

**DOCUMENT ADDENDUM
PROJECT TRAFFIC AND INTERSECTION ANALYSIS
TECHNICAL MEMORANDUM**

**S. R. 39
FROM I-4 TO U.S. 301
HILLSBOROUGH AND PASCO COUNTIES, FLORIDA**

**Work Program Item Segment Nos: 255099 1 & 256289 1
Federal Aid Project No: F-321-1(4)**

This proposed project involves multi-lane improvements to S.R. 39 and the proposed extension of the Alexander Street Bypass from I-4 in Hillsborough County to U.S. 301 in Pasco County, a distance of approximately 21.2 km (13.2 mi)

Prepared for:

**Florida Department of Transportation
District Seven
11201 North McKinley Drive
Tampa, Florida 33612**

April 2001

The attached Project Traffic and Intersection Analysis Technical Memorandum was completed in November 1999. This addendum provides updated project information that was not available in the previous Project Traffic and Intersection Analysis Technical Memorandum that was available for public review prior to and at the Public Hearing that was held on April 20, 2000. This addendum improves consistency between the Project Traffic and Intersection Analysis Technical Memorandum and the Environmental Assessment/Finding of No Significant Impact (EA/FONSI) that was approved by the (FHWA) on November 14, 2000.

INTRODUCTION

Through the PD&E Study process, the FDOT evaluated the expansion of S.R. 39 to a four-lane facility from the vicinity of Joe McIntosh Road in Hillsborough County to the vicinity of U.S. 301 in Pasco County (Addendum Figure 1). In addition, the FDOT evaluated the extension of Alexander Street Bypass as a four-lane facility from Interstate 4 (I-4) northward to S.R. 39 in the vicinity of Joe McIntosh Road.

The S.R. 39 corridor is functionally classified as a north/south minor arterial facility between I-4 and U.S. 301. S.R. 39 is part of the Federal-Aid Primary and State Highway System and is classified as an emergency evacuation route. The project limits extend from I-4 in Plant City and Hillsborough County to U.S. 301 in Pasco County, a distance of 21.2 kilometers (km) [13.2 miles (mi)].

The existing S.R. 39 within the project limits contains a two-lane undivided typical section with 3.658 meter (m) [12 foot (ft)] wide travel lanes, 1.219 m (4 ft) paved shoulders, and open roadside ditches on both sides of the roadway. The existing right-of-way (ROW) varies from 18.288 m (60 ft) to 45.720 m (150 ft).

S.R. 39 is currently a two-lane undivided roadway with drainage ditches adjacent to the existing roadway. A CSX Transportation railroad line parallels the existing roadway on

the east side of S.R. 39 for approximately 17.7 km (11.0 mi) from the existing S.R. 39 and I-4 intersection to a point just north of Crystal Springs in Pasco County.

PROPOSED IMPROVEMENTS

The FHWA approved project involves multi-lane improvements to S.R. 39 and the planned extension of the Alexander Street Bypass from I-4 in Hillsborough County to U.S. 301 in Pasco County, a distance of approximately 21.2 km (13.2 mi). The Alexander Street Bypass portion from I-4 to the vicinity of Joe McIntosh Road is approximately 4.02 km (2.5 mi). This new alignment alternative is located to the west of S.R. 39 between I-4 and Joe McIntosh Road due to significant land use constraints on S.R. 39, including the Memorial Park Cemetery in the vicinity of I-4. Overall, improvements will consist of a four-lane divided roadway on new alignment (the Alexander Street Bypass) and improvement to S.R. 39 north of the merge point with the Alexander Street Bypass northward. The existing S.R. 39 north of the merge point will be improved from a two-lane undivided roadway to a four-lane divided facility.

DOCUMENT SPECIFIC UPDATES

This update to the Project Traffic and Intersection Analysis Technical Memorandum includes the following:

- Project Location Map has been updated (Addendum Figure 1).
- This project is currently described in the EA/FONSI as multi-lane improvements to S.R. 39 and the proposed extension of the Alexander Street Bypass from I-4 in Hillsborough County to U.S. 301 in Pasco County.

**PROJECT TRAFFIC AND INTERSECTION ANALYSIS
TECHNICAL MEMORANDUM**

**S. R. 39
FROM I-4 TO U.S. 301
HILLSBOROUGH AND PASCO COUNTIES, FLORIDA**

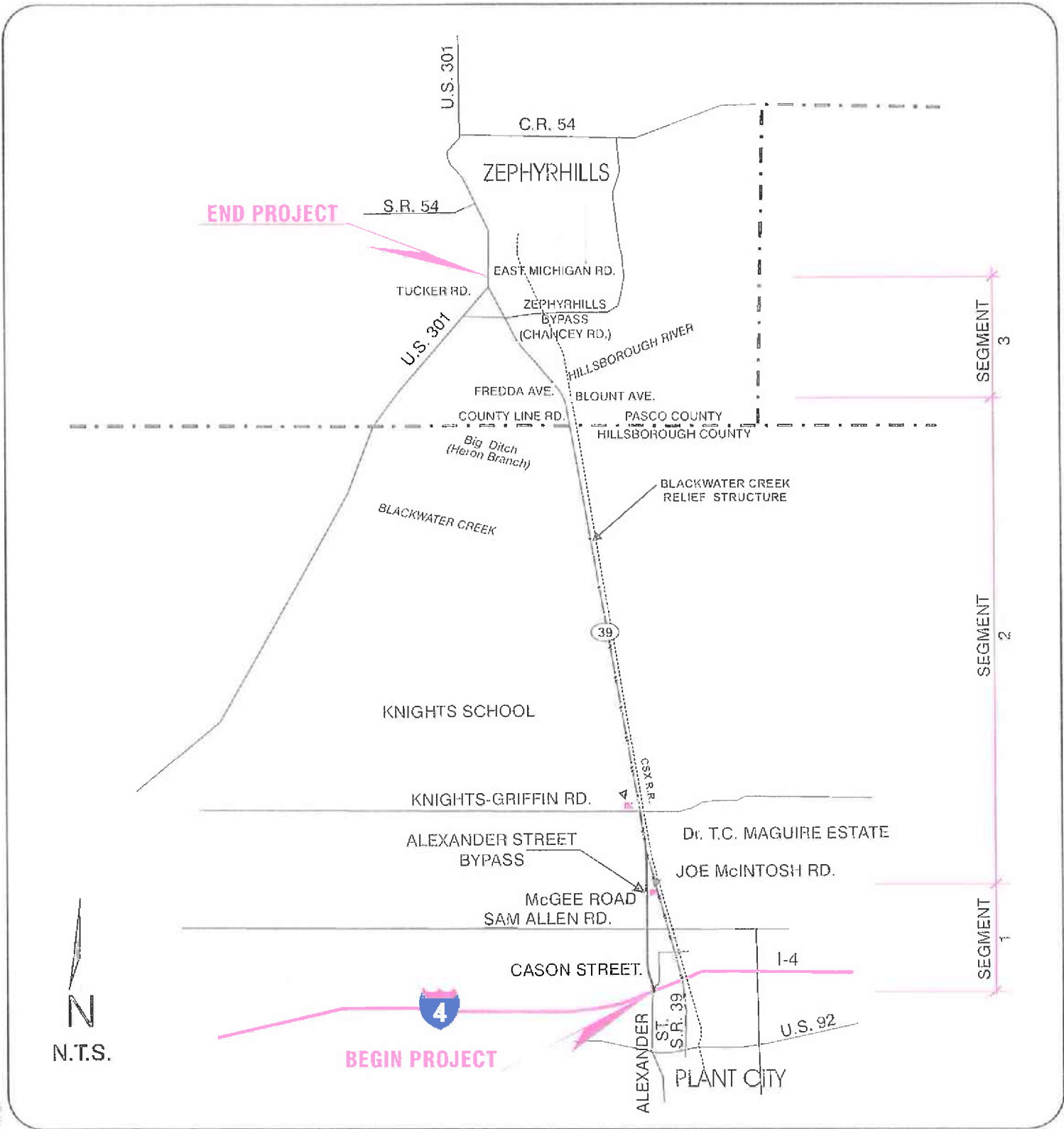
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This proposed project involves multi-lane improvements to S.R. 39 and the proposed extension of the Alexander Street Bypass from I-4 in Hillsborough County to U.S. 301 in Pasco County, a distance of approximately 21.2 km (13.2 mi)

Prepared for:

**Florida Department of Transportation
District Seven
11201 North McKinley Drive
Tampa, Florida 33612**

November 3, 1999



FLORIDA DEPARTMENT OF TRANSPORTATION

S.R. 39

From I-4 to U.S. 301
Pasco County, Florida

PROJECT LOCATION MAP

CERTIFICATION

PROJECT TRAFFIC VOLUMES

W.P.I. Number: 7113335

State Project Number: 10200-1508

Description: This project involves the multi-laning of State Road 39 from north
of I-4 to U.S. 301 in Hillsborough and Pasco Counties, Florida

"I have followed the Project Traffic Forecasting Procedures, adopted by the Florida Department of Transportation, and have arrived at the project traffic volumes. I have found these to be consistent with this historical traffic data and other available information."

11/3/99

Date

John Wright
John Wright, P.E.
Senior Traffic Engineer

Parsons Brinckerhoff Quade & Douglas, Inc.

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<u>Appendix</u>	<u>Description</u>
A.	<ul style="list-style-type: none">• 1996 AADT Volumes• Forecasted 2005 and 2020 AADT Volumes• Design Traffic Data (K, D, T)
B.	Intersection Turning Movement Count Summary Sheets
C.	Crash Experience Summary
D.	<ul style="list-style-type: none">• HCS Worksheets - Existing Conditions (1998) Analysis• Capacity Table For Roadway Segment Analysis
E.	TURNS 4 Analysis Output
F.	HCS Worksheets 2010 and 2020 LOS Analysis/No-Build Alternative
G.	<ul style="list-style-type: none">• HCS Worksheets 2010 and 2020 LOS Analysis/Build Alternative• Capacity Table For Roadway Segment Analysis
H.	Results of Year 2010 and 2020 Intersection Queue Length Analysis

INTRODUCTION

The purpose of this technical memorandum is to present a traffic analysis for SR 39 from I-4 to US 301, a length of approximately 13.5 miles, and for the proposed Alexander Street Extension from I-4 to SR 39 in the vicinity of Sam Allen Road, a length of approximately 1.5 miles. The project begins at I-4 on the north side of Plant City, in Hillsborough County, and ends at US 301 on the south side of Zephyrhills, in Pasco County. The project location is illustrated on Figure 1.

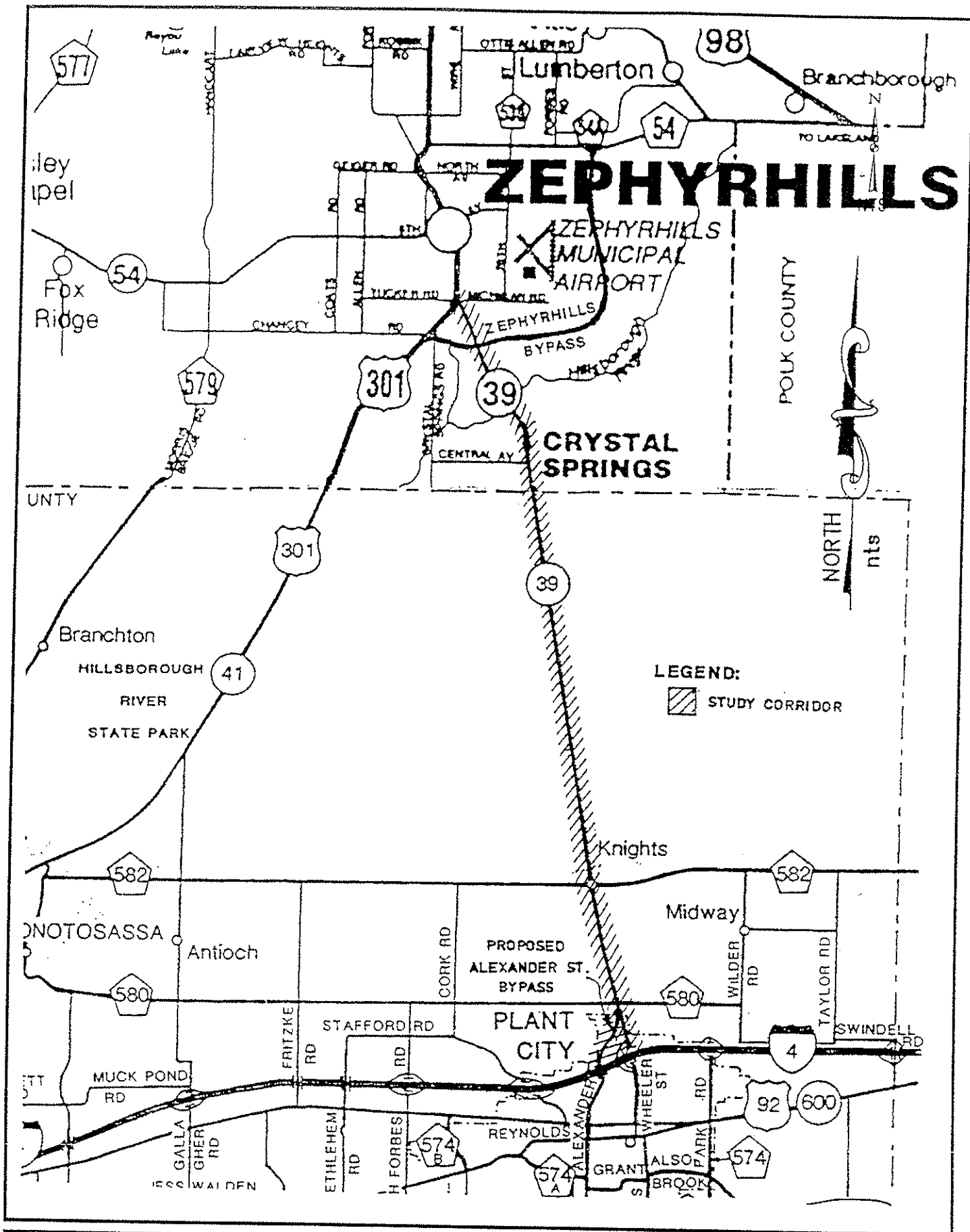
SR 39 is a north-south arterial roadway that extends as a state road from SR 60 on the south end to US 301 in Pasco County on the north end.

The purpose of this memorandum is two-fold: 1) to document the existing conditions along SR 39, including existing traffic characteristics, traffic demand, and levels of service (LOS); and 2) to provide estimated year 2010 and 2020 conditions, including traffic demand, geometric requirements, and LOS.

STUDY AREA

The project limits for this study begin on the north side of I-4 at the northern limits of the current I-4 reconstruction project. This project does not include the interchanges of I-4 with SR 39 or with Alexander Street. The project ends at US 301 and includes the intersection of SR 39/US 301.

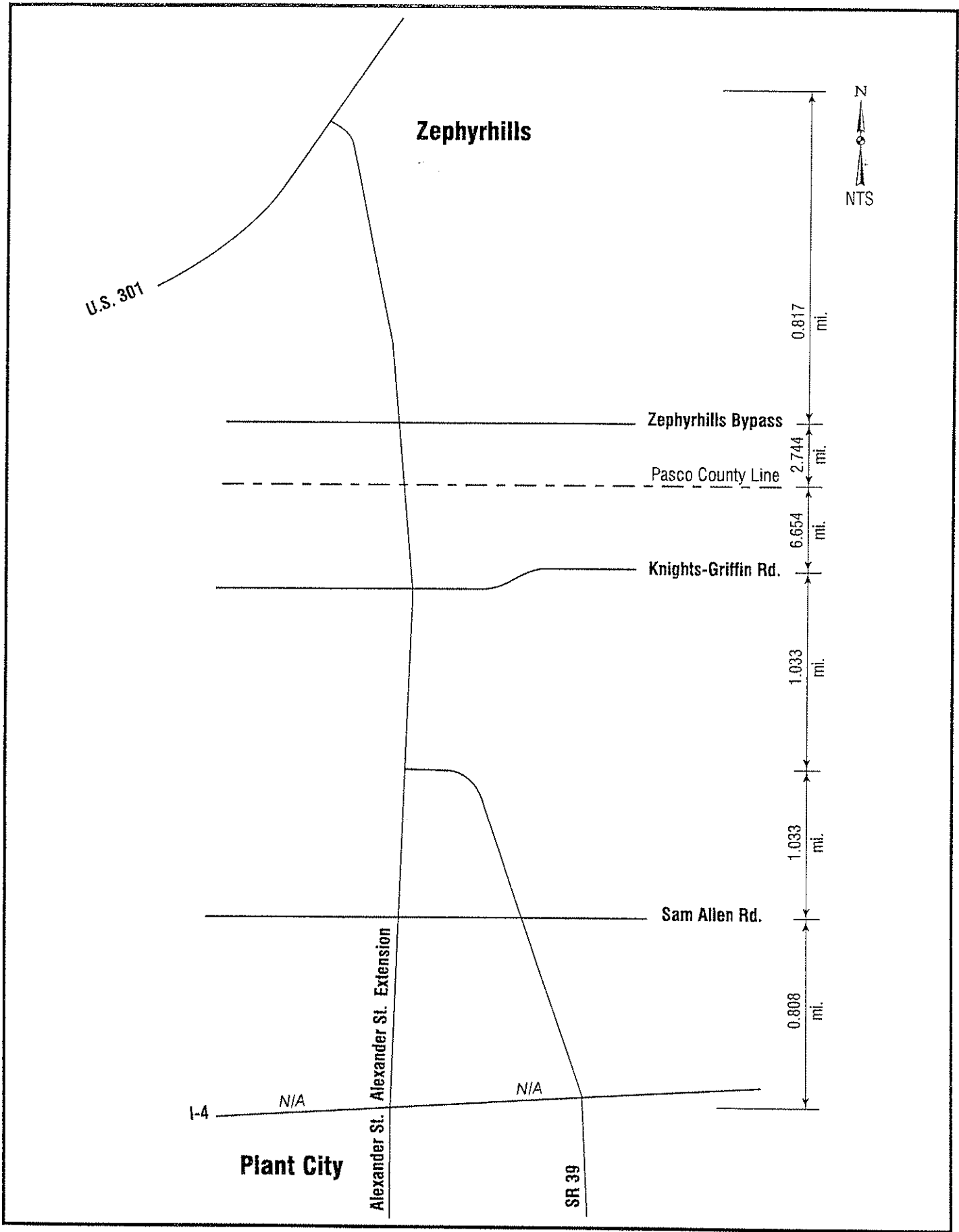
A review of the SR 39 corridor from north of I-4 in Plant City to US 301 in Zephyrhills concluded that only four intersecting roadways currently serve as thoroughfares. These roadways are Sam Allen Road, Knights-Griffin Road, Zephyrhills Bypass and US 301/Michigan Avenue. Therefore, only the intersections of these roadways with SR 39 were selected for detailed intersection



PROJECT LOCATION

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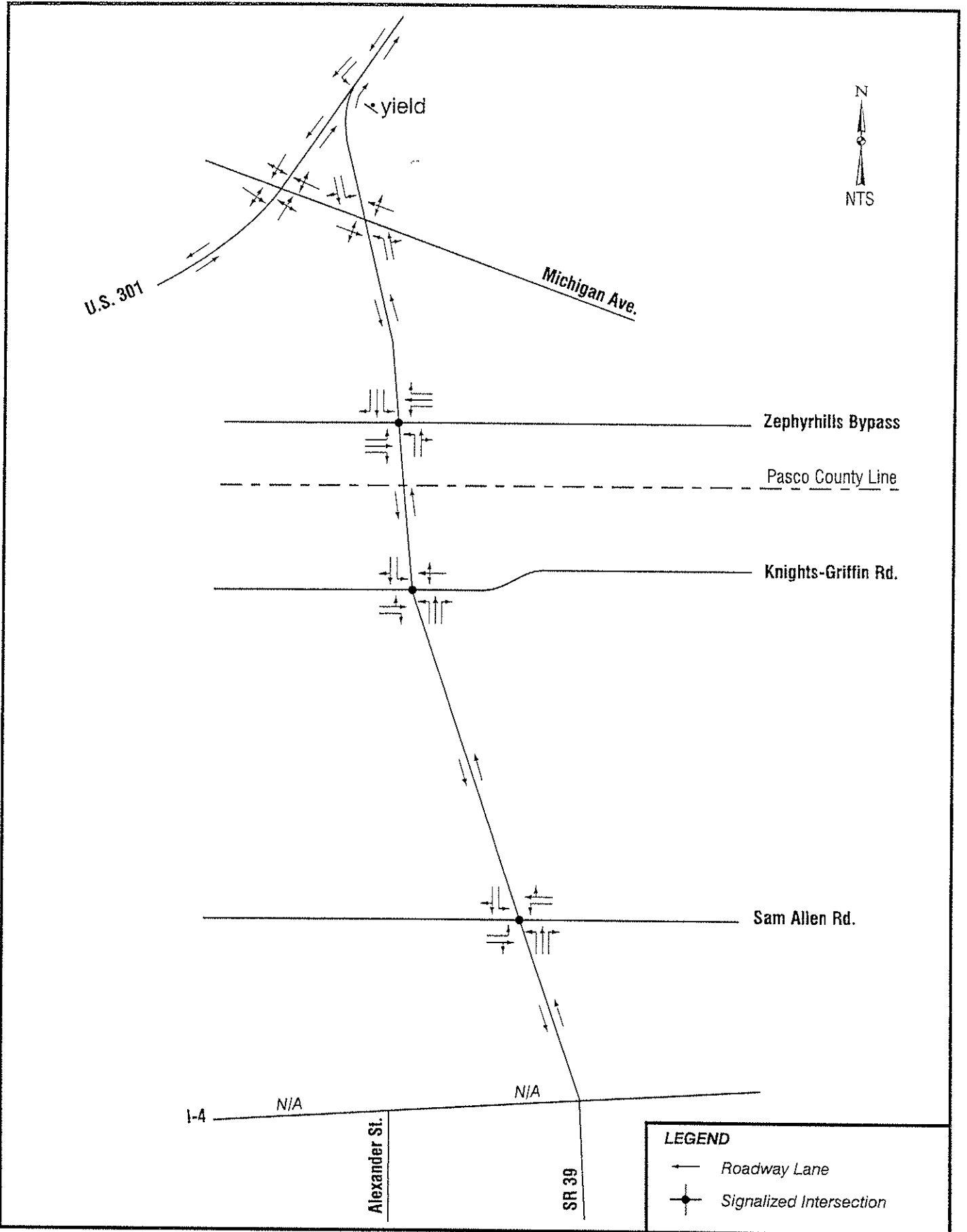
FIGURE
 1



STUDY AREA

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FIGURE
 2



**NO BUILD ALTERNATIVE
ROADWAY NETWORK**

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**FIGURE
3**

1998 AADT Volumes

1998 AADT volumes on SR 39 and the intersecting major roadways were developed by straight line interpolation between the 1996 AADT volumes and projected year 2005 AADT volumes for the same roadway links. The 1998 estimated AADT volume on SR 39 between I-4 and Sam Allen Road was adjusted downward to reflect a decline in traffic volumes on this segment of SR 39 in 1997, probably due to the ongoing construction at the SR 39/I-4 interchange. The 1997 AADT volume data used to make these adjustments are contained in the study report titled, "Interchange Operational Analysis Report, Interstate 4 Corridor, Thonotosassa Road (SR 566) to Park Road (SR 553), February 18, 1999." The 1996 and projected 2005 AADT volumes used to estimate the 1998 AADT volumes are contained in Appendix A. The estimated 1998 AADT volumes developed by this procedure are illustrated on Figure 4.'

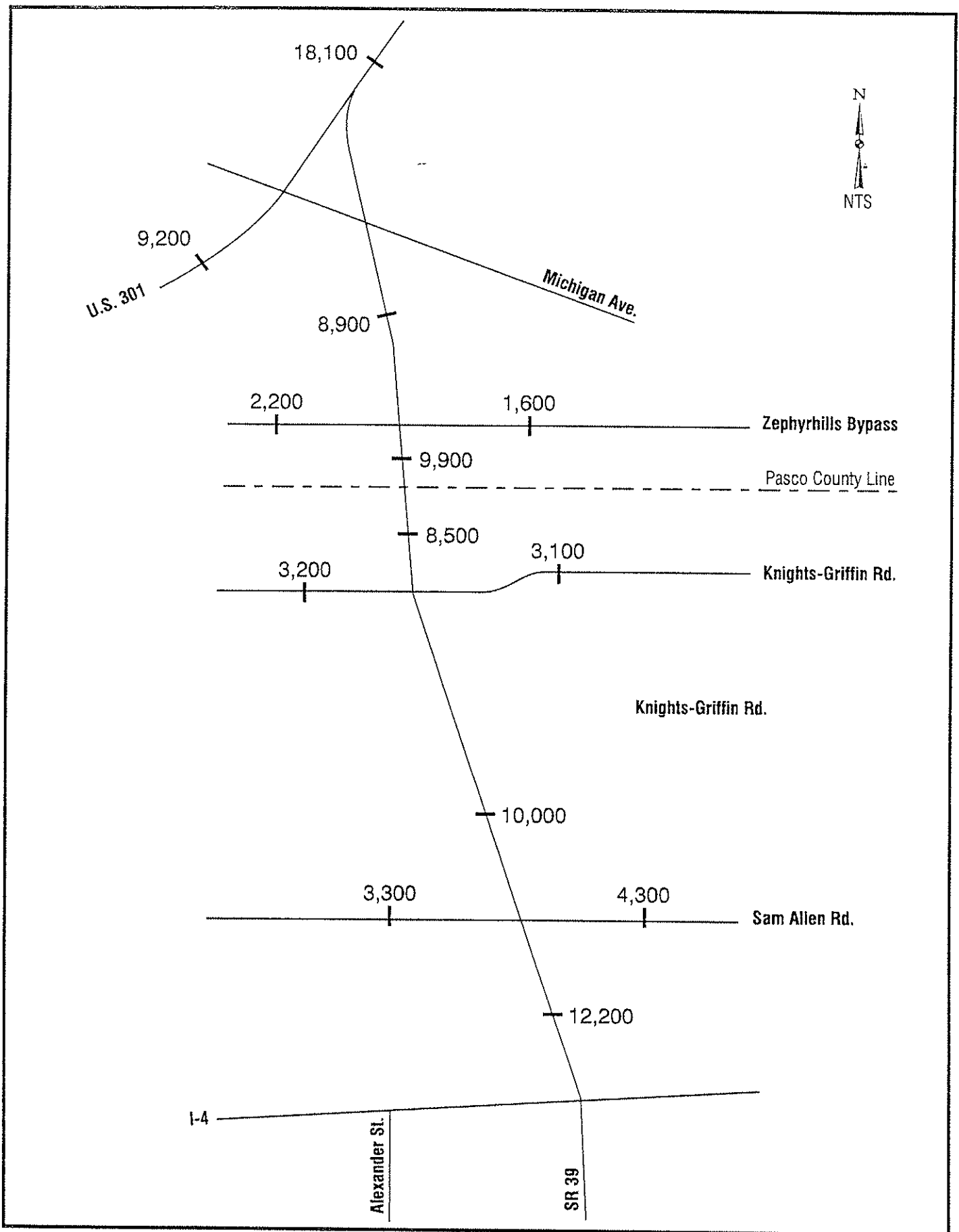
Peak Hour Traffic Volumes

Vehicle turning movement counts were conducted between the hours of 6:00AM to 9:00AM, 11:00AM to 1:00PM and 3:00PM to 6:00PM on September 21 and 22, 1998 at the following four intersections:

1. SR 39/Sam Allen Road
2. SR 39/Knights-Griffin Road
3. SR 39/Zephyrhills Bypass
4. SR 39/US 301/Michigan Avenue

The summary sheets for these counts are contained in Appendix B.

The intersection turning movement count data was analyzed to identify the peak traffic volume hours. The analysis determined that the peak traffic hours occurred between 6:00AM and 8:00AM, and between 4:00PM and 6:00PM, the traditional AM and PM peak traffic periods.



1998 AADT VOLUMES

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The peak hours for the four study intersections are as follows:

<u>Intersection</u>	<u>AM Peak Hour</u>	<u>PM Peak Hour</u>
1. SR 39/Sam Allen Road	7:00AM-8:00AM	5:00PM-6:00PM
2. SR 39/Knights-Griffin Road	7:00AM-8:00AM	5:00PM-6:00PM
3. SR 39/Zephyrhills Bypass	6:00AM-7:00AM	4:00PM-5:00PM
4. SR 39/US 301	7:00AM-8:00AM	5:00PM-6:00PM

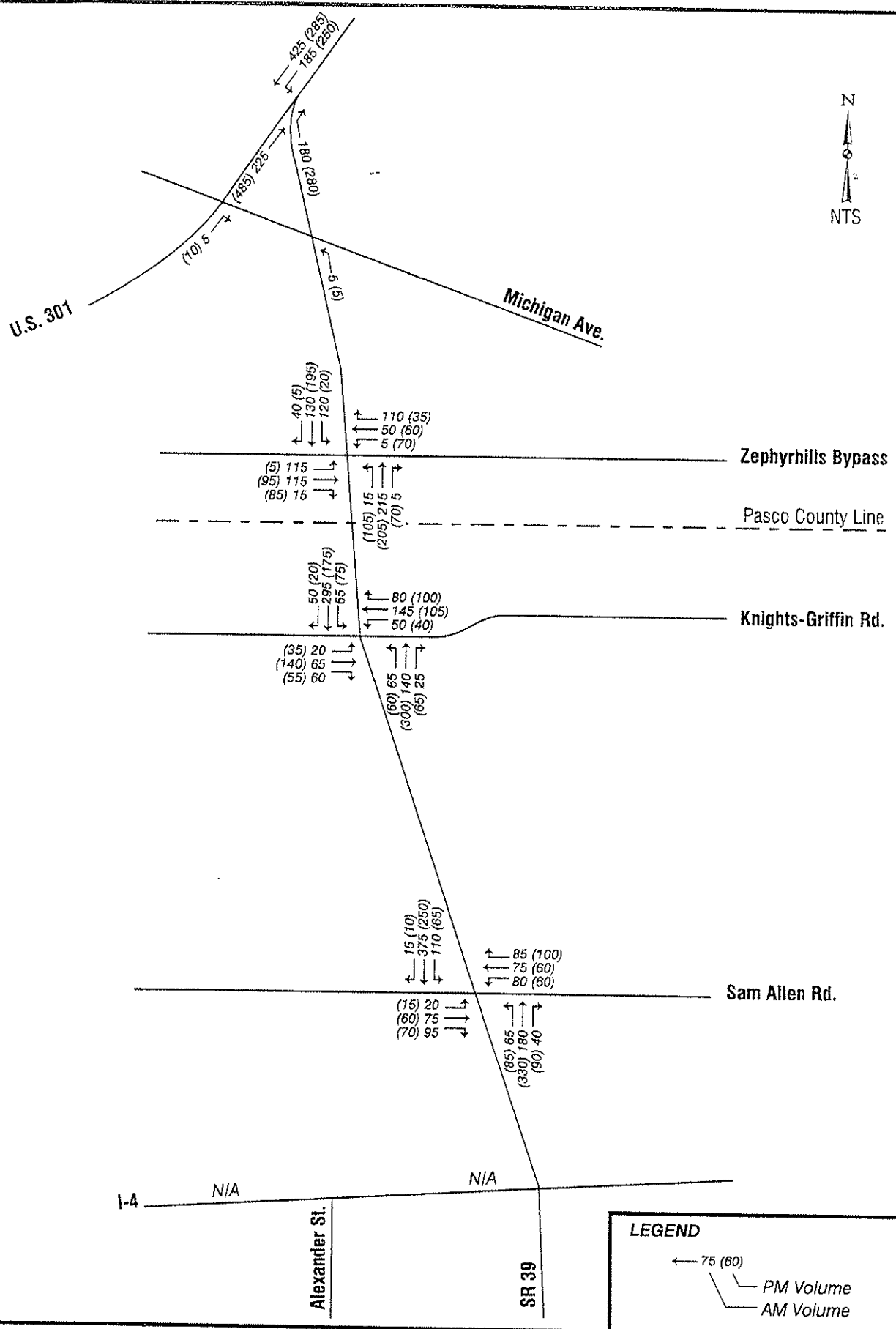
The AM and PM peak hour traffic volumes were adjusted to design hour conditions by applying a factor of 1.03 for Hillsborough County and 1.07 for Pasco County, from the 1997 Weekly Volume Factor Reports provided by District 7 Planning. The resulting 1998 AM and PM design hour volumes for the four study intersections are illustrated on Figure 5.

Truck, Bus, Pedestrian and Bicycle Volumes

The AM and PM peak period intersection turning movement counts also identified truck and bus (primarily school bus) volumes and the pedestrian and bicycle volumes at each of the four study intersections. The count summary sheets contained in Appendix B show that there was no significant pedestrian or bicycle volumes observed.

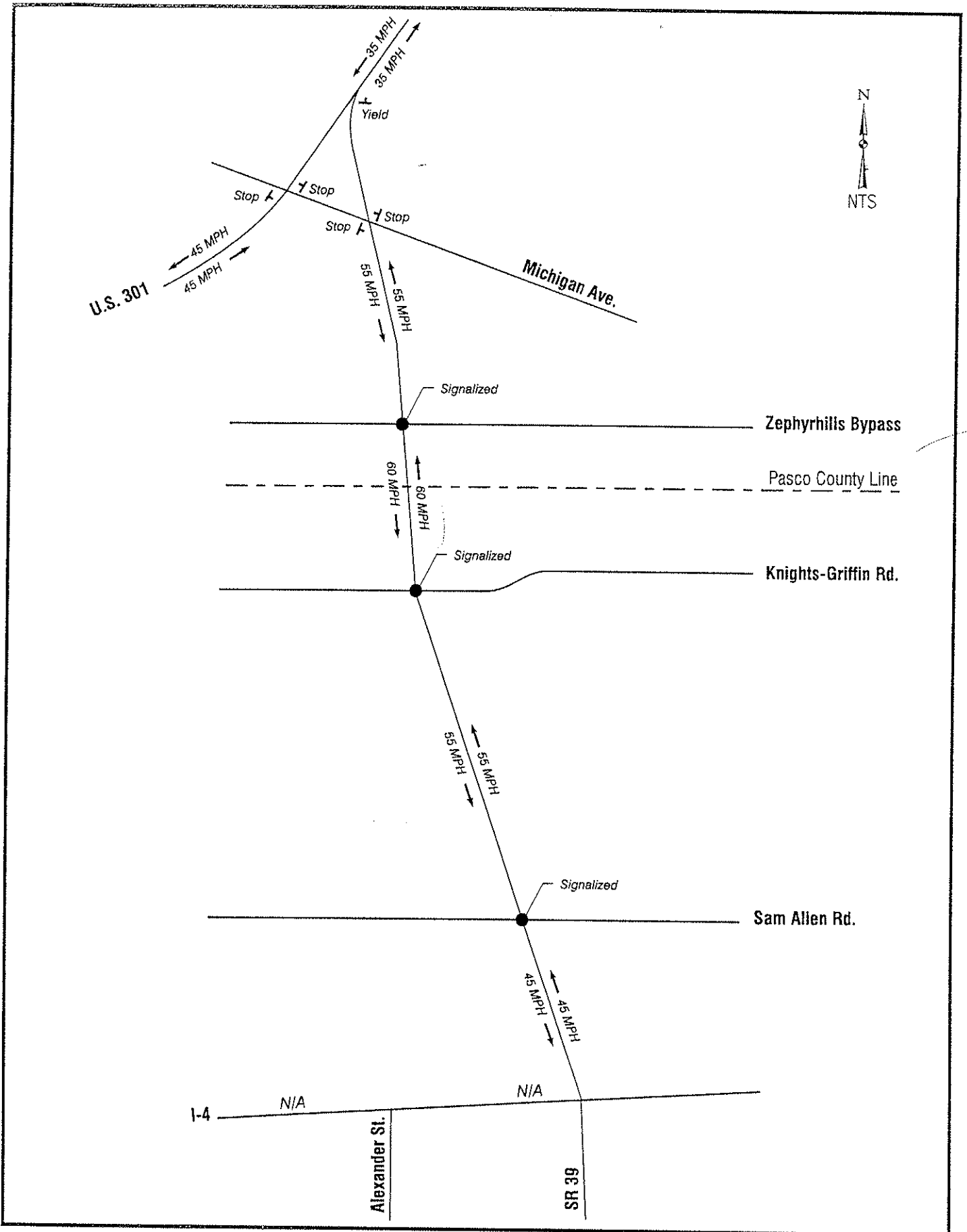
Existing Traffic Control And Posted Speed Limits

During the field review of the SR 39 corridor, the posted speed limits on SR 39 and on the four intersecting thoroughfare roadways were observed. The current posted speed limits on the study area roadways are illustrated on Figure 6.



1998 AM AND PM DESIGN HOUR INTERSECTION TURNING MOVEMENT VOLUMES

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EXISTING TRAFFIC CONTROL AND POSTED SPEED LIMITS

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These eight crash experience summaries are contained in Appendix C. Using the crash data contained in Appendix C, Safety Ratios were calculated for the four intersections and four roadway segments previously listed. A summary of the calculated Safety Ratios is contained in Tables 1 and 2.

TABLE 1
SUMMARY OF CALCULATED SAFETY RATIOS
INTERSECTIONS

Year	Safety Ratio			
	Street Intersecting With SR 39			
	Sam Allen Road	Knights-Griffin Rd.	Zephyrhills Bypass	US 301
1993	0.867	0.422	2.049	0.000
1994	0.610	0.542	1.117	0.000
1995	0.717	0.417	0.311	0.156
1996	0.540	0.696	1.279	0.000
1997	1.701	0.529	0.551	0.000

TABLE 2
SUMMARY OF CALCULATED SAFETY RATIOS
ROADWAY SEGMENTS

Year	Safety Ratio			
	SR 39 Roadway Segment			
	I-4 to Sam Allen Road	Sam Allen Rd. to Knights-Griffin Road	Knights-Griffin Road to Zephyrhills Bypass	Zephyrhills Bypass to US 301
1993	2.801	0.802	0.000	0.000
1994	1.867	0.692	0.474	0.000
1995	0.682	0.848	0.835	0.000
1996	1.678	0.765	0.678	0.000
1997	0.000	0.000	0.000	0.426

TABLE 3
RESULTS OF UNSIGNALIZED INTERSECTION LOS ANALYSIS
1998 CONDITIONS

Intersection		Level of Service			
			Left	Through	Right
SR 39/US 301	NB	AM	A	-	A
		PM	A	-	B
	SB	AM	-	-	-
		PM	-	-	-
	EB	AM	-	-	A
		PM	-	-	B
	WB	AM	A	-	-
		PM	B	-	-

TABLE 4
RESULTS OF SIGNALIZED INTERSECTION LOS ANALYSIS
1998 CONDITIONS

Intersection		Average Delay (Seconds)	LOS
SR 39/Sam Allen Road	AM	11.6	B
	PM	11.2	B
SR 39/Knights Griffin Rd.	AM	9.8	B
	PM	9.7	B
SR 39/Zephyrhills Road	AM	9.0	B
	PM	8.9	B

TABLE 5
RESULTS OF ROADWAY SEGMENT LOS ANALYSIS
1998 CONDITIONS

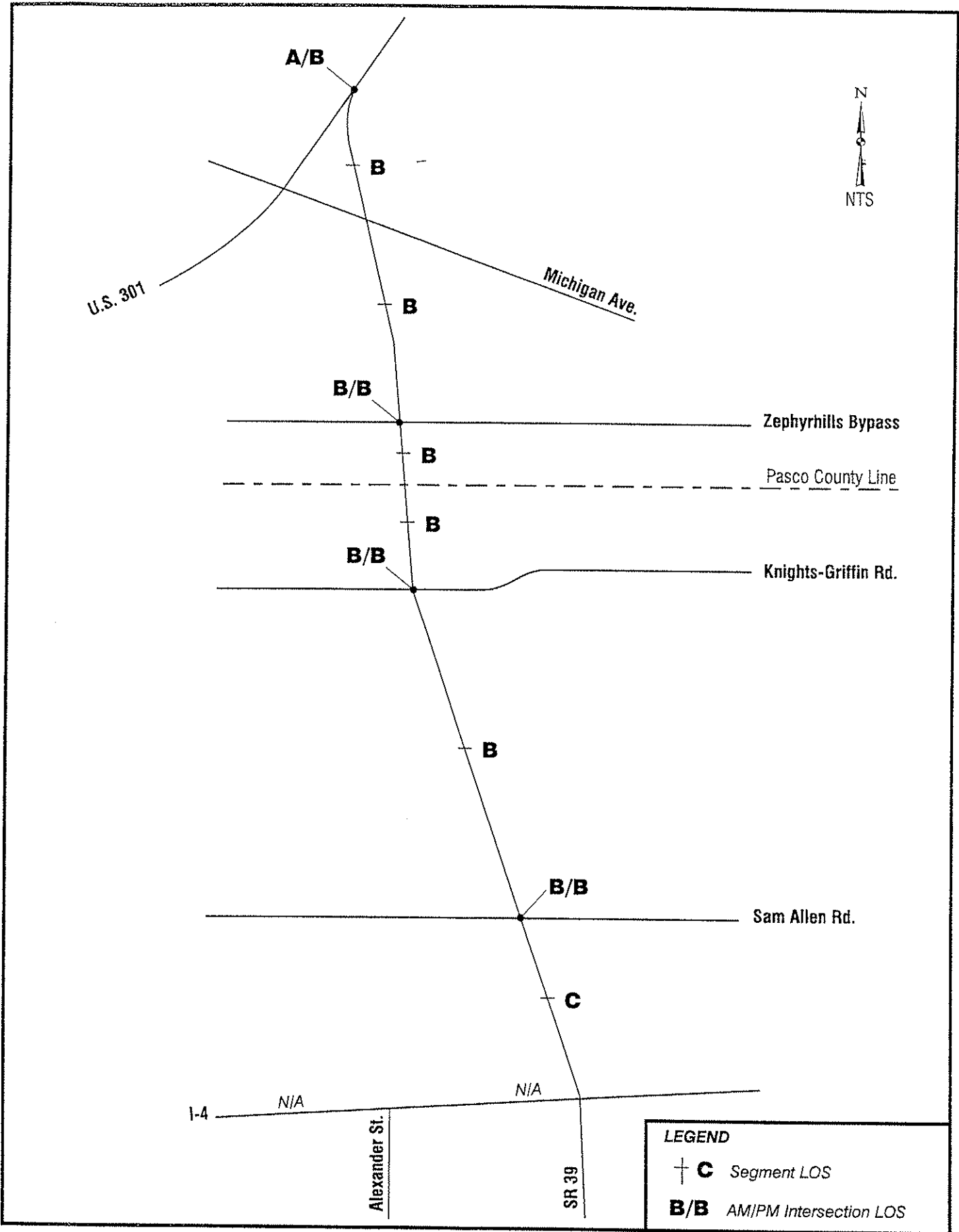
Road Segment	AADT Volume	Level of Service
I-4 to Sam Allen Road	12,200	C
Sam Allen Road to Knights- Griffin Road	10,000	B
Knights-Griffins Road to Pasco County Line	8,500	B
Pasco County Line to Zephyrhills Bypass	9,900	B
Zephyrhills Bypass to US 301	8,900	B

FUTURE CONDITIONS

The extension of Alexander Street from I-4 to SR 39 will add two (2) new intersections to the study area as follows:

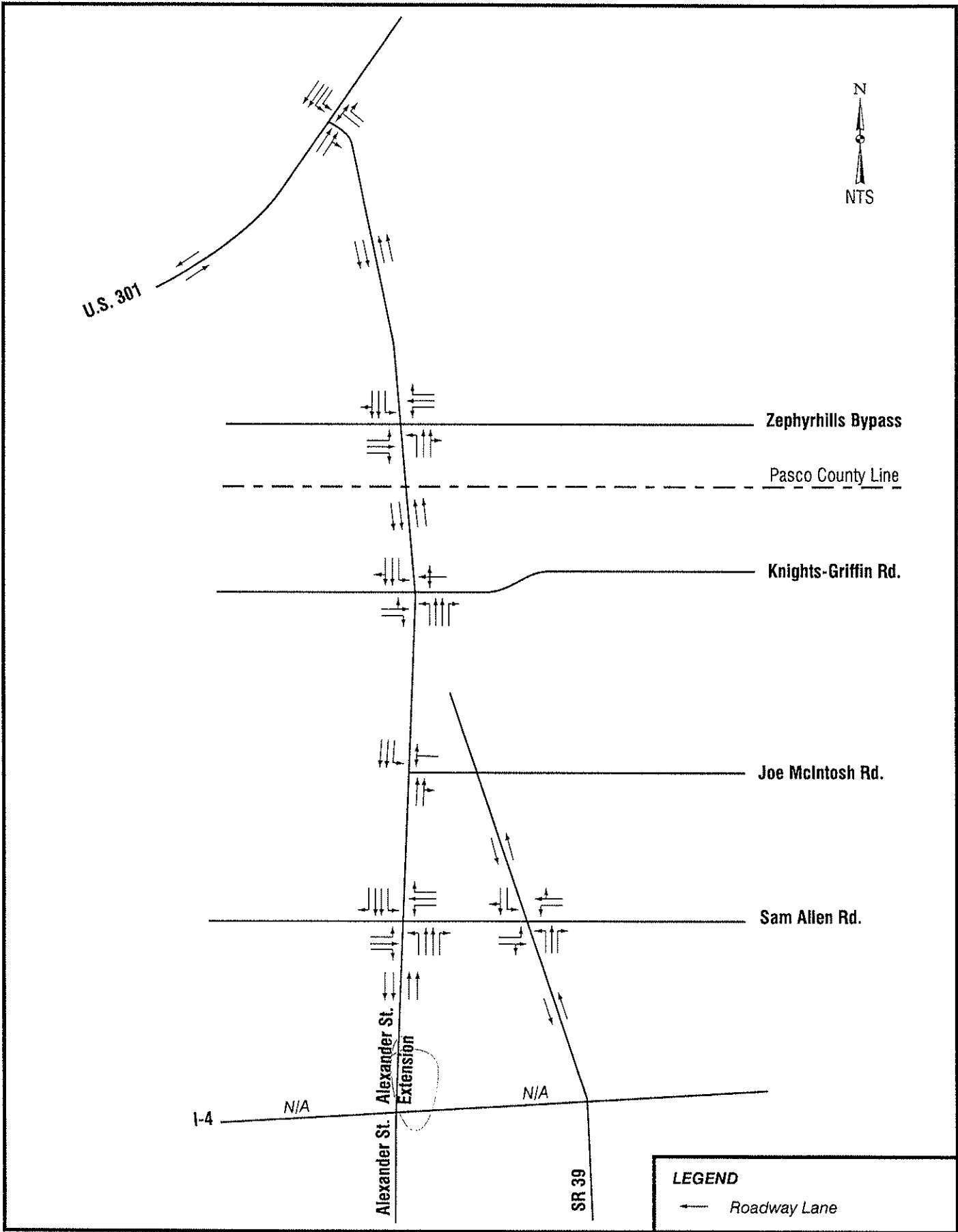
1. Alexander Street Extension/Sam Allen Road
2. Alexander Street Extension/SR 39

The Build alternative proposes that the Alexander Street Extension - SR 39 alignment, within the project limits, be constructed as a four-lane divided roadway. The existing segment of SR 39 between I-4 and the Alexander Street Extension is proposed to remain a two-lane undivided roadway. The proposed lane use on the Alexander Street Extension, and on SR 39 including the six (6) study intersections, is illustrated on Figure 8, which represents the Build alternative roadway network.



**RESULTS OF LOS ANALYSIS
EXISTING CONDITIONS**

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BUILD ALTERNATIVE ROADWAY NETWORK

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Year 2010 And 2020 Traffic Forecasts

Design traffic data for the years 2005 and 2020 for the Build and No-Build alternatives was provided by the District 7 Planning office and is contained in Appendix A. Design traffic factors (K, D and T) are summarized in Table 6.

TABLE 6
DESIGN TRAFFIC FACTORS

Roadway	K Factor	D Factor	24-Hour Truck Factor	Design Hour Truck Factor
US 301	10.56%	54.1%	8.0%	4.0%
Alexander Street Extension	9.54%	59.5%	14.0%	7.0%
Zephyrhills Bypass (Chaney Rd.)	9.54%	59.5%	6.0%	3.0%
Knights-Griffin Rd.	9.54%	59.5%	6.0%	3.0%
Sam Allen Rd.	9.54%	59.5%	6.0%	3.0%

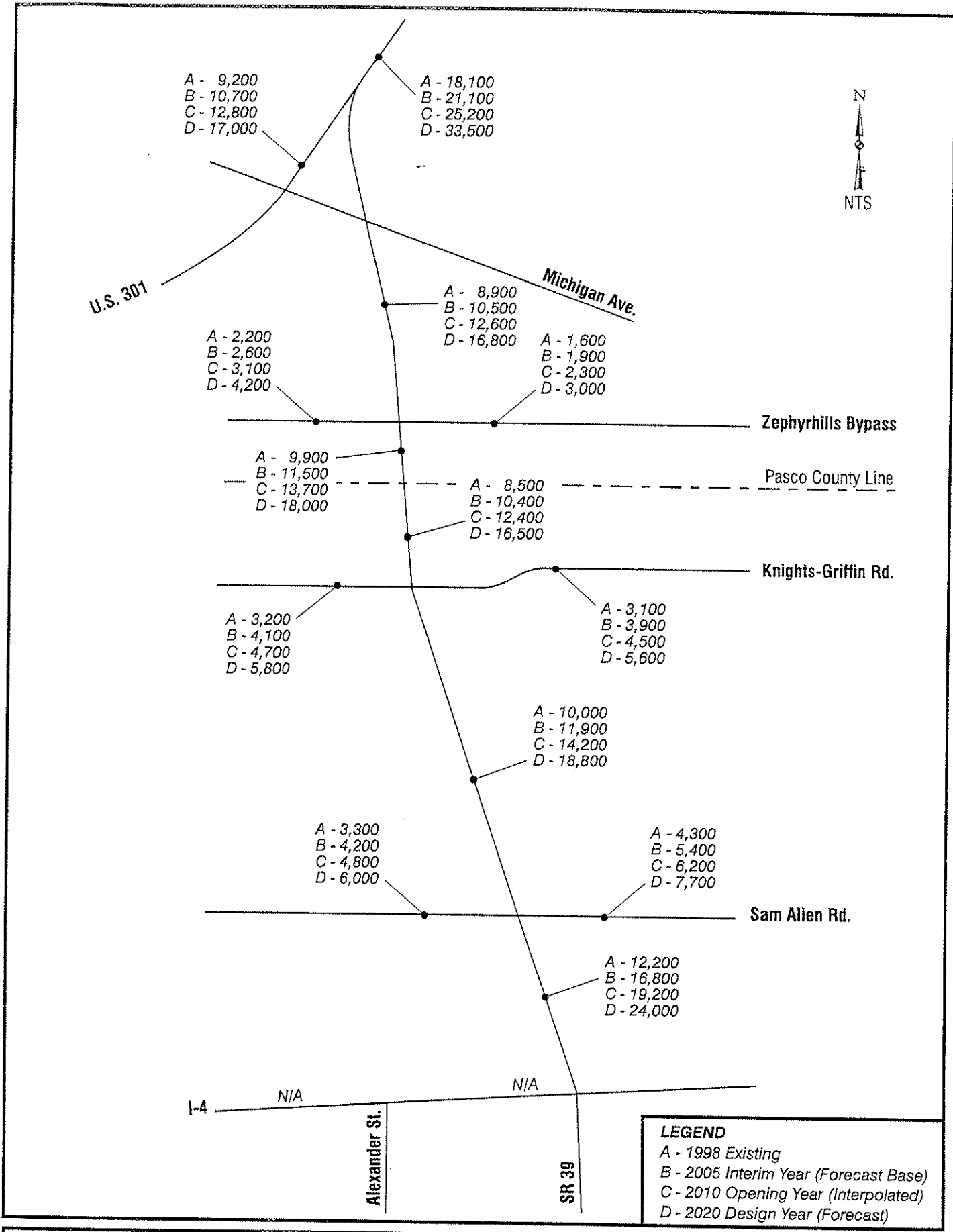
The factors identified for the Alexander Street Extension were assumed for SR 39.

AADT Volumes

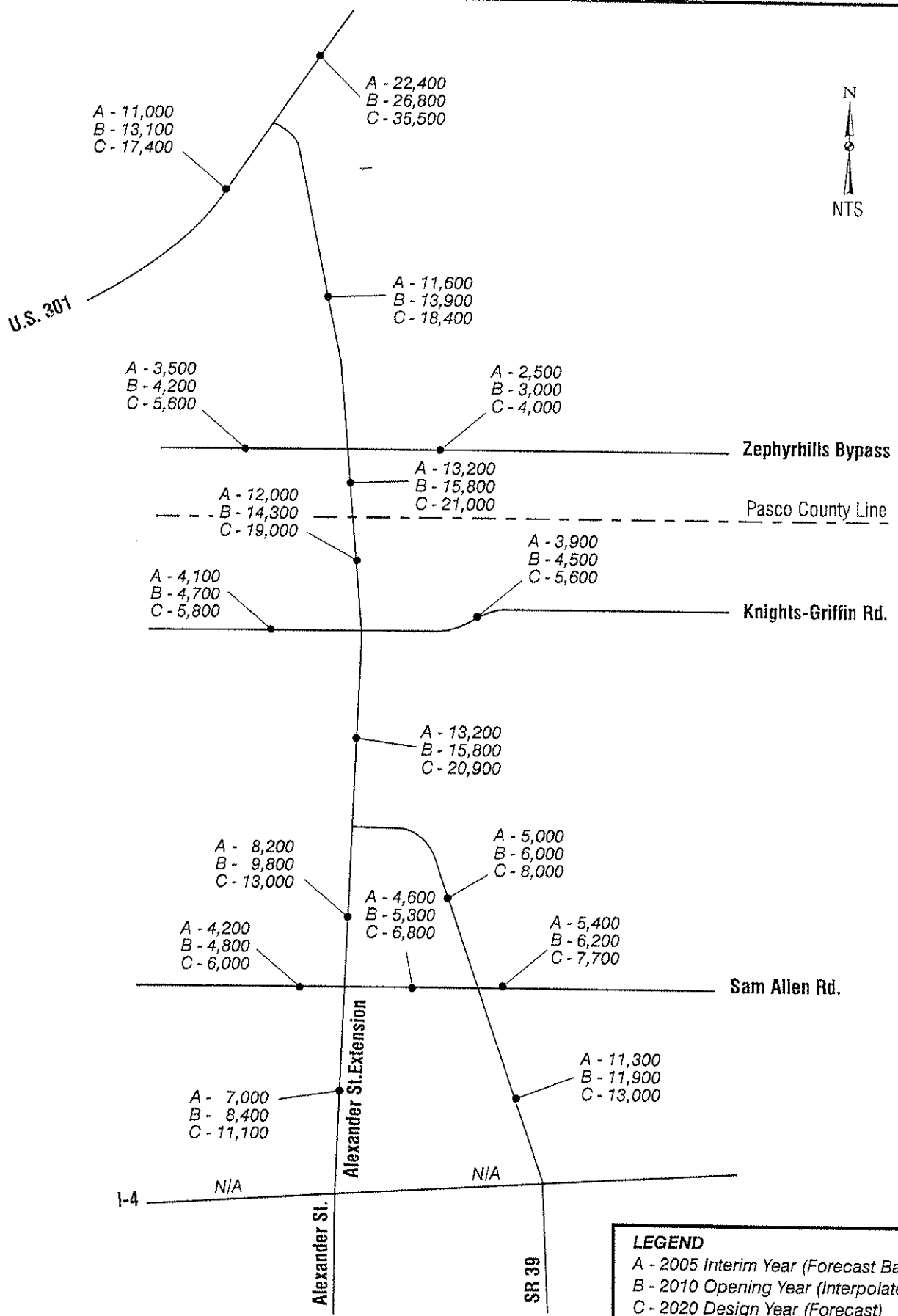
The AADT volumes for the year 2010 (project opening year), were interpolated from the year 2005 and year 2020 AADT volumes. Figures 9 and 10 illustrate the year 2010 and 2020 No-Build and Build AADT volumes, respectively, on the study roadways.

Design Hour Volumes

Design hour segment volumes and AM and PM design hour turning movement volumes for the years 2010 and 2020 were estimated using the TURNS 4 software and the 1998, 2005, and 2020 AADT volume data previously described. The output from the TURNS 4 analysis is contained in



**NO BUILD ALTERNATIVE
AADT**



LEGEND
 A - 2005 Interim Year (Forecast Base)
 B - 2010 Opening Year (Interpolated)
 C - 2020 Design Year (Forecast)

**BUILD ALTERNATIVE
AADT**

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**FIGURE
10**

Appendix E. The results of the TURNS 4 analysis was used as a preliminary estimate which was then manually adjusted to achieve a reasonable correlation with the distributions from the 2005 and 2020 AADT volumes provided by FDOT.

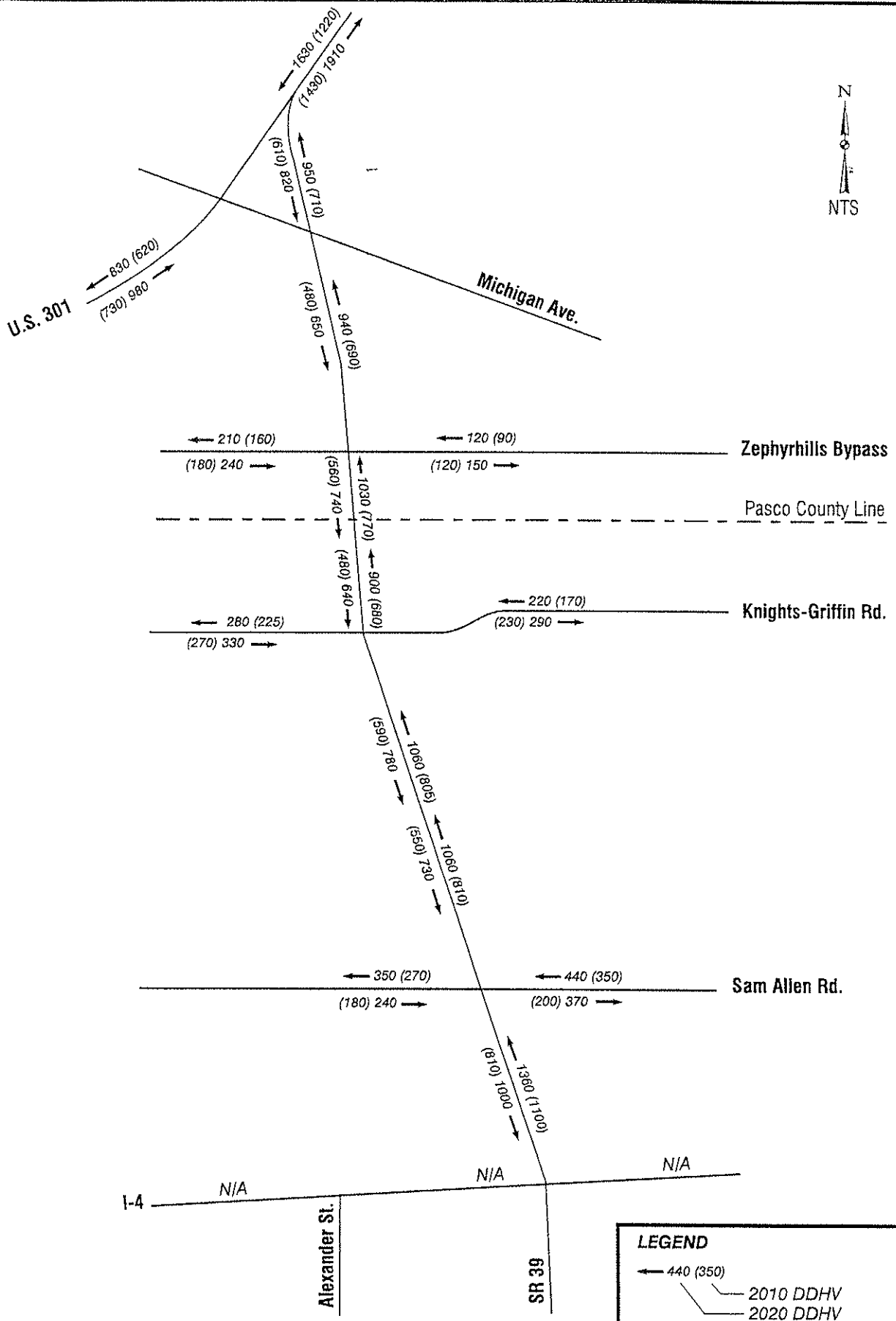
Figures 11 and 12 illustrate the years 2010 and 2020 Directional Design Hour Volumes (DDHV) for the No-Build and Build alternatives, respectively. Figures 13 and 14 illustrate the years 2010 and 2020, respectively, AM and PM design hour intersection turning movement volumes for the No-Build alternative. Figures 15 and 16 illustrate the years 2010 and 2020, respectively, AM and PM design hour intersection turning movement volumes for the Build alternative.

Year 2010 and 2020 Level of Service Analysis

Intersection and roadway segment LOS analyses were conducted to determine the operational characteristics on SR 39 within the project limits, and on the Alexander Street Extension in the years 2010 and 2020. The intersection LOS analyses were conducted using the years 2010 and 2020 design hour traffic volumes for the No-Build and the Build alternatives, and the procedures from the Transportation Research Board Special Report 209 - Highway Capacity Manual (HCM), 1997, Chapter 9 (Signalized Intersections) and Chapter 10 (Unsignalized Intersections).

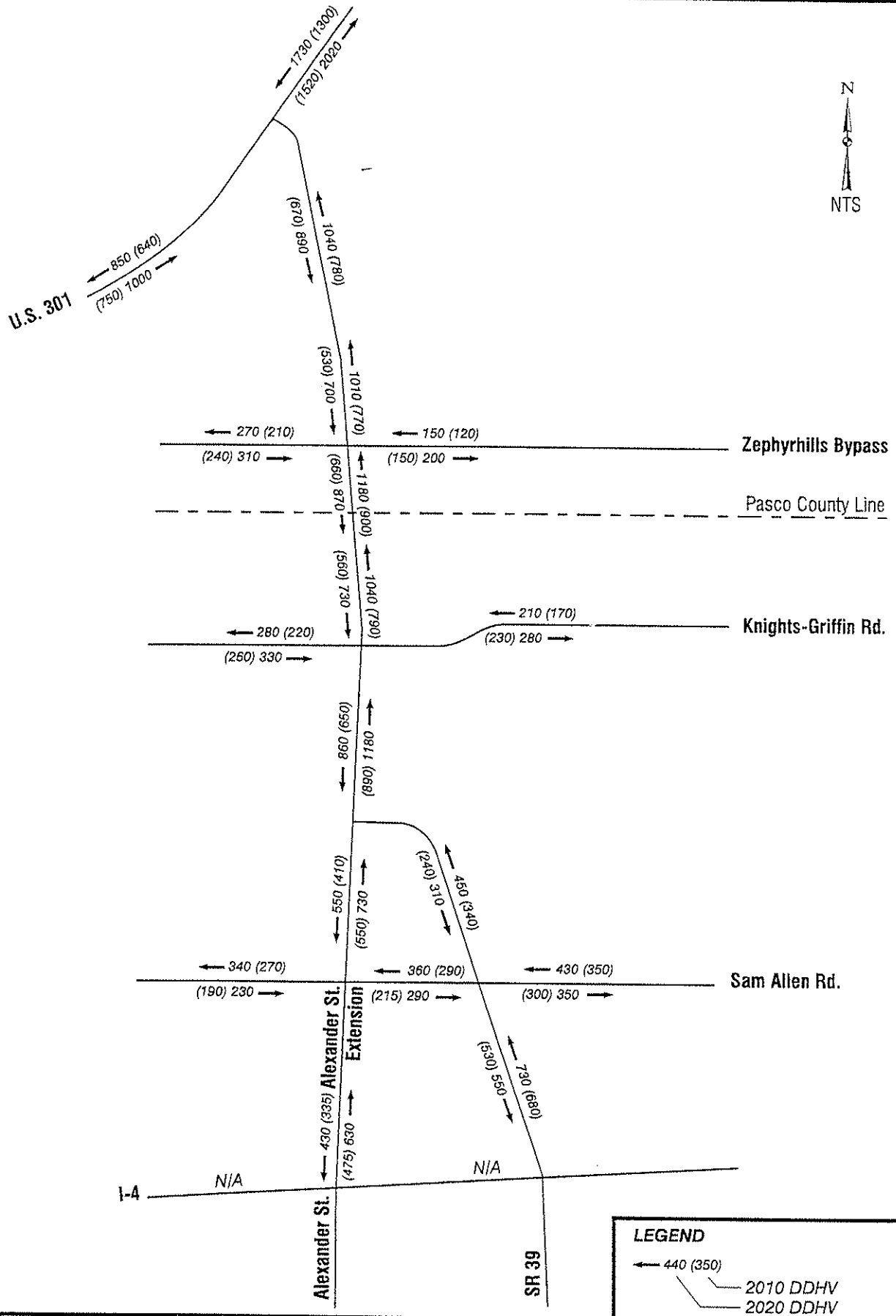
The roadway segment LOS analyses were conducted using the years 2010 and 2020 AADT volumes for the No-Build and the Build alternatives, and Florida's Level of Service Standards and Guidelines Manual for Planning, 1995.

The HCS worksheets for the No-Build and Build analyses are contained in Appendix F and G, respectively. A copy of the capacity table used in the roadway segment capacity analyses is contained in Appendix G.



**NO BUILD ALTERNATIVE
DIRECTIONAL DESIGN HOUR VOLUMES**

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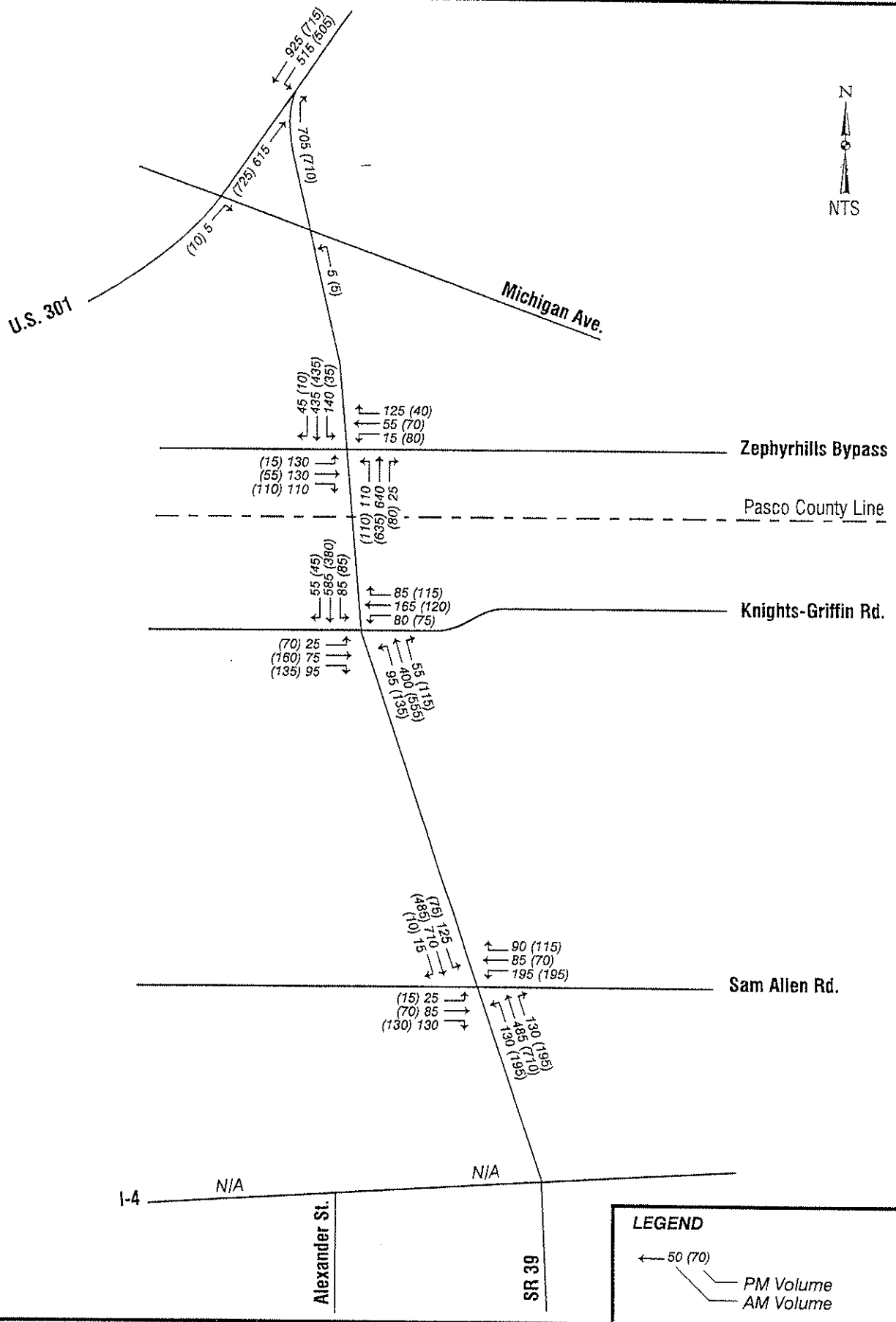
LEGEND

← 440 (350) — 2010 DDHV

— 2020 DDHV

**BUILD ALTERNATIVE
DIRECTIONAL DESIGN HOUR VOLUMES**

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**NO BUILD ALTERNATIVE
YEAR 2010 TURNING MOVEMENT VOLUMES**

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U.S. 301

Michigan Ave.

Zephyrhills Bypass

Pasco County Line

Knights-Griffin Rd.

Sam Allen Rd.

I-4

N/A

N/A

Alexander St.

SR 39

LEGEND

← 60 (90)

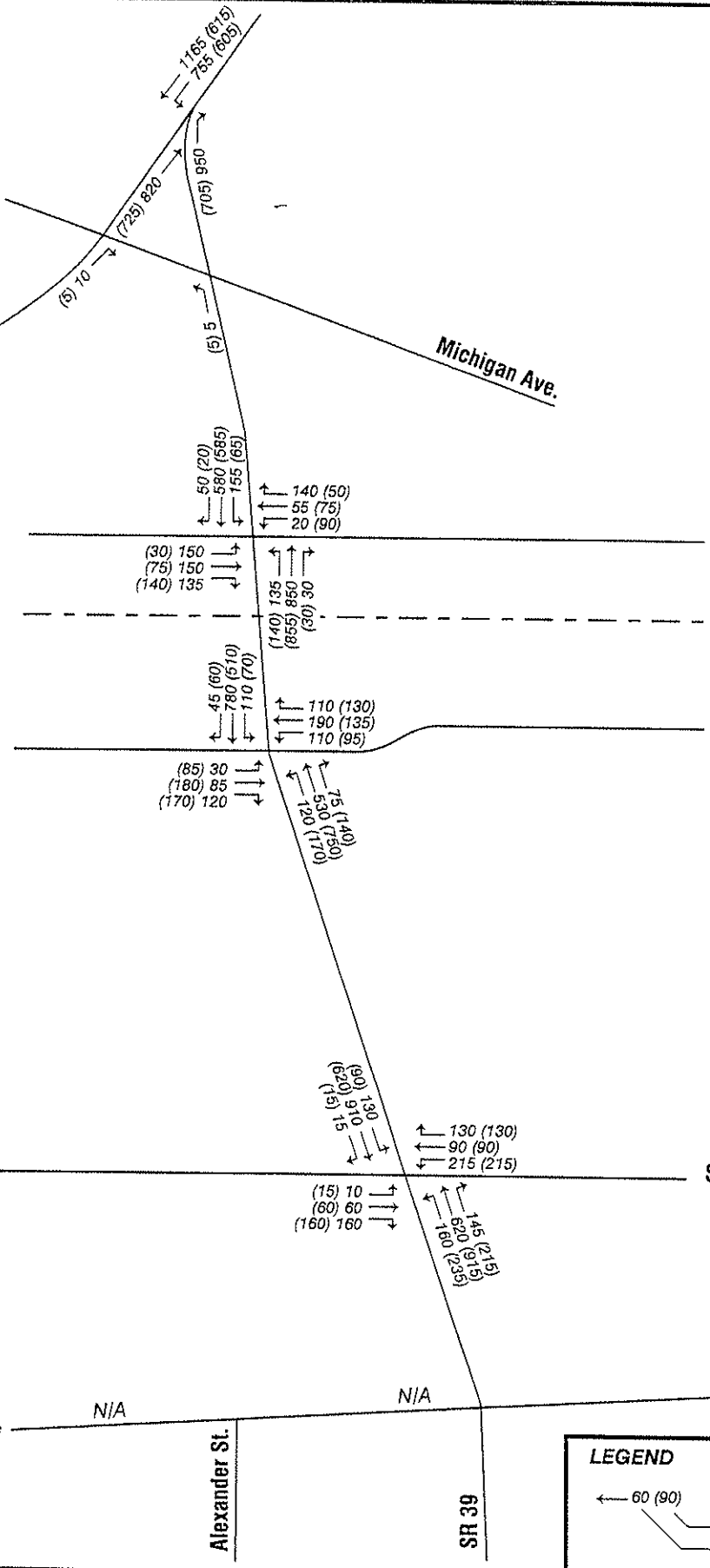
PM Volume

AM Volume

**NO BUILD ALTERNATIVE
YEAR 2020 TURNING MOVEMENT VOLUMES**

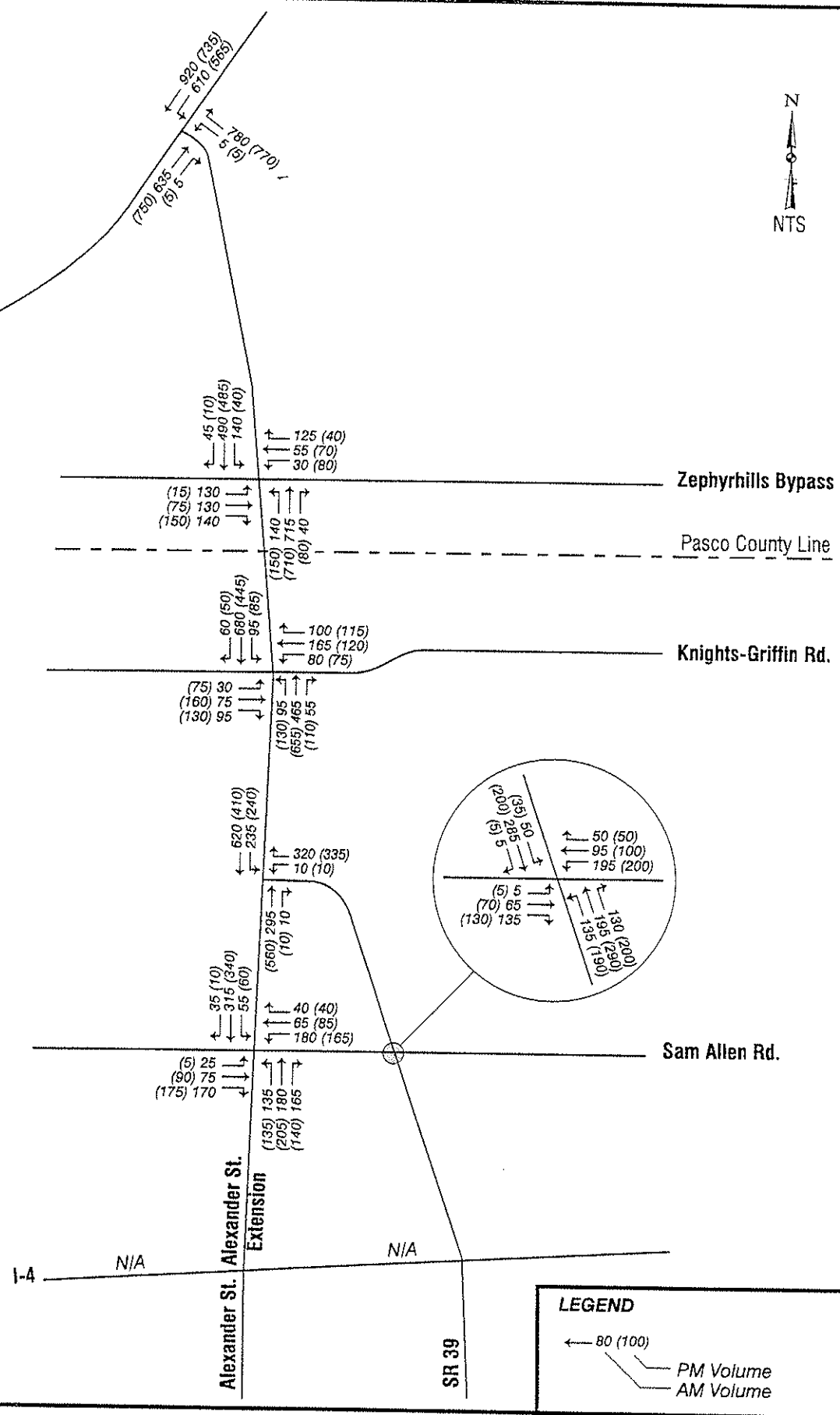
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**FIGURE
14**





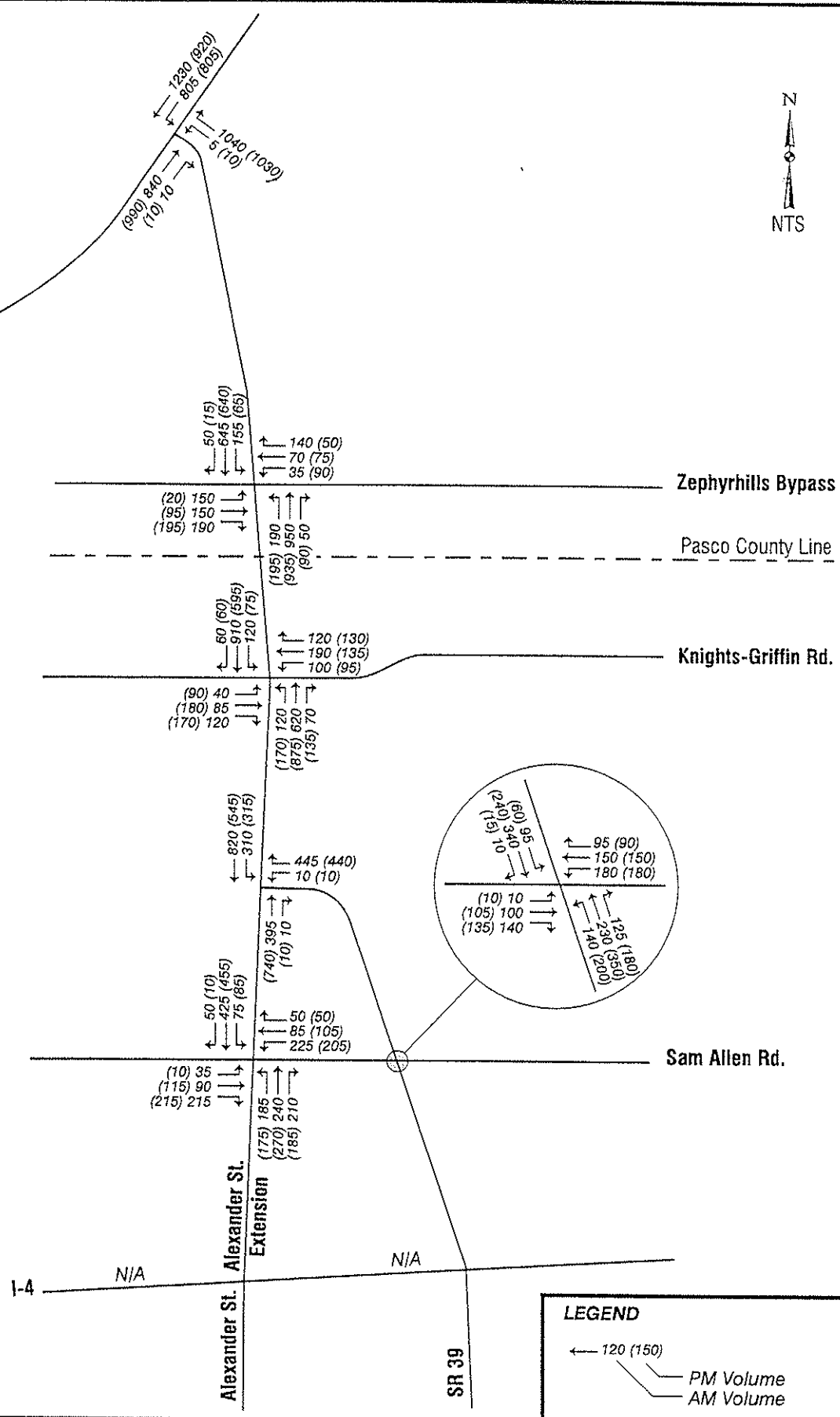
U.S. 301



**BUILD ALTERNATIVE
 YEAR 2010 TURNING MOVEMENT VOLUMES**



U.S. 301



**BUILD ALTERNATIVE
 YEAR 2020 TURNING MOVEMENT VOLUMES**

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**FIGURE
 16**

The results of the roadway segment LOS analysis for the years 2010 and 2020 for the No-Build alternative are summarized in Table 7 and are illustrated on Figure 17. The results of the roadway segment LOS analysis for the years 2010 and 2020 for the Build alternative are summarized in Table 8 and are illustrated on Figure 18.

