Length: 67.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
Westbound								
LT	633	1696	0.48	0.37	16.6	B	16.3	B
R	543	1454	0.06	0.37	13.5	B		
Northbound								
LT	773	1524	0.40	0.51	10.5	B	10.5	B
Southbound								
TR	863	1700	0.53	0.51	11.8	B	11.8	B

Intersection Delay = 12.8 (sec/veh) Intersection LOS = B

HCS+: Signalized Intersections Release 5.2

Analyst: Vargas Inter.: Southard/Simonton
 Agency: Traf Tech Engineering, Inc. Area Type: CBD or Similar
 Date: 6/29/2009 Jurisd: Key West
 Period: PM Peak Year : 2011 Background
 Project ID:
 E/W St: Southard Street N/S St: Simonton Street

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	0	1	1	0	1	0	0	1	0
LGConfig					LT	R		LT			TR	
Volume				47	233	28	44	230			397	17
Lane Width					12.0	12.0		12.0			12.0	
RTOR Vol						0					0	

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	A		
Thru					Thru	A		
Right					Right			
Peds					Peds			
WB Left		A			SB Left			
Thru		A			Thru	A		
Right		A			Right	A		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green		25.0				34.0		
Yellow		4.0				4.0		
All Red		0.0				0.0		

Cycle Length: 67.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS
Eastbound								
Westbound								
LT	633	1696	0.49	0.37	16.7	B	16.4	B
R	543	1454	0.06	0.37	13.5	B		
Northbound								
LT	769	1516	0.41	0.51	10.6	B	10.6	B
Southbound								
TR	863	1701	0.54	0.51	12.0	B	12.0	B

Intersection Delay = 12.9 (sec/veh) Intersection LOS = B

HCS+: Signalized Intersections Release 5.2

Analyst: Vargas Inter.: Southard/Simonton
 Agency: Traf Tech Engineering, Inc. Area Type: CBD or Similar
 Date: 6/29/2009 Jurisd: Key West
 Period: PM Peak Year : 2011 Total w/Project
 Project ID:
 E/W St: Southard Street N/S St: Simonton Street

SIGNALIZED INTERSECTION SUMMARY

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	0	1	1	0	1	0	0	1	0
LGConfig					LT	R		LT			TR	
Volume				49	233	28	44	236			398	17
Lane Width					12.0	12.0		12.0			12.0	
RTOR Vol						0					0	

Duration 0.25 Area Type: CBD or Similar

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	A		
Thru					Thru	A		
Right					Right			
Peds					Peds			
WB Left		A			SB Left			
Thru		A			Thru	A		
Right		A			Right	A		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green		25.0				34.0		
Yellow		4.0				4.0		
All Red		0.0				0.0		

Cycle Length: 67.0 secs

Intersection Performance Summary

Appr/ Lane Grp	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios		Lane Group		Approach	
			v/c	g/C	Delay	LOS	Delay	LOS

Eastbound

Westbound

LT	632	1695	0.50	0.37	16.8	B	16.5	B
R	543	1454	0.06	0.37	13.5	B		

Northbound

LT	771	1519	0.42	0.51	10.7	B	10.7	B
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Southbound

TR	863	1701	0.55	0.51	12.0	B	12.0	B
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Intersection Delay = 13.0 (sec/veh) Intersection LOS = B

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	Vargas			Intersection	Angela/Simonton			
Agency/Co.	Traf Tech Engineering, Inc.			Jurisdiction	Key West			
Date Performed	6/29/2009			Analysis Year	2009 Existing			
Analysis Time Period	Midday Peak							
Project Description								
East/West Street: Angela Street				North/South Street: Simonton Street				
Intersection Orientation: North-South				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	0	341	1	2	340	18		
Peak-Hour Factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94		
Hourly Flow Rate, HFR (veh/h)	3	168	3	0	79	2		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	1		
Configuration	LTR			LT		R		
Upstream Signal		0			0			
Minor Street	Eastbound			Westbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	3	152	3	0	73	2		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.92	0.92	0.92		
Hourly Flow Rate, HFR (veh/h)	2	361	19	0	415	1		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)		0			0			
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LT		LTR			LTR	
v (veh/h)	0	2		81			174	
C (m) (veh/h)	1190	1154		323			329	
v/c	0.00	0.00		0.25			0.53	
95% queue length	0.00	0.01		0.97			2.93	
Control Delay (s/veh)	8.0	8.1		19.8			27.6	
LOS	A	A		C			D	
Approach Delay (s/veh)	--	--		19.8			27.6	
Approach LOS	--	--		C			D	

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	Vargas			Intersection	Angela/Simonton			
Agency/Co.	Traf Tech Engineering, Inc.			Jurisdiction	Key West			
Date Performed	6/29/2009			Analysis Year	2011 Background			
Analysis Time Period	Midday Peak							
Project Description								
East/West Street: Angela Street				North/South Street: Simonton Street				
Intersection Orientation: North-South				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	0	348	1	2	347	19		
Peak-Hour Factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94		
Hourly Flow Rate, HFR (veh/h)	3	172	3	0	80	2		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0				0	
Lanes	0	1	0	0	1	1		
Configuration	LTR			LT			R	
Upstream Signal		0			0			
Minor Street	Eastbound			Westbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	3	155	3	0	74	2		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.92	0.92	0.92		
Hourly Flow Rate, HFR (veh/h)	2	369	20	0	424	1		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LT		LTR			LTR	
v (veh/h)	0	2		82			178	
C (m) (veh/h)	1181	1145		316			321	
v/c	0.00	0.00		0.26			0.55	
95% queue length	0.00	0.01		1.02			3.17	
Control Delay (s/veh)	8.0	8.1		20.3			29.3	
LOS	A	A		C			D	
Approach Delay (s/veh)	--	--		20.3			29.3	
Approach LOS	--	--		C			D	

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	Vargas			Intersection	Angela/Simonton			
Agency/Co.	Traf Tech Engineering, Inc.			Jurisdiction	Key West			
Date Performed	6/29/2009			Analysis Year	2011 Total w/Project			
Analysis Time Period	Midday Peak							
Project Description								
East/West Street: Angela Street				North/South Street: Simonton Street				
Intersection Orientation: North-South				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	0	368	1	2	353	19		
Peak-Hour Factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94		
Hourly Flow Rate, HFR (veh/h)	3	173	3	0	82	2		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	1		
Configuration	LTR			LT		R		
Upstream Signal		0			0			
Minor Street	Eastbound			Westbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	3	156	3	0	76	2		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.92	0.92	0.92		
Hourly Flow Rate, HFR (veh/h)	2	375	20	0	448	1		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)		0			0			
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LT		LTR			LTR	
v (veh/h)	0	2		84			179	
C (m) (veh/h)	1175	1122		304			309	
v/c	0.00	0.00		0.28			0.58	
95% queue length	0.00	0.01		1.10			3.41	
Control Delay (s/veh)	8.1	8.2		21.3			31.5	
LOS	A	A		C			D	
Approach Delay (s/veh)	--	--		21.3			31.5	
Approach LOS	--	--		C			D	

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	Vargas			Intersection	Angela/Simonton			
Agency/Co.	Traf Tech Engineering, Inc.			Jurisdiction	Key West			
Date Performed	6/29/2009			Analysis Year	2009 Existing			
Analysis Time Period	PM Peak							
Project Description								
East/West Street: Angela Street				North/South Street: Simonton Street				
Intersection Orientation: North-South				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	0	282	0	2	418	21		
Peak-Hour Factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94		
Hourly Flow Rate, HFR (veh/h)	1	147	5	0	45	1		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	1		
Configuration	LTR			LT		R		
Upstream Signal		0			0			
Minor Street	Eastbound			Westbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	1	133	5	0	42	1		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.92	0.92	0.92		
Hourly Flow Rate, HFR (veh/h)	2	444	22	0	343	0		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LT		LTR			LTR	
v (veh/h)	0	2		46			153	
C (m) (veh/h)	1106	1227		318			328	
v/c	0.00	0.00		0.14			0.47	
95% queue length	0.00	0.00		0.50			2.37	
Control Delay (s/veh)	8.3	7.9		18.2			25.2	
LOS	A	A		C			D	
Approach Delay (s/veh)	--	--		18.2			25.2	
Approach LOS	--	--		C			D	