The results of the intersection LOS analysis for the years 2010 and 2020 for the No-Build alternative are summarized in Table 9 and are illustrated on Figure 19. The results of the intersection LOS analysis for the years 2010 and 2020 for the Build alternative are summarized in Table 10 and are illustrated on Figure 20.

Intersection Queue Length Analysis

A queue length analysis was conducted for the Build alternative for the AM and PM peak hours in the years 2010 and 2020. The results of this analysis are summarized in Appendix H.

The analysis used the FDOT Plans Preparation Manual (PPM) formula for computing queue lengths and the intersection traffic volumes illustrated on Figures 15 and 16. A 90-second traffic signal cycle, or 40 cycles per hour, was assumed for this analysis.

CONCLUSIONS

The level of service analysis indicates that by the design year 2020 SR 39 will require a four-lane cross-section to maintain an acceptable level of service.

The analyses indicate that the intersection lane-use illustrated on Figure 8 should provide a good level of service through the year 2020, except at the intersection of SR 39 with US 301. The analyses indicate that by 2020, the south approach of SR 39 at US 301 will require exclusive dual right turn lanes in addition to a separate left turn lane. The intersection lane requirements to accommodate year 2020 AM and PM design hour traffic volumes is illustrated on Figure 21.

The crash analysis indicates that although SR 39, within the study limits, is operating within generally expected parameters with respect to the number and types of crashes, the number of injuries experienced is high, averaging approximately 1.5 injuries per crash. This high injury rate is probably due to the high speeds on SR 39 and the lack of access control common on two-lane highways. A four-lane median divided roadway on SR 39 should have a positive impact on the safety of traffic operations because it will provide increased control of access to the roadway and improved definition at the intersections on SR 39 within the study limits.

TABLE 7
RESULTS OF YEAR 2010 AND 2020 ROADWAY SEGMENT LOS ANALYSIS
NO-BUILD ALTERNATIVE

Road Segment	Number of Lanes	AADT Volume		Level of Service	
		2010	2020	2010	2020
<u>SR 39</u>					
I-4 to Sam Allen Road	2	19,200	24,000	F	F
Sam Allen Road to Knights-Griffin Road	2	14,200	18,800	D	F
Knights-Griffin Road to Pasco County Line	2	12,400	16,500	C	F
Pasco County Line to Zephyrhills Bypass	2	13,700	18,000	C	F
Zephyrhills Bypass to US 301	2	12,600	16,800	C	F



U.S. 301

Michigan Ave.

C
F

Zephyrhills Bypass

C
F

Pasco County Line

C
F

Knights-Griffin Rd.

D
F

Sam Allen Rd.

D
F

I-4



N/A

N/A

Alexander St.

SR 39

LEGEND

-  2010 Segment LOS
-  2020 Segment LOS

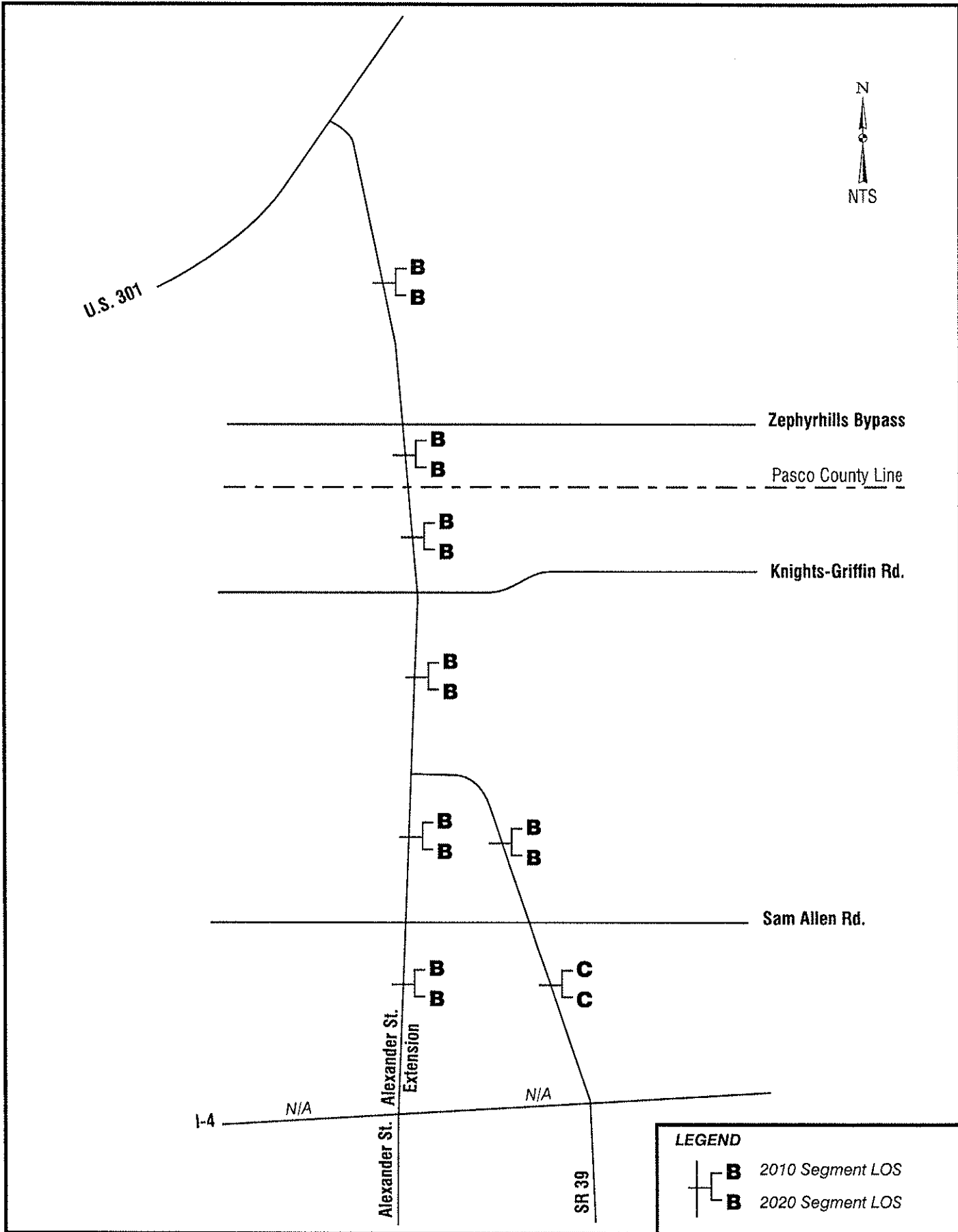
**RESULTS OF YEAR 2010 AND 2020 ROADWAY SEGMENT
LOS ANALYSIS - NO BUILD ALTERNATIVE**

State Road 39 PD&E Study
Project Traffic and Intersection
Analysis Technical Memorandum

FIGURE
17

TABLE 8
RESULTS OF YEAR 2010 AND 2020 ROADWAY SEGMENT LOS ANALYSIS
BUILD ALTERNATIVE

Road Segment	Number of Lanes	AADT Volume		Level of Service	
		2010	2020	2010	2020
<u>SR 39</u>					
I-4 to Sam Allen Road	2	11,900	13,000	C	C
Sam Allen Road to Alexander St. Extension	2	6,000	8,000	B	B
Alexander St. Extension to Knights-Griffin Road	4	15,800	20,900	B	B
Knights-Griffin Road to Pasco County Line	4	14,300	19,000	B	B
Pasco County Line to Zephyrhills Bypass	4	15,800	21,000	B	B
Zephyrhills Bypass to US 301	4	13,900	18,400	B	B
<u>Alexander Street Extension</u>					
I-4 to Sam Allen Road	4	8,400	11,100	B	B
Sam Allen Road to SR 39	4	9,800	13,000	B	B



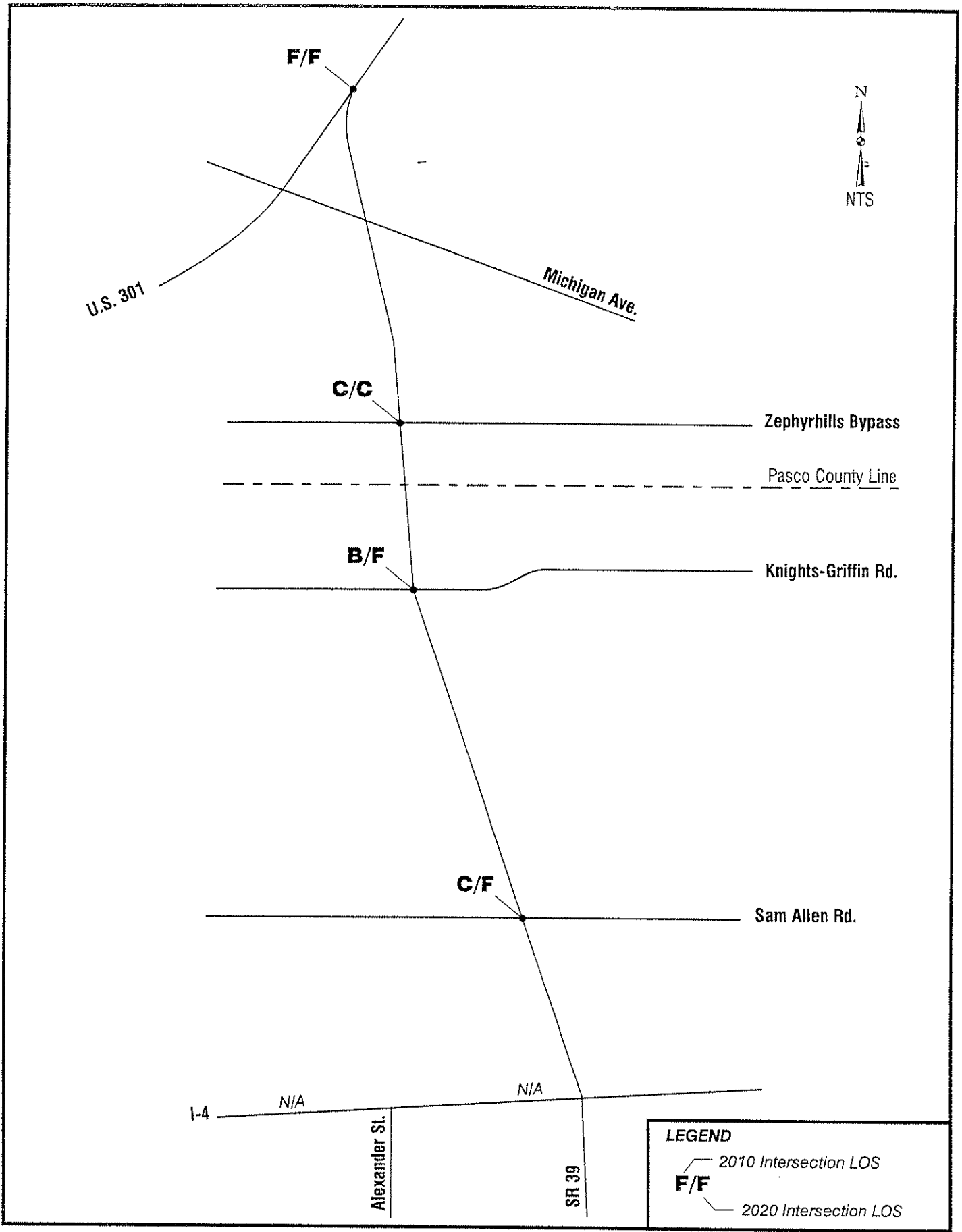
RESULTS OF YEAR 2010 AND 2020 ROADWAY SEGMENT LOS ANALYSIS - BUILD ALTERNATIVE

TABLE 9
RESULTS OF YEAR 2010 AND 2020 INTERSECTION LOS ANALYSIS
NO-BUILD ALTERNATIVE

Intersection		2010		2020	
		Average Delay(Seconds)	LOS	Average Delay(Seconds)	LOS
SR 39/Sam Allen Road	AM	22.0	C	*	F
	PM	19.2	C	*	F
SR 39/Knights-Griffth Road	AM	12.3	B	*	F
	PM	14.5	B	*	F
SR 39/Zephyrhills Bypass	AM	15.7	C	24.8	C
	PM	13.3	B	12.5	B
SR 39/US 301	AM	116.2	F	999.9	F
	PM	200.7	F	207.7	F

TABLE 10
RESULTS OF YEAR 2010 AND 2020 INTERSECTION LOS ANALYSIS
BUILD ALTERNATIVE

Intersection		2010		2020	
		Average Delay(Seconds)	LOS	Average Delay(Seconds)	LOS
SR 39/Sam Allen Road	AM	12.7	B	13.6	B
	PM	12.7	B	13.5	B
SR 39/Alexander Street Extension	AM	13.7	B	18.5	C
	PM	16.7	C	21.0	C
SR 39/Knights-Griffth Road	AM	13.9	B	16.3	C
	PM	15.2	C	20.0	C
SR 39/Zephyrhills Bypass	AM	8.4	B	16.3	C
	PM	7.4	B	16.2	C
SR 39/US 301	AM	17.7	C	14.3	B
	PM	18.6	C	15.8	C
Alexander St. Extension/ Sam Allen Road	AM	19.8	C	21.9	C
	PM	19.7	C	21.4	C



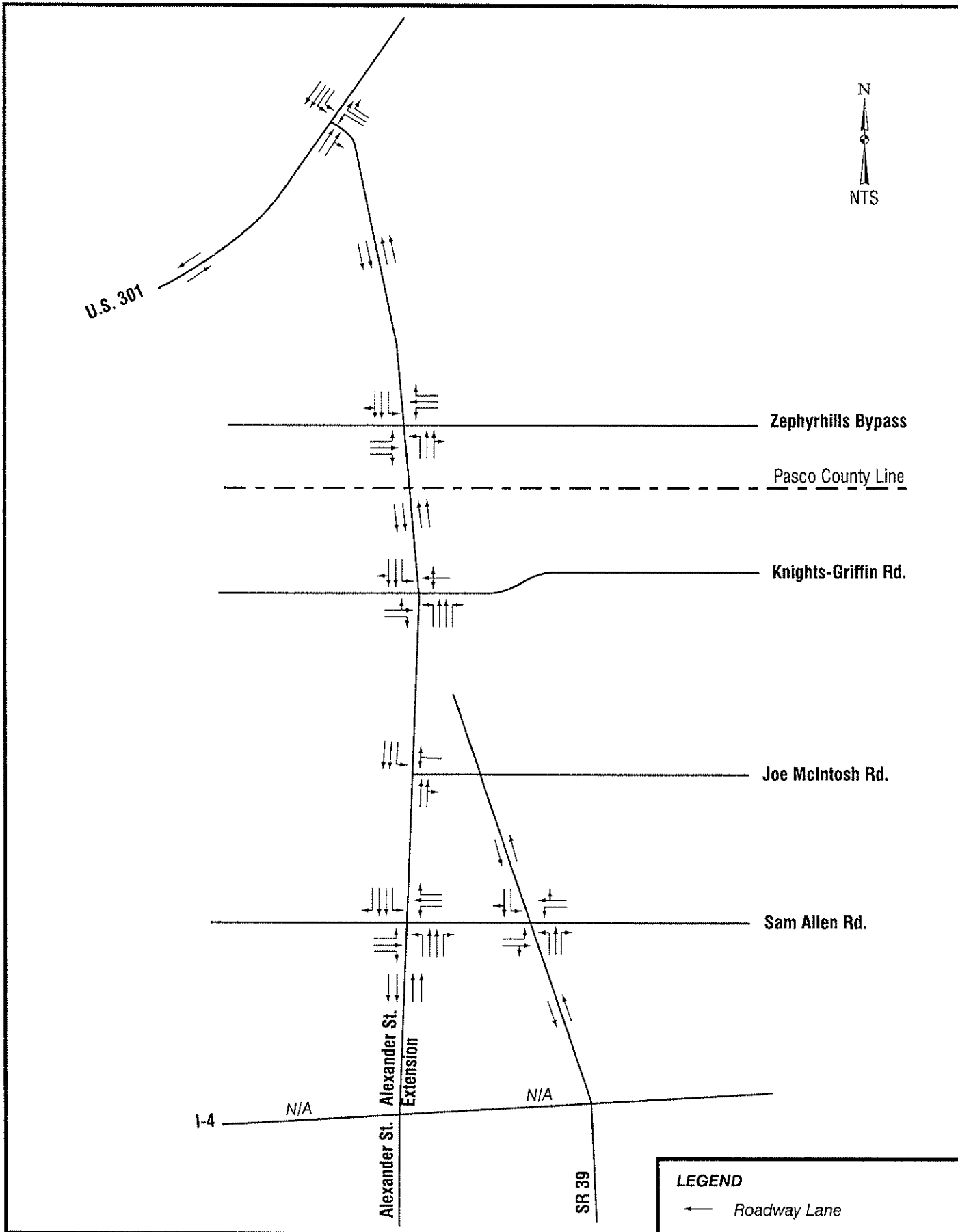
RESULTS OF YEAR 2010 AND 2020 INTERSECTION LOS ANALYSIS - NO BUILD ALTERNATIVE

State Road 39 PD&E Study
 Project Traffic and Intersection
 Analysis Technical Memorandum

RECOMMENDED IMPROVEMENTS

The level of service analysis indicates the need for a four-lane facility on the Alexander Street Extension - SR 39 alignment, from north of I-4 to US 301, to achieve level of Service C for projected year 2020 design hour traffic volumes.

Figure 21 identifies the number and type of lanes required at each of the six major intersections within the project to achieve level of Service C for projected year 2020 design hour traffic volumes.



**YEAR 2020
LANE REQUIREMENTS**

State Road 39 PD&E Study
Project Traffic and Intersection
Analysis Technical Memorandum

APPENDIX A

- 1996 AADT VOLUMES
- FORECASTED 2005 AND 2020 AADT VOLUMES
- DESIGN TRAFFIC DATA (K, D, T)

No Build SR 39

SR 39 2 Lanes		T	1996	2005	2020
From	To	%	AADT	AADT	AADT
I-4	Sam Allen	16	12,400	16,800	24,000
Sam Allen	Knights-Griffin	16	9,400	11,900	18,800
Knights-Griffin	Pasco County L	14	8,000	10,400	16,500
Pasco County L	Zepherhill Bypass	10		11,500	18,000
Zepherhill Bypass	US 301	8		10,500	16,800
US 301	N of US 301	8	17,300	21,100	33,500

Build SR 39

SR 39 4 Lane N. of Ext		T	1996	2005	2020
From	To	%	AADT	AADT	AADT
I-4	Sam Allen	4	12,400	11,300	13,000
Sam Allen	Alexander Ext	4	9,400	5,000	8,000
Alexander Ext	Knights-Griffin	16	9,400	13,200	20,900
Knights-Griffin	Pasco County L	14	8,000	12,000	19,000
Pasco County L	Zepherhill Bypass	10		13,200	21,000
Zepherhill Bypass	US 301	8		11,600	18,400
US 301	N of US 301	8	17,300	22,400	35,500

sr39adj.wk4

No Build Side Streets

SR 39 2 Lane		T	1996	2005	2020
Side Streets	At	%	AADT	AADT	AADT
Sam Allen	E of SR 39	6	4,000	5,400	7,700
Knights Griffin Rd	W of SR 39	6	3,100	4,200	6,000
Zepherhill Bypass	E of SR 39	6	3,000	4,100	5,800
US 301	W of SR 39	4	2,900	3,900	5,600
	E of SR 39	4		2,600	4,200
	W of SR 39	4		1,900	3,000
	W of SR 39	8	8,800	10,700	17,000

Build Side Streets

SR 39 4 Lane		T	1996	2005	2020
Side Streets	At	%	AADT	AADT	AADT
Sam Allen	E of SR 39	6	4,000	5,400	7,700
Alexander Ext	W of SR 39	6		4,600	6,800
Knights Griffin Rd	W of Alexmt	6	3,100	4,200	6,000
Zepherhill Bypass	S of SR 39	14		8,200	13,000
US 301	S of Sam All	14		7,000	11,100
	W of SR 39	6	3,000	4,100	5,800
	E of SR 39	6	2,900	3,900	5,600
	W of SR 39	6		3,500	5,600
	E of SR 39	6		2,500	4,000
	W of SR 39	8	8,800	11,000	17,400

SR 39 (4 Lane N. of Ext.)

US 301

5/28/98

AADT

xxx 2005

(xxx) 2020

(35,500)

22,400

(17,400)
11,000

(18,400)
11,600

(4,000)
2,500

Zepherhill
Bypass

(5,600)
3,500

US 301

(21,000)
13,200

Pasco C/L

Hillsboro C/L

(19,000)
12,000

(5,800)
4,100

(5,600)
3,900

Knights-Griffin

(20,900)
13,200

(13,000)
8,200

(8,000)
5,100

(6,000)
4,200

(6,800)
4,600

(7,700)
5,400

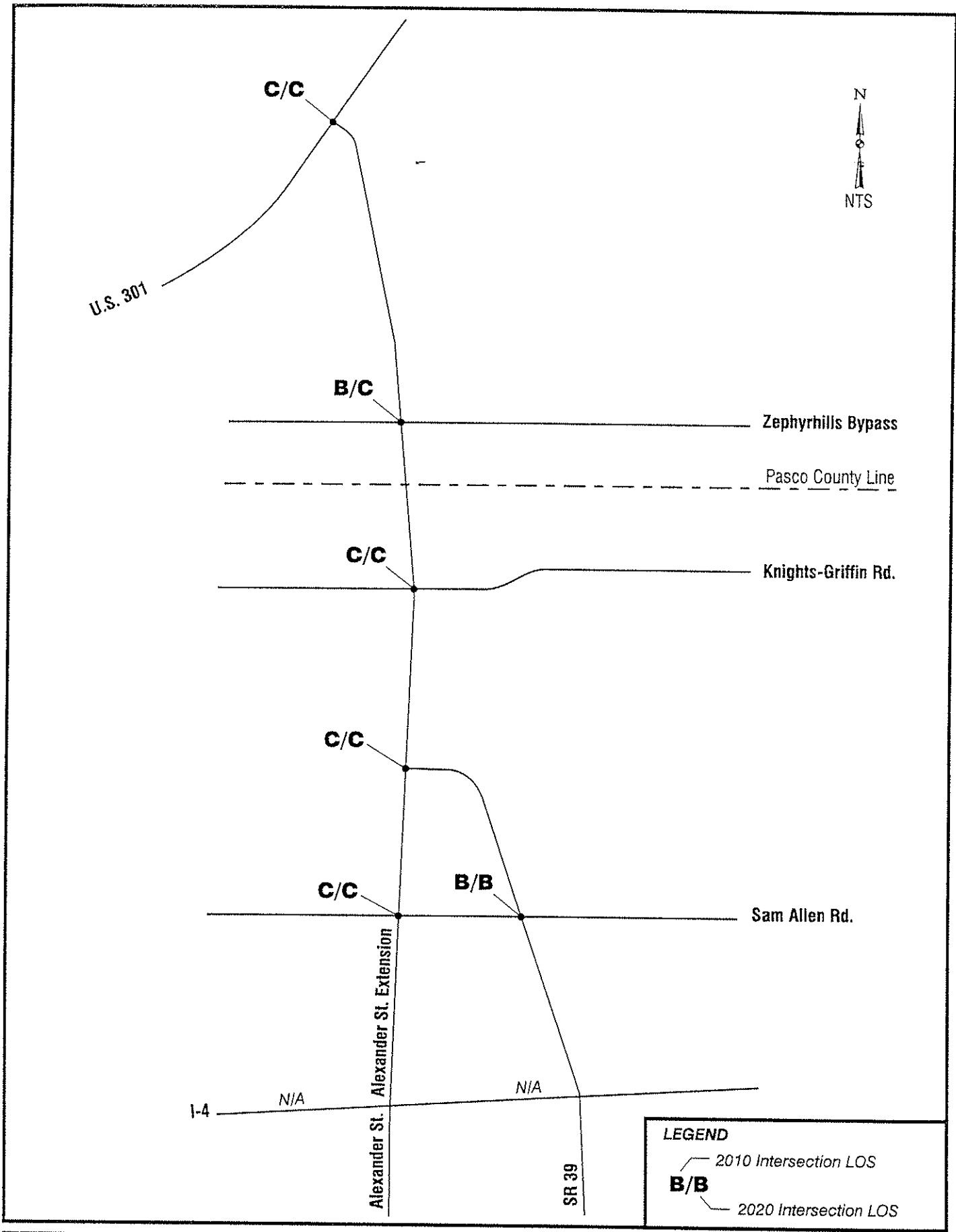
Sam Allen

(11,100)
7,000

(13,000)
11,300

Alake EXT

SR 39



RESULTS OF YEAR 2010 AND 2020 INTERSECTION LOS ANALYSIS - BUILD ALTERNATIVE

State Road 39 PD&E Study
 Project Traffic and Intersection
 Analysis Technical Memorandum

5/28/98

SR 39 (2 Lane)

AA DT
 xxx 2005
 (xxx) 2020

US 301

(33,500)
 21,100

(17,000)
 10,700

(16,800)
 10,500

US 301

(4,200)
 2,600

(3,000)
 1,900

Zepherhill Bypass

SR 39

(18,000)
 11,500

Pasco C/L

Hillsborough C/L

(16,500)
 10,400

(5,800)
 4,100

(5,600)
 3,900

Knights Griffin

(18,800)
 11,900

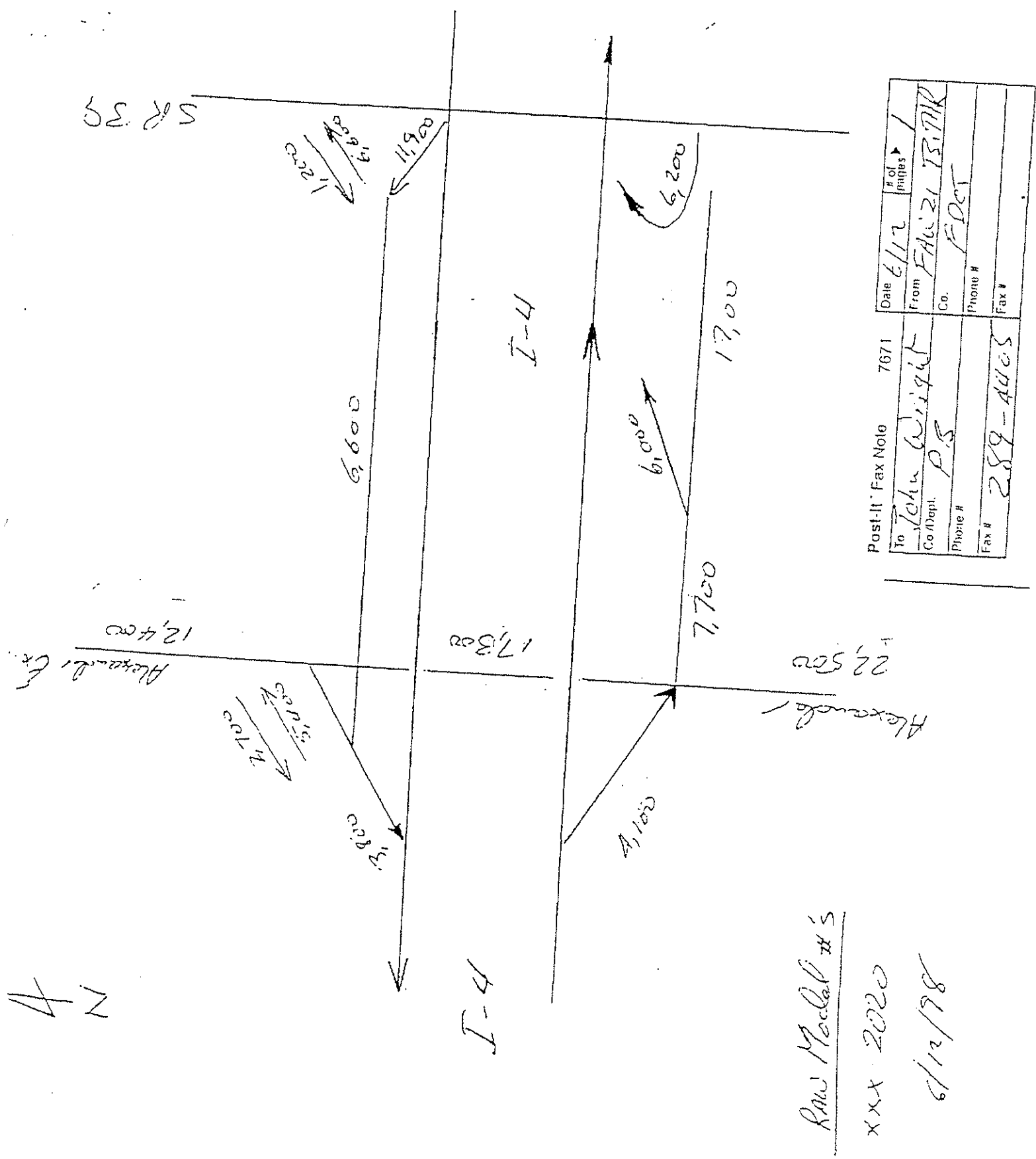
(6,000)
 4,200

(7,700)
 5,400

Sam Allen

(24,000)
 16,800

SR 39



Post-It Fax Note	7671	Date	6/12	# of pages	1
To	John Wright	From	FACI 21 B.M.R.	Co.	F.D.C.T.
Co/Dept.	P.S.	Phone #		Phone #	
Phone #		Fax #	289-4405	Fax #	

APPENDIX B

INTERSECTION TURNING MOVEMENT COUNT SUMMARY SHEETS

FLORIDA DEPARTMENT OF TRANSPORTATION
 VEHICLE MOVEMENTS DATA FORM

547 1098

LOCATION I.D. NO. US 301 EW SR39
 COUNTY PASCO CITY ZEPHER HILLS
 DATE 9-21-98 TIME FROM 6:00 TO 7:00
 OBSERVER GEORGE R HILL WEATHER _____
 REMARKS _____

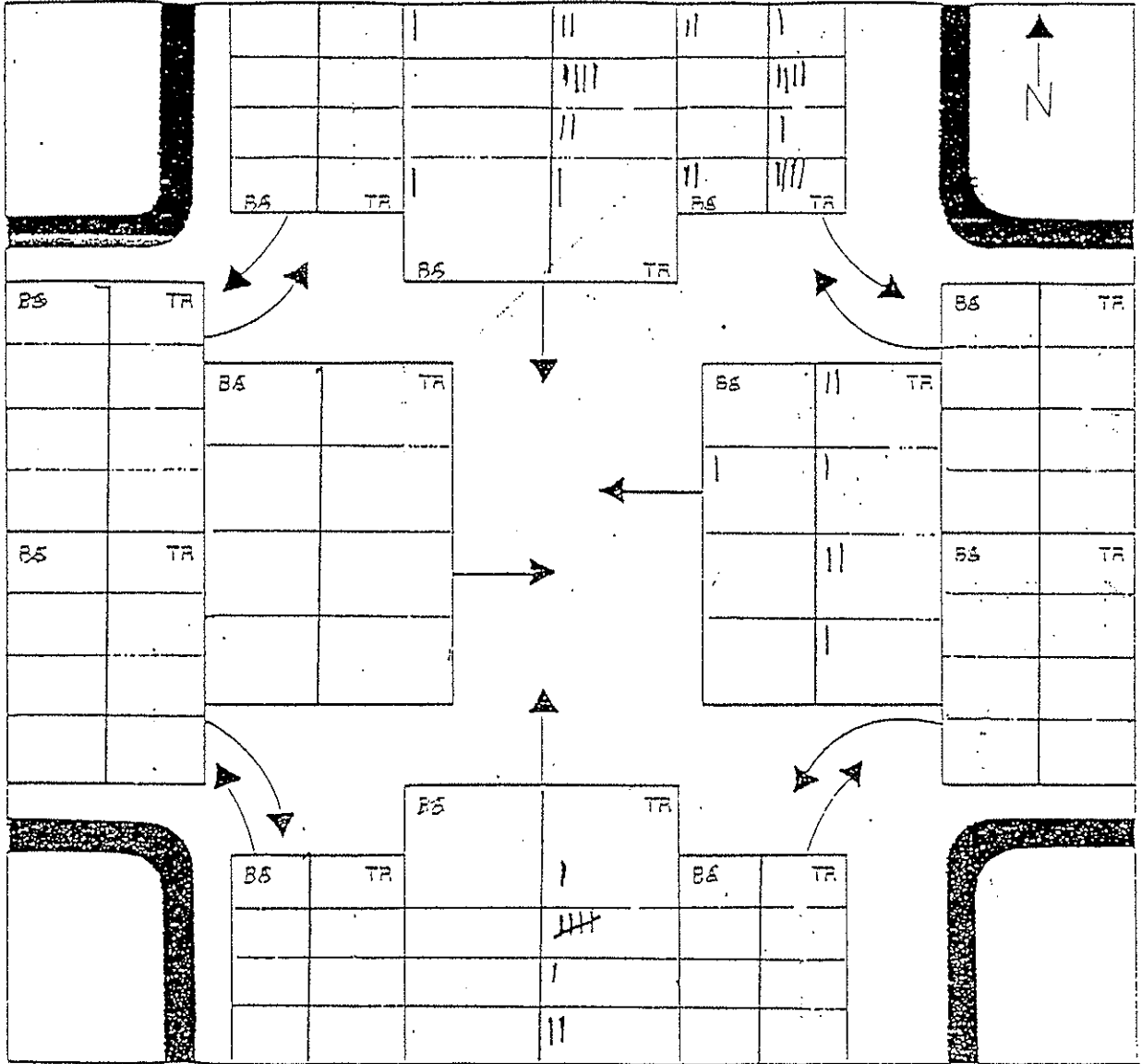


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
 VEHICLE MOVEMENTS DATA FORM

SHT 2 of 2

LOCATION I.D. NS US301 EW SR39
 COUNTY PASCO CITY ZEPHERHILLS
 DATE 9-21-98 TIME FROM 7:00 TO 8:00
 OBSERVER GEORGE R HILL WEATHER _____
 REMARKS _____

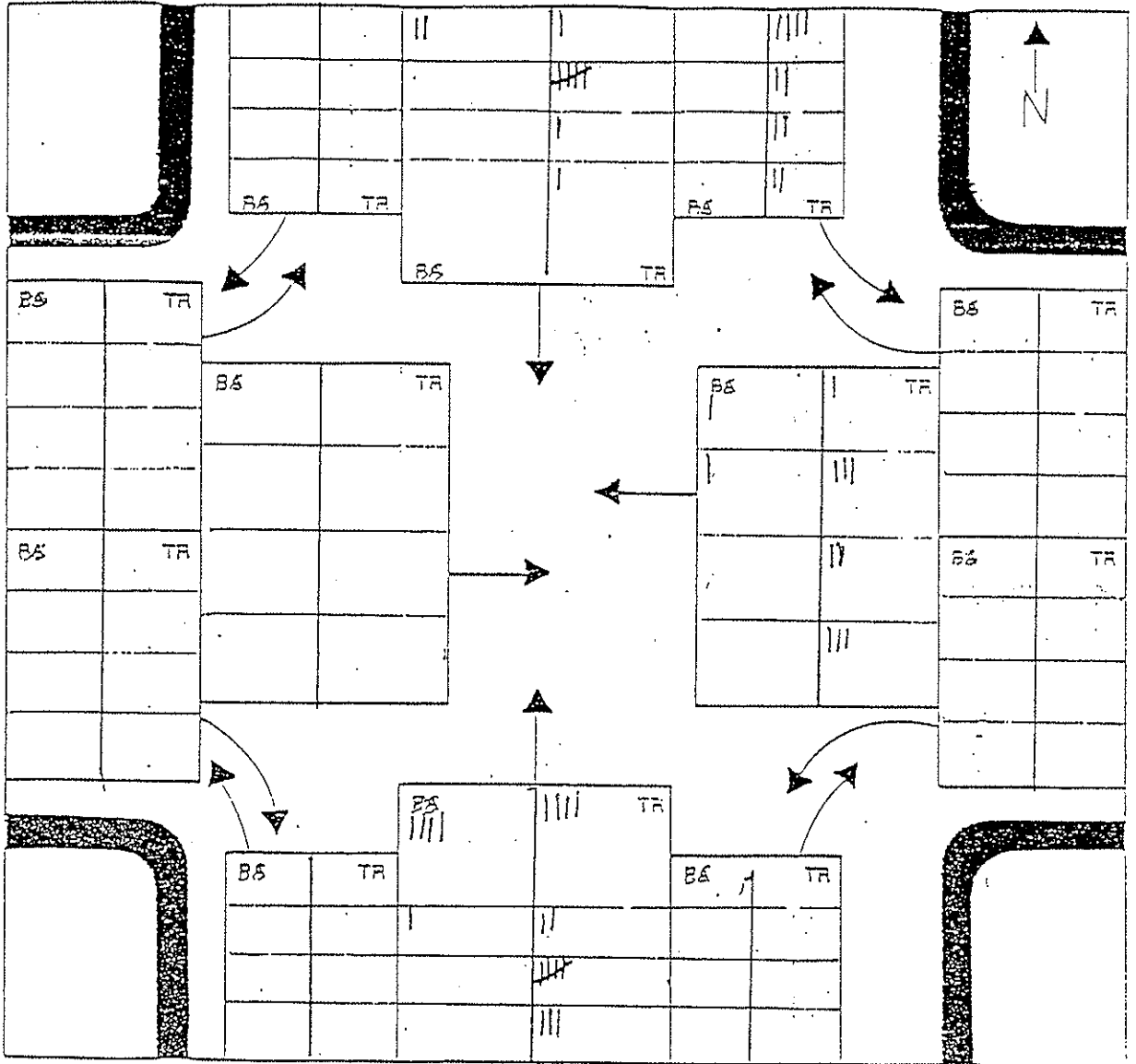


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
 VEHICLE MOVEMENTS DATA FORM

SHT 3 of 3

LOCATION I.D. NO. US 301 EW SR 39
 COUNTY PASCO CITY ZEDDHERHILLS
 DATE 9-21-98 TIME FROM 8:00 TO 9:00
 OBSERVER GEORGE R HILL WEATHER _____
 REMARKS _____

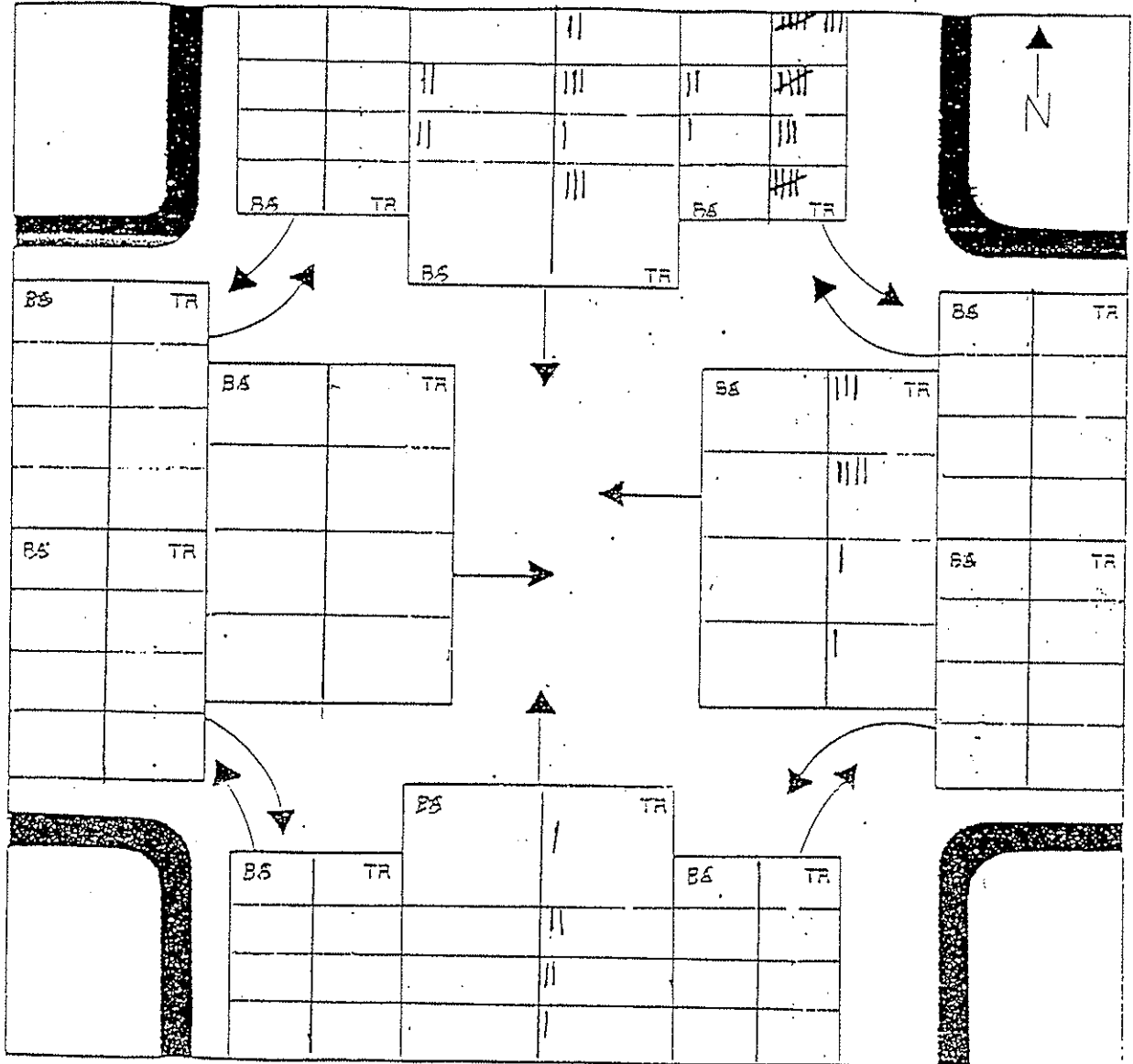


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
 VEHICLE MOVEMENTS DATA FORM

SHT. 4 088

LOCATION I.D. NO. U5301 EW SR39
 COUNTY DASCO CITY ZEPHERHILL
 DATE 9-21-98 TIME FROM 11:00 TO 12:00
 OBSERVER GEORGE R HILL WEATHER _____
 REMARKS _____

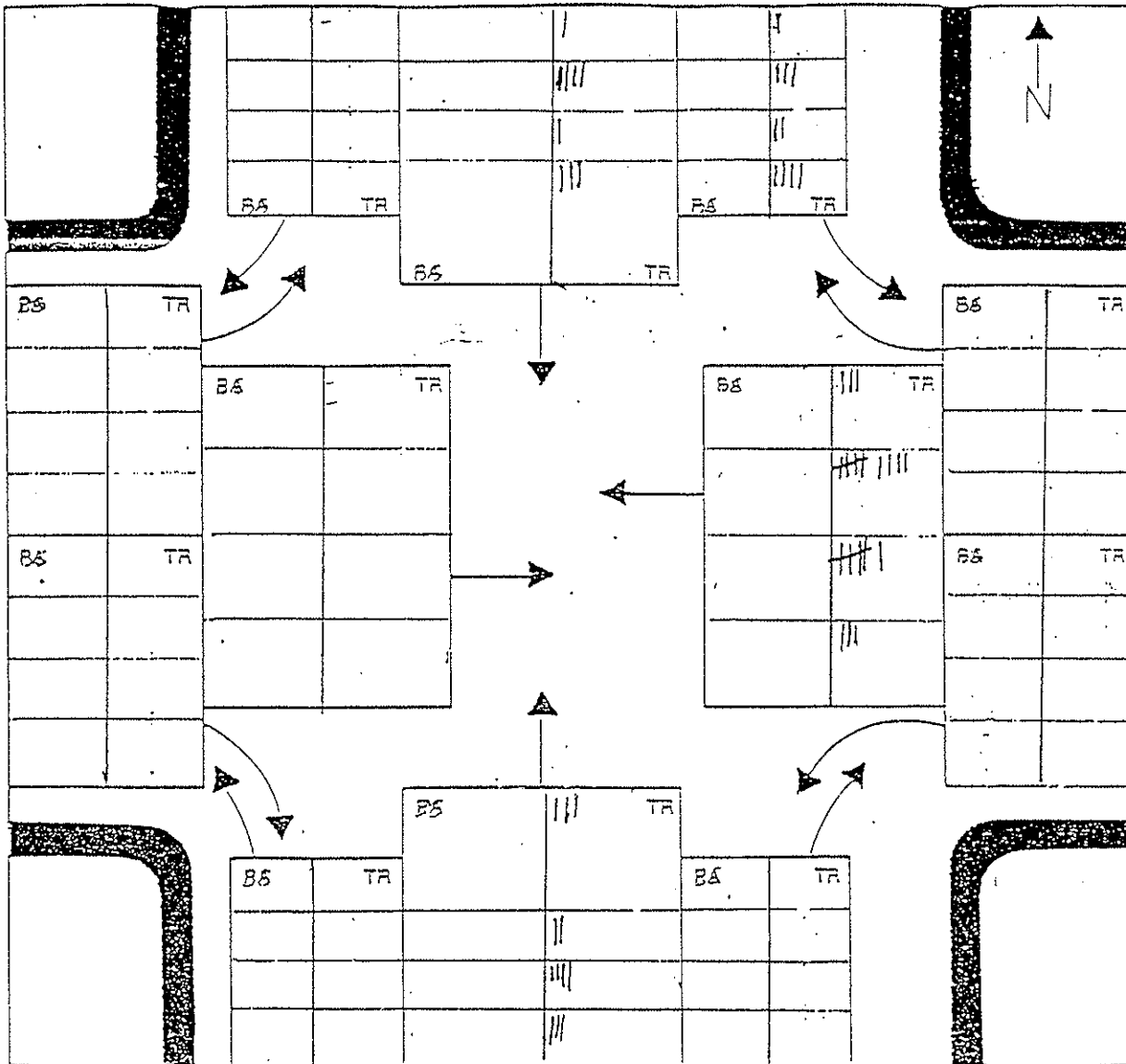


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
 VEHICLE MOVEMENTS DATA FORM

SHT. 5053

LOCATION I.D. NO. US301 EW SR39
 COUNTY PASCO CITY ZEPHERHILLS
 DATE 9-21-98 TIME FROM 12:00 TO 13:00
 OBSERVER GEORGE R HILL WEATHER _____
 REMARKS _____

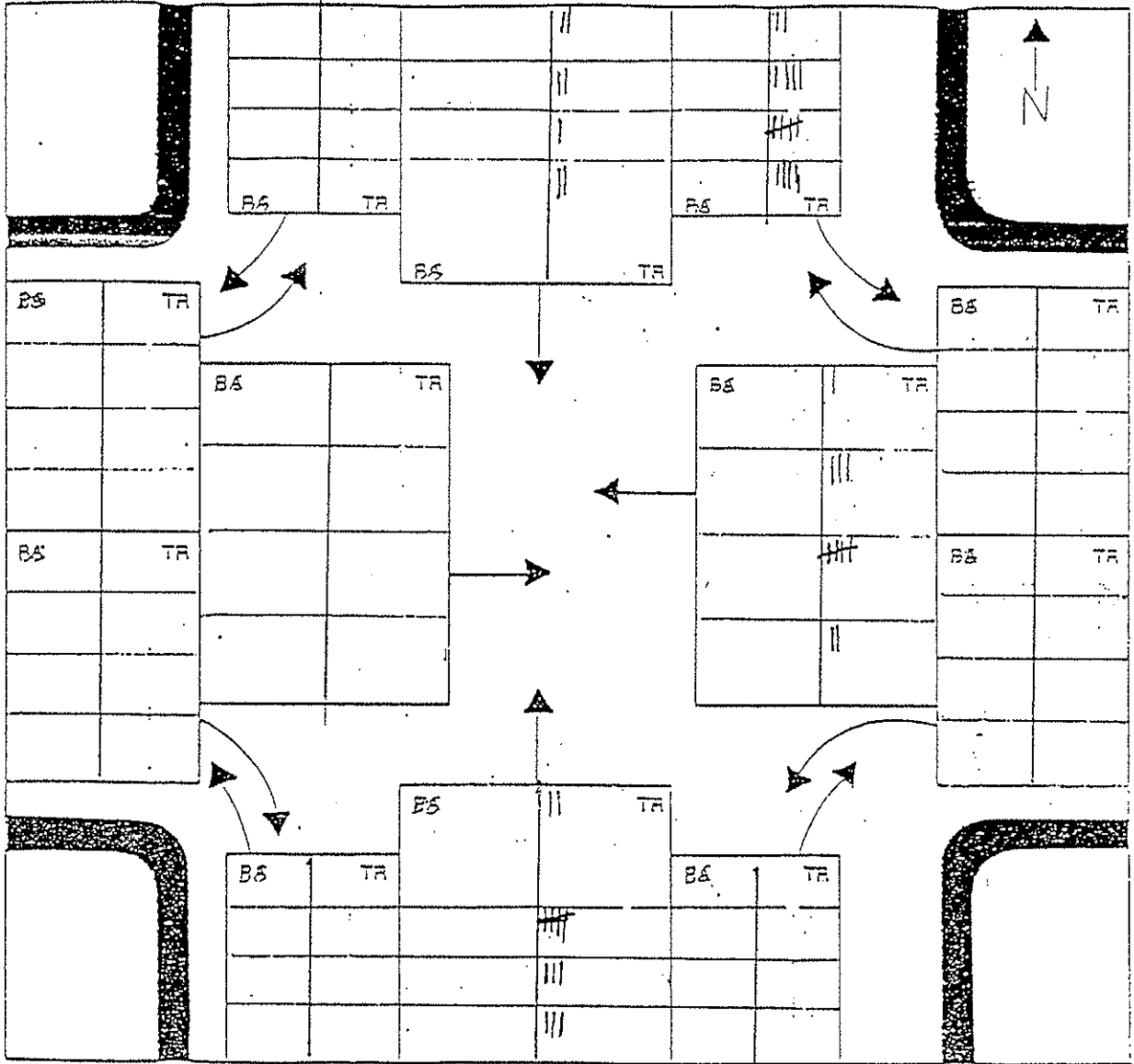


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
 VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NO. 45301 EW SR39
 COUNTY PASCO CITY ZEPHERHILLS
 DATE 9-21-98 TIME FROM 1500 TO 1600
 OBSERVER GEORGE R HILL WEATHER _____
 REMARKS _____

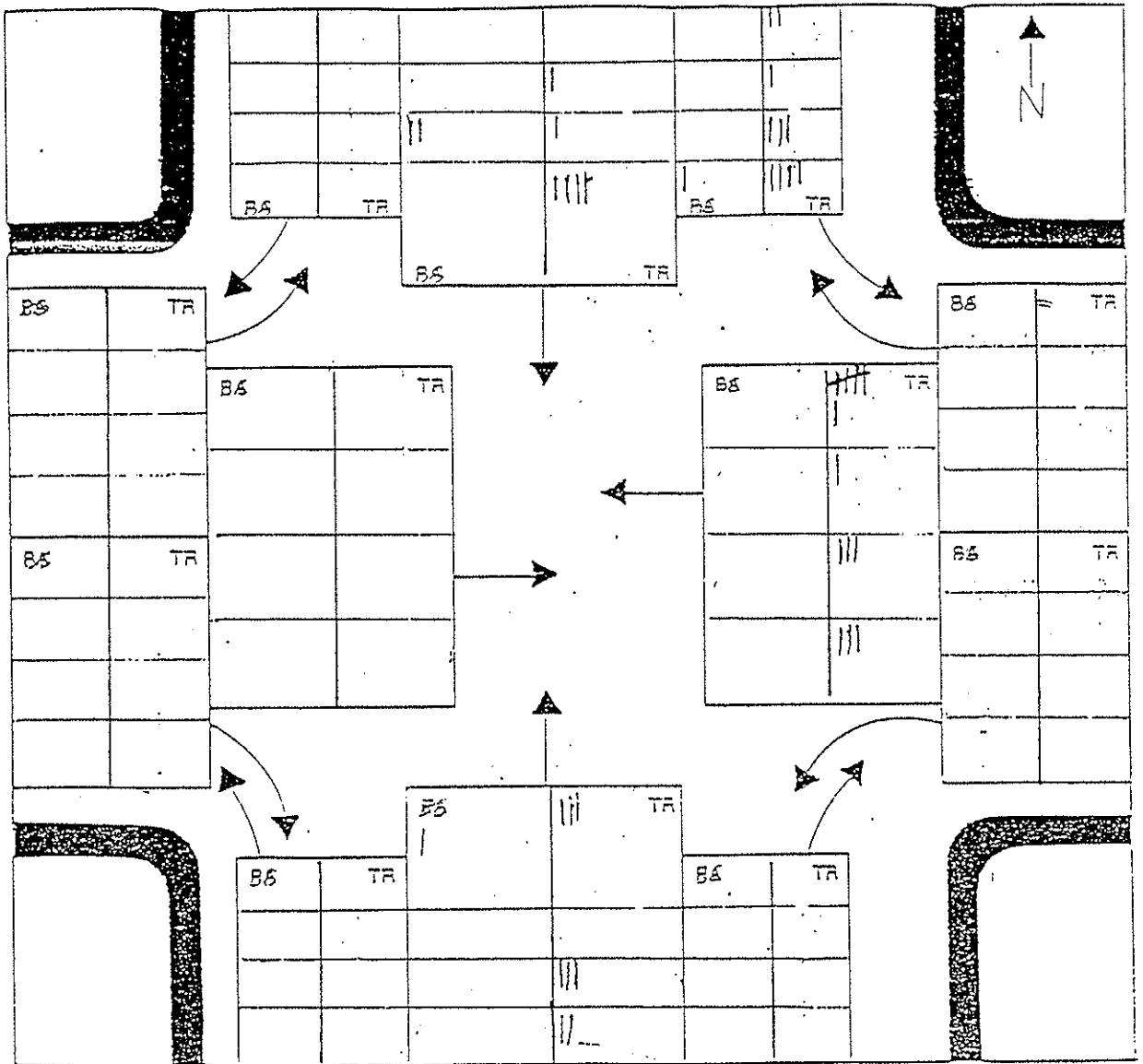


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
 VEHICLE MOVEMENTS DATA FORM

SHT. 70FB

LOCATION I.D. NS US 301 EW SR 39
 COUNTY PASCO CITY ZEPHER HILLS
 DATE 9-21-98 TIME FROM 16:00 TO 1700
 OBSERVER GEORGE R HILL WEATHER _____
 REMARKS _____

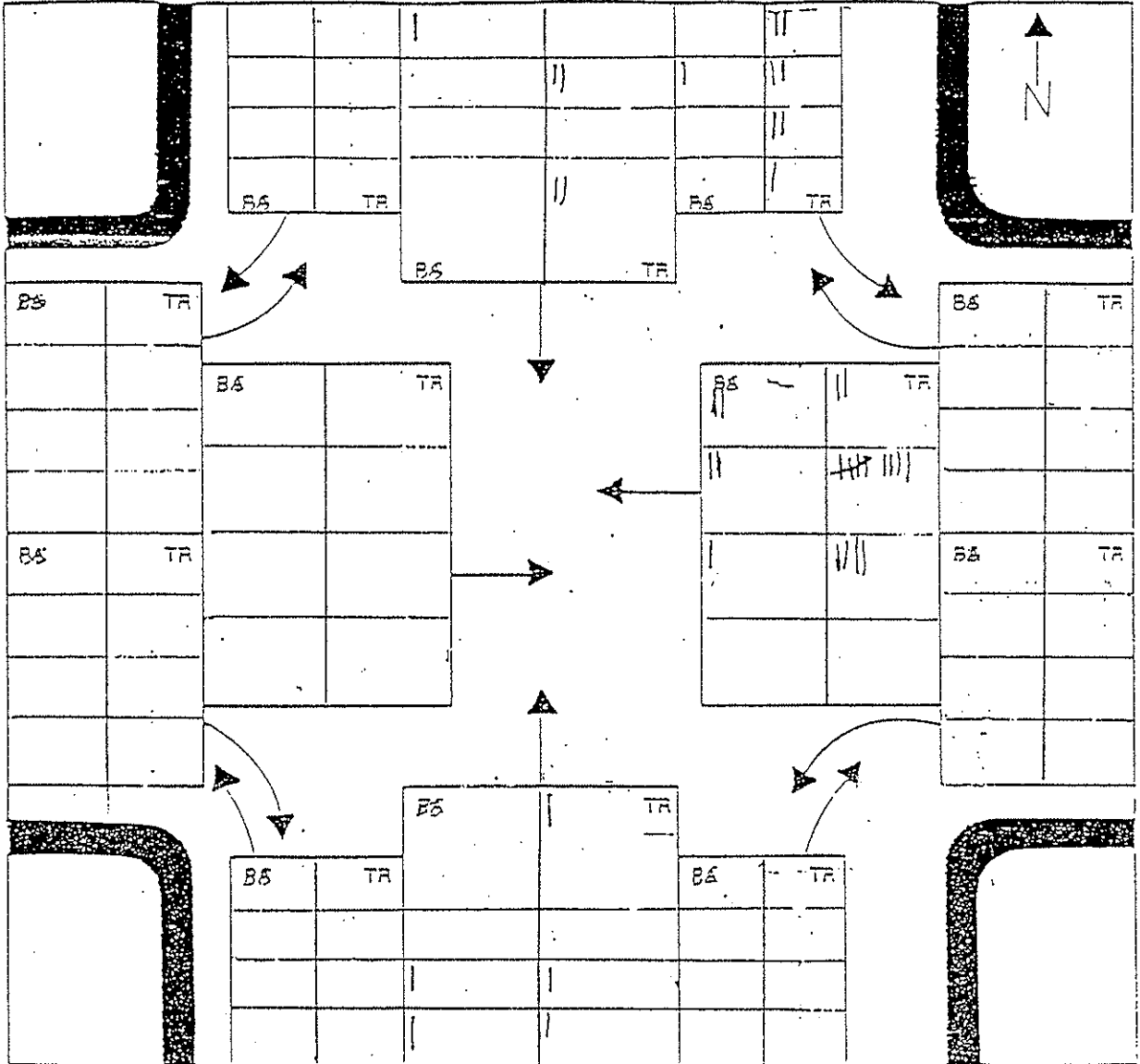


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NS US301 EW SR39
 COUNTY PASCO CITY ZEPHER HILLS
 DATE 9-21-98 TIME FROM 1700 TO 1800
 OBSERVER GEORGE R HILL WEATHER _____
 REMARKS _____

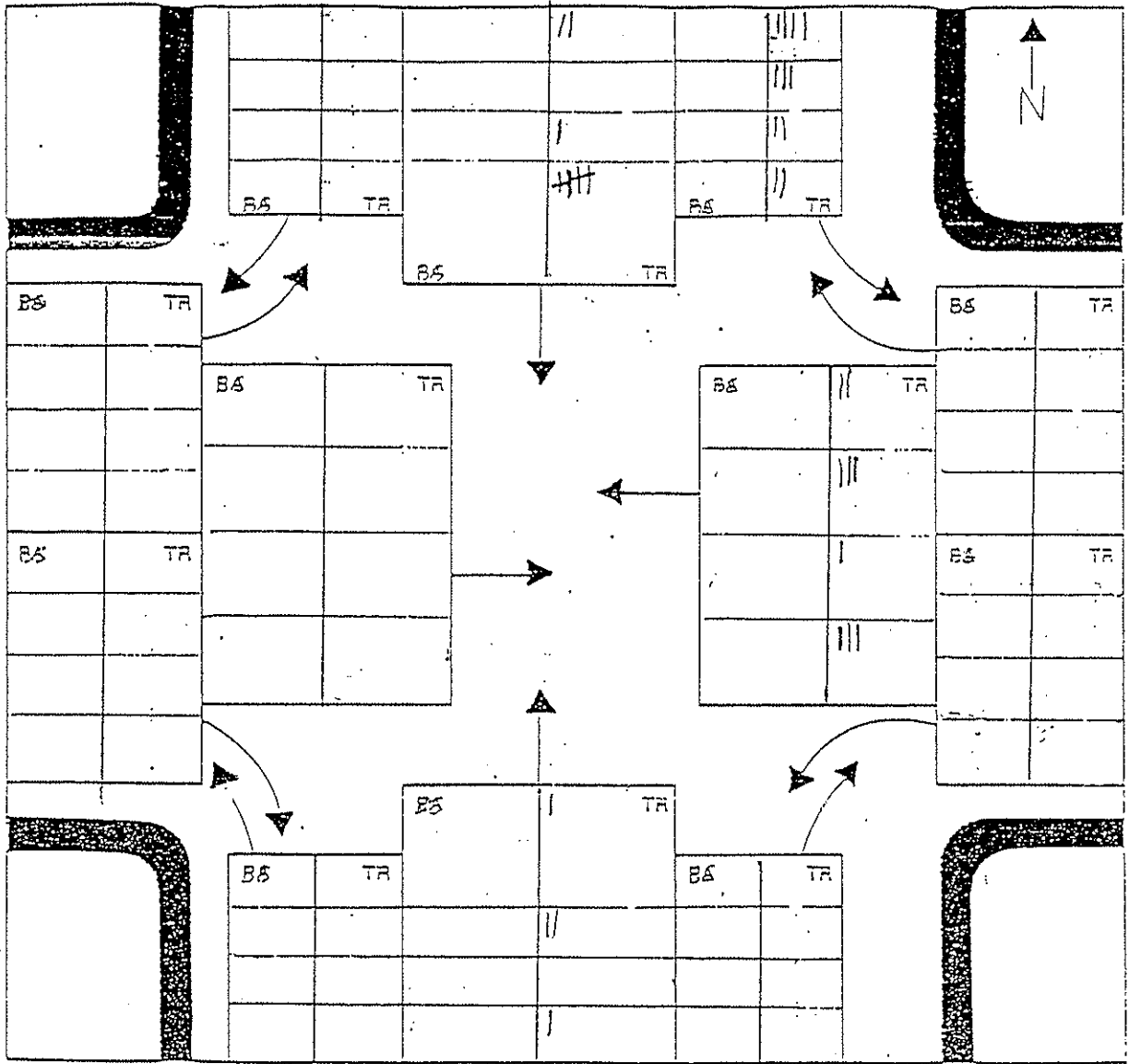


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

SHY 10FZ

FLORIDA DEPARTMENT OF TRANSPORTATION
PEDESTRIAN VOLUME FORM

LOCATION I.D. SR 39 @ US 301

COUNTY PASCO CITY Z-HILLS TYPE OF CONTROL _____

STUDY DATE 9-21-98 TIME: FROM 6:00 ^{AM} _{PM} TO 12:00 ^{AM} _{PM} OBSERVER GRH

REMARKS PEDESTRIAN & BIKE COUNTS

		TIME PERIODS					
		6-7	7-8	8-9	11-12		
P		0	0	0	0	0	0
		0	0	0	0	0	0
	TOTALS	0	0	0	0	0	0
B		0	0	0	0	0	0
		0	0	0	0	0	0
	TOTALS	0	0	0	0	0	0

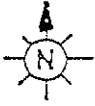
		TIME PERIODS					
		6-7	7-8	8-9	11-12		
P		0	0	0	0	0	0
		0	0	0	0	0	0
	TOTALS	0	0	0	0	0	0
B		0	1	1	0	0	0
		0	1	1	0	0	0
	TOTALS	0	2	2	0	0	0

↓

DISTANCE _____ FT.

RAISED MEDIAN YES NO

↑



SR 39 STREET

US 301 STREET

↓

DISTANCE _____ FT.

RAISED MEDIAN YES NO

↑

		TIME PERIODS					
		6-7	7-8	8-9	11-12		
P		0	0	0	1	0	0
		0	0	0	1	0	0
	TOTALS	0	0	0	1	0	0
B		0	0	1	0	0	0
		0	0	1	0	0	0
	TOTALS	0	0	1	0	0	0

		TIME PERIODS					
		6-7	7-8	8-9	11-12		
P		0	0	0	0	0	0
		0	0	0	0	0	0
	TOTALS	0	0	0	0	0	0
B		0	0	0	0	0	0
		0	0	0	0	0	0
	TOTALS	0	0	0	0	0	0

FLORIDA DEPARTMENT OF TRANSPORTATION
PEDESTRIAN VOLUME FORM

LOCATION I.D. SR 39 @ US 301
 COUNTY PASCO CITY Z-HILLS TYPE OF CONTROL _____
 STUDY DATE 9-21-98 TIME: FROM 12:00 ^{AM} TO 6:00 ^{AM} OBSERVER GRH
 REMARKS PEDESTRIAN & BIKE COUNTS

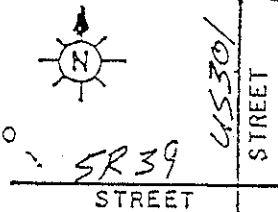
		TIME PERIODS					
		12-1	3-4	4-5	5-6		
P		0	0	0	0	DISTANCE _____ FT.	RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO
		0	0	0	0		
B		0	0	0	0	TOTALS	
		0	0	0	0		

P		0	6	0
B	2	0	6	0
TOTALS	0	0	7	1

P	0	1	0	0
B	0	1	0	0
TOTALS	0	0	0	1

DISTANCE _____ FT.
RAISED MEDIAN YES NO

DISTANCE _____ FT.
RAISED MEDIAN YES NO



P	0	0		0
B	0	0	2	0
TOTALS	0	0	1	2

P	0	0		0
B	0	0	2	0
TOTALS	0	0	0	1

TOTALS

P	0	0	0	0
B	0	0	0	0
TOTALS	0	0	0	0

P	0	0	0	0
B	0	0	0	0
TOTALS	0	0	0	0

DISTANCE _____ FT.
RAISED MEDIAN YES NO
TOTALS

DISTRICT 7 WORK COPY TRAFFIC OPERATIONS REQUEST FORM

IN OR N. <u>S</u> E. W. OF	MILE POST #	LOCAL STREET NAMES	U S	S R	SECTION	LEG
Z-Hills	3.670	SR 39 AT MICHIGAN AVE	—	39	1410	—

TYPE OF STUDY: BARTMC 6-9, 11-1, 3-6 Ped & Bikes
 NOTE: SEPARATE BUSES & TRUCKS. COUNTY: PASCO

SPEED ZONE	TRAFFIC SIGNAL	FLASHING BEACON	SCHOOL SPEED ZONE	UNAUTHORIZED TRAFFIC SIGNAL	DESIGN STUDY	REQUESTED BY: <u>GABOR</u>	DATE: <u>9-16-98</u>
						PERFORMED BY: <u>GEORGE R HILL</u>	
						JOB #:	
STUDY							DATE:
X	X	X	X	X		FIELD SKETCH	
	B	4		B	<u>B</u>	TURNING MOVEMENTS (TO 501 OR 508)	<u>9/28/98</u>
X	X	X	X			SPEED CHECK (TO 503 OR 506)	
	X	X			X	TRAFFIC COUNTS (TO 510 OR 570)	
	X	X				STOP SIGN OBSERVANCE (TO 518)	
	X					STOP & DELAY (TO 507)	
				X		DRIVER OBSERVANCE OF TRAFFIC SIGNAL (TO 504)	
	X	X	X	X	<u>X</u>	PEDESTRIAN VOLUME (TO 502 OR 509)	<u>9/28/98</u>
						DELAY STUDY OF SIGNALIZED INTERSECTION	
X						LEFT TURN STUDY (TO 513)	
	X	X		X		OBSERVATION STUDY (TO 519)	

SPECIAL INSTRUCTIONS: SEE SEPARATE SHTS. FOR TRUCK & BUS MOVEMENT AND PED./BIKE TRAFFIC

PT. CLOUDY

Weather : cloudy
 Counter :
 GEORGE R HILL
 SEE SEPERATE SHTS.FOR TRUCK/BUS,PEDS.

Traffic Counting Equipment & Supplies
 2031 Stout Drive, Suite 4
 Ivyland, PA 18974

Site Code : 00014110
 Start Date: 09/28/98
 File I.D. : SR39@MIC
 Page : 1

Vehicle group 1

Date	SR 39 Southbound				MICHIGAN RD Westbound				SR 39 Northbound				MICHIGAN RD Eastbound				Total
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	
09/28/98	-----																
6:00	0	39	0	0	0	0	0	0	1	20	0	0	0	0	0	0	60
6:15	0	60	0	0	2	0	0	0	1	24	0	0	0	1	4	0	92
6:30	1	72	0	0	2	1	0	0	0	32	3	0	1	0	1	0	113
6:45	1	55	0	0	1	0	0	0	0	45	1	0	0	1	2	0	106
r Total	2	226	0	0	5	1	0	0	2	121	4	0	1	2	7	0	371
7:00	0	48	0	0	0	2	0	0	0	45	1	0	1	0	0	0	97
7:15	0	43	0	0	0	0	0	0	2	44	1	0	0	0	0	0	90
7:30	1	57	0	0	1	0	0	0	1	43	1	0	0	0	2	0	106
7:45	0	35	1	0	0	1	1	0	1	46	1	0	0	0	1	0	87
r Total	1	183	1	0	1	3	1	0	4	178	4	0	1	0	3	0	380
8:00	0	28	0	0	0	0	1	0	1	28	0	0	0	0	0	0	58
8:15	1	44	0	0	0	2	0	0	1	37	0	0	0	0	1	0	86
8:30	0	29	0	0	1	0	0	0	1	36	1	0	0	1	2	0	71
8:45	1	23	0	0	2	0	2	0	1	66	0	0	0	0	1	0	95
r Total	2	124	0	0	3	2	3	0	4	167	1	0	0	1	4	0	311
----- * BREAK * -----																	
1:00	3	40	3	0	0	1	3	0	1	48	0	0	0	0	0	0	99
1:15	3	46	0	0	1	3	1	0	1	42	2	0	2	2	1	0	104
1:30	1	33	1	0	0	2	4	0	2	45	1	0	2	1	2	0	94
1:45	1	41	0	0	2	1	0	0	2	51	0	0	0	2	1	0	101
r Total	8	160	4	0	3	7	8	0	6	186	3	0	4	5	4	0	398
2:00	0	52	0	0	0	1	2	0	0	64	2	0	0	0	1	0	122
2:15	3	52	0	0	0	1	3	0	1	50	0	0	1	0	0	0	111
2:30	1	39	0	0	0	0	1	0	2	34	0	0	0	0	2	0	79
2:45	2	40	1	0	0	0	0	0	0	39	0	0	1	0	1	0	84
r Total	6	183	1	0	0	2	6	0	3	187	2	0	2	0	4	0	396
----- * BRBAK * -----																	
5:00	1	49	1	0	2	0	5	0	2	50	0	0	1	1	1	0	113
:15	3	36	0	0	1	1	2	0	4	51	1	0	0	2	0	0	101
:30	1	47	0	0	1	0	5	0	1	70	2	0	2	1	0	0	130
:45	0	54	0	0	2	2	1	0	1	58	0	0	0	2	2	0	122
Total	5	186	1	0	6	3	13	0	8	229	3	0	3	6	3	0	466
:00	6	46	1	0	1	2	3	0	1	47	1	0	0	1	1	0	110
:15	1	43	0	0	2	3	2	0	1	56	1	0	0	3	1	0	113
:30	1	48	0	0	0	2	2	0	0	59	1	0	0	0	0	0	113
:45	1	50	0	0	1	2	0	0	2	69	0	0	0	0	0	0	125
Total	9	187	1	0	4	9	7	0	4	231	3	0	0	4	2	0	461

Weather : cloudy
 Counter :
 GEORGE R HILL
 SEE SEPERATE SHTS. FOR TRUCK/BUS, PEDS.