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	Vargas			Intersection	Angela/Simonton			
Agency/Co.	Traf Tech Engineering, Inc.			Jurisdiction	Key West			
Date Performed	6/29/2009			Analysis Year	2011 Background			
Analysis Time Period	PM Peak							
Project Description								
East/West Street: Angela Street				North/South Street: Simonton Street				
Intersection Orientation: North-South				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	0	287	0	2	427	21		
Peak-Hour Factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94		
Hourly Flow Rate, HFR (veh/h)	1	151	5	0	46	1		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0				0	
Lanes	0	1	0	0	1	1		
Configuration	LTR			LT			R	
Upstream Signal		0			0			
Minor Street	Eastbound			Westbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	1	136	5	0	43	1		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.92	0.92	0.92		
Hourly Flow Rate, HFR (veh/h)	2	454	22	0	350	0		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0				0	
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LT		LTR			LTR	
v (veh/h)	0	2		47			157	
C (m) (veh/h)	1097	1220		311			320	
v/c	0.00	0.00		0.15			0.49	
95% queue length	0.00	0.00		0.53			2.57	
Control Delay (s/veh)	8.3	8.0		18.6			26.6	
LOS	A	A		C			D	
Approach Delay (s/veh)	--	--		18.6			26.6	
Approach LOS	--	--		C			D	

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	Vargas			Intersection	Angela/Simonton			
Agency/Co.	Traf Tech Engineering, Inc.			Jurisdiction	Key West			
Date Performed	6/29/2009			Analysis Year	2011 Total w/Project			
Analysis Time Period	PM Peak							
Project Description								
East/West Street: Angela Street				North/South Street: Simonton Street				
Intersection Orientation: North-South				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	0	294	0	2	438	21		
Peak-Hour Factor, PHF	0.82	0.82	0.82	0.94	0.94	0.94		
Hourly Flow Rate, HFR (veh/h)	1	152	5	0	47	1		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	1		
Configuration	LTR			LT			R	
Upstream Signal		0			0			
Minor Street	Eastbound			Westbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	1	137	5	0	44	1		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.92	0.92	0.92		
Hourly Flow Rate, HFR (veh/h)	2	465	22	0	358	0		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LT		LTR			LTR	
v (veh/h)	0	2		48			158	
C (m) (veh/h)	1086	1212		303			312	
v/c	0.00	0.00		0.16			0.51	
95% queue length	0.00	0.00		0.56			2.70	
Control Delay (s/veh)	8.3	8.0		19.1			27.8	
LOS	A	A		C			D	
Approach Delay (s/veh)	--	--		19.1			27.8	
Approach LOS	--	--		C			D	

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	Vargas			Intersection	Angela/Driveway			
Agency/Co.	Traf Tech Engineering, Inc.			Jurisdiction	Key West			
Date Performed	7/1/2009			Analysis Year	2011 Total w/Project			
Analysis Time Period	Midday Peak							
Project Description								
East/West Street: Angela Street				North/South Street: Driveway				
Intersection Orientation: East-West				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	2	146			40	55		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90		
Hourly Flow Rate, HFR (veh/h)	2	162	0	0	44	61		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0				0	
Lanes	0	1	0	0	1	0		
Configuration	LT						TR	
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)				16		11		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90		
Hourly Flow Rate, HFR (veh/h)	0	0	0	17	0	12		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration				LR				
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT					LR		
v (veh/h)	2						29	
C (m) (veh/h)	1499						836	
v/c	0.00						0.03	
95% queue length	0.00						0.11	
Control Delay (s/veh)	7.4						9.5	
LOS	A						A	
Approach Delay (s/veh)	--	--				9.5		
Approach LOS	--	--				A		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	Vargas			Intersection	Angela/Driveway			
Agency/Co.	Traf Tech Engineering, Inc.			Jurisdiction	Key West			
Date Performed	7/1/2009			Analysis Year	2011 Total w/Project			
Analysis Time Period	PM Peak							
Project Description								
East/West Street: Angela Street				North/South Street: Driveway				
Intersection Orientation: East-West				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	1	130			48	17		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90		
Hourly Flow Rate, HFR (veh/h)	1	144	0	0	53	18		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0				0	
Lanes	0	1	0	0	1	0		
Configuration	LT						TR	
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)				13		6		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90		
Hourly Flow Rate, HFR (veh/h)	0	0	0	14	0	6		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration				LR				
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT					LR		
v (veh/h)	1						20	
C (m) (veh/h)	1542						840	
v/c	0.00						0.02	
95% queue length	0.00						0.07	
Control Delay (s/veh)	7.3						9.4	
LOS	A						A	
Approach Delay (s/veh)	--	--				9.4		
Approach LOS	--	--				A		

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	Vargas			Intersection	Simonton Driveway			
Agency/Co.	Traf Tech Engineering, Inc.			Jurisdiction	Key West			
Date Performed	7/1/2009			Analysis Year	2011 Total w/Project			
Analysis Time Period	Midday Peak							
Project Description								
East/West Street: Driveway				North/South Street: Simonton Street				
Intersection Orientation: North-South				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	45	328			343	46		
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90		
Hourly Flow Rate, HFR (veh/h)	27	0	34	0	0	0		
Percent Heavy Vehicles	0	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0				0	
Lanes	0	1	0	0	1	0		
Configuration	LT						TR	
Upstream Signal		0			0			
Minor Street	Eastbound			Westbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	25		31					
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90		
Hourly Flow Rate, HFR (veh/h)	0	381	51	50	364	0		
Percent Heavy Vehicles	0	0	0	0	0	0		
Percent Grade (%)		0			0			
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0				0	
Lanes	0	0	0	0	0	0		
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	50						61	
C (m) (veh/h)	1138						438	
v/c	0.04						0.14	
95% queue length	0.14						0.48	
Control Delay (s/veh)	8.3						14.5	
LOS	A						B	
Approach Delay (s/veh)	--	--					14.5	
Approach LOS	--	--					B	

TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst	Vargas			Intersection	Simonton Driveway		
Agency/Co.	Traf Tech Engineering, Inc.			Jurisdiction	Key West		
Date Performed	7/1/2009			Analysis Year	2011 Total w/Project		
Analysis Time Period	PM Peak						
Project Description							
East/West Street: Driveway				North/South Street: Simonton Street			
Intersection Orientation: North-South				Study Period (hrs): 0.25			
Vehicle Volumes and Adjustments							
Major Street	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume (veh/h)	20	276			408	17	
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	
Hourly Flow Rate, HFR (veh/h)	32	0	58	0	0	0	
Percent Heavy Vehicles	0	--	--	0	--	--	
Median Type	Undivided						
RT Channelized			0				0
Lanes	0	1	0	0	1		0
Configuration	LT						TR
Upstream Signal		0			0		
Minor Street	Eastbound			Westbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume (veh/h)	29		53				
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	
Hourly Flow Rate, HFR (veh/h)	0	453	18	22	306	0	
Percent Heavy Vehicles	0	0	0	0	0	0	
Percent Grade (%)		0			0		
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0				0
Lanes	0	0	0	0	0		0
Configuration		LR					
Delay, Queue Length, and Level of Service							
Approach	Northbound	Southbound	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11 12
Lane Configuration	LT						LR
v (veh/h)	22						90
C (m) (veh/h)	1101						476
v/c	0.02						0.19
95% queue length	0.06						0.69
Control Delay (s/veh)	8.3						14.3
LOS	A						B
Approach Delay (s/veh)	--	--					14.3
Approach LOS	--	--					B

APPENDIX G

City of Key West Comprehensive Plan Traffic Circulation Element

CHAPTER 2: TRAFFIC CIRCULATION ELEMENT
(Reference §91-5.007(3), F.A.C.)

§2-1: TRAFFIC CIRCULATION GOALS, OBJECTIVES, AND IMPLEMENTING POLICIES. This section stipulates goals, objectives, and implementing policies for the Traffic Circulation Element pursuant to §163.3177(6)(b), F.S., and §93-5.007(3), F.A.C.

GOAL 2-1: TRAFFIC CIRCULATION. Plan for a safe, convenient, and efficient motorized and non-motorized transportation system which shall be available for existing and anticipated future users of the system.