SAKAR Technologies, Inc.
 Traffic Counting Equipment & Supplies
 2031 Stout Drive, Suite 4
 Ivyland, PA 18974

Site Code : 0001411
 Start Date: 09/28/98
 File I.D. : SR39@MIL
 Page : 2

Vehicle group 1

Date	SR 39 Southbound				MICHIGAN RD Westbound				SR 39 Northbound				MICHIGAN RD Eastbound				Total
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	
09/28/98																	
17:00	1	51	1	0	2	0	3	0	2	62	4	0	0	1	1	0	12
17:15	1	62	0	0	1	2	1	0	1	63	2	0	1	1	0	0	135
17:30	9	66	0	0	2	4	3	0	1	71	5	0	1	2	3	0	167
17:45	5	58	0	0	3	2	2	0	2	76	0	0	0	0	3	0	157
Hr Total	16	237	1	0	8	8	9	0	6	272	11	0	2	4	7	0	581
TOTAL	49	1486	9	0	30	35	47	0	37	1571	31	0	13	22	34	0	3364

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D.N.S. SR 39 EW MICHIGAN / TUCKER
COUNTY PASCO CITY ZEPHER HILLS
DATE 9-28-98 TIME FROM 0600 TO 0700
OBSERVER GEORGE HILL WEATHER CLOUDY
REMARKS _____

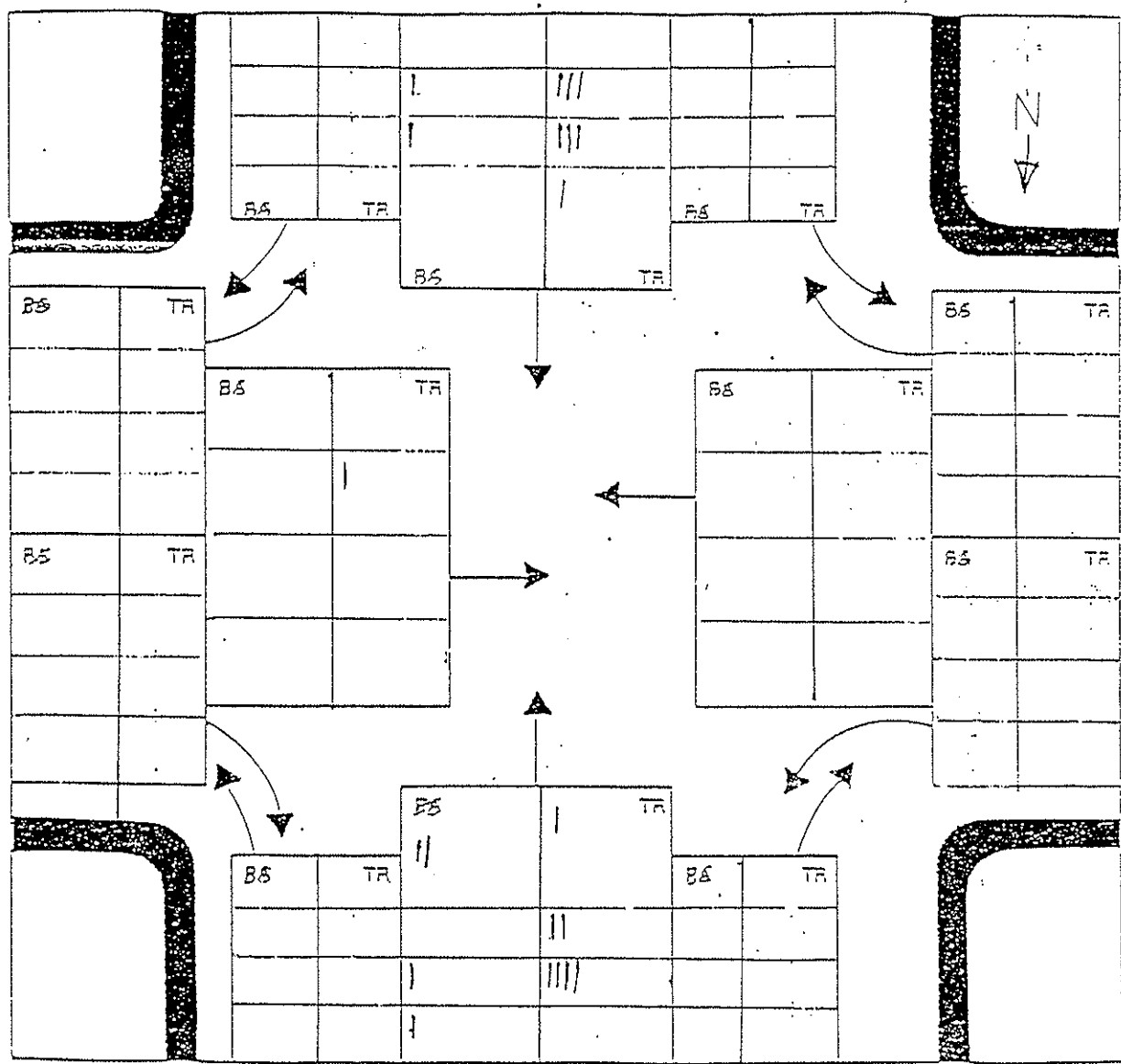


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NS SR 39 EW MICHIGAN TUCKER
 COUNTY PAISLEY CITY ZEPHERHILLS
 DATE 9-28-98 TIME FROM 0800 TO 0900
 OBSERVER GEORGE HILL WEATHER _____
 REMARKS _____

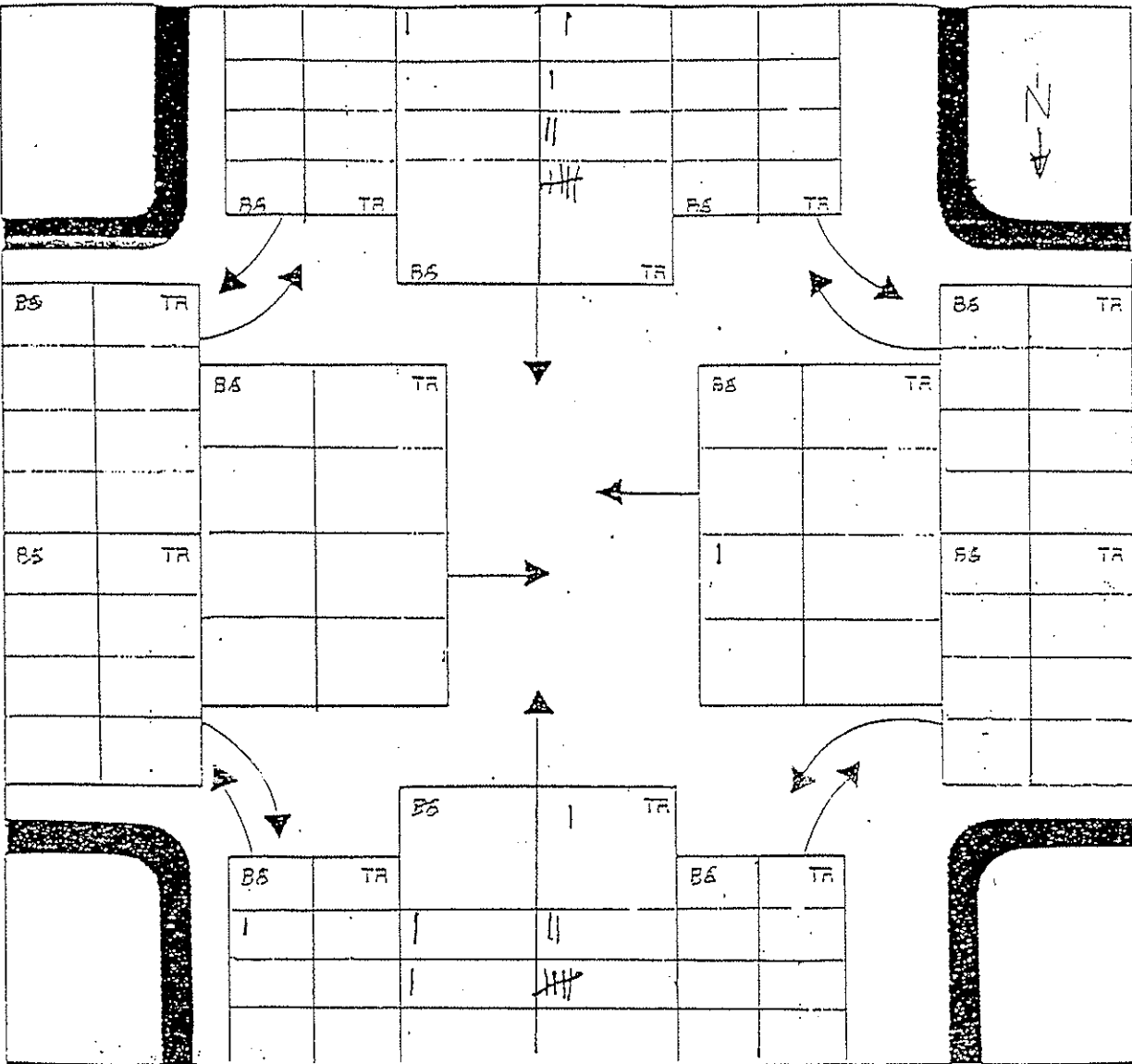


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NO. SR39 EW MICHIGAN/TUCKER
COUNTY FLASCO CITY ZOPHER HILLS
DATE 9-28-98 TIME FROM 1100 TO 1200
OBSERVER GEORGE HILL WEATHER _____
REMARKS _____

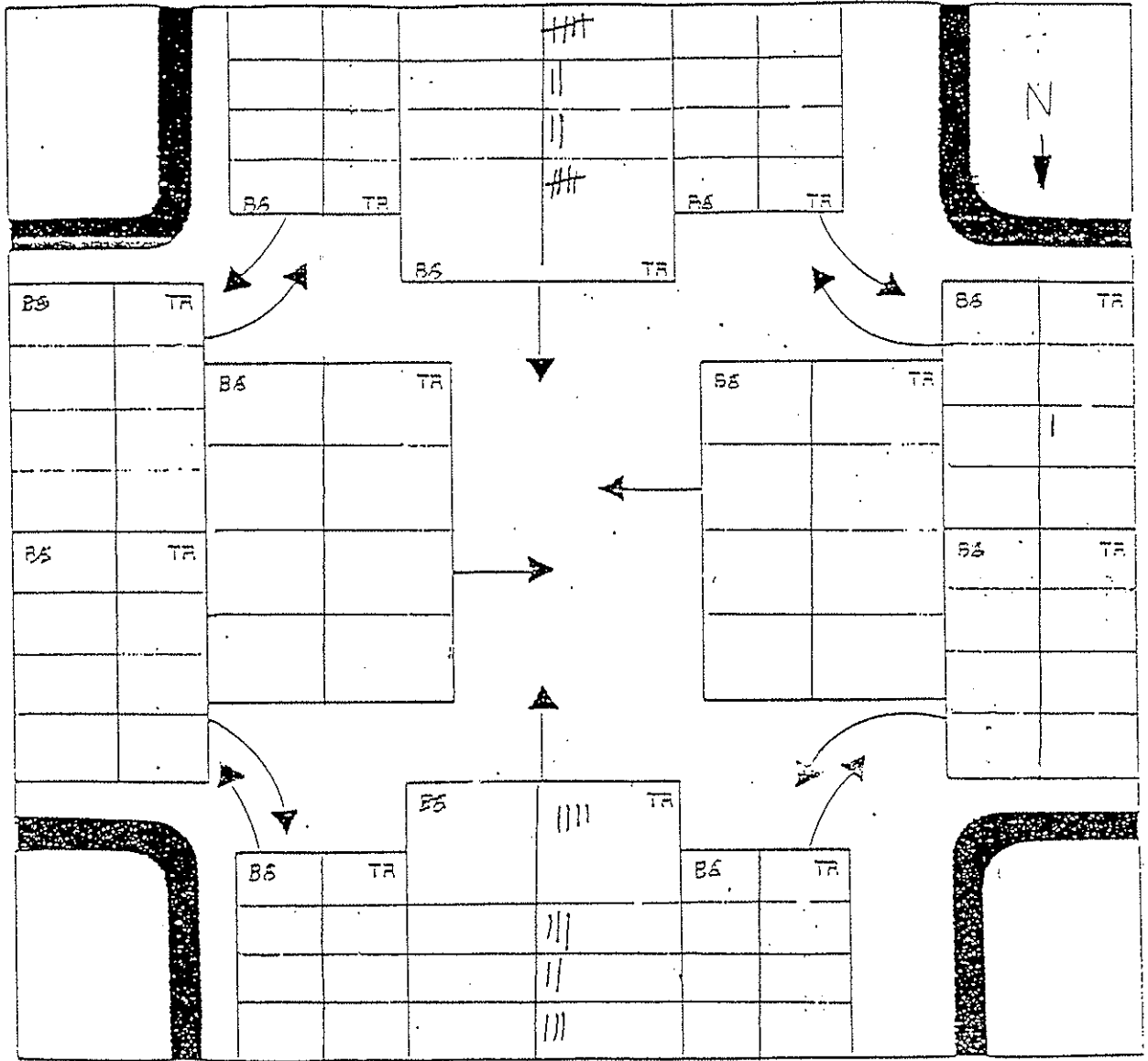


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NS SR 39 EW MICHIGAN/TUCKER
 COUNTY PASCO CITY _____
 DATE 9-28-98 TIME FROM 1200 TO 1300
 OBSERVER GEORGE HILL WEATHER PT CLOUDY
 REMARKS _____

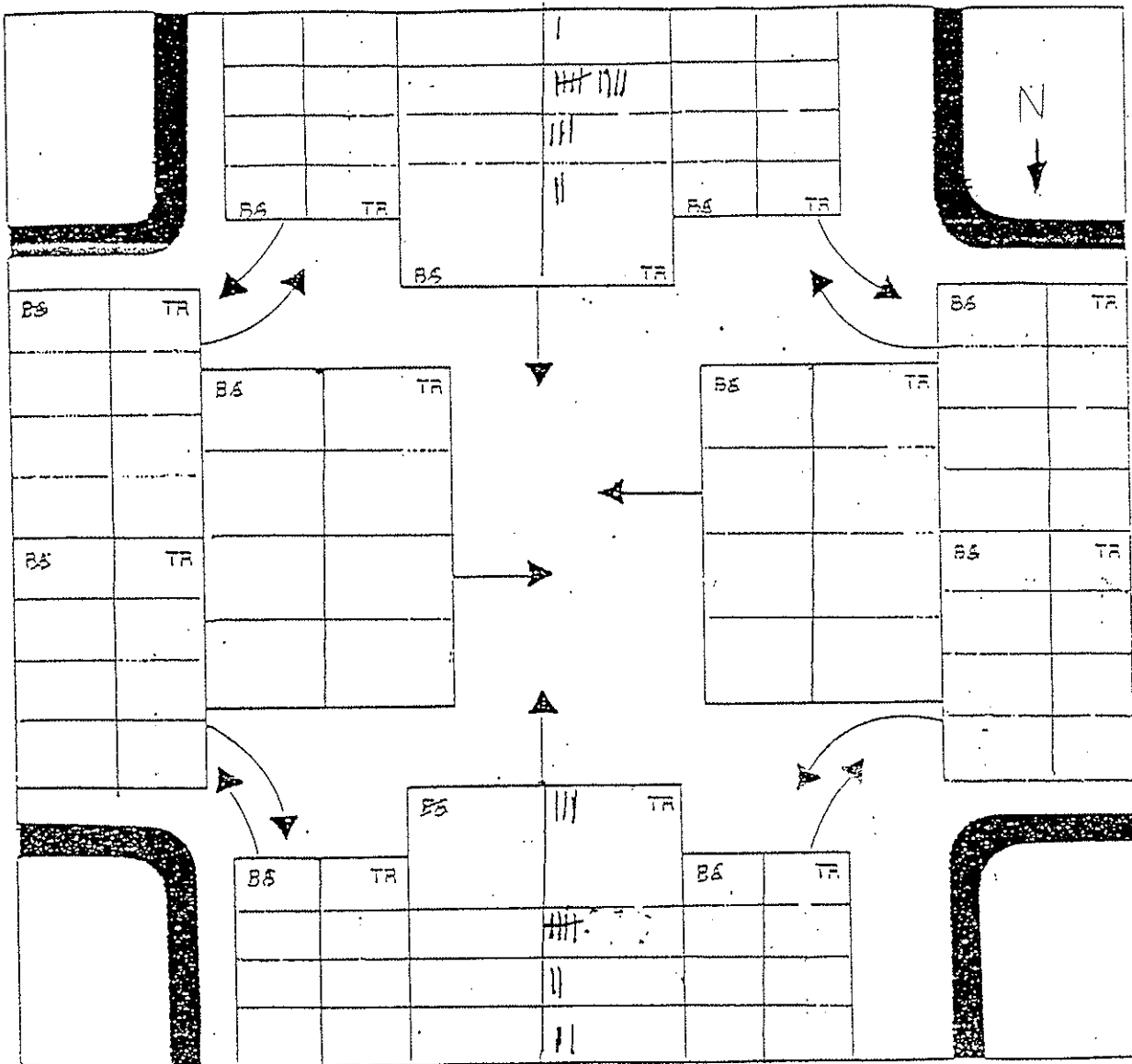


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NO. SR 39 EW MICHIGAN/TUCKER
 COUNTY PASCO CITY ZEPHER HILLS
 DATE 9-28-98 TIME FROM 1500 TO 1600
 OBSERVER GEORGE HILL WEATHER _____
 REMARKS _____

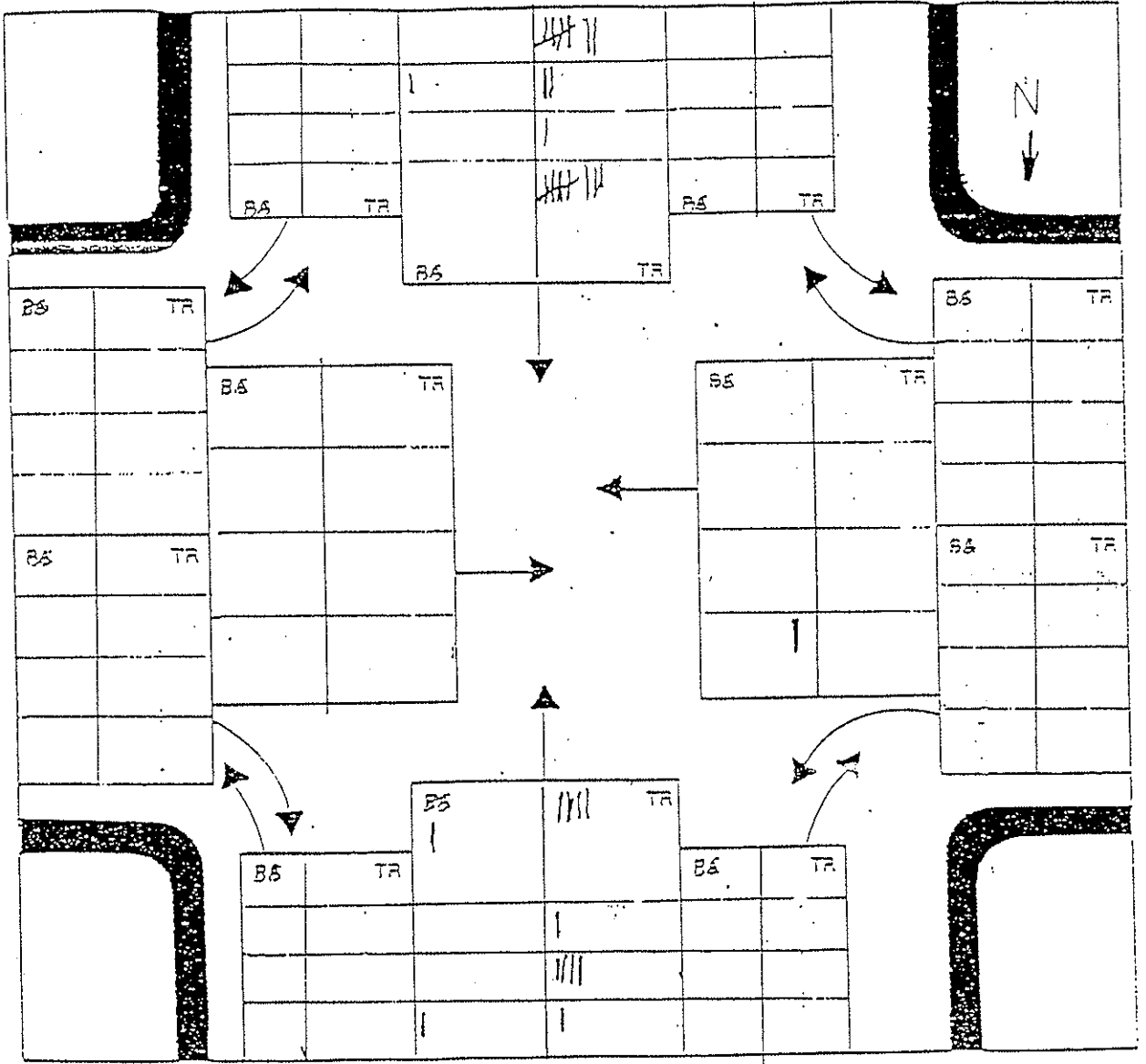


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

5HT 70F8

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NS SR 39 EW MICHIGAN/TUCKER
COUNTY PASCO CITY ZEPHERHILLS
DATE 9-28-98 TIME FROM 1600 TO 1700
OBSERVER GEORGE HILL WEATHER CLOUDY
REMARKS _____

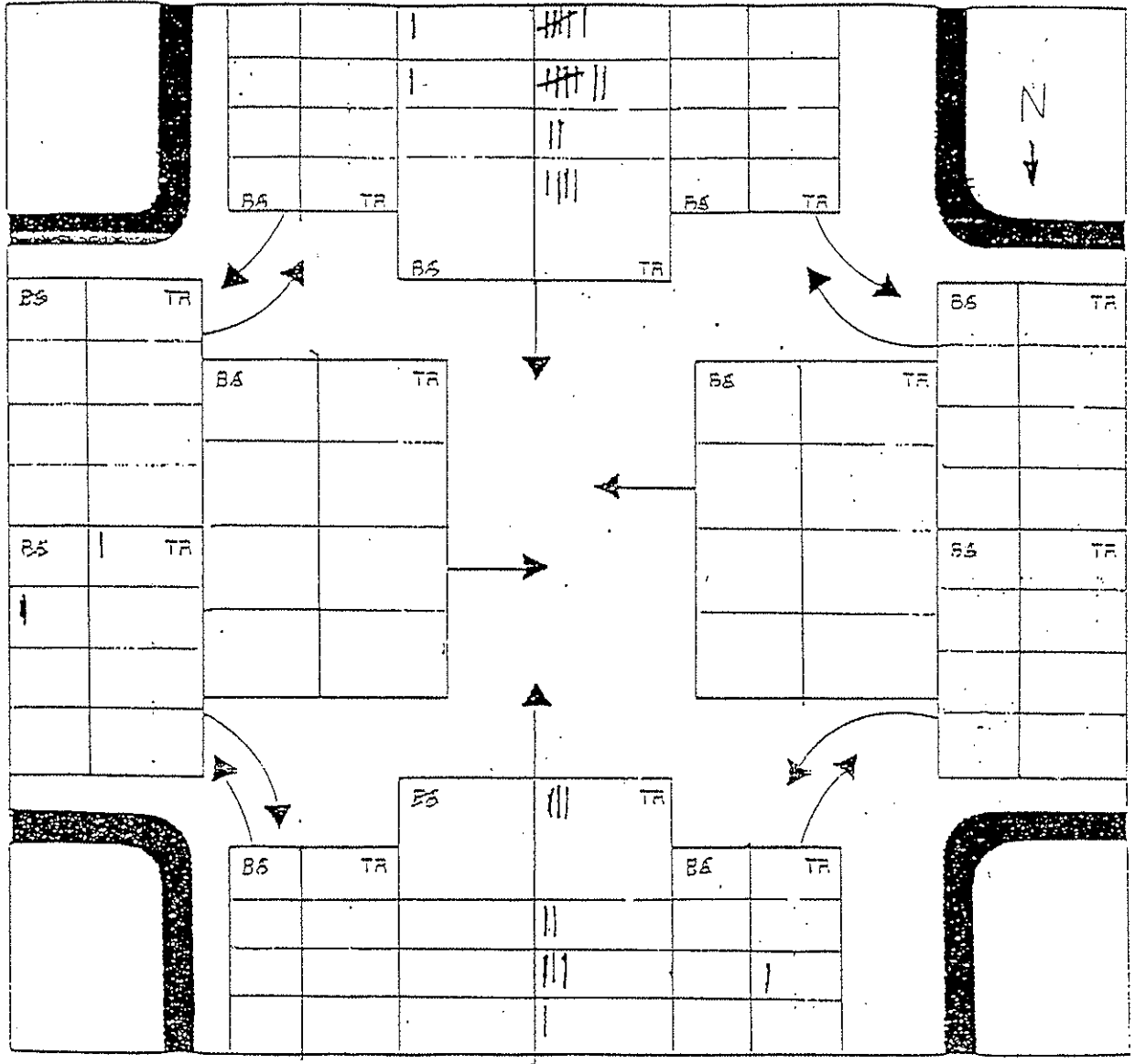


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NO. SR39 EW MICHIGAN / TUCKER
 COUNTY PASCO CITY ZEPHER HILLS
 DATE 9-28-98 TIME FROM 1200 TO 1800
 OBSERVER GEORGE HILL WEATHER CLOUDY
 REMARKS _____

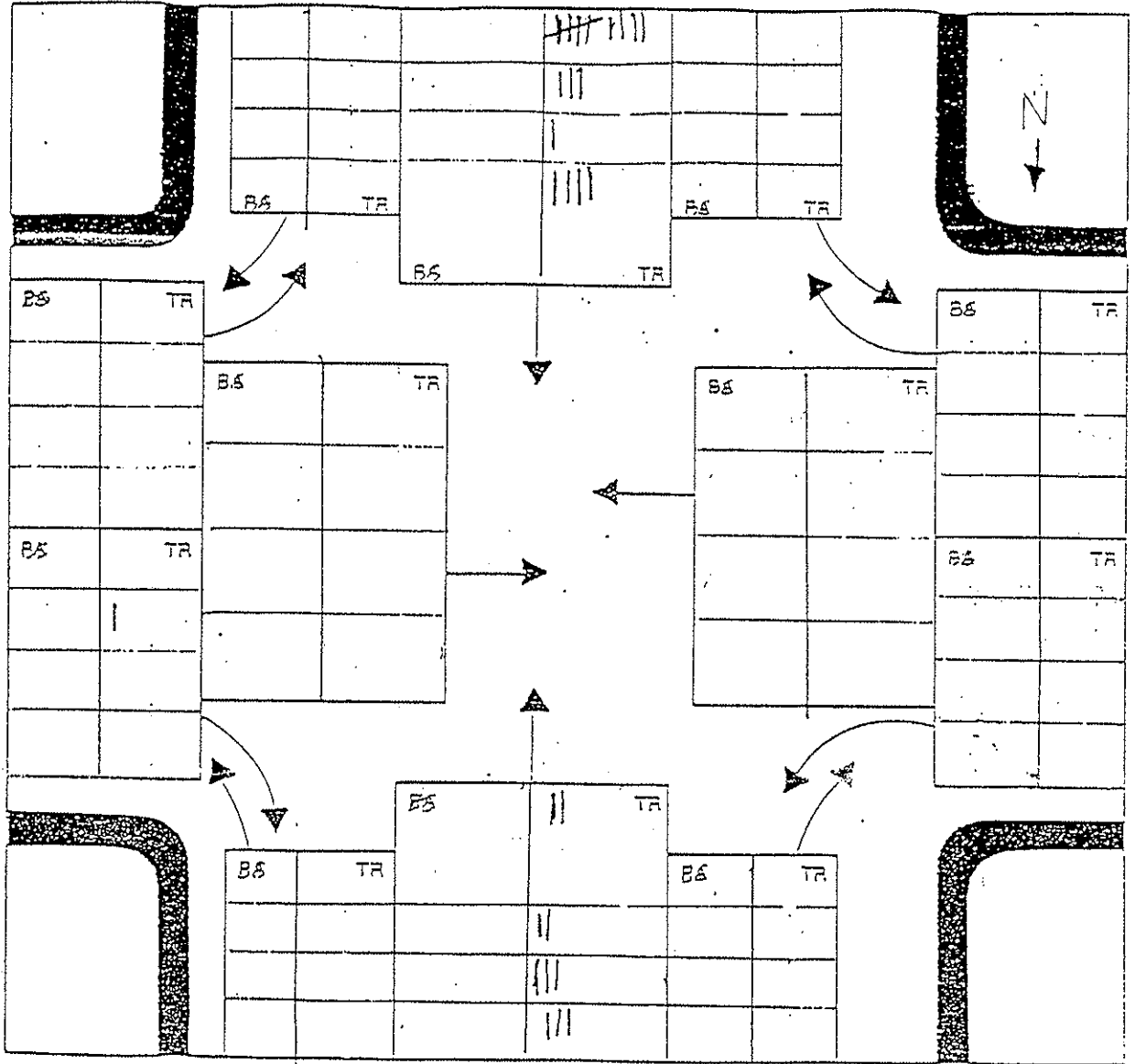


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION PEDESTRIAN VOLUME FORM

LOCATION I.D. SR 39 @ MICHIGAN / TUCKER
 COUNTY PASCO CITY Z-HILLS TYPE OF CONTROL _____
 STUDY DATE 9-28-98 TIME: FROM 6:00 ^{AM} ~~PM~~ TO 12:00 ^{PM} ~~AM~~ OBSERVER GRH
 REMARKS _____

		TIME PERIODS									
		6-7	7-8	8-9	11-12						
P	→					←					
	→	0	0	0	0		→	0	0	0	0
	→	0	0	0	0		→	0	0	0	0
TOTALS											

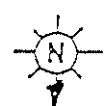
P				
P	0	0	0	0
B				
B	1	0	0	0

P				
P	0	0	0	0
B				
B	0	0	0	0

TOTALS

DISTANCE _____ FT.
 RAISED MEDIAN YES NO

DISTANCE _____ FT.
 RAISED MEDIAN YES NO



MICHIGAN STREET

SR 39 STREET

P	11			
P	2	0	1	0
B				
B	0	0	0	0

P				
P	0	0	0	0
B				
B	1	0	0	0

TOTALS

P				
P	0	0	0	0
B				
B	0	0	0	0

P				
P	0	0	0	0
B				
B	0	0	0	0

DISTANCE _____ FT.
 RAISED MEDIAN YES NO

FLORIDA DEPARTMENT OF TRANSPORTATION PEDESTRIAN VOLUME FORM

LOCATION I.D. SR 39 @ MICHIGAN / TUCKER
 COUNTY PASCO CITY Z HILLS TYPE OF CONTROL _____
 STUDY DATE 9-28-98 TIME: FROM 12:00 AM TO 1:00 AM OBSERVER GRH
 REMARKS _____

P	TIME PERIODS				DISTANCE _____ FT.	RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO	P	TIME PERIODS			
	12-1	3-4	4-5	5-6				12-1	3-4	4-5	5-6
B	0	0	0	0	SR 39 STREET MICHIGAN STREET	B	0	0	0	0	
	0	0	0	0			0	0	0	0	
TOTALS	0	0	0	0		TOTALS	0	0	0	0	
P					DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO	P					
B	0	0	2	0		B	0	2	1	0	
TOTALS	0	1	1	0		TOTALS	0	0	0	0	
P	0	0	0	0	DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO	P					
B	0	0	0	0		B	0	2	1	0	
TOTALS	0	0	0	0		TOTALS	0	0	1	1	
P	0	0	1	0	DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO	P	0	0	0	0	
B	0	0	0	0		B	0	0	0	0	
TOTALS	0	0	0	0		TOTALS	0	0	0	0	

47301
 FLORIDA DEPARTMENT OF TRANSPORTATION
 VEHICLE MOVEMENTS DATA FORM

SHT 1 OF 8

LOCATION I.D. NS 47301 EW MICHIGAN RD
 COUNTY PASCO CITY ZEPHER HILLS
 DATE 9-28-98 TIME FROM 0600 - TO 0700
 OBSERVER George Hill WEATHER CLOUDY
 REMARKS MILE MARK 3.670

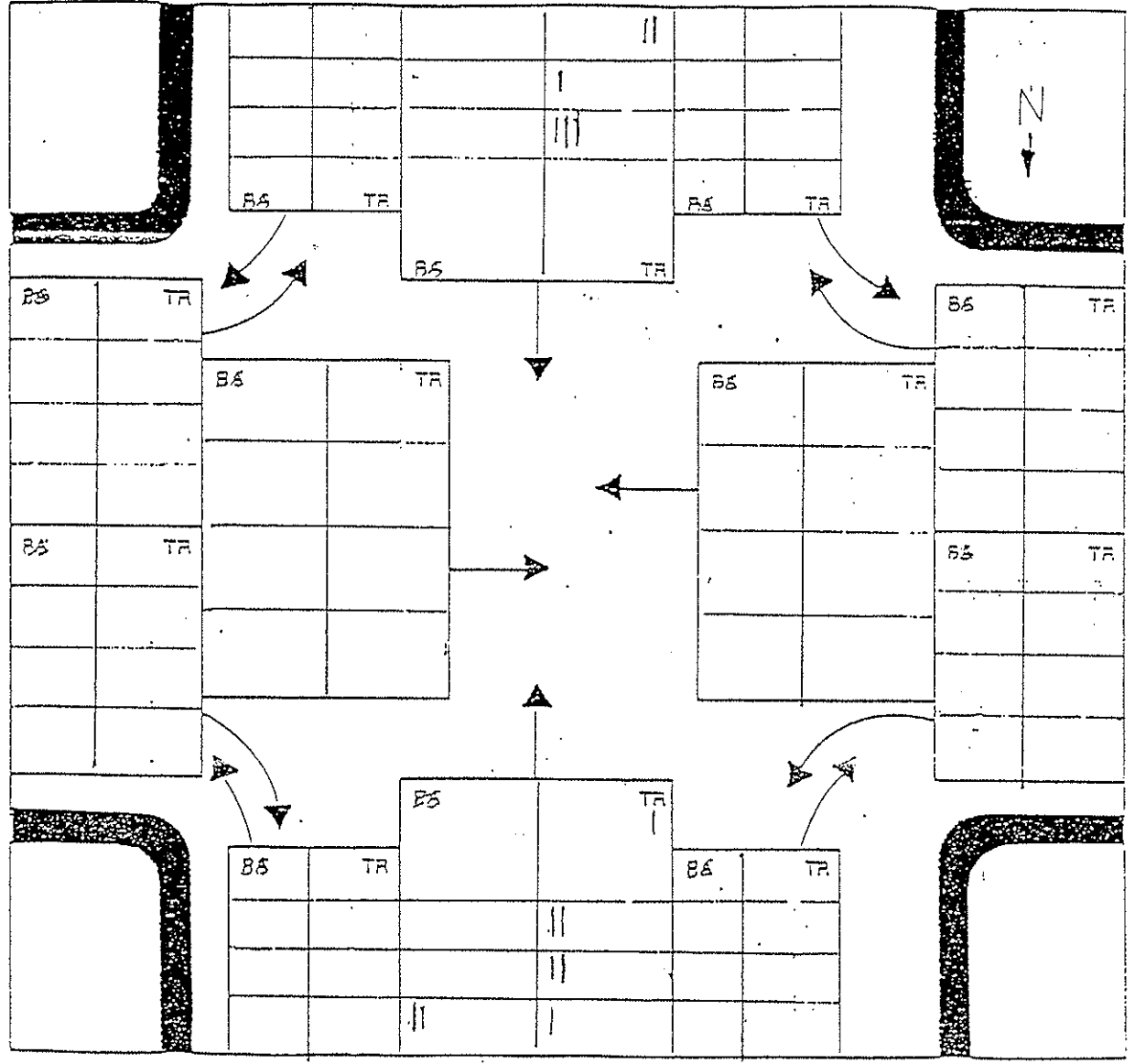


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

SHT 2098

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NO. US 301 EW MICHIGAN R.D.
COUNTY FALCO CITY ZEPHERHILLS
DATE 9-28-98 TIME FROM 0700 TO 0800
OBSERVER GEORGE HILL WEATHER _____
REMARKS _____

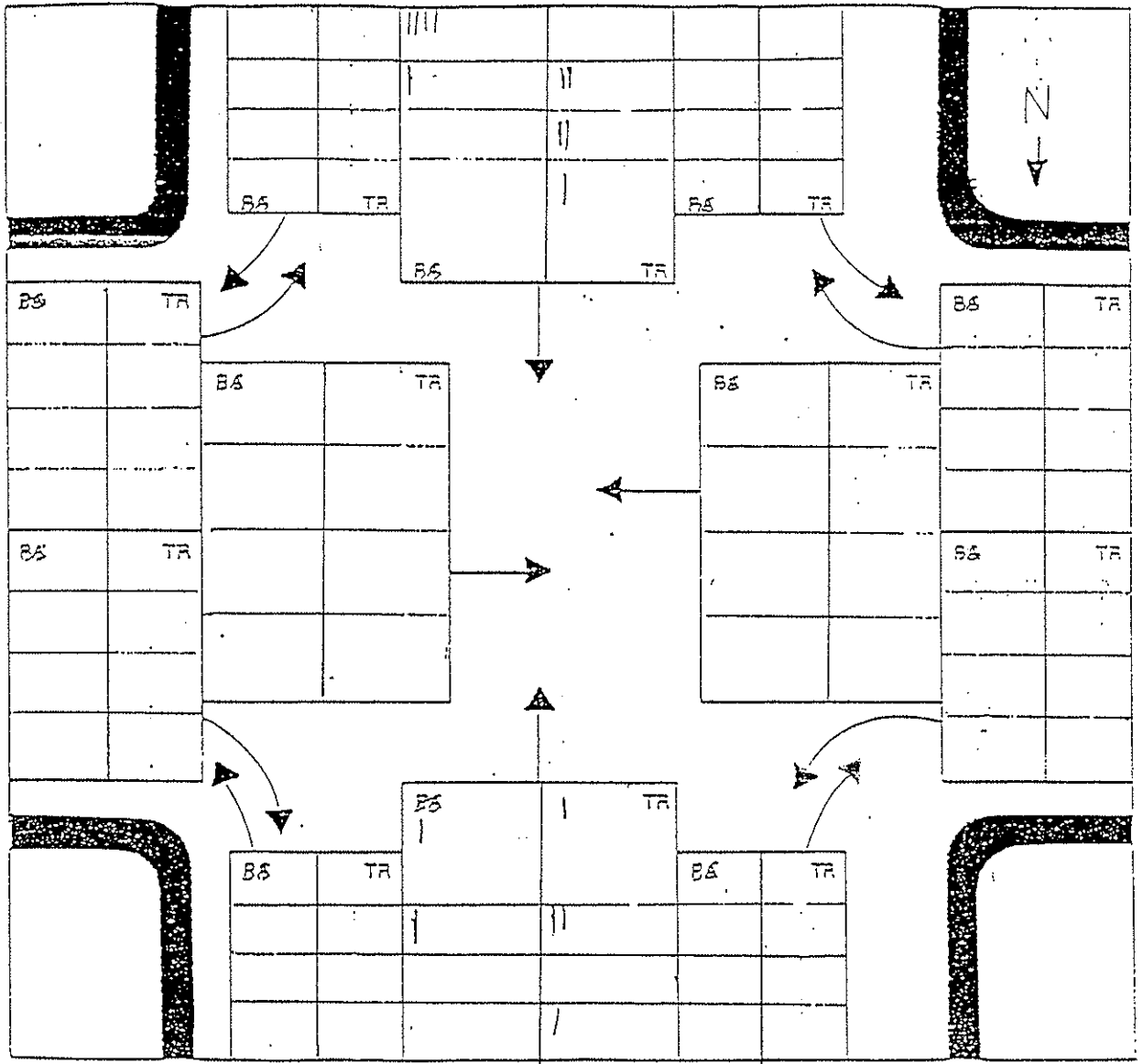


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

5HT3 OF 8

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NS US 301 EW MICHIGAN RD
COUNTY FLS CO CITY ZEPHER HILLS
DATE 9-28-98 TIME FROM 0800 TO 0900
OBSERVER GEORGE HILL WEATHER _____
REMARKS _____

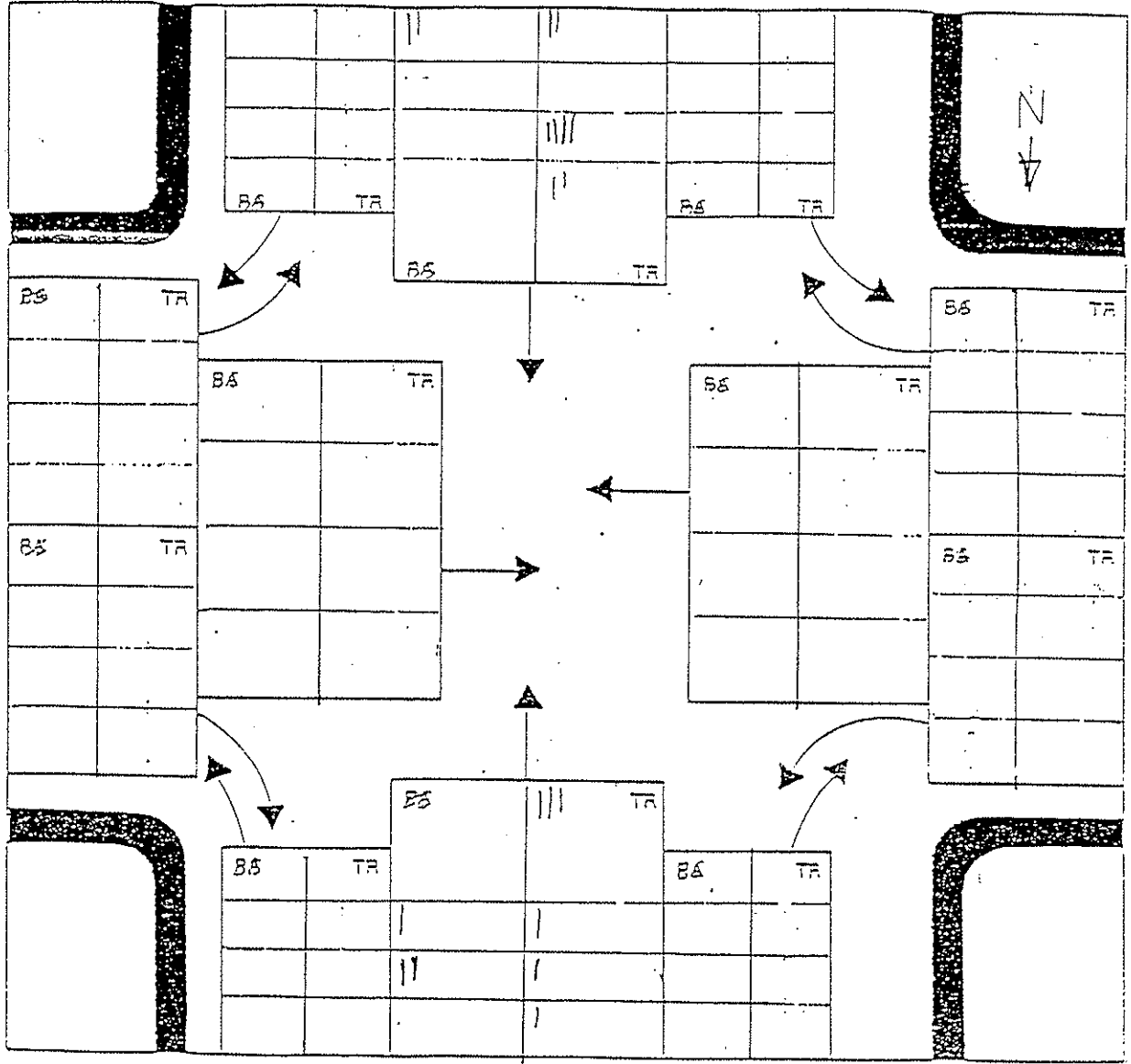


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

5HT4 of 6

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NO. US 301 EW MICHIGAN RD.
COUNTY PASCO CITY ZEPHER HILLS
DATE 9-28-98 TIME FROM 1100 TO 1200
OBSERVER GEORGE HILL WEATHER _____
REMARKS _____

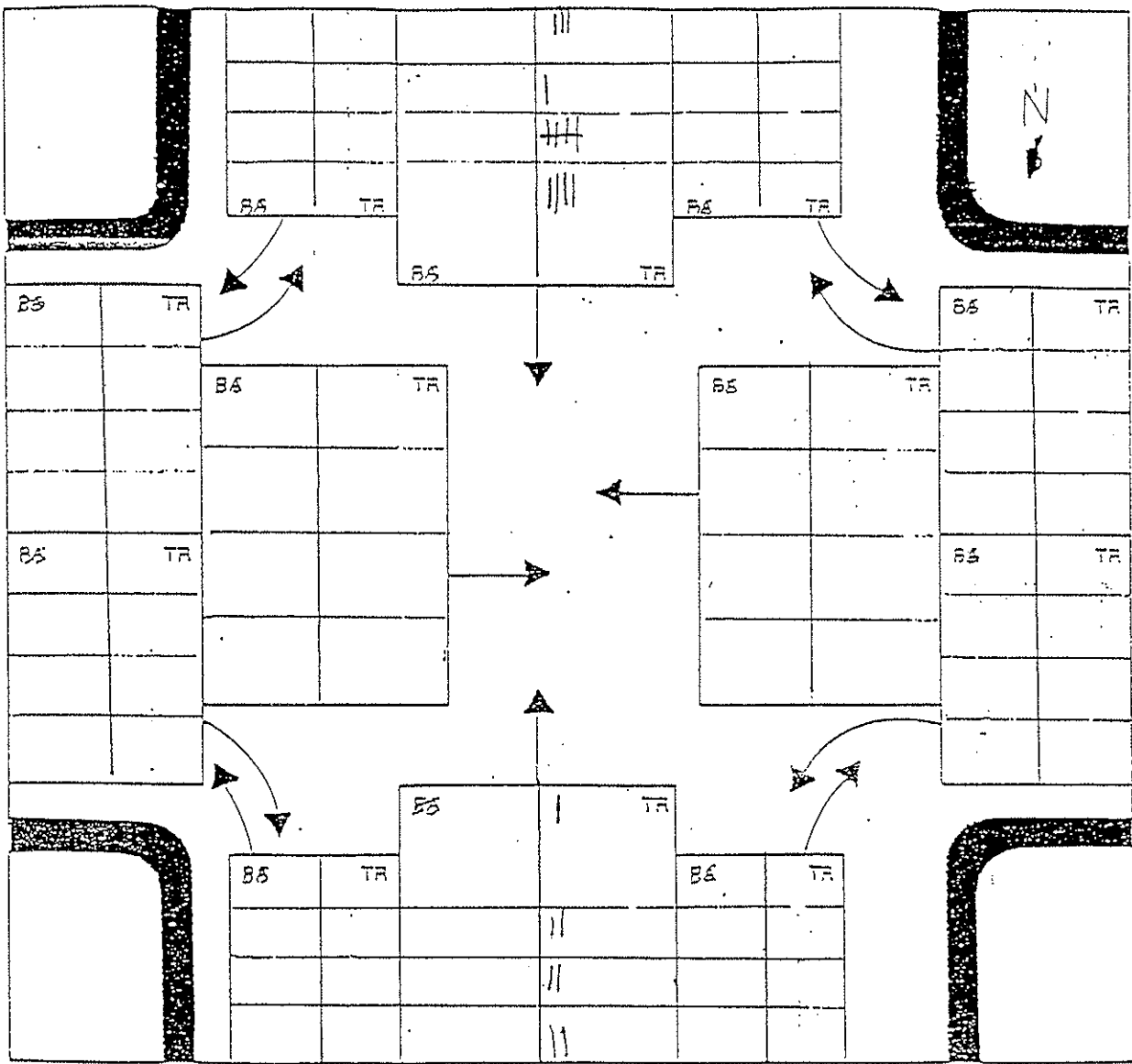


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NS US 301 EW MICHIGAN Rd.
COUNTY FLASCO CITY ZEPHERHILLS
DATE 9-28-98 TIME FROM 1200 TO 1300
OBSERVER GEORGE HILL WEATHER _____
REMARKS _____

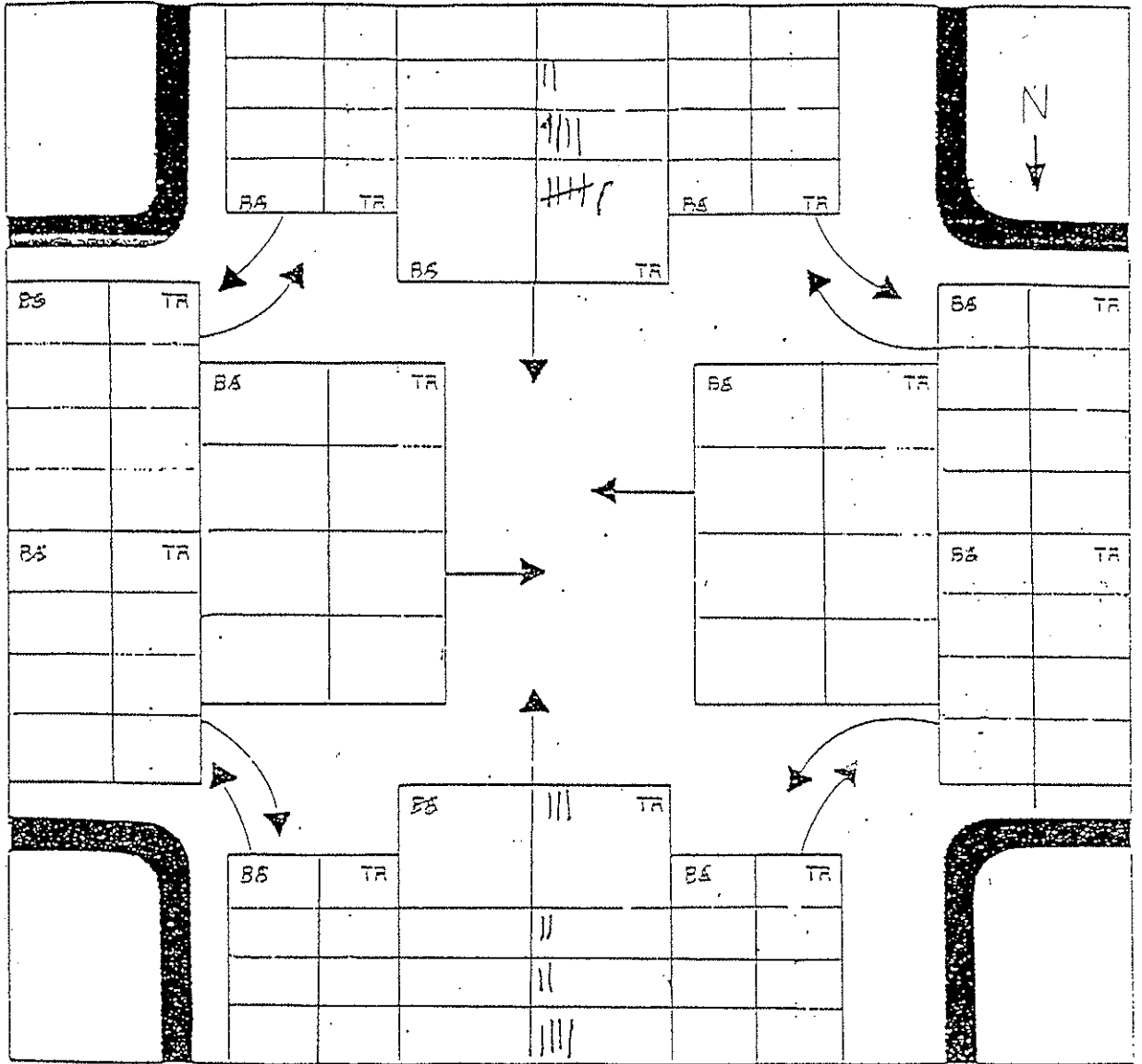


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

SHT 6 OF 8

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NO. US 301 EW MICHIGAN RD
COUNTY FASCO CITY ZEPHERHILLS
DATE 9-28-98 TIME FROM 1500 TO 1600
OBSERVER GEORGE HILL WEATHER CLOUDY
REMARKS _____

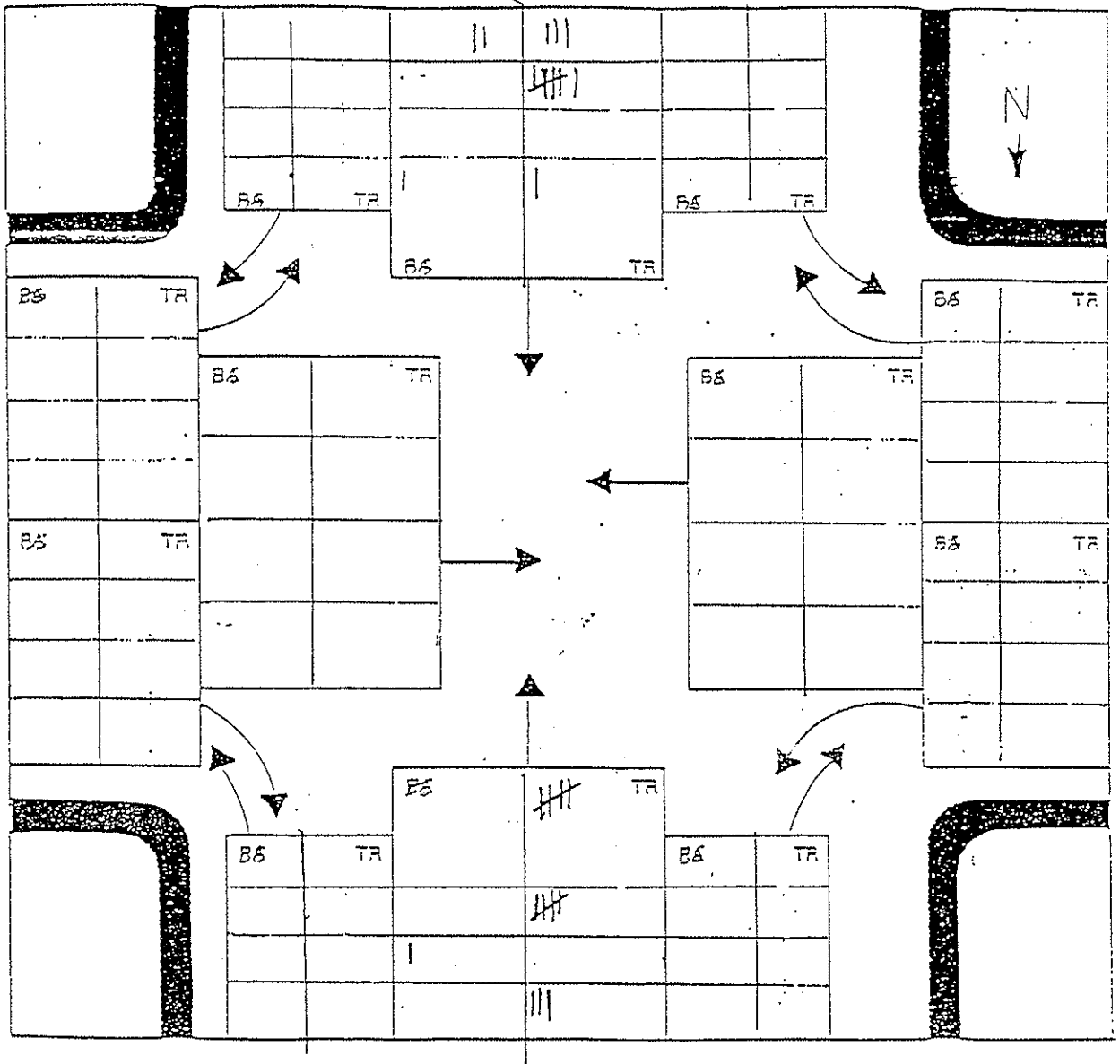


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NO. US 301 EW MICHIGAN RD
 COUNTY PASCO CITY ZEPHERHILLS
 DATE 9-28-98 TIME FROM 1600 TO 1700
 OBSERVER GEORGE HILL WEATHER _____
 REMARKS _____

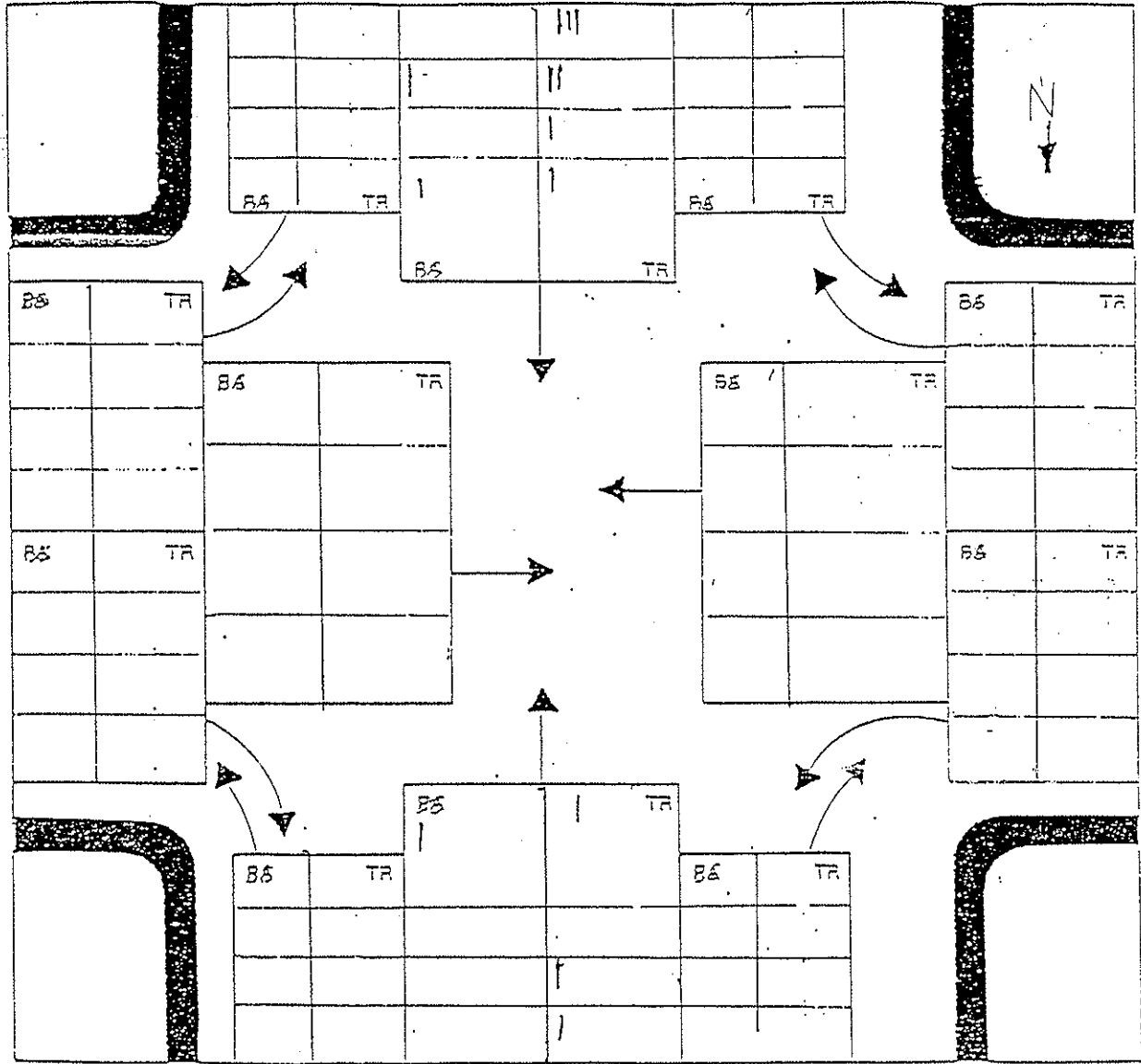


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NO. US 301 EW MICHIGAN R.
 COUNTY FLASCO CITY ZEPHERHILLS
 DATE 9-28-98 TIME FROM 1700 TO 1800
 OBSERVER GEORGE HILL WEATHER _____
 REMARKS _____

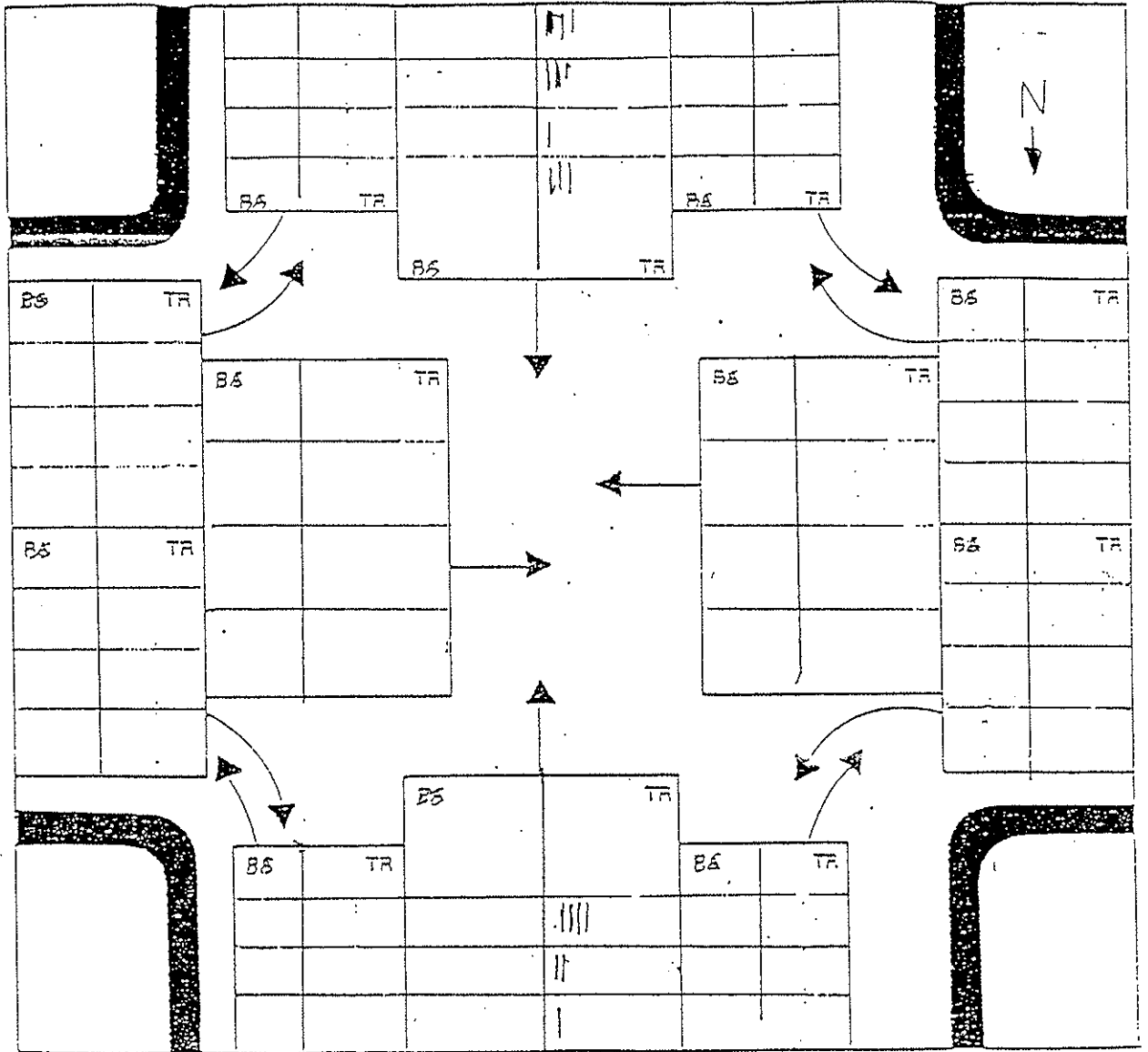


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
 DISTRICT 7 WORK COPY
 TRAFFIC OPERATIONS
 REQUEST FORM

IN OR N (S) E. W. OF	MILE POST #	LOCAL STREET NAMES	U S	S R	SECTION	LEG
Z-Hills	2.744	39 AT Z-Hills Bypass (Chankey Rd)	-	39	1410	-

TYPE OF STUDY: SHRIMP 6-9, 11-1, 3-6 PEDES BIKES
 COUNTY: PASCO
 NOTE SEPARATE TRUCKS & BUSES

SPEED ZONE	TRAFFIC SIGNAL	FLASHING BEACON	SCHOOL SPEED ZONE	UNAUTHORIZED TRAFFIC SIGNAL	DESIGN STUDY	REQUESTED BY: <u>GABOR</u>	DATE: <u>9-16-98</u>
						PERFORMED BY: <u>GEORGE R HILL</u>	
						JOB #:	
STUDY							DATE:
X	X	X	X	X		FIELD SKETCH	
	<u>8</u>	4		8	8	TURNING MOVEMENTS (TO 501 OR 508)	<u>9/22/98</u>
X	X	X	X			SPEED CHECK (TO 503 OR 506)	
	X	X			X	TRAFFIC COUNTS (TO 510 OR 570)	
	X	X				STOP SIGN OBSERVANCE (TO 518)	
	X					STOP & DELAY (TO 507)	
				X		DRIVER OBSERVANCE OF TRAFFIC SIGNAL (TO 504)	
	<u>X</u>	X	X	X	X	PEDESTRIAN VOLUME (TO 502 OR 509)	<u>9/22/98</u>
						DELAY STUDY OF SIGNALIZED INTERSECTION	
X						LEFT TURN STUDY (TO 513)	
	X	X		X		OBSERVATION STUDY (TO 519)	

SPECIAL INSTRUCTIONS: SEE SEPARATE TRUCK/BUS MOVEMENT SHEETS
AND PEDESTRIAN & BIKE COUNT.

CLOUDY

Weather : CLOUDY
 Counter :
 GEORGE R HILL
 SEE SEPERATE TRUCK/BUS MOVEMENT SHTS.

Traffic Counting Equipment & Supplies
 2031 Stout Drive, Suite 4
 Ivyland, PA 18974

Site Code : 000141
 Start Date: 09/22/98
 File I.D. : 39@ZHills
 Page : 1

Vehicle group 1

Date	SR 39 Southbound				Z HILLS BY PASS Westbound				SR 39 Northbound				Z HILLS BY PASS Eastbound				Total
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	
06:00	26	26	6	0	0	9	19	0	0	57	0	0	33	16	4	0	100
06:15	35	26	14	0	0	9	23	1	5	61	1	0	32	25	1	0	233
06:30	23	35	10	0	0	10	37	0	4	58	2	0	19	22	5	0	207
06:45	27	37	10	0	0	17	23	0	3	26	0	0	24	44	6	0	207
Hr Total	111	124	40	0	0	45	102	1	12	202	3	0	108	107	16	0	871
07:00	22	39	17	0	0	7	35	0	3	51	0	0	19	27	2	0	210
07:15	24	44	19	0	0	19	26	0	3	52	0	0	14	26	1	0	220
07:30	19	56	12	0	0	15	24	0	7	47	1	0	17	23	1	0	227
07:45	12	37	2	0	8	17	5	0	16	25	9	0	10	9	15	0	167
Hr Total	77	176	50	0	8	58	90	0	29	175	10	0	60	85	19	0	811
08:00	3	21	0	0	10	10	3	0	14	37	11	0	0	7	21	0	127
08:15	2	24	1	0	12	14	4	0	20	24	17	0	0	7	18	0	147
08:30	3	24	2	0	15	15	2	0	19	52	10	0	0	9	10	0	161
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	8	69	3	0	37	39	9	0	53	113	38	0	0	23	49	0	447
* BREAK *																	
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	4	39	0	0	10	4	6	0	10	31	11	2	0	6	9	0	132
Hr Total	4	39	0	0	10	4	6	0	10	31	11	2	0	6	9	0	132
11:00	2	32	1	0	15	9	10	0	14	44	14	0	0	16	19	0	177
11:15	1	27	0	0	11	10	4	0	12	34	11	0	2	12	11	0	137
11:30	11	38	3	0	18	10	10	0	12	60	9	0	2	9	18	0	200
11:45	7	27	1	0	16	11	9	0	19	38	9	0	0	4	17	0	158
Hr Total	21	124	5	0	60	40	33	0	57	176	43	0	4	41	65	0	667
12:00	9	37	2	0	11	7	6	0	20	47	10	0	1	10	14	0	174
12:15	5	36	0	0	13	5	5	0	18	30	12	0	2	6	12	0	144
12:30	9	39	0	0	14	14	6	0	14	31	7	0	0	14	24	0	172
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	23	112	2	0	38	26	17	0	52	108	29	0	3	30	50	0	490
* BREAK *																	
4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45	5	33	1	0	12	15	4	0	21	42	12	0	3	12	25	0	185
Hr Total	5	33	1	0	12	15	4	0	21	42	12	0	3	12	25	0	185

Weather : CLOUDY
 Counter :
 GEORGE R HILL
 SEE SEPERATE TRUCK/BUS MOVEMENT SHTS.

DATA TECHNOLOGIES, INC.
 Traffic Counting Equipment & Supplies
 2031 Stout Drive, Suite 4
 Ivyland, PA 18974

Site Code : 00014110
 Start Date: 09/22/98
 File I.D. : 39@ZHILS
 Page : 2

Vehicle group 1

Date	SR 39 Southbound				Z HILLS BY PASS Westbound				SR 39 Northbound				Z HILLS BY PASS Eastbound				Total
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	
09/22/98																	
15:00	3	50	1	0	10	7	3	0	24	47	17	0	1	8	22	0	193
15:15	5	37	1	0	20	11	4	0	30	67	26	0	2	9	31	0	243
15:30	4	43	0	0	8	5	3	0	20	52	15	0	0	19	18	0	187
15:45	8	30	1	0	13	14	6	0	24	51	16	0	2	19	37	0	221
Tr Total	20	160	3	0	51	37	16	0	98	217	74	0	5	55	108	0	844
16:00	3	45	0	0	8	8	4	0	18	42	18	0	1	26	22	0	195
16:15	4	42	1	0	17	12	6	0	27	53	17	0	0	22	15	0	216
16:30	5	36	2	0	21	5	6	0	31	55	14	0	1	15	18	0	209
16:45	7	60	1	0	22	32	15	0	21	43	16	0	0	25	27	0	269
Tr Total	19	183	4	0	68	57	31	0	97	193	65	0	2	88	82	0	889
17:00	4	44	2	0	22	19	9	0	25	63	18	0	3	28	33	0	270
17:15	6	47	0	0	14	7	6	0	26	62	17	0	0	20	33	0	238
17:30	4	62	0	0	16	8	6	0	25	73	21	0	1	27	29	0	272
Tr Total	14	153	2	0	52	34	21	0	76	198	56	0	4	75	95	0	780
TOTAL*	302	1173	110	0	336	355	329	1	505	1455	341	2	189	522	518	0	6138

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NO. SR 39 EW Z-HILLS BYPASS
 COUNTY PASCO CITY ZEPHERHILLS
 DATE 9-22-98 TIME FROM 6:00 TO 7:00
 OBSERVER GEORGE R HILL WEATHER CLOUDY
 REMARKS _____

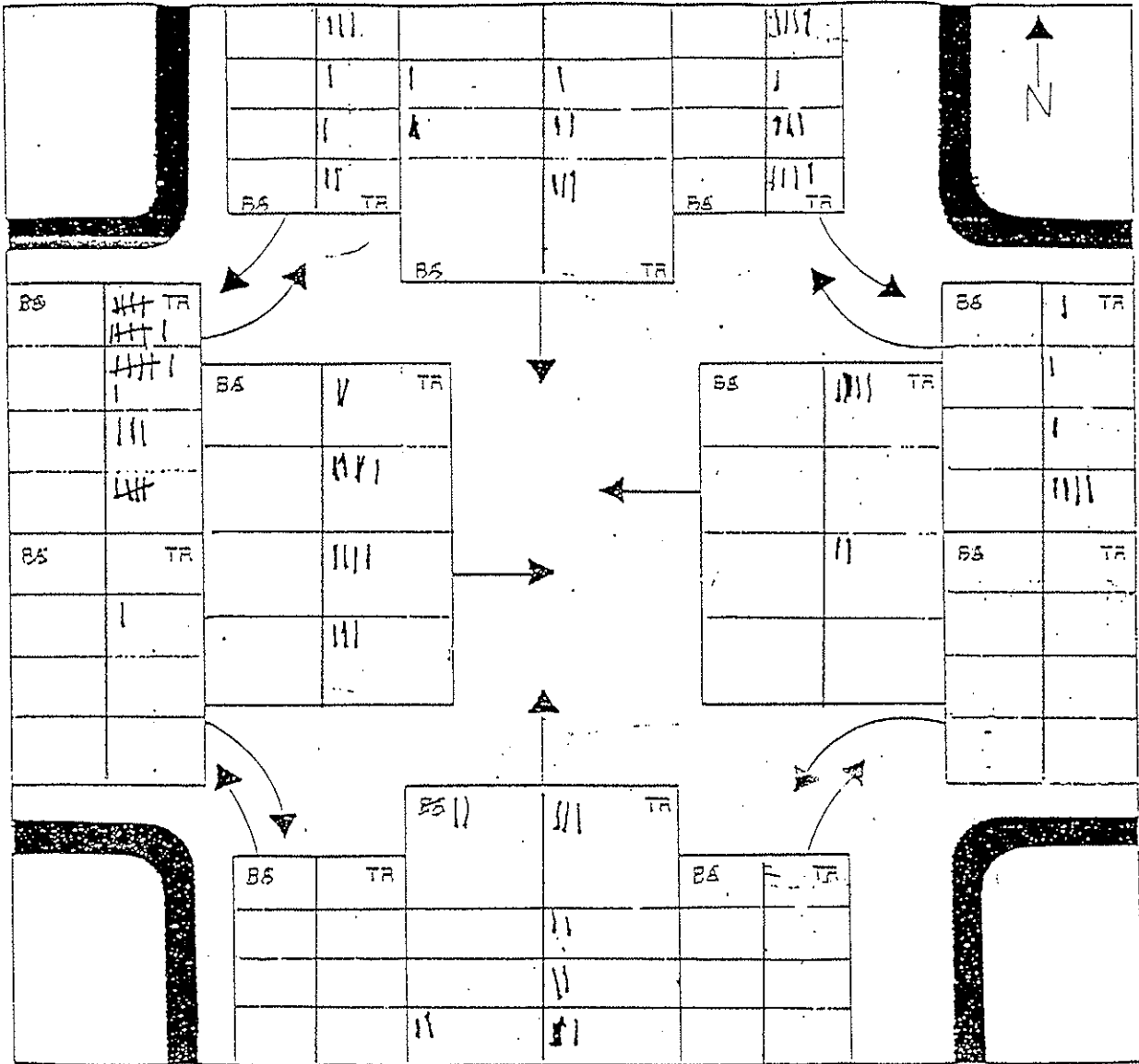


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NO. SR39 EW Z-HILLS BYPASS
 COUNTY PASCO CITY ZEPHER HILLS
 DATE 9-22-98 TIME FROM 7:00 TO 8:00
 OBSERVER GEORGE R HILL WEATHER CLOUDY
 REMARKS _____

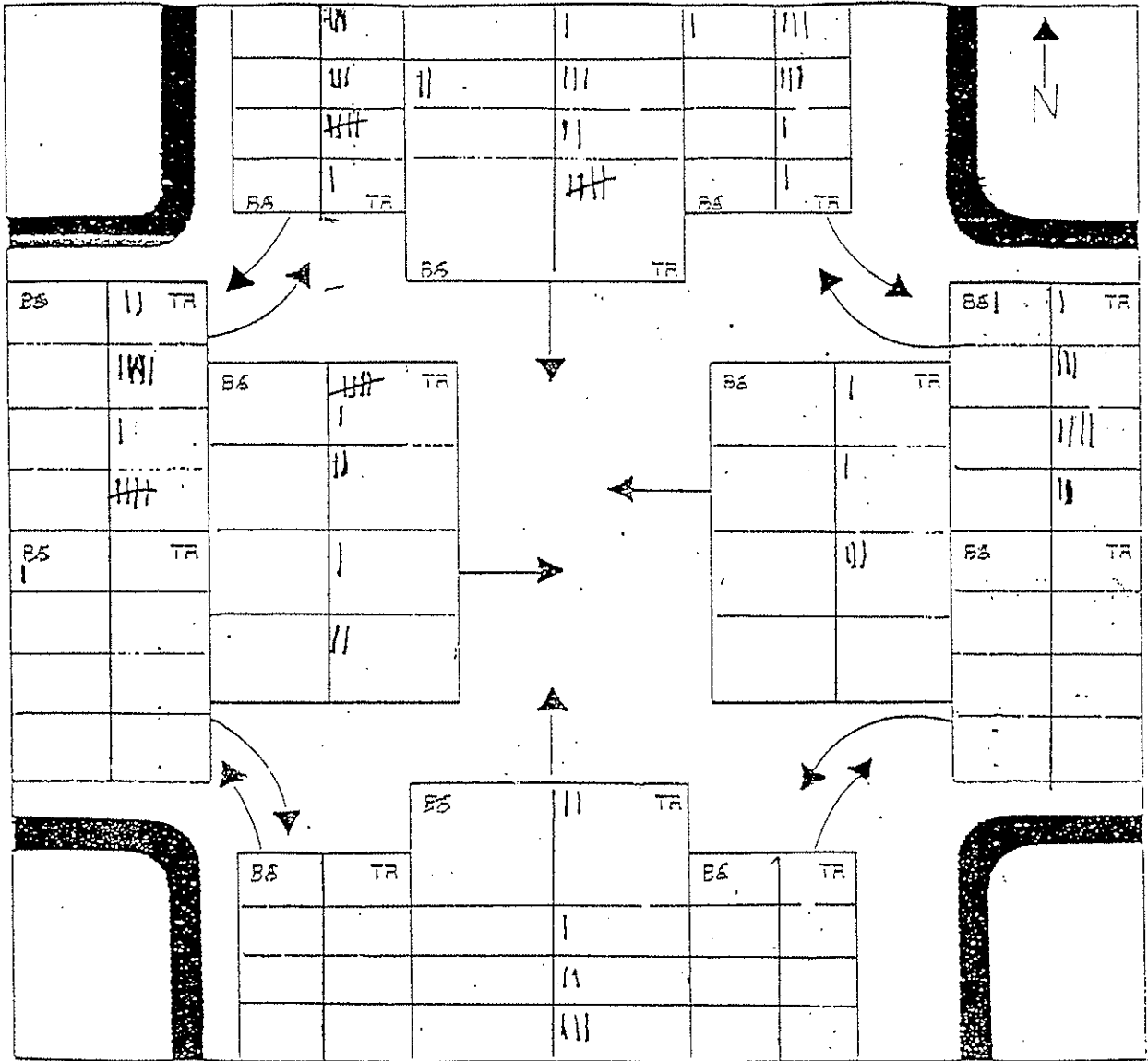


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NS SR39 EW Z-HILLS BY PAS
 COUNTY PASCO CITY ZEPHER HILLS
 DATE 9-22-98 TIME: FROM 7:00 TO 8:00
 OBSERVER GEORGE R HILL WEATHER CLOUDY
 REMARKS _____

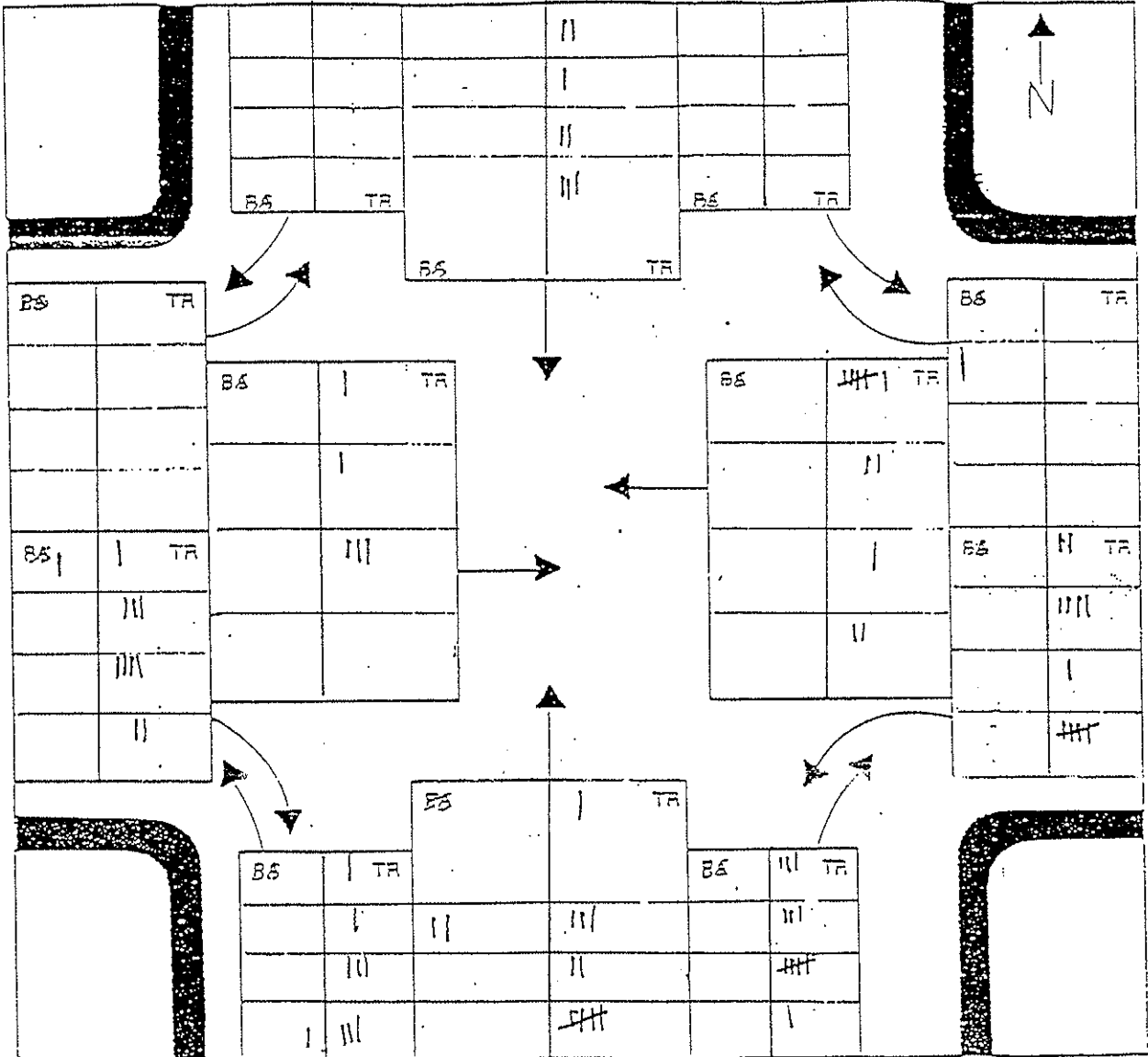


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NO. SR 39 EW Z-HILLS BYPASS
 COUNTY PASCO CITY ZEPHER HILLS
 DATE 9-22-98 TIME FROM 8:00 TO 2:00
 OBSERVER GEORGE R HILL WEATHER CLOUDY
 REMARKS _____

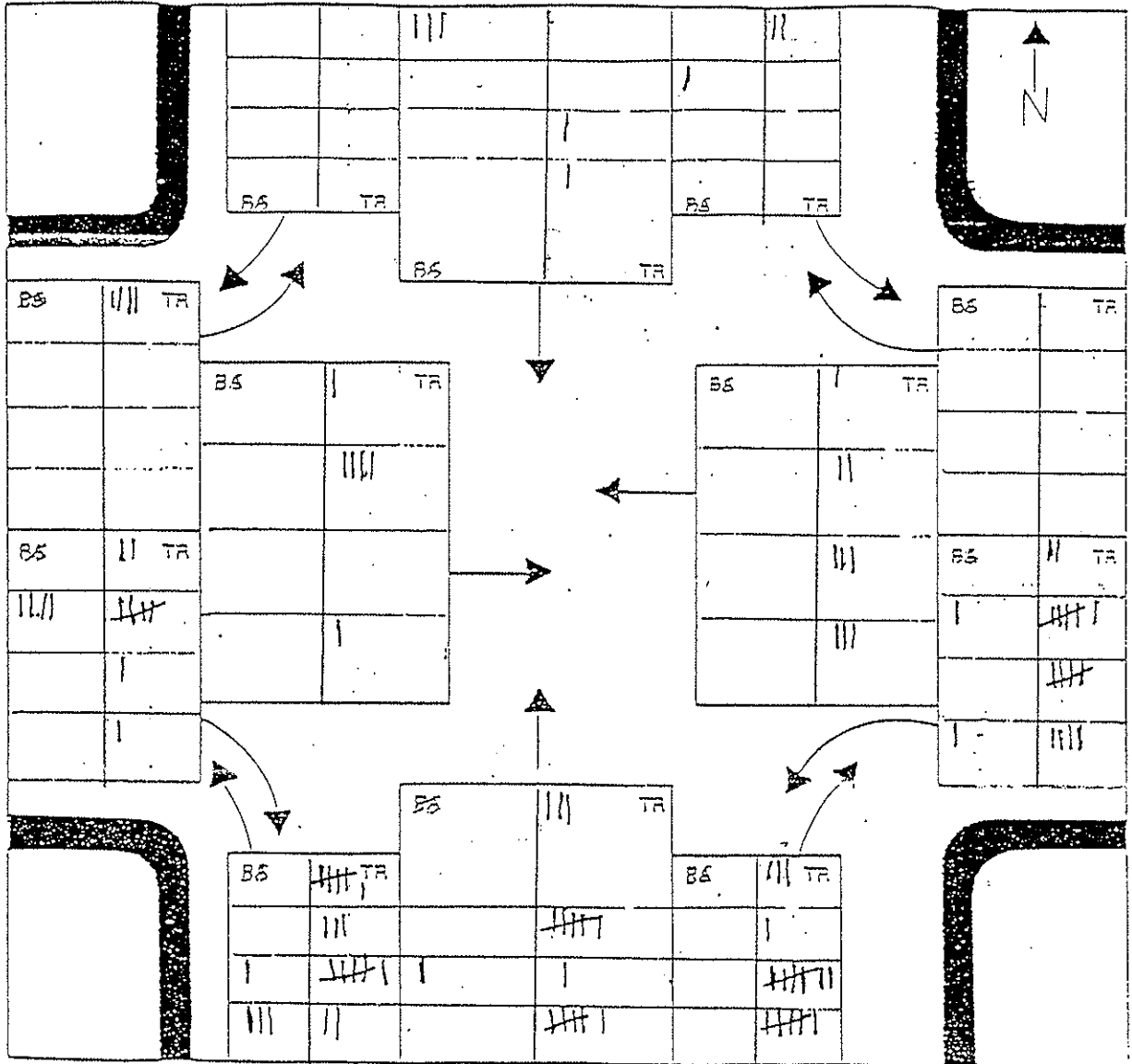


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NO. SR 39 EW Z-HILLS BYPASS
 COUNTY PASCO CITY ZEPHER HILLS
 DATE 9-22-98 TIME FROM 11:00 TO 12:00
 OBSERVER GEORGE R HILL WEATHER _____
 REMARKS _____