OBJECTIVE 2-1.1: SAFE, CONVENIENT, AND EFFICIENT TRANSPORTATION SYSTEM. Establish a safe, convenient, and efficient motorized and non-motorized transportation system in the City through development and implementation of level of service (LOS) standards and identified transportation improvements, as shown in the Future Traffic Circulation Map (Map II-8) and Schedule of Improvements (Table II-1), to meet said levels of service standards.

Policy 2-1.1.1: Level of Service Standards. The Level of Service (LOS) determination of thresholds shall be calculated using F-DOJ software such as ART PLAN that incorporates the speed based methodology described in the data and analysis. The City hereby adopts the following peak hour roadway level of service standards based on functional classification (for U.S. 1, the LOS shall be assessed based on a peak direction analysis of the highest 15 minute period of the 100th highest hourly volume of the year, or K100):

Roadway Facilities	Segment	Min LOS Standard Peak Hour
State Urban Principal Arterials		C (1)
U.S. 1	N. Roosevelt Blvd.	C (1)
	Truman Ave	Physically Constrained (1)
	Whitehead St.	Physically Constrained (1)
County Urban Minor Arterials		D
County Urban Collectors		D
City Urban Collectors		D

(1) Due to physical constraints that would make U.S. 1 improvements cost prohibitive, the segments from Eisenhower Drive to Whitehead Street and from Truman Avenue to Fleming Street, are designated as constrained. These segments have an existing operating condition below the LOS C standard. Constrained facilities level of service shall be C plus five (5) percent.

Policy 2-1.1.2: Maintenance Plan for Constrained Segments of U.S. 1. The City shall monitor development activity to continue the operating condition such that significant degradation does not occur on the constrained segments of U.S. 1. In the case of Key West, "significant degradation" shall mean an average annual daily traffic increase in two-way traffic volume of five percent.

Policy 2-1.1.3: Possible Changes in Level of Service Standard. The City will continue to explore the applicability and utility of designating Old Town as a Transportation Concurrence Management Area (TCMA), as a means of ensuring an adequate level of mobility that is sensitive to the City's historic character. If pursued, the TCMA will promote the use of public transit and other non-automobile modes, such as bicycling and walking, while discouraging the proliferation of urban sprawl and protecting natural resources.

Policy 2-1.1.4: Criteria for Evaluating Proposed Roadway Improvement. Future roadway improvement proposals shall be evaluated and assigned a relative priority based on specific criteria below cited:

1. Whether the project is needed to:
 - o Protect public health and safety;
 - o Fulfill the City's legal commitment to provide facilities and services; or Preserve or achieve full use of existing facilities.

2. Whether the project:
 - o Ameliorates a deficient level of service on existing facilities;
 - o Increases efficiency of use of existing facilities;
 - o Prevents or reduces future improvement cost;
 - o Provides service to developed areas lacking full service; or
 - o Promotes in-fill development.

Policy 2-1.1.5: Review of Proposed Developments. The City shall review all proposed development for consistency with adopted LOS standards. No development shall be approved that is projected to generate a traffic volume which would decrease the existing LOS below the adopted standard, or degrade the operating condition on the constrained segments of U.S. 1 below the five percent (5%) threshold stated in Policy 2-1.1.2, unless those impacts are mitigated by the developer.

Policy 2-1.1.6: Monitor and Evaluate Impact Fee. The City shall monitor and evaluate the City transportation impact fee ordinance based on a continuing assessment of traffic circulation improvement needs and public and private funding resources required to accommodate those needs.

Policy 2-1.1.7: Adequate Facilities Ordinance. The City shall amend the land development regulations to require that physical improvements required to provide adequate roadway capacity be in place prior to the issuance of a development order/permit. In addition, prior to approval of a site plan the developer/applicant shall demonstrate to the City's satisfaction that required on- and off-site roadway and traffic improvements shall be in place concurrent with the impacts of development. Also, the developer shall demonstrate to the City's satisfaction that the proposed development shall not cause the level of service on adjacent public roads to decline below level of service standards cited in Policy 2-1.1.1.

Policy 2-1.1.8: On-Site Transportation Improvements and Safe Traffic Flow. Upon plan adoption the City shall amend its land development regulations to include performance standards which require that all developments provide safe and convenient on-site traffic flow considering motorized and non-motorized vehicle parking and internal circulation needs.