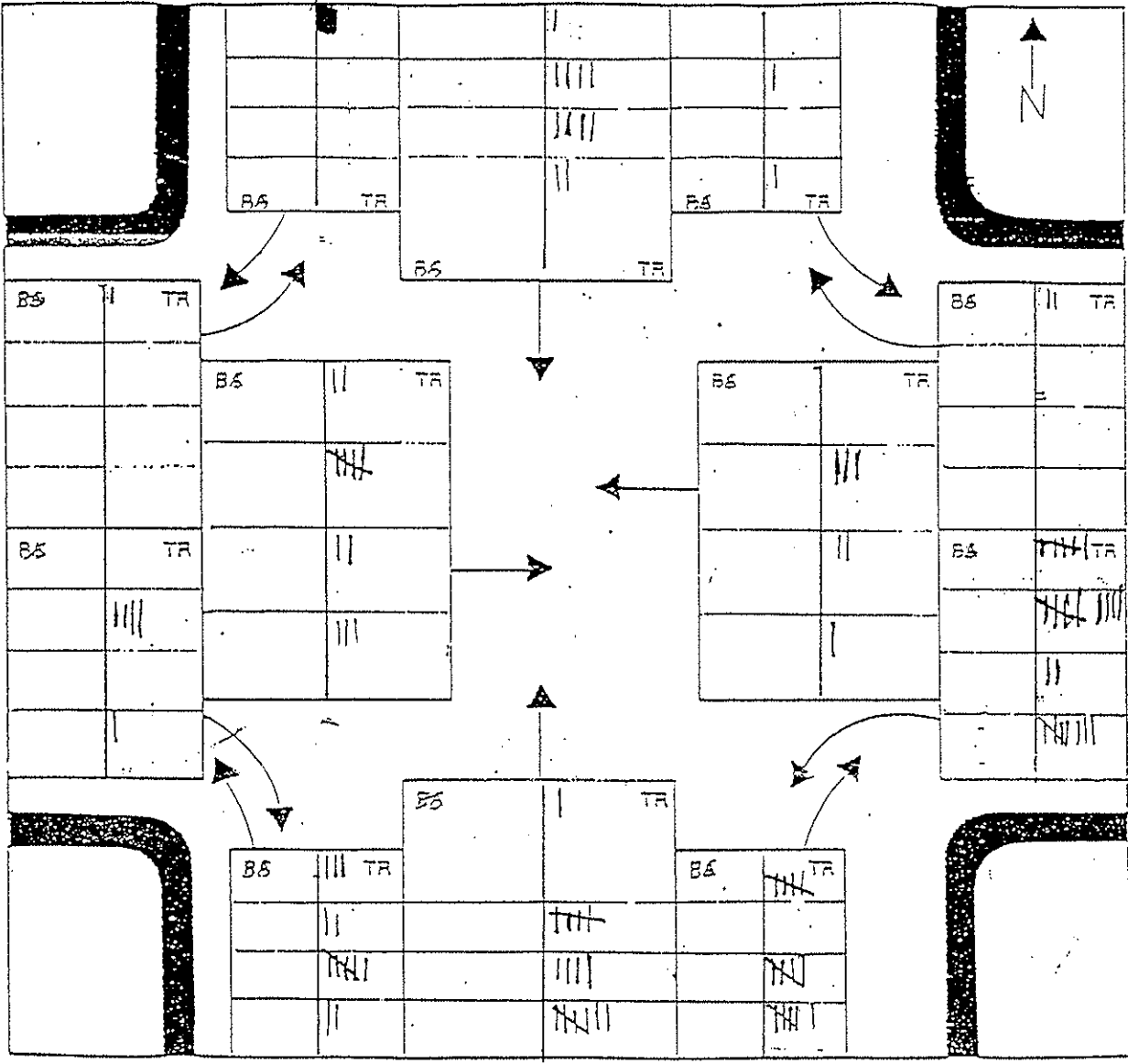


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NS SR 39 EW Z-HILLS BYPASS
 COUNTY PASCO CITY ZEPHER HILLS
 DATE 9-22-98 TIME FROM 1500 TO 16:00
 OBSERVER GEORGE R. HILL WEATHER CLOUDY
 REMARKS _____

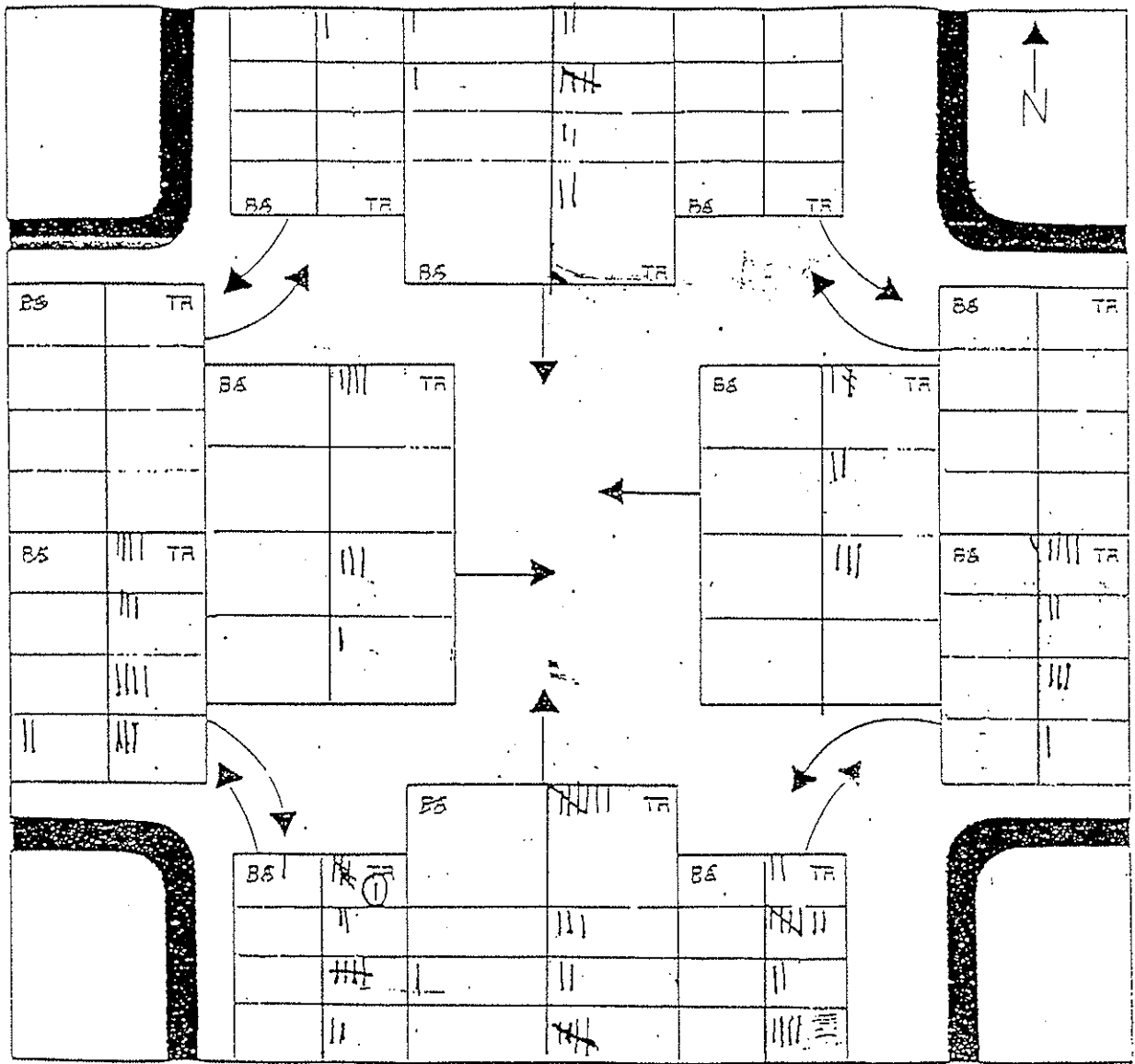


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NS SR39 EW Z-HILLS BYPASS
 COUNTY PASCO CITY ZEPHERHILLS
 DATE 9-22-98 TIME: FROM 12:00 TO 13:00
 OBSERVER GEORGE R HILL WEATHER _____
 REMARKS _____

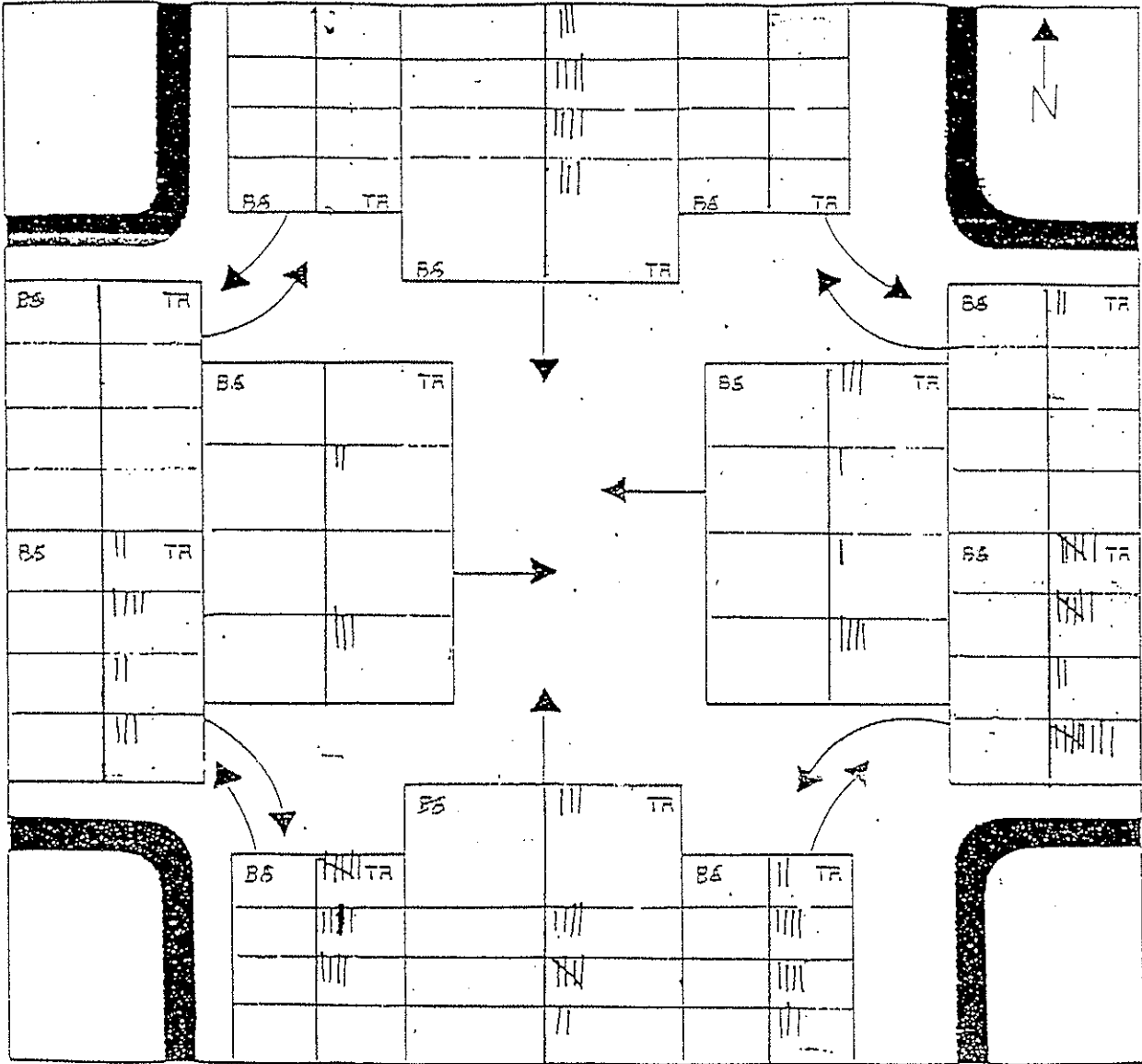


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NO. SR 39 EW Z-HILLS BY PASS
 COUNTY PASCO CITY ZEPHER HILLS
 DATE 9-22-98 TIME FROM 16:00 TO 17:00
 OBSERVER GEORGE R HILL WEATHER _____
 REMARKS _____

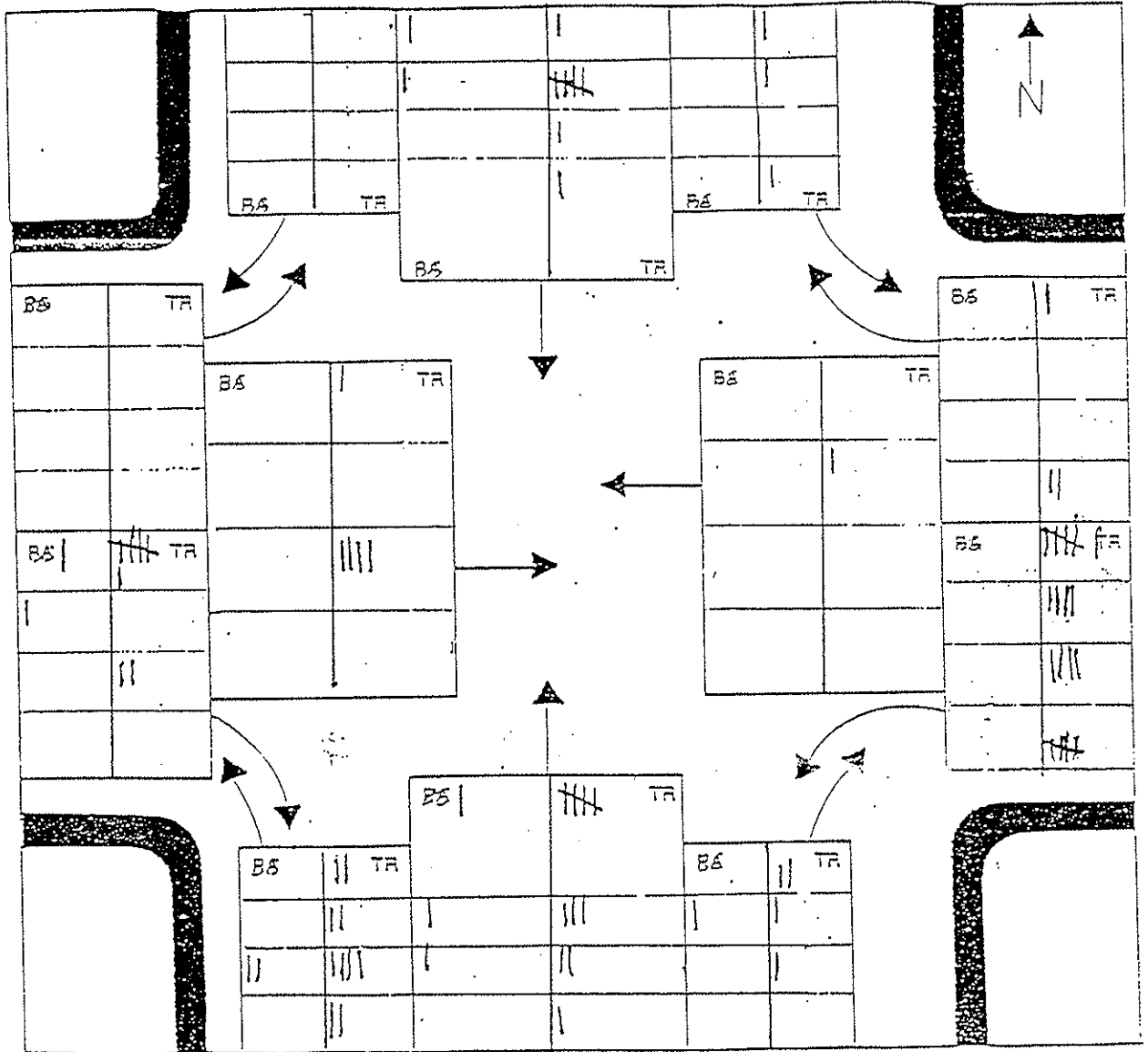


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

5HT.80FB

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NS SR39 EW Z-HILLS BYPASS
COUNTY PASCO CITY ZEPHER HILLS
DATE 9-22-98 TIME: FROM 17:00 TO 18:00
OBSERVER GEORGE R HILL WEATHER CLOUDY
REMARKS _____

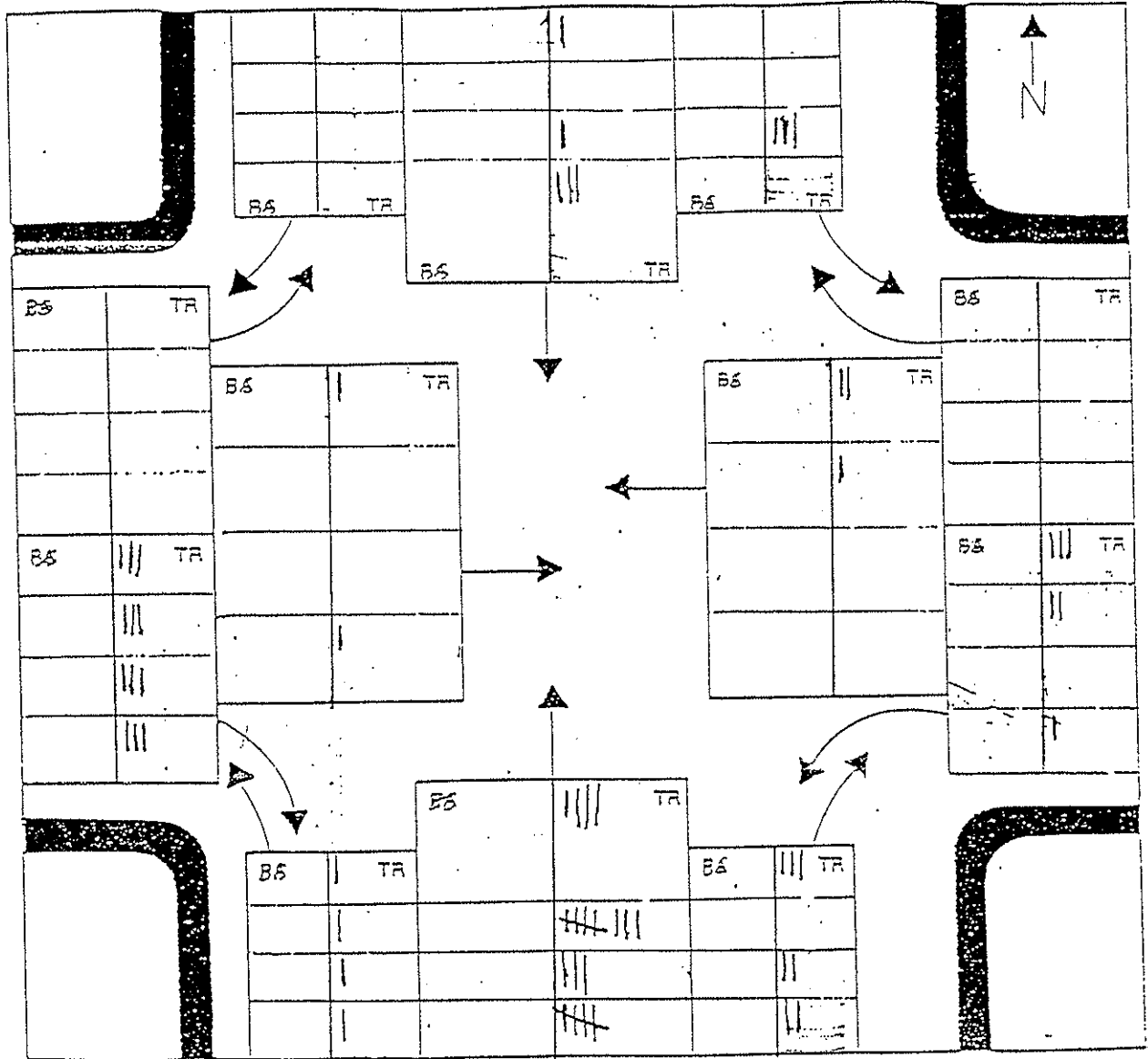


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

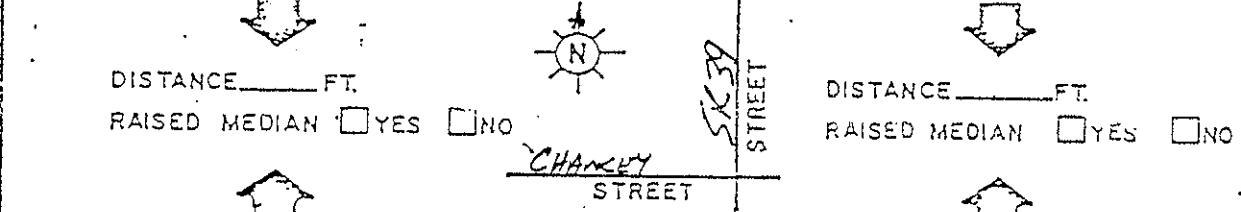
SHT 1052

FLORIDA DEPARTMENT OF TRANSPORTATION
PEDESTRIAN VOLUME FORM

LOCATION I.D. SR39 e Z-Hills Bypass
 COUNTY Pasco CITY Z-Hills TYPE OF CONTROL SIG
 STUDY DATE 9-22-98 TIME: FROM 6:00 ^{AM} ~~PM~~ TO 12:00 ^{AM} ~~PM~~ OBSERVER GRH
 REMARKS _____

	TIME PERIODS				DISTANCE _____ FT.	RAISED MEDIUM YES <input type="checkbox"/> NO <input type="checkbox"/>	TIME PERIODS				
	6-7	7-8	8-9	11-12			6-7	7-8	8-9	11-12	
P	0	0	0	0	↔		↔	0	0	0	0
B	0	0	0	0				0	0	0	0
TOTALS	0	0	0	0				0	0	0	0

P	0	0	0	0	↓		↓	0	0	0	0
B	0	1	0	0				0	0	0	0
TOTALS	0	1	0	0				0	0	0	0



P	0	0	0	0	↑		↑	0	0	0	0
B	0	1	0	0				0	0	0	0
TOTALS	0	1	0	0				0	0	0	0

	TIME PERIODS				DISTANCE _____ FT.	RAISED MEDIUM YES <input type="checkbox"/> NO <input type="checkbox"/>	TIME PERIODS				
	6-7	7-8	8-9	11-12			6-7	7-8	8-9	11-12	
P	0	0	0	0	↔		↔	0	0	0	0
B	0	0	0	0				0	0	0	0
TOTALS	0	0	0	0				0	0	0	0

547 20F2

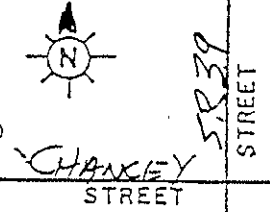
FLORIDA DEPARTMENT OF TRANSPORTATION PEDESTRIAN VOLUME FORM

LOCATION I.D. SR39 @ Z-HILLS BYPASS
 COUNTY PASCO CITY Z-HILLS TYPE OF CONTROL SLK
 STUDY DATE 9-22-98 TIME: FROM 12:00 AM TO 1:00 PM OBSERVER GRH
 REMARKS _____

		TIME PERIODS					
		12-1	3-4	4-5	5-6		
P	DISTANCE	0	0	0	0	RAISED MEDIAN	<input type="checkbox"/> YES
	FT.						<input type="checkbox"/> NO
B	RAISED MEDIAN	0	0	0	0	TOTALS	<input type="checkbox"/> YES
	YES						<input type="checkbox"/> NO
		0	0	0	0		

P	0	0	0	0	RAISED MEDIAN	<input type="checkbox"/> YES
	0	0	0	0		<input type="checkbox"/> NO
B	0	0	0	0	TOTALS	<input type="checkbox"/> YES
	0	0	0	0		<input type="checkbox"/> NO
		0	0	0		

DISTANCE _____ FT.
 RAISED MEDIAN YES NO



DISTANCE _____ FT.
 RAISED MEDIAN YES NO

P	0	0	0	0	RAISED MEDIAN	<input type="checkbox"/> YES
	0	0	0	0		<input type="checkbox"/> NO
B	0	0	0	0	TOTALS	<input type="checkbox"/> YES
	0	0	0	0		<input type="checkbox"/> NO
		0	0	0		

DISTANCE _____ FT.
 RAISED MEDIAN YES NO

P	0	0	0	0	RAISED MEDIAN	<input type="checkbox"/> YES
	0	0	0	0		<input type="checkbox"/> NO
B	0	0	0	0	TOTALS	<input type="checkbox"/> YES
	0	0	0	0		<input type="checkbox"/> NO
		0	0	0		

FLORIDA DEPARTMENT OF TRANSPORTATION
 DISTRICT 7 *WORK COPY*
 TRAFFIC OPERATIONS
 REQUEST FORM

IN OR <i>(N)</i> S. E. W. OF	MILE POST #	LOCAL STREET NAMES	U S	S R	SECTION	LEG
<i>PLANT CITY</i>	<i>A. 260</i>	<i>SR 39 AT KNIGHTS/ GRIFFIN RD</i>	—	<i>39</i>	<i>10700</i>	—

TYPE OF STUDY: *EMR TMC 6-9, 11-1, 3-6 & Ped counts & Bikes*
NOTE separate of Busses & Trucks COUNTY: *Hillborough*

SPEED ZONE	TRAFFIC SIGNAL	FLASHING BEACON	SCHOOL SPEED ZONE	UNAUTHORIZED TRAFFIC SIGNAL	DESIGN STUDY	REQUESTED BY: <i>GABOR</i>	DATE: <i>9-16-98</i>
						PERFORMED BY: <i>JOHN PEREZ</i>	
						JOB #:	
STUDY							
							DATE: <i>9-22-98</i>
X	X	X	X	X	X	FIELD SKETCH	
	<i>(8)</i>	4		8	8	TURNING MOVEMENTS (TO 501 OR 508)	
X	X	X	X			SPEED CHECK (TO 503 OR 506)	
	X	X			X	TRAFFIC COUNTS (TO 510 OR 570)	
	X	X				STOP SIGN OBSERVANCE (TO 518)	
	X					STOP & DELAY (TO 507)	
	<i>(X)</i>	X	X	X	X	DRIVER OBSERVANCE OF TRAFFIC SIGNAL (TO 504)	
					X	PEDESTRIAN VOLUME (TO 502 OR 509) <i>& Bikes</i>	
						DELAY STUDY OF SIGNALIZED INTERSECTION	
X						LEFT TURN STUDY (TO 513)	
	X	X		X		OBSERVATION STUDY (TO 519)	

SPECIAL INSTRUCTIONS: _____

WEATHER CLOUDY
 Counter :
 COUNTED BY JP

JAMAR Technologies, Inc.
 Traffic Counting Equipment & Supplies
 2031 Stout Drive, Suite 4
 Ivyland, PA 18974

Site Code : 1020000
 Start Date: 09/22/99
 File I.D. : TURN014
 Page : 1

Vehicle group 1

Date 09/22/98	Southbound				Westbound				Northbound				Eastbound				Total
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	
06:00	3	29	11	1	2	19	0	0	7	16	8	0	12	31	11	0	150
06:15	22	80	8	0	11	23	19	0	1	30	1	0	8	6	12	0	221
06:30	12	73	6	0	17	16	29	0	5	46	2	0	6	14	8	0	234
06:45	24	91	5	0	14	33	28	0	5	35	0	0	13	11	14	0	273
Hr Total	61	273	30	1	44	91	76	0	18	127	11	0	39	62	45	0	878
07:00	15	67	8	0	12	26	17	0	9	24	9	0	4	14	16	0	221
07:15	15	56	7	0	10	35	20	0	16	41	9	0	5	15	15	0	244
07:30	17	73	16	0	11	39	25	0	15	34	3	0	3	16	14	0	266
07:45	14	84	15	0	16	37	16	0	20	34	4	0	9	18	13	0	280
Hr Total	61	280	46	0	49	137	78	0	60	133	25	0	21	63	58	0	1011
08:00	16	66	12	0	13	27	16	0	5	28	4	0	9	21	21	0	238
08:15	15	35	7	0	10	22	3	0	9	28	2	0	4	8	13	0	156
08:30	11	42	2	0	8	20	8	0	10	21	8	0	0	13	12	0	155
08:45	13	32	3	0	7	19	6	0	3	30	7	0	4	10	19	0	153
Hr Total	55	175	24	0	38	88	33	0	27	107	21	0	17	52	65	0	702
* BREAK *																	
11:00	7	32	1	0	13	10	4	0	5	23	4	0	3	7	12	0	121
11:15	3	39	4	0	6	10	7	0	7	29	9	0	1	11	7	0	133
11:30	9	39	3	0	5	13	7	0	7	35	6	0	4	15	10	0	153
11:45	5	29	2	0	7	10	10	0	9	28	2	0	3	8	5	0	118
Hr Total	24	139	10	0	31	43	28	0	28	115	21	0	11	41	34	0	525
12:00	6	23	2	0	5	5	8	0	8	42	7	0	3	7	3	0	119
12:15	9	34	1	0	4	4	4	0	7	24	8	0	3	6	4	0	108
12:30	6	26	4	1	10	11	10	0	5	22	4	0	3	6	7	0	115
12:45	10	25	2	0	6	11	7	0	9	27	5	0	3	7	8	0	120
Hr Total	31	108	9	1	25	31	29	0	29	115	24	0	12	26	22	0	462
* BREAK *																	
5:00	10	46	4	0	10	9	8	0	10	39	12	0	3	8	14	0	173
5:15	10	29	5	0	5	21	5	0	9	40	6	0	4	15	11	0	160
5:30	22	50	9	0	9	6	11	0	19	58	10	0	5	18	9	0	226
5:45	24	58	5	0	14	14	22	0	11	39	9	0	7	21	14	0	238
Hr Total	66	183	23	0	38	50	46	0	49	176	37	0	19	62	48	0	797
6:00	11	34	6	0	7	18	17	1	12	52	14	0	6	19	17	0	214
6:15	6	48	2	0	10	16	13	0	15	65	10	0	4	21	9	0	219
6:30	8	35	6	0	9	19	14	0	13	57	10	0	9	23	6	0	209
6:45	16	30	4	0	12	19	10	0	14	64	24	0	5	23	9	0	230
Hr Total	41	147	18	0	38	72	54	1	54	238	58	0	24	86	41	0	872

WEATHER CLOUDY
 Counter :
 COUNTED BY JP

JAMAR Technologies, Inc.
 Traffic Counting Equipment & Supplies
 2031 Stout Drive, Suite 4
 Ivyland, PA 18974

Site Code : 10200000
 Start Date: 09/22/98
 File I.D. : TURN]014
 Page : 2

Vehicle group 1

Date	Southbound				Westbound				Northbound				Eastbound				Total
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	
09/22/98																	
17:00	17	41	6	0	8	25	15	0	19	68	13	0	4	23	14	0	253
17:15	13	40	6	0	10	26	26	0	17	78	21	0	8	33	12	0	290
17:30	22	43	3	0	9	28	32	0	11	66	14	0	7	42	14	0	291
17:45	18	44	5	0	11	19	21	0	10	75	15	0	12	37	14	0	281
Hr Total	70	168	20	0	38	98	94	0	57	287	63	0	31	135	54	0	1115
TOTAL	409	1473	180	2	301	610	438	1	322	1298	260	0	174	527	367	0	6362

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NS SR. 39 @ KNIGHTS / GRIFFIN RD EW
 COUNTY Hills CITY PLANT CITY
 DATE 9-22-98 TIME FROM 6:AM TO 6:45
 OBSERVER JOHN PEREZ WEATHER cloudy
 REMARKS

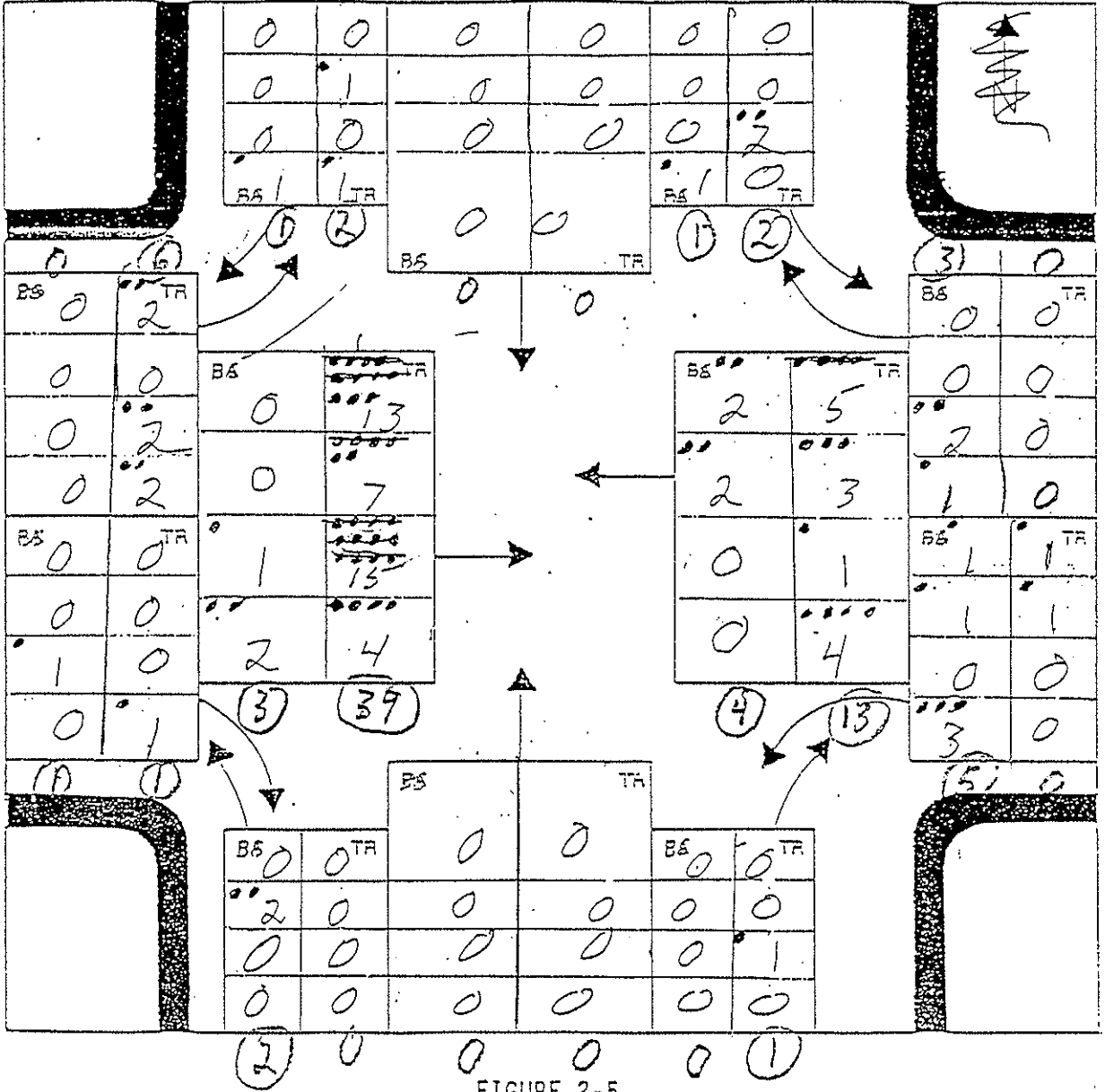


FIGURE 2-5

NOTE: EACH SQUARE

REPRESENT 15 MIN. (Source: Florida Department of Transportation)

VEHICLE MOVEMENT DATA FORM

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.O. NS SR. 39 @ KNIGHTS VERIFFIN RD EW
 COUNTY Hills CITY PLANT CITY
 DATE 9-22-98 TIME FROM 7:AM TO 7:45
 OBSERVER JOHN PEREZ WEATHER cloudy
 REMARKS _____

N

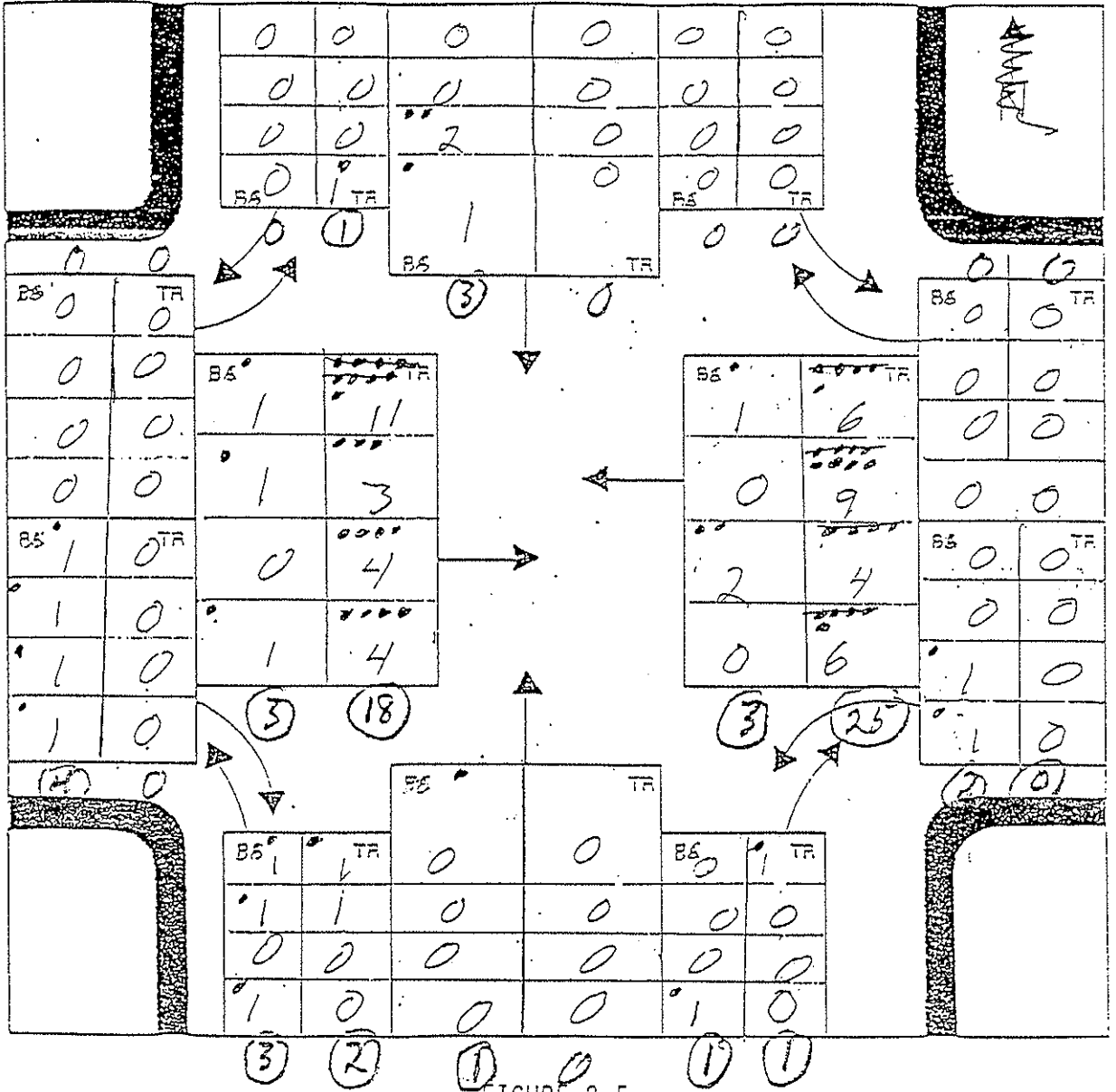


FIGURE 2-5

NOTE: EACH SQUARE REPRESENT 15 MIN. (Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NS SR. 39 @ KNIGHTS, GRIFFIN RD EW
 COUNTY Hills CITY PLANT CITY
 DATE 9-22-98 TIME FROM 8:AM TO 8:45
 OBSERVER JOHN PEREZ WEATHER cloudy
 REMARKS

N

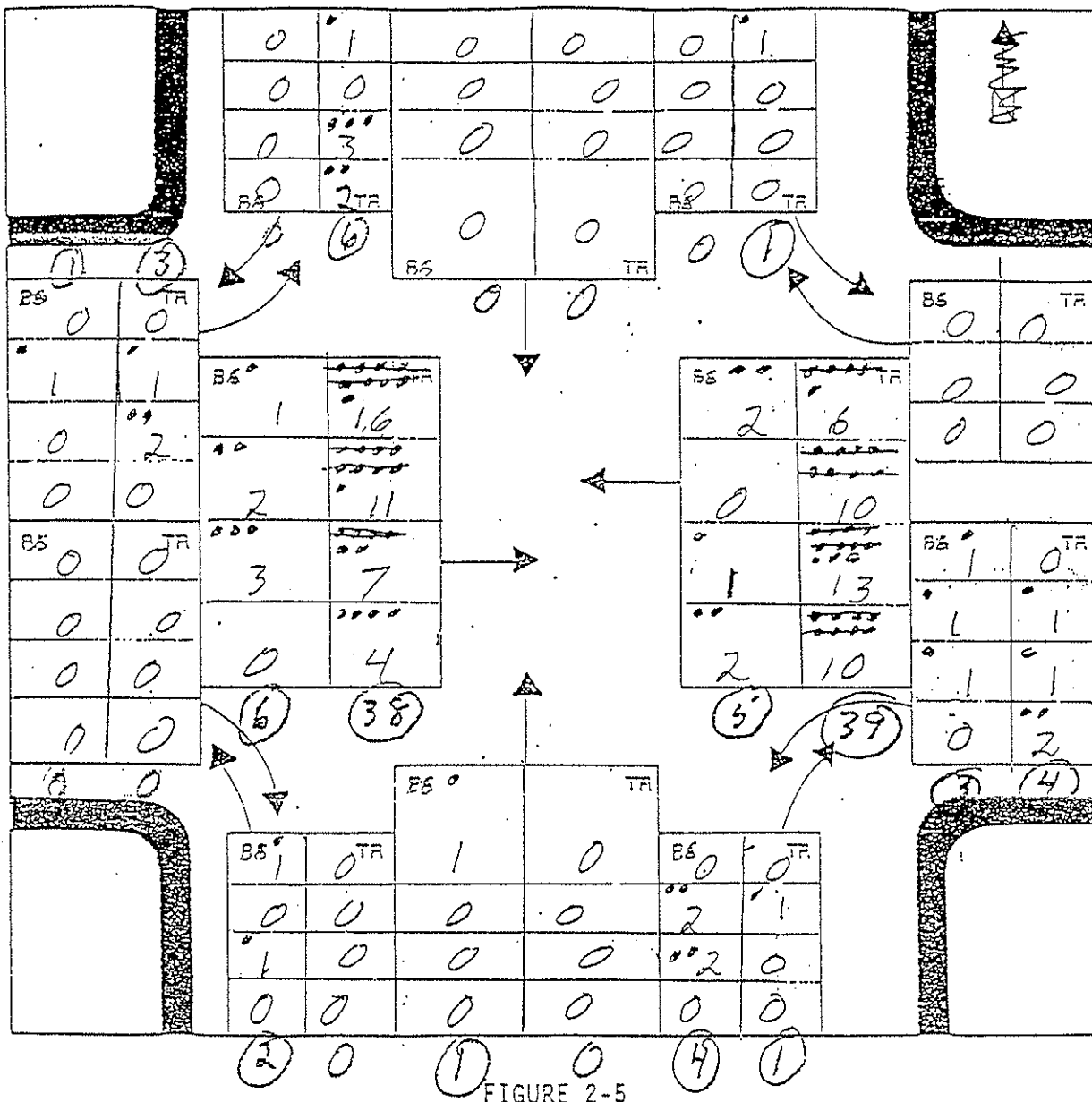


FIGURE 2-5

NOTE: EACH SQUARE REPRESENT 15 MIN. (Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

12-1
4-4

LOCATION I.D. NS SR. 39 @ KNIGHTS, GRIFFIN RD EW
 COUNTY HILLS CITY PLANT CITY
 DATE 9-22-78 TIME FROM 11: AM TO 11:45
 OBSERVER JOHN PEREZ WEATHER cloudy
 REMARKS _____

N

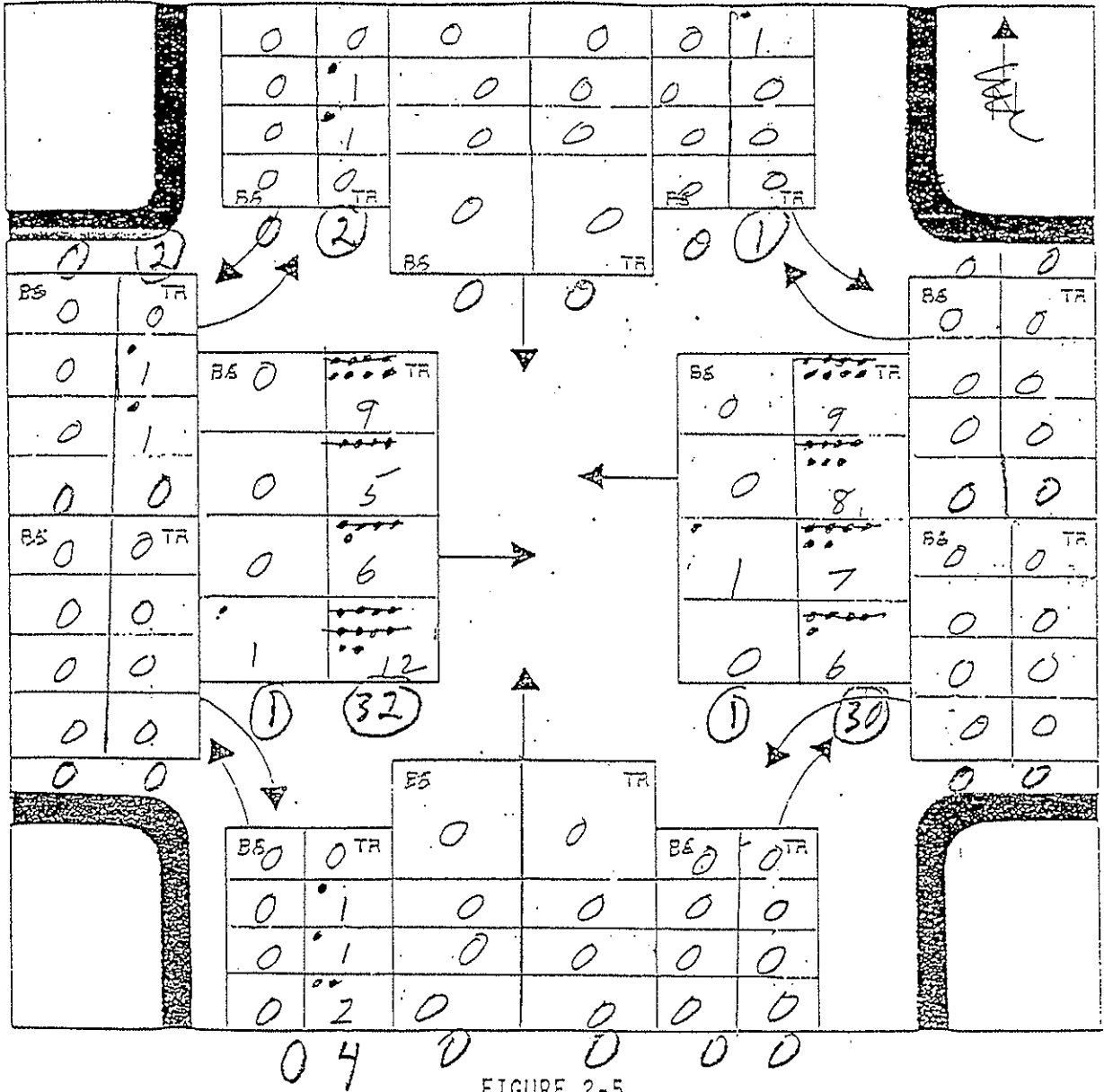


FIGURE 2-5

NOTE: EACH SQUARE REPRESENT 15 MIN. (Source: Florida Department of Transportation)

VEHICLE MOVEMENT DATA FORM

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NS SR. 39 @ KNIGHTS / GRIFFIN RD. EW
 COUNTY HILLS CITY PLANT CITY
 DATE 9-22-98 TIME FROM 12:00 TO 1:00 P.M.
 OBSERVER JOHN PEREZ WEATHER cloudy
 REMARKS _____

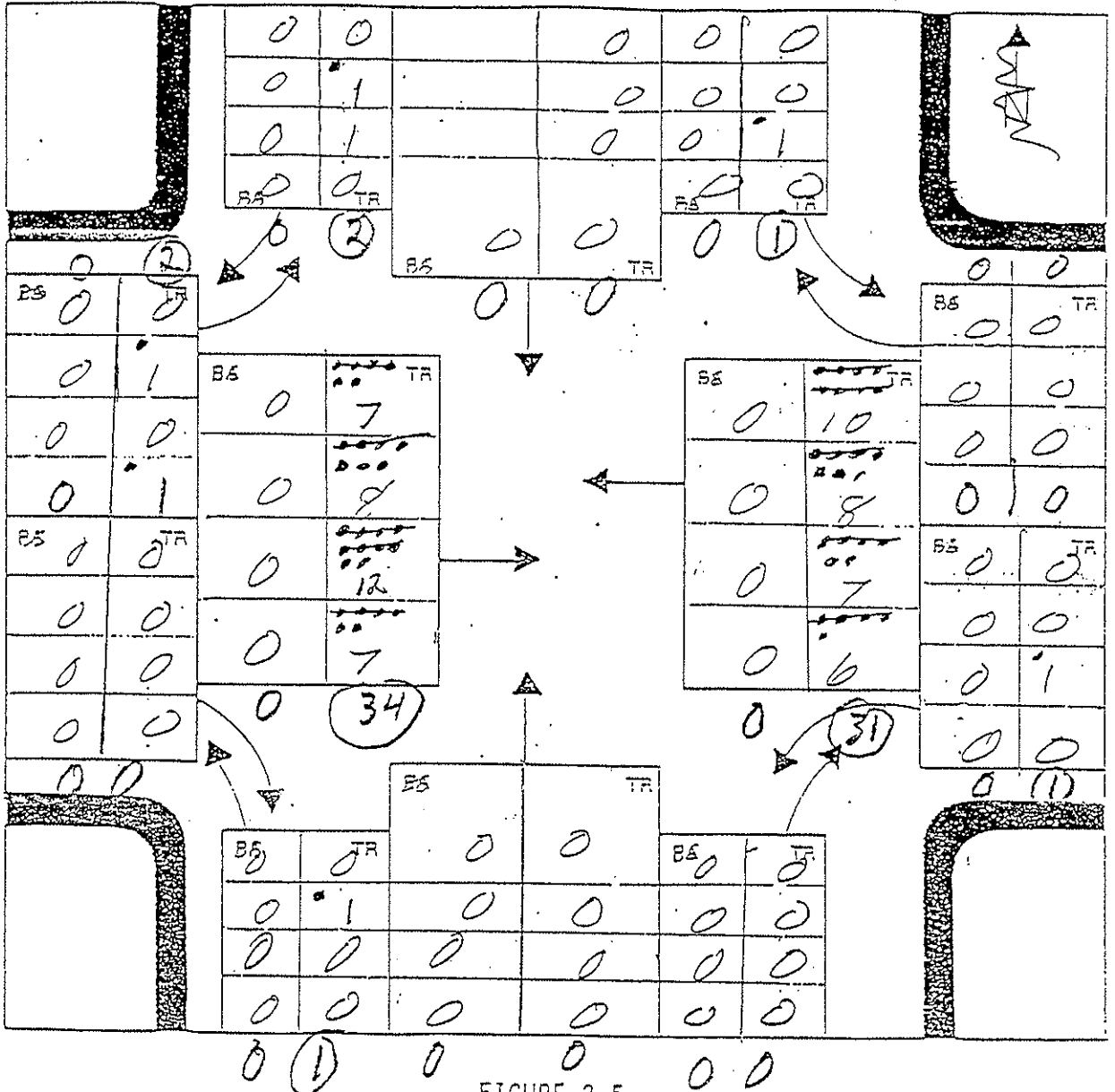


FIGURE 2-5

Note: Each square represent 15 min.

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NO. SR. 39 @ KNIGHTS / GRIFFIN RD. EW
 COUNTY HILLS CITY PLANT CITY
 DATE 9-22-98 TIME FROM 3: P.M. TO 3:45
 OBSERVER JOHN PEREZ WEATHER RAINING
 REMARKS _____

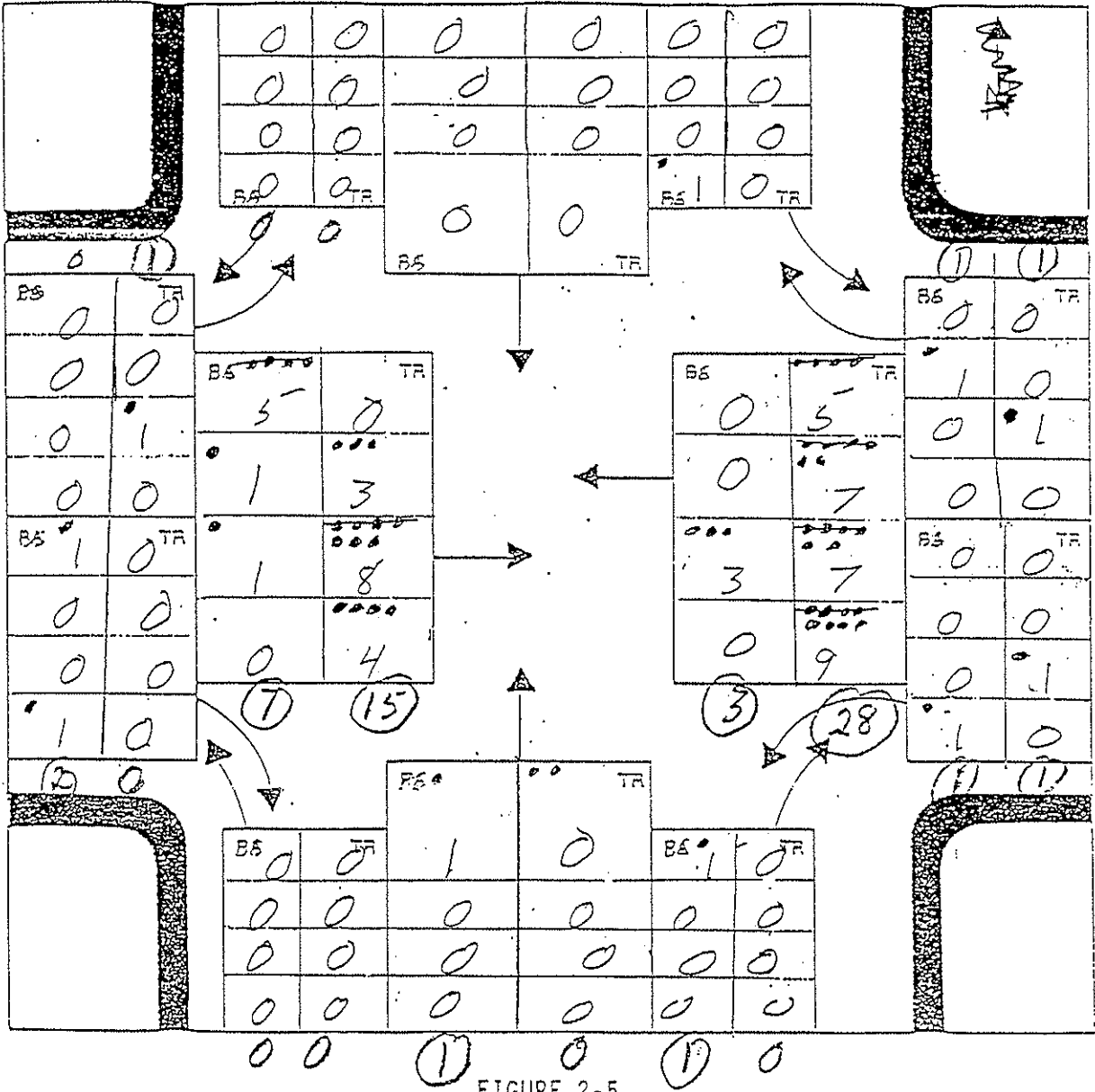
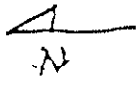


FIGURE 2-5

BTE: EACH SQUARE REPRESENT 15 MIN. (Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

12-1
5-4

LOCATION I.D. NS SR. 39 @ KNIGHTS, GRIFFIN RD EW
 COUNTY Hills CITY PLANT CITY
 DATE 9-22-98 TIME: FROM 4: P.M. TO 4:45
 OBSERVER JOHN PEREZ WEATHER RAINING
 REMARKS

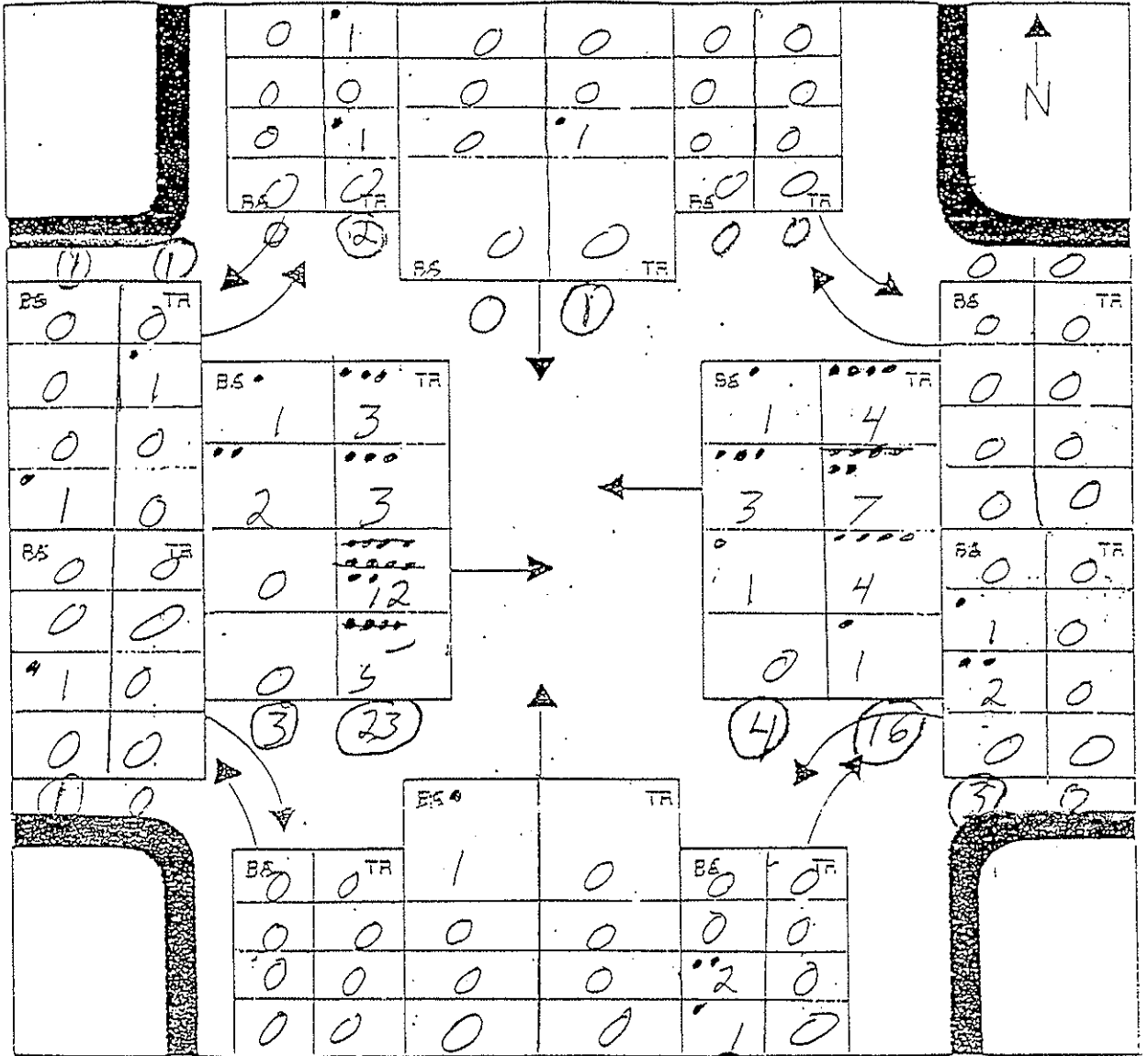


FIGURE 2-5

NOTE: EACH SQUARE REPRESENT 15 MIN. (Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

12-1
4

LOCATION I.O. NS SR. 39 @ KNIGHTS GRIFFIN RD EW
 COUNTY Hills CITY PLANT CITY
 DATE 9-22-98 TIME FROM 5: P.M. TO 5:45
 OBSERVER JOHN PEREZ WEATHER cloudy
 REMARKS

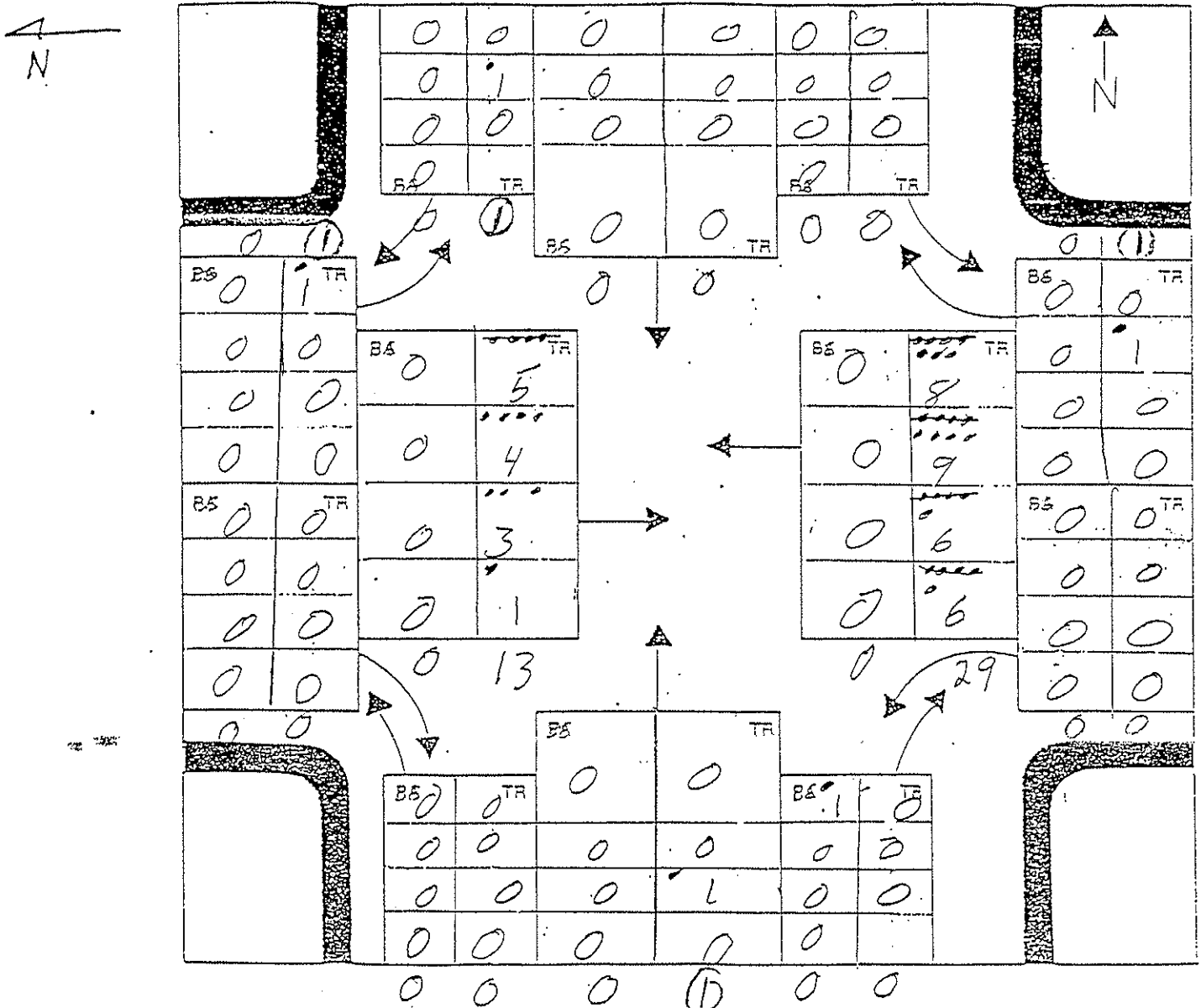



FIGURE 2-5

NOTE: EACH SQUARE REPRESENT 15 MIN. (Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION PEDESTRIAN VOLUME FORM

LOCATION I.D.S.R. 39 @ KNIGHT AND GRIFFIN RD
 COUNTY HILLS CITY PLANT CITY TYPE OF CONTROL _____
 STUDY DATE 9-22-98 TIME: FROM _____ AM TO _____ AM
 OBSERVER J.P.
 REMARKS _____

		6-7	7-8	8-9	11-12	TIME PERIODS	6-7	7-8	8-9	11-12
A	↓					DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO TOTALS				
B	↓					DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO TOTALS				
P	↑					DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO TOTALS				
B	↑					DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO TOTALS				
P	↓					DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO TOTALS				
B	↓					DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO TOTALS				



 STREET ——— STREET

FLORIDA DEPARTMENT OF TRANSPORTATION PEDESTRIAN VOLUME FORM

LOCATION I.D. S.R. 39 @ KNIGHT AND GRIFFIN RD.
 COUNTY HILLS CITY PLANT CITY TYPE OF CONTROL _____
 STUDY DATE 9-22-98 TIME: FROM _____ AM TO _____ AM
 OBSERVER J.P.
 REMARKS _____

		TIME PERIODS					
		12-1	3-4	4-5	5-6		
P							
B							
		DISTANCE _____ FT.					
		RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO					
		TOTALS					
P							
B							
		DISTANCE _____ FT.					
		RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO					
		TOTALS					
P							
B							
		DISTANCE _____ FT.					
		RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO					
		TOTALS					
P							
B							
		DISTANCE _____ FT.					
		RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO					
		TOTALS					

DISTRICT 7 WORK COPY TRAFFIC OPERATIONS REQUEST FORM

IN OR <u>N</u> S, E, W, OF	MILE POST #	LOCAL STREET NAMES	U S	S R	SECTION
PLANT CITY.	2.196	SR 39 AT SAM ALLEN RD	—	39	10700

TYPE OF STUDY: BHR TMC 6-9, 11-1, 3-6 & Ped & Bicycle Count
 COUNTY: Hillsborough
 NOTE: Separate out Busses & Heavy Trucks

SPEED ZONE	TRAFFIC SIGNAL	FLASHING BEACON	SCHOOL SPEED ZONE	UNAUTHORIZED TRAFFIC SIGNAL	DESIGN STUDY
X	X	X	X	X	
	<u>8</u>	4		8	8
X	X	X	X		
	X	X			X
	X	X			
	X				
	<u>X</u>	X	X	X	X
X					
	X	X		X	

REQUESTED BY: GABOR DATE: 9-16-
 PERFORMED BY: JOHN PEREZ
 JOB #: _____

STUDY

- DATE: 9-21-78
- FIELD SKETCH -----
 - TURNING MOVEMENTS (TO 501 OR 508) -----
 - SPEED CHECK (TO 503 OR 506) -----
 - TRAFFIC COUNTS (TO 510 OR 570) -----
 - STOP SIGN OBSERVANCE (TO 518) -----
 - STOP & DELAY (TO 507) -----
 - DRIVER OBSERVANCE OF TRAFFIC SIGNAL (TO 504) -----
 - PEDESTRIAN VOLUME (TO 502 OR 509) & Bikes -----
 - DELAY STUDY OF SIGNALIZED INTERSECTION -----
 - LEFT TURN STUDY (TO 513) -----
 - OBSERVATION STUDY (TO 519) -----

SPECIAL INSTRUCTIONS: _____

WEATHER CLOUDY
 Counter :
 COUNTED BY JP

TRAFFIC TECHNOLOGIES, Inc.
 Traffic Counting Equipment & Supplies
 2031 Stout Drive, Suite 4
 Ivyland, PA 18974

Site Code : 10200000
 Start Date: 09/21/98
 File I.D. : TURN|001
 Page : 1

Vehicle group 1

Date 09/21/98	Southbound				Westbound				Northbound				Eastbound				Total
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	
6:15	22	68	2	0	9	5	11	0	9	21	4	0	2	7	6	0	166
6:30	28	81	4	0	21	4	16	0	9	37	3	0	4	13	4	0	224
6:45	33	108	4	0	16	7	17	1	10	31	2	0	3	9	15	1	257
7:00	22	85	5	0	20	15	15	0	10	33	8	0	3	12	19	0	247
Total	105	342	15	0	66	31	59	1	38	122	17	0	12	41	44	1	894
7:15	27	96	2	0	12	22	24	0	20	51	6	0	5	9	14	0	288
7:30	19	71	6	0	20	16	21	0	12	45	6	0	3	18	19	0	256
7:45	29	102	4	0	29	16	19	0	14	41	11	0	7	26	33	0	331
8:00	30	85	3	0	15	18	14	0	15	32	14	0	4	20	24	0	274
Total	105	354	15	0	76	72	78	0	61	169	37	0	19	73	90	0	1149
8:15	23	67	5	0	16	6	10	0	15	33	6	0	7	16	13	0	217
8:30	18	52	5	0	15	9	9	0	13	30	7	0	3	17	8	0	186
8:45	16	54	4	0	25	6	11	0	18	30	11	0	4	9	18	0	206
9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	57	173	14	0	56	21	30	0	46	93	24	0	14	42	39	0	609
+ BREAK +																	
9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	5	43	9	0	17	8	18	0	16	40	14	0	5	10	11	0	196
Total	5	43	9	0	17	8	18	0	16	40	14	0	5	10	11	0	196
10:15	12	51	5	0	22	16	19	0	15	39	14	0	4	6	18	0	221
10:30	11	53	1	0	11	13	15	0	18	49	18	0	3	12	21	0	225
10:45	8	60	6	0	10	8	11	0	17	41	16	0	5	3	14	0	199
11:00	14	48	7	0	17	12	17	0	18	42	13	0	4	8	9	0	209
Total	45	212	19	0	60	49	62	0	68	171	61	0	16	29	62	0	654
11:15	9	55	5	0	15	9	11	0	10	54	18	0	5	9	18	0	219
11:30	16	49	2	0	16	13	18	0	30	44	14	0	6	9	15	0	232
11:45	11	42	2	0	20	6	11	0	14	46	18	0	7	11	15	0	203
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	36	146	9	0	51	28	40	0	54	144	50	0	18	29	48	0	653
+ BREAK +																	
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00	3	55	9	0	15	13	13	0	16	58	13	0	2	11	13	0	221
Total	3	55	9	0	15	13	13	0	16	58	13	0	2	11	13	0	221

WEATHER CLOUDY
 Counter :
 COUNTED BY JP

JAMAR Technologies, Inc.
 Traffic Counting Equipment & Supplies
 2031 Stout Drive, Suite 4
 Ivyland, PA 18974

Site Code : 10200001
 Start Date: 09/21/98
 File I.D. : TURN001
 Page : 2

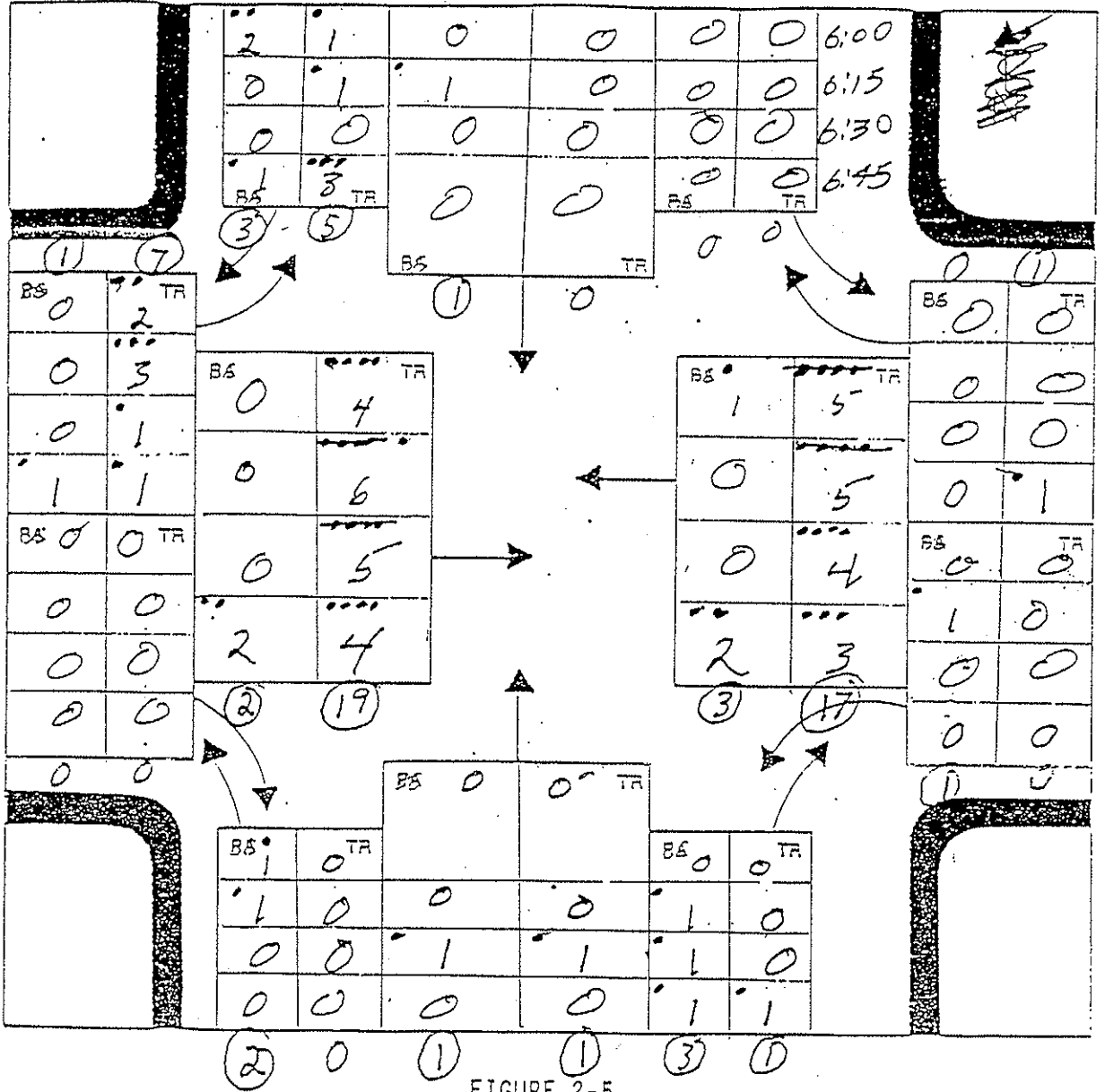
Vehicle group 1

Date	Southbound				Westbound				Northbound				Eastbound				Total
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	
09/21/98	-----																
5:15	18	45	0	0	14	10	13	0	13	54	27	0	3	11	19	0	227
5:30	17	61	1	0	14	11	26	0	12	64	24	0	3	7	15	0	255
5:45	10	90	2	0	11	10	19	0	21	77	22	0	3	8	10	0	282
6:00	16	58	4	0	15	13	25	0	14	72	24	0	5	11	14	0	271
r Total	61	254	7	0	54	44	83	0	60	267	97	0	14	37	58	0	1036
6:15	12	61	1	0	16	12	29	0	24	84	25	0	4	18	14	0	300
6:30	16	67	2	0	11	14	18	0	18	80	18	0	3	12	15	0	274
6:45	14	54	2	0	15	15	19	0	21	76	23	0	2	11	23	0	275
7:00	20	55	5	0	14	18	27	0	16	72	18	0	7	17	15	0	284
r Total	62	237	10	0	56	59	93	0	79	312	84	0	16	58	67	0	1133
	76	230	12		43	63	157		55	244	77		25	62	50		
7:15	26	74	2	0	9	14	29	0	21	125	24	0	6	11	9	0	350
7:30	19	55	5	0	14	16	20	0	17	97	17	0	5	14	13	0	292
7:45	31	52	0	0	6	15	25	0	11	100	20	0	7	26	13	0	306
r Total	76	181	7	0	29	45	74	0	49	322	61	0	18	51	35	0	948

TOTAL*	555	1997	114	0	480	370	550	1	487	1698	458	0	134	381	467	1	7693

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NO. S.R. 39 @ SAM ALLEN RD. EW
 COUNTY HILLS CITY PLANT CITY
 DATE 9-21-78 TIME FROM 6: A.M. TO 6:45
 OBSERVER JOHN PEREZ WEATHER cloudy
 REMARKS _____



NOTE EACH SQUARE WILL REPRESENTS 15 MIN.