Policy 2-1.1.9: Controlled Access. Upon plan adoption the City shall adopt land development regulations which incorporate standards for:

- o Controlling connections and access points of driveways and roadways to existing roadways, and which conform to the standards outlined in the State's Access Management Rule for state facilities;
- o Preventing conflicts between vehicular, pedestrian and bicycle traffic; and
- o Providing a traffic circulation system which is designed to accommodate the demands of emergency service delivery systems.

Policy 2-1.1.10: Comprehensive Traffic Circulation Study. Within the next two years the City of Key West will conduct a comprehensive traffic circulation study that considers current traffic volumes, recent and planned development projects, street circulation, parking, public transportation, ports, aviation facilities, level of service and potential needed improvements and changes in traffic circulation. This study should result in a comprehensive listing of needed transportation improvements and an identification of short term and long term implementation and financing strategies. Special efforts will be made to maximize the utilization of mass transit systems and other alternative modes. Needed improvements and financing strategies to address, among others, the impacts from the Chapter 288 Military Base Reuse Plan will also be incorporated in the Capital Improvement Element of the City's comprehensive plan by June 30, 2001 as applicable.

Policy 2-1.1.11: Concurrency Management Study. Within the next two years the City of Key West will conduct a study to evaluate concurrency management options that may include reducing level of service standards, concurrency exception areas, and other options as appropriate. The recommendations of this study will be used to update the City of Key West's concurrency management system.

OBJECTIVE 2-1.2: RIGHT-OF-WAY ACQUISITION. The City shall protect existing and future right-of-way from building encroachment. Following the completion of the countywide transportation plan update identified in Objective 2-1.8, the City shall program any additional transportation system right-of-way acquisition needs identified in the countywide transportation system plan update.

Policy 2-1.2.2: Standards For Road R/W Acquisition. The City hereby adopts the following minimum standards for road rights-of-way:

Arterial Roadways:	80' – 90' R/W
Collector Streets:	
Major	60' – 80' R/W
Minor	50' – 60' R/W
Local Streets:	40' – 60' R/W (if curb and gutter)

The City shall preserve existing rights-of-way and shall enforce standards requiring dedication of roadways for which the need is generated by new development.

Policy 2-1.2.3: Mandatory R/W Dedication/Fees in Lieu. The City shall implement a program for mandatory dedication or fees in lieu thereof as a condition of development approval associated with plats, replats, PUDs, or site plans where such developments generate a need for new or improved roadways. The purpose and intent of such program shall be to ensure that: 1) adequate road R/W and necessary roadway improvements are dedicated and developed concurrent with the impacts of new development; and 2) the cost of such improvements shall be borne by the developer generating the need for the facilities.

OBJECTIVE 2-1.3: FUTURE ROADWAY IMPROVEMENTS. The City shall coordinate with the FDOT and with Monroe County to attain improvements to State and County roadways required to accommodate future traffic circulation system demands through the short (1995) and long term (2010) timeframe.

Policy 2-1.3.1: Specific FDOT Planned Roadway Improvements. No FDOT traffic circulation improvements are scheduled for the City of Key West within the FDOT 5-Year Road Improvement Program.

Policy 2-1.3.2: Coordinate Engineered Traffic Circulation Master Plan with FDOT and Monroe County. Since most of the principal arterial, minor arterial and urban collector streets are either County or State facilities, the City of Key West shall coordinate improvement strategies outlined in the Future Traffic Circulation Map with the State DOT and Monroe County.

Policy 2-1.3.3: Monitor Future Capacity of Roadways. The City shall coordinate with FDOT and Monroe County in order to develop a model for continuing monitoring of traffic circulation system needs. Furthermore, the City shall attempt to ensure that FDOT traffic counts include all facilities on the state map of the City's major thoroughfares by functional classification. The improved data base shall be a major component of the continuing monitoring and evaluation system.

Policy 2-1.3.4: Jose Marti Parking Facility. The City has received an Urban Mass Transit Assistance (UMTA) grant to construct the proposed Jose Marti parking facility in FY 1991-92. The facility improvements will be undertaken in two phases FY 1991-92 through 1992-93. The second phase is contingent on the success of phase one according to terms of the UMTA grant.