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NS S.R. 39 @ SAM ALLEN EW
 COUNTY HILLS CITY PLANT CITY
 DATE 9-21-98 TIME FROM 7:AM TO 7:45
 OBSERVER JOHN PEREZ WEATHER cloudy
 REMARKS _____

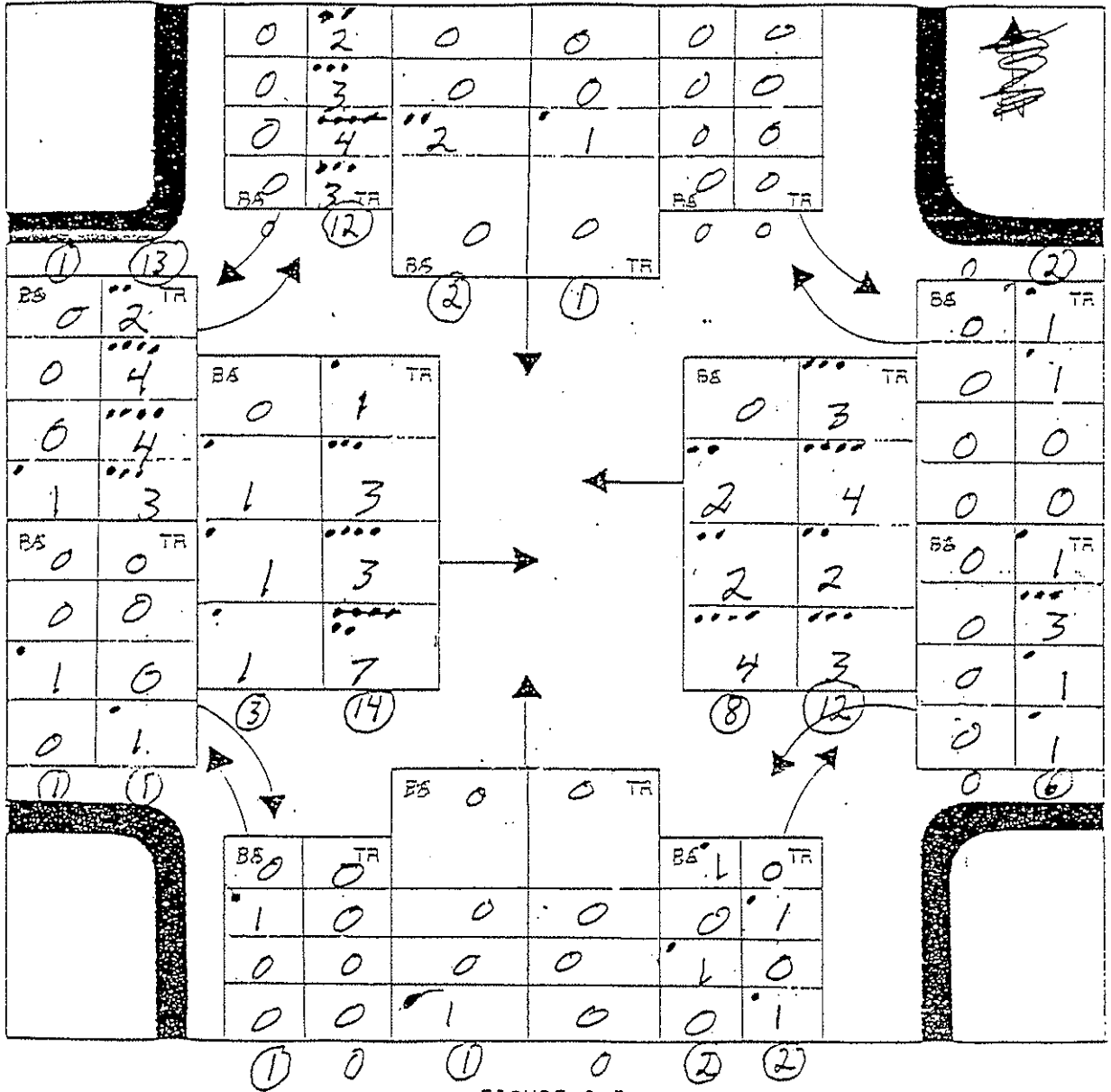


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

NOTE: EACH SQUARE WILL REPRESENT 15 MIN.
 (Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NO. SR 39 @ CAM ALLEN RD EW
 COUNTY HILLS CITY PLANT CITY
 DATE 9-21-98 TIME FROM 8:AM TO 8:45
 OBSERVER JOHN PEREZ WEATHER cloudy
 REMARKS _____

24

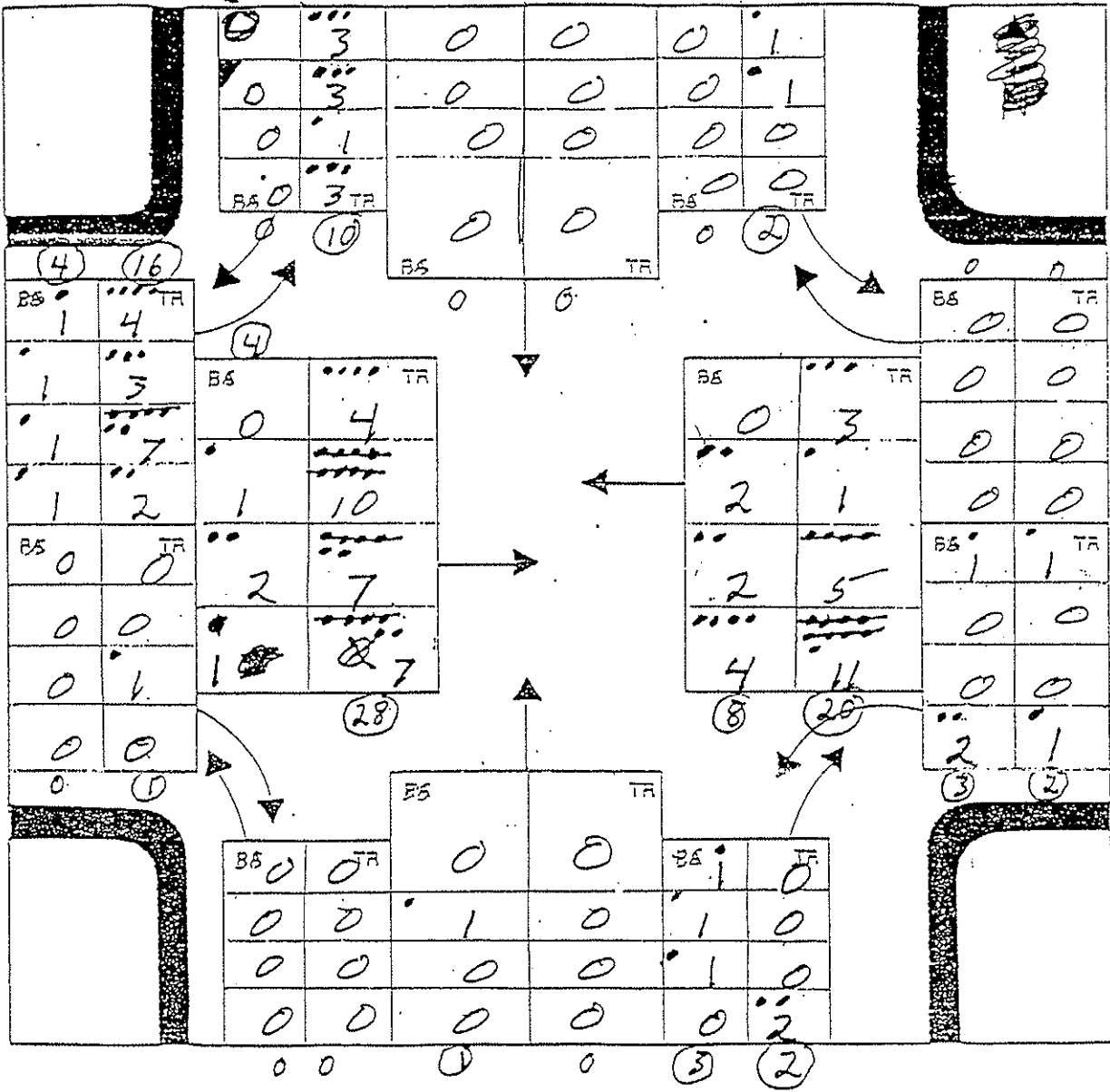


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

NOTE:
EACH SQUARE WILL
REPRESENT 15 MIN;

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NO. SR 39 @ SAM ALLEN RD EW
 COUNTY HILLS CITY PLANT CITY
 DATE 9-21-98 TIME FROM 11 A.M. TO 11:45
 OBSERVER JOHN PEREZ WEATHER Cloudy
 REMARKS _____

N

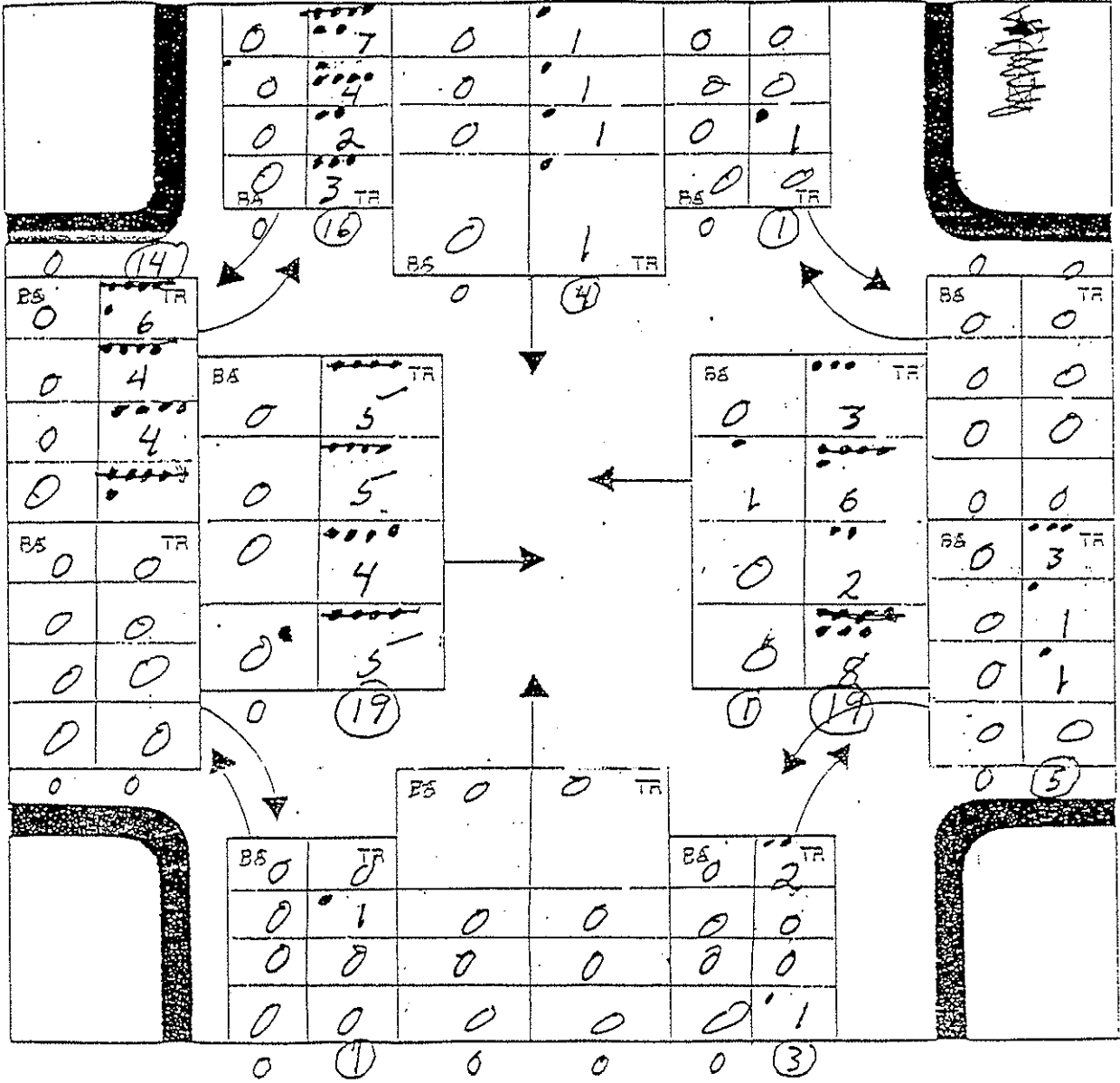


FIGURE 2-5

NOTE: EACH SQUARE WILL PRESENT 15 MIN.

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NS SR 39 @ SAM ALLEN RD EW _____
 COUNTY HILLS CITY PLANT CITY
 DATE 9-21-98 TIME: FROM 12 AM TO 12 45
 OBSERVER JOHN PEREZ WEATHER Cloudy
 REMARKS _____

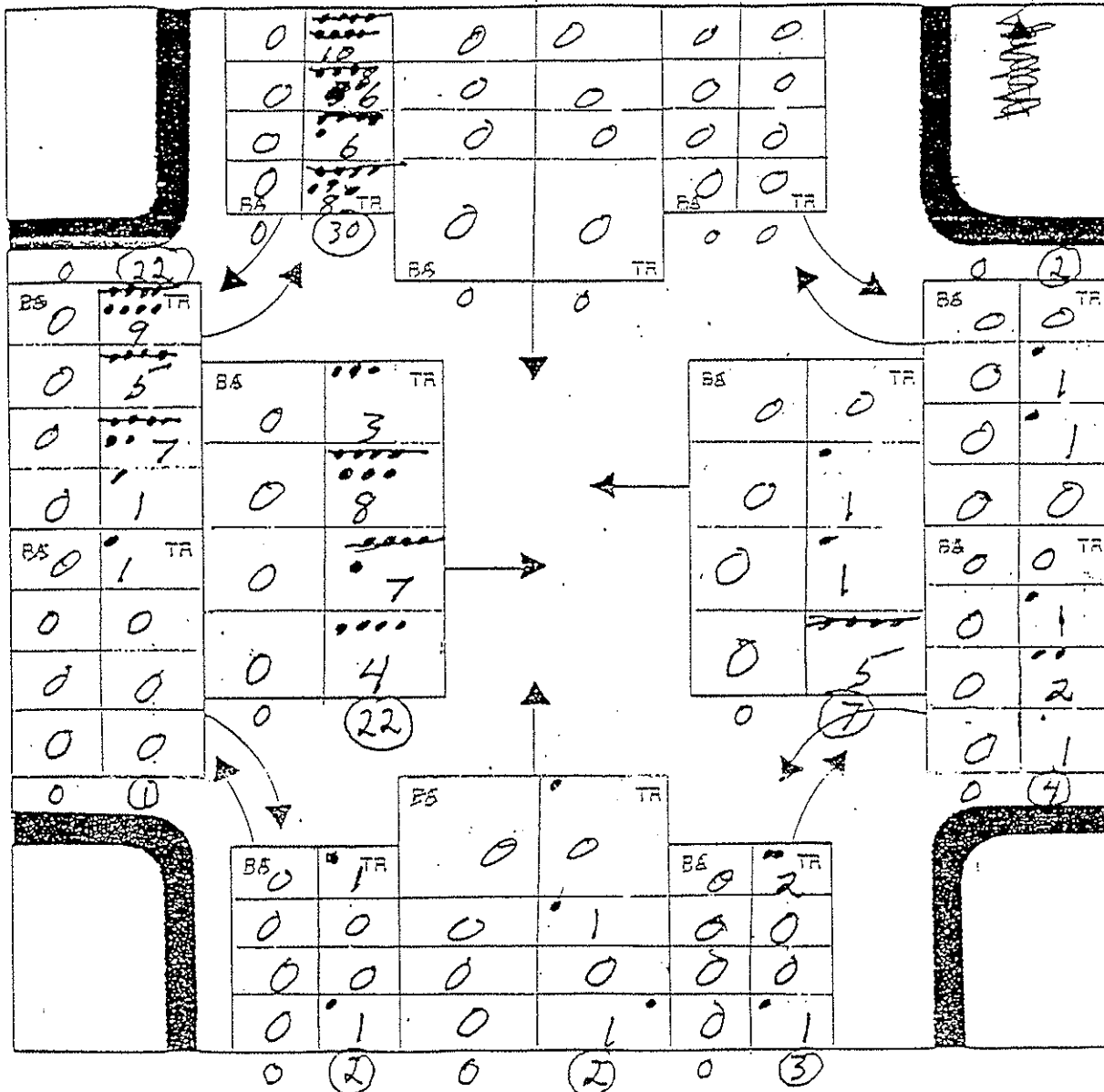


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NS SR 39 @ SAM A1 EW _____
 COUNTY HILLS CITY PLANT CITY
 DATE 9-21-98 TIME FROM 3: P.M. TO 3:45 P.M.
 OBSERVER JOHN PEREZ WEATHER cloudy
 REMARKS _____

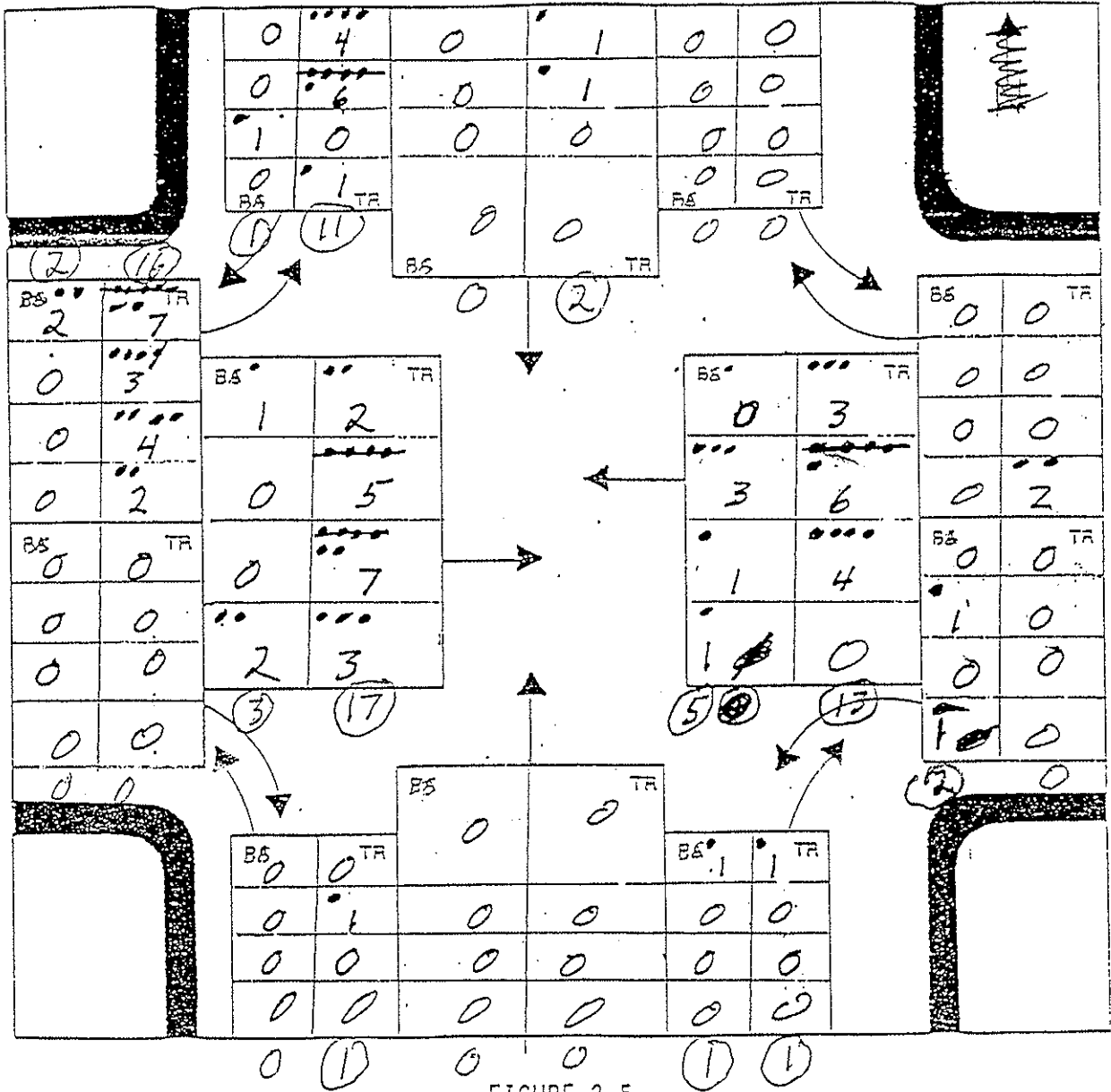


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NS SR 39 @ SAM ALLEN RD EW _____
 COUNTY HILLS CITY PLANT CITY
 DATE 9-21-98 TIME FROM 4: P.M. TO 4:45
 OBSERVER JOHN PEREZ WEATHER cloudy
 REMARKS _____

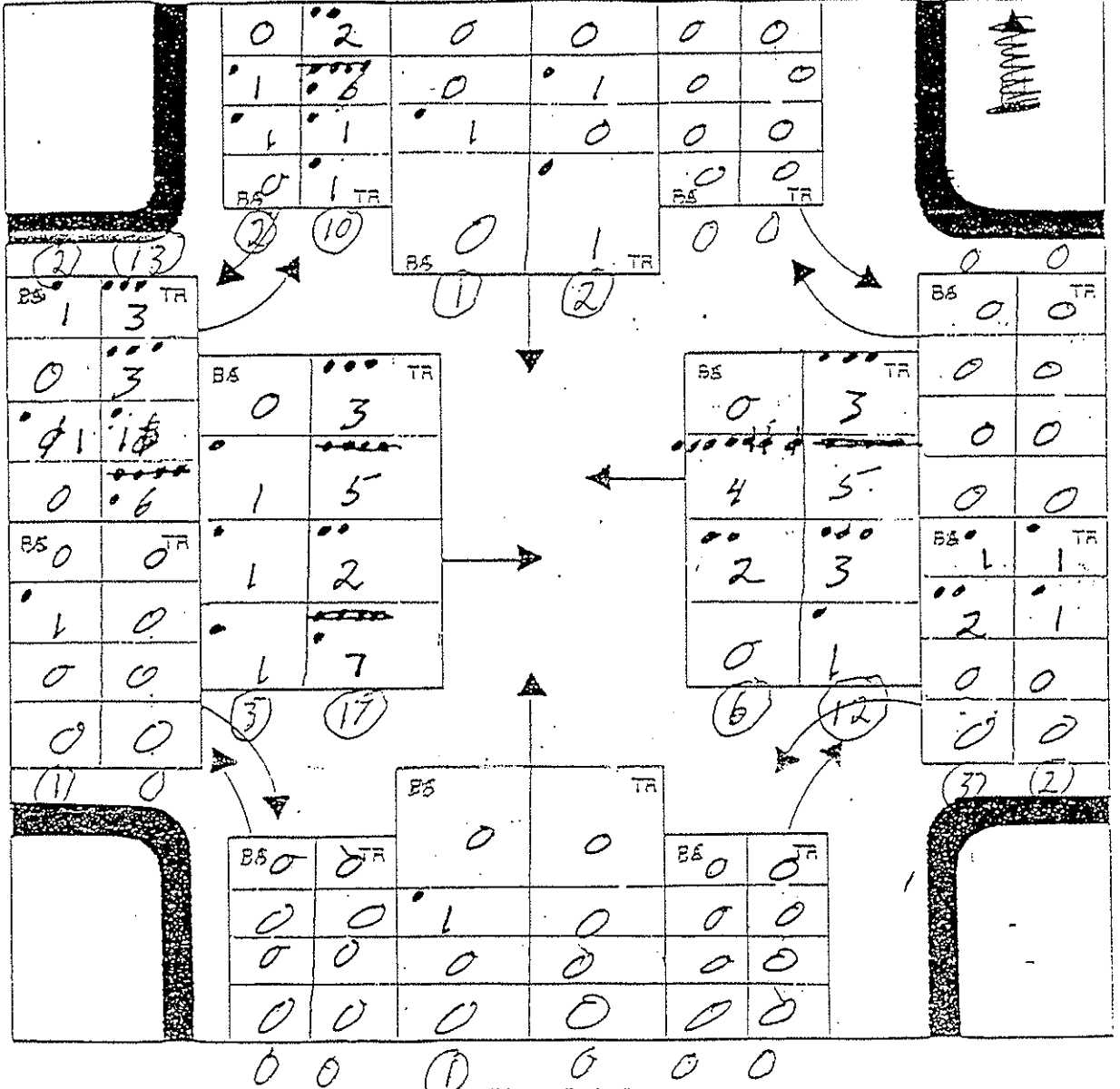
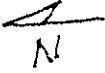


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NO. SR. 390, SAM ALLEN RD. EW
 COUNTY HILLS CITY PLANT CITY
 DATE 9-21-98 TIME FROM 5: P.M. TO 5:45
 OBSERVER JOHN PEREZ WEATHER Cloudy
 REMARKS _____

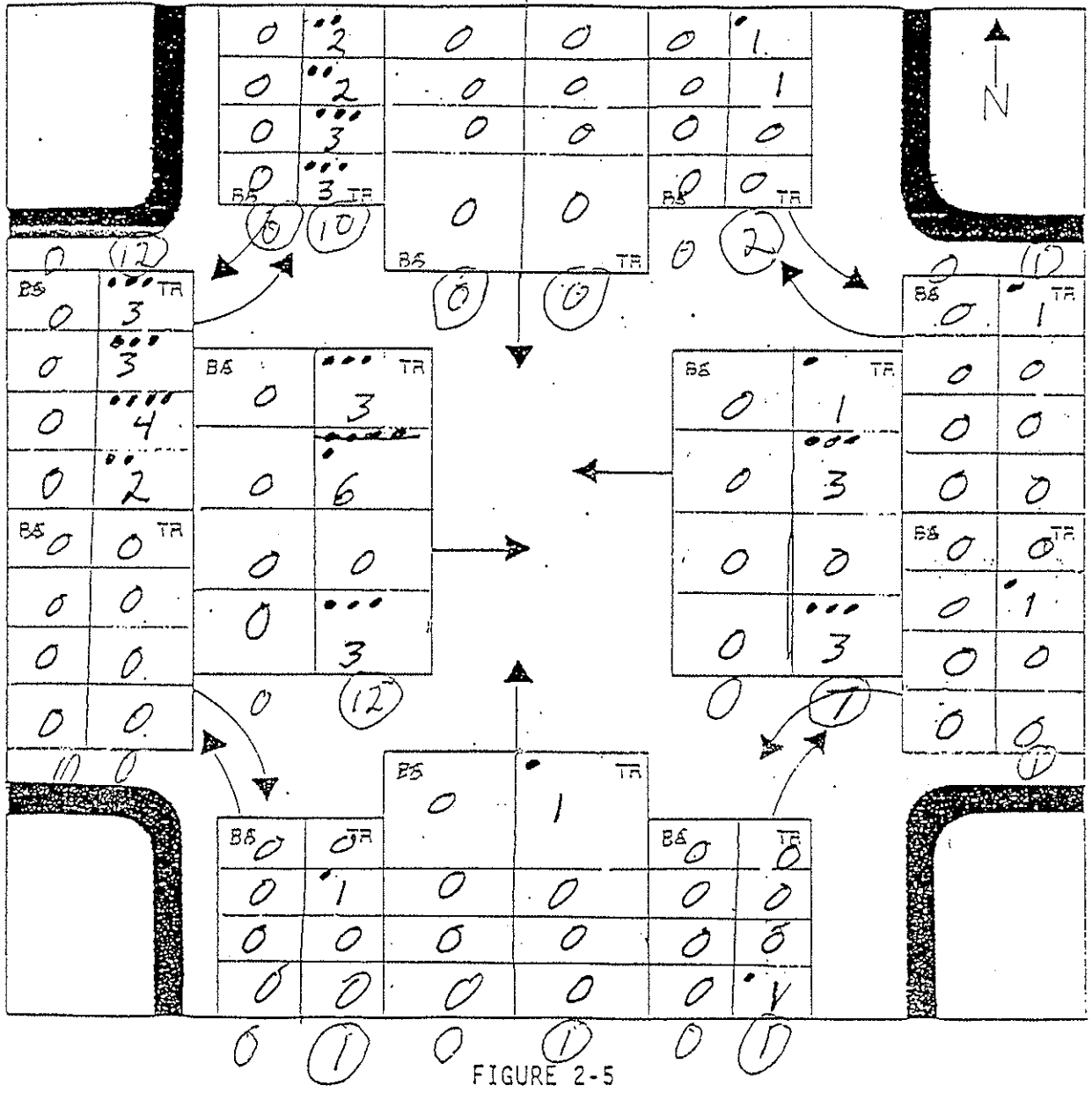


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
PEDESTRIAN VOLUME FORM


LOCATION I.D. S.R. 39 @ SAM ALLEN RD.

COUNTY Hills CITY Plant city TYPE OF CONTROL _____

STUDY DATE 9-21-98 TIME: FROM 6⁰⁰ AM TO 12⁰⁰ PM OBSERVER J.P.

REMARKS _____

		6-7	7-8	8-9	11-12	TIME PERIODS	6-7	7-8	8-9	11-12
P		0	0	0	0	DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO	0	0	0	0
	B	0	0	0	0		0	0	0	0
TOTALS										
P		0	0	0	0	DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO	0	0	0	0
	B	0	0	0	0		0	0	0	0
TOTALS										
P		0	0	0	0	DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO	0	0	0	0
	B	0	0	0	0		0	0	0	0
TOTALS										
P		0	0	0	0	DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO	0	0	0	0
	B	0	0	0	0		0	0	0	0
TOTALS										



STREET

FLORIDA DEPARTMENT OF TRANSPORTATION PEDESTRIAN VOLUME FORM

LOCATION I.D. S.R. 39 @ SAM. ALLEN R.D.
 COUNTY HILLS CITY PLANT CITY TYPE OF CONTROL _____
 STUDY DATE 9-21-91 TIME: FROM _____ AM TO _____ AM
 REMARKS _____

		12-1	3-4	4-5	5-6	TIME PERIODS	12-1	3-4	4-5	5-6	
P	B					DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO					
TOTALS											
DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO		STREET		DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO		TOTALS		DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO		TOTALS	
TOTALS				TOTALS		TOTALS		TOTALS			
P	B					DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO					
TOTALS											
DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO		STREET		DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO		TOTALS		DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO		TOTALS	
TOTALS				TOTALS		TOTALS		TOTALS			
P	B					DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO					
TOTALS											
DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO		STREET		DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO		TOTALS		DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO		TOTALS	
TOTALS				TOTALS		TOTALS		TOTALS			

(Handwritten notes: A circled '2' is written in the bottom-most 'TOTALS' box. A circled '2' is written below the 'TOTALS' label for the bottom-most section.)

DISTRICT 7 *WORK COPY* TRAFFIC OPERATIONS REQUEST FORM

IN OR <u>N</u> S, E, W, OF	MILE POST #	LOCAL STREET NAMES	U S	S R	SECTION	LEG
PLANT CITY	1.259	39 AT I-4 RAMPS SOUTHSIDE	—	39	10700	—

TYPE OF STUDY: BHR TMC 6-9, 11-1, 3-6 *Ped & Bikes*
 COUNTY: Hillsborough
 NOTE: SEPARATE TRUCKS & BUSES

SPEED ZONE	TRAFFIC SIGNAL	FLASHING BEACON	SCHOOL SPEED ZONE	UNAUTHORIZED TRAFFIC SIGNAL	DESIGN STUDY	REQUESTED BY: <u>GABOR</u>	DATE: <u>9-16-98</u>
						PERFORMED BY: <u>JOHN PEREZ</u>	
						JOB #:	
STUDY							DATE:
X	X	X	X	X		FIELD SKETCH	<u>10-13-98</u>
	8	4		8	<u>8</u>	TURNING MOVEMENTS (TO 501 OR 508)	
X	X	X	X			SPEED CHECK (TO 503 OR 506)	
	X	X			X	TRAFFIC COUNTS (TO 510 OR 570)	
	X	X				STOP SIGN OBSERVANCE (TO 518)	
	X					STOP & DELAY (TO 507)	
				X		DRIVER OBSERVANCE OF TRAFFIC SIGNAL (TO 504)	
	X	X	X	X	X	PEDESTRIAN VOLUME (TO 502 OR 509)	
						DELAY STUDY OF SIGNALIZED INTERSECTION	
X						LEFT TURN STUDY (TO 513)	
	X	X		X		OBSERVATION STUDY (TO 519)	

SPECIAL INSTRUCTIONS: _____

Weather :
 Counter :
 Counted by :

JAMAK technologies, inc.
 Traffic Counting Equipment & Supplies
 2031 Stout Drive, Suite 4
 Ivyland, PA 18974

Site Code : 10200000
 Start Date: 10/13/
 File I.D. : 39@I-485
 Page : 1

Vehicle group 1

Date 10/13/98	Southbound				Westbound				Northbound				Eastbound				Total
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	
06:00	7	32	9	1	3	2	1	0	6	23	10	0	6	2	4	0	100
06:15	8	34	7	0	5	2	6	0	7	46	6	0	14	9	4	0	148
06:30	17	45	13	0	4	0	10	0	6	63	10	0	14	10	1	0	1
06:45	29	48	16	0	2	1	7	0	8	63	15	0	16	13	0	0	2
Hr Total	61	159	45	1	14	5	24	0	27	195	41	0	50	34	9	0	665
07:00	11	43	10	0	7	1	14	0	17	53	9	0	12	13	8	0	10
07:15	4	89	22	0	5	0	6	0	16	68	3	0	20	1	22	0	256
07:30	8	67	21	0	8	0	7	0	17	73	8	0	12	3	13	0	237
07:45	7	105	20	0	6	1	9	0	20	76	15	0	11	4	23	0	21
Hr Total	30	304	73	0	26	2	36	0	70	270	35	0	55	21	66	0	98
08:00	11	97	14	0	9	5	10	0	14	66	16	0	11	6	35	0	29
08:15	1	64	10	0	5	0	8	0	13	47	8	0	6	3	19	0	18
08:30	8	68	14	0	2	1	7	0	12	65	3	0	15	3	20	0	218
08:45	8	66	15	0	6	1	6	0	5	67	10	0	9	6	21	0	22
Hr Total	28	295	53	0	22	7	31	0	44	245	37	0	41	18	95	0	91
* BREAK *																	
11:00	11	71	10	0	6	0	8	0	8	57	8	0	7	4	19	0	20
11:15	10	66	11	0	8	1	3	0	9	62	8	0	7	4	12	0	201
11:30	9	69	14	0	9	3	5	0	11	83	11	0	5	1	18	0	23
11:45	3	60	12	0	13	0	12	0	7	94	6	0	4	2	26	0	23
Hr Total	33	266	47	0	36	4	28	0	35	296	33	0	23	11	75	0	88
12:00	10	53	7	0	14	1	7	0	7	88	9	0	10	5	13	0	22
12:15	10	67	12	0	6	1	9	0	6	86	7	0	13	4	15	0	230
12:30	12	56	15	0	22	1	19	0	4	63	14	0	8	9	13	0	236
12:45	15	66	10	0	9	0	5	0	8	76	18	0	9	7	15	0	238
Hr Total	47	242	44	0	51	3	40	0	25	313	48	0	40	25	56	0	93
* BREAK *																	
15:00	1	67	11	0	5	1	7	0	7	87	4	0	4	6	14	0	214
15:15	6	39	6	0	7	1	11	0	6	114	4	0	4	2	4	0	204
15:30	9	72	14	0	12	0	10	0	6	109	7	0	13	4	15	0	271
15:45	12	75	7	0	10	2	10	0	5	90	2	0	15	6	18	0	252
Hr Total	28	253	38	0	34	4	38	0	24	400	17	0	36	18	51	0	941
16:00	6	59	9	0	5	1	8	0	6	117	12	0	14	2	21	0	260
16:15	5	63	9	0	10	1	4	0	12	96	13	0	20	4	25	0	262
16:30	6	69	9	0	10	0	10	0	13	110	8	0	14	3	33	0	285
16:45	5	75	17	0	6	2	10	0	16	96	20	0	12	9	21	0	289
Hr Total	22	266	44	0	31	4	32	0	47	419	53	0	60	18	100	0	1096

Weather :
 Counter :
 Counted by:

Traffic Counting Equipment & Supplies
 2031 Stout Drive, Suite 4
 Ivyland, PA 18974

Site Code : 10200000
 Start Date: 10/13/98
 File I.D. : 39@I-4SS
 Page : 2

Vehicle group 1

Date	Southbound				Westbound				Northbound				Eastbound				Total
	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	Left	Thru	Right	Other	
10/13/98																	
17:00	6	73	14	0	17	5	17	0	10	116	9	0	12	4	22	0	305
17:15	11	89	13	0	15	0	23	0	10	147	13	0	14	5	17	0	357
17:30	10	75	19	0	13	4	16	0	11	116	8	0	4	2	11	0	289
17:45	8	66	5	0	20	0	22	0	3	128	13	0	0	0	2	0	267
Hr Total	35	303	51	0	65	9	78	0	34	507	43	0	30	11	52	0	1218
TOTAL	284	2088	395	1	279	38	307	0	306	2645	307	0	335	156	504	0	7645

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NS SR-39 + I-4 RAMP (S. ^S) EW _____
 COUNTY HILLSBOROUGH CITY PLANT CITY
 DATE 10-13-98 TIME FROM 6 AM TO 7 AM
 OBSERVER JOHN PEREZ WEATHER _____
 REMARKS _____

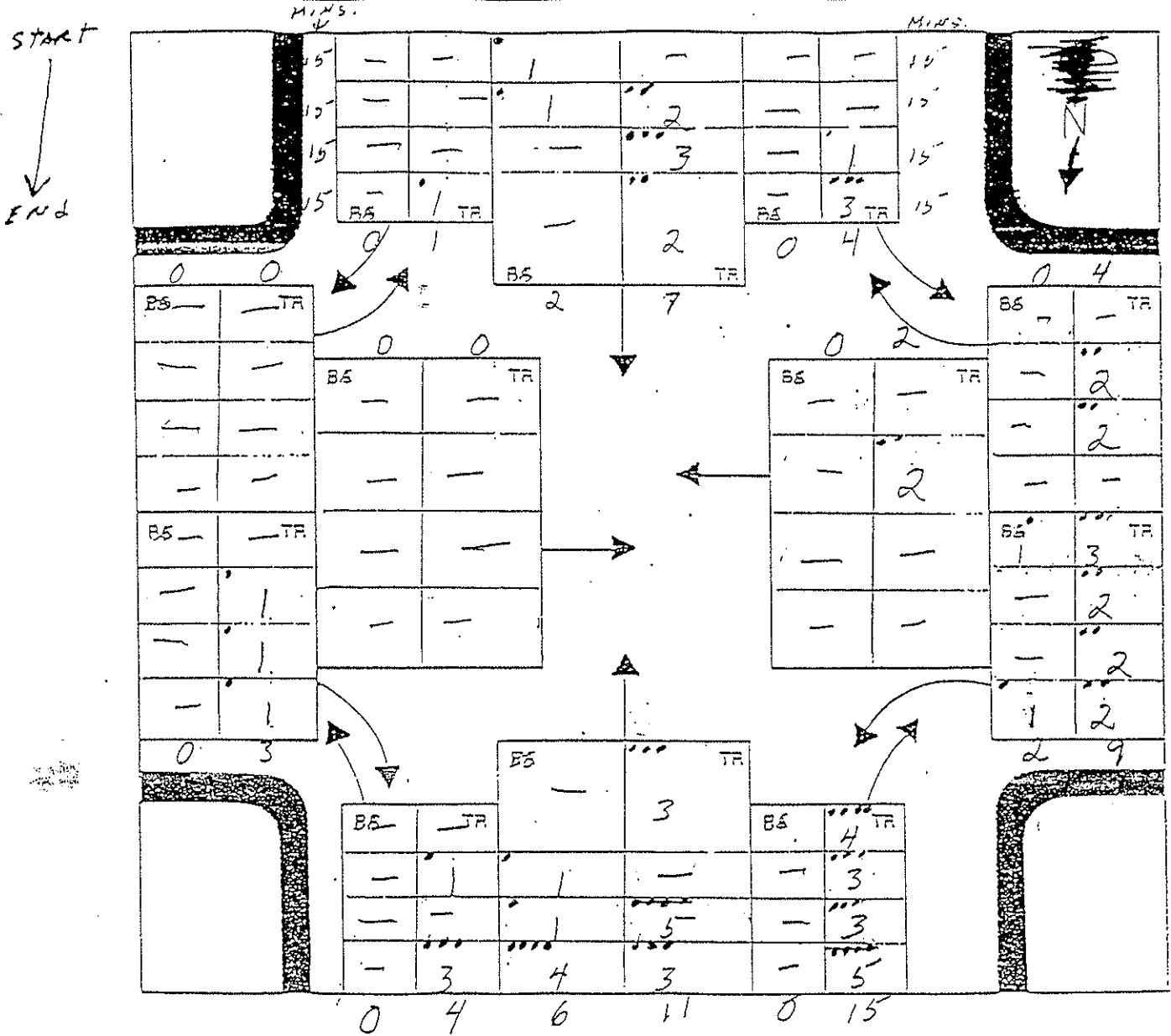


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NS SR-39 + I-4 RAMP 5 (S. 8) EW
 COUNTY HILLSBOROUGH CITY PLANT CITY
 DATE 11-15-98 TIME FROM 7:AM TO 4:PM
 OBSERVER John P. Lee WEATHER _____
 REMARKS _____

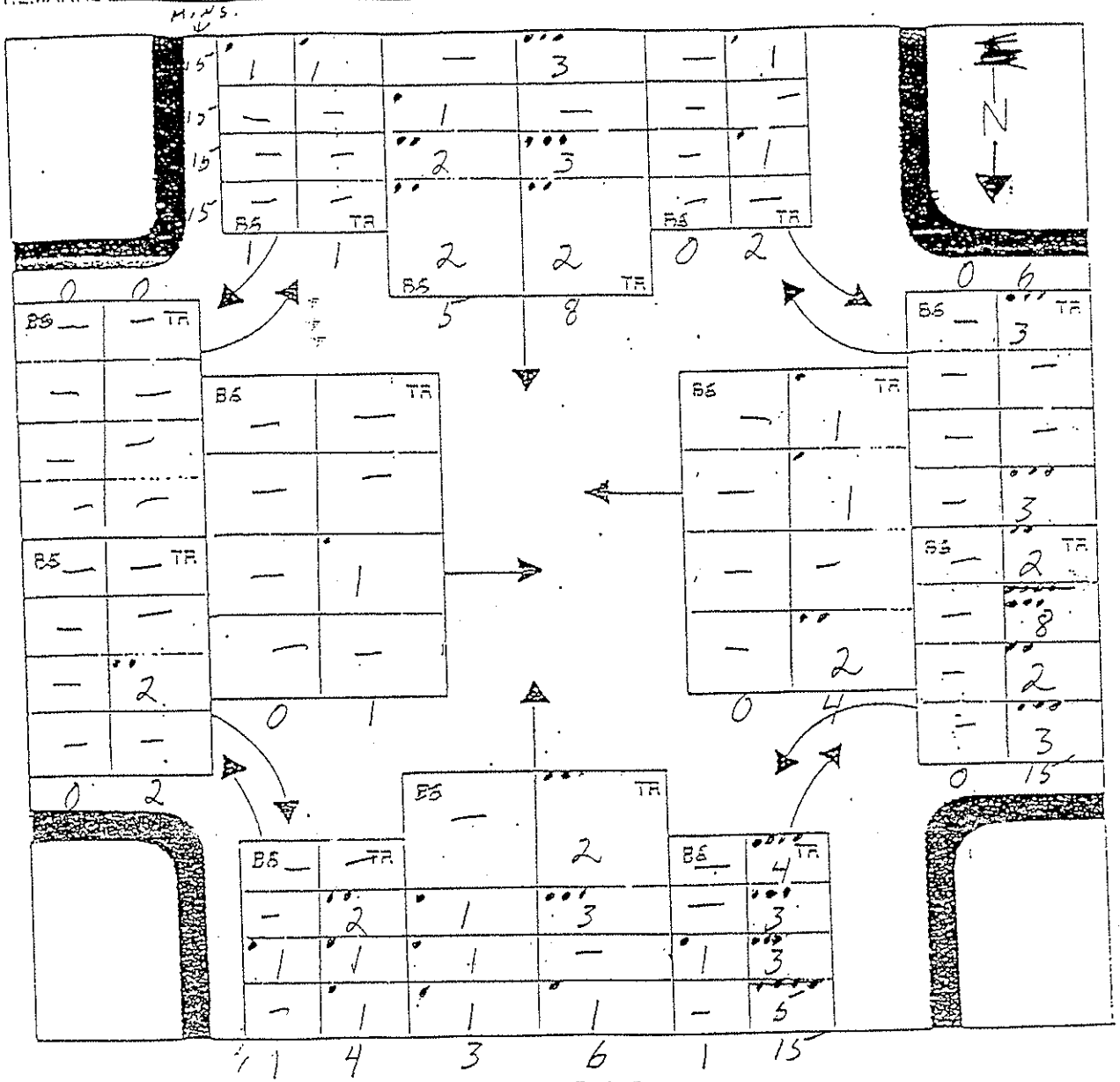


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
 VEHICLE MOVEMENTS DATA FORM

LOCATION I.O. NS SR-39 + I-4 RAMP 5 (S. R.) EW
 COUNTY Hillsborough CITY PLANT CITY
 DATE 10-13-48 TIME FROM 8:00 AM TO 9:00 AM
 OBSERVER John Perez WEATHER
 REMARKS

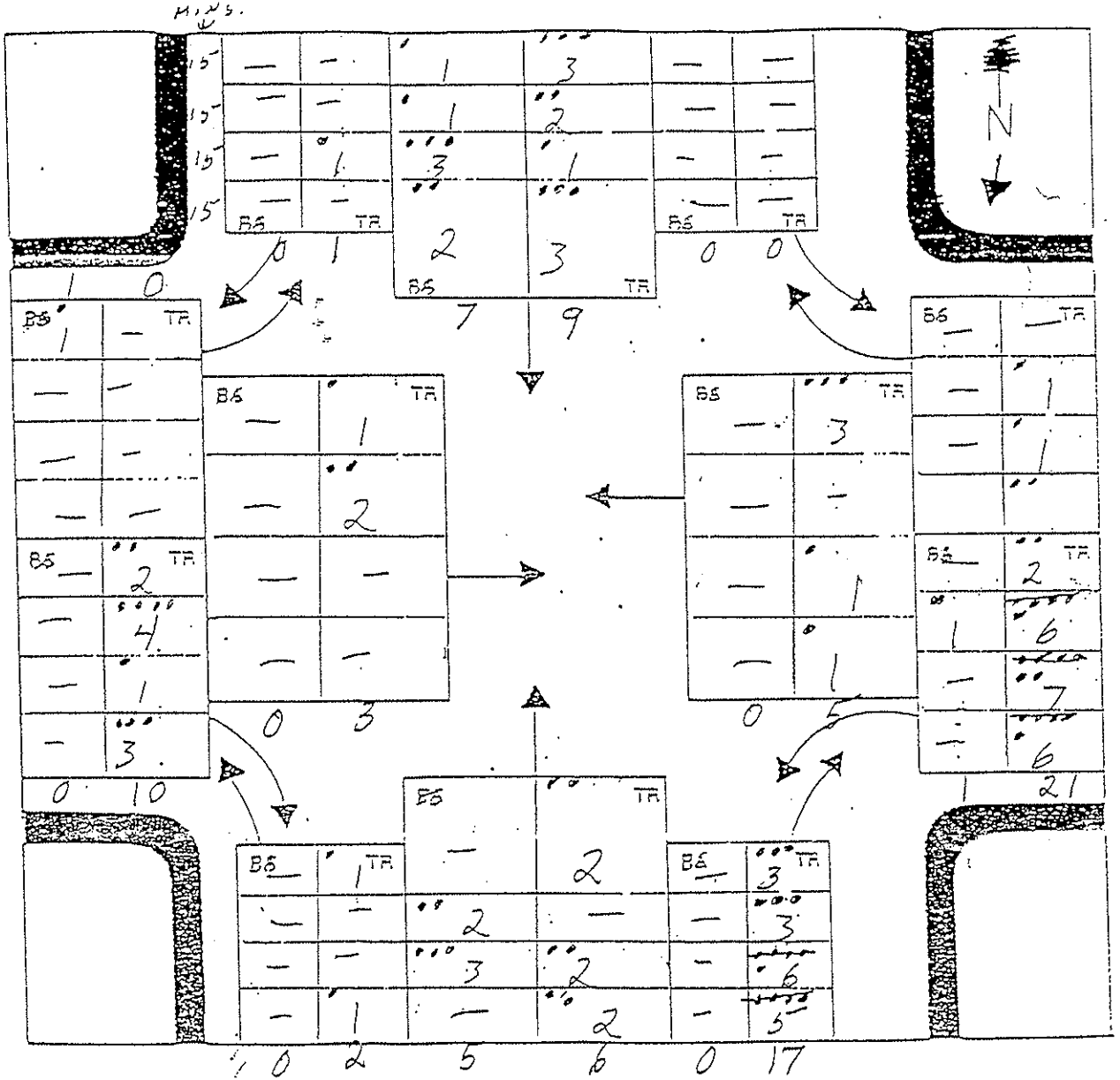


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

VEHICLE MOVEMENTS DATA FORM

LOCATION I.O. NS SR-39 + I-4 RAMP 5 (S. 8) EW
 COUNTY HILLSBOROUGH CITY PLANT CITY
 DATE 10-13-98 TIME FROM 11:00 AM TO 12:00 PM
 OBSERVER John PEREZ WEATHER _____
 REMARKS _____

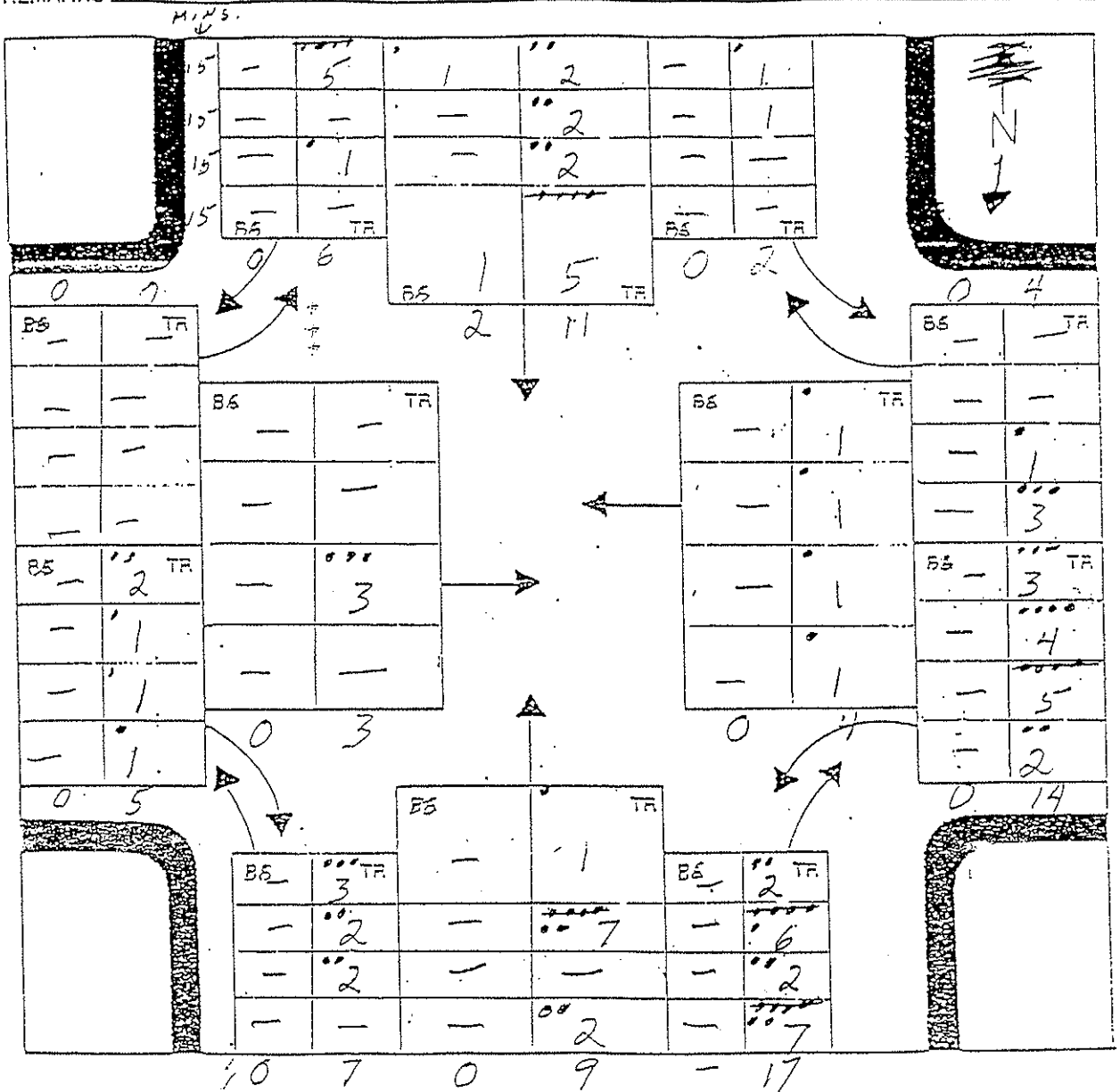


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION
VEHICLE MOVEMENTS DATA FORM

LOCATION I.O. NS SR-39 + I-4 RAMP 5 (S) EW
 COUNTY Hillsborough CITY Plant City
 DATE 10-13-40 TIME FROM 12:00 TO 1:00 P.M.
 OBSERVER John Perez WEATHER
 REMARKS

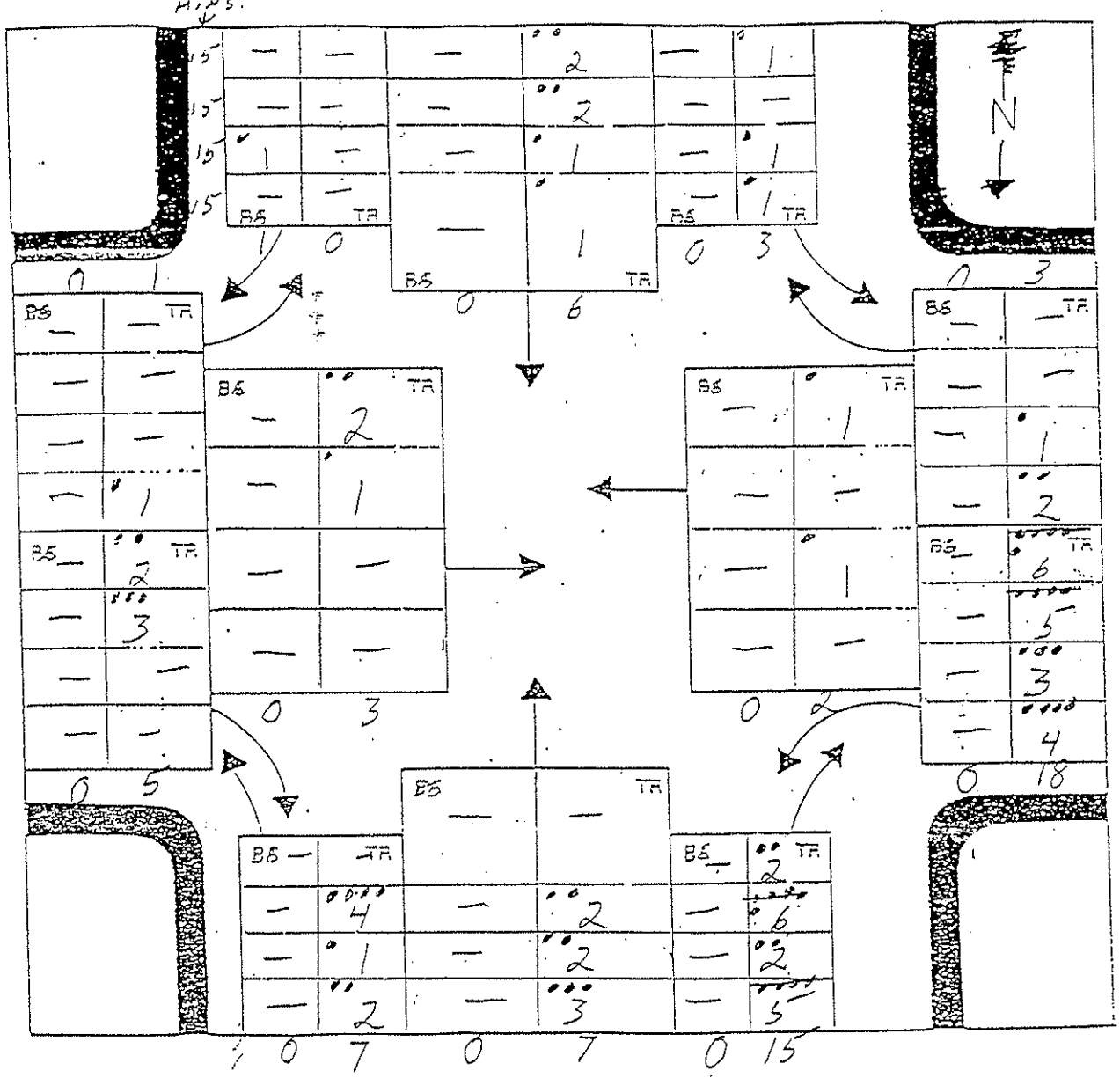


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

VEHICLE MOVEMENTS DATA FORM

LOCATION I.O. NS SR-39 + I-4 RAMP^S (S, R) EW
 COUNTY HILLSBOROUGH CITY PLANT CITY
 DATE 10-13-99 TIME FROM 3: PM TO 4: AM
 OBSERVER JOHN PEREZ WEATHER _____
 REMARKS _____

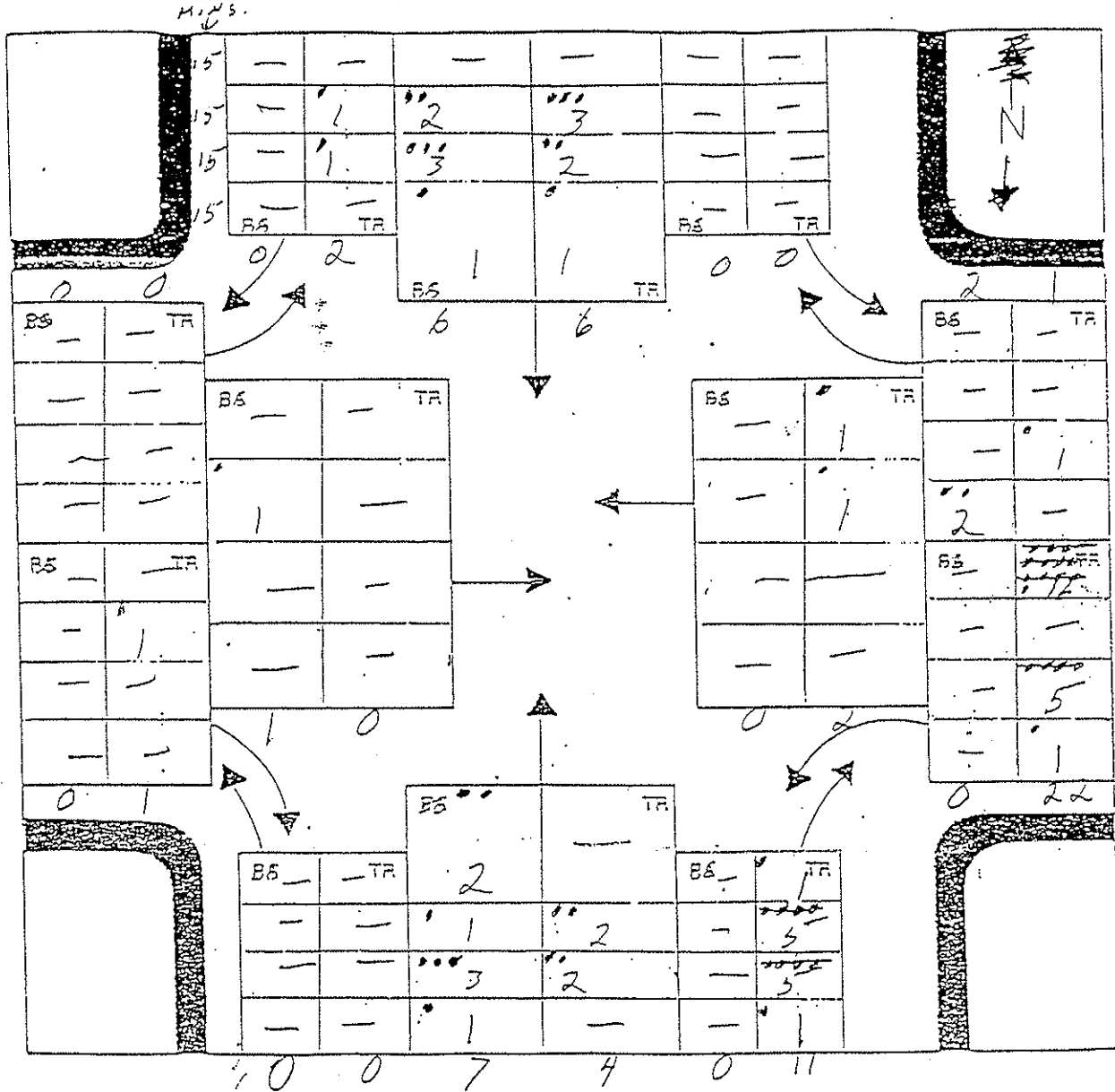


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

VEHICLE MOVEMENTS DATA FORM

LOCATION I.O. NS SR-39 + I-4 RAMP 5 (S. 8) EW
 COUNTY HILLSBOROUGH CITY PLANT CITY
 DATE 10-13-90 TIME FROM 4:00 P.M. TO 5:00 P.M.
 OBSERVER JOHN PEREZ WEATHER _____
 REMARKS _____

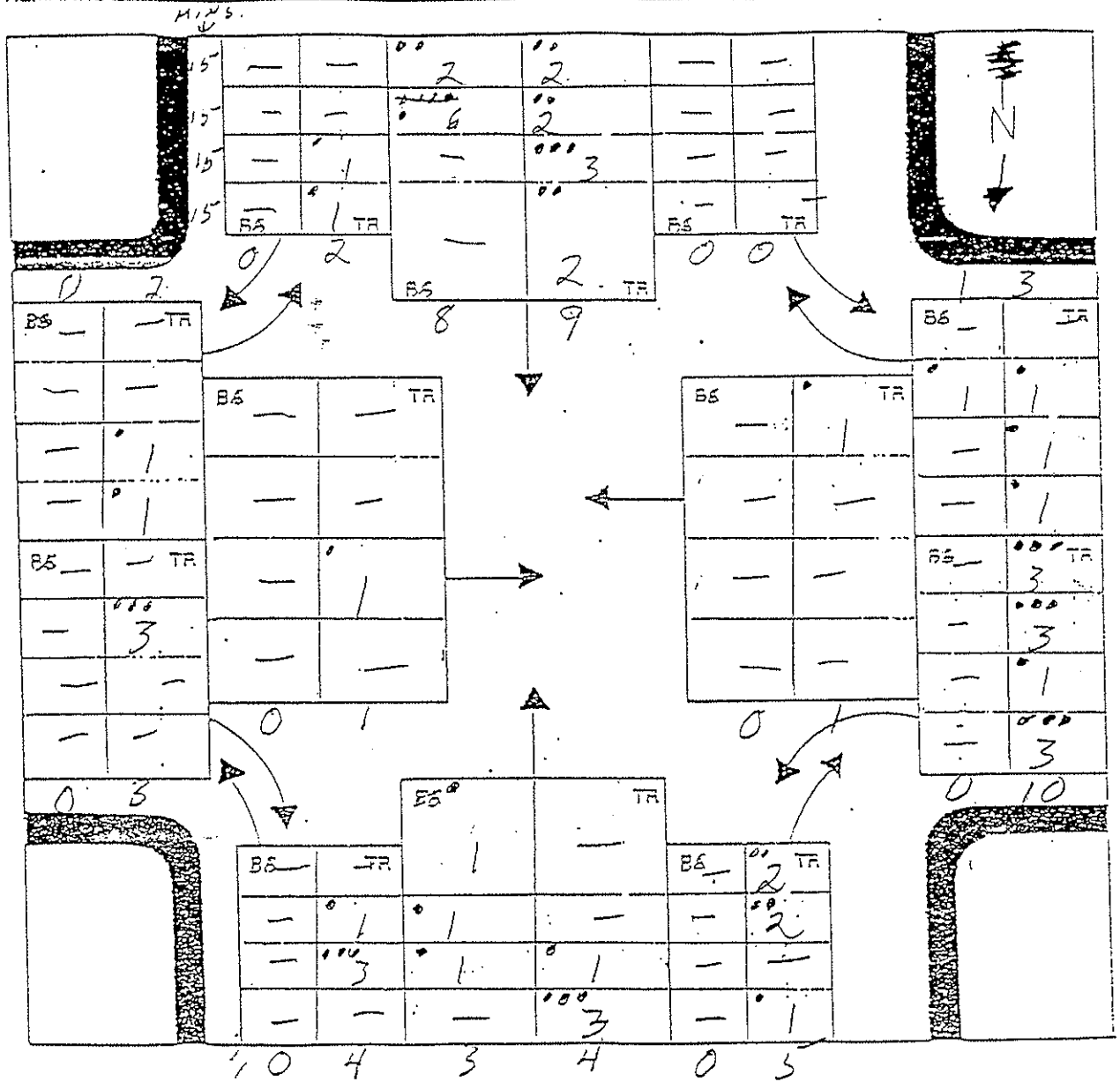


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NS SR-39 + I-4 RAMP 5 (S. #1) EW
 COUNTY WILKESBOROUGH CITY PLANT CITY
 DATE 10-13-49 TIME FROM 5 P.M. TO 6 P.M.
 OBSERVER John PERKINS WEATHER _____
 REMARKS _____

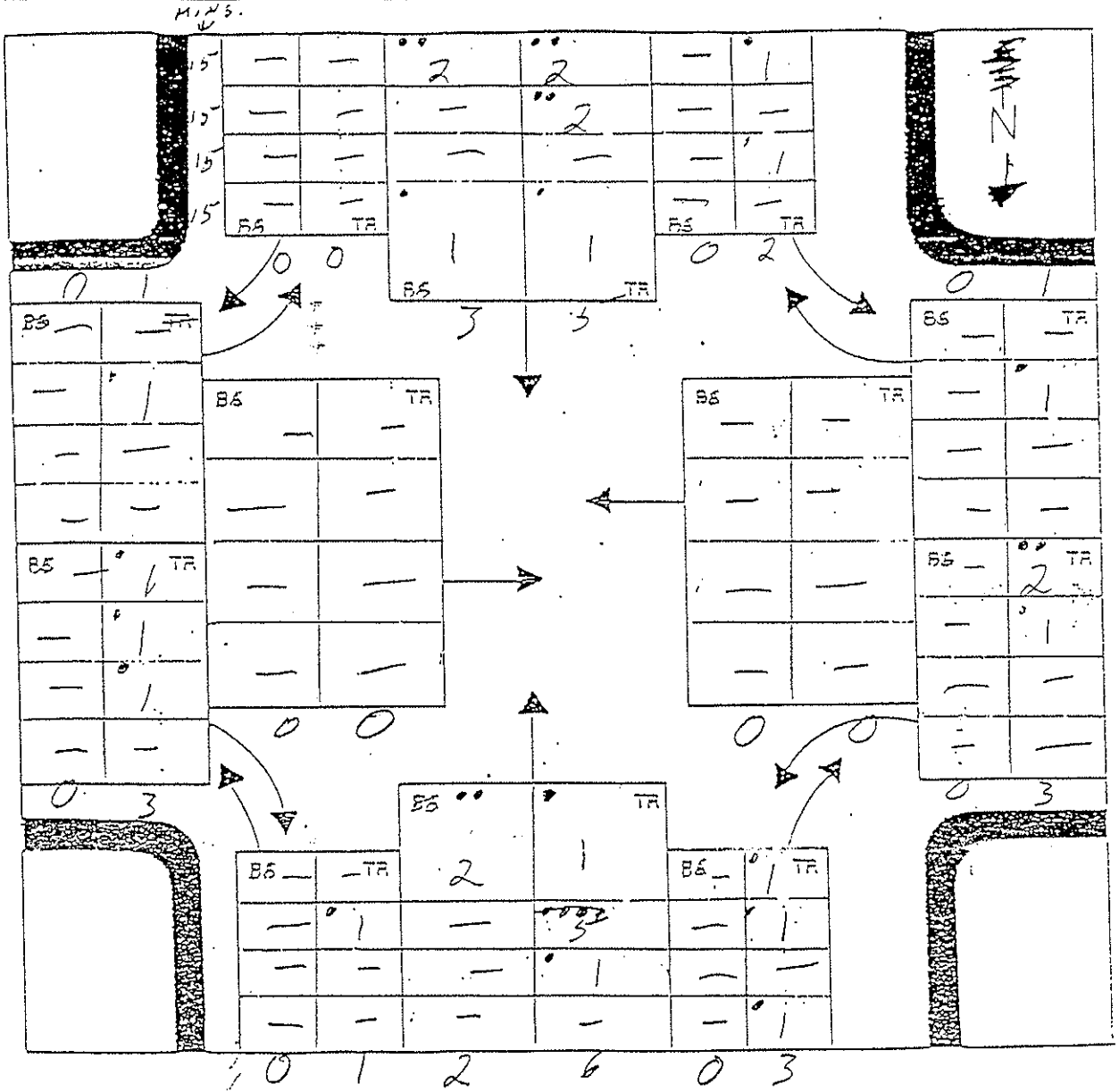


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

FLORIDA DEPARTMENT OF TRANSPORTATION PEDESTRIAN VOLUME FORM

LOCATION I.D. SR 39 + T.H. RAMP S.E. SIDE
 COUNTY Hillsborough CITY Plant City TYPE OF CONTROL _____
 STUDY DATE 10-13-98 TIME: FROM 6:00 ^{AM} _{PM} TO 6:00 ^{AM} _{PM} OBSERVER J.F.
 REMARKS _____

6-7	7-8	8-9	
			TIME PERIODS DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO TOTALS
			DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO TOTALS
DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO		DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO	
			DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO TOTALS
			DISTANCE _____ FT. RAISED MEDIAN <input type="checkbox"/> YES <input type="checkbox"/> NO TOTALS

STREET

FLORIDA DEPARTMENT OF TRANSPORTATION
 VEHICLE MOVEMENTS DATA FORM

LOCATION I.D. NS SR-39 + I-4 RAMP(S) 15.81 EW _____
 COUNTY MILLSBOROUGH CITY PLANT CITY
 DATE 10-13-49 TIME FROM _____ TO _____
 OBSERVER JOHN PEREZ WEATHER _____
 REMARKS _____

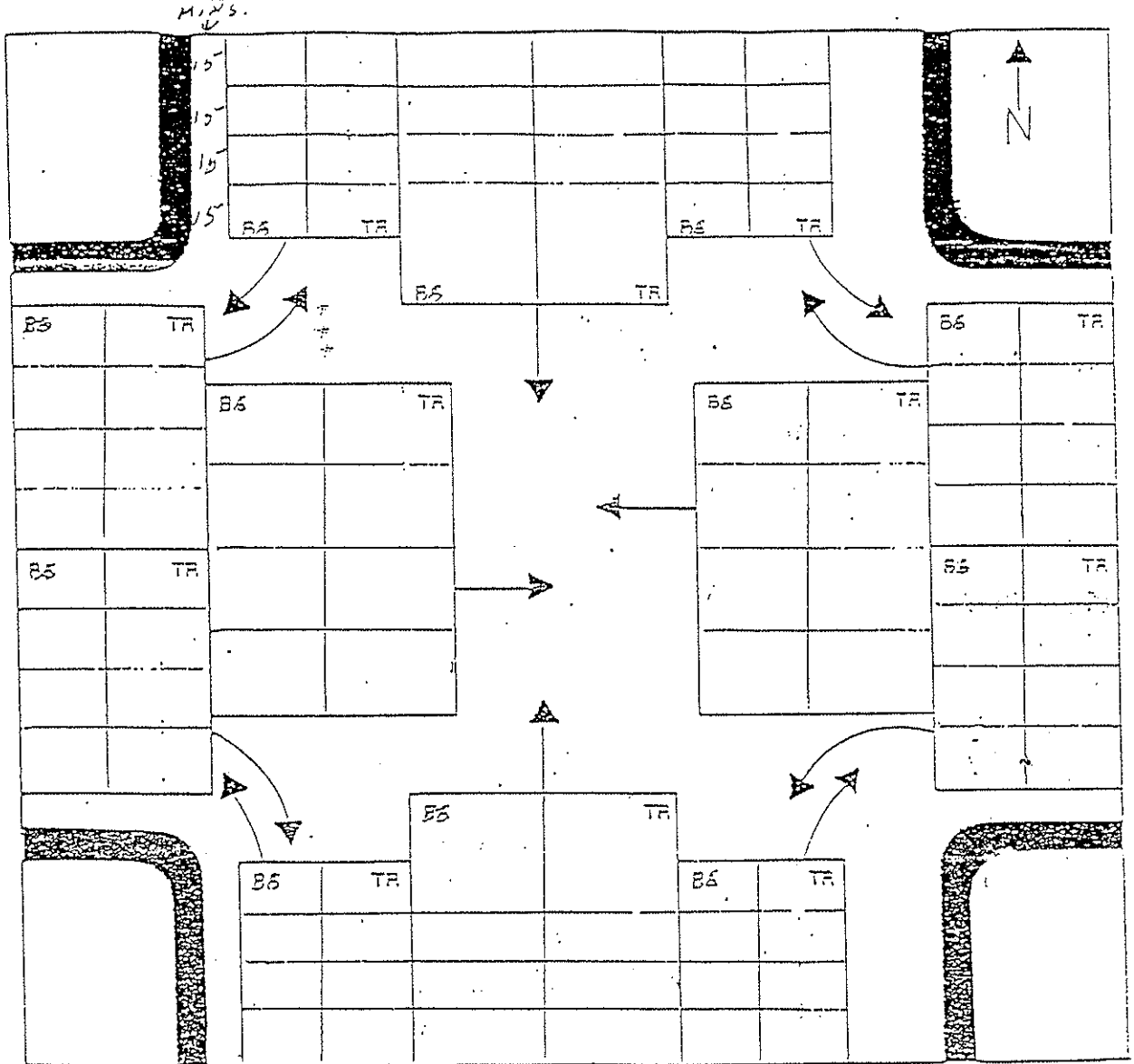


FIGURE 2-5

VEHICLE MOVEMENT DATA FORM

(Source: Florida Department of Transportation)

APPENDIX C

CRASH EXPERIENCE SUMMARY

SUMMARY OF CRASH EXPERIENCE

SR 39/SAM ALLEN ROAD

Number of Crashes by Crash Type								Number of Crashes Involving	
YEAR	RIGHT ANGLE	LEFT TURN	REAR END	SIDE SWIPE	AUTO/ PEDES- TRIAN	OTHER	TOTAL	INJURY	FATALIT Y
1993	2	2	2	0	1	0	7	8	2
1994	3	0	2	1	0	0	6	9	0
1995	2	2	1	0	0	2	7	6	0
1996	0	0	3	2	0	0	5	6	0
1997	2	4	7	1	0	0	14	22	0
TOTAL	9	8	15	4	1	2	39	51	2

SUMMARY OF CRASH EXPERIENCE

SR 39/KNIGHTS-GRIFFIN ROAD

Number of Crashes by Crash Type								Number of Crashes Involving	
YEAR	RIGHT ANGLE	LEFT TURN	REAR END	SIDE SWIPE	AUTO/ PEDES- TRIAN	OTHER	TOTAL	INJURY	FATALITY
1993	0	1	1	0	0	0	2	8	0
1994	3	1	0	0	0	0	4	5	0
1995	1	1	1	0	0	0	3	2	0
1996	3	2	0	0	0	0	5	20	0
1997	0	0	3	1	0	0	4	5	0
TOTAL	7	5	5	1	0	0	18	40	0

SUMMARY OF CRASH EXPERIENCE

SR 39/ZEPHYRHILLS BYPASS

Number of Crashes by Crash Type								Number of Crashes Involving	
YEAR	RIGHT ANGLE	LEFT TURN	REAR END	SIDE SWIPE	AUTO/ PEDES- TRIAN	OTHER	TOTAL	INJURY	FATALITY
1993	10	1	1	0	0	0	12	34	0
1994	5	1	0	0	0	0	6	10	1
1995	1	0	1	0	0	0	2	5	0
1996	3	4	1	0	0	0	8	11	0
1997	1	2	0	0	1	0	4	5	0
TOTAL	20	8	3	0	1	0	32	65	1

SUMMARY OF CRASH EXPERIENCE

SR 39/US 301

Number of Crashes by Crash Type								Number of Crashes Involving	
YEAR	RIGHT ANGLE	LEFT TURN	REAR END	SIDE SWIPE	AUTO/ PEDES- TRIAN	OTHER	TOTAL	INJURY	FATALITY
1993	0	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0	0
1995	0	0	1	0	0	0	1	2	0
1996	0	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0	0	0
TOTAL	0	0	1	0	0	0	1	2	0

SUMMARY OF CRASH EXPERIENCE

SR 39 (I-4 TO SAM ALLEN ROAD)

Number of Crashes by Crash Type								Number of Crashes Involving	
YEAR	RIGHT ANGLE	LEFT TURN	REAR END	SIDE SWIPE	AUTO/ PEDES- TRIAN	OTHER	TOTAL	INJURY	FATALITY
1993	3	4	1	0	1	1	10	9	0
1994	2	3	2	0	0	0	7	19	0
1995	0	0	0	0	0	2	2	0	0
1996	0	2	5	0	0	0	7	3	0
1997	0	0	0	0	0	0	0	0	0
TOTAL	5	9	8	0	1	3	26	31	0

SUMMARY OF CRASH EXPERIENCE

SR 39 (SAM ALLEN ROAD TO KNIGHTS-GRIFFIN ROAD)

Number of Crashes by Crash Type								Number of Crashes Involving	
YEAR	RIGHT ANGLE	LEFT TURN	REAR END	SIDE SWIPE	AUTO/ PEDES- TRIAN	OTHER	TOTAL	INJURY	FATALITY
1993	2	0	1	0	0	2	5	15	0
1994	3	0	1	0	0	2	6	8	0
1995	1	0	2	0	1	2	6	6	0
1996	0	0	3	0	0	3	6	3	0
1997	0	0	0	0	0	0	0	0	0
TOTAL	6	0	7	0	1	9	23	32	0

SUMMARY OF CRASH EXPERIENCE

SR 39 (KNIGHTS-GRIFFIN ROAD TO ZEPHYRHILLS BYPASS)

Number of Crashes by Crash Type								Number of Crashes Involving	
YEAR	RIGHT ANGLE	LEFT TURN	REAR END	SIDE SWIPE	AUTO/ PEDES- TRIAN	OTHER	TOTAL	INJURY	FATALITY
1993	0	0	0	0	0	0	0	0	0
1994	1	1	3	0	0	4	9	11	2
1995	2	1	4	1	0	10	18	22	1
1996	2	1	4	3	0	5	15	17	0
1997	0	0	0	0	0	0	0	0	0
TOTAL	5	3	11	4	0	19	42	50	3

SUMMARY OF CRASH EXPERIENCE

SR 39 (ZEPHYRHILLS BYPASS TO US 301)

Number of Crashes by Crash Type								Number of Crashes Involving	
YEAR	RIGHT ANGLE	LEFT TURN	REAR END	SIDE SWIPE	AUTO/ PEDES- TRIAN	OTHER	TOTAL	INJURY	FATALITY
1993	0	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0	0
1996	0	0	0	0	0	0	0	0	0
1997	0	1	0	0	0	0	1	0	0
TOTAL	0	1	0	0	0	0	1	0	0

APPENDIX D

- HCS WORKSHEETS - EXISTING CONDITIONS (1998) ANALYSIS
- CAPACITY TABLE FOR ROADWAY SEGMENT ANALYSIS

=====
 Streets: (E-W) Sam Allen Road (N-S) SR 39
 Analyst: JW File Name: SR39-50.HC9
 Area Type: Other 1-7-99 AM
 Comment: 1998 AM Peak Hour
 =====

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	< 0	1	1	< 0	1	1	1	1	1	< 0
Volumes	20	75	95	80	75	85	65	180	40	110	375	15
PHF or PK15	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Lane W (ft)	12.0	12.0		12.0	12.0		12.0	12.0	12.0	12.0	12.0	
Grade		0			0			0			0	
% Heavy Veh	3	3	3	3	3	3	3	7	3	3	7	3
Parking	N	N		N	N		N	N		N	N	
Bus Stops			0			0			0			0
Con. Peds			0			0			0			0
Ped Button	(Y/N)	N		(Y/N)	N		(Y/N)	N		(Y/N)	N	
Arr Type	3	3		3	3		3	3		3	3	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Prop. Share												
Prop. Prot.												

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*		
Thru	*				Thru	*		
Right	*				Right	*		
Peds					Peds			
WB Left		*			SB Left		*	
Thru		*			Thru		*	
Right		*			Right		*	
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	25.0A				Green	10.0A	38.0A	
Yellow/AR	6.0				Yellow/AR	5.0	6.0	
Cycle Length:	90 secs	Phase combination order: #1 #5 #6						

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmnts	Cap	Flow	Ratio	Ratio					
EB	L	300	965	0.070	0.311	14.1	B	15.4	C
	TR	526	1690	0.340	0.311	15.6	C		
WB	L	288	924	0.292	0.311	15.3	C	15.4	C
	TR	528	1698	0.318	0.311	15.4	C		
NB	L	403	1752	0.169	0.622	5.2	B	8.5	B
	T	809	1776	0.234	0.456	9.7	B		
	R	714	1568	0.059	0.456	8.9	B		
SB	L	679	1752	0.171	0.622	4.6	A	10.1	B
	TR	804	1765	0.511	0.456	11.7	B		

Intersection Delay = 11.6 sec/veh Intersection LOS = B
 Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.450

=====
 Streets: (E-W) Knights-Griffin Rd. (N-S) SR 39
 Analyst: JW File Name: SR39-51.HC9
 Area Type: Other 1-11-99 AM
 Comment: 1998 AM Peak Hour
 =====

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	> 1	1	0	> 1	< 0	1	1	1	1	1	< 0
Volumes	20	65	60	50	145	80	65	140	25	65	295	50
PHF or PK15	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Lane W (ft)		12.0	12.0		12.0		12.0	12.0	12.0	12.0	12.0	
Grade		0			0			0			0	
% Heavy Veh	3	3	3	3	3	3	3	7	3	3	7	3
Parking	N		N	N		N	N		N		N	
Bus Stops			0			0			0			0
Con. Peds			0			0			0			0
Ped Button	(Y/N)	N		(Y/N)	N		(Y/N)	N		(Y/N)	N	
Arr Type		3	3		3		3	3	3	3	3	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Prop. Share												
Prop. Prot.												

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*		
Thru	*				Thru	*		
Right	*				Right	*		
Peds					Peds			
WB Left	*				SB Left	*		
Thru	*				Thru	*		
Right	*				Right	*		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	26.0A				Green	52.0A		
Yellow/AR	6.0				Yellow/AR	6.0		
Cycle Length:	90 secs	Phase combination order: #1 #5						

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach:	
								Delay	LOS
EB	LT	499	1549	0.178	0.322	14.2	B	14.1	B
	R	505	1568	0.125	0.322	13.9	B		
WB	LTR	480	1489	0.604	0.322	18.1	C	18.1	C
NB	L	413	676	0.165	0.611	4.9	A	4.8	A
	T	1085	1776	0.135	0.611	4.8	A		
	R	958	1568	0.027	0.611	4.5	A		
SB	L	736	1205	0.092	0.611	4.7	A	5.5	B
	TR	1071	1753	0.340	0.611	5.6	B		

Intersection Delay = 9.8 sec/veh Intersection LOS = B
 Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.431

Streets: (E-W) Zepherhills Bypass (N-S) SR 39
 Analyst: JW File Name: SR 39-52.HC9
 Area Type: Other 1-11-99 AM
 Comment: 1998 AM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	1	1	1	1	1	< 0	1	1	1
Volumes	115	115	15	5	50	110	15	215	5	120	130	40
PHF or PK15	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Lane W (ft)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0
Grade		0			0			0			0	
% Heavy Veh	3	3	3	3	3	3	3	7	3	3	7	3
Parking	N	N		N	N		N	N		N	N	
Bus Stops			0			0			0			0
Con. Peds			0			0			0			0
Ped Button	(Y/N)	N		(Y/N)	N		(Y/N)	N		(Y/N)	N	
Arr Type	3	3	3	3	3	3	3	3		3	3	3
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Prop. Share												
Prop. Prot.												

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*		
Thru	*				Thru	*		
Right	*				Right	*		
Peds					Peds			
WB Left	*				SB Left	*		
Thru	*				Thru	*		
Right	*				Right	*		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	35.0A				Green	43.0A		
Yellow/AR	6.0				Yellow/AR	6.0		
Cycle Length:	90 secs	Phase combination order: #1 #5						

Intersection Performance Summary

	Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:		
								Mvmts	Cap	Flow
EB	L		637	1509	0.190	0.422	10.6	B	10.4	B
	T		779	1845	0.155	0.422	10.4	B		
	R		662	1568	0.024	0.422	9.8	B		
WB	L		529	1253	0.009	0.422	9.7	B	10.3	B
	T		779	1845	0.068	0.422	10.0	B		
	R		662	1568	0.175	0.422	10.5	B		
NB	L		622	1217	0.026	0.511	7.0	B	8.0	B
	TR		905	1770	0.255	0.511	8.0	B		
SB	L		474	927	0.266	0.511	8.1	B	7.7	B
	T		908	1776	0.151	0.511	7.5	B		
	R		801	1568	0.052	0.511	7.1	B		

Intersection Delay = 9.0 sec/veh Intersection LOS = B
 Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.232

=====
 Center For Microcomputers In Transportation
 University of Florida
 512 Weil Hall
 Gainesville, FL 32611-2083
 Ph: (904) 392-0378
 =====

Streets: (N-S) SR 39 (E-W) US 301
 Major Street Direction.... EW
 Length of Time Analyzed... 60 (min)
 Analyst.....
 Date of Analysis..... 1/11/99
 Other Information.....1998 AM Peak Hour
 Two-way Stop-controlled Intersection
 =====

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	< 0	1	1	0	0	0	1	0	0	0
Stop/Yield			N			N						
Volumes		225	5	185	425				180			
PHF		.95	.95	.95	.95				.95			
Grade		0			0			0				
MC's (%)				0					0			
SU/RV's (%)				0					0			
CV's (%)				7					7			
PCE's				1.07					1.07			

Adjustment Factors

Vehicle Maneuver	Critical Gap (tg)	Follow-up Time (tf)
Left Turn Major Road	5.00	2.10
Right Turn Minor Road	5.50	2.60
Through Traffic Minor Road	6.00	3.30
Left Turn Minor Road	6.50	3.40

Worksheet for TWSC Intersection

 Step 1: RT from Minor Street NB SB

Conflicting Flows: (vph) 240
 Potential Capacity: (pcph) 1046
 Movement Capacity: (pcph) 1046
 Prob. of Queue-Free State: 0.81

Step 2: LT from Major Street WB EB

Conflicting Flows: (vph) 242
 Potential Capacity: (pcph) 1315
 Movement Capacity: (pcph) 1315
 Prob. of Queue-Free State: 0.84

Intersection Performance Summary

Movement	Flow Rate (pcph)	Move Cap (pcph)	Shared Cap (pcph)	Avg. Total Delay (sec/veh)	95% Queue Length (veh)	LOS	Approach Delay (sec/veh)
NB R	202	1046		4.3	0.8	A	4.3
WB L	209	1315		3.3	0.6	A	1.0

Intersection Delay = 1.3 sec/veh

=====
 Streets: (E-W) Sam Allen Road (N-S) SR 39
 Analyst: JW File Name: SR39-54.HC9
 Area Type: Other 1-7-99 PM
 Comment: 1998 PM Peak Hour
 =====

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	< 0	1	1	< 0	1	1	1	1	1	< 0
Volumes	15	60	70	60	60	100	85	330	90	65	250	10
PHF or PK15	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Lane W (ft)	12.0	12.0		12.0	12.0		12.0	12.0	12.0	12.0	12.0	
Grade		0			0			0			0	
% Heavy Veh	3	3	3	3	3	3	3	7	3	3	7	3
Parking	N	N		N	N		N	N		N	N	
Bus Stops			0			0			0			0
Con. Peds			0			0			0			0
Ped Button	(Y/N)	N		(Y/N)	N		(Y/N)	N		(Y/N)	N	
Arr Type	3	3		3	3		3	3	3	3	3	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Prop. Share												
Prop. Prot.												

 Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*	*	
EB Thru	*				NB Thru	*	*	
EB Right	*				NB Right	*	*	
EB Peds					NB Peds			
WB Left		*			SB Left	*	*	
WB Thru		*			SB Thru	*	*	
WB Right		*			SB Right	*	*	
WB Peds					SB Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	25.0A				Green	10.0A	38.0A	
Yellow/AR	6.0				Yellow/AR	5.0	6.0	
Cycle Length:	90 secs	Phase combination order: #1 #5 #6						

 Intersection Performance Summary

	Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:		
								Mvmts	Cap	Flow
EB	L		300	965	0.053	0.311	14.0	B	15.0	B
	TR		527	1695	0.260	0.311	15.1	C		
WB	L		339	1091	0.186	0.311	14.7	B	15.3	C
	TR		520	1672	0.323	0.311	15.5	C		
NB	L		540	1752	0.165	0.622	4.7	A	9.6	B
	T		809	1776	0.429	0.456	10.9	B		
	R		714	1568	0.133	0.456	9.2	B		
SB	L		462	1752	0.147	0.622	4.9	A	9.2	B
	TR		804	1765	0.341	0.456	10.3	B		

Intersection Delay = 11.2 sec/veh Intersection LOS = B
 Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.385

=====
 Streets: (E-W) Knights-Griffin Rd. (N-S) SR 39
 Analyst: JW File Name: SR39-55.HC9
 Area Type: Other 1-11-99 PM
 Comment: 1998 PM Peak Hour
 =====

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	> 1	1	0	> 1	< 0	1	1	1	1	1	< 0
Volumes	35	140	55	40	105	100	60	300	65	75	175	20
PHF or PK15	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Lane W (ft)		12.0	12.0		12.0		12.0	12.0	12.0	12.0	12.0	
Grade			0			0			0			0
% Heavy Veh	3	3	3	3	3	3	3	7	3	3	7	3
Parking	N		N	N		N	N		N		N	
Bus Stops			0			0			0			0
Con. Peds			0			0			0			0
Ped Button	(Y/N)	N		(Y/N)	N		(Y/N)	N		(Y/N)	N	
Arr Type			3			3			3			3
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Prop. Share												
Prop. Prot.												

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*		
Thru	*				Thru	*		
Right	*				Right	*		
Peds					Peds			
WB Left	*				SB Left	*		
Thru	*				Thru	*		
Right	*				Right	*		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	26.0A				Green	52.0A		
Yellow/AR	6.0				Yellow/AR	6.0		
Cycle Length:	90 secs	Phase combination order: #1 #5						

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:
Mvmts	Cap	Flow	Ratio	Ratio			Delay LOS
EB	LT	466	1447	0.395	0.322	15.6	C 15.2 C
	R	505	1568	0.115	0.322	13.9	B
WB	LTR	454	1409	0.568	0.322	17.6	C 17.6 C
NB	L	637	1042	0.099	0.611	4.7	A 5.2 B
	T	1085	1776	0.291	0.611	5.4	B
	R	958	1568	0.071	0.611	4.6	A
SB	L	466	763	0.169	0.611	4.9	A 5.0 A
	TR	1068	1748	0.192	0.611	5.0	A

Intersection Delay = 9.7 sec/veh Intersection LOS = B
 Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.387

=====
 Streets: (E-W) Zepherhills Bypass (N-S) SR 39
 Analyst: JW File Name: SR 39-56.HC9
 Area Type: Other 1-11-99 PM
 Comment: 1998 PM Peak Hour
 =====

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	1	1	1	1	1	< 0	1	1	1
Volumes	5	95	85	70	60	35	105	205	70	20	195	5
PHF or PK15	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Lane W (ft)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0
Grade		0			0			0			0	
% Heavy Veh	3	3	3	3	3	3	3	7	3	3	7	3
Parking	N	N		N	N		N	N		N	N	
Bus Stops			0			0			0			0
Con. Peds			0			0			0			0
Ped Button	(Y/N)	N		(Y/N)	N		(Y/N)	N		(Y/N)	N	
Arr Type	3	3	3	3	3	3	3	3		3	3	3
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Prop. Share												
Prop. Prot.												

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*		
Thru	*				Thru	*		
Right	*				Right	*		
Peds					Peds			
WB Left		*			SB Left	*		
Thru		*			Thru	*		
Right		*			Right	*		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	35.0A				Green 43.0A			
Yellow/AR	6.0				Yellow/AR 6.0			
Cycle Length:	90 secs Phase combination order: #1 #5							

Intersection Performance Summary

	Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
	Mvmnts	Cap	Flow	Ratio	Ratio					
EB	L	621	1470	0.008	0.422	9.7	B	10.3	B	
	T	779	1845	0.128	0.422	10.3	B			
	R	662	1568	0.134	0.422	10.3	B			
WB	L	566	1339	0.131	0.422	10.3	B	10.1	B	
	T	779	1845	0.081	0.422	10.0	B			
	R	662	1568	0.056	0.422	9.9	B			
NB	L	516	1009	0.215	0.511	7.8	B	8.3	B	
	TR	881	1724	0.329	0.511	8.4	B			
SB	L	395	772	0.053	0.511	7.1	B	7.8	B	
	T	908	1776	0.226	0.511	7.9	B			
	R	801	1568	0.006	0.511	7.0	B			

Intersection Delay = 8.9 sec/veh Intersection LOS = B
 Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.241

=====
 Center For Microcomputers In Transportation
 University of Florida
 512 Weil Hall
 Gainesville, FL 32611-2083
 Ph: (904) 392-0378
 =====

Streets: (N-S) SR 39 (E-W) US 301
 Major Street Direction.... EW
 Length of Time Analyzed... 60 (min)
 Analyst..... JW
 Date of Analysis..... 1/25/99
 Other Information.....1998 PM Peak Hour
 Two-way Stop-controlled Intersection
 =====

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	< 0	1	1	0	0	0	1	0	0	0
Stop/Yield			N			N						
Volumes		485	10	250	285				280			
PHF		.95	.95	.95	.95				.95			
Grade		0			0			0				
MC's (%)				0					0			
SU/RV's (%)				0					0			
CV's (%)				7					7			
PCE's				1.07					1.07			

Adjustment Factors

Vehicle Maneuver	Critical Gap (tg)	Follow-up Time (tf)
Left Turn Major Road	5.00	2.10
Right Turn Minor Road	5.50	2.60
Through Traffic Minor Road	6.00	3.30
Left Turn Minor Road	6.50	3.40

=====

Worksheet for TWSC Intersection

Step 1: RT from Minor Street		NB	SB
Conflicting Flows: (vph)		516	
Potential Capacity: (pcph)		758	
Movement Capacity: (pcph)		758	
Prob. of Queue-Free State:		0.58	
Step 2: LT from Major Street		WB	EB
Conflicting Flows: (vph)		522	
Potential Capacity: (pcph)		967	
Movement Capacity: (pcph)		967	
Prob. of Queue-Free State:		0.71	

Intersection Performance Summary

Movement	Flow Rate (pcph)	Move Cap (pcph)	Shared Cap (pcph)	Avg. Total Delay (sec/veh)	95% Queue Length (veh)	LOS	Approach Delay (sec/veh)
NB R	316	758		8.1	2.4	B	8.1
WB L	281	967		5.2	1.4	B	2.5

Intersection Delay = 2.7 sec/veh

TABLE E - 2

GENERALIZED ANNUAL AVERAGE DAILY VOLUMES FOR FLORIDA'S
AREAS TRANSITIONING INTO URBANIZED AREAS OR
AREAS OVER 5000 NOT IN URBANIZED AREAS*

STATE TWO-WAY ARTERIALS UNINTERRUPTED FLOW						FREEWAYS					
UNSIGNALIZED						Level of Service					
Lanes	A	B	C	D	E	Lanes	A	B	C	D	E
2 Undiv.	8,400	13,000	17,700	23,300	31,000	4	20,100	32,200	47,900	60,400	68,100
4 Div.	20,600	34,500	47,800	57,000	66,300	6	30,400	48,500	72,200	91,100	107,300
6 Div.	30,800	51,700	71,600	85,600	99,500	8	40,500	64,700	96,300	121,500	143,100
						10	50,600	80,900	120,400	151,900	178,900

INTERRUPTED FLOW						NON-STATE ROADWAYS MAJOR CITY/COUNTY ROADWAYS					
Class Ia (>0.00 to 2.49 signalized intersections per mile)						Level of Service					
Lanes	A**	B	C	D***	E***	Lanes	A**	B**	C	D	E
2 Undiv.	-	11,500	14,000	15,300	15,900	2 Undiv.	-	-	9,900	12,900	14,100
4 Div.	-	25,500	30,600	32,800	33,500	4 Div.	-	-	22,100	28,200	30,200
6 Div.	-	39,600	46,400	49,700	50,300	6 Div.	-	-	34,300	43,200	45,700

Class Ib (2.50 to 4.50 signalized intersections per mile)						OTHER SIGNALIZED ROADWAYS (signalized intersection analysis)					
Level of Service						Level of Service					
Lanes	A**	B**	C	D	E	Lanes	A**	B**	C	D	E
2 Undiv.	-	-	8,000	13,200	14,600	2 Undiv.	-	-	4,700	9,200	10,600
4 Div.	-	-	17,600	28,600	31,300	4 Div.	-	-	10,300	20,500	22,800
6 Div.	-	-	26,900	43,600	47,300						

Class II (more than 4.50 signalized intersections per mile and not within primary city central business district of urbanized area over 500,000)						ADJUSTMENTS			
Level of Service						DIVIDED/UNDIVIDED (alter corresponding two-way volume indicated percent)			
Lanes	A**	B**	C**	D	E	Lanes	Median	Bays	Adjustment Factors
2 Undiv.	-	-	-	10,900	14,100	2	Divided	Yes	+5%
4 Div.	-	-	-	24,600	30,900	2	Undivided	No	-20%
6 Div.	-	-	-	37,800	47,000	Multi	Undivided	Yes	-5%
						Multi	Undivided	No	-25%

ONE-WAY (alter corresponding two-way volume indicated percent)		
One-Way	Lanes	Adjustment Factors
2	4	-40%
3	6	-40%
4	6	-25%

The table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Values shown are annual average daily traffic (AADT) maximum volumes (based on K_{max} factors, not peak to daily ratios) for levels of service, and are based on the 1994 Highway Capacity Manual Update and Florida traffic, roadway and signalization data. The table's input value assumptions and level of service criteria appear on the back.

** Cannot be achieved.

*** Volumes are comparable because intersection capacities are reached.

Source: Florida Department of Transportation, 1995.

No Build Alternative
TURNS4 Analysis Documentation

DATA INPUT

Date:

30-Mar-99

Analyst:

Highway:

Intersection:

From:

To:

County:

North/South Orientation of Mainline?

D Factors:

K Factors:

Mainline	<input type="text" value="9.54%"/>	Sidestreet	<input type="text" value="9.54%"/>
a. Mainline	<input type="text" value="40.5%"/>	Northbound(NB)	<input type="text" value="59.5%"/>
b. Sidestreet	<input type="text" value="40.5%"/>	Southbound(SB)	<input type="text" value="59.5%"/>
	<input type="text" value="59.5%"/>	Eastbound(EB)	<input type="text" value="40.5%"/>
		Westbound(WB)	<input type="text" value="59.5%"/>

RANGE NAMES FOR YEARS:

Base	2005
Open	2010
Mid	2015
Design	2020

Do you have FSUTMS Model Year Traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Manual Instr:
If Y, go to A43
If N, go to A24

IF NO: Enter Year and Growth Rates from Base Year:

Year	Base	Opening	Mid	Design
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Enter Base Year AADTs for Volume Comparison:
(uses growth rates to calculate other project years)

Year	From West:		From East:		From North:		From South:		TOTAL
	EB Approach	WB Approach	WB Approach	EB Approach	SB Approach	NB Approach	SB Approach	NB Approach	
2005									0
2010									0
2015									0
2020									0

AREA FOR CALCULATIONS: 1/2 OF INPUT AADI

Year	From West:		From East:		From North:		From South:		TOTAL
	EB Approach	WB Approach	WB Approach	EB Approach	SB Approach	NB Approach	SB Approach	NB Approach	
2005	2,100	2,700	2,700	8,400	5,950	8,400	8,400	8,400	19,150
2010	2,400	3,083	3,083	7,100	7,100	9,600	9,600	9,600	22,183
2015	2,700	3,467	3,467	8,250	8,250	10,800	10,800	10,800	25,217
2020	3,000	3,850	3,850	9,400	9,400	12,000	12,000	12,000	28,250

Year	To West:		To East:		To North:		To South:		TOTAL
	wbApproach	ebApproach	wbApproach	ebApproach	nbApproach	sbApproach	nbApproach	sbApproach	
2005	2,100	2,700	2,700	8,400	5,950	8,400	8,400	8,400	19,150
2010	2,400	3,083	3,083	7,100	7,100	9,600	9,600	9,600	22,183
2015	2,700	3,467	3,467	8,250	8,250	10,800	10,800	10,800	25,217
2020	3,000	3,850	3,850	9,400	9,400	12,000	12,000	12,000	28,250

DATA INPUT

Date:

30-Mar-99

Analyst: PAP

IF YES: Enter Project & Model Years:

Base	2005
Opening	2010
Mid	2015
Design	2020
Model	2020

Enter Base & Model Year AADTs for Interpolation:

	From West (EB)Approach	From East (WB)Approach	From North (SB)Approach	From South (NB)Approach	TOTAL
Base	4,200	5,400	11,900	16,800	38,300
Model	6,000	7,700	18,800	24,000	56,500

AREA FOR CALCULATION: INTERPOLATION

model - base: 15

diff of vols: 1800 2300 6900 7200

year	EB	WB	SB	NB
2005	4,200	5,400	11,900	16,800
2010	4,800	6,167	14,200	19,200
2015	5,400	6,933	16,500	21,600
2020	6,000	7,700	18,800	24,000

Enter "1st Guess" Turning

Percentages for AADT Balancing:

(EB THRU)	W-to-E	0.40
(EB LT)	W-to-N	0.10
(EB RT)	W-to-S	0.49
(WB THRU)	E-to-W	0.32
(WB RT)	E-to-N	0.35
(WB LT)	E-to-S	0.34
(SB RT)	N-to-W	0.03
(SB LT)	N-to-E	0.22
(SB THRU)	N-to-S	0.75
(NB LT)	S-to-W	0.23
(NB RT)	S-to-E	0.14
(NB THRU)	S-to-N	0.63
Desired Closure:		0.010

Actual/Counted Traffic:

W-to-E	73
W-to-N	19
W-to-S	90
E-to-W	72
E-to-N	78
E-to-S	76
N-to-W	15
N-to-E	105
N-to-S	354
S-to-W	61
S-to-E	37
S-to-N	169

2005		2010	
1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR		1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR	
Sam Allen Rd.	SR.39 - NO.BUILD -AM	Sam Allen Rd.	SR.39 - NO.BUILD -AM
11	675	11	812
8	596	710	582
39	68	91	91
166	68	205	91
120	57	182	62
182	307	483	193
406	124	131	265
649	114	1034	746
17	114	131	131
12	114	270	131
54	79	236	131
147	204	162	147
842	139	1286	927
K ml = 9.54%		K ml = 9.54%	
K ss = 9.54%		K ss = 9.54%	
D nb&sb = 40.5%		D nb&sb = 40.5%	
D eb&wb = 40.5%		D eb&wb = 40.5%	
2015		2020	
1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR		1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR	
Sam Allen Rd.	SR.39 - NO.BUILD -AM	Sam Allen Rd.	SR.39 - NO.BUILD -AM
17	948	17	1,056
12	817	908	760
54	114	131	131
147	114	270	131
842	79	236	131
147	204	162	147
842	139	1286	927
K ml = 9.54%		K ml = 9.54%	
K ss = 9.54%		K ss = 9.54%	
D nb&sb = 40.5%		D nb&sb = 40.5%	
D eb&wb = 40.5%		D eb&wb = 40.5%	

2005 TRAFFIC		2005 TRAFFIC COMPARED TO		2010 TRAFFIC		2010 TRAFFIC	
Sam Allen Rd.	SR 39 - NO BUILD - AM	Sam Allen Rd.	SR 39 - NO BUILD - AM	Sam Allen Rd.	SR 39 - NO BUILD - AM	Sam Allen Rd.	SR 39 - NO BUILD - AM
9,400	9,400	9,400	9,400	9,400	9,400	9,400	9,400
16,700	16,700	18,800	18,800	14,300	14,300	18,800	18,800
1.78	1.78	2.00	2.00	1.52	1.52	2.00	2.00
200	200	200	200	200	200	200	200
300	300	300	300	1,000	1,000	1,000	1,000
1.50	1.50	1.50	1.50	1.00	1.00	1.00	1.00
1,000	1,000	1,000	1,000	1,100	1,100	1,100	1,100
1,400	1,400	1,600	1,600	1,100	1,100	1,600	1,600
1.40	1.40	1.60	1.60	1.10	1.10	1.60	1.60
10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500
14,400	14,400	16,000	16,000	N/S	N/S	N/S	N/S
1.37	1.37	1.52	1.52				
12,400	12,400	12,400	12,400	12,400	12,400	12,400	12,400
21,800	21,800	24,000	24,000	19,300	19,300	24,000	24,000
1.76	1.76	1.94	1.94	1.56	1.56	1.94	1.94
3,100	3,100	3,100	3,100	3,100	3,100	3,100	3,100
5,500	5,500	6,000	6,000	4,700	4,700	6,000	6,000
1.77	1.77	1.94	1.94	1.52	1.52	1.94	1.94
X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005
X,XXX - 2015	X,XXX - 2015	X,XXX - 2015	X,XXX - 2015	X,XXX - 2010	X,XXX - 2010	X,XXX - 2010	X,XXX - 2010
X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio
5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400
7,000	7,000	7,000	7,000	6,100	6,100	7,000	7,000
1.30	1.30	1.30	1.30	1.13	1.13	1.30	1.30

2005 ACTUAL TRAFFIC COMPARED TO 2005 DHV		2005 ACTUAL TRAFFIC COMPARED TO 2010 DHV	
Sam Allen Rd.	SR 39 - NO BUILD - AM	Sam Allen Rd.	SR 39 - NO BUILD - AM
(15) 11	(354) 596	(15) 11	(354) 710
0.76	1.68	0.76	2.00
(19) 8	0.65	(19) 8	0.86
0.41	0.87	0.41	1.16
(73) 39	(72) 57	(73) 43	(72) 62
0.53	0.79	0.58	0.87
(90) 120	(76) 182	(90) 131	(76) 193
1.33	2.39	1.46	2.54
(169) 120	(37) 124	(169) 131	(37) 131
1.96	3.34	2.15	3.55
2.40		2.86	
(XXX) - Actual		(XXX) - Actual	
XXX - Calculated DHV		XXX - Calculated DHV	
X.XX - Ratio		X.XX - Ratio	
2005 ACTUAL TRAFFIC COMPARED TO 2015 DHV		2005 ACTUAL TRAFFIC COMPARED TO 2020 DHV	
Sam Allen Rd.	SR 39 - NO BUILD - AM	Sam Allen Rd.	SR 39 - NO BUILD - AM
(15) 17	(354) 817	(15) 17	(354) 908
1.14	2.31	1.14	2.57
(19) 12	1.08	(19) 12	1.24
0.61	1.46	0.61	1.67
(73) 54	(72) 79	(73) 62	(72) 91
0.74	1.10	0.85	1.26
(90) 147	(76) 204	(90) 162	(76) 216
1.63	2.69	1.80	2.84
(169) 147	(37) 139	(169) 162	(37) 147
2.41	3.76	2.66	3.97
3.29		3.66	
(XXX) - Actual		(XXX) - Actual	
XXX - Calculated DHV		XXX - Calculated DHV	
X.XX - Ratio		X.XX - Ratio	

DATA INPUT

Date:

28-Nov-98

Analyst: PAP
 Highway: SR 39 - NO BUILD - PM
 Intersection: Sam Allen Rd.
 From: Opening Day
 To: 2010 (From 2005 Base)
 County: Hillsborough

North/South Orientation of Mainline?
 (Y/N) Y

K Factors: Mainline 9.54% Sidesreet 9.54%
 D Factors: a. Mainline Northbound(NB) 59.5% Southbound(SB) 40.5%
 b. Sidesreet Eastbound(EB) 40.5% Westbound(WB) 59.5%

RANGE NAMES FOR YEARS:

Base	2005
Open	2010
Mid	2015
Design	2020

Do you have FSUTMS Model Year Traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Y
 Manual Instr:
 If Y, go to A43
 If N, go to A24

IF NO: Enter Year and Growth Rates from Base Year:
 Year Rate

Base	
Opening	
Mid	
Design	

Enter Base Year AADTs for Volume Comparison:
 (uses growth rates to calculate other project years)

AREA FOR CALCULATIONS: 1/2 OF INPUT AADI

Year	From West: EB Approach	From East: WB Approach	From North: SB Approach	From South: NB Approach	TOTAL
2005	2,100	2,700	5,950	8,400	19,150
2010	2,400	3,083	7,100	9,600	22,183
2015	2,700	3,467	8,250	10,800	25,217
2020	3,000	3,850	9,400	12,000	28,250

Year	From West: EB Approach	From East: WB Approach	From North: SB Approach	From South: NB Approach	TOTAL
2005					0
2010					0
2015					0
2020					0

Year	To West: wb Approach	To East: eb Approach	To North: nb Approach	To South: sb Approach	TOTAL
2005	2,100	2,700	5,950	8,400	19,150
2010	2,400	3,083	7,100	9,600	22,183
2015	2,700	3,467	8,250	10,800	25,217
2020	3,000	3,850	9,400	12,000	28,250

DATA INPUT

Date:

28-Nov-98

Analyst: PAP
 IF YES: Enter Project & Model Years:

Base	2005
Opening	2010
Mid	2015
Design	2020
Model	2020

Enter Base & Model Year AADTs for Interpolation:

	From West	From East	From North	From South	TOTAL
Base	(EB)Approach	(WB)Approach	(SB)Approach	(NB)Approach	
Model	4,200	5,400	11,900	16,800	38,300
2020	6,000	7,700	18,800	24,000	56,500

AREA FOR CALCULATION : INTERPOLATION

model - base: 15
 diff of vols: 1800

year	EB	WB	SB	NB
2005	4,200	5,400	11,900	16,800
2010	4,800	6,167	14,200	19,200
2015	5,400	6,933	16,500	21,600
2020	6,000	7,700	18,800	24,000

Enter "1st Guess" Turning

Percentages for AADT Balancing:

(EB THRU)	W-to-E	0.41	2005	W-to-E	58
(EB LT)	W-to-N	0.11		W-to-N	16
(EB RT)	W-to-S	0.48		W-to-S	67
(WB THRU)	E-to-W	0.28		E-to-W	59
(WB RT)	E-to-N	0.45		E-to-N	93
(WB LT)	E-to-S	0.27		E-to-S	56
(SB RT)	N-to-W	0.03		N-to-W	10
(SB LT)	N-to-E	0.20		N-to-E	62
(SB THRU)	N-to-S	0.77		N-to-S	237
(NB LT)	S-to-W	0.17		S-to-W	79
(NB RT)	S-to-E	0.18		S-to-E	84
(NB THRU)	S-to-N	0.65		S-to-N	312

Desired Closure: 0.010

2-WAY AADT TURNING MOVEMENTS IN YEAR		2005		2010	
Sam Allen Rd.	SR 39 - NO BUILD - PM	SR 39 - NO BUILD - PM	SR 39 - NO BUILD - PM	SR 39 - NO BUILD - PM	SR 39 - NO BUILD - PM
6,000	70	1%	7,200	95	1%
9,400	102	1%	14,300	200	1%
91%	5%	1%	90%	138	1%
500	5%	1%	6,400	200	1%
1,200	22%	1%	E/W	600	1%
714	73%	1%	1,200	1,600	1%
26%	19%	1%	N/S	600	1%
19%	55%	1%	2,700	3,400	1%
5,400	1,534	18%	5,400	1,694	18%
2,700	1,508	18%	2,700	1,694	18%
5,400	12,400	61%	5,400	19,300	63%
	8,300	61%	5,400	19,300	63%
			12,500	3,400	19%
			12,500	1,861	19%
			6,000	3,400	19%
			6,000	1,861	19%
			19,300	1,861	19%
			9,600	1,861	19%
			9,600	1,861	19%
			1,561	1,861	19%
			1,561	1,861	19%
			3,100	1,861	19%
			6,200	1,861	19%

2-WAY AADT TURNING MOVEMENTS IN YEAR		2015		2020	
Sam Allen Rd.	SR 39 - NO BUILD - PM	SR 39 - NO BUILD - PM	SR 39 - NO BUILD - PM	SR 39 - NO BUILD - PM	SR 39 - NO BUILD - PM
8,200	120	1%	9,400	149	2%
16,500	182	1%	18,800	400	2%
89%	6%	1%	88%	222	2%
805	6%	1%	8,300	400	2%
1,900	25%	1%	E/W	800	2%
1,101	69%	1%	1,600	800	2%
32%	21%	1%	N/S	800	2%
21%	1,920	17%	16,100	2,078	17%
47%	1,881	17%	16,100	2,035	17%
3,400	1,881	17%	3,400	2,035	17%
6,900	21,700	64%	6,900	24,000	65%
3,400	10,900	64%	3,400	24,000	65%
6,900			6,900	2,106	18%
			6,900	2,106	18%
			16,100	2,106	18%
			16,100	2,106	18%
			7,900	3,800	18%
			7,900	1,685	18%
			24,000	1,685	18%
			12,000	1,685	18%
			12,000	1,685	18%
			1,685	1,685	18%
			1,685	1,685	18%
			3,800	1,685	18%
			7,700	1,685	18%

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR 2005

Sam.Allen.Rd.	460	SR_39 - NO BUILD - PM	2005
	8	46	
	8	68	
	162	57	307
	116	182	
	596	182	
	948		
	9.54%	59.5%	40.5%
	9.54%	40.5%	59.5%

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR 2015

Sam.Allen.Rd.	638	SR_39 - NO BUILD - PM	2015
	12	73	
	12	108	
	213	79	392
	147	204	
	812	204	
	1,232		
	9.54%	59.5%	40.5%
	9.54%	40.5%	59.5%

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR 2010

Sam.Allen.Rd.	553	SR_39 - NO BUILD - PM	2010
	8	62	
	8	91	
	185	68	352
	131	193	
	193	193	
	710	193	
	1,096		
	9.54%	59.5%	40.5%
	9.54%	40.5%	59.5%

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR 2020

Sam.Allen.Rd.	726	SR_39 - NO BUILD - PM	2020
	15	89	
	15	131	
	236	91	437
	158	216	
	233	216	
	914	216	
	1,362		
	9.54%	59.5%	40.5%
	9.54%	40.5%	59.5%

2005 TRAFFIC		2005 TRAFFIC COMPARED TO		2010 TRAFFIC	
Sam.Allen.Rd.	SR_39 - NO_BUILD - PM	Sam.Allen.Rd.	SR_39 - NO_BUILD - PM	Sam.Allen.Rd.	SR_39 - NO_BUILD - PM
9,400	9,400	9,400	9,400	9,400	9,400
14,300	14,300	14,300	14,300	14,300	14,300
1.52	1.52	1.52	1.52	1.52	1.52
200	200	200	200	200	200
1,000	1,000	1,000	1,000	1,000	1,000
1,200	1,200	1,200	1,200	1,200	1,200
1.20	1.20	1.20	1.20	1.20	1.20
5,400	5,400	5,400	5,400	5,400	5,400
10,500	10,500	10,500	10,500	10,500	10,500
12,500	12,500	12,500	12,500	12,500	12,500
1.19	1.19	1.19	1.19	1.19	1.19
3,400	3,400	3,400	3,400	3,400	3,400
1.13	1.13	1.13	1.13	1.13	1.13
12,400	12,400	12,400	12,400	12,400	12,400
19,300	19,300	19,300	19,300	19,300	19,300
1.56	1.56	1.56	1.56	1.56	1.56
X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005
X,XXX - 2010	X,XXX - 2010	X,XXX - 2010	X,XXX - 2010	X,XXX - 2010	X,XXX - 2010
X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio

2005 TRAFFIC COMPARED TO		2015 TRAFFIC		2005 TRAFFIC COMPARED TO		2020 TRAFFIC	
Sam.Allen.Rd.	SR_39 - NO_BUILD - PM	Sam.Allen.Rd.	SR_39 - NO_BUILD - PM	Sam.Allen.Rd.	SR_39 - NO_BUILD - PM	Sam.Allen.Rd.	SR_39 - NO_BUILD - PM
9,400	9,400	9,400	9,400	9,400	9,400	9,400	9,400
16,500	16,500	16,500	16,500	18,800	18,800	18,800	18,800
1.76	1.76	1.76	1.76	2.00	2.00	2.00	2.00
200	200	200	200	200	200	200	200
1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1,400	1,400	1,400	1,400	1,600	1,600	1,600	1,600
1.40	1.40	1.40	1.40	1.60	1.60	1.60	1.60
5,400	5,400	5,400	5,400	5,400	5,400	5,400	5,400
10,500	10,500	10,500	10,500	10,500	10,500	10,500	10,500
14,300	14,300	14,300	14,300	16,100	16,100	16,100	16,100
1.36	1.36	1.36	1.36	1.53	1.53	1.53	1.53
3,600	3,600	3,600	3,600	4,100	4,100	4,100	4,100
1.27	1.27	1.27	1.27	1.37	1.37	1.37	1.37
12,400	12,400	12,400	12,400	12,400	12,400	12,400	12,400
21,700	21,700	21,700	21,700	24,000	24,000	24,000	24,000
1.75	1.75	1.75	1.75	1.94	1.94	1.94	1.94
X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005
X,XXX - 2015	X,XXX - 2015	X,XXX - 2015	X,XXX - 2015	X,XXX - 2020	X,XXX - 2020	X,XXX - 2020	X,XXX - 2020
X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio

2005 ACTUAL TRAFFIC COMPARED TO 2005 DHV		2005 ACTUAL TRAFFIC COMPARED TO 2010 DHV	
Sam Allen Rd.	SR 39 - NO BUILD - PM	Sam Allen Rd.	SR 39 - NO BUILD - PM
(10) 8	(237) 406	(10) 8	(237) 483
0.77	1.71	0.77	2.04
(16) 8	0.75	(16) 8	1.00
0.48	0.73	0.48	0.98
(58) 39	(59) 57	(58) 46	(59) 68
0.67	0.96	0.80	1.15
(67) 116	(56) 182	(67) 131	(56) 193
1.73	3.24	1.96	3.45
(79) 170	(84) 182	(79) 193	(84) 193
2.16	2.16	2.44	2.30
1.91		2.27	
(XXX) - Actual		(XXX) - Actual	
XXX - Calculated DHV		XXX - Calculated DHV	
X.XX - Ratio		X.XX - Ratio	
2005 ACTUAL TRAFFIC COMPARED TO 2015 DHV		2005 ACTUAL TRAFFIC COMPARED TO 2020 DHV	
Sam Allen Rd.	SR 39 - NO BUILD - PM	Sam Allen Rd.	SR 39 - NO BUILD - PM
(10) 12	(237) 553	(10) 15	(237) 622
1.16	2.33	1.55	2.62
(16) 12	1.18	(16) 15	1.43
0.72	1.16	0.97	1.40
(58) 54	(59) 79	(58) 62	(59) 91
0.93	1.35	1.07	1.54
(67) 147	(56) 204	(67) 158	(56) 216
2.19	3.65	2.36	3.85
(79) 216	(84) 204	(79) 233	(84) 216
2.73	2.43	2.95	2.57
2.60		2.93	
(XXX) - Actual		(XXX) - Actual	
XXX - Calculated DHV		XXX - Calculated DHV	
X.XX - Ratio		X.XX - Ratio	

DATA INPUT

Date:

28-Nov-98

Analyst: PAP

Highway: SR 39 - No-Build - AM

Intersection: Knights Griffin Rd.

From: Opening Day

To: 2010 (From 2005 Base)

County: Hillsborough

North/South Orientation of Mainline?

(Y/N) Y

D Factors:

a. Mainline

40.5%	Northbound(NB)
59.5%	Southbound(SB)

b. Sidestreet

40.5%	Eastbound(EB)
59.5%	Westbound(WB)

K Factors:

Mainline	9.54%	Sidestreet	9.54%
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Do you have FSUTMS Model Year Traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Y

Manual Instr:
If Y, go to A43
If N, go to A24

IF NO: Enter Year and Growth Rates from Base Year:

Year	Rate
Base	
Opening	
Mid	
Design	

Enter Base Year AADTs for Volume Comparison:

(uses growth rates to calculate other project years)

Year	From West:		From East:		From North:		From South:		TOTAL
	EB Approach	WB Approach	WB Approach	EB Approach	SB Approach	NB Approach	SB Approach	NB Approach	
2005									0
2010									0
2015									0
2020									0

RANGE NAMES FOR YEARS:

Base	2005
Open	2010
Mid	2015
Design	2020

AREA FOR CALCULATIONS: 1/2 OF INPUT AADT

Year	From West:		From East:		From North:		From South:		TOTAL
	EB Approach	WB Approach	WB Approach	EB Approach	SB Approach	NB Approach	SB Approach	NB Approach	
2005	2,050	1,950	1,950	5,200	5,200	5,950	5,950	15,150	
2010	2,333	2,233	2,233	6,217	6,217	7,100	7,100	17,883	
2015	2,617	2,517	2,517	7,233	7,233	8,250	8,250	20,617	
2020	2,900	2,800	2,800	8,250	8,250	9,400	9,400	23,350	

DATA INPUT

Analyst: PAP

Date:

28-Nov-98

IF YES: Enter Project & Model Years:

Base	2005
Opening	2010
Mid	2015
Design	2020
Model	2020

Enter Base & Model Year AADTs for Interpolation:

Base	2005	4,100	3,900	10,400	11,900	TOTAL	30,300
Model	2020	5,800	5,600	16,500	18,800		46,700
				From West	From East	From North	From South
				(EB)Approach	(WB)Approach	(SB)Approach	(NB)Approach

AREA FOR CALCULATION : INTERPOLATION

model - base:	15							
diff of vols:	1700	1700	1700	6100	6900			
year	2005	2010	2015	2020	2005	2010	2015	2020
	4,100	4,667	5,233	5,800	3,900	4,467	5,033	5,600
	10,400	12,433	14,467	16,500	11,900	14,200	16,500	18,800
	30,300	35,767	41,233	46,700				
					EB	WB	SB	NB

Enter "1st Guess" Turning

Percentages for AADT Balancing:

(ER THRU)	W-to-E	0.44	2005	63
(EB LT)	W-to-N	0.15		21
(EB RT)	W-to-S	0.41		58
(WB THRU)	E-to-W	0.51		137
(WB RT)	E-to-N	0.30		78
(WB LT)	E-to-S	0.19		49
(SB RT)	N-to-W	0.12		46
(SB LT)	N-to-E	0.16		61
(SB THRU)	N-to-S	0.72		280
(NB LT)	S-to-W	0.28		60
(NB RT)	S-to-E	0.11		25
(NB THRU)	S-to-N	0.61		133

Actual/Counted Traffic:

W-to-E	2005	63
W-to-N		21
W-to-S		58
E-to-W		137
E-to-N		78
E-to-S		49
N-to-W		46
N-to-E		61
N-to-S		280
S-to-W		60
S-to-E		25
S-to-N		133

Desired Closure:

0.010

2005 TRAFFIC COMPARED TO 2010 TRAFFIC

Knights Griffin Rd.	2005 TRAFFIC		SR 39 - No-Build - AM		2010 TRAFFIC	
	Volume	Ratio	Volume	Ratio	Volume	Ratio
Knights Griffin Rd.	8,000		8,000		8,000	
	12,500	1.56	12,500	1.56	12,500	1.56
	600	^	600	^	600	^
	700		700		700	
	1,17	<	1,17	<	1,17	<
	1,400		1,400		1,400	
	1,500	<	1,500	<	1,500	<
	1,500		1,500		1,500	
	1.07	E/W	1.07	E/W	1.07	E/W
	4,200	<	4,200	<	4,200	<
	4,700	<	4,700	<	4,700	<
	1.12	<	1.12	<	1.12	<
	8,500		8,500		8,500	
	10,300		10,300		10,300	
	1.21		1.21		1.21	
	1,200	<	1,200	<	1,200	<
	1,400	<	1,400	<	1,400	<
	1.14	v	1.14	v	1.14	v
	9,400	<	9,400	<	9,400	<
	14,200	<	14,200	<	14,200	<
	1.51	<	1.51	<	1.51	<
X,XXX - 2005						
X,XXX - 2010						
X,XXX - Ratio						

2005 TRAFFIC COMPARED TO 2020 TRAFFIC

Knights Griffin Rd.	2005 TRAFFIC		SR 39 - No-Build - AM		2020 TRAFFIC	
	Volume	Ratio	Volume	Ratio	Volume	Ratio
Knights Griffin Rd.	8,000		8,000		8,000	
	16,400	2.05	16,400	2.05	16,400	2.05
	600	^	600	^	600	^
	800		800		800	
	1.33	<	1.33	<	1.33	<
	1,400		1,400		1,400	
	1,800	<	1,800	<	1,800	<
	1,29	E/W	1,29	E/W	1,29	E/W
	4,200	<	4,200	<	4,200	<
	5,800	<	5,800	<	5,800	<
	1.38	<	1.38	<	1.38	<
	8,500		8,500		8,500	
	13,700		13,700		13,700	
	1.61		1.61		1.61	
	1,200	<	1,200	<	1,200	<
	1,900	<	1,900	<	1,900	<
	1.41	v	1.41	v	1.41	v
	9,400	<	9,400	<	9,400	<
	18,800	<	18,800	<	18,800	<
	2.00	<	2.00	<	2.00	<
X,XXX - 2005						
X,XXX - 2020						
X,XXX - Ratio						

2005 TRAFFIC COMPARED TO 2015 TRAFFIC

Knights Griffin Rd.	2005 TRAFFIC		SR 39 - No-Build - AM		2015 TRAFFIC	
	Volume	Ratio	Volume	Ratio	Volume	Ratio
Knights Griffin Rd.	8,000		8,000		8,000	
	14,600	1.83	14,600	1.83	14,600	1.83
	600	^	600	^	600	^
	800		800		800	
	1.33	<	1.33	<	1.33	<
	1,400		1,400		1,400	
	1,700	<	1,700	<	1,700	<
	1.21	E/W	1.21	E/W	1.21	E/W
	4,200	<	4,200	<	4,200	<
	5,400	<	5,400	<	5,400	<
	1.29	<	1.29	<	1.29	<
	8,500		8,500		8,500	
	12,100		12,100		12,100	
	1.42		1.42		1.42	
	1,200	<	1,200	<	1,200	<
	1,700	<	1,700	<	1,700	<
	1.32	v	1.32	v	1.32	v
	9,400	<	9,400	<	9,400	<
	16,700	<	16,700	<	16,700	<
	1.78	<	1.78	<	1.78	<
X,XXX - 2005						
X,XXX - 2015						
X,XXX - Ratio						

2005 TRAFFIC COMPARED TO 2010 TRAFFIC

Knights Griffin Rd.	2005 TRAFFIC		SR 39 - No-Build - AM		2010 TRAFFIC	
	Volume	Ratio	Volume	Ratio	Volume	Ratio
Knights Griffin Rd.	8,000		8,000		8,000	
	12,500	1.56	12,500	1.56	12,500	1.56
	600	^	600	^	600	^
	700		700		700	
	1.17	<	1.17	<	1.17	<
	1,400		1,400		1,400	
	1,500	<	1,500	<	1,500	<
	1.07	E/W	1.07	E/W	1.07	E/W
	4,200	<	4,200	<	4,200	<
	4,400	<	4,400	<	4,400	<
	1.13	<	1.13	<	1.13	<
	8,500		8,500		8,500	
	10,300		10,300		10,300	
	1.21		1.21		1.21	
	1,200	<	1,200	<	1,200	<
	1,400	<	1,400	<	1,400	<
	1.14	v	1.14	v	1.14	v
	9,400	<	9,400	<	9,400	<
	14,200	<	14,200	<	14,200	<
	1.51	<	1.51	<	1.51	<
X,XXX - 2005						
X,XXX - 2010						
X,XXX - Ratio						

2005 ACTUAL TRAFFIC COMPARED TO 2005 DHV

Knights Griffin Rd.	2005 ACTUAL TRAFFIC COMPARED TO		2005 ACTUAL TRAFFIC COMPARED TO		2010 DHV	
	(280)	SR_39 - No-Build - AM	(280)	SR_39 - No-Build - AM	(280)	SR_39 - No-Build - AM
(46)	482	(61)	(46)	585	(61)	
34	1.72	74	40	2.09	85	
0.74		1.21	0.86		1.40	
(21)	^		(21)	^		(78)
23			27			85
1.10	----->	----->	1.29	----->	----->	1.09
(63)			(63)			(137)
54			58			85
0.86			0.92			0.62
(58)	----->		(58)	----->		
85			97			(49)
1.47	v	v	1.67	v	v	79
						1.62
(60)			(60)			(25)
85			97			54
1.42			1.61			2.16
(133)			(133)			
328			398			
2.47			2.99			
(XXX) - Actual			(XXX) - Actual			
XXX - Calculated DHV			XXX - Calculated DHV			
X.XX - Ratio			X.XX - Ratio			

2005 ACTUAL TRAFFIC COMPARED TO 2015 DHV

Knights Griffin Rd.	2005 ACTUAL TRAFFIC COMPARED TO		2005 ACTUAL TRAFFIC COMPARED TO		2020 DHV	
	(280)	SR_39 - No-Build - AM	(280)	SR_39 - No-Build - AM	(280)	SR_39 - No-Build - AM
(46)	687	(61)	(46)	778	(61)	
45	2.45	96	45	2.78	108	
0.99		1.58	0.99		1.77	
(21)	^		(21)	^		(78)
31			31			108
1.47	----->	----->	1.47	----->	----->	1.38
(63)			(63)			(137)
66			70			102
1.04			1.10			0.75
(58)	----->		(58)	----->		
112			120			(49)
1.93	v	v	2.07	v	v	108
						2.20
(60)			(60)			(25)
112			120			73
1.87			2.00			2.94
(133)			(133)			
468			529			
3.52			3.98			
(XXX) - Actual			(XXX) - Actual			
XXX - Calculated DHV			XXX - Calculated DHV			
X.XX - Ratio			X.XX - Ratio			

DATA INPUT

Analyst: PAP Date: 30-Nov-98

Highway: SR 39 - No-Build - PM
 Intersection: Knights Griffin Rd.
 From: Opening Day
 To: 2010 (From 2005 Base)
 County: Hillsborough

North/South Orientation of Mainline?
 (Y/N) Y

K Factors: Mainline 9.54% Sidestreet 9.54% Must Total 1
 D Factors: a. Mainline Northbound(NB) 59.4% Southbound(SB) 40.5%
 b. Sidestreet Eastbound(EB) 59.5% Westbound(WB) 40.5%

Do you have FSUTMS Model Year Traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

IF NO: Enter Year and Growth Rates from Base Year:
 Year Rate

Base	
Opening	
Mid	
Design	

Manual Instr:
 If Y, go to A43
 If N, go to A24

RANGE NAMES FOR YEARS:

Base	2005
Open	2010
Mid	2015
Design	2020

AREA FOR CALCULATIONS: 1/2 OF INPUT AADI

Year	From West:		From East:		From North:		From South:		TOTAL
	EB Approach	wb Approach	WB Approach	eb Approach	SB Approach	nb Approach	NB Approach	sb Approach	
2005	2,050	2,050	1,950	1,950	5,200	5,200	5,950	5,950	15,150
2010	2,333	2,333	2,233	2,233	6,217	6,217	7,100	7,100	17,883
2015	2,617	2,617	2,517	2,517	7,233	7,233	8,250	8,250	20,617
2020	2,900	2,900	2,800	2,800	8,250	8,250	9,400	9,400	23,350

Enter Base Year AADTs for Volume Comparison:
 (uses growth rates to calculate other project years)

Year	From West:		From East:		From North:		From South:		TOTAL
	EB Approach	wb Approach	WB Approach	eb Approach	SB Approach	nb Approach	NB Approach	sb Approach	
2005									0
2010									0
2015									0
2020									0

DATA INPUT

Date:

30-Nov-98

Analyst: P&P

IF YES: Enter Project & Model Years:

Base	2005
Opening	2010
Mid	2015
Design	2020
Model	2020

Enter Base & Model Year AADTs for interpolation:

Base	From West (EB)Approach	From East (WB)Approach	From North (SB)Approach	From South (NB)Approach	TOTAL
2005	4,100	3,900	10,400	11,900	30,300
Model	5,800	5,600	16,500	18,800	46,700

AREA FOR CALCULATION : INTERPOLATION

model - base:	15	1700	1700	1700	6100	6900
diff of vols:	EB	WB	SB	NB		
year	2005	2010	2015	2020		
	4,100	3,900	10,400	11,900		30,300
	4,667	4,467	12,433	14,200		35,767
	5,233	5,033	14,467	16,500		41,233
	5,800	5,600	16,500	18,800		46,700

Enter "1st Guess" Turning

Percentages for AADT Balancing:

(EB THRU)	W-to-E	0.14
(EB LT)	W-to-N	0.61
(EB RT)	W-to-S	0.25
(WB THRU)	E-to-W	0.42
(WB RT)	E-to-N	0.41
(WB LT)	E-to-S	0.17
(SB RT)	N-to-W	0.08
(SB LT)	N-to-E	0.27
(SB THRU)	N-to-S	0.65
(NB LT)	S-to-W	0.14
(NB RT)	S-to-E	0.15
(NB THRU)	S-to-N	0.71

Actual/Counted Traffic:

2005	135
W-to-E	31
W-to-N	54
W-to-S	
E-to-W	98
E-to-N	94
E-to-S	38
N-to-W	20
N-to-E	70
N-to-S	168
S-to-W	57
S-to-E	63
S-to-N	287

Desired Closure:

0.010

2-WAY AADT TURNING MOVEMENTS IN YEAR		2005		2010	
Knights Griffin Rd.	SR 39 - No-Build - PM	Knights Griffin Rd.	SR 39 - No-Build - PM	Knights Griffin Rd.	SR 39 - No-Build - PM
236	5,200	269	6,200	269	6,200
5%	8,000	4%	12,400	4%	12,400
^	82%	^	83%	^	83%
1,000	708	1,200	807	1,400	601
14%	1,200	14%	1,200	13%	807
^	539	^	539	^	601
39% <	E/W	39% <	E/W	39% <	27%
200	1,000	200	1,100	200	800
11% <	2,000	11% <	2,000	11% <	37%
38%	2,900	38%	2,000	37%	2,200
50% <	N/S	50% <	N/S	50% <	35%
8,200	8,200	9,800	9,800	9,800	9,800
994	3,900	1,154	4,700	1,154	4,700
17%	692	17%	692	17%	779
^	1,700	^	1,700	^	2,000
1,073	1,022	1,232	1,022	1,232	1,175
18%	9,400	17%	9,400	17%	1,175
65%	6,000	66%	14,200	66%	14,200
9,400	9,400	14,200	14,200	14,200	14,200
6,000	6,000	7,100	7,100	7,100	7,100

2-WAY AADT TURNING MOVEMENTS IN YEAR		2015		2020	
Knights Griffin Rd.	SR 39 - No-Build - PM	Knights Griffin Rd.	SR 39 - No-Build - PM	Knights Griffin Rd.	SR 39 - No-Build - PM
301	7,200	334	8,200	334	8,200
4%	14,400	4%	16,500	4%	16,500
^	83%	^	84%	^	84%
907	907	1,005	1,005	1,005	1,005
13%	907	13%	907	12%	1,005
^	690	^	690	^	778
39% <	E/W	39% <	E/W	39% <	28%
300	1,200	300	1,300	300	1,000
10% <	2,500	10% <	2,500	10% <	36%
36%	5,000	36%	5,000	36%	2,800
51% <	N/S	51% <	N/S	51% <	37%
11,500	11,500	13,200	13,200	13,200	13,200
1,314	5,500	1,474	6,300	1,474	6,300
17%	901	17%	901	16%	1,023
^	2,200	^	2,200	^	2,500
1,391	1,328	1,565	1,328	1,565	1,497
17%	16,400	17%	16,400	16%	1,497
67%	8,200	67%	18,000	67%	18,000
16,400	16,400	18,000	18,000	18,000	18,000
8,200	8,200	9,400	9,400	9,400	9,400

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR 2010

Knights_Griffin Rd. SR_39 - No-Build - PM

479	↓	↑	67	↓	54		
46			379		54		
225	←	→	^	→	^		
68			v			54	
267	→	←	←	←	←	43	174
136			136			77	229
136			555		113		
592	↓	↑	805				
K ml =	9.54%			D nb&sb =	59.4%		40.5%
K ss =	9.54%			D eb&wb =	59.5%		40.5%

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR 2005

Knights_Griffin Rd. SR_39 - No-Build - PM

402			46				
39			317		46		
57	←	→	^	→	^	46	
57			v			39	151
233	→	←	←	←	←	66	
119			119		96		
119			465				
680							
K ml =	9.54%			D nb&sb =	59.4%		40.5%
K ss =	9.54%			D eb&wb =	59.5%		40.5%

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR 2020

Knights_Griffin Rd. SR_39 - No-Build - PM

638	↓	↑	103	↓	70		
58			510		70		
270	←	→	^	→	^		
85			v			70	
329	→	←	←	←	←	50	216
170			170			97	286
170			748		142		
777	↓	↑	1,060				
K ml =	9.54%			D nb&sb =	59.4%		40.5%
K ss =	9.54%			D eb&wb =	59.5%		40.5%

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR 2015

Knights_Griffin Rd. SR_39 - No-Build - PM

556			62				
50			444		62		
74	←	→	^	→	^	62	
295			v			46	193
68	→	←	←	←	←	85	
153			153		125		
153			652				
929							
K ml =	9.54%			D nb&sb =	59.4%		40.5%
K ss =	9.54%			D eb&wb =	59.5%		40.5%

2005 TRAFFIC		2005 TRAFFIC COMPARED TO		2010 TRAFFIC	
Knights Griffin Rd.	SR 39 - No-Build - PM	Knights Griffin Rd.	SR 39 - No-Build - PM	Knights Griffin Rd.	SR 39 - No-Build - PM
8,000	8,000	8,000	8,000	8,000	8,000
14,400	12,400	12,400	16,500	12,400	16,500
1.80	1.55	1.55	2.06	1.55	2.06
1,000	1,000	1,000	1,000	1,000	1,000
1,300	1,200	1,200	1,500	1,400	1,800
1.30	1.17	1.17	1.50	1.17	1.50
1,200	1,100	1,100	1,300	1,200	1,200
1.20	1.10	1.10	1.30	1.10	1.30
1.20	E/W	E/W	E/W	E/W	E/W
8,200	8,200	8,200	8,200	8,200	8,200
N/S	N/S	N/S	N/S	N/S	N/S
1,700	1,700	1,700	1,700	1,700	1,700
1,700	1,700	1,700	1,800	1,800	1,800
1.70	1.18	1.18	1.50	1.18	1.50
9,400	9,400	9,400	9,400	9,400	9,400
14,200	14,200	14,200	14,200	14,200	14,200
1.51	1.51	1.51	1.51	1.51	1.51
X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005
X,XXX - 2010	X,XXX - 2010	X,XXX - 2010	X,XXX - 2010	X,XXX - 2010	X,XXX - 2010
X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio
2005 TRAFFIC COMPARED TO 2015 TRAFFIC		2005 TRAFFIC COMPARED TO 2010 TRAFFIC		2005 TRAFFIC COMPARED TO 2020 TRAFFIC	
Knights Griffin Rd.	SR 39 - No-Build - PM	Knights Griffin Rd.	SR 39 - No-Build - PM	Knights Griffin Rd.	SR 39 - No-Build - PM
8,000	8,000	8,000	8,000	8,000	8,000
14,400	14,400	16,500	16,500	12,400	16,500
1.80	1.80	2.06	2.06	1.55	2.06
1,000	1,000	1,000	1,000	1,000	1,000
1,300	1,600	1,500	1,500	1,400	1,800
1.30	1.33	1.50	1.50	1.17	1.50
1,200	1,200	1,200	1,300	1,200	1,200
1.20	1.20	1.30	1.30	1.10	1.30
1.20	E/W	E/W	E/W	E/W	E/W
8,200	8,200	8,200	8,200	8,200	8,200
N/S	N/S	N/S	N/S	N/S	N/S
1,700	1,700	1,700	1,700	1,700	1,700
1,700	1,700	1,800	1,800	1,800	1,800
1.70	1.29	1.50	1.50	1.18	1.50
9,400	9,400	9,400	9,400	9,400	9,400
16,400	16,400	18,000	18,000	12,400	16,400
1.74	1.74	1.91	1.91	1.55	1.74
X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005
X,XXX - 2015	X,XXX - 2015	X,XXX - 2020	X,XXX - 2020	X,XXX - 2010	X,XXX - 2010
X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio

2005 ACTUAL TRAFFIC COMPARED TO 2010 DHV

Knights Griffin Rd.	(20)	(168)	SR 39 - No-Build - PM (70)	(94)	(135)	(98)
	39	317	46	46	57	39
	1.93	1.89	0.66	0.49	1.83	0.39
(31)	^	^	^	^	^	^
57						
2.20	<---	v	<---	<---	<---	<---
(54)	^	^	^	^	^	^
119						
2.21	v	v	v	v	v	v
(57)	^	^	^	^	^	^
119						
2.09	<---	v	<---	<---	<---	<---
(63)	^	^	^	^	^	^
96						
1.53	<---	v	<---	<---	<---	<---
(287)	^	^	^	^	^	^
465						
1.62	<---	v	<---	<---	<---	<---
(XXX) - Actual						
XXX - Calculated DHV						
X.XX - Ratio						

2005 ACTUAL TRAFFIC COMPARED TO 2020 DHV

Knights Griffin Rd.	(20)	(168)	SR 39 - No-Build - PM (70)	(94)	(135)	(98)
	46	379	54	54	62	43
	2.32	2.25	0.77	0.58	2.20	0.43
(31)	^	^	^	^	^	^
68						
2.20	<---	v	<---	<---	<---	<---
(54)	^	^	^	^	^	^
136						
2.52	v	v	v	v	v	v
(57)	^	^	^	^	^	^
136						
2.39	<---	v	<---	<---	<---	<---
(63)	^	^	^	^	^	^
113						
1.80	<---	v	<---	<---	<---	<---
(287)	^	^	^	^	^	^
555						
1.93	<---	v	<---	<---	<---	<---
(XXX) - Actual						
XXX - Calculated DHV						
X.XX - Ratio						

2005 ACTUAL TRAFFIC COMPARED TO 2015 DHV

Knights Griffin Rd.	(20)	(168)	SR 39 - No-Build - PM (70)	(94)	(135)	(98)
	39	317	46	46	57	39
	1.93	1.89	0.66	0.49	1.83	0.39
(31)	^	^	^	^	^	^
74						
2.38	<---	v	<---	<---	<---	<---
(54)	^	^	^	^	^	^
153						
2.84	v	v	v	v	v	v
(57)	^	^	^	^	^	^
153						
2.68	<---	v	<---	<---	<---	<---
(63)	^	^	^	^	^	^
125						
1.98	<---	v	<---	<---	<---	<---
(287)	^	^	^	^	^	^
652						
2.27	<---	v	<---	<---	<---	<---
(XXX) - Actual						
XXX - Calculated DHV						
X.XX - Ratio						

2005 ACTUAL TRAFFIC COMPARED TO 2020 DHV

Knights Griffin Rd.	(20)	(168)	SR 39 - No-Build - PM (70)	(94)	(135)	(98)
	58	510	70	70	74	46
	2.90	3.04	0.99	0.74	2.75	0.47
(31)	^	^	^	^	^	^
85						
2.75	<---	v	<---	<---	<---	<---
(54)	^	^	^	^	^	^
170						
3.15	v	v	v	v	v	v
(57)	^	^	^	^	^	^
170						
2.98	<---	v	<---	<---	<---	<---
(63)	^	^	^	^	^	^
142						
2.25	<---	v	<---	<---	<---	<---
(287)	^	^	^	^	^	^
748						
2.61	<---	v	<---	<---	<---	<---
(XXX) - Actual						
XXX - Calculated DHV						
X.XX - Ratio						

DATA INPUT

Date:

28-Nov-98

Analyst: PAP

Highway: SR 39 - No-Build - AM

Intersection: Zephyrhills Bypass

From: Opening Day

To: 2010 (From 2005 Base)

County: Hillsborough

North/South Orientation of Mainline? Y

D Factors:

K Factors: Mainline 9.54% Sidestreet 9.54%

a. Mainline: Northbound(NB) 59.5% Southbound(SB) 40.5%

b. Sidestreet: Eastbound(EB) 59.5% Westbound(WB) 40.5%

RANGE NAMES FOR YEARS:

Base	2005
Open	2010
Mid	2015
Design	2020

Do you have FSUTIMS Model Year Traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Y Manual Instr:

IF NO: Enter Year and Growth Rates from Base Year: Rate

Base	
Opening	
Mid	
Design	

AREA FOR CALCULATIONS: 1/2 OF INPUT AADI

Year	From West:		From East:		From North:		From South:		TOTAL
	EB Approach	WB Approach	WB Approach	EB Approach	SB Approach	NB Approach	sb Approach	NB Approach	
2005	1,300	950	950	1,300	5,250	5,750	5,750	13,250	
2010	1,567	1,133	1,133	1,567	6,300	6,833	6,833	15,833	
2015	1,833	1,317	1,317	1,833	7,350	7,917	7,917	18,417	
2020	2,100	1,500	1,500	2,100	8,400	9,000	9,000	21,000	

Enter Base Year AADTs for Volume Comparison: (uses growth rates to calculate other project years)

Year	From West:		From East:		From North:		From South:		TOTAL
	EB Approach	WB Approach	WB Approach	EB Approach	SB Approach	NB Approach	sb Approach	NB Approach	
2005									0
2010									0
2015									0
2020									0

DATA INPUT

Date:

28-Nov-98

Analyst:

IF YES: Enter Project & Model Years:

Base	2005
Opening	2010
Mid	2015
Design	2020
Model	2020

Enter Base & Model Year AADTs for Interpolation:

	From West	From East	From North	From South	TOTAL
Base	2,600	1,900	10,500	11,500	26,500
Model	4,200	3,000	16,800	18,000	42,000

AREA FOR CALCULATION: INTERPOLATION

model - base: 15

diff of vols:

year	EB	WB	SB	NB
2005	2,600	1,900	10,500	11,500
2010	3,133	2,267	12,600	13,667
2015	3,667	2,633	14,700	15,833
2020	4,200	3,000	16,800	18,000

Enter "1st Guess" Turning

Percentages for AADT Balancing:

(EB THRU)	W-to-E	0.46	W-to-E	2005
(EB LT)	W-to-N	0.47	W-to-N	107
(EB RT)	W-to-S	0.07	W-to-S	108
(WB THRU)	E-to-W	0.30	E-to-W	45
(WB RT)	E-to-N	0.69	E-to-N	102
(WB LT)	E-to-S	0.01	E-to-S	0
(SB RT)	N-to-W	0.15	N-to-W	40
(SB LT)	N-to-E	0.40	N-to-E	111
(SB THRU)	N-to-S	0.45	N-to-S	124
(NB LT)	S-to-W	0.06	S-to-W	12
(NB RT)	S-to-E	0.01	S-to-E	3
(NB THRU)	S-to-N	0.93	S-to-N	202

Desired Closure:

2-WAY AADT TURNING MOVEMENTS IN YEAR				2005				2010			
Zephyrhills Bypass		SR 39 - No-Build - AM		Zephyrhills Bypass		SR 39 - No-Build - AM		Zephyrhills Bypass		SR 39 - No-Build - AM	
1,300	104	5,300	7%	137	2%	6,200	7%	1,600	11%	11,300	19%
2,600	200	10,600	91%	300	2%	12,500	91%	3,200	32%	11,300	19%
	126	4,800	^	173	^	5,600	^	1,000	11%	5,700	19%
	400	E/W	----->	500	----->	E/W	----->	1,000	----->	11,300	----->
	808	800	400	942	14%	83%	13,600	942	14%	13,600	19%
	756	4,800	^	1,900	^	5,700	^	1,900	57%	5,700	19%
	808	9,700	----->	1,900	----->	5,700	----->	1,900	57%	5,700	----->
	808	83%	3%	176	3%	83%	3%	186	3%	83%	3%
	11,700	11,700	400	194	3%	13,600	400	186	3%	13,600	3%
	5,800	5,800	176	194	3%	6,800	176	186	3%	6,800	3%
2-WAY AADT TURNING MOVEMENTS IN YEAR				2015				2020			
Zephyrhills Bypass		SR 39 - No-Build - AM		Zephyrhills Bypass		SR 39 - No-Build - AM		Zephyrhills Bypass		SR 39 - No-Build - AM	
1,800	177	7,400	7%	214	3%	8,400	7%	2,200	12%	15,000	17%
3,600	400	14,700	91%	500	3%	16,800	90%	4,200	32%	15,000	17%
	210	6,700	^	272	^	7,600	^	2,200	12%	15,000	17%
	600	E/W	----->	700	----->	E/W	----->	4,200	----->	15,000	----->
	1,088	1,100	600	1,221	14%	1,400	700	1,221	14%	1,400	14%
	1,007	13,300	----->	2,400	----->	15,000	----->	1,221	55%	15,000	----->
	1,088	13,300	----->	2,400	----->	15,000	----->	1,221	55%	15,000	----->
	1,088	84%	3%	202	3%	84%	3%	215	2%	84%	2%
	1,088	84%	3%	202	3%	84%	3%	215	2%	84%	2%
	15,800	15,800	400	235	3%	18,000	400	215	2%	18,000	2%
	7,900	7,900	202	235	3%	8,900	202	215	2%	8,900	2%

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR		2005		2010	
Zephyrhills_Bypass	SR_39 - No-Build - AM	Zephyrhills_Bypass	SR_39 - No-Build - AM	Zephyrhills_Bypass	SR_39 - No-Build - AM
8	410	12	483	17	35
11	375	108	437	57	39
148	27	182	35	182	39
91	73	108	15	182	15
664	15	772	46	772	46
664	39	772	46	772	46
204	97	244	79	244	79
119	15	136	19	136	19
897	23	1,016	28	1,016	28
897	23	1,016	28	1,016	28
9.54%	9.54%	9.54%	9.54%	9.54%	9.54%
9.54%	9.54%	9.54%	9.54%	9.54%	9.54%
59.5%	40.5%	59.5%	40.5%	59.5%	40.5%
59.5%	40.5%	59.5%	40.5%	59.5%	40.5%
1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR		1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR		1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR	
Zephyrhills_Bypass	SR_39 - No-Build - AM	Zephyrhills_Bypass	SR_39 - No-Build - AM	Zephyrhills_Bypass	SR_39 - No-Build - AM
15	568	19	645	136	19
23	514	136	580	136	19
204	39	244	46	244	46
119	97	136	79	136	79
897	15	1,016	28	1,016	28
897	23	1,016	28	1,016	28
9.54%	9.54%	9.54%	9.54%	9.54%	9.54%
9.54%	9.54%	9.54%	9.54%	9.54%	9.54%
59.5%	40.5%	59.5%	40.5%	59.5%	40.5%
59.5%	40.5%	59.5%	40.5%	59.5%	40.5%

2005 TRAFFIC		2005 TRAFFIC COMPARED TO		2010 TRAFFIC	
Zephyrhills_Bypass	SR_39 - No-Build - AM		SR_39 - No-Build - AM		TRAFFIC
10,600	10,600	^	10,600	^	
14,700	12,500		12,500		
1.39	1.18		1.18		
200	200	^	200	^	
400	300		300		
2.00	1.50		1.50		
800	800		800		
1,100	1,000		1,000		
1.38	1.25		1.25		
EAW	EAW		EAW		
9,700	9,700		9,700		
13,300	11,300		11,300		
1.37	1.16		1.16		
400	400		400		
400	400		400		
1.00	1.00		1.00		
11,700	11,700		11,700		
15,800	13,600		13,600		
1.35	1.16		1.16		
2,600	2,600		2,600		
3,600	3,200		3,200		
1.38	1.23		1.23		
X,XXX - 2005	X,XXX - 2005		X,XXX - 2005		
X,XXX - 2015	X,XXX - 2010		X,XXX - 2010		
X,XXX - Ratio	X,XXX - Ratio		X,XXX - Ratio		
1,900	1,900		1,900		
2,500	2,300		2,300		
1.32	1.21		1.21		
2005 TRAFFIC COMPARED TO		2015 TRAFFIC		2005 TRAFFIC COMPARED TO	
Zephyrhills_Bypass	SR_39 - No-Build - AM		SR_39 - No-Build - AM		TRAFFIC
10,600	10,600	^	10,600	^	
14,700	14,700		16,800		
1.39	1.39		1.58		
200	200	^	200	^	
400	400		500		
2.00	2.00		2.50		
800	800		800		
1,100	1,100		1,400		
1.38	1.38		1.75		
EAW	EAW		EAW		
9,700	9,700		9,700		
13,300	13,300		15,000		
1.37	1.37		1.55		
400	400		400		
400	400		500		
1.00	1.00		1.25		
11,700	11,700		11,700		
15,800	15,800		18,000		
1.35	1.35		1.54		
2,600	2,600		2,600		
3,600	4,200		4,200		
1.38	1.62		1.62		
X,XXX - 2005	X,XXX - 2005		X,XXX - 2005		
X,XXX - 2015	X,XXX - 2015		X,XXX - 2020		
X,XXX - Ratio	X,XXX - Ratio		X,XXX - Ratio		

2005 ACTUAL TRAFFIC COMPARED TO 2005 DHV		2005 ACTUAL TRAFFIC COMPARED TO 2010 DHV	
Zephyrhills Bypass	SR 39 - No-Build - AM	Zephyrhills Bypass	SR 39 - No-Build - AM
(124) 375 (40) 8 0.19	(111) 27 0.24	(124) 437 (40) 12 0.29	(111) 35 0.31
(108) 11 0.11	(102) 27 0.27	(108) 17 0.16	(102) 35 0.34
(107) 45 0.42	(45) 31 0.69	(107) 57 0.53	(45) 39 0.86
(16) 91 5.68	0 15 ERR	(16) 108 6.74	0 15 ERR
(12) 91 7.57	(3) 23 7.57	(12) 108 8.99	(3) 23 7.57
(202) 551 2.73	(202) 757 3.74	(202) 641 3.18	(202) 757 3.18
(XXX) - Actual XXX - Calculated DHV X.XX - Ratio	(XXX) - Actual XXX - Calculated DHV X.XX - Ratio	(XXX) - Actual XXX - Calculated DHV X.XX - Ratio	(XXX) - Actual XXX - Calculated DHV X.XX - Ratio
2005 ACTUAL TRAFFIC COMPARED TO 2015 DHV		2005 ACTUAL TRAFFIC COMPARED TO 2020 DHV	
Zephyrhills Bypass	SR 39 - No-Build - AM	Zephyrhills Bypass	SR 39 - No-Build - AM
(124) 514 (40) 15 0.39	(111) 39 0.35	(124) 580 (40) 19 0.48	(111) 46 0.42
(108) 23 0.21	(102) 39 0.38	(108) 28 0.26	(102) 46 0.45
(107) 62 0.58	(45) 43 0.94	(107) 79 0.74	(45) 54 1.20
(16) 119 7.45	0 15 ERR	(16) 136 8.51	0 19 ERR
(12) 119 9.93	(3) 23 7.57	(12) 136 11.35	(3) 28 9.46
(202) 755 3.74	(202) 757 3.74	(202) 851 4.22	(202) 946 4.22
(XXX) - Actual XXX - Calculated DHV X.XX - Ratio	(XXX) - Actual XXX - Calculated DHV X.XX - Ratio	(XXX) - Actual XXX - Calculated DHV X.XX - Ratio	(XXX) - Actual XXX - Calculated DHV X.XX - Ratio

DATA INPUT

Date:

28-Nov-98

Analyst:

Highway:

Intersection:

From:

To:

County:

North/South Orientation of Mainline?

(Y/N)

D Factors:

a. Mainline

Northbound(NB)	59.5%
Southbound(SB)	40.5%

b. Sidestreet

Eastbound(EB)	59.5%
Westbound(WB)	40.5%

K Factors:

Mainline	Sidestreet
9.54%	9.54%

RANGE NAMES FOR YEARS:

Base	2005
Open	2010
Mid	2015
Design	2020

Do you have FSUTMS Model Year Traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Manual instr:

If Y, go to A43
If N, go to A24

IF NO: Enter Year and Growth Rates from Base Year:

Year	Rate
Base	
Opening	
Mid	
Design	

Enter Base Year AADTs for Volume Comparison:

(uses growth rates to calculate other project years)

Year	From West:		From East:		From North:		From South:		TOTAL
	EB Approach	WB Approach	WB Approach	EB Approach	SB Approach	NB Approach	sb Approach	SB Approach	
2005			1,300	950	5,250	5,750	13,250		13,250
2010			1,567	1,133	6,300	6,833	15,833		15,833
2015			1,833	1,317	7,350	7,917	18,417		18,417
2020			2,100	1,500	8,400	9,000	21,000		21,000

AREA FOR CALCULATIONS: 1/2 OF INPUT AADI

DATA INPUT

Analyst: Date: 28-Nov-98

IF YES: Enter Project & Model Years:

Base	2005
Opening	2010
Mid	2015
Design	2020
Model	2020

Enter Base & Model Year AADTs for Interpolation:

Base	From West (EB)Approach	From East (WB)Approach	From North (SB)Approach	From South (NB)Approach	TOTAL
2005	2,600	1,900	10,500	11,500	26,500
2020	4,200	3,000	16,800	18,000	42,000

AREA FOR CALCULATION : INTERPOLATION

model - base: 15
diff of vols: 1600 1100 6300 6500

year	EB	WB	SB	NB
2005	2,600	1,900	10,500	11,500
2010	3,133	2,267	12,600	13,667
2015	3,667	2,633	14,700	15,833
2020	4,200	3,000	16,800	18,000

Enter "1st Guess" Turning

Percentages for AADT Balancing:

(EB THRU) (EB LT) (EB RT)	W-to-E	0.51	W-to-N	0.01	W-to-S	0.48
(WB THRU) (WB RT) (WB LT)	E-to-W	0.36	E-to-N	0.20	E-to-S	0.44
(SB RT) (SB LT) (SB THRU)	N-to-W	0.02	N-to-E	0.09	N-to-S	0.89
(NB LT) (NB RT) (NB THRU)	S-to-W	0.27	S-to-E	0.18	S-to-N	0.55
Desired Closure:		0.010				

Actual/Counted Traffic:

W-to-E	88
W-to-N	2
W-to-S	82
E-to-W	57
E-to-N	31
E-to-S	68
N-to-W	4
N-to-E	19
N-to-S	183
S-to-W	97
S-to-E	65
S-to-N	193

2-WAY AADT TURNING MOVEMENTS IN YEAR				2-WAY AADT TURNING MOVEMENTS IN YEAR			
2005				2010			
Zephyrhills Bypass		SR 39 - No-Build - PM		Zephyrhills Bypass		SR 39 - No-Build - PM	
1,400	36%	5,300	91%	1,600	37%	6,200	91%
2,700	58%	10,500	91%	3,200	57%	12,400	91%
79	6%	4,800	E/W	101	6%	5,600	E/W
300	36%	700	30%	300	37%	900	31%
500	58%	800	22%	600	57%	1,000	20%
		N/S				N/S	
		9,500				11,200	
813	14%	4,700	200	913	14%	5,600	242
823	14%	11,500	192	971	14%	13,600	209
		5,700				6,800	
2-WAY AADT TURNING MOVEMENTS IN YEAR				2-WAY AADT TURNING MOVEMENTS IN YEAR			
2015				2020			
Zephyrhills Bypass		SR 39 - No-Build - PM		Zephyrhills Bypass		SR 39 - No-Build - PM	
1,800	37%	7,300	90%	2,200	37%	8,500	90%
3,600	56%	14,600	90%	4,200	56%	16,800	90%
123	7%	6,600	E/W	159	7%	7,600	E/W
400	37%	1,100	31%	500	37%	1,300	31%
700	56%	1,100	19%	800	56%	1,300	18%
		N/S				N/S	
		13,100				15,100	
1,014	14%	6,600	246	1,227	14%	7,500	287
1,119	14%	15,700	228	1,266	14%	18,000	246
		7,900				9,000	

2005		2010	
1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR		1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR	
Zephyrhills Bypass		Zephyrhills Bypass	
K ml =	9.54%	K ml =	9.54%
K ss =	9.54%	K ss =	9.54%
12	406	12	479
17	367	17	433
27	27	35	688
31	73	39	93
15	15	19	120
23	23	28	28
43	43	50	50
43	43	50	50
104	104	120	120
119	119	142	152
153	153	182	182
159	159	182	182
17	17	17	17
45	45	57	57
91	91	108	108
539	539	636	636
564	564	772	772
564	564	772	772
506	506	583	583
43	43	50	50
43	43	50	50
19	19	19	19
19	19	19	19
891	891	1,027	1,027
891	891	1,027	1,027

2005 TRAFFIC		2005 TRAFFIC COMPARED TO		2010 TRAFFIC	
Zephyrhills Bypass	SR 39 - No-Build - PM			SR 39 - No-Build - PM	
10,500	10,500	10,500	10,500	10,500	10,500
14,600	14,600	12,400	12,400	16,800	16,800
1.39	1.39	1.18	1.18	1.60	1.60
300	300	300	300	300	300
400	400	300	300	500	500
1.33	1.33	1.00	1.00	1.67	1.67
1,100	1,100	1,000	1,000	1,300	1,300
1.38	1.38	1.25	1.25	1.63	1.63
9,500	9,500	9,500	9,500	9,500	9,500
13,100	13,100	15,100	15,100	15,100	15,100
1.38	1.38	1.59	1.59	1.59	1.59
1,600	1,600	1,600	1,600	1,600	1,600
2,100	2,100	2,500	2,500	2,500	2,500
1.31	1.31	1.56	1.56	1.56	1.56
11,500	11,500	11,500	11,500	11,500	11,500
15,700	15,700	18,000	18,000	18,000	18,000
1.37	1.37	1.57	1.57	1.57	1.57
2,700	2,700	2,700	2,700	2,700	2,700
3,600	3,600	4,200	4,200	4,200	4,200
1.33	1.33	1.56	1.56	1.56	1.56
X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005
X,XXX - 2015	X,XXX - 2015	X,XXX - 2010	X,XXX - 2010	X,XXX - 2020	X,XXX - 2020
X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio
1,900	1,900	1,900	1,900	1,900	1,900
2,700	2,700	2,700	2,700	3,000	3,000
1.42	1.42	1.42	1.42	1.58	1.58
700	700	700	700	700	700
1,100	1,100	1,300	1,300	1,300	1,300
1.57	1.57	1.86	1.86	1.86	1.86
400	400	400	400	400	400
500	500	500	500	500	500
1.25	1.25	1.25	1.25	1.25	1.25

2005 ACTUAL TRAFFIC COMPARED TO 2005 DHV

	(183)	SR_39 - No-Build - PM	(19)	2005	DHV
Zephyrhills Bypass	(4)	367	(19)		
	12	2.01	27		
	2.90		1.42		
(2)	<---	^		(31)	
17				27	
8.51	----->	----->	----->	0.87	
(88)				(57)	
45				31	
0.52				0.54	
(82)				(68)	
91				15	
1.11	v	^	v	0.23	
(97)				(65)	
91				23	
0.94				0.35	
(193)				539	
				2.79	
(XXX) - Actual					
XXX - Calculated DHV					
X.XX - Ratio					

2005 ACTUAL TRAFFIC COMPARED TO 2020 DHV

	(183)	SR_39 - No-Build - PM	(19)	2005	DHV
Zephyrhills Bypass	(4)	433	(19)		
	12	2.36	35		
	2.90		1.83		
(2)	<---	^		(31)	
17				35	
8.51	----->	----->	----->	1.12	
(88)				(57)	
57				39	
0.65				0.68	
(82)				(68)	
108				19	
1.32	v	^	v	0.28	
(97)				(65)	
108				28	
1.11				0.44	
(193)				636	
				3.29	
(XXX) - Actual					
XXX - Calculated DHV					
X.XX - Ratio					

2005 ACTUAL TRAFFIC COMPARED TO 2015 DHV

	(183)	SR_39 - No-Build - PM	(19)	2005	DHV
Zephyrhills Bypass	(4)	367	(19)		
	12	2.01	27		
	2.90		1.42		
(2)	<---	^		(31)	
17				27	
8.51	----->	----->	----->	0.87	
(88)				(57)	
45				31	
0.52				0.54	
(82)				(68)	
91				15	
1.11	v	^	v	0.23	
(97)				(65)	
91				23	
0.94				0.35	
(193)				539	
				2.79	
(XXX) - Actual					
XXX - Calculated DHV					
X.XX - Ratio					

2005 ACTUAL TRAFFIC COMPARED TO 2010 DHV

	(183)	SR_39 - No-Build - PM	(19)	2005	DHV
Zephyrhills Bypass	(4)	583	(19)		
	19	3.19	50		
	4.83		2.64		
(2)	<---	^		(31)	
28				50	
14.19	----->	----->	----->	1.62	
(88)				(57)	
74				50	
0.84				0.88	
(82)				(68)	
142				19	
1.73	v	^	v	0.28	
(97)				(65)	
142				28	
1.46				0.44	
(193)				857	
				4.44	
(XXX) - Actual					
XXX - Calculated DHV					
X.XX - Ratio					

DATA INPUT

Date:

30-Nov-98

Analyst: PAP

Highway: SR 39 - No Build - AM

Intersection: US 301

From: Opening Day

To: 2010 (From 2005 Base)

County: Pasco

North/South Orientation of Mainline?

(Y/N) N

D Factors:

a. Mainline

54.1%	Westbound(WB)
45.9%	Eastbound(EB)

b. Sidestreet

59.5%	Northbound(NB)
40.5%	Southbound(SB)

K Factors:

Sidestreet	Mainline
9.54%	10.56%

Do you have FSUTMS Model Year Traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Y Manual Instr: IF Y, go to A43 IF N, go to A24

IF NO: Enter Year and Growth Rates from Base Year:

Year	Rate
Base	
Opening	
Mid	
Design	

Enter Base Year AADTs for Volume Comparison:

(uses growth rates to calculate other project years)

RANGE NAMES FOR YEARS:

Base	2005
Open	2010
Mid	2015
Design	2020

AREA FOR CALCULATIONS: 1/2 OF INPUT AADI

Year	From West		From East		From North		From South		TOTAL
	EB Approach	WB Approach	WB Approach	EB Approach	nbApproach	sbApproach	nbApproach	sbApproach	
2005	5,350	10,550	0	0	0	0	5,250	21,150	
2010	6,400	12,617	0	0	0	0	6,300	25,317	
2015	7,450	14,683	0	0	0	0	7,350	29,483	
2020	8,500	16,750	0	0	0	0	8,400	33,650	

Year	From West		From East		From North		From South		TOTAL
	EB Approach	WB Approach	WB Approach	EB Approach	nbApproach	sbApproach	nbApproach	sbApproach	
2005	5,350	10,550	0	0	0	0	5,250	21,150	
2010	6,400	12,617	0	0	0	0	6,300	25,317	
2015	7,450	14,683	0	0	0	0	7,350	29,483	
2020	8,500	16,750	0	0	0	0	8,400	33,650	

DATA INPUT

Date:

30-Nov-98

Analyst: PAP

IF YES: Enter Project & Model Years:

Base	2005
Opening	2010
Mid	2015
Design	2020
Model	2020

Enter Base & Model Year AADTs for Interpolation:

Base Model	From West (EB)Approach	From East (WB)Approach	From North (SB)Approach	From South (NB)Approach	TOTAL
2005	10,700	21,100	10,500	42,300	42,300
2020	17,000	33,500	16,800	67,300	67,300

AREA FOR CALCULATION: INTERPOLATION

model - base: diff of vols:	15	6300	12400	6300	6300
year	EB	WB	SB	NB	
2005	10,700	21,100	0	10,500	42,300
2010	12,800	25,233	0	12,600	50,633
2015	14,900	29,367	0	14,700	58,967
2020	17,000	33,500	0	16,800	67,300

Enter "1st Guess" Turning Percentages for AADT Balancing:

(EB THRU) (EB LT) (EB RT)	W-to-E	0.95
	W-to-N	0.00
	W-to-S	0.05
(WB THRU) (WB RT) (WB LT)	E-to-W	0.70
	E-to-N	0.00
	E-to-S	0.30
(SB RT) (SB LT) (SB THRU)	N-to-W	0.00
	N-to-E	0.00
	N-to-S	0.00
(NB LT) (NB RT) (NB THRU)	S-to-W	0.05
	S-to-E	0.95
	S-to-N	0.00

Actual/Counted Traffic:

W-to-E	2005	213
W-to-N		
W-to-S		3
E-to-W		400
E-to-N		0
E-to-S		174
N-to-W		0
N-to-E		0
N-to-S		0
S-to-W		4
S-to-E		172
S-to-N		0

Desired Closure:

0.010

2005

2-WAY AADT TURNING MOVEMENTS IN YEAR

SR 39 - No Build - AM	US 301
0	0
0	0
0%	0%
0	0
0	0
0	0
0	0
0	0
0	0

5,300
10,600

0% 0%
10,400
5,200

2010

2-WAY AADT TURNING MOVEMENTS IN YEAR

SR 39 - No Build - AM	US 301
0	0
0	0
0%	0%
0	0
0	0
0	0
0	0
0	0
0	0

6,400
12,800

12,600
6,300
100% 6,275

2-WAY AADT TURNING MOVEMENTS IN YEAR

SR 39 - No Build - AM	US 301
0	0
0	0
0%	0%
0	0
0	0
0	0
0	0
0	0
0	0

7,500
14,900

0% 0%
14,800
7,400

14,700
29,300

0% 0%
7,400
14,500

0% 0%
7,277
7,265

2-WAY AADT TURNING MOVEMENTS IN YEAR

SR 39 - No Build - AM	US 301
0	0
0	0
0%	0%
0	0
0	0
0	0
0	0
0	0
0	0

8,500
17,100

16,900
8,400
N/S

16,800
33,600

0% 0%
8,400
16,900

0% 0%
8,500
N/S

0% 0%
16,700
8,320

0% 0%
8,354
8,400

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR 2005

SR 39 - No Build - AM		US_301		SR 39 - No Build - AM		US_301	
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
514	514	606	1,200	620	616	726	1,440

K ml = ***** 590
 K ss = 9.54%
 D wb&eb = 54.1%
 D nb&sb = 59.5%
 45.9%
 40.5%

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR 2010

SR 39 - No Build - AM		US_301		SR 39 - No Build - AM		US_301	
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
722	717	846	1,674	829	819	965	1,920

K ml = ***** 590
 K ss = 9.54%
 D wb&eb = 54.1%
 D nb&sb = 59.5%
 45.9%
 40.5%

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR 2015

SR 39 - No Build - AM		US_301		SR 39 - No Build - AM		US_301	
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
722	717	846	1,674	829	819	965	1,920

K ml = ***** 590
 K ss = 9.54%
 D wb&eb = 54.1%
 D nb&sb = 59.5%
 45.9%
 40.5%

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR 2020

SR 39 - No Build - AM		US_301		SR 39 - No Build - AM		US_301	
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
722	717	846	1,674	829	819	965	1,920

K ml = ***** 590
 K ss = 9.54%
 D wb&eb = 54.1%
 D nb&sb = 59.5%
 45.9%
 40.5%

2005 ACTUAL TRAFFIC COMPARED TO 2005		2005 ACTUAL TRAFFIC COMPARED TO 2010		2020	
SR 39 - No Build - AM	US 301	SR 39 - No Build - AM	US 301	2020	DHV
(213)	(400)	(213)	(400)		
514	606	616	606		
2.41	1.51	2.89	1.51		
(3)	(174)	(3)	(174)		
0	594	5	594		
0.00	3.41	1.62	3.41		
	(172)		(172)		
	590		590		
	3.43		3.43		
(XXX) - Actual	0.00	(XXX) - Actual	1.42		
XXX - Calculated DHV	ERR	XXX - Calculated DHV	ERR		
X.XX - Ratio		X.XX - Ratio			

2005 ACTUAL TRAFFIC COMPARED TO 2015		2005 ACTUAL TRAFFIC COMPARED TO 2020		2020	
SR 39 - No Build - AM	US 301	SR 39 - No Build - AM	US 301	2020	DHV
(213)	(400)	(213)	(400)		
717	846	819	846		
3.37	2.11	3.85	2.11		
(3)	(174)	(3)	(174)		
5	828	10	828		
1.62	4.76	3.23	4.76		
	(172)		(172)		
	823		823		
	4.79		4.79		
(XXX) - Actual	1.42	(XXX) - Actual	2.84		
XXX - Calculated DHV	ERR	XXX - Calculated DHV	ERR		
X.XX - Ratio		X.XX - Ratio			

DATA INPUT

Date:

30-Nov-98

Analyst: PAP

Highway: SR 38 - No Build - PM

Intersection: US 301

From: Opening Day

To: 2010 (From 2005 Base)

County: PASCO

North/South Orientation of Mainline?
(Y/N) N S

K Factors:

Sidestreet	9.54%	Mainline	10.56%
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D Factors:

a. Mainline	45.9%	Westbound(WB)	
	54.1%	Eastbound(EB)	
b. Sidestreet	59.1%	Northbound(NB)	
	40.5%	Southbound(SB)	

RANGE NAMES FOR YEARS:

Base	2005
Open	2010
Mid	2015
Design	2020

Do you have FSUTMS Model Year Traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Y N
Manual Instr:
If Y, go to A43
If N, go to A24

IF NO: Enter Year and Growth Rates from Base Year:
Year Rate

Base	
Opening	
Mid	
Design	

Enter Base Year AADTs for Volume Comparison:
(uses growth rates to calculate other project years)

AREA FOR CALCULATIONS: 1/2 OF INPUT AADT

Year	From West:		From East:		From North:		From South:		TOTAL
	EB Approach	WB Approach	WB Approach	EB Approach	SB Approach	nb Approach	NB Approach	sb Approach	
2005	5,350	10,550	0	0	0	0	5,250	21,150	
2010	6,400	12,617	0	0	0	0	6,300	25,317	
2015	7,450	14,683	0	0	0	0	7,350	29,483	
2020	8,500	16,750	0	0	0	0	8,400	33,650	

Year	From West:		From East:		From North:		From South:		TOTAL
	EB Approach	WB Approach	WB Approach	EB Approach	SB Approach	nb Approach	NB Approach	sb Approach	
2005	5,350	10,550	0	0	0	0	5,250	21,150	
2010	6,400	12,617	0	0	0	0	6,300	25,317	
2015	7,450	14,683	0	0	0	0	7,350	29,483	
2020	8,500	16,750	0	0	0	0	8,400	33,650	

DATA INPUT

Date:

30-Nov-98

Analyst:

IF YES: Enter Project & Model Years:

Base	2005
Opening	2010
Mid	2015
Design	2020
Model	2020

Enter Base & Model Year AADTs for Interpolation:

	From West	From East	From North	From South	TOTAL
Base	(EB)Approach	(WB)Approach	(SB)Approach	(NB)Approach	
2005	10,700	21,100	10,500		42,300
Model	17,000	33,500	16,800		67,300

AREA FOR CALCULATION - INTERPOLATION

model - base: 15

diff of vols:

year	EB	WB	SB	NB
2005	10,700	21,100	0	10,500
2010	12,800	25,233	0	12,600
2015	14,900	29,367	0	14,700
2020	17,000	33,500	0	16,800

Enter "1st Guess" Turning Percentages for AADT Balancing:

	2005
(EB THRU) W-to-E	0.96
(EB LT) W-to-N	0.00
(EB RT) W-to-S	0.04
(WB THRU) E-to-W	0.53
(WB RT) E-to-N	0.00
(WB LT) E-to-S	0.47
(SB RT) N-to-W	0.00
(SB LT) N-to-E	0.00
(SB THRU) N-to-S	0.00
(NB LT) S-to-W	0.02
(NB RT) S-to-E	0.98
(NB THRU) S-to-N	0.00

Desired Closure:

Actual/Counted Traffic:

W-to-E	463
W-to-N	0
W-to-S	7
E-to-W	272
E-to-N	0
E-to-S	240
N-to-W	0
N-to-E	0
N-to-S	0
S-to-W	6
S-to-E	268
S-to-N	0

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR 2005 2010

SR 39 - No Build - PM US 301

SR 39 - No Build - PM	0	US 301	0	US 301
611	606	514	1,018	1,221
6	504	504	606	1,431
6	586	586	616	1,221

SR 39 - No Build - PM US 301

SR 39 - No Build - PM	0	US 301	0	US 301
611	606	514	1,018	1,221
6	504	504	606	1,431
6	586	586	616	1,221

K ml = 592
 K ss = 9.54%
 D wb&eb = 45.9%
 D nb&sb = 59.1%

K ml = 710
 K ss = 9.54%
 D wb&eb = 45.9%
 D nb&sb = 59.1%

SR 39 - No Build - PM US 301

SR 39 - No Build - PM	0	US 301	0	US 301
851	846	717	1,420	1,629
6	703	703	809	1,907
6	818	818	819	1,629

SR 39 - No Build - PM US 301

SR 39 - No Build - PM	0	US 301	0	US 301
851	846	717	1,420	1,629
6	703	703	809	1,907
6	818	818	819	1,629

K ml = 823
 K ss = 9.54%
 D wb&eb = 45.9%
 D nb&sb = 59.1%

K ml = 953
 K ss = 9.54%
 D wb&eb = 45.9%
 D nb&sb = 59.1%

2005 TRAFFIC

SR_39_No_Build_-_PM

0	^	0	^	0	US_301
0		0		0	
10,600		10,600		10,600	
<		<		<	
10,700		12,700		12,700	
<		<		<	
1.20		1.20		1.20	
<		<		<	
10,500		10,500		10,500	
<		<		<	
100		100		100	
100		100		100	
1.00		1.00		1.00	
<		<		<	
10,400		10,400		10,400	
<		<		<	
12,500		12,500		12,500	
<		<		<	
1.20		1.20		1.20	
<		<		<	
21,000		21,000		21,000	
<		<		<	
25,200		25,200		25,200	
<		<		<	
1.20		1.20		1.20	
<		<		<	

US_301

2005 TRAFFIC COMPARED TO 2010 TRAFFIC

SR_39_No_Build_-_PM

0	^	0	^	0	US_301
0		0		0	
10,600		10,600		10,600	
<		<		<	
12,700		12,700		12,700	
<		<		<	
1.20		1.20		1.20	
<		<		<	
10,500		10,500		10,500	
<		<		<	
100		100		100	
100		100		100	
1.00		1.00		1.00	
<		<		<	
10,400		10,400		10,400	
<		<		<	
12,500		12,500		12,500	
<		<		<	
1.20		1.20		1.20	
<		<		<	
21,000		21,000		21,000	
<		<		<	
25,200		25,200		25,200	
<		<		<	
1.20		1.20		1.20	
<		<		<	

US_301

2005 TRAFFIC COMPARED TO 2020 TRAFFIC

2005 TRAFFIC

SR_39_No_Build_-_PM

0	^	0	^	0	US_301
0		0		0	
10,600		10,600		10,600	
<		<		<	
10,700		10,700		10,700	
<		<		<	
1.40		1.40		1.40	
<		<		<	
10,500		10,500		10,500	
<		<		<	
100		100		100	
100		100		100	
1.00		1.00		1.00	
<		<		<	
10,400		10,400		10,400	
<		<		<	
14,500		14,500		14,500	
<		<		<	
1.39		1.39		1.39	
<		<		<	
21,000		21,000		21,000	
<		<		<	
29,300		29,300		29,300	
<		<		<	
1.40		1.40		1.40	
<		<		<	

US_301

2005 TRAFFIC COMPARED TO 2015 TRAFFIC

SR_39_No_Build_-_PM

0	^	0	^	0	US_301
0		0		0	
10,600		10,600		10,600	
<		<		<	
14,800		14,800		14,800	
<		<		<	
1.40		1.40		1.40	
<		<		<	
10,500		10,500		10,500	
<		<		<	
100		100		100	
100		100		100	
1.00		1.00		1.00	
<		<		<	
10,400		10,400		10,400	
<		<		<	
14,500		14,500		14,500	
<		<		<	
1.39		1.39		1.39	
<		<		<	
21,000		21,000		21,000	
<		<		<	
29,300		29,300		29,300	
<		<		<	
1.40		1.40		1.40	
<		<		<	

US_301

2005 TRAFFIC COMPARED TO 2020 TRAFFIC

2005 ACTUAL TRAFFIC COMPARED TO 2005

SR 39 - No Build - PM	US 301	2005	DHV
(463)	(272)		
606	514		
1.31	1.89		
(7)-----	(240)		
6	504		
0.82 v	2.10		
(6)	(268)		
6	586		
0.94	2.19		
ERR	ERR		
(XXX) - Actual			
XXX - Calculated DHV			
X.XX - Ratio			

2005 ACTUAL TRAFFIC COMPARED TO 2010

SR 39 - No Build - PM	US 301	2010	DHV
(463)	(272)		
726	514		
1.57	1.89		
(7)-----	(240)		
6	504		
0.82 v	2.10		
(6)	(268)		
6	586		
0.94	2.19		
ERR	ERR		
(XXX) - Actual			
XXX - Calculated DHV			
X.XX - Ratio			

2005 ACTUAL TRAFFIC COMPARED TO 2020

SR 39 - No Build - PM	US 301	2020	DHV
(463)	(272)		
965	514		
2.09	1.89		
(7)-----	(240)		
11	703		
1.63 v	2.93		
(6)	(268)		
11	818		
1.88	3.05		
ERR	ERR		
(XXX) - Actual			
XXX - Calculated DHV			
X.XX - Ratio			

2005 ACTUAL TRAFFIC COMPARED TO 2015

SR 39 - No Build - PM	US 301	2015	DHV
(463)	(272)		
846	717		
1.83	2.64		
(7)-----	(240)		
6	703		
0.82 v	2.93		
(6)	(268)		
6	818		
0.94	3.05		
ERR	ERR		
(XXX) - Actual			
XXX - Calculated DHV			
X.XX - Ratio			

Build Alternative

TURNS4 Analysis Documentation

DATA INPUT

Date:

30-Mar-99

Analyst: PAP

Highway: SR 39 - BUILD - AM

Intersection: Sam Allen Rd.

From: Opening Day

To: 2010 (From 2005 Base)

County: Hillsborough

North/South Orientation of Mainline?

Y

D Factors:

a. Mainline

40.5%	Northbound(NB)
59.5%	Southbound(SB)

b. Sidestreet

40.5%	Eastbound(EB)
59.5%	Westbound(WB)

K Factors:

Mainline	9.54%	Sidestreet	9.54%
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Do you have FSUTMS Model Year Traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Y

Manual Instr:
If Y, go to A43
If N, go to A24

IF NO: Enter Year and Growth Rates from Base Year:

Year	Rate
Base	
Opening	
Mid	
Design	

Enter Base Year AADTs for Volume Comparison:
(uses growth rates to calculate other project years)

Year	From West:		From East:		From North:		From South:		TOTAL
	EB Approach	WB Approach	WB Approach	EB Approach	SB Approach	NB Approach	NB Approach	SB Approach	
2005									0
2010									0
2015									0
2020									0

RANGE NAMES FOR YEARS:

Base	2005
Open	2010
Mid	2015
Design	2020

AREA FOR CALCULATIONS: 1/2 OF INPUT_AADT

Year	From West:		From East:		From North:		From South:		TOTAL
	EB Approach	WB Approach	WB Approach	EB Approach	SB Approach	NB Approach	SB Approach	NB Approach	
2005	2,300	2,700	2,700	2,300	2,500	2,500	5,650	5,650	13,150
2010	2,667	3,083	3,083	2,667	3,000	3,000	5,933	5,933	14,683
2015	3,033	3,467	3,467	3,033	3,500	3,500	6,217	6,217	16,217
2020	3,400	3,850	3,850	3,400	4,000	4,000	6,500	6,500	17,750

Year	To West:		To East:		To North:		To South:		TOTAL
	wbApproach	ebApproach	ebApproach	wbApproach	nbApproach	sbApproach	sbApproach	nbApproach	
2005	2,300	2,700	2,700	2,300	2,500	2,500	5,650	5,650	13,150
2010	2,667	3,083	3,083	2,667	3,000	3,000	5,933	5,933	14,683
2015	3,033	3,467	3,467	3,033	3,500	3,500	6,217	6,217	16,217
2020	3,400	3,850	3,850	3,400	4,000	4,000	6,500	6,500	17,750

DATA INPUT

Date:

30-Mar-99

Analyst: PAP

IF YES: Enter Project & Model Years:

Base	2005
Opening	2010
Mid	2015
Design	2020
Model	2020

Enter Base & Model Year AADTs for Interpolation:

Base Model	From West (EB)Approach	From East (WB)Approach	From North (SB)Approach	From South (NB)Approach	TOTAL
2005	4,600	5,400	5,000	11,300	26,300
2020	6,800	7,700	8,000	13,000	35,500

AREA FOR CALCULATION: INTERPOLATION

model - base: diff of vols: year	15	2200	2300	3000	1700
	EB	WB	SB	NB	
2005	4,600	5,400	5,000	11,300	26,300
2010	5,333	6,167	6,000	11,867	29,367
2015	6,067	6,933	7,000	12,433	32,433
2020	6,800	7,700	8,000	13,000	35,500

Enter "1st Guess" Turning

Percentages for AADT Balancing:

(EB THRU) (EB LT) (EB RT)	W-to-E W-to-N W-to-S	0.40 0.10 0.50	2005	73 19 90
(WB THRU) (WB RT) (WB LT)	E-to-W E-to-N E-to-S	0.32 0.35 0.33		72 78 76
(SB RT) (SB LT) (SB THRU)	N-to-W N-to-E N-to-S	0.03 0.22 0.75		15 105 354
(NB LT) (NB RT) (NB THRU)	S-to-W S-to-E S-to-N	0.23 0.14 0.63		61 37 169

Actual/Counted Traffic:

Desired Closure:

	0.010
--	-------

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR		2005		2010	
Sam Allen Rd.	SR 39 - BUILD - AM	SR 39 - BUILD - AM	SR 39 - BUILD - AM	SR 39 - BUILD - AM	SR 39 - BUILD - AM
284	6	284	6	341	248
244	4	244	4	284	51
178	46	178	46	237	51
128	128	128	128	135	193
433	166	433	166	460	131
397	312	397	312	448	336
312	74	312	74	341	96
236	89	236	89	247	100
139	139	139	139	139	124
483	213	483	213	661	495
K ml = 9.54%		K ml = 9.54%		K ml = 9.54%	
K ss = 9.54%		K ss = 9.54%		K ss = 9.54%	
D nb&sb = 40.5%		D nb&sb = 40.5%		D nb&sb = 40.5%	
D eb&wb = 40.5%		D eb&wb = 40.5%		D eb&wb = 40.5%	
2015		2010		2020	
1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR		2005		2010	
Sam Allen Rd.	SR 39 - BUILD - AM	SR 39 - BUILD - AM	SR 39 - BUILD - AM	SR 39 - BUILD - AM	SR 39 - BUILD - AM
397	11	397	11	448	336
312	74	312	74	341	96
236	89	236	89	247	100
139	139	139	139	139	124
483	213	483	213	661	495
K ml = 9.54%		K ml = 9.54%		K ml = 9.54%	
K ss = 9.54%		K ss = 9.54%		K ss = 9.54%	
D nb&sb = 40.5%		D nb&sb = 40.5%		D nb&sb = 40.5%	
D eb&wb = 40.5%		D eb&wb = 40.5%		D eb&wb = 40.5%	
2015		2010		2020	

2005 TRAFFIC		2005 TRAFFIC COMPARED TO		2010 TRAFFIC	
Sam Allen Rd.	SR_39 - BUILD - AM	Sam Allen Rd.	SR_39 - BUILD - AM	Sam Allen Rd.	SR_39 - BUILD - AM
9,400	9,400	9,400	9,400	9,400	9,400
7,000	7,000	6,000	6,000	6,000	6,000
0.74	0.74	0.64	0.64	0.64	0.64
100	100	100	100	100	600
200	200	100	100	100	900
2.00	2.00	1.00	1.00	1.00	1.50
<	<	<	<	<	>
1,200	1,200	1,200	1,200	1,200	1,700
E/W	E/W	E/W	E/W	E/W	E/W
<	<	<	<	<	>
3,100	3,100	3,100	3,100	3,100	5,400
5,400	5,400	5,300	5,300	5,300	6,000
1.71	1.71	1.71	1.71	1.71	1.11
N/S	N/S	N/S	N/S	N/S	N/S
4,300	4,300	4,300	4,300	4,300	3,600
N/S	N/S	N/S	N/S	N/S	N/S
3,300	3,300	3,300	3,300	3,300	3,400
V	V	V	V	V	V
3,500	3,500	3,500	3,500	3,500	3,400
1.06	1.06	1.06	1.06	1.06	0.94
12,400	12,400	12,400	12,400	12,400	12,400
X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005
X,XXX - 2010	X,XXX - 2010	X,XXX - 2010	X,XXX - 2010	X,XXX - 2010	X,XXX - 2010
X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio
0.96	0.96	0.96	0.96	0.96	0.96
2005 TRAFFIC COMPARED TO		2005 TRAFFIC COMPARED TO		2005 TRAFFIC COMPARED TO	
Sam Allen Rd.	SR_39 - BUILD - AM	Sam Allen Rd.	SR_39 - BUILD - AM	Sam Allen Rd.	SR_39 - BUILD - AM
9,400	9,400	9,400	9,400	9,400	9,400
7,000	7,000	18,800	18,800	18,800	18,800
0.74	0.74	2.00	2.00	2.00	2.00
100	100	100	100	100	600
200	200	200	200	200	1,700
2.00	2.00	2.00	2.00	2.00	2.83
<	<	<	<	<	>
1,200	1,200	1,200	1,200	1,200	2,600
E/W	E/W	E/W	E/W	E/W	E/W
<	<	<	<	<	>
3,100	3,100	3,100	3,100	3,100	5,400
6,100	6,100	6,000	6,000	6,000	7,500
1.97	1.97	1.94	1.94	1.94	1.39
N/S	N/S	N/S	N/S	N/S	N/S
4,300	4,300	4,300	4,300	4,300	3,600
N/S	N/S	N/S	N/S	N/S	N/S
3,300	3,300	3,300	3,300	3,300	3,200
V	V	V	V	V	V
3,600	3,600	3,600	3,600	3,600	3,200
1.09	1.09	1.09	1.09	1.09	0.89
12,400	12,400	12,400	12,400	12,400	12,400
X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005
X,XXX - 2015	X,XXX - 2015	X,XXX - 2015	X,XXX - 2015	X,XXX - 2015	X,XXX - 2015
X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio
1.01	1.01	1.94	1.94	1.94	1.94

2005 ACTUAL TRAFFIC COMPARED TO 2005 DHV		2005 ACTUAL TRAFFIC COMPARED TO 2010 DHV	
Sam Allen Rd.	SR 39 - BUILD - AM	Sam Allen Rd.	SR 39 - BUILD - AM
(15) 6	(354) 244	(15) 6	(354) 284
0.38	0.69	0.38	0.80
(19) 4	0.32	(19) 4	0.49
0.20	0.44	0.20	0.65
(73) 46	(72) 68	(73) 66	(72) 96
0.64	0.95	0.90	1.34
(90) 128	(76) 204	(90) 135	(76) 193
1.42	2.69	1.50	2.54
(169) 128	(37) 139	(169) 135	(37) 131
2.09	3.76	2.22	3.55
(XXX) - Actual		(XXX) - Actual	
XXX - Calculated DHV		XXX - Calculated DHV	
X.XX - Ratio		X.XX - Ratio	
(15) 11	(354) 312	(15) 11	(354) 341
0.76	0.88	0.76	0.96
(19) 8	0.70	(19) 8	0.92
0.41	0.95	0.41	1.24
(73) 89	(72) 131	(73) 100	(72) 148
1.22	1.81	1.38	2.05
(90) 139	(76) 193	(90) 139	(76) 182
1.55	2.54	1.55	2.39
(169) 139	(37) 131	(169) 139	(37) 124
2.28	3.55	2.28	3.34
(XXX) - Actual		(XXX) - Actual	
XXX - Calculated DHV		XXX - Calculated DHV	
X.XX - Ratio		X.XX - Ratio	

DATA INPUT

Date:

28-Nov-98

Analyst: PAP
 Highway: SR 39 - BUILD - PM
 Intersection: Sam Allen Rd.
 From: Opening Day
 To: 2010 (From 2005 Base)
 County: Hillsborough

North/South Orientation of Mainline?
 (Y/N) Y

K Factors: Mainline 9.54% Sidestreet 9.54%

D Factors: a. Mainline Northbound(NB) 59.5% Southbound(SB) 40.5%
 b. Sidestreet Eastbound(EB) 40.5% Westbound(WB) 59.5%

Do you have FSUTMS Model Year Traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Y
 Manual Instr:
 If Y, go to A43
 If N, go to A24

IF NO: Enter Year and Growth Rates from Base Year:
 Year Rate

Base	
Opening	
Mid	
Design	

Enter Base Year AADTs for Volume Comparison:
 (uses growth rates to calculate other project years)

Year	From West:		From East:		From North:		From South:		TOTAL
	EB Approach	WB Approach	WB Approach	EB Approach	SB Approach	NB Approach	TOTAL		
2005								0	
2010								0	
2015								0	
2020								0	

RANGE NAMES FOR YEARS:

Base	2005
Open	2010
Mid	2015
Design	2020

AREA FOR CALCULATIONS: 1/2 OF INPUT AADT

Year	From West:		From East:		From North:		From South:		TOTAL
	EB Approach	WB Approach	WB Approach	EB Approach	SB Approach	NB Approach	sbApproach	TOTAL	
2005	2,300	2,300	2,700	2,700	2,500	2,500	5,650	13,150	
2010	2,667	2,667	3,083	3,083	3,000	3,000	5,933	14,683	
2015	3,033	3,033	3,467	3,467	3,500	3,500	6,217	16,217	
2020	3,400	3,400	3,850	3,850	4,000	4,000	6,500	17,750	

Year	To West:		To East:		To North:		To South:		TOTAL
	wbApproach	wbApproach	ebApproach	ebApproach	nbApproach	nbApproach	sbApproach	TOTAL	
2005	2,300	2,300	2,700	2,700	2,500	2,500	5,650	13,150	
2010	2,667	2,667	3,083	3,083	3,000	3,000	5,933	14,683	
2015	3,033	3,033	3,467	3,467	3,500	3,500	6,217	16,217	
2020	3,400	3,400	3,850	3,850	4,000	4,000	6,500	17,750	

DATA INPUT

Date:

28-Nov-98

Analyst: PAP
 IF YES: Enter Project & Model Years:

Base	2005
Opening	2010
Mid	2015
Design	2020
Model	2020

Enter Base & Model Year AADTs for Interpolation:

Base Model	From West (EB) Approach	From East (WB) Approach	From North (SB) Approach	From South (NB) Approach	TOTAL
2005	4,600	5,400	5,000	11,300	26,300
2020	6,800	7,700	8,000	13,000	35,500

AREA FOR CALCULATION: INTERPOLATION

model - base: 15
 diff of vols: 1700

Year	EB	WB	SB	NB
2005	4,600	5,400	5,000	11,300
2010	5,333	6,167	6,000	11,867
2015	6,067	6,933	7,000	12,433
2020	6,800	7,700	8,000	13,000

Enter "1st Guess" Turning

Percentages for AADT Balancing:

(EB THRU) (EB LT) (EB RT)	W-to-E	0.41	W-to-N	0.11	W-to-S	0.48	2005	58	16	67
(WB THRU) (WB RT) (WB LT)	E-to-W	0.28	E-to-N	0.45	E-to-S	0.27		59	93	56
(SB RT) (SB LT) (SB THRU)	N-to-W	0.03	N-to-E	0.20	N-to-S	0.77		10	62	237
(NB LT) (NB RT) (NB THRU)	S-to-W	0.17	S-to-E	0.18	S-to-N	0.65		79	84	312

Actual/Counted Traffic:

Desired Closure: 0.010

2-WAY AADT TURNING MOVEMENTS IN YEAR 2005				2-WAY AADT TURNING MOVEMENTS IN YEAR 2010			
Sam.Allen.Rd.	2,400 9,400	SR_39 - BUILD - PM 9% 219	2005	Sam.Allen.Rd.	3,100 6,100	SR_39 - BUILD - PM 13% 391	2010
	30 1% ^	600	332		56 2% ^	900	528
	46 100	600	13%		78 100	900	18%
	2% <----->	600	24%		3% <----->	900	30%
2,300	25% <----->		64%	2,600	32% <----->		53%
3,100	73% <----->			5,200	65% <----->		
	N/S				N/S		
	4,200		1,657		5,100		1,578
	2,100	3,500	1,657		2,400	3,500	1,578
	1,688 3,300				1,699 3,400		
	1,620 29% v	1,890			1,713 29% v	1,882	
	37%				40%		
	12,400				12,000		
	5,600				6,000		
2-WAY AADT TURNING MOVEMENTS IN YEAR 2015				2-WAY AADT TURNING MOVEMENTS IN YEAR 2020			
Sam.Allen.Rd.	3,500 7,000	SR_39 - BUILD - PM 15% 540	2015	Sam.Allen.Rd.	4,000 8,000	SR_39 - BUILD - PM 18% 709	2020
	83 2% ^	1,300	730		117 3% ^	1,600	935
	119 200	1,200	21%		151 300	1,400	25%
	4% <----->		34%		5% <----->		37%
3,000	37% <----->		44%	3,100	40% <----->		38%
6,000	59% <----->			6,000	55% <----->		
	N/S				N/S		
	5,500		1,508		6,100		1,444
	2,600	3,300	1,508		2,900	3,200	1,444
	1,782 3,500				1,699 3,500		
	1,760 28% v	1,811			1,843 28% v	1,770	
	42%				44%		
	12,300				12,800		
	6,200				6,500		

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR		1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR	
2005	2010	2005	2010
<p>Sam.Allen.Rd.</p> <p>189 SR 39 - BUILD - PM</p> <p>4 162 23</p> <p>^ ^</p> <p><--- ---></p> <p>4 34</p> <p>4 </p> <p>178 46 301</p> <p>128 199</p> <p> ^</p> <p>v v</p> <p><--- ---></p> <p>187 238 199</p> <p>624</p> <p>K ml = 9.54% 59.5% 40.5%</p> <p>K ss = 9.54% 40.5% 59.5%</p>	<p>Sam.Allen.Rd.</p> <p>236 SR 39 - BUILD - PM</p> <p>4 197 35</p> <p>^ ^</p> <p><--- ---></p> <p>4 51</p> <p>4 </p> <p>201 66 346</p> <p>131 199</p> <p> ^</p> <p>v v</p> <p><--- ---></p> <p>193 289 199</p> <p>681</p> <p>K ml = 9.54% 59.5% 40.5%</p> <p>K ss = 9.54% 40.5% 59.5%</p>	<p>Sam.Allen.Rd.</p> <p>270 SR 39 - BUILD - PM</p> <p>8 213 50</p> <p>^ ^</p> <p><--- ---></p> <p>8 74</p> <p>8 </p> <p>232 89 392</p> <p>135 187</p> <p> ^</p> <p>v v</p> <p><--- ---></p> <p>199 312 187</p> <p>698</p> <p>K ml = 9.54% 59.5% 40.5%</p> <p>K ss = 9.54% 40.5% 59.5%</p>	<p>Sam.Allen.Rd.</p> <p>309 SR 39 - BUILD - PM</p> <p>12 236 62</p> <p>^ ^</p> <p><--- ---></p> <p>12 91</p> <p>12 </p> <p>251 104 153</p> <p>135 182</p> <p> ^</p> <p>v v</p> <p><--- ---></p> <p>199 346 182</p> <p>727</p> <p>K ml = 9.54% 59.5% 40.5%</p> <p>K ss = 9.54% 40.5% 59.5%</p>

2005 TRAFFIC		2005 TRAFFIC COMPARED TO		2010 TRAFFIC	
Sam Allen Rd.	SR_39 - BUILD - PM	Sam Allen Rd.	SR_39 - BUILD - PM	Sam Allen Rd.	SR_39 - BUILD - PM
9,400	9,400	9,400	9,400	9,400	9,400
7,000	7,000	8,000	8,000	6,100	6,100
0.74	0.74	0.85	0.85	0.65	0.65
100	100	100	100	100	100
200	200	300	300	100	100
2.00	2.00	3.00	3.00	1.00	1.00
1,200	1,200	1,200	1,200	1,200	1,200
1.92	1.92	2,700	2,700	1,700	1,700
1.92	1.92	2.25	2.25	1.42	1.42
4,200	4,200	4,200	4,200	4,200	4,200
N/S	N/S	N/S	N/S	N/S	N/S
3,300	3,300	3,300	3,300	3,300	3,300
3,500	3,500	3,500	3,500	3,500	3,500
1.06	1.06	1.06	1.06	1.03	1.03
12,400	12,400	12,400	12,400	12,400	12,400
12,300	12,300	12,800	12,800	12,000	12,000
0.99	0.99	1.03	1.03	0.97	0.97
3,100	3,100	3,100	3,100	3,100	3,100
6,000	6,000	6,000	6,000	5,200	5,200
1.94	1.94	1.94	1.94	1.68	1.68
X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005
X,XXX - 2015	X,XXX - 2015	X,XXX - 2020	X,XXX - 2020	X,XXX - 2010	X,XXX - 2010
X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio
5,300	5,300	5,300	5,300	5,300	5,300
6,900	6,900	6,000	6,000	6,100	6,100
1.30	1.30	1.94	1.94	1.15	1.15
X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005
X,XXX - 2015	X,XXX - 2015	X,XXX - 2020	X,XXX - 2020	X,XXX - 2010	X,XXX - 2010
X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio

2005 ACTUAL TRAFFIC COMPARED TO 2005 DHV		2005 ACTUAL TRAFFIC COMPARED TO 2010 DHV	
Sam.Allen.Rd.	SR_39 - BUILD - PM	Sam.Allen.Rd.	SR_39 - BUILD - PM
(10) 4	(237) 162	(10) 4	(237) 197
0.39	0.68	0.39	0.83
(16) 4	(62) 23	(16) 4	(62) 35
0.24	0.37	0.24	0.56
(58) 46	(93) 34	(58) 66	(93) 51
0.80	0.37	1.13	0.55
(67) 128	(56) 199	(67) 131	(56) 199
1.90	3.55	1.96	3.55
(79) 187	(84) 199	(79) 193	(84) 199
2.37	2.37	2.44	2.37
0.76	0.76	0.93	0.93
(XXX) - Actual		(XXX) - Actual	
XXX - Calculated DHV		XXX - Calculated DHV	
X.XX - Ratio		X.XX - Ratio	
2005 ACTUAL TRAFFIC COMPARED TO 2015 DHV		2005 ACTUAL TRAFFIC COMPARED TO 2020 DHV	
Sam.Allen.Rd.	SR_39 - BUILD - PM	Sam.Allen.Rd.	SR_39 - BUILD - PM
(10) 8	(237) 213	(10) 12	(237) 236
0.77	0.90	1.16	0.99
(16) 8	(62) 50	(16) 12	(62) 62
0.48	0.81	0.72	1.00
(58) 89	(93) 74	(58) 104	(93) 91
1.53	0.79	1.80	0.98
(67) 135	(56) 187	(67) 135	(56) 182
2.02	3.34	2.02	3.24
(79) 199	(84) 187	(79) 199	(84) 182
2.51	2.23	2.51	2.16
1.00	1.00	1.11	1.11
(XXX) - Actual		(XXX) - Actual	
XXX - Calculated DHV		XXX - Calculated DHV	
X.XX - Ratio		X.XX - Ratio	

DATA INPUT

Date: 30-Nov-98

Analyst: PAP
 Highway: SR 39 - Build - AM
 Intersection: Knights Griffin Rd.
 From: Opening Day
 To: 2010 (From 2005 Base)
 County: Hillsborough

North/South Orientation of Mainline? Y

K Factors:
 Mainline 9.54% Sidestreet 9.54%

D Factors:
 a. Mainline Northbound(NB) 40.5% Southbound(SB) 59.5%
 b. Sidestreet Eastbound(EB) 40.5% Westbound(WB) 59.5%

RANGE NAMES FOR YEARS:

Base	2005
Open	2010
Mid	2015
Design	2020

Do you have FSUTMS Model Year Traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Y
 Manual Instr:
 If Y, go to A43
 If N, go to A24

IF NO: Enter Year and Growth Rates from Base Year:
 Year Rate

Base	
Opening	
Mid	
Design	

Enter Base Year AADTs for Volume Comparison:
 (uses growth rates to calculate other project years)

Year	From West		From East		From North		From South		TOTAL
	EB Approach	WB Approach	WB Approach	WB Approach	SB Approach	NB Approach	NB Approach	TOTAL	
2005									0
2010									0
2015									0
2020									0

AREA FOR CALCULATIONS: 1/2 OF INPUT AADI

Year	From West		From East		From North		From South		TOTAL
	EB Approach	WB Approach	WB Approach	WB Approach	SB Approach	NB Approach	NB Approach	TOTAL	
2005	2,050	1,950	1,950	6,000	6,000	6,600	16,600		
2010	2,333	2,233	2,233	7,167	7,167	7,883	19,616		
2015	2,617	2,517	2,517	8,333	8,333	9,167	22,634		
2020	2,900	2,800	2,800	9,500	9,500	10,450	25,650		

Year	To West		To East		To North		To South		TOTAL
	wbApproach	ebApproach	ebApproach	nbApproach	nbApproach	sbApproach	sbApproach	TOTAL	
2005	2,050	1,950	1,950	6,000	6,000	6,600	16,600		
2010	2,333	2,233	2,233	7,167	7,167	7,883	19,616		
2015	2,617	2,517	2,517	8,333	8,333	9,167	22,634		
2020	2,900	2,800	2,800	9,500	9,500	10,450	25,650		

DATA INPUT

Date:

Analyst: PAP

30-Nov-98

IF YES: Enter Project & Model Years:

Base	2005
Opening	2010
Mid	2015
Design	2020
Model	2020

Enter Base & Model Year AADTs for Interpolation:

Base	2005	2020	From West (EB)Approach	From East (WB)Approach	From North (SB)Approach	From South (NB)Approach	TOTAL
Model	4,100	5,800	3,900	12,000	13,200	33,200	
			5,600	19,000	20,900	51,300	

AREA FOR CALCULATION : INTERPOLATION

model - base: diff of vols: year	15	1700	1700	1700	7000	7700
	EB	WB	SB	NB		
2005	4,100	3,900	12,000	13,200		33,200
2010	4,667	4,467	14,333	15,767		39,233
2015	5,233	5,033	16,667	18,333		45,267
2020	5,800	5,600	19,000	20,900		51,300

Enter "1st Guess" Turning

Percentages for AADT Balancing:

(EB THRU)	W-to-E	0.44	W-to-E	2005	63
(EB LT)	W-to-N	0.15	W-to-N		21
(EB RT)	W-to-S	0.41	W-to-S		58
(WB THRU)	E-to-W	0.51	E-to-W		137
(WB RT)	E-to-N	0.30	E-to-N		78
(WB LT)	E-to-S	0.19	E-to-S		49
(SB RT)	N-to-W	0.12	N-to-W		46
(SB LT)	N-to-E	0.16	N-to-E		61
(SB THRU)	N-to-S	0.72	N-to-S		280
(NB LT)	S-to-W	0.28	S-to-W		60
(NB RT)	S-to-E	0.11	S-to-E		25
(NB THRU)	S-to-N	0.61	S-to-N		133

Desired Closure:

0.010

Actual/Counted Traffic:

W-to-E	2005	63
W-to-N		21
W-to-S		58
E-to-W		137
E-to-N		78
E-to-S		49
N-to-W		46
N-to-E		61
N-to-S		280
S-to-W		60
S-to-E		25
S-to-N		133

2-WAY AADT TURNING MOVEMENTS IN YEAR 2005

Knights Griffin Rd.	SR 39 - Build - AM	SR 39 - Build - AM	Knights Griffin Rd.	SR 39 - Build - AM
6,000	345	664	7,200	769
8,000	6%	11%	14,500	84%
83%	^	^	84%	^
5,000	700	1,400	6,000	1,700
E/W	16% <	39%	E/W	39%
1,300	700	600	1,400	700
N/S	33% <	32%	N/S	31%
9,900	51% <	29%	12,000	30%
4,900	1,021	1,200	5,900	1,400
74%	1,081	613	75%	723
9,400	16%	9%	15,800	9%
6,600			7,900	

2-WAY AADT TURNING MOVEMENTS IN YEAR 2010

Knights Griffin Rd.	SR 39 - Build - AM	SR 39 - Build - AM	Knights Griffin Rd.	SR 39 - Build - AM
6,000	393	769	7,200	769
8,000	5%	11%	14,500	84%
83%	^	^	84%	^
5,000	800	1,700	6,000	1,700
E/W	16% <	39%	E/W	39%
1,300	700	700	1,400	700
N/S	32% <	31%	N/S	31%
9,900	52% <	30%	12,000	30%
4,900	1,195	1,400	5,900	1,400
74%	1,254	723	75%	723
9,400	16%	9%	15,800	9%
6,600			7,900	

2-WAY AADT TURNING MOVEMENTS IN YEAR 2015

Knights Griffin Rd.	SR 39 - Build - AM	SR 39 - Build - AM	Knights Griffin Rd.	SR 39 - Build - AM
8,300	435	863	9,600	977
16,700	5%	10%	16,500	85%
84%	^	^	85%	^
7,000	900	1,900	8,100	2,100
E/W	16% <	40%	E/W	40%
1,600	800	800	1,700	800
N/S	31% <	30%	N/S	30%
13,900	53% <	30%	16,000	31%
6,900	1,368	1,600	7,900	1,800
75%	1,410	824	76%	934
18,300	15%	9%	18,800	9%
9,100			10,400	

2-WAY AADT TURNING MOVEMENTS IN YEAR 2020

Knights Griffin Rd.	SR 39 - Build - AM	SR 39 - Build - AM	Knights Griffin Rd.	SR 39 - Build - AM
8,300	488	977	9,600	977
16,700	5%	10%	16,500	85%
84%	^	^	85%	^
7,000	1,000	2,100	8,100	2,100
E/W	16% <	40%	E/W	40%
1,600	900	800	1,700	800
N/S	31% <	30%	N/S	30%
13,900	53% <	31%	16,000	31%
6,900	1,541	1,800	7,900	1,800
75%	1,582	934	76%	934
18,300	15%	9%	18,800	9%
9,100			10,400	

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR

Knights, Griffin Rd.	SR_39 - Build - AM	2005	2010
	681	79	
40			
^	<---	^	^
	v		
27	-----	79	96
158	50 ----->	74	79
81	-----	68	79
v	^	^	^
<---			
81	-----	46	54
383			
	-----	221	255
510	<-----	221	255

Knights, Griffin Rd.

K ml = 9.54%
K ss = 9.54%

D nb&sb = 40.5%
D eb&wb = 40.5%

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR

Knights, Griffin Rd.	SR_39 - Build - AM	2015	2020
	948	108	
51			
^	<---	^	^
	v		
35	-----	108	119
205	62 ----->	91	96
108	-----	91	102
v	^	^	^
<---			
108	-----	62	70
537			
707	<-----	289	318

Knights, Griffin Rd.

K ml = 9.54%
K ss = 9.54%

D nb&sb = 40.5%
D eb&wb = 40.5%

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR

Knights, Griffin Rd.	SR_39 - Build - AM	2005	2010
	823	96	
45			
<---	^	^	^
	v		
31	-----	96	96
178	54 ----->	79	79
93	-----	79	79
v	^	^	^
<---			
93	-----	54	54
464			
610	<-----	610	610

Knights, Griffin Rd.

K ml = 9.54%
K ss = 9.54%

D nb&sb = 40.5%
D eb&wb = 40.5%

2005 TRAFFIC		2005 TRAFFIC COMPARED TO		2010 TRAFFIC	
Knights Griffin Rd.	SR 39 - Build - AM	Knights Griffin Rd.	SR 39 - Build - AM	Knights Griffin Rd.	SR 39 - Build - AM
8,000	8,000	8,000	8,000	8,000	8,000
16,700	16,700	14,500	16,400	14,500	16,400
2.09	2.09	1.81	2.05	1.81	2.05
700	700	700	700	700	700
900	900	800	1,000	800	1,000
1.29	1.29	1.14	1.43	1.14	1.43
1,600	1,600	1,400	1,700	1,400	1,700
1.23	1.23	1.08	1.31	1.08	1.31
9,900	9,900	9,900	9,900	9,900	9,900
13,900	13,900	16,000	16,000	16,000	16,000
1.40	1.40	1.62	1.62	1.62	1.62
1,300	1,300	1,300	1,300	1,300	1,300
1.33	1.33	1.48	1.48	1.48	1.48
9,400	9,400	9,400	9,400	9,400	9,400
18,300	18,300	18,800	18,800	18,800	18,800
1.95	1.95	2.00	2.00	2.00	2.00
X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005	X,XXX - 2005
X,XXX - 2015	X,XXX - 2015	X,XXX - 2020	X,XXX - 2020	X,XXX - 2020	X,XXX - 2020
X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio	X,XXX - Ratio
4,100	4,100	4,100	4,100	4,100	4,100
5,300	5,300	5,800	5,800	5,800	5,800
1.29	1.29	1.41	1.41	1.41	1.41
3,900	3,900	3,900	3,900	3,900	3,900
5,100	5,100	5,100	5,100	5,100	5,100
1.31	1.31	1.31	1.31	1.31	1.31

2005 ACTUAL TRAFFIC COMPARED TO 2005 DHV

Knights Griffin Rd.	(46)	(280)	SR_39_Build_AM	(61)	(280)	SR_39_Build_AM	(61)
	40	562		79	562		96
	0.86	2.01		1.30	2.43		1.58
(21)	<---						
27	^	v	^	^	v	^	^
1.29							
	-----	-----	-----	-----	-----	-----	-----
(63)							
50							
0.80							
(58)							
81							
1.40	v	^	v	^	^	v	^
	-----	-----	-----	-----	-----	-----	-----
(XXX) - Actual							
XXX - Calculated DHV							
X.XX - Ratio							

2005 ACTUAL TRAFFIC COMPARED TO 2020 DHV

Knights Griffin Rd.	(46)	(280)	SR_39_Build_AM	(61)	(280)	SR_39_Build_AM	(61)
	51	789		108	908		119
	1.11	2.82		1.77	3.24		1.95
(21)	<---						
35	^	v	^	^	v	^	^
1.66							
	-----	-----	-----	-----	-----	-----	-----
(63)							
62							
0.98							
(58)							
108							
1.87	v	^	v	^	^	v	^
	-----	-----	-----	-----	-----	-----	-----
(XXX) - Actual							
XXX - Calculated DHV							
X.XX - Ratio							

DATA INPUT

Date:

30-Nov-98

Analyst: PAP

Highway: SR.39 - Build - PM

Intersection: Knights Griffin Rd

From: Opening Day

To: 2010 (From 2005 Base)

County: Hillsborough

North/South Orientation of Mainline?

(Y/N) Y

D Factors:

K Factors: Mainline 9.54% Sidestreet 9.54%

a. Mainline: Northbound(NB) 59.5% Southbound(SB) 40.5%

b. Sidestreet: Eastbound(EB) 59.5% Westbound(WB) 40.5%

Do you have FSUTMS Model Year Traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Y

Manual Instr:

If Y, go to A43
If N, go to A24

IF NO: Enter Year and Growth Rates from Base Year:

Year	Rate
Base	
Opening	
Mid	
Design	

Enter Base Year AADTs for Volume Comparison:

(uses growth rates to calculate other project years)

Year	From West:		From East:		From North:		From South:		TOTAL
	EB Approach	WB Approach	WB Approach	EB Approach	SB Approach	NB Approach	NB Approach	SB Approach	
2005									0
2010									0
2015									0
2020									0

RANGE NAMES FOR YEARS:

Base	2005
Open	2010
Mid	2015
Design	2020

AREA FOR CALCULATIONS: 1/2 OF INPUT AADT

Year	From West:		From East:		From North:		From South:		TOTAL
	EB Approach	WB Approach	WB Approach	EB Approach	SB Approach	NB Approach	NB Approach	SB Approach	
2005	2,050	1,950	1,950	6,000	6,000	6,600	6,600	16,600	
2010	2,333	2,233	2,233	7,167	7,167	7,883	7,883	19,616	
2015	2,617	2,517	2,517	8,333	8,333	9,167	9,167	22,634	
2020	2,900	2,800	2,800	9,500	9,500	10,450	10,450	25,650	

Year	To West:		To East:		To North:		To South:		TOTAL
	wbApproach	ebApproach	wbApproach	ebApproach	nbApproach	sbApproach	nbApproach	sbApproach	
2005	2,050	1,950	1,950	6,000	6,000	6,600	6,600	16,600	
2010	2,333	2,233	2,233	7,167	7,167	7,883	7,883	19,616	
2015	2,617	2,517	2,517	8,333	8,333	9,167	9,167	22,634	
2020	2,900	2,800	2,800	9,500	9,500	10,450	10,450	25,650	

DATA INPUT

Date:

30-Nov-98

Analyst: PAP

IF YES: Enter Project & Model Years:

Base	2005
Opening	2010
Mid	2015
Design	2020
Model	2020

Enter Base & Model Year AADTs for Interpolation:

Base	2005	4,100	3,900	12,000	13,200	TOTAL	33,200
Model	2020	5,800	5,600	19,000	20,900		51,300
		From West	From East	From North	From South		
		(EB)Approach	(WB)Approach	(SB)Approach	(NB)Approach		

AREA FOR CALCULATION : INTERPOLATION

model - base:	15							
diff of vols:	1700	1700	7000	7700				
year	2005	2010	2015	2020	EB	WB	SB	NB
	4,100	4,667	5,233	5,800	3,900	4,467	5,033	5,600
	13,200	14,333	16,667	19,000	12,000	14,333	16,667	19,000
	33,200	39,233	45,267	51,300				

Enter "1st Guess" Turning

Percentages for AADT Balancing:

(EB THRU)	W-to-E	0.14
(EB LT)	W-to-N	0.61
(EB RT)	W-to-S	0.25
(WB THRU)	E-to-W	0.42
(WB RT)	E-to-N	0.41
(WB LT)	E-to-S	0.17
(SB RT)	N-to-W	0.08
(SB LT)	N-to-E	0.27
(SB THRU)	N-to-S	0.65
(NB LT)	S-to-W	0.14
(NB RT)	S-to-E	0.15
(NB THRU)	S-to-N	0.71

Actual/Counted Traffic:

W-to-E	2005	135
W-to-N		31
W-to-S		54
E-to-W		98
E-to-N		94
E-to-S		38
N-to-W		20
N-to-E		70
N-to-S		168
S-to-W		57
S-to-E		63
S-to-N		287

Desired Closure:

0.010

2-WAY AADT TURNING MOVEMENTS IN YEAR 2005

Knights_Griffin_Rd.	272	4%	^	SR_39_Build_PM	6,100	8,000	83%	^	13%	781	SR_39_Build_PM	7,200	14,400	84%	^	12%	880	SR_39_Build_PM	7,200	14,400	84%	^	12%	880	SR_39_Build_PM	
Knights_Griffin_Rd.	892	1,200		5,000		1,400		596				6,000		1,600		693				6,000		1,600		693		
	42%	<		E/W				30%			E/W			42%	<				E/W							
	200			900				700			1,000			200					1,000							
	10%	<		N/S				36%			N/S			2,300					2,300							
	4,200			9,600				34%			11,500			4,600					4,600							
	48%	<		1,000	2,100		4,500		1,700	675	5,400		1,900		796				5,400		1,900		796			
	16%			1,072	16%		69%	979	15%		9,400			1,228	16%				15,700							
				6,600				7,800			7,800			1,124					7,800							

2-WAY AADT TURNING MOVEMENTS IN YEAR 2010

Knights_Griffin_Rd.	305	4%	^	SR_39_Build_PM	7,200	14,400	84%	^	12%	880	SR_39_Build_PM	7,200	14,400	84%	^	12%	880	SR_39_Build_PM	7,200	14,400	84%	^	12%	880	SR_39_Build_PM
Knights_Griffin_Rd.	1,224	1,600		8,000		1,900		855				8,000		1,900		855			8,000		1,900		855		
	42%	<		E/W				31%			E/W			42%	<				E/W						
	300			1,200				900			1,200			300					1,200						
	9%	<		N/S				34%			N/S			2,900					2,900						
	5,800			15,400				36%			15,400			5,800					15,400						
	49%	<		1,417	3,000		7,400		2,400	1,001	7,400		2,400		1,001				7,400		2,400		1,001		
	15%			1,571	15%		71%	1,442	14%		18,000			1,571	15%				18,000						
				10,400				10,400			10,400			1,124					10,400						

2-WAY AADT TURNING MOVEMENTS IN YEAR 2015

Knights_Griffin_Rd.	272	4%	^	SR_39_Build_PM	6,100	8,000	83%	^	13%	781	SR_39_Build_PM	7,200	14,400	84%	^	12%	880	SR_39_Build_PM	7,200	14,400	84%	^	12%	880	SR_39_Build_PM
Knights_Griffin_Rd.	1,099	1,400		7,000		1,800		789				8,000		1,900		855			8,000		1,900		855		
	42%	<		E/W				30%			E/W			42%	<				E/W						
	200			1,100				900			1,200			200					1,200						
	9%	<		N/S				34%			N/S			2,600					2,600						
	5,200			13,500				35%			13,500			5,100					13,500						
	49%	<		1,262	2,700		6,500		2,200	917	6,500		2,200		917				6,500		2,200		917		
	15%			1,416	15%		71%	1,298	14%		18,400			1,416	15%				18,400						
				9,200				9,200			9,200			1,124					9,200						

2-WAY AADT TURNING MOVEMENTS IN YEAR 2020

Knights_Griffin_Rd.	305	4%	^	SR_39_Build_PM	7,200	14,400	84%	^	12%	880	SR_39_Build_PM	7,200	14,400	84%	^	12%	880	SR_39_Build_PM	7,200	14,400	84%	^	12%	880	SR_39_Build_PM
Knights_Griffin_Rd.	1,224	1,600		8,000		1,900		855				8,000		1,900		855			8,000		1,900		855		
	42%	<		E/W				31%			E/W			42%	<				E/W						
	300			1,200				900			1,200			300					1,200						
	9%	<		N/S				34%			N/S			2,900					2,900						
	5,800			15,400				36%			15,400			5,800					15,400						
	49%	<		1,417	3,000		7,400		2,400	1,001	7,400		2,400		1,001				7,400		2,400		1,001		
	15%			1,571	15%		71%	1,442	14%		18,000			1,571	15%				18,000						
				10,400				10,400			10,400			1,124					10,400						

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR

2005

Knights Griffin Rd. SR_39 - Build - PM

471	46	371	54	54
68	51	119	96	35
238	119	545	125	66

Knights Griffin Rd.

K ml = 9.54%	D nb&sb = 59.5%
K ss = 9.54%	D eb&wb = 59.5%

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR

2010

Knights Griffin Rd. SR_39 - Build - PM

645	54	522	70	70
79	62	153	125	43
295	153	766	125	85

Knights Griffin Rd.

K ml = 9.54%	D nb&sb = 59.5%
K ss = 9.54%	D eb&wb = 59.5%

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR

2010

Knights Griffin Rd. SR_39 - Build - PM

556	50	444	62	62
220	261	131	108	39
648	891	653	174	73

Knights Griffin Rd.

K ml = 9.54%	D nb&sb = 59.5%
K ss = 9.54%	D eb&wb = 59.5%

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR

2020

Knights Griffin Rd. SR_39 - Build - PM

730	62	595	73	73
278	329	874	136	46
858	1,181	874	213	93

Knights Griffin Rd.

K ml = 9.54%	D nb&sb = 59.5%
K ss = 9.54%	D eb&wb = 59.5%

2005 TRAFFIC

Knights Griffin Rd.	8,000	SR_39 - Build - PM
	1,200	1,400
	900	
	2,900	
	4,200	

2005 TRAFFIC COMPARED TO 2010 TRAFFIC

Knights Griffin Rd.	8,000	SR_39 - Build - PM
	1,200	1,400
	1,300	1,600
	1.08	1.14
	1,000	
	1.11	E/W
	4,200	
	4,600	
	1.10	

X,XXX - 2005

X,XXX - 2005
X,XXX - 2010
X,XXX - Ratio

2005 TRAFFIC COMPARED TO 2015 TRAFFIC

Knights Griffin Rd.	8,000	SR_39 - Build - PM
	1,200	1,400
	1,400	1,800
	1.17	1.29
	1,100	
	1.22	E/W
	4,200	
	5,200	
	1.24	

2005 TRAFFIC COMPARED TO 2020 TRAFFIC

Knights Griffin Rd.	8,000	SR_39 - Build - PM
	1,200	1,400
	1,600	1,900
	1.33	1.36
	1,200	
	1.33	E/W
	4,200	
	5,800	
	1.38	

X,XXX - 2005
X,XXX - 2015
X,XXX - Ratio

X,XXX - 2005
X,XXX - 2020
X,XXX - Ratio

2005 ACTUAL TRAFFIC COMPARED TO 2005 DHV

Knights_Griffin Rd.	(168)	(20)	(70)	(70)	(168)	(70)	(70)
	371	46	54	54	444	62	62
	2.21	2.32	0.77	0.77	2.64	0.88	0.88
(31) ^							
68		<---					
2.20 -----			^	^	v	^	^
(135)							
51 ----->							
0.38							
(98)							
35 ----->							
0.35							
(54) -----							
119							
2.21 v							
(54) -----							
131							
2.42 v							
(54) -----							
131							
2.42 v							
(57)							
119							
2.09							
(287)							
545							
1.90							
(63)							
96							
1.53							
(XXX) - Actual							
XXX - Calculated DHV							
X.XX - Ratio							

2005 ACTUAL TRAFFIC COMPARED TO 2010 DHV

Knights_Griffin Rd.	(168)	(20)	(70)	(70)	(168)	(70)	(70)
	522	54	70	70	595	73	73
	3.10	2.70	0.99	0.99	3.54	1.05	1.05
(31) ^							
79							
2.56 -----							
(135)							
62 ----->							
0.46							
(98)							
43 ----->							
0.43							
(54) -----							
153							
2.84 v							
(54) -----							
170							
3.15 v							
(54) -----							
170							
3.15 v							
(57)							
153							
2.69							
(287)							
766							
1.98							
(63)							
125							
1.98							
(XXX) - Actual							
XXX - Calculated DHV							
X.XX - Ratio							

2005 ACTUAL TRAFFIC COMPARED TO 2020 DHV

Knights_Griffin Rd.	(168)	(20)	(70)	(70)	(168)	(70)	(70)
	595	62	73	73	653	108	108
	3.54	3.09	1.05	1.05	2.27	1.71	1.71
(31) ^							
91							
2.93 -----							
(135)							
68 ----->							
0.50							
(98)							
46 ----->							
0.47							
(54) -----							
170							
3.15 v							
(54) -----							
170							
3.15 v							
(57)							
170							
2.99							
(287)							
874							
3.05							
(63)							
136							
2.16							
(XXX) - Actual							
XXX - Calculated DHV							
X.XX - Ratio							

2005 ACTUAL TRAFFIC COMPARED TO 2015 DHV

Knights Griffin Rd.	(168)	(20)	(70)	(70)	(168)	(70)	(70)
	371	46	54	54	444	62	62
	2.21	2.32	0.77	0.77	2.64	0.88	0.88
(31) ^							
68							
2.20 -----							
(135)							
51 ----->							
0.38							
(98)							
35 ----->							
0.35							
(54) -----							
119							
2.21 v							
(54) -----							
131							
2.42 v							
(54) -----							
131							
2.42 v							
(57)							
119							
2.09							
(287)							
545							
1.90							
(63)							
96							
1.53							
(XXX) - Actual							
XXX - Calculated DHV							
X.XX - Ratio							

DATA INPUT

Date: 30-Nov-98

Analyst: PAP

Highway: SR 39 - Build - AM

Intersection: Zephyrhills Bypass

From: Opening Day

To: 2010 (From 2005 Base)

County: Hillsborough

North/South Orientation of Mainline? Y N

K Factors:

Mainline 9.54% Sidestreet 9.54%

D Factors:

a. Mainline 59.5% Northbound(NB) 40.5% Southbound(SB)

b. Sidestreet 59.5% Eastbound(EB) 40.5% Westbound(WB)

Do you have FSUTMS Model Year Traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Y N
Manual Instr: If Y, go to A43 If N, go to A24

IF NO: Enter Year and Growth Rates from Base Year: Rate

Base	
Opening	
Mid	
Design	

Enter Base Year AADTs for Volume Comparison: (uses growth rates to calculate other project years)

Year	From West: EB Approach	From East: WB Approach	From North: SB Approach	From South: NB Approach	TOTAL
2005					0
2010					0
2015					0
2020					0

RANGE NAMES FOR YEARS:

Base	2005
Open	2010
Mid	2015
Design	2020

AREA FOR CALCULATIONS: 1/2 OF INPUT AADT

Year	From West: EB Approach		From East: WB Approach		From North: SB Approach		From South: NB Approach		TOTAL
	wbApproach	1,750	1,250	1,500	5,800	6,600	6,600	15,400	
2005	1,750	1,250	1,500	5,800	6,600	6,600	15,400	15,400	
2010	2,100	1,500	1,750	6,933	7,900	7,900	18,433	18,433	
2015	2,450	1,750	2,000	8,067	9,200	9,200	21,467	21,467	
2020	2,800	2,000	2,250	9,200	10,500	10,500	24,500	24,500	

Year	To West: wbApproach		To East: ebApproach		To North: nbApproach		To South: sbApproach		TOTAL
	1,750	1,250	1,500	5,800	6,600	6,600	15,400		
2005	1,750	1,250	1,500	5,800	6,600	6,600	15,400	15,400	
2010	2,100	1,500	1,750	6,933	7,900	7,900	18,433	18,433	
2015	2,450	1,750	2,000	8,067	9,200	9,200	21,467	21,467	
2020	2,800	2,000	2,250	9,200	10,500	10,500	24,500	24,500	

DATA INPUT

Date:

30-Nov-98

Analyst: PAP

IF YES: Enter Project & Model Years:

Base	2005
Opening	2010
Mid	2015
Design	2020
Model	2020

Enter Base & Model Year AADTs for Interpolation:

Base	From West (EB)Approach	From East (WB)Approach	From North (SB)Approach	From South (NB)Approach	TOTAL
2005	3,500	2,500	11,600	13,200	30,800
Model	5,600	4,000	18,400	21,000	49,000

AREA FOR CALCULATION: INTERPOLATION

model - base: 15

diff of vols:

year	EB	WB	SB	NB
2005	3,500	2,500	11,600	13,200
2010	4,200	3,000	13,867	15,800
2015	4,900	3,500	16,133	18,400
2020	5,600	4,000	18,400	21,000

Enter "1st Guess" Turning

Percentages for AADT Balancing:

(EB THRU)	W-to-E	0.46
(EB LT)	W-to-N	0.47
(EB RT)	W-to-S	0.07
(WB THRU)	E-to-W	0.30
(WB RT)	E-to-N	0.69
(WB LT)	E-to-S	0.01
(SB RT)	N-to-W	0.15
(SB LT)	N-to-E	0.40
(SB THRU)	N-to-S	0.45
(NB LT)	S-to-W	0.06
(NB RT)	S-to-E	0.01
(NB THRU)	S-to-N	0.93

Actual/Counted Traffic:

2005	W-to-E	107
	W-to-N	108
	W-to-S	16
	E-to-W	45
	E-to-N	102
	E-to-S	0
	N-to-W	40
	N-to-E	111
	N-to-S	124
	S-to-W	12
	S-to-E	3
	S-to-N	202

Desired Closure: 0.010

2-WAY AADT TURNING MOVEMENTS IN YEAR 2005

Zephyrhills Bypass		SR_39 - Build - AM	
111	2%	5,800	SR_39 - Build - AM
132	200	11,600	7% 410
8%	800	5,300	800
600	600	EAW	416
1,700	34%	1,100	32%
3,400	59%	N/S	44%
		10,600	24%
		5,300	306
		1,101	16%
		13,300	80%
		6,700	255
			1,300
			2,500

2-WAY AADT TURNING MOVEMENTS IN YEAR 2015

Zephyrhills Bypass		SR_39 - Build - AM	
153	2%	8,100	SR_39 - Build - AM
183	300	16,100	7% 572
8%	800	7,400	1,100
800	800	EAW	572
2,400	34%	1,600	32%
4,800	59%	N/S	44%
		14,700	24%
		7,300	428
		1,409	17%
		1,520	4%
		18,400	80%
		9,200	355
			1,800
			3,500

2-WAY AADT TURNING MOVEMENTS IN YEAR 2010

Zephyrhills Bypass		SR_39 - Build - AM	
131	2%	6,900	SR_39 - Build - AM
161	300	13,900	7% 487
8%	700	6,300	1,000
700	700	EAW	510
2,100	34%	1,400	32%
4,200	59%	N/S	44%
		12,600	24%
		6,300	379
		1,232	2,500
		1,302	16%
		15,800	80%
		7,900	303
			4%
			700
			1,000

2-WAY AADT TURNING MOVEMENTS IN YEAR 2020

Zephyrhills Bypass		SR_39 - Build - AM	
173	2%	9,200	SR_39 - Build - AM
205	400	16,800	7% 650
8%	900	8,400	1,300
900	900	EAW	634
2,700	34%	1,800	32%
4,200	59%	N/S	44%
		16,700	24%
		8,400	478
		1,586	3,300
		1,738	17%
		18,000	80%
		10,500	408
			4%
			900
			1,300

2005		2010	
1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR		1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR	
Zephyrhills Bypass	SR_39 - Build - AM	Zephyrhills Bypass	SR_39 - Build - AM
448	410	537	487
8	31	12	39
11	31	17	39
62	43	238	79
119	23	142	27
602	34	142	40
755		897	
K ml = 9.54% K ss = 9.54%		D nb&sb = 59.5% D eb&wb = 59.5%	
2015		2020	
1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR		1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR	
Zephyrhills Bypass	SR_39 - Build - AM	Zephyrhills Bypass	SR_39 - Build - AM
622	568	711	645
12	43	15	50
17	43	23	50
91	62	312	102
165	31	187	35
834	45	187	51
1,044		1,186	
K ml = 9.54% K ss = 9.54%		D nb&sb = 59.5% D eb&wb = 59.5%	

2005 TRAFFIC		2005 TRAFFIC COMPARED TO		2010 TRAFFIC	
Zephyrhills Bypass	SR_39 - Build - AM	Zephyrhills Bypass	SR_39 - Build - AM	Zephyrhills Bypass	SR_39 - Build - AM
3,400	11,600	3,400	11,600	3,400	11,600
4,200	13,900	4,200	13,900	4,200	13,900
1.24	1.20	1.24	1.20	1.24	1.20
X,XXX - 2005	200	X,XXX - 2005	200	X,XXX - 2005	200
X,XXX - 2010	800	X,XXX - 2010	800	X,XXX - 2010	800
X,XXX - Ratio	1,100	X,XXX - Ratio	1,100	X,XXX - Ratio	1,100
	1,100		1,100		1,100
	1,400		1,400		1,400
	1.27		1.27		1.27
	E/W		E/W		E/W
	N/S		N/S		N/S
	10,600		10,600		10,600
	12,600		12,600		12,600
	1.19		1.19		1.19
	600		600		600
	700		700		700
	1.17		1.17		1.17
	13,300		13,300		13,300
	15,800		15,800		15,800
	1.19		1.19		1.19
	2,500		2,500		2,500
	3,100		3,100		3,100
	1.24		1.24		1.24
	2,500		2,500		2,500
	3,500		3,500		3,500
	1.40		1.40		1.40
	11,600		11,600		11,600
	16,100		16,100		16,100
	1.39		1.45		1.45
	200		200		200
	800		800		800
	1,100		1,100		1,300
	1.38		1,100		1.63
	1,600		1,800		1,800
	1.45		1.64		1.64
	E/W		E/W		E/W
	N/S		N/S		N/S
	10,600		10,600		10,600
	14,700		16,700		16,700
	1.39		1.58		1.58
	600		600		600
	800		900		900
	1.33		1.50		1.50
	13,300		13,300		13,300
	18,400		18,000		18,000
	1.38		1.35		1.35
	X,XXX - 2005		X,XXX - 2005		X,XXX - 2005
	X,XXX - 2010		X,XXX - 2010		X,XXX - 2010
	X,XXX - Ratio		X,XXX - Ratio		X,XXX - Ratio

2005 ACTUAL TRAFFIC COMPARED TO 2005 DHV

Zephyrhills.Bypass	(40)	(124)	SR_39 - Build - AM	(111)	(124)	SR_39 - Build - AM
	8	410		31	487	(111)
	0.19	3.30		0.28	3.93	39
(108)	^					
11	<---					
0.11	-----	v	^	0.35	-----	^
(107)						
62						
0.58						
(16)						
119						
7.45						
(12)						
119						
9.93						
(202)						
602						
2.98						
(XXX) - Actual						
XXX - Calculated DHV						
X.XX - Ratio						

Zephyrhills.Bypass	(40)	(124)	SR_39 - Build - AM	(111)	(124)	SR_39 - Build - AM
	12	568		43	645	(111)
	0.29	4.58		0.38	5.20	50
(108)	^					
17	<---					
0.16	-----	v	^	0.45	-----	^
(107)						
91						
0.85						
(16)						
165						
10.29						
(12)						
165						
13.72						
(202)						
834						
4.13						
(XXX) - Actual						
XXX - Calculated DHV						
X.XX - Ratio						

2005 ACTUAL TRAFFIC COMPARED TO 2020 DHV

Zephyrhills.Bypass	(40)	(124)	SR_39 - Build - AM	(111)	(124)	SR_39 - Build - AM
	12	645		50	645	(111)
	0.39	5.20		0.45	5.20	50
(108)	^					
23	<---					
0.21	-----	v	^	0.45	-----	^
(107)						
102						
0.95						
(16)						
187						
11.71						
(12)						
187						
15.61						
(202)						
948						
4.69						
(XXX) - Actual						
XXX - Calculated DHV						
X.XX - Ratio						

Zephyrhills.Bypass	(40)	(124)	SR_39 - Build - AM	(111)	(124)	SR_39 - Build - AM
	15	645		50	645	(111)
	0.39	5.20		0.45	5.20	50
(108)	^					
23	<---					
0.21	-----	v	^	0.45	-----	^
(107)						
102						
0.95						
(16)						
187						
11.71						
(12)						
187						
15.61						
(202)						
948						
4.69						
(XXX) - Actual						
XXX - Calculated DHV						
X.XX - Ratio						

2005 ACTUAL TRAFFIC COMPARED TO 2020 DHV

Zephyrhills.Bypass	(40)	(124)	SR_39 - Build - AM	(111)	(124)	SR_39 - Build - AM
	12	568		43	645	(111)
	0.29	4.58		0.38	5.20	50
(108)	^					
17	<---					
0.16	-----	v	^	0.45	-----	^
(107)						
91						
0.85						
(16)						
165						
10.29						
(12)						
165						
13.72						
(202)						
834						
4.13						
(XXX) - Actual						
XXX - Calculated DHV						
X.XX - Ratio						

Zephyrhills.Bypass	(40)	(124)	SR_39 - Build - AM	(111)	(124)	SR_39 - Build - AM
	15	645		50	645	(111)
	0.39	5.20		0.45	5.20	50
(108)	^					
23	<---					
0.21	-----	v	^	0.45	-----	^
(107)						
102						
0.95						
(16)						
187						
11.71						
(12)						
187						
15.61						
(202)						
948						
4.69						
(XXX) - Actual						
XXX - Calculated DHV						
X.XX - Ratio						

DATA INPUT

Date: 30-Nov-98

Analyst: IPAP

Highway: SR 39 - Build - PM

Intersection: Zephyrhills Bypass

From: Opening Day

To: 2010 (From 2005 Base)

County: Pasco

North/South Orientation of Mainline? (Y/N) Y

D Factors:

K Factors: Mainline 9.54% Sidestreet 9.54%

a. Mainline: Northbound(NB) 59.5% Southbound(SB) 40.5%

b. Sidestreet: Eastbound(EB) 59.5% Westbound(WB) 40.5%

Do you have FSUTMS Model Year Traffic from which you would like to interpolate/extrapolate for project years? (Y/N) Y

Manual Instr: If Y, go to A43 If N, go to A24

IF NO: Enter Year and Growth Rates from Base Year: Rate

Year	Base	Opening	Mid	Design

Enter Base Year AADTs for Volume Comparison: (uses growth rates to calculate other project years)

Year	From West:		From East:		From North:		From South:		TOTAL
	EB Approach	WB Approach	WB Approach	EB Approach	SB Approach	NB Approach	NB Approach	SB Approach	
2005									0
2010									0
2015									0
2020									0

RANGE NAMES FOR YEARS:

Base	2005
Open	2010
Mid	2015
Design	2020

AREA FOR CALCULATIONS: 1/2 OF INPUT AADT

Year	From West:		From East:		From North:		From South:		TOTAL
	EB Approach	WB Approach	WB Approach	EB Approach	SB Approach	NB Approach	SB Approach	NB Approach	
2005	1,750	1,750	1,250	1,250	5,800	5,800	6,600	6,600	15,400
2010	2,100	2,100	1,500	1,500	6,933	6,933	7,900	7,900	18,433
2015	2,450	2,450	1,750	1,750	8,067	8,067	9,200	9,200	21,467
2020	2,800	2,800	2,000	2,000	9,200	9,200	10,500	10,500	24,500

Year	To West:		To East:		To North:		To South:		TOTAL
	wbApproach	ebApproach	wbApproach	ebApproach	nbApproach	sbApproach	nbApproach	sbApproach	
2005	1,750	1,750	1,250	1,250	5,800	5,800	6,600	6,600	15,400
2010	2,100	2,100	1,500	1,500	6,933	6,933	7,900	7,900	18,433
2015	2,450	2,450	1,750	1,750	8,067	8,067	9,200	9,200	21,467
2020	2,800	2,800	2,000	2,000	9,200	9,200	10,500	10,500	24,500

DATA INPUT

Date:

30-Nov-98

Analyst: PAP

IF YES: Enter Project & Model Years:

Base	2005
Opening	2010
Mid	2015
Design	2020
Model	2020

Enter Base & Model Year AADTs for Interpolation:

Base Model	From West (EB)Approach	From East (WB)Approach	From North (SB)Approach	From South (NB)Approach	TOTAL
2005	3,500	2,500	11,600	13,200	30,800
2020	5,600	4,000	18,400	21,000	49,000

AREA FOR CALCULATION: INTERPOLATION

model - base: diff of vols: year	EB	WB	SB	NB
2005	3,500	2,500	11,600	13,200
2010	4,200	3,000	13,867	15,800
2015	4,900	3,500	16,133	18,400
2020	5,600	4,000	18,400	21,000

Enter "1st Guess" Turning

Percentages for AADT Balancing:

(EB THRU) (EB LT)	W-to-E	0.51	W-to-E	88
(EB RT)	W-to-N	0.01	W-to-N	2
	W-to-S	0.48	W-to-S	82
(WB THRU) (WB RT)	E-to-W	0.36	E-to-W	57
(WB LT)	E-to-N	0.20	E-to-N	31
	E-to-S	0.44	E-to-S	68
(SB THRU) (SB RT)	N-to-W	0.02	N-to-W	4
(SB LT)	N-to-E	0.09	N-to-E	19
	N-to-S	0.89	N-to-S	183
(NB THRU) (NB LT)	S-to-W	0.27	S-to-W	97
(NB RT)	S-to-E	0.18	S-to-E	65
	S-to-N	0.55	S-to-N	193
Desired Closure:		0.010		

Actual/Counted Traffic:

W-to-E	88
W-to-N	2
W-to-S	82
E-to-W	57
E-to-N	31
E-to-S	68
N-to-W	4
N-to-E	19
N-to-S	183
S-to-W	97
S-to-E	65
S-to-N	193

2-WAY AADT TURNING MOVEMENTS IN YEAR 2005

Zephyrhills Bypass	SR_39_Build - PM		SR_39_Build - PM	
	5,800 11,600	6% 91%	323 800	504
199	3%	^	82	300
5%	<	E/W	5%	<
700	400	1,100	37%	<
1,800	37%	<	1,200	2,500
3,600	58%	<	N/S	>
			10,500	>
1,045	2,200	600	17%	294
1,132	17%	4%	273	
			13,300	79%
			6,600	

2-WAY AADT TURNING MOVEMENTS IN YEAR 2015

Zephyrhills Bypass	SR_39_Build - PM		SR_39_Build - PM	
	8,000 16,100	6% 91%	445 1,200	709
272	3%	^	108	400
4%	<	E/W	4%	<
900	600	1,500	37%	<
2,400	37%	<	1,700	3,500
4,900	58%	<	N/S	>
			14,500	>
1,395	3,000	800	17%	420
1,588	17%	4%	386	
			18,300	79%
			9,200	

2-WAY AADT TURNING MOVEMENTS IN YEAR 2010

Zephyrhills Bypass	SR_39_Build - PM		SR_39_Build - PM	
	6,900 13,800	6% 91%	384 1,000	627
235	3%	^	95	300
5%	<	E/W	5%	<
800	500	1,300	37%	<
2,100	37%	<	2,100	4,200
4,200	58%	<	N/S	>
			12,500	>
1,221	2,600	700	17%	370
1,360	17%	4%	329	
			15,800	79%
			7,900	

2-WAY AADT TURNING MOVEMENTS IN YEAR 2020

Zephyrhills Bypass	SR_39_Build - PM		SR_39_Build - PM	
	9,200 16,800	6% 91%	512 1,300	832
312	3%	^	121	400
4%	<	E/W	4%	<
1,000	700	1,700	37%	<
2,700	37%	<	2,700	4,200
4,200	58%	<	N/S	>
			16,500	>
1,571	3,400	900	17%	496
1,799	17%	4%	438	
			18,000	78%
			10,400	

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR 2005

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR 2010

Zephyrhills Bypass		SR_39_Build_PM	
12	448	12	483
17	406	17	483
31	31	39	39
43	97	50	116
23	23	27	153
34	34	40	40
596	596	710	710
755	755	897	897

Zephyrhills Bypass		SR_39_Build_PM	
15	622	15	638
23	560	23	560
46	46	50	50
58	135	66	151
31	31	35	197
45	45	51	51
823	823	937	937
1,039	1,039	1,181	1,181

K ml = 9.54%
 K ss = 9.54%

K ml = 9.54%
 K ss = 9.54%

D nb&sb = 59.5%
 D eb&wb = 59.5%

D nb&sb = 59.5%
 D eb&wb = 59.5%

2010

2020

2005 TRAFFIC		2005 TRAFFIC COMPARED TO		2010 TRAFFIC	
	SR_39 - Build - PM		SR_39 - Build - PM		SR_39 - Build - PM
Zephyrhills Bypass	11,600	^	11,600	^	11,600
	16,100		13,800		13,800
	1.39	<----->	1.19	<----->	1.19
	300	^	300	^	800
	400		1,100		1,000
	1.33	<----->	1.30	<----->	1.25
	3,600	<----->	3,600	E/W	2,500
	4,900	<----->	4,200	<----->	3,000
	1.36	<----->	1.17	<----->	1.20
X,XXX - 2005	13,300		10,500	N/S	
X,XXX - 2010			12,500		600
X,XXX - Ratio			1.19		700
			1.18		1.17

2005 TRAFFIC		2005 TRAFFIC COMPARED TO		2020 TRAFFIC	
	SR_39 - Build - PM		SR_39 - Build - PM		SR_39 - Build - PM
Zephyrhills Bypass	11,600	^	11,600	^	11,600
	16,100		16,800		16,800
	1.39	<----->	1.45	<----->	1.45
	300	^	300	^	800
	400		400		1,300
	1.33	<----->	1.33	<----->	1.63
	3,600	<----->	3,600	E/W	2,500
	4,900	<----->	4,200	<----->	3,000
	1.36	<----->	1.17	<----->	1.20
X,XXX - 2005	13,300		10,500	N/S	
X,XXX - 2015			16,500		600
X,XXX - Ratio			1.57		900
			1.55		1.50

2005 ACTUAL TRAFFIC COMPARED TO 2005 DHV

Zephyrhills Bypass		(183)	SR_39 - Build - PM	(4)	(19)	(183)	SR_39 - Build - PM
		406	(19)	12	31	483	(19)
		2.22	1.63	2.90	1.63	2.64	2.03
(2)	^			<---			
17		v	^				
31							
1.00	-----		1.00				(31)
8.51	-----		1.00				39
(88)	-----		1.00				1.25
62	----->						
0.71	----->						
(57)							(57)
43							50
0.75							0.88
(82)	-----						(68)
125		^		<---			23
1.52	v		v				0.34
(65)							(65)
34							40
0.52							0.61
3.09							3.68
(XXX) - Actual							
XXX - Calculated DHV							
X.XX - Ratio							

2005 ACTUAL TRAFFIC COMPARED TO 2015 DHV

Zephyrhills Bypass		(183)	SR_39 - Build - PM	(4)	(19)	(183)	SR_39 - Build - PM
		560	(19)	15	46	638	(19)
		3.06	2.44	3.86	2.44	3.48	2.64
(2)	^			<---			
23		v	^				
46							
1.50	-----		1.50				(31)
11.35	-----		1.50				50
(88)	-----		1.50				1.62
85	----->						
0.97	----->						
(57)							(57)
58							66
1.02							1.15
(82)	-----						(68)
170		^		<---			31
2.08	v		v				0.45
(65)							(65)
45							51
0.70							0.79
4.26							4.85
(XXX) - Actual							
XXX - Calculated DHV							
X.XX - Ratio							

DATA INPUT

Date:

30-Nov-98

Analyst: PAP

Highway: SR 39 - Build - AM

Intersection: US 301

From: Opening Day

To: 2010 (From 2005 Base)

County: Pasco

North/South Orientation of Mainline?
(Y/N) N

D Factors:

K Factors: Sidesreet 9.54% Mainline 10.56%

a. Mainline: Westbound(WB) 54.1% Eastbound(EB) 45.9%

b. Sidesreet: Northbound(NB) 59.5% Southbound(SB) 40.5%

RANGE NAMES FOR YEARS:

Base	2005
Open	2010
Mid	2015
Design	2020

Do you have FSUTMS Model Year Traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Y Manual Instr:
If Y, go to A43
If N, go to A24

IF NO: Enter Year and Growth Rates from Base Year:
Year Rate

Base	
Opening	
Mid	
Design	

Enter Base Year AADTs for Volume Comparison:
(uses growth rates to calculate other project years)

Year	From West: EB Approach	From East: WB Approach	From North: SB Approach	From South: NB Approach	TOTAL
2005					0
2010					0
2015					0
2020					0

AREA FOR CALCULATIONS: 1/2 OF INPUT AADT

Year	From West:		From East:		From North:		From South:		TOTAL
	EB Approach	WB Approach	WB Approach	EB Approach	SB Approach	nb Approach	NB Approach	sb Approach	
2005	5,500	11,200	0	0	0	0	5,800	0	22,500
2010	6,567	13,383	0	0	0	0	6,933	0	26,883
2015	7,633	15,567	0	0	0	0	8,067	0	31,267
2020	8,700	17,750	0	0	0	0	9,200	0	35,650

Year	To West:		To East:		To North:		To South:		TOTAL
	wb Approach	eb Approach	wb Approach	eb Approach	nb Approach	sb Approach	nb Approach	sb Approach	
2005	5,500	11,200	0	0	0	0	5,800	0	22,500
2010	6,567	13,383	0	0	0	0	6,933	0	26,883
2015	7,633	15,567	0	0	0	0	8,067	0	31,267
2020	8,700	17,750	0	0	0	0	9,200	0	35,650

DATA INPUT

Date:

Analyst: PAP

30-Nov-98

IF YES: Enter Project & Model Years:

Base	2005
Opening	2010
Mid	2015
Design	2020
Model	2020

Enter Base & Model Year AADTs for Interpolation:

Base	2005	11,000	22,400	11,600	45,000
Model	2020	17,400	35,500	18,400	71,300
					TOTAL
					45,000
					71,300

AREA FOR CALCULATION: INTERPOLATION

model - base:	15					
diff of vols:	6400	13100	0	6800		
year	2005	2010	2015	2020	EB	NB
	11,000	13,133	15,267	17,400	22,400	11,600
					26,767	13,867
					31,133	16,133
					35,500	18,400
						45,000
						53,767
						62,533
						71,300

Enter "1st Guess" Turning

Percentages for AADT Balancing:

(EB THRU)	W-to-E	0.95	2005	W-to-E	213
(EB LT)	W-to-N	0.00		W-to-N	
(EB RT)	W-to-S	0.05		W-to-S	3
(WB THRU)	E-to-W	0.70		E-to-W	400
(WB RT)	E-to-N	0.00		E-to-N	0
(WB LT)	E-to-S	0.30		E-to-S	174
(SB RT)	N-to-W	0.00		N-to-W	0
(SB LT)	N-to-E	0.00		N-to-E	0
(SB THRU)	N-to-S	0.00		N-to-S	0
(NB LT)	S-to-W	0.05		S-to-W	4
(NB RT)	S-to-E	0.95		S-to-E	172
(NB THRU)	S-to-N	0.00		S-to-N	0

Desired Closure:

0.010

Actual/Counted Traffic:

2005	W-to-E	213
	W-to-N	
	W-to-S	3
	E-to-W	400
	E-to-N	0
	E-to-S	174
	N-to-W	0
	N-to-E	0
	N-to-S	0
	S-to-W	4
	S-to-E	172
	S-to-N	0

2005 TRAFFIC

2005 TRAFFIC COMPARED TO 2010 TRAFFIC

SR_39 - Build - AM	0	US_301	0	US_301
	0	0	0	0
	10,900	10,900	10,900	0
	11,000	11,000	11,000	0
	15,200	15,200	13,100	1,200
	1.38	1.39	1.20	1.20
	11,600	11,600	11,600	0
	11,500	11,500	11,500	0
	13,800	13,800	13,700	100
	1.19	1.19	1.19	1.00

X,XXX - 2005

2005 TRAFFIC COMPARED TO 2015 TRAFFIC

SR_39 - Build - AM	0	US_301	0	US_301
	0	0	0	0
	10,900	10,900	10,900	0
	15,100	15,100	17,300	1,590
	1.39	1.39	1.59	1.59
	11,600	11,600	11,600	0
	16,100	16,100	18,500	1,590
	1.39	1.39	1.59	1.59

X,XXX - 2005

X,XXX - 2015

X,XXX - Ratio

DATA INPUT

Date: 30-Nov-98

Analyst: PAP
 Highway: SR 39 - Build - PM
 Intersection: US 301
 From: Opening Day
 To: 2010 (From 2005 Base)
 County: PASCO

North/South Orientation of Mainline?
 (Y/N) N

K Factors: Sidesreet 9.54% Mainline 10.56%
 D Factors: a. Mainline Westbound(WB) 45.9% Eastbound(EB) 54.1%
 b. Sidesreet Northbound(NB) 59.1% Southbound(SB) 40.5%

Do you have FSUTMS Model Year Traffic from which you would like to interpolate/extrapolate for project years? (Y/N) Y
 Manual Instr: If Y, go to A43 If N, go to A24

Enter Year and Growth Rates from Base Year:
 Year Rate
 Base
 Opening
 Mid
 Design

Enter Base Year AADTs for Volume Comparison:
 (uses growth rates to calculate other project years)

RANGE NAMES FOR YEARS:

Base	2005
Open	2010
Mid	2015
Design	2020

AREA FOR CALCULATIONS: 1/2 OF INPUT AADT

Year	From West:		From East:		From North:		From South:		TOTAL
	wbApproach	ebApproach	wbApproach	ebApproach	nbApproach	sbApproach	nbApproach	sbApproach	
2005	5,500	11,200	11,200	0	0	5,800	22,500	0	5,800
2010	6,567	13,383	13,383	0	0	6,933	26,883	0	6,933
2015	7,633	15,567	15,567	0	0	8,067	31,267	0	8,067
2020	8,700	17,750	17,750	0	0	9,200	35,650	0	9,200

Year	From West:		From East:		From North:		From South:		TOTAL
	EB Approach	WB Approach	WB Approach	SB Approach	SB Approach	NB Approach	NB Approach	TOTAL	
2005	0	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0	0
2015	0	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0	0

DATA INPUT

Date:

Analyst: PAP

30-Nov-98

IF YES: Enter Project & Model Years:

Base	2005
Opening	2010
Mid	2015
Design	2020
Model	2020

Enter Base & Model Year AADTs for Interpolation:

Base	2005	11,000	(WB)Approach	22,400	From East	From North	From South	TOTAL
Model	2020	17,400	(SB)Approach	11,600	(NB)Approach			45,000
					18,400			71,300

AREA FOR CALCULATION: INTERPOLATION

model - base:	15							
diff of vols:	6400	13100	6800					
year	2005	2010	2015	2020	EB	WB	SB	NB
	11,000	13,133	15,267	17,400	22,400	26,767	31,133	35,500
	0	0	0	0	11,600	13,867	16,133	18,400
	45,000	53,767	62,533	71,300				

Enter "1st Guess" Turning

Percentages for AADT Balancing:

(EB THRU) (EB LT) (EB RT)	W-to-E	0.96	W-to-N	0.00	W-to-S	0.04
(WB THRU) (WB RT) (WB LT)	E-to-W	0.53	E-to-N	0.00	E-to-S	0.47
(SB RT) (SB LT) (SB THRU)	N-to-W	0.00	N-to-E	0.00	N-to-S	0.00
(NB LT) (NB RT) (NB THRU)	S-to-W	0.02	S-to-E	0.98	S-to-N	0.00

Desired Closure:

0.010

Actual/Counted Traffic:

2005	W-to-E	463
	W-to-N	0
	W-to-S	7
	E-to-W	272
	E-to-N	0
	E-to-S	240
	N-to-W	0
	N-to-E	0
	N-to-S	0
	S-to-W	6
	S-to-E	268
	S-to-N	0

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR 2005 2010

SR 39 - Build - PM	US 301	SR 39 - Build - PM	US 301
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
628	623	754	748
6	557	6	635
6	648	6	664
654	654	670	778

K ml =	*****	D wb&eb =	45.9%	54.1%
K ss =	9.54%	D nb&sb =	59.1%	40.5%

SR 39 - Build - PM	US 301	SR 39 - Build - PM	US 301
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
868	863	1,000	988
6	776	11	839
6	902	11	887
908	908	893	1,043

K ml =	*****	D wb&eb =	45.9%	54.1%
K ss =	9.54%	D nb&sb =	59.1%	40.5%

1-WAY DESIGN-HOUR TURNING MOVEMENTS IN YEAR 2005 2010

SR 39 - Build - PM	US 301	SR 39 - Build - PM	US 301
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
628	623	754	748
6	557	6	635
6	648	6	664
654	654	670	778

K ml =	*****	D wb&eb =	45.9%	54.1%
K ss =	9.54%	D nb&sb =	59.1%	40.5%

SR 39 - Build - PM	US 301	SR 39 - Build - PM	US 301
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
868	863	1,000	988
6	776	11	839
6	902	11	887
908	908	893	1,043

K ml =	*****	D wb&eb =	45.9%	54.1%
K ss =	9.54%	D nb&sb =	59.1%	40.5%

APPENDIX F

HCS WORKSHEETS/2010 AND 2020 LOS ANALYSIS

NO-BUILD ALTERNATIVE

=====
 Streets: (E-W) Sam Allen Road (N-S) SR 39
 Analyst: JW File Name: SR39-1.HC9
 Area Type: Other 1-7-99 AM
 Comment: 2010 No Build AM Peak Hour
 =====

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	< 0	1	1	< 0	1	1	1	1	1	< 0
Volumes	25	85	130	195	85	90	130	485	130	125	710	15
Lane W (ft)	12.0	12.0		12.0	12.0		12.0	12.0	12.0	12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*	*	
Thru	*				Thru	*	*	
Right	*				Right	*	*	
Peds					Peds			
WB Left		*			SB Left	*	*	
Thru		*			Thru	*	*	
Right		*			Right	*	*	
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	27.0A				Green	10.0A	38.0A	
Yellow/AR	5.0				Yellow/AR	5.0	5.0	
Cycle Length:	90 secs	Phase combination order: #1 #5 #6						

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio					
EB	L	295	0.088	0.322	13.7	B		15.5	C
	TR	540	0.418	0.322	15.8	C			
WB	L	239	0.859	0.322	35.9	D		26.1	D
	TR	548	0.336	0.322	15.1	C			
NB	L	316	0.434	0.611	10.9	B		12.7	B
	T	789	0.647	0.444	13.9	B			
	R	697	0.197	0.444	9.8	B			
SB	L	316	0.418	0.611	7.7	B		30.3	D
	TR	787	0.970	0.444	34.2	D			

Intersection Delay = 22.0 sec/veh Intersection LOS = C
 Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.873
 =====

Center For Microcomputers In Transportation

Streets: (E-W) Sam Allen Road (N-S) SR 39
 Analyst: JW File Name: SR39-2.HC9
 Area Type: Other 1-7-99 PM
 Comment: 2010 No Build PM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	< 0	1	1	< 0	1	1	1	1	1	< 0
Volumes	15	70	130	195	70	115	195	710	195	75	485	10
Lane W (ft)	12.0	12.0		12.0	12.0		12.0	12.0	12.0	12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*					*		
EB Thru	*					*		
EB Right	*					*		
EB Peds								
WB Left		*				*		
WB Thru		*				*		
WB Right		*				*		
WB Peds								
NB Right								
SB Right								
Green	25.0A				Green 10.0A 38.0A			
Yellow/AR	6.0				Yellow/AR 5.0 6.0			
Cycle Length:	90 secs Phase combination order: #1 #5 #6							

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:		
							Mvmts	Cap	Flow
EB	L	270	868	0.059	0.311	14.1	B	16.0	C
	TR	518	1665	0.407	0.311	16.1	C		
WB	L	248	797	0.827	0.311	32.3	D	24.3	C
	TR	520	1673	0.375	0.311	15.8	C		
NB	L	316	1752	0.649	0.622	14.0	B	21.3	C
	T	809	1776	0.923	0.456	26.5	D		
	R	714	1568	0.287	0.456	10.0	B		
SB	L	316	1752	0.250	0.622	9.2	B	12.9	B
	TR	806	1770	0.647	0.456	13.5	B		

Intersection Delay = 19.2 sec/veh Intersection LOS = C
 Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.883

Streets: (E-W) Knights-Griffin Rd. (N-S) SR 39
 Analyst: JW File Name: SR39-9.HC9
 Area Type: Other 1-11-99 AM
 Comment: 2010 No Build AM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	> 1	1	0	> 1	< 0	1	1	1	1	1	< 0
Volumes	25	75	95	80	165	85	95	400	55	85	585	55
Lane W (ft)		12.0	12.0		12.0		12.0	12.0	12.0	12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*		
Thru	*				Thru	*		
Right	*				Right	*		
Peds					Peds			
WB Left	*				SB Left	*		
Thru	*				Thru	*		
Right	*				Right	*		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	26.0A				Green	54.0A		
Yellow/AR	5.0				Yellow/AR	5.0		
Cycle Length:	90 secs	Phase combination order: #1 #5						

Intersection Performance Summary

	Lane Group:	Mvmts	Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach:	
									Delay	LOS
EB	LT	407		1308	0.258	0.311	15.1	C	14.9	B
	R	488		1568	0.205	0.311	14.8	B		
WB	LTR	446		1433	0.778	0.311	24.1	C	24.1	C
NB	L	116		187	0.860	0.622	38.4	D	11.1	B
	T	1105		1776	0.381	0.622	5.5	B		
	R	976		1568	0.059	0.622	4.3	A		
SB	L	353		568	0.252	0.622	5.0	A	7.2	B
	TR	1091		1753	0.618	0.622	7.5	B		

Intersection Delay = 12.3 sec/veh Intersection LOS = B
 Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.832

Streets: (E-W) Knights-Griffin Rd. (N-S) SR 39
 Analyst: JW File Name: SR39-10.HC9
 Area Type: Other 1-11-99 PM
 Comment: 2010 No Build PM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	> 1	1	0	> 1	< 0	1	1	1	1	1	< 0
Volumes	70	160	135	75	120	115	135	555	115	85	380	45
Lane W (ft)		12.0	12.0		12.0		12.0	12.0	12.0	12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*		
Thru	*				Thru	*		
Right	*				Right	*		
Peds					Peds			
WB Left	*				SB Left	*		
Thru	*				Thru	*		
Right	*				Right	*		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	26.0A				Green	52.0A		
Yellow/AR	6.0				Yellow/AR	6.0		
Cycle Length:	90 secs	Phase combination order: #1 #5						

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio			Delay	LOS	
EB	LT	282	875	0.858	0.322	33.8	D	26.7	D
	R	505	1568	0.281	0.322	14.8	B		
WB	LTR	369	1144	0.884	0.322	33.8	D	33.8	D
NB	L	308	503	0.462	0.611	6.9	B	6.7	B
	T	1085	1776	0.538	0.611	7.0	B		
	R	958	1568	0.126	0.611	4.8	A		
SB	L	186	305	0.478	0.611	7.7	B	6.3	B
	TR	1068	1748	0.419	0.611	6.1	B		

Intersection Delay = 14.5 sec/veh Intersection LOS = B
 Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.658

Streets: (E-W) Zepherhills Bypass (N-S) SR 39
 Analyst: JW File Name: SR 39-17.HC9
 Area Type: Other 1-11-99 AM
 Comment: 2010 No Build AM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	1	1	1	1	1	< 0	1	1	1
Volumes	130	130	110	15	55	125	110	640	25	140	435	45
Lane W (ft)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*		
Thru	*				Thru		*	
Right	*				Right		*	
Peds					Peds			
WB Left	*				SB Left	*		
Thru	*				Thru		*	
Right	*				Right		*	
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	15.0A				Green	15.0A	45.0P	
Yellow/AR	5.0				Yellow/AR	5.0	5.0	
Cycle Length:	90 secs	Phase combination order: #1 #5 #6						

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:		
							Mvmts	Cap	Flow
EB	L	275	1455	0.498	0.189	22.3	C	21.5	C
	T	348	1845	0.393	0.189	21.1	C		
	R	296	1568	0.392	0.189	21.1	C		
WB	L	183	971	0.087	0.189	19.5	C	20.9	C
	T	348	1845	0.166	0.189	19.8	C		
	R	296	1568	0.446	0.189	21.6	C		
NB	L	331	1752	0.350	0.189	20.8	C	14.6	B
	TR	922	1766	0.759	0.522	13.6	B		
SB	L	331	1752	0.444	0.189	21.5	C	11.9	B
	T	927	1776	0.494	0.522	9.3	B		
	R	819	1568	0.057	0.522	6.8	B		

Intersection Delay = 15.7 sec/veh Intersection LOS = C
 Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.638

=====
 Streets: (E-W) Zepherhills Bypass (N-S) SR 39
 Analyst: JW File Name: SR 39-18.HC9
 Area Type: Other 1-11-99 PM
 Comment: 2010 No Build PM Peak Hour
 =====

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	1	1	1	1	1	< 0	1	1	1
Volumes	15	55	110	80	70	40	110	635	80	35	435	10
Lane W (ft)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*		
Thru	*				Thru	*		
Right	*				Right	*		
Peds					Peds			
WB Left	*				SB Left	*		
Thru	*				Thru	*		
Right	*				Right	*		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	35.0A				Green	43.0A		
Yellow/AR	6.0				Yellow/AR	6.0		
Cycle Length:	90 secs	Phase combination order: #1 #5						

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach:	
								Delay	LOS
EB	L	604	1429	0.027	0.422	9.8	B	10.3	B
	T	779	1845	0.074	0.422	10.0	B		
	R	662	1568	0.175	0.422	10.5	B		
WB	L	629	1489	0.134	0.422	10.3	B	10.2	B
	T	779	1845	0.095	0.422	10.1	B		
	R	662	1568	0.063	0.422	10.0	B		
NB	L	217	425	0.534	0.511	11.6	B	16.6	C
	TR	892	1746	0.843	0.511	17.4	C		
SB	L	82	160	0.451	0.511	11.7	B	9.8	B
	T	908	1776	0.505	0.511	9.8	B		
	R	801	1568	0.014	0.511	7.0	B		

Intersection Delay = 13.3 sec/veh Intersection LOS = B
 Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.541

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 512 Weil Hall
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Streets: (N-S) SR 39 (E-W) US 301
 Major Street Direction.... EW
 Length of Time Analyzed... 60 (min)
 Analyst.....
 Date of Analysis..... 1/11/99
 Other Information.....2010 No Build AM Peak Hour
 Two-way Stop-controlled Intersection
 =====

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	< 0	1	1	0	0	0	1	0	0	0
Stop/Yield			N			N						
Volumes		615	0	515	925				710			
PHF		.95	.95	.95	.95				.95			
Grade		0			0			0				
MC's (%)				0					0			
SU/RV's (%)				0					0			
CV's (%)				7					7			
PCE's				1.07					1.07			

Adjustment Factors

Vehicle Maneuver	Critical Gap (tg)	Follow-up Time (tf)
Left Turn Major Road	5.00	2.10
Right Turn Minor Road	5.50	2.60
Through Traffic Minor Road	6.00	3.30
Left Turn Minor Road	6.50	3.40

Worksheet for TWSC Intersection

Step 1: RT from Minor Street	NB	SB

Conflicting Flows: (vph)	647	
Potential Capacity: (pcph)	651	
Movement Capacity: (pcph)	651	
Prob. of Queue-Free State:	0.00	

Step 2: LT from Major Street	WB	EB

Conflicting Flows: (vph)	647	
Potential Capacity: (pcph)	843	
Movement Capacity: (pcph)	843	
Prob. of Queue-Free State:	0.31	

Intersection Performance Summary

Movement	Flow Rate (pcph)	Move Cap (pcph)	Shared Cap (pcph)	Avg. Total Delay (sec/veh)	95% Queue Length (veh)	LOS	Approach Delay (sec/veh)

NB R	799	651		442.7	85.1	F	442.7
WB L	580	843		13.5	6.6	C	4.8

Intersection Delay = 116.2 sec/veh

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Streets: (N-S) SR 39 (E-W) US 301
 Major Street Direction.... EW
 Length of Time Analyzed... 60 (min)
 Analyst.....
 Date of Analysis..... 1/11/99
 Other Information.....2010 No Build PM Peak Hour
 Two-way Stop-controlled Intersection
 =====

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	< 0	1	1	0	0	0	1	0	0	0
Stop/Yield			N			N						
Volumes		725	0	505	715				705			
PHF		.95	.95	.95	.95				.95			
Grade		0			0			0				
MC's (%)				0					0			
SU/RV's (%)				0					0			
CV's (%)				7					7			
PCE's				1.07					1.07			

Adjustment Factors

Vehicle Maneuver	Critical Gap (tg)	Follow-up Time (tf)
Left Turn Major Road	5.00	2.10
Right Turn Minor Road	5.50	2.60
Through Traffic Minor Road	6.00	3.30
Left Turn Minor Road	6.50	3.40

Worksheet for TWSC Intersection

Step 1: RT from Minor Street	NB	SB

Conflicting Flows: (vph)	763	
Potential Capacity: (pcph)	569	
Movement Capacity: (pcph)	569	
Prob. of Queue-Free State:	0.00	

Step 2: LT from Major Street	WB	EB

Conflicting Flows: (vph)	763	
Potential Capacity: (pcph)	742	
Movement Capacity: (pcph)	742	
Prob. of Queue-Free State:	0.23	

Intersection Performance Summary

Movement	Flow Rate (pcph)	Move Cap (pcph)	Shared Cap (pcph)	Avg. Total Delay (sec/veh)	95% Queue Length (veh)	LOS	Approach Delay (sec/veh)

NB R	794	569		739.8	119.5	F	739.8
WB L	569	742		20.2	9.1	D	8.4

Intersection Delay = 200.7 sec/veh

=====
 Streets: (E-W) Sam Allen Road (N-S) SR 39
 Analyst: JW File Name: SR39-4.HC9
 Area Type: Other 1-7-99 AM
 Comment: 2020 No Build AM Peak Hour
 =====

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	< 0	1	1	< 0	1	1	1	1	1	< 0
Volumes	10	60	160	215	90	130	160	620	145	130	910	15
PHF or PK15	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Lane W (ft)	12.0	12.0		12.0	12.0		12.0	12.0	12.0	12.0	12.0	
Grade		0			0			0			0	
% Heavy Veh	3	3	3	3	3	3	3	7	3	3	7	3
Parking	N	N		N	N		N	N		N	N	
Bus Stops			0			0			0			0
Con. Peds			0			0			0			0
Ped Button	(Y/N)	N		(Y/N)	N		(Y/N)	N		(Y/N)	N	
Arr Type	3	3		3	3		3	3	3	3	3	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Prop. Share												
Prop. Prot.												

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*	*	
Thru	*				Thru	*	*	
Right	*				Right	*	*	
Peds					Peds			
WB Left	*				SB Left	*	*	
Thru	*				Thru	*	*	
Right	*				Right	*	*	
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	25.0A				Green	10.0A	38.0A	
Yellow/AR	6.0				Yellow/AR	5.0	6.0	
Cycle Length:	90 secs	Phase combination order: #1 #5 #6						

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio					
EB	L	219	705	0.050	0.311	14.0	B	16.4	C
	TR	511	1643	0.452	0.311	16.5	C		
WB	L	221	709	1.025	0.311	74.2	F	44.9	E
	TR	523	1681	0.444	0.311	16.4	C		
NB	L	316	1752	0.532	0.622	12.3	B	15.6	C
	T	809	1776	0.807	0.456	17.9	C		
	R	714	1568	0.214	0.456	9.6	B		
SB	L	316	1752	0.434	0.622	9.1	B	*	*
	TR	807	1771	1.207	0.456	*	*		

Intersection Delay = * (sec/veh) Intersection LOS = *
 (g/C)*(V/c) is greater than one. Calculation of D1 is infeasible.

=====
 Streets: (E-W) Sam Allen Road (N-S) SR 39
 Analyst: JW File Name: SR39-3.HC9
 Area Type: Other 1-7-99 PM
 Comment: 2020 No Build PM Peak Hour
 =====

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	< 0	1	1	< 0	1	1	1	1	1	< 0
Volumes	15	60	160	215	90	130	235	915	215	90	620	15
PHF or PK15	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Lane W (ft)	12.0	12.0		12.0	12.0		12.0	12.0	12.0	12.0	12.0	
Grade		0			0			0			0	
% Heavy Veh	3	3	3	3	3	3	3	7	3	3	7	3
Parking	N	N		N	N		N	N		N	N	
Bus Stops			0			0			0			0
Con. Peds			0			0			0			0
Ped Button	(Y/N)	N		(Y/N)	N		(Y/N)	N		(Y/N)	N	
Arr Type	3	3		3	3		3	3		3	3	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Prop. Share												
Prop. Prot.												

 Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*	*	
Thru	*				Thru	*	*	
Right	*				Right	*	*	
Peds					Peds			
WB Left		*			SB Left	*	*	
Thru		*			Thru	*	*	
Right		*			Right	*	*	
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	25.0A				Green	10.0A	38.0A	
Yellow/AR	6.0				Yellow/AR	5.0	6.0	
Cycle Length:	90 secs	Phase combination order: #1 #5 #6						

 Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:
Mvmts	Cap	Flow	Ratio	Ratio			Delay LOS
EB	L	219	705	0.073	0.311	14.1	B 16.3 C
	TR	511	1643	0.452	0.311	16.5	C
WB	L	221	709	1.025	0.311	74.2	F 44.9 E
	TR	523	1681	0.444	0.311	16.4	C
NB	L	316	1752	0.782	0.622	22.4	C * *
	T	809	1776	1.190	0.456	*	* *
	R	714	1568	0.316	0.456	10.2	B
SB	L	316	1752	0.301	0.622	10.6	B 17.9 C
	TR	806	1769	0.830	0.456	19.0	C

Intersection Delay = * (sec/veh) Intersection LOS = *
 (g/C)*(V/c) is greater than one. Calculation of D1 is infeasible.

Streets: (E-W) Knights-Griffin Rd. (N-S) SR 39
 Analyst: JW File Name: SR39-11.HC9
 Area Type: Other 1-11-99 AM
 Comment: 2020 No Build AM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	> 1	1	0	> 1	< 0	1	1	1	1	1	< 0
Volumes	30	85	120	110	190	110	120	530	75	110	780	45
Lane W (ft)		12.0	12.0		12.0		12.0	12.0	12.0	12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*		
Thru	*				Thru		*	
Right	*				Right		*	
Peds					Peds			
WB Left		*			SB Left	*		
Thru		*			Thru		*	
Right		*			Right		*	
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	22.0A				Green	15.0A	38.0P	
Yellow/AR	5.0				Yellow/AR	5.0	5.0	
Cycle Length:	90 secs	Phase combination order: #1 #5 #6						

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio					
EB	LT	200	748	0.606	0.267	22.3	C	19.7	C
	R	418	1568	0.301	0.267	17.1	C		
WB	LTR	348	1303	1.243	0.267	*	*	*	*
NB	L	331	1752	0.381	0.189	21.0	C	15.5	C
	T	789	1776	0.707	0.444	15.1	C		
	R	697	1568	0.113	0.444	9.5	B		
SB	L	331	1752	0.350	0.189	20.8	C	*	*
	TR	783	1761	1.109	0.444	*	*		

Intersection Delay = * (sec/veh) Intersection LOS = *
 (g/C) * (V/c) is greater than one. Calculation of D1 is infeasible.

=====
 Streets: (E-W) Knights-Griffin Rd. (N-S) SR 39
 Analyst: JW File Name: SR 39-12.HC9
 Area Type: Other 1-11-99 PM
 Comment: 2020 No Build PM Peak Hour
 =====

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	> 1	1	0	> 1	< 0	1	1	1	1	1	< 0
Volumes	85	180	170	95	135	130	170	750	140	70	510	60
Lane W (ft)		12.0	12.0		12.0		12.0	12.0	12.0	12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*		
Thru	*				Thru	*		
Right	*				Right	*		
Peds					Peds			
WB Left	*				SB Left	*		
Thru	*				Thru	*		
Right	*				Right	*		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	24.0A				Green	54.0A		
Yellow/AR	6.0				Yellow/AR	6.0		
Cycle Length:	90 secs	Phase combination order: #1 #5						

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio					
EB	LT	177	591	1.569	0.300	*	*	*	*
	R	470	1568	0.381	0.300	16.3	C		
WB	LTR	269	897	1.408	0.300	*	*	*	*
NB	L	190	300	0.944	0.633	45.3	E	13.8	B
	T	1125	1776	0.702	0.633	8.4	B		
	R	993	1568	0.148	0.633	4.3	A		
SB	L	82	129	0.903	0.633	56.1	E	11.8	B
	TR	1107	1748	0.542	0.633	6.4	B		

Intersection Delay = * (sec/veh) Intersection LOS = *
 (g/C)*(V/c) is greater than one. Calculation of D1 is infeasible.

Streets: (E-W) Zepherhills Bypass (N-S) SR 39
 Analyst: JW File Name: SR 39-19.HC9
 Area Type: Other 1-11-99 AM
 Comment: 2020 No Build AM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	1	1	1	1	1	< 0	1	1	1
Volumes	150	150	135	20	55	140	135	850	30	155	580	50
Lane W (ft)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*							
Thru	*							
Right	*							
Peds								
WB Left		*						
Thru		*						
Right		*						
Peds								
NB Right								
SB Right								
Green	15.0A				15.0A	45.0P		
Yellow/AR	5.0				5.0	5.0		
Cycle Length:	90 secs	Phase combination order: #1 #5 #6						

Intersection Performance Summary

Lane	Group:	Mvmts	Adj Sat	v/c	g/C	Delay	LOS	Approach:	
								Flow	Ratio
EB	L	275	1455	0.575	0.189	23.6	C	22.4	C
	T	348	1845	0.453	0.189	21.6	C		
	R	296	1568	0.479	0.189	22.0	C		
WB	L	162	857	0.130	0.189	19.6	C	21.3	C
	T	348	1845	0.166	0.189	19.8	C		
	R	296	1568	0.496	0.189	22.2	C		
NB	L	331	1752	0.429	0.189	21.4	C	35.6	D
	TR	923	1767	1.005	0.522	37.8	D		
SB	L	331	1752	0.492	0.189	22.0	C	13.2	B
	T	927	1776	0.659	0.522	11.3	B		
	R	819	1568	0.065	0.522	6.9	B		

Intersection Delay = 24.8 sec/veh Intersection LOS = C
 Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.807

Streets: (E-W) Zepherhills Bypass (N-S) SR 39
 Analyst: JW File Name: SR 39-20.HC9
 Area Type: Other 1-11-99 PM
 Comment: 2020 No Build PM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	1	1	1	1	1	< 0	1	1	1
Volumes	30	75	140	90	75	50	140	855	30	65	585	20
Lane W (ft)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*		
Thru	*				Thru	*		
Right	*				Right	*		
Peds					Peds			
WB Left	*				SB Left	*		
Thru	*				Thru	*		
Right	*				Right	*		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	23.0A				Green	55.0A		
Yellow/AR	6.0				Yellow/AR	6.0		
Cycle Length:	90 secs	Phase combination order: #1 #5						

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio					
EB	L	408	1412	0.078	0.289	15.0	B	15.9	C
	T	533	1845	0.148	0.289	15.4	C		
	R	453	1568	0.325	0.289	16.4	C		
WB	L	408	1412	0.233	0.289	15.8	C	15.5	C
	T	533	1845	0.148	0.289	15.4	C		
	R	453	1568	0.117	0.289	15.2	C		
NB	L	176	274	0.834	0.644	26.6	D	13.3	B
	TR	1138	1767	0.819	0.644	11.2	B		
SB	L	82	127	0.829	0.644	39.6	D	9.2	B
	T	1144	1776	0.538	0.644	6.0	B		
	R	1010	1568	0.021	0.644	3.7	A		

Intersection Delay = 12.5 sec/veh Intersection LOS = B
 Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.676

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Streets: (N-S) SR 39 (E-W) US 301
 Major Street Direction.... EW
 Length of Time Analyzed... 60 (min)
 Analyst.....
 Date of Analysis..... 1/11/99
 Other Information.....2020 No Build AM Peak Hour
 Two-way Stop-controlled Intersection

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	< 0	1	1	0	0	0	1	0	0	0
Stop/Yield			N			N						
Volumes		820	0	755	1165				950			
PHF		.95	.95	.95	.95				.95			
Grade		0			0			0				
MC's (%)				0					0			
SU/RV's (%)				0					0			
CV's (%)				7					7			
PCE's				1.07					1.07			

Adjustment Factors

Vehicle Maneuver	Critical Gap (tg)	Follow-up Time (tf)
Left Turn Major Road	5.00	2.10
Right Turn Minor Road	5.50	2.60
Through Traffic Minor Road	6.00	3.30
Left Turn Minor Road	6.50	3.40

Worksheet for TWSC Intersection

Step 1: RT from Minor Street	NB	SB

Conflicting Flows: (vph)	863	
Potential Capacity: (pcph)	506	
Movement Capacity: (pcph)	506	
Prob. of Queue-Free State:	0.00	

Step 2: LT from Major Street	WB	EB

Conflicting Flows: (vph)	863	
Potential Capacity: (pcph)	665	
Movement Capacity: (pcph)	665	
Prob. of Queue-Free State:	0.00	

Intersection Performance Summary

Movement	Flow Rate (pcph)	Move Cap (pcph)	Shared Cap (pcph)	Avg. Total Delay (sec/veh)	95% Queue Length (veh)	LOS	Approach Delay (sec/veh)

NB R	1070	506		*	284.6	F	*
WB L	851	665		532.5	102.5	F	209.4

Intersection Delay = 630.8 sec/veh

* The calculated value was greater than 999.9.

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 =====

Streets: (N-S) SR 39 (E-W) US 301
 Major Street Direction.... EW
 Length of Time Analyzed... 60 (min)
 Analyst.....
 Date of Analysis..... 1/11/99
 Other Information.....2020 No Build PM Peak Hour
 Two-way Stop-controlled Intersection
 =====

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	1	< 0	1	1	0	0	0	1	0	0	0
Stop/Yield			N			N						
Volumes		725	0	605	615				705			
PHF		.95	.95	.95	.95				.95			
Grade		0			0			0				
MC's (%)				0					0			
SU/RV's (%)				0					0			
CV's (%)				7					7			
PCE's				1.07					1.07			

Adjustment Factors

Vehicle Maneuver	Critical Gap (tg)	Follow-up Time (tf)
Left Turn Major Road	5.00	2.10
Right Turn Minor Road	5.50	2.60
Through Traffic Minor Road	6.00	3.30
Left Turn Minor Road	6.50	3.40

Worksheet for TWSC Intersection

Step 1: RT from Minor Street	NB	SB

Conflicting Flows: (vph)	763	
Potential Capacity: (pcph)	569	
Movement Capacity: (pcph)	569	
Prob. of Queue-Free State:	0.00	

Step 2: LT from Major Street	WB	EB

Conflicting Flows: (vph)	763	
Potential Capacity: (pcph)	742	
Movement Capacity: (pcph)	742	
Prob. of Queue-Free State:	0.08	

Intersection Performance Summary

Movement	Flow Rate (pcph)	Move Cap (pcph)	Shared Cap (pcph)	Avg. Total Delay (sec/veh)	95% Queue Length (veh)	LOS	Approach Delay (sec/veh)

NB R	794	569		739.8	119.5	F	739.8
WB L	682	742		47.5	19.8	F	23.6

Intersection Delay = 207.7 sec/veh

APPENDIX G

- HCS WORKSHEETS/2010 AND 2020 LOS ANALYSIS
BUILD ALTERNATIVE
- CAPACITY TABLE FOR ROADWAY SEGMENT ANALYSIS

Streets: (E-W) Sam Allen Rd (N-S) Alexander Ext
 Analyst: DK File Name: AL2020AM.HC9
 Area Type: Other 1-14-99
 Comment: Year 2020 Build AM

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Volumes	35	90	215	225	85	50	185	240	210	75	425	50
Lane W (ft)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*		
Thru	*				Thru	*		
Right	*				Right	*		
Peds					Peds			
WB Left		*			SB Left		*	
Thru		*			Thru		*	
Right		*			Right		*	
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	20.0A	15.0A			Green	20.0A	15.0A	
Yellow/AR	5.0	5.0			Yellow/AR	5.0	5.0	
Cycle Length:	90 secs Phase combination order: #1 #2 #5 #6							

Intersection Performance Summary

	Lane	Group:	Adj Sat			Delay	LOS	Approach:		
			Cap	Flow	v/c			Ratio	g/C	Delay
EB	L		433	1770	0.086	0.244	17.0	C	19.7	C
	T		455	1863	0.209	0.244	17.5	C		
	R		387	1583	0.584	0.244	21.0	C		
WB	L		334	1770	0.709	0.189	26.7	D	24.2	C
	T		352	1863	0.253	0.189	20.2	C		
	R		299	1583	0.177	0.189	19.8	C		
NB	L		433	1770	0.451	0.244	19.2	C	19.2	C
	T		911	3725	0.292	0.244	17.9	C		
	R		387	1583	0.571	0.244	20.8	C		
SB	L		334	1770	0.236	0.189	20.1	C	22.8	C
	T		704	3725	0.666	0.189	23.6	C		
	R		299	1583	0.177	0.189	19.8	C		

Intersection Delay = 21.3 sec/veh Intersection LOS = C
 Lost Time/Cycle, L = 12.0 sec Critical v/c(x) = 0.626

Streets: (E-W) Sam Allen Rd (N-S) Alexander Ext
 Analyst: DK File Name: AL2020PM.HC9
 Area Type: Other 1-14-99
 Comment: Year 2020 Build PM

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Volumes	10	115	215	205	105	50	175	270	185	85	455	10
Lane W (ft)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*		
EB Thru	*				NB Thru	*		
EB Right	*				NB Right	*		
EB Peds					NB Peds			
WB Left		*			SB Left	*		
WB Thru		*			SB Thru	*		
WB Right		*			SB Right	*		
WB Peds					SB Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	20.0A	15.0A			Green	20.0A	15.0A	
Yellow/AR	5.0	5.0			Yellow/AR	5.0	5.0	
Cycle Length:	90 secs Phase combination order: #1 #2 #5 #6							

Intersection Performance Summary

	Lane	Group:	Adj Sat		v/c	g/C	Delay	LOS	Approach:	
			Flow	Ratio					Delay	LOS
EB	L		433	1770	0.025	0.244	16.7	C	19.8	C
	T		455	1863	0.266	0.244	17.8	C		
	R		387	1583	0.584	0.244	21.0	C		
WB	L		334	1770	0.646	0.189	24.8	C	22.8	C
	T		352	1863	0.315	0.189	20.5	C		
	R		299	1583	0.177	0.189	19.8	C		
NB	L		433	1770	0.425	0.244	18.9	C	18.8	C
	T		911	3725	0.327	0.244	18.1	C		
	R		387	1583	0.504	0.244	19.8	C		
SB	L		334	1770	0.266	0.189	20.2	C	23.8	C
	T		704	3725	0.715	0.189	24.5	C		
	R		299	1583	0.037	0.189	19.3	C		

Intersection Delay = 21.2 sec/veh Intersection LOS = C

Lost Time/Cycle, L = 12.0 sec Critical v/c(x) = 0.603

Streets: (E-W) Alexander St. (N-S) SR 39
 Analyst: JW File Name: SR39-33.HC9
 Area Type: Other 1-11-99 AM
 Comment: 2010 Build AM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	0	> 1	< 0	0	2	< 0	1	2	0
Volumes				10	1	320		295	10	235	620	
Lane W (ft)					12.0			12.0		12.0	12.0	
RTOR Vols						0			0			0
Lost Time				3.00	3.00	3.00		3.00	3.00	3.00	3.00	

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left								
Thru								
Right						*		
Peds						*		
WB Left		*						
Thru		*						
Right		*						
Peds								
NB Right								
SB Right								
Green		25.0A				25.0A	25.0P	
Yellow/AR		5.0				5.0	5.0	
Cycle Length:	90 secs							

Phase combination order: #1 #5 #6

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio					
WB	LTR	429	1431	0.813	0.300	26.6	D	26.6	D
NB	TR	1060	3533	0.319	0.300	15.8	C	15.8	C
SB	L	531	1770	0.465	0.300	17.0	C	8.1	B
	T	2249	3551	0.305	0.633	4.9	A		

Intersection Delay = 13.7 sec/veh Intersection LOS = B
 Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.532

Streets: (E-W) Alexander St. (N-S) SR 39
 Analyst: JW File Name: SR39-34.HC9
 Area Type: Other 1-11-99 PM
 Comment: 2010 Build PM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	0	> 1	< 0	0	2	< 0	1	2	0
Volumes				10	1	335		560	10	240	410	
Lane W (ft)				12.0				12.0		12.0	12.0	
RTOR Vols						0			0			0
Lost Time				3.00	3.00	3.00		3.00	3.00	3.00	3.00	

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left								
Thru								
Right								
Peds								
WB Left		*						
Thru		*						
Right		*						
Peds								
NB Right								
SB Right								
Green	25.0A				25.0A	25.0P		
Yellow/AR	5.0				5.0	5.0		
Cycle Length:	90 secs Phase combination order: #1 #5 #6							

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio			Delay	LOS	
WB	LTR	429	1431	0.850	0.300	29.5	D	29.5	D
NB	TR	1062	3542	0.593	0.300	18.0	C	18.0	C
SB	L	531	1770	0.477	0.300	17.2	C	9.0	B
	T	2249	3551	0.202	0.633	4.5	A		

Intersection Delay = 16.7 sec/veh Intersection LOS = C
 Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.640

Streets: (E-W) Knights-Griffin Rd. (N-S) SR 39
 Analyst: JW File Name: SR 39-14.HC9
 Area Type: Other 1-11-99 AM
 Comment: 2010 Build AM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	> 1	1	0	> 1	< 0	1	2	1	1	2	< 0
Volumes	30	75	95	80	165	100	95	465	55	95	680	60
Lane W (ft)		12.0	12.0		12.0		12.0	12.0	12.0	12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*					*		
EB Thru	*					*		
EB Right	*					*		
EB Peds								
WB Left		*				*		
WB Thru		*				*		
WB Right		*				*		
WB Peds								
NB Right								
SB Right								
Green	24.0A				10.0A	39.0P		
Yellow/AR	6.0				5.0	6.0		
Cycle Length:	90 secs	Phase combination order: #1 #5 #6						

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio					
EB	LT	299	997	0.371	0.300	16.4	C	15.9	C
	R	470	1568	0.213	0.300	15.3	C		
WB	LTR	418	1395	0.867	0.300	31.3	D	31.3	D
NB	L	337	1752	0.297	0.633	5.4	B	9.0	B
	T	1657	3551	0.310	0.467	9.7	B		
	R	732	1568	0.079	0.467	8.6	B		
SB	L	480	1752	0.208	0.633	4.5	A	10.3	B
	TR	1637	3508	0.500	0.467	11.0	B		

Intersection Delay = 13.9 sec/veh Intersection LOS = B
 Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.612

Streets: (E-W) Knights-Griffin Rd. (N-S) SR 39
 Analyst: JW File Name: SR 39-13.HC9
 Area Type: Other 1-11-99 PM
 Comment: 2010 Build PM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	> 1	1	0	> 1	< 0	1	2	1	1	2	< 0
Volumes	75	160	130	75	120	115	130	655	110	85	445	50
Lane W (ft)		12.0	12.0		12.0		12.0	12.0	12.0	12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*							
Thru	*							
Right	*							
Peds								
WB Left	*							
Thru	*							
Right	*							
Peds								
NB Right								
SB Right								
Green	30.0A				10.0A	35.0P		
Yellow/AR	5.0				5.0	5.0		
Cycle Length:	90 secs	Phase combination order: #1 #5 #6						

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio					
EB	LT	303	852	0.816	0.356	27.7	D	22.6	C
	R	557	1568	0.246	0.356	13.3	B		
WB	LTR	403	1134	0.809	0.356	24.9	C	24.9	C
NB	L	424	1752	0.323	0.578	6.2	B	11.7	B
	T	1460	3551	0.495	0.411	12.9	B		
	R	645	1568	0.180	0.411	10.9	B		
SB	L	342	1752	0.260	0.578	6.4	B	11.2	B
	TR	1438	3497	0.380	0.411	12.0	B		

Intersection Delay = 15.2 sec/veh Intersection LOS = C
 Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.635

Streets: (E-W) Zepherhills Bypass (N-S) SR 39
 Analyst: JW File Name: SR 39-21.HC9
 Area Type: Other 1-11-99 AM
 Comment: 2010 Build AM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	1	1	1	1	2	< 0	1	2	< 0
Volumes	130	130	140	30	55	125	140	715	40	140	490	45
Lane W (ft)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*							
Thru		*						
Right		*						
Peds								
WB Left		*						
Thru		*						
Right		*						
Peds								
NB Right								
SB Right								
Green	25.0A				53.0A			
Yellow/AR	6.0				6.0			
Cycle Length:	90 secs Phase combination order: #1 #5							

Intersection Performance Summary

Approach:	Lane	Group:	Adj Sat		v/c	g/C	Delay	LOS	Delay	LOS
			Mvmts	Cap						
EB	L		463	1489	0.296	0.311	15.3	C	15.2	C
	T		574	1845	0.239	0.311	14.9	B		
	R		488	1568	0.301	0.311	15.3	C		
WB	L		355	1141	0.090	0.311	14.2	B	14.8	B
	T		574	1845	0.101	0.311	14.2	B		
	R		488	1568	0.271	0.311	15.1	C		
NB	L		374	601	0.393	0.622	5.9	B	5.5	B
	TR		2192	3523	0.381	0.622	5.5	B		
SB	L		224	359	0.657	0.622	11.7	B	6.3	B
	TR		2182	3507	0.271	0.622	5.0	A		

Intersection Delay = 8.4 sec/veh Intersection LOS = B
 Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.539

Streets: (E-W) Zepherhills Bypass (N-S) SR 39
 Analyst: JW File Name: SR 39-22.HC9
 Area Type: Other 1-11-99 PM
 Comment: 2010 Build PM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	1	1	1	1	2	< 0	1	2	< 0
Volumes	15	75	150	80	70	40	150	710	80	40	485	10
Lane W (ft)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*							
Thru	*							
Right	*							
Peds								
WB Left		*						
Thru		*						
Right		*						
Peds								
NB Right					*			
SB Right					*			
Green	25.0A				53.0A			
Yellow/AR	6.0				6.0			
Cycle Length:	90 secs	Phase combination order: #1 #5						

Intersection Performance Summary

	Lane	Group:	Adj Sat		v/c	g/C	Delay	LOS	Approach:	
			Flow	Ratio					Delay	LOS
EB	L	445	1429	0.036	0.311	14.0	B	15.1	C	
	T	574	1845	0.138	0.311	14.4	B			
	R	488	1568	0.324	0.311	15.5	C			
WB	L	439	1412	0.191	0.311	14.7	B	14.5	B	
	T	574	1845	0.129	0.311	14.4	B			
	R	488	1568	0.086	0.311	14.2	B			
NB	L	399	641	0.396	0.622	5.9	B	5.6	B	
	TR	2176	3498	0.401	0.622	5.6	B			
SB	L	203	326	0.207	0.622	4.8	A	4.9	A	
	TR	2203	3540	0.249	0.622	4.9	A			

Intersection Delay = 7.4 sec/veh Intersection LOS = B

Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.375

=====
 Streets: (E-W) US 301 (N-S) SR 39
 Analyst: JW File Name: SR39-29.HC9
 Area Type: Other 1-11-99 AM
 Comment: 2010 Build AM Peak Hour
 =====

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2	< 0	2	2	0	0	> 2	< 0	0	0	0
Volumes		635	5	610	920		5	1	780			
Lane W (ft)		12.0		12.0	12.0			12.0				
RTOR Vols			0			0			0			
Lost Time		3.00	3.00	3.00	3.00		3.00	3.00	3.00			

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					*			
Thru					*			
Right			*		*			
Peds								
WB Left		*						
Thru		*	*					
Right								
Peds								
NB Right								
SB Right								
Green		25.0A	23.0A			25.0A		
Yellow/AR		5.0	6.0			6.0		
Cycle Length:	90 secs Phase combination order: #1 #2 #5							

Intersection Performance Summary

Lane Group:	Mvmts	Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach:	Delay	LOS
EB TR	1075		3721	0.658	0.289	19.2	C		19.2	C
WB L	1012		3374	0.653	0.300	18.8	C		10.9	B
T	2318		3725	0.438	0.622	5.8	B			
NB LTR	940		3022	0.923	0.311	29.7	D		29.7	D

Intersection Delay = 17.7 sec/veh Intersection LOS = C
 Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.748

Streets: (E-W) US 301 (N-S) SR 39
 Analyst: JW File Name: SR39-30.HC9
 Area Type: Other 1-11-99 PM
 Comment: 2010 Build PM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2	< 0	2	2	0	0	> 2	< 0	0	0	0
Volumes		750	5	565	735		5	1	770			
Lane W (ft)		12.0		12.0	12.0			12.0				
RTOR Vols			0			0			0			
Lost Time		3.00	3.00	3.00	3.00		3.00	3.00	3.00			

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	*		
Thru					Thru	*		
Right			*		Right	*		
Peds					Peds			
WB Left		*			SB Left			
Thru		*	*		Thru			
Right					Right			
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green		25.0A	23.0A		Green	25.0A		
Yellow/AR		5.0	6.0		Yellow/AR	6.0		
Cycle Length:	90 secs Phase combination order: #1 #2 #5							

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio					
EB	TR	1075	3722	0.776	0.289	21.5	C	21.5	C
WB	L	1012	3374	0.606	0.300	18.2	C	10.9	B
	T	2318	3725	0.351	0.622	5.3	B		
NB	LTR	940	3022	0.913	0.311	28.6	D	28.6	D
Intersection Delay = 18.6 sec/veh Intersection LOS = C									
Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.766									

Streets: (E-W) Sam Allen Rd (N-S) Alexander Ext
 Analyst: DK File Name: AL2020AM.HC9
 Area Type: Other 1-14-99
 Comment: Year 2020 Build AM

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	1	1	1	1	2	1	1	2	< 0
Volumes	34	92	214	227	83	50	183	239	208	77	423	50
Lane W (ft)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*		
Thru	*				Thru	*		
Right	*				Right	*		
Peds					Peds			
WB Left		*			SB Left		*	
Thru		*			Thru		*	
Right		*			Right		*	
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	20.0A	15.0A			Green	20.0A	15.0A	
Yellow/AR	5.0	5.0			Yellow/AR	5.0	5.0	
Cycle Length:	90 secs	Phase combination order: #1 #2 #5 #6						

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio					
EB	L	433	1770	0.083	0.244	16.9	C	19.6	C
	T	455	1863	0.213	0.244	17.5	C		
	R	387	1583	0.581	0.244	21.0	C		
WB	L	334	1770	0.715	0.189	27.0	D	24.4	C
	T	352	1863	0.247	0.189	20.1	C		
	R	299	1583	0.177	0.189	19.8	C		
NB	L	433	1770	0.446	0.244	19.1	C	19.2	C
	T	911	3725	0.291	0.244	17.9	C		
	R	387	1583	0.566	0.244	20.7	C		
SB	L	334	1770	0.242	0.189	20.1	C	24.9	C
	TR	692	3666	0.755	0.189	25.6	D		

Intersection Delay = 21.9 sec/veh Intersection LOS = C
 Lost Time/Cycle, L = 12.0 sec Critical v/c(x) = 0.644

Streets: (E-W) Sam Allen Rd (N-S) Alexander Ext
 Analyst: DK File Name: AL2020PM.HC9
 Area Type: Other 1-14-99
 Comment: Year 2020 Build PM

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	1	1	1	1	2	1	1	2	< 0
Volumes	7	116	217	206	104	50	176	270	184	83	456	11
Lane W (ft)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*		
Thru	*				Thru	*		
Right	*				Right	*		
Peds					Peds			
WB Left		*			SB Left	*		
Thru		*			Thru	*		
Right		*			Right	*		
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	20.0A	15.0A			Green	20.0A	15.0A	
Yellow/AR	5.0	5.0			Yellow/AR	5.0	5.0	
Cycle Length:	90 secs Phase combination order: #1 #2 #5 #6							

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio					
EB	L	433	1770	0.016	0.244	16.7	C	19.9	C
	T	455	1863	0.268	0.244	17.8	C		
	R	387	1583	0.589	0.244	21.1	C		
WB	L	334	1770	0.649	0.189	24.8	C	22.9	C
	T	352	1863	0.310	0.189	20.5	C		
	R	299	1583	0.177	0.189	19.8	C		
NB	L	433	1770	0.428	0.244	19.0	C	18.8	C
	T	911	3725	0.327	0.244	18.1	C		
	R	387	1583	0.501	0.244	19.8	C		
SB	L	334	1770	0.260	0.189	20.2	C	24.4	C
	TR	701	3712	0.737	0.189	25.1	D		

Intersection Delay = 21.4 sec/veh Intersection LOS = C
 Lost Time/Cycle, L = 12.0 sec Critical v/c(x) = 0.610

Streets: (E-W) Sam Allen Road (N-S) SR 39
 Analyst: JW File Name: SR39-5.HC9
 Area Type: Other 1-7-99 AM
 Comment: 2020 Build AM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	< 0	1	1	< 0	1	1	1	1	1	< 0
Volumes	10	100	140	180	150	95	140	230	125	95	340	10
Lane W (ft)	12.0	12.0		12.0	12.0		12.0	12.0	12.0	12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*					*		*
Thru	*					*		*
Right	*					*		*
Peds								
WB Left		*				*		*
Thru		*				*		*
Right		*				*		*
Peds								
NB Right								
SB Right								
Green	30.0A				10.0A	33.0A		
Yellow/AR	6.0				5.0	6.0		
Cycle Length:	90 secs	Phase combination order: #1 #5 #6						

Intersection Performance Summary

	Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:		
								Mvmts	Cap	Flow
EB	L		243	662	0.045	0.367	11.9	B	13.9	B
	TR		617	1683	0.408	0.367	14.0	B		
WB	L		250	682	0.756	0.367	24.5	C	18.4	C
	TR		637	1737	0.405	0.367	13.9	B		
NB	L		401	1752	0.367	0.567	7.1	B	10.6	B
	T		710	1776	0.341	0.400	12.2	B		
	R		627	1568	0.210	0.400	11.5	B		
SB	L		530	1752	0.189	0.567	6.1	B	12.2	B
	TR		707	1768	0.522	0.400	13.8	B		

Intersection Delay = 13.6 sec/veh Intersection LOS = B
 Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.633

Streets: (E-W) Sam Allen Road (N-S) SR 39
 Analyst: JW File Name: SR39-6.HC9
 Area Type: Other 1-7-99 PM
 Comment: 2020 Build PM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	< 0	1	1	< 0	1	1	1	1	1	< 0
Volumes	10	105	135	180	150	90	200	350	180	60	240	15
Lane W (ft)	12.0	12.0		12.0	12.0		12.0	12.0	12.0	12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*	*	
Thru	*				Thru		*	
Right	*				Right		*	
Peds					Peds			
WB Left		*			SB Left	*	*	
Thru		*			Thru		*	
Right		*			Right		*	
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	30.0A				Green	10.0A	33.0A	
Yellow/AR	6.0				Yellow/AR	5.0	6.0	
Cycle Length:	90 secs Phase combination order: #1 #5 #6							

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio					
EB	L	249	679	0.044	0.367	11.9	B	13.9	B
	TR	619	1689	0.408	0.367	14.0	B		
WB	L	249	679	0.760	0.367	24.8	C	18.5	C
	TR	638	1741	0.396	0.367	13.9	B		
NB	L	494	1752	0.427	0.567	7.0	B	11.5	B
	T	710	1776	0.518	0.400	13.8	B		
	R	627	1568	0.301	0.400	12.0	B		
SB	L	402	1752	0.157	0.567	6.4	B	11.4	B
	TR	704	1760	0.382	0.400	12.5	B		

Intersection Delay = 13.5 sec/veh Intersection LOS = B
 Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.674

Streets: (E-W) Alexander St. (N-S) SR 39
 Analyst: JW File Name: SR39-35.HC9
 Area Type: Other 1-11-99 AM
 Comment: 2020 Build AM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	0	> 1	< 0	0	2	< 0	1	2	0
Volumes				10	1	445		395	10	310	820	
Lane W (ft)					12.0			12.0		12.0	12.0	
RTOR Vols						0			0			0
Lost Time				3.00	3.00	3.00		3.00	3.00	3.00	3.00	

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left								
Thru								
Right								
Peds								
WB Left		*						
Thru		*						
Right		*						
Peds								
NB Right								
SB Right								
Green		30.0A				20.0A	25.0P	
Yellow/AR		5.0				5.0	5.0	
Cycle Length:	90 secs							
Phase combination order:	#1	#5	#6					

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:
Mvmts	Cap	Flow	Ratio	Ratio			Delay LOS
WB	LTR	508	1430	0.944	0.356	37.5	D 37.5 D
NB	TR	1061	3538	0.422	0.300	16.5	C 16.5 C
SB	L	433	1770	0.754	0.244	25.4	D 11.9 B
	T	2052	3551	0.442	0.578	7.1	B

Intersection Delay = 18.5 sec/veh Intersection LOS = C
 Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.718

=====
 Streets: (E-W) Alexander St. (N-S) SR 39
 Analyst: JW File Name: SR39-36.HC9
 Area Type: Other 1-11-99 PM
 Comment: 2020 Build PM Peak Hour
 =====

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	0	0	0	> 1	< 0	0	2	< 0	1	2	0
Volumes				10	1	440		740	10	315	545	
Lane W (ft)					12.0			12.0		12.0	12.0	
RTOR Vols						0			0			0
Lost Time				3.00	3.00	3.00		3.00	3.00	3.00	3.00	

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left								
Thru								
Right						*		
Peds						*		
WB Left		*						
Thru		*						
Right		*						
Peds								
NB Right								
SB Right								
Green	30.0A				20.0A	25.0P		
Yellow/AR	5.0				5.0	5.0		
Cycle Length:	90 secs Phase combination order: #1 #5 #6							

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio			Delay	LOS	
WB	LTR	508	1430	0.934	0.356	35.9	D	35.9	D
NB	TR	1063	3544	0.780	0.300	21.2	C	21.2	C
SB	L	433	1770	0.768	0.244	26.0	D	13.3	B
	T	2052	3551	0.294	0.578	6.3	B		

Intersection Delay = 21.0 sec/veh Intersection LOS = C
 Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.838

Streets: (E-W) Knights-Griffin Rd. (N-S) SR 39
 Analyst: JW File Name: SR 39-15.HC9
 Area Type: Other 1-11-99 AM
 Comment: 2020 Build AM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	> 1	1	0	> 1	< 0	1	2	1	1	2	< 0
Volumes	40	85	120	100	190	120	120	620	70	120	910	60
Lane W (ft)		12.0	12.0		12.0		12.0	12.0	12.0	12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*	*	
Thru	*				Thru		*	
Right	*				Right		*	
Peds					Peds			
WB Left	*				SB Left	*	*	
Thru	*				Thru		*	
Right	*				Right		*	
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	30.0A				Green	10.0A	33.0P	
Yellow/AR	6.0				Yellow/AR	5.0	6.0	
Cycle Length:	90 secs	Phase combination order: #1 #5 #6						

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:
Mvmts	Cap	Flow	Ratio	Ratio			Delay LOS
EB	LT	331	902	0.396	0.367	14.1	B 13.4 B
	R	575	1568	0.219	0.367	12.7	B
WB	LFR	496	1353	0.869	0.367	27.8	D 27.8 D
NB	L	316	1752	0.399	0.567	8.9	B 12.4 B
	T	1421	3551	0.483	0.400	13.2	B
	R	627	1568	0.118	0.400	11.0	B
SB	L	351	1752	0.359	0.567	7.0	B 15.8 C
	TR	1407	3519	0.762	0.400	16.8	C

Intersection Delay = 16.3 sec/veh Intersection LOS = C

Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.772

Streets: (E-W) Knights-Griffin Rd. (N-S) SR 39
 Analyst: JW File Name: SR 39-16.HC9
 Area Type: Other 1-11-99 PM
 Comment: 2020 Build PM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	> 1	1	0	> 1	< 0	1	2	1	1	2	< 0
Volumes	90	180	170	95	135	130	170	875	135	75	595	60
Lane W (ft)		12.0	12.0		12.0		12.0	12.0	12.0	12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*	*	
Thru	*				Thru		*	
Right	*				Right		*	
Peds					Peds			
WB Left	*				SB Left	*	*	
Thru	*				Thru		*	
Right	*				Right		*	
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	35.0A				Green	10.0A	30.0P	
Yellow/AR	5.0				Yellow/AR	5.0	5.0	
Cycle Length:	90 secs	Phase combination order: #1 #5 #6						

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio					
EB	LT	317	770	0.897	0.411	34.6	D	25.6	D
	R	645	1568	0.278	0.411	11.4	B		
WB	LTR	414	1006	0.916	0.411	33.9	D	33.9	D
NB	L	317	1752	0.565	0.522	10.6	B	16.9	C
	T	1263	3551	0.766	0.356	18.6	C		
	R	557	1568	0.255	0.356	13.3	B		
SB	L	316	1752	0.250	0.522	8.9	B	15.1	C
	TR	1245	3503	0.581	0.356	15.7	C		

Intersection Delay = 20.0 sec/veh Intersection LOS = C
 Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.835

Streets: (E-W) Zepherhills Bypass (N-S) SR 39
 Analyst: JW File Name: SR 39-23.HC9
 Area Type: Other 1-11-99 AM
 Comment: 2020 Build AM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	1	1	1	1	2	< 0	1	2	< 0
Volumes	150	150	190	35	70	140	190	950	50	155	645	50
Lane W (ft)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*				NB Left	*		
Thru	*				Thru		*	
Right	*				Right		*	
Peds					Peds			
WB Left	*				SB Left	*		
Thru	*				Thru		*	
Right	*				Right		*	
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	25.0A				Green	15.0A	35.0P	
Yellow/AR	5.0				Yellow/AR	5.0	5.0	
Cycle Length:	90 secs Phase combination order: #1 #5 #6							

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio			Delay	LOS	
EB	L	417	1390	0.379	0.300	16.4	C	16.3	C
	T	553	1845	0.286	0.300	15.7	C		
	R	470	1568	0.425	0.300	16.7	C		
WB	L	299	996	0.124	0.300	14.8	B	15.4	C
	T	553	1845	0.134	0.300	14.8	B		
	R	470	1568	0.313	0.300	15.8	C		
NB	L	331	1752	0.604	0.189	23.8	C	17.6	C
	TR	1449	3525	0.763	0.411	16.4	C		
SB	L	331	1752	0.492	0.189	22.0	C	14.8	B
	TR	1444	3513	0.532	0.411	13.2	B		

Intersection Delay = 16.3 sec/veh Intersection LOS = C
 Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.617

Streets: (E-W) Zepherhills Bypass (N-S) SR 39
 Analyst: JW File Name: SR 39-24.HC9
 Area Type: Other 1-11-99 PM
 Comment: 2020 Build PM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	1	1	1	1	1	2	< 0	1	2	< 0
Volumes	20	95	195	90	75	50	195	935	90	65	640	15
Lane W (ft)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left	*							
Thru	*							
Right	*							
Peds								
WB Left	*							
Thru	*							
Right	*							
Peds								
NB Right								
SB Right								
Green	25.0A				15.0A	35.0A		
Yellow/AR	5.0				5.0	5.0		
Cycle Length:	90 secs	Phase combination order: #1 #5 #6						

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:
Mvmts	Cap	Flow	Ratio	Ratio			Delay LOS
EB	L	411	1370	0.051	0.300	14.5	B 16.1 C
	T	553	1845	0.181	0.300	15.1	C
	R	470	1568	0.436	0.300	16.8	C
WB	L	378	1261	0.251	0.300	15.5	C 15.1 C
	T	553	1845	0.143	0.300	14.9	B
	R	470	1568	0.113	0.300	14.7	B
NB	L	331	1752	0.619	0.189	24.1	C 18.1 C
	TR	1441	3504	0.786	0.411	17.0	C
SB	L	331	1752	0.205	0.189	19.9	C 13.5 B
	TR	1455	3539	0.498	0.411	12.9	B

Intersection Delay = 16.2 sec/veh Intersection LOS = C
 Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.634

Streets: (E-W) US 301 (N-S) SR 39
 Analyst: JW File Name: SR39-31.HC9
 Area Type: Other 1-11-99 AM
 Comment: 2020 Build AM Peak Hour

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2	< 0	2	2	0	1	0	2	0	0	0
Volumes		840	10	805	1230		5		1040			
Lane W (ft)		12.0		12.0	12.0		12.0		12.0			
RTOR Vols			0			0			0			
Lost Time		3.00	3.00	3.00	3.00		3.00		3.00			

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					*			
Thru								
Right			*					
Peds					*			
WB Left		*						
Thru		*	*					
Right								
Peds								
NB Right		*						
SB Right								
Green		25.0A	23.0A		25.0A			
Yellow/AR		5.0	6.0		6.0			
Cycle Length:	90 secs	Phase combination order: #1 #2 #5						

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio			Delay	LOS	
EB	TR	1074	3719	0.875	0.289	25.5	D	25.5	D
WB	L	1012	3374	0.861	0.300	24.7	C	13.8	B
	T	2318	3725	0.587	0.622	6.8	B		
NB	L	525	1687	0.010	0.311	13.8	B	6.8	B
	R	1946	3019	0.636	0.644	6.7	B		

Intersection Delay = 14.3 sec/veh Intersection LOS = B
 Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.710

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 Streets: (E-W) US 301 (N-S) SR 39
 Analyst: JW File Name: SR39-32.HC9
 Area Type: Other 1-11-99 PM
 Comment: 2020 Build PM Peak Hour
 =====

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	2	< 0	2	2	0	1	0	2	0	0	0
Volumes		990	10	805	920		10		1030			
Lane W (ft)		12.0		12.0	12.0		12.0		12.0			
RTOR Vols			0			0			0			
Lost Time		3.00	3.00	3.00	3.00		3.00		3.00			

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	*		
Thru					Thru			
Right		*			Right	*		
Peds					Peds			
WB Left	*				SB Left			
Thru	*	*			Thru			
Right					Right			
Peds					Peds			
NB Right	*				EB Right			
SB Right					WB Right			
Green	25.0A	26.0A			Green	22.0A		
Yellow/AR	5.0	6.0			Yellow/AR	6.0		
Cycle Length:	90 secs Phase combination order: #1 #2 #5							

Intersection Performance Summary

Lane	Group:	Adj Sat	v/c	g/C	Delay	LOS	Approach:	Delay	LOS
Mvmts	Cap	Flow	Ratio	Ratio			Delay	LOS	
EB	TR	1199	3720	0.923	0.322	27.5	D	27.5	D
WB	L	1012	3374	0.861	0.300	24.7	C	14.0	B
	T	2442	3725	0.416	0.656	4.8	A		
NB	L	469	1687	0.023	0.278	15.3	C	8.1	B
	R	1845	3019	0.664	0.611	8.0	B		

Intersection Delay = 15.8 sec/veh Intersection LOS = C
 Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.753

TABLE E - 2

GENERALIZED ANNUAL AVERAGE DAILY VOLUMES FOR FLORIDA'S
AREAS TRANSITIONING INTO URBANIZED AREAS OR
AREAS OVER 5000 NOT IN URBANIZED AREAS*

STATE TWO-WAY ARTERIALS UNINTERRUPTED FLOW						FREEWAYS					
UNSIGNALIZED						Level of Service					
Lanes	A	B	C	D	E	Lanes	A	B	C	D	E
2 Undiv.	8,400	13,000	17,700	23,300	31,000	4	20,100	32,200	47,900	60,400	68,100
4 Div.	20,600	34,500	47,800	57,000	66,300	6	30,400	48,500	72,200	91,100	107,300
6 Div.	30,800	51,700	71,600	85,600	99,500	8	40,500	64,700	96,300	121,500	143,100
						10	50,600	80,900	120,400	151,900	178,900

INTERRUPTED FLOW						NON-STATE ROADWAYS MAJOR CITY/COUNTY ROADWAYS					
Class Ia (>0.00 to 2.49 signalized intersections per mile)						Level of Service					
Lanes	A**	B	C	D***	E***	Lanes	A**	B**	C	D	E
2 Undiv.	-	11,500	14,000	15,300	15,900	2 Undiv.	-	-	9,900	12,900	14,100
4 Div.	-	25,500	30,600	32,800	33,500	4 Div.	-	-	22,100	28,200	30,200
6 Div.	-	39,600	46,400	49,700	50,300	6 Div.	-	-	34,300	43,200	45,700

Class Ib (2.50 to 4.50 signalized intersections per mile)						OTHER SIGNALIZED ROADWAYS (signalized intersection analysis)					
Level of Service						Level of Service					
Lanes	A**	B**	C	D	E	Lanes	A**	B**	C	D	E
2 Undiv.	-	-	8,000	13,200	14,600	2 Undiv.	-	-	4,700	9,200	10,600
4 Div.	-	-	17,600	28,600	31,300	4 Div.	-	-	10,300	20,500	22,800
6 Div.	-	-	26,900	43,600	47,300						

Class II (more than 4.50 signalized intersections per mile and not within primary city central business district of urbanized area over 500,000)						ADJUSTMENTS			
Level of Service						DIVIDED/UNDIVIDED (alter corresponding two-way volume indicated percent)			
Lanes	A**	B**	C**	D	E	Lanes	Median	Bays	Adjustment Factors
2 Undiv.	-	-	-	10,900	14,100	2	Divided	Yes	+5%
4 Div.	-	-	-	24,600	30,900	2	Undivided	No	-20%
6 Div.	-	-	-	37,800	47,000	Multi	Undivided	Yes	-5%
						Multi	Undivided	No	-25%

ONE-WAY (alter corresponding two-way volume indicated percent)		
One-Way	Lanes	Adjustment Factors
2	4	-40%
3	6	-40%
4	6	-25%

The table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Values shown are annual average daily traffic (AADT) maximum volumes (based on K_{95} factors, not peak to daily ratios) for levels of service, and are based on the 1994 Highway Capacity Manual Update and Florida traffic, roadway and signalization data. The table's input value assumptions and level of service criteria appear on the back.

** Cannot be achieved.
*** Volumes are comparable because intersection capacities are reached.
Source: Florida Department of Transportation, 1995.

APPENDIX H

RESULTS OF YEAR 2010 AND 2020 INTERSECTION
QUEUE LENGTH ANALYSIS

Intersection	Queue Lengths (in meters)												
	Eastbound			Westbound			Northbound			Southbound			
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right	
SR 39/US 301 SR 39/Zephyrhills Bypass SR 39/Knights-Griffin Rd. Alexander St. Ext./Joe McIntosh Rd. Alexander St. Ext./Sam Allen Rd. SR 39/Sam Allen Rd.	n/a	121	shared	114	173	n/a	2	n/a	146	n/a	n/a	n/a	
	49	49	53	11	21	47	53	149	shared	53	109	shared	
	shared	39	36	shared	129	shared	36	87	21	36	150	shared	
	n/a	n/a	n/a	4	n/a	120	n/a	n/a	59	shared	88	116	n/a
	9	28	64	68	24	15	51	68	62	21	118	13	
	2	75	shared	73	54	shared	51	73	49	19	109	shared	
SR 39/US 301 SR 39/Zephyrhills Bypass SR 39/Knights-Griffin Rd. Alexander St. Ext./Joe McIntosh Rd. Alexander St. Ext./Sam Allen Rd. SR 39/Sam Allen Rd.	n/a	143	shared	106	138	n/a	2	n/a	144	n/a	n/a	n/a	
	6	28	56	30	26	15	56	163	shared	15	95	shared	
	shared	88	49	shared	116	shared	49	123	41	32	102	shared	
	n/a	n/a	n/a	4	n/a	126	n/a	n/a	109	shared	90	77	n/a
	2	34	66	62	32	15	51	77	53	23	128	4	
	2	75	shared	75	56	shared	71	109	75	13	77	shared	
SR 39/US 301 SR 39/Zephyrhills Bypass SR 39/Knights-Griffin Rd. Alexander St. Ext./Joe McIntosh Rd. Alexander St. Ext./Sam Allen Rd. SR 39/Sam Allen Rd.	n/a	161	shared	151	231	n/a	2	n/a	195	n/a	n/a	n/a	
	56	56	71	13	26	53	71	197	shared	58	140	shared	
	shared	47	45	shared	154	shared	45	116	26	45	193	shared	
	n/a	n/a	n/a	4	n/a	167	n/a	n/a	78	shared	116	154	n/a
	13	34	81	84	32	19	69	90	79	28	159	19	
	4	90	shared	68	92	shared	53	86	47	36	131	shared	
SR 39/US 301 SR 39/Zephyrhills Bypass SR 39/Knights-Griffin Rd. Alexander St. Ext./Joe McIntosh Rd. Alexander St. Ext./Sam Allen Rd. SR 39/Sam Allen Rd.	n/a	189	shared	151	173	n/a	4	n/a	193	n/a	n/a	n/a	
	8	36	73	34	28	19	73	209	shared	24	126	shared	
	shared	101	64	shared	135	shared	64	164	51	28	134	shared	
	n/a	n/a	n/a	4	n/a	165	n/a	n/a	143	shared	118	102	n/a
	4	43	81	77	39	19	66	101	69	32	171	4	
	4	90	shared	68	90	shared	75	131	68	23	96	shared	

Number of cycles per hour for peak hour = 40